

1973

Water Resources Data for Colorado

Part 1. Surface Water Records



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Prepared in cooperation with the State of Colorado
and with other agencies

CALENDAR FOR WATER YEAR 1973

1972

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1973

Water Resources Data

for

Colorado

Part 1. Surface Water Records



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GEOLOGICAL SURVEY

Prepared in cooperation with the State of Colorado
and with other agencies

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Colorado Water Conservation Board
Colorado Division of Water Resources
Division of Highways, State of Colorado
Southeastern Colorado Water Conservancy District
Arkansas River Compact Administration
Colorado River Water Conservation District
City and County of Denver, Board of Water Commissioners
Urban Drainage and Flood Control District
City of Colorado Springs, Department of Public Utilities
City of Aspen
City of Aurora, Director of Utilities
Bureau of Reclamation, U.S. Department of the Interior
National Park Service, U.S. Department of the Interior
Corps of Engineers, U.S. Army

Water resources records, 1973, for Colorado are
in the following reports of the U.S. Geological Survey:

1. Water Resources Data for Colorado
Part 1: Surface Water Records
2. Water Resources Data for Colorado
Part 2: Water Quality Records

Copies of this report may be obtained from
District Chief, Water Resources Division
U.S. Geological Survey
Denver Federal Center
Lakewood, Colorado 80225

CONTENTS

	Page
List of gaging stations, in downstream order, for which records are published.....	IV
Introduction.....	1
Cooperation.....	1
Definition of terms.....	2
Special networks and programs.....	4
Downstream order and station number.....	4
Surface-water data.....	5
Collection and computation of data.....	5
Accuracy of data.....	9
Publications.....	10
Other data available.....	10
Records of discharge collected by agencies other than the Geological Survey.....	11
Selected references.....	11
Surface water records.....	13
Transmountain diversions	
Transmountain diversions from Arkansas River basin to South Platte River basin in Colorado.....	374
Transmountain diversions from Colorado River basin in Colorado.....	374
Discharge at partial-record stations and miscellaneous sites.....	377
Low-flow partial-record stations.....	377
Crest-stage partial-record stations.....	378
Storm-runoff partial-record stations.....	386
Discharge measurements at miscellaneous sites.....	388
Index.....	390

ILLUSTRATIONS

Figure 1. Map of Colorado showing location of gaging stations.....	XV
2. Map of Colorado showing location of crest-stage and storm-runoff partial-record stations.....	XVI

TABLES

Table 1. Factors for converting English units to metric units (International System, SI, units).....	12
--	----

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

	Page
<u>MISSOURI RIVER BASIN</u>	
Missouri River:	
PLATTE RIVER BASIN	
Grizzly Creek (head of Platte River):	
Little Grizzly Creek near Coalmont.....	13
North Platte River (continuation of Grizzly Creek):	
Michigan River:	
North Fork Michigan River near Gould.....	14
North Platte River near Northgate.....	15
Laramie River near Glendevey.....	16
South Platte River above Elevenmile Canyon Reservoir, near Hartsel.....	17
South Platte River near Lake George.....	18
Goose Creek above Cheesman Lake.....	19
South Platte River below Cheesman Lake.....	20
North Fork South Platte River below Geneva Creek, at Grant.....	21
North Fork South Platte River at South Platte.....	22
South Platte River at South Platte.....	23
South Platte River at Waterton.....	24
Plum Creek near Louviers.....	25
South Platte River at Littleton.....	26
Bear Creek at Morrison.....	27
Bear Creek at mouth, at Sheridan.....	28
Cherry Creek near Franktown.....	29
Cherry Creek below Cherry Creek Lake.....	30
South Platte River at Denver.....	31
Clear Creek near Lawson.....	32
Clear Creek near Golden.....	33
Clear Creek at mouth, near Derby.....	34
South Platte River at Henderson.....	35
North St. Vrain Creek (head of St. Vrain Creek):	
South St. Vrain Creek near Ward.....	36
St. Vrain Creek at Lyons.....	37
Middle Boulder Creek (head of Boulder Creek) at Nederland....	38
Boulder Creek near Orodell.....	39
South Boulder Creek near Eldorado Springs.....	40
Coal Creek near Plainview.....	41
St. Vrain Creek at mouth, near Platteville.....	42
Big Thompson River at Estes Park.....	43
Big Thompson River near Estes Park.....	44
Big Thompson River at mouth of canyon, near Drake.....	45
Big Thompson River at mouth, near La Salle.....	46

Missouri River--Continued

PLATTE RIVER BASIN--Continued

North Platte River--Continued

South Platte River--Continued

Cache la Poudre River:

South Fork Cache la Poudre River:

Fall Creek near Rustic.....	47
-----------------------------	----

Little Beaver Creek near Idylwilde.....	48
---	----

Little Beaver Creek near Rustic.....	49
--------------------------------------	----

South Fork Cache la Poudre River near Rustic.....	50
---	----

Translasiin diversions from North Platte River basin to Cache la Poudre River basin.....	51
---	----

Cache la Poudre River at mouth of canyon, near Fort Collins....	52
---	----

Cache la Poudre River near Greeley.....	53
---	----

South Platte River near Kersey.....	54
-------------------------------------	----

South Platte River near Weldona.....	55
--------------------------------------	----

South Platte River at Balzac.....	56
-----------------------------------	----

South Platte River at Julesburg.....	57
--------------------------------------	----

Reservoirs in South Platte River basin.....	58
---	----

KANSAS RIVER BASIN

Arikaree River (head of Kansas River):

Republican River (continuation of Arikaree River):

South Fork Republican River:

Landsman Creek near Hale.....	60
-------------------------------	----

Bonny Reservoir near Hale.....	61
--------------------------------	----

South Fork Republican River near Hale.....	62
--	----

LOWER MISSISSIPPI RIVER BASIN

Mississippi River:

ARKANSAS RIVER BASIN:

Arkansas River near Leadville.....	63
------------------------------------	----

Lake Fork:

Turquoise Lake near Leadville.....	64
------------------------------------	----

Halfmoon Creek near Malta.....	65
--------------------------------	----

Lake Creek above Twin Lakes Reservoir.....	66
--	----

Arkansas River at Granite.....	67
--------------------------------	----

Clear Creek above Clear Creek Reservoir.....	68
--	----

Arkansas River at Buena Vista.....	69
------------------------------------	----

Cottonwood Creek below Hot Springs, near Buena Vista.....	70
---	----

Arkansas River near Nathrop.....	71
----------------------------------	----

Arkansas River at Salida.....	72
-------------------------------	----

Arkansas River near Wellsville.....	73
-------------------------------------	----

Arkansas River at Parkdale.....	74
---------------------------------	----

Grape Creek near Westcliffe.....	75
----------------------------------	----

Mississippi River--Continued

ARKANSAS RIVER BASIN--Continued

Arkansas River at Canon City.....	76
Fourmile Creek at Canon City.....	77
Beaver Creek near Portland.....	78
Arkansas River near Portland.....	79
Arkansas River above Pueblo.....	80
Arkansas River near Pueblo.....	81
Fountain Creek near Colorado Springs.....	82
Monument Creek:	
West Monument Creek at U.S. Air Force Academy.....	83
Templeton Gap Floodway at Colorado Springs.....	84
Fountain Creek at Security.....	85
Fountain Creek near Pinon.....	86
Fountain Creek at Pueblo.....	87
St. Charles River near Vineland.....	88
Arkansas River near Avondale.....	89
Huerfano River at Manzanares Crossing, near Redwing.....	90
Cucharas River at Boyd Ranch, near La Veta.....	91
Arkansas River near Nepesta.....	92
Chicosa Creek near Fowler.....	93
Apishapa River near Fowler.....	94
Arkansas River at Catlin Dam, near Fowler.....	95
Timpas Creek at mouth, near Swink.....	96
Fort Lyon Canal near Hasty.....	97
Crooked Arroyo near Swink.....	98
Arkansas River at La Junta.....	99
Arkansas River at Las Animas.....	100
Purgatoire River at Madrid.....	101
Long Canyon Creek near Madrid.....	102
Purgatoire River at Trinidad.....	103
Luning Arroyo near Model.....	104
Van Bremer Arroyo near Model.....	105
Purgatoire River near Thatcher.....	106
Purgatoire River at Ninemile Dam, near Higbee.....	107
Purgatoire River near Las Animas.....	108
John Martin Reservoir at Caddoa.....	109
Arkansas River below John Martin Reservoir.....	110
Arkansas River at Lamar.....	111
Big Sandy Creek near Lamar.....	112
Frontier ditch near Coolidge, Kans.....	113
Arkansas River near Coolidge, Kans.....	114

WESTERN GULF OF MEXICO BASINS:RIO GRANDE BASIN

Rio Grande at Thirtymile Bridge, near Creede.....	115
North Clear Creek below Continental Reservoir.....	116
Willow Creek at Creede.....	117
Rio Grande at Wagonwheel Gap.....	118
Goose Creek at Wagonwheel Gap.....	119
South Fork Rio Grande at South Fork.....	120
Rio Grande near Del Norte.....	121
Pinos Creek near Del Norte.....	122
Rio Grande near Monte Vista.....	123
Rio Grande at Alamosa.....	124
Closed basin in San Luis Valley:	
Kerber Creek at Ashley Ranch, near Villa Grove.....	125
Saguache Creek near Saguache.....	126
North Crestone Creek near Crestone.....	127
Carnero Creek near La Garita.....	128
La Garita Creek near La Garita.....	129
Alamosa Creek above Terrace Reservoir.....	130
La Jara Creek at Gallegos Ranch, near Capulin.....	131
Rio Grande above mouth of Trinchera Creek, near Lasauses.....	132
Trinchera Creek above Turners Ranch, near Fort Garland.....	133
Sangre de Cristo Creek above Fort Garland.....	134
Ute Creek near Fort Garland.....	135
Trinchera Creek below Smith Reservoir, near Blanca.....	136
Conejos River:	
Platoro Reservoir at Platoro.....	137
Conejos River below Platoro Reservoir.....	138
Conejos River near Mogote.....	139
San Antonio River at Ortiz.....	140
Los Pinos River near Ortiz.....	141
San Antonio River at mouth, near Manassa.....	142
Conejos River near Lasauses.....	143
Culebra Creek at San Luis.....	144
Rio Grande near Lobatos.....	145
Rio Grande at Colorado-New Mexico State line.....	146

COLORADO RIVER BASINColorado River:LADY CREEK BASIN

Lady Creek near Grand Lake.....	147
---------------------------------	-----

JIMMY CREEK BASIN

Jimmy Creek near Grand Lake.....	148
Colorado River below Baker Gulch, near Grand Lake.....	149
Colorado River near Grand Lake.....	150

VIII

SURFACE-WATER STATIONS, IN DOWNSTREAM ORDER

	Page
Colorado River--Continued	
GRAND LAKE OUTLET BASIN	
North Inlet (head of Grand Lake Outlet):	
Grand Lake:	
Alva B. Adams tunnel at east portal, near Estes Park.....	151
Shadow Mountain Lake near Grand Lake.....	152
Lake Granby near Granby.....	153
Colorado River below Lake Granby.....	154
Colorado River near Granby.....	155
WILLOW CREEK BASIN	
Willow Creek Reservoir near Granby.....	156
Willow Creek below Willow Creek Reservoir.....	157
FRASER RIVER BASIN	
Fraser River at upper station, near Winter Park.....	158
Fraser River near Winter Park.....	159
Vasquez Creek near Winter Park.....	160
Elk Creek near Fraser.....	161
St. Louis Creek near Fraser.....	162
Ranch Creek near Fraser.....	163
Colorado River at Hot Sulphur Springs.....	164
WILLIAMS FORK BASIN	
Bobtail Creek (head of Williams Fork) near Jones Pass.....	165
Williams Fork below Steelman Creek.....	166
Williams Fork above Darling Creek, near Leal.....	167
Darling Creek near Leal.....	168
South Fork of Williams Fork near Leal.....	169
Williams Fork near Leal.....	170
Williams Fork near Parshall.....	172
Williams Fork Reservoir near Parshall.....	173
Williams Fork below Williams Fork Reservoir.....	174
TROUBLESOME CREEK BASIN	
Troublesome Creek near Pearmont.....	175
East Fork Troublesome Creek near Troublesome.....	176
MUDDY CREEK BASIN	
Muddy Creek:	
Red Dirt Creek near Kremmling.....	177
BLUE RIVER BASIN	
Monte Cristo Creek (head of Blue River):	
Monte Cristo diversion near Hoosier Pass.....	178
Hoosier Creek:	
Bemrose-Hoosier diversion near Hoosier Pass.....	179
Blue River:	
McCullough Creek:	
McCullough-Spruce-Crystal diversion near Hoosier Pass.....	180

	Page
Colorado River--Continued	
BLUE RIVER BASIN--Continued	
Blue River near Dillon.....	181
Snake River near Montezuma.....	182
Keystone Gulch near Dillon.....	183
Tenmile Creek below North Tenmile Creek, at Frisco.....	184
Dillon Reservoir at Dillon.....	185
Blue River below Dillon.....	186
Rock Creek near Dillon.....	187
Boulder Creek at upper station, near Dillon.....	188
Slate Creek at upper station, near Dillon.....	189
Black Creek below Black Lake, near Dillon.....	190
Cataract Creek near Kremmling.....	191
Green Mountain Reservoir near Kremmling.....	192
Blue River below Green Mountain Reservoir.....	193
Colorado River near Kremmling.....	194
PINEY RIVER BASIN	
Piney River below Piney Lake, near Minturn.....	195
Dickson Creek near Vail.....	196
Freeman Creek near Minturn.....	197
East Meadow Creek near Minturn.....	198
Piney River near State Bridge.....	199
ROCK CREEK BASIN	
Rock Creek near Toponas.....	200
Egeria Creek near Toponas.....	201
EAGLE RIVER BASIN	
Eagle River at Red Cliff.....	202
Turkey Creek:	
Wearyman Creek near Red Cliff.....	203
Turkey Creek near Red Cliff.....	204
Homestake Creek:	
Missouri River near Gold Park.....	205
Homestake Creek at Gold Park.....	207
Homestake Creek near Red Cliff.....	209
Cross Creek near Minturn.....	210
Gore Creek at upper station, near Minturn.....	211
Black Gore Creek near Minturn.....	212
Bighorn Creek near Minturn.....	213
Pitkin Creek near Minturn.....	214
Booth Creek near Minturn.....	215
Middle Creek near Minturn.....	216
Red Sandstone Creek near Minturn.....	217
Eagle River below Gypsum.....	218
Colorado River near Dotsero.....	219

	Page
Colorado River--Continued	
ROARING FORK RIVER BASIN	
Roaring Fork River near Aspen.....	220
Hunter Creek above Midway Creek, near Aspen.....	221
Midway Creek near Aspen.....	222
No Name Creek near Aspen.....	223
Hunter Creek near Aspen.....	224
Castle Creek above Aspen.....	225
Maroon Creek above Aspen.....	226
Fryingpan River:	
Fryingpan River Feeder Canal near Norrie.....	227
Fryingpan River near Ivanhoe Lake.....	228
Ivanhoe Creek near Norrie.....	229
South Fork Fryingpan River:	
South Fork Fryingpan River Feeder Canal near Norrie.....	230
South Fork Fryingpan River at upper station, near Norrie.....	231
Chapman Gulch:	
Chapman Gulch Feeder Canal near Norrie.....	232
Chapman Gulch near Nast.....	233
Sawyer Creek:	
Sawyer Creek Feeder Canal near Norrie.....	234
Fryingpan River at Norrie.....	235
North Fork Fryingpan River above Cunningham Creek, near Norrie.....	236
Cunningham Creek near Norrie.....	237
North Fork Fryingpan River near Norrie.....	238
Fryingpan River at Meredith.....	239
Ruedi Reservoir near Basalt.....	240
Rocky Fork Creek near Meredith.....	241
Fryingpan River near Ruedi.....	242
Crystal River at Placita.....	243
Crystal River above Avalanche Creek, near Redstone.....	244
North Thompson Creek (head of Thompson Creek) near Carbondale.....	245
Roaring Fork River at Glenwood Springs.....	246
Colorado River below Glenwood Springs.....	247
CANYON CREEK BASIN	
Canyon Creek above New Castle.....	248
East Canyon Creek near New Castle.....	249
Possum Creek near New Castle.....	250
DIVIDE CREEK BASIN	
West Divide Creek (head of Divide Creek) near Raven.....	251

	Page
Colorado River--Continued	
BEAVER CREEK BASIN	
Beaver Creek near Rifle.....	252
Colorado River near De Beque.....	253
Colorado River near Cameo.....	254
Government Highline Canal:	
Lateral No. 48 near Mack.....	256
Government Highline Canal near Mack.....	257
PLATEAU CREEK BASIN	
Plateau Creek:	
Vega Reservoir near Collbran.....	258
Plateau Creek near Collbran.....	259
Buzzard Creek near Collbran.....	260
Plateau Creek near Cameo.....	261
Lewis Wash near Grand Junction.....	262
GUNNISON RIVER BASIN	
Taylor River (head of Gunnison River):	
Taylor Park Reservoir at Taylor Park.....	263
Taylor River below Taylor Reservoir.....	264
Taylor River at Almont.....	265
East River at Almont.....	266
Gunnison River near Gunnison.....	267
Tomichi Creek at Gunnison.....	268
Lake Fork at Gateview.....	269
Blue Mesa Reservoir near Sapinero.....	270
Morrow Point Reservoir near Cimarron.....	271
Cimarron River near Cimarron.....	272
Gunnison River below Gunnison tunnel.....	273
Smith Fork near Crawford.....	274
Clear Fork (head of North Fork Gunnison River) near Ragged	
Mountain.....	275
East Muddy Creek (continuation of Clear Fork):	
West Muddy Creek near Bowie.....	276
Cow Creek near Paonia.....	277
West Muddy Creek near Somerset.....	278
North Fork Gunnison River near Somerset.....	279
Hubbard Creek:	
West Hubbard Creek near Paonia.....	280
Hubbard Creek near Bowie.....	281
Gunnison River near Lazear.....	282
Tongue Creek:	
Surface Creek near Cedaredge.....	283
Surface Creek at Cedaredge.....	284

	Page
Colorado River--Continued	
GUNNISON RIVER BASIN--Continued	
Uncompahgre River near Ridgway.....	285
Cow Creek near Ridgway.....	286
Uncompahgre River at Colona.....	287
Uncompahgre River at Delta.....	288
Kannah Creek near Whitewater.....	289
Gunnison River near Grand Junction.....	290
Orchard Mesa Drain at Grand Junction.....	291
Leach Creek at Durham.....	292
Adobe Creek near Fruita.....	293
Big Salt Wash near Fruita.....	294
Reed Wash near Loma.....	295
Salt Creek:	
West Salt Creek (head of Salt Creek):	
Badger Wash near Mack.....	296
East Salt Creek near Mack.....	297
Salt Creek near Mack.....	298
Colorado River near Colorado-Utah State line.....	299
DOLOROS RIVER BASIN	
Dolores River below Rico.....	300
Dolores River at Dolores.....	301
Disappointment Creek near Dove Creek.....	302
Dolores River at Bedrock.....	303
West Paradox Creek above Bedrock.....	304
Dolores River near Bedrock.....	305
San Miguel River near Placerville.....	306
San Miguel River at Naturita.....	307
Dry Creek near Naturita.....	308
GREEN RIVER BASIN	
Green River:	
Yampa River near Toponas.....	309
Service Creek near Oak Creek.....	310
Walton Creek:	
North Fork Walton Creek near Rabbit Ears Pass.....	311
Walton Creek near Steamboat Springs.....	312
Yampa River at Steamboat Springs.....	313
Elk River:	
South Fork Elk River near Clark.....	314
Elk River at Clark.....	315
Trout Creek:	
Fish Creek near Milner.....	316

	Page
Colorado River--Continued	
GREEN RIVER BASIN--Continued	
Yampa River below diversion, near Hayden.....	317
Elkhead Creek near Clark.....	318
Elkhead Creek near Elkhead.....	319
North Fork Elkhead Creek near Elkhead.....	320
Williams Fork:	
South Fork of Williams Fork near Pagoda.....	321
Milk Creek near Thornburgh.....	322
Yampa River near Maybell.....	323
Little Snake River near Slater.....	324
Slater Fork near Slater.....	325
Willow Creek near Dixon, Wyo.....	326
Little Snake River near Lily.....	327
North Fork White River above Ripple Creek, near Trapper's	
Lake.....	328
Lost Creek near Buford.....	329
Marvine Creek near Buford.....	330
North Fork White River near Buford.....	332
North Fork White River at Buford.....	333
South Fork White River near Buford.....	334
South Fork White River at Buford.....	335
White River:	
Miller Creek near Meeker.....	336
White River above Coal Creek, near Meeker.....	337
White River near Meeker.....	338
White River below Meeker.....	339
Piceance Creek below Ryan Gulch, near Rio Blanco.....	340
Piceance Creek at White River.....	341
Yellow Creek near White River.....	342
White River above Rangely.....	343
White River near Watson, Utah.....	344
SAN JUAN RIVER BASIN	
East Fork San Juan River above Sand Creek, near Pagosa Springs.....	345
East Fork San Juan River near Pagosa Springs.....	346
West Fork San Juan River:	
Wolf Creek near Pagosa Springs.....	347
San Juan River at Pagosa Springs.....	348
Navajo River at Banded Peak Ranch, near Chromo.....	349
Navajo River at Edith.....	350

	Page
Colorado River--Continued	
SAN JUAN RIVER BASIN--Continued	
San Juan River near Carracas.....	351
Middle Fork Piedra River near Pagosa Springs.....	352
Piedra River near Piedra.....	353
Piedra River near Arboles.....	354
Los Pinos River:	
Vallecito Creek near Bayfield.....	355
Vallecito Reservoir near Bayfield.....	356
Los Pinos River near Bayfield.....	357
Los Pinos River at La Boca.....	358
Spring Creek at La Boca.....	359
Animas River at Howardsville.....	360
Mineral Creek above Silverton.....	361
Hermosa Creek near Hermosa.....	362
Animas River at Durango.....	363
Florida River below Florida Farmers ditch, near Durango.....	364
Salt Creek near Oxford.....	365
Florida River at Bondad.....	366
Animas River near Cedar Hill, N. Mex.....	367
La Plata River at Hesperus.....	368
La Plata River at Colorado-New Mexico State line.....	369
Mancos River near Towaoc.....	370
McElmo Creek above Alkali Canyon, near Cortez.....	371
McElmo Creek below Cortez.....	372
McElmo Creek near Colorado-Utah State line.....	373

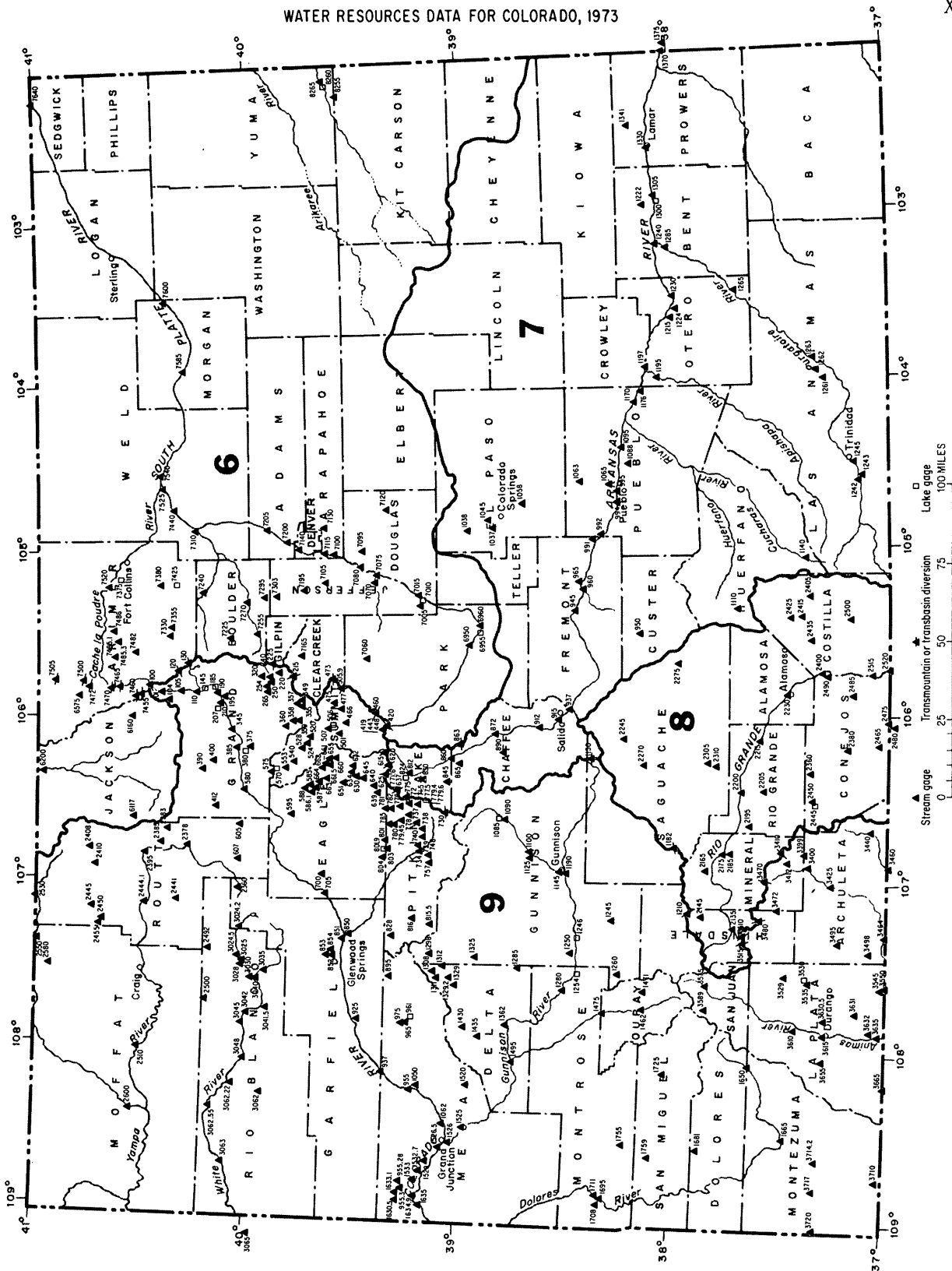
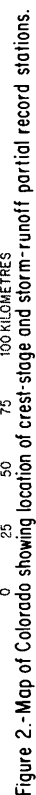


Figure 1.-Map of Colorado showing location of lake and stream-gaging stations



WATER RESOURCES DATA FOR COLORADO, 1973

PART 1. SURFACE-WATER RECORDS

INTRODUCTION

Water resources data for the 1973 water year for Colorado, including records of streamflow or reservoir storage at gaging stations, partial-record stations, and miscellaneous sites, are given in this report. Records are given for 388 gaging stations, of which 368 are streamflow discharge stations and 20 are reservoir or lake stations; also included are records for 1 low-flow partial-record station, 73 crest-stage partial-record stations, 13 storm-runoff partial-record stations, and 16 miscellaneous sites. Locations of gaging stations are shown in figure 1, and locations of crest-stage and storm-runoff partial-record stations are shown in figure 2. A few pertinent stations in bordering States are also 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 J. E. Biesecker, district chief. These data represent that portion of the National Water Data System collected by the U.S. Geological Survey and cooperating State and Federal agencies in Colorado.

Beginning with the 1961 water year, streamflow records and related data have been released by the Geological Survey in annual reports on a State-boundary basis. These reports are for limited distribution and are designed primarily for rapid release of data shortly after the end of the water year.

Records of discharge and stage of streams, and contents and stage of lakes and reservoirs are published in a series of U.S. Geological Survey Water-Supply Papers entitled, "Surface Water Supply of the United States." Through September 30, 1960, these Water-Supply Papers were in an annual series, and since then, are in a 5-year series. More information is given under the heading, "Publications" on page 10.

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. Organizations that assisted in collecting data for this report through cooperative agreement with the Survey are:

Colorado Water Conservation Board, F. L. Sparks, director.
Colorado Division of Water Resources, C. J. Kuiper, State engineer.
Division of Highways, State of Colorado, C. E. Shumate, Chief Engineer.
Southeastern Colorado Water Conservancy District, C. L. Thomson,
general manager.
Arkansas River Compact Administration, Colonel Gustav L. Seligmann,
chairman.
Colorado River Water Conservation District, Roland C. Fischer,
secretary-engineer.
City and County of Denver, Board of Water Commissioners, William G.
Temple, president.
Urban Drainage and Flood Control District, L. Scott Tucker, Executive
Director.
City of Colorado Springs, Department of Public Utilities, R. D.
Nixon, director, succeeded by James D. Phillips.
City of Aspen, Russell Campbell, City Manager.
City of Aurora, C. A. Wemlinger, Director of Utilities.

Financial assistance was also provided by Corps of Engineers, U.S.
Army, Bureau of Reclamation, and the National Park Service, U.S. Department
of the Interior.

DEFINITION OF TERMS

Terms related to streamflow and other hydrologic data, as used in this
report, are defined below. See also table for converting English units to
metric units (International System, SI, units) on page 12.

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

Cfs-day is the volume of water represented by a flow of 1 cubic foot
per second for 24 hours. It is equivalent to 86,400 cubic feet, approxi-
mately 1.9835 acre-feet, or about 646,000 gallons, and represents a runoff
of approximately 0.0372 inch from 1 square mile.

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

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

Cubic foot per second (cfs, ft^3/s) is the rate of discharge representing a volume of 1 cubic foot passing a given point during 1 second, and is equivalent to approximately 7.48 gallons per second or 448.8 gallons per minute.

Discharge is the volume of water (or more broadly, total fluids), that passes a given point within a given period of time.

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

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

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.

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

Gaging station is a particular site on a stream, canal, lake, or reservoir where systematic observations of gage height or discharge are obtained. When used in connection with a discharge record, the term is applied only to those gaging stations where a continuous record of discharge is computed.

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

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

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

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

SPECIAL NETWORKS AND PROGRAMS

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

DOWNSTREAM ORDER AND STATION NUMBER

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

As an added means of identification, each gaging station and partial-record station has been assigned a station number. These are in the same downstream order used in this report. In assigning station numbers, no distinction is made between partial-record stations and continuous-record gaging 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 numbers to allow for new stations that may be established; hence the numbers are not consecutive. The complete 8-digit number for each station, such as 07083000, which appears just to the left of the station name, includes the 2-digit part number "07" plus the 6-digit downstream order number "083000." In this report the records are listed in downstream order by parts. The part number refers to an area whose boundaries coincide with certain natural drainage lines. Records in this report are in Part 6 (Missouri River basin), Part 7 (Lower Mississippi River basin), Part 8 (Western Gulf of Mexico basins), and Part 9 (Colorado River basin). All records for a drainage basin encompassing more than one State can be arranged in downstream order by assembling pages from the various State reports by station number to include all records in the basin.

SURFACE WATER DATA

Collection and Computation of Data

The base data collected at gaging stations consist of records of stage and measurements of discharge of streams or canals, and stage, surface area, and contents of lakes or reservoirs. In addition, observations of factors affecting the stage-discharge relation or the stage-capacity relation, weather records, and other information are used to supplement base data in determining the daily flow or volume of water in storage. Records of stage are obtained from direct readings on a nonrecording gage or from a water-stage recorder that gives either a continuous graph of the fluctuations or a tape punched at 15-, 30- or 60-minute intervals. Measurements of discharge are made with a current meter, using the general methods adopted by the Geological Survey on the basis of experience in stream gaging since 1888. These methods are described in standard textbooks, in Water-Supply Paper 888, and in U.S. Geological Survey Techniques of Water Resources Investigations, book 3, chapter A6. Surface areas of lakes or reservoirs are determined from instrument surveys using standard methods. The configuration of the reservoir bottom is determined by sounding at many points.

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

At some stream-gaging stations the stage-discharge relation is affected by 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 is used as a factor in computing discharge.

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

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

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

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

The data in this report generally comprise a description of the station and tabulations of daily and monthly figures. For gaging stations on streams or canals a table showing the daily discharge and monthly and yearly discharge is given. For gaging stations on lakes and reservoirs a monthly summary table of stage and contents or a table showing the daily contents is given. Records are published for the water year, which begins on October 1 and ends on September 30. A calendar for the current water year is shown on the reverse side of the front cover to facilitate finding the day of the week for any date.

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

Previously published records of some stations have been found to be in error on the basis of data or information later obtained. Revisions of such records are usually published along with the current records in one of the annual or compilation reports. In order to make it easier to find such

revised records, a paragraph headed "REVISIONS (WATER YEARS)" has been added to the description of all stations for which revised records have been published. Listed therein are all the reports in which revisions have been published, each followed by the water years for which figures are revised in that report. In listing the water years only one number is given; for instance, 1933 stands for the water year October 1, 1932, to September 30, 1933. If no daily, monthly, or annual figures of discharge were revised, that fact is brought out by notations after the year dates as follows: "(M)" means that only the instantaneous maximum discharge was revised; "(m)" that only the instantaneous minimum was revised; and "(P)" that only peak discharges were revised. If the drainage area has been revised, the report in which the revised figure was first published is given.

The daily table for stream-gaging stations gives the mean discharge for each day and is followed by monthly and yearly summaries. In the monthly summary below the daily table, the line headed "TOTAL" gives the sum of the daily figures. The line headed "MEAN" gives the average flow in cubic feet per second during the month. The lines headed "MAX" and "MIN" give the maximum and minimum daily discharges, respectively, for the month. Discharge for the month is also expressed in acre-feet (line headed "AC-FT"). In the yearly summary below the monthly summary, the figures following "MAX" are the maximum daily discharges for the calendar and water years; likewise, those following "MIN" are the minimum daily discharges.

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

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

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

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

Accuracy of Data

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

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

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

Discharge at many stations, as indicated by the monthly mean, may not reflect natural runoff due to the effects of diversion, consumption, regulation by storage, evaporation, or other factors. However, because all the effects cannot be measured or evaluated, satisfactory adjustments generally cannot be made. For some stations, available figures of diversions or change

in contents of reservoirs are included as supplemental data. Even at those stations where adjustments can be made, large errors in computed runoff may occur if adjustments or losses are large in comparison with the observed discharge.

Publications

In each water-supply paper entitled, "Surface Water Supply of the United States" there is a list of numbers of preceding water-supply papers containing streamflow information for the area covered by that report. In addition, there is a list of numbers of water-supply papers containing detailed information on major floods in the area. Records for stations in Colorado for the period October 1960 to September 1965 are in Water-Supply Papers 1918, 1919, 1921, 1923, 1924, and 1925, and for the period October 1965 to September 1970 are in Water-Supply Papers 2118, 2119, 2121 (in preparation), 2123 (in preparation), 2124, and 2125.

Two series of summary reports entitled, "Compilation of Records of Surface Waters of the United States" have been published; the first series covers the entire period of record through September 1950 and the second series covers the period October 1950 to September 1960. These reports contain summaries of monthly and annual discharge and monthend storage for all previously published records, as well as some records not contained in the annual series of water-supply papers. All records were reexamined and revised where warranted. Estimates of discharge were made to fill short gaps where practical. The yearly summary table for each gaging station lists the numbers of the water-supply papers in which daily records were published for that station. Records for stations in Colorado are compiled in Water-Supply Papers 1310, 1311, 1312, and 1313 through September 1950, and in Water-Supply Papers 1730, 1731, 1732, and 1733 for October 1950 to September 1960.

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

Other Data Available

Information of a more detailed nature than that published for most of the gaging stations, such as discharge measurements, gage-height records, and rating tables, is on file in the district office. Also

At or near some gaging stations, water-quality records also are collected. Data are obtained on the chemical quality of the stream water, on water temperature, and on the sediment. These data are given in Part 2 of this report. Under the "REMARKS" paragraph of the gaging-station description, reference is made to water-quality records collected on a regular basis.

Records of Discharge Collected by Agencies
Other than the Geological Survey

Records of discharge not published by the Geological Survey were collected at 87 sites in Colorado during the 1973 water year by the following agencies: City of Colorado Springs (36 sites); Colorado Division of Water Resources (23 sites); Forest Service, U.S. Department of Agriculture (12 sites); City and County of Denver, Board of Water Commissioners (11 sites); National Weather Service, Department of Commerce (5 sites). Information on specific sites can be obtained from the district office of the U.S. Geological Survey at the address given on page II of this report.

SELECTED REFERENCES

- Carter, R. W., and Davidian, Jacob, 1968, General procedures for gaging streams: U.S. Geol. Survey Techniques Water-Resources Inv., book 3, chap. A6, 13 p.
- Corbett, D. M., and others, 1943, Stream-gaging procedure, a manual describing methods and practices of the Geological Survey: U.S. Geol. Survey Water-Supply Paper 888, 245 p.
- Langbein, W. B., and Iseri, K. T., 1960, General introduction and hydrologic definitions: U.S. Geol. Survey Water-Supply Paper 1541-A, 29 p.

Table 1.--Factors for converting English units to metric units

(International System, SI, units)

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

Multiply English units	By	To obtain metric units
<i>Length</i>		
inch (in.)	2.54	centimetre (cm)
	25.4	millimetre (mm)
	.0254	metre (m)
foot (ft)	.3048	metre (m)
yard (yd)	.9144	metre (m)
rod	5.0292	metre (m)
mile (mi)	1.609	kilometre (km)
<i>Area</i>		
acre	4047	square metre (m ²)
	.4047	*hectare (ha)
	.4047	square hectometre (hm ²)
	.004047	square kilometre (km ²)
square mile (mi ²)	2.590	square kilometre (km ²)
<i>Volume</i>		
gallon (gal)	3.785	**litre (l)
	3.785	cubic decimetre (dm ³)
	3.785×10 ⁻³	cubic metre (m ³)
million gallons (10 ⁶ gal)	3785	cubic metre (m ³)
	3.785×10 ⁻³	cubic hectometre (hm ³)
cubic foot (ft ³)	28.32	cubic decimetre (dm ³)
	.02832	cubic metre (m ³)
cubic foot per second-day (ft ³ /s-day)	2447	cubic metre (m ³)
	2.447×10 ⁻³	cubic hectometre (hm ³)
acre-foot (acre-ft)	1233	cubic metre (m ³)
	1.233×10 ⁻³	cubic hectometre (hm ³)
	1.233×10 ⁻⁶	cubic kilometre (km ³)
<i>Flow</i>		
cubic foot per second (ft ³ /s)	28.32	litre per second (l/s)
	28.32	cubic decimetre per second (dm ³ /s)
	.02832	cubic metre per second (m ³ /s)
gallon per minute (gpm)	.06309	litre per second (l/s)
	.06309	cubic decimetre per second (dm ³ /s)
	6.309×10 ⁻⁵	cubic metre per second (m ³ /s)
million gallons per day (mgd)	43.81	cubic decimetre per second (dm ³ /s)
	.04381	cubic metre per second (m ³ /s)
<i>Mass</i>		
ton (short)	907.2	kilogram (kg)
	.9072	tonne (t)

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

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

SURFACE WATER RECORDS

13

MISSOURI RIVER BASIN

PLATTE RIVER BASIN

06611700 LITTLE GRIZZLY CREEK NEAR COALMONT, COLO.

LOCATION.--Lat 40°33'05", long 106°36'57", in SE¼NE¼ sec.29, T.7 N., R.82 W., (projected), Jackson County, on left bank 0.2 mi (0.3 km) downstream from Sawmill Creek, 2.7 mi (4.3 km) upstream from Doran Creek, and 9.5 mi (15.3 km) west of Coalmont.

DRAINAGE AREA.--10.1 mi² (26.2 km²).

PERIOD OF RECORD.--October 1967 to September 1973 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 8,625 ft (2,629 m) from topographic map.

AVERAGE DISCHARGE.--6 years, 20.2 ft³/s (0.572 m³/s), 14,630 acre-ft/yr (18.0 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 183 ft³/s (5.18 m³/s) June 14 (gage height, 2.44 ft or 0.744 m); minimum daily, 1.5 ft³/s (0.042 m³/s) Feb. 15.

Period of record: Maximum discharge, 300 ft³/s (8.50 m³/s) June 9, 1972 (gage height, 3.09 ft or 0.942 m), from rating curve extended above 160 ft³/s (4.5 m³/s); minimum daily, 1.4 ft³/s (0.040 m³/s) Sept. 15, 17, 1972.

REMARKS.--Records good. No diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.6	5.6	2.7	2.4	1.6	1.6	1.6	24	102	68	11	3.9
2	3.4	4.2	2.3	2.3	1.6	1.6	1.6	17	147	60	10	4.0
3	2.9	3.9	2.9	2.2	1.6	1.6	1.7	13	105	51	9.4	4.2
4	2.4	3.7	2.8	2.3	1.6	1.6	1.6	15	85	47	9.0	3.6
5	3.2	3.9	2.8	2.3	1.6	1.6	1.6	17	74	43	11	2.9
6	3.2	3.9	2.8	2.3	1.6	1.6	1.6	18	77	38	12	2.6
7	3.4	4.0	2.6	2.3	1.6	1.6	1.7	17	94	33	11	2.6
8	5.8	3.6	2.5	2.3	1.6	1.6	1.7	16	122	30	9.9	2.5
9	4.4	3.6	2.6	2.3	1.6	1.6	1.7	24	142	29	8.0	2.4
10	3.4	3.4	2.3	2.2	1.6	1.6	1.9	33	156	25	7.2	2.5
11	2.9	3.6	2.3	2.0	1.6	1.6	1.8	34	155	22	6.6	2.5
12	2.6	3.2	2.5	2.1	1.6	1.6	1.8	41	145	23	6.2	2.5
13	2.6	3.2	2.5	2.3	1.6	1.6	1.9	49	141	32	5.6	2.6
14	2.6	3.1	2.5	2.3	1.6	1.6	2.1	53	151	34	5.3	2.2
15	8.2	3.2	2.5	1.9	1.5	1.6	3.4	63	150	25	5.1	2.3
16	9.4	3.4	2.5	1.9	1.6	1.6	2.5	69	101	25	4.6	2.3
17	9.9	3.2	2.5	1.9	1.6	1.6	2.7	83	88	19	4.6	2.2
18	11	3.2	2.5	1.8	1.6	1.7	3.0	100	79	17	4.7	2.1
19	7.8	3.2	2.5	1.8	1.6	1.7	2.8	126	66	26	4.2	2.1
20	7.0	3.1	2.5	1.8	1.6	1.9	2.4	158	65	30	3.9	2.0
21	7.6	2.9	2.6	1.8	1.6	1.8	2.4	151	74	25	3.6	2.0
22	6.8	2.8	2.4	1.8	1.6	1.6	2.4	145	84	20	3.9	2.0
23	6.2	2.8	2.4	1.7	1.6	1.6	3.0	129	97	17	3.4	2.2
24	5.6	2.7	2.3	1.7	1.6	1.7	4.3	124	95	14	3.7	2.9
25	5.3	2.7	2.3	1.7	1.6	1.7	4.9	117	100	13	3.2	2.8
26	5.1	2.7	2.3	1.7	1.6	1.7	5.6	116	96	12	2.9	2.5
27	5.1	2.7	2.3	1.7	1.6	1.6	8.6	89	92	12	2.8	2.5
28	4.9	2.7	2.3	1.7	1.6	1.6	18	79	83	14	2.5	2.4
29	4.4	2.7	2.3	1.7	-----	1.6	25	78	77	13	2.5	2.4
30	4.2	2.7	2.3	1.7	-----	1.6	30	68	75	13	2.4	2.4
31	6.0	-----	2.4	1.7	-----	1.6	-----	70	-----	13	2.3	-----
TOTAL	160.9	99.6	77.0	61.6	44.7	50.6	145.3	2,136	3,118	843	182.5	78.1
MEAN	5.19	3.32	2.48	1.99	1.60	1.63	4.84	68.9	104	27.2	5.89	2.60
MAX	11	5.6	2.9	2.4	1.6	1.9	30	158	156	68	12	4.2
MIN	2.4	2.7	2.3	1.7	1.5	1.6	1.6	13	65	12	2.3	2.0
AC-FT	319	198	153	122	89	100	288	4,240	6,180	1,670	362	155

CAL YR 1972 TOTAL 6,820.8 MEAN 18.6 MAX 201 MIN 1.4 AC-FT 13,530
 WTR YR 1973 TOTAL 6,997.3 MEAN 19.2 MAX 158 MIN 1.5 AC-FT 13,880

PEAK DISCHARGE (BASE, 200 CFS).--No peak above base.

PLATTE RIVER BASIN

06616000 NORTH FORK MICHIGAN RIVER NEAR GOULD, COLO.

LOCATION.--Lat 40°32'58", long 106°01'14", in SE¼NW¼ sec.27, T.7 N., R.77 W., Jackson County, on left bank 25 ft (8 m) upstream from county road bridge, 0.7 mi (1.1 km) downstream from dam on recreation lake, 1.6 mi (2.6 km) north of Gould, 2.8 mi (4.5 km) upstream from mouth, and 19 mi (31 km) southeast of Walden.

DRAINAGE AREA.--21.2 mi² (54.9 km²).

PERIOD OF RECORD.--October 1950 to current year.

GAGE.--Water-stage recorder. Datum of gage is 8,793 ft (2,680.1 m) above mean sea level. Prior to Oct. 6, 1964, at site 0.6 mi (1.0 km) upstream at datum 55.00 ft (16.764 m) higher. Oct. 6, 1964, to Aug. 10, 1965, at site 0.2 mi (0.3 km) upstream at different datum.

AVERAGE DISCHARGE.--23 years, 17.7 ft³/s (0.50 m³/s) 12,820 acre-ft/yr (15.8 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 222 ft³/s (6.29 m³/s) May 20 (gage height, 4.49 ft or 1.369 m); maximum gage height, 4.56 ft (1.390 m) Mar. 14 (backwater from ice); minimum daily discharge, 2.4 ft³/s (0.068 m³/s) Feb. 8.

Period of record: Maximum discharge, 290 ft³/s (8.21 m³/s) May 25, 1961 (gage height, 3.15 ft or 0.960 m, site and datum then in use), from rating curve extended above 160 ft³/s (4.5 m³/s); maximum gage height, 4.56 ft (1.390 m) Mar. 14, 1973 (backwater from ice); no flow Dec. 11, 1963, to Apr. 30, 1964, caused by filling recreation lake upstream.

REMARKS.--Records good except those for winter period and period of no gage-height record, which are fair. One small diversion above station to Canadian River drainage. Slight natural regulation by recreation lake (capacity, 1,250 acre-ft or 1.54 hm³) since Dec. 11, 1963.

REVISIONS.--WSP 1730: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.0	4.6	2.8	3.0	2.6	2.7	4.0	8.1	107	59	12	5.6
2	4.0	4.3	2.8	3.0	2.6	2.7	4.0	9.6	114	54	12	5.8
3	3.5	4.2	2.8	3.0	2.6	2.7	4.0	14	106	48	12	5.9
4	3.5	4.0	2.9	3.3	2.6	2.7	4.0	10	92	43	11	5.9
5	3.4	4.2	3.0	3.3	2.6	2.7	4.0	8.8	81	39	12	5.7
6	3.3	4.4	3.1	3.3	2.6	2.7	4.2	13	80	34	13	5.6
7	3.1	4.3	3.2	3.3	2.5	2.7	4.2	16	93	31	12	6.0
8	3.0	4.2	3.3	3.3	2.4	2.7	4.3	17	123	30	12	5.6
9	3.1	4.5	3.3	3.3	2.5	2.7	4.3	19	158	28	11	5.1
10	3.2	3.9	3.3	3.3	2.6	2.7	4.4	30	177	25	9.5	5.3
11	3.3	3.9	3.3	3.3	2.7	2.7	4.5	52	170	23	10	6.5
12	3.4	3.9	3.3	3.0	2.7	2.7	4.7	70	154	22	9.2	7.0
13	3.5	3.5	3.3	2.6	2.7	2.7	5.0	78	161	26	8.5	6.3
14	3.6	3.5	3.3	2.5	2.7	2.7	5.0	82	177	28	7.9	5.4
15	3.7	3.5	3.0	2.5	2.7	2.7	5.2	89	175	23	7.5	4.9
16	3.8	3.5	3.0	2.5	2.7	2.7	5.4	105	136	22	7.2	4.7
17	3.9	3.5	3.0	2.5	2.7	2.7	5.4	113	108	21	7.3	4.4
18	4.0	3.6	3.0	2.5	2.7	2.8	5.5	143	102	19	7.5	4.4
19	4.6	3.5	3.0	2.5	2.7	2.9	5.6	189	85	21	7.2	4.1
20	4.9	3.5	3.0	2.6	2.7	3.0	5.6	194	73	24	6.6	3.9
21	5.0	3.4	3.0	2.6	2.7	3.0	5.6	184	70	22	6.4	3.5
22	4.9	3.4	3.0	2.6	2.7	3.0	5.8	149	71	20	8.1	3.6
23	4.7	3.3	3.0	2.6	2.7	3.0	5.8	138	73	17	8.1	3.2
24	4.4	3.2	3.0	2.6	2.7	3.1	5.9	137	73	15	8.1	3.0
25	4.2	3.0	3.0	2.6	2.7	3.2	6.4	132	74	15	7.9	4.1
26	4.5	2.9	3.0	2.6	2.7	3.2	7.0	116	77	14	7.2	5.4
27	4.6	2.8	3.0	2.6	2.7	3.2	7.0	93	78	13	6.7	5.0
28	4.5	2.8	3.0	2.6	2.7	3.3	6.6	78	74	13	6.4	5.8
29	4.3	2.8	3.0	2.6	-----	3.4	7.6	79	68	14	6.4	6.9
30	4.2	2.8	3.0	2.6	-----	3.5	7.8	76	64	13	6.1	6.7
31	4.7	-----	3.0	2.6	-----	3.7	-----	84	-----	12	6.0	-----
TOTAL	122.8	108.9	94.7	87.2	74.2	90.2	158.8	2,526.5	3,194	788	272.8	155.3
MEAN	3.96	3.63	3.05	2.81	2.65	2.91	5.29	81.5	106	25.4	8.80	5.18
MAX	5.0	4.6	3.3	3.3	2.7	3.7	7.8	194	177	59	13	7.0
MIN	3.0	2.8	2.8	2.5	2.4	2.7	4.0	8.1	64	12	6.0	3.0
AC-FT	244	216	188	173	147	179	315	5,010	6,340	1,560	541	308

CAL YR 1972 TOTAL 5,475.4 MEAN 15.0 MAX 124 MIN 1.5 AC-FT 10,860

WTR YR 1973 TOTAL 7,673.4 MEAN 21.0 MAX 194 MIN 2.4 AC-FT 15,220

PEAK DISCHARGE (BASE, 100 CFS).--May 20 (0300) 222 cfs (4.49 ft); June 14 (1900) 206 cfs (4.35 ft).

NOTE.--No gage-height record Oct. 4 to Nov. 8.

15

LOCATION.--Lat 40°56'10", long 106°20'21", in SW¼SE¼ sec.11, T.11 N., R.80 W., Jackson County, on right bank 350 ft (110 m) downstream from bridge on State Highway 125, 0.8 mi (1.3 km) upstream from Camp Creek, 4.2 mi (6.8 km) northwest of Northgate, and 4.4 mi (7.1 km) south of Colorado-Wyoming State line.

PERIOD OF RECORD.--May to November 1904 (published as "near Pinkhampton"), May 1915 to current year. Monthly discharge only for some periods. published in WSP 1310.

GAGE.--Water-stage recorder. Datum of gage is 7,810.39 ft (2,380.607 m) above mean sea level. See WSP 1730 for history of changes prior to Apr. 8, 1918. Apr. 8, 1918 to Aug. 21, 1961, water-stage recorder, at site 0.8 mi (1.3 km) downstream at datum 3.36 ft (1.024 m) lower.

EXTREMES.--Current year: Maximum discharge, 3,950 ft³/s (112 m³/s) Apr. 30 (gage height, 6.35 ft or 1.935 m); maximum gage height, 7.77 ft (2.368 m) Apr. 26 (ice jam); minimum daily discharge, 90 ft³/s (2.55 m³/s) Feb. 15.

Period of record: Maximum discharge, 6,720 ft³/s (190 m³/s) June 11, 1923 (gage height, 6.24 ft or 1.902 m, site and datum then in use); maximum gage height recorded, 8.84 ft (2.694 m) Apr. 9, 1962 (ice jam); minimum daily discharge, 19 ft³/s (0.54 m³/s) July 17-19, 1934.

REMARKS.--Records good except those for winter period, which are poor. Diversions for irrigation of about 130,000 acres (526 km²) of hay meadows above station. Transbasin diversions above station to Cache la Poudre River basin (see elsewhere in this report). Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	UCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	105	240	130	105	100	100	120	3,770	1,050	1,690	663	166
2	105	250	130	105	100	100	120	2,390	1,070	1,430	592	177
3	101	260	120	105	100	100	120	1,640	1,340	1,230	536	176
4	101	270	120	105	100	100	120	1,440	1,560	1,110	545	181
5	103	270	110	105	100	100	120	1,620	1,490	985	543	176
6	108	260	110	105	100	100	120	1,960	1,170	865	547	165
7	118	270	110	105	100	110	120	2,290	931	776	557	157
8	127	270	110	105	100	110	120	2,110	755	784	548	152
9	153	250	110	105	100	110	120	1,920	748	802	496	147
10	165	240	110	105	100	110	120	1,980	1,080	710	433	142
11	164	230	110	105	100	110	120	2,110	1,560	666	396	161
12	143	210	110	105	100	110	120	2,430	2,010	588	371	202
13	126	200	110	105	100	110	130	2,520	2,270	849	338	211
14	121	190	110	105	96	110	150	2,340	2,650	1,800	312	194
15	122	180	110	105	90	120	160	2,200	3,290	1,970	290	171
16	135	170	110	105	97	120	180	2,040	3,790	1,670	271	158
17	201	160	110	105	96	120	210	1,920	3,580	1,390	260	151
18	226	160	110	105	98	120	390	1,860	2,520	1,120	258	146
19	260	160	110	105	100	120	440	1,860	1,940	1,270	253	140
20	240	150	110	105	100	120	470	2,020	1,540	1,640	243	139
21	263	150	110	100	100	120	500	2,410	1,190	1,810	237	127
22	313	150	110	100	100	120	560	2,780	985	1,810	241	116
23	301	140	110	100	100	120	620	2,680	904	1,330	245	112
24	288	140	110	100	100	120	780	2,340	912	1,050	245	113
25	264	140	110	100	100	120	900	2,270	1,050	929	237	124
26	236	140	110	100	100	120	1,100	2,120	1,100	838	226	143
27	226	130	110	100	100	120	1,600	1,970	1,300	774	213	157
28	236	130	110	100	100	120	1,700	1,640	1,520	743	195	163
29	234	130	100	100	-----	120	2,410	1,240	1,700	727	181	179
30	157	130	100	100	-----	120	3,330	1,130	1,700	718	172	189
31	168	-----	100	100	-----	120	-----	1,180	-----	696	168	-----
TOTAL	5,610	5,770	3,440	3,200	2,777	3,520	17,070	64,180	48,705	34,770	10,812	4,735
MEAN	181	192	111	103	99.2	114	569	2,070	1,624	1,122	349	158
MAX	313	270	130	105	100	120	3,330	3,770	3,790	1,970	663	211
MIN	101	130	100	100	90	100	120	1,130	748	588	168	112
AC-FT	11,130	11,440	6,820	6,350	5,510	6,980	33,860	127,300	96,610	68,970	21,450	9,390
CAL YR 1972	TOTAL 121,586		MEAN 332	MAX 2,990	MIN 66	AC-FT 241,200						
WTR YR 1973	TOTAL 204,589		MEAN 561	MAX 3,790	MIN 90	AC-FT 405,800						

PLATTE RIVER BASIN

06657500 LARAMIE RIVER NEAR GLENDEVEY, COLO.

LOCATION.--Lat 40°48'02", long 105°52'40", in NW¼NW¼ sec.36, T.10 N., R.76 W., Larimer County, on left bank 200 ft (61 m) downstream from bridge on county road, 350 ft (110 m) downstream from Nunn Creek, 1,300 ft (400 m) upstream from Stub Creek, and 3.0 mi (4.8 km) east of Glendevy.

DRAINAGE AREA.--101 mi² (262 km²).

PERIOD OF RECORD.--June 1904 to October 1905, August 1910 to current year. Monthly discharge only for some periods, published in WSP 1310. Published as "at Glendevy" 1905, 1910-18.

GAGE.--Water-stage recorder. Altitude of gage is 8,230 ft (2,509 m) from topographic map. See WSP 1730 for history of changes prior to Sept. 20, 1935.

AVERAGE DISCHARGE.--64 years, 73.8 ft³/s (2.090 m³/s), 53,470 acre-ft/yr (65.9 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 900 ft³/s (25.5 m³/s) June 11 (gage height, 3.41 ft or 1.039 m); minimum daily, 14 ft³/s (0.40 m³/s) Jan. 28.
Period of record: Maximum discharge, 2,240 ft³/s (63.4 m³/s) June 9, 1923 (gage height, 4.55 ft or 1.387 m, site datum then in use, from floodmarks), from rating curve extended above 1,400 ft³/s (40 m³/s); minimum daily recorded, 5.0 ft³/s (0.14 m³/s) Feb. 14, 15, 1911, but may have been less during winter periods of no gage-height record.

REMARKS.--Records good. Diversions for irrigation of about 700 acres (2.83 km²) of hay meadows above station. Transbasin diversions above station to Cache la Poudre River and tributaries (see elsewhere in this report).

REVISIONS (WATER YEARS).--WSP 469: 1911-12. WSP 506: Drainage area. WSP 1310: 1905, 1914. WSP 1918: 1918 (monthly runoff).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	UCT	NUV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38	41	23	15	16	17	17	43	292	352	57	22
2	34	37	24	15	16	17	17	35	318	331	60	22
3	33	36	23	15	16	17	17	34	266	280	53	50
4	31	38	22	15	16	18	17	44	224	203	52	53
5	34	36	22	15	16	18	17	56	203	176	61	49
6	34	34	22	15	16	18	17	66	235	170	57	47
7	33	34	22	15	17	18	17	69	296	156	51	53
8	38	36	22	15	17	18	17	80	380	132	47	49
9	40	32	22	15	17	18	17	108	487	123	41	47
10	36	31	22	15	17	18	18	117	736	112	37	52
11	33	31	22	16	17	18	18	117	820	98	39	63
12	31	31	22	16	16	18	20	119	754	100	37	58
13	31	31	22	16	16	18	21	123	759	152	54	50
14	32	31	22	16	16	18	23	134	786	188	31	45
15	37	31	21	16	16	18	25	145	764	135	30	43
16	49	31	21	17	16	18	22	172	565	115	29	41
17	44	31	21	17	15	18	23	206	455	91	29	39
18	50	30	20	17	15	18	25	254	428	82	29	38
19	48	29	20	17	15	18	21	328	345	105	28	36
20	44	28	19	17	15	18	22	402	296	144	26	35
21	54	27	19	16	15	18	22	444	314	142	26	33
22	53	26	18	16	15	18	22	387	311	93	26	32
23	47	25	18	16	15	18	22	398	248	75	26	32
24	45	24	17	16	16	18	22	410	296	132	26	32
25	42	23	17	16	16	18	23	376	289	181	26	34
26	41	22	17	15	16	18	23	352	373	169	24	40
27	42	22	17	15	17	18	26	277	380	79	23	37
28	40	21	17	14	17	18	34	251	335	63	22	44
29	36	21	17	15	-----	18	47	254	292	64	22	47
30	32	22	16	16	-----	17	52	254	328	79	21	49
31	43	-----	15	16	-----	17	-----	243	-----	68	21	-----
TOTAL	1,225	892	622	486	448	553	684	6,298	12,575	4,390	1,091	1,272
MEAN	39.5	29.7	20.1	15.7	16.0	17.8	22.8	203	419	142	35.2	42.4
MAX	54	41	24	17	17	18	52	444	820	352	61	63
MIN	31	21	15	14	15	17	17	34	203	63	21	22
AC=FT	2,430	1,770	1,230	964	889	1,100	1,360	12,490	24,940	8,710	2,160	2,520

CAL YR 1972 TOTAL 25,605 MEAN 70.0 MAX 708 MIN 15 AC=FT 50,790
WTR YR 1973 TOTAL 30,536 MEAN 83.7 MAX 820 MIN 14 AC=FT 60,570

PLATTE RIVER BASIN

17

06695000 SOUTH PLATTE RIVER ABOVE ELEVENMILE CANYON RESERVOIR, NEAR HARTSEL, COLO.

LOCATION.--Lat 38°58'03", long 105°34'51", in NE¼ sec.32, T.12 S., R.73 W., Park County, on left bank 200 ft (61 m) downstream from highway bridge, 2.5 mi (4.0 km) upstream from water line of Elevenmile Canyon Reservoir at elevation 8,561 ft (2,609 m), and 13 mi (21 km) southeast of Hartsel.

DRAINAGE AREA.--880 mi² (2,279 km²).

PERIOD OF RECORD.--June 1933 to current year (no winter records prior to 1940). Monthly discharge only for some periods, published in WSP 1310.

GAGE.--Water-stage recorder and Parshall flume. Datum of gage is 8,612.83 ft (2,625.191 m) above mean sea level (datum of Denver Board of Water Commissioners). Prior to May 27, 1939, water-stage recorder near present site at different datum. May 27, 1939, to Nov. 4, 1961, at datum 0.46 ft (0.140 m) lower.

AVERAGE DISCHARGE.--34 years (1939-73), 81.5 ft³/s (2.308 m³/s), 59,050 acre-ft/yr (73.4 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 640 ft³/s (18.1 m³/s) July 15 (gage height, 3.28 ft or 1.000 m); minimum daily, 16 ft³/s (0.45 m³/s) Oct. 5, 31.
Period of record: Maximum discharge not determined, occurred Apr. 28, 1970 (gage height, 7.60 ft or 2.316 m, from floodmarks); maximum daily, 3,970 ft³/s (112 m³/s) Apr. 27, 1970; minimum daily recorded, 0.9 ft³/s (0.025 m³/s) Apr. 22, 1940.

REMARKS.--Records good except those for winter period, which are poor. Flow regulated by Antero Reservoir (capacity, 22,300 acre-ft or 27.5 hm³). Many small diversions above station for irrigation of about 24,000 acres (97.1 km²).

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

REVISIONS (WATER YEARS).--WSP 1630: 1958. WSP 1730: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	28	31	24	25	20	29	219	89	269	278	74
2	17	33	29	24	22	22	29	189	90	223	262	66
3	17	43	28	23	23	21	28	197	89	205	240	60
4	17	51	28	23	24	20	28	187	104	203	238	56
5	16	50	25	21	24	21	30	160	106	203	240	44
6	17	52	23	22	25	21	34	172	87	175	232	37
7	17	46	21	22	24	19	42	195	77	160	213	36
8	22	49	19	22	24	19	39	238	69	155	189	35
9	23	46	21	21	24	20	39	213	72	168	170	34
10	20	36	24	22	24	20	39	183	102	215	158	44
11	17	36	24	22	23	20	39	153	170	215	132	54
12	17	38	35	23	22	22	44	127	205	209	125	56
13	18	37	43	25	21	23	50	123	219	356	106	58
14	18	40	38	26	21	23	60	151	249	537	98	56
15	18	37	35	27	19	21	70	151	245	621	99	44
16	20	42	33	27	19	22	70	127	209	526	101	41
17	20	40	35	26	19	24	75	117	207	442	93	32
18	19	41	34	25	18	26	90	117	187	434	110	23
19	21	40	30	26	19	27	110	127	172	523	112	21
20	26	32	29	25	18	27	100	146	168	606	109	20
21	26	30	25	24	18	30	100	151	153	609	86	18
22	26	29	30	22	19	25	100	173	144	514	86	18
23	28	28	28	20	19	23	130	197	139	453	83	17
24	32	30	28	21	21	22	210	175	144	392	79	18
25	29	31	28	20	21	22	300	164	153	325	81	18
26	26	31	26	21	21	22	290	141	146	315	74	27
27	24	32	28	22	21	29	282	120	144	285	62	26
28	24	31	30	21	19	38	294	109	177	280	52	26
29	24	29	34	22	-----	33	332	93	247	294	52	24
30	22	31	30	23	-----	28	276	89	296	287	55	24
31	16	-----	25	24	-----	28	-----	95	-----	299	89	-----
TOTAL	654	1,119	897	716	597	738	3,359	4,799	4,659	10,498	4,104	1,107
MEAN	21.1	37.3	28.9	23.1	21.3	23.8	112	155	155	339	132	36.9
MAX	32	52	43	27	25	38	332	238	296	621	278	74
MIN	16	28	19	20	18	19	28	89	69	155	52	17
AC-FT	1,300	2,220	1,780	1,420	1,180	1,460	6,660	9,520	9,240	20,820	8,140	2,200

CAL YR 1972 TOTAL 22,464 MEAN 61.4 MAX 322 MIN 12 AC-FT 44,560
WTR YR 1973 TOTAL 33,247 MEAN 91.1 MAX 621 MIN 16 AC-FT 65,950

NOTE.--No gage-height record Nov. 16 to Apr. 26.

LOCATION.--Lat 38°54'19", long 105°28'22", in SW¼ sec.20, T.13 S., R.72 W., Park County, on left bank 700 ft (210 m) downstream from Elevenmile Canyon Reservoir and 8.2 mi (13.2 km) southwest of town of Lake George.

GAGE.--Water-stage recorder and Parshall flume. Altitude of gage is 8,458 ft (2,578.0 m) from topographic map. Prior to Oct. 26, 1940, at site 1 mi (1.6 km) downstream at datum 8,423.95 ft (2,567.620 m) above mean sea level. adjustment of 1912.

Period of record: Maximum discharge, about 3,000 ft³/s (85 m³/s) Apr. 28, 1970 (gage height, 8.34 ft or 2.542 m, from floodmarks), by computation of outflow from Elevenmile Canyon Reservoir, no flow at times in January 1930, February 1931, November 1935.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	8.9	8.9	9.8	68	22	60	309	20	206	330	87
2	10	8.9	8.9	9.8	73	22	60	309	20	209	318	89
3	9.8	8.9	8.9	13	75	22	66	181	21	210	302	83
4	9.3	8.9	8.9	17	77	22	70	92	22	210	287	80
5	9.3	8.9	8.9	25	80	22	76	93	22	210	278	77
6	9.3	8.9	8.9	28	80	22	78	93	22	206	268	74
7	9.3	8.9	8.9	28	83	22	78	118	22	204	257	71
8	9.3	8.9	9.3	28	85	23	78	145	23	204	244	70
9	9.3	8.9	9.3	35	85	23	78	145	20	207	230	66
10	8.9	8.9	9.3	46	85	23	78	147	17	210	216	67
11	8.9	8.4	9.3	51	85	23	78	98	19	219	200	68
12	8.9	8.4	9.3	52	85	23	78	40	25	228	185	65
13	8.9	8.4	9.3	52	88	23	78	22	42	247	171	61
14	9.3	8.4	9.3	52	80	23	78	22	64	311	157	59
15	9.3	8.4	9.3	52	56	23	78	17	86	387	144	56
16	9.3	8.4	9.3	54	30	22	78	14	100	451	134	58
17	9.3	8.4	9.3	57	22	22	119	14	111	471	125	57
18	9.3	8.4	9.3	60	22	22	166	14	119	479	123	55
19	9.3	8.4	9.3	60	22	22	221	14	117	508	119	53
20	9.3	8.4	9.3	60	22	22	278	14	120	533	119	52
21	9.3	8.4	9.3	60	22	22	300	14	123	577	119	51
22	9.3	8.4	9.3	60	22	22	232	14	125	585	114	48
23	9.3	8.9	9.3	60	22	22	198	137	126	553	111	51
24	9.3	8.9	9.3	60	22	22	198	238	130	519	107	49
25	9.3	8.9	9.3	60	22	22	401	190	134	473	102	48
26	9.3	8.9	9.3	60	22	22	510	164	138	439	99	58
27	9.3	8.9	9.3	60	22	22	433	164	138	417	95	60
28	8.9	8.9	9.3	60	22	28	385	105	147	387	89	64
29	8.9	8.9	9.8	60	-----	28	357	69	160	370	86	59
30	8.9	8.9	9.8	61	-----	48	325	41	182	350	86	58
31	8.9	-----	9.8	65	-----	60	-----	20	-----	341	86	-----
TOTAL	287.0	261.0	287.0	1,455.6	1,479	766	5,313	3,057	2,415	10,921	5,301	1,894
MEAN	9.26	8.70	9.26	47.0	52.8	24.7	177	98.6	80.5	352	171	63.1
MAX	10	8.9	9.8	65	88	60	510	309	182	585	330	89
MIN	8.9	8.4	8.9	9.8	22	22	60	14	17	204	86	48
AC=FT	569	518	569	2,890	2,930	1,520	10,540	6,060	4,790	21,660	10,510	3,760
CAL YR 1972	TOTAL 17,008.0			MEAN 46.5	MAX 246	MIN 8.4	AC=FT 33,740					
WTR YR 1973	TOTAL 33,436.6			MEAN 91.6	MAX 585	MIN 8.4	AC=FT 66,320					

PLATTE RIVER BASIN

19

06700500 GOOSE CREEK ABOVE CHEESMAN LAKE, COLO.
(Known also as Lost Park Creek)

LOCATION.--Lat 39°12'32", long 105°18'11", in sec.2, T.10 S., R.71 W., Jefferson County, on right bank 1.0 mi (1.6 km) upstream from water line of Cheesman Lake at elevation 6,842 ft (2,085.4 m) and 1.7 mi (2.7 km) west of Cheesman Dam.

DRAINAGE AREA.--86.6 mi² (224 km²).

PERIOD OF RECORD.--August to December 1899 (published as "at Lake Cheesman"), October 1924 to current year (no winter records in some years). Monthly discharge only for some periods, published in WSP 1310.

GAGE.--Water-stage recorder and compound rectangular weir. Altitude of gage is 6,910 ft (2,106 m) from topographic map.

AVERAGE DISCHARGE.--36 years (1924-30, 1935-36, 1939-41, 1943-47, 1950-73), 28.9 ft³/s (0.818 m³/s), 20,940 acre-ft/yr (25.8 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 452 ft³/s (12.8 m³/s) May 22 (gage height, 3.96 ft or 1.207 m); minimum daily, 5.5 ft³/s (0.16 m³/s) Jan. 8-13, Feb. 23-26.
Period of record: Maximum discharge, 487 ft³/s (13.8 m³/s) June 9, 1957 (gage height, 4.11 ft or 1.253 m), from rating curve extended above 170 ft³/s (4.8 m³/s); maximum gage height, 4.57 ft (1.393 m) May 30, 1942; minimum discharge not determined.

REMARKS.--Records good except those for winter period, which are poor. Small diversions above station for irrigation of about 100 acres (404,700 m²).

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

REVISIONS (WATER YEARS).--WSP 1730: Drainage area. WSP 1918: 1953.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.8	9.5	12	7.0	7.0	6.0	8.0	43	313	93	60	31
2	10	13	11	7.0	7.0	6.0	9.0	40	325	88	69	24
3	10	17	11	7.0	6.5	6.0	8.5	45	328	82	67	21
4	9.8	16	11	7.0	6.5	6.0	8.0	55	334	79	70	19
5	9.5	16	11	7.0	6.5	6.0	9.5	67	332	75	67	19
6	9.8	16	11	6.5	6.5	6.0	11	75	319	69	59	19
7	10	16	10	6.0	6.5	6.0	10	110	321	66	48	18
8	16	15	10	5.5	6.5	6.0	9.0	130	326	70	48	18
9	21	15	10	5.5	6.5	6.0	10	150	342	72	41	18
10	18	14	10	5.5	6.5	6.0	10	175	361	69	36	19
11	15	15	10	5.5	6.5	6.0	11	201	389	59	37	21
12	13	12	9.5	5.5	6.5	6.0	12	213	403	57	40	21
13	13	12	9.5	5.5	6.5	6.0	13	242	403	118	36	18
14	12	14	9.5	6.0	6.0	6.5	15	247	403	110	35	17
15	12	14	9.0	6.0	6.0	6.5	17	213	399	99	34	17
16	12	12	9.0	6.5	6.0	6.0	14	218	383	76	31	17
17	12	12	8.5	6.5	6.0	7.0	15	236	357	65	30	17
18	11	12	8.5	6.5	6.0	7.0	16	262	308	61	28	16
19	12	12	8.0	6.5	6.0	7.0	17	310	259	91	28	16
20	12	12	8.0	6.5	6.0	6.5	13	357	223	114	27	16
21	12	11	8.0	6.5	6.0	7.5	14	391	198	78	27	15
22	12	11	8.0	6.5	6.0	7.0	14	436	180	69	27	15
23	13	11	8.0	6.5	5.5	6.5	16	431	165	61	26	14
24	13	11	8.0	6.5	5.5	7.0	25	410	152	55	24	15
25	12	11	7.5	6.5	5.5	8.0	31	403	138	53	24	16
26	12	11	8.0	7.0	5.5	7.5	30	393	127	53	23	22
27	11	11	8.0	7.0	6.0	8.0	31	379	119	54	22	20
28	11	11	8.0	7.0	6.0	7.5	35	355	117	60	21	22
29	12	10	8.0	7.0	-----	7.0	40	338	109	61	22	23
30	11	11	7.5	7.0	-----	7.0	45	334	100	65	26	26
31	9.2	-----	7.5	7.0	-----	7.0	-----	317	-----	63	27	-----
TOTAL	376.1	383.5	283.0	199.5	173.5	204.5	517.0	7,576	8,233	2,285	1,160	570
MEAN	12.1	12.8	9.13	6.44	6.20	6.60	17.2	244	274	73.7	37.4	19.0
MAX	21	17	12	7.0	7.0	8.0	45	436	403	118	70	31
MIN	9.2	9.5	7.5	5.5	5.5	6.0	8.0	40	100	53	21	14
AC-FT	746	761	561	396	344	406	1,030	15,030	16,330	4,530	2,300	1,130
CAL YR 1972	TOTAL	6,184.2	MEAN	16.9	MAX	66	MIN	5.5	AC-FT	12,270		
WTR YR 1973	TOTAL	21,961.1	MEAN	60.2	MAX	436	MIN	5.5	AC-FT	43,560		

PEAK DISCHARGE (BASE, 110 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
5-22	0530	3.96	452	7-20	0830	2.14	133
7-13	1600	2.36	163				

NOTE.--No gage-height record Nov. 2 to May 10.

PLATTE RIVER BASIN

06701500 SOUTH PLATTE RIVER BELOW CHEESMAN LAKE, COLO.

LOCATION.--Lat 39°12'33", long 105°16'02", in SE¼NW¼ sec.6, T.10 S., R.70 W., Jefferson County, on left bank 1,400 ft (430 m) downstream from toe of Cheesman Dam and 3.8 mi (6.1 km) southwest of Deckers.

DRAINAGE AREA.--1,752 mi² (4,538 km²).

PERIOD OF RECORD.--October 1924 to current year. Monthly discharge only for some periods, published in WSP 1310.

GAGE.--Water-stage recorder and Parshall flume. Datum of gage is 6,609.29 ft (2,014.512 m) above mean sea level. Prior to May 14, 1956, at site 370 ft (110 m) upstream at datum 0.50 ft (0.152 m) higher.

AVERAGE DISCHARGE.--49 years, 160 ft³/s (4.531 m³/s), 115,900 acre-ft/yr (143 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,290 ft³/s (36.5 m³/s) May 27 (gage height, 5.03 ft or 1.533 m); minimum daily, 14 ft³/s (0.40 m³/s) Mar. 31 to Apr. 3.
Period of record: Maximum discharge, 4,640 ft³/s (131 m³/s) Apr. 29, 1970 (gage height, 13.4 ft or 4.08 m, from floodmarks), by computation of outflow from Cheesman Lake; minimum daily determined, 1.6 ft³/s (0.045 m³/s) Apr. 8-14, 1957.

REMARKS.--Records good. Natural flow of stream affected by minor transmountain diversion from Colorado River basin through Boreas Pass ditch (see elsewhere in this report), Elevenmile Canyon Reservoir and Cheesman Lake (see elsewhere in this report), diversions for irrigation of about 40,000 acres (162 km²), and return flow from irrigated areas.

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

REVISIONS (WATER YEARS).--WSP 1310: 1949. WSP 1730: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	189	57	81	58	101	138	14	24	564	493	581	468
2	235	56	81	58	103	140	14	24	649	568	591	423
3	259	54	82	58	104	140	14	24	706	604	558	394
4	292	54	82	58	104	140	22	22	742	688	554	391
5	316	54	84	86	104	113	35	22	695	688	528	321
6	316	63	84	110	104	103	35	24	674	688	519	311
7	313	71	84	110	104	103	35	25	695	692	493	379
8	313	71	84	119	104	103	35	24	684	731	453	379
9	221	71	84	126	104	104	35	24	684	611	423	379
10	38	69	84	126	104	104	35	56	692	515	382	264
11	157	69	84	126	103	104	28	221	728	561	599	151
12	254	69	84	123	103	104	24	568	821	632	468	117
13	252	69	84	122	103	86	24	772	874	674	490	96
14	252	68	84	122	103	77	24	878	970	731	528	158
15	252	68	74	122	103	79	24	890	1,020	817	574	207
16	252	68	79	122	103	79	24	750	1,040	1,030	541	231
17	168	77	79	122	103	79	24	663	970	1,210	525	189
18	86	126	79	120	103	81	22	615	847	1,240	528	149
19	87	128	79	117	103	81	22	584	695	1,240	475	149
20	87	128	79	117	104	81	22	584	598	1,150	444	192
21	89	128	79	117	110	73	22	710	545	1,050	444	269
22	89	144	66	117	122	68	22	863	541	843	444	298
23	89	156	57	117	122	77	22	1,120	512	660	462	298
24	89	156	57	110	122	84	22	1,280	506	481	528	319
25	89	156	57	101	122	84	24	1,280	490	295	525	311
26	89	156	58	101	132	49	24	1,280	441	147	462	233
27	89	101	58	101	138	20	22	1,280	459	221	444	198
28	89	79	58	101	138	20	21	1,220	475	313	487	98
29	89	79	58	101	-----	20	22	982	481	513	481	32
30	91	79	58	101	-----	17	24	695	487	311	478	31
31	74	-----	58	101	-----	14	-----	581	-----	459	475	-----
TOTAL	5,303	2,724	2,299	3,290	3,073	2,565	737	18,085	20,285	20,656	15,284	7,435
MEAN	171	90.8	74.2	106	110	82.7	24.6	583	676	666	493	248
MAX	316	156	84	126	138	140	35	1,280	1,040	1,240	591	468
MIN	38	54	57	58	101	14	14	22	441	147	382	31
AC-FT	10,520	5,400	4,560	6,530	6,100	5,090	1,460	35,870	40,240	40,970	30,320	14,750
CAL YR 1972	TOTAL	55,124	MEAN	151	MAX	456	MIN	38	AC-FT	109,300		
WTR YR 1973	TOTAL	101,736	MEAN	279	MAX	1,280	MIN	14	AC-FT	201,800		

06706000 NORTH FORK SOUTH PLATTE RIVER BELOW GENEVA CREEK, AT GRANT, COLO.

LOCATION.--Lat 39°27'26", long 105°39'29", in NW¼ sec.10, T.7 S., R.74 W., Park County, on left bank at Grant, 1,550 ft (470 m) downstream from Geneva Creek and 1.3 mi (2.1 km) downstream from east portal of Harold D. Roberts tunnel.

DRAINAGE AREA.--127 mi² (329 km²).

PERIOD OF RECORD.--July 1908 to November 1913 (published as "at Cassells"), June 1942 to current year. Monthly discharge only for some periods, published in WSP 1310. December 1913 to March 1918 equivalent records many be obtained by summation of flow of North Fork South Platte River at Grant (above Geneva Creek) and Geneva Creek at Grant.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 8,560.81 ft (2,609.335 m) above mean sea level. See WSP 1710 or 1730 for history of changes prior to July 23, 1948. July 23, 1948, to Nov. 15, 1968, water-stage recorder at site 50 ft (15 m) downstream at datum 3.49 ft (1.064 m) lower.

AVERAGE DISCHARGE.--36 years, 72.2 ft³/s (2.045 m³/s), 52,310 acre-ft/yr (64.5 hm³/yr), adjusted for inflow from Harold D. Roberts tunnel since 1964.

EXTREMES.--Current year: Maximum discharge, 530 ft³/s (15.0 m³/s) June 13 (gage height, 2.02 ft or 0.616 m); minimum daily, 15 ft³/s (0.42 m³/s) Jan. 28.

Period of record: Maximum discharge observed, 990 ft³/s (28.0 m³/s) June 7, 8, 1912 (gage height, 3.30 ft or 1.006 m, site and datum then in use), from rating curve extended above 530 ft³/s (15 m³/s); maximum gage height, 4.72 ft (1.439 m), site and datum then in use, Feb. 11, 1952 (backwater from ice); minimum daily discharge, 6.5 ft³/s (0.18 m³/s) Nov. 27, 1958.

REMARKS.--Records good except those for winter period, which are poor. Small diversions above station for irrigation of about 200 acres (809,400 m²). Transmountain diversions from Colorado River basin to North Fork South Platte River above station through Harold D. Roberts tunnel (see elsewhere in this report).

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

REVISIONS.--WSP 956: Drainage area at site at Cassells. WSP 1116: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37	30	29	34	16	21	18	28	193	225	130	63
2	37	33	30	36	17	21	19	26	173	213	121	61
3	36	33	29	36	18	20	19	28	173	197	127	58
4	36	34	27	36	18	20	18	34	177	185	134	54
5	36	33	23	36	18	20	19	41	162	193	127	52
6	36	34	22	34	17	19	19	36	177	181	112	49
7	37	33	32	34	17	21	18	33	233	173	100	44
8	44	33	41	33	16	24	17	37	298	181	97	42
9	39	32	39	33	17	24	18	56	344	189	91	44
10	36	31	37	33	18	24	19	76	395	169	85	45
11	34	31	37	33	18	24	23	94	380	162	85	49
12	34	30	39	33	17	23	37	103	370	165	82	45
13	34	27	41	33	16	23	44	109	400	217	79	42
14	33	25	41	34	16	24	45	103	405	241	79	41
15	33	27	42	36	16	24	44	100	344	221	79	41
16	34	27	42	36	17	23	33	109	298	193	73	41
17	33	27	42	36	17	23	21	124	273	177	76	45
18	33	27	42	36	17	23	23	151	265	205	79	41
19	34	27	42	36	17	23	22	197	237	273	73	37
20	33	27	42	36	17	22	23	217	225	217	70	36
21	31	27	42	35	17	21	22	229	237	201	70	33
22	30	27	42	16	17	20	21	221	237	189	70	33
23	30	27	42	17	19	19	21	189	241	165	65	33
24	27	27	42	19	20	22	22	189	253	151	65	33
25	30	27	42	20	20	22	22	185	253	144	63	34
26	27	28	45	20	20	21	22	169	257	140	63	39
27	28	26	42	18	20	21	26	144	261	151	61	37
28	31	24	37	15	21	20	30	140	257	144	61	39
29	28	26	37	18	-----	20	33	154	245	144	63	37
30	27	27	36	20	-----	19	34	185	241	144	65	39
31	26	-----	33	18	-----	18	-----	185	-----	134	70	-----
TOTAL	1,024	867	1,159	910	494	669	752	3,692	8,004	5,684	2,615	1,287
MEAN	33.0	28.9	37.4	29.4	17.6	21.6	25.1	119	267	183	84.4	42.9
MAX	44	34	45	36	21	24	45	229	405	273	134	63
MIN	26	24	22	15	16	18	17	26	162	134	61	33
AC-FT	2,030	1,720	2,300	1,800	980	1,330	1,490	7,320	15,880	11,270	5,190	2,550

CAL YR 1972 TOTAL 40,379 MEAN 110 MAX 435 MIN 11 AC-FT 80,090
WTR YR 1973 TOTAL 27,157 MEAN 74.4 MAX 405 MIN 15 AC-FT 53,870

PLATTE RIVER BASIN

06707000 NORTH FORK SOUTH PLATTE RIVER AT SOUTH PLATTE, COLO.

LOCATION.--Lat 39°24'32", long 105°10'31", in SW¼ sec.25, T.7 S., R.70 W., Jefferson County, on left bank 0.2 mi (0.3 km) west of South Platte and 0.3 mi (0.5 km) upstream from mouth.

DRAINAGE AREA.--479 mi² (1,241 km²).

PERIOD OF RECORD.--June 1909 to September 1910, April 1913 to current year. Monthly discharge only for some periods, published in WSP 1310.

GAGE.--Water-stage recorder. Datum of gage is 6,090.55 ft (1,856.400 m) above mean sea level, adjustment of 1912. Prior to May 13, 1925, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--61 years, 156 ft³/s (4.418 m³/s), 113,000 acre-ft/yr (139 hm³/yr), adjusted for inflow from Harold D. Roberts tunnel since 1964.

EXTREMES.--Current year: Maximum discharge, 1,550 ft³/s (43.9 m³/s) May 22 (gage height, 4.96 ft or 1.512 m); minimum daily, 37 ft³/s (1.05 m³/s) Feb. 9.
Period of record: Maximum discharge, 2,050 ft³/s (58.1 m³/s) June 13, 1949 (gage height, 6.30 ft or 1.920 m); minimum observed, 4.0 ft³/s (0.11 m³/s) Dec. 8, 1932 (discharge measurement).

REMARKS.--Records good except those for winter period, which are poor. Small diversions above station for irrigation of about 2,000 acres (8.09 km²). Transmountain diversions from Colorado River basin to North Fork South Platte River above station through Harold D. Roberts tunnel (see elsewhere in this report).

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

REVISIONS: (WATER YEARS).--WSP 1310: 1930(M), 1933(M), 1942(M). WSP 1730: 1954(M), drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	77	50	61	64	58	65	56	264	766	518	295	169
2	75	67	60	62	51	61	58	246	752	490	295	156
3	75	63	56	60	52	57	54	246	740	465	277	150
4	75	64	56	60	54	53	54	286	752	440	322	147
5	77	69	50	54	54	55	55	322	746	420	300	147
6	78	74	40	56	51	55	60	518	720	395	254	125
7	80	64	46	54	47	47	77	740	746	376	259	114
8	91	66	50	55	47	50	74	759	804	380	254	107
9	101	82	55	57	37	50	70	850	906	410	234	105
10	90	47	57	58	44	52	69	983	1,060	367	222	112
11	80	60	57	53	48	52	69	1,020	1,170	349	214	114
12	78	61	67	65	50	58	78	1,050	1,120	344	218	112
13	77	52	77	72	47	65	97	1,070	1,180	440	210	101
14	75	50	71	76	47	60	105	950	1,320	512	222	93
15	75	60	75	80	40	55	120	900	1,190	507	218	91
16	74	55	70	80	40	55	114	906	969	445	214	91
17	72	60	83	80	40	61	120	927	844	395	206	93
18	72	63	93	78	40	66	134	990	824	390	203	91
19	72	61	82	80	43	70	144	1,170	778	570	200	86
20	77	55	88	77	40	70	132	1,280	752	496	192	82
21	75	52	75	74	40	74	139	1,320	733	405	189	80
22	74	51	86	67	40	64	134	1,390	708	385	192	80
23	74	52	82	44	42	59	147	1,130	690	349	186	78
24	74	54	82	49	49	58	172	1,020	678	322	182	80
25	72	52	82	46	52	56	196	976	660	308	178	80
26	70	55	81	50	55	58	186	941	654	300	169	105
27	66	54	83	50	55	63	189	871	666	313	166	99
28	69	54	85	44	50	61	218	772	642	308	166	105
29	67	56	80	51	-----	55	254	740	594	304	166	118
30	66	60	70	55	-----	55	277	811	552	322	166	107
31	54	-----	67	60	-----	55	-----	772	-----	322	172	-----
TOTAL	2,332	1,763	2,167	1,911	1,313	1,815	3,652	26,220	24,716	12,347	6,741	3,218
MEAN	75.2	58.8	69.9	61.6	46.9	58.5	122	846	824	398	217	107
MAX	101	82	93	80	58	74	277	1,390	1,320	570	322	169
MIN	54	47	40	44	37	47	54	246	552	300	166	78
AC=FT	4,630	3,500	4,300	3,790	2,600	3,600	7,240	52,010	49,020	24,490	13,370	6,380

CAL YR 1972 TOTAL 62,382 MEAN 170 MAX 636 MIN 25 AC=FT 123,700

WTR YR 1973 TOTAL 88,195 MEAN 242 MAX 1,390 MIN 37 AC=FT 174,900

NOTE.--No gage-height record Dec. 8 to Mar. 20.

06707500 SOUTH PLATTE RIVER AT SOUTH PLATTE, COLO.

LOCATION.--Lat 39°24'33", long 105°10'10", in SE¼ sec.25, T.7 S., R.70 W., Jefferson County, on left bank at South Platte, 200 ft (61 m) downstream from bridge on State Highway 75 and 400 ft (120 m) downstream from North Fork.

DRAINAGE AREA.--2,579 mi² (6,680 km²).

PERIOD OF RECORD.--July 1887 to September 1891, May to October 1892, October 1895 to September 1897, October 1898 to June 1900, October 1900 to current year. Monthly discharge only for some periods, published in WSP 1310. Published as "at" or "near Deansbury," "at Deansbury and Platte Canyon," "at" or "near Platte Canyon," prior to 1901, and as "below North Fork, at South Platte" 1914.

GAGE.--Water-stage recorder. Datum of gage is 6,078.43 ft (1,852.705 m) above mean sea level, adjustment of 1912. See WSP 1710 or 1730 for history of changes prior to Mar. 14, 1910.

EXTREMES.--Current year: Maximum discharge, 3,450 ft³/s (97.7 m³/s) May 22 (gage height, 6.85 ft or 2.088 m); minimum daily, 92 ft³/s (2.61 m³/s) Apr. 4.

Period of record: Maximum discharge, 6,320 ft³/s (179 m³/s) June 8, 1921 (gage height, 8.95 ft or 2.728 m), from rating curve extended above 3,500 ft³/s (99 m³/s); minimum daily determined, 10 ft³/s (0.28 m³/s) Dec. 5, 1899.

REMARKS.--Records good except those for winter period, which are fair. Natural flow of stream affected by transmountain diversions through Boreas Pass ditch and Harold D. Roberts tunnel (see elsewhere in this report), Elevenmile Canyon Reservoir and Cheesman Lake (see elsewhere in this report), diversions above station for irrigation of about 45,000 acres (182 km²) and return flow from irrigated areas.

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

REVISIONS (WATER YEARS).--WSP 306: 1910. WSP 1310: 1887-91, 1893, 1896, 1900, 1904, 1915(M), 1922(M), 1936(M). WSP 1730: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	286	132	180	135	175	225	94	588	1,760	1,090	875	681
2	301	150	159	135	165	220	102	548	1,790	1,150	885	640
3	361	159	148	130	170	215	95	536	1,720	1,120	845	580
4	378	150	154	130	175	210	92	576	1,820	1,210	900	576
5	420	159	125	135	175	205	110	658	1,760	1,190	865	540
6	420	168	110	150	170	175	150	1,080	1,620	1,160	845	456
7	420	154	125	175	165	165	150	1,770	1,660	1,140	805	520
8	431	161	150	180	165	170	127	1,860	1,790	1,180	762	520
9	431	185	155	190	150	170	146	2,210	1,910	1,140	712	512
10	186	146	150	195	160	173	140	2,370	2,040	941	663	473
11	144	157	150	190	165	173	164	2,670	2,200	936	636	347
12	347	168	180	205	170	182	178	3,100	2,260	1,000	735	292
13	350	150	180	215	165	190	218	3,340	2,380	1,150	735	248
14	350	127	170	220	165	154	268	3,330	2,560	1,280	776	240
15	350	150	170	225	155	148	307	3,150	2,400	1,360	830	322
16	350	138	160	225	155	148	268	3,100	2,230	1,440	810	331
17	321	122	180	225	155	159	283	2,960	2,050	1,590	780	350
18	182	162	195	220	155	168	292	2,910	1,900	1,630	771	280
19	182	195	180	220	160	175	319	3,040	1,660	1,880	748	268
20	182	198	190	215	155	175	289	3,080	1,470	1,730	681	277
21	180	200	170	210	160	192	289	3,070	1,350	1,520	681	340
22	180	175	175	200	165	170	283	3,320	1,300	1,330	676	400
23	178	208	170	175	175	164	298	3,260	1,260	1,120	668	396
24	180	218	165	180	185	170	331	3,170	1,240	925	726	403
25	182	222	160	165	190	178	389	3,040	1,210	735	726	431
26	178	228	155	165	200	170	378	2,920	1,170	568	690	403
27	173	238	160	165	210	125	382	2,750	1,170	528	627	358
28	178	132	165	155	205	114	424	2,590	1,200	668	681	328
29	175	136	160	170	-----	103	500	2,360	1,170	654	686	253
30	168	154	140	175	-----	100	576	2,170	1,140	676	676	220
31	148	-----	140	180	-----	93	-----	1,890	-----	762	686	-----
TOTAL	8,312	5,042	4,971	5,655	4,760	5,179	7,642	73,416	51,190	34,803	23,182	11,985
MEAN	268	168	160	182	170	167	255	2,368	1,706	1,123	748	400
MAX	431	238	195	225	210	225	576	3,340	2,560	1,880	900	681
MIN	144	122	110	130	150	93	92	536	1,140	528	627	220
AC-FT	16,490	10,000	9,860	11,220	9,440	10,270	15,160	145,600	101,500	69,030	45,980	23,770
CAL YR 1972	TOTAL 122,365		MEAN 334		MAX 1,090		MIN 110		AC-FT 242,700			
WTR YR 1973	TOTAL 236,137		MEAN 647		MAX 3,340		MIN 92		AC-FT 468,400			

LOCATION (REVISED).--Lat 39°29'18", long 105°05'32", in NE¼ sec.34, T.6 S., R.69 W., Jefferson County, on left bank 168 ft (51 m) downstream from bridge on State Highway 221, 0.4 mi (0.6 km) south of Waterton, 4.7 mi (7.6 km) west of Louviers, and 6 mi (10 km) upstream from Plum Creek.

GAGE.--Water-stage recorder. Datum of gage is 5,484.43 ft (1,671.654 m) above mean sea level, adjustment of 1912.

EXTREMES.--Current year: Maximum discharge, 4,030 ft³/s (114 m³/s) May 6 (gage height, 4.35 ft or 1.326 m); minimum daily, 11 ft³/s (0.31 m³/s) Nov. 11, Dec. 2, 3.
Period of record: Maximum discharge, 5,700 ft³/s (161 m³/s) Apr. 23, 1942 (gage height, 5.68 ft or 1.731 m); minimum daily, 0.1 ft³/s (0.003 m³/s) Mar. 6, 7, 1933, Feb. 28 to Mar. 2, Mar. 20, 1938.

REMARKS.--Records good except those for winter period, which are fair. Natural flow of stream affected by transmountain diversions (see elsewhere in this report), Elevenmile Canyon Reservoir and Cheesman Lake (see elsewhere in this report), diversions for irrigation of about 55,000 acres (223 km²) and municipal use, and return flow from irrigated areas.

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

DAY	JCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	46	33	12	14	15	22	14	422	1,580	573	313	282
2	50	36	11	15	15	24	15	383	1,400	615	361	277
3	56	27	11	15	15	25	94	389	1,200	615	323	287
4	58	26	12	15	15	22	45	417	1,300	705	400	184
5	53	26	20	16	14	24	14	514	1,240	662	380	120
6	50	19	21	15	17	20	19	1,750	1,050	652	370	56
7	53	17	21	15	17	16	29	3,000	979	627	361	130
8	56	15	21	15	18	15	29	2,540	1,060	621	405	82
9	56	14	20	15	18	15	27	2,790	1,170	603	302	72
10	72	12	20	15	19	14	20	2,660	1,340	394	177	64
11	61	11	20	15	19	12	19	2,910	1,470	383	122	96
12	74	12	20	15	19	12	22	3,340	1,610	474	354	82
13	56	14	20	15	19	12	26	3,490	1,840	615	417	48
14	53	11	19	17	20	12	27	3,340	2,160	744	389	48
15	53	12	20	19	20	12	26	2,960	2,020	848	400	56
16	53	14	20	21	20	12	24	2,800	1,670	889	372	58
17	53	15	19	24	19	12	60	2,460	1,440	1,020	313	46
18	50	12	19	24	19	14	114	2,150	1,330	1,060	297	42
19	53	12	19	20	19	15	182	2,290	1,130	808	262	31
20	58	14	19	19	20	12	223	2,480	970	776	168	31
21	61	13	20	17	17	12	228	2,550	872	1,210	177	33
22	61	14	19	17	18	12	177	2,900	800	1,110	143	35
23	61	14	19	16	18	12	95	2,800	768	1,050	169	27
24	64	14	17	15	20	14	58	2,700	744	816	366	34
25	64	14	15	15	20	15	177	2,540	720	633	344	35
26	58	14	15	14	26	14	204	2,500	675	479	243	44
27	58	12	14	15	26	14	182	2,400	652	350	154	40
28	64	12	14	17	22	14	218	2,150	660	233	292	46
29	61	14	15	18	-----	14	313	2,000	652	182	282	134
30	54	15	16	19	-----	14	389	1,950	615	182	277	114
31	29	-----	15	19	-----	14	-----	1,800	-----	228	282	-----
TOTAL	1,749	488	543	521	524	471	3,070	69,375	35,117	20,177	9,215	2,634
MEAN	56.4	16.3	17.5	16.8	18.7	15.2	102	2,238	1,171	651	297	87.8
MAX	74	36	21	24	26	25	389	3,490	2,160	1,210	417	287
MIN	29	11	11	14	14	12	14	383	615	182	122	27
AC=FT	3,470	968	1,080	1,030	1,040	934	6,090	137,600	69,650	40,020	18,280	5,220
CAL YR 1972	TOTAL	36,168	MEAN	98.8	MAX	580	MIN	10	AC=FT	71,740		
WTR YR 1973	TOTAL	143,884	MEAN	394	MAX	3,490	MIN	11	AC=FT	285,400		

PLATTE RIVER BASIN

25

06709500 PLUM CREEK NEAR LOUVIERS, COLO.

LOCATION.--Lat 39°29'04", long 105°00'07", in SE¼ sec.33, T.6 S., R.68 W., Douglas County, on downstream side of bridge on county road from U.S. Highway 85 to Louviers, 0.8 mi (1.3 km) northeast of Louviers, 1.2 mi (1.9 km) downstream from Indian Creek, and 7.5 mi (12.1 km) upstream from mouth.

DRAINAGE AREA.--302 mi² (782 km²).

PERIOD OF RECORD.--October 1947 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5,585 ft (1,702 m) from topographic map. Prior to Feb. 12, 1957, at site 2.5 mi (4.0 km) downstream and Nov. 7, 1965, to Aug. 6, 1966, at site 2.2 mi (3.5 km) downstream at different datums. Feb. 12, 1957, to Nov. 6, 1965, at present site at about present datum.

AVERAGE DISCHARGE.--26 years, 27.4 ft³/s (0.776 m³/s), 19,850 acre-ft/yr (24.5 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 3,900 ft³/s (110 m³/s) May 6 (gage height, 5.75 ft or 1.753 m); minimum daily, 0.20 ft³/s (0.006 m³/s) Oct. 16.

Period of record: Maximum discharge, 154,000 ft³/s (4,360 m³/s) June 16, 1965 (gage height, 22.4 ft or 6.83 m, from floodmarks), by slope-area measurement of peak flow; no flow at times in 1951-52, 1956-60, 1963-64.

REMARKS.--Records poor. Diversions above station for irrigation.

REVISIONS (WATER YEARS).--WSP 1730: 1958, drainage area at site 2.5 mi (4.0 km) downstream. WSP 1918: 1957(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.34	1.5	11	8.0	12	15	35	391	566	35	46	14
2	.34	12	20	7.0	11	15	46	313	669	33	44	13
3	.34	21	15	6.6	9.4	18	46	391	447	30	68	13
4	.34	19	16	6.0	14	20	35	339	378	29	65	12
5	.34	14	13	6.2	17	20	37	464	352	31	62	9.4
6	.48	12	11	6.4	15	20	50	2,020	365	35	78	10
7	.48	12	9.0	6.6	16	20	74	1,780	326	33	71	11
8	.62	14	10	6.8	12	21	74	1,020	300	33	48	12
9	.48	20	11	7.0	10	26	78	1,640	290	39	55	14
10	.48	12	9.0	7.5	12	29	65	1,050	220	33	50	12
11	.48	6.8	7.0	10	14	26	78	830	240	35	29	14
12	.62	11	7.0	10	15	26	125	1,050	220	32	19	13
13	.62	7.2	7.0	9.4	14	31	116	600	158	37	18	12
14	.62	8.2	7.2	14	14	25	130	692	65	39	18	10
15	.48	12	7.4	14	11	23	193	1,140	98	33	19	9.5
16	.20	9.4	7.0	13	12	23	107	1,590	116	33	20	10
17	.34	9.4	6.5	13	12	22	93	1,540	107	46	14	11
18	.48	9.4	7.4	12	13	23	165	1,420	112	41	13	12
19	.48	7.6	8.0	12	14	33	165	1,260	112	41	14	12
20	.62	6.8	9.0	5.7	15	28	125	892	98	41	13	10
21	.62	9.4	10	4.2	16	26	121	830	102	37	14	9.0
22	.76	12	11	5.0	14	25	107	1,640	107	35	13	8.4
23	.76	12	12	6.0	13	24	102	1,020	112	42	8.2	7.8
24	.76	12	12	8.9	13	23	172	1,080	52	42	9.4	7.5
25	.76	12	13	8.7	14	32	326	807	74	46	10	9.0
26	1.0	15	12	9.0	12	33	250	692	55	41	11	12
27	1.8	8.2	12	5.0	15	37	193	481	68	37	11	20
28	2.5	5.7	14	8.0	15	44	200	270	68	37	12	30
29	2.5	6.1	12	13	-----	42	260	417	52	32	12	50
30	2.5	6.1	8.8	11	-----	37	365	830	52	35	12	46
31	3.6	-----	8.0	12	-----	32	-----	646	-----	50	14	-----
TOTAL	26,54	323.8	323.3	272.0	374.4	819	3,933	29,135	5,981	1,143	890.6	433.6
MEAN	.86	10.8	10.4	8.77	13.4	26.4	131	940	199	36.9	28.7	14.5
MAX	3.6	21	20	14	17	44	365	2,020	669	50	78	50
MIN	.20	1.5	6.5	4.2	9.4	15	35	270	52	29	8.2	7.5
AC-F T	53	642	641	540	743	1,620	7,800	57,790	11,860	2,270	1,770	860

CAL YR 1972 TOTAL 3,115.44 MEAN 8.5 MAX 89 MIN .20 AC-F T 6,180
WTR YR 1973 TOTAL 43,655.24 MEAN 120 MAX 2,020 MIN .20 AC-F T 86,590

PEAK DISCHARGE (BASE, 220 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
5-6	1845	5.75	3,900	5-30	1545	3.54	1,220
5-16	0530	3.65	2,640				

PLATTE RIVER BASIN

06710000 SOUTH PLATTE RIVER AT LITTLETON, COLO.

LOCATION.--Lat 39°37'08", long 105°01'07", in NE¼ sec.17, T.5 S., R.68 W., Arapahoe County, on left bank 200 ft (61 m) downstream from Crestline Avenue Bridge at Littleton and 3.1 mi (5.0 km) upstream from Bear Creek.

DRAINAGE AREA.--3,069 mi² (7,949 km²).

PERIOD OF RECORD.--July 1941 to current year.

GAGE.--Water-stage recorder. Datum of gage is 5,304.36 ft (1,616.769 m) above mean sea level (levels by Corps of Engineers). Prior to Nov. 23, 1948, nonrecording gage on bridge 200 ft (61 m) upstream at datum 1.00 ft (0.305 m) higher. Nov. 23, 1948, to Sept. 30, 1951, water-stage recorder at present site at datum 1.00 ft (0.305 m) higher.

AVERAGE DISCHARGE.--32 years, 236 ft³/s (6.684 m³/s), 171,000 acre-ft/yr (211 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 11,000 ft³/s (312 m³/s) May 6 (gage height, 11.12 ft or 3.389 m); minimum daily, 22 ft³/s (0.62 m³/s) Sept. 25.

Period of record: Maximum discharge, about 110,000 ft³/s (3,100 m³/s) June 16, 1965 (gage height, 15.45 ft or 4.709 m, from floodmarks), estimated from contracted-opening and flow-over-road measurements of peak flow at point 1.6 mi (2.6 km) downstream and slope-area measurement of peak flow on Plum Creek at point 12.7 mi (20.4 km) upstream; minimum daily, 7.2 ft³/s (0.20 m³/s) Oct. 2, 1956.

Stage and discharge of the flood of June 16, 1965, are the greatest since at least 1894.

REMARKS.--Records good. Natural flow of stream affected by transmountain diversions, storage reservoirs, power developments, diversions for irrigation and municipal use; and return flow from irrigated areas. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1730: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	45	61	40	34	48	74	72	886	2,090	715	472	280
2	43	56	51	42	51	76	76	766	2,040	758	466	259
3	45	66	52	42	51	76	142	766	1,880	729	424	271
4	51	80	48	38	51	70	152	758	2,050	886	424	227
5	52	76	47	44	51	68	88	910	2,080	862	466	119
6	51	72	47	46	51	59	95	4,150	1,790	830	418	93
7	49	64	46	46	51	58	117	6,550	1,730	758	360	109
8	56	63	45	48	52	59	98	4,350	1,790	798	360	112
9	58	66	42	48	52	58	109	4,480	1,940	838	330	86
10	59	63	40	48	52	61	102	3,780	2,060	532	184	80
11	66	58	38	46	52	63	130	3,980	2,200	430	130	64
12	70	59	39	42	52	66	158	4,500	2,200	478	227	147
13	63	59	41	40	52	74	190	4,450	2,330	617	412	100
14	58	54	42	45	51	68	293	4,350	2,710	838	350	64
15	54	52	42	49	48	64	293	4,060	2,680	999	394	68
16	52	51	41	52	45	61	250	3,780	2,230	1,110	340	95
17	54	51	40	54	43	59	246	3,340	1,900	1,180	306	88
18	56	51	42	54	45	61	330	3,820	1,750	1,260	311	74
19	56	49	40	56	51	82	466	3,680	1,460	1,510	259	64
20	56	51	40	54	51	82	448	4,080	1,260	1,620	190	51
21	56	52	42	49	52	76	412	4,120	1,110	1,460	212	48
22	59	51	43	48	52	91	376	5,280	1,030	1,300	161	43
23	61	48	45	47	52	84	311	4,750	958	1,170	158	34
24	61	46	45	45	58	80	223	4,200	886	990	288	26
25	61	45	42	45	70	82	430	3,920	862	736	311	22
26	59	46	39	48	76	84	520	3,580	830	532	271	40
27	61	51	38	46	76	84	460	3,200	790	400	107	76
28	63	51	42	46	80	84	490	2,770	838	267	216	107
29	68	48	45	45	-----	82	592	2,330	830	187	263	293
30	78	39	42	45	-----	80	708	2,490	774	261	275	204
31	70	-----	38	46	-----	74	-----	2,350	-----	340	259	-----
TOTAL	1,791	1,679	1,324	1,438	1,516	2,240	8,377	106,426	49,078	25,391	9,344	3,344
MEAN	57.8	56.0	42.7	46.4	54.1	72.3	279	3,433	1,636	819	301	111
MAX	78	80	52	56	80	91	708	6,550	2,710	1,620	472	293
MIN	43	39	38	34	43	58	72	758	774	187	107	22
AC=FT	3,550	3,330	2,630	2,850	3,010	4,440	16,620	211,100	97,350	50,360	18,530	6,630

CAL YR 1972 TOTAL 40,708 MEAN 111 MAX 736 MIN 14 AC=FT 80,740
 WTR YR 1973 TOTAL 211,948 MEAN 581 MAX 6,550 MIN 22 AC=FT 420,400

06710500 BEAR CREEK AT MORRISON, COLO.

LOCATION.--Lat 39°39'11", long 105°11'43", in SE¼SW¼ sec.35, T.4 S., R.70 W., Jefferson County, on left bank at Morrison, 180 ft (55 m) upstream from bridge on U.S. Highway 285 and 0.2 mi (0.3 km) upstream from Mount Vernon Creek.

DRAINAGE AREA.--164 mi² (425 km²).

PERIOD OF RECORD.--September 1887 to September 1891, May 1895 to December 1901, February 1902 (gage heights only), October 1919 to current year. No winter records for water years 1888-90, 1896, 1898, 1900. Monthly discharge only for some periods, published in WSP 1310. Published as "near Morrison" 1900-1902, as "at Starbuck" 1919-28, and as "at Idledale" 1929-34.

GAGE.--Water-stage recorder. Datum of gage is 5,780.43 ft (1,761.875 m) above mean sea level. See WSP 1710 or 1730 for history of changes prior to Oct. 1, 1934. Oct. 1, 1934, to Oct. 10, 1961, water-stage recorder at site 80 ft (24 m) downstream at same datum.

AVERAGE DISCHARGE.--58 years (1890-91, 1896-97, 1898-99, 1900-1901, 1919-73), 54.2 ft³/s (1.535 m³/s), 39,270 acre-ft/yr (48.3 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,480 ft³/s (41.9 m³/s) May 6 (gage height, 7.30 ft or 2.225 m, from floodmarks); minimum daily, 12 ft³/s (0.34 m³/s) Dec. 6.
Period of record: Maximum discharge, 8,600 ft³/s (244 m³/s, estimated, July 24, 1896; minimum daily, 0.8 ft³/s (0.023 m³/s) Nov. 26, 1939, result of freezeup.

REMARKS.--Records good except those for winter period, which are fair. Small diversions for irrigation of about 1,000 acres (4.05 km²) above station.

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

REVISIONS (WATER YEARS).--WSP 976: 1942. WSP 1310: 1888, 1890-91, 1898, 1935(M). WSP 1730: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	31	23	15	16	22	25	201	291	140	94	37
2	25	35	26	15	17	24	28	187	291	134	98	33
3	24	33	20	15	16	23	27	201	243	126	84	32
4	25	29	17	15	14	21	26	251	259	113	86	30
5	25	30	14	15	16	21	32	320	239	113	86	30
6	27	29	12	16	15	19	43	890	219	110	76	30
7	27	22	15	16	15	22	37	1,090	227	106	73	29
8	30	27	17	15	15	19	32	789	273	108	71	27
9	34	32	18	14	16	17	38	757	282	113	64	30
10	30	19	14	15	18	18	33	864	330	103	61	32
11	26	28	14	16	18	22	40	890	380	90	62	32
12	27	30	15	19	15	27	56	725	375	90	69	44
13	26	24	16	25	14	30	68	643	375	128	62	35
14	25	22	16	30	15	24	84	594	422	167	59	30
15	27	18	16	24	15	24	94	479	375	161	58	31
16	27	19	16	19	16	24	73	497	305	154	55	33
17	24	19	17	18	17	28	80	503	277	120	53	35
18	26	21	18	16	18	30	86	534	259	126	53	31
19	28	22	18	16	17	29	90	702	227	237	52	27
20	27	23	18	17	19	28	76	717	219	201	51	24
21	30	23	18	16	16	35	76	672	201	164	46	24
22	29	20	19	15	18	34	74	687	187	151	49	23
23	28	18	18	15	19	28	86	444	177	131	45	23
24	28	17	17	16	17	30	101	385	174	120	42	24
25	25	17	17	17	16	30	123	365	167	118	40	22
26	23	18	18	18	21	27	110	350	148	108	37	31
27	24	20	17	17	24	30	123	325	158	108	34	30
28	26	19	17	15	24	28	174	300	161	113	35	38
29	25	17	17	16	-----	24	208	291	154	101	40	36
30	23	20	16	17	-----	24	211	325	148	118	37	40
31	14	-----	15	16	-----	22	-----	305	-----	123	40	-----
TOTAL	810	702	529	529	477	784	2,354	16,283	7,543	3,995	1,812	983
MEAN	26.1	23.4	17.1	17.1	17.0	25.3	78.5	525	251	129	56.5	32.8
MAX	34	35	26	30	24	35	211	1,090	422	237	98	56
MIN	14	17	12	14	14	17	25	187	148	90	34	22
AC-FT	1,610	1,390	1,050	1,050	946	1,560	4,670	32,300	14,960	7,920	3,590	1,950

CAL YR 1972 TOTAL 10,222.0 MEAN 27.9 MAX 116 MIN 6.0 AC-FT 20,280
WTR YR 1973 TOTAL 36,801.0 MEAN 101 MAX 1,090 MIN 12 AC-FT 72,990

PEAK DISCHARGE (BASE, 250 CFS).--May 6 (1500) 1,480 cfs (7.30 ft); July 19 (2200) 455 cfs (5.77 ft).

PLATTE RIVER BASIN

06711500 BEAR CREEK AT MOUTH, AT SHERIDAN, COLO.

LOCATION.--Lat 39°39'08", long 105°01'57", in NW¼NW¼ sec.5, T.5 S., R.68 W., Arapahoe County, on left bank just downstream from bridge on road to Fort Logan Mental Health Center, at Highway Department maintenance building at northwest city limits of Sheridan, 1.3 mi (2.1 km) upstream from mouth, and 2.1 mi (3.4 km) west of city hall in Englewood.

DRAINAGE AREA.--260 mi² (673 km²).

PERIOD OF RECORD.--April to November 1914, March 1927 to current year. Monthly discharge only prior to October 1933, published in WSP 1310. Published as "at Sheridan Junction" 1934-41.

GAGE.--Water-stage recorder. Altitude of gage is 5,295 ft (1,614 m) from topographic map. See WSP 1710 or 1730 for history of changes prior to Oct. 9, 1953. Oct. 9, 1953, to Aug. 6, 1969, water-stage recorder at present site at datum 1.0 (0.305 m) higher.

AVERAGE DISCHARGE.--46 years (1927-73), 38.6 ft³/s (1.093 m³/s), 27,970 acre-ft/yr (34.5 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 3,750 ft³/s (106 m³/s) May 6 (gage height, 8.34 ft or 2.542 m); minimum daily, 4.0 ft³/s (0.11 m³/s) Oct. 3.
Period of record: Maximum discharge, 8,150 ft³/s (231 m³/s) May 7, 1969 (gage height, 10.5 ft or 3.20 m, present datum, from floodmarks), from rating curve extended above 3,400 ft³/s (96 m³/s); no flow July 13, 1954.

REMARKS.--Records fair. Storage and diversions above station for irrigation of about 12,000 acres (48.6 km²).

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

REVISIONS.--WSP 1730: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.8	20	20	26	40	33	37	261	459	98	68	12
2	6.1	32	14	22	34	37	50	250	427	89	64	9.6
3	4.0	32	12	20	41	45	49	264	406	82	62	15
4	4.7	21	10	19	37	33	46	312	463	80	60	19
5	4.7	20	9.0	18	38	36	56	392	406	74	64	34
6	5.4	21	8.0	18	37	31	89	1,790	333	70	63	36
7	6.8	19	13	18	37	31	88	1,940	336	66	57	38
8	4.7	19	16	19	35	33	83	1,470	349	67	56	45
9	6.1	21	20	20	37	31	93	1,350	368	69	46	60
10	6.8	18	19	22	37	29	91	1,390	399	60	40	68
11	6.1	17	19	25	38	29	96	1,330	438	53	41	86
12	7.5	21	21	29	34	36	100	1,160	406	58	53	60
13	14	19	23	33	31	36	121	1,030	375	96	49	31
14	19	15	23	35	29	29	143	980	406	126	43	19
15	19	13	24	36	25	23	173	854	359	126	32	17
16	11	14	27	38	28	20	141	826	298	122	28	21
17	7.5	13	30	34	28	36	145	820	270	100	24	23
18	4.7	15	33	32	29	43	156	859	253	96	20	22
19	5.4	16	33	29	31	46	186	930	220	145	18	18
20	6.8	17	35	29	25	34	156	947	205	149	18	17
21	9.6	18	36	27	29	37	153	892	186	106	22	15
22	9.6	14	36	25	27	41	151	1,040	175	96	25	13
23	8.2	13	36	30	29	34	153	820	156	83	29	13
24	10	13	36	40	32	36	175	745	151	80	32	12
25	13	13	34	42	33	41	214	690	147	78	31	9.6
26	13	13	38	40	32	34	193	634	137	72	29	17
27	13	16	34	34	33	37	193	567	130	68	26	18
28	14	15	36	36	36	41	234	519	119	66	29	69
29	14	13	37	38	-----	38	248	499	112	59	37	95
30	16	17	34	41	-----	37	264	559	106	80	29	63
31	16	-----	30	42	-----	32	-----	503	-----	91	16	-----
TOTAL	293.5	528	796.0	917	922	1,079	4,077	26,623	8,595	2,705	1,211	975.2
MEAN	9.47	17.6	25.7	29.6	32.9	34.8	136	859	287	87.3	39.1	32.5
MAX	19	32	38	42	41	46	264	1,940	463	149	68	95
MIN	4.0	13	8.0	18	25	20	37	250	106	53	16	9.6
AC-FT	582	1,050	1,580	1,820	1,830	2,140	8,090	52,810	17,050	5,370	2,400	1,930
CAL YR 1972 TOTAL	7,219.4			MEAN 19.7	MAX 101	MIN 1.9	AC-FT 14,320					
WTR YR 1973 TOTAL	48,721.7			MEAN 133	MAX 1,940	MIN 4.0	AC-FT 96,640					

06712000 CHERRY CREEK NEAR FRANKTOWN, COLO.

LOCATION.--Lat 39°21'21", long 104°45'46", in NE¼ sec.15, T.8 S., R.66 W., Douglas County, on right bank 1.5 mi (2.4 km) upstream from Russellville Gulch and 2.5 mi (4.0 km) south of Franktown.

DRAINAGE AREA.--169 mi² (438 km²).

PERIOD OF RECORD.--November 1939 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,170 ft (1,881 m) from topographic map. See WSP 1730 for history of changes prior to Oct. 1, 1953.

AVERAGE DISCHARGE.--33 years (1940-73), 8.76 ft³/s (0.248 m³/s), 6,350 acre-ft/yr (7.83 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 4,670 ft³/s (132 m³/s) May 6 (gage height, 9.61 ft or 2.929 m); minimum daily, 1.1 ft³/s (0.031 m³/s) Oct. 10-12.

Period of record: Maximum discharge, 9,170 ft³/s (260 m³/s) Aug. 5, 1945 (gage height, 4.91 ft or 1.497 m, site and datum then in use), by float measurement; minimum daily, 0.20 ft³/s (0.006 m³/s) July 13, 1946, Sept. 30, Oct. 1, 1950.

Flood of Aug. 3, 1933, caused by Castlewood Dam failure, exceeded all other observed floods at this location.

REMARKS.--Records fair. Many small diversions above station for irrigation of about 800 acres (3.24 km²).

REVISIONS.--WSP 1730: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.3	1.4	3.7	3.1	3.7	9.4	21	61	46	9.6	11	2.2
2	1.3	3.2	3.9	3.0	3.7	11	26	84	42	8.1	9.6	2.0
3	1.3	3.2	3.8	3.4	3.7	10	16	68	40	7.6	6.5	2.0
4	1.2	3.6	3.4	3.1	3.8	7.0	13	49	36	7.0	7.8	2.0
5	1.2	3.7	2.8	3.0	3.8	7.0	22	49	34	5.9	6.0	2.0
6	1.2	3.8	2.4	3.2	3.8	6.1	53	1,400	32	5.2	12	2.0
7	1.2	3.4	2.5	3.1	3.8	6.1	37	667	29	5.4	16	1.9
8	1.2	3.5	2.6	2.9	3.8	7.1	19	233	27	5.8	11	1.9
9	1.2	4.8	2.8	2.8	3.8	9.0	22	162	24	5.5	7.3	2.0
10	1.1	4.0	2.8	2.7	3.9	12	31	120	23	5.2	6.2	2.8
11	1.1	3.7	2.8	2.9	4.0	16	64	86	22	4.6	5.7	6.7
12	1.1	3.9	2.6	2.9	4.2	23	112	71	23	3.9	5.1	5.2
13	1.2	3.4	2.7	2.9	4.2	31	135	64	24	4.2	4.9	4.5
14	1.2	3.4	2.7	3.0	4.2	16	204	63	21	4.6	4.9	5.9
15	1.3	3.5	2.7	3.2	4.0	14	73	63	19	5.6	4.6	3.9
16	1.3	3.5	2.4	3.3	4.0	14	32	60	17	6.8	4.2	4.2
17	1.3	3.4	2.6	3.4	4.4	20	49	54	16	6.8	3.5	4.4
18	1.3	3.4	2.7	3.4	4.3	33	53	52	14	6.2	3.3	4.4
19	1.4	3.0	2.8	3.6	4.2	40	52	47	12	9.9	3.2	4.2
20	1.4	3.2	2.9	3.3	4.5	45	49	56	12	14	2.7	3.9
21	1.4	3.0	2.9	3.6	4.4	77	42	57	9.4	14	2.6	3.7
22	1.5	3.2	2.9	3.2	4.4	68	34	122	10	13	2.5	3.4
23	1.5	3.3	3.0	3.7	4.5	42	31	124	9.0	11	2.4	3.4
24	1.5	3.3	3.0	3.7	5.0	24	40	99	8.5	11	2.2	3.2
25	1.5	3.1	3.0	3.5	5.2	19	102	82	7.5	9.4	2.2	3.6
26	1.5	3.4	3.1	3.5	5.9	23	77	66	6.8	8.5	2.2	12
27	1.6	3.3	3.2	3.0	7.6	43	57	52	6.2	8.5	2.0	8.3
28	1.6	3.6	3.3	3.7	9.2	26	42	37	32	7.3	2.0	38
29	1.6	3.7	3.2	3.7	-----	24	40	30	27	7.2	2.0	74
30	1.7	3.6	3.0	3.7	-----	21	41	49	13	10	2.2	35
31	1.6	-----	3.1	3.7	-----	19	-----	50	-----	16	2.2	-----
TOTAL	41.8	102.5	91.3	101.2	126.0	722.7	1,589	4,277	642.4	247.8	164.0	248.7
MEAN	1.35	3.42	2.95	3.26	4.50	23.3	53.0	138	21.4	7.99	5.29	8.29
MAX	1.7	4.8	3.9	3.7	9.2	77	204	1,400	46	16	16	74
MIN	1.1	1.4	2.4	2.7	3.7	6.1	13	30	6.2	3.9	2.0	1.9
AC-FT	83	203	181	201	250	1,430	3,150	8,480	1,270	492	325	493

CAL YR 1972 TOTAL 2,334.82 MEAN 6.38 MAX 551 MIN .82 AC-FT 4,630
WTR YR 1973 TOTAL 8,354.40 MEAN 22.9 MAX 1,400 MIN 1.1 AC-FT 16,570

PEAK DISCHARGE (BASE, 200 CFS).--Apr. 14 (1815) 513 cfs (5.28 ft); May 6 (1815) 4,670 cfs (9.61 ft).

PLATTE RIVER BASIN

06713000 CHERRY CREEK BELOW CHERRY CREEK LAKE, COLO.

LOCATION.--Lat 39°39'12", long 104°51'41", in SW¼SW¼ sec.35, T.4 S., R.67 W., Arapahoe County, on right bank 2,000 ft (610 m) downstream from Cherry Creek Dam, 2.2 mi (3.5 km) southeast of Sullivan, 9 mi (14 km) southeast of Civic Center in Denver, and 11 mi (18 km) upstream from mouth.

DRAINAGE AREA.--385 mi² (997 km²).

PERIOD OF RECORD.--June 1950 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 5,490.51 ft (1,673.507 m) above mean sea level (Corps of Engineers bench mark).

AVERAGE DISCHARGE.--23 years, 4.14 ft³/s (0.117 m³/s), 3,000 acre-ft/yr (3.70 hm³/yr), unadjusted.

EXTREMES.--Current year: Maximum discharge, 394 ft³/s (11.2 m³/s) June 12 (gage height, 4.71 ft or 1.436 m); maximum gage height, 4.73 ft (1.442 m) June 7 (backwater from vegetation in channel); no flow most of year. Period of record: Maximum discharge, 1,440 ft³/s (40.8 m³/s) July 31, 1956 (gage height, 6.07 ft or 1.850 m); no flow most of time since May 1957. Maximum flood known, 34,000 ft³/s (963 m³/s) Aug. 3, 1933, by slope-area measurement near present site (Castlewood Dam failure).

REMARKS.--Flow regulated by Cherry Creek Lake (capacity, 95,960 acre-ft or 118 hm³). See table below for monthend contents. Dam completed in June 1950. Permanent storage started May 15, 1957. Diversions above station for irrigation of about 1,800 acres (7.28 km²).

REVISIONS.--WSP 1730: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1							0	126	0	270		
2							0	130	0	266		
3							0	133	0	185		
4							0	133	74	130		
5							0	140	148	126		
6							0	76	217	126		
7							0	1.5	309	126		
8							0	0	330	122		
9							0	0	340	55		
10							0	0	360	.08		
11							0	0	365	0		
12							0	0	360	0		
13							0	0	233	0		
14							0	0	140	0		
15							0	0	136	0		
16							0	0	136	0		
17							0	0	133	0		
18							0	0	256	0		
19							0	0	355	0		
20							0	0	345	0		
21							0	0	340	0		
22							0	0	335	0		
23							0	0	335	0		
24							0	0	335	0		
25							0	0	330	0		
26							0	0	280	0		
27							0	0	275	0		
28							0	0	275	0		
29							0	0	270	0		
30							53	0	270	0		
31								0		0		
TOTAL	0	0	0	0	0	0	53	739.5	7,282	1,406.08	0	0
MEAN	0	0	0	0	0	0	1.77	23.9	243	45.4	0	0
MAX	0	0	0	0	0	0	53	140	365	270	0	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC=FT	0	0	0	0	0	0	105	1,470	14,440	2,790	0	0
†	11,520	11,640	11,740	11,870	11,950	12,640	15,340	30,870	16,960	13,970	13,680	13,610
CAL YR 1972 TOTAL	0.00											
MEAN	.00											
MAX	.0											
MIN	0											
AC=FT	0											
WTR YR 1973 TOTAL	9,480.58											
MEAN	26.0											
MAX	365											
MIN	0											
AC=FT	18,800											

†Monthend contents, in acre-feet, in Cherry Creek Lake; furnished by Corps of Engineers.

06714000 SOUTH PLATTE RIVER AT DENVER, COLO.

LOCATION.--Lat 39°45'35", long 105°00'10", in NW¼SE¼ sec.28, T.3 S., R.68 W., Denver County, on right bank 90 ft (27 m) upstream from Nineteenth Street Bridge in Denver and 0.4 mi (0.6 km) downstream from Cherry Creek.

DRAINAGE AREA.--3,804 mi² (9,852 km²).

PERIOD OF RECORD.--May to October 1889, June to October 1890, July 1895 to current year. Monthly discharge only for some periods, published in WSP 1310.

GAGE.--Water-stage recorder. Datum of gage is 5,157.64 ft (1,572.049 m) above mean sea level. Prior to Aug. 12, 1909, nonrecording gages and Aug. 12, 1909, to Aug. 28, 1931, water-stage recorder, at several sites within 0.5 mi (0.8 km) of present site at various datums. Aug. 29, 1931, to June 28, 1965, water-stage recorder at site 70 ft (21 m) downstream at datum 3.66 ft (1.116 m) higher. June 29, 1965, to Mar. 18, 1966, water-stage recorder at site 70 ft (21 m) downstream at present datum.

AVERAGE DISCHARGE.--78 years, 345 ft³/s (9.77 m³/s), 250,000 acre-ft/yr (308 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 17,600 ft³/s (498 m³/s) May 7 (gage height, 10.85 ft or 3.307 m); minimum daily, 83 ft³/s (2.35 m³/s) Dec. 6.

Period of record: Maximum discharge, 40,300 ft³/s (1,140 m³/s) June 17, 1965 (gage height, 18.66 ft or 5.688 m, from floodmarks, present datum), from rating curve extended above 2,700 ft³/s (76 m³/s), on basis of contracted-opening measurement of peak flow; minimum daily, 8.8 ft³/s (0.25 m³/s) Mar. 25, 1951.

REMARKS.--Records good. Natural flow of stream affected by transmountain diversions, storage reservoirs, power developments, groundwater withdrawals, and diversions for irrigation of about 79,000 acres (320 km²) and municipal use, and return flow from irrigated areas.

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

REVISIONS (WATER YEARS).--WSP 1310: 1934(M). WSP 1730: 1957(M), drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	94	132	140	97	123	134	153	1,920	2,530	1,100	640	358
2	92	236	120	92	112	134	309	1,620	2,340	1,100	640	342
3	88	300	104	94	114	249	361	1,570	2,220	1,050	619	353
4	97	213	100	94	120	160	280	1,580	2,360	1,070	584	342
5	97	161	85	85	123	153	193	1,840	2,390	1,050	612	217
6	100	167	83	92	120	132	197	9,660	2,100	996	605	191
7	100	150	90	94	117	126	332	12,500	2,040	952	563	163
8	100	137	90	92	107	126	374	7,010	2,200	987	500	208
9	102	160	88	90	107	126	319	5,890	2,340	987	500	256
10	94	134	90	90	110	126	269	5,670	2,460	692	364	238
11	107	123	102	92	110	126	280	5,690	2,590	542	278	362
12	110	150	104	104	117	129	332	5,670	2,950	584	338	257
13	110	156	102	143	114	146	357	5,730	2,630	731	556	227
14	107	132	102	146	110	140	441	5,410	2,750	952	521	163
15	110	120	102	132	100	137	544	5,000	2,700	1,140	494	138
16	100	112	104	123	100	126	439	4,750	2,350	1,160	448	200
17	94	107	123	120	92	129	404	4,370	2,070	1,260	405	208
18	100	104	162	114	94	225	498	4,410	1,980	1,290	370	174
19	104	104	126	117	117	335	883	4,340	1,900	1,590	364	160
20	107	114	117	129	107	174	629	4,650	1,710	1,770	288	138
21	161	129	114	126	110	156	560	4,480	1,580	1,640	283	132
22	117	127	126	114	104	164	528	6,110	1,500	1,460	262	123
23	117	97	123	114	107	170	498	5,130	1,420	1,320	237	123
24	112	97	110	137	114	156	494	4,580	1,360	1,330	334	120
25	112	94	107	140	120	304	1,070	4,430	1,340	978	393	117
26	110	97	107	132	134	178	930	4,270	1,240	755	381	142
27	114	114	107	117	134	164	748	3,940	1,180	619	232	156
28	114	100	107	110	140	205	843	3,500	1,200	514	257	676
29	114	90	112	140	-----	178	1,020	3,020	1,200	405	348	665
30	137	107	107	132	-----	174	1,350	3,650	1,150	411	353	393
31	129	-----	97	126	-----	156	-----	3,020	-----	612	353	-----
TOTAL	3,350	4,084	3,351	3,528	3,177	5,138	15,635	145,410	59,780	31,047	13,122	7,342
MEAN	108	136	108	114	113	166	521	4,691	1,993	1,002	423	245
MAX	161	300	162	146	140	335	1,350	12,500	2,950	1,770	640	676
MIN	88	90	83	85	92	126	153	1,570	1,150	405	232	117
AC-FT	6,640	8,100	6,650	7,000	6,300	10,190	31,010	288,400	118,600	61,580	26,030	14,560
CAL YR 1972	TOTAL	66,629	MEAN	182	MAX	1,160	MIN	68	AC-FT	132,200		
WTR YR 1973	TOTAL	294,964	MEAN	808	MAX	12,500	MIN	83	AC-FT	585,100		

PLATTE RIVER BASIN

06716500 CLEAR CREEK NEAR LAWSON, COLO.

LOCATION.--Lat 39°45'57", long 105°37'32", in NW¼NW¼ sec.25, T.3 S., R.74 W., Clear Creek County, on left bank at east edge of Lawson, 30 ft (9 m) downstream from private bridge and 2.0 mi (3.2 km) downstream from West Fork Clear Creek.

DRAINAGE AREA.--147 mi² (381 km²).

PERIOD OF RECORD.--March 1946 to current year. Records prior to 1959 include inflow from August P. Gumlick Tunnel (formerly Jones Pass tunnel).

GAGE.--Water-stage recorder. Altitude of gage is 8,080 ft (2,463 m) from topographic map. Mar. 29, 1946, to Sept. 30, 1967, at site 1.5 mi (2.4 km) upstream at different datum.

AVERAGE DISCHARGE.--27 years, 137 ft³/s (3.880 m³/s), 99,260 acre-ft/yr (122 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,250 ft³/s (35.4 m³/s) June 13 (gage height, 6.05 ft or 1.844 m); minimum daily, 24 ft³/s (0.68 m³/s) Mar. 16.

Period of record: Maximum discharge, 6,130 ft³/s (174 m³/s) June 4, 1956 (gage height, 7.41 ft or 2.259 m, site and datum then in use), from rating curve extended above 1,600 ft³/s (45 m³/s), on basis of computation of peak flow over dam, caused by failure of Georgetown Dam on White Reservoir 5.0 mi (8.0 km) upstream; minimum daily, 13 ft³/s (0.37 m³/s) Feb. 20, 1955.

REMARKS.--Records good except those for winter period, which are poor. Natural flow affected by minor trans-mountain diversion from Colorado River basin through Berthoud Pass ditch (see elsewhere in this report). No diversion above station.

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

REVISIONS.--WSP 1730: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	UCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	68	57	43	32	31	28	28	48	228	805	278	115
2	66	58	44	32	30	28	29	45	222	755	268	110
3	64	59	35	32	31	26	28	44	228	694	252	104
4	64	57	34	30	32	29	27	49	235	638	255	104
5	63	57	31	29	31	29	29	52	218	542	262	97
6	63	55	25	29	29	28	30	62	230	550	250	94
7	63	47	27	28	28	28	30	60	272	518	235	94
8	73	51	28	28	27	28	32	61	351	510	222	94
9	65	53	29	26	28	28	31	69	475	518	210	112
10	63	49	30	27	29	28	30	81	638	489	200	102
11	61	52	31	28	30	28	28	97	800	475	192	102
12	61	50	32	29	30	28	32	92	855	461	184	97
13	60	51	32	30	30	26	36	102	1,030	489	178	96
14	60	48	32	31	28	26	34	109	1,050	522	174	91
15	60	49	32	31	27	27	37	116	880	503	168	90
16	62	48	34	31	27	24	34	100	710	492	158	86
17	61	40	36	30	27	29	34	90	594	447	157	88
18	60	34	37	29	27	29	36	194	550	464	160	81
19	59	38	37	28	27	29	35	262	489	522	146	77
20	57	40	36	28	27	28	32	302	461	475	146	72
21	59	41	36	27	27	29	32	318	472	436	148	66
22	58	40	36	27	28	28	34	310	514	405	148	66
23	58	32	35	28	29	28	35	278	594	375	139	65
24	59	35	34	30	30	28	37	272	626	357	138	65
25	59	35	34	32	30	28	40	265	654	342	132	65
26	60	34	35	31	30	28	39	255	800	330	122	72
27	60	32	37	30	30	28	38	222	865	325	122	69
28	60	31	35	28	28	28	42	210	855	318	116	69
29	60	35	33	31	-----	28	43	206	855	312	116	69
30	58	42	32	33	-----	27	47	210	830	305	115	66
31	56	-----	32	32	-----	28	-----	200	-----	285	120	-----
TOTAL	1,900	1,350	1,044	917	808	862	1,019	4,781	17,581	14,659	5,511	2,578
MEAN	61.3	45.0	33.7	29.6	28.9	27.8	34.0	154	586	473	178	85.9
MAX	73	59	44	33	32	29	47	318	1,050	805	278	115
MIN	56	31	25	26	27	24	27	44	218	285	115	65
AC-FT	3,770	2,680	2,070	1,820	1,600	1,710	2,020	9,480	34,870	29,080	10,930	5,110

CAL YR 1972 TOTAL 42,971 MEAN 117 MAX 845 MIN 25 AC-FT 85,230

WTR YR 1973 TOTAL 53,010 MEAN 145 MAX 1,050 MIN 24 AC-FT 105,100

PEAK DISCHARGE (BASE, 600 CFS).--June 13 (2100) 1,250 cfs (6.05 ft).

06719500 CLEAR CREEK NEAR GOLDEN, COLO.

LOCATION.--Lat 39°45'02", long 105°14'54", in NE¼ sec.32, T.3 S., R.70 W., Jefferson County, on left bank 0.2 mi (0.3 km) upstream from headgate of Church ditch, 0.7 mi (1.1 km) downstream from headgate of Welch ditch, 1.0 mi (1.6 km) west of Golden, and 12.5 mi (20.1 km) downstream from North Clear Creek.

DRAINAGE AREA.--399 mi² (1,033 km²).

PERIOD OF RECORD.--October 1908 to December 1909, June 1911 to current year. Monthly discharge only for some periods, published in WSP 1310. Records for 1940-58 include inflow from August P. Gumlick Tunnel.

GAGE.--Water-stage recorder. Datum of gage is 5,735.27 ft (1,748.110 m) above mean sea level (State Highway Department bench mark). See WSP 1710 or 1730 for history of changes prior to Jan. 21, 1943.

AVERAGE DISCHARGE.--63 years, 228 ft³/s (6.457 m³/s), 165,200 acre-ft/yr (204 hm³/yr), adjusted for inflow from August P. Gumlick Tunnel and Berthoud Pass ditch 1940-58.

EXTREMES.--Current year: Maximum discharge, 2,210 ft³/s (62.6 m³/s) June 14 (gage height, 5.55 ft or 1.692 m); maximum gage height, 5.62 ft (1.713 m) Sept. 9; minimum daily discharge, 35 ft³/s (0.99 m³/s) Dec. 6.
Period of record: Maximum discharge, 5,890 ft³/s (167 m³/s) Sept. 9, 1933 (gage height, 11.57 ft or 3.527 m, present datum, from floodmarks), from rating curve extended above 2,200 ft³/s (62 m³/s) on basis of slope-area measurement of peak flow; minimum daily recorded, 10 ft³/s (0.28 m³/s) Mar. 4, 1966.
Maximum discharge since at least 1867, 8,700 ft³/s (246 m³/s) Aug. 1, 1888, from reports of State engineer of Colorado for station 5.5 mi (8.8 km) upstream.

REMARKS.--Records good except those for winter period, which are poor. Natural flow of stream affected by minor transmountain diversion from Colorado River basin through Berthoud Pass ditch (see elsewhere in this report) and several small reservoirs above station. Diversion 0.7 mi (1.1 km) above station by Welch ditch for irrigation of about 1,000 acres (4.05 km²) below station.

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

REVISIONS (WATER YEARS).--WSP 1310: 1920(M), 1939(M), 1944(M). WSP 1730: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	69	66	54	46	46	51	52	156	652	1,130	586	150
2	69	68	54	46	45	50	57	145	626	1,080	591	143
3	69	69	48	46	48	48	54	147	633	1,000	560	139
4	66	65	43	43	50	42	48	163	666	919	551	133
5	68	65	40	41	48	57	58	182	608	858	568	129
6	66	65	35	42	47	43	71	437	578	806	551	127
7	68	56	42	41	45	54	61	549	652	757	519	127
8	77	61	47	40	43	61	54	544	799	737	504	127
9	77	66	48	39	42	57	66	596	1,070	764	285	287
10	69	54	50	40	46	56	65	652	1,360	698	264	158
11	66	64	53	42	49	54	72	678	1,700	666	258	137
12	66	61	54	45	48	62	80	659	1,780	633	251	129
13	64	56	54	49	48	59	85	640	1,840	698	238	123
14	65	51	54	51	47	47	95	596	1,990	778	230	116
15	66	57	54	52	41	48	103	572	1,710	704	224	116
16	66	54	56	53	40	51	90	578	1,390	692	212	112
17	65	42	58	52	40	59	93	578	1,110	626	207	114
18	65	39	60	49	40	62	96	743	1,030	614	221	105
19	65	44	60	47	44	64	102	951	927	764	202	100
20	64	46	58	47	40	58	86	1,080	858	685	192	96
21	69	47	58	45	42	66	91	1,140	835	620	199	93
22	62	47	59	45	45	57	91	1,130	858	578	202	91
23	64	38	60	45	47	52	96	1,030	927	538	185	95
24	59	44	55	47	51	56	109	975	1,010	505	180	93
25	62	43	55	50	48	57	119	927	1,000	472	180	96
26	64	42	58	49	46	50	116	872	1,150	456	170	110
27	65	40	60	48	53	58	119	764	1,270	445	160	105
28	66	38	54	47	51	53	139	718	1,270	425	152	107
29	64	45	50	52	-----	47	152	678	1,220	435	158	116
30	62	50	48	50	-----	46	163	704	1,200	466	154	109
31	64	-----	47	47	-----	47	-----	640	-----	410	156	-----
TOTAL	2,051	1,583	1,626	1,436	1,280	1,672	2,683	20,224	32,719	20,959	7,510	3,683
MEAN	66.2	52.8	52.5	46.3	45.7	53.9	89.4	652	1,091	676	242	123
MAX	77	69	60	53	53	66	163	1,140	1,990	1,130	591	287
MIN	59	38	35	39	40	42	48	145	578	410	152	91
AC-FT	4,070	3,140	3,230	2,850	2,540	3,320	5,320	40,110	64,900	41,570	14,900	7,310

CAL YR 1972 TOTAL 59,300 MEAN 162 MAX 1,300 MIN 35 AC-FT 117,600
WTR YR 1973 TOTAL 97,426 MEAN 267 MAX 1,990 MIN 35 AC-FT 193,200

PEAK DISCHARGE (BASE, 1,100 CFS).--June 14 (0600) 2,210 cfs (5.55 ft); Sept. 9 (1800) 2,130 cfs (5.62 ft).

06720000 CLEAR CREEK AT MOUTH; NEAR DERBY, COLO.

LOCATION.--Lat 39°49'42", long 104°57'30", in SW¼SW¼ sec.36, T.2 S., R.68 W., Adams County, on right bank 210 ft (64 m) downstream from York Street bridge, 0.6 mi (1.0 km) upstream from mouth, and 2.5 mi (4.0 km) west of Derby.

DRAINAGE AREA. -- 575 mi² (1,489 km²).

PERIOD OF RECORD.--April to November 1914, March 1927 to current year. Prior to October 1933 monthly discharge only, published in WSP 1310.

GAGE.--Water-stage recorder. Altitude of gage is 5,110 ft (1,558 m) from topographic map. See WSP 1710 or 1730 for history of changes prior to July 16, 1958. July 16, 1958, to Sept. 20, 1965, water-stage recorder at site 50 ft (15 m) upstream at datum 1.56 ft (0.475 m) higher.

AVERAGE DISCHARGE.--46 years (1927-73), 94.2 ft³/s (2.668 m³/s), 68,250 acre-ft/yr (84.2 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 4,700 ft³/s (133 m³/s) May 6 (gage height, 8.90 ft or 2.713 m); minimum daily, 7.0 ft³/s (0.20 m³/s) Oct. 25, 26.

Period of record: Maximum discharge, 5,070 ft³/s (144 m³/s) July 24, 1965 (gage height, 8.97 ft or 2.734 m, present datum); minimum daily, 0.4 ft³/s (0.011 m³/s) Mar. 11, 1943.

REMARKS.--Records good. Natural flow of stream affected by transmountain diversions (see elsewhere in this report), storage reservoirs, diversions for irrigation of about 75,000 acres (304 km²) above station, and return flow from irrigated areas.

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

REVISIONS.--WSP 1730: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	50	52	27	34	35	22	260	215	426	124	12
2	13	147	50	26	33	28	65	167	162	390	110	15
3	17	140	43	26	33	53	76	207	146	356	88	15
4	14	65	40	25	33	38	44	170	180	339	66	9,8
5	12	54	35	25	35	29	39	147	155	306	70	9,8
6	12	49	31	24	35	28	34	2,260	118	278	101	11
7	12	44	35	24	32	32	65	1,350	110	245	90	12
8	12	46	38	23	33	30	86	925	203	210	94	13
9	12	38	39	22	30	30	69	895	423	238	78	20
10	12	39	40	25	32	29	58	985	620	208	36	120
11	11	39	41	31	32	29	67	1,020	825	157	19	77
12	11	50	42	33	34	28	65	1,000	1,010	151	23	67
13	12	55	42	33	33	30	69	940	1,140	255	24	43
14	10	43	43	34	30	25	48	890	1,260	306	19	25
15	8,2	39	45	35	30	27	55	798	1,100	352	17	21
16	8,2	38	47	36	30	24	48	694	860	348	16	24
17	7,6	40	48	32	32	24	40	592	654	282	17	29
18	7,6	36	50	25	32	30	39	690	604	258	22	24
19	8,8	42	50	25	35	82	100	816	528	443	20	15
20	8,8	46	47	33	33	39	57	955	450	572	17	12
21	19	54	45	29	33	33	42	1,020	362	432	19	14
22	20	43	40	30	32	29	34	1,090	345	384	21	10
23	18	38	38	32	33	28	34	1,000	306	324	17	8,6
24	7,6	35	34	42	34	32	41	830	330	294	14	8,0
25	7,0	35	30	40	34	60	168	752	373	367	11	9,8
26	7,0	35	29	38	33	35	92	703	380	207	12	21
27	8,2	46	28	38	33	34	57	620	426	128	13	29
28	10	42	29	35	34	42	49	616	502	126	13	126
29	8,8	42	29	39	-----	34	49	528	499	140	11	155
30	26	44	28	42	-----	35	111	584	474	190	12	94
31	38	-----	27	36	-----	32	-----	440	-----	155	12	-----
TOTAL	390,8	1,514	1,215	965	917	1,064	1,823	23,944	14,760	8,867	1,206	1,050,0
MEAN	12,6	50,5	39,2	31,1	32,8	34,3	60,8	772	492	286	38,9	35,0
MAX	38	147	52	42	35	82	168	2,260	1,260	572	124	155
MIN	7,0	35	27	22	30	24	22	147	110	126	11	8,0
AC=FT	775	3,000	2,410	1,910	1,820	2,110	3,620	47,490	29,280	17,590	2,390	2,080
CAL YR 1972	TOTAL	21,854,0	MEAN	59,7	MAX	1,020	MIN	7,0	AC=FT	43,350		
WTR YR 1973	TOTAL	57,715,8	MEAN	158	MAX	2,260	MIN	7,0	AC=FT	114,500		

06720500 SOUTH PLATTE RIVER AT HENDERSON, COLO.

LOCATION.--Lat 39°55'19", long 104°52'00", in SE¼NE¼ sec.34, T.1 S., R.67 W., Adams County, on right bank 500 ft (150 m) upstream from bridge on State Highway 22 and 0.2 mi (0.3 km) northwest of Henderson.

DRAINAGE AREA. -- 4,713 mi² (12,207 km²).

PERIOD OF RECORD.--May 1926 to current year. Prior to October 1933 monthly discharge only, published in WSP 1310.

GAGE.--Water-stage recorder. Datum of gage is 5,003.12 ft (1,524.951 m) above mean sea level. See WSP 1710 or 1730 for history of changes prior to June 1, 1960. June 1, 1960, to May 10, 1969, water-stage recorder at site 1,200 ft (370 m) upstream at datum 2.00 ft (0.610 m) higher. May 11 to Oct. 2, 1969, nonrecording gage at site 500 ft (150 m) downstream at present datum.

AVERAGE DISCHARGE.--47 years, 362 ft³/s (10.25 m³/s), 262,300 acre-ft/yr (323 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 33,000 ft³/s (935 m³/s) May 6 (gage height, 11.67 ft or 3.557 m), from rating curve extended as explained below; minimum daily, 161 ft³/s (4.56 m³/s) Nov. 26.
Period of record: Maximum discharge, 33,000 ft³/s (935 m³/s) May 6, 1973 (gage height, 11.67 ft or 3.557 m), from rating curve extended above 7,200 ft³/s (200 m³/s), partly on basis of flow-over-road measurement at peak flow; maximum gage height, 12.93 ft (3.941 m) June 17, 1965, site and datum then in use; minimum daily discharge, 4.4 ft³/s (0.12 m³/s) Apr. 1, 1950.

REMARKS.--Records fair. Natural flow of stream affected by transmountain diversions, storage reservoirs, groundwater withdrawal, diversions for irrigation of about 253,000 acres (1,020 km²), and return flow from irrigated areas. Water-quality records for the current year are published in Part 2 of this report.

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

REVISIONS (WATER YEARS).--WSP 1310: 1934-36(M). WSP 1730: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	228	255	233	172	338	446	214	2,710	2,910	1,080	672	530
2	210	373	232	189	305	433	360	1,960	2,620	1,070	695	530
3	237	571	202	190	275	682	355	1,840	2,530	1,180	650	571
4	255	390	197	193	232	537	446	1,720	2,650	1,060	530	585
5	232	332	172	170	255	472	338	1,870	2,730	1,090	550	446
6	255	305	170	176	255	452	322	12,700	2,230	1,060	658	354
7	228	224	193	168	237	420	497	13,200	2,120	978	704	378
8	219	189	193	181	232	402	628	8,400	2,370	926	514	446
9	232	181	181	181	242	420	542	7,050	2,910	1,010	402	511
10	242	176	185	181	237	402	466	7,000	3,420	818	290	842
11	228	172	185	219	228	402	530	7,130	3,850	794	338	794
12	232	181	189	327	270	408	606	7,000	4,170	818	466	426
13	224	228	185	360	310	459	592	6,850	4,490	1,200	786	322
14	242	214	168	378	290	466	585	6,430	4,530	1,490	818	295
15	260	197	228	354	290	420	770	5,790	4,170	1,810	702	338
16	246	197	176	338	305	396	702	5,420	3,410	1,760	688	354
17	193	193	168	322	316	390	702	4,990	2,670	1,580	620	402
18	202	189	245	300	305	384	710	4,960	2,410	1,340	544	420
19	214	176	255	295	322	948	1,180	4,990	2,200	1,420	544	360
20	224	210	232	290	338	366	952	5,530	1,850	2,520	518	316
21	338	228	228	275	332	246	826	5,560	1,600	1,900	478	316
22	260	219	232	280	338	224	748	7,390	1,340	1,610	564	305
23	260	185	219	260	349	214	748	6,780	1,150	1,260	446	265
24	250	181	206	280	327	219	688	5,900	1,100	1,300	518	305
25	275	176	185	300	322	388	1,570	5,580	1,150	1,460	695	316
26	275	161	185	290	344	354	1,300	5,110	1,140	688	613	390
27	265	197	197	295	378	232	1,020	4,780	1,100	433	485	402
28	255	189	206	372	440	260	1,020	4,370	1,230	402	420	1,320
29	242	189	206	452	-----	246	1,150	3,850	1,240	372	478	1,730
30	275	193	189	478	-----	246	1,450	4,730	1,190	492	504	842
31	290	-----	181	396	-----	232	-----	3,800	-----	695	511	-----
TOTAL	7,588	6,871	6,223	8,662	8,412	12,166	22,017	175,390	72,480	35,616	17,401	15,414
MEAN	245	229	201	279	300	392	734	5,658	2,416	1,149	561	514
MAX	338	571	255	478	440	948	1,570	13,200	4,530	2,520	818	1,730
MIN	193	161	168	168	228	214	214	1,720	1,100	372	290	265
AC=FT	15,050	13,630	12,340	17,180	16,690	24,130	43,670	347,900	143,800	70,640	34,510	30,575

GAL YR 1972	TOTAL 123,623	MEAN 338	MAX 2,290	MIN 97	AC-FT 245,200
WTR YR 1973	TOTAL 388,237	MEAN 1,064	MAX 13,200	MIN 161	AC-FT 770,100

PLATTE RIVER BASIN

06722500 SOUTH ST. VRAIN CREEK NEAR WARD, COLO.

LOCATION.--Lat 40°05'27", long 105°30'50", in NE¼SW¼ sec.36, T.2 N., R.73 W., Boulder County, on left bank at downstream side of bridge, 1.3 mi (2.1 km) north of Ward and 3.5 mi (5.6 km) downstream from Brainard Lake.

DRAINAGE AREA.--14.4 mi² (37.3 km²).

PERIOD OF RECORD.--October 1925 to September 1927, October 1928 to September 1931, September 1954 to current year. Monthly discharge only for some periods, published in WSP 1310.

GAGE.--Water-stage recorder. Altitude of gage is 9,372 ft (2,856.6 m) from topographic map. May 29, 1926, to Sept. 30, 1927, and May 21, 1929, to Sept. 30, 1931, at site 600 ft (180 m) downstream at datum 24.37 ft (7.428 m) lower.

AVERAGE DISCHARGE.--24 years, 28.1 ft³/s (0.796 m³/s), 20,360 acre-ft/yr (25.1 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 328 ft³/s (9.29 m³/s) June 29 (gage height, 3.75 ft or 1.143 m); maximum gage height, 3.78 ft (1.152 m) June 10; minimum daily discharge, 1.4 ft³/s (0.040 m³/s) Jan. 11. Period of record: Maximum discharge, 462 ft³/s (13.1 m³/s) June 29, 1957 (gage height, 4.06 ft or 1.237 m); maximum gage height, 7.45 ft (2.271 m) May 7, 1969 (backwater from ice); minimum daily discharge determined, 1.0 ft³/s (0.028 m³/s) Mar. 20, 1930.

REMARKS.--Records good except those for winter period, which are poor. No diversion above station. Slight regulation by several small lakes above station.

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

REVISIONS (WATER YEARS).--WSP 1560: 1957(M). WSP 1730: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.9	6.0	4.0	2.0	2.0	2.0	2.0	6.0	34	218	58	28
2	7.4	6.0	3.5	2.0	2.0	2.0	2.0	6.0	39	198	57	28
3	7.2	6.5	3.5	2.0	2.0	2.0	2.0	6.0	35	167	58	27
4	6.7	6.0	3.5	2.0	2.0	2.0	2.5	7.0	34	135	58	22
5	7.0	6.0	3.5	2.0	2.0	2.0	2.5	7.0	30	132	56	22
6	7.0	6.0	3.5	2.0	2.0	2.0	2.5	10	35	132	58	20
7	7.0	6.0	3.5	2.0	2.0	2.0	3.0	8.0	51	132	60	20
8	8.9	5.8	3.5	1.5	2.0	2.0	2.5	7.0	79	132	56	19
9	9.8	5.8	3.0	1.5	2.0	2.0	2.5	9.0	139	154	52	22
10	8.2	5.7	3.0	1.5	2.0	2.0	2.5	10	198	128	50	24
11	7.4	5.6	3.0	1.4	2.0	2.0	2.5	15	238	120	46	24
12	7.2	5.6	3.0	1.5	2.0	2.0	3.0	20	238	110	45	24
13	7.2	5.5	3.0	1.6	2.0	2.0	3.5	20	223	146	42	23
14	7.4	5.8	3.0	2.0	2.0	2.5	4.0	15	233	146	40	21
15	8.2	5.6	2.5	2.0	2.0	2.5	4.5	20	193	107	40	20
16	8.9	5.6	2.5	2.0	2.0	2.0	4.0	25	132	107	39	20
17	8.2	5.6	2.5	2.0	2.0	2.0	3.5	35	102	107	39	20
18	8.2	5.5	2.5	2.0	2.0	2.0	4.5	45	105	96	48	17
19	8.4	5.5	2.5	2.0	2.0	2.0	4.0	60	79	102	46	16
20	8.2	5.5	2.5	2.0	1.5	2.5	5.0	75	77	107	43	15
21	9.8	5.0	2.5	2.0	1.5	2.5	5.5	75	88	105	43	14
22	9.3	5.0	2.5	2.0	1.5	2.5	5.0	65	102	83	45	12
23	8.9	5.0	2.5	2.0	1.5	2.5	5.0	60	139	76	43	12
24	8.2	5.0	2.5	2.0	1.5	2.5	5.5	55	180	66	41	13
25	8.2	5.0	2.0	2.0	1.5	2.5	5.5	55	208	63	40	12
26	7.4	4.5	2.0	2.0	1.5	2.5	5.5	48	249	60	39	12
27	7.2	4.0	2.0	2.0	1.5	2.5	5.5	35	274	61	38	12
28	7.0	3.5	2.0	2.0	1.5	2.5	6.0	32	274	61	35	12
29	6.0	3.0	2.0	2.0	-----	2.5	6.5	31	280	61	34	15
30	5.0	5.0	2.0	2.0	-----	2.0	6.5	28	255	72	32	14
31	5.5	-----	2.0	2.0	-----	2.0	-----	29	-----	65	30	-----
TOTAL	238.9	160.6	85.5	59.0	51.5	68.0	119.0	919.0	4,343	3,449	1,411	560
MEAN	7.71	5.35	2.76	1.90	1.84	2.19	3.97	29.6	145	111	45.5	18.7
MAX	9.8	6.5	4.0	2.0	2.0	2.5	6.5	75	280	218	60	28
MIN	5.0	3.0	2.0	1.4	1.5	2.0	2.0	6.0	30	60	30	12
AC-FT	474	319	170	117	102	135	236	1,820	8,610	6,840	2,800	1,110

CAL YR 1972 TOTAL 8,917.5 MEAN 24.4 MAX 255 MIN 2.0 AC-FT 17,690
WTR YR 1973 TOTAL 11,464.5 MEAN 31.4 MAX 280 MIN 1.4 AC-FT 22,740

PEAK DISCHARGE (BASE, 170 CFS).--June 10 (2130) 312 cfs (3.78 ft); June 29 (2330) 328 cfs (3.75 ft).

NOTE.--No gage-height record Nov. 21 to May 25.

PLATTE RIVER BASIN

37

06724000 ST. VRAIN CREEK AT LYONS, COLO.

LOCATION.--Lat 40°13'05", long 105°15'34", in NW¼NW¼ sec.20, T.3 N., R.70 W., Boulder County, on left bank 75 ft (23 m) southwest of State Highways 7 and 66 at southeast edge of Lyons, 400 ft (120 m) upstream from St. Vrain Supply Canal, and 0.4 mi (0.6 km) downstream from confluence of North and South St. Vrain Creeks.

DRAINAGE AREA.--212 mi² (549 km).

PERIOD OF RECORD.--August 1887 to September 1891, June 1895 to current year. Monthly discharge only for some periods, published in WSP 1310. Published as "near Lyons" 1901, 1903.

GAGE.--Water-stage recorder. Altitude of gage is 5,292 ft (1,613 m) from topographic map. Prior to Apr. 6, 1923, nonrecording gages near present site at different datums. Apr. 6, 1923, to Sept. 30, 1956, water-stage recorder at same site at datum 1.00 ft (0.305 m) higher.

AVERAGE DISCHARGE.--82 years, 129 ft³/s (3.653 m³/s), 93,460 acre-ft/yr (115 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,360 ft³/s (38.5 m³/s) June 11 (gage height, 5.33 ft or 1.625 m); minimum daily, 7.5 ft³/s (0.21 m³/s) Feb. 2.

Period of record: Maximum discharge, 10,500 ft³/s (297 m³/s) June 22, 1941 (gage height, 9.06 ft or 2.761 m, present datum, from floodmark), from rating curve extended above 2,100 ft³/s (59 m³/s) on basis of slope-area measurement at gage height 8.90 ft (2.713 m); no flow Jan. 19, 20, 1922, Jan. 12, 13, 1950.

Outstanding floods occurred in June 1864 and May 1876. Flood in May or June 1894 reached a stage of 9.13 ft (2.783 m), from information by local resident (discharge, about 9,800 ft³/s or 278 m³/s). For discussions of these floods, see WSP 997.

REMARKS.--Records good. Diversions above station for irrigation of about 20,000 acres (80.9 km²). Flow partly regulated by small diversions above station.

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

REVISIONS (WATER YEARS).--WSP 1310: 1898, 1900. WSP 1730: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34	31	23	14	9.5	15	14	115	258	606	171	118
2	34	33	21	15	7.5	14	15	105	296	559	165	108
3	34	35	16	18	9.0	15	15	115	324	520	165	98
4	34	35	14	16	9.5	12	12	137	400	444	165	98
5	35	35	12	15	9.5	14	15	220	380	427	165	95
6	36	35	11	15	10	12	17	666	370	427	165	95
7	30	32	17	15	9.5	11	23	730	350	422	165	92
8	28	34	16	14	9.0	15	21	692	400	416	159	85
9	27	30	15	15	9.0	12	23	641	678	444	151	92
10	25	28	14	12	12	14	26	648	994	400	151	85
11	23	28	15	17	12	14	28	572	1,200	385	148	81
12	20	28	16	18	14	14	36	472	1,050	375	145	77
13	20	22	18	19	11	15	44	438	949	416	145	73
14	20	20	17	20	10	14	48	395	949	422	143	71
15	23	25	16	17	9.0	15	53	355	895	380	143	67
16	25	20	18	17	9.5	14	47	365	754	390	134	63
17	23	16	19	17	11	15	47	370	533	380	134	60
18	25	18	19	16	14	15	47	400	484	355	148	56
19	27	17	20	16	11	16	56	444	365	355	143	43
20	28	20	18	16	10	14	48	472	337	375	137	42
21	32	18	17	14	10	17	48	502	360	365	129	43
22	31	12	18	13	10	14	48	627	395	301	126	35
23	30	16	18	14	11	14	48	559	449	310	126	32
24	30	21	18	15	11	15	51	484	466	292	126	26
25	30	21	17	14	11	16	75	400	484	278	124	26
26	29	25	17	15	11	14	77	375	559	234	124	27
27	29	23	18	11	12	14	77	310	606	220	124	28
28	28	15	18	11	14	15	108	270	678	212	124	35
29	28	19	17	15	-----	15	113	237	738	212	124	31
30	27	22	16	17	-----	14	108	258	692	206	124	28
31	29	-----	14	16	-----	14	-----	237	-----	177	124	-----
TOTAL	874	734	523	477	296.0	442	1,388	12,611	17,393	11,305	4,417	1,910
MEAN	28.2	24.5	16.9	15.4	10.6	14.3	46.3	407	580	365	142	63.7
MAX	36	35	23	20	14	17	113	730	1,200	606	171	118
MIN	20	12	11	11	7.5	11	12	105	258	177	124	26
AC-FT	1,730	1,460	1,040	946	587	877	2,750	25,010	34,500	22,420	8,760	3,790

CAL YR 1972 TOTAL 32,657.5 MEAN 89.2 MAX 648 MIN 8.0 AC-FT 64,780
WTR YR 1973 TOTAL 52,370.0 MEAN 143 MAX 1,200 MIN 7.5 AC-FT 103,900

PLATTE RIVER BASIN

06725500 MIDDLE BOULDER CREEK AT NEDERLAND, COLO.

LOCATION.--Lat 39°57'42", long 105°30'14", in NE¼SE¼ sec.13, T.1 S., R.73 W., Boulder County, on left bank at Nederland just downstream from North Beaver Creek, 1,000 ft (300 m) upstream from Barker Reservoir.

DRAINAGE AREA.--36.2 mi² (93.8 km²).

PERIOD OF RECORD.--June 1907 to current year. Monthly discharge only for some periods, published in WSP 1310.

GAGE.--Water-stage recorder and compound sharp-crested weir. Datum of gage is 8,186.0 ft (2,495.09 m) above mean sea level (Public Service Co. bench mark). Prior to Mar. 18, 1909, at datum 4.0 ft (1.22 m) lower. Mar. 18, 1909, to Apr. 23, 1952, at datum 2.5 ft (0.76 m) lower than present datum.

AVERAGE DISCHARGE.--66 years, 54.2 ft³/s (1.535 m³/s), 39,270 acre-ft/yr (48.4 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 478 ft³/s (13.5 m³/s) June 10 (gage height, 3.33 ft or 1.015 m); minimum daily, 4.1 ft³/s (0.12 m³/s) Jan. 9.

Period of record: Maximum discharge, 811 ft³/s (23.0 m³/s) June 2, 1914 (gage height, 5.37 ft or 1.637 m, datum then in use), by computation of peak flow over compound weir; minimum daily, 0.8 ft³/s (0.023 m³/s) Jan. 14, 1908.

REMARKS.--Records good. No diversion above station. Flow regulated at times by Jasper Lake (capacity, 326 acre-ft or 402,000 m³). North Beaver Creek entered Middle Boulder Creek downstream from station June 1 to Dec. 31, 1907, March 1911 to Dec. 31, 1916.

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

REVISIONS.--WSP 1730: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	14	10	5.6	5.3	4.7	5.1	20	150	247	89	29
2	16	14	9.1	5.5	5.3	4.9	5.1	18	162	268	94	28
3	15	15	9.9	5.5	5.1	4.7	5.1	18	146	237	85	28
4	15	14	8.7	5.5	5.1	4.9	5.7	21	140	214	77	26
5	15	14	8.7	5.5	5.1	4.7	5.7	24	124	214	81	24
6	15	13	8.9	5.5	5.1	4.7	5.5	54	132	208	85	28
7	14	13	8.3	5.1	5.1	4.7	7.3	39	168	200	78	36
8	19	12	8.3	4.3	5.1	4.7	6.9	32	239	200	74	36
9	20	12	8.3	4.1	5.1	4.7	5.7	52	319	198	72	38
10	17	11	8.1	4.3	5.1	4.5	5.5	69	388	188	69	39
11	16	12	7.9	4.5	5.1	5.1	5.9	86	405	178	64	38
12	14	10	7.7	4.5	5.1	5.1	7.1	89	390	164	62	38
13	14	10	7.5	4.5	5.1	4.9	7.9	91	370	142	56	34
14	14	11	7.5	4.7	4.9	6.5	9.5	81	372	182	53	33
15	15	11	7.3	4.9	4.9	5.7	10	91	304	158	44	29
16	20	10	7.5	5.3	4.9	4.7	8.9	120	239	154	46	25
17	18	10	7.1	5.3	4.9	5.5	7.5	150	198	144	46	23
18	19	9.5	7.1	5.3	4.9	5.5	10	198	194	142	53	19
19	20	10	6.5	5.3	4.9	5.1	8.1	257	160	170	47	18
20	17	10	6.5	5.3	4.9	5.7	10	316	156	158	46	16
21	14	9.1	6.5	5.3	4.7	6.5	11	311	172	142	47	15
22	21	9.1	6.5	5.3	4.7	6.7	10	275	202	120	47	14
23	19	9.2	6.3	5.3	4.5	6.1	10	235	232	114	42	14
24	17	9.3	6.5	5.3	4.5	6.1	11	228	250	105	41	15
25	16	9.0	5.9	5.3	4.3	5.7	11	235	283	101	40	16
26	16	9.0	6.3	5.5	4.3	5.9	11	202	331	100	40	18
27	17	8.8	6.3	5.5	4.5	5.9	13	160	343	98	39	18
28	16	8.5	6.1	5.5	4.5	5.5	17	146	335	94	36	20
29	14	8.0	6.1	5.5	-----	5.5	22	134	335	93	35	24
30	11	12	5.8	5.5	-----	5.3	22	128	314	105	33	22
31	12	-----	5.7	5.5	-----	5.5	-----	132	-----	91	31	-----
TOTAL	511	527.5	227.9	160.0	137.0	165.7	280.5	4,012	7,558	5,029	1,757	766
MEAN	16.5	16.9	7.35	5.16	4.84	5.35	9.35	129	252	162	56.7	25.5
MAX	21	15	10	5.6	5.3	6.7	22	316	405	297	94	39
MIN	11	8.0	5.7	4.1	4.3	4.5	5.1	18	124	91	31	14
AC-FT	1,010	650	452	317	272	329	556	7,960	14,990	9,980	3,490	1,520

CAL YR 1972 TOTAL 17,647.1 MEAN 48.4 MAX 448 MIN 4.5 AC-FT 35,100
 WTR YR 1973 TOTAL 20,931.6 MEAN 57.3 MAX 405 MIN 4.1 AC-FT 41,520

PEAK DISCHARGE (BASE, 280 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
5-20	2000	2.89	392	6-26	1900	3.05	412
6-10	2200	3.33	478				

LOCATION.--Lat 40°00'23", long 105°19'49", in NE¼SW¼ sec.34, T.1 N., R.71 W., Boulder County, on left bank along State Highway 119, 0.7 mi (1.1 km) southwest of old Orodell, 1.1 mi (1.8 km) upstream from Fourmile Creek, and 2.9 mi (4.7 km) southwest of courthouse in Boulder.

PERIOD OF RECORD.--August to October 1887, April to October 1888, October 1906 to November 1914, March 1916 to current year. Monthly discharge only for some periods, published in WSP 1310. Figures of daily discharge for Feb. 3-10, 17-25, 1912, published in WSP 326, have been found to be unreliable and should not be used. Published as North Boulder Creek, Colorado 1887-88 and as "at Orodell" March 1907 to December 1916.

AVERAGE DISCHARGE.--65 years (1906-14, 1916-73), 90.4 ft³/s (2.560 m³/s), 65,490 acre-ft/yr (80.7 hm³/yr).

Period of record: Maximum discharge, 2,500 ft³/s (70.8 m³/s) June 6, 1921 (gage height, 4.31 ft or 1.314 m, from rating curve extended above 1,200 ft³/s (34.0 m³/s); minimum daily, 1 ft³/s (0.03 m³/s) Jan. 29, Feb. 1-3, 16-24, 1933.

REMARKS.--Records good. Flow regulated by Barker Reservoir (capacity, 11,500 acre-ft or 14.2 hm³). Low flow during non-irrigation season regulated by Orodell powerplant 1,500 ft (460 m) upstream from station.

REVISIONS (WATER YEARS).--WSP 1310: 1941(M). WSP 1560: 1914(M). WSP 1730: Drainage area. See also PERIOD OF RECORD.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	27	53	46	25	9.0	8.0	82	156	433	130	51
2	19	39	50	50	23	6.0	43	75	154	399	133	51
3	19	57	51	53	23	6.6	38	72	159	361	126	67
4	18	49	58	50	25	6.0	44	89	148	322	108	50
5	18	51	55	50	26	8.6	43	80	136	266	114	40
6	30	55	56	56	23	6.8	24	179	124	282	114	33
7	21	56	54	54	30	6.2	26	226	126	273	108	29
8	16	46	54	47	23	6.0	17	205	144	269	97	29
9	16	7.7	52	56	24	3.6	47	216	171	295	93	28
10	17	5.0	51	46	23	4.2	51	241	221	265	87	44
11	18	4.6	45	50	22	4.2	46	237	440	245	75	42
12	17	4.0	52	60	22	6.5	49	237	523	223	80	50
13	14	34	58	56	25	5.5	23	226	488	213	74	46
14	16	51	46	55	21	12	31	185	502	313	67	39
15	13	47	55	54	23	9.3	33	179	448	257	56	36
16	22	53	52	57	23	9.0	28	195	370	237	50	38
17	22	53	47	60	23	6.0	23	212	294	223	55	36
18	21	54	64	54	23	10	26	219	326	216	74	31
19	20	53	54	52	21	9.6	32	219	241	241	87	30
20	7.5	17	51	50	30	9.6	25	230	233	249	66	29
21	13	5.1	49	54	29	10	26	223	245	230	77	33
22	12	4.8	43	52	26	7.2	24	209	253	198	89	19
23	21	6.3	62	50	21	7.2	37	182	322	179	91	19
24	20	6.9	50	54	26	9.6	39	176	377	153	84	26
25	16	8.3	45	53	20	6.0	50	189	394	143	79	23
26	20	4.9	57	56	22	33	45	164	464	133	79	23
27	20	3.5	48	48	22	42	39	143	489	126	74	26
28	19	3.9	50	58	16	46	60	116	482	119	63	30
29	19	51	56	47	-----	41	67	123	495	135	63	51
30	14	55	50	42	-----	16	86	143	476	151	60	46
31	14	-----	48	46	-----	14	-----	151	-----	145	56	-----
TOTAL	553.5	913.0	1,596	1,616	666	378.7	1,135.6	5,423	9,388	7,374	2,629	1,095
MEAN	17.9	30.4	51.5	52.1	23.8	12.2	37.9	175	313	238	84.8	36.5
MAX	30	57	64	60	30	46	86	241	523	433	133	67
MIN	7.5	3.5	36	42	16	3.6	8.6	72	124	119	50	19
AC=FT	1,100	1,810	3,170	3,210	1,320	751	2,250	10,760	18,620	14,630	5,210	2,170
CAL YR 1972	TOTAL 23,016.5											
WIR YR 1973	TOTAL 32,767.8											
	MEAN 62.9	MAX 320	MIN 3.5	AC=FT 45,650								

PLATTE RIVER BASIN

06729500 SOUTH BOULDER CREEK NEAR ELDORADO SPRINGS, COLO.

LOCATION.--Lat 39°55'52", long 105°17'43", in SE¼ sec.26, T.1 S., R.71 W., Boulder County, on left bank 0.2 mi (0.3 km) downstream from South Draw, 1.0 mi (1.6 km) west of Eldorado Springs, 1.8 mi (2.9 km) downstream from South Boulder diversion canal, 5.0 mi (8.0 km) south of Boulder, and 6.7 mi (10.8 km) downstream from Gross Reservoir.

DRAINAGE AREA.--109 mi² (282 km²).

PERIOD OF RECORD.--April 1888 to October 1892, May 1895 to September 1901, August 1904 to current year. No winter records for water years 1889-92, 1900. Monthly discharge only for some periods, published in WSP 1310. Prior to January 1911, published as "at" or "near Marshall;" January 1911 to December 1913 as "at Eldorado Springs." Records for periods June 1900 to September 1901, August 1904 to September 1908, October 1909 to September 1911 are not adjusted for diversions by Community ditch and South Boulder and Coal Creek ditch; all other records contain flow in these ditches.

GAGE.--Water-stage recorder. Altitude of gage is 6,080 ft (1,853 m) from topographic map. See WSP 1710 or 1730 for history of changes prior to May 10, 1940.

AVERAGE DISCHARGE.--67 years (1895-99, 1908-9, 1911-73), 76.2 ft³/s (2.158 m³/s), 55,210 acre-ft/yr (68.1 hm³/yr), adjusted for storage and diversions.

EXTREMES.--Current year: Maximum discharge, 450 ft³/s (12.7 m³/s) May 6 (gage height, 3.33 ft or 1.015 m); minimum daily, 5.0 ft³/s (0.14 m³/s) Dec. 1-21.

Period of record: Maximum discharge, 7,390 ft³/s (209 m³/s) Sept. 2, 1938 (gage height, 9.24 ft or 2.816 m, from floodmarks, site and datum then in use), from rating curve extended above 600 ft³/s (17 m³/s) on basis of slope-area measurement of peak flow; no flow Oct. 15, 1932.

REMARKS.--Records good except those for winter period, which are fair. Many small diversions above station for irrigation. Water is imported above Gross Reservoir from Colorado River basin through Moffat water tunnel (see elsewhere in this report). Flow regulated since May 1, 1955, by Gross Reservoir (capacity, 43,060 acre-ft or 53.1 hm³), 6.7 mi (10.8 km) above station. City of Denver diverts water 1.8 mi (2.9 km) above station.

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

REVISIONS (WATER YEARS).--WSP 856: 1937(M). WSP 1310: 1937. WSP 1440: 1896. WSP 1710: Drainage area. WSP 1730: 1959-60.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	19	5.0	11	11	8.5	17	187	116	366	64	35
2	14	19	5.0	11	11	8.5	18	155	131	370	64	34
3	18	19	5.0	11	11	8.5	17	161	330	274	64	34
4	22	20	5.0	11	11	8.0	17	167	375	212	64	33
5	22	20	5.0	11	11	8.0	19	178	339	147	64	33
6	21	19	5.0	11	11	7.2	22	344	181	114	64	32
7	21	19	5.0	11	11	6.0	22	266	144	118	62	32
8	21	19	5.0	11	11	6.0	19	175	206	121	60	31
9	19	20	5.0	11	11	6.0	14	147	262	121	60	31
10	17	20	5.0	11	11	6.0	12	133	270	121	65	33
11	18	20	5.0	11	11	6.4	14	111	314	121	67	37
12	16	21	5.0	11	11	6.4	21	87	254	130	67	32
13	15	16	5.0	11	11	6.8	30	74	232	142	67	34
14	15	16	5.0	11	11	13	33	64	236	142	62	38
15	14	16	5.0	11	11	12	34	59	294	142	56	38
16	14	16	5.0	11	11	12	28	56	306	142	53	38
17	15	17	5.0	11	10	11	27	54	226	142	36	38
18	15	21	5.0	11	9.0	12	30	53	190	150	23	38
19	15	21	5.0	11	9.0	12	35	53	215	152	22	37
20	15	21	5.0	11	9.0	11	29	48	266	155	21	29
21	16	21	5.0	11	9.0	15	26	40	266	155	20	24
22	16	21	7.0	11	9.0	19	27	35	254	152	19	24
23	16	21	9.0	11	9.0	19	32	31	236	152	19	24
24	14	21	10	11	9.0	19	40	30	236	121	30	24
25	12	21	10	11	9.0	19	54	58	240	106	38	19
26	12	21	10	11	8.5	19	46	116	240	89	37	12
27	14	21	10	11	8.5	19	46	114	290	67	37	12
28	19	15	10	11	8.0	19	62	111	366	64	36	12
29	19	10	10	11	-----	18	65	111	388	64	36	15
30	19	7.0	10	11	-----	17	147	126	375	64	35	12
31	19	-----	10	11	-----	16	-----	118	-----	64	35	-----
TOTAL	517	558.0	201.0	341	283.0	374.3	1,003	3,462	7,778	4,480	1,447	865
MEAN	16.7	18.6	6.48	11.0	10.1	12.1	33.4	112	259	145	46.7	28.8
MAX	22	21	10	11	11	19	147	344	388	370	67	38
MIN	12	7.0	5.0	11	8.0	6.0	12	30	116	64	19	12
AC-FT	1,030	1,110	399	676	561	742	1,990	6,870	15,430	8,890	2,870	1,720
CAL YR 1972	TOTAL 18,038.4 MEAN 49.3 MAX 406 MIN 5.0 AC-FT 35,780											
WTR YR 1973	TOTAL 21,309.3 MEAN 58.4 MAX 388 MIN 5.0 AC-FT 42,270											

NOTE.--No gage-height record Dec. 1 to Feb. 26.

PLATTE RIVER BASIN

41

06730300 COAL CREEK NEAR PLAINVIEW, COLO.

LOCATION.--Lat 39°52'40", long 105°16'36", in SE¼NE¼ sec.13, T.2 S., R.71 W., Jefferson County, on left bank 100 ft (30 m) upstream from culvert on State Highway 72, 1.2 mi (1.9 km) south of Plainview, 4.9 mi (7.9 km) downstream from Beaver Creek, and 9 mi (14 km) north of Golden.

DRAINAGE AREA.--15.1 mi² (39.1 km²).

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

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 6,540 ft (1,993 m) from topographic map. Prior to June 17, 1964, water-stage recorder at site 60 ft (18 m) downstream at datum 4.49 ft (1.369 m) lower.

AVERAGE DISCHARGE.--14 years, 4.72 ft³/s (0.134 m³/s), 3,420 acre-ft/yr (4.22 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 338 ft³/s (9.57 m³/s) May 6 (gage height, 2.74 ft or 0.835 m); minimum daily, 0.05 ft³/s (0.001 m³/s) Sept. 3-8, 10.

Period of record: Maximum discharge, 2,060 ft³/s (58.3 m³/s) May 7, 1969 (gage height, 5.30 ft or 1.615 m), from rating curve extended above 730 ft³/s (21 m³/s); no flow for many days in most years.

REMARKS.--Records good except those for period of no gage-height record, which are poor. No diversion above station.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.12	.30	1.3	.75	2.4	1.8	5.0	48	30	2.3	.79	.06
2	.10	.35	1.3	.80	2.1	1.9	6.0	45	30	2.1	.73	.06
3	.10	.40	.90	.85	1.9	1.9	6.5	45	30	2.0	.50	.05
4	.12	.45	.70	.80	2.0	1.8	7.0	50	30	1.0	.50	.05
5	.12	.50	.55	.70	2.0	2.0	8.0	59	26	1.2	.45	.05
6	.14	.50	.50	.70	1.8	2.1	10	195	23	1.2	.28	.05
7	.14	.45	.75	.70	1.5	2.3	9.0	213	21	1.2	.16	.05
8	.10	.50	.75	.70	1.4	2.3	8.0	171	20	1.2	.14	.05
9	.16	.67	.75	.60	1.7	2.3	7.0	167	19	1.2	.12	.06
10	.16	.67	.70	.60	2.0	2.3	9.0	151	18	1.1	.12	.05
11	.16	.67	.70	.70	2.3	2.4	12	143	16	.93	.15	.08
12	.16	.73	.70	.70	2.3	2.9	15	118	15	.86	.20	.10
13	.19	.73	.60	.80	2.2	3.0	20	94	14	1.0	.19	.08
14	.19	.73	.60	.90	2.0	2.9	26	76	12	1.3	.16	.10
15	.19	.86	.60	1.1	1.5	3.0	30	76	10	1.2	.17	.10
16	.16	.86	.55	1.5	1.3	3.0	24	73	9.0	1.1	.14	.20
17	.16	.86	.55	1.4	1.2	2.7	23	75	8.2	1.0	.16	.30
18	.19	.86	.55	1.3	1.1	2.9	25	83	7.3	1.3	.19	.20
19	.19	.93	.55	1.2	1.0	2.9	28	102	6.5	1.5	.16	.20
20	.22	1.0	.67	1.2	1.0	3.5	26	96	6.1	1.4	.12	.20
21	.25	1.2	.79	1.0	1.1	4.3	23	86	5.8	1.2	.12	.15
22	.25	1.3	1.1	1.0	1.1	4.6	23	72	5.4	1.1	.10	.15
23	.25	1.2	1.0	1.0	1.2	3.9	23	66	5.1	1.0	.10	.15
24	.25	1.1	1.0	1.2	1.2	4.1	25	57	4.1	.90	.10	.10
25	.25	1.1	1.0	1.2	1.2	4.3	35	52	3.5	.86	.08	.10
26	.22	1.2	1.1	1.2	1.3	4.6	35	49	3.2	.67	.08	.10
27	.22	1.0	1.2	1.1	1.3	5.8	35	41	3.0	.55	.08	.15
28	.28	.90	1.2	.90	1.8	5.4	40	34	2.9	.45	.08	.40
29	.25	.90	1.0	1.2	-----	4.8	45	30	2.6	.73	.08	2.6
30	.20	1.1	.80	2.1	-----	4.1	50	34	2.4	.79	.06	1.4
31	.25	-----	.80	2.6	-----	4.0	-----	33	-----	1.2	.06	-----
TOTAL	5.80	24.02	25.26	32.50	44.9	99.8	638.5	2,634	389.1	36.14	6.39	7.39
MEAN	.19	.80	.81	1.05	1.60	3.22	21.3	85.0	13.0	1.17	.21	.25
MAX	.28	1.3	1.3	2.6	2.4	5.8	50	213	30	2.3	.79	2.6
MIN	.10	.30	.50	.60	1.0	1.8	5.0	30	2.4	.45	.06	.05
AC-FT	12	48	50	64	89	198	1,270	5,220	772	72	13	15

CAL YR 1972 TOTAL 466.10 MEAN 1.27 MAX 19 MIN .06 AC-FT 925
WTR YR 1973 TOTAL 3,943.80 MEAN 10.8 MAX 213 MIN .05 AC-FT 7,820

PEAK DISCHARGE (BASE, 25 CFS)--May 6 (1745) 338 cfs (2.74 ft).

NOTE.--No gage-height record Dec. 29 to Jan. 30.

PLATTE RIVER BASIN

06731000 ST. VRAIN CREEK AT MOUTH, NEAR PLATTEVILLE, COLO.

LOCATION.--Lat 40°15'29", long 104°52'45", in SE¼NW¼ sec.3, T.3 N., R.67 W., Weld County, on right bank 140 ft (43 m) downstream from bridge on county road, 1.3 mi (2.1 km) upstream from mouth, and 4.2 mi (6.8 km) north-west of Platteville.

DRAINAGE AREA.--976 mi² (2,528 km²).

PERIOD OF RECORD.--July 1904 to December 1906, April to December 1915, March 1927 to current year. Prior to October 1933 monthly discharge only, published in WSP 1310.

GAGE.--Water-stage recorder. Altitude of gage is 4,740 ft (1,445 m) from topographic map. See WSP 1730 for history of changes prior to Apr. 25, 1960.

AVERAGE DISCHARGE.--48 years (1904-6, 1927-73), 204 ft³/s (5.777 m³/s), 147,800 acre-ft/yr (182 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 5,620 ft³/s (159 m³/s) May 7 (gage height, 7.81 ft or 2.380 m); minimum daily, 70 ft³/s (1.98 m³/s) Dec. 5.
Period of record: Maximum discharge, 11,300 ft³/s (320 m³/s) Sept. 3, 1938 (gage height, 8.93 ft or 2.722 m, site and datum then in use), from rating curve extended above 4,700 ft³/s (133 m³/s); minimum daily, 12 ft³/s (0.34 m³/s) Apr. 23, 1935.

REMARKS.--Records good. Diversions above station for irrigation of about 177,000 acres (716 km²). Flow partly regulated by many small reservoirs above station. Water-quality records for the current year are published in Part 2 of this report.

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

REVISIONS (WATER YEARS).--WSP 956: 1938(M). WSP 1440: 1934, 1935(M). WSP 1730: 1958, drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	119	164	189	195	170	151	96	434	635	392	274	189
2	116	186	195	159	146	138	96	595	615	266	268	192
3	117	206	192	175	143	131	112	620	665	212	277	206
4	114	212	156	181	151	131	116	504	844	172	286	206
5	119	206	70	175	159	131	114	540	880	148	274	203
6	107	198	115	175	164	131	112	1,080	750	143	268	200
7	107	200	140	189	156	131	114	4,760	536	143	244	200
8	114	192	160	181	141	131	116	3,640	417	184	206	203
9	112	164	170	141	154	131	116	2,770	520	209	167	256
10	112	156	160	177	154	131	133	2,370	772	235	143	220
11	112	151	150	179	154	126	151	2,240	1,150	241	143	274
12	114	148	150	211	156	124	175	1,840	1,390	223	159	307
13	119	156	150	274	159	126	209	1,590	1,360	250	148	265
14	119	164	155	307	148	128	189	1,400	1,310	361	148	238
15	119	172	170	253	143	124	154	1,240	1,370	431	175	238
16	119	175	180	235	146	124	172	1,150	1,190	386	154	256
17	124	186	195	226	146	124	151	1,120	904	304	146	256
18	133	181	220	212	151	124	136	1,070	556	292	167	253
19	133	178	265	206	154	124	133	1,150	466	325	217	235
20	138	178	290	209	143	124	138	1,180	289	389	184	214
21	146	164	300	195	148	124	133	1,200	209	456	164	209
22	148	151	315	189	146	124	131	1,290	172	434	154	189
23	133	141	320	178	141	116	131	1,260	159	400	156	184
24	131	141	260	192	146	109	136	1,090	167	316	164	200
25	133	138	226	192	154	105	271	934	186	304	192	200
26	136	141	206	186	156	105	378	886	198	280	175	217
27	136	146	214	175	161	105	344	778	241	250	181	203
28	145	141	206	172	159	109	289	645	268	232	181	220
29	138	121	195	203	-----	116	304	504	364	220	184	319
30	133	189	172	186	-----	116	316	548	448	235	184	280
31	151	-----	181	181	-----	107	-----	772	-----	265	186	-----
TOTAL	5,897	5,066	6,067	6,109	4,249	3,821	5,166	41,200	19,031	8,718	5,969	6,832
MEAN	126	169	196	197	152	123	172	1,329	634	281	193	228
MAX	151	212	320	307	170	151	378	4,760	1,390	456	286	319
MIN	107	121	70	141	141	105	96	434	159	143	143	164
AC-FT	7,730	10,050	12,030	12,120	8,430	7,580	10,250	81,720	37,750	17,290	11,840	13,550

CAL YR 1972 TOTAL 60,961 MEAN 167 MAX 1,450 MIN 70 AC-FT 120,900

WTR YR 1973 TOTAL 116,125 MEAN 318 MAX 4,760 MIN 70 AC-FT 230,300

PLATTE RIVER BASIN

43

06733000 BIG THOMPSON RIVER AT ESTES PARK, COLO.

LOCATION.--Lat 40°22'42", long 105°30'48", in NW¼NW¼ sec.30, T.5 N., R.72 W., Larimer County, on right bank in Estes Park, 600 ft (180 m) downstream from bridge on State Highways 7 and 66, 900 ft (270 m) downstream from Black Canyon Creek, and 0.3 mi (0.5 km) northwest of Estes powerplant. Station is upstream from Lake Estes.

DRAINAGE AREA.--137 mi² (486 km²).

PERIOD OF RECORD.--October 1946 to current year. Prior to October 1947, published as Thompson River at Estes Park.

GAGE.--Water-stage recorder and Parshall flume with overflow weirs. Datum of gage is 7,492.5 ft (2,283.71 m) above mean sea level (levels by Bureau of Reclamation). Prior to May 18, 1949, at site 740 ft (230 m) downstream at different datum. May 18, 1949, to Mar. 22, 1951, at site 60 ft (18 m) upstream at datum 1.2 ft (0.37 m) higher.

AVERAGE DISCHARGE.--27 years, 127 ft³/s (3.60 m³/s), 92,010 acre-ft/yr (113 hm³/yr), adjusted for inflow from Alva B. Adams tunnel Aug. 10, 1947, to Aug. 2, 1950.

EXTREMES.--Current year: Maximum discharge, 1,170 ft³/s (33.1 m³/s) June 11 (gage height, 6.02 ft or 1.835 m); minimum daily, 8.0 ft³/s (0.23 m³/s) Feb. 22.

Period of record: Maximum discharge, 1,660 ft³/s (47.0 m³/s) June 18, 1949 (gage height, 3.16 ft or 0.963 m, site and datum then in use); maximum gage height, 6.89 ft (2.100 m) June 17, 1965; minimum discharge not determined.

REMARKS.--Records good except those for winter period, which are fair. Diversion from Colorado River basin to Big Thompson River basin above station through Alva B. Adams tunnel began Aug. 10, 1947, and ended Aug. 2, 1950. Small power developments and small diversions for irrigation and municipal use above station. Diversions above station from Wind River to Lake Estes (bypassing this station) were 1,430 acre-ft (1.76 hm³) during current year.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	45	48	14	17	10	11	12	50	326	706	239	68
2	44	47	14	16	10	11	12	45	366	653	225	68
3	42	47	15	16	11	11	12	52	346	566	213	63
4	41	44	14	15	11	11	12	64	302	502	213	74
5	43	44	15	14	12	10	12	65	263	485	216	69
6	45	43	18	14	11	10	14	96	270	467	254	65
7	44	41	20	13	11	12	13	128	350	455	238	62
8	51	40	19	12	11	12	15	148	538	483	224	62
9	52	39	19	11	10	12	15	151	750	457	207	65
10	49	38	18	10	10	13	15	156	994	425	191	71
11	45	38	18	10	11	14	13	172	985	400	182	60
12	43	34	18	11	11	14	16	172	972	402	178	65
13	43	35	18	11	11	14	20	175	1,010	546	167	75
14	45	39	18	12	10	12	20	164	1,020	655	157	68
15	46	36	17	12	9.6	13	22	168	817	489	151	64
16	56	38	18	13	9.4	13	18	197	570	461	142	64
17	54	39	18	13	9.2	13	20	222	445	391	138	60
18	61	33	18	13	9.0	14	24	302	435	370	160	53
19	60	30	18	13	8.8	13	24	447	342	433	151	52
20	59	30	19	13	8.4	13	20	538	309	529	139	47
21	86	28	19	12	8.2	15	22	574	341	481	139	43
22	71	26	19	12	8.0	14	22	498	429	385	143	43
23	62	24	18	12	8.4	12	22	429	516	330	142	42
24	56	26	18	11	9.0	14	26	421	579	299	134	41
25	53	19	18	10	9.4	13	30	394	623	293	126	42
26	51	17	17	10	9.8	14	29	383	820	257	119	45
27	52	17	17	10	10	13	36	293	882	270	114	42
28	53	17	17	10	11	13	45	242	823	263	108	43
29	50	16	17	11	-----	13	45	244	793	270	102	47
30	44	17	17	11	-----	13	52	273	781	285	99	49
31	41	-----	17	11	-----	15	-----	283	-----	262	96	-----
TOTAL	1,587	990	540	379	278.2	395	658	7,546	17,997	13,270	5,107	1,812
MEAN	51.2	33.0	17.4	12.2	9.94	12.7	21.9	243	600	428	165	60.4
MAX	86	48	20	17	12	15	52	574	1,020	706	254	88
MIN	41	16	14	10	8.0	10	12	45	263	257	96	41
AC-FT	3,150	1,960	1,070	752	552	783	1,310	14,970	35,700	26,320	10,130	3,590

CAL YR 1972 TOTAL 59,144.0 MEAN 107 MAX 857 MIN 11 AC-FT 77,640
 WTR YR 1973 TOTAL 50,559.2 MEAN 139 MAX 1,020 MIN 8.0 AC-FT 100,300

PEAK DISCHARGE (BASE, 600 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
5-21	2300	4.37	612	6-27	0330	5.88	1,100
6-11	0300	6.02	1,170				

NOTE.--No gage-height record Dec. 8 to Mar. 1.

PLATTE RIVER BASIN

06735500 BIG THOMPSON RIVER NEAR ESTES PARK, COLO.

LOCATION.--Lat 40°22'35", long 105°29'06", in NE¼NE¼ sec.29, T.5 N., R.72 W., Larimer County, on right bank 100 ft (30 m) upstream from Dry Creek, 600 ft (180 m) downstream from Olympus Dam, and 2.0 mi (3.2 km) east of Estes Park.

DRAINAGE AREA.--156 mi² (404 km²).

PERIOD OF RECORD.--July 1930 to current year. Prior to October 1933 monthly discharge only, published in WSP 1310. Published as Thompson River near Estes Park 1934-47.

GAGE.--Water-stage recorder and Parshall flume. Datum of gage is 7,422.5 ft (2,262.38 m) above mean sea level (levels by Bureau of Reclamation). Prior to Jan. 29, 1934, nonrecording gage on highway bridge 1.5 mi (2.4 km) downstream at different datum. Jan. 29, 1934, to Mar. 21, 1951, water-stage recorder at site 0.4 mi (0.6 km) downstream at datum 10.5 ft (3.20 m) lower.

EXTREMES.--Current year: Maximum discharge, 921 ft³/s (26.1 m³/s) June 27 (gage height, 5.57 ft or 1.698 m); minimum daily, 10 ft³/s (0.28 m³/s) Jan. 10, 11.

Period of record: Maximum discharge observed, 2,800 ft³/s (79.3 m³/s) June 20, 1933 (gage height, 4.0 ft or 1.22 m, site and datum then in use), from rating curve extended above 460 ft³/s (13 m³/s); minimum daily, 4.4 ft³/s (0.12 m³/s) Dec. 12, 1940, but may have been less during periods of no gage-height record.

REMARKS.--Records excellent. Low flow regulated by Lake Estes since Nov. 30, 1948. Diversion from Colorado River to Big Thompson River basin above station through Alva B. Adams tunnel began Aug. 10, 1947 (see sta. 09013000 for diversion during current year); since Apr. 15, 1953, this imported water has been diverted from Lakes Estes through Olympus tunnel bypassing this station. Since May 17, 1955, part of the natural flow of Big Thompson River (43,580 acre-ft or 53.7 hm³ during current year) has also been diverted through Olympus tunnel and returned to the river below the station at mouth of canyon, near Drake. Small power developments and small diversions for irrigation and municipal use above station.

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

REVISIONS (WATER YEARS).--WSP 1310: 1931. WSP 1730: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	46	48	12	17	11	12	15	45	76	653	100	75
2	45	48	12	17	11	12	12	41	101	566	100	75
3	43	46	15	17	11	12	12	53	101	516	100	75
4	42	44	12	17	11	11	14	45	101	425	100	73
5	44	44	14	17	11	11	15	80	101	363	100	50
6	47	45	15	17	11	12	14	113	101	346	100	49
7	45	42	18	16	11	11	14	166	101	377	100	49
8	51	40	22	14	12	12	15	80	101	413	100	50
9	52	40	22	12	12	12	15	80	173	441	100	50
10	51	36	22	10	12	13	16	78	449	465	100	49
11	46	32	24	10	12	17	17	75	481	381	100	49
12	45	32	25	12	12	14	17	75	402	361	100	49
13	45	32	26	11	12	17	20	74	361	366	100	49
14	47	30	23	11	12	16	22	75	402	618	99	49
15	48	34	18	11	11	16	23	75	439	667	73	49
16	58	40	18	11	11	20	22	75	175	458	75	50
17	56	38	18	11	11	18	20	75	125	417	75	49
18	64	33	18	12	11	16	22	75	125	350	75	49
19	62	31	18	12	11	13	22	75	125	374	75	50
20	60	29	18	13	11	18	22	75	125	441	75	49
21	47	27	19	14	11	16	20	75	125	531	75	45
22	73	27	19	13	11	16	19	75	125	489	75	45
23	64	24	19	13	11	17	19	75	125	351	75	43
24	59	26	19	13	11	16	20	75	125	243	75	43
25	55	20	19	13	11	14	22	75	125	207	75	44
26	52	17	19	13	11	14	24	75	244	198	75	46
27	53	17	20	13	11	14	36	75	562	166	75	43
28	55	18	18	13	11	12	42	75	811	101	75	44
29	52	20	18	12	-----	13	43	75	711	100	75	49
30	46	17	17	12	-----	13	48	75	660	100	75	51
31	42	-----	17	12	-----	15	-----	76	-----	100	75	-----
TOTAL	1,635	979	572	409	315	443	642	2,356	7,778	11,584	2,672	1,540
MEAN	52.7	32.6	18.5	13.2	11.3	14.3	21.4	76.0	259	374	86.2	51.3
MAX	87	48	26	17	12	20	48	166	811	667	100	75
MIN	42	17	12	10	11	11	12	41	76	100	73	43
AC-FT	3,240	1,940	1,130	811	625	879	1,270	4,670	15,430	22,980	5,300	3,050

CAL YR 1972 TOTAL 21,485 MEAN 58.7 MAX 483 MIN 11 AC-FT 42,620
WTR YR 1973 TOTAL 30,925 MEAN 84.7 MAX 811 MIN 10 AC-FT 61,340

45

LOCATION.--Lat 40°25'18", long 105°13'34", in SW¼SW¼ sec.3, T.5 N., R.70 W., Larimer County, on right bank at mouth of canyon, 400 ft (120 m) upstream from Handy Ditch diversion dam and 6.0 mi (9.7 km) east of Drake.

PERIOD OF RECORD.--August 1887 to September 1892, May 1895 to September 1903, October 1926 to September 1933 (no winter records prior to October 1932, except water years 1927-28), April 1938 to September 1949, March 1951 to current year. Monthly discharge only for some periods, published in WSP 1310. Published as Big Thompson Creek at Arkins 1887-92, Big Thompson Creek near Arkins 1901-3, and as Thompson River at mouth of canyon, near Drake 1927-30, 1938-47.

EXTREMES.--Current year: Maximum discharge, 1,180 ft³/s (33.4 m³/s) June 27 (gage height, 4.03 ft or 1.228 m); minimum daily, 14 ft³/s (0.40 m³/s) Dec. 30, 31.
Period of record: Maximum discharge, 7,600 ft³/s (215 m³/s) July 19, 1945 (gage height, 7.55 ft or 2.301 m, site and datum then in use), from rating curve extended above 2,200 ft³/s (62 m³/s); minimum daily, 0.20 ft³/s (0.006 m³/s) Dec. 10-21, 1969.

REMARKS.--Records good except those for winter period, which are fair. Diversions above station for irrigation. Diversions from Colorado River to Big Thompson River basin above station through Alva B. Adams tunnel began Aug. 10, 1947 (see sta. 09013000 for diversion for water year 1973); since Apr. 15, 1953, this imported water has been diverted from Lake Estes through Olympus tunnel bypassing this station. Part of the natural flow of Big Thompson River has also been diverted through Olympus tunnel since May 17, 1955 (43,580 acre-ft or 53.7 hm³ during current year), and Dille tunnel since Apr. 20, 1959 (28,870 acre-ft or 35.6 hm³ during current year), and returned to the river just below this station.

REVISIONS (WATER YEARS).--WSP 1310: 1891, 1927. WSP 1730: Drainage area.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	67	60	33	18	18	19	23	134	110	655	95	95
2	65	64	27	19	17	21	22	127	180	574	95	97
3	64	65	20	23	18	18	20	141	205	516	99	97
4	58	58	18	20	19	17	18	194	191	372	93	95
5	60	58	21	18	19	18	20	196	134	246	89	85
6	64	60	26	20	18	16	25	611	83	237	93	76
7	64	54	28	22	18	18	28	725	87	249	125	76
8	67	54	26	21	20	19	19	395	168	240	125	76
9	72	55	26	19	16	20	25	146	336	261	123	80
10	51	46	27	18	19	19	28	91	745	273	108	82
11	33	46	29	17	18	20	26	78	840	216	119	97
12	29	44	30	17	20	25	30	69	790	243	114	85
13	29	34	32	18	17	30	29	48	725	390	110	80
14	32	40	28	17	20	23	33	30	765	574	102	76
15	33	42	27	18	21	22	38	25	775	632	83	55
16	27	48	24	18	19	30	32	26	512	488	78	49
17	22	49	26	18	19	29	38	36	324	412	76	48
18	27	48	26	18	20	27	36	72	270	337	82	46
19	28	39	26	22	19	26	42	174	228	297	95	43
20	23	44	28	20	17	23	34	348	156	368	99	42
21	32	43	26	19	18	27	36	412	93	412	93	39
22	26	20	28	19	15	22	35	372	97	368	102	34
23	20	22	26	18	17	22	34	365	170	210	106	34
24	20	28	23	19	18	24	40	351	249	121	104	33
25	19	33	20	19	18	22	76	327	264	151	104	35
26	14	28	24	19	18	21	72	276	365	160	99	40
27	50	28	27	19	19	20	82	228	694	136	99	38
28	74	16	22	17	19	22	116	125	810	125	102	40
29	69	16	22	19	-----	17	123	83	720	119	102	52
30	65	33	15	18	-----	17	127	112	650	127	99	52
31	54	-----	15	18	-----	19	-----	106	-----	119	99	-----
TOTAL	1,358	1,279	776	585	514	673	1,307	6,423	11,736	9,628	5,112	1,877
MEAN	43.8	42.6	25.0	18.9	18.4	21.7	43.6	207	391	311	100	62.6
MAX	74	65	33	23	21	30	127	725	840	655	125	97
MIN	14	16	15	17	15	16	18	25	83	119	76	33
AC-FT	2,690	2,540	1,540	1,160	1,020	1,330	2,590	12,740	23,280	19,100	6,170	3,720
CAL YR 1972	TOTAL 24,922		MEAN 68.1	MAX 408	MIN 14	AC-FT 49,430						
WTR YR 1973	TOTAL 39,268		MEAN 108	MAX 840	MIN 14	AC-FT 77,890						

PLATTE RIVER BASIN

06744000 BIG THOMPSON RIVER AT MOUTH, NEAR LA SALLE, COLO.

LOCATION.--Lat 40°21'00", long 104°47'04", in SW¼SE¼ sec.33, T.5 N., R.66 W., Weld County, on left bank just southeast of gage on Evans Town ditch, 0.7 mi (1.1 km) upstream from highway bridge, 1.6 mi (2.6 km) upstream from mouth, and 4.2 mi (6.8 km) west of La Salle.

DRAINAGE AREA.--828 mi² (2,145 km²).

PERIOD OF RECORD.--April 1914 to October 1915, March 1927 to current year. Prior to October 1933 monthly discharge only, published in WSP 1310. Published as Thompson River at mouth, near La Salle, 1934-47.

GAGE.--Water-stage recorder. Altitude of gage is 4,680 ft (1,426 m) from topographic map. Apr. 1, 1914, to Oct. 31, 1915, nonrecording gage and Mar. 1, 1927, to Sept. 30, 1951, water-stage recorder, at bridge 0.7 mi (1.1 km) downstream at different datums. Datum lowered 0.50 ft (0.152 m) May 21, 1962.

EXTREMES.--Current year: Maximum discharge, 1,610 ft³/s (45.6 m³/s) May 7 (gage height, 5.75 ft or 1.753 m); minimum daily, 20 ft³/s (0.28 m³/s) Oct. 3.

Period of record: Maximum discharge, 6,100 ft³/s (173 m³/s) Aug. 4, 1951 (gage height, 7.80 ft or 2.377 m, site and datum then in use), from rating curve extended above 4,500 ft³/s (127 m³/s); maximum gage height, 8.72 ft (2.658 m) May 9, 1957, present datum; no flow at times in 1934-35, 1948.

REMARKS.--Records good. Natural flow of stream affected by transmountain diversions, storage reservoirs, power developments, diversions for irrigation of about 95,000 acres (384 km²) above station, and return flow from irrigated areas. Water-quality records for the current year are published in Part 2 of this report.

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

REVISIONS (WATER YEARS).--WSP 976: 1941(M). WSP 1730: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	87	72	66	72	87	69	118	347	34	75	96
2	22	93	75	60	66	85	72	124	332	34	69	46
3	20	91	75	61	66	85	75	107	350	39	60	105
4	25	87	60	61	69	82	77	94	371	49	58	98
5	33	85	25	58	74	82	72	93	311	72	53	100
6	33	84	40	58	80	80	72	257	225	72	56	96
7	37	84	45	60	74	75	74	1,240	149	74	53	91
8	40	84	46	58	63	75	69	1,040	124	94	51	100
9	40	82	47	57	63	80	63	731	124	109	46	131
10	44	80	50	56	72	82	69	723	289	94	48	127
11	42	80	52	54	70	80	72	683	571	74	48	149
12	54	82	58	60	74	80	74	740	663	66	49	179
13	61	82	56	61	70	84	74	727	691	77	48	137
14	66	80	54	69	69	85	74	643	695	129	46	133
15	69	80	50	78	66	72	72	856	820	127	51	129
16	72	80	52	80	66	69	70	892	852	105	50	135
17	75	82	56	82	69	69	67	906	496	100	53	135
18	77	75	60	75	70	67	67	938	329	98	56	135
19	77	74	61	80	77	74	69	960	252	103	48	127
20	78	74	62	75	75	69	66	1,080	200	127	48	116
21	80	75	67	77	74	67	64	1,240	116	124	50	116
22	82	74	70	70	75	66	61	1,280	89	98	50	116
23	78	74	74	58	78	66	61	1,260	91	91	49	122
24	80	74	74	72	85	63	66	1,130	78	91	46	111
25	82	72	70	72	93	63	135	1,030	70	111	84	96
26	84	72	70	85	96	61	127	965	64	82	93	87
27	82	74	74	75	94	60	109	870	77	82	102	82
28	84	72	80	80	89	61	103	719	93	67	96	69
29	84	61	78	98	-----	67	96	571	85	54	94	109
30	84	74	61	100	-----	69	96	362	51	56	100	111
31	82	-----	63	85	-----	69	-----	392	-----	61	96	-----
TOTAL	1,889	2,368	1,877	2,181	2,089	2,274	2,335	22,771	9,005	2,594	1,926	3,454
MEAN	60.9	78.9	60.5	70.4	74.6	73.4	77.8	735	300	83.7	62.1	115
MAX	84	93	80	100	96	87	135	1,280	852	129	102	179
MIN	20	61	25	54	63	60	61	93	51	34	46	82
AC-FT	3,750	4,700	3,720	4,330	4,140	4,510	4,630	45,170	17,860	5,150	3,820	6,850

CAL YR 1972 TOTAL 23,162.8 MEAN 63.3 MAX 726 MIN 1.6 AC-FT 45,940
 WTR YR 1973 TOTAL 54,763.0 MEAN 150 MAX 1,280 MIN 20 AC-FT 108,600

PLATTE RIVER BASIN

47

06748200 FALL CREEK NEAR RUSTIC, COLO.

LOCATION.--Lat 40°33'06", long 105°37'35", in NW¼ sec.30, at line of sec.19, T.7 N., R.73 W., Larimer County, on left bank on upstream side of bridge, 1.5 mi (2.4 km) upstream from mouth, 11 mi (18 km) southwest of Rustic, and 29 mi (47 km) west of Fort Collins.

DRAINAGE AREA.--3.64 mi² (9.43 km²).

PERIOD OF RECORD.--October 1960 to September 1973 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 9,765 ft (2,976 m) from topographic map.

AVERAGE DISCHARGE.--13 years, 6.34 ft³/s (0.180 m³/s), 4,590 acre-ft/yr (5.66 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 68 ft³/s (1.93 m³/s) June 13 (gage height, 2.65 ft or 0.808 m); maximum gage height, 4.96 ft (1.512 m) May 23 (backwater from ice); minimum daily discharge, 0.25 ft³/s (0.007 m³/s) Mar. 30.

Period of record: Maximum discharge, 108 ft³/s (3.06 m³/s) June 16, 1965 (gage height, 3.41 ft or 1.039 m), from rating curve extended above 59 ft³/s (1.7 m³/s); maximum gage height, 4.96 ft (1.512 m) May 23, 1973 (backwater from ice); minimum daily discharge, 0.08 ft³/s (0.002 m³/s) Feb. 6-12, 1972.

REMARKS.--Records good. No diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.0	1.9	1.1	.65	.50	.34	.28	.60	13	39	11	6.0
2	2.8	1.9	1.0	.65	.50	.34	.28	.55	14	34	11	6.0
3	2.7	1.9	1.0	.65	.50	.34	.28	.60	10	31	10	5.5
4	2.5	1.9	.95	.65	.50	.34	.28	.80	9.0	29	10	4.8
5	2.7	1.8	.95	.65	.50	.34	.31	.95	7.2	29	11	4.7
6	2.6	1.8	.95	.65	.50	.34	.31	.95	11	27	11	4.4
7	2.6	1.7	.95	.60	.46	.34	.31	.85	19	30	11	4.0
8	3.1	1.7	.90	.55	.46	.31	.31	.95	33	31	11	4.0
9	2.9	1.6	.90	.50	.46	.31	.31	1.1	43	29	10	4.4
10	2.5	1.6	.90	.50	.46	.31	.28	2.0	48	26	11	4.0
11	2.3	1.6	.85	.55	.46	.31	.28	3.0	47	25	10	4.0
12	2.2	1.6	.75	.55	.46	.31	.34	5.0	49	23	9.4	4.1
13	2.2	1.5	.75	.55	.42	.31	.38	6.0	51	26	9.2	4.1
14	2.1	1.5	.80	.55	.42	.31	.46	7.0	51	24	9.0	4.0
15	2.5	1.4	.75	.60	.42	.31	.55	6.0	40	20	8.4	3.9
16	2.5	1.4	.75	.60	.42	.31	.42	5.5	28	18	8.2	3.9
17	2.5	1.3	.75	.60	.42	.31	.42	5.9	23	19	8.0	4.0
18	2.6	1.2	.75	.55	.42	.34	.42	9.2	19	18	8.4	4.0
19	2.6	1.2	.75	.55	.42	.34	.42	16	17	19	8.2	4.0
20	2.5	1.2	.75	.55	.42	.34	.42	21	15	20	8.0	3.8
21	3.0	1.1	.75	.55	.38	.34	.38	17	16	18	8.6	3.6
22	2.5	1.1	.75	.55	.38	.34	.36	14	19	17	9.0	3.5
23	2.3	1.1	.75	.55	.34	.31	.34	16	25	15	8.4	3.5
24	2.2	1.1	.75	.50	.34	.31	.34	15	26	14	8.4	3.7
25	2.1	1.0	.70	.50	.34	.31	.34	14	32	14	7.9	3.9
26	1.9	1.0	.70	.50	.34	.31	.34	12	43	13	7.2	4.0
27	1.9	1.1	.70	.50	.34	.31	.46	9.2	45	13	6.8	4.0
28	2.0	1.2	.70	.50	.34	.31	.55	7.7	42	13	6.6	4.0
29	1.9	1.2	.70	.50	-----	.28	.65	7.4	43	13	6.5	4.0
30	2.0	1.1	.70	.50	-----	.25	.70	7.2	39	13	6.3	4.0
31	2.0	-----	.70	.50	-----	.28	-----	8.8	-----	12	6.0	-----
TOTAL	75.2	42.7	25.15	17.35	11.92	9.85	11.54	222.25	877.2	672	275.5	125.8
MEAN	2.43	1.42	.81	.56	.43	.32	.38	7.17	29.2	21.7	8.89	4.19
MAX	3.1	1.9	1.1	.65	.50	.34	.70	21	51	39	11	6.0
MIN	1.9	1.0	.70	.50	.34	.25	.28	.55	7.2	12	6.0	3.5
AC=FT	149	85	50	34	24	20	23	441	1,740	1,330	546	250

CAL YR 1972 TOTAL 2,200.47 MEAN 6.01 MAX 54 MIN .08 AC=FT 4,360

WTR YR 1973 TOTAL 2,366.46 MEAN 6.48 MAX 51 MIN .25 AC=FT 4,690

PEAK DISCHARGE (BASE, 30 CFS).--June 13 (2200) 68 cfs (2.65 ft); June 26 (2100) 57 cfs (2.50 ft).

PLATTE RIVER BASIN

06748510 LITTLE BEAVER CREEK NEAR IDYLWILDE, COLO.

LOCATION.--Lat 40°38'19", long 105°39'40", in NW¼ sec.26, T.8 N., R.74 W., Larimer County, on left bank 4.5 mi (7.2 km) south of Idylwilde and 8 mi (13 km) upstream from mouth.

DRAINAGE AREA.--0.89 mi² (2.31 km²).

PERIOD OF RECORD.--October 1960 to September 1973 (discontinued).

GAGE.--Water-stage recorder and Marshall flume with V-notch sharp-crested weir. Altitude of gage is 10,000 ft (3,048 m) from topographic map.

AVERAGE DISCHARGE.--13 years, 1.11 ft³/s (0.0314 m³/s) 804 acre-ft/yr (991,000 m³/yr).

EXTREMES.--Current year: Maximum discharge, 21 ft³/s (0.59 m³/s) June 26 (gage height, 1.89 ft or 0.576 m);

minimum daily, 0.05 ft³/s (0.001 m³/s) Mar. 10-20, 24.

Period of record: Maximum discharge, 28 ft³/s (0.79 m³/s) June 28, 1970 (gage height, 2.15 ft or 0.655 m);

minimum daily, 0.01 ft³/s (<0.001 m³/s) Apr. 25 to May 14, 1961.

REMARKS.--Records excellent. No diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.30	.20	.16	.12	.12	.08	.07	.11	.90	14	1.8	.53
2	.30	.20	.16	.12	.12	.08	.07	.11	.96	12	1.7	.53
3	.28	.18	.16	.12	.12	.07	.07	.11	.95	10	1.6	.53
4	.30	.18	.16	.12	.12	.07	.07	.11	.94	9.8	1.5	.50
5	.30	.18	.16	.12	.12	.07	.07	.11	.98	9.4	1.5	.47
6	.30	.18	.16	.12	.12	.07	.07	.11	1.2	8.8	1.4	.44
7	.30	.18	.15	.12	.12	.06	.08	.12	1.7	7.8	1.4	.44
8	.35	.18	.15	.12	.12	.06	.08	.12	3.9	7.2	1.3	.44
9	.33	.18	.15	.12	.12	.06	.07	.12	6.5	6.5	1.2	.44
10	.30	.18	.15	.12	.12	.05	.07	.13	9.4	5.9	1.2	.44
11	.30	.18	.15	.12	.12	.05	.07	.16	10	5.6	1.2	.44
12	.28	.18	.15	.12	.12	.05	.07	.16	9.6	5.2	1.2	.43
13	.26	.18	.15	.12	.12	.05	.07	.16	11	5.9	1.1	.42
14	.26	.18	.15	.12	.12	.05	.07	.15	12	5.4	1.0	.39
15	.26	.18	.15	.12	.12	.05	.07	.16	12	4.6	.93	.39
16	.26	.18	.15	.12	.12	.05	.07	.22	9.0	4.3	.88	.39
17	.26	.18	.15	.12	.12	.05	.07	.26	8.1	3.9	.88	.41
18	.26	.18	.15	.12	.12	.05	.07	.33	8.0	3.8	.84	.40
19	.26	.18	.13	.12	.12	.05	.08	.47	6.4	3.9	.84	.40
20	.26	.18	.13	.12	.11	.05	.08	.71	5.9	3.6	.80	.38
21	.24	.18	.13	.12	.11	.06	.08	.75	6.1	3.4	.80	.36
22	.24	.18	.12	.12	.11	.06	.08	.67	6.5	3.1	.75	.35
23	.24	.18	.12	.12	.11	.06	.09	.67	8.5	2.9	.71	.35
24	.24	.18	.12	.12	.11	.05	.09	.80	9.4	2.8	.71	.37
25	.24	.18	.12	.12	.11	.06	.11	.84	12	2.7	.67	.39
26	.24	.16	.12	.12	.11	.06	.11	.84	15	2.5	.60	.40
27	.22	.16	.12	.12	.09	.06	.11	.80	15	2.3	.60	.40
28	.22	.16	.12	.12	.09	.06	.11	.80	14	2.2	.60	.40
29	.22	.16	.12	.12	-----	.06	.11	.80	15	2.2	.56	.40
30	.21	.16	.12	.12	-----	.06	.11	.80	14	2.2	.56	.40
31	.20	-----	.12	.12	-----	.07	-----	.84	-----	2.0	.56	-----
TOTAL	8.23	5.34	4.35	5.72	3.23	1.83	2.44	12.54	234.93	165.9	31.39	12.63
MEAN	.27	.18	.14	.12	.12	.059	.081	.40	7.83	5.35	1.01	.42
MAX	.35	.20	.16	.12	.12	.08	.11	.84	15	14	1.8	.53
MIN	.20	.16	.12	.12	.09	.05	.07	.11	.90	2.0	.56	.35
AC-FT	16	11	8.6	7.4	6.4	3.6	4.8	25	466	329	62	25

CAL YR 1972 TOTAL 355.18 MEAN .97 MAX 11 MIN .05 AC-FT 704
 WTR YR 1973 TOTAL 486.53 MEAN 1.33 MAX 15 MIN .05 AC-FT 965

PEAK DISCHARGE (BASE, 10 CFS).--June 14 (2230) 13 cfs (1.58 ft); June 26 (1930) 21 cfs (1.89 ft).

PLATTE RIVER BASIN

49

06748530 LITTLE BEAVER CREEK NEAR RUSTIC, COLO.

LOCATION.--Lat 40°37'23", long 105°33'52", in N½ sec.34, T.8 N., R.73 W., Larimer County, on left bank 2.6 mi (4.2 km) upstream from mouth and 5.5 mi (8.8 km) south of Rustic.

DRAINAGE AREA.--12.3 mi² (31.9 km²).

PERIOD OF RECORD.--October 1960 to September 1973 (discontinued).

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 8,350 ft (2,545 m) from topographic map.

AVERAGE DISCHARGE.--13 years, 7.97 ft³/s (0.226 m³/s), 5,770 acre-ft/yr (7.11 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 125 ft³/s (3.54 m³/s) June 26 (gage height, 1.64 ft or 0.500 m); minimum daily, 0.94 ft³/s (0.027 m³/s) Mar. 14-16.

Period of record: Maximum discharge, 187 ft³/s (5.30 m³/s) June 17, 1965 (gage height, 1.89 ft or 0.576 m), from rating curve extended above 94 ft³/s (2.7 m³/s); minimum daily, 0.90 ft³/s (0.025 m³/s) Feb. 19 to Mar. 4, Mar. 9, 10, Nov. 12, 1964.

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

REVISIONS.--WSP 2118: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.2	2.3	1.6	1.4	1.5	1.4	1.2	3.6	41	65	11	3.0
2	2.2	2.3	1.6	1.4	1.5	1.4	1.3	3.4	44	59	10	3.0
3	2.2	2.2	1.6	1.4	1.6	1.3	1.3	3.8	43	49	9.6	3.0
4	2.2	2.0	1.6	1.4	1.6	1.3	1.3	4.9	42	44	9.2	3.0
5	2.2	2.2	1.5	1.4	1.6	1.3	1.4	6.0	40	43	8.8	3.0
6	2.2	2.0	1.5	1.4	1.6	1.2	1.5	5.5	42	39	8.4	2.8
7	2.3	2.0	1.5	1.4	1.6	1.2	1.4	7.2	48	36	8.0	2.8
8	2.8	2.0	1.4	1.4	1.6	1.2	1.5	10	57	34	7.2	2.8
9	2.5	2.0	1.4	1.4	1.6	1.1	1.5	14	67	30	6.9	3.2
10	2.2	2.0	1.4	1.4	1.6	1.0	1.5	18	88	28	6.9	2.8
11	2.0	2.0	1.4	1.4	1.6	1.0	1.5	20	98	26	6.9	2.8
12	2.0	2.0	1.4	1.5	1.5	1.0	1.6	18	92	25	6.6	2.8
13	2.0	1.9	1.4	1.5	1.5	1.0	1.5	18	96	28	6.3	2.6
14	2.0	2.0	1.5	1.5	1.5	.94	1.6	24	98	31	5.8	2.6
15	2.2	1.9	1.5	1.5	1.6	.94	1.7	19	92	26	5.5	2.5
16	2.2	2.0	1.6	1.6	1.6	.94	1.8	21	72	23	5.2	2.5
17	2.2	2.0	1.6	1.6	1.6	1.0	1.9	24	65	21	5.2	2.5
18	2.5	2.0	1.6	1.6	1.6	1.2	2.0	27	64	20	4.7	2.6
19	2.3	2.0	1.6	1.6	1.5	1.0	2.0	34	55	22	4.4	2.5
20	2.2	2.0	1.6	1.6	1.5	1.1	1.9	41	53	20	4.2	2.4
21	3.2	2.0	1.6	1.6	1.5	1.3	2.0	44	44	18	4.4	2.2
22	2.6	2.0	1.6	1.5	1.5	1.2	2.0	44	52	16	4.7	2.2
23	2.3	2.0	1.6	1.5	1.5	1.2	2.2	44	53	14	4.0	2.2
24	2.3	2.0	1.6	1.5	1.4	1.3	2.0	48	55	14	3.8	2.3
25	2.2	1.9	1.5	1.5	1.4	1.3	2.0	52	61	14	3.6	2.4
26	2.2	1.9	1.5	1.5	1.4	1.3	2.2	51	92	12	3.4	2.4
27	2.2	1.9	1.5	1.5	1.5	1.3	2.5	45	96	14	3.2	2.4
28	2.2	1.8	1.5	1.5	1.4	1.3	3.8	42	86	13	3.2	2.4
29	2.0	1.7	1.5	1.5	-----	1.3	4.2	40	86	12	3.0	2.4
30	2.2	1.7	1.4	1.5	-----	1.2	4.0	38	75	13	3.0	2.4
31	2.2	-----	1.4	1.5	-----	1.2	-----	38	-----	12	3.0	-----
TOTAL	70.2	59.7	47.0	46.0	42.9	36.42	58.3	808.4	2,002	821	180.1	78.5
MEAN	2.26	1.99	1.52	1.48	1.53	1.17	1.94	26.1	66.7	26.5	5.81	2.62
MAX	3.2	2.3	1.6	1.6	1.6	1.4	4.2	52	98	65	11	3.2
MIN	2.0	1.7	1.4	1.4	1.4	.94	1.2	3.4	40	12	3.0	2.2
AC=FT	139	118	93	91	85	72	116	1,600	3,970	1,630	357	156

CAL YR 1972 TOTAL 2,507.80 MEAN 6.85 MAX 59 MIN 1.2 AC=FT 4,970

WTR YR 1973 TOTAL 4,250.52 MEAN 11.6 MAX 98 MIN .94 AC=FT 8,430

PEAK DISCHARGE (BASE, 40 CFS).--June 26 (2200) 125 cfs (1.64 ft).

PLATTE RIVER BASIN

06748600 SOUTH FORK CACHE LA-POUDRE RIVER NEAR RUSTIC, COLO.

LOCATION.--Lat 40°38'49", long 105°29'35", in SW¼ sec.20, T.8 N., R.72 W., Larimer County, on left bank 5.7 mi (9.2 km) upstream from mouth, 6 mi (10 km) southeast of Rustic, and 22 mi (35 km) west of Fort Collins.

DRAINAGE AREA.--90.3 mi² (234 km²).

PERIOD OF RECORD.--August 1956 to current year.

GAGE.--Water-stage recorder. Datum of gage is 7,596.86 ft (2,315.523 m) above mean sea level (Bureau of Reclamation bench mark).

AVERAGE DISCHARGE.--17 years, 64.4 ft³/s (1.824 m³/s) 46,660 acre-ft/yr (57.5 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 610 ft³/s (17.3 m³/s) June 14 (gage height, 3.92 ft or 1.195 m); minimum daily, 8.0 ft³/s (0.23 m³/s) Mar. 8.

Period of record: Maximum discharge, 1,260 ft³/s (35.7 m³/s) June 17, 1965 (gage height, 5.05 ft or 1.539 m), from rating curve extended above 780 ft³/s (22 m³/s); minimum not determined.

REMARKS.--Records good except those for winter period and periods of no gage-height record, which are poor. No diversion above station. Slight regulation by small reservoirs and lakes.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	15	11	9.2	9.0	8.6	11	20	262	383	215	54
2	18	15	11	9.2	9.0	8.6	11	21	279	371	218	52
3	18	15	11	9.2	9.0	8.4	11	21	262	339	234	50
4	17	15	11	9.2	9.0	8.4	11	22	209	321	248	48
5	18	15	11	9.2	9.0	8.4	11	23	194	304	254	47
6	18	15	10	9.2	9.0	8.4	12	26	194	279	248	48
7	18	15	10	9.2	9.0	8.2	12	37	224	262	237	46
8	20	15	10	9.2	9.0	8.0	12	50	290	279	227	43
9	19	15	10	9.2	9.0	8.2	12	98	363	258	224	39
10	17	15	10	9.2	9.0	8.2	12	108	433	248	203	38
11	16	15	10	9.2	9.0	8.4	12	144	465	234	206	44
12	16	14	10	9.2	9.0	8.4	13	162	515	227	182	43
13	16	13	10	9.2	9.0	8.4	13	154	550	262	131	41
14	16	12	10	9.2	9.0	8.4	13	147	565	265	91	40
15	16	12	10	9.2	9.0	8.4	13	152	525	234	77	39
16	16	12	10	9.2	9.0	8.6	13	160	460	212	67	38
17	16	12	10	9.2	9.0	8.6	13	176	407	203	67	37
18	16	12	10	9.2	9.0	8.6	14	197	391	191	73	38
19	16	12	10	9.0	9.0	8.6	14	251	339	200	67	37
20	16	12	10	9.0	9.0	8.8	15	307	310	203	64	36
21	22	12	9.6	9.0	9.0	9.0	15	328	290	188	72	35
22	19	12	9.4	9.0	9.0	9.0	16	321	282	176	77	35
23	18	12	9.4	9.0	9.0	9.2	16	332	307	162	69	34
24	17	11	9.2	9.0	9.0	9.4	17	351	324	157	64	33
25	17	11	9.2	9.0	9.0	9.6	18	347	335	147	66	33
26	16	11	9.2	9.0	9.0	9.6	18	343	415	138	58	33
27	16	11	9.2	9.0	9.0	9.8	18	304	446	136	58	32
28	16	11	9.2	9.0	9.0	10	19	265	415	136	60	32
29	15	11	9.2	9.0	-----	10	19	258	428	131	56	32
30	15	11	9.2	9.0	-----	10	20	262	411	140	56	33
31	15	-----	9.2	9.0	-----	10	-----	251	-----	206	56	-----
TOTAL	527	389	307.0	282.6	252.0	274.2	424	5,638	10,890	6,992	4,025	1,190
MEAN	17.0	13.0	9.90	9.12	9.00	8.85	14.1	182	363	226	130	39.7
MAX	22	15	11	9.2	9.0	10	20	351	565	383	254	54
MIN	15	11	9.2	9.0	9.0	8.0	11	20	194	131	56	32
AC-FT	1,050	772	609	561	500	544	841	11,180	21,600	13,870	7,980	2,360

CAL YR 1972 TOTAL 19,336.1 MEAN 52.8 MAX 424 MIN 7.2 AC-FT 38,350

WTR YR 1973 TOTAL 31,190.8 MEAN 85.5 MAX 565 MIN 8.0 AC-FT 61,870

PEAK DISCHARGE (BASE, 250 CFS).--June 14 (0230) 610 cfs (3.92 ft); Aug. 4 (2130) 262 cfs (3.11 ft).

NOTE.--No gage-height record Nov. 26 to May 10, Aug. 25 to Sept. 30.

TRANSBASIN DIVERSIONS FROM NORTH PLATTE RIVER BASIN TO
CACHE LA POUDE RIVER BASIN IN COLORADO

The following seven diversions, which are equipped with water-stage recorders, divert water from tributaries of the North Platte River to the Cache la Poudre River or its tributaries. Records furnished by Colorado Division of Water Resources.

06745500 Cameron Pass ditch diverts water from tributaries of Michigan River in sec.10, T.6 N., R.76 W., to Joe Wright Creek (tributary to Cache la Poudre River) in sec.2, T.6 N., R.76 W.

06746000 Michigan ditch diverts water from Michigan River, headgate in sec.12, T.6 N., R.76 W., and many small tributaries and Agnes Creek (tributary to Michigan River), headgate in sec.15, T.6 N., R.76 W., to Joe Wright Creek (tributary to Cache la Poudre River) in sec.2, T.6 N., R.76 W.

06746500 Skyline ditch diverts water from West Branch Laramie River (tributary to Laramie River), headgate in sec.14, T.8 N., R.76 W., to Chambers Lake (tributary to Cache la Poudre River) in sec.31, T.8 N., R.75 W.

06747000 Laramie-Poudre tunnel diverts water from Laramie River in sec.7, T.8 N., R.75 W., and Rawah Creek (tributary to Laramie River) in sec.14, T.9 N., R.76 W., to Cache la Poudre River in sec.9, T.8 N., R.75 W.

06747200 Bob Creek ditch diverts water from Nunn Creek (tributary to Laramie River) in sec.9, T.9 N., R.75 W., to Roaring Creek (tributary to Cache la Poudre River) in sec.11, T.9 N., R.75 W.

06750000 Columbine ditch diverts water from Nunn Creek (tributary to Laramie River) in sec.3, T.9 N., R.75 W., to North Fork Cache la Poudre River (tributary to Cache la Poudre River) in sec.25, T.10 N., R.75 W.

06750500 Wilson supply ditch diverts water from Sand Creek in sec.22, T.11 N., R.75 W., and at times includes water diverted from tributaries of Deadman Creek in sec.9, T.10 N., R.75 W. Diversion is from the Laramie River basin to Sheep Creek (tributary to North Fork Cache la Poudre River) in sec.23, T.11 N., R.75 W., in the Cache la Poudre River basin. Records herein represent total flow diverted from the Laramie River basin by Wilson supply ditch.

REVISIONS (WATER YEARS).--WSP 1310: 1945, 1947.

DIVERSIONS, IN ACRE-FEET, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

Month	06745500 Cameron Pass ditch	06746000 Michigan ditch	06746500 Skyline ditch	06747000 Laramie- Poudre tunnel	06747200 Bob Creek ditch	06750000 Columbine ditch	06750500 Wilson supply ditch	Total
October.....	0	0	0	0	0	0	0	0
November.....	0	0	0	0	0	0	0	0
December.....	0	0	0	0	0	0	0	0
January.....	0	0	0	0	0	0	0	0
February.....	0	0	0	0	0	0	0	0
March.....	0	0	0	0	0	0	0	0
April.....	0	0	0	0	0	0	0	0
May.....	0	0	0	216	0	0	0	216
June.....	137	452	571	5,020	0	0	1,140	7,320
July.....	258	1,190	2,110	6,980	0	0	243	10,780
August.....	12	236	0	4,340	0	0	0	4,590
September.....	0	14	0	139	0	0	0	153
Water year 1973....	407	1,890	2,680	16,690	0	0	1,380	23,050

PLATTE RIVER BASIN

06752000 CACHE LA POUDE RIVER AT MOUTH OF CANYON, NEAR FORT COLLINS, COLO.

LOCATION.--Lat 40°39'52", long 105°13'26", in NW¼ sec.15, T.8 N., R.70 W., Larimer County, on left bank at mouth of canyon, 0.5 mi (0.8 km) downstream from headgate of Poudre Valley Canal, 1.2 mi (1.9 km) upstream from Lewstone Creek, and 9.3 mi (15.0 km) northwest of courthouse in Fort Collins.

DRAINAGE AREA.--1,055 mi² (2,732 km²).

PERIOD OF RECORD.--June to August 1881, May to July 1883, October 1883 to current year. Monthly discharge only for some periods, published in WSP 1310. Records for Mar. 23 to Apr. 30 and July 4 to Aug. 20, 1883, published in WSP 9, have been found to be unreliable and should not be used. Prior to 1902, published as Cache la Poudre Creek or River at or near Fort Collins.

GAGE.--Water-stage recorder. Altitude of gage is 5,220 ft (1,591 m) from topographic map.

EXTREMES.--Current year: Maximum discharge, 3,780 ft³/s (107 m³/s) June 14 (gage height, 5.78 ft or 1.762 m); minimum daily, 8.0 ft³/s (0.23 m³/s) Sept. 26-28.
Period of record: Maximum discharge not determined, occurred May 20, 1904; maximum discharge determined, 21,000 ft³/s (595 m³/s) June 9, 1891 (from reports of State engineer of Colorado), caused by failure of Chambers Lake Dam; minimum daily discharge, 1.6 ft³/s (0.045 m³/s) Nov. 20, 28, 1948, caused by diversion of Poudre Valley Canal 0.5 mi (0.8 km) upstream.

REMARKS.--Records good except those for winter period, which are poor. Natural flow of stream affected by transbasin and transmountain diversions (see elsewhere in this report), diversions above station for irrigation of about 50,000 acres (202 km²), most of which is below station (96,840 acre-ft or 119 hm³ during current year), and diversions for municipal use (10,670 acre-ft or 13.2 hm³ during current year). Water-quality records for the current year are published in Part 2 of this report.

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

REVISIONS (WATER YEARS).--WSP 1310: 1885-87, 1889, 1892, 1894-96, 1934. WSP 1730: 1960, drainage area. See also PERIOD OF RECORD.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	73	40	57	25	21	27	33	178	1,700	2,180	550	105
2	75	70	53	28	22	30	35	216	1,790	2,130	550	103
3	73	70	39	28	24	30	35	292	1,580	1,950	486	112
4	68	61	35	27	25	28	39	486	1,330	1,680	486	98
5	50	58	28	24	25	25	46	518	1,140	1,620	544	73
6	51	57	21	24	24	27	54	680	1,110	1,510	626	54
7	58	45	18	25	23	28	58	864	1,290	1,360	612	58
8	55	47	19	26	25	29	45	984	1,550	1,400	591	47
9	68	57	19	26	22	33	46	1,060	2,070	1,280	598	42
10	78	39	19	27	25	28	46	1,280	2,480	1,150	557	43
11	75	28	19	28	24	30	53	1,450	2,540	1,060	505	75
12	58	53	18	28	21	34	50	1,480	2,960	992	440	139
13	54	38	18	29	25	42	53	1,390	3,310	1,220	453	142
14	58	36	18	27	30	37	58	1,300	3,380	1,410	374	154
15	58	55	18	26	39	27	71	1,300	3,230	1,090	330	150
16	55	49	20	24	33	35	64	1,350	2,760	960	310	150
17	64	35	24	23	28	39	61	1,420	1,980	848	336	112
18	64	32	26	23	27	40	66	1,510	1,830	752	342	71
19	68	31	26	21	24	43	80	1,620	1,540	776	295	33
20	73	33	28	20	25	40	66	2,090	1,400	1,020	230	12
21	76	29	27	21	25	47	61	2,550	1,260	1,080	244	12
22	84	32	26	22	23	45	66	2,890	1,370	832	285	12
23	75	27	26	19	22	36	70	2,430	1,670	736	295	12
24	73	28	26	20	33	37	73	2,480	1,880	557	310	11
25	71	58	25	21	30	34	100	2,420	1,930	505	295	9.6
26	63	64	25	22	33	27	94	2,430	2,540	422	226	8.0
27	57	58	27	21	28	32	77	2,110	2,940	550	178	8.0
28	54	43	28	21	24	37	69	1,560	2,670	460	136	8.0
29	50	19	27	20	-----	32	36	1,520	2,470	434	117	15
30	51	34	22	20	-----	27	42	1,530	2,520	492	120	22
31	33	-----	21	21	-----	30	-----	1,490	-----	577	120	-----
TOTAL	1,963	1,326	803	737	729	1,036	1,747	45,078	62,220	33,033	11,541	1,890.6
MEAN	63.3	44.2	25.9	23.8	26.0	33.4	58.2	1,454	2,074	1,066	372	63.0
MAX	84	70	57	29	39	47	100	2,890	3,380	2,180	626	154
MIN	33	19	18	19	21	25	33	178	1,110	422	117	8.0
AC-FT	3,890	2,630	1,590	1,460	1,450	2,050	3,470	89,410	123,400	65,520	22,890	3,750

CAL YR 1972 TOTAL 89,004.0 MEAN 243 MAX 2,690 MIN 18 AC-FT 176,500
WTR YR 1973 TOTAL 162,103.6 MEAN 444 MAX 3,380 MIN 8.0 AC-FT 321,500

NOTE.--No gage-height record Dec. 4 to Mar. 6.

PLATTE RIVER BASIN

53

06752500 CACHE LA POUDE RIVER NEAR GREELEY, COLO.

LOCATION.--Lat 40°25'04", long 104°38'22", in NW¼ sec.11, T.5 N., R.65 W., Weld County, on right bank 25 ft (8 m) downstream from highway bridge, 2.9 mi (4.7 km) east of courthouse in Greeley, and 3.0 mi (4.8 km) upstream from mouth.

DRAINAGE AREA.--1,877 mi² (4,861 km²).

PERIOD OF RECORD.--March to October 1903, August to November 1904, January 1914 to December 1919, June 1924 to current year. Monthly discharge only for some periods, published in WSP 1310.

GAGE.--Water-stage recorder. Altitude of gage is 4,610 ft (1,405 m) from topographic map. See WSP 1710 or 1730 for history of changes prior to Dec. 14, 1933.

AVERAGE DISCHARGE.--54 years (1914-19, 1924-73), 103 ft³/s (2.917 m³/s), 74,620 acre-ft/yr (92.0 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,360 ft³/s (66.8 m³/s) June 16 (gage height, 6.72 ft or 2.048 m); minimum daily, 23 ft³/s (0.65 m³/s) June 8.
Period of record: Maximum daily discharge, 4,220 ft³/s (120 m³/s) June 24, 26, 1917; minimum daily, 0.8 ft³/s (0.023 m³/s) Oct. 3, 1946.

REMARKS.--Records good except those for period of no gage-height record, which are fair. Natural flow of stream affected by transmountain and transbasin diversions, storage reservoirs, power developments, diversion for municipal supply, diversions above station for irrigation of about 250,000 acres (1,010 km²), and return flow from irrigated areas. Water-quality records for the current year are published in Part 2 of this report.

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

REVISIONS (WATER YEARS).--WSP 1440: 1935, 1938(M), 1942-43. WSP 1730: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	44	120	112	71	120	136	99	195	66	301	224	16
2	44	128	106	69	125	142	101	209	61	184	161	104
3	48	112	91	73	125	139	104	292	76	142	224	96
4	57	101	88	73	122	133	93	394	76	114	238	71
5	61	96	57	93	136	133	91	563	61	101	212	73
6	71	99	91	112	139	128	93	682	46	86	184	69
7	96	96	86	128	133	122	114	935	32	91	99	64
8	93	99	78	128	125	120	99	1,140	23	86	99	44
9	88	106	76	125	125	112	88	1,220	31	96	106	46
10	93	109	71	128	128	109	81	1,200	105	99	93	78
11	96	106	69	128	131	104	88	1,430	179	83	106	120
12	93	104	69	125	142	104	91	1,610	420	64	96	167
13	109	114	71	125	136	122	88	1,640	1,150	117	69	164
14	106	117	66	136	133	131	86	1,650	1,720	158	39	117
15	101	101	66	144	131	112	91	1,570	2,060	172	57	93
16	114	109	64	150	131	109	93	1,560	2,190	120	59	101
17	99	104	66	164	131	106	88	1,580	1,760	101	61	106
18	76	106	76	158	136	101	88	1,360	955	91	41	86
19	55	99	83	161	147	101	93	1,140	842	122	48	81
20	55	104	88	158	133	86	88	1,340	434	170	48	64
21	52	101	88	153	131	73	81	1,420	238	274	46	86
22	59	96	88	136	131	71	78	1,610	209	280	66	114
23	106	93	88	140	131	69	81	1,730	181	198	48	139
24	112	104	86	150	144	73	91	925	170	218	50	172
25	112	96	78	160	142	81	170	730	153	206	37	178
26	114	99	78	160	144	93	158	614	124	175	55	192
27	106	109	86	106	142	99	156	578	246	122	46	189
28	109	101	86	93	136	117	158	532	468	244	46	233
29	109	81	86	115	-----	114	153	309	400	236	69	247
30	117	109	64	115	-----	117	156	131	265	161	69	230
31	117	-----	64	120	-----	114	-----	101	-----	227	73	-----
TOTAL	2,712	3,119	2,466	3,897	3,730	3,371	3,139	30,390	14,741	4,839	2,869	3,600
MEAN	87.5	104	79.5	126	133	109	105	980	491	156	92.5	120
MAX	117	128	112	164	147	142	170	1,730	2,190	301	238	247
MIN	44	81	57	69	120	69	78	101	23	64	37	44
AC-FT	5,380	6,190	4,890	7,730	7,400	6,690	6,230	60,280	29,240	9,600	5,690	7,140

CAL YR 1972 TOTAL 40,684.4 MEAN 111 MAX 1,140 MIN 7.5 AC-FT 80,700
WTR YR 1973 TOTAL 78,873.0 MEAN 216 MAX 2,190 MIN 23 AC-FT 156,400

PLATTE RIVER BASIN

55

06758500 SOUTH PLATTE RIVER NEAR WELDONA, COLO.

LOCATION.--Lat 40°19'19", long 103°55'17", in SW¼SW¼ sec.7, T.4 N., R.58 W., Morgan County, on left bank 400 ft (120 m) downstream from bridge on State Highway 144, 2.8 mi (4.5 km) southeast of Weldona, and 4.2 mi (6.8 km) upstream from Bijou Creek.

DRAINAGE AREA.--13,245 mi² (34,305 km²).

PERIOD OF RECORD.--October 1952 to current year.

GAGE.--Water-stage recorder. Datum of gage is 4,307.80 ft (1,313.017 m) above mean sea level.

AVERAGE DISCHARGE.--21 years, 564 ft³/s (15.97 m³/s), 408,600 acre-ft/yr (504 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 26,800 ft³/s (759 m³/s) May 8 (gage height, 11.68 ft or 3.560 m), from rating curve extended above 16,000 ft³/s (453 m³/s); minimum daily, 155 ft³/s (4.38 m³/s) Nov. 21.
Period of record: Maximum discharge, 26,800 ft³/s (759 m³/s) May 8, 1973 (gage height, 11.68 ft or 3.560 m), from rating curve extended above 16,000 ft³/s (453 m³/s); minimum daily, 39 ft³/s (1.10 m³/s) May 19, 1972.

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

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

REVISIONS.--WSP 1710: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR (OCTOBER 1972 TO SEPTEMBER 1973)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	316	264	330	430	1,120	656	712	2,130	6,460	440	423	372
2	287	282	380	450	1,020	684	621	2,770	5,320	440	1,020	356
3	250	325	400	420	923	735	593	3,740	4,390	430	477	446
4	241	351	350	450	914	720	644	3,660	4,160	412	423	532
5	241	412	220	500	878	742	780	3,570	4,100	429	604	649
6	241	400	220	550	820	780	756	3,660	4,230	389	712	720
7	264	362	220	600	780	788	836	6,040	3,440	458	663	742
8	259	356	280	750	712	765	905	15,200	3,250	458	539	756
9	346	320	350	790	663	720	941	20,800	2,660	440	470	1,160
10	378	287	400	820	780	677	1,020	14,600	2,560	446	378	1,120
11	362	254	430	840	941	677	1,080	12,500	3,050	476	351	1,240
12	372	215	450	840	878	663	1,110	11,700	4,050	429	351	1,650
13	383	202	450	850	804	772	2,060	11,500	6,330	372	341	1,740
14	383	190	460	880	780	812	1,630	11,300	6,460	412	346	1,540
15	378	190	440	900	772	746	1,390	11,100	8,000	649	351	1,370
16	378	187	460	950	765	772	1,300	10,900	8,040	1,080	356	1,290
17	412	187	500	940	758	750	1,340	10,600	8,150	1,240	376	1,310
18	389	183	580	950	758	852	1,370	10,100	6,760	1,060	356	1,290
19	383	180	572	930	765	941	1,300	9,710	4,630	1,030	351	1,250
20	389	169	513	920	765	977	1,350	9,420	3,760	977	330	1,290
21	394	155	458	920	758	1,090	1,610	9,710	2,840	1,450	330	1,240
22	378	250	476	920	758	968	1,560	10,600	1,920	1,990	320	1,210
23	362	254	520	923	750	869	1,460	10,900	1,490	1,460	320	1,200
24	316	254	500	852	728	812	1,370	11,800	1,140	1,660	242	1,200
25	259	250	494	836	705	772	1,480	11,400	780	1,500	268	1,160
26	250	245	446	828	712	735	1,810	10,000	572	1,660	242	1,140
27	236	250	412	828	663	758	2,270	8,980	384	1,370	320	1,180
28	232	245	383	628	656	820	2,160	8,300	384	905	330	1,300
29	228	241	346	628	-----	812	1,980	7,680	440	728	335	1,630
30	228	260	360	860	-----	812	1,950	6,690	440	565	341	2,250
31	232	-----	390	1,110	-----	804	-----	5,760	-----	742	362	-----
TOTAL	9,767	7,720	12,790	24,093	22,326	24,531	34,345	286,820	111,200	26,547	14,430	34,315
MEAN	315	257	413	777	797	791	1,312	4,252	3,707	858	465	1,144
MAX	412	412	580	1,110	1,120	1,090	2,270	20,800	8,150	1,990	1,020	2,250
MIN	228	155	220	420	656	656	593	2,130	389	372	268	356
AC-FT	19,370	15,310	25,370	47,790	44,280	48,660	78,040	568,900	220,600	52,760	28,620	68,060

CAL YR 1972 TOTAL 125,379 MEAN 343 MAX 2,380 MIN 39 AC-FT 248,700
WTR YR 1973 TOTAL 613,934 MEAN 1,682 MAX 20,800 MIN 155 AC-FT 1,216,000

PLATTE RIVER BASIN

06760000 SOUTH PLATTE RIVER AT BALZAC, COLO.

LOCATION.--Lat 40°24'24", long 103°27'58", in NE¼NE¼ sec.13, T.5 N., R.55 W., Morgan County, on right bank just upstream from highway bridge at Balzac siding, 2.8 mi (4.5 km) northeast of Union and 7.0 mi (11.3 km) downstream from Beaver Creek.

DRAINAGE AREA.--16,852 mi² (43,647 km²).

PERIOD OF RECORD.--October 1916 to current year. Prior to October 1933 monthly discharge only, published in WSP 1310.

GAGE.--Water-stage recorder. Datum of gage is 4,091.06 ft (1,246.955 m) above mean sea level. Since Oct. 1, 1936, supplementary water-stage recorder on secondary channel 600 ft (180 m) to the left; at datum 1.69 ft (0.515 m) lower prior to July 24, 1973, and at datum 0.09 ft (0.027 m) lower thereafter. See WSP 1710 or 1730 for history of changes prior to Aug. 21, 1947.

AVERAGE DISCHARGE.--57 years, 399 ft³/s (11.30 m³/s) 289,100 acre-ft/yr (356 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 20,300 ft³/s (575 m³/s) May 9 (gage height, 10.70 ft or 3.261 m); minimum daily, 24 ft³/s (0.68 m³/s) Oct. 26, 27, Nov. 13.
Period of record: Maximum discharge, 123,000 ft³/s (3,480 m³/s) June 18, 1965 (gage height, 13.32 ft or 4.060 m), from rating curve extended above 6,400 ft³/s (180 m³/s) on basis of contracted-opening measurement of peak flow; minimum daily, 1.3 ft³/s (0.037 m³/s) Jan. 25, 1947.

REMARKS.--Records fair except those for winter period, which are poor. Natural flow of stream affected by transmountain and transbasin diversions, storage reservoirs, power developments, groundwater withdrawals and diversions above station for irrigation of about 1,065,000 acres (4,310 km²), and return flow from irrigated areas.

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

REVISIONS (WATER YEARS).--WSP 1310: 1937(M). WSP 1730: 1957, drainage area. WSP 1918: 1928(monthly runoff).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	146	27	83	235	985	623	854	2,070	4,110	558	640	551
2	184	30	100	230	910	618	778	2,270	4,530	294	732	526
3	103	31	129	220	836	625	699	3,290	3,600	243	748	543
4	32	32	110	215	807	615	668	3,780	3,120	227	658	422
5	25	39	87	206	806	592	696	3,530	2,930	318	581	482
6	29	63	75	192	823	618	737	3,720	2,940	374	497	566
7	64	65	65	190	805	583	796	10,400	2,870	303	447	653
8	76	48	80	195	766	541	846	13,000	2,470	321	400	664
9	93	30	132	245	744	521	877	15,800	2,160	318	282	1,140
10	104	26	178	368	660	502	913	12,200	2,110	312	251	1,290
11	87	25	225	249	710	493	992	9,760	2,140	304	210	1,260
12	86	25	251	580	752	462	1,070	8,580	2,780	282	202	1,500
13	98	24	261	635	723	508	1,110	8,520	4,080	252	183	1,600
14	105	32	262	689	704	709	2,310	8,520	5,470	251	164	1,450
15	86	31	261	728	702	644	1,720	8,520	6,180	323	153	1,210
16	97	30	256	781	682	605	1,520	6,630	6,760	602	140	1,130
17	85	30	246	905	661	570	1,480	8,740	7,350	990	139	1,060
18	68	30	246	974	651	566	1,520	8,460	6,720	1,000	150	1,050
19	60	30	257	1,070	628	636	1,500	8,580	4,470	836	149	1,030
20	57	28	274	1,010	624	723	1,380	8,100	3,340	840	148	1,010
21	58	27	297	908	621	805	1,320	8,410	2,650	779	145	966
22	61	26	347	931	615	860	1,410	9,070	1,850	1,350	148	907
23	57	25	444	804	621	854	1,340	9,820	1,470	1,620	150	880
24	43	25	522	825	618	1,010	1,230	10,200	1,100	1,540	147	886
25	28	32	581	812	627	964	1,420	11,000	862	1,360	176	872
26	24	27	545	808	623	836	1,640	10,000	619	1,280	310	873
27	24	26	425	810	599	753	2,180	8,850	345	1,370	327	850
28	25	27	413	801	678	849	2,300	7,750	317	1,020	318	920
29	26	76	354	669	-----	853	2,080	6,620	405	716	325	1,080
30	26	145	226	663	-----	874	1,960	5,230	432	709	321	1,260
31	27	-----	239	793	-----	891	-----	4,140	-----	584	346	-----
TOTAL	2,091	1,108	7,971	18,731	19,981	21,323	39,546	247,520	90,220	21,076	9,587	28,011
MEAN	67.5	36.9	257	604	714	688	1,318	7,985	3,007	680	309	934
MAX	184	145	581	1,070	985	1,010	2,310	15,800	7,350	1,620	748	1,600
MIN	24	24	65	190	599	482	668	2,070	317	227	139	326
AC-FT	4,150	2,200	15,810	37,150	39,630	42,290	78,440	491,000	179,000	41,800	14,020	55,560

CAL YR 1972 TOTAL 83,636.7 MEAN 229 MAX 1,520 MIN 9.7 AC-FT 165,900
WTR YR 1973 TOTAL 507,165.0 MEAN 1,589 MAX 15,800 MIN 24 AC-FT 1,006,000

06764000 SOUTH PLATTE RIVER AT JULESBURG, COLO.

LOCATION.--Lat 40°58'46", long 102°15'15", in NW¼NE¼ and SE¼NE¼ (two channels) sec.33, T.12 N., R.44 W., Sedgwick County, on left bank of channel no. 4 (left channel) 215 ft (66 m) downstream from bridge, and on right bank of channel no. 2, 800 ft (244 m) downstream from bridge on U.S. Highway 385, 0.9 mi (1.4 km) southeast of Julesburg, 3.0 mi (4.8 km) upstream from Colorado-Nebraska State line, and 8 mi (13 km) downstream from Lodgepole Creek.

DRAINAGE AREA.--23,138 mi² (59,927 km²).

PERIOD OF RECORD.--April 1902 to current year. Monthly discharge only for some periods, published in WSP 1310. Published as "near Julesburg" 1903-8, 1915-16 and as "at Ovid" 1922-24.

GAGE.--Two water-stage recorders. Datum of gages is 3,446.76 ft (1,050.572 m) above mean sea level. See WSP 1710 or 1730 for history of changes prior to Oct. 1, 1956. Since Oct. 1, 1956, water-stage recorders on channels nos. 2 and 4. Channel no. 2: Oct. 1, 1956, to Sept. 22, 1965, at site 300 ft (91 m) downstream at present datum. Channel no. 4: Oct. 1, 1956, to Dec. 10, 1958, at site 135 ft (41 m) downstream at present datum. Since May 11, 1973, supplementary water-stage recorder on channel no. 2 at bridge 800 ft (244 m) upstream at same datum.

AVERAGE DISCHARGE.--71 years, 485 ft³/s (13.74 m³/s), 351,400 acre-ft/yr (433 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 22,000 ft³/s (623 m³/s) May 11 (gage height, 8.10 ft or 2.469 m); minimum daily, 42 ft³/s (1.19 m³/s) Aug. 24.

Period of record: Maximum discharge, 37,600 ft³/s (1,060 m³/s) June 20, 1965 (gage height, 10.44 ft or 3.182 m, from floodmarks in gage well); no flow Aug. 18-20, 1902, July 25 to Aug. 7, 1903.

REMARKS.--Records fair. Natural flow of stream affected by transmountain diversions, storage reservoirs, power developments, groundwater withdrawals and diversions for irrigation of 1,200,000 acres (4,940 km²) above station, and return flow from irrigated areas. Water-quality records for the current year are published in Part 2 of this report.

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

REVISIONS (WATER YEARS).--WSP 1310: 1902, 1906-7, 1948(P). WSP 1440: 1903-4. WSP 1730: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	56	108	278	353	886	887	1,290	2,530	6,460	507	436	58
2	56	92	310	371	985	900	1,270	2,460	5,610	470	342	54
3	84	133	326	389	1,100	910	1,220	2,550	5,290	382	291	49
4	86	129	222	357	1,160	883	1,160	2,690	5,050	292	249	48
5	84	131	162	348	1,180	884	1,100	3,080	4,380	189	229	48
6	89	131	142	381	1,210	873	1,060	3,540	4,010	172	203	46
7	93	131	147	410	1,150	839	1,100	3,940	3,760	161	175	46
8	102	135	152	455	835	832	1,160	3,960	3,590	153	140	52
9	100	138	157	465	758	813	1,210	4,750	3,310	147	106	80
10	100	135	162	475	727	804	1,250	11,200	3,000	126	84	176
11	114	131	167	484	791	779	1,320	18,100	2,660	109	70	526
12	125	131	172	504	959	745	1,380	16,400	2,660	97	92	1,040
13	132	107	182	534	1,010	680	1,420	13,200	3,030	103	82	1,190
14	137	99	192	563	973	751	1,440	11,600	3,420	95	79	1,330
15	137	128	202	593	931	857	1,660	11,300	4,000	87	64	1,390
16	119	148	212	633	989	846	1,960	11,200	4,600	80	58	1,340
17	112	159	222	700	970	763	1,820	10,900	5,170	76	56	1,310
18	104	149	243	835	949	702	1,700	10,800	5,640	75	56	1,300
19	99	147	263	892	975	665	1,700	10,600	5,980	92	55	1,240
20	99	140	314	1,030	954	642	1,720	10,200	5,830	130	51	1,200
21	97	135	385	1,080	931	671	1,630	9,960	4,680	172	49	1,180
22	97	131	414	1,080	913	754	1,510	9,760	3,860	309	44	1,160
23	95	146	443	1,020	913	871	1,530	9,620	3,210	387	43	1,150
24	93	229	462	990	913	997	1,560	9,340	2,600	618	42	1,130
25	91	239	492	1,060	913	1,030	1,630	9,550	2,180	850	121	1,140
26	91	254	571	1,070	913	1,120	1,970	9,580	1,870	896	101	1,150
27	91	272	643	910	913	1,140	2,320	10,000	1,590	873	86	1,140
28	95	272	693	659	912	1,140	2,420	9,650	1,080	840	82	1,240
29	96	268	707	594	-----	1,180	2,580	8,730	735	818	94	1,280
30	95	278	530	620	-----	1,230	2,640	7,960	571	691	84	1,280
31	93	-----	404	817	-----	1,280	-----	7,100	-----	552	68	-----
TOTAL	3,062	4,826	9,971	20,672	26,813	27,468	47,730	266,270	109,826	10,549	3,732	24,373
MEAN	98.8	161	322	667	958	886	1,591	8,589	3,661	340	120	812
MAX	137	278	707	1,080	1,210	1,280	2,640	18,100	6,460	896	436	1,390
MIN	56	92	142	348	727	642	1,060	2,460	571	75	42	46
AC-FT	6,070	9,570	19,780	41,000	53,180	54,480	94,670	528,100	217,800	20,920	7,400	48,340
CAL YR 1972	TOTAL	82,357	MEAN	225	MAX	1,120	MIN	13	AC-FT	163,400		
WTR YR 1973	TOTAL	555,292	MEAN	1,521	MAX	18,100	MIN	42	AC-FT	1,101,000		

RESERVOIRS IN SOUTH PLATTE RIVER BASIN

06695500 ELEVENMILE CANYON RESERVOIR NEAR LAKE GEORGE, COLO.--Lat 38°54'19", long 105°28'30", in N½SW¼ sec.20, T.13 S., R.72 W., Park County, at north end of dam on South Platte River, 8 mi (13 km) southwest of Lake George. Drainage area, 963 mi² (2,494 km²). Period of record, October 1932 to current year. Prior to September 1938, published in WSP 1310. Nonrecording gage read twice daily. Datum of gage is at mean sea level (datum of Denver Board of Water Commissioners). Extremes for current year: Maximum contents observed, 104,000 acre-ft (128 hm³) July 21 (elevation, 8,598.79 ft or 2,620.911 m); minimum observed, 90,090 acre-ft (111 hm³) Oct. 17-19 (elevation, 8,594.66 ft or 2,619.652 m). Extremes for period of record: Maximum contents observed, 111,200 acre-ft (137 hm³) Apr. 28, 1970 (elevation, 8,600.82 ft or 2,621.530 m); no contents at times in 1935.

Reservoir is formed by concrete arch dam completed by Denver Board of Water Commissioners in November 1932. Spillway built 5.00 ft (1.524 m) higher Aug. 1, 1957. Storage began in October 1932. Capacity, 97,780 acre-ft (121 hm³) between elevations 8,488.25 ft or 2,587.219 m (invert of outlet pipe) and 8,597.00 ft or 2,620.366 m (crest of spillway). Dead storage is negligible. Records given herein represent total contents. Water is for municipal use by city of Denver.

REVISIONS.--WSP 1730: Drainage area.

06701000 CHEESMAN LAKE NEAR DECKERS, COLO.--Lat 39°12'26", long 105°16'18", in NW¼SW¼ sec.6, T.10 S., R.70 W., Douglas County, at dam on South Platte River, 4.1 mi (6.6 km) southwest of Deckers. Drainage area, 1,752 mi² (4,538 km²). Period of record, September 1900 to December 1901, September 1902 to current year. Prior to October 1938, published in WSP 1310. Published as Lake Cheesman Reservoir prior to 1947. Nonrecording gage read twice daily. Datum of gage is 6,622.91 ft (2,018.663 m) above mean sea level (datum of Denver Board of Water Commissioners). Extremes for current year: Maximum contents observed, 79,570 acre-ft (98.1 hm³) June 13 (gage height, 212.58 ft or 64.794 m); minimum observed, 39,500 acre-ft (48.7 hm³) Mar. 20 (gage height, 157.08 ft or 47.878 m). Extremes for period of record: Maximum contents observed, 81,360 acre-ft (100 hm³) Apr. 29, 1970 (gage height, 214.60 ft or 65.410 m); minimum observed since appreciable storage was attained, 3,650 acre-ft (4.50 hm³) Apr. 20, 1933 (gage height, 55.02 ft or 16.770 m).

Reservoir is formed by masonry dam completed about October 1902. Capacity, 79,060 acre-ft (97.5 hm³) at gage height 212 ft or 64.6 m (spillway crest) above sill of lowest gate. No dead storage. Records given herein represent total contents. Water is for municipal use by city of Denver. Records furnished by Denver Board of Water Commissioners.

REVISIONS.--WSP 1730: Drainage area.

06737500 HORSETOOTH RESERVOIR NEAR FORT COLLINS, COLO.--Lat 40°36'00", long 105°10'06", in NW¼SW¼ sec.6, T.7 N., R. 69 W., Larimer County, on right bank near abutment of Horsetooth Dam on tributaries of Cache la Poudre River, 4.8 mi (7.7 km) west of city hall in Fort Collins. Period of record, April 1951 to current year. Nonrecording gage read at irregular intervals varying from 1 to 10 days. Datum of gage is 5,270.00 ft (1,606.296 m) above mean sea level (levels by Bureau of Reclamation). Gage readings have been reduced to elevations above mean sea level. Extremes for current year: Maximum contents observed, 135,600 acre-ft (167 hm³) July 9-11 (elevation, 5,425.75 ft or 1,653.769 m); minimum contents, 50,770 acre-ft (62.6 hm³) Oct. 27 (elevation, 5,368.60 ft or 1,636.349 m). Extremes for period of record: Maximum contents observed, 141,600 acre-ft (175 hm³) July 2, 1970 (elevation, 5,429.02 ft or 1,654.765 m); minimum observed, 3,040 acre-ft (3.75 hm³) Sept. 23, 1954 (elevation, 5,302.20 ft or 1,616.111 m); no storage prior to Apr. 18, 1951.

Reservoir is formed by earth and rockfill dike and dams closing openings in a subsequent valley between hogbacks. Dams completed July 21, 1949; storage began Jan. 10, 1951; dead storage pools filled Apr. 18, 1951. Usable capacity, 143,500 acre-ft (177 hm³) above elevations 5,320 ft or 1,621.5 m (invert of channel from Spring Canyon Dam), 5,310 ft or 1,618.5 m (invert of channel from Dixon Canyon Dam), 5,270 ft or 1,606.3 m (trashrack sill of outlet at Soldier Canyon Dam), and below maximum water surface elevation 5,430 ft or 1,655.1 m (6 ft or 1.8 m below crest of Satanka Dike). Dead storage, 8,270 acre-ft (10.2 hm³). Reservoir is used for storage of water diverted from Colorado River basin through Alva B. Adams tunnel for supplemental irrigation supply to Cache la Poudre River as part of the Colorado-Big Thompson project. Figures given herein represent usable contents. Records furnished by Bureau of Reclamation. Water-quality records for the current year are published in Part 2 of this report.

06742500 CARTER LAKE NEAR BERTHOUD, COLO.--Lat 40°19'28", long 105°12'41", in SE¼ sec.10, T.4 N., R.70 W., Larimer County, in hoist house 293 ft (89 m) from right abutment of Carter Lake Dam on Dry Creek, 7.0 mi (11.3 km) west of Berthoud, and 8.9 mi (14.3 km) upstream from mouth. Period of record, March 1954 to current year. Nonrecording gage read at irregular intervals varying from 1 to 13 days. Datum of gage is 5,618.00 ft (1,712.366 m) above mean sea level (levels by Bureau of Reclamation). Gage readings have been reduced to elevations above mean sea level. Extremes for current year: Maximum contents observed, 107,900 acre-ft (133 hm³) June 25 (elevation, 5,758.10 ft or 1,755.069 m); minimum observed, 45,780 acre-ft (56.4 hm³) Oct. 19 (elevation, 5,696.40 ft or 1,736.263 m). Extremes for period of record: Maximum contents observed, 109,100 acre-ft (135 hm³) Apr. 27-29, 1971 (elevation, 5,759.12 ft or 1,755.380 m); minimum observed since appreciable storage was attained, 960 acre-ft (1.18 hm³) Oct. 25, 1954 (elevation, 5,621.40 ft or 1,713.403 m).

Reservoir is formed by earth and rockfill dam and dikes enlarging the natural basin of Carter Lake. Storage began in February 1954 and dead storage pool was filled Mar. 5, 1954. Usable capacity, 113,500 acre-ft (140 hm³) between elevations 5,618.00 ft or 1,712.366 m (trashrack sill at Carter Lake Dam Outlet) and 5,763.00 ft or 1,756.562 m (maximum water surface, 6 ft or 1.8 m below crest of dam). Dead storage, 3,310 acre-ft (4.08 hm³). Water diverted from Colorado River basin through Alva B. Adams tunnel is pumped from Flatiron Reservoir into Carter Lake for supplemental irrigation supply to Little Thompson River, St. Vrain Creek, and Boulder Creek basins. Water above elevation 5,620 ft (1,713.0 m) may be released for return to Flatiron Reservoir where pump turbines can operate in reverse to generate power and water can be used for irrigation in Big Thompson or Cache la Poudre River basins. It is part of the Colorado-Big Thompson project. Figures given herein represent usable contents. Records furnished by Bureau of Reclamation. Water-quality records for the current year are published in Part 2 of this report.

RESERVOIRS IN SOUTH PLATTE RIVER BASIN--Continued

MONTHEND ELEVATION OR GAGE HEIGHT AND CONTENTS AT 0800, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	ELEVATION (FEET)	CONTENTS (ACRE- FEET)	CHANGE IN CONTENTS (ACRE-FEET)	ELEVATION OR GAGE HEIGHT (FEET)	CONTENTS (ACRE- FEET)	CHANGE IN CONTENTS (ACRE-FEET)
06695500 ELEVENMILE CANYON RESERVOIR			06701000 CHEESMAN LAKE			
Sept. 30.....	8,594.69	90,210	-	186.60	58,730	-
Oct. 31.....	8,594.71	90,250	+40	175.72	51,120	-7,610
Nov. 30.....	8,595.28	92,080	+1,830	171.24	48,160	-2,960
Dec. 31.....	8,595.73	93,540	+1,460	167.84	45,980	-2,180
CAL YR 1972.....	-	-	+14,160	-	-	-33,310
Jan. 31.....	8,595.46	92,660	-880	163.28	43,160	-2,820
Feb. 28.....	8,594.94	90,980	-1,680	160.34	41,400	-1,760
Mar. 31.....	8,595.29	92,110	+1,130	158.30	40,200	-1,200
Apr. 30.....	8,594.95	91,010	-1,100	187.28	59,230	+19,030
May 31.....	8,596.62	96,500	+5,490	210.50	77,760	+18,530
June 30.....	8,597.88	100,800	+4,300	212.52	79,520	+1,760
July 31.....	8,598.28	102,200	+1,400	212.35	79,370	-150
Aug. 31.....	8,597.60	99,840	-2,360	198.85	68,080	-11,290
Sept. 30.....	8,597.44	99,290	-550	189.30	60,720	-7,360
WTR YR 1973.....	-	-	+9,080	-	-	+1,990
06737500 HORSETOOTH RESERVOIR			06742500 CARTER LAKE			
Sept. 30.....	5,383.35	68,980	-	5,698.80	47,850	-
Oct. 31.....	5,369.15	51,400	-17,580	5,699.80	48,720	+870
Nov. 30.....	5,375.45	58,910	+7,510	5,712.70	60,440	+11,720
Dec. 31.....	5,386.70	73,460	+14,550	5,725.60	73,010	+12,570
CAL YR 1972.....	-	-	-940	-	-	-4,200
Jan. 31.....	5,394.60	84,540	+11,080	5,736.00	83,700	+10,690
Feb. 28.....	5,401.75	95,200	+10,660	5,746.60	95,060	+11,360
Mar. 31.....	5,408.20	105,400	+10,200	5,751.18	100,100	+5,040
Apr. 30.....	5,417.70	121,200	+15,800	5,753.55	102,800	+2,700
May 31.....	5,423.75	131,900	+10,700	5,756.10	105,600	+2,800
June 30.....	5,423.75	131,900	0	5,757.50	107,200	+1,600
July 31.....	5,423.75	131,900	0	5,750.95	99,850	-7,350
Aug. 31.....	5,405.60	101,200	-30,700	5,731.75	79,280	-20,570
Sept. 30.....	5,397.05	88,120	-13,080	5,705.50	53,790	-25,490
WTR YR 1973.....	-	-	+19,140	-	-	+5,940

06825500 LANDSMAN CREEK NEAR HALE, COLO.

LOCATION.--Lat 39°34'32", long 102°15'06", in SE¼ sec.35, T.5 S., R.44 W., Yuma County, on right bank 900 ft (270 m) upstream from bridge on U.S. Highway 385, 3.2 mi (5.1 km) upstream from mouth, 5.2 mi (8.4 km) southwest of Bonny Dam, and 7 mi (11 km) southwest of Hale.

DRAINAGE AREA.--268 mi² (694 km²).

PERIOD OF RECORD.--May 1950 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 3,720 ft (1,134 m) from topographic map. Prior to Aug. 3, 1965, at site 1,200 ft (370 m) downstream: at datum 0.68 ft (0.207 m) lower prior to Oct. 21, 1950, and June 6 to Aug. 10, 1951; at datum 0.79 ft (0.241 m) higher Oct. 21, 1950, to June 5, 1951; and at present datum subsequent to Aug. 10, 1951.

AVERAGE DISCHARGE.--23 years, 3.90 ft³/s (0.110 m³/s), 2,830 acre-ft/yr (3.49 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 250 ft³/s (7.08 m³/s) July 19 (gage height, 8.30 ft or 2.530 m); minimum daily, 0.09 ft³/s (0.003 m³/s) July 12, 14, 16.

Period of record: Maximum discharge, 10,600 ft³/s (300 m³/s) Aug. 23, 1969 (gage height, 15.78 ft or 4.810 m), by contracted-opening measurement of peak flow; no flow for several days in 1955 and 1965.

Outstanding flood of May 30, 31, 1935, reached a stage of about 10 ft (3.0 m) (at former site and present datum) from information by local resident.

REMARKS.--Records poor. Small diversions above station for irrigation.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.37	.33	.37	.37	.40	.92	2.1	2.1	.37	.33	.40	.23
2	.37	.33	.37	.37	.50	.87	1.9	2.1	.42	.37	.40	.20
3	.37	.33	.37	.37	.55	1.1	1.7	1.8	.46	.42	.40	.19
4	.23	.33	.37	.37	.60	1.1	1.4	1.6	.51	.20	.44	.18
5	.23	.33	.37	.37	.65	1.0	1.3	1.4	.46	.27	.42	.19
6	.23	.33	.37	.37	.65	.87	1.2	1.7	.23	.23	.40	.18
7	.23	.33	.37	.37	.65	.83	1.3	2.1	.20	.23	.41	.20
8	.23	.33	.37	.37	.65	.78	1.4	1.6	.20	.17	.39	.20
9	.23	.33	.37	.37	.74	.87	1.3	1.4	.20	.15	.38	.20
10	.23	.33	.37	.37	.74	.83	1.4	1.2	.23	.15	.36	.20
11	.23	.33	.37	.33	.85	.74	1.7	1.0	.27	.10	.38	.28
12	.23	.33	.37	.33	.87	.69	1.4	.92	.37	.09	.35	2.4
13	.23	.33	.37	.33	.69	1.1	1.2	.87	.42	.15	.31	.33
14	.27	.33	.37	.33	.69	1.6	1.1	.83	.46	.09	.32	.32
15	.27	.33	.37	.33	.69	1.1	.97	.78	.55	.10	.33	.32
16	.27	.33	.37	.33	.69	.92	.87	.74	.55	.09	.30	.33
17	.33	.33	.37	.33	.69	.92	.83	.74	.42	.13	.28	.33
18	.33	.33	.37	.33	1.1	.92	.83	.74	.23	.15	.24	.34
19	.33	.33	.37	.33	.64	.83	.92	.64	.27	15	.26	.34
20	.33	.33	.37	.33	.78	.74	.78	.60	.33	6.1	.24	.35
21	.33	.33	.37	.33	.83	.74	.64	.69	.27	.51	.23	.37
22	.33	.33	.37	.33	.92	.87	.64	.83	.27	.44	.23	.34
23	.33	.33	.37	.33	1.0	.74	.64	.74	.27	.40	.24	.34
24	.33	.33	.37	.33	1.0	1.2	1.4	.46	.27	.77	.24	.35
25	.33	.37	.37	.33	.97	1.4	3.1	.42	.27	11	.25	.36
26	.33	.37	.37	.33	.97	1.2	2.6	.37	.27	.69	.25	.39
27	.33	.38	.37	.35	1.0	1.1	2.3	.42	.23	.41	.26	.43
28	.33	.37	.37	.35	.92	1.8	1.9	.55	.23	.40	.27	.46
29	.33	.37	.37	.37	-----	1.7	1.7	.27	.23	.40	.28	.42
30	.33	.37	.37	.37	-----	1.8	1.6	.33	.27	.40	.28	.42
31	.33	-----	.37	.33	-----	2.1	-----	.23	-----	.41	.26	-----
TOTAL	9.17	10.15	11.47	10.75	21.41	33.38	42.12	30.17	9.73	40.35	9.80	11.19
MEAN	.30	.34	.37	.35	.76	1.08	1.40	.97	.32	1.30	.32	.37
MAX	.37	.38	.37	.37	1.1	2.1	3.1	2.1	.55	15	.44	2.4
MIN	.23	.33	.37	.33	.40	.69	.64	.23	.20	.09	.23	.18
AC=FT	18	20	23	21	42	66	84	60	19	80	19	22

CAL YR 1972 TOTAL 1,298.09 MEAN 3.55 MAX 264 MIN .09 AC=FT 2,570

WTR YR 1973 TOTAL 239.69 MEAN .66 MAX 15 MIN .09 AC=FT 475

PEAK DISCHARGE (BASE, 350 CFS).--No peak above base.

06826000 BONNY RESERVOIR NEAR HALE, COLO.

LOCATION (REVISED).--Lat 39°37'24", long 102°10'26", in SE¼SE¼ sec.9, T.5 S., R.43 W., Yuma County, in stair well to outlet conduit of Bonny Dam on South Fork Republican River, 1.7 mi (2.7 km) west of Hale, and 3.0 mi (4.8 km) downstream from Landsman Creek.

DRAINAGE AREA.--1,820 mi² (4,710 km²), approximately.

PERIOD OF RECORD.--October 1950 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Bureau of Reclamation). Prior to Oct. 1, 1967, nonrecording gage at same site and datum.

EXTREMES.--Current year: Maximum contents, 42,740 acre-ft (52.7 hm³) Mar. 12 (elevation, 3,672.68 ft or 1,119.433 m); minimum, 35,360 acre-ft (43.6 hm³) Oct. 31 (elevation, 3,668.92 ft or 1,118.287 m).

Period of record: Maximum contents observed, 55,030 acre-ft (67.9 hm³) May 17, 1957 (elevation, 3,678.10 ft or 1,121.085 m); minimum observed since appreciable contents was attained, 22,520 acre-ft (27.83 hm³) Oct. 6, 6-14, 1952 (elevation, 3,661.20 ft or 1,115.934 m).

REMARKS.--Reservoir is formed by an earthfill dam. Storage began July 6, 1950; dam completed May 4, 1951. Capacity of reservoir, 170,200 acre-ft (210 hm³) below elevation 3,710 ft or 1,130.8 m (crest of spillway) of which 128,800 acre-ft (159 hm³) is for flood control and 39,900 acre-ft (49.2 hm³) for irrigation. Dead storage, 1,420 acre-ft (1.75 hm³) below elevation 3,635.0 ft or 1,107.95 m (sill of trashrack at outlet conduit). Figures given herein represent total contents.

REVISIONS (WATER YEARS).--WSP 1710: 1955.

Capacity table (elevation, in feet, and total contents, in acre-feet)
(Furnished by Bureau of Reclamation)

3,665.0	28,460
3,670.0	37,390
3,675.0	47,760

CONTENTS, IN ACRE-Feet, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36,270	35,600	37,310	38,870	40,600	42,140	41,810	42,350	41,210	37,450	38,150	36,480
2	36,250	35,650	37,330	38,930	40,670	42,200	41,770	42,350	41,210	37,330	38,090	36,400
3	36,250	35,730	37,370	38,970	40,730	42,310	41,730	42,330	41,190	37,350	38,060	36,350
4	36,210	35,800	37,390	39,010	40,790	42,370	41,730	42,330	41,170	37,260	38,110	36,290
5	36,160	35,820	37,410	39,050	40,850	42,430	41,690	42,290	41,130	37,260	38,110	36,250
6	36,160	35,890	37,450	39,110	40,890	42,490	41,580	42,410	41,070	37,220	38,110	36,230
7	36,160	35,950	37,480	39,150	40,950	42,530	41,620	42,370	41,030	37,100	38,020	36,190
8	36,140	35,980	37,520	39,190	40,990	42,570	41,600	42,510	40,930	37,000	38,000	36,100
9	36,140	36,060	37,560	39,250	41,050	42,610	41,580	42,510	40,890	36,960	37,940	36,060
10	36,160	36,100	37,600	39,270	41,110	42,650	41,560	42,470	40,810	36,910	37,980	36,060
11	36,160	36,160	37,680	39,330	41,170	42,700	41,540	42,430	40,690	36,820	37,880	36,250
12	36,160	36,230	37,770	39,390	41,260	42,630	41,520	42,370	40,580	36,710	37,870	36,350
13	36,160	36,380	37,830	39,450	41,280	42,610	41,520	42,350	40,520	36,650	37,810	36,350
14	36,160	36,440	37,880	39,510	41,320	42,470	41,560	42,260	40,420	36,590	37,770	36,350
15	36,160	36,520	37,920	39,570	41,360	42,310	41,500	42,240	40,280	36,560	37,750	36,350
16	36,160	36,570	37,960	39,620	41,440	42,120	41,500	42,180	40,200	36,480	37,710	36,310
17	36,180	36,610	38,020	39,680	41,480	41,950	41,480	42,120	40,060	36,440	37,620	36,190
18	36,160	36,670	38,060	39,740	41,540	41,790	41,460	42,080	39,900	36,440	37,560	36,250
19	36,080	36,720	38,110	39,800	41,600	41,710	41,520	41,990	39,680	36,780	37,540	36,290
20	36,040	36,760	38,190	39,860	41,640	41,500	41,460	41,930	39,410	37,390	37,470	36,290
21	35,960	36,820	38,270	39,920	41,710	41,440	41,460	41,890	39,150	37,540	37,410	36,270
22	35,890	36,880	38,330	39,960	41,750	41,360	41,440	41,850	38,930	37,580	37,330	36,250
23	35,820	36,930	38,410	40,000	41,810	41,300	41,440	41,810	38,700	37,620	37,220	36,250
24	35,760	36,960	38,480	40,060	41,850	41,380	41,730	41,730	38,440	38,000	37,160	36,250
25	35,710	37,000	38,540	40,120	41,910	41,440	41,990	41,640	38,170	38,110	37,120	36,210
26	35,650	37,060	38,600	40,220	41,950	41,460	42,120	41,540	37,900	38,130	37,040	36,310
27	35,580	37,100	38,640	40,280	42,010	41,500	42,160	41,440	37,880	38,190	36,930	36,500
28	35,540	37,160	38,700	40,340	42,080	41,640	42,200	41,420	37,560	38,210	36,880	36,570
29	35,460	37,200	38,780	40,400	-----	41,670	42,200	41,340	37,430	38,210	36,710	36,590
30	35,410	37,260	38,800	40,480	-----	41,750	42,200	41,280	37,470	38,190	36,570	36,630
31	35,480	-----	38,860	40,540	-----	41,810	-----	41,240	-----	38,170	36,520	-----
MAX	36,270	37,260	38,860	40,540	42,080	42,700	42,200	42,510	41,210	38,210	38,150	36,630
MIN	35,410	35,600	37,310	38,870	40,600	41,300	41,440	41,240	37,430	36,440	36,520	36,060
(†)	3,668.99	3,669.93	3,670.76	3,671.61	3,672.36	3,672.23	3,672.42	3,671.95	3,670.04	3,670.41	3,669.54	3,669.60
(‡)	-810	+1,780	+1,600	+1,680	+1,540	-270	+390	-960	-3,770	+700	-1,650	+110
CAL YR 1972.....†	2,550											
WTR YR 1973.....‡	+340											

† Elevation, in feet, at end of month.

‡ Change in contents, in acre-feet.

KANSAS RIVER BASIN

06826500 SOUTH FORK REPUBLICAN RIVER NEAR HALE, COLO.

LOCATION.--Lat 39°37'26", long 102°09'47", in SW¼NE¼ sec.15, T.5 S., R.43 W., Yuma County, on right bank 0.5 mi (0.8 km) downstream from Bonny Dam and 1.2 mi (1.9 km) west of Hale.

DRAINAGE AREA.--1,825 mi² (4,730 km²), approximately.

PERIOD OF RECORD.--October 1946 to September 1948, May 1951 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 3,610 ft (1,100 m) from topographic map. Oct. 1, 1946, to Sept. 30, 1948, at site 4 mi (6 km) downstream at different datum.

AVERAGE DISCHARGE.--22 years (1951-73), 23.6 ft³/s (0.668 m³/s), 17,100 acre-ft/yr (21.1 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 130 ft³/s (3.68 m³/s) Mar. 12, 13 (gage height, 4.74 ft or 1.445 m); minimum daily, 4.8 ft³/s (0.14 m³/s) July 6-12.

Period of record: Maximum discharge, 3,790 ft³/s (107 m³/s) May 28, 1947 (gage height, 4.71 ft or 1.436 m, site and datum then in use); maximum gage height, 4.84 ft (1.475 m) Apr. 28, 1947, site and datum then in use; no flow Aug. 11-13, 1947.

Greatest flood known occurred May 31, 1935, stage and discharge not determined. A discharge of 103,000 ft³/s (2,920 m³/s) was determined at a site near Newton, 5.5 mi (8.8 km) upstream, with a drainage area of approximately 1,270 mi² (3,290 km²).

REMARKS.--Records excellent. Flow regulated by Bonny Reservoir since July 6, 1950 (see sta. 06826000). Many diversions above station for irrigation. Water diverted by Hale ditch from Bonny Reservoir bypasses station (1,800 acre-ft or 2.22 hm³ diverted during current year).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.2	6.5	5.2	6.2	5.8	6.2	54	37	46	5.5	6.5	6.2
2	6.2	7.6	5.2	6.2	5.8	6.2	54	43	46	5.5	7.0	6.2
3	6.2	5.8	5.2	6.2	5.8	6.5	54	43	46	5.5	7.6	6.2
4	5.8	5.8	5.3	6.2	5.8	6.5	52	43	46	5.2	8.2	6.2
5	5.8	5.8	5.3	6.2	5.8	6.5	52	43	46	5.2	9.2	6.2
6	5.8	5.8	5.4	6.2	5.8	6.5	52	46	46	4.8	7.6	6.2
7	5.8	5.5	5.4	6.2	5.8	6.5	52	46	46	4.8	7.6	6.2
8	5.8	5.5	5.5	5.8	5.8	6.5	54	46	46	4.8	7.6	6.2
9	5.8	5.8	5.6	5.8	5.8	6.5	54	46	46	4.8	7.0	6.2
10	5.8	5.5	5.6	5.8	5.8	6.5	54	46	46	4.8	7.0	6.2
11	5.8	5.8	5.6	5.8	6.2	6.5	54	46	46	4.8	7.0	7.6
12	5.8	5.8	5.6	5.8	6.2	57	54	46	46	4.8	7.0	7.6
13	5.8	6.2	5.6	5.8	5.8	126	46	46	46	5.2	7.0	6.5
14	5.8	5.8	5.6	6.2	5.8	126	35	46	46	5.2	7.0	7.0
15	5.8	5.8	5.6	6.2	5.8	126	35	46	46	5.2	6.5	7.0
16	5.8	5.5	5.6	6.2	5.8	126	35	46	43	5.2	6.2	7.0
17	5.8	5.5	5.6	6.2	6.2	126	37	48	43	5.2	5.8	7.0
18	5.8	5.5	5.6	6.2	6.2	126	37	48	43	5.2	5.8	7.0
19	29	5.5	5.8	5.8	6.2	126	37	48	87	7.0	5.8	7.0
20	50	5.2	5.8	6.2	6.2	85	31	48	117	6.2	5.8	7.0
21	52	5.2	5.8	6.2	6.2	73	28	48	117	6.2	5.5	7.0
22	52	5.2	5.8	5.8	6.2	73	28	48	117	6.2	5.5	7.0
23	52	5.2	5.8	5.8	6.2	42	29	48	117	6.2	5.5	7.0
24	52	5.2	6.2	5.8	6.2	29	31	48	117	7.0	5.5	6.5
25	52	5.2	6.2	6.2	6.2	29	32	48	117	7.0	5.5	6.2
26	52	5.5	6.2	6.2	6.2	29	31	48	117	6.2	5.5	7.0
27	52	5.5	6.2	6.2	6.2	29	29	50	105	6.2	5.5	7.0
28	52	5.2	6.2	5.8	6.2	29	29	46	66	6.2	5.5	7.0
29	52	5.2	6.2	5.8	-----	44	29	46	55	6.2	5.8	6.2
30	39	5.2	6.2	5.8	-----	54	29	46	9.6	6.5	5.8	5.8
31	19	-----	6.2	5.8	-----	56	-----	46	-----	6.5	5.8	-----
TOTAL	710.6	168.8	177.1	186.6	168.0	1,581.9	1,228	1,429	1,960.6	175.3	200.6	199.4
MEAN	22.9	5.63	5.71	6.02	6.00	51.0	40.9	46.1	65.4	5.65	6.47	6.65
MAX	52	7.6	6.2	6.2	6.2	126	54	50	117	7.0	9.2	7.6
MIN	5.8	5.2	5.2	5.8	5.8	6.2	28	37	9.6	4.8	5.5	5.8
AC-FT	1,410	335	351	370	333	3,140	2,440	2,830	3,890	348	398	396

CAL YR 1972 TOTAL 5,135.1 MEAN 14.0 MAX 121 MIN 4.8 AC-FT 10,190
 WTR YR 1973 TOTAL 8,185.9 MEAN 22.4 MAX 126 MIN 4.8 AC-FT 16,240

ARKANSAS RIVER BASIN

07081200 ARKANSAS RIVER NEAR LEADVILLE, COLO.

LOCATION (REVISED).--Lat 39°15'26", long 106°20'35", in NW¼NW¼ sec.21, T.9 S., R.80 W., Lake County, on right bank 500 ft (150 m) downstream from confluence of East Fork Arkansas River and Tennessee Creek, 0.5 mi (0.8 km) downstream from highway bridge, and 2.8 mi (4.5 km) west of Leadville.

DRAINAGE AREA.--97.2 mi² (251.7 km²).

PERIOD OF RECORD.--October 1967 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 9,730 ft (2,966 m) from topographic map.

AVERAGE DISCHARGE.--6 years, 75.6 ft³/s (2.141 m³/s), 54,770 acre-ft/yr (67.5 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 803 ft³/s (22.7 m³/s) June 12 (gage height, 4.34 ft or 1.323 m); minimum daily, 14 ft³/s (0.40 m³/s) Mar. 30.
Period of record: Maximum discharge, 803 ft³/s (22.7 m³/s) June 12, 1973 (gage height, 4.34 ft or 1.323 m); minimum daily, 9.6 ft³/s (0.27 m³/s) Mar. 20, 1968.

REMARKS.--Records good except those for winter period, which are poor. Transmountain diversion from Colorado River basin to Arkansas River basin enters above this station (see elsewhere in this report). Small diversions upstream for irrigation and municipal use.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	22	28	15	17	22	16	22	195	335	90	36
2	28	22	28	15	17	22	16	21	171	302	85	35
3	27	24	28	15	19	22	15	21	160	284	82	34
4	27	26	28	15	20	21	15	26	160	266	82	32
5	28	25	28	15	20	20	15	31	136	246	92	30
6	28	23	23	15	20	20	15	31	134	230	90	29
7	29	21	17	15	20	20	15	27	174	212	80	29
8	34	20	15	15	20	20	15	30	266	212	76	28
9	31	20	15	15	20	20	15	40	420	274	70	28
10	29	20	15	15	20	20	15	65	549	216	65	29
11	28	20	15	15	20	20	15	123	693	198	63	32
12	28	20	15	15	20	20	15	160	693	209	58	30
13	28	20	15	15	20	20	15	198	699	250	55	29
14	28	20	15	15	20	20	15	165	705	238	53	26
15	29	20	15	15	20	20	15	140	639	206	53	26
16	35	22	16	15	20	20	15	150	445	186	50	26
17	34	26	17	15	21	20	15	160	350	162	50	27
18	32	26	17	15	21	20	15	202	355	162	47	24
19	34	26	18	15	22	18	15	274	297	242	45	24
20	34	27	18	15	22	16	15	292	274	198	43	23
21	31	28	18	15	22	16	15	288	302	171	44	23
22	30	28	18	16	22	16	16	258	335	152	46	22
23	30	28	18	16	22	16	16	189	355	132	43	23
24	28	28	18	17	22	16	16	195	360	123	42	24
25	27	28	18	17	22	16	16	183	330	115	43	26
26	26	28	18	17	22	16	16	192	380	113	41	26
27	26	28	18	17	22	16	16	150	460	111	39	25
28	26	28	18	17	22	16	16	132	450	106	37	25
29	26	28	18	17	-----	15	16	130	435	110	37	25
30	26	28	16	17	-----	14	16	140	380	110	39	24
31	23	-----	15	17	-----	15	-----	142	-----	97	40	-----
TOTAL	899	730	579	483	575	573	461	4,177	11,302	5,968	1,780	820
MEAN	29.0	24.3	18.7	15.6	20.5	18.5	15.4	135	377	193	57.4	27.3
MAX	35	28	28	17	22	22	16	292	705	335	92	36
MIN	23	20	15	15	17	14	15	21	134	97	37	22
AC-FT	1,780	1,450	1,150	958	1,140	1,140	914	8,290	22,420	11,840	3,530	1,630

CAL YR 1972 TOTAL 27,098 MEAN 74.0 MAX 655 MIN 12 AC-FT 53,750
WTR YR 1973 TOTAL 28,347 MEAN 77.7 MAX 705 MIN 14 AC-FT 56,230

NOTE.--No gage-height record Nov. 9 to Mar. 27.

ARKANSAS RIVER BASIN

07082400 TURQUOISE LAKE NEAR LEADVILLE, COLO.

LOCATION.--Lat 39°15'10", long 106°22'26", in SW¼NE¼ sec.19, T.9 S., R.80 W., Lake County, in control house of Sugar Loaf Dam on Lake Fork, 4.0 mi (6.4 km) west of Leadville and 4.6 mi (7.4 km) upstream from mouth.

DRAINAGE AREA.--28.1 mi² (72.8 km²).

PERIOD OF RECORD.--April 1968 to current year.

GAGE.--Nonreading gage read once daily. Datum of gage is 9,754.00 ft (2,973.019 m) above mean sea level (levels by Bureau of Reclamation); gage readings have been reduced to elevations above mean sea level.

EXTREMES (at 0800 of following day).--Current year: Maximum contents, 104,900 acre-ft (129 hm³) July 25, 26 (elevation, 9,855.28 ft or 3,003.889 m); minimum, 45,690 acre-ft (56.3 hm³) Nov. 23-26 (elevation, 9,815.20 ft or 2,991.673 m).

Period of record: Maximum contents, 104,900 acre-ft (129 hm³) July 25, 26, 1973 (elevation, 9,855.28 ft or 3,003.889 m); minimum since appreciable storage was attained, 14,510 acre-ft (17.9 hm³) Oct. 1, 1968 (elevation, 9,782.85 ft or 2,981.813 m).

REMARKS.--Reservoir formed by earthfill dam completed in 1909 (capacity, 17,400 acre-ft or 21.5 hm³). Enlargement of dam began Dec. 8, 1965, and completed Mar. 22, 1969; closure of dam was made Apr. 15, 1968. Enlarged capacity, 129,400 acre-ft (160 hm³) at elevation 9,869.4 ft or 3,008.19 m (crest of spillway). Dead storage 2,770 acre-ft (3.42 hm³) below elevation 9,765.90 ft or 2,976.646 m (sill of lowest outlet). Figures given herein represent total contents. Since Apr. 15, 1968, Turquoise Lake has been a regulatory reservoir for the Fryingpan-Arkansas Project and stores water imported from the Colorado River basin through Charles H. Boustead Tunnel for irrigation, municipal water supply, and power development. It also stores water for industrial use, and water imported from the Colorado River basin through Busk-Ivanhoe Tunnel for irrigation and through Homestake Tunnel for municipal water supply.

COOPERATION.--Records furnished by Bureau of Reclamation.

MONTHEND ELEVATION AND CONTENTS, OCTOBER 1972 TO SEPTEMBER 1973

DATE	ELEVATION (FEET)†	CONTENTS (ACRE-FEET)	CHANGE IN CONTENTS (ACRE-FEET)
Sept. 30.....	9,820.15	51,920	-
Oct. 31.....	9,816.45	47,230	-4,690
Nov. 30.....	9,815.35	45,870	-1,360
Dec. 31.....	9,816.40	47,170	+1,300
CAL YR 1972	-	-	-10,750
Jan. 31.....	9,817.40	48,420	+1,250
Feb. 28.....	9,817.80	48,920	+500
Mar. 31.....	9,818.00	49,170	+250
Apr. 30.....	9,819.15	50,630	+1,460
May 31.....	9,828.04	62,500	+11,870
June 30.....	9,848.48	93,650	+31,150
July 31.....	9,854.78	104,100	+10,450
Aug. 31.....	9,845.13	88,230	-15,870
Sept. 30.....	9,837.70	76,600	-11,630
WTR YR 1973	-	-	+24,680

† At 0800 hours of following day.

07083000 HALFMOON CREEK NEAR MALTA, COLO.

(Hydrologic bench-mark station)

LOCATION.--Lat 39°10'20", long 106°23'19", in SE¼SE¼ sec.13, T.10 S., R.81 W., Lake County, on right bank 1.4 mi (2.3 km) upstream from culvert, 3.3 mi (5.3 km) upstream from mouth, and 4.3 mi (6.9 km) south-west of Malta.

DRAINAGE AREA.--23.6 mi² (61.1 km²).

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

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 9,830 ft (2,996 m) from topographic map. Prior to Oct. 19, 1966, at sites 1.4 mi (2.3 km) downstream at different datums.

AVERAGE DISCHARGE.--27 years, 29.0 ft³/s (0.821 m³/s), 21,010 acre-ft/yr (25.9 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 360 ft³/s (10.2 m³/s) June 28 (gage height, 3.42 ft or 1.042 m); minimum daily, 1.8 ft³/s (0.051 m³/s) Apr. 7.
Period of record: Maximum discharge, 450 ft³/s (12.7 m³/s) June 30, 1957 (gage height, 3.48 ft or 1.061 m, site and datum then in use); minimum not determined.

REMARKS.--Records good except those for winter period, which are fair. No regulation or diversion above station. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WRD Colo. 1967: Drainage area. WRD Colo. 1968: 1967(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	12	5.5	2.7	3.0	2.3	2.0	5.5	44	198	40	17
2	13	11	5.5	2.7	3.0	2.1	2.0	4.4	38	184	39	17
3	12	9.5	5.5	2.7	2.9	2.3	1.9	4.6	36	160	39	15
4	12	9.5	5.0	2.7	3.2	2.0	1.9	6.4	34	160	38	14
5	13	8.8	4.0	2.7	2.9	2.3	2.0	8.2	31	154	39	13
6	13	7.8	3.0	2.7	2.7	2.1	2.0	7.8	35	143	41	13
7	13	6.9	3.0	2.7	2.7	2.0	1.8	6.7	47	120	39	12
8	15	8.5	3.0	2.7	2.4	2.3	2.4	7.2	76	115	36	11
9	14	8.2	3.0	2.7	2.3	2.3	2.3	8.8	113	118	34	11
10	13	7.2	3.0	2.7	2.3	2.1	2.3	11	160	115	32	12
11	12	8.8	3.0	2.7	2.4	2.1	2.3	18	180	111	31	13
12	13	8.5	3.0	2.7	2.4	2.1	2.4	24	177	113	30	13
13	12	7.5	3.0	2.7	2.4	2.0	2.4	32	173	130	29	13
14	12	7.2	3.0	2.7	2.1	2.1	2.4	39	170	111	28	11
15	14	7.5	3.0	2.7	2.4	2.1	2.3	35	115	96	28	11
16	16	7.5	3.5	2.7	2.6	2.0	2.6	43	85	85	26	11
17	15	7.5	3.5	3.0	2.6	2.0	2.7	49	75	76	25	11
18	14	7.5	3.9	3.0	2.6	2.0	2.7	60	73	78	26	10
19	15	7.2	3.9	3.3	2.7	2.3	2.7	75	64	100	25	9.9
20	15	6.9	3.9	3.3	2.7	2.3	2.7	78	65	90	24	9.5
21	13	6.7	3.9	3.3	2.9	2.3	2.4	72	85	80	24	9.2
22	13	6.4	3.9	3.0	2.9	2.1	2.7	60	105	68	23	9.2
23	14	6.7	3.7	3.0	2.6	2.1	2.9	50	137	60	22	9.5
24	11	6.9	3.7	3.0	2.7	1.9	3.2	51	143	57	24	10
25	12	6.9	3.5	2.7	2.6	2.3	3.2	46	160	54	23	11
26	11	6.9	3.5	2.7	2.4	2.0	2.9	42	206	54	23	11
27	11	6.0	3.3	2.7	2.6	2.0	2.9	35	240	52	19	10
28	12	5.0	3.5	3.0	2.4	2.1	4.4	31	244	49	19	10
29	11	5.5	3.5	3.0	-----	2.1	5.1	32	231	47	19	10
30	9.5	5.5	3.3	3.0	-----	2.0	5.6	34	215	45	21	9.5
31	10	-----	3.2	3.0	-----	2.0	-----	37	-----	43	19	-----
TOTAL	396.5	228.0	113.2	88.2	73.4	65.7	81.1	1,013.6	3,557	3,066	885	346.8
MEAN	12.8	7.60	3.65	2.85	2.62	2.12	2.70	32.7	119	98.9	28.5	11.6
MAX	16	12	5.5	3.3	3.2	2.3	5.6	78	244	198	41	17
MIN	9.5	5.0	3.0	2.7	2.1	1.9	1.8	4.4	31	43	19	9.2
AC-FT	786	452	225	175	146	130	161	2,010	7,060	6,080	1,760	688

CAL YR 1972 TOTAL 10,092.1 MEAN 27.6 MAX 227 MIN 2.2 AC-FT 20,020
WTR YR 1973 TOTAL 9,914.5 MEAN 27.2 MAX 244 MIN 1.8 AC-FT 19,670

PEAK DISCHARGE (BASE, 150 CFS).--June 10 (2300) 244 cfs (3.24 ft); June 28 (0130) 360 cfs (3.42 ft).

NOTE.--No gage-height record Jan. 1 to Feb. 2.

ARKANSAS RIVER BASIN

07084500 LAKE CREEK ABOVE TWIN LAKES RESERVOIR, COLO.

LOCATION.--Lat 39°03'47", long 106°24'26", Lake County, on left bank 1.2 mi (1.9 km) upstream from water line of Twin Lakes Reservoir at elevation 9,200 ft (2,804.2 m) and 1.9 mi (3.1 km) southwest of village of Twin Lakes.

DRAINAGE AREA.--75 mi² (194 km²).

PERIOD OF RECORD.--April 1946 to September 1962, October 1963 to current year. Monthly discharge only for some periods, published in WSP 1241, 1311, and 1731.

GAGE.--Water-stage recorder. Altitude of gage is 9,310 ft (2,838 m), from topographic map. Prior to May 20, 1950, at site 190 ft (58 m) downstream at different datum. May 20, 1950, to Apr. 7, 1953, at site 10 ft (3 m) upstream at present datum.

AVERAGE DISCHARGE.--26 years, 172 ft³/s (4.871 m³/s), 124,600 acre-ft/yr (154 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,480 ft³/s (70.2 m³/s) June 10 (gage height, 5.10 ft or 1.554 m); minimum daily, 9.0 ft³/s (0.25 m³/s) Apr. 4, 5, 7.
Period of record: Maximum discharge, 3,150 ft³/s (89.2 m³/s) June 10, 1952 (gage height, 5.74 ft or 1.750 m), from rating curve extended above 1,400 ft³/s (40 m³/s); minimum not determined.

REMARKS.--Records good except those for winter period, which are poor. No diversion above station. Records include inflow from Roaring Fork River in Colorado River basin through Twin Lakes tunnel (see elsewhere in this report).

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

REVISIONS (WATER YEARS).--WSP 1117: Drainage area. WSP 1711: 1951(M), 1952.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	81	44	35	16	13	12	10	17	557	1,330	248	88
2	74	46	34	14	13	12	11	16	359	1,170	242	86
3	46	46	30	14	13	12	10	17	326	1,070	236	84
4	45	47	28	15	13	12	9.0	45	282	966	215	79
5	48	49	26	15	14	12	9.0	22	254	890	221	77
6	47	46	24	13	12	12	9.5	24	275	868	248	76
7	64	34	26	13	13	12	9.0	21	400	784	245	74
8	71	43	26	13	13	12	9.5	22	699	650	218	66
9	68	47	24	13	12	12	10	25	1,230	650	203	52
10	81	42	20	13	12	12	10	32	1,830	683	195	60
11	76	45	21	13	13	12	11	51	1,770	638	170	19
12	63	46	21	14	13	12	11	105	1,860	624	162	89
13	67	51	21	14	13	12	11	181	1,770	650	154	99
14	35	39	20	14	12	11	11	154	1,720	638	149	89
15	42	38	18	13	12	11	11	199	1,230	575	129	81
16	71	37	20	13	12	11	10	326	861	506	127	74
17	120	35	21	13	12	11	11	289	696	485	125	73
18	109	31	21	14	12	11	10	369	676	465	122	71
19	97	31	21	14	12	11	11	690	599	506	120	96
20	45	33	21	14	12	12	12	618	587	501	118	63
21	37	34	21	14	12	12	11	674	709	501	120	60
22	36	34	21	13	12	12	11	512	868	460	113	45
23	51	32	21	12	12	11	13	408	1,120	413	105	48
24	65	33	20	13	13	11	13	404	1,430	338	113	46
25	81	34	18	13	13	11	13	372	1,390	318	113	52
26	61	34	20	13	12	10	13	342	1,620	322	116	81
27	47	34	18	14	12	10	13	272	1,860	318	103	73
28	28	32	18	14	12	11	14	224	1,590	303	101	39
29	34	33	18	14	-----	10	16	233	1,480	296	99	36
30	40	35	18	15	-----	10	17	263	1,400	282	93	44
31	42	-----	17	14	-----	10	-----	306	-----	254	89	-----
TOTAL	1,872	1,165	688	424	349	352	340.0	7,233	31,448	18,454	4,812	2,080
MEAN	60.4	38.8	22.2	13.7	12.5	11.4	11.3	233	1,048	595	155	69.3
MAX	120	51	35	16	14	12	17	690	1,860	1,330	248	99
MIN	28	31	17	12	12	10	9.0	16	254	254	89	36
AC-FT	3,710	2,310	1,360	841	692	698	674	14,350	62,380	36,600	9,540	4,130

CAL YR 1972 TOTAL 68,901.3 MEAN 188 MAX 2,030 MIN 7.5 AC-FT 136,700
WTR YR 1973 TOTAL 69,217.0 MEAN 190 MAX 1,860 MIN 9.0 AC-FT 137,300

NOTE.--No gage-height record Oct. 31 to Apr. 28.

ARKANSAS RIVER BASIN

67

07086000 ARKANSAS RIVER AT GRANITE, COLO.

LOCATION.--Lat 39°02'34", long 106°15'55", in SE¼SW¼ sec.31, T.11 S., R.79 W., Chaffee County, on right bank at Granite, 100 ft (30 m) east of U.S. Highway 34, 100 ft (30 m) downstream from county bridge, and 200 ft (61 m) upstream from Cache Creek.

DRAINAGE AREA.--427 mi² (1,106 km²).

PERIOD OF RECORD.--April to October 1895, May to December 1897, August to September 1898, March to October 1899, April to May 1902 (gage heights and discharge measurements only in 1895, 1899, and 1901), April 1910 to current year. Monthly discharge only for some periods, published in WSP 1311.

GAGE.--Water-stage recorder. Datum of gage is 8,914.86 ft (2,717.249 m) above mean sea level. Prior to Apr. 6, 1910, nonrecording gages near present site at different datums. Apr. 6, 1910, to Oct. 25, 1917, water-stage recorder or nonrecording gage at site 832 ft (254 m) upstream at different datum. Oct. 26, 1917, to Oct. 26, 1960, water-stage recorder at site 168 ft (51 m) downstream at present datum.

AVERAGE DISCHARGE.--63 years (1910-73), 365 ft³/s (10.34 m³/s), 264,400 acre-ft/yr (326 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,700 ft³/s (76.5 m³/s) June 11 (gage height, 4.98 ft or 1.518 m); minimum daily, 90 ft³/s (2.55 m³/s) Mar. 6, 7, 24-26, 29.
Period of record: Maximum discharge, 5,360 ft³/s (152 m³/s) June 28, 1957 (gage height, 7.20 ft or 2.195 m); minimum not determined.

REMARKS.--Records good except those for winter period, which are poor. Diversions above station for irrigation of about 6,700 acres (27.1 km²). Sugar Loaf and Twin Lakes Reservoirs are on tributaries above station (combined capacity, 182,700 acre-ft or 225 hm³). Transmountain diversions from Colorado River basin enter above this station (see elsewhere in this report).

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

REVISIONS (WATER YEARS).--WSP 1117: Drainage area. WSP 1711: 1952, 1956(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	170	165	135	105	105	115	115	182	636	1,630	723	1,190
2	170	152	130	105	100	110	115	179	777	1,430	596	1,180
3	168	148	120	105	105	105	115	182	939	1,600	408	1,140
4	168	143	115	105	115	100	115	202	867	1,750	432	1,060
5	168	143	120	100	115	95	120	211	759	1,710	438	831
6	176	148	130	95	115	90	140	208	741	1,720	414	813
7	180	131	120	95	115	90	120	199	786	1,720	375	759
8	185	134	110	95	110	95	125	205	975	1,620	375	759
9	190	138	105	95	110	100	135	217	1,390	1,720	402	750
10	184	131	110	95	115	105	135	282	1,980	1,640	561	750
11	176	136	115	100	115	110	150	370	2,370	1,540	777	524
12	176	138	120	105	110	110	157	365	1,970	1,640	750	235
13	176	138	125	110	110	115	162	426	1,770	1,940	732	226
14	176	134	125	110	105	110	168	432	1,740	1,810	714	214
15	179	136	135	110	105	105	168	360	1,640	1,710	723	235
16	190	138	145	110	105	110	160	450	1,350	1,530	795	235
17	182	136	155	110	105	115	168	559	1,060	1,300	858	238
18	182	138	165	110	105	115	173	652	948	1,270	939	229
19	184	138	150	110	110	115	165	957	930	1,540	930	223
20	184	134	145	110	110	115	160	1,250	984	1,540	948	217
21	176	134	140	105	105	110	152	1,240	1,010	1,470	1,060	190
22	173	131	135	100	110	100	155	1,050	1,090	1,410	1,090	205
23	179	138	125	110	115	95	165	759	1,340	1,200	1,080	208
24	173	143	120	110	115	90	173	644	1,640	1,270	1,130	217
25	176	136	110	110	115	90	176	636	1,530	858	1,280	226
26	170	138	110	105	110	90	170	652	1,620	750	1,280	226
27	173	130	110	95	120	95	176	517	1,960	813	1,260	223
28	176	130	110	105	125	100	199	420	2,100	840	1,250	211
29	168	135	105	105	-----	90	217	396	2,060	840	1,240	187
30	165	135	95	105	-----	109	211	396	1,870	813	1,210	184
31	160	-----	105	105	-----	114	-----	414	-----	768	1,160	-----
TOTAL	5,453	4,149	3,840	3,235	3,100	3,208	4,660	15,012	40,832	43,392	25,930	13,885
MEAN	176	138	124	104	111	103	155	484	1,361	1,400	836	463
MAX	190	165	165	110	125	115	217	1,250	2,370	1,940	1,280	1,190
MIN	160	130	95	95	100	90	115	179	636	750	375	184
AC-FT	10,820	8,230	7,620	6,420	6,150	6,360	9,240	29,780	80,990	86,070	51,430	27,540

CAL YR 1972 TOTAL 173,497 MEAN 474 MAX 2,420 MIN 55 AC-FT 344,100
WTR YR 1973 TOTAL 166,696 MEAN 457 MAX 2,370 MIN 90 AC-FT 330,600

NOTE.--No gage-height record Nov. 27 to Mar. 28.

ARKANSAS RIVER BASIN

07086500 CLEAR CREEK ABOVE CLEAR CREEK RESERVOIR, COLO.

LOCATION.--Lat 39°01'05", long 106°16'38", in SE¼ sec.12, T.12 S., R.80 W., Chaffee County, on right bank 0.5 mi (0.8 km) upstream from water line of Clear Creek Reservoir at elevation 8,875 ft (2,705.1 m), 1.5 mi (2.4 km) downstream from unnamed tributary, and 1.9 mi (3.1 km) southwest of Granite.

DRAINAGE AREA.--67.1 mi² (173.8 km²).

PERIOD OF RECORD.--May 1946 to current year. Monthly discharge only for some periods, published in WSP 1241 and 1311.

GAGE.--Water-stage recorder. Altitude of gage is 8,885 ft (2,708 m) from topographic map. May 7, 1946, to Apr. 20, 1954, water-stage recorder at site 133 ft (41 m) upstream at different datum. Apr. 21, 1954, to May 28, 1958, water-stage recorder 333 ft (101 m) upstream at different datum. Datum raised 2.19 ft (0.668 m) Apr. 21, 1954.

AVERAGE DISCHARGE.--27 years, 69.9 ft³/s (1.980 m³/s), 50,640 acre-ft/yr (62.4 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 680 ft³/s (19.3 m³/s) June 29 (gage height, 3.12 ft or 0.951 m); minimum daily, 8.8 ft³/s (0.25 m³/s) Mar. 15.

Period of record: Maximum daily discharge, 1,300 ft³/s (36.8 m³/s) June 29, 1957; maximum gage height recorded, 4.34 ft or 1.323 m (site and datum then in use) June 16, 1952; minimum discharge not determined.

REMARKS.--Records good except those for winter period, which are poor. Diversions for irrigation of about 250 acres (1.01 km²) above station.

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

REVISIONS.--WRD Colo. 1969: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	23	16	10	12	11	9.5	14	141	366	84	54
2	26	22	16	9.5	12	11	10	13	123	338	80	50
3	25	21	14	10	12	11	9.5	13	111	305	79	46
4	24	20	13	11	13	10	9.0	14	110	282	75	45
5	27	22	12	11	13	10	9.5	15	100	273	72	44
6	27	21	10	10	11	10	10	17	96	256	80	42
7	27	17	13	10	12	10	9.0	16	117	245	86	40
8	30	20	13	10	12	11	9.5	18	191	229	79	38
9	31	20	12	11	11	10	10	23	302	262	70	38
10	33	17	9.0	11	12	10	10	26	390	240	65	44
11	29	20	10	11	13	11	11	45	437	224	60	47
12	29	13	12	12	13	10	11	59	386	213	58	47
13	27	15	12	13	12	11	11	70	370	216	56	45
14	27	14	11	13	11	10	11	79	350	229	53	42
15	29	13	11	13	10	8.8	11	82	300	203	50	40
16	36	13	12	13	10	9.2	10	89	260	170	46	40
17	31	13	13	13	11	9.5	11	111	230	158	46	38
18	30	13	13	13	12	10	10	129	200	167	47	35
19	31	13	13	13	12	10	9.5	162	185	231	47	33
20	32	13	13	13	11	10	10	170	180	208	46	32
21	30	12	13	13	11	11	10	152	210	184	46	31
22	30	12	13	11	11	10	10	133	250	156	46	31
23	29	11	13	10	11	9.0	11	106	300	135	46	30
24	25	12	12	11	12	9.0	11	108	370	123	47	32
25	25	13	10	12	12	9.0	11	106	380	113	50	32
26	23	13	12	13	11	9.0	11	102	450	110	68	35
27	24	13	11	13	11	9.5	11	91	477	104	60	31
28	24	11	11	13	11	10	11	82	453	98	52	32
29	22	12	11	14	-----	9.5	12	79	477	96	49	30
30	24	14	11	14	-----	9.5	13	84	394	93	60	29
31	22	-----	11	13	-----	9.5	-----	104	-----	86	59	-----
TOTAL	855	466	376.0	367.5	325	308.5	312.5	2,312	8,340	6,113	1,862	1,153
MEAN	27.6	15.5	12.1	11.9	11.6	9.95	10.4	74.6	278	197	60.1	38.4
MAX	36	23	16	14	13	11	13	170	477	366	86	54
MIN	22	11	9.0	9.5	10	8.8	9.0	13	96	86	46	29
AC-FT	1,700	924	746	729	645	612	620	4,590	16,540	12,130	3,690	2,290

CAL YR 1972 TOTAL 19,144.9 MEAN 52.3 MAX 408 MIN 5.0 AC-FT 37,970
WTR YR 1973 TOTAL 22,790.5 MEAN 62.4 MAX 477 MIN 8.8 AC-FT 45,200

PEAK DISCHARGE (BASE, 400 CFS).--June 11 (0330) 557 cfs (2.90 ft); June 29 (0230) 680 cfs (3.12 ft).

NOTE.--No gage-height record Nov. 12 to May 3.

07087200 ARKANSAS RIVER AT BUENA VISTA, COLO.

LOCATION.--Lat 38°50'56", long 106°07'27", in NW¼NW¼ sec.9, T.14 S., R.78 W., Chaffee County, on right bank at northeast corner of Buena Vista city limits and 1.1 mi (1.8 km) upstream from Cottonwood Creek.

DRAINAGE AREA.--611 mi² (1,582 km²).

PERIOD OF RECORD.--October 1964 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 7,920 ft (2,414 m) from topographic map.

AVERAGE DISCHARGE.--9 years, 522 ft³/s (14.78 m³/s), 378,200 acre-ft/yr (466 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,970 ft³/s (84.1 m³/s) June 11 (gage height, 5.66 ft or 1.725 m); minimum daily, 70 ft³/s (1.98 m³/s) Dec. 30.

Period of record: Maximum discharge, 3,640 ft³/s (103 m³/s) July 13, 1965 (gage height, 6.32 ft or 1.926 m); minimum daily, 70 ft³/s (1.98 m³/s) Feb. 27, 1971, Dec. 30, 1972.

REMARKS.--Records good except those for winter period, which are fair. Natural flow of stream affected by transmountain diversions (see elsewhere in this report), storage reservoirs (combined capacity, 193,900 acre-ft or 239 hm³), diversions above station for irrigation of 7,400 acres (29.9 km²), and return flow from irrigated areas.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	212	215	126	75	90	107	105	218	762	2,320	868	1,320
2	199	151	121	80	90	96	105	182	915	1,990	805	1,300
3	195	151	121	85	90	93	107	192	1,050	2,030	601	1,230
4	179	142	110	85	90	81	104	212	1,020	2,140	617	1,180
5	186	149	90	85	90	84	100	242	868	2,030	617	880
6	189	149	90	85	90	75	117	253	841	1,990	605	863
7	195	131	90	85	90	74	121	208	863	1,990	585	810
8	212	138	90	85	90	79	102	225	1,070	1,910	589	800
9	212	142	90	85	90	84	108	225	1,510	1,980	625	800
10	212	128	90	85	90	88	116	327	2,070	1,890	736	810
11	202	138	90	90	90	94	114	441	2,600	1,790	997	694
12	202	142	90	100	90	96	124	434	2,340	1,820	958	302
13	205	138	90	110	90	100	130	422	2,210	2,140	909	284
14	202	136	90	115	90	94	136	529	2,150	2,070	897	264
15	205	133	90	116	90	107	140	461	2,080	1,920	880	260
16	228	135	100	109	90	100	123	517	1,760	1,740	927	242
17	218	130	120	107	90	109	133	629	1,400	1,490	945	267
18	208	140	120	108	95	114	153	771	1,210	1,450	1,130	250
19	218	138	120	108	95	112	140	1,120	1,130	1,840	1,160	236
20	222	136	120	111	95	108	128	1,490	1,250	1,850	1,180	228
21	212	133	115	105	95	108	121	1,610	1,280	1,790	1,340	225
22	205	120	110	100	105	99	120	1,420	1,440	1,660	1,360	225
23	208	118	105	95	110	99	130	1,120	1,740	1,440	1,360	215
24	208	124	105	95	112	98	151	863	2,030	1,180	1,360	218
25	212	160	105	95	112	95	158	795	1,990	1,050	1,460	215
26	195	192	105	95	108	98	170	795	2,040	997	1,450	222
27	202	140	105	90	111	100	173	726	2,440	1,040	1,440	215
28	215	110	105	90	124	114	205	605	2,730	1,070	1,410	215
29	192	135	100	90	-----	109	239	573	2,710	1,060	1,390	215
30	192	130	70	90	-----	102	246	577	2,480	1,030	1,360	212
31	158	-----	75	90	-----	104	-----	601	-----	921	1,290	-----
TOTAL	6,300	4,224	3,148	2,944	2,692	3,021	4,119	18,783	49,979	51,618	31,851	15,197
MEAN	203	141	102	95.0	96.1	97.5	137	606	1,666	1,665	1,027	507
MAX	228	215	126	116	124	114	246	1,610	2,730	2,320	1,460	1,320
MIN	158	110	70	75	90	74	100	182	762	921	585	212
AC-FT	12,500	8,380	6,240	5,840	5,340	5,990	8,170	37,260	99,130	102,400	63,180	30,140

CAL YR 1972 TOTAL 187,684 MEAN 513 MAX 2,590 MIN 70 AC-FT 372,300
 WTR YR 1973 TOTAL 193,876 MEAN 531 MAX 2,730 MIN 70 AC-FT 384,600

07089000 COTTONWOOD CREEK BELOW HOT SPRINGS, NEAR BUENA VISTA, COLO.

LOCATION.--Lat 38°48'46", long 106°13'18", in SE¼SE¼ sec.21, T.14 S., R.79 W., Chaffee County, on left bank 0.2 mi (0.3 km) downstream from Cottonwood Hot Springs, 0.9 mi (1.4 km) downstream from confluence of Middle Cottonwood and South Cottonwood Creeks, 2.9 mi (4.7 km) upstream from North Cottonwood Creek, and 5.5 mi (8.8 km) southwest of Buena Vista.

DRAINAGE AREA.--65 mi² (168 km²).

PERIOD OF RECORD.--October 1910 to September 1923, August 1949 to current year. Monthly discharge only for some periods, published in WSP 1311.

GAGE.--Water-stage recorder. Datum of gage is 8,532 ft (2,600.6 m) from river-profile survey. Prior to Oct. 1, 1923, nonrecording gage near present site at different datum.

AVERAGE DISCHARGE.--37 years, 58.3 ft³/s (1.651 m³/s), 42,240 acre-ft/yr (52.1 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 370 ft³/s (10.5 m³/s) June 29 (gage height, 2.93 ft or 0.893 m); minimum daily, 16 ft³/s (0.45 m³/s) Mar. 31, Apr. 1, 3-7, 9, 10.
Period of record: Maximum discharge, 1,180 ft³/s (33.4 m³/s) July 1, 1957 (gage height, 4.52 ft or 1.378 m; from floodmarks), from rating curve extended above 690 ft³/s (20 m³/s); minimum observed, 10 ft³/s (0.28 m³/s) Mar. 20-23, 25, Apr. 9, 19, 1914.

REMARKS.--Records good. Several small diversions above station for irrigation.

REVISIONS (WATER YEARS).--WSP 1177: 1915, drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33	32	26	24	22	20	16	20	85	241	82	51
2	32	32	26	24	21	20	17	20	79	234	82	47
3	32	32	26	24	22	20	16	20	68	224	72	45
4	32	32	27	24	22	20	16	22	65	211	75	43
5	32	32	27	24	22	19	16	22	62	211	91	42
6	33	32	26	23	22	19	16	19	62	211	88	42
7	33	31	26	23	22	19	16	20	73	199	78	43
8	36	31	26	23	22	20	17	22	110	196	73	44
9	40	32	26	22	22	19	16	24	144	208	70	43
10	35	30	25	22	22	19	16	27	202	193	65	46
11	33	31	25	22	22	19	17	34	214	181	61	49
12	32	32	25	22	22	19	17	41	217	172	59	49
13	32	31	25	23	22	18	17	44	220	184	57	46
14	31	30	25	23	22	18	17	55	300	190	55	44
15	32	31	24	23	21	18	18	44	252	178	52	42
16	37	30	24	23	21	18	18	49	184	152	49	40
17	37	30	24	23	21	18	18	60	160	142	49	41
18	35	31	24	22	21	18	18	70	172	148	49	40
19	37	30	24	22	20	18	18	94	152	175	46	35
20	37	31	24	22	21	18	17	94	150	166	44	35
21	35	29	24	22	21	17	17	98	156	158	43	36
22	34	28	24	22	22	17	17	85	175	156	44	35
23	33	28	24	22	21	17	17	62	178	130	43	36
24	32	29	24	22	21	17	19	66	190	121	42	39
25	32	28	24	22	20	17	19	70	190	112	43	39
26	32	28	24	22	20	17	19	68	217	107	55	40
27	32	28	24	22	20	17	20	53	248	103	52	39
28	32	28	24	22	20	17	20	49	252	98	46	38
29	31	28	24	22	-----	17	21	55	300	93	46	38
30	32	28	24	22	-----	17	21	59	259	89	49	37
31	31	-----	24	22	-----	16	-----	70	-----	85	53	-----
TOTAL	1,037	905	769	700	597	563	527	1,536	5,136	5,068	1,813	1,244
MEAN	33.5	30.2	24.8	22.6	21.3	18.2	17.6	49.5	171	163	58.5	41.5
MAX	40	32	27	24	22	20	21	98	300	241	91	51
MIN	31	28	24	22	20	16	16	19	62	85	42	35
AC-FT	2,060	1,800	1,530	1,390	1,180	1,120	1,050	3,050	10,190	10,050	3,600	2,470

CAL YR 1972 TOTAL 18,670 MEAN 51.0 MAX 279 MIN 24 AC-FT 37,030
WTR YR 1973 TOTAL 19,895 MEAN 54.5 MAX 300 MIN 16 AC-FT 39,460

PEAK DISCHARGE (BASE, 300 CFS).--June 14 (1430) 331 cfs (2.85 ft); June 29 (0600) 370 cfs (2.93 ft).

07091200 ARKANSAS RIVER NEAR NATHROP, COLO.

LOCATION.--Lat 38°39'08", long 106°03'02", in SE¼SW¼ sec.23, T.51 N., R.8 E., Chaffee County, on right bank 300 ft (91 m) upstream from end of Chaffee County road 60, in Browns Canyon, 3.7 mi (5.9 km) downstream from Browns Creek, 6.7 mi (10.8 km) south of Nathrop, and 9 mi (14 km) north of Salida.

DRAINAGE AREA.--1,060 mi² (2,745 km²).

PERIOD OF RECORD.--October 1964 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 7,350 ft (2,240 m) from topographic map.

AVERAGE DISCHARGE.--9 years, 669 ft³/s (18.95 m³/s), 484,700 acre-ft/yr (598 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 3,500 ft³/s (99.1 m³/s) June 11 (gage height, 8.86 ft or 2.701 m); minimum daily, 110 ft³/s (3.12 m³/s) Dec. 31.

Period of record: Maximum discharge, 4,480 ft³/s (127 m³/s) July 13, 1965 (gage height, 7.79 ft or 2.374 m); maximum gage height, 8.94 ft (2.725 m) Aug. 31, 1972 (backwater from unnamed tributary); minimum daily discharge, 110 ft³/s (3.12 m³/s) Dec. 31, 1972.

REMARKS.--Records good except those for winter period, which are fair. Natural flow of stream affected by transmountain diversions (see elsewhere in this report), storage reservoirs, power developments, diversions for irrigation of about 15,000 acres (60.7 km²) and return flow from irrigated areas.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	306	374	231	115	120	231	171	288	812	2,600	1,080	1,340
2	299	320	225	120	120	178	171	262	934	2,370	1,030	1,310
3	285	339	231	130	120	183	165	255	1,050	2,360	795	1,250
4	271	328	210	130	130	155	165	268	1,020	2,450	795	1,200
5	275	332	180	130	130	157	165	288	884	2,310	800	955
6	282	332	150	130	130	159	178	313	866	2,240	806	908
7	292	302	150	130	130	134	228	278	890	2,180	755	854
8	313	302	150	130	130	140	157	278	1,100	2,150	750	842
9	317	310	150	130	130	153	171	282	1,730	2,180	760	824
10	313	271	150	130	140	146	178	353	2,850	2,130	824	848
11	302	292	150	135	140	159	192	491	3,230	2,050	1,110	824
12	299	310	150	140	140	169	207	524	2,880	2,050	1,060	422
13	310	288	150	150	140	174	214	587	2,770	2,330	1,000	370
14	310	278	150	150	140	155	225	675	2,830	2,400	983	350
15	317	271	150	150	140	167	234	605	2,690	2,200	962	343
16	354	268	165	150	150	174	192	614	2,370	2,020	990	320
17	354	262	190	150	150	176	202	775	1,970	1,740	990	350
18	339	296	190	150	160	204	228	927	1,740	1,690	1,130	328
19	366	285	190	150	160	204	220	1,270	1,510	2,160	1,160	313
20	382	285	190	150	165	197	190	1,550	1,640	2,140	1,160	302
21	354	268	180	145	170	200	185	2,030	1,700	2,060	1,300	296
22	343	245	180	135	180	176	174	1,540	1,870	1,970	1,350	288
23	366	239	180	120	190	165	180	1,280	2,210	1,740	1,350	288
24	366	245	180	120	200	169	204	997	2,450	1,420	1,340	292
25	354	288	180	120	210	155	228	908	2,470	1,290	1,440	292
26	343	339	180	120	212	165	234	878	2,510	1,240	1,440	313
27	343	313	180	120	204	169	234	812	2,770	1,270	1,420	306
28	366	255	180	120	234	185	258	650	2,910	1,290	1,400	306
29	350	248	170	120	-----	187	285	605	2,880	1,280	1,370	313
30	358	237	140	120	-----	171	299	596	2,680	1,270	1,380	306
31	313	-----	110	120	-----	167	-----	628	-----	1,160	1,330	-----
TOTAL	10,142	8,722	5,362	4,110	4,365	5,304	6,134	21,807	60,216	59,740	34,060	17,253
MEAN	327	291	173	133	156	171	204	703	2,007	1,927	1,099	575
MAX	382	374	231	150	234	231	299	2,030	3,230	2,600	1,440	1,340
MIN	271	237	110	115	120	134	157	255	812	1,160	750	288
AC-FT	20,120	17,300	10,640	8,150	8,660	10,520	12,170	43,250	119,400	118,500	67,560	34,220

CAL YR 1972 TOTAL 228,415 MEAN 624 MAX 2,970 MIN 110 AC-FT 453,100
 WTR YR 1973 TOTAL 237,215 MEAN 650 MAX 3,230 MIN 110 AC-FT 470,500

ARKANSAS RIVER BASIN

07091500 ARKANSAS RIVER AT SALIDA, COLO.

LOCATION.--Lat 38°32'45", long 106°00'36", in NE¼ sec.31, T.50 N., R.9 E., Chaffee County, on right bank at Salida, 450 ft (140 m) upstream from bridge on State Highway 291 and 2.7 mi (4.3 km) upstream from South Arkansas River.

DRAINAGE AREA. --1,218 mi² (3,155 km²).

PERIOD OF RECORD.--April to October 1895, May to December 1897, August 1898 to September 1899, April to October 1900, April 1901 to October 1903, October 1909 to current year. Monthly discharge only for some periods, published in WSP 1311.

GAGE.--Water-stage recorder. Datum of gage is 7,050.45 ft (2,148.977 m) above mean sea level. See WSP 1711 or 1731 for history of changes prior to Dec. 6, 1957.

AVERAGE DISCHARGE.--67 years (1898-99, 1901-3, 1909-73), 632 ft³/s (17.90 m³/s), 457,900 acre-ft/yr (565 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 4,050 ft³/s (115 m³/s) June 29 (gage height, 3.84 ft or 1.170 m); minimum daily, 155 ft³/s (4.39 m³/s) Jan. 11.

Period of record: Maximum discharge, 9,220 ft³/s (261 m³/s) June 29, 1957 (gage height, 7.82 ft or 2.384 m, present datum; minimum observed, 100 ft³/s (2.83 m³/s) Oct. 4, 6, 7, 1898.

REMARKS.--Records good. Natural flow of stream affected by transmountain diversions (see elsewhere in this report), storage reservoirs (combined capacity, 193,900 acre-ft or 239 hm³), diversions for irrigation of about 18,000 acres (72.8 km²) above station, and return flow from irrigated areas.

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

REVISIONS (WATER YEARS).--WSP 1117: Drainage area. WSP 1311: 1899, 1900, 1914(M), 1921(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	273	332	275	195	185	238	195	280	764	3,110	1,270	1,440
2	273	312	270	180	175	200	195	260	930	2,690	1,150	1,430
3	260	312	270	185	185	205	190	238	1,070	2,590	900	1,340
4	254	306	240	185	200	190	190	258	1,040	2,740	880	1,300
5	254	306	230	185	200	185	190	260	890	2,560	890	1,040
6	260	306	245	180	195	175	195	286	860	2,440	890	970
7	260	286	260	165	195	170	238	260	880	2,530	812	920
8	273	286	240	160	195	175	190	254	1,100	2,370	802	910
9	280	292	220	165	185	190	205	254	1,660	2,430	792	890
10	280	273	200	160	190	180	200	299	2,780	2,390	821	910
11	273	280	205	155	200	190	222	403	3,650	2,230	1,140	900
12	273	292	210	170	200	195	227	467	3,360	2,210	1,120	509
13	273	280	215	180	190	205	238	518	3,140	2,680	1,030	419
14	273	266	215	185	190	190	238	605	3,280	2,800	1,010	411
15	280	266	210	185	180	195	244	552	3,100	2,590	980	403
16	286	260	222	180	185	200	216	518	2,320	2,300	1,000	374
17	292	260	249	180	190	195	216	707	1,840	1,950	980	395
18	286	273	273	185	190	216	238	840	1,560	1,850	1,140	374
19	292	273	286	180	185	216	244	1,210	1,380	2,500	1,190	353
20	306	280	254	180	180	216	222	1,550	1,480	2,540	1,180	346
21	292	273	260	185	185	216	222	1,850	1,500	2,400	1,360	325
22	286	260	244	160	185	195	205	1,650	1,670	2,260	1,420	325
23	292	260	238	160	205	195	210	1,340	2,090	1,980	1,430	318
24	299	265	222	190	216	195	222	990	2,500	1,610	1,410	325
25	286	270	227	185	210	180	244	890	2,570	1,460	1,520	318
26	280	290	210	190	210	190	249	860	2,590	1,420	1,550	346
27	286	280	210	185	205	195	244	812	3,190	1,440	1,540	339
28	306	255	210	165	232	205	254	632	3,700	1,460	1,510	332
29	312	266	210	190	-----	216	273	569	3,760	1,430	1,490	339
30	318	270	205	185	-----	195	286	552	3,350	1,420	1,510	339
31	306	-----	170	190	-----	190	-----	569	-----	1,280	1,450	-----
TOTAL	8,764	8,430	7,195	5,525	5,443	6,098	6,702	20,713	64,004	67,660	36,167	18,940
MEAN	283	281	232	178	194	197	223	668	2,133	2,183	1,167	631
MAX	318	332	286	195	232	238	286	1,850	3,760	3,110	1,550	1,440
MIN	254	255	170	155	175	170	190	238	764	1,280	792	318
AC=FT	17,380	16,720	14,270	10,960	10,800	12,100	13,290	41,080	127,000	134,200	71,740	37,570
CAL YR 1972	TOTAL 224,825		MEAN 614	MAX 3,040	MIN 170	AC=FT 445,900						
WTR YR 1973	TOTAL 255,641		MEAN 700	MAX 3,760	MIN 155	AC=FT 507,100						

LOCATION.--Lat 38°30'10", long 105°56'21", in SW¼NE¼ sec.14, T.49 N., R.9 E., Chaffee County, on right bank 50 ft (15 m) upstream from Chaffee-Fremont County line, 2.0 mi (3.2 km) northwest of Wellsville, 2.8 mi (4.5 km) downstream from South Arkansas River, and 3.5 mi (5.6 km) southeast of Salida.

AVERAGE DISCHARGE.--12 years, 712 ft³/s (20.16 m³/s), 515,800 acre-ft/yr (636 hm³/yr). 11 years, 710 ft³/s (20.11 m³/s), 514,400 acre-ft/yr (634 hm³/yr); figure published in Water Resources Data for Colorado, 1972, in error.

REMARKS.--Records good. Natural flow of stream affected by transmountain diversions, storage reservoirs, power developments, diversions for irrigation of about 26,000 acres (105 km²), and return flow from irrigated areas.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	313	428	364	296	244	302	232	320	641	2,900	1,200	1,330
2	310	424	364	257	229	254	238	302	700	2,620	1,140	1,320
3	302	428	364	240	238	257	232	278	950	2,480	912	1,250
4	292	432	364	230	244	238	226	271	1,080	2,590	868	1,200
5	296	436	300	230	254	232	226	288	920	2,430	868	980
6	299	432	250	230	244	223	238	310	882	2,320	868	905
7	306	416	250	230	241	215	288	292	928	2,280	809	860
8	320	408	250	220	240	220	235	274	1,190	2,270	795	823
9	320	416	250	200	240	241	250	282	1,820	2,290	781	816
10	324	400	250	200	240	235	247	324	2,790	2,270	802	823
11	324	396	280	220	240	238	274	444	3,600	2,180	1,140	823
12	316	408	280	250	250	244	278	508	3,420	2,140	1,130	518
13	320	400	280	300	250	254	288	574	3,190	2,430	1,050	444
14	324	400	280	300	250	238	296	636	3,340	2,530	1,010	424
15	324	404	280	300	250	241	306	592	3,300	2,380	988	420
16	344	392	300	300	250	254	278	564	2,530	2,190	1,000	400
17	344	396	328	280	250	247	271	675	2,090	1,930	946	388
18	340	412	352	270	250	274	302	574	1,830	1,840	1,140	384
19	352	404	352	250	250	278	302	900	1,620	2,280	1,200	376
20	364	412	336	250	240	268	271	1,300	1,700	2,340	1,190	360
21	356	400	332	250	244	278	268	2,000	1,710	2,230	1,310	356
22	344	376	328	250	244	250	254	1,770	1,830	2,060	1,360	356
23	352	356	324	232	264	238	260	1,480	2,150	1,960	1,360	348
24	364	364	306	264	274	238	271	1,130	2,450	1,610	1,340	348
25	356	380	313	264	271	226	285	980	2,560	1,460	1,430	348
26	352	408	296	268	268	235	288	958	2,590	1,360	1,450	372
27	356	432	316	264	264	238	288	882	3,030	1,370	1,430	368
28	380	372	310	232	288	238	302	690	3,420	1,420	1,410	364
29	392	372	313	247	-----	254	332	650	3,490	1,410	1,380	372
30	396	364	288	254	-----	241	340	623	3,140	1,390	1,390	364
31	396	-----	244	260	-----	226	-----	623	-----	1,290	1,340	-----
TOTAL	10,478	12,068	9,444	7,838	7,011	7,615	8,166	21,494	64,891	64,250	35,087	18,440
MEAN	338	402	305	253	250	246	272	693	2,163	2,073	1,132	615
MAX	396	436	364	300	288	302	340	2,000	3,600	2,900	1,450	1,330
MIN	292	356	244	200	229	215	226	271	641	1,290	781	348
AC=FT	20,780											

ARKANSAS RIVER BASIN

07094500 ARKANSAS RIVER AT PARKDALE, COLO.

LOCATION.--Lat 38°29'14", long 105°22'23", in NE¼NW¼ sec.18, T.18 S., R.71 W., Fremont County, on left bank at Parkdale, 100 ft (30 m) upstream from Bumback Gulch, 300 ft (91 m) upstream from bridge on U.S. Highway 50, and 0.9 mi (1.4 km) upstream from Copper Gulch.

DRAINAGE AREA.--2,548 mi² (6,599 km²).

PERIOD OF RECORD.--October 1945 to September 1955, October 1964 to current year. Monthly discharge only for October 1945 to May 1946, published in WSP 1311.

GAGE.--Water-stage recorder. Altitude of gage is 5,720 ft (1,743 m) from topographic map. Prior to Oct. 1, 1964, at site 600 ft (180 m) downstream at different datum.

AVERAGE DISCHARGE.--19 years, 788 ft³/s (22.32 m³/s), 570,900 acre-ft/yr (704 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 4,160 ft³/s (118 m³/s) June 12 (gage height, 6.60 ft or 2.012 m); minimum daily, 250 ft³/s (7.08 m³/s) Jan. 9, 10.
Period of record: Maximum discharge, 5,880 ft³/s (167 m³/s) June 22, 1947 (gage height, 9.02 ft or 2.749 m, site and datum then in use), from rating curve extended above 3,000 ft³/s (85 m³/s); minimum daily, 200 ft³/s (5.66 m³/s) Jan. 5-7, 1971.

REMARKS.--Records good. Natural flow of stream affected by transmountain diversions, storage reservoirs, diversions for irrigation of about 35,000 acres (142 hm³) above station, and return flow from irrigated areas.

REVISIONS.--WSP 1117: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	UCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	349	450	420	317	287	320	290	430	820	3,120	1,370	1,430
2	345	484	420	304	300	320	304	430	1,080	2,820	1,310	1,430
3	341	466	420	300	279	304	297	391	1,200	2,580	1,160	1,370
4	341	490	415	290	284	294	287	354	1,280	2,730	1,020	1,320
5	333	490	396	280	294	279	287	358	1,150	2,600	1,020	1,190
6	328	496	307	280	294	276	304	405	1,060	2,450	1,020	1,030
7	333	490	300	280	284	265	328	455	1,060	2,380	976	994
8	345	466	300	265	279	271	324	391	1,200	2,400	932	949
9	358	490	300	250	287	282	307	376	1,700	2,360	924	932
10	345	472	300	250	279	284	317	381	2,640	2,420	940	958
11	349	445	330	300	287	276	349	484	3,640	2,260	1,130	958
12	341	466	330	330	294	290	367	610	3,910	2,190	1,220	794
13	341	466	330	410	290	300	372	661	3,580	2,430	1,170	532
14	345	460	330	391	279	294	386	759	3,550	2,720	1,140	496
15	349	455	330	386	280	284	400	745	3,730	2,550	1,120	472
16	358	440	340	367	260	294	386	654	2,930	2,440	1,110	466
17	376	450	400	358	260	300	358	745	2,420	2,080	1,110	445
18	376	455	420	349	260	310	386	892	2,030	1,900	1,150	460
19	381	450	430	345	280	328	400	1,260	1,830	2,260	1,280	435
20	405	450	430	345	268	324	362	1,680	1,790	2,490	1,280	415
21	400	440	420	345	274	341	349	2,090	1,790	2,330	1,320	410
22	386	430	415	333	274	320	337	2,020	1,880	2,260	1,430	391
23	381	420	410	282	282	297	328	1,770	2,130	2,130	1,430	391
24	391	420	405	313	294	290	337	1,350	2,430	1,770	1,420	386
25	391	435	376	341	297	284	381	1,190	2,680	1,580	1,470	386
26	386	455	354	337	297	284	386	1,120	2,580	1,510	1,530	415
27	376	450	372	328	304	300	381	1,080	2,990	1,510	1,520	420
28	410	440	376	304	304	297	372	900	3,510	1,520	1,500	410
29	425	396	372	287	-----	304	391	788	3,680	1,530	1,470	415
30	435	415	354	290	-----	304	415	745	3,380	1,540	1,470	410
31	460	-----	294	284	-----	290	-----	752	-----	1,470	1,450	-----
TOTAL	11,480	13,632	11,396	9,841	7,951	9,206	10,488	26,266	69,650	68,330	38,392	21,110
MEAN	370	454	368	317	284	297	350	847	2,322	2,204	1,238	704
MAX	460	496	430	410	304	341	415	2,090	3,910	3,120	1,530	1,430
MIN	328	396	294	250	260	265	287	354	820	1,470	924	386
AC=FT	22,770	27,040	22,600	19,520	15,770	18,260	20,800	52,100	138,200	135,500	76,150	41,870
CAL YR 1972	TOTAL 260,395		MEAN 711		MAX 3,070		MIN 240		AC=FT 516,500			
MTR YR 1973	TOTAL 297,742		MEAN 816		MAX 3,910		MIN 250		AC=FT 590,600			

07095000 GRAPE CREEK NEAR WESTCLIFFE, COLO.

LOCATION.--Lat 38°11'10", long 105°28'59", in NW¼NW¼ sec.31, T.21 S., R.72 W., Custer County, on left bank 0.5 mi (0.8 km) upstream from water line of De Weese Reservoir at elevation 7,665 ft (2,336.3 m), 0.5 mi (0.8 km) downstream from Swift Creek, and 3.6 mi (5.8 km) northwest of Westcliffe.

DRAINAGE AREA.--320 mi² (829 km²).

PERIOD OF RECORD.--October 1924 to September 1961, October 1962 to current year. Monthly discharge only for some periods, published in WSP 1311.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 7,690 ft (2,344 m) from topographic map. Prior to Mar. 17, 1939, at site 30 ft (9 m) upstream at same datum.

AVERAGE DISCHARGE.--48 years, 32.6 ft³/s (0.923 m³/s), 23,620 acre-ft/yr (29.1 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 836 ft³/s (23.7 m³/s) May 7 (gage height, 3.22 ft or 0.981 m); minimum daily, 6.9 ft³/s (0.20 m³/s), Oct. 1-5, 11-14.
Period of record: Maximum discharge, 7,460 ft³/s (211 m³/s) Aug. 2, 1966 (gage height, 8.45 ft or 2.576 m), from rating curve extended above 320 ft³/s (9.1 m³/s) on basis of slope-area measurement of peak flow; minimum daily, 0.1 ft³/s (0.003 m³/s) June 19-22, 1936.

REMARKS.--Records good except those for winter period, which are poor. Diversions above station for irrigation of about 15,000 acres (60.7 km²).

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

REVISIONS (WATER YEARS).--WSP 1117: Drainage area. WSP 1241: 1950(M). WSP 1311: 1927(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.9	18	15	11	10	21	50	46	84	149	105	17
2	6.9	20	17	11	10	26	50	97	94	159	97	13
3	6.9	23	16	11	12	25	50	94	92	112	81	12
4	6.9	26	16	12	13	24	50	51	97	103	77	9.8
5	6.9	30	15	13	12	24	55	41	85	105	85	9.8
6	7.4	29	9.5	12	12	27	60	46	71	89	79	8.9
7	8.0	28	12	11	13	31	55	277	64	81	85	12
8	8.0	28	13	10	12	33	53	306	77	77	84	12
9	8.0	34	12	10	11	35	50	75	110	101	70	12
10	7.4	28	11	11	13	32	65	59	156	252	60	13
11	6.9	29	11	10	15	32	90	60	232	154	58	17
12	6.9	28	11	11	17	36	105	71	314	108	84	16
13	6.9	27	12	12	15	35	115	92	344	97	63	15
14	6.9	27	11	12	14	40	115	106	341	188	59	14
15	8.0	25	10	13	13	45	110	81	320	238	63	13
16	8.9	22	11	15	13	47	100	70	209	214	56	12
17	8.0	23	12	14	14	49	125	74	158	180	49	12
18	8.0	24	14	13	16	50	132	91	114	180	44	12
19	9.8	19	13	13	16	52	77	128	101	229	39	12
20	16	17	13	12	16	53	45	173	97	229	37	11
21	14	15	12	11	16	54	50	198	96	201	34	8.9
22	14	13	15	10	16	51	46	227	94	163	29	8.9
23	16	13	13	9.0	16	48	50	214	96	146	26	8.9
24	14	14	12	10	17	47	49	180	105	119	22	8.9
25	13	15	12	10	18	47	60	175	117	103	21	8.9
26	13	14	12	11	18	49	74	185	119	105	19	16
27	12	15	13	12	19	51	63	151	130	112	15	15
28	13	12	15	9.5	20	46	46	108	156	101	13	14
29	14	13	15	10	-----	48	38	85	173	97	14	15
30	13	14	12	11	-----	48	36	81	168	97	16	14
31	16	-----	11	11	-----	50	-----	89	-----	114	18	-----
TOTAL	311.6	643	594.5	351.5	407	1,256	2,064	3,731	4,414	4,363	1,602	372.0
MEAN	10.1	21.4	12.7	11.3	14.5	40.5	68.8	120	147	141	51.7	12.4
MAX	16	34	17	15	20	54	132	306	344	238	105	17
MIN	6.9	12	9.5	9.0	10	21	36	41	64	77	13	8.9
AC-FT	618	1,260	782	697	807	2,490	4,090	7,400	8,760	8,650	3,180	738

CAL YR 1972 TOTAL 4,481.3 MEAN 12.2 MAX 36 MIN 3.6 AC-FT 8,890
WTR YR 1973 TOTAL 19,909.6 MEAN 54.5 MAX 344 MIN 6.9 AC-FT 39,490

PEAK DISCHARGE (BASE, 250 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
5-7	2330	3.22	836	7-10	0700	2.03	278
6-13	1530	2.28	372	7-15	0800	1.90	254

NOTE.--No gage-height record Nov. 24 to Apr. 17.

LOCATION.--Lat 38°26'02", long 105°15'24", in SE&SE& sec.31, T.18 S., R.70 W., Fremont County, on right bank 800 ft (240 m) upstream from Sand Creek, 0.7 mi (1.1 km) downstream from Grape Creek, and 0.7 mi (1.1 km) upstream from First Street Bridge in Canon City.

PERIOD OF RECORD.--January 1888 to current year. Monthly discharge only for some periods, published in WSP 1311. Published as "near Canyon" 1900-1906.

AVERAGE DISCHARGE.--85 years, 722 ft³/s (20.45 m³/s), 523,100 acre-ft/yr (645 hm³/yr).

REMARKS.--Records good. Natural flow of stream affected by transmountain diversions, storage reservoirs, power developments, diversions for irrigation of about 56,000 acres (227 km²), and return flow from irrigated areas. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1117: Drainage area. WSP 1311: 1897-98.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	165	300	332	253	288	304	253	292	719	3,520	1,380	1,340
2	165	324	324	268	268	316	246	292	1,050	3,200	1,370	1,340
3	162	304	328	256	256	292	250	276	1,180	2,870	1,250	1,290
4	165	324	332	260	288	284	236	242	1,300	3,030	1,000	1,230
5	162	324	320	272	308	272	228	232	1,230	2,910	993	1,080
6	162	324	260	256	292	256	242	264	1,070	2,720	1,020	882
7	165	320	280	236	280	242	300	320	1,060	2,600	966	866
8	168	300	320	236	268	246	316	438	1,240	2,620	922	805
9	174	316	350	204	272	268	276	368	1,790	2,540	898	790
10	174	308	320	242	276	272	276	348	3,020	2,700	906	820
11	171	288	300	292	280	260	296	380	4,170	2,540	1,060	828
12	165	308	340	292	292	276	328	475	4,760	2,360	1,260	660
13	174	320	340	372	288	284	372	510	4,410	2,620	1,200	376
14	180	304	335	344	268	280	495	628	4,270	3,080	1,150	332
15	183	300	332	312	256	272	580	646	4,350	2,970	1,100	304
16	186	292	324	284	246	280	475	525	3,330	2,720	1,090	300
17	207	308	407	280	264	288	416	586	2,660	2,310	1,080	288
18	216	316	407	272	276	300	460	719	2,130	2,010	1,110	300
19	216	328	417	332	268	312	430	1,040	1,860	2,400	1,250	268
20	236	320	412	328	246	312	340	1,640	1,800	2,910	1,240	260
21	232	324	394	300	260	356	304	2,300	1,800	2,690	1,280	260
22	228	292	356	272	256	368	276	2,370	1,910	2,570	1,400	250
23	225	296	344	222	256	344	256	2,020	2,180	2,360	1,410	250
24	232	296	348	253	280	312	246	1,490	2,580	1,900	1,390	260
25	236	300	336	300	284	280	268	1,270	2,920	1,610	1,440	270
26	232	320	320	288	280	264	284	1,200	2,860	1,520	1,500	280
27	225	356	308	292	284	292	320	1,140	3,280	1,560	1,510	280
28	242	340	308	242	288	304	280	898	3,920	1,560	1,450	276
29	256	324	316	246	-----	304	268	733	4,210	1,560	1,430	276
30	264	332	292	292	-----	304	276	672	3,850	1,550	1,410	260
31	300	-----	250	284	-----	280	-----	672	-----	1,480	1,400	-----
TOTAL	6,268	9,408	10,347	8,582	7,668	9,024	9,593	24,986	76,909	74,990	37,865	17,021
MEAN	202	314	334	277	274	291	320	806	2,564	2,419	1,221	567
MAX	300	356	412	372	308	368	580	2,370	4,760	3,520	1,510	1,340
MIN	162	288	250	204	246	242	228	232	719	1,480	898	250
AC-FT	12,430	18,660	20,520									

07096500 FOURMILE CREEK NEAR CANON CITY, COLO.

LOCATION.--Lat 38°26'11", long 105°11'27", in NE¼SW¼ sec.35, T.18 S., R.70 W., Fremont County, on right bank 1,000 ft (300 m) downstream from railroad bridge, 0.6 mi (1.0 km) upstream from mouth, and 2.8 mi (4.5 km) east of courthouse in Canon City.

DRAINAGE AREA.--434 mi² (1,124 km²).

PERIOD OF RECORD.--April to October 1910 (gage heights and discharge measurements only), October 1948 to September 1953, November 1970 to current year. Published as "Oil or Fourmile Creek" in 1910 and as Oil Creek near Canon City, 1948-53.

GAGE.--Water-stage recorder. Altitude of gage is 5,254 ft (1,601 m) from topographic map. April to October 1910 nonrecording gage at site 1,200 ft (370 m) upstream at different datum. October 1948 to September 1953 water-stage recorder at site 0.6 mi (1.0 km) upstream at different datum.

AVERAGE DISCHARGE.--7 years (1949-53, 1972-73), 16.1 ft³/s (0.456 m³/s), 11,660 acre-ft/yr (14.4 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 631 ft³/s (17.9 m³/s) July 8 (gage height, 4.42 ft or 1.347 m in gage well, 5.11 ft or 1.558 m, from floodmarks), from rating curve extended above 290 ft³/s (8.2 m³/s) on basis of slope-area measurement of peak flow; minimum daily, 6.1 ft³/s (0.173 m³/s) Nov. 29.
Period of record: Maximum discharge, 4,260 ft³/s (121 m³/s) July 11, 1951 (gage height, 9.25 ft or 2.819 m, from floodmarks, site and datum then in use), from rating curve extended above 96 ft³/s (2.7 m³/s) on basis of slope-area measurement of peak flow; no flow Sept. 3-10, 1950, Sept. 23, 1951.

REMARKS.--Records good. Diversions for irrigation of about 500 acres (2.02 km²) above station. Water imported to basin from Arkansas River for irrigation of a few small orchards above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	23	6.8	23	16	12	21	65	190	35	104	52
2	20	18	8.8	21	16	10	21	68	180	36	94	40
3	17	20	12	21	16	9.7	21	67	168	30	86	40
4	17	19	14	19	16	9.7	19	70	158	35	112	40
5	20	14	13	15	17	9.7	19	84	163	34	153	41
6	21	11	13	15	16	9.7	19	140	138	26	144	38
7	19	11	14	15	17	9.7	20	160	128	26	140	29
8	20	11	15	15	16	9.7	23	213	124	67	132	24
9	21	11	15	15	17	9.7	23	220	122	98	124	21
10	20	10	15	16	17	9.7	24	213	142	70	114	21
11	22	9.7	16	17	17	11	27	264	142	104	112	21
12	21	9.5	17	18	18	13	32	318	158	100	128	21
13	17	10	18	18	17	22	30	360	155	102	128	21
14	14	9.9	18	18	17	21	26	336	146	128	120	21
15	20	9.2	18	19	16	24	32	285	144	126	116	21
16	17	9.0	18	21	16	23	31	270	136	138	114	21
17	12	9.1	19	22	16	21	33	270	126	122	108	21
18	12	9.0	19	21	16	22	33	273	106	68	100	21
19	17	9.0	20	20	15	29	34	276	102	54	104	21
20	24	9.0	21	19	15	33	33	282	112	47	96	21
21	35	8.7	21	19	15	31	35	273	100	68	92	21
22	39	8.5	21	18	15	30	30	324	94	54	90	21
23	35	8.0	22	19	14	30	28	360	78	44	84	21
24	21	8.1	20	20	14	31	27	348	76	43	70	21
25	16	7.6	21	20	14	30	44	348	66	44	47	21
26	15	7.6	21	18	15	31	51	339	65	44	43	21
27	15	6.3	22	16	15	32	38	306	63	120	40	21
28	15	6.5	24	16	15	29	47	270	50	66	34	21
29	13	6.1	25	16	-----	26	53	264	44	70	47	23
30	14	6.5	22	16	-----	26	56	246	32	84	61	22
31	17	-----	21	16	-----	24	-----	223	-----	104	66	-----
TOTAL	605	315.3	550.6	562	444	638.6	930	7,535	3,508	2,187	3,003	769
MEAN	19.5	10.5	17.8	18.1	15.9	20.6	31.0	243	117	70.5	96.9	25.6
MAX	39	23	25	23	18	33	56	360	190	138	153	52
MIN	12	6.1	6.8	15	14	9.7	19	65	32	26	34	21
AC-FT	1,200	625	1,090	1,110	881	1,270	1,840	14,950	6,960	4,340	5,960	1,530

CAL YR 1972 TOTAL 5,833.3 MEAN 15.9 MAX 42 MIN 2.9 AC-FT 11,570
WTR YR 1973 TOTAL 21,047.5 MEAN 57.7 MAX 360 MIN 6.1 AC-FT 41,750

PEAK DISCHARGE (BASE, 300 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
5-22	2000	3.97	412	7-27	1545	4.20	569
7- 8	2045	4.42	631				

07099100 BEAVER CREEK NEAR, PORTLAND, COLO.

LOCATION.--Lat 38°22'27", long 104°57'49", in NW¼NE¼ sec.26, T.19 S., R.68 W., Fremont County, on right bank 80 ft (24 m) downstream from bridge on State Highway 120, 1,500 ft (460 m) upstream from mouth, and 3.4 mi (5.5 km) southeast of Portland.

DRAINAGE AREA.--214 mi² (554 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 4,993 ft (1,522 m) above mean sea level, from topographic map.

EXTREMES.--Current year: Maximum discharge, 4,800 ft³/s (136 m³/s) Sept. 9 (gage height, 7.56 ft or 2.304 m in gage well, 8.79 ft or 2.679 m, from floodmarks), from rating curve extended as explained below; minimum daily, 0.15 ft³/s (0.004 m³/s) Oct. 3.

Period of record: Maximum discharge, 4,800 ft³/s (136 m³/s) Sept. 9, 1973 (gage height, 7.56 ft or 2.304 m in gage well, 8.79 ft or 2.679 m, from floodmarks), from rating curve extended above 17 ft³/s (0.5 m³/s) on basis of slope-area measurement at gage height 4.36 ft (1.329 m); no flow for several days in 1971.

REMARKS.--Records fair. Storage and diversions above station for municipal supply of city of Colorado Springs. Water exported above station for irrigation of a few hundred acres in adjacent basin.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.18	.25	.31	.38	.43	.69	.70	41	113	140	64	7.8
2	.18	.25	.37	.38	.53	.69	.66	27	121	157	58	6.0
3	.15	.25	.25	.38	.55	.74	.63	25	116	140	56	1.9
4	.17	.30	.25	.38	.45	.70	.60	52	114	115	87	1.1
5	.18	.35	.25	.38	.45	.75	.59	97	116	82	80	.69
6	.23	.36	.25	.38	.48	.68	.56	166	112	31	71	.60
7	.18	.37	.25	.38	.41	.69	.65	125	108	21	75	.52
8	.19	.37	.25	.38	.51	1.1	.61	147	116	25	69	.44
9	.19	.38	.25	.38	.58	4.4	.57	163	137	26	60	258
10	.20	.39	.25	.38	.69	2.0	.47	104	146	24	58	4.0
11	.17	.36	.25	.38	1.5	1.0	.47	333	179	21	46	40
12	.18	.36	.25	.40	1.7	.66	.47	416	225	18	42	16
13	.17	.31	.25	.45	.98	.76	.45	406	291	15	31	5.6
14	.26	.30	.25	.49	.82	.93	.44	350	338	27	20	2.7
15	.25	.30	.25	.43	.73	.85	.48	283	294	24	12	2.0
16	.23	.29	.27	.41	.77	.77	.44	268	205	42	7.8	1.9
17	.23	.30	.29	.42	.69	.77	.45	207	160	24	4.8	1.9
18	.31	.30	.42	.38	.73	.77	.47	187	135	18	3.5	1.9
19	.25	.30	.43	.37	.76	.71	.55	270	112	24	2.7	1.4
20	.24	.30	.45	.39	.81	.69	.48	299	99	34	2.2	1.3
21	.25	.25	.46	.38	.68	.69	.48	294	85	58	1.6	1.3
22	.30	.25	.46	.39	.76	.66	.47	415	80	50	1.1	1.2
23	.29	.25	.43	.40	.81	.67	.47	191	73	37	.88	1.2
24	.21	.25	.41	.40	.72	.70	.68	157	72	27	.69	1.2
25	.19	.24	.39	.37	.69	.69	.86	175	78	35	.60	1.1
26	.24	.25	.42	.36	.67	.69	1.1	221	75	64	1.4	1.4
27	.24	.25	.41	.34	.69	.78	1.6	206	80	50	1.3	2.3
28	.25	.25	.41	.50	.69	.83	12	193	85	54	.88	2.3
29	.25	.25	.38	.44	-----	.84	22	203	95	48	1.1	1.2
30	.25	.35	.38	.51	-----	1.0	44	221	112	75	4.5	.98
31	.25	-----	.38	.52	-----	.85	-----	163	-----	54	6.7	-----
TOTAL	6.86	8.98	10.32	12.53	20.28	28.75	94.40	6,405	4,072	1,560	870.75	369.93
MEAN	.22	.30	.33	.40	.72	.93	3.15	207	136	50.3	28.1	12.3
MAX	.31	.39	.46	.52	1.7	4.4	.44	416	338	157	87	258
MIN	.15	.24	.25	.34	.41	.66	.44	25	72	15	.60	.44
AC=FT	14	18	20	25	40	57	187	12,700	8,080	3,090	1,730	734
CAL YR 1972	TOTAL	387.95	MEAN	1.06	MAX	.99	MIN	.02	AC=FT	769		
WTR YR 1973	TOTAL	13,459.80	MEAN	36.9	MAX	416	MIN	.15	AC=FT	26,700		

79

LOCATION.--Lat 38°20'14", long 104°56'18", in NW¼SW¼ sec.6, T.20 S., R.67 W., Pueblo County, on right bank 1.4 mi (2.3 km) downstream from Willow Spring Creek and 5.4 mi (8.7 km) southeast of Portland.

PERIOD OF RECORD.--October 1964 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 4,940 ft (1,506 m) from topographic map. Oct. 1, 1964, to Apr. 19, 1966, on left bank 1,500 ft (460 m) upstream, and Apr. 20, 1966, to Oct. 9, 1969, on left bank 1,000 ft (300 m) upstream, at datums 2.12 ft (0.646 m) higher.

EXTREMES.--Current year: Maximum discharge, 6,020 ft³/s (170 m³/s) July 26 (gage height, 6.60 ft or 2.012 m); minimum daily, 180 ft³/s (5.10 m³/s) Jan. 9, 10.

Period of record: Maximum discharge, 23,900 ft³/s (677 m³/s) Aug. 21, 1965 (gage height, 11.85 ft or 3.612 m, from rating curve extended above 7,400 ft³/s (210 m³/s) on basis of slope-area measurement of peak flow; minimum daily, 86 ft³/s (2.44 m³/s) May 10, 1967.

REMARKS.--Records good. Natural flow of stream affected by transmountain diversions, storage reservoirs, power developments, diversions for irrigation of about 68,000 acres (275 km²), and return flow from irrigated areas. Water-quality records for the current year are published in Part 2 of this report.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	215	373	340	202	248	262	228	421	1,100	3,490	1,590	1,340
2	215	393	344	253	234	285	234	429	1,360	3,140	1,500	1,550
3	215	385	340	217	210	270	248	401	1,480	2,770	1,570	1,280
4	202	397	330	210	228	256	234	397	1,600	2,800	1,170	1,190
5	202	397	260	200	256	242	220	413	1,580	2,740	1,210	1,100
6	202	393	200	200	256	228	230	649	1,370	2,580	1,170	875
7	212	393	200	200	256	220	250	730	1,320	2,490	1,130	854
8	210	381	200	190	242	220	290	1,010	1,410	2,510	1,060	762
9	218	409	200	180	228	248	260	988	1,890	2,550	1,010	1,130
10	228	381	200	180	228	250	259	959	2,950	2,620	1,000	762
11	205	362	210	210	234	237	273	1,100	4,080	2,550	1,050	808
12	208	369	220	240	256	248	309	1,340	4,770	2,400	1,280	749
13	215	377	220	267	256	250	340	1,480	4,510	2,570	1,230	417
14	223	365	220	291	237	250	421	1,460	4,480	3,100	1,140	337
15	239	362	221	273	226	239	552	1,360	4,690	3,000	1,100	312
16	245	358	230	273	202	237	437	1,100	3,740	2,830	1,060	312
17	256	351	260	262	202	250	358	1,060	3,000	2,480	1,060	300
18	262	358	300	264	220	245	389	1,170	2,420	2,090	1,060	297
19	267	360	350	264	228	273	401	1,430	2,110	2,340	1,200	276
20	300	360	330	309	223	297	397	1,980	1,960	2,860	1,200	259
21	300	350	325	270	220	312	385	2,500	1,960	2,670	1,210	250
22	309	340	318	253	228	334	362	3,060	2,030	2,630	1,560	239
23	306	330	312	212	218	318	340	2,770	2,240	2,400	1,360	231
24	300	327	309	208	242	303	321	2,190	2,580	1,980	1,360	234
25	297	340	294	248	250	270	373	1,940	2,920	1,810	1,390	242
26	294	340	297	248	242	250	433	1,830	2,880	2,090	1,450	264
27	288	389	264	259	248	259	429	1,720	3,190	1,980	1,430	288
28	306	377	294	237	250	267	344	1,490	3,670	1,780	1,380	288
29	327	362	291	195	-----	267	344	1,270	3,960	1,740	1,380	285
30	340	358	267	237	-----	276	377	1,210	3,720	2,290	1,380	288
31	373	-----	228	245	-----	262	-----	1,190	-----	1,740	1,410	-----
TOTAL	7,979	11,037	8,374	7,292	6,568	8,125	10,038	41,047	80,970	77,020	38,700	17,279
MEAN	257	368	270	235	235	262	335	1,324	2,699	2,485	1,248	576
MAX	373	409	350	309	256	334	552	3,060	4,770	3,490	1,590	1,340
MIN	202	327	200	180	202	220						

07099400 ARKANSAS RIVER ABOVE PUEBLO, COLO.

LOCATION.--Lat 38°16'17", long 104°43'06", in NE¼NE¼ sec.36, T.20 S., R.66 W., Pueblo County, on left bank 450 ft (140 m) downstream from headgate of West Pueblo ditch, 0.4 mi (0.6 km) downstream from Rock Canyon Barrier Dam, and 7 mi (11 km) west of Pueblo.

DRAINAGE AREA.--4,670 mi² (12,095 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 4,740 ft (1,445 m) from topographic map. Prior to Mar. 23, 1967, at site 730 ft (220 m) upstream at datum 1.23 ft (0.375 m) higher.

AVERAGE DISCHARGE.--8 years, 643 ft³/s (18.21 m³/s), 465,900 acre-ft/yr (574 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 7,100 ft³/s (201 m³/s) July 30 (gage height, 7.23 ft or 2.204 m); minimum daily, 85 ft³/s (2.41 m³/s) Oct. 6.
Period of record: Maximum discharge, 10,100 ft³/s (286 m³/s) Aug. 1, 1966 (gage height, 9.4 ft or 2.87 m, from floodmarks, present site and datum), from rating curve extended above 1,600 ft³/s (45 m³/s) on basis of slope-area measurement of peak flow; minimum daily, 28 ft³/s (0.79 m³/s) May 11, 1967.

REMARKS.--Records good. Natural flow of stream affected by transmountain diversions, storage reservoirs, power developments, diversions above station for irrigation of about 88,000 acres (356 km²) and return flow from irrigated areas.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	104	306	261	230	244	223	136	427	874	3,090	1,280	1,150
2	117	325	252	230	231	236	117	415	1,070	2,810	1,280	1,130
3	101	340	240	230	192	227	145	278	1,260	2,280	1,120	1,070
4	92	335	257	200	200	215	134	315	1,380	2,370	902	1,000
5	95	355	188	190	244	196	104	410	1,410	2,410	972	944
6	85	340	117	190	261	152	101	633	1,180	2,220	951	666
7	101	335	130	190	252	148	131	853	1,070	2,100	923	571
8	95	320	120	160	231	114	204	944	1,120	2,050	846	523
9	111	315	120	120	211	141	177	986	1,510	2,100	777	1,060
10	124	315	120	140	211	177	166	902	2,360	2,130	732	974
11	101	292	150	190	223	159	170	944	3,460	2,160	744	867
12	98	288	150	280	248	155	215	1,150	4,160	2,140	1,000	881
13	98	310	200	280	252	155	265	1,280	4,020	2,090	1,000	493
14	104	301	250	310	231	155	393	1,270	4,020	2,550	944	320
15	114	292	250	330	219	152	559	1,210	4,300	2,690	888	257
16	128	288	300	330	200	148	481	972	3,580	2,610	846	248
17	131	274	310	300	184	155	340	867	2,730	2,250	846	240
18	152	274	433	280	211	162	350	1,040	2,010	1,890	811	223
19	159	283	517	310	223	196	393	1,280	1,820	1,900	951	184
20	188	288	535	350	211	215	376	1,930	1,540	2,470	979	138
21	211	296	457	315	200	219	393	2,300	1,530	2,450	965	124
22	207	283	415	270	211	278	350	2,720	1,530	2,340	1,140	131
23	215	252	398	236	207	257	310	2,560	1,690	2,190	1,180	128
24	192	244	350	196	231	223	278	1,990	2,010	1,790	1,130	124
25	204	248	310	236	248	196	315	1,680	2,370	1,560	1,100	131
26	196	252	301	248	244	162	433	1,480	2,430	1,260	1,180	148
27	188	245	274	257	244	155	439	1,360	2,550	2,240	1,220	170
28	184	220	278	257	215	184	335	1,180	3,490	1,520	1,170	173
29	215	240	288	196	-----	180	301	923	3,480	1,460	1,170	192
30	227	270	250	223	-----	196	340	832	3,490	2,490	1,140	192
31	270	-----	230	264	-----	177	-----	867	-----	1,760	1,220	-----
TOTAL	4,607	8,726	8,451	7,538	6,279	5,708	8,453	35,998	69,444	67,370	31,407	14,452
MEAN	149	291	273	243	224	184	282	1,161	2,315	2,173	1,013	482
MAX	270	355	535	350	261	278	559	2,720	4,300	3,090	1,280	1,150
MIN	85	220	117	120	184	114	101	278	874	1,260	732	124
AC-FT	9,140	17,310	16,760	14,950	12,450	11,320	16,770	71,400	137,700	133,600	62,300	28,670

CAL YR 1972 TOTAL 190,608 MEAN 521 MAX 2,660 MIN 70 AC-FT 378,100
WTR YR 1973 TOTAL 268,433 MEAN 735 MAX 4,300 MIN 85 AC-FT 532,400

07099500 ARKANSAS RIVER NEAR PUEBLO, COLO.

LOCATION.--Lat 38°16'02", long 104°39'26", in SE¼NW¼ sec.34, T.20 S., R.65 W., Pueblo County, on right bank at intake of south-side waterworks, 1.6 mi (2.6 km) upstream from Dry Creek and 2.5 mi (4.0 km) west of city hall in Pueblo.

DRAINAGE AREA.--4,686 mi² (12,137 km²).

PERIOD OF RECORD.--May to June 1885, January 1886 to December 1887, May to August 1889, September 1894 to current year. Monthly discharge only for some periods, published in WSP 1311. Published as "at Rock Canyon" 1889 and as "at Pueblo" 1885-87, 1894-1924.

GAGE.--Water-stage recorder and concrete control on river; water-stage recorder and Parshall flume at north-side waterworks intake. Datum of river gage is 4,689.74 ft (1,429.433 m) above mean sea level. See WSP 1731 for history of changes prior to May 26, 1925.

AVERAGE DISCHARGE.--80 years (1886-87, 1894-1973), 709 ft³/s (20.08 m³/s), 513,700 acre-ft/yr (633 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 6,760 ft³/s (191 m³/s) July 30 (gage height, 5.82 ft or 1.774 m); minimum daily, 91 ft³/s (2.58 m³/s) Oct. 4.

Period of record: Maximum discharge, 103,000 ft³/s (2,920 m³/s) June 3, 1921 (gage height, 24.66 ft or 7.516 m, site and datum then in use), from rating curve extended above 6,800 ft³/s (190 m³/s) on basis of float measurement at gage height 11.2 ft (3.41 m) and slope-area measurement of peak flow; minimum daily, 18 ft³/s or 0.51 m³/s (including 13 ft³/s or 0.37 m³/s diverted into intake of north-side waterworks) Apr. 7, 1935.

Maximum stage since at least 1865, that of June 3, 1921.

REMARKS.--Records good. Records include water diverted above station into intake of north-side waterworks for municipal supply of Pueblo, but not water diverted by south-side waterworks. Natural flow of stream affected by transmountain diversions, storage reservoirs, power developments, diversions above station for irrigation of about 88,000 acres (356 km²), and return flow from irrigated areas.

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

REVISIONS (WATER YEARS).--WSP 1311: 1896, 1902. WSP 1341: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	104	379	348	225	233	218	167	384	820	3,300	1,530	1,220
2	104	363	333	284	221	200	147	418	1,010	2,950	1,420	1,190
3	107	370	302	229	182	184	175	229	1,220	2,420	1,290	1,180
4	91	339	344	259	182	175	161	235	1,400	2,480	1,020	1,120
5	96	370	272	209	221	151	125	361	1,430	2,530	1,060	1,090
6	96	339	140	264	251	104	112	530	1,150	2,350	1,030	908
7	120	323	131	214	244	107	147	869	1,040	2,240	1,020	748
8	116	316	192	181	227	95	226	917	1,070	2,180	922	716
9	124	296	222	147	188	119	202	1,080	1,460	2,320	863	1,110
10	160	296	252	162	199	164	171	941	2,260	2,300	828	861
11	128	275	231	238	204	144	175	953	3,340	2,320	805	769
12	124	303	263	305	227	131	214	1,270	4,170	2,280	1,100	790
13	104	362	283	305	239	168	266	1,470	4,040	2,200	1,110	460
14	109	331	294	351	218	173	419	1,490	4,040	2,740	994	307
15	174	331	304	367	207	153	550	1,440	4,380	2,980	933	260
16	194	310	300	359	176	144	384	1,200	3,720	2,920	885	235
17	193	307	316	323	161	153	252	1,030	2,860	2,580	885	242
18	233	305	452	306	155	153	245	1,180	2,150	2,160	862	223
19	244	312	505	253	196	205	321	1,340	1,960	2,180	993	218
20	277	306	605	347	190	307	293	1,800	1,690	2,760	1,000	201
21	310	300	567	309	176	337	329	2,200	1,680	2,820	993	191
22	304	271	539	267	185	426	286	2,900	1,650	2,700	1,140	174
23	310	245	548	206	184	383	252	2,770	1,790	2,540	1,220	165
24	250	231	505	194	196	352	221	2,200	2,100	2,180	1,190	154
25	250	249	451	194	224	258	258	1,850	2,460	1,920	1,150	154
26	255	255	425	188	224	181	398	1,660	2,590	1,610	1,230	194
27	251	342	433	183	213	172	433	1,520	2,700	2,280	1,260	215
28	237	408	466	228	224	214	328	1,290	3,770	1,630	1,220	232
29	303	297	440	168	-----	209	259	994	3,740	1,550	1,220	232
30	323	335	396	183	-----	237	307	924	3,720	2,430	1,210	228
31	370	-----	312	227	-----	226	-----	888	-----	2,160	1,280	-----
TOTAL	6,061	9,466	11,171	7,675	5,747	6,243	7,823	38,333	71,410	74,010	33,663	15,787
MEAN	196	316	360	248	205	201	261	1,237	2,380	2,387	1,086	526
MAX	370	408	605	367	251	426	550	2,900	4,380	3,300	1,530	1,220
MIN	91	231	131	147	155	95	112	229	820	1,550	805	154
AC-FT	12,020	18,780	22,160	15,220	11,400	12,380	15,520	76,030	141,600	146,800	66,770	31,310

CAL YR 1972 TOTAL 200,624 MEAN 548 MAX 2,820 MIN 85 AC-FT 397,900
WTR YR 1973 TOTAL 287,389 MEAN 787 MAX 4,380 MIN 91 AC-FT 570,000

LOCATION.--Lat 38°51'17", long 104°52'39", in SE¼SW¼ sec.3, T.14 S., R.67 W., El Paso County, on left bank 200 ft (61 m) upstream from diversion to city of Colorado Springs, 0.5 mi (0.8 km) east of bridge on U.S. Highway 24 near west city limits of Colorado Springs, and 1.0 mi (1.6 km) downstream from Sutherland Creek.

GAGE.--Water-stage recorder and Parshall flume with overflow weirs. Altitude of gage is 6,110 ft (1,862 m) from topographic map.

EXTREMES.--Current year: Maximum discharge, 283 ft³/s (8.01 ft³/s) July 29 (gage height, 3.53 ft or 1.076 m); minimum daily, 2.9 ft³/s (0.082 m³/s) Dec. 6.

Period of record: Maximum discharge, 2,630 ft³/s (74.5 m³/s) Aug. 4, 1964 (gage height, 5.27 ft or 1.606 m), from rating curve extended above 190 ft³/s (5.4 m³/s) on basis of slope-area measurements at gage heights 3.87, 4.52, and 5.27 ft (1.180, 1.378, and 1.606 m); minimum daily, 2.0 ft³/s (0.057 m³/s) Jan. 24, 1969.

REMARKS.--Records good. Natural flow of stream affected by storage reservoirs, power developments, diversions for irrigation and municipal use, and at times, transbasin diversion from Beaver Creek drainage and trans-mountain diversions from Colorado River basin.

DAY	UCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.0	5.0	7.5	5.3	6.1	5.4	6.9	34	103	42	38	13
2	5.1	7.3	7.7	6.0	5.5	5.4	8.6	34	98	37	33	12
3	5.3	11	7.0	6.1	6.1	5.4	8.1	32	93	37	29	10
4	5.7	9.2	5.8	5.0	6.3	5.4	8.1	33	94	50	33	7.3
5	5.5	8.0	6.0	4.8	6.1	6.0	7.8	40	98	50	45	7.3
6	5.7	7.0	2.9	4.6	6.0	5.4	9.1	63	84	41	36	6.7
7	5.8	6.7	3.0	4.4	6.1	5.5	8.8	72	73	43	32	5.7
8	6.1	6.6	3.5	4.0	4.8	6.4	8.1	60	69	53	30	5.1
9	6.3	7.2	3.5	4.0	4.3	6.3	7.8	81	72	44	29	4.8
10	5.1	5.7	3.0	4.0	6.7	6.1	7.6	94	73	40	27	5.8
11	5.0	7.3	3.0	4.0	6.4	6.3	8.3	107	78	37	25	6.7
12	5.1	7.3	3.0	4.0	6.1	6.3	11	109	84	37	29	11
13	5.1	7.2	3.0	4.5	5.4	7.8	11	107	93	37	29	9.7
14	5.4	6.4	3.0	6.0	5.0	6.3	12	98	86	55	22	6.6
15	5.8	7.3	3.5	6.9	4.8	7.0	15	89	79	54	20	6.3
16	5.7	6.7	3.5	6.7	4.8	6.7	12	93	83	45	22	9.0
17	5.5	6.1	3.5	6.4	5.4	6.9	12	72	78	41	22	13
18	5.8	6.1	4.0	6.3	5.8	6.7	16	78	76	43	22	12
19	6.0	6.0	5.0	6.3	5.8	6.6	16	107	73	49	20	11
20	5.8	5.7	6.5	6.3	5.3	6.4	13	121	70	53	18	11
21	7.5	5.3	6.5	6.0	5.5	6.7	11	118	76	58	14	10
22	6.4	5.1	6.5	5.5	5.1	6.9	11	131	72	45	15	10
23	5.5	4.6	6.6	4.8	5.1	6.7	13	112	59	44	17	12
24	5.4	4.7	5.3	6.9	5.7	6.6	17	121	64	42	22	11
25	5.1	6.7	5.7	6.6	5.7	6.7	24	114	63	44	21	12
26	5.0	6.3	4.4	6.6	5.7	6.6	18	105	60	42	20	25
27	5.0	7.7	6.6	5.8	5.8	7.8	18	103	65	39	17	17
28	5.7	5.8	5.5	4.8	5.5	7.0	20	98	64	35	23	18
29	5.7	3.3	5.4	7.2	-----	7.0	27	94	45	63	21	19
30	5.7	5.0	3.4	6.6	-----	7.5	34	98	44	58	15	18
31	4.6	-----	3.8	6.3	-----	6.9	-----	105	-----	42	13	-----
TOTAL	172.4	194.3	147.6	172.7	156.9	200.7	400.2	2,723	2,269	1,400	759	326.0
MEAN	5.56	6.48	4.76	5.57	5.60	6.47	13.3	87.8	75.6	45.2	24.5	10.9
MAX	7.5	11	7.7	7.2	6.7	7.8	34	131	103	63	45	25
MIN	4.6	3.3	2.9	4.0	4.3	5.4	6.9	32	44	35	13	4.8
AC-FT	342	385	293	343	311	398	794	5,400	4,500	2,780	1,510	647
CAL YR 1972	TOTAL 2,533.9		MEAN 6.92	MAX 39	MIN 2.9	AC-FT 5,030						
WTP YR 1973	TOTAL 8,921.8		MEAN 24.4	MAX 131	MIN 2.9							

07103800 WEST MONUMENT CREEK AT U.S. AIR FORCE ACADEMY, COLO.

LOCATION.--Lat 38°58'14", long 104°54'08", in SW¼SW¼ sec.28, T.12 S., R.67 W., El Paso County, on left bank 500 ft (150 m) upstream from diversion to city of Colorado Springs water treatment plant, 2.7 mi (4.3 km) south of U.S. Air Force Academy chapel, and 4.4 mi (7.1 km) upstream from mouth.

DRAINAGE AREA.--14.9 mi² (38.6 km²).

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

GAGE.--Water-stage recorder and concrete flume. Altitude of gage is 7,180 ft (2,188 m) from topographic map.

EXTREMES.--Current year: Maximum discharge, 37 ft³/s (1.05 m³/s) May 11 (gage height, 2.40 ft or 0.732 m); maximum gage height, 2.78 ft (0.847 m) Jan. 1 (backwater from ice); minimum daily discharge, 0.07 ft³/s (0.002 m³/s) Jan. 19.

Period of record: Maximum discharge, 47 ft³/s (1.33 m³/s) May 20, 1970 (gage height, 2.69 ft or 0.820 m); maximum gage height, 2.78 ft (or 0.847 m) Jan. 1, 1973 (backwater from ice); minimum daily discharge, 0.07 ft³/s (0.002 m³/s) Jan. 19, 1973.

REMARKS.--Records good. Natural flow of stream affected by transmountain diversions from Colorado River basin, storage reservoirs, and operation of a water-supply system.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.72	.60	.28	.10	.25	.19	.35	6.0	6.4	1.5	.80	.45
2	1.2	.58	.35	.10	.31	.11	.28	5.7	7.5	1.4	.62	.58
3	.80	.40	.28	.10	.28	.16	.31	6.2	6.9	1.3	1.1	.57
4	1.1	.35	.25	.10	.28	.14	1.4	6.7	6.6	1.4	1.4	.59
5	1.2	.28	.20	.10	.28	.19	.58	7.4	6.0	1.4	1.3	.98
6	.80	.65	.16	.10	.22	.25	.61	9.1	5.5	1.3	1.2	.90
7	1.1	.40	.16	.08	.22	.14	.77	12	5.5	1.4	1.1	.79
8	1.1	.28	.16	.08	.35	.16	1.5	14	5.0	1.0	1.1	1.0
9	1.3	.46	.22	.08	.31	.22	1.6	18	4.2	1.3	.95	.81
10	3.2	.31	.22	.08	.65	.14	.69	25	4.2	1.1	1.3	.69
11	3.4	.51	.22	.08	.14	.19	.72	32	4.2	1.4	1.1	.96
12	6.6	.25	.22	.20	.19	.22	.76	32	3.6	1.9	.90	.54
13	9.3	1.7	.22	.40	.16	.19	1.1	31	3.6	1.6	1.2	.54
14	3.8	4.2	.22	.22	.31	.22	1.8	29	3.2	1.4	.94	.83
15	.98	1.4	.24	.28	.28	.22	2.6	28	3.2	1.3	.96	1.0
16	.98	1.5	.24	.19	.46	.22	2.1	25	3.0	1.4	1.5	1.4
17	1.4	1.2	.24	.22	1.6	.28	2.3	18	3.0	1.5	1.0	.61
18	1.2	.65	.07	.19	.31	.25	2.6	21	3.0	1.2	.96	.81
19	1.2	.65	.25	.07	.28	.40	2.8	25	3.2	1.8	.90	.89
20	.58	.58	.22	.14	.28	.28	2.4	28	2.6	2.4	.85	1.1
21	.72	.35	.09	.16	.31	.31	2.2	28	2.6	2.1	.89	1.3
22	.58	.60	.09	.11	.14	.52	2.2	29	2.8	1.6	.60	1.4
23	1.1	.72	.28	.22	.28	.28	2.3	27	2.6	1.1	1.1	.81
24	.52	3.0	.16	.19	.19	.35	2.8	25	2.8	1.4	1.1	1.1
25	.46	6.0	.09	.22	.25	.40	3.3	24	2.3	1.3	1.0	.69
26	.46	1.5	.09	.11	.22	.31	3.0	19	2.5	1.3	.92	1.2
27	.88	.16	.14	.25	.16	.25	3.3	14	2.0	1.0	.76	.86
28	.65	.19	.24	.22	.28	.25	4.2	12	2.2	1.1	2.7	.66
29	.58	.20	.11	.22	-----	.46	5.5	11	1.6	1.4	2.8	.93
30	.58	.14	.10	.22	-----	.28	6.1	10	1.7	1.1	.68	.70
31	.60	-----	.10	.22	-----	.25	-----	9.4	-----	1.2	.69	-----
TOTAL	49.09	29.61	5.91	5.05	8.99	7.83	62.17	587.5	115.5	43.6	34.40	25.69
MEAN	1.58	.99	.19	.16	.32	.25	2.07	19.0	3.85	1.41	1.11	.86
MAX	9.3	6.0	.35	.40	1.6	.52	6.1	32	8.4	2.4	2.8	1.4
MIN	.46	.14	.07	.07	.14	.11	.28	5.7	1.6	1.0	.60	.45
AC-FT	97	59	12	10	18	16	123	1,170	229	86	68	51

CAL YR 1972 TOTAL 272.49 MEAN .74 MAX 9.3 MIN .07 AC-FT 540
WTR YR 1973 TOTAL 975.34 MEAN 2.67 MAX 32 MIN .07 AC-FT 1,930

ARKANSAS RIVER BASIN

07104500 TEMPLETON GAP FLOODWAY AT COLORADO SPRINGS, COLO.

LOCATION.--Lat 38°53'17", long 104°49'01", in SE¼ sec.30, T.13 S., R.66 W., El Paso County, on left bank 75 ft (23 m) upstream from head of concrete flume, 400 ft (120 m) upstream from bridge on U.S. Highways 85 and 87, and 0.8 mi (1.3 km) north of Colorado Springs.

DRAINAGE AREA.--8.46 mi² (21.91 km²).

PERIOD OF RECORD.--July 1951 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 6,200 ft (1,890 m) from topographic map.

AVERAGE DISCHARGE.--22 years, 0.36 ft³/s (0.0102 m³/s), 261 acre-ft/yr (322,000 m³/yr).

EXTREMES.--Current year: Maximum discharge, 482 ft³/s (13.7 m³/s) July 30 (gage height, 2.89 ft or 0.881 m), from rating curve extended above 130 ft³/s (3.7 m³/s); no flow for most of year.

Period of record: Maximum discharge, 1,090 ft³/s (30.9 m³/s) July 24, 1970 (gage height, 3.45 ft or 1.052 m), from rating curve based on computation of flow at critical depth at gage heights 1.3, 1.4, 1.8, and 3.0 ft (0.40, 0.43, 0.55, and 0.91 m); no flow most of time.

REMARKS.--Records good. This is an artificial channel constructed to divert flood flows from normally dry channels around Colorado Springs during periods of heavy rainfall.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0					0	.40		0	0	0
2		0					0	0		0	0	0
3		1.4					1.2	0		0	1.6	0
4		.85					.02	0		0	.03	0
5		.45					0	0		0	3.7	0
6		0					0	37		0	.05	0
7		0					0	2.4		.02	3.8	0
8		.06					0	0		.03	.10	0
9		.17					0	0		0	.07	.37
10		0					0	0		0	.04	9.8
11		0					0	0		0	0	5.6
12		0					0	0		0	0	1.1
13		0					0	0		0	.01	.02
14		0					0	0		.04	0	0
15		0					0	0		.01	0	0
16		0					0	0		.01	0	0
17		0					0	0		.01	0	0
18		0					0	0		.02	.01	0
19		0					0	0		5.6	.02	0
20		0					0	0		21	0	0
21		0					0	0		.12	.01	0
22		0					0	19		29	0	0
23		0					0	0		.05	0	0
24		0					0	0		0	0	0
25		0					3.2	0		0	0	0
26		0					0	0		0	0	5.1
27		0					0	0		0	0	0
28		0					0	0		0	.01	3.4
29		0					0	0		6.2	.03	.07
30		0					1.0	8.2		41	0	.02
31		-----					-----	0	-----	.03	0	-----
TOTAL	0	2.93	0	0	0	0	5.42	67.00	0	103.14	9.48	25.48
MEAN	0	.098	0	0	0	0	.18	2.16	0	3.33	.31	.85
MAX	0	1.4	0	0	0	0	3.2	37	0	41	3.8	9.8
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC=FT	0	5.8	0	0	0	0	11	133	0	205	19	51
CAL YR 1972	TOTAL	595.92	MEAN	1.63	MAX	112	MIN	0	AC=FT	1,180		
WTR YR 1973	TOTAL	213.45	MEAN	.58	MAX	41	MIN	0	AC=FT	423		

07105800 FOUNTAIN CREEK AT SECURITY, COLO.

LOCATION.--Lat 38°43'46", long 104°44'00", in SW¼ sec.24, T.15 S., R.66 W., El Paso County, on right bank 980 ft (300 m) downstream from Carson Road bridge, 1.0 mi (1.6 km) southwest of South Security School, 3.5 mi (5.6 km) northeast of Fountain, and 5.0 mi (8.0 km) upstream from Jimmy Camp Creek.

DRAINAGE AREA.--488 mi² (1,264 km²).

PERIOD OF RECORD.--October 1964 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5,640 ft (1,719 m) from topographic map. Prior to Oct. 26, 1966, at site 1,040 ft (320 m) upstream at datum 6.00 ft (1.829 m) higher. Oct. 26, 1966, to July 18, 1972, at site 980 ft (300 m) upstream at datum 6.00 ft (1.829 m) higher.

AVERAGE DISCHARGE.--9 years, 58.3 ft³/s (1.651 m³/s), 42,240 acre-ft/yr (52.1 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,340 ft³/s (66.3 m³/s) July 22 (gage height, 5.27 ft or 1.606 m), from rating curve extended above 1,300 ft³/s (37 m³/s); minimum daily, 15 ft³/s (0.42 m³/s) Dec. 8-10, Jan. 9.

Period of record: Maximum discharge, 25,000 ft³/s (708 m³/s) July 24, 1965 (gage height, 11.30 ft or 3.444 m, site and datum then in use, from floodmarks), from rating curve extended above 2,900 ft³/s (82 m³/s) on basis of slope-area measurement of peak flow; minimum daily, 1.9 ft³/s (0.054 m³/s) Mar. 1, 1965.

REMARKS.--Records fair. Natural flow of stream affected by storage reservoirs, power developments, diversions for irrigation of about 5,100 acres (20.6 km²), municipal use, and return flow from irrigated areas.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1	42	29	27	37	44	52	59	278	875	97	110	70
2	39	38	26	30	36	59	95	235	820	62	101	55
3	36	64	36	25	32	55	85	270	916	68	125	44
4	31	78	40	25	38	59	62	270	666	89	107	50
5	28	78	30	20	47	74	58	286	611	56	107	50
6	33	69	25	20	48	74	62	442	480	54	107	53
7	38	43	20	20	43	62	59	343	430	40	104	44
8	33	49	15	20	44	66	68	559	410	89	87	44
9	32	49	15	15	49	74	55	319	382	72	64	49
10	25	43	15	20	44	77	54	172	328	83	60	59
11	22	40	18	25	54	68	38	176	310	49	69	66
12	26	38	20	34	45	75	55	182	346	68	79	68
13	30	38	20	37	55	72	37	262	373	87	74	36
14	28	38	20	34	38	60	66	519	355	119	52	25
15	27	32	22	36	62	59	79	285	262	130	47	26
16	23	31	34	36	54	59	77	230	270	104	49	28
17	26	39	44	33	53	56	89	205	262	122	37	30
18	33	28	48	33	58	60	91	148	224	101	41	32
19	37	32	43	32	55	55	113	122	246	143	44	33
20	40	33	43	28	45	50	93	149	254	172	47	32
21	39	33	40	37	54	66	122	286	262	143	47	32
22	46	26	40	38	48	50	104	1,030	200	253	46	32
23	39	21	44	32	53	58	89	1,060	156	63	43	33
24	41	21	45	35	59	66	110	946	176	98	47	35
25	38	19	41	36	46	62	212	619	166	130	45	40
26	33	21	43	47	41	62	161	502	156	95	45	50
27	28	20	44	44	52	60	148	382	194	91	54	63
28	28	20	43	41	54	70	122	400	212	72	82	62
29	29	22	43	39	-----	74	143	677	156	124	68	66
30	24	26	42	42	-----	81	212	640	125	235	62	72
31	22	-----	41	48	-----	64	-----	688	-----	83	66	-----
TOTAL	996	1,118	1,027	999	1,351	1,979	2,818	12,682	10,623	3,292	2,116	1,379
MEAN	32.1	37.3	33.1	32.2	48.3	63.8	93.9	409	354	106	68.5	46.0
MAX	46	78	48	48	62	81	212	1,060	916	272	125	72
MIN	22	19	15	15	32	50	37	122	125	40	37	25
AC=FT	1,980	2,220	2,040	1,980	2,680	3,930	5,590	25,150	21,070	6,530	4,200	2,740
CAL YR 1972	TOTAL 14,728.8		MEAN 40.2	MAX 1,400	MIN 2.4	AC=FT 29,210						
WTR YR 1973	TOTAL 40,380.0		MEAN 111	MAX 1,060	MIN 15	AC=FT 80,090						

ARKANSAS RIVER BASIN

07106300 FOUNTAIN CREEK NEAR PINON, COLO.

LOCATION.--Lat 38°26'50", long 104°35'28", in NE¼NE¼ sec.31, T.18 S., R.84 W., Pueblo County, near left bank on downstream side of county road bridge, 1.2 mi (1.9 km) northeast of Pinon and 3.2 mi (5.1 km) upstream from Steele Hollow Creek.

DRAINAGE AREA.--846 mi² (2,191 km²).

PERIOD OF RECORD.--April to September 1973.

GAGE.--Nonrecording gage. Altitude of gage is 5,005 ft (1,526 m) from topographic map.

EXTREMES.--Maximum discharge observed during period (also maximum for water year), 1,970 ft³/s (55.8 m³/s) May 7 (gage height, 4.60 ft or 1.402 m); no flow several days.

REMARKS.--Records fair. Natural flow of stream affected by storage reservoirs, power developments, trans-basin and transmountain diversions for municipal use, diversions above station for irrigation of about 10,000 acres (40.5 km²) and for municipal use, and return flow from irrigated areas.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1							80	220	421	4.8	111	0
2							80	156	360	4.4	95	0
3							85	76	443	.70	95	0
4							90	95	421	.15	105	0
5							90	149	330	.15	95	0
6							95	890	247	0	105	0
7							100	1,920	283	4.3	100	0
8							100	950	247	65	111	0
9							105	980	238	24	22	98
10							105	785	142	11	44	28
11							111	890	220	2.8	17	2.2
12							95	935	171	.70	68	14
13							95	1,010	135	.30	68	18
14							90	1,230	129	7.8	41	6.5
15							111	757	100	9.3	13	4.4
16							117	509	1,090	18	13	5.6
17							129	731	111	19	.23	17
18							129	757	61	14	0	17
19							123	757	80	68	0	11
20							129	815	55	105	0	10
21							123	1,170	39	454	0	12
22							105	1,250	52	100	0	11
23							90	1,070	41	350	0	28
24							49	705	36	135	0	10
25							292	785	36	163	0	13
26							220	845	16	95	0	117
27							163	666	9.3	85	0	36
28							100	679	16	95	0	41
29							85	476	44	90	4.8	52
30							65	731	10	142	0	68
31							-----	731	-----	142	0	-----
TOTAL							3,351	23,720	5,583.3	2,210.40	1,108.03	619.7
MEAN							112	765	186	71.3	35.7	20.7
MAX							292	1,920	1,090	454	111	117
MIN							49	76	9.3	0	0	0
AC-FT							6,650	47,050	11,070	4,380	2,200	1,230

07106500 FOUNTAIN GREEK AT PUEBLO, COLO.

LOCATION.--Lat 38°18'27", long 104°36'09", in NE¼SW¼ sec.18, T.20 S., R.64 W., Pueblo County, on left bank at downstream side of bridge on State Highway 47 at Pueblo and 4.0 mi (6.4 km) upstream from mouth.

DRAINAGE AREA.--920 mi² (2,383 km²).

PERIOD OF RECORD.--January 1922 to September 1925, October 1940 to September 1965, February 1971 to current year. Monthly discharge only for some periods, published in WSP 1311.

GAGE.--Water-stage recorder. Datum of gage is 4,725.30 ft (1,440.271 m) above mean sea level. See WSP 1711 or 1731 for history of changes prior to Oct. 1, 1940. Oct. 1, 1940, to Apr. 6, 1965, water-stage recorder at site 2.4 mi (3.9 km) downstream at datum 4,663.45 ft (1,421.420 m) above mean sea level (unadjusted). Apr. 7 to Sept. 30, 1965, water-stage recorder at site 2.3 mi (3.7 km) downstream at datum 4,668.4 ft (1,422.93 m) above mean sea level (unadjusted).

AVERAGE DISCHARGE.--30 years, 55.5 ft³/s (1.572 m³/s), 40,210 acre-ft/yr (49.6 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,970 ft³/s (84.1 m³/s) July 20 (gage height, 5.86 ft or 1.786 m); minimum daily, 0.09 ft³/s (0.003 m³/s) Sept. 7.

Period of record: Maximum discharge, 47,000 ft³/s (1,330 m³/s) June 17, 1965 (gage height, 19.0 ft or 5.79 m, from floodmarks, site and datum then in use), from rating curve extended above 400 ft³/s (11 m³/s), on basis of contracted-opening measurement of peak flow; no flow at times many years.

Maximum stage since at least 1903, that of June 17, 1965. Flood of June 4, 1921, reached a discharge of 34,000 ft³/s (963 m³/s), by slope-area measurement. Flood of May 30, 1935, reached a discharge of 35,000 ft³/s (991 m³/s) by slope-area measurement.

REMARKS.--Records good. Natural flow of stream affected by storage reservoirs, power developments, transbasin and transmountain diversions for municipal use, diversions for irrigation of about 14,000 acres (56.7 km²) above station and municipal use and return flow from irrigated areas.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	32	70	40	123	86	89	190	380	8.0	225	.14
2	21	63	58	40	165	86	77	174	340	7.0	93	.14
3	19	165	58	40	147	86	105	129	310	3.2	89	.14
4	15	159	56	30	147	86	111	147	270	1.8	97	.14
5	14	159	55	25	153	110	93	208	300	1.6	81	.14
6	11	174	50	25	129	110	69	1,250	242	1.0	101	.14
7	9.0	233	50	22	129	125	63	2,000	194	.70	215	.09
8	17	153	35	22	153	125	85	1,310	165	10	117	.14
9	22	135	25	20	135	117	101	964	129	4.5	81	58
10	23	105	20	15	101	135	81	908	129	1.0	48	36
11	13	81	20	30	97	123	85	978	208	.55	67	9.5
12	10	73	20	60	123	105	77	1,140	153	.55	14	13
13	11	60	20	97	129	135	73	936	182	.42	18	13
14	9.5	55	20	190	129	153	65	936	199	.31	17	9.5
15	10	58	20	159	123	117	117	800	153	.31	11	7.0
16	18	69	40	233	105	111	190	700	123	.31	5.3	7.5
17	13	77	60	141	85	111	153	600	159	.31	6.1	11
18	15	63	60	81	63	101	141	558	165	.55	4.2	13
19	17	58	60	147	69	89	153	630	97	81	3.2	11
20	17	63	60	199	60	85	153	690	81	418	1.4	9.5
21	17	58	60	159	60	81	141	594	69	472	.86	7.5
22	22	58	60	141	70	89	153	858	60	208	.70	5.7
23	29	58	60	153	70	101	111	1,150	65	586	.31	5.3
24	36	77	50	141	80	85	85	786	48	69	.31	6.6
25	30	77	55	141	86	89	190	678	38	105	.31	9.5
26	25	77	60	117	86	81	153	570	40	164	.25	30
27	25	62	70	105	86	73	123	500	28	65	.19	40
28	26	50	80	105	86	89	117	500	24	38	.19	40
29	32	54	48	147	-----	85	105	410	29	41	4.3	43
30	38	60	45	141	-----	89	111	420	15	85	.19	55
31	30	-----	40	117	-----	117	-----	498	-----	396	.14	-----
TOTAL	612.5	2,666	1,485	3,083	2,989	3,175	3,370	22,202	4,400	2,770.11	1,301.95	441.67
MEAN	19.8	88.9	47.9	99.5	107	102	112	716	147	89.4	42.0	14.7
MAX	38	233	80	233	165	153	190	2,000	380	586	225	58
MIN	9.0	32	20	15	60	73	63	129	15	.31	.14	.09
AC=FT	1,210	5,290	2,950	6,120	5,930	6,300	6,680	44,040	8,730	5,490	2,580	876

CAL YR 1972 TOTAL 18,802.37 MEAN 51.4 MAX 1,010 MIN .25 AC=FT 37,290
WTR YR 1973 TOTAL 48,496.23 MEAN 133 MAX 2,000 MIN .09 AC=FT 96,190

PEAK DISCHARGE (BASE, 1,700 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
5-7	0400	5.95	2,920	7-23	0130	5.15	1,790
7-20	1800	5.86	2,970				

LOCATION.--Lat 38°13'37", long 104°29'54", in SE¼SE¼ sec.12, T.21 S., R.64 W., Pueblo County, on downstream side of right pier of bridge on South Road, 2.5 mi (4.0 km) southwest of Vineland, and 5.6 mi (9.0 km) upstream from mouth.

PERIOD OF RECORD.--March 1968 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 4,619 ft (1,408 m) from topographic map.

AVERAGE DISCHARGE.--5 years, 20.5 ft³/s (0.581 m³/s), 14,850 acre-ft/yr (18.3 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,260 ft³/s (35.7 m³/s) May 7 (gage height, 4.88 ft or 1.487 m, from floodmarks), from rating curve extended above 610 ft³/s (17 m³/s) on basis of slope-area measurement at gage height 13.08 ft (3.987 m); minimum daily, 0.56 ft³/s (0.016 m³/s) Aug. 25-27.
Period of record: Maximum discharge, 20,400 ft³/s (578 m³/s) Aug. 3, 1972 (gage height, 13.08 ft or 3.987 m, from floodmarks), from rating curve extended above 610 ft³/s (17 m³/s) on basis of slope-area measurement of peak flow; minimum daily, 0.10 ft³/s (0.003 m³/s) June 27, 28, 1972.
Greatest flood since at least 1901 occurred June 3, 1921 (discharge, 56,000 ft³/s or 1,590 m³/s at site 2.5 mi or 4.0 km upstream). Flood of May 19, 1955, reached a discharge of 20,600 ft³/s (583 m³/s) at site 2.5 mi (4.0 km) upstream.

REMARKS.--Records fair. Natural flow of stream affected by diversions above station for irrigation of about 8,500 acres (34.4 km²) and return flow from land irrigated by Bessemer Ditch.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	UCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.0	1.7	2.8	6.5	11	4.8	6.1	66	130	12	32	1.1
2	.89	2.6	2.8	6.5	9.9	5.0	5.5	70	120	12	25	.89
3	1.1	2.6	2.7	7.0	9.4	7.4	5.5	73	120	11	18	1.2
4	1.4	2.5	2.3	7.0	9.2	4.3	5.3	75	120	11	12	2.3
5	1.5	2.5	2.0	7.0	8.9	4.6	5.7	79	115	8.9	10	2.8
6	1.4	2.3	2.0	7.0	8.6	4.5	5.9	95	103	7.7	9.4	2.6
7	1.6	2.3	3.0	7.5	8.2	4.6	7.0	545	101	7.2	8.4	2.8
8	1.4	2.2	2.5	7.5	7.7	5.3	8.2	245	101	6.4	20	2.6
9	1.0	2.5	2.1	7.5	7.0	5.5	7.6	225	119	11	8.6	2.8
10	1.0	2.1	2.1	7.5	6.6	5.5	7.9	260	137	10	7.2	2.8
11	1.0	1.1	2.1	8.0	6.8	5.5	8.6	294	145	7.9	5.9	2.6
12	1.2	1.1	2.1	10	7.0	5.3	9.2	260	153	5.7	5.0	2.8
13	1.0	1.1	2.1	15	6.6	5.5	11	235	151	4.3	4.3	1.9
14	1.0	1.1	2.1	17	5.5	5.0	13	210	143	3.9	2.5	1.1
15	1.0	2.2	2.5	25	5.3	4.8	15	141	141	16	1.7	1.0
16	1.0	2.2	2.5	31	5.1	4.3	15	123	125	11	1.6	1.1
17	1.0	2.2	2.5	27	5.1	4.3	13	119	115	8.9	1.1	2.1
18	2.5	2.2	2.5	24	5.1	4.3	12	119	105	13	.89	2.6
19	2.5	2.2	3.0	21	4.8	3.8	14	143	95	9.4	.67	2.8
20	1.9	2.2	4.1	21	4.8	3.8	14	200	91	16	1.0	2.6
21	1.9	2.0	4.5	19	4.6	3.9	14	315	70	11	1.4	2.6
22	1.8	2.5	4.5	15	4.6	3.8	15	315	33	12	1.8	2.6
23	1.8	2.5	5.1	14	4.6	3.6	16	260	27	11	.89	2.8
24	2.3	2.5	5.5	15	4.6	3.3	18	215	22	10	.67	2.8
25	1.9	2.5	5.9	16	4.3	3.6	19	215	20	15	.56	2.8
26	1.8	2.5	5.9	15	4.5	4.1	33	200	16	13	.56	3.7
27	1.7	2.5	6.1	12	4.6	5.9	40	160	13	15	.56	2.9
28	1.7	2.5	6.4	12	4.8	6.6	42	150	15	15	.78	3.5
29	1.7	2.1	6.6	12	-----	6.8	43	140	15	15	.89	4.1
30	1.7	2.2	6.5	12	-----	7.2	52	130	13	22	.89	3.9
31	1.6	-----	6.5	12	-----	6.7	-----	130	-----	36	1.2	-----
TOTAL	46.29	64.7	113.3	424.0	179.2	153.6	481.5	5,807	2,674	368.3	185.46	74.39
MEAN	1.49	2.16	3.65	13.7	6.40	4.95	16.1	187	89.1	11.9	5.98	2.48
MAX	2.5	2.6	6.6	31	11	7.4	52	545	153	36	32	4.1
MIN	.89	1.1	2.0	6.5	4.3	3.3	5.3	66	13	3.9	.56	.89
AC=FT	92	128	225	841	355	305	955	11,520	5,300	731	368	148
CAL YR 1972	TOTAL	4,567.58	MEAN	12.5	MAX	1,230	MIN	.10	AC=FT	9,060		
WTR YR 1973	TOTAL	10,571.74	MEAN	29.0	MAX	545	MIN	.56	AC=FT	20,970		

07109500 ARKANSAS RIVER NEAR AVONDALE, COLO.

LOCATION.--Lat 38°14'53", long 104°23'55", in NE¼SW¼ sec.1, T.21 S., R.63 W., Pueblo County, on right bank 15 ft (5 m) downstream from bridge on Sixmile Road, 0.3 mi (0.5 km) upstream from Sixmile Creek, and 2.6 mi (4.2 km) west of Avondale.

DRAINAGE AREA.--6,327 mi² (16,387 km²).

PERIOD OF RECORD.--May 1939 to September 1951, February 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is 4,509.53 ft (1,374.505 m) above mean sea level. Prior to February 1965 at site 550 ft (170 m) downstream at datum 1.37 ft (0.418 m) lower.

AVERAGE DISCHARGE.--20 years, 867 ft³/s (24.55 m³/s), 628,100 acre-ft/yr (774 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 6,700 ft³/s (190 m³/s) July 20 (gage height, 6.41 ft or 1.954 m); minimum daily, 150 ft³/s (4.25 m³/s) Jan. 9.

Period of record: Maximum discharge, about 50,000 ft³/s (1,416 m³/s) June 18, 1965 (gage height, 9.77 ft or 2.978 m), from rating curve extended above 6,700 ft³/s (190 m³/s) on basis of records for station near Pueblo and indirect measurements of peak flow on Fountain Creek at Pueblo, Chico Creek near North Avondale, and Arkansas River near North Avondale; minimum daily, 50 ft³/s (1.42 m³/s) Apr. 2, 1940.

REMARKS.--Records good. Natural flow of stream affected by transmountain diversions, storage reservoirs, power developments, groundwater withdrawals, diversions for irrigation of about 123,000 acres (498 km²) and municipal use, and return flow from irrigated areas.

REVISIONS (WATER YEARS).--WSP 1087: 1942. WSP 1311: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR (OCTOBER 1972 TO SEPTEMBER 1973)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	193	560	540	250	300	511	402	810	1,430	2,990	1,850	1,230
2	236	560	540	250	300	511	344	909	1,460	2,730	1,600	1,180
3	213	605	540	250	350	483	378	738	1,640	2,230	1,440	1,160
4	196	575	540	250	450	441	384	678	1,730	2,200	1,260	1,090
5	193	582	450	250	450	441	350	783	1,830	2,260	1,220	1,060
6	189	568	300	220	450	402	334	1,670	1,650	2,130	1,170	873
7	203	553	324	200	450	360	334	3,200	1,510	1,990	1,190	747
8	210	546	414	180	450	355	408	1,920	1,480	1,990	1,270	729
9	206	539	518	150	462	378	455	1,830	1,650	2,090	1,080	923
10	210	525	540	300	469	441	420	1,790	2,250	2,080	974	1,060
11	206	483	480	350	490	408	408	1,840	3,300	2,120	1,010	864
12	189	483	400	400	497	390	408	2,090	4,380	2,120	1,140	837
13	183	539	400	400	511	427	455	2,250	4,280	2,040	1,190	645
14	173	497	400	450	490	455	518	2,210	4,160	2,360	1,140	408
15	203	497	400	500	469	427	660	2,050	4,340	2,790	1,060	350
16	240	497	400	500	462	396	774	1,770	3,980	2,660	984	534
17	240	476	450	500	434	402	635	1,600	2,950	2,340	965	344
18	248	483	500	450	462	396	568	1,620	2,340	1,990	937	329
19	270	483	550	400	462	448	660	1,750	2,040	1,950	1,010	334
20	318	532	600	400	490	539	644	2,170	1,830	3,290	1,040	248
21	334	598	550	350	455	560	620	2,720	1,750	3,180	1,080	270
22	396	540	500	350	462	582	605	3,320	1,680	2,800	1,160	279
23	420	540	500	350	455	598	575	3,660	1,730	2,760	1,230	270
24	366	532	450	300	462	568	518	2,720	1,950	2,230	1,220	265
25	313	518	400	300	490	497	560	2,370	2,270	2,090	1,200	284
26	318	532	400	300	497	396	837	2,100	2,430	1,690	1,250	444
27	334	590	400	300	511	384	783	1,960	2,430	2,200	1,270	470
28	339	630	400	300	518	420	703	1,780	3,180	1,760	1,230	450
29	339	500	350	250	-----	427	598	1,580	3,420	1,660	1,250	450
30	355	540	300	250	-----	476	644	1,490	3,480	1,930	1,260	450
31	427	-----	250	250	-----	469	-----	1,580	-----	3,090	1,280	-----
TOTAL	8,260	16,103	13,786	9,950	12,748	13,988	15,982	58,958	74,550	71,740	36,960	18,427
MEAN	266	537	445	321	455	451	533	1,902	2,485	2,314	1,192	614
MAX	427	630	600	500	518	598	837	3,660	4,380	3,290	1,850	1,230
MIN	173	476	250	150	300	355	334	678	1,430	1,660	937	265
AC-FT	16,380	31,940	27,340	19,740	25,290	27,750	31,700	116,900	147,900	142,300	73,310	36,550

CAL YR 1972 TOTAL 249,930 MEAN 683 MAX 2,880 MIN 173 AC-FT 495,700
WTR YR 1973 TOTAL 351,452 MEAN 963 MAX 4,380 MIN 150 AC-FT 697,100

NOTE.--No gage-height record Dec. 10 to Feb. 8.

07111000 HUERFANO RIVER AT MANZANARES CROSSING, NEAR REDWING, COLO.

LOCATION.--Lat 37°43'40", long 105°21'03", in sec.5, T.27 S., R.71 W., Huerfano County, on left bank at Manzanares Crossing, 500 ft (150 m) downstream from private bridge, 0.2 mi (0.3 km) downstream from Manzanares Creek, and 3.5 mi (5.6 km) southwest of Redwing.

DRAINAGE AREA.--73 mi² (189 km²).

PERIOD OF RECORD.--July 1923 to current year. Monthly discharge only for some periods, published in WSP 1311.

GAGE.--Water-stage recorder. Altitude of gage is 8,270 ft (2,521 m) from topographic map. Apr. 26, 1946, to Sept. 30, 1972, at datum 1.00 ft (0.305 m) higher. See WSP 1711 or 1731 for history of changes prior to Apr. 26, 1946.

AVERAGE DISCHARGE.--50 years, 32.0 ft³/s (0.906 m³/s), 23,180 acre-ft/yr (28.6 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 350 ft³/s (9.91 m³/s) June 12 (gage height, 2.90 ft or 0.884 m); minimum daily, 6.0 ft³/s (0.17 m³/s) Mar. 13.

Period of record: Maximum discharge, 10,200 ft³/s (289 m³/s) Aug. 2, 1951 (gage height, 8.14 ft or 2.481 m), from rating curve extended above 270 ft³/s (7.6 m³/s) on basis of slope-area measurement of peak flow; minimum daily determined, 4 ft³/s (0.11 m³/s) Jan. 22, 1937.

REMARKS.--Records good except those for winter period, which are poor. Diversions above station for irrigation of about 1,800 acres (7.28 km²).

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

REVISIONS (WATER YEARS).--WSP 1117: Drainage area. WSP 1311: 1945(M). WSP 1921: 1957.

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	14	13	10	13	7.9	13	46	132	148	63	30
2	12	15	14	10	14	7.5	12	46	130	142	60	28
3	11	16	13	10	13	7.1	12	47	126	135	60	27
4	9.6	17	13	11	12	7.0	10	47	140	128	65	26
5	9.6	18	11	12	13	6.7	14	51	124	118	60	25
6	10	18	9.0	11	14	7.0	13	50	118	114	59	24
7	13	16	11	10	15	7.5	10	50	128	107	57	23
8	13	16	12	9.5	14	7.5	9.6	55	164	105	54	22
9	13	16	11	9.5	13	7.5	11	71	202	105	52	22
10	12	15	10	10	15	7.1	10	91	256	97	52	23
11	12	14	10	10	17	7.5	12	110	305	94	51	26
12	12	16	10	11	19	8.3	13	114	282	90	50	24
13	12	14	11	12	18	6.0	16	102	260	104	48	23
14	13	14	10	13	17	9.6	20	80	274	120	50	22
15	15	13	9.5	13	16	11	18	80	213	115	52	22
16	18	13	10	14	16	10	16	91	192	115	45	21
17	19	13	11	14	17	10	20	99	179	110	43	21
18	20	14	13	13	18	10	22	112	167	110	42	21
19	22	12	12	13	18	10	17	138	160	105	40	21
20	30	16	12	12	18	10	19	199	155	96	39	20
21	27	12	11	11	16	12	18	188	155	87	37	18
22	24	11	14	11	15	12	18	206	150	77	35	16
23	25	11	12	11	13	12	23	167	150	71	34	16
24	22	12	11	12	12	12	26	170	150	66	33	17
25	22	13	11	12	11	12	29	202	155	65	32	17
26	20	12	11	13	10	12	26	188	160	63	31	19
27	18	13	12	12	9.0	12	26	150	165	63	30	19
28	18	10	14	12	8.5	11	36	124	170	63	29	19
29	15	11	14	13	-----	12	43	112	170	61	31	19
30	13	12	11	14	-----	12	46	112	164	72	33	19
31	14	-----	10	13	-----	12	-----	110	-----	63	33	-----
TOTAL	507.2	417	356.5	362.0	404.5	296.2	578.6	3,408	5,296	3,009	1,400	650
MEAN	16.4	13.9	11.5	11.7	14.4	9.55	19.3	110	177	97.1	45.2	21.7
MAX	30	18	14	14	19	12	46	206	305	148	65	30
MIN	9.6	10	9.0	9.5	8.5	6.0	9.6	46	118	61	29	16
AC-FT	1,010	827	707	718	802	588	1,150	6,760	10,500	5,970	2,780	1,290

CAL YR 1972 TOTAL 6,403.2 MEAN 17.5 MAX 333 MIN 6.0 AC-FT 12,700
WTR YR 1973 TOTAL 16,685.0 MEAN 45.7 MAX 305 MIN 6.0 AC-FT 33,090

PEAK DISCHARGE (BASE, 200 CFS).--June 12 (0200) 350 cfs (2.90 ft).

NOTE.--No gage-height record Nov. 21 to Feb. 28.

07114000 CUCHARAS RIVER AT BOYD RANCH, NEAR LA VETA, COLO.

LOCATION.--Lat 37°25'12", long 105°03'08", in SE¼NE¼SE¼ sec.24, T.30 S., R.69 W., Huerfano County, on left bank at Boyd Ranch, 29 ft (9 m) downstream from private bridge, 1.4 mi (2.3 km) downstream from Chaparral Creek, and 6.5 mi (10.5 km) southwest of La Veta.

DRAINAGE AREA.--56 mi² (145 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 7,781 ft (2,371.6 m) from topographic map.

AVERAGE DISCHARGE.--39 years, 23.1 ft³/s (0.654 m³/s), 16,740 acre-ft/yr (20.6 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 300 ft³/s (8.50 m³/s) May 22 (gage height, 2.88 ft or 0.878 m, from recorded range in stage); minimum daily, 3.0 ft³/s (0.085 m³/s) Jan. 8, 9.
Period of record: Maximum discharge, 444 ft³/s (12.6 m³/s) May 23, 1955 (gage height, 4.05 ft or 1.234 m); minimum daily, 2 ft³/s (0.06 m³/s) for several days November 1934 to January 1935, Sept. 29, 1950.

REMARKS.--Records good except those for periods of no gage-height record, which are poor. Diversions for irrigation of about 500 acres (2.02 km²) above station.

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

REVISIONS (WATER YEARS).--WSP 827: 1936. WSP 1007: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.8	6.0	7.0	3.5	6.0	4.9	6.5	64	129	110	27	14
2	3.8	7.0	7.5	3.5	6.5	5.2	6.0	50	144	103	26	13
3	3.8	7.7	7.0	3.5	6.0	5.2	6.0	55	142	96	26	13
4	4.0	7.8	7.0	4.0	5.5	5.2	5.5	83	148	91	26	13
5	4.2	4.9	6.0	4.5	6.0	4.4	7.0	86	138	84	25	13
6	4.6	4.6	5.0	4.0	6.5	4.9	6.5	90	125	76	24	12
7	4.6	4.9	6.0	3.5	7.0	5.4	5.5	100	129	70	24	12
8	4.6	5.4	5.5	3.0	6.5	4.4	5.5	110	136	66	23	12
9	4.6	7.0	5.0	3.0	6.0	4.4	6.5	125	158	62	23	12
10	4.4	6.5	4.5	3.5	6.5	3.6	6.0	135	183	60	23	12
11	4.2	7.0	4.5	3.5	7.0	4.4	7.0	140	212	52	22	12
12	4.2	6.5	4.5	4.0	7.5	4.4	7.8	145	225	49	22	12
13	4.2	6.5	5.0	4.5	7.0	3.8	11	140	218	48	22	11
14	4.2	6.0	4.5	5.5	6.5	4.0	16	120	205	51	22	11
15	5.0	6.0	4.0	6.0	6.0	5.9	18	120	183	46	21	11
16	5.5	7.0	4.5	6.5	6.0	5.6	16	140	164	43	19	11
17	4.5	7.0	4.5	6.5	6.5	5.6	19	160	144	42	18	11
18	4.2	7.5	5.0	6.0	7.0	5.9	26	180	127	43	18	11
19	4.4	6.5	4.5	5.5	7.0	5.9	23	200	123	42	18	10
20	4.9	7.0	4.5	5.0	7.0	5.9	23	220	117	38	18	10
21	4.4	6.5	4.0	4.5	6.5	6.2	21	240	108	38	17	9.6
22	4.9	6.0	4.5	4.5	6.5	6.5	24	265	107	36	17	10
23	6.2	6.0	4.0	4.5	6.0	5.9	32	220	108	34	16	10
24	5.9	6.5	3.5	5.5	5.5	6.0	45	199	110	33	16	11
25	5.9	7.0	3.5	5.5	5.5	6.5	49	201	110	32	16	11
26	5.6	6.5	3.5	6.0	5.0	6.5	37	210	114	31	16	13
27	5.4	7.0	4.0	5.5	5.0	7.0	37	152	119	29	15	13
28	5.6	5.5	4.5	5.5	4.8	6.2	59	123	121	28	16	12
29	4.9	6.0	4.5	6.0	-----	6.5	88	119	121	28	16	12
30	4.6	6.5	4.0	6.5	-----	6.5	98	121	117	28	17	12
31	5.0	-----	3.5	6.0	-----	6.5	-----	117	-----	28	16	-----
TOTAL	146.1	192.3	149.5	149.0	174.8	169.3	717.8	4,430	4,285	1,617	625	349.6
MEAN	4.71	6.41	4.82	4.81	6.24	5.46	23.9	143	143	52.2	20.2	11.7
MAX	6.2	7.8	7.5	6.5	7.5	7.0	98	265	225	110	27	14
MIN	3.8	4.6	3.5	3.0	4.8	3.6	5.5	50	107	28	15	9.6
AC-FT	290	381	297	296	347	336	1,420	8,790	8,500	3,210	1,240	693

CAL YR 1972 TOTAL 2,753.4 MEAN 7.52 MAX 19 MIN 3.5 AC-FT 5,460
WTR YR 1973 TOTAL 13,005.4 MEAN 35.6 MAX 265 MIN 3.0 AC-FT 25,800

PEAK DISCHARGE (BASE, 150 CFS).--May 22 (time unknown) 300 cfs (2.88 ft).

NOTE.--No gage-height record Nov. 12 to Feb. 28, May 6-23.

LOCATION.--Lat 38°11'03", long 104°10'22", in SW¼SE¼ sec.25, T.21 S., R.61 W., Pueblo County, on right bank 0.7 mi (1.1 km) upstream from headgate of Oxford Farmers Co. canal, 1.9 mi (3.1 km) northwest of Nepesta, 2.7 mi (4.3 km) upstream from Kramer Creek, and 6.6 mi (10.6 km) downstream from Huerfano River.

PERIOD OF RECORD.--April to October 1903, April to November 1912, October 1913 to current year. Monthly discharge only for some periods, published in WSP 1311. Records originally published for October 1933 to June 1936 did not include diversion to Oxford Farmers Co. canal, but monthly figures only for this period have been adjusted for diversion and published in WSP 1311.

Records for river below Oxford Farmers Co. canal (diversion to canal not included), published as "at Nepesta," September 1897 to October 1903 (irrigation seasons only), April to October 1904, June 1906 to September 1908 (irrigation seasons only), September 1909 to December 1910, February to September 1911 (gauge heights and discharge measurements only), October 1911 to November 1912, March to August 1913 (discharge measurements only), October 1913 to September 1936. Monthly discharge only for some periods, published in WSP 1311.

AVERAGE DISCHARGE.--60 years (1913-73), 684 ft³/s (19.37 m³/s) 495,600 acre-ft/yr (611 hm³/yr).

Period of record: Maximum discharge, 180,000 ft³/s (5,100 m³/s) June 4, 1921 (gage height not determined), by slope-area measurement of peak flow at a point 8 mi (13 km) upstream; no flow at times in 1902, 1910, 1931, and 1934.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	135	350	232	149	226	456	337	722	1,160	2,310	1,400	714
2	149	422	291	143	223	462	260	820	1,050	2,020	1,190	605
3	155	504	284	178	217	428	168	510	1,230	1,690	975	582
4	143	542	214	190	252	395	214	562	1,250	1,600	1,110	542
5	131	556	226	214	428	428	309	793	1,360	2,140	1,280	523
6	133	562	100	198	462	480	302	1,600	1,300	2,180	1,300	480
7	135	542	115	202	462	444	302	4,030	1,090	1,830	1,300	355
8	143	549	110	170	456	444	341	1,690	1,010	1,700	1,440	341
9	143	542	135	160	450	450	385	1,480	1,340	1,830	1,130	333
10	141	498	135	160	444	462	380	1,320	1,570	1,900	1,150	904
11	145	355	110	210	450	395	385	1,480	2,520	1,920	942	462
12	145	337	170	250	434	360	355	2,230	3,750	1,960	1,080	355
13	143	298	175	350	428	370	365	2,400	4,160	1,770	793	422
14	141	195	180	320	462	390	395	2,020	3,660	2,160	722	439
15	137	195	185	330	417	355	439	1,760	3,600	2,680	620	302
16	162	158	190	400	406	365	313	1,490	3,340	2,380	612	260
17	168	160	250	456	400	360	562	1,340	2,590	2,120	568	256
18	172	151	290	380	400	360	462	1,340	1,960	1,700	492	260
19	182	149	330	317	412	355	504	1,430	1,420	1,310	486	223
20	208	149	310	284	434	390	549	1,690	1,230	2,040	498	198
21	220	168	420	280	450	412	516	2,230	1,100	3,280	516	168
22	252	165	330	246	439	417	523	3,010	1,070	2,540	590	160
23	291	165	305	270	428	450	516	3,780	1,200	2,360	642	162
24	291	170	277	288	434	428	456	2,940	1,570	1,770	658	153
25	260	180	226	291	439	390	444	2,200	1,550	1,420	658	160
26	256	172	214	302	444	333	682	2,180	1,790	1,070	666	246
27	256	168	200	298	439	321	674	2,000	1,720	1,680	698	266
28	270	188	223	202	468	337	666	1,460	2,410	1,070	706	280
29	280	198	238	202	-----	345	568	1,190	2,490	840	666	277
30	288	185	217	131	-----	355	556	900	2,470	802	722	274
31	294	-----	172	151	-----	360	-----	1,020	-----	3,030	722	-----
TOTAL	5,969	8,973	6,854	7,722	11,404	12,297	12,928	53,617	57,960	59,102	26,332	10,702
MEAN	193	299	221	249	407	397	431	1,730	1,932	1,907	849	357
MAX	294	562	420	456	468	480	682	4,030	4,160	3,280	1,440	904
MIN	131	149	100	131	217	321	168	510	1,010	802	486	153
AC-FT	11,840	17,800	13,590	15,320	22,620	24,390	25,640	106,300	115,000	117,200	52,230	21,230
CAL YR 1972	TOTAL 161,426		MEAN 441	MAX 3,240	MIN 100	AC-FT 320,200						
WTR YR 1973	TOTAL 273,860		MEAN 750	MAX 4,160	MIN 100	AC-FT 543,200						

07117600 CHICOSA CREEK NEAR FOWLER, COLO.

LOCATION.--Lat 38°08'57", long 104°04'47", in SE¼NE¼ sec.11, T.22 S., R.60 W., Pueblo County, near center of span on downstream side of bridge on U.S. Highway 50, 0.6 mi (1.0 km) upstream from mouth and 3.4 mi (5.5 km) northwest of Fowler.

DRAINAGE AREA.--109 mi² (282 km²).

PERIOD OF RECORD.--October 1968 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 4,335 ft (1,321 m) from topographic map.

AVERAGE DISCHARGE.--5 years, 4.32 ft³/s (0.122 m³/s), 3,130 acre-ft/yr (3.86 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 212 ft³/s (6.00 m³/s) June 25 (gage height, 6.23 ft or 1.899 m), from rating curve extended above 45 ft³/s (1.3 m³/s); minimum daily, 1.0 ft³/s (0.028 m³/s) Oct. 24.

Period of record: Maximum discharge, 300 ft³/s (8.50 m³/s) Sept. 17, 1969 (gage height, 7.18 ft or 2.188 m), from rating curve extended above 45 ft³/s (1.3 m³/s); minimum daily, 0.20 ft³/s (0.006 m³/s) Jan. 4, 1971.

REMARKS.--Records good. Natural flow of stream affected by diversions for irrigation of about 1,000 acres (4.05 km²) above station, return flow from areas above station irrigated by water imported from the Arkansas and Huerfano Rivers, and diversions from Arkansas River wasted into Chicosa Creek above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.6	1.6	1.4	1.3	1.1	1.5	1.5	4.2	26	31	20	2.2
2	1.3	7.6	1.4	1.3	1.2	1.6	2.0	9.9	25	13	19	3.3
3	1.5	3.8	1.4	1.3	1.2	2.4	1.9	15	13	13	18	3.6
4	1.5	1.9	1.5	1.3	1.2	2.5	2.2	3.4	36	12	18	3.0
5	1.4	1.6	1.5	1.5	1.1	2.7	2.1	3.2	47	12	9.2	2.4
6	1.5	3.7	1.4	1.5	1.1	4.4	2.7	4.0	35	11	9.0	2.3
7	2.2	1.8	1.4	1.6	1.1	5.2	2.0	5.5	27	11	2.0	2.3
8	2.0	1.6	1.4	1.8	1.1	3.1	2.2	3.0	24	11	2.0	2.2
9	1.8	1.6	1.4	1.8	1.1	2.8	1.9	3.0	23	8.7	2.0	3.0
10	1.6	1.6	1.4	1.8	1.1	2.6	2.0	3.0	24	7.3	2.0	2.5
11	1.6	2.2	1.3	1.9	1.1	3.0	1.8	2.3	33	6.6	2.3	3.0
12	1.9	2.3	1.4	1.9	1.1	4.0	1.9	5.4	25	6.0	3.0	3.2
13	1.9	1.8	1.4	1.7	1.1	4.1	2.6	7.3	27	6.2	3.0	2.5
14	1.9	1.6	1.4	2.1	1.1	4.0	2.3	2.3	27	6.3	1.9	2.1
15	1.8	1.6	1.4	2.0	1.1	3.8	2.9	2.5	10	9.6	1.8	2.1
16	1.9	1.6	1.4	1.9	1.1	3.9	2.4	2.7	4.5	18	2.3	2.2
17	1.9	1.6	1.4	1.7	1.2	3.7	2.5	3.0	10	8.0	2.7	2.2
18	1.9	1.4	1.4	1.7	1.2	5.6	2.8	3.7	12	4.8	2.7	2.1
19	1.7	1.4	1.4	1.6	1.1	5.7	5.5	3.2	21	4.6	2.3	2.2
20	1.6	1.4	1.5	1.6	1.1	5.8	4.8	3.1	8.4	11	2.5	2.7
21	1.5	1.4	1.4	1.6	1.1	4.0	4.8	3.4	8.1	34	2.6	2.9
22	1.4	1.4	1.5	1.5	1.2	3.9	2.3	5.3	9.9	6.4	2.5	3.6
23	1.3	1.3	1.4	1.4	1.3	4.9	3.0	20	8.5	18	2.2	4.7
24	1.0	1.4	1.4	1.4	1.4	15	3.4	5.3	6.2	15	2.2	6.0
25	1.5	1.2	1.4	1.4	1.4	3.7	3.7	5.1	77	12	2.3	6.4
26	1.6	1.2	1.4	1.2	1.3	3.8	4.9	5.5	9.1	12	2.4	8.1
27	2.4	1.4	1.3	1.2	1.4	3.3	6.8	3.9	28	12	2.7	5.1
28	2.1	1.2	1.3	1.1	1.5	3.4	5.6	4.6	22	12	2.2	2.2
29	2.3	1.2	1.2	1.3	-----	3.1	4.8	17	45	29	2.6	2.0
30	2.6	1.3	1.2	1.3	-----	2.7	4.5	30	14	16	2.5	1.8
31	2.2	-----	1.2	1.2	-----	1.8	-----	30	-----	19	2.3	-----
TOTAL	54.4	56.7	42.9	47.9	33.1	149.0	93.8	219.8	685.7	396.5	152.2	93.9
MEAN	1.75	1.89	1.38	1.55	1.18	4.81	3.13	7.09	22.9	12.8	4.91	3.13
MAX	2.6	7.6	1.5	2.1	1.5	30	6.8	30	77	34	20	8.1
MIN	1.0	1.2	1.2	1.1	1.1	1.5	1.5	2.3	4.5	4.6	1.8	1.8
AC-FT	108	112	85	95	66	296	186	436	1,360	786	302	186

CAL YR 1972 TOTAL 1,385.92 MEAN 3.79 MAX 59 MIN .94 AC-FT 2,750
WTR YR 1973 TOTAL 2,025.90 MEAN 5.55 MAX 77 MIN 1.0 AC-FT 4,020

07119500 APISHAPA RIVER NEAR FOWLER, COLO.

LOCATION.--Lat 38°05'28", long 103°58'52", in SE¼NW¼ sec.35, T.22 S., R.59 W., Otero County, near right bank on downstream side of county highway bridge, 3.5 mi (5.6 km) southeast of Fowler and 5.4 mi (8.7 km) upstream from mouth.

DRAINAGE AREA.--1,125 mi² (2,914 km²).

PERIOD OF RECORD.--April 1922 to September 1925, May 1939 to current year. Monthly discharge only for some periods, published in WSP 1311.

GAGE.--Water-stage recorder. Datum of gage is 4,317.05 ft (1,315.837 m) above mean sea level. Prior to Aug. 29, 1923, at site 3 mi (5 km) downstream at different datum. Aug. 29, 1923, to Sept. 30, 1925, at present site at different datum.

AVERAGE DISCHARGE.--37 years, 32.8 ft³/s (0.929 m³/s), 23,760 acre-ft/yr (29.3 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 192 ft³/s (5.44 m³/s) May 26 (gage height, 3.15 ft or 0.960 m); minimum daily, 0.30 ft³/s (0.008 m³/s) Jan. 19, 20.
Period of record: Maximum discharge, 83,000 ft³/s (2,350 m³/s) Aug. 22, 1923, by slope-area measurement 2 mi (3 km) upstream from present station, caused by failure of Apishapa Dam 31 mi (50 km) upstream; no flow Feb. 5, 1951.

REMARKS.--Records fair. Waste water from Oxford Farmers Co. and Rocky Ford Highline canals enters river above station. Diversions above station for irrigation of about 4,700 acres (19.0 km²).

REVISIONS (WATER YEARS).--WSP 957: 1939, 1941. WSP 1117: Drainage area. WSP 1241: 1923(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.4	5.7	2.2	4.2	2.5	5.2	26	36	72	10	52	3.7
2	3.7	9.5	2.7	4.0	2.2	6.8	33	29	97	10	43	3.2
3	2.2	4.2	4.4	4.0	3.0	9.2	25	25	86	11	30	3.4
4	4.0	2.7	4.7	3.5	3.0	10	23	36	86	11	21	3.7
5	2.7	2.5	4.0	3.0	3.7	9.2	17	39	90	12	11	4.7
6	3.2	2.5	3.5	3.0	3.4	13	16	44	98	9.5	15	4.7
7	3.7	2.5	3.5	3.0	3.5	22	20	35	83	9.5	14	3.7
8	4.4	4.7	3.0	3.0	3.5	16	34	45	75	12	16	3.4
9	4.2	5.7	3.0	2.7	3.5	16	25	57	58	12	19	3.4
10	5.0	8.7	2.8	2.6	3.7	15	17	56	60	14	18	3.0
11	5.0	8.4	2.8	2.5	4.4	15	14	62	45	15	15	3.0
12	5.5	8.2	2.8	2.4	4.4	12	12	68	33	14	9.5	4.0
13	5.2	8.1	2.8	2.2	5.2	24	14	55	26	16	6.0	5.0
14	5.2	8.1	2.8	2.5	4.6	31	16	66	38	17	3.2	4.4
15	5.5	5.4	2.6	3.7	4.3	22	15	72	39	11	5.2	3.7
16	7.0	6.0	2.6	6.5	4.4	17	16	58	36	18	3.2	3.2
17	5.7	6.2	2.6	4.2	4.4	13	17	46	34	19	3.2	3.0
18	6.0	6.5	2.4	1.0	3.0	9.0	17	61	30	21	5.0	3.0
19	5.7	7.0	2.4	.30	3.0	8.4	25	51	22	21	6.5	3.4
20	6.8	7.3	2.4	.30	3.3	8.1	25	34	18	21	4.4	3.4
21	8.1	17	2.5	1.5	3.0	13	20	48	17	68	3.2	3.4
22	9.2	10	2.5	2.0	2.7	11	14	47	15	40	3.2	3.0
23	3.7	8.0	2.7	2.0	2.7	9.0	17	62	14	39	3.2	2.2
24	7.8	8.0	3.2	2.2	3.2	12	23	105	12	39	3.2	2.2
25	9.0	6.0	3.4	2.5	5.0	7.8	27	105	14	29	3.2	2.5
26	6.5	6.0	3.4	2.7	5.5	8.4	32	123	10	29	4.0	3.7
27	6.5	3.7	3.7	1.5	6.0	11	31	48	9.2	28	6.0	4.4
28	8.1	3.0	4.2	.78	7.0	13	32	85	13	27	4.0	16
29	9.2	2.5	3.4	2.5	-----	16	31	80	16	29	4.2	23
30	6.5	2.3	4.0	2.2	-----	25	32	82	11	29	4.2	20
31	7.5	-----	3.7	2.5	-----	25	-----	74	-----	40	4.2	-----
TOTAL	176.2	186.4	96.7	80.98	108.1	433.1	666	1,834	1,257.2	681.0	340.8	153.4
MEAN	5.68	6.21	3.12	2.61	3.86	14.0	22.2	59.2	41.9	22.0	11.0	5.11
MAX	9.2	17	4.7	6.5	7.0	31	34	123	98	68	52	23
MIN	2.2	2.3	2.2	.30	2.2	5.2	12	25	9.2	9.5	3.2	2.2
AC-FT	349	370	192	161	214	859	1,320	3,640	2,490	1,350	676	304

CAL YR 1972 TOTAL 4,943.10 MEAN 13.5 MAX 1,350 MIN .50 AC-FT 9,800
MTR YR 1973 TOTAL 6,013.88 MEAN 16.5 MAX 123 MIN .30 AC-FT 11,930

PEAK DISCHARGE (BASE, 3,000 CFS).--No peak above base.

07119700 ARKANSAS RIVER AT CATLIN DAM, NEAR FOWLER, COLO.

LOCATION.--Lat 38°07'33", long 103°54'41", in NW¼NW¼ sec.21, T.22 S., R.58 W., Otero County, 600 ft (180 m) downstream from gage on Catlin Canal, on right bank 2.2 mi (3.5 km) downstream from diversion dam for Catlin Canal, 2.3 mi (3.7 km) downstream from Apishapa River and 6.0 mi (9.7 km) east of Fowler.

DRAINAGE AREA.--10,901 mi² (28,234 km²), of which 54 mi² (140 km²) is probably noncontributing.

PERIOD OF RECORD.--October 1964 to current year.

GAGE.--Water-stage recorders on river and on Catlin Canal. Datum of river gage is 4,245.92 ft (1,294.156 m) above mean sea level. Datum of canal gage is 4,257.87 ft (1,297.799 m) above mean sea level. Prior to May 13, 1971, river gage at site 2.2 mi (3.5 km) upstream at datum 24.08 ft (7.340 m) higher and canal gage at site 1.7 mi (2.7 km) upstream at datum 3.26 ft (0.994 m) higher.

AVERAGE DISCHARGE.--9 years, 636 ft³/s (18.01 m³/s), 460,800 acre-ft/yr (568 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 4,850 ft³/s (137 m³/s) July 31 (gage height, 5.57 ft or 1.698 m); minimum daily, 110 ft³/s (3.12 m³/s) Oct. 5, 6.
Period of record: Maximum discharge, 43,200 ft³/s (1,220 m³/s) June 18, 1965 (gage height, 7.95 ft or 2.423 m, site and datum then in use), from rating curve extended above 13,000 ft³/s (370 m³/s) on basis of flow-over-dam computation of peak flow; minimum daily, 37 ft³/s (1.05 m³/s) Oct. 10, 11, 1966.

REMARKS.--Records fair except those for period of no gage-height record, which are poor. Discharge computed by combining discharge of river below canal with that of Catlin Canal. Natural flow of stream affected by trans-mountain diversions, storage reservoirs, groundwater withdrawals and diversions for irrigation, and return flow from irrigated areas.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR (OCTOBER 1972 TO SEPTEMBER 1973)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	120	259	234	137	276	434	462	640	1,070	2,500	1,590	720
2	130	389	243	135	276	417	376	838	987	2,160	1,220	617
3	144	487	253	138	276	415	264	718	1,240	1,740	873	569
4	120	536	248	152	276	395	172	455	1,350	1,380	833	561
5	110	535	242	162	326	393	291	547	1,410	1,640	1,110	519
6	110	574	250	162	399	439	327	754	1,420	1,980	1,120	527
7	125	593	250	164	406	449	338	2,870	1,130	1,700	1,070	369
8	125	556	250	195	405	412	362	1,640	899	1,590	1,210	317
9	130	523	250	195	409	412	419	1,380	1,130	1,570	1,040	312
10	125	442	230	196	409	438	418	1,250	1,210	1,730	974	650
11	125	389	216	198	420	442	397	1,250	2,110	1,690	764	431
12	130	338	210	199	430	370	381	1,770	3,450	1,700	916	338
13	130	292	210	219	396	352	356	2,020	3,780	1,660	628	377
14	125	296	210	268	412	424	384	1,860	3,900	1,670	569	423
15	125	286	210	320	344	392	422	1,770	4,030	2,170	484	378
16	125	285	210	378	334	367	528	1,550	3,920	2,010	482	264
17	150	254	210	451	329	345	586	1,250	3,000	1,900	453	243
18	161	253	209	429	324	341	489	1,110	2,110	1,820	426	261
19	176	235	207	377	334	335	481	1,190	1,490	1,540	402	221
20	231	229	206	326	339	344	569	1,350	1,360	1,830	420	206
21	252	214	205	276	359	375	514	2,080	1,010	3,080	436	184
22	238	195	204	274	358	396	529	2,620	914	2,350	440	165
23	283	192	204	270	358	410	506	3,020	1,040	2,030	527	178
24	291	191	201	281	368	452	475	3,190	1,440	1,820	595	176
25	256	192	201	296	363	442	454	2,370	1,540	1,440	594	184
26	254	192	197	279	379	376	511	2,200	1,760	1,270	579	253
27	254	192	196	262	384	335	647	2,190	1,730	1,240	634	318
28	254	215	197	259	406	345	620	1,550	1,950	1,710	658	336
29	253	213	196	266	-----	359	576	1,260	2,650	1,200	628	368
30	263	220	166	228	-----	305	493	979	2,910	1,130	668	345
31	223	-----	146	226	-----	362	-----	907	-----	2,460	687	-----
TOTAL	5,538	9,767	6,661	7,718	10,095	12,073	13,347	48,578	57,940	55,710	23,030	10,810
MEAN	179	326	215	249	361	389	445	1,567	1,931	1,797	743	360
MAX	291	593	253	451	430	452	647	3,190	4,030	3,080	1,590	720
MIN	110	191	146	135	276	305	172	455	899	1,130	402	165
AC-FT	10,980	19,370	13,210	15,310	20,020	23,950	26,470	96,350	114,900	110,500	45,680	21,440
CAL YR 1972	TOTAL 148,908	MEAN 407	MAX 3,640	MIN 109	AC-FT 295,400							
WTR YR 1973	TOTAL 261,267	MEAN 716	MAX 4,030	MIN 110	AC-FT 518,200							

NOTE.--No gage-height record Oct. 1 to Feb. 8.

07121500 TIMPAS CREEK AT MOUTH, NEAR SWINK, COLO.

LOCATION.--Lat 38°00'10", long 103°39'18", in NW¼SW¼ sec.35, T.23 S., R.56 W., Otero County, near right bank on downstream side of pier of 20th Road Bridge, 1.7 mi (2.7 km) southwest of Swink, and 3.0 mi (4.8 km) upstream from mouth.

DRAINAGE AREA.--496 mi² (1,285 km²).

PERIOD OF RECORD.--January 1922 to September 1925, March 1968 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 4,113 ft (1,254 m) from topographic map.

AVERAGE DISCHARGE.--8 years, 84.1 ft³/s (2.382 m³/s), 60,930 acre-ft/yr (75.1 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 576 ft³/s (16.3 m³/s) Sept. 27 (gage height, 4.64 ft or 1.414 m), from rating curve extended above 210 ft³/s (5.9 m³/s) on basis of slope-area measurement at gage height 9.61 ft (2.929 m); minimum daily, 17 ft³/s (0.48 m³/s) Jan. 9.

Period of record: Maximum discharge not determined, probably occurred June 8, 1923 (discharge, 11,200 ft³/s or 317 m³/s, at site 6 mi or 10 km upstream); minimum daily, 13 ft³/s (0.37 m³/s) May 14, 1925.

Maximum discharge since at least 1922, 21,400 ft³/s (606 m³/s) June 17, 1965.

REMARKS.--Records good. Natural flow of stream affected by minor diversions above station for irrigation, water imported from Arkansas River and Crooked Arroyo for irrigation above station, and return flow from irrigated areas.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	124	40	25	34	87	143	98	144	50	151	49
2	49	134	60	25	37	96	111	134	117	65	112	38
3	46	115	70	24	39	124	159	140	100	58	113	52
4	55	102	55	19	41	111	141	92	101	55	102	41
5	41	87	40	19	39	108	158	91	108	58	81	39
6	44	71	25	19	40	113	180	90	112	52	85	46
7	45	87	25	19	42	119	184	117	110	54	87	49
8	28	91	25	18	40	105	137	128	85	46	156	41
9	51	98	25	17	37	91	140	113	58	36	90	33
10	40	81	26	19	38	58	188	123	62	38	65	53
11	39	76	32	20	42	50	193	144	82	38	45	67
12	40	79	37	21	42	73	186	148	84	36	43	72
13	43	100	37	23	46	72	159	154	77	40	46	62
14	42	127	37	24	63	98	126	162	63	48	47	67
15	52	112	37	24	62	82	121	136	66	43	42	104
16	51	106	40	29	70	56	108	146	80	78	42	100
17	47	110	40	32	55	85	82	135	87	59	41	40
18	48	114	38	41	59	85	58	126	85	57	40	50
19	42	81	35	45	48	100	67	101	74	50	43	47
20	48	81	32	39	65	90	97	78	84	48	48	49
21	39	88	33	36	71	99	71	86	69	46	37	53
22	49	81	34	35	83	109	92	104	59	148	35	49
23	45	50	34	35	75	100	102	98	59	100	35	41
24	53	45	33	32	83	75	76	101	48	90	35	57
25	48	42	31	42	85	109	81	126	63	85	35	55
26	51	40	31	53	79	125	105	143	46	80	34	102
27	58	50	24	38	85	85	87	152	47	77	45	307
28	60	35	30	21	81	85	70	93	45	74	38	200
29	68	30	31	24	-----	87	82	56	46	73	42	140
30	67	32	29	28	-----	121	88	135	55	100	40	116
31	73	-----	25	41	-----	138	-----	153	-----	90	45	-----
TOTAL	1,490	2,469	1,091	887	1,581	2,936	3,592	3,703	2,316	1,972	1,900	2,219
MEAN	48.1	82.3	35.2	28.6	56.5	94.7	120	119	77.2	63.6	61.3	74.0
MAX	73	134	70	53	85	138	193	162	144	148	156	307
MIN	28	30	24	17	34	50	58	56	45	36	34	33
AC=FT	2,960	4,900	2,160	1,760	3,140	5,820	7,120	7,340	4,590	3,910	3,770	4,400

CAL YR 1972 TOTAL 17,862 MEAN 48.8 MAX 1,040 MIN 15 AC=FT 35,430
 WTR YR 1973 TOTAL 26,156 MEAN 71.7 MAX 307 MIN 17 AC=FT 51,880

ARKANSAS RIVER BASIN

97

07122200 FORT LYON CANAL NEAR HASTY, COLO.

LOCATION.--Lat 38°08'39", long 102°57'30", in SW¼SW¼ sec.7, T.22 S., R.49 W., Bent County, on left bank 60 ft (18 m) downstream from bridge, 2.1 mi (3.4 km) north of Hasty, and 50 mi (80 km) downstream from headgate.

PERIOD OF RECORD.--October 1968 to current year.

GAGE.--Water-stage recorder and sharp-crested weir. Altitude of gage is 3,953 ft (1,204.9 m) from topographic map.

EXTREMES.--Period of record: Maximum daily discharge, 969 ft³/s (27.4 m³/s) May 27, 1970; no flow for many days in most years.

REMARKS.--Records good. Canal diverts from left bank of Arkansas River in SW¼SW¼ sec.29, T.23 S., R.55 W., for irrigation and offstream reservoir storage.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.7	205	56	26	176	141	4.7	197	508	575	535	49
2	4.0	346	42	32	56	203	3.8	282	508	440	704	117
3	2.2	481	5.0	3.0	58	324	3.4	401	513	552	646	305
4	.51	458	3.0	3.0	82	276	2.9	373	426	721	514	357
5	23	381	1.0	3.0	76	295	7.7	291	426	823	538	366
6	64	276	0	3.0	51	226	41	262	346	525	587	363
7	88	255	0	3.0	34	205	29	450	260	258	548	367
8	115	208	0	3.0	67	321	4.6	513	284	461	463	341
9	138	354	0	3.0	49	313	3.9	445	301	805	452	77
10	130	447	0	3.0	41	305	3.6	381	207	840	56	4.9
11	105	401	0	3.0	87	337	3.4	369	385	814	3.0	60
12	108	364	0	5.0	75	298	26	360	508	325	101	203
13	113	617	0	5.0	37	214	44	376	596	116	153	334
14	116	237	0	5.0	4.4	262	43	296	617	562	385	358
15	115	174	0	5.0	3.4	221	47	268	710	895	363	366
16	116	143	0	0	5.4	202	52	250	780	788	344	383
17	117	99	0	7.5	7.6	188	166	251	712	364	348	339
18	113	68	0	38	37	222	248	372	673	421	241	29
19	125	42	0	0	26	233	233	620	637	724	63	0
20	139	31	0	0	23	194	183	528	683	899	4.7	74
21	141	31	67	0	24	111	157	551	687	831	19	168
22	137	66	77	0	22	221	209	518	366	404	76	226
23	135	5.0	124	0	37	307	212	572	189	394	205	249
24	126	5.0	190	0	35	319	358	519	595	742	329	268
25	80	20	137	0	34	341	304	628	961	765	346	279
26	16	120	71	0	51	334	250	512	577	568	343	284
27	.57	75	41	1.5	132	220	128	432	243	613	342	223
28	0	24	38	13	139	186	174	239	406	713	340	86
29	.80	39	28	10	-----	224	378	226	745	772	312	152
30	6.7	53	21	0	-----	194	295	369	958	700	56	241
31	40	-----	20	131	-----	12	-----	375	-----	578	5.6	-----
TOTAL	2,417.48	6,025.0	921.0	306.0	1,469.8	7,449	3,615.0	12,226	15,807	18,988	9,422.3	6,668.9
MEAN	78.0	201	29.7	9.87	52.5	240	121	394	527	613	304	222
MAX	141	617	190	131	176	341	378	628	961	899	704	383
MIN	0	5.0	0	0	3.4	12	2.9	197	189	116	3.0	0
AC-FT	4,800	11,950	1,830	607	2,920	14,780	7,170	24,250	31,350	37,660	18,690	13,230

CAL YR 1972 TOTAL 51,974.96 MEAN 142 MAX 831 MIN 0 AC-FT 103,100

WTR YR 1973 TOTAL 85,315.48 MEAN 234 MAX 961 MIN 0 AC-FT 169,200

LOCATION.--Lat 37°58'56", long 103°35'52", in SW¼SW¼ sec.5, T.24 S., R.55 W., Otero County, on right bank 54 ft (16 m) downstream from bridge on State Highway 10, 2.0 mi (3.2 km) upstream from mouth, and 2.8 mi (4.5 km) southeast of Swink.

PERIOD OF RECORD.--February 1968 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 4,100 ft (1,250 m) from topographic map.

AVERAGE DISCHARGE.--5 years, 15.8 ft³/s (0.447 m³/s), 11,450 acre-ft/yr (14.1 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 105 ft³/s (2.97 m³/s) May 9 (gage height, 2.76 ft or 0.841 m), from rating curve extended above 87 ft³/s (2.5 m³/s); minimum daily, 0.83 ft³/s (0.024 m³/s) Feb. 12.
Period of record: Maximum discharge, 1,200 ft³/s (34.0 m³/s) Aug. 7, 1971 (gage height, 7.91 ft or 2.411 m), from rating curve extended above 87 ft³/s (2.5 m³/s); minimum daily, 0.83 ft³/s (0.024 m³/s) Feb. 12, 1973.

REMARKS.--Records good. Natural flow of stream affected by minor diversions above station for irrigation, water exported above station to Timpas Creek, water imported from Arkansas River for irrigation above station, and return flow from irrigated areas.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	JCT	NUV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.94	37	3.7	1.7	1.4	2.2	4.8	43	44	29	24	13
2	1.0	9.2	2.6	1.7	1.4	2.2	11	39	45	31	44	15
3	1.0	4.6	2.2	1.7	1.5	2.4	25	16	45	30	44	15
4	.94	4.2	2.2	1.7	1.5	2.2	8.1	16	52	30	24	16
5	.94	4.0	2.1	1.6	1.5	1.6	5.5	29	42	23	19	20
6	.94	4.5	2.0	1.6	1.5	6.6	4.8	27	43	14	15	16
7	1.1	16	2.0	1.6	1.5	22	4.6	20	58	15	9.0	16
8	1.0	9.0	2.0	1.6	1.5	17	4.2	26	36	14	8.8	14
9	1.4	17	2.0	1.6	1.5	12	4.3	31	30	10	8.9	11
10	1.5	17	2.0	1.6	1.2	12	3.9	53	26	13	9.9	7.8
11	1.6	14	2.0	1.6	.87	17	3.8	24	18	13	8.9	14
12	1.7	12	2.0	1.6	.83	16	3.6	17	27	6.7	9.5	19
13	1.8	14	1.9	1.4	.87	25	6.5	32	31	5.7	10	22
14	2.0	17	1.9	1.4	1.0	23	13	48	40	10	7.6	27
15	2.0	14	1.8	1.4	.90	4.2	16	36	51	15	8.5	28
16	2.1	6.9	1.8	1.4	.99	3.4	14	29	44	14	7.5	6.5
17	2.1	6.0	1.8	1.4	1.1	7.6	5.0	15	39	15	9.1	5.2
18	2.1	8.5	1.8	1.4	2.1	27	5.8	13	33	14	11	4.6
19	2.2	14	1.8	1.4	2.4	22	25	25	34	13	7.9	4.1
20	2.4	19	1.7	1.4	1.9	12	12	31	36	11	7.7	4.5
21	3.2	21	1.7	1.4	2.3	22	20	25	31	13	8.1	4.5
22	3.4	10	1.9	1.4	2.2	12	19	48	30	28	9.5	4.1
23	4.2	7.1	1.9	1.5	1.9	23	20	66	27	70	7.4	3.3
24	8.5	8.1	1.7	1.5	1.9	32	14	46	20	72	11	3.3
25	12	12	1.6	1.5	1.9	25	18	48	15	65	10	2.6
26	17	13	1.6	1.5	2.1	11	16	70	7.0	70	8.3	6.2
27	17	13	1.8	1.5	2.1	14	6.3	88	7.4	40	9.7	11
28	19	7.2	1.7	1.5	2.1	12	7.9	52	25	27	9.1	7.3
29	25	12	1.7	1.5	-----	18	18	26	29	24	11	5.7
30	26	6.0	1.7	1.5	-----	18	8.1	57	25	20	13	4.3
31	41	-----	1.7	1.5	-----	5.4	-----	68	-----	40	13	-----
TOTAL	207.06	357.3	60.3	47.1	43.96	429.8	328.2	1,164	990.4	795.4	404.4	331.0
MEAN	6.68	11.9	1.95	1.52	1.57	13.9	10.9	37.5	33.0	25.7	13.0	11.0
MAX	41	37	3.7	1.7	2.4	32	25	88	58	72	44	28
MIN	.94	4.0	1.6	1.4	.83	1.6	3.6	13	7.0	5.7	7.4	2.6
AC-FT	411	709	120	93	87	853	651	2,310	1,960	1,580	802	657
CAL YR 1972	TOTAL	2,840.76	MEAN	7.76	MAX	45	MIN	.94	AC-FT	5,630		
WTR YR 1973	TOTAL	5,158.92	MEAN	14.1	MAX	88	MIN	.83	AC-FT	10,230		

07123000 ARKANSAS RIVER AT LA JUNTA, COLO.

LOCATION.--Lat 37°59'26", long 103°31'55", in SE¼NE¼ sec.2, T.24 S., R.55 W., Otero County, on right bank at upstream side of bridge on State Highway 109 in La Junta, 450 ft (140 m) upstream from King Arroyo.

DRAINAGE AREA.--12,210 mi² (31,623 km²), of which 115 mi² (298 km²) is probably noncontributing.

PERIOD OF RECORD.--May to August 1889, September 1893 to December 1895 (gage heights, discharge measurements, and flood data only), April to October 1903, June to November 1908 (gage heights and discharge measurements only), April 1912 to current year. Monthly discharge only for some periods, published in WSP 1311. Published as "near La Junta" in 1903.

GAGE.--Water-stage recorder, and nonrecording gage read twice daily. Datum of gage is 4,039.60 ft (1,231.270 m) above mean sea level. See WSP 1711 or 1731 for history of changes prior to June 13, 1940. June 13, 1940, to June 6, 1967, water-stage recorder at site 300 ft (91 m) upstream at present datum.

AVERAGE DISCHARGE.--61 years (1912-73), 244 ft³/s (6.910 m³/s), 176,800 acre-ft/yr (218 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 3,840 ft³/s (109 m³/s) May 7 (gage height, 6.88 ft or 2.097 m); minimum daily, 5.6 ft³/s (0.16 m³/s) Feb. 25.

Period of record: Maximum discharge, 200,000 ft³/s (5,660 m³/s) June 4, 1921 (gage height, 18.4 ft or 5.61 m, site and datum then in use), from rating curve extended above 15,000 ft³/s (420 m³/s) on basis of slope-area measurement of peak flow; no flow Jan. 20-23, Mar. 20-22, 1915.

REMARKS.--Records fair. Natural flow of stream affected by transmountain diversions, storage reservoirs, power developments, groundwater withdrawals and diversions for irrigation of about 400,000 acres (1,620 km²), and return flow from irrigated areas.

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

REVISIONS (WATER YEARS).--WSP 1341: Drainage area. WSP 1731: 1922.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	UCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.0	75	41	14	11	6.0	133	80	64	974	512	80
2	10	25	17	17	11	6.6	28	101	64	624	178	140
3	9.9	49	16	15	11	6.0	42	45	80	793	280	94
4	9.6	26	22	15	10	22	22	45	97	407	356	56
5	7.2	50	19	16	9.6	8.6	19	60	97	519	464	54
6	7.4	26	23	16	8.8	8.8	20	51	56	804	443	47
7	7.4	36	33	17	8.6	16	19	839	75	485	422	47
8	7.6	27	33	21	13	14	16	383	64	464	363	62
9	7.4	35	32	24	23	11	16	217	45	528	478	75
10	7.2	30	47	24	23	11	28	170	37	651	510	83
11	7.4	27	60	30	16	12	18	78	61	597	593	265
12	7.2	35	51	40	14	16	28	75	196	615	502	222
13	7.4	221	42	61	14	41	17	337	893	606	562	139
14	7.6	180	49	30	12	26	20	103	579	615	396	64
15	7.6	43	39	18	9.6	12	21	75	350	633	363	134
16	7.4	20	47	13	9.6	10	36	64	604	570	270	158
17	8.0	18	56	35	9.9	17	24	45	177	615	160	151
18	11	17	33	61	10	29	32	87	62	624	113	67
19	23	17	36	12	8.4	27	36	45	124	528	88	67
20	23	32	35	13	8.6	20	26	79	80	494	78	60
21	22	35	32	12	8.4	24	27	170	64	767	57	45
22	24	24	27	10	7.8	31	32	140	74	544	48	32
23	30	26	24	11	8.0	30	33	967	75	332	30	27
24	32	20	20	9.6	6.2	49	32	356	257	271	59	19
25	54	21	20	8.8	5.6	32	33	204	536	245	86	18
26	51	26	19	8.8	5.8	24	36	327	680	355	97	68
27	43	25	18	14	6.2	23	28	154	588	230	86	260
28	42	20	18	27	6.2	20	27	155	478	1,040	49	113
29	49	19	16	69	-----	38	36	49	1,020	597	54	30
30	60	35	18	40	-----	97	32	88	782	562	51	119
31	88	-----	15	14	-----	228	-----	88	-----	513	64	-----
TOTAL	687.3	1,240	958	716.2	295.3	916.0	917	5,677	8,359	17,602	7,612	2,816
MEAN	22.2	41.3	30.9	23.1	10.5	29.5	30.6	183	279	568	252	93.9
MAX	88	221	60	69	23	228	133	967	1,020	1,040	593	265
MIN	7.2	17	15	8.8	5.6	6.0	16	45	37	230	30	18
AC=FT	1,360	2,460	1,900	1,420	586	1,820	1,820	11,260	16,580	34,910	15,500	5,590

CAL YR 1972	TOTAL 40,445.2	MEAN 111	MAX 2,870	MIN 7.2	AC-FT 80,220
WIR YR 1973	TOTAL 47,995.8	MEAN 131	MAX 1,040	MIN 5.6	AC-FT 95,200

07124000 ARKANSAS RIVER AT LAS ANIMAS, COLO.

LOCATION.--Lat 38°04'51", long 103°13'09", in SE¼NE¼ sec.3, T.23 S., R.52 W., Bent County, on right bank at upstream side of bridge on U.S. Highway 50, 1.1 mi (1.8 km) north of courthouse in Las Animas, and 4.2 mi (6.8 km) upstream from Purgatoire River.

DRAINAGE AREA.--14,417 mi² (37,340 km²), of which 441 mi² (1,142 km²) is probably noncontributing.

PERIOD OF RECORD.--May to November 1898 (gage heights only), August to November 1909 (gage heights and discharge measurements only), May 1939 to current year.

GAGE.--Water-stage recorder. Datum of gage is 3,883.97 ft (1,183.834 m) above mean sea level. May 13 to Nov. 12, 1898, and Aug. 1 to Nov. 10, 1909, nonrecording gages near present site at different datums. May 23, 1939, to Apr. 27, 1967, water-stage recorder at site 0.4 mi (0.6 km) downstream at datum 9.00 ft (2.743 m) lower.

AVERAGE DISCHARGE.--34 years, 203 ft³/s (5.749 m³/s), 147,100 acre-ft/yr (181 hm³/yr).

EXTREMES.--Current year: Maximum discharge, not determined; minimum daily, 6.0 ft³/s (0.17 m³/s) Nov. 10, 11. Period of record: Maximum discharge, 44,000 ft³/s (1,250 m³/s) May 20, 1955 (gage height, 15.03 ft or 4.581 m, site and datum then in use), from rating curve extended above 24,000 ft³/s (680 m³/s) on basis of slope-area measurement of peak flow; minimum daily, 0.9 ft³/s (0.025 m³/s) July 31, Aug. 1, 3, 1964.

REMARKS.--Records poor. Natural flow of stream affected by transmountain diversions, storage reservoirs, power developments, ground-water withdrawals and diversions for irrigation of about 412,000 acres (1,670 km²), and return flow from irrigated areas.

REVISIONS.--WSP 1341: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	47	25	41	54	31	345	31	56	800	484	27
2	13	39	25	37	47	30	98	54	58	600	509	51
3	13	16	25	42	47	29	47	90	62	723	484	106
4	12	11	25	30	41	26	47	51	70	330	452	54
5	12	8.2	20	20	39	25	63	49	58	450	428	30
6	12	9.4	15	20	36	22	39	70	53	600	392	19
7	12	7.5	15	20	34	21	29	85	60	450	371	19
8	11	6.9	15	20	34	21	70	130	50	430	378	16
9	11	6.6	15	20	34	21	44	77	40	480	378	16
10	11	6.0	15	25	34	21	31	143	34	581	452	19
11	10	6.0	15	25	34	20	29	70	32	509	460	19
12	11	6.2	15	25	34	23	31	68	31	460	460	126
13	10	102	15	25	34	34	27	150	100	518	468	114
14	10	144	15	30	34	60	24	92	500	484	444	44
15	11	70	20	39	34	25	24	89	200	452	350	14
16	11	49	22	41	34	20	23	50	400	509	296	54
17	11	36	26	34	34	30	23	40	100	406	230	81
18	11	29	29	94	34	57	22	180	70	527	100	63
19	11	25	40	106	34	47	24	40	100	536	90	41
20	11	25	50	41	34	25	25	50	69	509	70	41
21	11	25	50	34	33	26	23	120	60	452	60	34
22	11	25	54	30	34	26	21	219	72	581	40	27
23	12	25	54	28	34	23	19	500	80	300	30	22
24	12	25	54	26	36	26	18	20	200	197	35	15
25	11	25	51	23	36	26	23	180	300	197	70	15
26	11	25	27	20	41	22	22	280	700	280	90	55
27	11	25	24	18	42	37	16	150	500	290	75	77
28	11	25	19	30	33	54	14	140	400	452	45	100
29	12	25	24	65	-----	49	12	45	800	518	21	28
30	12	25	30	134	-----	94	16	65	700	476	19	80
31	14	-----	40	77	-----	186	-----	80	-----	518	19	-----
TOTAL	354	899.8	869	1,220	1,029	1,157	1,249	3,408	5,955	14,615	7,800	1,407
MEAN	11.4	30.0	28.0	39.4	36.8	37.3	41.6	110	199	471	252	46.9
MAX	14	144	54	134	54	186	345	500	800	800	509	126
MIN	10	6.0	15	18	33	20	12	20	31	197	19	14
AC-FT	702	1,780	1,720	2,420	2,040	2,290	2,480	6,760	11,810	28,990	15,470	2,790

CAL YR 1972 TOTAL 34,558.8 MEAN 94.4 MAX 1,540 MIN 6.0 AC-FT 68,550
WTR YR 1973 TOTAL 39,962.8 MEAN 109 MAX 800 MIN 6.0 AC-FT 79,270

NOTE.--No gage-height record May 10 to July 9.

ARKANSAS RIVER BASIN

101

07124200 PURGATOIRE RIVER AT MADRID, COLO.

LOCATION.--Lat 37°07'46", long 104°38'20", in SW¼NE¼ sec.35, T.33 S., R.65 W., Las Animas County, on left bank 70 ft (21 m) downstream from county bridge, 0.3 mi (0.5 km) northeast of Madrid, and 1.0 mi (1.6 km) downstream from Burro Canyon.

DRAINAGE AREA.--550 mi² (1,420 km²), approximately.

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

GAGE.--Water-stage recorder. Datum of gage is 6,261.61 ft (1,908.539 m) above mean sea level (Corps of Engineers bench mark).

EXTREMES.--Current year: Maximum discharge, 2,310 ft³/s (65.4 m³/s) July 31 (gage height, 5.40 ft or 1.646 m), from rating table extended as explained below; minimum daily, 4.7 ft³/s (0.13 m³/s) Feb. 8. Period of record: Maximum discharge, 3,270 ft³/s (92.6 m³/s) Sept. 1, 1972 (gage height, 5.88 ft or 1.792 m), from rating table extended above 300 ft³/s (8.5 m³/s) on basis of step-backwater method; minimum daily, 4.7 ft³/s (0.13 m³/s) Feb. 8, 1973.

REMARKS.--Records good except those for winter period, which are fair. Diversions for irrigation of about 6,000 acres (24.3 km²) above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.3	13	14	9.0	8.0	7.6	25	77	143	263	95	30
2	7.6	14	14	9.0	8.0	6.8	25	75	162	260	95	28
3	7.3	15	14	9.0	8.0	6.8	23	87	162	254	167	24
4	7.3	15	14	9.0	8.0	6.8	25	85	162	233	107	23
5	7.0	15	14	8.0	8.0	6.8	34	87	170	218	93	21
6	7.0	15	10	7.0	8.0	6.3	44	85	155	200	83	20
7	7.6	15	11	6.0	7.0	6.8	66	83	158	180	83	19
8	8.1	14	11	5.5	4.7	7.8	50	87	170	168	77	19
9	8.1	15	11	5.0	5.2	8.1	50	87	198	178	72	20
10	7.8	14	9.0	5.0	6.0	8.1	54	91	254	195	70	48
11	7.8	14	9.0	6.0	7.0	7.8	68	97	281	162	64	34
12	7.3	18	9.0	7.0	7.0	8.3	83	131	300	160	84	30
13	8.1	15	9.0	8.0	7.0	8.3	99	111	325	195	79	26
14	8.3	15	9.0	9.0	7.0	7.6	129	85	350	192	75	22
15	8.3	16	9.0	9.0	7.5	8.3	131	75	311	180	63	20
16	8.3	14	10	9.0	8.0	9.8	87	74	287	185	57	22
17	8.9	15	11	9.0	8.6	9.2	91	101	260	168	48	20
18	8.9	16	11	9.0	8.1	9.2	105	125	239	204	36	19
19	9.5	14	11	9.0	8.1	9.5	101	175	225	170	36	17
20	11	14	11	8.0	8.3	9.8	75	212	220	139	36	16
21	12	15	11	7.0	8.6	10	68	222	218	139	33	18
22	12	11	11	7.0	8.1	9.8	66	225	228	129	32	18
23	12	11	11	7.0	8.6	11	74	205	230	125	30	16
24	14	11	11	8.0	9.5	14	91	195	236	117	30	16
25	13	11	11	8.0	8.3	14	107	185	242	111	30	50
26	14	14	11	8.0	7.8	14	101	195	248	116	33	30
27	14	14	11	6.0	7.8	15	91	182	263	125	33	28
28	14	14	11	6.0	7.6	15	97	151	287	111	32	26
29	14	12	11	7.0	-----	16	97	133	297	116	32	28
30	13	13	10	8.0	-----	21	89	135	287	166	32	26
31	12	-----	9.0	8.0	-----	23	-----	135	-----	234	30	-----
TOTAL	306.5	422	339.0	235.5	213.8	322.5	2,246	3,993	7,068	5,393	1,867	736
MEAN	9.89	14.1	10.9	7.60	7.64	10.4	74.9	129	236	174	60.2	24.5
MAX	14	18	14	9.0	9.5	23	131	225	350	263	167	50
MIN	7.0	11	9.0	5.0	4.7	6.3	23	74	143	111	30	16
AC-FT	608	837	672	467	424	640	4,450	7,920	14,020	10,700	3,700	1,460

WTR YR 1973 TOTAL 23,142.3 MEAN 63.4 MAX 350 MIN 4.7 AC-FT 45,900

PEAK DISCHARGE (BASE, 2,500 CFS).--No peak above base.

ARKANSAS RIVER BASIN

07124300 LONG CANYON CREEK NEAR MADRID, COLO.

LOCATION.--Lat 37°06'53", long 104°36'17", in SE¼NW¼ sec.6, T.34 S., R.64 W., Las Animas County, on left bank 700 ft (210 m) upstream from private bridge, 1.4 mi (2.3 km) upstream from Oso Canyon, 2.2 mi (3.5 km) southeast of Madrid, and 2.3 mi (3.7 km) upstream from mouth.

DRAINAGE AREA.--100 mi² (260 km²), approximately.

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

GAGE.--Water-stage recorder. Datum of gage is 6,259.09 ft (1,907.771 m) above mean sea level.

EXTREMES.--Current year: Maximum discharge, 1,150 ft³/s (32.6 m³/s) Apr. 14 (gage height, 4.7 ft or 1.43 m, from floodmarks); minimum daily, 0.01 ft³/s (<0.001 m³/s) Dec. 9-16.

Period of record: Maximum discharge, 1,150 ft³/s (32.6 m³/s) Apr. 14, 1973 (gage height, 4.7 ft or 1.43 m, from floodmarks); minimum daily, 0.01 ft³/s (<0.001 m³/s) Dec. 9-16, 1972.

REMARKS.--Records good. No diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.05	.08	.04	.06	.06	.15	.27	42	4.6	1.3	.31	.45
2	.04	.10	.05	.08	.07	.12	.54	34	4.2	1.2	3.0	.45
3	.04	.11	.06	.10	.08	.12	.54	12	3.6	1.2	2.5	.57
4	.04	.10	.04	.12	.09	.12	.27	24	3.6	1.1	2.2	.37
5	.04	.08	.03	.12	.07	.10	.54	23	3.3	1.1	2.0	.37
6	.04	.08	.03	.08	.08	.10	3.5	22	3.0	1.1	2.0	.33
7	.04	.08	.03	.08	.08	.10	1.1	26	3.0	1.0	2.0	.33
8	.04	.08	.02	.08	.06	.10	.43	24	2.8	1.1	1.8	.33
9	.04	.08	.01	.08	.06	.10	.66	20	2.6	1.1	1.5	.30
10	.04	.10	.01	.08	.07	.10	.54	17	2.2	1.1	1.2	.33
11	.04	.11	.01	.08	.10	.10	4.3	14	2.4	1.0	1.5	.33
12	.04	.10	.01	.13	.11	.08	55	17	2.4	1.0	1.8	.33
13	.04	.08	.01	.10	.10	.10	204	17	2.8	1.0	1.5	.33
14	.04	.09	.01	.11	.11	.10	353	17	3.0	1.3	1.3	.30
15	.04	.10	.01	.11	.12	.10	261	17	2.6	1.3	1.2	.30
16	.05	.10	.01	.11	.12	.10	133	16	2.2	1.7	1.0	.30
17	.05	.10	.02	.12	.12	.10	171	13	2.1	2.3	.90	.30
18	.05	.10	.02	.11	.12	.10	204	12	2.0	2.0	.82	.33
19	.05	.10	.02	.12	.12	.08	123	9.5	1.6	5.0	.75	.30
20	.05	.10	.02	.12	.12	.08	59	11	1.6	4.0	.75	.27
21	.05	.08	.03	.12	.12	.08	52	8.8	1.5	3.0	.75	.21
22	.05	.08	.04	.12	.12	.10	70	9.5	1.8	3.5	.70	.19
23	.06	.08	.04	.13	.12	.08	96	8.8	1.6	4.0	.75	.24
24	.06	.08	.04	.10	.11	.08	90	6.9	1.6	3.0	.70	.24
25	.06	.07	.05	.11	.11	.08	156	6.4	1.5	3.0	.70	.24
26	.06	.07	.05	.11	.11	.12	98	5.9	1.3	3.0	.70	.24
27	.06	.06	.05	.12	.11	.12	55	5.4	1.3	2.0	.70	.24
28	.07	.06	.05	.12	.15	.10	56	4.6	1.3	2.0	.82	.27
29	.08	.06	.06	.10	-----	.10	56	4.6	2.0	2.0	.82	.27
30	.08	.04	.06	.10	-----	.10	49	4.6	1.4	2.3	.70	.27
31	.08	-----	.06	.08	-----	.18	-----	5.4	-----	25	.51	-----
TOTAL	1.57	2.55	.99	3.20	2.81	3.19	2,353.69	458.4	70.9	84.7	68.57	9.13
MEAN	.051	.085	.032	.10	.10	.10	78.5	14.8	2.36	2.73	2.21	.30
MAX	.08	.11	.06	.13	.15	.18	353	42	4.6	25	31	.45
MIN	.04	.04	.01	.06	.06	.08	.27	4.6	1.3	1.0	.51	.19
AC-FT	3.1	5.1	2.0	6.3	5.6	6.3	4,670	909	141	168	136	18

WTR YR 1973 TOTAL 3,059,70 MEAN 8.38 MAX 353 MIN .01 AC-FT 6,070

PEAK DISCHARGE (BASE, 50 CFS).--Apr. 14 (1830) 1,150 cfs (4.7 ft); Apr. 25 (1930) 201 cfs (3.17 ft).

07124500 PURGATOIRE RIVER AT TRINIDAD, COLO.

LOCATION.--Lat 37°10'15", long 104°30'31", in SW¼SE¼ sec.13, T.33 S., R.64 W., Las Animas County, on left bank 90 ft (27 m) downstream from railroad bridge and 680 ft (210 m) downstream from Animas Street Bridge in Trinidad.

DRAINAGE AREA.--795 mi² (2,059 km²).

PERIOD OF RECORD.--October 1895 to September 1899, August to December 1905, November 1906 to March 1907, October 1907 to November 1908, May to August 1909 (gage heights and discharge measurements only), September 1909 to November 1912, October 1915 to September 1960, October 1961 to current year. Monthly discharge only for some periods, published in WSP 1311. Prior to October 1915, published as "Purgatory River."

GAGE.--Water-stage recorder. Datum of gage is 5,979.76 ft (1,822.631 m) above mean sea level. See WSP 1711 or 1731 for history of changes prior to Dec. 11, 1950. Dec. 11, 1950, to Sept. 30, 1960, water-stage recorder at site 180 ft (55 m) upstream at datum 2.00 ft (0.610 m) higher. Since May 30, 1955, supplemental nonrecording gage at site 90 ft (27 m) upstream on downstream side of railroad bridge; at datum 3.00 ft (0.914 m) lower prior to Oct. 1, 1962, and at present datum thereafter.

AVERAGE DISCHARGE.--65 years (1895-99, 1907-8, 1909-12, 1915-60, 1961-73), 85.5 ft³/s (2.421 m³/s), 61,940 acre-ft/yr (76.4 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 810 ft³/s (22.9 m³/s) Apr. 15 (gage height, 3.48 ft or 1.061 m), from rating curve extended above 230 ft³/s (6.5 m³/s); minimum daily, 5.0 ft³/s (0.14 m³/s) Oct. 8.

Period of record: Maximum discharge, 28,000 ft³/s (793 m³/s) May 19, 1955 (gage height, 14.35 ft or 4.374 m, site and datum then in use), from rating curve extended above 2,800 ft³/s (79 m³/s) on basis of indirect measurements of peak flow above and below station; no flow for several days during summer of 1896, June 11, 1950, Sept. 20, 25, 28, 29, Oct. 3-5, 7, 8, 1956.

Maximum discharge since at least 1859, 45,400 ft³/s (1,290 m³/s) Sept. 30, 1904 (gage height, 16.6 ft or 5.06 m, at site 680 ft or 210 m upstream), by slope-area measurement of peak flow.

REMARKS.--Records good except those for winter period, which are fair. Diversions above station for irrigation of about 6,500 acres (26.3 km²).

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

REVISIONS (WATER YEARS).--WSP 1117: Drainage area. WSP 1311: 1935(M). WSP 1731: 1925(M), 1942(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.2	19	20	19	18	10	30	195	144	325	198	25
2	6.0	24	21	18	17	11	36	162	154	335	141	25
3	6.0	20	21	17	17	10	30	134	165	330	116	24
4	5.8	20	21	16	17	11	28	152	169	310	134	20
5	6.5	18	16	15	18	10	33	149	188	284	110	20
6	6.2	18	11	13	16	8.8	55	162	165	242	103	18
7	6.2	17	13	11	15	8.2	67	209	172	209	96	18
8	5.0	16	14	10	12	11	60	165	195	182	88	18
9	5.8	18	14	9.0	16	12	48	157	216	178	80	18
10	6.0	17	13	8.0	17	11	47	162	250	195	76	45
11	5.2	16	14	9.0	18	10	76	220	306	185	69	35
12	6.0	17	14	11	18	11	199	266	360	157	64	30
13	7.3	16	15	14	13	12	286	262	420	223	59	22
14	6.5	16	15	17	13	9.1	536	250	432	262	52	20
15	6.5	18	14	21	14	10	702	216	432	238	46	18
16	6.8	18	15	18	13	10	392	142	420	270	41	19
17	5.5	17	16	21	16	13	306	198	370	209	37	20
18	5.2	22	17	21	12	13	345	226	325	223	31	19
19	6.5	18	17	18	12	16	279	279	288	288	31	18
20	6.8	13	17	13	10	21	154	325	279	202	32	16
21	7.3	14	18	16	11	21	132	335	262	178	26	14
22	8.2	14	19	16	12	21	127	355	258	175	25	17
23	8.2	18	19	16	11	21	154	315	262	169	25	18
24	8.2	18	20	18	12	22	188	270	270	157	24	14
25	9.1	18	21	18	14	22	279	250	284	149	25	14
26	9.4	22	22	18	12	22	284	254	292	139	28	43
27	10	21	18	18	12	22	188	250	306	141	27	36
28	10	15	24	18	11	22	188	216	320	132	26	28
29	10	17	22	19	-----	25	212	172	320	125	35	25
30	9.7	18	19	22	-----	30	212	162	320	139	26	23
31	13	-----	20	18	-----	35	-----	157	-----	185	27	-----
TOTAL	225.1	533	540	496.0	397	491.1	5,675	6,822	8,344	6,536	1,900	680
MEAN	7.26	17.8	17.4	16.0	14.2	15.8	189	220	278	211	61.3	22.7
MAX	13	24	24	22	18	35	702	355	432	335	198	45
MIN	5.0	13	11	8.0	10	8.2	26	132	144	125	24	14
AC-FT	446	1,060	1,070	984	787	974	11,260	13,530	16,550	12,960	3,770	1,350

CAL YR 1972 TOTAL 7,659.5 MEAN 20.9 MAX 253 MIN 5.0 AC-FT 15,190
 WTR YR 1973 TOTAL 32,659.2 MEAN 89.4 MAX 702 MIN 5.0 AC-FT 64,740

ARKANSAS RIVER BASIN

07126100 LUNING ARROYO NEAR MODEL, COLO.

LOCATION.--Lat 37°18'16", long 104°00'54", in sec.33, T.31 S., R.59 W., Las Animas County, on right bank 600 ft (180 m) downstream from ford, 6 mi (10 km) upstream from mouth, 13.5 mi (21.7 km) east of Model, and 29 mi (47 km) northeast of Trinidad.

DRAINAGE AREA.--86 mi² (223 km²).

PERIOD OF RECORD.--July 1966 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5,150 ft (1,570 m) from topographic map.

AVERAGE DISCHARGE.--7 years, 1.36 ft³/s (0.0385 m³/s), 985 acre-ft/yr (1.21 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 20 ft³/s (0.57 m³/s) July 20 (gage height, 2.23 ft or 0.680 m), from rating curve extended as explained below; no flow most of year.

Period of record: Maximum discharge, 9,400 ft³/s (2.66 m³/s) Aug. 9, 1968 (gage height, 12.46 ft or 3.798 m), from rating curve extended above 17 ft³/s (0.48 m³/s) on basis of slope-area measurements at gage heights 8.78 and 11.39 ft (2.676 and 3.472 m); no flow for many days each year.

REMARKS.--Records fair.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1						0	.86	0		0	.40	0
2						0	.90	0		0	.10	0
3						0	1.0	0		0	0	0
4						0	.66	0		0	0	0
5						0	.54	0		0	0	0
6						0	.29	0		0	0	0
7						0	.26	0		0	0	0
8						0	.35	0		0	0	0
9						0	.29	0		0	0	0
10						0	.14	0		0	0	0
11						0	.04	0		0	0	0
12						0	.29	0		0	0	0
13						0	.41	0		0	0	0
14						0	.26	.02		0	0	0
15						0	.14	.19		0	0	0
16						0	0	.19		0	0	0
17						0	0	.17		0	0	0
18						0	0	.16		0	0	0
19						0	0	.35		0	0	0
20						0	0	.26		2.1	0	0
21						0	0	.38		.30	0	0
22						0	0	.44		0	0	0
23						0	0	.41		0	0	0
24						0	0	.44		0	0	0
25						.25	0	.38		0	0	0
26						.50	.22	.12		0	0	0
27						.35	.09	.09		0	0	0
28						.03	0	.16		0	0	.05
29					-----	0	0	.05		.10	0	0
30					-----	.26	0	0		.40	0	0
31		-----			-----	.47	-----	0	-----	1.8	0	-----
TOTAL	0	0	0	0	0	1.86	6.74	3.81	0	4.70	.50	.05
MEAN	0	0	0	0	0	.060	.22	.12	0	.15	.016	.002
MAX	0	0	0	0	0	.50	1.0	.44	0	2.1	.40	.05
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	0	0	0	3.7	13	7.6	0	9.3	1.0	.10

CAL YR 1972 TOTAL 165.95 MEAN .45 MAX 45 MIN 0 AC-FT 329
WTR YR 1973 TOTAL 17.66 MEAN .048 MAX 2.1 MIN 0 AC-FT 35

PEAK DISCHARGE (BASE, 500 CFS).--No peak above base.

NOTE.--No gage-height record July 21 to Aug. 21.

ARKANSAS RIVER BASIN

105

07126200 VAN BREMER ARROYO NEAR MODEL, COLO.

LOCATION.--Lat 37°20'45", long 103°57'27", in sec.13, T.31 S., R.59 W., Las Animas County, on right bank 3 mi (5 km) upstream from mouth, 16 mi (26 km) east of Model, and 33 mi (53 km) northeast of Trinidad.

DRAINAGE AREA.--168 mi² (435 km²).

PERIOD OF RECORD.--July 1966 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 4,960 ft (1,512 m) from topographic map.

AVERAGE DISCHARGE.--7 years, 2.05 ft³/s (0.0581 m³/s), 1,490 acre-ft/yr (1.84 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,660 ft³/s (75.3 m³/s) July 30 (gage height, 5.70 ft or 1.737 m), from rating curve extended above 65 ft³/s (1.8 m³/s) on basis of slope-area measurement at gage height 9.4 ft (2.87 m); minimum daily, 0.04 ft³/s (0.001 m³/s) July 8.
Period of record: Maximum discharge, 6,240 ft³/s (177 m³/s) May 26, 1967 (gage height, 9.4 ft or 2.87 m, from floodmarks), from rating curve extended above 65 ft³/s (1.8 m³/s) on basis of slope-area measurement of peak flow; no flow June 7-13, 1968.

REMARKS.--Records good.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.06	.20	.28	.28	.47	.20	1.3	.60	.20	.10	2.2	.28
2	.06	.20	.28	.28	.47	.20	1.5	.60	.20	.10	.60	.28
3	.06	.28	.28	.28	.37	.20	1.3	.47	.10	.10	.20	.28
4	.10	.28	.28	.37	.28	.20	1.1	.37	.06	.10	.15	.28
5	.15	.28	.28	.37	.28	.20	.96	.37	.10	.10	.10	.28
6	.15	.28	.28	.37	.28	.28	.78	.37	.10	.10	.06	.28
7	.15	.28	.28	.37	.28	.28	.78	.37	.10	.06	.06	.28
8	.10	.28	.28	.37	.28	.28	.78	.37	.10	.04	.06	.28
9	.10	.47	.28	.37	.28	.28	.78	.37	.10	.06	.06	.28
10	.10	.47	.28	.37	.28	.28	.78	.37	.10	.15	.06	.28
11	.10	.47	.28	.37	.28	.28	.78	.37	.10	.10	.06	.28
12	.15	.47	.28	.37	.28	.20	.60	.37	.10	.10	.06	.28
13	.15	.47	.20	.47	.28	.28	.60	.37	.10	.15	.06	.28
14	.15	.47	.20	.47	.28	.28	1.3	.37	.10	1.1	.06	.28
15	.15	.37	.15	.60	.28	.28	1.5	.37	.06	.15	.06	.28
16	.10	.37	.15	.47	.28	.28	.96	.37	.06	.10	.06	.28
17	.10	.37	.15	.47	.28	.28	.60	.28	.06	.15	.06	.28
18	.15	.37	.20	.47	.20	.28	.47	.28	.10	.28	.06	.37
19	.15	.37	.20	.47	.20	.28	.37	.60	.10	.47	.10	.37
20	.15	.37	.28	.47	.20	.28	.37	.96	.10	.96	.10	.28
21	.10	.37	.20	.47	.20	.28	.37	.37	.10	2.6	.10	.20
22	.15	.37	.20	.47	.20	.28	.37	.37	.10	2.2	.10	.15
23	.20	.37	.20	.47	.20	.47	.37	.37	.10	.60	.20	.60
24	.20	.37	.28	.47	.20	1.3	.37	.28	.10	.20	.20	.20
25	.20	.37	.28	.47	.20	.96	.78	.28	.10	.15	.20	.10
26	.15	.28	.28	.47	.20	.78	.60	.28	.10	.15	.20	20
27	.15	.28	.28	.96	.20	.60	.47	.20	.10	.15	.20	50
28	.20	.28	.37	.47	.20	.60	.37	.20	.20	.15	.20	5.0
29	.20	.28	.37	.37	-----	.60	.37	.20	.20	.15	.20	1.5
30	.20	.28	.37	.37	-----	.60	.37	.20	.15	232	.20	1.0
31	.15	-----	.28	.37	-----	.96	-----	.20	-----	34	.20	-----
TOTAL	4.28	10.37	8.00	13.42	7.43	12.55	22.05	11.55	3.29	276.82	6.23	84.53
MEAN	.14	.35	.26	.43	.27	.40	.74	.37	.11	8.93	.20	2.82
MAX	.20	.47	.37	.96	.47	1.3	1.5	.96	.20	232	2.2	50
MIN	.06	.20	.15	.28	.20	.20	.37	.20	.06	.04	.06	.10
AC-FT	8.5	21	16	27	15	25	44	23	6.5	549	12	168

CAL YR 1972 TOTAL 593.32 MEAN 1.62 MAX 164 MIN .06 AC-FT 1,180

WTR YR 1973 TOTAL 460.52 MEAN 1.26 MAX 232 MIN .04 AC-FT 913

PEAK DISCHARGE (BASE, 450 CFS).--July 30 (2030) 2,660 cfs (5.70 ft); Sept. 27 (time unknown) about 500 cfs.

ARKANSAS RIVER BASIN

07126300 PURGATOIRE RIVER NEAR THATCHER, COLO.

LOCATION.--Lat 37°21'30", long 103°53'44", in sec.10, T.31 S., R.58 W., Las Animas County, 250 ft (76 m) downstream from county road bridge at gas line crossing, 1.2 mi (1.9 km) downstream from Van Bremer Arroyo, and 18 mi (29 km) southeast of Thatcher.

DRAINAGE AREA.--1,935 mi² (5,012 km²).

PERIOD OF RECORD.--July 1966 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 4,790 ft (1,460 m) from topographic map.

AVERAGE DISCHARGE.--7 years, 48.6 ft³/s (1.376 m³/s), 35,210 acre-ft/yr (43.4 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,920 ft³/s (82.7 m³/s) Apr. 14 (gage height, 7.26 ft or 2.213 m); no flow many days.

Period of record: Maximum discharge, 15,100 ft³/s (428 m³/s) June 17, 1967 (gage height, 12.35 ft or 3.764 m), from rating curve extended above 2,100 ft³/s (59 m³/s); no flow at times most years.

Floods of July 22, 1954, and May 19, 1955, reached stages of 26.7 and 25.2 ft (8.14 and 7.68 m), respectively (from floodmarks). Flood of June 8, 1965, reached a stage of 23.5 ft (7.16 m), from floodmarks, discharge, 47,700 ft³/s or 1,350 m³/s).

REMARKS.--Records good except those for winter period, which are fair. Diversions above station for irrigation of about 30,000 acres (121 km²).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.60	2.7	15	10	30	5.2	33	326	39	34	124	0
2	.50	3.1	15	9.5	22	5.2	39	250	31	34	81	0
3	.40	3.6	15	9.5	20	5.5	43	232	27	41	51	0
4	.34	4.2	15	9.5	24	4.9	37	224	22	34	58	0
5	.10	4.6	15	9.5	23	6.2	32	269	22	71	61	.70
6	.10	5.3	13	9.0	22	7.9	31	180	24	46	34	.70
7	.10	6.0	11	8.0	22	7.9	52	242	19	29	35	.20
8	.10	7.0	10	7.5	21	7.6	54	371	18	22	39	0
9	.10	8.2	9.0	7.0	17	7.3	48	232	14	53	34	0
10	.10	9.7	8.0	8.0	20	7.0	42	228	12	25	50	0
11	0	10	7.0	9.0	23	6.4	39	229	9.7	21	31	.40
12	0	10	7.0	12	19	6.4	55	222	30	22	22	1.0
13	0	12	6.6	14	16	6.1	299	164	74	19	18	.70
14	0	11	7.0	14	14	6.7	1,610	184	112	409	14	1.0
15	0	12	8.0	16	12	6.4	1,720	146	137	94	14	1.0
16	0	12	10	17	10	6.1	410	113	106	56	14	1.5
17	0	9.4	12	18	10	6.1	268	102	52	54	7.6	1.1
18	0	10	12	19	12	5.5	382	86	53	51	4.0	.70
19	.30	12	13	20	13	4.6	441	95	52	117	4.0	.30
20	.40	14	14	20	13	4.0	315	104	45	337	3.8	0
21	.30	16	14	20	13	7.0	208	114	39	67	1.9	1.5
22	.30	10	17	20	9.7	7.0	168	123	33	34	1.3	1.6
23	.30	8.0	19	17	10	7.9	196	220	50	34	.90	.90
24	.50	9.0	20	14	10	22	259	125	63	36	.40	.60
25	.60	11	18	17	10	26	374	87	66	34	0	.10
26	.60	12	17	20	12	27	588	66	68	28	0	68
27	.50	15	16	20	12	27	369	70	62	29	0	204
28	1.2	19	18	20	8.2	29	337	63	58	40	0	42
29	1.6	13	15	18	-----	31	309	51	133	46	0	25
30	2.1	13	11	20	-----	36	310	44	55	205	0	22
31	2.4	-----	10	27	-----	36	-----	38	-----	270	0	-----
TOTAL	13.54	292.8	397.6	459.5	447.9	378.9	9,068	5,000	1,525.7	2,392	703.90	375.00
MEAN	.44	9.76	12.8	14.8	16.0	12.2	302	161	50.9	77.2	22.7	12.5
MAX	2.4	19	20	27	30	36	1,720	371	137	409	124	204
MIN	0	2.7	6.6	7.0	8.2	4.0	31	38	9.7	19	0	0
AC-FT	27	581	789	911	888	752	17,990	9,920	3,030	4,740	1,400	744

CAL YR 1972 TOTAL 6,349.94 MEAN 17.3 MAX 1,290 MIN 0 AC-FT 12,600

WTR YR 1973 TOTAL 21,054.84 MEAN 57.7 MAX 1,720 MIN 0 AC-FT 41,760

PEAK DISCHARGE (BASE, 2,700 CFS).--Apr. 14 (2400) 2,920 cfs (7.26 ft); July 20 (2000) 2,910 cfs (7.25 ft).

07126500 PURGATOIRE RIVER AT NINEMILE DAM, NEAR HIGBEE, COLO.

LOCATION.--Lat 37°44'06", long 103°29'45", in NW¼ sec. 7, T.27 S., R.54 W., Otero County, on left bank 850 ft (260 m) upstream from Ninemile Dam, 4 mi (6 km) southwest of Higbee, and 5.5 mi (8.8 km) upstream from Smith Canyon.

DRAINAGE AREA.--2,900 mi² (7,511 km²).

PERIOD OF RECORD.--October 1924 to current year. Monthly discharge only for some periods, published in WSP 1311.

GAGE.--Water-stage recorder. Datum of gage is 4,240.59 ft (1,292.532 m) above mean sea level. See WSP 1711 or 1731 for history of changes prior to Dec. 6, 1956.

AVERAGE DISCHARGE.--49 years, 99.4 ft³/s (2.815 m³/s), 72,020 acre-ft/yr (88.8 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 7,160 ft³/s (203 m³/s) July 31 (gage height, 6.66 ft or 2.030 m); maximum gage height, 7.11 ft (2.167 m) July 21; no flow many days.
Period of record: Maximum discharge, 105,000 ft³/s or 2,970 m³/s (estimated) June 18, 1965 (gage height, 19.6 ft or 5.97 m, from floodmarks); no flow at times in most years.

REMARKS.--Records poor. Diversions for irrigation of about 32,000 acres (130 km²) above station.

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

REVISIONS (WATER YEARS).--WSP 1311: 1934(M), 1936(M), 1941-42(M), 1948-49(M). WSP 1731: 1929(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.6	0	16	14	16	7.2	70	380	62	108	380	0
2	1.4	.74	14	14	13	7.4	74	406	54	88	194	0
3	.82	3.0	10	14	13	7.2	60	250	47	30	129	0
4	.61	2.1	11	14	18	6.7	64	260	41	29	80	0
5	.27	1.2	10	13	18	5.8	60	240	37	32	55	0
6	0	2.1	9.0	13	14	5.6	55	308	31	29	78	0
7	0	6.2	10	13	15	5.4	57	250	26	46	46	0
8	0	9.2	10	12	14	5.6	76	412	23	47	38	0
9	0	13	10	12	16	7.2	78	419	23	22	37	0
10	0	13	10	12	16	7.7	57	278	23	32	38	0
11	0	11	11	13	18	7.4	60	240	23	33	36	0
12	0	10	11	13	15	7.0	55	296	111	19	44	0
13	0	16	11	13	14	7.9	74	308	55	13	30	0
14	0	12	12	14	15	7.7	450	220	40	18	22	0
15	0	11	12	14	16	6.5	2,080	210	47	426	18	0
16	0	11	12	14	13	6.2	730	198	82	160	14	0
17	0	10	12	13	12	6.0	412	178	105	92	10	0
18	0	9.8	13	13	11	5.8	302	138	80	82	8.0	0
19	0	10	13	11	10	7.7	438	123	54	76	6.8	0
20	0	9.8	13	12	9.2	7.2	501	123	52	226	4.7	0
21	0	9.5	14	11	9.5	6.2	438	142	50	2,200	2.3	0
22	0	8.7	14	9.5	9.8	7.4	350	166	46	226	1.3	0
23	0	10	14	13	8.7	8.0	284	206	41	98	.50	0
24	0	11	14	10	8.7	43	296	260	36	64	0	0
25	0	10	14	12	7.2	46	393	163	41	58	0	0
26	0	8.7	14	14	7.0	41	646	135	64	120	0	40
27	0	11	14	7.2	7.0	44	766	120	72	58	0	338
28	0	9.0	14	7.5	7.0	54	477	95	78	38	0	206
29	0	14	14	8.0	-----	47	368	85	80	83	0	62
30	0	16	14	8.8	-----	55	368	78	98	708	0	47
31	0	-----	14	14	-----	66	-----	70	-----	2,460	0	-----
TOTAL	4.70	269.04	384.0	376.0	351.1	552.8	10,139	6,757	1,622	7,721	1,272.60	713
MEAN	.15	8.97	12.4	12.1	12.5	17.8	338	218	54.1	249	41.1	23.8
MAX	1.6	16	16	14	18	66	2,080	419	111	2,460	380	338
MIN	0	0	9.0	7.2	7.0	5.4	55	70	23	13	0	0
AC-FT	9.3	534	762	746	696	1,100	20,110	13,400	3,220	15,310	2,520	1,410

CAL YR 1972 TOTAL 19,138.84 MEAN 52.3 MAX 4,150 MIN 0 AC-FT 37,960

WTR YR 1973 TOTAL 30,162.24 MEAN 82.6 MAX 2,460 MIN 0 AC-FT 59,830

PEAK DISCHARGE (BASE, 3,000 CFS).--July 21 (0900) 6,820 cfs (7.11 ft); July 31 (0100) 7,160 cfs (6.66 ft).

NOTE.--No gage-height record Nov. 2 to Mar. 21.

ARKANSAS RIVER BASIN

07128500 PURGATOIRE RIVER NEAR LAS ANIMAS, COLO.

LOCATION.--Lat 38°02'02", long 103°12'00", in NE¼SW¼ sec.23, T.23 S., R.52 W., Bent County, on right bank at downstream side of bridge on State Highway 101, 2.3 mi (3.7 km) southeast of courthouse in Las Animas and 4.5 mi (7.2 km) upstream from mouth.

DRAINAGE AREA.--3,503 mi² (9,073 km²).

PERIOD OF RECORD.--May to September 1889, July to October 1909 (gage heights and discharge measurements only), January 1922 to September 1931, July 1948 to current year. Monthly discharge only for some periods, published in WSP 1311. Published as Purgatoire Creek at Las Animas in 1889 and as Purgatory River near Las Animas in 1909.

GAGE.--Water-stage recorder. Datum of gage is 3,874.94 ft (1,181.082 m) above mean sea level. See WSP 1731 for history of changes prior to Oct. 1, 1955. Oct. 1, 1955, to July 11, 1966, at datum 3.00 ft (0.914 m) higher. Supplementary water-stage recorder at site 1.6 mi (2.6 km) downstream at different datum July 12 to Nov. 17, 1966.

AVERAGE DISCHARGE.--34 years (1922-31, 1948-73), 125 ft³/s (3.540 m³/s), 90,560 acre-ft/yr (112 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 3,720 ft³/s (105 m³/s) July 21 (gage height, 7.23 ft or 2.204 m); minimum daily, 0.90 ft³/s (0.025 m³/s) Aug. 21, Sept. 4.
Period of record: Maximum discharge, 70,000 ft³/s (1,980 m³/s) May 20, 1955 (gage height, 20.00 ft or 6.096 m, present datum), from rating curve extended above 38,000 ft³/s (1,100 m³/s); no flow at times in 1924-25, 1927, 1949.
Greatest flood since at least 1860 occurred Oct. 1, 1904.

REMARKS.--Records good. Diversions for irrigation of about 36,000 acres (146 km²) above station.

REVISIONS (WATER YEARS).--WSP 1241: 1927(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.4	31	22	28	23	9.4	99	409	78	16	750	2.2
2	2.4	4.8	29	28	22	10	99	426	73	32	328	1.5
3	2.4	20	20	23	23	14	110	380	64	12	168	1.5
4	2.4	22	14	18	19	14	90	280	67	7.6	86	.90
5	2.4	4.8	19	15	27	19	88	252	60	24	63	2.2
6	2.8	13	13	15	20	17	82	318	52	6.8	38	1.5
7	2.8	10	10	15	27	15	90	325	44	4.4	35	1.5
8	2.8	11	8.0	15	27	22	69	230	26	4.4	22	1.5
9	2.4	15	8.0	12	19	27	80	450	15	4.4	15	1.5
10	2.4	22	8.0	15	21	26	115	289	5.2	6.0	12	1.5
11	2.0	16	8.0	15	29	24	88	252	4.4	3.6	8.4	2.8
12	2.4	14	8.0	15	21	21	84	252	5.2	2.8	9.2	2.2
13	2.8	10	8.0	19	27	27	74	268	14	3.6	6.8	2.2
14	2.8	10	8.0	19	32	12	84	245	10	6.8	8.4	2.2
15	2.8	19	9.0	19	30	15	1,330	180	4.4	60	8.4	2.2
16	2.8	21	9.0	24	30	12	1,380	205	40	143	6.8	2.2
17	2.4	21	10	31	31	10	593	159	95	44	4.4	2.2
18	2.8	16	9.2	37	28	5.2	340	116	75	17	3.6	2.8
19	3.2	17	10	30	23	12	418	80	30	18	2.8	2.2
20	3.6	18	10	28	10	31	543	75	12	177	2.2	2.2
21	4.0	17	15	19	6.4	27	390	57	6.8	1,430	.90	2.2
22	3.6	15	26	16	6.4	31	283	69	7.6	909	2.8	2.2
23	3.6	14	23	21	4.0	32	222	235	7.6	295	2.2	2.2
24	3.6	14	28	14	3.6	38	205	117	6.8	144	2.2	2.2
25	7.0	18	29	17	3.6	66	291	164	5.2	144	2.2	2.2
26	4.0	28	28	20	3.2	90	462	118	5.2	95	2.8	44
27	3.6	30	28	17	3.2	69	747	112	5.2	95	3.6	167
28	3.6	20	26	20	4.0	88	488	116	8.4	46	4.4	338
29	3.6	19	34	22	-----	97	408	88	13	50	3.6	162
30	11	19	36	17	-----	108	342	88	12	362	3.6	90
31	10	-----	42	23	-----	70	-----	84	-----	1,420	3.6	-----
TOTAL	110.4	517.6	556.8	627	523.4	1,058.6	9,694	6,439	852.0	5,583.4	1,609.90	851.00
MEAN	3.56	17.3	18.0	20.2	18.7	34.1	323	208	28.4	180	51.9	28.4
MAX	11	31	42	37	32	108	1,380	450	95	1,430	750	338
MIN	2.0	8.8	8.0	12	3.2	5.2	69	57	4.4	2.8	.90	.90
AC-FT	219	1,030	1,100	1,240	1,040	2,100	19,230	12,770	1,690	11,070	3,190	1,690

CAL YR 1972 TOTAL 21,465.60 MEAN 58.6 MAX 4,740 MIN .40 AC-FT 42,580
WTR YR 1973 TOTAL 28,423.10 MEAN 77.9 MAX 1,430 MIN .90 AC-FT 56,380

PEAK DISCHARGE (BASE, 6,000 CFS).--No peak above base.

07130000 JOHN MARTIN RESERVOIR AT CADDOA, COLO.

LOCATION.--Lat 38°04'05", long 102°56'13", in NE¼NW¼ sec.8, T.23 S., R.49 W., Bent County, at dam on Arkansas River at Caddoa, 3.2 mi (5.1 km) southeast of Hasty and 58 mi (93 km) upstream from Colorado-Kansas State line.

DRAINAGE AREA.--18,915 mi² (48,990 km²), of which 785 mi² (2,033 km²) is probably noncontributing.

PERIOD OF RECORD.--January 1943 to current year. Monthend contents only prior to November 1943, published in WSP 1311.

GAGE.--Water-stage recorder for elevations above about 3,785 ft (1,153.7 m) and nonrecording gage read once daily for those below. Datum of gage is 3,760.00 ft (1,146.048 m) above mean sea level (Corps of Engineers bench mark); gage readings have been reduced to elevations above mean sea level.

EXTREMES (AT 2400).--Current year: Maximum contents, 55,670 acre-ft (68.6 hm³) May 14, 15 (elevation, 3,809.95 ft or 1,161.273 m); no contents Oct. 1-31, June 25 to July 20, July 26-30, Aug. 1 to Sept. 30. Period of record: Maximum contents, 429,600 acre-ft (530 hm³) Aug. 25, 1965 (elevation, 3,856.16 ft or 1,175.358 m); no contents at times most years.

REMARKS.--Reservoir is formed by concrete and earthfill dam. Storage began while dam was under construction prior to 1943, and record of contents began Jan. 1, 1943. Capacity (based on 1972 resurvey; new capacity table put into use Nov. 1, 1972), 621,300 acre-ft (766 hm³) at elevation 3,870.00 ft or 1,179.576 m (top of spillway gates), of which 351,000 acre-ft or 433 hm³ (between elevations 3,764.20 ft or 1,147.328 m, elevation of no contents, and 3,851.00 ft or 1,173.785 m) is for conservation and 270,300 acre-ft or 333 hm³ (between elevations 3,851.00 ft or 1,173.785 m and 3,870.00 ft or 1,179.576 m) is reserved for flood control. No dead storage. Figures given herein represent total contents.

COOPERATION.--Record of contents furnished by Corps of Engineers.

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	ELEVATION (FEET)	CONTENTS (ACRE-Feet)	CHANGE IN CONTENTS (ACRE-Feet)
Sept. 30.....	--	0	--
Oct. 31.....	--	0	0
Nov. 30.....	3,789.57	4,850	+4,850
Dec. 31.....	3,792.45	8,820	+3,970
CAL YR 1972	--	--	b-3,460
Jan. 31.....	3,795.42	14,100	+5,280
Feb. 28.....	3,797.48	18,360	+4,260
Mar. 31.....	3,799.96	24,090	+5,730
Apr. 30.....	3,807.60	47,280	+23,190
May 31.....	3,802.95	32,290	-14,990
June 30.....	--	0	-32,290
July 31.....	3,786.00	1,820	+1,820
Aug. 31.....	--	0	-1,820
Sept. 30.....	--	--0	0
WTR YR 1973	--	--	0

07130500 ARKANSAS RIVER BELOW JOHN MARTIN RESERVOIR, COLO.

LOCATION.--Lat 38°05'02", long 102°55'10", in NW¼NW¼ sec.4, T.23 S., R.49 W., Bent County, on left bank 1.1 mi (1.8 km) upstream from Caddoa Creek, 1.7 mi (2.7 km) downstream from John Martin Dam, and 2.9 mi (4.7 km) southeast of Hasty.

DRAINAGE AREA.--18,917 mi² (48,995 km²), of which 785 mi² (2,033 km²) is probably noncontributing.

PERIOD OF RECORD.--March 1938 to current year. Published as "at Caddoa" prior to October 1947.

GAGE.--Water-stage recorder. Datum of gage is 3,737.40 ft (1,139.160 m) above mean sea level (Corps of Engineers bench mark). Prior to Feb. 22, 1940, at site 3 mi (5 km) upstream at datum 22.83 ft (6.959 m) higher. Feb. 22, 1940, to Feb. 4, 1943, at site 700 ft (210 m) upstream at datum 3.64 ft (1.109 m) higher.

AVERAGE DISCHARGE.--35 years, 321 ft³/s (9.091 m³/s), 232,600 acre-ft/yr (287 hm³/yr), adjusted for storage in John Martin Reservoir.

EXTREMES.--Current year: Maximum discharge, 1,650 ft³/s (46.7 m³/s July 31 (gage height, 3.77 ft or 1,149 m); minimum daily, 1.7 ft³/s (0.048 m³/s) Feb. 3, 10, Mar. 14.

Period of record: Maximum discharge, 40,000 ft³/s (1,130 m³/s) Apr. 24, 1942 (gage height, 10.46 ft or 3.188 m, site and datum then in use), from rating curve extended above 12,000 ft³/s (340 m³/s) on basis of flow-over-dam and critical-depth measurement of peak flow; no flow at times in 1945-47; minimum daily prior to construction of John Martin Reservoir, 5 ft³/s (0.14 m³/s) July 16, 1939.

REMARKS.--Records good. Storage and diversions above station for irrigation of about 438,000 acres (1,770 km²) and for flood control. Flow completely regulated by John Martin Reservoir 1.7 mi (2.7 km) upstream (see sta. 07130000). Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1241: 1942(M). WSP 1341: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31	3.1	2.1	2.0	2.0	2.3	2.8	2.0	828	642	698	42
2	31	3.0	2.1	2.0	1.8	1.8	2.8	1.8	822	630	959	45
3	33	3.0	2.2	2.0	1.7	1.8	3.0	2.0	822	556	903	49
4	33	2.8	2.3	2.0	1.8	1.8	2.6	2.0	780	702	822	81
5	30	2.8	2.0	2.0	1.8	1.8	2.6	2.0	696	573	440	57
6	28	2.8	1.8	2.0	1.8	1.8	2.8	1.8	708	556	460	45
7	31	2.7	2.0	2.0	2.3	1.8	3.0	180	726	642	422	43
8	33	2.7	2.3	2.0	2.3	2.0	3.0	303	720	475	418	43
9	31	2.6	2.3	2.0	1.8	1.8	2.6	310	714	465	391	40
10	33	2.9	2.0	2.0	1.7	1.8	2.6	314	708	518	445	45
11	31	2.9	2.0	2.0	1.8	1.8	2.3	329	762	550	450	43
12	31	2.8	2.0	2.0	2.0	1.8	2.6	348	804	534	485	56
13	33	2.9	2.0	2.6	1.8	1.8	2.3	348	834	556	422	135
14	31	2.6	2.0	2.4	1.8	1.7	2.6	352	834	550	422	117
15	33	2.4	2.0	2.8	2.0	1.8	2.6	352	847	496	365	67
16	31	2.2	2.0	2.8	2.8	2.0	2.3	694	868	606	325	57
17	31	2.3	2.0	3.0	2.6	1.8	2.3	952	868	523	284	106
18	30	2.2	2.0	2.8	2.6	1.8	2.0	973	854	485	208	117
19	31	2.1	1.8	2.0	2.3	2.0	2.0	966	861	485	162	81
20	33	2.2	1.8	2.0	2.3	2.0	2.0	959	896	436	131	56
21	32	2.3	1.8	2.0	2.8	2.0	2.3	994	896	798	108	53
22	31	2.2	1.8	2.0	2.8	2.8	2.3	1,020	924	810	90	46
23	30	2.1	2.0	2.0	2.8	4.0	2.0	1,040	938	816	75	43
24	31	1.9	2.0	2.0	2.6	4.8	2.3	1,060	924	792	63	39
25	32	1.8	2.0	2.0	2.6	3.6	2.6	1,050	726	768	54	33
26	34	2.0	1.8	2.0	2.3	2.3	2.3	1,060	322	732	51	48
27	33	2.5	1.8	2.0	2.3	2.8	2.0	1,060	440	397	49	131
28	33	2.3	2.0	2.0	2.0	2.6	2.0	1,060	470	329	57	567
29	32	2.1	2.0	2.0	-----	2.6	2.0	1,060	460	586	54	369
30	30	2.1	2.0	2.3	-----	3.3	2.3	1,070	702	571	51	215
31	26	-----	2.0	2.3	-----	3.3	-----	924	-----	837	46	-----
TOTAL	973	74.3	61.9	67.4	61.2	71.3	72.9	18,789.6	22,754	18,416	9,910	2,869
MEAN	31.4	2.48	2.00	2.17	2.19	2.30	2.43	606	758	594	320	95.6
MAX	34	3.1	2.3	3.0	2.8	4.8	3.0	1,070	938	837	959	567
MIN	26	1.8	1.8	2.0	1.7	1.7	2.0	1.8	322	329	46	33
AC-FT	1,930	147	123	134	121	141	145	37,270	45,130	36,530	19,660	5,690
CAL YR 1972	TOTAL	56,214.4	MEAN	154	MAX	1,250	MIN	1.8	AC-FT	111,500		
WTR YR 1973	TOTAL	74,120.6	MEAN	203	MAX	1,070	MIN	1.7	AC-FT	147,000		

111

LOCATION.--Lat 38°06'24", long 102°37'04", in SE¼ sec.30, T.22 S., R.46 W., Prowers County, on left bank at downstream side of bridge on U.S. Highways 50 and 287, 1.4 mi (2.3 km) north of courthouse in Lamar.

PERIOD OF RECORD.--May 1913 to September 1955, April 1959 to current year. Monthly discharge only for some periods, published in WSP 1311.

AVERAGE DISCHARGE.--56 years, 213 ft³/s (6.032 m³/s), 154,300 acre-ft/yr (190 hm³/yr).

Period of record: Maximum discharge, 130,000 ft³/s (3,680 m³/s) June 5, 1921 (gage height, 14.55 ft or 4.435 m, present datum), from rating curve extended above 10,000 ft³/s (280 m³/s); maximum gage height, 16.48 ft (5.023 m), present datum (from floodmarks) June 18, 1965; no flow at times in 1913-15, 1953.

REVISIONS (WATER YEARS).--WSP 1341: 1921(M), 1945-46(M), drainage area.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.7	21	20	24	38	21	50	18	391	164	110	31
2	5.7	21	20	24	35	21	56	41	388	162	346	29
3	4.7	21	20	24	34	23	54	25	367	173	361	27
4	4.2	24	17	24	32	23	48	19	377	145	294	35
5	4.7	21	14	24	31	21	50	17	292	168	122	44
6	4.2	22	28	24	31	20	49	16	249	100	37	35
7	3.8	18	25	24	30	20	48	15	274	77	29	34
8	4.7	7.3	20	24	29	20	47	20	266	93	20	36
9	5.7	6.7	15	24	28	20	45	34	264	77	9.2	32
10	5.2	6.7	15	24	27	21	44	30	256	66	9.9	30
11	5.7	5.7	15	25	26	20	43	22	249	75	37	30
12	5.7	5.7	15	26	25	19	44	14	352	35	47	32
13	5.7	6.2	15	28	23	17	54	13	358	44	39	44
14	5.7	3.8	15	30	21	19	62	16	391	57	14	42
15	6.2	12	15	30	19	18	62	6.7	380	42	12	45
16	6.7	26	15	32	18	17	52	24	367	48	15	29
17	7.3	23	15	34	18	19	45	323	391	104	42	27
18	6.2	21	15	35	18	18	42	440	391	24	54	21
19	3.8	21	15	35	16	18	39	461	364	43	48	39
20	5.2	19	15	35	17	17	38	472	384	52	41	35
21	6.2	19	16	35	16	18	42	482	374	32	20	39
22	5.2	20	18	35	16	21	38	520	340	475	16	35
23	5.2	30	20	35	45	27	26	517	355	454	15	42
24	5.2	29	22	35	19	39	19	534	355	402	44	45
25	6.2	27	24	35	19	56	105	520	337	300	32	39
26	6.2	24	26	35	19	39	68	552	135	313	27	25
27	7.3	20	25	36	19	37	39	552	135	300	21	63
28	5.7	16	23	37	21	47	25	584	149	297	22	116
29	6.2	16	23	38	-----	41	15	600	145	16	36	126
30	5.2	16	23	38	-----	48	15	584	168	96	35	29
31	9.8	-----	23	37	-----	52	-----	548	-----	325	35	-----
TOTAL	175.2	529.1	587	946	690	817	1,364	8,019.7	9,244	4,759	1,990.1	1,236
MEAN	5.65	17.6	18.9	30.5	24.6	26.4	45.5	259	308	154	64.2	41.2
MAX	9.8	30	28	38	45	56	105	600	391	475	361	126
MIN	3.8	3.8	14	24	16	17	15	6.7	135	16	9.2	21
AC-FT	348	1,050	1,160	1,880	1,370	1,620	2,710	15,910	18,340	9,440	3,950	2,450
CAL YR 1972	TOTAL	21,401.9	MEAN	58.5	MAX	897	MIN	1.0	AC-FT	42,450		
WTR YR 1973	TOTAL	30,357.1	MEAN	83.2	MAX	600	MIN	3.8	AC-FT	60,210		

LOCATION.--Lat 38°06'51", long 102°29'00", in SW¼SW¼ sec.21, T.22 S., R.45 W., Prowers County, on left bank 15 ft (5 m) upstream from State Highway 196, 950 ft (290 m) upstream from mouth, and 7.5 mi (12.1 km) east of Lamar.

PERIOD OF RECORD.--February 1968 to current year.

AVERAGE DISCHARGE.--5 years, 19.2 ft³/s (0.544 m³/s), 13,910 acre-ft/yr (17.2 hm³/yr).

Period of record: Maximum discharge, 568 ft³/s (16.1 m³/s) May 29, 1971 (gage height, 5.57 ft or 1.698 m), from rating curve extended above 260 ft³/s (7.4 m³/s); minimum daily, 0.16 ft³/s (0.005 m³/s) Aug. 13, 1968.

Flood of Aug. 21, 1965, reached a stage of 9.93 ft (3.027 m) from floodmarks (discharge not determined).

REVISIONS.--WRD Colo. 1971: Drainage area.

DAY	UCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT
1	7.3	20	8.0	10	9.6	7.7	73	61	8.0	6.6	6.5	2.0
2	7.1	20	8.0	11	8.4	10	65	61	7.7	7.2	6.5	1.0
3	6.8	19	8.2	9.0	8.0	11	61	50	7.7	7.2	5.9	1.0
4	6.7	19	8.4	7.5	8.4	11	57	36	9.6	6.0	5.7	1.0
5	6.6	26	8.4	6.1	8.4	11	54	38	11	5.2	7.2	2.0
6	6.5	35	8.4	6.2	7.7	11	54	40	9.4	5.3	7.3	2.0
7	6.1	33	8.0	6.0	8.0	13	54	44	8.4	4.9	7.2	2.0
8	5.9	30	6.3	5.7	10	11	54	58	6.8	4.2	7.3	3.0
9	5.4	16	5.9	5.4	11	9.6	56	81	5.3	4.0	10	2.0
10	5.9	13	7.5	5.8	7.7	9.3	55	201	5.3	3.2	8.1	1.0
11	5.6	12	4.8	6.2	9.6	7.4	54	139	5.3	2.8	6.7	2.0
12	5.9	11	4.0	6.6	9.2	6.9	46	82	4.8	3.0	7.2	3.0
13	7.4	3.9	3.8	8.6	7.7	4.4	45	56	5.0	6.4	5.0	3.0
14	8.0	8.4	4.0	8.5	8.0	7.4	44	51	4.5	18	4.5	3.0
15	8.4	6.8	8.5	9.6	8.0	7.7	42	51	5.0	4.5	3.5	3.0
16	8.5	8.2	9.0	10	7.7	8.2	42	34	4.8	4.5	3.8	4.0
17	7.4	8.5	3.5	11	8.0	8.7	41	18	4.5	4.0	3.2	4.0
18	7.7	7.4	3.0	13	6.5	12	42	16	4.2	5.4	2.2	4.0
19	8.8	9.1	2.5	13	6.2	20	41	16	3.2	4.9	1.2	3.0
20	9.6	9.5	1.0	13	5.3	25	40	15	3.8	5.3	.50	3.0
21	10	8.0	1.2	14	5.3	20	43	14	5.0	6.6	.50	3.0
22	10	8.0	1.2	16	5.6	24	44	13	4.7	11	1.0	3.0
23	9.6	8.0	3.8	14	5.3	29	45	14	4.8	6.5	2.2	3.0
24	10	8.0	5.1	15	5.3	42	45	12	4.7	8.5	2.5	4.0
25	14	8.0	6.6	15	4.8	44	48	12	5.5	8.5	2.5	5.0
26	16	8.0	6.0	15	5.6	42	55	12	4.9	6.7	2.5	8.0
27	17	8.0	18	15	6.8	45	55	11	3.8	6.3	2.8	11
28	16	8.0	16	13	8.0	53	50	9.6	4.2	7.2	1.8	15
29	14	8.0	13	15	-----	56	45	9.6	8.8	7.4	2.0	12
30	17	8.0	10	18	-----	59	46	9.2	6.0	6.2	1.8	11
31	18	-----	9.0	13	-----	46	-----	9.2	-----	6.4	2.0	-----
TOTAL	293.7	395.8	211.1	335.2	210.1	672.3	1,496	1,273.6	176.7	193.9	131.10	135.
MEAN	9.47	13.2	6.81	10.8	7.50	21.7	49.9	41.1	5.89	6.25	4.23	4.5
MAX	18	35	18	18	11	59	73	201	11	18	10	1
MIN	5.6	3.9	1.0	5.4	4.8	4.4	40	9.2	3.2	2.8	.50	1.
AC-FT	583	785	419	665	417	1,330	2,970	2,530	350	385	260	26
CAL YR 1972	TOTAL 4,884.71		MEAN 13.3		MAX 54	MIN .62	AC-FT 9,690					
NTR YR 1973	TOTAL 5,524.50		MEAN 15.1		MAX 201	MIN .50	AC-FT 10,960					

CAL YR 1972	TOTAL 4,884.71	MEAN 13.3	MAX 54	MIN .62	AC-FT 9,690
WTR YR 1973	TOTAL 5,524.50	MEAN 15.1	MAX 201	MIN .50	AC-FT 10,960

ARKANSAS RIVER BASIN

113

07137000 FRONTIER DITCH NEAR COOLIDGE, KANS.

LOCATION.--Lat 38°02'18", long 102°02'19", in NE¼ sec.21, T.23 S., R.43 W., Hamilton County, on left bank 0.3 mi (0.5 km) east of Colorado-Kansas State line, 0.5 mi (0.8 km) downstream from Holly drain diversion, 1.5 mi (2.4 km) west of Coolidge, and 2.3 mi (3.7 km) downstream from diversion from Arkansas River.

PERIOD OF RECORD.--October 1950 to current year.

GAGE.--Water-stage recorders and Parshall flume. Datum of gage is 3,353.14 ft (1,022.037 m) above mean sea level.

EXTREMES.--Period of record: Maximum daily discharge, 70 ft³/s (1.98 m³/s) May 7, 1959; no flow for many days each year.

REMARKS.--Records good. This ditch diverts water from Arkansas River in Colorado for use in Kansas. These records and records for Arkansas River near Coolidge represent total flow of Arkansas River at the Colorado-Kansas State line.

REVISIONS (WATER YEARS).--WSP 1731: 1951.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.1	36						0	42	39	40	47
2	1.1	34						0	38	27	33	40
3	1.1	36						0	39	39	38	41
4	1.2	40						0	40	42	35	38
5	1.2	40						0	49	39	30	.20
6	1.1	34						0	48	37	20	.40
7	1.4	34						0	50	22	9.2	32
8	14	35						0	48	20	12	29
9	32	37						0	27	25	14	29
10	37	36						0	24	19	21	27
11	35	34						0	21	14	33	25
12	29	32						0	27	36	36	26
13	28	19						0	17	51	34	26
14	29	0						0	24	54	34	27
15	28	0						0	25	31	41	29
16	31	0						16	27	27	50	28
17	30	0						19	29	26	50	24
18	32	0						40	28	52	50	28
19	35	0						41	29	52	52	24
20	35	0						41	48	51	47	28
21	36	0						45	49	50	49	28
22	33	0						24	47	35	46	28
23	36	0						23	44	31	58	26
24	35	0						30	43	29	56	36
25	34	0						32	49	40	55	31
26	30	0						32	55	43	48	32
27	29	0						29	30	50	45	36
28	28	0						32	27	45	44	30
29	29	0						34	45	38	42	1.0
30	30	0						31	32	28	46	1.7
31	30	-----			-----		-----	35	-----	37	47	-----
TOTAL	753.2	447	0	0	0	0	0	504	1,101	1,129	1,215.2	807.30
MEAN	24.3	14.9	0	0	0	0	0	16.3	36.7	36.4	39.2	26.9
MAX	37	40	0	0	0	0	0	45	55	54	58	47
MIN	1.1	0	0	0	0	0	0	0	17	14	9.2	.20
AC-FT	1,490	887	0	0	0	0	0	1,000	2,180	2,240	2,410	1,600

CAL YR 1972 TOTAL 5,381.40 MEAN 14.7 MAX 59 MIN 0 AC-FT 10,670
 WTR YR 1973 TOTAL 5,956.70 MEAN 16.3 MAX 58 MIN 0 AC-FT 11,820

ARKANSAS RIVER BASIN

07137500 ARKANSAS RIVER NEAR COOLIDGE, KANS.

LOCATION.--Lat 38°01'34", long 102°00'41", in NE¼NW¼ sec.26, T.23 S., R.43 W., Hamilton County, on right bank at downstream side of bridge, 1.0 mi (1.6 km) south of Coolidge, and 1.9 mi (3.1 km) downstream from Colorado-Kansas State line.

DRAINAGE AREA.--25,410 mi² (65,812 km²), of which 1,708 mi² (4,424 km²) is probably noncontributing.

PERIOD OF RECORD.--May to October 1903, March to May 1921, October 1950 to current year. Monthly discharge only for some periods, published in WSP 1311.

GAGE.--Water-stage recorder. Datum of gage is 3,330.84 ft (1,015.240 m) above mean sea level. May 5 to Oct. 31, 1903, nonrecording gage, and Mar. 1 to May 31, 1921, water-stage recorder at present site at different datums. Oct. 1, 1950, to Mar. 31, 1966, water-stage recorder at site 0.3 mi (0.5 km) upstream at datum 3.00 ft (0.914 m) higher.

AVERAGE DISCHARGE.--23 years, 219 ft³/s (6.202 m³/s), 158,700 acre-ft/yr (196 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,440 ft³/s (69.1 m³/s) July 31 (gage height, 5.50 ft or 1.676 m); minimum daily, 6.2 ft³/s (0.18 m³/s) Sept. 2, 3.

Period of record: Maximum discharge, 158,000 ft³/s (4,470 m³/s) June 17, 1965 (gage height, 14.8 ft or 4.51 m, present site and datum, from floodmarks), from rating curve extended above 13,000 ft³/s (370 m³/s) on basis of slope-area measurement of peak flow; no flow for many days in 1903, 1954, 1960.

REMARKS.--Records good except those for winter periods, which are fair. Combined flow of river and Frontier ditch (see sta. 07137000) represents entire flow that enters Kansas. Flow regulated by John Martin Reservoir (see sta. 07130000). Natural flow of stream affected by transmountain diversions, storage reservoirs, power developments, ground-water withdrawals and diversions for irrigation of about 500,000 acres (2,020 km²), and return flow from irrigated areas. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1341: 1903, drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	68	44	128	100	125	95	232	139	446	228	402	7.8
2	62	47	142	100	119	92	254	156	355	188	350	6.2
3	52	49	80	100	113	104	249	150	345	236	476	6.2
4	57	36	40	87	107	101	236	125	355	212	482	231
5	71	42	23	70	107	92	220	95	380	172	482	71
6	62	62	23	50	107	110	220	89	365	176	365	39
7	77	68	23	50	110	98	220	110	340	139	258	11
8	57	68	23	50	104	80	216	98	350	153	164	13
9	32	77	23	50	104	80	212	104	335	172	150	16
10	49	60	23	50	101	80	204	172	285	119	160	24
11	39	52	23	70	101	74	204	236	310	101	139	26
12	22	44	23	85	101	71	196	204	690	86	107	36
13	19	54	25	100	101	77	192	160	390	86	95	39
14	14	60	29	100	92	80	196	160	396	320	80	36
15	19	76	30	100	89	68	192	136	407	176	52	39
16	34	98	40	101	92	68	172	95	402	168	22	52
17	32	98	45	100	101	57	180	68	385	156	20	55
18	39	107	56	100	95	62	164	216	396	136	20	39
19	49	116	70	100	98	74	184	320	375	116	20	19
20	52	110	75	100	98	74	164	355	345	95	20	14
21	52	110	80	100	98	86	180	380	325	104	20	13
22	52	113	100	100	95	101	196	429	315	212	22	14
23	55	100	100	100	98	107	176	458	285	596	19	16
24	49	104	100	100	98	216	164	440	272	330	14	47
25	57	116	100	100	92	172	153	446	272	390	12	36
26	57	132	110	100	92	150	204	470	254	340	10	57
27	49	128	120	100	92	139	200	494	188	315	10	65
28	47	107	110	110	95	150	168	524	176	244	10	128
29	39	104	110	125	-----	164	146	542	254	146	9.0	212
30	36	113	110	125	-----	184	125	542	192	156	9.3	236
31	36	-----	110	125	-----	196	-----	548	-----	867	11	-----
TOTAL	1,435	2,495	2,094	2,848	2,825	3,302	5,819	8,461	10,185	6,935	4,010.3	1,604.2
MEAN	46.3	83.2	67.5	91.9	101	107	194	273	340	224	129	53.5
MAX	77	132	142	125	125	216	254	548	690	867	482	236
MIN	14	36	23	50	89	57	125	68	176	86	9.0	6.2
AC-FT	2,350	4,950	4,150	5,650	5,600	6,550	11,540	16,780	20,200	13,760	7,950	3,180

CAL YR 1972 TOTAL 50,522.5 MEAN 138 MAX 3,140 MIN 5.3 AC-FT 100,200
WTR YR 1973 TOTAL 52,013.5 MEAN 143 MAX 867 MIN 6.2 AC-FT 103,200

NOTE.--No gage-height record Dec. 3 to Jan. 3.

RIO GRANDE BASIN

08213500 RIO GRANDE AT THIRTYMILE BRIDGE, NEAR CREEDE, COLO.

LOCATION.--Lat 37°43'29", long 107°15'18", in NE¼ sec.13, T.40 N., R.4 W., Hinsdale County, on right bank 70 ft (21 m) downstream from bridge, 500 ft (150 m) upstream from Squaw Creek, 0.8 mi (1.3 km) downstream from Rio Grande Reservoir, and 20 mi (32 km) southwest of Creede.

DRAINAGE AREA.--163 mi² (422 km²).

PERIOD OF RECORD.--June 1909 to September 1923, May 1925 to current year. No winter records 1910, 1926. Monthly discharge only for some periods, published in WSP 1312.

GAGE.--Water-stage recorder. Altitude of gage is 9,300 ft (2,835 m) from topographic map. See WSP 1712 or 1732 for history of changes prior to Oct. 1, 1934.

AVERAGE DISCHARGE.--60 years (1910-23, 1926-73), 214 ft³/s (6.060 m³/s), 155,000 acre-ft/yr (191 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,010 ft³/s (56.9 m³/s) June 28 (gage height, 4.16 ft or 1.268 m); minimum daily, 4.1 ft³/s (0.12 m³/s) Oct. 16-18.

Period of record: Maximum discharge, 7,500 ft³/s (212 m³/s) June 28, 1927 (gage height, 7.03 ft or 2.143 m, present datum), from rating curve extended above 1,200 ft³/s (34 m³/s): minimum daily, 0.10 ft³/s (0.003 m³/s) Nov. 2-4, 1960.

REMARKS.--Records good except those for period of no gage-height record, which are poor. Flow regulated by Rio Grande Reservoir (capacity, 51,110 acre-ft or 63.0 hm³) since 1912. Natural flow of stream affected by transmountain diversions from Colorado River basin to drainage area above station through Raber-Lohr and Fuchs ditches (see elsewhere in this report). No known diversions above station.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	39	5.0	5.2	5.3	5.5	6.5	7.1	9.8	622	1,550	811	168
2	41	5.0	5.2	5.3	5.5	6.5	7.1	34	757	1,510	758	168
3	43	5.0	5.2	5.3	5.5	6.5	7.1	80	876	1,320	706	168
4	43	5.0	5.2	5.3	5.5	6.5	7.1	93	900	1,200	692	150
5	70	5.0	5.2	5.3	5.5	6.5	7.1	137	750	1,190	660	128
6	101	5.0	5.2	5.3	5.5	6.5	7.2	249	680	1,140	648	96
7	101	5.0	5.2	5.3	5.5	6.5	7.2	249	680	958	673	92
8	101	5.0	5.2	5.3	5.5	6.5	7.2	151	799	972	699	92
9	101	5.0	5.2	5.3	5.5	6.5	7.2	131	324	1,050	618	92
10	101	5.0	5.2	5.3	5.5	6.5	7.2	134	451	1,380	564	92
11	101	5.0	5.2	5.3	5.5	6.5	7.3	144	622	1,430	594	122
12	61	5.0	5.2	5.3	5.5	6.5	7.3	151	634	1,050	624	150
13	12	5.0	5.2	5.3	5.5	6.5	7.3	154	701	916	630	150
14	12	5.0	5.2	5.3	5.5	6.5	7.3	158	1,480	986	570	152
15	7.0	5.0	5.2	5.3	5.5	6.5	7.3	161	1,480	1,090	582	152
16	4.1	5.1	5.2	5.3	5.5	6.5	7.4	161	1,120	811	594	152
17	4.1	5.1	5.2	5.3	5.5	6.5	16	303	1,080	853	344	150
18	4.1	5.1	5.2	5.3	5.5	6.5	95	277	1,140	972	177	108
19	4.7	5.1	5.2	5.3	5.5	6.5	131	82	1,140	923	150	108
20	5.0	5.1	5.2	5.3	5.5	6.5	134	348	1,140	811	120	108
21	4.7	5.1	5.2	5.3	5.5	6.5	134	474	1,200	804	110	108
22	4.7	5.1	5.2	5.3	5.5	6.5	76	474	1,310	770	110	81
23	4.7	5.1	5.2	5.3	5.5	6.5	27	654	1,430	673	112	67
24	4.7	5.1	5.2	5.3	5.5	6.5	8.6	750	1,520	576	115	67
25	4.7	5.1	5.2	5.3	5.5	6.5	8.6	757	1,770	618	130	69
26	4.7	5.1	5.2	5.3	5.5	6.5	8.6	757	1,770	744	138	69
27	4.7	5.1	5.2	5.3	5.5	6.5	9.0	757	1,880	770	152	90
28	4.7	5.1	5.2	5.3	5.5	6.5	9.0	722	1,850	764	168	105
29	5.0	5.1	5.2	5.3	-----	6.5	9.4	628	1,670	818	168	105
30	5.0	5.1	5.2	5.3	-----	6.5	9.8	615	1,660	777	168	77
31	5.0	-----	5.2	5.3	-----	6.5	-----	622	-----	744	168	-----
TOTAL	1,008.6	151.5	161.2	164.3	154.0	201.5	791.4	10,416.8	33,436	30,170	12,753	3,436
MEAN	32.5	5.05	5.20	5.30	5.50	6.50	26.4	336	1,115	973	411	115
MAX	101	5.1	5.2	5.3	5.5	6.5	134	757	1,880	1,550	811	168
MIN	4.1	5.0	5.2	5.3	5.5	6.5	7.1	9.8	324	576	110	67
AC-FT	2,000	301	320	326	305	400	1,570	20,660	66,320	59,840	25,300	6,820

CAL YR 1972 TOTAL 58,808.0 MEAN 161 MAX 1,540 MIN 4.1 AC-FT 116,600
 WTR YR 1973 TOTAL 92,844.3 MEAN 254 MAX 1,880 MIN 4.1 AC-FT 184,200

NOTE.--No gage-height record Nov. 3 to Apr. 18.

RIO GRANDE BASIN

08214500 NORTH CLEAR CREEK BELOW CONTINENTAL RESERVOIR, COLO.

LOCATION.--Lat 37°53'18", long 107°12'10", in NE¼SW¼ sec.21, T.42 N., R.3 S., Hinsdale County, on left bank 100 ft (30 m) downstream from bridge, 1,000 ft (300 m) downstream from Continental Reservoir, and 15 mi (24 km) west of Creede.

DRAINAGE AREA.--51.7 mi² (134 km²).

PERIOD OF RECORD.--May 1929 to current year. Monthly discharge only for some periods, published in WSP 1312. Prior to October 1960, published as Clear Creek below Continental Reservoir.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 10,200 ft (3,109 m) from topographic map. Prior to Oct. 2, 1951, at site 150 ft (46 m) upstream at different datum.

AVERAGE DISCHARGE.--44 years, 30.9 ft³/s (0.875 m³/s), 22,390 acre-ft/yr (27.6 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 152 ft³/s (4.30 m³/s) Aug. 4 (gage height, 2.68 ft or 0.817 m); minimum daily, 1.4 ft³/s (0.040 m³/s) Oct. 24 to Mar. 31.

Period of record: Maximum discharge, 362 ft³/s (10.3 m³/s) May 8, 1952 (gage height, 3.66 ft or 1.116 m), from rating curve extended above 120 ft³/s (3.4 m³/s); no flow June 22, 23, 1935.

REMARKS.--Records good except those for periods of no gage-height record, which are poor. Flow regulated by Continental Reservoir (capacity, 26,720 acre-ft or 32.9 hm³). No diversion above station.

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

REVISIONS.--WSP 1008: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	1.4	1.4	1.4	1.4	1.4	1.5	1.5	134	3.0	245	59
2	11	1.4	1.4	1.4	1.4	1.4	1.5	8.0	137	3.0	250	44
3	11	1.4	1.4	1.4	1.4	1.4	1.5	12	154	3.2	252	36
4	11	1.4	1.4	1.4	1.4	1.4	1.5	12	182	47	252	34
5	11	1.4	1.4	1.4	1.4	1.4	1.5	12	194	70	250	33
6	11	1.4	1.4	1.4	1.4	1.4	1.5	12	162	65	245	33
7	12	1.4	1.4	1.4	1.4	1.4	1.5	12	141	59	234	19
8	13	1.4	1.4	1.4	1.4	1.4	1.5	12	149	54	228	15
9	13	1.4	1.4	1.4	1.4	1.4	1.5	12	67	55	221	19
10	13	1.4	1.4	1.4	1.4	1.4	1.5	12	2.6	59	232	25
11	13	1.4	1.4	1.4	1.4	1.4	1.5	12	2.6	74	239	31
12	25	1.4	1.4	1.4	1.4	1.4	1.5	12	2.8	88	241	30
13	37	1.4	1.4	1.4	1.4	1.4	1.5	26	2.8	95	230	25
14	39	1.4	1.4	1.4	1.4	1.4	1.5	34	3.2	104	215	30
15	39	1.4	1.4	1.4	1.4	1.4	1.5	34	3.4	109	206	38
16	42	1.4	1.4	1.4	1.4	1.4	1.5	34	80	152	192	40
17	45	1.4	1.4	1.4	1.4	1.4	1.5	34	128	164	174	38
18	45	1.4	1.4	1.4	1.4	1.4	1.5	151	128	160	166	36
19	45	1.4	1.4	1.4	1.4	1.4	1.5	232	127	164	178	45
20	45	1.4	1.4	1.4	1.4	1.4	1.5	90	127	158	192	50
21	45	1.4	1.4	1.4	1.4	1.4	1.5	3.8	125	154	202	40
22	45	1.4	1.4	1.4	1.4	1.4	1.5	3.8	125	154	206	13
23	18	1.4	1.4	1.4	1.4	1.4	1.5	3.8	121	168	178	9.6
24	1.4	1.4	1.4	1.4	1.4	1.4	1.5	92	121	176	77	17
25	1.4	1.4	1.4	1.4	1.4	1.4	1.5	149	82	190	42	22
26	1.4	1.4	1.4	1.4	1.4	1.4	1.5	154	2.8	190	48	21
27	1.4	1.4	1.4	1.4	1.4	1.4	1.5	156	2.8	188	58	18
28	1.4	1.4	1.4	1.4	1.4	1.4	1.5	106	2.8	208	66	17
29	1.4	1.4	1.4	1.4	-----	1.4	1.5	78	2.8	232	71	16
30	1.4	1.4	1.4	1.4	-----	1.4	1.5	104	3.0	234	72	16
31	1.4	-----	1.4	1.4	-----	1.4	-----	130	-----	241	70	-----
TOTAL	611.2	42.0	43.4	43.4	39.2	43.4	45.0	1,744.9	2,515.6	3,821.2	5,532	869.6
MEAN	19.7	1.40	1.40	1.40	1.40	1.40	1.50	56.3	83.9	123	178	29.0
MAX	45	1.4	1.4	1.4	1.4	1.4	1.5	232	194	241	252	59
MIN	1.4	1.4	1.4	1.4	1.4	1.4	1.5	1.5	2.6	3.0	42	9.6
AC-FT	1,210	83	86	86	78	86	89	3,460	4,990	7,580	10,970	1,720

CAL YR 1972 TOTAL 9,123.7 MEAN 24.9 MAX 141 MIN 1.0 AC-FT 18,100
 WTR YR 1973 TOTAL 15,350.9 MEAN 42.1 MAX 252 MIN 1.4 AC-FT 30,450

NOTE.--No gage-height record Oct. 24 to May 15.

08216500 WILLOW CREEK AT CREEDE, COLO.

LOCATION.--Lat 37°51'22", long 106°55'37", in SW¼ sec.25, T.42 N., R.1 W., (projected), Mineral County, on left bank at north city limits of Creede, 8 ft (2 m) upstream from entrance to paved channel just downstream from Windy Gulch, 0.5 mi (0.8 km) downstream from confluence of East and West Willow Creeks, and 2.6 mi (4.2 km) upstream from mouth.

DRAINAGE AREA.--35.3 mi³ (91.4 km²).

PERIOD OF RECORD.--May 1951 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 8,880 ft (2,707 m) from topographic map. Prior to Sept. 2, 1953, at site 17 ft (5 m) upstream at same datum.

AVERAGE DISCHARGE.--22 years, 22.3 ft³/s (0.632 m³/s), 16,160 acre-ft/yr (19.9 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 318 ft³/s (9.01 m³/s) June 10 (gage height, 3.66 ft or 1.116 m); minimum daily, 4.0 ft³/s (0.11 m³/s) Jan. 23.

Period of record: Maximum discharge, 430 ft³/s (12.2 m³/s) June 5, 1957 (gage height, 4.14 ft or 1.262 m); maximum gage height, 4.16 ft (1.268 m) May 23, 1958; minimum daily discharge, 0.2 ft³/s (0.006 m³/s) Mar. 25, 1956, probably caused by snowslide upstream.

REMARKS.--Records good except those for period of no gage-height record, which are poor. Diversions above station for municipal supply of Creede.

REVISIONS (WATER YEARS).--WSP 1712: 1955, 1956(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	9.0	6.5	6.0	4.6	5.4	5.4	16	122	125	29	16
2	9.8	11	6.5	6.0	4.6	5.4	5.9	14	110	117	26	16
3	9.8	9.8	7.0	5.5	4.6	5.0	5.4	16	98	105	26	15
4	9.8	9.8	7.0	4.6	4.6	5.0	5.4	20	93	97	28	15
5	11	11	7.0	4.6	5.0	5.0	5.9	22	88	91	29	14
6	9.8	8.6	6.5	5.0	5.0	5.0	5.9	21	96	85	31	14
7	9.8	8.1	6.5	5.0	5.0	5.0	5.4	20	121	79	33	14
8	9.8	9.0	6.5	5.0	5.0	5.0	5.4	25	164	72	28	13
9	9.0	8.6	6.5	5.0	5.0	4.5	5.4	38	197	74	24	14
10	8.6	8.1	6.0	5.0	5.0	5.0	5.9	52	235	71	23	14
11	8.6	9.0	5.5	5.0	5.0	5.0	5.9	77	237	63	23	15
12	8.1	9.0	5.5	5.0	5.0	5.9	6.3	102	233	70	22	15
13	8.6	9.0	5.5	5.0	4.6	5.4	6.3	117	233	65	22	14
14	8.6	9.0	5.0	5.0	4.6	5.0	7.7	118	219	58	20	13
15	11	9.0	5.0	5.0	4.6	5.0	7.2	109	161	53	20	12
16	15	8.0	5.0	5.0	4.6	5.0	6.8	110	140	51	19	12
17	12	8.5	5.0	5.0	4.6	5.4	7.2	116	140	53	18	12
18	12	8.5	5.5	5.0	5.0	5.4	8.1	130	135	55	17	12
19	15	8.0	5.5	5.0	5.0	5.4	6.8	164	126	54	17	11
20	17	8.0	5.5	5.0	4.6	5.4	6.3	168	122	50	17	10
21	14	8.0	5.5	5.0	5.0	5.9	6.8	153	127	45	18	10
22	12	7.5	5.5	4.6	5.0	5.4	7.2	129	123	44	19	10
23	11	7.5	5.5	4.0	4.6	5.0	8.1	117	129	42	17	10
24	11	7.0	5.5	4.6	4.6	5.4	9.0	127	135	40	16	10
25	11	7.0	5.5	5.0	5.0	5.0	9.8	137	137	38	16	11
26	11	7.0	5.5	5.0	5.0	5.4	11	121	146	38	16	13
27	9.8	7.0	5.5	5.0	5.0	5.9	14	100	156	37	15	13
28	9.8	6.5	5.5	4.6	5.5	5.9	18	90	144	34	15	13
29	9.8	7.0	5.5	4.6	-----	5.9	19	87	140	34	15	13
30	9.8	6.5	5.5	5.0	-----	5.4	18	96	131	33	16	12
31	9.0	-----	5.5	4.6	-----	5.4	-----	112	-----	31	17	-----
TOTAL	332.5	250.0	179.5	153.7	135.7	163.8	245.5	2,724	4,438	1,904	652	386
MEAN	10.7	8.33	5.79	4.96	4.85	5.28	8.18	87.9	148	61.4	21.0	12.9
MAX	17	11	7.0	6.0	5.5	5.9	19	168	237	125	33	16
MIN	8.1	6.5	5.0	4.0	4.6	4.5	5.4	14	88	31	15	10
AC-FT	660	496	356	305	269	325	487	5,400	8,800	3,780	1,290	766

CAL YR 1972 TOTAL 7,722.6 MEAN 21.1 MAX 90 MIN 4.8 AC-FT 15,320
WTR YR 1973 TOTAL 11,564.7 MEAN 31.7 MAX 237 MIN 4.0 AC-FT 22,940

PEAK DISCHARGE (BASE, 120 CFS).--May 19 (2200) 186 cfs (3.22 ft); June 10 (2030) 318 cfs (3.66 ft).

NOTE.--No gage-height record Nov. 16 to Feb. 28.

RIO GRANDE BASIN

119

08218500 GOOSE CREEK AT WAGONWHEEL GAP, COLO.

LOCATION.--Lat 37°45'07", long 106°49'46", in SW¼SE¼ sec.35, T.41 N., R.1 E., Mineral County, on left bank 0.2 mi (0.3 km) downstream from Pierce Creek, 1.0 mi (1.6 km) upstream from mouth, 1.0 mi (1.6 km) south of Wagonwheel Gap, and 8.8 mi (14.2 km) southeast of Creede.

DRAINAGE AREA.--90 mi² (230 km²), approximately.

PERIOD OF RECORD.--June 1954 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 8,460 ft (2,579 m) from topographic map.

AVERAGE DISCHARGE.--19 years, 59.6 ft³/s (1.688 m³/s), 43,180 acre-ft/yr (53.2 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 708 ft³/s (20.1 m³/s) June 11 (gage height, 4.22 ft or 1.286 m); minimum daily, 14 ft³/s (0.40 m³/s) Feb. 3.
Period of record: Maximum discharge, 879 ft³/s (24.9 m³/s) Sept. 14, 1970 (gage height, 4.52 ft or 1.378 m, from recorded range in stage), from rating curve extended above 480 ft³/s (14 m³/s); minimum daily, 9.6 ft³/s (0.27 m³/s) Nov. 15, 16, Dec. 5, 1956.
Flood in June 1927 exceeded all other observed floods at this location including those in October 1911 and June 18, 1949. Flood in October 1911 probably exceeded that of June 18, 1949, from information by local residents.

REMARKS.--Records good except those for periods of no gage-height record, which are poor. Several small diversions above station for irrigation. Lake Humphreys (capacity, 842 acre-ft or 1.04 hm³) above station with a fixed spillway and no gates has slight effect on flow.

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

REVISIONS (WATER YEARS).--WSP 1712: 1955, 1956(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	36	19	17	16	17	17	77	318	376	61	56
2	17	35	18	17	15	17	17	70	292	350	58	46
3	18	34	18	16	14	17	16	79	276	318	58	42
4	19	31	19	17	15	16	16	103	268	292	58	40
5	44	31	20	17	16	16	16	108	239	272	58	39
6	30	31	18	17	16	16	17	94	246	253	56	37
7	31	29	20	17	16	16	17	83	292	239	59	35
8	36	30	21	17	16	17	17	96	336	218	56	32
9	29	29	20	16	16	17	21	133	405	225	49	32
10	26	27	19	17	15	16	25	200	550	222	48	41
11	24	29	18	17	15	16	25	272	574	190	45	45
12	24	30	18	17	16	16	25	280	580	181	44	42
13	32	27	17	17	16	17	27	272	556	163	42	39
14	29	25	17	16	16	16	28	276	556	152	41	36
15	42	26	17	16	16	16	24	264	446	141	45	32
16	72	25	18	16	16	16	20	268	354	130	42	31
17	62	27	19	15	16	17	25	284	318	123	41	31
18	58	27	20	15	16	17	30	327	304	138	41	28
19	87	25	20	15	16	18	25	381	300	146	41	28
20	96	26	20	16	16	18	23	381	280	130	42	29
21	70	27	20	16	16	18	22	415	296	118	49	29
22	58	24	21	15	16	18	23	363	304	108	45	26
23	51	20	20	15	15	17	32	340	304	99	40	29
24	46	20	19	16	15	17	38	340	318	90	41	31
25	45	20	18	16	15	17	46	350	340	85	48	30
26	41	21	17	16	15	17	54	354	372	65	46	29
27	40	21	17	16	16	18	64	280	400	83	40	29
28	39	18	18	15	17	18	81	250	430	76	37	29
29	35	19	17	15	-----	18	94	236	400	76	52	28
30	37	19	17	15	-----	18	96	264	395	72	64	26
31	36	-----	17	16	-----	17	-----	292	-----	66	72	-----
TOTAL	1,291	789	577	499	439	525	981	7,536	11,054	5,217	1,523	1,027
MEAN	41.6	26.3	18.6	16.1	15.7	16.9	32.7	243	368	168	49.1	34.2
MAX	96	36	21	17	17	18	96	415	580	376	72	56
MIN	17	18	17	15	14	16	16	70	239	66	37	26
AC-FT	2,560	1,560	1,140	990	871	1,040	1,950	14,950	21,930	10,350	3,020	2,040

CAL YR 1972 TOTAL 17,925 MEAN 49.0 MAX 204 MIN 14 AC-FT 35,550
WTR YR 1973 TOTAL 31,458 MEAN 86.2 MAX 580 MIN 14 AC-FT 62,400

PEAK DISCHARGE (BASE, 200 CFS).--June 11 (2400) 708 cfs (4.22 ft).

NOTE.--No gage-height record Nov. 5 to Apr. 25.

RIO GRANDE BASIN

08219500 SOUTH FORK RIO GRANDE AT SOUTH FORK, COLO.

LOCATION.--Lat 37°39'25", long 106°38'55", in SW¼NE¼ sec.3, T.39 N., R.3 E., Rio Grande County, on left bank near U.S. Highway 160, 700 ft (210 m) downstream from Church Creek, 0.8 mi (1.3 km) southwest of village of South Fork, and 1.4 mi (2.3 km) upstream from mouth.

DRAINAGE AREA.--216 mi² (559 km²).

PERIOD OF RECORD.--August 1910 to September 1922, May 1936 to current year. Monthly discharge only for some periods, published in WSP 1312.

GAGE.--Water-stage recorder. Datum of gage is 8,221.79 ft (2,506.002 m) above mean sea level. Aug. 9, 1910, to Mar. 28, 1915, nonrecording gage and Mar. 29, 1915, to Sept. 30, 1922, water-stage recorder, at bridges 1 mi (1.6 km) downstream at different datums.

AVERAGE DISCHARGE.--49 years, 211 ft³/s (5.976 m³/s), 152,900 acre-ft/yr (189 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,640 ft³/s (74.8 m³/s) June 12 (gage height, 6.09 ft or 1.856 m); minimum daily, 30 ft³/s (0.85 m³/s) Oct. 2.

Period of record: Maximum discharge, 8,000 ft³/s (227 m³/s) Oct. 5, 1911 (gage height, 9.7 ft or 2.96 m, from floodmarks, present site and datum), from rating curve extended above 1,500 ft³/s (42 m³/s); minimum daily, 14 ft³/s (0.40 m³/s) Nov. 28, 29, 1960.

Flood of Oct. 5, 1911, exceeded all other observed floods at this location since at least 1873. Flood of June 29, 1927, reached a stage about 1 ft (0.3 m) lower than that of Oct. 5, 1911, from information by local residents.

REMARKS.--Records good except those for winter period, which are poor. Transmountain diversions from Colorado River basin to drainage area above station through Treasure Pass ditch (see elsewhere in this report). Natural flow of stream affected by a few small diversions for irrigation, slight regulation by Beaver Creek Reservoir (capacity, 4,760 acre-ft or 5.87 hm³), and several smaller storage reservoirs.

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

REVISIONS (WATER YEARS).--WSP 898: 1911(M). WSP 1312: 1912, 1944(M). WSP 1632: 1956-58(P).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31	106	60	50	49	56	51	383	1,360	1,060	148	96
2	30	99	58	50	48	56	52	379	1,230	978	182	61
3	36	104	56	46	47	56	49	464	1,110	882	245	70
4	39	111	61	47	48	54	49	576	1,060	835	242	66
5	169	115	62	49	49	52	49	615	930	735	235	64
6	150	108	49	50	50	52	54	536	984	650	230	61
7	93	98	56	48	51	54	57	482	1,190	595	200	66
8	101	106	58	49	52	56	54	478	1,420	605	141	60
9	87	101	56	50	51	56	82	620	1,780	760	106	58
10	87	88	55	48	48	57	104	825	2,170	610	113	70
11	78	95	52	46	50	57	103	984	2,230	443	95	115
12	74	98	53	44	52	58	104	960	2,260	403	90	88
13	91	87	50	46	51	59	118	924	1,970	375	87	79
14	91	84	52	48	50	59	122	990	1,900	368	81	78
15	158	87	50	46	50	59	99	1,060	1,540	337	95	84
16	298	85	52	44	51	60	85	1,120	1,310	295	81	78
17	252	90	54	43	51	62	104	1,140	1,200	260	74	75
18	235	88	56	45	52	64	131	1,200	1,160	255	72	70
19	486	77	56	44	52	66	106	1,420	1,130	278	74	66
20	655	85	57	46	54	66	95	1,510	1,060	245	75	63
21	415	88	56	48	54	65	88	1,490	1,070	225	98	59
22	325	77	56	47	53	60	96	1,410	1,060	208	104	53
23	295	58	57	46	52	60	139	1,290	1,060	185	95	52
24	268	60	54	46	51	54	173	1,300	1,070	165	84	54
25	220	62	52	48	52	51	188	1,350	1,130	160	84	53
26	135	64	50	50	53	51	235	1,540	1,180	158	85	57
27	124	66	50	50	54	54	295	1,290	1,240	160	74	58
28	116	58	52	48	55	53	423	1,100	1,260	169	61	74
29	108	60	52	47	-----	53	518	1,030	1,180	171	66	91
30	108	62	50	49	-----	53	496	1,090	1,130	158	88	90
31	106	-----	50	50	-----	51	-----	1,230	-----	158	135	-----
TOTAL	5,461	2,567	1,682	1,468	1,430	1,764	4,319	30,786	40,374	12,886	3,640	2,129
MEAN	176	85.6	54.3	47.4	51.1	56.9	144	993	1,346	416	117	71.0
MAX	655	115	62	50	55	66	518	1,540	2,260	1,060	245	115
MIN	30	58	49	43	47	51	49	379	930	158	61	52
AC-FT	10,830	5,090	3,340	2,910	2,840	3,500	8,570	61,060	80,080	25,560	7,220	4,220

CAL YR 1972 TOTAL 54,626 MEAN 149 MAX 705 MIN 28 AC-FT 108,400
WTR YR 1973 TOTAL 108,506 MEAN 297 MAX 2,260 MIN 30 AC-FT 215,200

PEAK DISCHARGE (BASE, 900 CFS).--June 12 (0015) 2,640 cfs (6.09 ft).

NOTE.--No gage-height record Dec. 11 to Mar. 19.

08220000 RIO GRANDE NEAR DEL NORTE, COLO.

LOCATION (REVISED).--Lat 37°41'22", long 106°27'38", in NW¼ sec.29, T.40 N., R.5 E., Rio Grande County, on right bank 20 ft (6 m) downstream from county highway bridge, 6.0 mi (9.7 km) west of Del Norte, and 6.8 mi (10.9 km) upstream from Pinos Creek.

DRAINAGE AREA.--1,320 mi² (830 km²), approximately.

PERIOD OF RECORD.--June 1889 to current year. Monthly discharge only for some periods, published in WSP 1312.

GAGE.--Water-stage recorder. Datum of gage is 7,980.25 ft (2,432.380 m) above mean sea level. Prior to May 16, 1908, nonrecording gage at site 4 mi (6 km) downstream at different datum. May 16, 1908, to Nov. 8, 1910, nonrecording gages on bridge at present site and datum.

AVERAGE DISCHARGE.--84 years, 907 ft³/s (25.69 m³/s), 657,100 acre-ft/yr (810 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 6,380 ft³/s (181 m³/s) June 12 (gage height, 3.60 ft or 1.097 m); minimum daily, 160 ft³/s (4.53 m³/s) Jan. 3, 23, 24.

Period of record: Maximum discharge, 18,000 ft³/s (510 m³/s) Oct. 5, 1911 (gage height, 6.80 ft or 2.073 m), from rating curve extended above 12,900 ft³/s (365 m³/s); minimum daily, 69 ft³/s (1.95 m³/s) Aug. 21, 1902.

Maximum stage since at least 1873, that of Oct. 5, 1911, from information by local residents.

REMARKS.--Records good except those for winter period, which are fair. Small diversions above station for irrigation. Flow regulated by Beaver Creek Reservoir since 1910, Santa Maria Reservoir since 1912, Rio Grande Reservoir since 1913, and Continental Reservoir since 1925 (total capacity, 126,100 acre-ft or 155 hm³), and by several smaller reservoirs. Transmountain diversions to drainage area above station from Colorado River basin (see elsewhere in this report).

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

REVISIONS (WATER YEARS).--WSP 763: Drainage area. WSP 1312: 1889, 1901, 1913-14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	194	335	210	170	180	200	198	1,080	4,410	4,560	1,740	745
2	194	308	200	170	170	200	217	992	4,160	4,340	1,830	664
3	208	341	195	160	165	200	208	1,110	4,090	3,970	1,760	611
4	217	318	240	165	170	205	194	1,440	4,090	3,520	1,760	574
5	354	318	250	175	170	205	198	1,660	3,780	3,460	1,710	527
6	534	308	180	180	170	210	226	1,570	3,620	3,190	1,690	481
7	395	280	220	170	170	220	242	1,500	4,010	2,910	1,650	449
8	468	258	230	175	170	220	194	1,500	4,580	2,630	1,650	407
9	437	296	210	180	170	220	208	1,740	5,330	2,930	1,570	383
10	413	242	190	175	170	225	286	2,240	5,370	3,040	1,390	431
11	589	231	183	170	175	225	296	2,970	5,810	3,060	1,340	561
12	371	296	190	170	175	230	324	3,170	5,970	2,820	1,390	540
13	371	237	170	175	175	240	347	3,250	5,630	2,320	1,410	507
14	330	221	180	180	175	240	401	3,360	5,900	2,290	1,260	474
15	341	264	170	170	180	240	401	3,120	5,790	2,430	1,220	468
16	649	226	170	165	180	250	341	3,210	4,800	2,360	1,250	449
17	696	237	180	165	180	260	365	3,380	4,410	1,970	1,140	455
18	588	296	190	175	175	270	462	3,720	4,340	2,240	804	443
19	788	212	190	170	175	280	425	4,780	4,280	2,540	696	407
20	1,300	217	195	175	175	280	449	5,050	4,090	2,190	704	365
21	937	242	190	180	180	280	468	4,960	4,140	1,940	721	353
22	721	203	190	170	180	270	488	4,670	4,240	1,920	770	335
23	664	177	200	160	175	260	540	4,260	4,320	1,740	729	318
24	626	190	190	160	175	250	574	4,600	4,520	1,580	664	341
25	568	200	180	165	180	250	561	4,940	4,800	1,460	664	335
26	455	210	170	175	185	250	680	5,070	4,800	1,610	672	335
27	401	230	170	180	190	240	804	4,490	5,050	1,730	649	335
28	371	190	180	180	195	231	1,020	3,920	5,300	1,690	618	353
29	335	200	180	170	-----	221	1,220	3,580	4,960	1,740	649	383
30	341	213	170	170	-----	212	1,330	3,660	4,870	1,810	688	383
31	347	-----	170	180	-----	203	-----	3,970	-----	1,770	848	-----
TOTAL	15,003	7,496	5,933	5,325	4,930	7,287	13,667	98,962	141,460	77,760	35,656	13,412
MEAN	484	250	191	172	176	235	456	3,192	4,715	2,508	1,150	447
MAX	1,300	341	250	180	195	280	1,330	5,070	5,970	4,560	1,830	745
MIN	194	177	170	160	165	200	194	992	3,620	1,460	618	318
AC-FT	29,760	14,870	11,770	10,560	9,780	14,450	27,110	196,300	280,600	154,200	70,680	26,600
CAL YR 1972	TOTAL 240,788	MEAN 658	MAX 3,380	MIN 130	AC-FT 477,600							
WTR YR 1973	TOTAL 426,871	MEAN 1,170	MAX 5,970	MIN 160	AC-FT 846,700							

NOTE.--No gage-height record Feb. 6 to Mar. 27.

08220500 PINOS CREEK NEAR DEL NORTE, COLO.

LOCATION.--Lat 37°35'30", long 106°26'58", in SW¼SE¼ sec.29, T.39 N., R.5 E., Rio Grande County, on left bank 90 ft (27 m) downstream from Bennett Creek and 8.0 mi (12.9 km) southwest of Del Norte.

DRAINAGE AREA.--53 mi² (140 km²), approximately.

PERIOD OF RECORD.--April 1919 to September 1924, May 1936 to current year. No winter records prior to 1950 except water years 1941, 1944-47. Monthly discharge only for some periods, published in WSP 1312.

GAGE.--Water-stage recorder and rectangular box flume. Altitude of gage is 8,480 ft (2,585 m) from topographic map. May 1, 1919, to Sept. 30, 1924, nonrecording gages at sites about 1,000 ft (300 m) downstream at different datum.

AVERAGE DISCHARGE.--29 years (1940-41, 1943-47, 1949-73), 24.4 ft³/s (0.691 m³/s), 17,680 acre-ft/yr (21.8 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 268 ft³/s (7.59 m³/s) June 11 (gage height, 2.48 ft or 0.756 m); minimum daily, 4.7 ft³/s (0.13 m³/s) Oct. 1-4, 31.

Period of record: Maximum discharge not determined, occurred June 3, 1922, caused by failure of private fish-lake dam; maximum discharge determined, 720 ft³/s (20.4 m³/s) Aug. 3, 1936 (gage height, 4.19 ft or 1.277 m, by slope-area measurement of peak flow; minimum daily recorded, 1.8 ft³/s (0.051 m³/s) Sept. 26-28, 1951.

Flood of June 3, 1922, exceeded all other observed floods at this location since at least 1903, from information by local residents.

REMARKS.--Records good except those for winter period, which are poor. One small diversion above station.

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

REVISIONS (WATER YEARS).--WSP 1312: 1922(M), 1941(M). WSP 1923: 1960(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.7	7.1	6.5	6.0	6.0	6.8	8.8	43	167	95	24	14
2	4.7	7.9	6.4	6.0	5.9	6.8	8.6	41	154	94	21	12
3	4.7	7.5	6.3	5.9	5.9	6.8	8.4	48	147	90	21	11
4	4.7	7.0	6.5	5.9	6.0	6.6	8.2	69	144	84	23	11
5	8.7	7.0	6.5	6.0	6.1	6.6	8.2	77	135	80	23	10
6	6.7	7.5	5.6	6.2	6.2	6.6	8.6	63	142	75	21	10
7	6.7	7.0	6.2	6.0	6.2	7.0	8.8	47	156	75	21	10
8	6.7	7.0	6.2	6.0	6.3	7.4	8.4	51	168	75	19	9.6
9	6.4	7.0	6.0	6.2	6.2	7.4	8.8	83	191	75	18	9.6
10	6.0	6.8	5.8	5.9	6.1	7.2	9.2	121	221	71	17	12
11	5.6	7.0	5.8	5.7	6.2	8.0	9.6	157	238	64	16	18
12	6.0	7.5	5.9	5.5	6.2	8.5	10	147	239	57	15	12
13	7.5	7.0	5.8	5.7	6.2	9.0	10	138	232	63	14	10
14	6.7	7.0	5.9	5.8	6.2	8.8	11	136	236	63	17	10
15	7.5	7.0	5.8	5.7	6.4	8.8	11	124	212	54	16	9.1
16	11	7.0	6.0	5.6	6.3	8.8	12	133	186	48	14	8.7
17	10	7.0	6.2	5.5	6.3	9.2	14	154	168	43	14	7.9
18	8.7	7.5	6.2	5.6	6.3	9.6	17	164	157	42	14	8.3
19	14	6.5	6.2	5.6	6.3	10	12	192	149	45	13	7.9
20	19	6.5	6.2	5.7	6.4	10	12	215	138	44	14	7.9
21	10	6.7	6.2	5.8	6.4	10	11	212	133	42	15	7.9
22	8.3	6.2	6.2	5.8	6.3	10	13	197	117	41	14	7.9
23	9.6	5.8	6.3	5.7	6.2	10	19	179	108	36	12	7.9
24	7.9	6.2	6.2	5.7	6.2	9.8	24	177	100	32	12	8.7
25	9.1	6.4	6.1	5.8	6.3	9.8	26	179	98	30	12	8.7
26	7.5	6.6	6.0	5.9	6.4	9.8	31	182	100	31	14	10
27	7.9	6.8	6.0	6.0	6.5	10	40	144	103	30	12	10
28	7.5	6.4	6.1	6.0	6.6	10	55	125	104	28	11	11
29	6.0	6.5	6.1	5.9	-----	9.6	63	129	101	26	13	10
30	7.1	6.6	6.0	5.9	-----	9.2	49	146	98	27	18	10
31	4.7	-----	6.0	6.0	-----	9.0	-----	161	-----	26	20	-----
TOTAL	241.6	206.0	189.2	181.0	174.6	267.1	535.6	4,034	4,642	1,686	508	301.1
MEAN	7.79	6.87	6.10	5.84	6.24	8.62	17.9	130	155	54.4	16.4	10.0
MAX	19	7.9	6.5	6.2	6.6	10	63	215	239	95	24	18
MIN	4.7	5.8	5.6	5.5	5.9	6.6	8.2	41	98	26	11	7.9
AC-FT	479	409	375	359	346	530	1,060	8,000	9,210	3,340	1,010	597

CAL YR 1972 TOTAL 4,920.9 MEAN 13.4 MAX 52 MIN 3.5 AC-FT 9,760
WTR YR 1973 TOTAL 12,966.2 MEAN 35.5 MAX 239 MIN 4.7 AC-FT 25,720

PEAK DISCHARGE (BASE, 120 CFS).--June 11 (2230) 268 cfs (2.48 ft).

NOTE.--No gage-height record Nov. 3 to Apr. 13.

08221500 RIO GRANDE NEAR MONTE VISTA, COLO.

LOCATION.--Lat 37°36'34", long 106°08'54", in NW¼SW¼ sec.19, T.39 N., R.8 E., Rio Grande County, on left bank 50 ft (15 m) downstream from bridge on U.S. Highway 285, 2.0 mi (3.2 km) north of Monte Vista, and 12 mi (19 km) downstream from San Francisco Creek.

DRAINAGE AREA.--1,590 mi² (4,120 km²), approximately.

PERIOD OF RECORD.--May 1926 to current year. Monthly discharge only for some periods, published in WSP 1312.

GAGE.--Water-stage recorder. Datum of gage is 7,654.16 ft (2,332.988 m) above mean sea level (State Highway Department bench mark). See WSP 1712 or 1732 for history of changes prior to June 15, 1938. June 16, 1938, to Feb. 28, 1971, at site 50 ft (15 m) upstream at present datum.

AVERAGE DISCHARGE.--47 years, 327 ft³/s (9.261 m³/s), 236,900 acre-ft/yr (292 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,960 ft³/s (83.8 m³/s) June 12 (gage height, 6.57 ft or 2.003 m); minimum daily, 22 ft³/s (0.62 m³/s) Oct. 19.

Period of record: Maximum discharge, 18,500 ft³/s (524 m³/s) June 30, 1927 (gage height, 7.35 ft or 2.240 m, present datum, from floodmarks); maximum gage height, 8.00 ft (2.438 m) June 19, 1949; minimum daily discharge, 1.5 ft³/s (0.042 m³/s) Apr. 14, 1959.

REMARKS.--Records good except those for winter period, which are poor. Diversions above station for irrigation of about 90,000 acres (364 km²). Flow regulated by Beaver Creek, Santa Maria, Rio Grande, and Continental Reservoirs (total capacity, 126,100 acre-ft or 155 hm³), and by several smaller reservoirs. Transmountain diversions to drainage area above station from Colorado River basin (see elsewhere in this report).

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

REVISIONS (WATER YEARS).--WSP 928: Drainage area. WSP 1712: 1959.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	UCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	120	391	215	175	185	215	260	447	2,050	1,680	399	391
2	110	375	205	175	175	215	254	407	1,830	1,420	419	284
3	112	390	200	165	170	215	237	415	1,720	1,100	395	262
4	120	375	225	170	175	220	228	567	1,840	980	371	280
5	140	375	250	175	175	225	212	655	1,770	1,130	355	273
6	383	395	210	185	175	230	225	590	1,720	705	323	262
7	288	358	205	175	175	235	237	558	1,940	610	371	276
8	308	330	230	180	175	240	200	690	2,140	645	331	270
9	350	354	225	185	175	240	203	870	2,460	980	266	252
10	302	355	200	180	175	245	250	1,150	2,380	1,030	252	280
11	250	298	185	180	180	245	284	1,410	2,590	974	223	387
12	168	344	190	175	180	250	312	1,400	2,760	848	213	407
13	148	320	180	180	180	260	336	1,420	2,590	670	219	355
14	130	300	180	180	180	260	383	1,610	2,510	786	226	294
15	94	310	175	175	185	260	395	1,440	2,760	938	270	294
16	200	290	175	170	185	270	267	1,350	2,220	968	287	298
17	228	270	180	170	185	280	156	1,400	1,810	630	252	308
18	65	326	190	175	180	290	200	1,550	1,780	680	235	287
19	22	319	195	175	180	305	122	2,240	1,710	980	223	256
20	382	274	195	180	180	310	117	2,510	1,630	748	252	242
21	267	267	195	180	185	320	135	2,460	1,740	489	287	239
22	191	274	195	180	185	305	138	2,180	2,000	566	308	226
23	404	230	200	170	185	298	173	1,680	2,050	525	287	219
24	621	205	195	165	180	274	228	1,730	2,110	494	259	216
25	572	215	185	170	185	274	215	2,010	2,140	440	248	232
26	487	225	175	175	195	284	240	2,100	2,020	516	256	239
27	427	240	175	180	200	298	257	1,860	1,860	556	294	232
28	407	220	180	185	210	284	344	1,470	2,120	471	235	219
29	387	205	185	180	-----	284	495	1,560	2,000	411	287	223
30	375	215	175	175	-----	277	576	1,660	1,840	419	308	229
31	407	-----	175	180	-----	267	-----	1,850	-----	423	423	-----
TOTAL	8,465	9,045	6,045	5,465	5,095	8,175	7,679	43,239	62,090	23,812	9,074	8,232
MEAN	273	302	195	176	182	264	256	1,395	2,070	768	293	274
MAX	621	395	250	185	210	320	576	2,510	2,760	1,680	423	407
MIN	22	205	175	165	170	215	117	407	1,630	411	213	216
AC-FT	16,790	17,940	11,990	10,840	10,110	16,220	15,230	85,760	123,200	47,230	18,000	16,330

CAL YR 1972 TOTAL 105,388 MEAN 288 MAX 1,010 MIN 22 AC-FT 209,000
WTR YR 1973 TOTAL 196,416 MEAN 538 MAX 2,760 MIN 22 AC-FT 389,600

RIO GRANDE BASIN

08223000 RIO GRANDE AT ALAMOSA, COLO.

LOCATION.--Lat 37°28'53", long 105°52'46", in SE¼NE¼ sec.4, T.37 N., R.10 E., Alamosa County, on right bank 0.2 mi (0.3 km) northwest of city limits of Alamosa and 9 mi (14 km) upstream from Alamosa Creek.

DRAINAGE AREA.--1,710 mi² (4,430 km²), approximately.

PERIOD OF RECORD.--May 1912 to current year. Monthly discharge only for some periods, published in WSP 1312.

GAGE.--Water-stage recorder. Datum of gage is 7,532.66 ft (2,295.955 m) above mean sea level. Prior to Apr. 7, 1915, nonrecording gages and Apr. 7, 1915, to Nov. 5, 1935, water-stage recorder, at railroad and highway bridges in Alamosa 1.0 to 2.5 mi (1.6 to 4.0 km) downstream at different datums. Nov. 6, 1935, to June 30, 1942, water-stage recorder at present site at datum 1.00 ft (0.305 m) higher.

AVERAGE DISCHARGE.--61 years, 253 ft³/s (7.164 m³/s), 183,300 acre-ft/yr (226 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,500 ft³/s (42.5 m³/s) June 16 (gage height, 6.40 ft or 1.951 m); minimum daily, 68 ft³/s (1.93 m³/s) Oct. 4.

Period of record: Maximum discharge, 14,000 ft³/s (396 m³/s) July 1, 1927 (gage height, 8.37 ft or 2.551 m, site and datum then in use); maximum gage height, 10.62 ft (3.237 m) June 20, 1949; minimum daily discharge, 1.0 ft³/s (0.028 m³/s) May 19, 1950.

Flood in October 1911 (stage, 0.2 ft or 0.061 m lower than that of July 1, 1927, from floodmarks), probably exceeded that of July 1, 1927, and is probably the greatest since at least 1884, from information by local residents.

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

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

REVISIONS (WATER YEARS).--WSP 928: Drainage area. WSp 1312: 1936(M) WSP 1732: 1951.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	78	368	225	180	190	230	312	260	766	928	362	345
2	73	368	220	180	185	230	306	220	889	868	358	310
3	73	358	205	175	175	235	298	192	766	688	375	254
4	68	378	215	170	180	240	284	208	721	455	350	235
5	69	370	240	180	180	245	274	292	774	485	342	224
6	80	372	235	185	180	250	260	274	728	460	332	211
7	211	392	210	185	180	255	270	222	710	233	316	206
8	201	370	220	185	180	255	280	201	854	155	326	208
9	224	352	230	190	180	260	230	274	970	166	296	201
10	249	368	210	185	180	260	230	388	1,120	304	258	196
11	232	355	195	185	185	265	260	595	1,210	338	228	239
12	184	334	190	180	185	270	300	746	1,260	330	197	308
13	118	358	190	180	185	275	320	760	1,380	245	182	322
14	93	340	185	185	185	280	360	791	1,440	185	184	298
15	80	314	180	180	190	290	380	889	1,350	256	190	268
16	75	322	180	175	190	300	410	788	1,460	338	215	266
17	137	295	180	175	190	320	300	735	1,340	340	222	264
18	174	300	190	180	190	330	222	721	988	196	204	270
19	102	338	195	180	185	345	215	784	861	179	218	250
20	76	326	200	185	185	365	182	1,020	822	410	190	228
21	213	304	200	185	190	378	165	1,220	763	330	189	215
22	187	290	200	185	190	370	163	1,310	882	232	204	209
23	168	250	200	175	190	368	165	1,160	984	245	222	199
24	301	210	200	170	190	340	181	774	1,030	237	208	185
25	442	230	195	175	195	320	210	798	1,070	370	194	187
26	450	250	185	180	200	325	210	917	1,070	382	201	204
27	398	260	180	185	210	332	224	880	1,020	442	211	208
28	365	235	180	190	225	330	240	830	970	465	208	209
29	352	215	185	190	-----	326	260	643	1,070	418	185	201
30	342	225	185	180	-----	322	280	634	1,030	382	220	209
31	340	-----	180	185	-----	318	-----	649	-----	392	250	-----
TOTAL	6,155	9,447	6,185	5,620	5,270	9,229	7,791	20,175	30,298	11,454	7,637	7,129
MEAN	199	315	200	181	188	298	260	651	1,010	369	246	238
MAX	450	392	240	190	225	378	410	1,310	1,460	928	375	345
MIN	68	210	180	170	175	230	163	192	710	155	182	185
AC-FT	12,210	18,740	12,270	11,150	10,450	18,310	15,450	40,020	60,100	22,720	15,150	14,140

CAL YR 1972 TOTAL 58,175 MEAN 159 MAX 475 MIN 16 AC-FT 115,400

WTR YR 1973 TOTAL 126,390 MEAN 346 MAX 1,460 MIN 68 AC-FT 250,700

NOTE.--No gage-height record Dec. 27 to Mar. 20.

08224500 KERBER CREEK AT ASHLEY RANCH, NEAR VILLA GROVE, COLO.

LOCATION.--Lat 38°14'28", long 106°06'57", in SW¼NW¼ sec.17, T.46 N., R.8 E., Saguache County, on left bank at Ashley Ranch, 4.5 mi (7.2 km) upstream from Little Kerber Creek and 9 mi (14 km) west of Villa Grove.

DRAINAGE AREA.--38 mi² (98 km²), approximately.

PERIOD OF RECORD.--June 1923 to September 1926 (published as Kerber Creek near Villa Grove), May 1936 to current year. Monthly discharge only for some periods, published in WSP 1312.

GAGE.--Water-stage recorder. Altitude of gage is 8,830 ft (2,691 m) from topographic map. Prior to Dec. 10, 1963, at site 150 ft (46 m) upstream at datum 1.50 ft (0.457 m) higher.

AVERAGE DISCHARGE.--40 years, 12.6 ft³/s (0.357 m³/s), 9,130 acre-ft/yr (11.3 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 260 ft³/s (7.36 m³/s) May 18 (gage height, 1.50 ft or 0.457 m); minimum daily, 1.6 ft³/s (0.045 m³/s) Feb. 16-20.

Period of record: Maximum discharge, 407 ft³/s (11.5 m³/s) May 14, 1941 (gage height, 3.88 ft or 1.183 m, site and datum then in use), from rating curve extended above 140 ft³/s (4.0 m³/s); maximum gage height, 5.04 ft or 1.536 m (site and datum then in use) May 11, 1947 (backwater from beaver dam); minimum daily discharge, 0.20 ft³/s (0.006 m³/s) Sept. 3, 1950, July 30 to Aug. 2, 1963, but may have been less during periods of no gage-height record.

Maximum stage since at least 1872, that of May 14, 1941, from information by local residents.

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

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

REVISIONS (WATER YEARS).--WSP 1312: 1937-38. WSP 1512: 1943.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.2	4.0	3.0	2.1	2.1	2.4	3.3	19	89	52	13	8.2
2	2.2	4.0	3.0	2.1	2.0	2.4	3.3	19	89	52	13	7.0
3	2.0	4.5	2.8	2.1	2.0	2.4	3.0	24	80	52	13	6.5
4	2.0	4.5	3.0	2.1	2.0	2.2	2.8	30	77	45	13	6.0
5	2.7	4.5	3.2	2.1	2.0	2.0	3.0	30	80	40	17	5.6
6	2.2	5.0	2.8	2.2	2.2	2.1	3.5	30	89	40	16	5.6
7	2.2	4.0	2.5	2.1	2.2	2.2	3.5	30	97	31	13	5.2
8	4.1	4.0	2.5	2.1	2.2	2.3	2.5	31	119	31	11	4.8
9	3.2	4.5	2.5	2.2	2.1	2.2	4.0	38	160	31	9.6	4.4
10	2.7	4.0	2.5	2.3	2.0	2.2	5.5	57	152	24	8.2	6.0
11	2.0	4.0	2.5	2.3	2.0	2.2	7.0	112	152	22	8.2	7.6
12	2.0	4.2	2.5	2.3	2.0	2.2	8.0	163	129	33	8.2	6.5
13	2.2	4.0	2.5	2.4	2.0	2.5	9.0	177	109	29	8.2	4.8
14	2.0	4.0	2.3	2.4	1.8	2.5	10	129	129	26	7.0	4.4
15	5.1	4.0	2.1	2.3	1.7	2.5	10	129	80	21	7.0	4.1
16	5.6	4.0	2.3	2.3	1.6	2.3	8.0	132	80	16	7.0	4.1
17	3.6	4.2	2.5	2.3	1.6	2.7	9.0	146	89	14	7.0	4.1
18	2.7	4.2	2.7	2.3	1.6	3.1	9.4	196	92	24	7.0	3.8
19	6.0	4.0	3.0	2.3	1.6	3.5	8.6	166	94	31	7.0	3.8
20	7.8	4.0	3.3	2.3	1.6	3.8	8.6	146	80	22	7.0	3.5
21	5.1	4.0	3.3	2.4	1.8	3.9	9.4	119	77	22	6.0	3.5
22	3.6	3.5	3.0	2.2	2.0	3.8	8.6	119	72	19	6.5	3.5
23	3.2	3.0	3.1	2.0	2.0	3.7	9.4	109	67	19	6.0	3.5
24	3.2	3.0	3.1	2.0	2.0	3.4	9.4	119	62	17	6.5	3.8
25	2.7	3.1	2.5	2.0	2.2	3.0	9.4	122	64	17	7.6	4.1
26	2.7	3.2	2.5	2.1	2.2	3.0	12	122	64	14	8.2	6.0
27	3.2	3.3	2.5	2.2	2.2	3.2	17	109	59	14	7.0	5.6
28	3.6	3.4	2.5	2.0	2.2	3.5	23	89	57	13	6.5	5.2
29	3.2	3.0	2.5	1.9	-----	3.3	23	77	52	13	7.6	5.2
30	3.2	3.0	2.5	1.9	-----	3.3	23	62	49	21	11	4.8
31	3.0	-----	2.1	2.0	-----	3.3	-----	62	-----	14	12	-----
TOTAL	101.2	116.1	83.1	67.3	54.9	87.1	266.2	2,913	2,689	819	285.3	151.2
MEAN	3.26	3.87	2.68	2.17	1.96	2.81	8.87	94.0	89.6	26.4	9.20	5.04
MAX	7.8	5.0	3.3	2.4	2.2	3.9	23	196	160	52	17	8.2
MIN	2.0	3.0	2.1	1.9	1.6	2.0	2.5	19	49	13	6.0	3.5
AC-FT	201	230	165	133	109	173	528	5,780	5,330	1,620	566	300

CAL YR 1972 TOTAL 2,596.50 MEAN 7.09 MAX 31 MIN .40 AC-FT 5,150
WTR YR 1973 TOTAL 7,633.40 MEAN 20.9 MAX 196 MIN 1.6 AC-FT 15,140

PEAK DISCHARGE (BASE, 70 CFS).--May 18 (1945) 260 cfs (1.50 ft); June 10 (1930) 207 cfs (1.24 ft).

NOTE.--No gage-height record Nov. 12 to Apr. 18.

RIO GRANDE BASIN

CLOSED BASIN IN SAN LUIS VALLEY, COLO.

08227000 SAGUACHE CREEK NEAR SAGUACHE, COLO.

LOCATION.--Lat 38°09'48", long 106°17'24", in SE¼SE¼ sec.10, T.45 N., R.6 E., Saguache County, on left bank 0.2 mi (0.3 km) downstream from Middle Creek, and 10 mi (16 km) northwest of Saguache.

DRAINAGE AREA.--595 mi² (1,541 km²).

PERIOD OF RECORD.--August 1910 to September 1912, June 1914 to current year. Monthly discharge only for some periods, published in WSP 1312.

GAGE.--Water-stage recorder. Altitude of gage is about 8,030 ft (2,448 m) from topographic map. Prior to Apr. 9, 1934, at sites 0.8 mi (1.3 km) downstream at different datums. Apr. 10, 1934, to Nov. 20, 1966, at present site at datum 1.00 ft (0.305 m) higher.

AVERAGE DISCHARGE.--61 years, 69.9 ft³/s (1.980 m³/s), 50,640 acre-ft/yr (62.4 hm³/yr).

EXTREMES.--Current year; Maximum discharge, 404 ft³/s (11.4 m³/s) June 14 (gage height, 3.75 ft or 1.143 m); minimum daily, 15 ft³/s (0.42 m³/s) Jan. 2.

Period of record: Maximum discharge, 790 ft³/s (22.4 m³/s) Aug. 3, 1964 (gage height, 3.85 ft or 1.173 m, present datum), from rating curve extended above 83 ft³/s (2.4 m³/s); maximum gage height, 3.94 ft (1.201 m) May 20, 1970; minimum daily discharge recorded, 8.2 ft³/s (0.23 m³/s) Dec. 22, 1950, Aug. 17, 1951.

REMARKS.--Records good except those for winter period, which are poor. Natural flow of stream affected by transmountain diversions from Colorado River basin to drainage area above station through Tarbell ditch (see elsewhere in this report), and diversions above station for irrigation.

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

REVISIONS (WATER YEARS).--WSP 1242: 1948-49. WSP 1312: 1912, 1934(M), 1942(M). WSP 1923: 1951.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	32	22	18	19	27	36	77	242	186	74	67
2	17	29	22	15	18	27	36	66	269	178	69	56
3	16	36	21	17	18	27	33	62	258	170	69	50
4	16	34	22	17	18	25	31	69	260	163	77	47
5	16	36	23	18	19	23	34	83	238	152	83	46
6	18	45	19	17	19	25	45	87	218	145	97	44
7	20	32	19	17	20	27	45	77	218	138	97	43
8	23	29	20	16	20	29	28	74	237	140	90	43
9	24	41	19	17	20	28	32	91	263	154	74	42
10	22	26	19	17	19	28	42	114	300	151	66	51
11	20	27	19	17	19	28	50	138	340	136	63	73
12	20	33	20	17	19	28	58	158	366	140	63	66
13	22	28	19	18	19	31	69	180	368	145	61	58
14	23	27	19	17	19	31	77	218	386	137	59	52
15	28	27	18	17	19	32	77	215	374	134	58	50
16	36	27	19	17	18	31	56	215	332	114	57	48
17	39	28	20	17	18	33	60	227	287	114	56	47
18	35	28	21	17	19	35	71	237	263	118	53	45
19	34	25	21	18	20	39	59	278	249	148	53	44
20	39	25	21	17	21	43	38	308	233	141	58	43
21	40	25	21	17	21	44	43	319	223	129	59	42
22	36	23	21	17	21	43	44	329	215	111	60	42
23	34	20	21	17	22	40	54	315	210	101	57	42
24	33	21	20	16	23	36	61	283	203	91	53	48
25	32	22	19	16	24	36	59	278	200	86	57	49
26	29	23	19	17	25	36	58	289	199	81	60	50
27	23	24	19	18	25	40	59	281	199	81	57	51
28	29	21	19	17	26	41	63	249	207	80	51	49
29	30	22	20	16	-----	36	71	227	208	79	52	48
30	34	22	20	16	-----	37	83	213	195	79	61	47
31	36	-----	18	17	-----	35	-----	215	-----	81	83	-----
TOTAL	840	838	620	525	568	1,021	1,572	5,972	7,760	3,903	2,027	1,483
MEAN	27.1	27.9	20.0	16.9	20.3	32.9	52.4	193	259	126	65.4	49.4
MAX	40	45	23	18	26	44	83	329	386	186	97	73
MIN	16	20	18	15	18	23	28	62	195	79	51	42
AC-FT	1,670	1,660	1,230	1,040	1,130	2,030	3,120	11,850	15,390	7,740	4,020	2,940

CAL YR 1972 TOTAL 16,912 MEAN 46.2 MAX 160 MIN 15 AC-FT 33,540
 WTR YR 1973 TOTAL 27,129 MEAN 74.3 MAX 386 MIN 15 AC-FT 53,810

PEAK DISCHARGE (BASE, 210 CFS).--June 14 (1245) 404 cfs (3.75 ft).

RIO GRANDE BASIN

127

CLOSED BASIN IN SAN LUIS VALLEY, COLO.

08227500 NORTH CRESTONE CREEK NEAR CRESTONE, COLO.

LOCATION.--Lat 38°00'49", long 105°41'32", Saguache County, on right bank in canyon, 1.5 mi (2.4 km) northeast of Crestone and 3.2 mi (5.1 km) upstream from South Crestone Creek.

DRAINAGE AREA.--10.7 mi² (27.7 km²).

PERIOD OF RECORD.--May 1936 to current year (no winter records prior to 1948).

GAGE.--Water-stage recorder. Altitude of gage is 8,360 ft (2,548 m) from topographic map.

AVERAGE DISCHARGE.--26 years (1947-73), 11.1 ft³/s (0.314 m³/s), 8,040 acre-ft/yr (9.91 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 268 ft³/s (7.59 m³/s) June 14 (gage height, 2.69 ft or 0.820 m); minimum daily, 1.9 ft³/s (0.054 m³/s) Feb. 17-20.

Period of record: Maximum discharge, 735 ft³/s (20.8 m³/s) Aug. 6, 1936 (gage height, 4.33 ft or 1.320 m), from rating curve extended above 160 ft³/s (4.5 m³/s) on basis of slope-area measurement of peak flow; minimum daily recorded, 0.4 ft³/s (0.011 m³/s) Apr. 3, 1945.

Flood of October 1911 is the greatest probably since at least 1884. Stage and discharge of the flood of Aug. 6, 1936, are the greatest since October 1911, from information by local residents.

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

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.2	15	5.6	3.2	2.8	3.2	3.9	9.6	67	66	22	8.4
2	3.9	15	5.6	2.7	2.5	3.2	3.9	8.8	49	62	21	7.6
3	3.9	12	5.4	2.7	2.5	3.2	3.7	8.0	46	60	21	7.2
4	3.9	11	5.7	2.7	2.5	3.0	3.5	9.6	50	51	20	6.4
5	5.7	9.6	6.0	2.7	2.8	2.8	3.8	10	50	50	19	6.0
6	5.4	8.8	5.5	2.7	2.8	3.0	4.5	11	50	49	19	6.0
7	5.1	8.8	5.0	2.7	2.9	3.2	4.5	9.6	62	50	20	5.7
8	8.0	8.0	5.2	2.7	2.9	3.4	3.4	11	114	51	20	5.4
9	8.4	8.0	5.0	2.9	2.7	3.3	4.1	15	176	47	19	5.4
10	8.0	8.0	5.0	2.9	2.5	3.2	5.1	25	212	46	17	6.4
11	8.0	6.8	5.0	2.9	2.5	3.4	5.5	44	208	47	16	8.4
12	7.6	6.8	5.2	2.8	2.5	3.6	6.0	51	201	45	18	7.2
13	9.2	6.8	5.0	3.0	2.5	3.6	6.5	55	188	41	16	6.8
14	9.2	6.4	5.0	3.0	2.5	3.4	7.0	55	210	46	15	6.4
15	18	6.0	4.5	2.8	2.3	4.0	7.0	57	114	49	15	5.7
16	29	6.0	4.6	2.8	2.1	4.0	5.5	59	101	46	14	5.4
17	26	6.0	4.8	2.8	1.9	4.3	5.7	60	96	47	14	5.4
18	24	6.0	5.0	2.8	1.9	4.6	5.7	73	96	49	14	5.1
19	40	6.0	5.0	2.9	1.9	4.9	5.4	82	96	52	12	5.4
20	51	6.0	5.0	2.8	1.9	5.2	5.0	82	74	52	12	5.1
21	41	6.4	5.0	3.0	2.2	5.2	5.4	76	78	49	12	4.8
22	34	5.8	4.8	2.8	2.5	5.0	5.4	69	79	47	11	4.8
23	29	5.2	5.0	2.6	2.5	4.8	6.0	62	80	40	11	4.8
24	23	5.3	4.5	2.6	2.5	4.8	6.4	55	79	35	10	4.8
25	22	5.4	4.0	2.6	2.7	4.5	6.4	47	80	32	9.6	4.8
26	20	5.5	4.0	2.8	2.8	4.5	6.4	47	84	30	9.2	5.1
27	20	5.6	4.0	3.0	2.8	4.2	8.0	47	88	28	8.8	5.4
28	18	5.4	4.0	2.8	2.8	3.9	10	45	90	25	8.4	5.4
29	17	5.6	4.0	2.6	-----	3.7	11	43	80	23	8.0	5.4
30	17	5.6	4.0	2.6	-----	3.7	11	42	76	23	8.4	5.7
31	15	-----	3.2	2.7	-----	3.7	-----	50	-----	22	8.4	-----
TOTAL	534.5	222.8	149.6	86.6	69.7	120.5	175.7	1,318.6	3,074	1,360	448.8	176.4
MEAN	17.2	7.43	4.83	2.79	2.49	3.89	5.86	42.5	102	43.9	14.5	5.88
MAX	51	15	6.0	3.2	2.9	5.2	11	82	212	66	22	8.4
MIN	3.9	5.2	3.2	2.6	1.9	2.8	3.4	8.0	46	22	6.0	4.8
AC-FT	1,060	442	297	172	138	239	349	2,620	6,100	2,700	840	350

CAL YR 1972 TOTAL 2,903.50 MEAN 7.93 MAX 51 MIN .90 AC-FT 5,760
WTR YR 1973 TOTAL 7,737.20 MEAN 21.2 MAX 212 MIN 1.9 AC-FT 15,350

PEAK DISCHARGE (BASE, 60 CFS).--June 14 (0545) 268 cfs (2.69 ft).

NOTE.--No gage-height record Nov. 23 to Mar. 22.

RIO GRANDE BASIN

CLOSED BASIN IN SAN LUIS VALLEY, COLO.

08230500 CARNERO CREEK NEAR LA GARITA, COLO.

LOCATION.--Lat 37°51'35", long 106°19'08", in SW¼NE¼ sec.28, T.42 N., R.6 E., (projected), Saguache County, on left bank 4.5 mi (7.2 km) northwest of La Garita and 6.6 mi (10.6 km) downstream from North Fork.

DRAINAGE AREA.--117 mi² (303 km²).

PERIOD OF RECORD.--April 1919 to current year. No winter records prior to water year 1945 except water years 1926, 1941. Monthly discharge only for some periods, published in WSP 1312.

GAGE.--Water-stage recorder. Altitude of gage is 8,150 ft (2,484 m) from topographic map. Prior to Aug. 6, 1925, nonrecording gage or water-stage recorder at site 300 ft (91 m) downstream at different datum. Aug. 6, 1925, to Apr. 20, 1929, nonrecording gage or water-stage recorder at present site at datum 1.00 ft (0.305 m) higher. Apr. 21, 1929, to Nov. 20, 1966, water-stage recorder at present site at datum 1.00 ft (0.305 m) higher.

AVERAGE DISCHARGE.--31 years (1925-26, 1940-41, 1944-73), 11.3 ft³/s (0.320 m³/s), 8,190 acre-ft/yr (10.1 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 214 ft³/s (6.06 m³/s) May 12 (gage height, 2.89 ft or 0.881 m); minimum daily, 1.3 ft³/s (0.037 m³/s) Oct. 1.
Period of record: Maximum discharge, 1,600 ft³/s (45.3 m³/s) July 21, 1945 (gage height, 6.75 ft or 2.057 m, present datum), from rating curve extended above 160 ft³/s (4.5 m³/s); no flow for several days during summer months in 1951, 1955-56, 1963.

REMARKS.--Records good except those for winter period, which are poor. Diversions above station for irrigation.

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

REVISIONS (WATER YEARS).--WSP 1312: 1935(monthly figures only).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.3	3.4	2.5	2.2	2.6	3.8	5.1	34	59	22	10	7.6
2	1.5	3.0	2.5	2.0	2.6	3.8	5.2	27	64	21	9.1	5.8
3	1.4	3.5	2.4	2.1	2.6	3.8	4.8	30	64	20	9.1	5.2
4	1.5	3.5	2.5	2.1	2.6	3.7	4.5	43	66	19	13	4.8
5	1.7	3.5	2.6	2.2	2.7	3.6	5.0	48	58	18	10	4.5
6	1.9	4.0	2.2	2.2	2.8	3.7	6.6	39	52	17	13	4.2
7	2.0	3.4	2.2	2.2	2.8	3.8	6.6	35	48	17	20	4.2
8	2.0	3.0	2.3	2.1	2.8	4.0	4.5	45	47	17	13	4.2
9	2.1	3.4	2.2	2.2	2.8	3.9	5.0	58	48	22	10	4.0
10	2.1	2.8	2.2	2.2	2.7	3.9	6.6	79	51	18	9.4	4.8
11	1.7	2.8	2.2	2.2	2.7	3.9	8.0	119	51	16	9.1	7.6
12	1.6	3.2	2.3	2.2	2.7	3.9	9.5	136	50	14	8.8	6.0
13	1.9	3.0	2.2	2.3	2.7	4.5	11	130	71	18	8.8	5.0
14	2.2	2.8	2.2	2.2	2.7	4.5	12	130	60	20	8.5	4.5
15	2.7	2.8	2.1	2.2	2.7	4.8	12	111	53	20	8.2	4.5
16	4.8	2.8	2.2	2.2	2.6	4.7	9.6	102	48	16	7.3	4.5
17	4.3	2.9	2.3	2.2	2.6	4.8	10	104	44	17	7.3	4.5
18	3.1	2.9	2.4	2.2	2.8	5.0	12	109	39	18	6.8	4.5
19	3.9	2.5	2.4	2.3	3.0	5.6	11	140	37	27	6.5	4.5
20	8.0	2.5	2.4	2.2	3.2	6.0	9.1	146	37	19	6.0	4.5
21	5.5	2.5	2.4	2.2	3.2	6.2	7.3	146	36	16	6.0	4.5
22	3.9	2.4	2.4	2.2	3.2	6.0	6.8	142	35	14	6.2	4.2
23	3.5	2.2	2.4	2.1	3.3	5.8	10	126	32	13	6.0	4.0
24	3.3	2.3	2.3	2.1	3.4	5.2	17	108	30	12	5.5	4.5
25	3.3	2.4	2.2	2.1	3.5	5.2	16	97	29	12	5.8	4.8
26	3.3	2.5	2.2	2.2	3.6	5.2	20	97	26	12	6.0	5.0
27	3.3	2.6	2.2	2.3	3.6	5.8	20	90	25	11	5.5	5.8
28	3.3	2.4	2.2	2.2	3.7	5.8	34	72	25	11	5.0	5.0
29	3.1	2.5	2.3	2.1	-----	5.2	53	64	25	10	5.2	4.8
30	3.5	2.5	2.3	2.1	-----	5.2	47	58	23	12	7.0	4.5
31	3.5	-----	2.2	2.3	-----	4.9	-----	55	-----	13	10	-----
TOTAL	91.2	86.0	71.4	67.6	82.2	146.2	389.2	2,720	1,333	512	262.1	146.5
MEAN	2.94	2.87	2.30	2.18	2.94	4.72	13.0	87.7	44.4	16.5	8.45	4.88
MAX	8.0	4.0	2.6	2.3	3.7	6.2	53	146	71	27	20	7.6
MIN	1.3	2.2	2.1	2.0	2.6	3.6	4.5	27	23	10	5.0	4.0
AC-FT	181	171	142	134	163	290	772	5,400	2,640	1,020	520	291

CAL YR 1972 TOTAL 2,010.74 MEAN 5.49 MAX 26 MIN .50 AC-FT 3,990
WTR YR 1973 TOTAL 5,907.40 MEAN 16.2 MAX 146 MIN 1.3 AC-FT 11,720

PEAK DISCHARGE (BASE, 110 CFS).--May 12 (0230) 214 cfs (2.89 ft).

NOTE.--No gage-height record Nov. 10 to Apr. 19.

CLOSED BASIN IN SAN LUIS VALLEY, COLO.

08231000 LA GARITA CREEK NEAR LA GARITA, COLO.

LOCATION.--Lat 37°48'48", long 106°19'04", in NW¼SE¼ sec.9, T.41 N., R.6 E., Saguache County, on right bank 4.5 mi (7.2 km) downstream from Little La Garita Creek and 4.5 mi (7.2 km) southwest of La Garita.

DRAINAGE AREA.--61 mi² (160 km²), approximately.

PERIOD OF RECORD.--April 1919 to current year. No winter records prior to water year 1948 except water years 1926, 1941, 1945-46. Monthly discharge only for some periods, published in WSP 1312.

GAGE.--Water-stage recorder. Altitude of gage is 8,030 ft (2,448 m) from topographic map. Apr. 1, 1919, to June 23, 1927, nonrecording gages and June 24, 1927, to Nov. 13, 1935, water-stage recorder, at sites within 0.2 mi (0.3 km) downstream at different datums. Nov. 14, 1935, to Nov. 16, 1966, water-stage recorder at present site at datum 1.00 ft (0.305 m) higher.

AVERAGE DISCHARGE.--30 years (1925-26, 1940-41, 1944-46, 1947-73), 13.2 ft³/s (0.374 m³/s), 9,560 acre-ft/yr (11.8 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 235 ft³/s (6.66 m³/s) May 21 (gage height, 2.70 ft or 0.823 m); minimum daily, 2.4 ft³/s (0.068 m³/s) Nov. 19.

Period of record: Maximum discharge, 530 ft³/s (15.0 m³/s) July 9, 1957 (gage height, 4.00 ft or 1.219 m, present datum), from rating curve extended above 140 ft³/s (4.0 m³/s); minimum daily recorded, 0.2 ft³/s (0.006 m³/s) Sept. 28, 29, 1956.

REMARKS.--Records good except those for winter period, which are poor. Diversions above station for irrigation.

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

REVISIONS (WATER YEARS).--WSP 1312: 1946(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.3	5.0	3.7	3.5	4.0	5.1	5.0	25	67	37	16	8.8
2	3.5	4.5	3.7	3.3	4.0	5.1	5.1	21	67	36	13	7.6
3	3.3	4.4	3.6	3.4	4.0	5.1	4.9	24	73	32	14	6.8
4	3.5	5.0	3.7	3.4	4.1	4.9	4.7	36	71	30	14	6.5
5	4.0	4.2	3.8	3.5	4.2	4.7	5.2	39	58	29	14	6.2
6	4.4	3.2	3.5	3.5	4.3	4.9	5.6	30	54	27	14	6.2
7	4.4	3.0	3.4	3.5	4.3	5.1	5.6	26	56	26	21	5.9
8	4.4	4.0	3.5	3.4	4.3	5.2	4.8	37	60	26	18	6.2
9	4.4	2.8	3.4	3.5	4.3	5.0	5.0	48	63	30	13	5.9
10	4.4	3.3	3.4	3.5	4.0	5.0	6.0	49	76	26	12	7.6
11	4.2	3.5	3.4	3.5	4.0	5.0	7.0	55	80	24	11	10
12	4.2	4.0	3.5	3.5	4.0	5.0	8.0	76	87	23	12	8.4
13	5.1	3.8	3.4	3.7	4.0	5.4	9.0	87	111	26	11	8.0
14	6.5	3.7	3.4	3.5	4.0	5.4	9.8	76	114	28	11	7.6
15	6.8	3.7	3.3	3.5	4.0	5.6	9.4	60	94	30	11	7.2
16	9.8	3.8	3.5	3.5	3.9	5.4	9.8	58	80	24	9.4	7.2
17	7.2	4.0	3.7	3.5	3.9	5.6	10	58	69	25	8.8	6.8
18	5.4	3.0	3.8	3.5	4.1	5.8	13	78	65	25	8.4	6.8
19	7.2	2.4	3.8	3.7	4.3	6.0	9.8	122	63	35	8.4	6.8
20	13	3.0	3.8	3.6	4.5	6.2	8.8	163	60	23	8.0	6.2
21	8.8	3.7	3.8	3.6	4.5	6.4	7.6	163	51	22	8.4	6.2
22	5.6	3.5	3.8	3.6	4.5	6.2	8.8	132	45	21	8.8	6.2
23	5.4	3.2	3.8	3.5	4.6	6.0	17	100	44	19	8.4	6.2
24	4.6	3.3	3.7	3.5	4.7	5.4	24	102	42	17	7.6	6.5
25	4.4	3.5	3.5	3.5	4.8	5.2	22	100	41	17	8.4	6.5
26	4.2	3.7	3.5	3.6	4.9	5.4	22	100	39	17	8.4	6.5
27	4.2	3.8	3.5	3.7	5.0	5.6	28	78	42	16	7.6	6.5
28	4.2	3.5	3.5	3.6	5.0	5.6	38	76	42	16	7.6	6.8
29	4.6	3.7	3.6	3.5	-----	5.2	52	71	42	16	7.6	6.2
30	5.1	3.7	3.6	3.5	-----	5.2	35	67	39	21	9.8	5.6
31	5.1	-----	3.5	3.7	-----	4.9	-----	65	-----	19	14	-----
TOTAL	165.2	109.9	111.1	109.3	120.2	166.6	400.9	2,222	1,895	763	344.6	205.9
MEAN	5.33	3.66	3.58	3.53	4.29	5.37	13.4	71.7	63.2	24.6	11.1	6.86
MAX	13	5.0	3.8	3.7	5.0	6.4	52	163	114	37	21	10
MIN	3.3	2.4	3.3	3.3	3.9	4.7	4.7	21	39	16	7.6	5.6
AC-FT	328	218	220	217	238	330	795	4,410	3,760	1,510	684	408

CAL YR 1972 TOTAL 2,612.8 MEAN 7.14 MAX 25 MIN 2.0 AC-FT 5,180
WTR YR 1973 TOTAL 6,613.7 MEAN 18.1 MAX 163 MIN 2.4 AC-FT 13,120

PEAK DISCHARGE (BASE, 80 CFS).--May 21 (0300) 235 cfs (2.70 ft); June 13 (0700) 138 cfs (2.45 ft).

NOTE.--No gage-height record Nov. 22 to Apr. 5.

08236000 ALAMOSA CREEK ABOVE TERRACE RESERVOIR, COLO.

LOCATION.--Lat 37°22'29", long 106°20'03", in NW¼NE¼ sec.17, T.36 N., R.6 E., Conejos County, on left bank 0.8 mi (1.3 km) upstream from high-water line of Terrace Reservoir at elevation 8,568 ft (2,611.5 m), 3.0 mi (4.8 km) downstream from French Creek, and 15 mi (24 km) northwest of Capulin.

DRAINAGE AREA.--107 mi² (277 km²).

PERIOD OF RECORD.--September 1911 to September 1912 (published as Rio Alamosa near Monte Vista), May to June 1914, April 1915 to September 1927, October 1934 to current year. No winter records water years 1919-23. Monthly discharge only for some periods, published in WSP 1312.

GAGE.--Water-stage recorder. Altitude of gage is 8,600 ft (2,621 m) from topographic map. See WSP 1712 or 1732 for history of changes prior to Oct. 1, 1927.

AVERAGE DISCHARGE.--47 years (1911-12, 1915-18, 1923-27, 1934-73), 113 ft³/s (3.200 m³/s), 81,870 acre-ft/yr (101 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,590 ft³/s (45.0 m³/s) June 12 (gage height, 3.58 ft or 1.091 m); minimum daily, 9.5 ft³/s (0.27 m³/s) Oct. 2-4.

Period of record: Maximum discharge, 5,200 ft³/s (147 m³/s) Oct. 9, 1911 (gage height, 11.0 ft or 3.353 m, site and datum then in use, from floodmark), from rating curve extended above 1,000 ft³/s (28 m³/s) on basis of computation of peak flow over dam about 8 mi (13 km) upstream; minimum not determined.

Maximum stage since at least 1854, that of Oct. 5, 1911, from information by local residents.

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

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

REVISIONS (WATER YEARS).--WSP 898: 1911(M). WSP 1312: 1935(M), 1944(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	52	24	19	18	18	21	130	662	762	110	64
2	9.5	43	23	19	17	18	22	110	514	702	104	52
3	9.5	46	22	19	16	18	20	117	427	640	99	45
4	9.5	40	25	20	17	17	19	152	404	582	108	42
5	83	45	24	20	18	17	20	175	360	494	117	38
6	46	41	20	19	20	16	22	145	404	457	112	36
7	50	32	24	19	23	16	20	121	547	410	108	35
8	80	39	27	18	23	17	18	135	702	360	104	34
9	59	39	25	19	20	18	21	229	910	360	89	31
10	46	29	22	20	18	19	23	360	1,100	371	83	40
11	39	35	21	18	19	20	26	439	1,160	340	76	61
12	38	39	19	19	20	20	29	421	1,130	310	74	45
13	52	28	17	20	20	19	31	393	970	280	72	38
14	43	25	18	21	18	19	36	388	950	260	67	33
15	56	24	19	22	17	19	39	360	860	230	72	31
16	82	23	20	22	15	19	35	398	815	210	62	30
17	89	24	21	22	14	21	40	475	779	190	59	28
18	83	25	22	21	14	22	48	582	694	210	58	26
19	114	25	22	19	14	22	39	797	662	240	62	25
20	130	24	22	19	14	22	34	950	625	210	58	24
21	102	22	21	18	15	21	32	910	655	190	67	23
22	82	21	21	17	15	20	34	806	632	180	62	23
23	78	21	22	16	14	20	45	632	603	170	53	23
24	67	22	21	18	14	20	58	625	596	155	50	24
25	66	23	20	18	15	20	64	728	625	148	53	23
26	59	23	20	18	15	21	74	685	702	145	62	27
27	56	22	20	18	16	22	97	482	779	145	49	27
28	53	22	21	17	17	22	138	388	920	130	45	28
29	45	23	22	17	-----	21	160	388	870	121	56	26
30	46	24	20	17	-----	20	169	482	851	119	66	24
31	48	-----	18	19	-----	19	-----	589	-----	119	93	-----
TOTAL	1,830.5	901	663	588	476	603	1,434	13,592	21,908	9,240	2,350	1,006
MEAN	59.0	30.0	21.4	19.0	17.0	19.5	47.8	438	730	298	75.8	33.5
MAX	130	52	27	22	23	22	169	950	1,160	762	117	64
MIN	9.5	21	17	16	14	16	18	110	360	119	45	23
AC-FT	3,630	1,790	1,320	1,170	944	1,200	2,840	26,960	43,450	18,330	4,660	2,000

CAL YR 1972 TOTAL 22,652.0 MEAN 61.9 MAX 296 MIN 9.5 AC-FT 44,930

WTR YR 1973 TOTAL 54,591.5 MEAN 150 MAX 1,160 MIN 9.5 AC-FT 108,300

NOTE.--No gage-height record Nov. 29 to Apr. 13.

08238000 LA JARA CREEK AT GALLEGOS RANCH, NEAR CAPULIN, COLO.

LOCATION.--Lat 37°12'32", long 106°11'16", in NE¼ sec.10, T.34 N., R.7 E., Conejos County, on left bank 2.7 mi (4.3 km) downstream from Canyon Del Rancho, 7 mi (11 km) southwest of Capulin, and 16.5 mi (26.5 km) downstream from La Jara Reservoir.

DRAINAGE AREA.--98 mi² (250 hm²), approximately.

PERIOD OF RECORD.--April 1916 to November 1917, April 1919 to November 1923, May 1936 to current year. No winter records prior to 1950 except water year 1944. Monthly discharge only for some periods, published in WSP 1312.

GAGE.--Water-stage recorder. Altitude of gage is 8,130 ft (2,478 m) from topographic map. Apr. 1, 1916, to Nov. 30, 1917, and Apr. 1, 1919, to Nov. 30, 1923, near present site at different datum.

AVERAGE DISCHARGE.--25 years (1943-44, 1949-73), 15.8 ft³/s (0.447 m³/s), 11,450 acre-ft/yr (14.1 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 285 ft³/s (80.7 m³/s) May 11 (gage height, 4.56 ft or 1.390 m); minimum daily, 4.8 ft³/s (0.14 m³/s) Jan. 8.

Period of record: Maximum discharge, 653 ft³/s (18.5 m³/s) Apr. 22, 1919 (gage height, 3.22 ft or 0.981 m, site and datum then in use), Apr. 15, 1937 (gage height, 5.94 ft or 1.811 m); maximum gage height, 6.12 ft or 1.865 m Aug. 11, 1961; minimum daily discharge recorded, 2.2 ft³/s (0.062 m³/s) Nov. 6, 1951.

REMARKS.--Records good except those for winter period, which are poor. Small diversions above station for irrigation. Flow regulated by La Jara Reservoir (capacity, 14,040 acre-ft or 17.3 hm³).

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

REVISIONS (WATER YEARS).--WSP 1242: Drainage area. WSP 1732: 1952.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.2	7.5	6.4	5.4	5.7	6.0	7.3	73	64	25	16	7.2
2	6.2	6.8	6.2	5.4	5.4	6.0	7.6	73	57	25	13	7.0
3	6.2	6.8	6.0	5.4	5.0	6.0	7.3	85	52	24	12	6.8
4	6.2	6.6	6.4	5.6	5.4	5.8	6.8	113	68	25	11	7.0
5	6.2	6.8	6.0	5.6	5.8	5.8	7.3	121	51	25	11	7.0
6	6.2	6.6	5.6	5.4	6.2	5.6	7.8	94	45	20	10	7.0
7	6.4	6.4	6.2	5.2	6.6	5.6	7.0	71	40	17	9.5	7.2
8	6.2	7.0	6.8	4.8	6.6	6.0	6.4	99	37	17	9.5	7.2
9	6.2	7.0	6.4	5.2	6.2	6.4	7.2	140	35	19	9.5	7.0
10	6.2	6.0	6.0	5.4	5.8	6.8	8.0	159	34	20	9.5	8.2
11	6.0	6.5	5.8	5.2	6.0	7.0	8.8	178	32	17	8.2	9.2
12	6.2	7.0	5.6	5.4	6.2	7.0	9.5	170	43	17	8.2	7.5
13	6.8	6.8	5.2	5.8	6.2	6.8	11	142	42	17	8.2	6.8
14	6.6	6.6	5.4	6.1	5.8	6.8	12	142	43	25	7.8	6.8
15	6.6	6.4	5.6	6.4	5.4	6.8	12	113	40	22	7.8	6.6
16	6.8	6.2	5.8	6.4	5.2	6.8	10	108	36	20	7.8	6.6
17	6.6	6.3	6.0	6.4	5.0	7.3	12	115	34	19	7.5	6.4
18	6.8	6.4	6.2	6.2	5.0	7.8	14	119	32	20	7.5	6.4
19	7.8	6.4	6.2	6.0	5.0	7.8	10	139	31	31	7.8	6.2
20	10	6.2	6.2	6.0	5.0	7.8	9.5	140	31	20	7.8	6.2
21	9.0	5.8	6.1	5.8	5.2	7.5	9.8	146	30	18	8.0	6.2
22	7.8	5.4	6.1	5.6	5.2	7.0	9.5	124	30	17	7.5	6.4
23	7.8	5.4	6.2	5.4	5.0	7.0	12	101	29	16	7.0	6.4
24	7.8	5.6	6.1	5.8	5.0	7.0	13	93	29	15	7.0	6.6
25	7.5	5.8	6.0	5.8	5.2	7.0	17	89	28	14	7.2	6.8
26	7.2	5.8	6.0	5.8	5.4	7.4	26	116	28	14	8.0	7.2
27	6.8	5.7	6.0	5.8	5.6	7.8	46	95	28	15	7.2	7.0
28	6.6	5.7	6.1	5.6	5.8	7.8	62	68	26	14	7.0	7.0
29	6.6	6.0	6.2	5.6	-----	7.4	76	57	26	13	6.8	6.8
30	7.0	6.4	5.7	5.6	-----	7.0	77	53	26	15	7.5	6.8
31	7.5	-----	5.2	6.0	-----	6.8	-----	57	-----	17	7.5	-----
TOTAL	214.2	189.9	185.7	176.1	155.9	211.6	530.0	3,393	1,127	593	270.3	207.5
MEAN	6.91	6.33	5.99	5.68	5.57	6.83	17.7	109	37.6	19.1	8.72	6.92
MAX	10	7.5	6.8	6.4	6.6	7.8	77	178	68	31	16	9.2
MIN	6.0	5.4	5.2	4.8	5.0	5.6	6.4	53	26	13	6.8	6.2
AC-FT	425	377	368	349	309	420	1,050	6,730	2,240	1,180	536	412

CAL YR 1972 TOTAL 2,988.2 MEAN 8.16 MAX 19 MIN 4.5 AC-FT 5,930
WTR YR 1973 TOTAL 7,254.2 MEAN 19.9 MAX 178 MIN 4.8 AC-FT 14,390

NOTE.--No gage-height record Nov. 17 to Apr. 11.

08240000 RIO GRANDE ABOVE MOUTH OF TRINCHERA CREEK, NEAR LASAUSES, COLO.

LOCATION.--Lat 37°18'58", long 105°44'32", in sec.35, T.36 N., R.11 E., Conejos County, on right bank 0.2 mi (0.3 km) upstream from Trinchera Creek, 3.2 mi (5.1 km) north of Lasasues, and 13 mi (21 km) southeast of Alamosa.

DRAINAGE AREA.--5,740 mi² (14,900 km²), approximately (includes 2,940 mi² or 7,610 km² in closed basin in northern part of San Luis Valley, Colo.).

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

GAGE.--Water-stage recorder. Altitude of gage is 7,500 ft (2,286 m) estimated from nearby level lines.

AVERAGE DISCHARGE.--37 years, 242 ft³/s (6.853 m³/s), 175,300 acre-ft/yr (216 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,710 ft³/s (48.4 m³/s) May 23 (gage height, 6.39 ft or 1.948 m); minimum daily, 59 ft³/s (1.67 m³/s) Oct. 17.

Period of record: Maximum discharge, 5,470 ft³/s (155 m³/s) June 21, 1949 (gage height, 9.50 ft or 2.896 m), from rating curve extended above 3,600 ft³/s (100 m³/s); minimum daily, 0.4 ft³/s (0.011 m³/s) July 4, 1940.

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

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

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	86	392	225	195	200	285	402	415	1,080	1,050	501	302
2	82	402	230	190	195	290	388	358	1,200	995	450	400
3	80	400	230	190	190	290	372	290	1,270	906	435	348
4	83	398	220	185	190	290	360	244	1,100	744	435	285
5	78	405	230	185	190	285	350	275	1,060	606	410	263
6	79	402	245	190	190	290	345	338	1,060	748	400	242
7	97	405	240	195	190	295	328	318	965	638	382	226
8	186	418	225	195	190	295	342	288	945	483	370	224
9	188	405	230	200	190	295	325	318	1,020	423	360	222
10	218	392	230	200	190	295	328	342	1,120	447	320	186
11	201	402	220	195	195	310	338	432	1,260	534	282	205
12	184	390	210	190	195	340	380	586	1,300	544	244	256
13	139	372	200	190	195	350	402	739	1,400	525	216	345
14	96	385	195	190	195	380	432	802	1,530	423	209	360
15	78	368	190	190	200	400	450	906	1,560	418	207	320
16	65	348	190	185	200	420	489	1,060	1,500	483	222	292
17	59	330	190	185	200	440	486	955	1,580	558	239	265
18	108	335	190	190	200	471	375	925	1,500	568	233	290
19	122	400	200	190	200	513	332	925	1,160	507	214	280
20	84	368	205	190	200	459	315	1,060	1,040	519	222	256
21	79	342	210	195	200	462	272	1,340	1,010	718	207	231
22	159	308	210	195	200	468	256	1,580	950	600	211	220
23	170	260	210	190	200	444	244	1,680	1,070	513	226	203
24	173	215	210	185	200	429	242	1,460	1,130	498	233	188
25	320	235	210	180	210	402	260	1,120	1,160	498	220	175
26	477	260	205	185	220	382	288	1,240	1,180	600	209	190
27	507	290	195	190	225	398	292	1,360	1,170	592	214	199
28	456	260	190	195	260	423	295	1,400	1,070	650	235	207
29	410	230	190	200	-----	420	320	1,200	1,040	638	207	207
30	395	220	195	200	-----	420	388	1,060	1,120	558	214	197
31	382	-----	195	195	-----	412	-----	1,040	-----	510	251	-----
TOTAL	5,841	10,337	6,515	5,930	5,610	11,653	10,396	26,056	35,550	18,494	8,778	7,604
MEAN	188	345	210	191	200	376	347	841	1,185	597	283	253
MAX	507	418	245	200	260	513	489	1,680	1,580	1,050	501	400
MIN	59	215	190	180	190	285	242	244	945	418	207	175
AC-FT	11,590	20,500	12,920	11,760	11,130	23,110	20,620	51,680	70,510	36,680	17,410	15,080

CAL YR 1972 TOTAL 63,671 MEAN 174 MAX 564 MIN 18 AC-FT 126,300
 WTR YR 1973 TOTAL 152,764 MEAN 419 MAX 1,680 MIN 59 AC-FT 303,000

08240500 TRINCHERA CREEK ABOVE TURNERS RANCH, NEAR FORT GARLAND, COLO.

LOCATION.--Lat 37°22'29", long 105°17'40", Costilla County, in Sangre de Cristo Grant, on right bank 0.9 mi (1.4 km) downstream from North Fork, 1.0 mi (1.6 km) upstream from Turners Ranch and 8.3 mi (13.4 km) southeast of Fort Garland.

DRAINAGE AREA.--45 mi² (120 km²), approximately.

PERIOD OF RECORD.--April 1923 to current year. No winter records prior to 1935 except water year 1928. Monthly discharge only for some periods, published in WSP 1312.

GAGE.--Water-stage recorder. Altitude of gage is 8,520 ft (2,597 m) from topographic map. Prior to Apr. 12, 1929, at site 200 ft (60 m) upstream at different datum.

AVERAGE DISCHARGE.--40 years (1927-28, 1934-73), 23.1 ft³/s (0.654 m³/s), 16,740 acre-ft/yr (20.6 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 299 ft³/s (8.47 m³/s) June 11 (gage height, 3.58 ft or 1.088 m); minimum daily, 5.4 ft³/s (0.15 m³/s) Feb. 3.

Period of record: Maximum discharge, 689 ft³/s (19.5 m³/s) May 27, 1942 (gage height, 3.32 ft or 1.012 m), from rating curve extended above 240 ft³/s (6.8 m³/s); maximum gage height, 3.73 ft (1.137 m) May 10, 1947; minimum daily discharge recorded, 3.0 ft³/s (0.085 m³/s) Oct. 3, 1942.

Outstanding floods occurred in 1886 and in October 1911. The flood in 1886 probably exceeded that in October 1911 and the flood in October 1911 probably exceeded all subsequent floods, from information by local residents.

REMARKS.--Records good except those for winter period, which are poor. No regulation or diversion above station.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	UCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.9	6.9	6.8	7.0	5.8	9.0	6.2	31	180	121	31	18
2	6.9	6.9	6.8	7.0	5.6	9.0	6.0	27	183	112	31	16
3	6.9	6.9	7.0	7.0	5.4	8.5	6.0	26	175	103	31	16
4	6.9	7.2	7.2	7.0	5.6	8.0	6.2	29	177	95	31	15
5	6.9	7.2	7.4	7.4	5.8	8.0	7.0	31	167	87	28	14
6	7.2	6.9	7.4	7.2	6.0	7.5	7.5	31	165	80	27	14
7	7.2	6.6	8.0	7.0	6.2	7.5	7.0	29	172	76	26	14
8	6.9	7.2	8.0	6.8	6.2	7.5	6.5	30	188	74	25	13
9	6.6	7.2	7.4	7.2	5.9	7.5	7.0	41	213	72	24	13
10	6.6	6.6	7.0	7.5	5.9	7.0	7.5	70	249	69	24	14
11	6.6	6.9	6.6	7.0	6.4	7.0	8.5	90	278	60	23	17
12	7.2	6.6	6.4	7.2	6.8	7.0	9.5	100	282	56	23	15
13	7.5	6.3	6.0	7.4	7.0	6.2	10	105	272	56	23	14
14	8.3	6.4	5.8	7.6	7.0	6.2	12	105	276	57	23	13
15	7.5	6.9	5.8	7.6	7.4	6.2	11	100	258	50	23	13
16	9.1	6.9	6.0	7.6	7.8	6.4	10	110	238	50	21	12
17	7.9	6.6	6.2	7.6	7.8	6.6	12	120	220	48	20	12
18	7.9	6.0	6.4	7.2	7.8	6.6	14	140	203	48	20	12
19	9.1	6.0	6.4	6.8	7.8	6.2	13	180	194	46	19	12
20	10	6.9	6.6	7.0	7.8	6.2	13	190	180	44	20	12
21	9.1	6.0	6.6	6.6	8.4	6.2	13	200	169	43	20	11
22	7.9	5.8	6.6	6.2	9.0	6.0	14	186	159	42	19	11
23	8.3	5.5	6.8	6.2	8.8	5.8	16	170	153	39	18	12
24	7.9	6.0	6.6	6.2	8.8	6.0	18	169	147	38	18	12
25	8.3	6.5	6.6	6.2	9.0	6.2	20	175	143	36	18	13
26	7.9	7.0	7.2	6.4	8.8	6.4	19	183	143	36	17	14
27	7.4	7.5	7.6	6.4	9.2	6.2	22	162	136	34	16	14
28	7.9	7.5	7.6	6.0	9.2	6.0	29	143	138	34	16	14
29	7.5	7.5	7.6	5.8	-----	6.0	36	152	135	33	17	14
30	7.9	7.0	7.2	5.8	-----	6.2	38	129	128	32	18	14
31	8.3	-----	6.8	6.0	-----	6.4	-----	156	-----	31	18	-----
TOTAL	239.0	201.4	212.4	211.9	203.2	211.5	404.9	3,390	5,721	1,802	688	408
MEAN	7.71	6.71	6.85	6.84	7.26	6.82	13.5	109	191	58.1	22.2	13.6
MAX	10	7.5	8.0	7.6	9.2	9.0	38	200	282	121	31	18
MIN	6.6	5.5	5.8	5.8	5.4	5.8	6.0	26	128	31	16	11
AC-FT	474	399	421	420	403	420	803	6,720	11,350	3,570	1,360	809

CAL YR 1972 TOTAL 3,968.2 MEAN 10.8 MAX 28 MIN 4.5 AC-FT 7,870
WTR YR 1973 TOTAL 13,693.3 MEAN 37.5 MAX 282 MIN 5.4 AC-FT 27,160

PEAK DISCHARGE (BASE, 50 CFS).--June 11 (2330) 299 cfs (3.58 ft).

NOTE.--No gage-height record Nov. 27 to Apr. 17.

08241500 SANGRE DE CRISTO CREEK NEAR FORT GARLAND, COLO.

LOCATION.--Lat 37°25'30", long 105°24'52", Costilla County, in Sangre de Cristo Grant, on left bank at road bridge, 2,200 ft (670 m) upstream from Garland Canal, 1.0 mi (1.6 km) east of Fort Garland, and 6.3 mi (10.1 km) upstream from Ute Creek.

DRAINAGE AREA.--190 mi² (490 km²), approximately.

PERIOD OF RECORD.--March to October 1916, May 1923 to September 1930, October 1931 to current year. No winter records prior to 1946 except water year 1941. Monthly discharge only for some periods, published in WSP 1312.

GAGE.--Water-stage recorder. Altitude of gage is 7,900 ft (2,408 m) from topographic map. Mar. 15 to Oct. 9, 1916, nonrecording gage and Cippoletti weir at site 1,400 ft (430 m) downstream at different datum. May 7, 1923, to Feb. 29, 1964, water-stage recorder at site 1.0 mi (1.6 km) upstream at different datum.

AVERAGE DISCHARGE.--29 years (1940-41, 1945-73), 18.9 ft³/s (0.535 m³/s), 13,690 acre-ft/yr (16.9 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 383 ft³/s (10.8 m³/s) May 21 (gage height, 4.63 ft or 1.411 m); minimum daily, 0.50 ft³/s (0.014 m³/s) Oct. 9-18, 22-24.

Period of record: Maximum discharge, 1,520 ft³/s (43.0 m³/s) Aug. 31, 1936 (gage height, 6.10 ft or 1.859 m, site and datum then in use), from rating curve extended above 280 ft³/s (7.9 m³/s) on basis of slope-area measurement of peak flow; maximum gage height, 7.82 ft or 2.384 m (site and datum then in use) June 4, 1957; no flow at times in many years.

Outstanding floods occurred in 1886 and in October 1911. The flood in 1886 probably exceeded that in October 1911 and the flood in October 1911 probably exceeded all subsequent floods, from information by local residents.

REMARKS.--Records good except those for winter period, which are poor. Diversion above station by Sangre de Cristo-Trinchera canal for irrigation below station. Diversion above station from West Indian Creek to Mountain Home Reservoir on Trinchera Creek.

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

REVISIONS (WATER YEARS).--WSP 1312: 1935(M), 1950(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.75	.75	3.0	2.8	2.5	4.8	9.6	94	211	42	24	10
2	.75	.75	3.0	2.8	2.5	7.0	11	79	216	39	22	7.4
3	.75	1.8	3.0	2.8	2.5	8.8	8.8	69	196	36	22	7.0
4	1.0	3.0	3.0	2.8	2.5	9.6	9.2	76	186	34	26	7.0
5	.75	4.4	3.0	2.8	2.5	7.8	9.6	104	181	33	20	7.0
6	.75	4.8	3.0	3.0	2.5	6.5	12	114	163	31	18	6.5
7	.75	4.0	3.0	3.0	2.8	5.4	12	103	155	30	16	6.2
8	.75	4.0	3.0	3.0	2.8	5.1	9.0	103	148	30	16	6.2
9	.50	5.4	3.0	3.0	2.8	8.8	12	144	144	39	14	5.8
10	.50	4.4	2.8	3.0	2.2	8.8	14	208	149	36	14	6.5
11	.50	3.7	2.8	3.0	2.5	11	18	292	155	33	14	10
12	.50	3.7	2.8	3.0	2.8	12	23	316	151	31	13	9.2
13	.50	4.0	2.8	3.0	3.4	12	31	326	147	32	12	8.8
14	.50	3.0	2.8	2.8	3.0	12	36	305	145	39	14	7.8
15	.50	2.8	3.0	3.0	3.0	9.2	46	262	132	39	16	6.5
16	.50	2.5	3.0	3.0	3.0	11	32	294	120	32	14	6.2
17	.50	2.2	2.5	3.0	3.0	11	34	312	111	29	12	5.8
18	.50	2.5	1.5	3.0	3.0	12	45	328	103	30	11	5.8
19	.75	2.8	1.0	3.0	3.0	12	39	352	94	31	10	5.4
20	.75	3.0	1.0	3.0	3.0	12	35	369	88	28	10	5.1
21	.75	2.8	2.2	3.0	3.0	14	40	373	83	25	15	4.8
22	.50	2.5	2.5	2.8	2.2	12	36	365	79	25	13	5.1
23	.50	2.5	2.5	2.8	2.5	11	43	340	73	23	11	5.1
24	.50	2.8	2.5	2.8	2.5	8.8	48	311	69	21	10	5.4
25	.75	2.8	2.8	2.8	2.5	8.3	57	301	64	20	10	5.8
26	1.0	2.8	3.0	2.8	2.2	9.6	56	311	60	20	9.6	7.0
27	1.0	3.0	2.8	2.8	2.2	11	51	288	58	18	8.3	8.8
28	1.5	2.8	2.8	2.5	3.0	12	58	245	55	18	7.8	9.2
29	2.0	2.8	2.8	2.5	-----	8.3	72	214	52	20	8.3	9.6
30	2.2	3.0	2.8	2.5	-----	9.6	100	208	46	22	9.6	9.6
31	1.0	-----	2.8	2.8	-----	10	-----	204	-----	28	11	-----
TOTAL	24.45	91.30	82.5	88.9	75.4	301.4	1,007.2	7,430	3,634	914	431.6	210.6
MEAN	.74	3.04	2.66	2.87	2.69	9.72	33.6	240	121	29.5	13.9	7.02
MAX	2.2	5.4	3.0	3.0	3.4	14	100	373	216	42	26	10
MIN	.50	.75	1.0	2.5	2.2	4.8	8.8	69	46	18	7.8	4.8
AC-FT	48	181	164	176	150	598	2,000	14,740	7,210	1,810	856	418

CAL YR 1972 TOTAL 1,968.64 MEAN 5.39 MAX 20 MIN .29 AC-FT 3,900
 AY YR 1973 TOTAL 14,241.35 MEAN 39.2 MAX 373 MIN .50 AC-FT 28,350

08242500 UTE CREEK NEAR FORT GARLAND, COLO.

LOCATION.--Lat 37°26'50", long 105°25'30", Costilla County, in Sangre de Cristo Grant, on left bank 2,300 ft (700 m) upstream from Newton ditch, 1.4 mi (2.3 km) north of Fort Garland, and 5.7 mi (9.2 km) upstream from mouth.

DRAINAGE AREA.--32 mi² (83 km²), approximately.

PERIOD OF RECORD.--March to October 1916, May 1923 to current year. Monthly discharge only for some periods, published in WSP 1312.

GAGE.--Water-stage recorder. Altitude of gage is 8,045 ft (2,452 m) from topographic map. Mar. 18 to Oct. 9, 1916, nonrecording gage and Cippoletti weir at different datum.

AVERAGE DISCHARGE.--50 years, 20.3 ft³/s (0.575 m³/s), 14,710 acre-ft/yr (18.1 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 213 ft³/s (6.03 m³/s) May 19 (gage height, 3.20 ft or 0.975 m); minimum daily, 3.2 ft³/s (0.091 m³/s) Oct. 4.

Period of record: Maximum daily discharge, 630 ft³/s (17.8 m³/s) May 15, 1941; no flow July 28-31, Sept. 6-29, 1956.

Outstanding floods occurred in 1886 and in October 1911. The flood in 1886 probably exceeded that in October 1911 and the flood in October 1911 probably exceeded all subsequent floods, from information by local residents.

REMARKS.--Records good except those for winter period, which are poor. A few diversions above station for irrigation.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.3	7.0	4.8	4.5	4.3	6.2	7.2	30	111	96	46	15
2	5.0	7.0	4.5	4.0	4.0	6.6	7.8	29	104	88	38	14
3	4.8	8.0	4.5	4.0	3.5	6.6	7.5	27	90	81	35	13
4	3.2	9.3	4.8	4.0	4.0	6.6	7.4	29	89	75	39	12
5	4.0	10	5.0	4.5	4.2	6.6	7.4	30	81	67	32	11
6	6.6	9.3	4.5	4.4	4.4	6.4	7.4	32	79	64	29	11
7	5.9	8.1	6.4	4.2	4.4	6.6	6.8	31	87	62	27	10
8	7.3	8.9	6.4	4.0	4.5	7.5	6.0	32	101	59	25	9.7
9	7.0	9.7	5.6	4.2	4.5	7.5	7.0	40	118	61	23	9.3
10	5.6	8.9	4.5	4.5	4.0	7.0	8.0	56	142	61	21	10
11	5.6	9.3	4.8	3.9	4.2	6.8	9.0	82	162	52	20	14
12	6.2	8.9	4.4	4.5	4.4	7.0	10	116	172	44	19	12
13	6.6	8.9	4.0	5.0	4.4	7.0	12	119	154	43	18	11
14	7.3	8.9	4.4	5.2	4.2	6.6	14	111	162	70	18	10
15	9.3	8.9	4.0	5.4	4.0	6.6	13	92	127	70	25	9.3
16	12	8.9	4.0	5.5	3.8	6.6	11	94	116	56	20	8.9
17	12	8.9	4.5	5.5	4.0	7.0	12	99	110	47	18	8.5
18	11	8.5	5.0	5.2	4.0	7.5	14	132	112	39	18	7.7
19	13	7.7	4.8	5.0	4.0	7.5	12	180	105	74	15	7.2
20	21	7.3	5.0	5.5	4.0	7.8	11	198	100	48	15	6.8
21	16	6.0	5.0	5.4	5.0	7.0	12	186	99	37	15	6.4
22	12	5.0	4.8	5.2	5.0	7.0	13	172	101	52	15	6.8
23	12	4.5	5.0	5.2	4.5	7.0	14	140	102	50	14	6.8
24	12	4.8	4.8	5.2	4.5	7.0	15	125	104	29	14	7.0
25	11	5.0	4.8	5.0	5.2	6.6	18	130	102	28	17	7.3
26	9.3	4.8	4.5	5.2	5.2	6.4	18	129	104	28	17	8.4
27	9.7	4.8	5.0	5.2	6.0	7.0	18	109	115	27	15	10
28	9.7	4.5	5.0	4.5	6.2	6.5	23	100	109	27	14	10
29	10	4.8	5.2	4.0	-----	6.8	27	96	110	28	15	11
30	9.3	5.0	4.5	4.2	-----	6.6	31	99	102	36	17	11
31	7.3	-----	4.0	4.5	-----	6.4	-----	100	-----	31	18	-----
TOTAL	277.0	221.6	148.5	146.6	124.4	212.3	379.5	2,945	3,370	1,590	672	295.1
MEAN	8.94	7.39	4.79	4.73	4.44	6.85	12.7	95.0	112	51.3	21.7	9.84
MAX	21	10	6.4	5.5	6.2	7.8	31	198	172	96	46	15
MIN	3.2	4.5	4.0	3.9	3.5	6.2	6.0	27	79	27	14	6.4
AC-FT	549	440	295	291	247	421	753	5,840	6,680	3,150	1,330	585

CAL YR 1972 TOTAL 2,877.1 MEAN 7.86 MAX 21 MIN 1.2 AC-FT 5,710
WTR YR 1973 TOTAL 10,362.0 MEAN 28.4 MAX 198 MIN 3.2 AC-FT 20,590

PEAK DISCHARGE (BASE, 100 CFS).--May 19 (2300) 213 cfs (3.20 ft); June 12 (0200) 204 cfs (3.15 ft).

NOTE.--No gage-height record Nov. 22 to Apr. 12.

08243500 TRINCHERA CREEK BELOW SMITH RESERVOIR, NEAR BLANCA, COLO.

LOCATION.--Lat 37°23'10", long 105°33'02", in sec.4, T.31 S., R.73 W. (unsurveyed), Costilla County, on right bank 150 ft (46 m) downstream from bridge, 0.6 mi (1.0 km) downstream from Smith Reservoir, and 4.0 mi (6.4 km) southwest of Blanca.

DRAINAGE AREA.--396 mi² (1,026 km²).

PERIOD OF RECORD.--October 1928 to current year. No winter records prior to 1944 except water years 1931, 1934-36, 1938. Monthly discharge only for some periods, published in WSP 1312.

GAGE.--Water-stage recorder. Altitude of gage is 7,700 ft (2,347 m), estimated from nearby U.S. Coast and Geodetic Survey level lines. Prior to Oct. 12, 1964, at site 200 ft (61 m) downstream. Prior to Apr. 19, 1943, at datum 1.00 ft (0.305 m) higher, and at present datum thereafter.

AVERAGE DISCHARGE.--35 years (1930-31, 1933-36, 1937-38, 1943-73), 10.6 ft³/s (0.300 m³/s), 7,680 acre-ft/yr (9.47 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,070 ft³/s (30.3 m³/s) May 13 (gage height, 7.88 ft or 2.402 m); minimum daily, 0.20 ft³/s (0.006 m³/s) Nov. 4-9.

Period of record: Maximum daily discharge, 1,340 ft³/s (37.9 m³/s) May 11, 1942; no flow Sept. 13, 14, 16, 17, 1957.

Outstanding floods occurred in 1886 and October 1911. The flood in 1886 probably exceeded that in October 1911 and the flood in October 1911 probably exceeded all subsequent floods, from information by local residents.

REMARKS.--Records good. Diversions above station for irrigation. Flow regulated by Smith Reservoir (capacity, 5,335 acre-ft or 6.58 hm³).

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

REVISIONS (WATER YEARS).--WSP 1512: 1937, 1950(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.90	.30	.50	.60	.50	.70	2.6	21	147	9.5	2.2	8.6
2	.90	.30	.50	.60	.50	.70	2.6	21	155	8.6	2.2	8.6
3	.90	.30	.50	.60	.50	.70	2.6	21	152	7.4	2.5	8.6
4	.90	.20	.70	.60	.50	.50	2.5	21	147	5.8	2.5	8.6
5	.90	.20	.70	.60	.50	.70	2.5	21	137	5.2	2.5	8.6
6	.70	.20	.70	.60	.50	.70	2.5	21	122	3.9	2.5	8.6
7	.70	.20	.70	.60	.50	.70	2.1	22	106	3.0	2.5	8.6
8	.70	.20	.70	.60	.50	.70	2.3	21	112	2.2	2.5	8.6
9	.70	.20	.70	.60	.50	.70	2.5	23	104	2.2	2.5	8.6
10	.70	.40	.70	.60	.50	.50	2.3	21	103	2.5	4.8	8.6
11	.90	.50	.70	.60	.50	.50	3.4	22	116	2.5	2.5	8.6
12	.90	.50	.70	.60	.50	.50	7.3	66	126	2.5	2.5	8.6
13	.90	.50	.70	.60	.50	.50	7.3	195	129	2.5	3.6	8.6
14	.90	.50	.70	.60	.50	.50	6.4	301	125	2.5	5.2	8.6
15	.90	.50	.70	.60	.50	.50	6.4	284	118	2.5	5.5	8.6
16	.90	.50	.70	.60	.50	.50	6.0	266	102	6.8	5.5	8.6
17	.90	.50	.70	.60	.50	.50	5.5	261	81	9.5	5.5	8.6
18	.90	.50	.70	.60	.50	.50	5.5	273	69	5.2	5.5	8.6
19	.90	.50	.70	.60	.50	.50	5.5	304	58	2.2	5.5	8.6
20	.90	.50	.70	.60	.50	.70	5.5	370	40	2.0	5.5	8.6
21	.90	.50	.60	.60	.50	.90	5.5	423	32	2.0	5.5	8.2
22	.90	.70	.60	.60	.50	.90	5.5	443	26	2.0	5.5	8.2
23	.70	.70	.60	.60	.50	.90	6.0	415	22	2.0	5.5	8.2
24	.50	.70	.60	.60	.50	.90	6.4	352	18	2.0	5.5	8.2
25	.50	.70	.60	.60	.70	.90	6.4	317	17	2.2	6.2	8.2
26	.50	.70	.60	.60	.70	.90	6.4	304	15	2.2	8.2	8.2
27	.40	.70	.60	.60	.70	.90	6.4	301	14	2.2	8.2	8.2
28	.40	.70	.60	.60	.70	.90	6.4	273	14	2.2	8.6	8.2
29	.40	.70	.60	.60	-----	.90	8.6	234	12	2.2	8.6	8.2
30	.40	.70	.60	.60	-----	1.1	15	185	11	2.2	8.6	8.2
31	.40	-----	.60	.60	-----	2.8	-----	152	-----	2.2	8.6	-----
TOTAL	25.00	14.30	20.00	18.60	14.80	23.80	156.8	5,959	2,430	111.9	152.5	254.0
MEAN	.74	.48	.65	.60	.53	.77	5.23	192	81.0	3.61	4.92	8.47
MAX	.90	.70	.70	.60	.70	2.8	15	443	155	9.5	8.6	8.6
MIN	.40	.20	.50	.60	.50	.50	2.1	21	11	2.0	2.2	8.2
AC-FT	46	28	40	37	29	47	311	11,820	4,820	222	302	504

CAL YR 1972 TOTAL 854.00 MEAN 2.35 MAX 8.6 MIN .20 AC-FT 1,690
 CAL YR 1973 TOTAL 9,176.70 MEAN 25.1 MAX 443 MIN .20 AC-FT 18,210

NOTE.--No gage-height record Dec. 17 to Feb. 23.

08244500 PLATORO RESERVOIR AT PLATORO, COLO.

LOCATION.--Lat 37°21'07", long 106°32'38", Conejos County, on right bank in valvehouse, 400 ft (120 m) downstream from Platoro Dam on Conejos River and 0.7 mi (1.1 km) west of Platoro.

DRAINAGE AREA.--40 mi² (104 km²), approximately.

PERIOD OF RECORD.--November 1951 to current year.

GAGE.--Nonrecording gage. Datum of gage is 9,911.5 ft (3,021.03 m) above mean sea level (Bureau of Reclamation bench mark). Gage readings have been reduced to elevations above mean sea level. Prior to June 9, 1955, nonrecording gage at present site and datum. June 9, 1955, to Sept. 30, 1959, water-stage recorder in gate chamber at dam for elevations above 9,921.0 ft (3,023.92 m) at same datum.

EXTREMES (AT 0800).--Current year: Maximum contents, 37,100 acre-ft (45.7 hm³) July 6, 7, 9-11; maximum elevation, 10,007.8 ft (3,050.38 m) July 6, 7; minimum contents, 2,900 acre-ft (3.58 hm³) Nov. 5 (elevation, 9,942.1 ft or 3,030.35 m).

Period of record: Maximum contents, 61,420 acre-ft (75.7 hm³) June 9, 11, 1958 (elevation, 10,035.5 ft or 3,058.82 m); no contents for long periods in 1952-56.

REMARKS.--Reservoir is formed by an earth and rockfill dam and dikes. Dam completed Dec. 9, 1951; storage began Nov. 7, 1951. Capacity of reservoir, 60,000 acre-ft (74.0 hm³) between elevations 9,911.5 ft or 3,021.03 m (sill of trashrack at outlet) and 10,034.0 ft or 3,058.36 m (crest of spillway). No dead storage. Reservoir is used for irrigation and flood control. Figures given herein represent usable contents.

COOPERATION.--Records furnished by Bureau of Reclamation.

MONTHEND ELEVATION AND CONTENTS AT 0800, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	ELEVATION (FEET)	CONTENTS (ACRE-FEET)	CHANGE IN CONTENTS (ACRE-FEET)
Sept. 30.....	9,947.4	4,400	-
Oct. 31.....	9,947.4	4,400	0
Nov. 30.....	(a)	-	-
Dec. 31.....	-	-	-
CAL YR 1972	-	-	-
Jan. 31.....	-	-	-
Feb. 28.....	-	-	-
Mar. 31.....	-	-	-
Apr. 30.....	9,448.0	4,600	-
May 31.....	9,967.1	11,800	+7,200
June 30.....	9,999.8	31,300	+19,500
July 31.....	10,007.5	36,900	+5,600
Aug. 31.....	10,007.6	37,000	+100
Sept. 30.....	10,007.5	36,900	-100
WTR YR 1973	-	-	+32,500

a Operation of reservoir suspended for winter on Nov. 5; resumed on Apr. 13.

08245000 CONEJOS RIVER BELOW PLATORO RESERVOIR, COLO.

LOCATION.--Lat 37°21'18", long 106°32'37", Conejos County, on left bank 1,100 ft (340 m) downstream from valve-house for Platoro Reservoir and 0.7 mi (1.1 km) northwest of Platoro.

DRAINAGE AREA.--40 mi² (100 km²), approximately.

PERIOD OF RECORD.--May 1952 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 9,866.60 ft (3,007.340 m) above mean sea level (levels by Bureau of Reclamation).

AVERAGE DISCHARGE.--21 years, 87.3 ft³/s (2.472 m³/s), 63,250 acre-ft/yr (78.0 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 745 ft³/s (21.1 m³/s) June 25 (gage height, 3.50 ft or 1.067 m); minimum daily, 4.8 ft³/s (0.14 m³/s) June 11, 12.

Period of record: Maximum discharge, 1,160 ft³/s (32.9 m³/s) Nov. 1, 1957 (gage height, 4.02 ft or 1.225 m); maximum gage height, 4.29 ft (1.308 m) June 15, 1958; no flow Oct. 16-20, 1955.

Flood of Oct. 5, 1911, is the greatest since at least 1854, from information by local residents.

REMARKS.--Records good except those for period of no gage-height record, which are fair. No diversion above station. Flow completely regulated by Platoro Reservoir (see sta. 08244500).

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	121	9.0	9.0	9.0	9.5	10	36	410	139	128	78
2	13	296	9.0	9.0	9.0	9.5	10	37	422	201	128	70
3	10	312	9.0	9.0	9.0	9.5	10	47	322	305	96	40
4	8.8	333	9.0	9.0	9.0	9.5	10	64	281	526	82	28
5	25	119	9.0	9.0	9.0	9.5	10	64	251	633	92	22
6	68	11	9.0	9.0	9.0	9.5	10	59	215	690	131	22
7	114	11	9.0	9.0	9.0	9.5	10	59	260	690	131	53
8	326	11	9.0	9.0	9.0	9.5	10	88	396	610	125	44
9	333	10	9.0	9.0	9.0	9.5	10	104	554	579	100	23
10	93	10	9.0	9.0	9.0	9.5	10	128	281	638	86	23
11	56	10	9.0	9.0	9.0	9.5	10	138	4.8	660	86	29
12	56	10	9.0	9.0	9.0	9.5	10	25	4.8	382	86	46
13	69	9.5	9.0	9.0	9.0	9.5	10	25	7.4	426	82	55
14	80	9.5	9.0	9.0	9.0	9.5	10	23	13	386	81	68
15	123	9.5	9.0	9.0	9.0	9.5	10	96	84	554	41	28
16	185	9.5	9.0	9.0	9.0	9.5	10	248	438	430	34	21
17	200	9.5	9.0	9.0	9.0	9.5	10	336	610	209	34	17
18	200	9.5	9.0	9.0	9.0	9.5	10	322	576	312	48	17
19	218	9.5	9.0	9.0	9.0	9.5	10	141	498	382	78	17
20	372	9.5	9.0	9.0	9.0	9.5	10	23	308	382	70	17
21	273	9.5	9.0	9.0	9.0	9.5	10	20	308	322	57	17
22	118	9.5	9.0	9.0	9.0	9.5	10	16	382	170	57	17
23	164	9.5	9.0	9.0	9.0	9.5	10	12	656	142	57	17
24	131	9.5	9.0	9.0	9.0	9.5	21	53	680	200	56	15
25	84	9.5	9.0	9.0	9.0	9.5	36	150	633	187	47	12
26	57	9.5	9.0	9.0	9.0	9.5	62	164	522	203	32	12
27	49	9.5	9.0	9.0	9.0	9.5	64	203	162	203	32	12
28	56	9.5	9.0	9.0	9.0	9.5	57	281	23	167	32	12
29	57	9.5	9.0	9.0	-----	9.5	56	269	26	131	31	12
30	57	9.5	9.0	9.0	-----	9.5	47	245	26	120	40	12
31	57	-----	9.0	9.0	-----	9.5	-----	305	-----	128	80	-----
TOTAL	3,665.8	1,425.0	279.0	279.0	252.0	294.5	573	3,781	9,354.0	11,107	2,260	856
MEAN	118	47.5	9.00	9.00	9.00	9.50	19.1	122	312	358	72.9	28.5
MAX	372	333	9.0	9.0	9.0	9.5	64	336	680	690	131	78
MIN	8.8	9.5	9.0	9.0	9.0	9.5	10	12	4.8	120	31	12
AC-FT	7,270	2,830	553	553	500	584	1,140	7,500	18,550	22,030	4,480	1,700

CAL YR 1972 TOTAL 22,562.6 MEAN 61.6 MAX 375 MIN 4.4 AC-FT 44,750
WTR YR 1973 TOTAL 34,126.3 MEAN 93.5 MAX 690 MIN 4.8 AC-FT 67,690

NOTE.--No gage-height record Nov. 6 to Apr. 23.

08246500 CONEJOS RIVER NEAR MOGOTE, COLO.

LOCATION.--Lat 37°03'14", long 106°11'13", in SE¼SE¼ sec.34, T.33 N., R.7 E., Conejos County, on right bank 25 ft (8 m) upstream from bridge on State Highway 174, 0.4 mi (0.6 km) downstream from Fox Creek, 5.3 mi (8.5 km) west of Mogote, and 10 mi (16 km) west of Antonito.

DRAINAGE AREA.--282 mi² (730 km²).

PERIOD OF RECORD.--April 1903 to October 1905, October 1911 to current year. Monthly discharge only for some periods, published in WSP 1312. Records for March 1900 at site 5.5 mi (8.8 km) upstream and May 1905 to September 1911 (some missing periods most years) at site 3.2 mi (5.1 km) upstream not equivalent to present site owing to inflow.

GAGE.--Water-stage recorder. Datum of gage is 8,271.54 ft (2,521.156 m) above mean sea level (State Highway Department bench mark). Apr. 17, 1903, to Oct. 31, 1905, nonrecording gage 500 ft (150 m) downstream at different datum. Oct. 5, 1911, to early 1915, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--64 years, 336 ft³/s (9.516 m³/s), 243,400 acre-ft/yr (300 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,840 ft³/s (80.4 m³/s) June 10 (gage height, 5.14 ft or 1.567 m); minimum daily, 44 ft³/s (1.25 m³/s) Feb. 3.

Period of record: Maximum discharge, 9,000 ft³/s (255 m³/s) Oct. 5, 1911 (gage height, 8.50 ft or 2.591 m, from floodmarks, present site and datum), from rating curve extended above 3,100 ft³/s (88 m³/s); minimum daily determined, 10 ft³/s (0.28 m³/s) July 18, 1904.

Maximum stage since at least 1854, that of Oct. 5, 1911, from information by local residents.

REMARKS.--Records good except those for winter period, which are fair. Diversions for irrigation of about 500 acres (2.02 km²) of hay meadows above station. Some regulation by Platoro Reservoir (see sta. 08244500).

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

REVISIONS (WATER YEARS).--WSP 898: 1911(M). WSP 1312: 1903-5, 1913. See also PERIOD OF RECORD.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	50	156	59	60	48	66	62	404	1,680	1,440	384	204
2	48	272	57	62	46	66	64	356	1,730	1,500	340	177
3	48	342	57	58	44	64	59	376	1,430	1,420	328	148
4	47	374	58	58	48	61	59	472	1,390	1,570	316	122
5	111	356	60	60	51	61	59	548	1,230	1,650	316	106
6	118	140	58	59	53	59	68	472	1,150	1,660	313	96
7	159	96	68	58	57	60	72	400	1,300	1,610	316	91
8	308	102	68	57	57	60	62	448	1,600	1,490	310	122
9	473	99	65	62	56	60	64	646	2,110	1,440	288	101
10	280	79	62	65	53	60	75	920	2,640	1,370	246	106
11	143	94	62	58	54	62	77	1,290	2,020	1,370	232	158
12	127	96	62	56	56	68	84	1,240	2,150	1,080	229	139
13	163	75	58	54	55	75	101	1,110	1,890	1,050	226	139
14	173	75	58	52	53	62	131	1,020	1,880	945	218	148
15	195	82	58	50	51	64	142	925	1,610	1,120	212	139
16	296	67	58	50	50	66	128	1,150	1,680	1,000	161	103
17	320	69	59	50	52	68	139	1,440	1,880	815	148	93
18	324	79	60	50	52	68	174	1,600	1,920	725	142	86
19	419	67	61	49	52	68	145	1,940	1,910	960	158	82
20	640	67	62	49	52	70	128	1,860	1,610	850	201	79
21	635	63	62	47	54	68	122	1,880	1,530	805	180	77
22	347	61	62	45	55	62	116	1,650	1,560	642	170	77
23	342	61	62	45	56	66	142	1,390	1,810	498	154	75
24	324	62	60	45	58	64	177	1,390	1,860	484	151	75
25	272	66	60	45	60	70	232	1,620	2,030	480	154	77
26	221	63	59	46	60	72	296	1,770	2,100	448	167	82
27	177	59	59	46	64	72	372	1,380	1,980	456	131	79
28	166	56	60	45	66	68	436	1,210	1,690	464	119	79
29	156	56	63	45	-----	64	489	1,230	1,560	396	128	77
30	166	58	59	46	-----	62	498	1,210	1,540	384	142	75
31	156	-----	57	47	-----	60	-----	1,410	-----	388	177	-----
TOTAL	7,404	3,392	1,873	1,619	1,513	2,016	4,773	34,757	52,470	30,510	6,757	3,212
MEAN	239	113	60.4	52.2	54.0	65.0	159	1,121	1,749	984	218	107
MAX	640	374	68	65	66	75	498	1,940	2,640	1,660	384	204
MIN	47	56	57	45	44	59	59	356	1,150	384	119	75
AC-FT	14,690	6,730	3,720	3,210	3,000	4,000	9,470	68,940	104,100	60,520	13,400	6,370

CAL YR 1972 TOTAL 65,348 MEAN 179 MAX 828 MIN 32 AC-FT 129,600
 WTR YR 1973 TOTAL 150,296 MEAN 412 MAX 2,640 MIN 44 AC-FT 298,100

08247500 SAN ANTONIO RIVER AT ORTIZ, COLO.

LOCATION.--Lat 36°59'35", long 106°02'17", in NE¼SE¼ sec.24, T.32 N., R.8 E., Rio Arriba County, New Mexico, on left bank 800 ft (240 m) south of New Mexico-Colorado State line, 0.4 mi (0.6 km) southeast of Ortiz, and 0.4 mi (0.6 km) upstream from Los Pinos River.

DRAINAGE AREA.--110 mi² (280 km²), approximately.

PERIOD OF RECORD.--April 1919 to October 1920, October 1924 to current year (no winter records prior to 1941). Monthly discharge only for some periods, published in WSP 1312.

GAGE.--Water-stage recorder. Altitude of gage is 7,970 ft (2,429 m) from topographic map. Prior to Apr. 7, 1926, nonrecording gage at various locations near present site at different datums. Apr. 7, 1926, to June 24, 1954, water-stage recorder at site 200 ft (61 m) downstream at present datum.

AVERAGE DISCHARGE.--32 years (1940-73), 25.0 ft³/s (0.708 m³/s), 18,110 acre-ft/yr (22.3 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 820 ft³/s (23.2 m³/s) May 11 (gage height, 4.30 ft or 1.311 m); no flow for many days.

Period of record: Maximum discharge, 1,750 ft³/s (49.6 m³/s) Apr. 15, 1937 (gage height, 5.38 ft or 1.640 m), from rating curve extended above 1,100 ft³/s (31 m³/s); no flow at times in most years.

Flood of Oct. 5, 1911, is the greatest since at least 1854, from information by local residents.

REMARKS.--Records good except those for winter period, which are fair. A few small diversions above station for irrigation.

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

REVISIONS (WATER YEARS).--WSP 1732: 1951. WSP 1923: 1927 (monthly runoff).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.50	6.8	2.0	2.3	1.8	5.1	7.0	185	101	4.2	.40	0
2	.50	5.8	1.9	2.5	1.8	5.2	7.0	172	92	3.8	2.0	0
3	.45	6.4	1.8	2.5	2.0	5.1	6.8	192	79	3.2	1.0	0
4	.45	6.1	1.8	2.5	2.5	5.0	6.5	295	73	2.8	.80	0
5	.50	6.0	1.9	2.7	3.0	5.0	6.5	310	62	2.2	.50	0
6	.60	5.4	1.8	2.7	3.5	5.0	7.0	200	55	1.8	.20	0
7	3.0	5.8	2.1	2.6	4.5	5.1	6.5	150	50	1.3	.15	0
8	3.2	5.4	2.1	2.6	6.0	5.0	6.0	245	46	1.3	.30	0
9	3.0	5.8	1.9	2.8	6.1	5.4	6.2	367	42	1.8	.20	0
10	2.0	5.0	1.7	3.1	5.5	5.6	6.5	511	39	2.4	.08	0
11	1.4	5.0	1.7	3.1	5.6	5.8	8.0	644	38	4.0	0	0
12	1.4	4.5	1.6	3.2	5.6	6.0	11	608	32	2.8	0	2.6
13	1.4	4.0	1.5	3.2	5.6	5.8	20	563	30	8.7	0	2.8
14	1.5	4.5	1.5	3.2	5.3	6.0	30	412	32	5.8	0	2.2
15	2.8	4.0	1.5	3.3	5.0	6.2	44	331	26	11	0	1.8
16	3.2	3.5	1.5	3.3	4.8	6.5	42	340	23	5.2	0	1.2
17	4.7	3.0	1.7	3.3	5.1	6.8	45	394	20	4.8	0	.70
18	5.0	4.4	1.9	3.3	5.1	7.1	50	408	18	4.8	0	.40
19	3.8	4.4	1.9	3.3	5.1	7.4	45	499	15	7.8	0	.20
20	7.8	4.4	1.9	3.3	5.1	7.7	42	430	14	8.6	0	.10
21	12	4.0	1.9	3.3	5.2	8.0	39	446	12	4.5	0	.03
22	6.4	3.5	1.9	3.3	5.2	7.2	64	316	11	3.0	0	0
23	5.0	3.0	1.9	3.1	4.7	6.7	126	262	10	2.6	0	0
24	5.8	3.2	1.8	2.9	4.7	6.4	178	240	8.9	2.4	0	0
25	4.7	3.5	1.8	2.7	4.8	7.0	198	230	8.2	1.6	0	0
26	3.8	3.0	1.8	2.7	4.8	7.4	206	232	7.5	1.2	0	0
27	3.5	2.5	2.0	2.7	4.9	7.0	214	174	6.8	.90	0	1.4
28	3.2	2.0	2.1	2.5	5.0	6.6	279	133	6.1	.50	0	3.0
29	3.5	2.0	2.2	2.3	-----	6.4	291	123	5.5	.20	0	2.2
30	3.5	2.0	2.1	2.1	-----	6.6	268	116	5.0	.10	0	2.0
31	6.4	-----	2.0	1.9	-----	7.0	-----	109	-----	.30	0	-----
TOTAL	105.00	128.9	57.2	88.3	128.3	193.1	2,266.0	9,637	968.0	105.60	5.63	20.63
MEAN	3.39	4.30	1.85	2.85	4.58	6.23	75.5	311	32.3	3.41	.18	.69
MAX	12	6.8	2.2	3.3	6.1	8.0	291	644	101	11	2.0	3.0
MIN	.45	2.0	1.5	1.9	1.8	5.0	6.0	109	5.0	.10	0	0
AC=FT	208	256	113	175	254	383	4,490	19,110	1,920	209	11	41

CAL YR 1972 TOTAL 2,201.23 MEAN 6.01 MAX 43 MIN 0 AC=FT 4,370
WTR YR 1973 TOTAL 13,703.66 MEAN 37.5 MAX 644 MIN 0 AC=FT 27,180

PEAK DISCHARGE (BASE, 330 CFS).--May 4 (2400) 499 cfs (3.56 ft); May 11 (0130) 820 cfs (4.30 ft).

NOTE.--No gage-height record Nov. 22 to Mar. 26.

08248000 LOS PINOS RIVER NEAR ORTIZ, COLO.

LOCATION.--Lat 36°58'56", long 106°04'23", on line between secs.26 and 27, T.32 N., R.8 E., Rio Arriba County, New Mexico, on left bank 0.9 mi (1.4 km) south of New Mexico-Colorado State line, 2.1 mi (3.4 km) southwest of Ortiz, and 2.9 mi (4.7 km) upstream from mouth.

DRAINAGE AREA.--167 km² (433 km²).

PERIOD OF RECORD.--January 1915 to December 1920, October 1924 to current year. Monthly discharge only for some periods, published in WSP 1312.

GAGE.--Water-stage recorder. Altitude of gage is 8,040 ft (2,451 m) from topographic map. Prior to Apr. 15, 1955, at site 350 ft (110 m) upstream at datum 2.52 ft (0.768 m) higher.

AVERAGE DISCHARGE.--54 years, 121 ft³/s (3.427 m³/s), 87,660 acre-ft/yr (108 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,940 ft³/s (54.9 m³/s) May 21 (gage height, 3.60 ft or 1.097 m); minimum daily, 10 ft³/s (0.28 m³/s) Oct. 1-4.

Period of record: Maximum discharge, 3,160 ft³/s (89.5 m³/s) May 12, 1941 (gage height, 5.77 ft or 1.759 m, site and datum then in use), from rating curve extended above 1,600 ft³/s (45 m³/s); minimum observed, 4.0 ft³/s (0.11 m³/s) Dec. 17, 1945 (discharge measurement), but may have been less during periods of no gage-height record.

Flood of Oct. 5, 1911, is the greatest since at least 1854, from information by local residents.

REMARKS.--Records good except those for winter period, which are fair. Diversions above station for irrigation.

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

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	46	23	19	21	22	27	255	939	359	55	26
2	10	52	22	20	20	22	27	235	825	332	48	22
3	10	46	22	19	18	21	26	242	708	299	43	20
4	10	40	22	19	19	20	24	320	740	272	40	20
5	20	41	23	20	20	20	24	347	640	245	52	20
6	25	41	22	19	20	20	23	296	644	222	42	20
7	21	33	25	19	21	21	21	258	690	200	38	20
8	37	39	25	18	21	20	18	344	730	182	38	18
9	26	36	23	19	19	21	19	520	770	169	36	18
10	21	32	22	19	20	21	21	775	815	173	33	21
11	19	34	22	18	21	21	33	1,000	800	151	32	36
12	24	35	22	19	21	21	39	1,080	810	135	33	25
13	26	35	20	19	21	20	49	1,060	735	145	33	25
14	28	35	20	19	20	22	63	936	735	133	29	22
15	26	36	20	20	19	23	72	924	631	122	30	20
16	37	32	20	20	20	24	66	954	546	108	27	20
17	38	33	21	20	21	25	75	1,060	506	114	25	18
18	38	34	22	19	21	27	86	1,130	482	119	24	18
19	53	33	22	19	21	28	63	1,410	456	167	23	18
20	195	33	22	20	21	29	58	1,500	432	112	24	18
21	125	29	22	20	22	31	63	1,520	435	92	33	17
22	88	26	22	19	22	28	66	1,140	424	89	27	17
23	72	25	22	18	20	25	82	990	414	78	23	17
24	68	26	22	18	20	26	101	960	386	68	22	18
25	57	27	22	18	21	27	135	960	404	59	24	18
26	48	26	21	19	21	28	165	1,090	421	54	27	24
27	44	24	21	19	22	27	198	750	470	49	23	23
28	42	23	21	18	22	26	255	640	463	48	22	22
29	41	23	21	18	-----	25	305	680	428	48	22	22
30	42	24	20	19	-----	26	305	775	400	48	26	20
31	37	-----	18	20	-----	27	-----	874	-----	50	28	-----
TOTAL	1,338	999	672	590	575	744	2,509	25,025	17,879	4,442	982	623
MEAN	43.2	33.3	21.7	19.0	20.5	24.0	83.6	807	596	143	31.7	20.8
MAX	195	52	25	20	22	31	305	1,520	939	359	55	36
MIN	10	23	18	18	18	20	18	235	386	48	22	17
AC-FT	2,650	1,980	1,330	1,170	1,140	1,480	4,980	49,640	35,460	8,810	1,950	1,240

CAL YR 1972 TOTAL 18,752.4 MEAN 51.2 MAX 284 MIN 7.6 AC-FT 37,200
 WTR YR 1973 TOTAL 56,378.0 MEAN 154 MAX 1,520 MIN 10 AC-FT 111,800

PEAK DISCHARGE (BASE, 900 CFS).--May 21 (0100) 1,940 cfs (5.99 ft).

NOTE.--No gage-height record Nov. 21 to Mar. 21.

08248500 SAN ANTONIO RIVER AT MOUTH, NEAR MANASSA, COLO.

LOCATION.--Lat 37°10'37", long 105°52'39", in SE¼NE¼ sec.21, T.34 N., R.10 E., Conejos County, on right bank 0.3 mi (0.5 km) downstream from bridge on State Highway 142, 2.2 mi (3.5 km) upstream from mouth, and 3.3 mi (5.3 km) east of Manassa.

DRAINAGE AREA.--348 mi² (901 km²).

PERIOD OF RECORD.--April 1923 to current year. Monthly discharge only for some periods, published in WSP 1312.

GAGE.--Water-stage recorder. Altitude of gage is 7,650 ft (2,332 m) from topographic map. Prior to Apr. 23, 1936, at former bridge site 200 ft (60 m) upstream at same datum.

AVERAGE DISCHARGE.--50 years, 79.6 ft³/s (2.254 m³/s), 57,670 acre-ft/yr (71.1 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,160 ft³/s (32.9 m³/s) May 21 (gage height, 6.18 ft or 1.884 m); no flow Oct. 1-20, Aug. 14 to Sept. 27.

Period of record: Maximum discharge, 2,620 ft³/s (74.2 m³/s) May 14, 1941 (gage height, 6.26 ft or 1.908 m), from rating curve extended above 2,200 ft³/s (62 m³/s); maximum gage height, 6.42 ft (1.957 m) May 6, 1952; no flow at times in most years.

Maximum stage since at least 1854 occurred Oct. 5, 1911, from information by local residents.

REMARKS.--Records good except those for winter period, which are poor. Natural flow of stream affected by diversions to Cove Lake Reservoir (capacity, 9,700 acre-ft or 12.0 hm³) and diversions for irrigation above station.

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

REVISIONS (WATER YEARS).--WSP 1312: 1936(M). WSP 1732: 1957.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	2.7	11	8.0	9.5	25	29	268	882	198	7.0	0
2	0	3.0	11	7.5	9.0	27	28	184	878	184	6.0	0
3	0	14	11	7.5	8.5	27	27	124	756	167	4.2	0
4	0	19	12	8.0	9.5	26	28	209	714	150	2.9	0
5	0	20	11	8.0	10	26	30	331	659	140	2.2	0
6	0	23	10	8.0	11	26	31	268	610	128	1.8	0
7	0	25	12	8.0	12	26	32	160	629	116	1.5	0
8	0	21	13	8.0	12	27	30	191	656	101	1.3	0
9	0	7.9	13	8.5	11	27	28	357	671	102	1.0	0
10	0	5.5	11	8.5	11	25	26	580	659	115	.98	0
11	0	12	10	8.5	12	25	28	787	650	110	.70	0
12	0	14	9.0	8.5	12	26	31	975	656	102	.41	0
13	0	14	8.0	9.0	12	25	37	1,040	629	89	.08	0
14	0	11	7.0	9.5	11	25	55	1,020	605	87	0	0
15	0	12	7.0	10	11	25	80	878	570	95	0	0
16	0	14	7.0	10	11	26	62	886	462	96	0	0
17	0	12	7.5	10	12	27	65	918	432	92	0	0
18	0	14	8.0	10	13	28	98	944	386	110	0	0
19	0	22	9.0	10	14	28	86	1,040	358	168	0	0
20	0	19	9.0	10	15	28	42	1,110	343	143	0	0
21	12	12	9.0	10	16	29	44	1,130	334	101	0	0
22	18	10	9.0	10	16	29	42	1,120	331	84	0	0
23	11	10	9.0	9.0	15	30	64	1,020	302	70	0	0
24	8.7	11	9.0	10	15	30	94	970	247	49	0	0
25	8.3	12	9.0	10	17	30	171	1,020	228	34	0	0
26	7.1	11	9.0	10	19	32	178	1,040	214	30	0	0
27	7.1	11	9.0	10	21	32	205	1,030	229	29	0	0
28	5.8	10	9.0	9.5	23	31	254	815	236	21	0	1.1
29	4.4	11	8.5	9.5	-----	31	344	710	234	14	0	5.0
30	2.9	12	8.0	9.5	-----	30	362	780	217	10	0	4.6
31	2.9	-----	7.0	10	-----	29	-----	850	-----	8.0	0	-----
TOTAL	88.2	395.1	292.0	283.0	368.5	858	2,631	22,755	14,777	2,943.0	30.07	10.7
MEAN	2.85	13.2	9.42	9.13	13.2	27.7	87.7	734	493	94.9	.97	.36
MAX	18	25	13	10	23	32	362	1,130	882	198	7.0	5.0
MIN	0	2.7	7.0	7.5	8.5	25	26	124	214	8.0	0	0
AC-FT	175	784	579	561	731	1,700	5,220	45,130	29,310	5,840	60	21

CAL YR 1972 TOTAL 5,537.81 MEAN 15.1 MAX 130 MIN 0 AC-FT 10,980

WTR YR 1973 TOTAL 45,431.57 MEAN 124 MAX 1,130 MIN 0 AC-FT 90,110

PEAK DISCHARGE (BASE, 500 CFS).--May 21 (2030) 1,160 cfs (6.18 ft).

NOTE.--No gage-height record Nov. 22 to Mar. 26.

08249000 CONEJOS RIVER NEAR LASAUSES, COLO.

LOCATION.--Lat 37°18'01", long 105°44'47", in SW¼SW¼ sec.2, and SE¼NE¼ sec.10 (two channels), T.35 N., R.11 E., Conejos County, on left bank of main channel 125 ft (38 m) downstream from bridge on State Highway 158 and on left bank of secondary channel 230 ft (70 m) upstream from bridge on State Highway 158, 1.0 mi (1.6 km) upstream from mouth, 2.1 mi (3.4 km) north of Lasasues, and 13 mi (21 km) southeast of Alamosa.

DRAINAGE AREA.--887 mi² (2,297 km²).

PERIOD OF RECORD.--March 1921 to current year. Monthly discharge only for some periods, published in WSP 1312. Prior to Oct. 1, 1966, published as "near La Sausen."

GAGE.--Two water-stage recorders. Datum of gage on main (north) channel is 7,495.02 ft (2,284.482 m), and on secondary (south) channel is 7,496.89 ft (2,285.052 m), above mean sea level (levels by Bureau of Reclamation). Main channel: See WSP 1732 for history of changes prior to Oct. 1, 1937. South channel: Prior to Oct. 23, 1934, at bridge 230 ft (70 m) downstream at datum 0.56 ft (0.171 m) lower; Oct. 23, 1934, to May 3, 1936, at site 250 ft (76 m) downstream, and May 4, 1936, to Oct. 13, 1965, at site 280 ft (85 m) downstream, at datum 1.00 (0.305 m) lower.

AVERAGE DISCHARGE.--52 years, 184 ft³/s (5.211 m³/s), 133,300 acre-ft/yr (164 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,680 ft³/s (47.6 m³/s) May 22; minimum daily, 0.02 ft³/s (0.001 m³/s) Oct. 1-4.

Period of record: Maximum discharge, 3,890 ft³/s (110 m³/s) May 15, 1941; no flow at times some years. Flood of Oct. 5, 1911, is the greatest since at least 1854, from information by local residents.

REMARKS.--Records good except those for winter period, which are fair. Diversions for irrigation of about 75,000 acres (304 km²) above station.

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

REVISIONS (WATER YEARS).--WSP 1312: 1934(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.02	9.3	90	87	76	112	126	379	1,550	550	288	62
2	.02	56	92	86	74	109	129	216	1,560	505	235	85
3	.02	222	95	86	72	112	122	136	1,560	455	160	67
4	.02	290	90	86	74	114	106	138	1,370	418	117	48
5	.04	322	84	89	78	114	96	277	1,110	440	91	36
6	.04	292	80	82	84	108	93	296	871	454	78	41
7	.04	168	84	74	86	112	106	195	829	480	67	41
8	.04	142	79	69	86	115	105	142	932	470	61	38
9	.04	139	77	70	81	118	105	224	993	452	29	38
10	.04	118	75	71	83	127	108	426	1,150	516	5.7	50
11	.11	112	75	68	91	118	108	707	1,370	538	5.0	64
12	.15	120	73	72	88	124	123	1,010	1,290	554	3.5	87
13	.15	120	71	77	88	139	142	1,040	1,310	446	2.8	78
14	.15	106	75	82	88	130	173	1,130	1,200	514	2.5	75
15	.11	100	73	87	88	121	237	940	1,120	528	2.1	75
16	.15	106	73	87	85	118	237	937	921	586	11	69
17	.20	94	75	87	91	115	167	872	927	514	22	46
18	.26	108	80	87	88	119	140	1,070	950	478	28	39
19	.33	111	82	87	88	128	166	1,180	900	752	38	34
20	3.7	102	82	85	85	128	110	1,440	882	863	46	34
21	99	93	82	85	83	148	87	1,580	905	714	64	31
22	79	77	81	85	85	138	82	1,650	975	605	33	29
23	23	79	81	85	83	141	84	1,470	952	572	5.0	26
24	11	82	80	85	90	138	110	1,150	846	421	1.5	25
25	7.8	77	80	83	87	129	148	1,120	823	413	.61	26
26	7.6	85	79	85	90	132	205	1,260	841	376	.40	25
27	6.3	82	81	85	91	138	261	1,500	860	358	.23	31
28	4.8	75	83	79	99	136	286	1,180	818	362	.15	32
29	4.3	80	85	72	-----	138	381	866	703	336	.31	31
30	4.0	90	84	72	-----	132	442	928	628	296	5.3	31
31	4.8	-----	82	75	-----	123	-----	1,160	-----	280	20	-----
TOTAL	257.23	3,657.3	2,503	2,510	2,382	3,874	4,785	26,619	30,946	15,246	1,423.10	1,394
MEAN	8.30	122	80.7	81.0	85.1	125	160	859	1,032	492	45.9	46.5
MAX	99	322	95	89	99	148	442	1,650	1,560	863	288	87
MIN	.02	9.3	71	68	72	108	82	136	628	280	.15	25
AC-FT	510	7,250	4,960	4,980	4,720	7,680	9,490	52,800	61,380	30,240	2,820	2,760

CAL YR 1972 TOTAL 16,470.22 MEAN 45.0 MAX 322 MIN 0 AC-FT 32,670
WTR YR 1973 TOTAL 95,596.63 MEAN 262 MAX 1,650 MIN .02 AC-FT 189,600

NOTE.--No gage-height record on secondary channel Jan. 15 to Feb. 23.

RIO GRANDE BASIN

08250000 CULEBRA CREEK AT SAN LUIS, COLO.

LOCATION.--Lat 37°11'02", long 105°25'31", Costilla County, in Beaubien Grant, on left bank at bridge, 1.0 mi (1.6 km) south of San Luis and 1.0 mi (1.6 km) upstream from Rito Seco.

DRAINAGE AREA.--220 mi² (570 km²).

PERIOD OF RECORD.--April 1927 to current year. Monthly discharge only for some periods, published in WSP 1312. Records for January 1910 to December 1911, published as Culebra River at San Luis in WSP 288 and 308, have been found to be unreliable and should not be used.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 8,000 ft (2,438 m) from topographic map. Prior to May 23, 1931, water-stage recorder at present site at different datum.

AVERAGE DISCHARGE.--46 years, 47.6 ft³/s (1.348 m³/s), 34,490 acre-ft/yr (42.5 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 418 ft³/s (11.8 m³/s) June 14 (gage height, 3.75 ft or 1.143 m); minimum daily, 8.0 ft³/s (0.23 m³/s) Oct. 3-5, 10, 11.

Period of record: Maximum discharge, 654 ft³/s (18.5 m³/s) July 1, 1947 (gage height, 5.09 ft or 1.551 m), from rating curve extended above 300 ft³/s (8.5 m³/s); minimum daily, 4.6 ft³/s (0.13 m³/s) Oct. 31, 1950.

REMARKS.--Records good. Diversions above station for irrigation. Flow regulated by Sanchez Reservoir on Ventero Creek (capacity, 103,000 acre-ft or 127 hm³).

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

REVISIONS (WATER YEARS).--WSP 1312: 1940. See also PERIOD OF RECORD.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.4	12	10	10	9.6	11	16	11	105	105	115	44
2	8.4	13	10	10	9.6	11	16	11	67	107	140	42
3	8.0	12	10	10	9.6	11	14	9.6	46	99	145	41
4	8.0	12	10	10	10	11	14	17	42	98	145	39
5	8.0	12	9.2	10	10	11	14	28	38	118	135	31
6	8.8	12	11	10	10	12	15	38	34	110	135	22
7	9.2	11	10	10	10	12	15	29	38	98	133	22
8	9.2	12	11	10	10	13	15	16	44	90	132	21
9	8.4	13	10	10	10	13	14	21	128	85	130	20
10	8.0	12	11	10	10	13	15	37	271	90	126	19
11	8.0	12	11	10	10	13	16	23	277	103	126	26
12	8.4	11	11	10	10	14	16	19	281	117	125	23
13	8.8	11	11	10	11	14	16	16	263	121	126	22
14	8.8	11	11	10	11	13	15	14	302	120	127	22
15	9.2	12	10	10	9.6	14	14	16	193	103	128	23
16	11	12	10	10	9.6	15	13	22	187	112	127	21
17	9.6	12	10	10	10	16	12	42	156	134	124	21
18	10	12	10	9.6	9.6	17	13	37	136	138	121	20
19	11	11	10	9.6	9.6	19	12	23	112	140	120	21
20	12	12	11	9.6	9.6	20	12	28	95	141	120	21
21	10	11	10	9.6	10	23	12	76	108	138	102	20
22	10	10	10	9.6	10	20	12	68	139	133	87	20
23	16	11	10	9.6	10	17	12	63	144	97	85	20
24	14	11	10	9.6	10	16	12	76	140	73	88	20
25	13	11	10	9.6	10	15	12	82	125	77	87	20
26	12	11	10	9.6	10	16	12	100	121	96	86	24
27	11	10	10	9.6	10	17	12	57	120	102	85	24
28	11	10	10	9.6	10	18	12	82	136	114	80	25
29	10	10	10	9.6	-----	17	11	116	130	113	81	25
30	14	10	10	9.6	-----	16	11	88	112	114	83	25
31	14	-----	10	9.6	-----	16	-----	97	-----	115	60	-----
TOTAL	316.2	342	317.2	304.4	278.8	464	405	1,362.6	4,090	3,401	3,504	744
MEAN	10.2	11.4	10.2	9.82	9.96	15.0	13.5	44.0	136	110	113	24.8
MAX	16	13	11	10	11	23	16	116	302	141	145	44
MIN	8.0	10	9.2	9.6	9.6	11	11	9.6	34	73	60	19
AC-FT	627	678	629	604	553	920	803	2,700	8,110	6,750	6,950	1,480
CAL YR 1972	TOTAL	8,637.7	MEAN	23.6	MAX	114	MIN	7.3	AC-FT	17,130		
WTR YR 1973	TOTAL	15,529.2	MEAN	42.5	MAX	302	MIN	8.0	AC-FT	30,800		

08251500 RIO GRANDE NEAR LOBATOS, COLO.

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

DRAINAGE AREA.--7,700 mi² (19,900 km²), approximately (includes 2,940 mi² or 7,610 km² in closed basin in northern part of San Luis Valley, Colo.).

PERIOD OF RECORD.--June 1889 to current year. Monthly discharge only for some periods, published in WSP 1312. Published as "at Cenicero" 1899-1901, and as "near Cenicero" 1902-4.

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

AVERAGE DISCHARGE.--74 years, 595 ft³/s (16.85 m³/s), 431,100 acre-ft/yr (531 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 3,560 ft³/s (101 m³/s) May 23 (gage height, 4.69 ft or 1.430 m); minimum daily, 67 ft³/s (1.90 m³/s) Oct. 17, 18.

Period of record: Maximum discharge observed, 13,200 ft³/s (374 m³/s) June 8, 1905 (gage height, 9.1 ft or 2.77 m), from rating curve extended above 8,000 ft³/s (230 m³/s); no flow at times in 1950-51, 1956. Maximum stage since at least 1828, that of June 8, 1905.

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

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

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	98	390	325	290	290	400	556	824	2,500	1,790	792	294
2	90	430	345	285	275	410	544	657	2,780	1,600	760	410
3	85	514	340	285	265	415	526	478	2,960	1,520	643	450
4	85	664	345	285	265	425	502	395	2,740	1,290	567	360
5	85	720	370	275	285	450	478	435	2,420	1,120	544	310
6	80	744	320	280	295	470	466	636	2,150	1,160	508	294
7	85	622	310	285	290	480	460	580	1,970	1,280	478	278
8	120	574	300	290	285	500	460	460	1,960	1,080	450	258
9	188	562	280	290	285	500	460	478	2,120	970	450	258
10	184	520	285	280	290	520	450	643	2,320	979	385	266
11	206	508	330	275	295	560	455	916	2,630	1,100	325	258
12	188	508	320	270	305	580	490	1,430	2,750	1,220	294	298
13	174	484	290	270	310	520	526	1,740	2,810	1,130	266	360
14	125	490	290	265	300	560	566	1,850	2,960	1,060	242	415
15	95	490	295	265	300	580	629	1,870	2,970	1,010	234	405
16	82	472	290	275	310	574	692	1,850	2,730	1,120	230	370
17	67	450	280	280	305	568	671	1,870	2,700	1,160	270	330
18	67	420	260	285	300	608	562	1,980	2,800	1,150	282	310
19	125	455	265	285	295	629	502	2,080	2,310	1,200	270	310
20	118	508	270	290	290	636	472	2,490	2,060	1,450	274	298
21	90	466	280	290	300	622	395	2,740	1,950	1,450	286	270
22	178	445	300	285	295	643	355	3,290	1,970	1,360	290	250
23	216	320	305	280	295	615	335	3,500	2,050	1,100	246	242
24	184	280	310	280	295	601	345	3,060	2,090	970	246	226
25	202	300	310	275	300	568	370	2,500	2,050	934	250	216
26	345	350	310	270	300	550	440	2,570	2,100	961	238	220
27	430	390	300	275	310	556	502	2,940	2,100	970	226	234
28	435	360	300	275	350	587	550	2,960	2,060	988	230	246
29	400	310	290	280	-----	594	615	2,500	1,810	1,020	246	250
30	385	295	290	285	-----	587	768	2,170	1,810	916	216	242
31	375	-----	290	290	-----	580	-----	2,280	-----	832	258	-----
TOTAL	5,587	14,041	9,395	8,690	8,280	16,888	15,144	54,172	70,630	35,890	11,016	8,948
MEAN	180	468	303	280	296	545	505	1,747	2,354	1,158	355	298
MAX	435	744	370	290	350	643	768	3,500	2,970	1,790	792	450
MIN	67	280	260	265	265	400	335	395	1,810	832	216	216
AC-FT	11,080	27,850	18,630	17,240	16,420	33,500	30,040	107,500	140,100	71,190	21,850	17,750

CAL YR 1972 TOTAL 81,806 MEAN 224 MAX 840 MIN 21 AC-FT 162,300
 WTR YR 1973 TOTAL 258,681 MEAN 709 MAX 3,500 MIN 67 AC-FT 513,100

08252000 RIO GRANDE AT COLORADO-NEW MEXICO STATE LINE

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

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

GAGE.--Water-stage recorder. Altitude of gage is 7,390 ft (2,252 m) from topographic map.

AVERAGE DISCHARGE.--20 years, 325 ft³/s (9.204 m³/s, 235,500 acre-ft/yr (290 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 3,540 ft³/s (100 m³/s) May 23 (gage height, 6.66 ft or 2.030 m); minimum daily, 68 ft³/s (1.93 m³/s) Oct. 18.

Period of record: Maximum discharge, 4,150 ft³/s (118 m³/s) May 29, 1958 (gage height, 7.07 ft or 2.155 m); no flow at times in 1956.

Flood of June 8, 1905 (daily discharge, 13,100 ft³/s or 371 m³/s at station near Lobatos 5.8 mi or 9.3 km upstream), was probably the greatest since at least 1828.

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

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

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	99	381	315	290	290	380	543	800	2,420	1,740	756	268
2	88	435	335	290	280	405	539	684	2,700	1,550	738	359
3	86	494	340	285	270	415	515	508	2,920	1,480	644	431
4	82	635	340	285	265	420	501	408	2,740	1,290	575	368
5	82	680	350	280	275	440	473	431	2,380	1,100	535	308
6	82	725	325	280	290	465	459	619	2,130	1,100	494	286
7	82	640	310	280	290	475	452	611	1,930	1,240	473	271
8	95	575	300	285	285	495	421	476	1,890	1,060	442	246
9	180	571	280	290	285	500	462	462	2,030	938	428	246
10	180	535	285	285	290	515	442	587	2,220	926	381	252
11	204	515	310	280	295	550	442	820	2,520	1,030	324	246
12	195	519	300	275	300	575	470	1,280	2,710	1,150	295	274
13	186	501	285	270	310	530	512	1,680	2,740	1,090	258	333
14	143	490	290	270	305	550	539	1,830	2,860	1,000	231	385
15	103	480	290	265	300	575	603	1,870	2,880	956	225	378
16	90	456	290	270	305	575	676	1,820	2,670	1,050	222	346
17	76	438	280	280	305	570	666	1,880	2,590	1,100	243	324
18	68	442	270	280	300	590	579	1,940	2,720	1,100	268	298
19	103	466	260	285	295	611	490	2,050	2,290	1,130	264	295
20	122	504	265	285	290	635	480	2,380	2,010	1,400	261	283
21	90	445	275	290	295	603	401	2,830	1,900	1,400	274	261
22	143	442	290	285	295	623	352	3,240	1,910	1,370	280	246
23	228	330	300	285	295	615	330	3,460	1,950	1,120	246	234
24	189	261	305	280	295	591	336	3,100	2,030	950	234	222
25	186	295	305	275	300	575	362	2,520	1,990	905	237	210
26	317	317	305	275	300	535	428	2,520	2,040	920	228	213
27	428	394	300	270	305	527	480	2,850	2,030	926	216	222
28	445	378	295	275	340	555	535	2,930	2,020	926	219	240
29	408	327	290	275	-----	579	575	2,470	1,780	962	237	249
30	394	300	285	280	-----	567	716	2,060	1,750	885	213	246
31	391	-----	285	285	-----	563	-----	2,180	-----	800	231	-----
TOTAL	5,565	13,971	9,255	8,685	8,250	16,604	14,779	53,296	68,750	34,594	10,672	8,540
MEAN	180	466	299	280	295	536	493	1,719	2,292	1,116	344	285
MAX	445	725	350	290	340	635	716	3,460	2,920	1,740	756	431
MIN	68	261	260	265	265	380	330	408	1,750	800	213	210
AC-FT	11,040	27,710	18,360	17,230	16,360	32,930	29,310	105,700	136,400	68,620	21,170	16,940
CAL YR 1972	TOTAL	80,506	MEAN	220	MAX	820	MIN	22	AC-FT	159,700		
WTR YR 1973	TOTAL	252,961	MEAN	693	MAX	3,460	MIN	68	AC-FT	501,700		

COLORADO RIVER BASIN

147

LADY CREEK BASIN

09010100 LADY CREEK NEAR GRAND LAKE, COLO.

LOCATION.--Lat 40°27'56", long 105°50'46", in NW¼NE¼ sec.30, T.6 N., R.75 W., Grand County, on right bank 100 ft (30 m) upstream from Grand River ditch and 14.5 mi (23.3 km) north of Grand Lake.

DRAINAGE AREA.--0.08 mi² (0.21 km²).

PERIOD OF RECORD.--May 1969 to current year (seasonal records only).

GAGE.--Water-stage recorder. Altitude of gage is 10,220 ft (3,115 m) from topographic map.

EXTREMES.--Current season: Maximum discharge, 2.4 ft³/s (0.068 m³/s) June 8 (gage height, 1.21 ft or 0.369 m); no flow for many days.

Period of record: Maximum discharge, 2.4 ft³/s (0.068 m³/s) June 8, 1973 (gage height, 1.21 ft or 0.369 m); maximum gage height, 1.28 ft (0.390 m) June 25, 1971; no flow for many days each year.

REMARKS.--Records poor. No diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1									0	0	0	0
2									0	0	0	0
3									0	0	0	0
4									0	0	0	0
5									0	0	0	0
6									0	0	0	0
7									0	0	0	0
8									.13	0	0	0
9									.03	0	0	0
10									.04	0	0	0
11									.03	0		
12									.03	0	0	0
13									.02	0	0	0
14									.01	0	0	0
15									0	0	0	0
16									0	0	0	0
17									0	0	0	0
18									0	0	0	0
19									0	0	0	0
20									0	0	0	0
21									0			
22									0	0	0	0
23									0	0	0	0
24									0	0	0	0
25									0	0	0	0
26									0	0	0	0
27									0	0	0	0
28									0	0	0	0
29					-----				0	0	0	0
30					-----				0	0	0	0
31		-----			-----		-----		-----	0	0	-----
TOTAL								0	.29			
MEAN								0	.010			
MAX								0	.13			
MIN								0	0			
AC=FT								0	.0			

NOTE.--No gage-height record July 11 to Sept. 30.

JIMMY CREEK BASIN

09010400 JIMMY CREEK NEAR GRAND LAKE, COLO.

LOCATION.--Lat 40°22'32", long 105°52'48", Grand County, on right bank 200 ft (61 m) upstream from Grand River ditch and 8.5 mi (13.7 km) north of Grand Lake.

DRAINAGE AREA.--0.08 mi² (0.21 km²).

PERIOD OF RECORD.--May 1969 to current year (seasonal records only).

GAGE.--Water-stage recorder. Altitude of gage is 10,320 ft (3,146 m) from topographic map.

EXTREMES.--Current year: Maximum discharge, 5.1 ft³/s (0.14 m³/s) June 27 (gage height, 1.33 ft or 0.405 m); minimum daily, 0.04 ft³/s (0.001 m³/s) May 1, 2, 4-8.

Period of record: Maximum discharge, 5.5 ft³/s (0.16 m³/s) June 18, 1971 (gage height, 1.37 ft or 0.418 m); minimum daily, 0.04 ft³/s (0.001 m³/s) May 1, 2, 4-8, 1973.

REMARKS.--Records poor. No diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1								.34	.41	4.8	1.3	.61
2								.74	.42	4.7	1.3	.60
3								.05	.40	3.4	1.2	.60
4								.04	.40	4.1	1.1	.57
5								.34	.37	3.9	1.1	.55
6								.34	.40	3.8	1.1	.55
7								.04	.49	3.6	1.1	.55
8								.04	.74	3.4	1.1	.53
9								.05	1.2	3.1	.99	.50
10								.05	1.8	2.9	.98	.50
11								.07	2.1	2.8	.96	.50
12								.09	2.2	2.6	.94	.47
13								.10	2.4	2.6	.92	.47
14								.11	2.6	2.5	.89	.45
15								.13	2.5	2.4	.90	.45
16								.15	2.4	2.2	.89	.45
17								.19	2.2	2.2	.85	.44
18								.28	2.1	2.2	.81	.42
19								.41	2.0	2.1	.80	.37
20								.49	1.9	2.0	.80	.36
21								.54	1.9	2.0	.80	.34
22								.52	2.0	2.0	.80	.34
23								.52	2.5	1.9	.77	.34
24								.50	2.8	1.7	.72	.34
25								.47	3.0	1.6	.72	.34
26								.45	3.6	1.6	.72	.33
27								.41	4.4	1.6	.72	.33
28								.40	4.7	1.5	.69	.32
29								.37	4.8	1.4	.66	.32
30								.36	4.8	1.4	.66	.32
31								.38	-----	1.3	.65	-----
TOTAL								7.37	63.53	80.3	27.94	13.26
MEAN								.24	2.12	2.59	.90	.44
MAX								.54	4.8	4.8	1.3	.61
MIN								.04	.37	1.3	.65	.32
AC-FT								15	126	159	55	26

NOTE.--No gage-height record July 11 to Sept. 30.

09010500 COLORADO RIVER BELOW BAKER GULCH, NEAR GRAND LAKE, COLO.

LOCATION.--Lat 40°19'33", long 105°51'22", in NE¼NW¼ sec.12, T.4 N., R.76 W., Grand County, on left bank 500 ft (150 m) downstream from Baker Gulch, 1.0 mi (1.6 km) upstream from Bowen Gulch, and 5.5 mi (8.8 km) northwest of town of Grand Lake.

DRAINAGE AREA.--53.4 mi² (138 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 8,750 ft (2,667 m) from topographic map.

AVERAGE DISCHARGE.--20 years, 62.3 ft³/s (1.764 m³/s), 45,140 acre-ft/yr (55.7 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 688 ft³/s (19.5 m³/s) June 14, 26 (gage height, 6.97 ft or 2.124 m); minimum daily, 7.4 ft³/s (0.21 m³/s) Feb. 20-24.
Period of record: Maximum discharge, 976 ft³/s (27.6 m³/s) June 30, 1957 (gage height, 7.19 ft or 2.192 m); maximum gage height, 7.30 ft (2.225 m) June 25, 1971; minimum daily discharge, 3.0 ft³/s (0.085 m³/s) Jan. 13, 1963.

REMARKS.--Records good except those for winter period, which are poor. Transmountain diversion above station by Grand River ditch (see elsewhere in this report).

REVISIONS.--WRD Colo. 1967: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27	28	13	9.8	8.8	8.0	8.6	27	203	442	74	47
2	23	26	12	9.8	8.5	8.0	8.6	9.8	245	388	69	46
3	22	25	12	9.6	8.4	8.0	8.4	14	217	313	59	45
4	21	24	12	9.8	8.4	8.0	8.4	23	184	260	66	40
5	25	23	12	10	8.4	8.0	8.2	29	161	228	73	36
6	26	24	12	10	8.4	8.0	8.0	66	170	209	77	34
7	25	23	12	9.8	8.4	8.0	8.6	30	232	203	74	36
8	38	22	12	9.6	8.4	8.0	8.0	32	355	211	70	33
9	39	21	12	9.6	8.4	8.2	8.0	42	496	184	57	32
10	34	21	11	9.6	8.4	8.4	8.0	57	608	168	53	33
11	30	21	11	9.6	8.4	8.4	8.2	79	623	154	55	36
12	28	20	11	9.8	8.2	8.4	8.4	106	614	147	52	40
13	28	20	11	10	8.0	8.4	8.6	130	629	168	47	38
14	30	20	11	9.8	7.8	8.4	8.8	136	674	190	46	33
15	39	20	11	9.6	7.8	8.6	9.0	146	612	156	45	32
16	47	19	11	9.6	7.8	8.6	9.0	163	500	153	43	32
17	42	18	11	9.6	7.8	8.6	9.0	180	418	132	43	30
18	46	17	11	9.8	7.8	8.6	9.2	221	368	125	46	28
19	44	16	11	9.8	7.8	8.6	9.2	295	304	159	40	27
20	42	15	12	10	7.4	8.4	9.2	340	282	164	41	26
21	45	14	12	10	7.4	8.2	9.0	367	319	153	60	25
22	44	14	12	10	7.4	8.2	8.6	292	394	124	64	25
23	38	14	12	9.6	7.4	8.2	8.2	245	454	110	52	24
24	35	14	11	9.4	7.4	8.2	8.0	252	466	102	53	24
25	35	14	10	9.4	7.8	8.2	8.0	236	495	101	68	25
26	35	13	9.8	9.4	8.0	8.4	8.4	207	608	85	64	27
27	35	13	9.6	9.4	8.0	8.6	11	168	598	78	60	25
28	33	13	9.6	9.2	8.0	8.6	13	144	562	75	56	27
29	31	13	9.6	9.2	-----	8.6	13	139	496	75	52	31
30	26	13	9.6	8.8	-----	8.6	21	166	478	74	50	29
31	25	-----	9.6	8.8	-----	8.6	-----	170	-----	66	48	-----
TOTAL	1,038	558	345.8	298.4	224.8	258.0	279.0	4,511.8	12,786	5,197	1,757	966
MEAN	33.5	18.6	11.2	9.63	8.03	8.32	9.30	146	426	168	56.7	32.2
MAX	47	28	13	10	8.8	8.6	21	367	674	442	77	47
MIN	21	13	9.6	8.8	7.4	8.0	8.0	9.8	161	66	40	24
AC-FT	2,060	1,110	686	592	446	512	553	8,950	25,360	10,310	3,490	1,920

CAL YR 1972 TOTAL 22,752.4 MEAN 62.2 MAX 598 MIN 6.0 AC-FT 45,130
WTR YR 1973 TOTAL 28,219.8 MEAN 77.3 MAX 674 MIN 7.4 AC-FT 55,970

LOCATION.--Lat 40°13'08", long 105°51'25", in NE¼SW¼ sec.13, T.3 N., R.76 W., Grand County, on left bank 200 ft (61 m) downstream from bridge on U.S. Highway 34, 400 ft (120 m) upstream from high-water line of Shadow Mountain Lake at elevation 8,367 ft (2,550.3 m), and 3.0 mi (4.8 km) southwest of town of Grand Lake.

PERIOD OF RECORD.--July 1904 to September 1918, October 1933 to current year. Monthly discharge only for some periods, published in WSP 1313. Published as Grand River (North Fork) near Grand Lake 1904 and as North Fork of Grand River near Grand Lake 1905-18.

AVERAGE DISCHARGE.--54 years, 93.0 ft³/s (2.634 m³/s) 67,380 acre-ft/yr (83.1 hm³/yr).

Period of record: Maximum discharge observed, 1,840 ft³/s (52.1 m³/s) June 15, 16, 1918 (gage height, 7.0 ft or 2.13 m), from rating curve extended above 1,100 ft³/s (31 m³/s); maximum gage height, 8.21 ft (2.502 m) Apr. 20, 1971 (backwater from ice); minimum daily discharge, 1.7 ft³/s (0.048 m³/s) July 18, 19, 1934.

REVISIONS (WATER YEARS).--WSP 1213: 1914. WSP 2124: Drainage area.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34	46	24	19	16	16	16	47	275	392	20	53
2	33	42	23	19	16	16	16	40	318	348	25	53
3	31	43	22	20	16	16	16	94	308	281	36	54
4	30	40	22	19	16	16	16	56	269	215	35	50
5	32	37	22	18	16	16	16	68	222	178	47	45
6	36	38	22	18	16	16	16	76	208	145	82	41
7	35	36	22	18	16	16	15	81	257	131	100	42
8	47	34	22	18	16	15	15	83	360	135	109	40
9	51	32	22	18	16	15	15	101	490	108	84	37
10	48	31	22	18	16	15	15	135	653	95	76	41
11	42	30	22	18	16	15	16	187	702	80	75	44
12	39	29	21	18	16	15	16	223	656	71	76	51
13	39	28	21	17	16	15	17	243	643	82	64	51
14	44	28	21	17	16	15	17	240	746	235	60	42
15	46	28	22	17	16	15	17	226	697	222	57	39
16	66	27	22	17	16	15	18	257	549	215	54	39
17	57	26	20	18	16	15	19	269	420	195	53	37
18	62	25	20	18	16	15	19	314	397	156	57	36
19	62	24	20	18	16	15	19	405	295	171	52	33
20	58	24	20	18	16	16	19	448	253	165	47	32
21	62	24	20	18	16	16	19	480	306	139	64	31
22	63	24	20	18	16	16	19	440	317	101	72	30
23	58	24	20	18	16	16	19	368	379	86	64	29
24	52	24	20	18	16	16	19	376	411	68	59	30
25	52	24	20	17	16	16	22	364	397	70	69	31
26	55	24	20	17	16	17	22	325	513	51	69	35
27	55	25	19	17	16	17	41	269	545	39	65	33
28	53	25	19	17	16	17	36	222	530	29	62	33
29	48	24	19	17	-----	16	45	220	450	23	59	40
30	45	24	19	16	-----	16	49	242	435	26	56	40
31	44	-----	19	16	-----	16	-----	245	-----	20	55	-----
TOTAL	1,479	890	647	550	448	487	624	7,144	13,001	4,272	1,903	1,192
MEAN	47.7	29.7	20.9	17.7	16.0	15.7	20.8	230	433	138	61.4	39.7
MAX	66	46	24	20	16	17	49	480	746	392	109	54
MIN	30	24	19	16	16	15	15	40	208	20	20	29
AC=FT	2,930	1,770	1,280	1,090	889	966	1,240	14,170	25,790	8,470	3,770	2,360
CAL YR 1972	TOTAL 24,504.8		MEAN 67.0		MAX 536	MIN 4.4	AC=FT 48,610					
WTR YR 1973	TOTAL 32,637.0		MEAN 89.4		MAX 746	MIN 15	AC=FT 64,740					

GRAND LAKE OUTLET BASIN

151

09013000 ALVA B. ADAMS TUNNEL AT EAST PORTAL, NEAR ESTES PARK, COLO.

LOCATION.--Lat 40°19'40", long 105°34'39", in SW¼NW¼ sec.9, T.4 N., R.73 W., Larimer County, on right bank at upstream end of Aspen Creek siphon, 700 ft (210 m) downstream from east portal and 4.5 mi (7.2 km) southwest of Estes Park.

PERIOD OF RECORD.--October 1946 to current year (monthly discharge only for August and September 1947).

GAGE.--Water-stage recorder and Parshall flume. Altitude of gage is 8,250 ft (2,515 m) from topographic map. Prior to Oct. 1, 1950, water-stage recorder and Parshall flume at different datum. Oct. 1, 1950, to Sept. 30, 1952, water-stage recorder and Cippoletti weir at different datum.

AVERAGE DISCHARGE.--27 years, 256 ft³/s (7.250 m³/s), 185,500 acre-ft/yr (229 hm³/yr).

EXTREMES.--Period of record: Maximum daily discharge, 592 ft³/s (16.8 m³/s) June 30, 1962; no flow at times in most years.

REMARKS.--Records excellent. This is a transmountain diversion from Grand Lake and Shadow Mountain Lake for power and irrigation developments in the South Platte River basin as part of the Colorado-Big Thompson project. Diversion point is at west portal near town of Grand Lake, 13.35 mi (21.48 km) west of east portal.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	194	350	393	308	451	406	299	344	0	514	399	114
2	320	349	310	406	455	404	380	340	0	512	399	109
3	325	347	289	402	305	306	406	345	0	512	395	110
4	311	351	396	443	310	303	398	347	0	510	269	104
5	304	351	500	455	455	406	320	344	0	513	259	112
6	301	345	500	308	453	410	397	287	0	504	304	109
7	303	340	502	309	449	412	377	260	0	511	292	100
8	303	346	496	451	453	406	344	325	0	506	254	108
9	311	344	494	504	451	402	344	317	0	506	259	103
10	350	375	496	506	303	327	344	317	0	454	258	201
11	403	353	491	494	270	26	351	452	0	552	260	200
12	341	341	496	494	500	202	372	451	0	545	258	111
13	356	284	498	331	494	.75	296	435	0	557	255	101
14	360	341	496	289	498	0	384	423	0	558	255	79
15	360	344	498	410	451	101	312	445	0	547	193	77
16	349	340	496	410	465	.11	340	429	74	547	188	76
17	353	359	415	410	500	0	344	344	284	548	250	100
18	351	365	551	412	502	152	344	241	316	543	180	97
19	305	345	505	408	548	.27	345	208	270	550	177	99
20	305	343	430	304	498	0	341	2.0	325	549	286	97
21	301	344	447	296	498	0	296	2.0	379	555	332	98
22	298	344	459	456	408	209	245	107	265	544	273	98
23	298	388	441	410	445	344	337	165	160	538	256	98
24	296	348	434	408	294	337	340	215	7.0	544	294	100
25	292	375	418	406	268	366	341	147	188	543	311	99
26	354	344	429	396	410	441	308	200	3.0	467	306	155
27	345	353	429	303	449	444	283	144	188	465	298	174
28	376	350	431	291	500	448	154	40	504	426	316	167
29	345	349	437	406	-----	458	152	0	513	402	332	152
30	347	351	412	404	-----	446	338	0	510	392	282	151
31	358	-----	304	402	-----	324	-----	0	-----	402	213	-----
TOTAL	10,135	10,459	13,893	12,232	12,083	8,081.13	9,832	7,676.0	3,986.0	15,820	8,605	3,499
MEAN	327	349	448	395	432	261	328	248	133	510	278	117
MAX	403	368	551	506	548	458	406	452	513	558	399	201
MIN	194	284	289	289	268	0	152	0	0	392	177	76
AC-FT	20,100	20,750	27,560	24,260	23,970	16,030	19,500	15,230	7,910	31,380	17,070	6,940

CAL YR 1972 TOTAL 121,429.79 MEAN 332 MAX 554 MIN 0 AC-FT 240,900
WTR YR 1973 TOTAL 116,301.13 MEAN 319 MAX 558 MIN 0 AC-FT 230,700

COLORADO RIVER MAIN STEM

09014500 SHADOW MOUNTAIN LAKE NEAR GRAND LAKE, COLO.

LOCATION.--Lat 40°12'26", long 105°50'27", in SW¼NW¼ sec.19, T.3 N., R.75 W., Grand County, in gatehouse on left side of outlet gates near center of Shadow Mountain Dam on the Colorado River, 1.0 mi (1.6 km) upstream from Pole Creek and 3.2 mi (5.1 km) south of town of Grand Lake.

DRAINAGE AREA.--185 mi² (479 km²).

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

GAGE.--Water-stage recorder for elevations above 8,364.0 ft (2,549.35 m) and reference points along upstream face of dam for those below. Datum of gage is at mean sea level (Bureau of Reclamation bench mark). Supplementary water-stage recorder on Grand Lake, 800 ft (240 m) north of outlet gates and 2.9 mi (4.7 km) north of Shadow Mountain Dam.

EXTREMES (at 2400).--Current year: Maximum contents, 17,460 acre-ft (21.5 hm³) July 9, 19 (elevation, 8,366.83 ft or 2,550.195 m); minimum, 16,170 acre-ft (19.9 hm³) June 12, 26 (elevation, 8,366.08 ft or 2,549.981 m).
Period of record: Maximum contents, 17,920 acre-ft (22.1 hm³) May 22, 1955 (elevation, 8,367.03 ft or 2,550.271 m); minimum since appreciable storage was first attained, 2,630 acre-ft (3.24 hm³) May 14, 1948.

REMARKS.--Figures given herein are combined figures of usable contents from Shadow Mountain Lake and Grand Lake. Shadow Mountain Lake is used for stabilization of water level in Grand Lake, from which it is separated by gates. Shadow Mountain Lake is formed by earth and rockfill dam and dikes. Storage began in April 1947. Capacity, 17,860 acre-ft or 22.0 hm³ (including usable capacity of Grand Lake above elevation, 8,365 ft or 2,549.7 m) between elevations 8,347 ft or 2,544.2 m (sill of outlet gate) and 8,367 ft or 2,550.3 m (maximum water surface). Dead storage in Shadow Mountain Lake, 506 acre-ft (624,000 m³). Dead storage in Grand Lake not determined. Capacity of Shadow Mountain Lake and Grand Lake usable for diversion through Alva B. Adams tunnel, 3,660 acre-ft (4.51 hm³) between elevations 8,365 ft or 2,549.7 m (crest of tunnel inlet) and 8,367 ft or 2,550.3 m (maximum water surface). 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 furnished by Bureau of Reclamation.

REVISIONS (WATER YEARS).--WSP 1149: 1947-48. WSP 2124: Drainage area.

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	ELEVATION (FEET)	CONTENTS (ACRE-FEET)	CHANGE IN CONTENTS (ACRE-FEET)
Sept. 30.....	8,366.63	17,180	-
Oct. 31.....	8,366.63	17,180	0
Nov. 30.....	8,366.63	17,180	0
Dec. 31.....	8,366.72	17,350	+170
CAL YR 1972.....	-	-	+40
Jan. 31.....	8,366.64	17,200	-150
Feb. 28.....	8,366.64	17,200	0
Mar. 31.....	8,366.58	17,090	-110
Apr. 30.....	8,366.70	17,310	+220
May 31.....	8,366.58	17,090	-220
June 30.....	8,366.44	16,830	-260
July 31.....	8,366.58	17,090	+260
Aug. 31.....	8,366.62	17,160	+70
Sept. 30.....	8,366.65	17,220	+60
WTR YR 1973.....	-	-	+40

COLORADO RIVER MAIN STEM

153

09018500 LAKE GRANBY NEAR GRANBY, COLO.

LOCATION.--Lat 40°10'55", long 105°52'14", in NW¼NE¼ sec.35, T.3 N., R.76 W., Grand County, in Granby pumping plant at north shore of lake, 2.5 mi (4.0 km) north of Granby Dam on Colorado River and 7.5 mi (12.1 km) northeast of Granby.

DRAINAGE AREA.--312 mi² (808 km²).

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

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (Bureau of Reclamation bench mark). Prior to Apr. 9, 1951, nonrecording gage at Granby Dam at same datum.

EXTREMES (at 2400).--Current year: Maximum contents, 465,200 acre-ft (574 hm³) July 2, 14 (elevation, 8,279.95 ft or 2,523.729 m); minimum, 305,000 acre-ft (376 hm³) May 5 (elevation, 8,256.04 ft or 2,516.441 m).

Period of record: Maximum contents, 465,900 acre-ft (574 hm³) July 13, 1962 (elevation, 8,280.05 ft or 2,523.759 m); minimum since appreciable storage was first attained, 22,940 acre-ft (28.3 hm³) Apr. 21, 1956 (elevation, 8,194.37 ft or 2,497.644 m).

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 (574 hm³) between elevations 8,186.00 ft or 2,495.093 m (trashrack sills at outlet structures) and 8,280.00 ft or 2,523.744 m (top of radial spillway gates). Dead storage, 74,190 acre-ft (91.5 hm³). Lake is used to store water for pumping to Shadow Mountain Lake and transmountain diversion through Alva B. Adams tunnel for power and irrigation in South Platte River basin. Figures given represent usable contents.

COOPERATION.--Records furnished by Bureau of Reclamation.

REVISIONS.--WSP 2124: Drainage area.

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	ELEVATION (FEET)	CONTENTS (ACRE-FEET)	CHANGE IN CONTENTS (ACRE-FEET)
Sept. 30.....	8,275.04	430,100	-
Oct. 31.....	8,273.22	417,400	-12,700
Nov. 30.....	8,271.03	402,200	-15,200
Dec. 31.....	8,267.36	377,200	-25,000
CAL YR 1972.....	-	-	-16,000
Jan. 31.....	8,264.03	355,300	-21,900
Feb. 28.....	8,260.55	333,000	-22,300
Mar. 31.....	8,258.26	318,600	-14,400
Apr. 30.....	8,256.30	306,600	-12,000
May 31.....	8,264.08	355,600	+49,000
June 30.....	8,279.88	464,700	+109,100
July 31.....	8,279.38	461,100	-3,600
Aug. 31.....	8,278.88	457,500	-3,600
Sept. 30.....	8,278.47	454,500	-3,000
WTR YR 1973.....	-	-	+24,400

LOCATION.--Lat 40°08'39", long 105°52'00", in SE¼SE¼ sec.11, T.2 N., R.76 W., Grand County, on right bank 0.3 mi (0.5 km) downstream from Granby Dam, 1.0 mi (1.6 km) upstream from Walden Hollow, and 5.0 mi (8.0 km) northeast of Granby.

PERIOD OF RECORD.--October 1950 to current year. Prior to October 1955, published as "below Granby Reservoir."

GAGE.--Water-stage recorder and Parshall flume. Altitude of gage is 8,050 ft (2,454 m) from topographic map.

EXTREMES.--Current year: Maximum discharge, 1,440 ft³/s (40.8 m³/s) July 3 (gage height, 4.09 ft or 1.247 m); minimum daily, 14 ft³/s (0.40 m³/s) Sept. 27-30.

Period of record: Maximum discharge, 1,520 ft³/s (43.0 m³/s) June 27-30, 1971 (gage height, 3.95 ft or 1.204 m); maximum gage height, 4.09 ft (1.247 m) July 3, 1973; minimum daily discharge, 5.1 ft³/s (0.14 m³/s) Oct. 8, 9, 1970, Sept. 3, 1971.

REMARKS.--Records good except those for June 28 to July 26, which are fair. Seepage from Lake Granby, which varies from 2 to 8 ft³/s (0.06 to 0.23 m³/s) depending on elevation of Lake Granby, is not included in record. Flow completely regulated by Lake Granby (see sta. 09018500). Several diversions for irrigation of hay meadows above station. Transmountain diversions by Eureka and Grand River ditches and Alva B. Adams tunnel (see elsewhere in this report). Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WRD Colo. 1967: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1	15	20	20	20	20	19	49	81	1,380	43	23	
2	18	20	20	20	20	19	67	89	1,440	26	23	
3	20	20	20	20	20	20	67	89	1,440	25	23	
4	20	20	20	20	20	20	67	85	1,440	25	22	
5	20	20	20	20	20	20	67	80	1,180	25	21	
6	20	20	20	20	20	20	67	80	885	25	21	
7	20	20	21	20	20	20	67	85	778	25	21	
8	20	20	21	20	20	21	67	88	778	25	21	
9	20	20	21	20	19	21	67	89	602	26	21	
10	20	20	21	20	19	21	64	89	450	27	21	
11	20	20	20	20	19	21	61	86	382	27	21	
12	20	20	20	20	20	21	61	85	194	27	21	
13	20	20	20	20	20	20	61	85	94	28	21	
14	20	20	20	20	20	20	61	87	387	29	21	
15	20	20	20	20	20	20	61	87	970	29	21	
16	20	20	20	20	20	20	61	87	935	29	21	
17	20	20	20	20	20	20	59	87	724	29	21	
18	20	20	20	20	20	20	58	87	498	30	21	
19	20	20	20	20	20	20	58	88	438	30	21	
20	20	20	20	20	20	20	58	88	570	30	21	
21	20	20	20	20	20	20	58	88	688	32	21	
22	20	20	20	20	20	20	61	90	522	33	21	
23	20	20	20	20	20	20	64	93	195	33	21	
24	20	20	20	20	20	20	65	93	89	33	21	
25	20	20	20	20	20	20	66	90	77	33	21	
26	20	20	20	20	20	20	66	89	71	33	19	
27	20	20	20	20	20	20	65	160	71	32	14	
28	20	20	20	20	20	20	66	344	69	33	14	
29	20	20	20	-----	19	20	67	617	65	33	14	
30	20	20	20	-----	19	20	68	1,060	61	33	14	
31	20	-----	20	-----	19	-----	68	-----	60	27	-----	
TOTAL	613	600	615	624	560	614	603	1,962	4,446	17,533	915	607
MEAN	19.8	20.0	19.8	20.1	20.0	19.8	20.1	63.3	148	566	29.5	20.2
MAX	20	20	20	21	20	20	21	68	1,060	1,440	43	23
MIN	15	20	19	20	20	19	19	49	80	60	25	14
AC-FT	1,220	1,190	1,220	1,240	1,110	1,220	1,200	3,890	8,820	34,780	1,810	1,200
CAL YR 1972	TOTAL 13,430		MEAN 36.7	MAX 98	MIN 10	AC-FT 26,640						
TR YR 1973	TOTAL 29,692		MEAN 81.3	MAX 1,440	MIN 14	AC-FT 58,890						

COLORADO RIVER MAIN STEM

155

09019500 COLORADO RIVER NEAR GRANBY, COLO.

LOCATION.--Lat 40°07'15", long 105°54'00", in SW¼NW¼ sec.22, T.2 N., R.76 W., Grand County, on right bank 0.3 mi (0.5 km) upstream from bridge on U.S. Highway 34, 1.3 mi (2.1 km) upstream from Willow Creek, and 3.2 mi (5.1 km) northeast of Granby.

DRAINAGE AREA.--323 mi² (837 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 7,960 ft (2,426 m) from topographic map. June 10, 1908, to Sept. 30, 1911, and May 12 to June 10, 1934, nonrecording gage, at site 300 ft (91 m) upstream at different datums. June 11, 1934, to Sept. 30, 1953, water-stage recorder at same site and datum.

EXTREMES.--Current season: Maximum discharge, 1,460 ft³/s (41.3 m³/s) July 1 (gage height, 4.25 ft or 1.295 m); minimum daily, 18 ft³/s (0.51 m³/s) Sept. 6-22.
Period of continuous record: Maximum discharge observed, 4,100 ft³/s (116 m³/s) June 20, 1909 (gage height, 5.5 ft or 1.68 m, site and datum then in use); minimum daily, 6.6 ft³/s (0.19 m³/s) Jan. 29, 1950; minimum observed prior to starting construction of Shadow Mountain Lake, 20 ft³/s (0.57 m³/s) Apr. 6, 1936 (discharge measurement).
Period of seasonal record: Maximum discharge observed, 1,460 ft³/s (41.3 m³/s) July 1, 1973 (gage height, 4.25 ft or 1.295 m); minimum daily, 12 ft³/s (0.34 m³/s) Sept. 19, 20, 1964.

REMARKS.--Records good. Flow regulated by Lake Granby since Sept. 13, 1949 (see sta. 09018500). Several diversions for irrigation of hay meadows above station. Transmountain diversions above station by Eureka and Grand River ditches and Alva B. Adams tunnel (see elsewhere in this report).

REVISIONS.--WSP 2124: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1								48	72	1,370	56	21
2								71	77	1,440	41	22
3								72	84	1,440	41	22
4								78	84	1,440	41	20
5								81	76	1,150	42	19
6								81	73	827	42	18
7								81	73	735	40	18
8								81	72	745	35	18
9								89	73	603	36	18
10								94	76	440	36	18
11								85	75	366	36	18
12								77	72	179	36	18
13								76	73	92	36	18
14								78	77	256	37	18
15								80	76	888	37	18
16								82	77	882	36	18
17								77	73	691	36	18
18								73	71	513	38	18
19								72	73	452	39	18
20								70	77	555	37	18
21								69	70	665	36	18
22								71	73	531	37	18
23								73	77	218	37	19
24								76	77	89	39	19
25								77	76	82	42	19
26								75	73	80	43	21
27								73	118	81	40	23
28								70	297	84	39	23
29								71	570	84	38	24
30								81	1,050	81	40	23
31								75		78	31	
TOTAL								2,357	3,985	17,137	1,200	581
MEAN								76.0	133	553	38.7	19.4
MAX								94	1,050	1,440	56	24
MIN								48	70	78	31	18
AC-FT								4,680	7,900	33,990	2,380	1,150

WILLOW CREEK BASIN

09020700 WILLOW CREEK RESERVOIR NEAR GRANBY, COLO.

LOCATION.--Lat 40°08'49", long 105°56'31", in SE¼ sec.7, T.2 N., R.76 W., Grand County, in shaft house near right end of Willow Creek Dam on Willow Creek, 3.2 mi (5.1 km) upstream from mouth, and 4.2 mi (6.8 km) north of Granby.

DRAINAGE AREA.--134 mi² (347 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 8,077.00 ft (2,461.870 m) above mean sea level (levels by Bureau of Reclamation); gage readings have been reduced to elevations above mean sea level.

EXTREMES (at 2400).--Current year: Maximum contents, 8,900 acre-ft (11.0 hm³) July 14 (elevation, 8,129.46 ft or 2,477.859 m); minimum, 5,620 acre-ft (6.93 hm³) Apr. 6 (elevation, 8,116.45 ft or 2,473.894 m).
Period of record: Maximum contents observed, 9,060 acre-ft (11.2 hm³) Aug. 3, 1953 (elevation, 8,129.99 ft or 2,478.021 m); minimum since first filling to spillway level, 2,320 acre-ft (2.86 hm³) May 12, 1971 (elevation, 8,096.71 ft or 2,467.877 m).

REMARKS.--Reservoir is formed by earth and rockfill dam. Storage began in March 1953 and dead storage pool filled May 3, 1953. Usable capacity, 9,060 acre-ft (11.2 hm³) between elevations 8,077.00 ft or 2,461.870 m (trashrack sill at Willow Creek Outlet) and 8,130.00 ft or 2,478.024 m (crest of spillway). Dead storage, 1,490 acre-ft (1.84 hm³). Reservoir is used to store water for pumping to Lake Granby, Shadow Mountain Lake, and transmountain diversion through Alva B. Adams tunnel for power and irrigation in the South Platte River basin. It is part of the Colorado-Big Thompson project. Figures given represent usable contents.

COOPERATION.--Records furnished by Bureau of Reclamation.

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	ELEVATION (FEET)	CONTENTS (ACRE-FEET)	CHANGE IN CONTENTS (ACRE-FEET)
Sept. 30.....	8,123.63	7,290	-
Oct. 31.....	8,127.41	8,310	+1,020
Nov. 30.....	8,117.43	5,830	-2,480
Dec. 31.....	8,120.00	6,400	+570
CAL YR 1972.....	-	-	-360
Jan. 31.....	8,121.81	6,840	+440
Feb. 28.....	8,123.06	7,150	+310
Mar. 31.....	8,124.50	7,520	+370
Apr. 30.....	8,116.83	5,700	-1,820
May 31.....	8,124.35	7,480	+1,780
June 30.....	8,128.84	8,720	+1,240
July 31.....	8,129.19	8,820	+100
Aug. 31.....	8,128.37	8,580	-240
Sept. 30.....	8,128.02	8,480	-100
WTR YR 1973.....	-	-	+1,190

09021000 WILLOW CREEK BELOW WILLOW CREEK RESERVOIR, COLO.

LOCATION.--Lat 40°08'45", long 105°56'22", in SE¼ sec.7, T.2 N., R.76 W., Grand County, on left bank 1,000 ft (300 m) downstream from Willow Creek Dam, 0.8 mi (1.3 km) upstream from Bunte Highline Canal diversion, 4.0 mi (6.4 km) upstream from mouth, and 4.0 mi (6.4 km) north of Granby.

DRAINAGE AREA.--134 mi² (347 km²).

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

GAGE.--Water-stage recorder and 10-ft (3-m) Parshall flume with overflow weirs. Datum of gage is 8,023.64 ft (2,445.605 m) above mean sea level (Bureau of Reclamation bench mark). Supplementary water-stage recorder and Parshall flume on McQueary ditch 500 ft (150 m) downstream from point of diversion at Willow Creek Dam. Datum of gage is 8,031.68 ft (2,448.056 m) above mean sea level (Bureau of Reclamation bench mark).

AVERAGE DISCHARGE (COMBINED FLOW)--20 years, 28.5 ft³/s (0.807 m³/s), 20,650 acre-ft/yr (25.5 hm³/yr).

EXTREMES (COMBINED FLOW)--Current year: Maximum discharge, 458 ft³/s (13.0 m³/s) June 16-18 (gage height, 4.28 ft or 1.305 m); minimum daily, 0.08 ft³/s (0.002 m³/s) May 16-18.

Period of record: Maximum discharge, 867 ft³/s (24.6 m³/s) June 7, 1957 (gage height, 4.84 ft or 1.475 m); no flow Sept. 17-24, 1963; May 1, 1965, May 2-10, Aug. 16-21, 1969.

REMARKS.--Records good. Records show combined flow of creek and McQueary ditch. Flow completely regulated by Willow Creek Reservoir (see sta. 09020700). Diversions above station for irrigation of hay meadows. McQueary ditch diverts at Willow Creek Dam for irrigation below station. Diversion above station from Willow Creek Reservoir by Willow Creek Pump Canal to Lake Granby as part of the Colorado-Big Thompson project (see table below for figures of diversion). Prior to Oct. 1, 1962, records include priming and waste water from pump canal.

REVISIONS (WATER YEARS)--WSP 1563: 1954-55.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.8	6.8	6.7	6.9	6.7	6.5	6.3	1.8	.56	210	73	.33
2	5.8	6.8	6.7	6.9	6.7	6.4	6.3	.14	9.3	143	70	.33
3	5.8	6.8	6.7	6.9	6.7	6.4	6.3	.14	14	174	64	.33
4	5.8	6.8	6.7	6.9	6.7	6.4	6.3	.14	14	175	61	.33
5	5.8	6.8	6.7	6.9	6.7	6.4	6.3	.14	14	115	60	.23
6	5.8	6.8	6.7	6.9	6.7	6.4	6.3	.33	14	120	84	.23
7	5.8	6.8	6.7	6.9	6.7	6.4	6.3	.23	14	120	98	.33
8	6.0	6.8	6.7	6.9	6.7	6.4	6.3	.23	17	116	73	.33
9	6.0	6.8	6.7	6.9	6.7	6.4	6.3	.23	22	78	59	.44
10	6.0	6.8	6.7	6.9	6.7	6.4	6.3	.23	84	85	59	.44
11	6.0	7.0	6.7	6.9	6.5	6.4	6.3	.14	234	92	59	.44
12	6.0	7.0	6.7	6.9	6.5	6.4	6.3	.14	216	81	59	.56
13	6.0	7.0	6.7	6.9	6.5	6.4	6.3	.14	273	85	42	.44
14	6.0	7.0	6.7	6.9	6.5	6.4	6.3	.14	239	120	30	.33
15	6.0	7.0	6.7	6.9	6.5	6.4	6.3	.14	259	153	30	.33
16	6.0	7.0	6.7	6.9	6.5	6.4	6.3	.08	387	152	34	.33
17	6.0	7.0	6.7	6.9	6.5	6.4	6.3	.08	458	137	38	.33
18	6.0	7.0	6.7	6.9	6.5	6.4	6.3	.08	356	122	38	.33
19	6.4	7.0	6.7	6.9	6.5	6.4	6.3	83	270	126	38	.33
20	6.4	7.0	6.7	6.9	6.5	6.3	6.3	270	270	130	38	.33
21	6.4	6.9	6.7	6.7	6.5	6.3	6.3	357	251	150	38	.33
22	6.4	6.9	6.7	6.7	6.5	6.3	6.3	405	89	114	38	.33
23	6.4	6.9	6.7	6.7	6.5	6.3	6.3	357	48	103	38	.33
24	6.4	6.9	6.9	6.7	6.5	6.3	6.3	228	48	87	38	.33
25	6.4	6.9	6.9	6.7	6.5	6.3	6.3	103	48	83	38	.33
26	6.4	6.9	6.9	6.7	6.5	6.3	6.3	103	48	83	38	.33
27	6.4	6.9	6.9	6.7	6.5	6.3	6.3	103	48	86	33	.33
28	6.4	6.9	6.9	6.7	6.5	6.3	6.3	101	148	92	26	.33
29	6.4	6.9	6.9	6.7	-----	6.3	6.3	52	210	92	22	.33
30	6.8	6.9	6.9	6.7	-----	6.3	6.3	6.5	188	80	8.8	.33
31	6.8	-----	6.9	6.7	-----	6.3	-----	.69	-----	77	.33	-----
TOTAL	190.6	207.0	209.3	211.7	184.0	197.3	189.0	2,173.74	4,290.86	3,561	1,425.13	10.37
MEAN	6.15	6.90	6.75	6.83	6.57	6.36	6.30	70.1	143	115	46.0	.35
MAX	6.8	7.0	6.9	6.9	6.7	6.5	6.3	405	458	210	98	.56
MIN	5.8	6.8	6.7	6.7	6.5	6.3	6.3	.08	.56	77	.33	.23
AC-FT	378	411	415	420	365	391	375	4,310	8,510	7,060	2,830	21
†	0	2,990	0	0	0	0	2,760	17,510	14,180	0	226	1,460

CAL YR 1972 TOTAL 7,629.97 MEAN 20.8 MAX 351 MIN .23 AC-FT 15,130 AC-FT †42,160
WTR YR 1973 TOTAL 12,850.00 MEAN 35.2 MAX 458 MIN .08 AC-FT 25,490 AC-FT †39,130

†Diversions, in acre-feet, by Willow Creek Pump Canal; furnished by Bureau of Reclamation.
NOTE.--No gage-height record Oct. 1 to May 4.

09022000 FRASER RIVER AT UPPER STATION, NEAR WINTER PARK, COLO.

LOCATION.--Lat 39°50'45", long 105°45'05", in sec.26, T.2 S., R.75 W., Grand County, on left bank 0.8 mi (1.3 km) upstream from Parsenn Creek and 2.5 mi (4.0 km) south of Winter Park.

DRAINAGE AREA.--10.5 mi² (27.2 km²).

PERIOD OF RECORD.--May to September 1908, July to November 1909 (published as "at upper station near Fraser"), January to September 1911, gage heights only (published as "near Fraser"), October 1968 to September 1973 (discontinued). 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. Altitude of gage is 9,520 ft (2,902 m) from topographic map. Prior to Oct. 1, 1968, nonrecording gage at site 0.9 mi (1.4 km) upstream at different datum. Since Oct. 1, 1968, supplementary water-stage recorder and Parshall flume on Berthoud Pass ditch.

AVERAGE DISCHARGE.--5 years, 15.2 ft³/s (0.430 m³/s), 11,010 acre-ft/yr (13.6 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 155 ft³/s (4.39 m³/s) June 13 (gage height, 2.13 ft or 0.649 m); minimum daily, 1.6 ft³/s (0.045 m³/s) Apr. 19.
Period of record: Maximum discharge, 181 ft³/s (5.13 m³/s) June 5, 1972 (gage height, 2.15 ft or 0.655 m); minimum daily, 1.3 ft³/s (0.037 m³/s) Feb. 20, 1971.

REMARKS.--Records good. Transmountain diversions above station by Berthoud Pass ditch to South Platte River basin (see tables below for figures of diversions).

REVISIONS (WATER YEARS).--See PERIOD OF RECORD.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.8	4.3	2.9	2.6	2.4	2.0	2.0	3.5	30	73	20	8.9
2	5.6	4.3	2.9	2.5	2.2	1.9	1.9	3.0	32	66	18	9.8
3	5.5	4.2	2.9	2.5	2.1	1.8	1.8	3.3	30	58	18	9.2
4	5.3	4.0	2.9	2.5	2.1	1.8	1.7	4.2	27	55	19	8.5
5	5.2	4.0	2.8	2.5	2.1	1.8	1.9	4.5	26	51	20	8.1
6	5.2	3.6	2.9	2.5	2.1	1.8	2.1	3.8	28	48	19	8.1
7	5.2	3.9	2.9	2.5	2.1	1.7	1.7	4.3	36	46	18	7.9
8	5.6	4.0	2.9	2.5	2.0	1.8	2.0	4.3	50	45	17	7.5
9	5.3	3.9	2.8	2.5	2.0	1.8	1.8	5.6	69	42	17	7.9
10	5.0	3.9	2.6	2.5	2.1	1.7	1.8	7.2	85	40	17	7.9
11	4.9	4.0	2.6	2.4	2.1	1.8	1.9	9.2	102	37	17	8.3
12	4.8	3.9	2.6	2.4	2.1	1.9	1.9	11	104	36	16	7.9
13	4.6	3.9	2.6	2.4	2.0	1.7	2.0	15	120	39	16	7.5
14	4.6	3.9	2.6	2.4	2.0	1.9	2.5	16	122	40	15	7.4
15	5.0	3.9	2.6	2.4	2.0	1.9	2.2	18	115	40	15	7.2
16	5.0	3.9	2.6	2.4	2.1	1.8	2.0	20	104	37	14	7.0
17	5.0	3.7	2.6	2.4	2.1	1.9	2.2	21	94	34	14	7.0
18	5.2	3.6	2.6	2.4	2.0	1.9	2.2	28	85	35	14	6.7
19	4.9	3.6	2.6	2.4	2.0	1.9	1.6	35	76	39	12	6.7
20	4.9	3.5	2.6	2.2	1.9	2.0	1.8	40	73	35	12	6.6
21	5.2	3.3	2.8	2.4	1.9	2.0	1.8	43	75	33	15	6.4
22	5.0	2.9	2.8	2.1	1.9	1.9	1.9	37	80	30	14	6.6
23	4.8	2.9	2.6	2.1	1.9	1.8	2.0	34	91	29	12	6.7
24	4.6	2.9	2.5	2.2	1.9	1.9	2.1	30	100	26	11	7.0
25	4.6	2.9	2.6	2.2	1.9	1.9	2.0	32	108	25	11	7.0
26	4.8	2.9	2.5	2.2	1.9	1.9	2.0	30	95	23	10	7.2
27	4.6	2.9	2.6	2.2	2.0	1.9	2.4	25	104	22	10	6.9
28	4.5	2.9	2.6	2.2	1.9	1.9	2.9	25	93	22	9.8	7.2
29	4.2	2.9	2.6	2.4	-----	1.8	3.6	24	84	22	9.4	7.0
30	3.5	2.9	2.5	2.4	-----	1.9	4.0	23	76	22	9.2	7.4
31	4.2	-----	2.6	2.4	-----	1.9	-----	26	-----	20	9.2	-----
TOTAL	152.6	107.4	83.2	73.7	56.8	57.6	63.7	585.9	2,314	1,170	448.6	225.5
MEAN	4.92	3.58	2.68	2.38	2.03	1.86	2.12	18.9	77.1	37.7	14.5	7.52
MAX	5.8	4.3	2.9	2.6	2.4	2.0	4.0	43	122	73	20	9.8
MIN	3.5	2.9	2.5	2.1	1.9	1.7	1.6	3.0	26	20	9.2	6.4
AC-FT	303	213	165	146	113	114	126	1,160	4,590	2,320	890	447
†	0	0	0	0	0	0	0	0	186	443	109	16

CAL YR 1972 TOTAL 4,802.8 MEAN 13.1 MAX 120 MIN 1.6 AC-FT 9,530
WTR YR 1973 TOTAL 5,339.0 MEAN 14.6 MAX 122 MIN 1.6 AC-FT 10,590

†Diversions, in acre-feet, by Berthoud Pass ditch.

09024000 FRASER RIVER NEAR WINTER PARK, COLO.

LOCATION.--Lat 39°54'00", long 105°46'34", in SE¼ sec.4, T.2 S., R.75 W., Grand County, on left bank 500 ft (152 m) downstream from bridge on U.S. Highway 40, 1.1 mi (1.8 km) northwest of Winter Park, 2.0 mi (3.2 km) upstream from Vasquez Creek, 3.5 mi (5.6 km) downstream from point of diversion for Moffat water tunnel, and 3.9 mi (6.3 km) southeast of Fraser.

DRAINAGE AREA.--27.6 mi² (71.5 km²).

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. Records since June 9, 1936, equivalent to earlier records if transmountain diversions are added to flow past station.

GAGE.--Water-stage recorder. Datum of gage is 8,906.23 ft (2,714.619 m) above mean sea level (State Highway department bench mark). Sept. 23, 1910, to May 12, 1916, nonrecording gage at trail bridge 0.6 mi (1.0 km) upstream at different datum.

EXTREMES.--Current year: Maximum discharge, 510 ft³/s (14.4 m³/s) June 13 (gage height, 2.58 ft or 0.786 m); minimum daily, 5.5 ft³/s (0.16 m³/s) Sept. 25.
Period of record: Maximum discharge, 820 ft³/s (23.2 m³/s) June 13, 1918 (gage height, 2.9 ft or 0.88 m); minimum daily determined, 2 ft³/s (0.06 m³/s) Mar. 30, Apr. 9, 1912, Jan. 23, 1915.

REMARKS.--Records good except those for winter period, which are poor. Transmountain diversions above station through Berthoud Pass ditch (see elsewhere in this report) and to Moffat water tunnel (not known since 1968).

REVISIONS.--WSP 929: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	8.1	7.6	7.6	6.7	6.2	7.6	10	109	113	23	17
2	11	8.1	7.6	7.6	6.7	6.2	7.6	9.7	111	86	24	19
3	9.3	8.1	7.6	7.8	7.0	5.7	7.5	11	106	107	22	18
4	9.5	8.0	7.6	7.6	6.7	6.2	7.0	12	100	113	22	18
5	9.3	8.0	7.0	7.6	6.7	6.0	7.0	13	93	100	24	16
6	9.5	8.1	7.0	7.6	7.0	6.0	7.5	12	94	88	25	16
7	9.5	8.0	7.2	7.3	6.7	6.0	7.0	12	111	74	22	16
8	9.0	8.0	7.5	7.3	6.4	6.0	7.0	13	135	49	18	15
9	8.1	8.0	7.5	7.5	6.8	6.0	7.0	17	197	53	24	16
10	7.8	8.0	7.5	7.6	6.6	6.0	7.0	20	245	69	24	16
11	7.6	8.0	7.0	7.6	6.4	6.0	7.5	23	284	73	25	17
12	7.8	8.0	7.6	7.6	6.2	6.2	7.8	23	308	70	25	16
13	7.6	8.1	7.0	7.6	6.2	6.2	7.8	23	370	50	24	15
14	7.6	8.0	7.0	7.6	6.4	6.2	8.7	22	350	85	24	14
15	8.1	8.0	7.2	7.0	6.6	6.2	8.1	23	288	96	23	14
16	8.1	8.1	7.6	7.0	7.0	6.2	7.6	22	239	90	23	12
17	8.1	8.0	7.6	7.3	6.8	6.4	7.8	23	172	77	23	7.8
18	8.1	8.0	7.6	7.8	6.6	6.6	7.8	27	160	79	23	7.0
19	8.1	8.0	7.5	7.5	6.4	6.7	9.5	30	158	91	23	6.4
20	7.8	8.0	7.6	7.6	6.4	7.0	9.0	30	155	88	22	6.2
21	8.7	7.9	7.6	7.8	6.4	7.0	7.8	29	115	77	23	6.0
22	8.4	7.8	7.3	7.2	6.4	7.0	7.8	55	79	70	23	6.0
23	8.1	7.7	7.6	7.6	6.2	7.0	9.0	82	93	42	22	6.0
24	8.1	7.5	7.5	7.8	6.0	7.6	7.6	82	104	22	21	6.0
25	8.1	7.4	7.6	7.8	6.0	7.6	7.8	85	119	22	20	5.5
26	8.1	7.4	7.4	7.8	6.0	7.4	8.1	80	172	23	19	6.2
27	8.1	7.4	7.6	7.6	6.0	7.4	9.0	70	153	23	18	7.8
28	8.1	7.4	7.8	8.6	6.0	7.3	10	66	172	22	18	6.0
29	8.1	7.5	7.8	7.6	-----	7.3	11	63	158	24	18	6.4
30	7.4	7.6	7.8	7.0	-----	7.3	11	61	141	29	18	6.2
31	8.0	-----	7.6	6.7	-----	7.3	-----	82	-----	23	18	-----
TOTAL	262.5	236.2	230.4	233.2	181.3	204.2	242.1	1,130.7	5,091	2,028	681	344.5
MEAN	8.47	7.87	7.43	7.52	6.48	6.59	8.07	36.5	170	65.4	22.0	11.5
MAX	12	8.1	7.8	8.6	7.0	7.6	11	85	370	113	25	19
MIN	7.4	7.4	7.0	6.7	6.0	5.7	7.0	9.7	79	22	18	5.5
AC=FT	521	469	457	463	360	405	480	2,240	10,100	4,020	1,350	683

CAL YR 1972	TOTAL	5,086.9	MEAN	13.9	MAX	120	MIN	4.2	AC-FT	10,090
WTR YR 1973	TOTAL	10,865.1	MEAN	29.8	MAX	370	MIN	5.5	AC-FT	21,550

LOCATION.--Lat 39°55'13", long 105°47'05", in NE¼NW¼ sec.33, T.1 S., R.75 W., Grand County, on right bank 40 ft (12 m) downstream from bridge on U.S. Highway 40, 0.2 mi (0.3 km) upstream from mouth, 2.5 mi (4.0 km) northwest of Winter Park, 2.5 mi (4.0 km) southeast of Fraser, and 4.5 mi (7.2 km) downstream from Moffat water tunnel diversion.

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, and as "near West Portal" 1934-39. Records for May 26, 1937, to September 1959, equivalent to earlier records if diversion to Moffat water tunnel is added to flow past station.

EXTREMES.--Current year: Maximum discharge, 325 ft³/s (9.20 m³/s) June 13 (gage height, 3.09 ft or 0.942 m); minimum daily, 2.6 ft³/s (0.074 m³/s) Jan. 28 to Feb. 4, Feb. 14, 15, Mar. 7.
Period of record: Maximum discharge, 470 ft³/s (13.3 m³/s) June 10, 1952 (gage height, 3.13 ft or 0.954 m), from rating curve extended above 340 ft³/s (9.6 m³/s); no flow at times in 1944, 1946, 1956, 1960, 1966.

REVISIONS (WATER YEARS).--See PERIOD OF RECORD.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.6	4.7	4.1	3.3	2.6	3.3	3.5	4.6	64	14	12	11
2	4.9	4.9	4.0	3.3	2.6	3.1	3.3	4.0	64	12	12	12
3	4.6	4.9	4.0	3.1	2.6	2.9	3.3	4.3	61	42	12	12
4	4.6	5.0	4.0	3.1	2.6	3.1	4.3	5.2	56	83	12	11
5	4.6	5.1	4.0	3.3	2.9	3.1	4.0	5.9	52	77	12	11
6	4.6	4.9	4.0	3.5	2.9	2.9	3.5	5.6	59	73	13	11
7	4.9	4.6	4.0	3.5	2.9	2.6	3.5	6.6	77	69	13	11
8	5.6	4.5	4.0	3.5	3.1	2.9	4.0	6.3	104	75	13	11
9	5.2	4.4	4.0	3.5	2.9	3.1	4.3	7.1	141	50	13	11
10	4.9	4.3	4.0	3.5	2.9	2.9	3.8	10	178	15	13	11
11	4.6	4.2	3.8	3.5	2.9	3.1	3.5	12	214	13	13	11
12	4.5	4.2	3.8	3.5	3.1	2.9	3.5	14	218	16	14	11
13	4.5	4.3	3.8	3.5	2.9	3.1	3.5	16	246	21	13	11
14	4.5	4.3	3.8	3.5	2.6	3.1	3.5	18	242	56	13	11
15	4.6	4.4	3.8	3.5	2.6	3.1	3.8	20	210	95	13	11
16	4.7	4.4	4.0	3.3	2.9	3.1	3.8	22	175	90	13	10
17	4.7	4.3	4.0	3.5	3.1	3.3	3.8	26	151	86	13	5.2
18	4.8	4.4	4.0	3.3	3.1	3.3	3.8	32	138	88	14	4.3
19	4.7	4.3	4.3	3.3	3.1	3.5	3.5	38	119	95	13	4.1
20	4.6	4.3	4.3	3.3	3.1	3.5	4.3	37	113	86	13	3.9
21	4.5	4.1	4.0	3.3	3.1	3.3	3.8	35	104	79	13	3.9
22	4.5	3.6	4.0	2.9	3.1	3.3	3.5	46	77	72	14	3.8
23	4.6	3.2	3.8	2.9	3.3	3.5	3.5	64	69	42	13	4.5
24	4.6	3.5	3.8	2.9	3.3	3.3	3.5	73	77	12	13	6.5
25	4.7	3.9	3.8	2.9	3.3	3.3	3.3	79	98	12	13	7.0
26	4.6	4.2	3.8	2.9	3.3	3.3	3.5	71	85	12	12	7.0
27	4.5	4.3	3.8	2.9	3.3	3.1	3.8	56	27	13	12	6.7
28	4.4	4.3	3.5	2.6	3.3	3.3	4.6	54	21	13	12	7.1
29	4.0	4.2	3.5	2.6	-----	3.1	5.2	56	18	13	12	7.1
30	3.7	4.1	3.5	2.6	-----	3.3	4.6	54	18	15	12	6.8
31	4.4	-----	3.5	2.6	-----	3.3	-----	56	-----	13	12	-----
TOTAL	144.2	129.8	120.7	98.9	83.4	98.0	113.8	938.6	3,276	1,452	395	254.9
MEAN	4.65	4.33	3.89	3.19	2.98	3.16	3.79	30.3	109	46.8	12.7	8.50
MAX	5.6	5.1	4.3	3.5	3.3	3.5	5.2	79	246	95	14	12
MIN	3.7	3.2	3.5	2.6	2.6	2.6	3.3	4.0	18	12	12	3.8
AC=FT	286	257	239	196	165	194	226	1,860	6,500	2,880	783	506
CAL YR 1972	TOTAL 2,930.6		MEAN 8.01	MAX 51	MIN 3.1	AC=FT 5,810						
WTR YR 1973	TOTAL 7,105.3		MEAN 19.5	MAX 246	MIN 2.6	AC=FT 14,090						

09025400 ELK CREEK NEAR FRASER, COLO.

LOCATION.--Lat 39°55'09", long 105°49'31", in SE¼NW¼ sec.31, T.1 S., R.75 W., Grand County, on left bank 100 ft (30 m) upstream from unnamed tributary 1,150 ft (350 m) downstream from West Elk Creek, 2.0 mi (3.2 km) southwest of Fraser, and 2.5 mi (4.0 km) upstream from mouth.

DRAINAGE AREA.--7.15 mi² (18.52 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 8,805 ft (2,684 m) from topographic map.

EXTREMES.--Current year: Maximum discharge, 50 ft³/s (1.42 m³/s) May 22 (gage height, 2.39 ft or 0.728 m); maximum gage height, 2.40 ft (0.732 m) June 10; minimum daily discharge, 0.22 ft³/s (0.006 m³/s) Dec. 11. Period of record: Maximum discharge, 70 ft³/s (1.98 m³/s) May 29, 1971 (gage height, 2.53 ft or 0.771 m); minimum daily, 0.22 ft³/s (0.006 m³/s) Dec. 11, 1972.

REMARKS.--Records good except those for winter period, which are poor. Transmountain diversions above station to Moffat water tunnel. Diversions for irrigation of about 100 acres (405,000 m²) of hay meadows above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.4	1.3	.32	.33	.32	.28	.27	.90	22	15	4.9	2.0
2	1.3	1.3	.32	.35	.32	.28	.27	.70	22	13	4.9	2.1
3	1.2	1.3	.30	.35	.32	.28	.27	.90	22	12	4.7	2.2
4	1.2	1.3	.32	.35	.32	.28	.27	1.1	21	11	4.6	2.1
5	1.2	1.3	.28	.33	.32	.28	.27	1.5	20	10	5.0	1.9
6	1.2	1.3	.28	.33	.32	.28	.28	1.2	20	9.8	5.0	1.8
7	1.1	1.2	.26	.33	.32	.28	.28	1.0	23	9.5	4.3	1.8
8	1.7	1.2	.26	.33	.31	.28	.27	1.2	27	11	3.7	1.7
9	1.6	1.1	.26	.32	.30	.28	.25	1.3	32	10	3.4	1.3
10	1.3	.58	.24	.32	.29	.28	.26	1.7	37	8.6	3.2	1.1
11	1.1	.51	.22	.32	.30	.28	.27	2.8	39	7.6	3.3	1.3
12	1.1	.47	.24	.32	.31	.28	.28	4.5	36	8.9	3.2	1.3
13	1.1	.47	.26	.32	.31	.28	.27	7.8	34	12	5.0	1.2
14	1.2	.47	.28	.32	.30	.29	.26	10	39	12	2.8	1.1
15	1.3	.44	.30	.33	.29	.29	.26	11	33	10	2.7	1.1
16	1.6	.44	.30	.33	.30	.29	.26	12	26	9.2	2.6	1.2
17	1.4	.40	.30	.33	.31	.29	.26	19	23	8.0	3.5	1.3
18	1.6	.37	.30	.33	.30	.29	.28	27	21	8.8	3.7	1.1
19	1.4	.37	.30	.33	.29	.29	.30	33	19	11	2.8	1.1
20	1.3	.35	.30	.32	.29	.29	.28	29	18	9.4	2.5	1.2
21	1.6	.35	.31	.30	.28	.29	.26	26	18	8.6	2.6	1.3
22	1.6	.30	.35	.30	.28	.28	.26	33	18	7.8	3.2	1.2
23	1.5	.28	.35	.30	.28	.27	.26	38	18	7.3	2.9	.95
24	1.4	.35	.35	.30	.28	.27	.28	34	18	6.7	2.6	1.2
25	1.5	.37	.35	.30	.28	.27	.30	38	20	6.7	2.4	1.4
26	1.4	.37	.32	.30	.28	.27	.30	29	22	6.2	2.4	1.6
27	1.4	.32	.32	.30	.28	.27	.35	23	21	5.5	2.8	1.5
28	1.5	.30	.32	.30	.29	.27	.47	20	18	5.2	2.3	1.7
29	1.4	.28	.32	.31	-----	.27	.62	20	18	5.6	2.1	1.7
30	1.3	.30	.32	.32	-----	.27	1.1	21	16	7.4	2.0	1.7
31	1.3	-----	.31	.32	-----	.27	-----	20	-----	5.4	2.1	-----
TOTAL	42.2	19.39	9.26	9.94	8.39	8.67	9.61	469.60	721	279.2	101.2	44.15
MEAN	1.36	.65	.30	.32	.30	.28	.32	15.1	24.0	9.01	3.26	1.47
MAX	1.7	1.3	.35	.35	.32	.29	1.1	38	39	15	5.0	2.2
MIN	1.1	.28	.22	.30	.28	.27	.25	.70	16	5.2	2.0	.95
AC-FT	84	38	18	20	17	17	19	931	1,430	554	201	88

CAL YR 1972 TOTAL 853.11 MEAN 2.33 MAX 19 MIN .22 AC-FT 1,690
 WTR YR 1973 TOTAL 1,722.61 MEAN 4.72 MAX 39 MIN .22 AC-FT 3,420

NOTE.--No gage-height record Dec. 10 to Apr. 17.

09026500 ST. LOUIS CREEK NEAR FRASER, COLO.

LOCATION.--Lat 39°54'36", long 105°52'40", in SE¼SW¼ sec.34, T.1 S., R.76 W., Grand County, on left bank 300 ft (91 m) downstream from West St. Louis Creek and 4.1 mi (6.6 km) southwest of Fraser.

DRAINAGE AREA.--32.9 mi² (85.2 km²).

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.

GAGE.--Water-stage recorder. Datum of gage is 8,980.17 ft (2,737.156 m) above mean sea level, unadjusted.

EXTREMES.--Current year: Maximum discharge, 317 ft³/s (8.98 m³/s) June 13 (gage height, 2.40 ft or 0.732 m); minimum daily, 4.4 ft³/s (0.12 m³/s) Jan. 8.

Period of record: Maximum discharge, 470 ft³/s (13.3 m³/s) June 15, 1952 (gage height, 2.89 ft or 0.881 m); maximum gage height, 3.21 ft (0.978 m) June 10, 1952 (backwater from log on control; minimum discharge not determined, probably occurred during January or February 1961.

REMARKS.--Records good except those for winter period, which are poor. Transmountain diversions above station to Moffat water tunnel not known since 1959.

REVISIONS.--WSP 2124: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.6	6.5	6.0	5.4	4.8	4.8	5.4	9.3	62	97	53	14
2	7.2	6.5	6.0	5.4	4.8	4.7	5.4	9.0	63	91	33	14
3	6.8	6.0	6.0	5.4	4.8	4.6	5.8	9.0	62	128	53	14
4	6.8	7.0	5.5	5.1	4.8	4.6	6.2	9.0	60	117	32	14
5	6.8	6.5	5.5	4.9	4.8	4.6	6.0	9.0	58	110	33	13
6	6.8	6.0	5.5	4.7	4.8	4.6	6.0	9.3	62	106	33	13
7	7.2	7.0	5.5	4.7	4.6	4.5	6.0	9.0	75	101	31	13
8	7.9	6.5	5.6	4.4	4.6	4.5	6.4	8.6	99	99	30	13
9	7.6	6.8	5.6	4.7	4.6	4.7	6.6	10	138	95	29	13
10	7.2	6.5	5.5	4.7	4.6	4.7	6.3	13	187	84	28	13
11	6.8	6.5	5.5	4.7	4.6	4.8	6.1	14	260	69	28	13
12	6.5	6.0	5.5	4.7	4.6	4.8	6.0	14	264	68	27	13
13	6.5	6.8	5.5	4.7	4.6	4.9	5.8	15	260	72	26	13
14	6.5	6.0	5.5	5.0	4.6	5.0	5.8	15	271	79	26	12
15	7.2	6.5	5.5	5.0	4.6	5.0	5.8	16	244	119	26	12
16	7.2	6.0	5.8	5.0	4.6	5.2	5.8	18	211	140	25	12
17	6.8	6.5	5.6	5.0	4.6	5.3	5.8	18	178	126	25	7.6
18	7.2	6.3	5.6	5.0	4.7	5.4	5.8	22	158	121	25	6.5
19	6.8	6.0	5.4	5.0	4.8	5.4	6.2	27	138	126	23	6.3
20	6.8	6.0	5.4	5.0	4.8	5.4	6.5	31	133	110	21	6.8
21	6.8	6.0	5.4	5.0	4.8	5.4	5.5	33	121	101	16	6.8
22	7.2	6.3	5.1	5.0	4.8	5.4	5.5	46	112	90	16	6.8
23	6.8	6.0	5.0	5.0	4.8	5.4	6.0	58	124	58	16	6.8
24	6.5	6.0	5.5	5.0	4.8	5.4	5.8	61	133	31	15	6.8
25	6.5	6.0	5.5	5.0	4.8	5.4	6.0	68	152	34	15	7.2
26	6.5	6.0	5.5	5.0	4.8	5.4	6.3	62	138	33	16	7.2
27	6.5	6.0	5.5	5.0	4.8	5.4	6.7	55	108	33	15	6.8
28	6.5	6.0	5.5	5.0	4.8	5.3	7.2	54	106	34	14	7.2
29	6.5	6.0	5.2	5.0	-----	5.3	7.9	54	106	34	14	7.2
30	6.0	6.0	5.4	5.0	-----	5.2	7.9	54	104	36	14	6.8
31	6.5	-----	5.4	5.0	-----	5.2	-----	56	-----	33	14	-----
TOTAL	212.5	188.2	171.0	153.5	132.1	156.3	184.5	886.2	4,187	2,575	732	305.8
MEAN	6.85	6.27	5.52	4.95	4.72	5.04	6.15	28.6	140	83.1	23.6	10.2
MAX	7.9	7.0	6.0	5.4	4.8	5.4	7.9	68	271	140	33	14
MIN	6.0	6.0	5.0	4.4	4.6	4.5	5.4	8.6	58	31	14	6.3
AC=FT	421	373	339	304	262	310	366	1,760	8,300	5,110	1,450	607

CAL YR 1972 TOTAL 5,597.9 MEAN 15.3 MAX 169 MIN 4.5 AC=FT 11,100
 WTR YR 1973 TOTAL 9,884.1 MEAN 27.1 MAX 271 MIN 4.4 AC=FT 19,610

NOTE.--No gage-height record Jan. 14 to Apr. 17.

09032000 RANCH CREEK NEAR FRASER, COLO.

LOCATION.--Lat 39°57'00", long 105°45'54", in NW¼NE¼ sec.22, T.1 S., R.75 W., Grand County, on right bank 450 ft (137 m) downstream from Middle Fork and 2.7 mi (4.3 km) east of Fraser.

DRAINAGE AREA.--19.9 mi² (51.5 km²).

PERIOD OF RECORD.--August 1934 to current year. Records since May 15, 1949, equivalent to earlier records if diversion to Moffat water tunnel is added to flow past station.

GAGE.--Water-stage recorder. Altitude of gage is 8,685 ft (2,647 m) from topographic map.

EXTREMES.--Current year: Maximum discharge, 292 ft³/s (8.27 m³/s) June 13 (gage height, 3.25 ft or 0.991 m); minimum daily, 0.75 ft³/s (0.021 m³/s) Oct. 1.

Period of record: Maximum discharge, 402 ft³/s (11.2 m³/s) June 28, 1957 (gage height, 3.72 ft or 1.134 m); minimum daily, 0.4 ft³/s (0.011 m³/s) Sept. 21, Oct. 6, 1960.

REMARKS.--Records good. Diversion above station for irrigation of hay meadows along Fraser River. Transmountain diversion above station to Moffat water tunnel (not furnished by Colorado Division of Water Resources).

REVISIONS (WATER YEARS).--WSP 1243: 1935.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.75	1.2	2.9	2.4	1.8	1.8	2.0	3.2	65	55	11	7.6
2	.96	1.2	2.8	2.2	1.8	1.8	2.0	2.7	70	51	11	8.0
3	.86	2.6	2.8	2.2	1.8	1.8	2.0	2.8	67	49	11	8.6
4	.86	3.4	2.8	2.2	1.8	1.8	2.0	4.0	65	46	9.6	8.3
5	.86	3.7	2.4	2.1	1.8	1.8	2.0	5.2	61	43	8.3	6.4
6	.86	3.2	2.7	2.1	1.8	1.8	2.0	4.8	62	40	8.3	5.2
7	.86	3.4	2.6	2.1	2.0	1.7	2.0	5.0	74	38	6.0	5.2
8	1.6	3.4	2.5	2.2	2.0	1.8	2.0	5.0	96	48	7.6	5.2
9	1.6	3.4	2.5	2.2	2.0	1.8	2.0	7.0	132	43	6.4	5.0
10	1.2	3.4	2.5	2.1	2.0	1.8	2.0	10	166	36	6.7	5.0
11	1.2	3.4	2.5	2.1	2.0	1.8	2.1	13	199	29	8.6	5.4
12	1.0	3.2	2.5	2.1	2.0	2.0	2.2	14	217	32	9.1	5.2
13	1.2	3.2	2.5	2.0	1.9	2.0	2.2	16	245	37	6.7	5.0
14	1.2	3.1	2.5	2.0	1.9	2.0	2.3	18	245	32	6.7	4.8
15	1.3	2.9	2.5	2.0	1.9	2.0	2.3	20	211	42	7.3	4.5
16	2.0	2.9	2.5	2.1	1.9	2.0	2.3	21	181	48	7.0	4.5
17	1.6	2.9	2.5	2.0	1.8	2.0	2.4	23	162	44	8.3	4.5
18	2.0	2.9	2.5	1.8	1.8	2.0	2.4	30	152	47	8.0	4.3
19	1.8	2.9	2.4	1.8	1.8	2.0	2.3	38	134	50	7.6	4.1
20	1.5	2.8	2.4	1.8	1.8	2.0	2.5	43	128	45	8.6	4.1
21	2.4	2.8	2.4	1.8	1.9	2.0	2.6	49	102	40	9.6	4.1
22	2.4	2.7	2.4	1.8	1.9	2.0	2.4	53	67	36	8.0	4.1
23	2.1	2.7	2.4	1.8	1.8	2.0	2.4	77	75	31	6.7	4.1
24	1.8	2.8	2.4	2.0	1.8	2.0	2.5	75	76	10	7.3	4.3
25	1.7	2.9	2.4	2.0	1.8	2.0	2.2	74	86	13	8.0	4.5
26	1.6	3.1	2.4	2.0	1.9	2.1	2.4	70	102	16	8.3	5.0
27	1.7	3.2	2.4	2.0	1.9	2.0	2.6	59	82	11	7.0	4.5
28	1.7	3.1	2.2	2.0	1.8	2.0	3.7	56	65	10	6.0	5.2
29	1.4	2.9	2.2	2.0	-----	1.8	3.9	54	61	10	6.7	6.0
30	1.3	2.8	2.4	2.0	-----	1.8	4.1	50	59	11	7.0	6.0
31	1.2	-----	2.4	1.8	-----	2.0	-----	54	-----	11	7.6	-----
TOTAL	44.51	88.1	77.3	62.7	52.4	59.4	71.8	956.7	3,507	1,054	248.0	158.7
MEAN	1.44	2.94	2.49	2.02	1.87	1.92	2.39	30.9	117	34.0	8.00	5.29
MAX	2.4	3.7	2.9	2.4	2.0	2.1	4.1	77	245	55	11	8.6
MIN	.75	1.2	2.2	1.8	1.8	1.7	2.0	2.7	59	10	6.0	4.1
AC-FT	88	175	153	124	104	118	142	1,900	6,960	2,090	492	315

CAL YR 1972 TOTAL 1,897.31 MEAN 5.18 MAX 39 MIN .75 AC-FT 3,760
WTR YR 1973 TOTAL 6,380.61 MEAN 17.5 MAX 245 MIN .75 AC-FT 12,660

NOTE.--No gage-height record Jan. 27 to Mar. 10.

COLORADO RIVER MAIN STEM

09034500 COLORADO RIVER AT HOT SULPHUR SPRINGS, COLO.

LOCATION.--Lat 40°05'00", long 106°05'15", in NE¼NE¼ sec.2, T.1 N., R.78 W., Grand County, on left bank about 1,000 ft (300 m) north of U.S. Highway 40, 1 mi (1.6 km) northeast of Hot Sulphur Springs, and 4.5 mi (7.2 km) upstream from Beaver Creek.

DRAINAGE AREA.--825 mi² (2,137 km²).

PERIOD OF RECORD.--July 1904 to current year. 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.

GAGE.--Water-stage recorder. Altitude of gage is 7,670 ft (2,338 m) from railroad elevations. July 28, 1904, to Apr. 16, 1906, nonrecording gage on bridge 1.7 mi (2.7 km) downstream at different datum. Apr. 17, 1906, to Sept. 18, 1930, nonrecording gage at bridge 1.4 mi (2.3 km) downstream at datum 7,651.26 ft (2,332.104 m) above mean sea level, unadjusted. Supplemental water-stage recorder (nonrecording gage prior to Jan. 1, 1963) at different datum at site 1.7 mi (2.7 km) downstream, used for winter records some years.

EXTREMES.--Current year: Maximum discharge, 2,200 ft³/s (62.3 m³/s) June 14 (gage height, 3.11 ft or 0.948 m); minimum daily, 63 ft³/s (1.78 m³/s) Jan. 16, 17.
Period of record: Maximum discharge observed, 10,300 ft³/s (292 m³/s) June 15, 1921 (gage height, 8.7 ft or 2.65 m, site and datum then in use); minimum daily, 33 ft³/s (0.93 m³/s) Sept. 27, 1956.

REMARKS.--Records good except those for winter period, which are fair. Flow affected by transmountain diversions, storage reservoirs, and diversions above station for irrigation of about 13,000 acres (52.6 km²). Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1313: 1905. WSP 1924: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	81	102	85	68	72	78	96	280	782	2,050	323	107
2	77	94	82	70	74	78	98	250	841	2,080	324	108
3	84	90	78	70	74	78	96	216	828	2,070	330	113
4	86	82	79	70	74	74	87	279	863	2,150	311	111
5	87	87	74	72	74	74	92	339	811	1,870	302	106
6	88	95	82	74	74	72	115	457	740	1,410	364	102
7	89	81	79	74	74	73	115	411	713	1,250	326	104
8	100	81	78	74	74	72	92	474	834	1,270	285	100
9	103	96	74	74	74	74	87	591	1,070	1,170	239	98
10	97	78	68	74	74	76	96	712	1,350	847	231	104
11	90	101	72	74	74	78	107	741	1,710	760	222	110
12	88	98	73	74	74	78	125	627	1,730	569	223	111
13	88	99	74	70	70	80	152	590	1,790	648	207	108
14	88	98	73	65	70	76	184	572	2,040	812	182	104
15	90	99	73	64	70	79	212	562	1,930	1,650	180	99
16	101	96	74	63	70	79	144	594	1,810	1,720	176	98
17	103	98	76	63	70	80	149	600	1,600	1,440	178	99
18	104	94	76	64	70	82	181	654	1,460	1,160	210	87
19	100	92	74	64	72	84	167	839	1,190	1,200	194	78
20	99	98	73	64	72	85	127	1,170	1,100	1,230	179	72
21	113	94	69	64	72	89	139	1,310	1,040	1,370	174	69
22	118	88	69	64	72	87	137	1,380	754	1,160	179	69
23	109	82	68	64	73	87	128	1,360	635	803	178	68
24	103	80	65	66	73	85	164	1,280	664	450	171	75
25	101	84	65	66	76	92	198	1,180	682	394	170	77
26	99	82	65	66	76	89	185	1,120	825	359	167	80
27	100	82	65	66	78	92	194	945	771	370	168	83
28	106	80	66	66	76	92	290	825	1,010	354	152	83
29	100	92	66	66	-----	94	397	777	1,350	351	141	87
30	95	87	66	66	-----	87	366	766	1,760	384	137	91
31	86	-----	67	66	-----	89	-----	722	-----	346	120	-----
TOTAL	2,973	2,710	2,248	2,105	2,046	2,533	4,720	22,623	34,683	33,697	6,743	2,801
MEAN	95.9	90.3	72.5	67.9	73.1	81.7	157	730	1,156	1,087	218	93.4
MAX	118	102	85	74	78	94	397	1,380	2,040	2,150	364	113
MIN	77	78	65	63	70	72	87	216	635	346	120	68
AC-FT	5,900	5,380	4,460	4,180	4,060	5,020	9,360	44,870	68,790	66,840	13,370	5,560

CAL YR 1972 TOTAL 66,832 MEAN 183 MAX 990 MIN 54 AC-FT 132,600
WTR YR 1973 TOTAL 119,882 MEAN 328 MAX 2,150 MIN 63 AC-FT 237,800

WILLIAMS FORK BASIN

165

09034900 BOBTAIL CREEK NEAR JONES PASS, COLO.

LOCATION.--Lat 39°45'37", long 105°54'21", in sec.28, T.3 S., R.76 W., Grand County, on left bank, 320 ft (98 m) upstream from diversion dam and 0.4 mi (0.6 km) south of entrance to August P. Gumlick Tunnel.

DRAINAGE AREA.--5.49 mi² (14.21 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 10,430 ft (3,179 m) from topographic map.

AVERAGE DISCHARGE.--8 years, 9.92 ft³/s (0.281 m³/s), 7,190 acre-ft/yr (8.87 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 152 ft³/s (4.30 m³/s) June 13 (gage height, 4.58 ft or 1.396 m); minimum daily, 0.58 ft³/s (0.016 m³/s) Mar. 13.

Period of record: Maximum discharge, 187 ft³/s (5.30 m³/s) June 20, 1968 (gage height, 4.71 ft or 1.436 m); maximum gage height, 5.16 ft (1.573 m) May 18, 1970 (backwater from ice); minimum daily discharge, 0.44 ft³/s (0.012 m³/s) Feb. 11, 1972.

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

REVISIONS (WATER YEARS).--WRD Colo. 1968: 1966(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.6	2.3	1.3	.95	.90	.66	.60	1.1	13	74	14	4.6
2	5.2	1.8	1.3	.95	.82	.66	.60	1.0	11	68	13	5.3
3	2.9	1.8	1.2	.96	.78	.64	.60	1.1	9.9	60	12	4.0
4	2.7	1.8	1.2	.96	.74	.62	.60	1.2	8.8	54	13	4.0
5	2.6	1.7	1.2	.96	.72	.60	.60	1.3	8.5	51	14	3.6
6	2.5	1.7	1.2	.96	.71	.60	.60	1.4	10	48	13	3.5
7	2.7	1.7	1.2	.96	.70	.60	.60	1.3	17	42	12	3.3
8	3.7	1.7	1.2	.97	.70	.60	.60	1.6	30	43	11	5.1
9	3.1	1.7	1.1	.97	.70	.60	.60	1.8	53	43	10	5.1
10	2.7	1.7	1.1	.97	.70	.60	.60	2.0	74	40	9.7	4.3
11	2.4	1.7	1.0	.92	.70	.60	.60	3.0	80	36	9.7	4.3
12	2.3	1.7	1.0	.90	.70	.60	.60	4.0	83	38	8.9	3.1
13	2.3	1.6	1.0	.90	.70	.58	.60	5.4	101	52	8.8	2.7
14	2.2	1.6	1.0	.90	.70	.60	.60	6.2	91	56	8.1	2.6
15	2.5	1.6	1.0	.90	.70	.60	.60	7.0	65	47	7.6	2.6
16	2.4	1.6	1.0	.90	.70	.60	.60	7.6	47	43	6.8	2.9
17	2.6	1.5	1.0	.90	.70	.60	.60	8.6	39	36	7.1	2.6
18	2.9	1.4	1.0	.90	.70	.60	.60	14	35	38	7.1	2.4
19	2.7	1.4	1.0	.90	.70	.60	.60	22	30	42	6.4	2.1
20	2.5	1.4	1.0	.90	.70	.60	.60	30	33	35	6.4	1.9
21	2.5	1.4	1.1	.90	.66	.60	.60	28	38	30	6.4	1.8
22	2.5	1.4	1.1	.90	.66	.60	.60	15	45	27	6.8	1.8
23	2.6	1.4	1.1	.90	.66	.60	.60	14	59	24	6.1	1.8
24	2.7	1.4	1.0	.90	.66	.60	.60	13	61	23	5.9	2.2
25	2.6	1.4	.96	.90	.66	.60	.80	13	71	22	5.5	2.4
26	2.6	1.4	.96	.90	.66	.60	.64	12	89	20	5.5	2.4
27	2.5	1.4	.96	.90	.66	.60	.86	8.0	89	19	5.3	2.7
28	2.4	1.4	.96	.90	.66	.60	1.0	7.0	85	18	5.0	2.6
29	2.7	1.4	.95	.90	-----	.60	1.2	7.2	79	17	4.8	2.7
30	2.6	1.4	.95	.90	-----	.60	1.4	7.2	78	18	5.3	3.3
31	2.9	-----	.95	.90	-----	.60	-----	10	-----	15	4.8	-----
TOTAL	83.6	47.4	32.99	28.53	19.75	18.76	20.30	256.0	1,533.0	1,179	259.8	88.1
MEAN	2.70	1.58	1.06	.92	.71	.61	.68	8.26	51.1	38.0	8.38	2.94
MAX	3.7	2.3	1.3	.97	.90	.66	1.4	30	101	74	14	5.3
MIN	2.2	1.4	.95	.90	.66	.58	.60	1.0	8.3	15	4.8	1.8
AC-FT	166	94	65	57	39	37	40	508	3,040	2,340	515	175

CAL YR 1972 TOTAL 3,063.29 MEAN 8.37 MAX 89 MIN 4.4 AC-FT 6,080
 WTR YR 1973 TOTAL 5,567.23 MEAN 9.77 MAX 101 MIN 5.8 AC-FT 7,080

PEAK DISCHARGE (BASE, 90 CFS).--June 13 (1830) 152 cfs (4.58 ft); June 26 (1830) 138 cfs (4.44 ft).

NOTE.--No gage-height record Dec. 5 to Apr. 18, Apr. 25 to May 29.

WILLIAMS FORK BASIN

09035500 WILLIAMS FORK BELOW STEELMAN CREEK, COLO.

LOCATION.--Lat 39°46'44", long 105°55'40", in sec.20, T.3 S., R.75 W., Grand County, on right bank 700 ft (210 m) downstream from Steelman Creek, and 6.5 mi (10.5 km) southeast of Leal.

DRAINAGE AREA.--16.3 mi² (42.2 km²).

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. Altitude of gage is 9,800 ft (2,987 m) 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 (180 m) upstream at different datum.

AVERAGE DISCHARGE.--16 years, 25.4 ft³/s (0.719 m³/s), 18,400 acre-ft/yr (22.7 hm³/yr), including diversions to August P. Gumlick Tunnel. 15 years, 25.3 ft³/s (0.716 m³/s), 18,330 acre-ft/yr (22.6 m³/yr), including diversions to August P. Gumlick Tunnel; figure published in Water Resources Data for Colorado, 1972, in error.

EXTREMES.--Current year: Maximum discharge, 326 ft³/s (9.23 m³/s) June 13 (gage height, 5.34 ft or 1.628 m); maximum gage height, 5.66 ft (1.725 m) May 10 (backwater from ice); minimum daily discharge, 0.52 ft³/s (0.015 m³/s) Mar. 13.

Period of record: Maximum discharge, 441 ft³/s (12.5 m³/s) June 21, 1938 (gage height, 2.48 ft or 0.756 m, site and datum then in use), from rating curve extended above 260 ft³/s (7.4 m³/s); maximum gage height, 5.66 ft (1.725 m) May 10, 1973 (backwater from ice); minimum daily discharge, 0.20 ft³/s (0.006 m³/s) Mar. 6, 1967.

REMARKS.--Records good except those for winter period, which are poor. Transmountain diversions above station through August P. Gumlick Tunnel (see sta. 09036000) since May 10, 1940.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FFB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.1	1.2	.70	.60	.58	.55	.54	.75	39	209	36	13
2	1.1	.91	.70	.60	.55	.55	.54	.70	36	190	33	13
3	1.0	.80	.70	.60	.55	.55	.54	.75	32	171	32	13
4	1.0	.80	.70	.60	.55	.55	.54	.85	28	157	33	11
5	1.0	.80	.70	.60	.55	.55	.54	.85	26	141	35	11
6	1.0	.80	.70	.60	.55	.55	.54	.91	30	135	34	10
7	1.1	.80	.70	.60	.55	.55	.54	.97	47	124	30	9.8
8	1.5	.80	.70	.60	.55	.55	.54	1.3	88	130	28	9.5
9	1.4	.80	.68	.60	.55	.55	.54	3.3	143	124	26	9.2
10	1.2	2.4	.66	.60	.55	.55	.54	4.9	194	112	24	9.8
11	1.1	.90	.65	.60	.55	.55	.54	5.8	213	104	24	9.8
12	1.1	.80	.65	.60	.55	.54	.54	7.4	216	111	23	9.5
13	1.1	.80	.65	.60	.55	.52	.54	9.4	252	130	21	8.9
14	1.0	.75	.65	.60	.55	.54	.54	13	252	137	21	8.5
15	1.2	.80	.65	.60	.55	.54	.54	17	201	117	20	8.2
16	1.4	.80	.65	.60	.55	.55	.54	21	155	114	18	8.5
17	1.3	.75	.65	.60	.55	.55	.54	30	135	98	18	8.5
18	1.3	.70	.65	.60	.55	.55	.54	47	124	100	18	7.6
19	1.2	.70	.65	.60	.55	.55	.54	60	104	104	17	7.3
20	1.1	.70	.65	.60	.55	.55	.56	76	110	91	16	7.0
21	2.7	.70	.63	.60	.55	.55	.60	72	124	84	16	6.6
22	1.3	.70	.60	.60	.55	.55	.62	46	137	76	17	6.6
23	1.2	.70	.60	.60	.55	.55	.66	44	171	67	16	6.6
24	3.7	.75	.60	.60	.55	.55	.72	42	178	61	15	7.9
25	1.6	.75	.60	.60	.55	.55	.75	41	205	55	14	8.5
26	1.1	.75	.60	.60	.55	.55	.76	36	233	52	14	8.5
27	1.1	.75	.60	.60	.55	.55	.78	29	239	51	14	8.2
28	1.0	.70	.60	.60	.55	.55	.80	24	235	46	13	8.5
29	1.2	.70	.60	.60	-----	.55	.80	25	224	44	13	8.9
30	1.1	.75	.60	.60	-----	.55	.85	25	218	48	13	9.5
31	3.3	-----	.60	.60	-----	.55	-----	32	-----	40	14	-----
TOTAL	42.5	25.06	20.07	18.60	15.43	16.99	18.16	717.88	4,389	3,223	666	272.9
MEAN	1.37	.84	.65	.60	.55	.55	.61	23.2	146	104	21.5	9.10
MAX	3.7	2.4	.70	.60	.58	.55	.85	76	252	209	36	13
MIN	1.0	.70	.60	.60	.55	.52	.54	.70	26	40	13	6.6
AC-FT	84	50	40	37	31	34	36	1,420	8,710	6,390	1,320	541

CAL YR 1972 TOTAL 5,262.13 MEAN 14.4 MAX 235 MIN .60 AC-FT 10,440
 WTR YR 1973 TOTAL 9,425.59 MEAN 25.8 MAX 252 MIN .52 AC-FT 18,700

NOTE.--No gage-height record Dec. 6 to Apr. 16.

WILLIAMS FORK BASIN

167

09035700 WILLIAMS FORK ABOVE DARLING CREEK, NEAR LEAL, COLO.

LOCATION.--Lat 39°47'22", long 106°01'18", in NW¼SW¼ sec.16, T.3 S., R.77 W., Grand County, on left bank, 1.0 mi (1.6 km) upstream from Darling Creek and 1.9 mi (3.1 km) southeast of Leal. Prior to Oct. 1, 1972, at site 0.6 mi (1.0 km) downstream.

DRAINAGE AREA.--34.7 mi² (89.9 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 8,970 ft (2,734 m) from topographic map. Prior to Oct. 1, 1972, at site 0.6 mi (1.0 km) downstream at different datum.

AVERAGE DISCHARGE.--8 years, 39.3 ft³/s (1.113 m³/s), 28,470 acre-ft/yr (35.1 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 451 ft³/s (12.8 m³/s) June 27 (gage height, 4.97 ft or 1.515 m); minimum daily, 4.3 ft³/s (0.12 m³/s) Mar. 14.

Period of record: Maximum discharge, 677 ft³/s (19.2 m³/s) June 24, 1971 (gage height, 7.12 ft or 2.170 m, site and datum then in use), from rating curve extended above 430 ft³/s (12 m³/s); minimum daily, 3.8 ft³/s (0.11 m³/s) Mar. 5, 1967.

REMARKS.--Records good except those for winter period, which are poor. Transmountain diversion above station through August P. Gumlick Tunnel (see sta. 09036000).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.9	6.0	5.6	5.0	4.9	4.5	4.5	6.8	76	355	60	25
2	8.3	5.6	5.6	5.0	4.7	4.5	4.5	6.8	73	323	56	26
3	7.2	5.4	5.2	5.0	4.6	4.5	4.4	7.0	67	291	53	25
4	7.7	5.4	5.2	5.0	4.5	4.5	4.6	7.4	61	263	55	24
5	7.6	5.4	5.6	5.0	4.5	4.5	4.5	7.9	54	240	59	22
6	7.7	5.4	5.4	5.0	4.5	4.5	4.5	8.1	60	219	60	21
7	8.0	5.4	5.2	5.0	4.5	4.5	4.5	7.2	88	198	52	21
8	11	5.4	5.2	5.0	4.5	4.5	4.5	8.3	139	201	50	20
9	9.5	5.4	5.2	5.0	4.5	4.5	4.5	11	212	190	46	20
10	8.6	5.4	5.2	5.0	4.5	4.5	4.5	16	280	168	43	21
11	8.1	5.4	5.2	5.0	4.5	4.5	4.6	22	320	152	42	21
12	7.9	5.4	5.2	5.0	4.5	4.5	4.7	27	318	166	40	21
13	7.1	5.4	5.2	5.0	4.5	4.4	4.7	31	363	193	36	20
14	7.1	5.4	5.2	5.0	4.5	4.3	4.8	34	393	219	36	18
15	7.7	5.4	5.2	5.0	4.5	4.5	5.2	37	339	181	35	18
16	9.6	5.4	5.2	5.0	4.5	4.6	4.9	44	276	173	33	17
17	9.6	5.4	5.2	5.0	4.5	4.6	4.8	52	234	146	33	19
18	9.6	5.4	5.2	5.0	4.5	4.8	5.0	72	218	147	34	17
19	9.6	5.4	5.2	5.0	4.5	4.8	5.0	101	182	155	31	16
20	9.4	5.2	5.2	5.0	4.5	4.9	5.0	120	186	136	30	15
21	8.4	5.2	5.2	5.0	4.5	5.0	5.4	120	203	124	31	15
22	8.0	5.2	5.2	5.0	4.5	5.0	5.3	99	226	110	31	15
23	8.6	5.2	5.2	5.0	4.5	5.0	5.6	81	270	100	30	14
24	9.0	5.2	5.0	5.0	4.5	5.0	6.0	80	283	92	29	16
25	8.4	5.2	5.0	5.0	4.5	5.0	6.4	77	307	85	28	17
26	8.0	5.2	5.0	5.0	4.5	5.0	6.4	73	353	80	27	18
27	7.2	5.2	5.0	5.0	4.5	4.9	6.6	56	383	77	27	17
28	6.6	5.2	5.0	5.0	4.5	4.8	7.0	51	383	73	26	19
29	6.0	5.2	5.0	5.0	-----	4.6	7.8	53	371	69	25	19
30	6.4	5.4	5.0	5.0	-----	4.6	8.5	53	363	77	26	18
31	6.6	-----	5.0	5.0	-----	4.5	-----	59	-----	66	26	-----
TOTAL	253.4	160.8	161.0	155.0	126.7	144.3	158.7	1,428.5	7,081	5,069	1,192	575
MEAN	8.17	5.36	5.19	5.00	4.53	4.65	5.29	46.1	236	164	38.5	19.2
MAX	11	6.0	5.6	5.0	4.9	5.0	8.5	120	393	355	60	26
MIN	6.0	5.2	5.0	5.0	4.5	4.3	4.4	6.8	54	66	25	14
AC-FT	503	319	319	307	251	286	315	2,830	14,050	10,050	2,360	1,140

CAL YR 1972 TOTAL 11,662.5 MEAN 31.9 MAX 372 MIN 5.0 AC-FT 23,130
WTR YR 1973 TOTAL 16,505.4 MEAN 45.2 MAX 393 MIN 4.3 AC-FT 32,740

NOTE.--No gage-height record Jan. 1 to Mar. 27.

09035800 DARLING CREEK NEAR LEAL, COLO.

LOCATION.--Lat 39°48'17", long 106°01'11", in NE¼SW¼ sec.9, T.3 S., R.77 W., Grand County, on left bank, 0.6 mi (1.0 km) upstream from mouth and 1.4 mi (2.3 km) southeast of Leal.

DRAINAGE AREA.--8.18 mi² (21.2 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 9,090 ft (2,771 m) from topographic map.

AVERAGE DISCHARGE.--8 years, 9.66 ft³/s (0.274 m³/s) 7,000 acre-ft/yr (8.63 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 139 ft³/s (3.94 m³/s) June 26 (gage height, 3.89 ft or 1.186 m); minimum daily, 1.7 ft³/s (0.048 m³/s) Mar. 17, 18.

Period of record: Maximum discharge, 224 ft³/s (6.34 m³/s) June 20, 1968 (gage height, 3.62 ft or 1.103 m), from rating curve extended above 80 ft³/s (2.3 m³/s); maximum gage height, 3.91 ft (1.192 m) June 25, 1971; minimum daily discharge, 1.5 ft³/s (0.042 m³/s) Mar. 20, 1968.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.1	4.7	2.8	2.8	2.0	1.8	1.8	2.2	15	81	14	5.2
2	5.0	4.2	2.8	2.8	1.9	1.8	1.8	2.1	14	71	14	5.4
3	5.0	3.3	2.8	2.8	1.9	1.8	1.8	2.2	12	60	13	5.3
4	5.1	3.2	2.8	2.8	1.9	1.8	1.8	2.5	11	53	13	5.1
5	5.2	3.4	2.8	2.8	1.9	1.8	1.8	2.7	11	49	15	4.8
6	3.1	3.3	2.8	2.8	1.9	1.8	1.8	2.8	13	46	13	4.8
7	5.5	3.0	2.8	2.8	1.9	1.8	1.8	2.6	19	43	12	5.0
8	4.2	3.1	2.8	2.8	1.9	1.8	1.8	2.6	32	41	12	4.5
9	4.0	3.2	2.8	2.8	1.9	1.8	1.9	2.7	53	36	11	4.5
10	5.5	3.2	2.8	2.8	1.9	1.8	1.9	3.0	78	32	11	4.8
11	5.5	3.2	2.8	2.7	1.9	1.8	1.9	3.4	84	50	10	4.7
12	5.2	3.2	2.8	2.6	1.9	1.8	1.9	4.0	80	51	9.5	4.6
13	5.2	3.2	2.8	2.6	1.9	1.8	1.9	4.8	90	58	8.9	4.5
14	5.1	3.2	2.8	2.5	1.9	1.8	1.9	5.6	85	40	8.6	4.2
15	5.7	3.1	2.8	2.5	1.9	1.8	1.9	5.9	70	39	8.2	4.1
16	4.0	3.1	2.8	2.2	1.9	1.8	1.9	8.2	52	39	7.9	4.2
17	3.7	3.1	2.8	2.2	1.9	1.7	1.9	8.7	46	35	7.8	4.1
18	4.0	3.1	2.8	2.1	1.9	1.7	1.9	12	42	31	7.8	4.0
19	3.9	3.1	2.8	2.1	1.9	1.8	1.9	18	37	31	7.2	4.0
20	3.6	3.0	2.8	2.1	1.8	1.8	1.9	23	39	29	7.7	3.9
21	5.7	2.9	2.8	2.1	1.8	1.8	1.9	24	41	26	7.6	3.8
22	3.6	2.9	2.8	2.1	1.8	1.8	1.9	20	48	24	7.3	3.8
23	3.5	2.9	2.8	2.1	1.8	1.8	1.9	18	57	24	6.9	3.7
24	3.4	2.9	2.8	2.1	1.8	1.8	1.9	15	60	22	6.6	4.3
25	3.4	2.9	2.8	2.1	1.8	1.8	1.9	15	74	21	6.5	4.6
26	3.4	2.9	2.8	2.1	1.8	1.8	2.0	11	95	19	6.1	4.8
27	3.4	2.9	2.8	2.1	1.8	1.8	2.1	10	98	19	5.8	4.7
28	3.4	2.9	2.8	2.1	1.8	1.8	2.3	9.2	91	18	5.6	4.9
29	3.4	2.9	2.8	2.1	-----	1.8	2.4	8.6	88	18	5.2	5.0
30	4.4	2.8	2.8	2.1	-----	1.8	2.5	9.0	85	19	5.5	5.2
31	4.7	-----	2.8	2.1	-----	1.8	-----	14	-----	16	5.5	-----
TOTAL	109.7	94.8	86.8	74.5	52.4	55.6	58.0	270.4	1,618	1,081	277.6	156.3
MEAN	3.54	3.16	2.80	2.40	1.87	1.79	1.93	8.74	53.9	34.9	8.95	4.54
MAX	4.7	4.7	2.8	2.8	2.0	1.8	2.5	24	98	81	14	5.4
MIN	3.0	2.8	2.8	2.1	1.8	1.7	1.8	2.1	11	16	5.2	3.7
AC-FT	218	188	172	148	104	110	115	537	3,210	2,140	551	270

CAL YR 1972 TOTAL 5,261.2 MEAN 8.91 MAX 78 MIN 1.9 AC-FT 6,470
 WTR YR 1973 TOTAL 5,915.5 MEAN 10.7 MAX 98 MIN 1.7 AC-FT 7,770

NOTE.--No gage-height record Nov. 14 to May 14.

09035900 SOUTH FORK OF WILLIAMS FORK NEAR LEAL, COLO.

LOCATION.--Lat 39°47'44", long 106°01'49", in NE¼ sec.17, T.3 S., R.77 W., Grand County, on left bank, 800 ft (244 m) upstream from highway bridge, 0.6 mi (1.0 km) upstream from mouth, and 1.2 mi (1.9 km) southeast of Leal.

DRAINAGE AREA.--27.2 mi² (70.4 km²).

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

GAGE.--Water-stage recorder, Altitude of gage is 8,950 ft (2,728 m) from topographic map.

AVERAGE DISCHARGE.--8 years, 30.3 ft³/s (0.858 m³/s), 21,950 acre-ft/yr (27.1 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 318 ft³/s (9.01 m³/s) June 13 (gage height, 3.20 ft or 0.975 m); minimum daily, 5.2 ft³/s (0.147 m³/s) Mar. 26.

Period of record: Maximum discharge, about 380 ft³/s (11 m³/s) June 20, 1968 (gage height unknown); minimum daily, 2.6 ft³/s (0.074 m³/s) Mar. 6, 1967.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	9.8	6.2	6.5	6.0	5.6	5.8	8.2	81	169	41	22
2	12	9.4	8.2	6.4	6.0	5.6	5.8	7.6	79	153	37	21
3	12	9.2	8.2	6.2	5.8	5.6	5.8	8.6	77	142	35	21
4	12	9.2	8.2	6.2	5.8	5.6	5.8	9.4	75	133	37	20
5	12	9.0	8.0	6.2	5.8	5.6	5.8	10	71	127	41	20
6	12	9.0	7.8	6.2	5.8	5.6	5.8	9.8	76	118	40	19
7	12	8.8	7.6	6.2	5.8	5.6	5.8	9.6	99	112	35	19
8	15	8.8	7.6	6.2	5.8	5.6	6.0	13	126	110	34	18
9	13	8.6	7.6	6.2	5.8	5.6	6.2	21	163	103	32	18
10	12	8.6	7.6	6.2	5.8	5.6	6.4	28	186	94	31	19
11	12	8.4	7.6	6.2	5.8	5.6	6.4	32	205	88	30	19
12	12	8.4	7.6	6.2	5.8	5.6	6.4	35	209	91	29	19
13	12	8.4	7.6	6.2	5.8	5.6	6.4	38	237	97	28	18
14	12	8.4	7.6	6.0	5.8	5.6	6.6	41	252	102	27	17
15	12	8.4	7.6	6.0	5.8	5.6	6.4	44	206	88	27	17
16	13	8.4	7.6	6.0	5.8	5.6	6.2	48	168	89	26	17
17	13	8.4	7.6	6.0	5.8	5.6	6.4	58	148	82	26	18
18	13	8.4	7.6	6.0	5.8	5.6	6.6	74	143	82	27	16
19	13	8.4	7.4	6.0	5.8	5.6	6.4	84	131	86	25	16
20	12	8.4	7.2	6.0	5.8	5.6	6.4	94	128	77	24	15
21	12	8.4	7.2	6.0	5.6	5.6	6.2	92	129	70	24	15
22	12	8.2	7.0	6.0	5.6	5.6	6.2	82	136	66	24	15
23	12	8.2	7.0	6.0	5.6	5.6	6.2	70	151	60	24	15
24	12	8.2	7.0	6.0	5.6	5.6	6.4	70	156	56	23	17
25	12	8.2	6.6	6.0	5.6	5.4	6.8	70	171	53	22	17
26	12	8.2	6.6	6.0	5.6	5.2	7.2	68	195	49	21	18
27	11	8.2	6.6	6.0	5.6	5.4	8.0	59	199	49	21	17
28	11	8.2	6.6	6.0	5.6	5.6	8.6	56	210	47	20	18
29	11	8.2	6.6	6.0	-----	5.6	8.9	58	193	45	21	18
30	10	8.2	6.6	6.0	-----	5.6	8.6	63	175	47	21	18
31	10	-----	6.6	6.0	-----	5.8	-----	68	-----	43	22	-----
TOTAL	374	256.6	229.8	189.1	161.2	173.0	196.5	1,429.2	4,575	2,728	875	537
MEAN	12.1	8.55	7.38	6.10	5.76	5.58	6.55	46.1	153	88.0	28.2	17.9
MAX	15	9.8	8.2	6.5	6.0	5.8	8.9	94	252	169	41	22
MIN	10	8.2	6.6	6.0	5.6	5.2	5.8	7.6	71	43	20	15
AC-FT	742	509	454	375	320	343	390	2,830	9,070	5,410	1,740	1,070

CAL YR 1972 TOTAL 11,172.2 MEAN 30.5 MAX 238 MIN 6.4 AC-FT 22,160
 WTR YR 1973 TOTAL 11,723.4 MEAN 32.1 MAX 252 MIN 5.2 AC-FT 23,250

PEAK DISCHARGE (BASE, 200 CFS).--June 13 (2000) 318 cfs (3.20 ft).

NOTE.--No gage-height record Dec. 6 to Apr. 5, Apr. 9 to May 23.

WILLIAMS FORK BASIN

09036000 WILLIAMS FORK NEAR LEAL, COLO.

LOCATION.--Lat 39°49'53", long 106°03'15"; in sec.31, T.2 S., R.77 W., Grand County, on right bank at downstream side of bridge, 100 ft (30 m) downstream from Kinney Creek and 1.7 mi (2.7 km) northwest of Leal.

DRAINAGE AREA.--89.3 mi² (231.3 km²).

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.

GAGE.--Water-stage recorder. Altitude of gage is 8,790 ft (2,679 m) from topographic map. Prior to Aug. 16, 1953, at site 15 ft (5 m) downstream at same datum.

AVERAGE DISCHARGE.--40 years, 102 ft³/s (2.889 m³/s) 73,900 acre-ft/yr (91.1 hm³/yr), including diversions to August P. Gumlick Tunnel.

EXTREMES.--Current year: Maximum discharge, 1,030 ft³/s (29.2 m³/s) June 14 (gage height, 3.26 ft or 0.994 m); minimum daily, 18 ft³/s (0.51 m³/s) Mar. 4, 7, 8, 16, 23, 26, 30.

Period of record: Maximum discharge, 1,720 ft³/s (48.7 m³/s) June 10, 1952 (gage height, 4.23 ft or 1.289 m); maximum gage height, 5.46 ft (1.664 m) June 29, 1971 (backwater from log); minimum daily discharge, 13 ft³/s (0.37 m³/s) at times in 1939, 1963, 1964, and 1967.

REVISIONS.--The maximum discharge for the water year 1972 has been revised to 980 ft³/s (27.8 m³/s) June 7, 1972 (gage height, 2.98 ft or 0.908 m), superseding figures published in WRD Colo. 1972.

REMARKS.--Records good. Transmountain diversion above station through August P. Gumlick Tunnel (see table below for figures of diversion). Diversions above station for irrigation of about 200 acres (809,000 m²) of hay meadows above station and about 40 acres (162,000 m²) below.

NOTE.--Diversion, in acre-feet, through August P. Gumlick Tunnel for water year 1972, not previously published, are given herewith:

OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
312	214	123	12	0	0	0	1,510	2,190	918	707	553
			CAL YR 1971			2,470			WTR YR 1972		
									6,530		

REVISIONS (WATER YEARS).--WSP 1733: 1951. WSP 2124: drainage area. Revised figures of discharge, in ft³/s for highwater period in water year 1972, superseding figures published in WRD Colo. 1972, are given below:

Date	Discharge	Date	Discharge	Date	Discharge
1972		1972--Con.		1972--Con.	
May 3	43	May 17	128	May 31	308
4	51	18	135	June 1	326
5	58	19	161	2	368
6	56	20	183	3	445
7	58	21	205	4	435
8	58	22	185	5	515
9	67	23	145	6	685
10	66	24	143	7	834
11	63	25	173	8	756
12	62	26	225	9	705
13	60	27	232	10	695
14	61	28	235	11	665
15	72	29	260	12	665
16	102	30	284	13	630
Month	Ft ³ /s-days	Maximum	Minimum	Mean	Runoff in acre-feet
May 1972.....	3,962	308	40	128	7,860
June 1972.....	14,856	834	287	495	29,470
WTR YR 1972...	31,388	834	19	85.8	62,260

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32	29	23	21	20	19	19	27	208	705	149	63
2	30	29	23	21	20	19	19	24	200	649	140	64
3	29	30	23	21	19	19	19	25	190	593	132	67
4	28	28	23	21	20	18	19	30	184	541	132	63
5	28	29	22	21	19	19	19	32	168	507	144	58
6	28	29	22	22	19	19	19	33	172	468	145	56
7	28	27	23	21	20	18	19	30	220	430	126	57
8	38	28	23	21	19	18	19	32	315	428	120	53
9	35	29	22	21	19	19	19	44	449	406	112	52
10	31	26	22	21	19	19	19	64	588	367	103	56
11	29	27	22	22	19	19	19	89	669	334	100	57
12	28	27	22	21	19	19	20	107	672	338	98	55
13	29	27	22	21	19	19	20	118	763	389	95	52
14	29	26	22	21	19	19	21	127	883	446	92	51
15	31	26	22	20	20	19	21	134	739	389	88	50
16	36	25	22	20	19	18	20	148	619	385	84	49
17	34	25	22	20	19	19	21	158	529	327	83	52
18	36	26	22	20	19	19	22	196	508	321	87	46
19	35	26	22	20	19	19	20	257	440	338	79	42
20	33	24	22	20	19	19	21	297	430	299	78	40
21	34	24	22	20	19	20	21	297	446	272	79	39
22	35	24	22	20	19	19	20	263	469	247	79	37
23	32	23	21	20	19	18	20	218	546	228	77	39
24	31	24	21	20	19	19	21	219	576	210	73	42
25	32	24	22	20	19	19	21	212	614	199	70	45
26	31	24	21	20	19	18	21	208	720	186	65	49
27	31	23	22	20	19	19	24	172	840	180	61	44
28	31	23	22	20	19	20	27	155	817	174	59	51
29	28	24	22	20	-----	19	29	159	775	166	61	51
30	29	24	21	20	-----	18	29	163	746	179	62	50
31	26	-----	21	20	-----	19	-----	166	-----	160	66	-----
TOTAL	967	780	683	636	537	584	628	4,204	15,495	10,861	2,939	1,530
MEAN	31.2	26.0	22.0	20.5	19.2	18.8	20.9	136	517	350	94.8	51.0
MAX	38	30	23	22	20	20	29	297	883	705	149	67
MIN	26	23	21	20	19	18	19	24	168	160	59	37
AC-FT	1,920	1,550	1,350	1,260	1,070	1,160	1,250	8,340	30,730	21,540	5,830	3,030
†	265	213	115	102	77	96	80	25	0	0	0	0

CAL YR 1972 TOTAL 30,916 MEAN 84.5 MAX 834 MIN 19 AC-FT 61,320 †6,480
 WTR YR 1973 TOTAL 39,844 MEAN 109 MAX 883 MIN 18 AC-FT 79,030 † 971

†Diversions, in acre-feet, through August P. Gumlick Tunnel; furnished by Colorado Division of Water Resources.

09037500 WILLIAMS FORK NEAR PARSHALL, COLO.

LOCATION.--Lat 40°00'01", long 106°10'45", in SW¼SW¼ sec.31, T.1 N., R.78 W., Grand County, on right bank 150 ft (46 m) downstream from bridge on State Highway 286, 3.7 mi (6.0 km) downstream from Skylark Creek, 3.9 mi (6.3 km) south of Parshall, and 4.2 mi (6.8 km) upstream from Williams Fork Reservoir Dam.

DRAINAGE AREA.--184 mi² (477 km²).

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.

GAGE.--Water-stage recorder. Datum of gage is 7,808.95 ft (2,380.168 m) above mean sea level (datum of Denver Board of Water Commissioners). See WSP 1733 for history of changes prior to Aug. 9, 1938.

AVERAGE DISCHARGE.--60 years, 140 ft³/s (3.965 m³/s), 101,400 acre-ft/yr (125 hm³/yr), including diversion to August P. Gumlick Tunnel.

EXTREMES.--Current year: Maximum discharge, 1,160 ft³/s (32.9 m³/s) June 14 (gage height, 4.77 ft or 1.454 m); minimum daily, 31 ft³/s (0.88 m³/s) Apr. 6, 7.

Period of record: Maximum discharge observed, 2,620 ft³/s (74.2 m³/s) June 14, 1918 (gage height, 6.05 ft or 1.884 m, site and datum then in use), from rating curve extended above 1,400 ft³/s (40 m³/s); minimum daily, 4.8 ft³/s (0.14 m³/s) May 6, 8-10, 1972.

REMARKS.--Records good except those for winter period, which are fair. Transmountain diversion above station through August P. Gumlick Tunnel (see sta. 09036000). Diversions above station for irrigation of about 1,300 acres (5.26 km²) above station and about 2,500 acres (10.1 km²) below. About 150 acres (607,000 m²) above station irrigated by diversions into the drainage area.

REVISIONS (WATER YEARS).--WSP 1243: 1918. WSP 2124: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	53	47	39	38	34	33	33	68	220	628	152	82
2	51	47	40	38	34	33	33	59	271	550	139	82
3	50	47	41	38	34	33	32	58	274	485	133	83
4	49	47	41	38	34	33	32	71	244	410	129	80
5	49	47	41	38	34	33	32	80	223	380	149	78
6	48	46	41	38	34	33	31	89	220	340	175	78
7	49	43	40	38	34	33	31	80	210	302	165	79
8	59	44	39	38	34	33	32	86	306	288	158	74
9	59	44	39	38	34	33	32	127	520	299	145	72
10	56	42	39	38	34	33	33	175	712	264	135	74
11	53	40	39	38	34	33	34	220	812	229	131	79
12	50	39	39	38	34	33	34	247	788	218	131	75
13	51	39	39	38	33	33	36	244	868	274	123	72
14	52	39	39	38	33	33	39	238	1,070	356	118	66
15	53	39	39	38	33	33	43	232	852	313	116	65
16	64	39	39	38	33	33	35	254	733	313	109	64
17	59	39	39	37	33	33	38	247	568	264	107	66
18	62	39	39	36	33	33	40	299	505	244	116	64
19	62	39	39	36	33	33	38	440	400	296	106	60
20	58	39	39	35	33	33	37	598	360	257	101	59
21	60	39	39	34	33	33	40	598	388	306	107	58
22	64	39	39	34	33	33	38	540	400	306	106	57
23	59	39	39	34	33	33	36	420	480	282	103	56
24	57	39	39	34	33	33	45	400	652	250	96	60
25	55	39	39	34	33	33	46	410	719	244	93	64
26	56	39	39	34	33	33	44	384	764	235	89	69
27	58	39	39	34	33	33	46	302	740	226	85	66
28	64	39	39	34	33	32	62	238	733	223	82	69
29	57	39	39	34	-----	32	69	198	698	212	82	72
30	57	39	39	34	-----	32	72	190	684	202	80	72
31	45	-----	39	34	-----	32	-----	192	-----	163	83	-----
TOTAL	1,719	1,235	1,219	1,126	936	1,019	1,193	7,784	16,414	9,359	3,644	2,095
MEAN	55.5	41.2	39.3	36.3	33.4	32.9	39.8	251	547	302	118	69.8
MAX	64	47	41	38	34	33	72	598	1,070	628	175	83
MIN	45	39	39	34	33	32	31	58	210	163	80	56
AC-FT	3,410	2,450	2,420	2,230	1,860	2,020	2,370	15,440	32,560	18,560	7,230	4,160

CAL YR 1972 TOTAL 30,148.6 MEAN 82.4 MAX 820 MIN 4.8 AC-FT 59,800
WTR YR 1973 TOTAL 47,743.0 MEAN 131 MAX 1,070 MIN 31 AC-FT 94,700

WILLIAMS FORK BASIN

173

09038000 WILLIAMS FORK RESERVOIR NEAR PARSHALL, COLO.

LOCATION.--Lat 40°02'06", long 106°12'17", in SE¼ sec.23, T.1 N., R.79 W., Grand County, at dam on Williams Fork, 2.1 mi (3.4 km) upstream from mouth and 2.2 mi (3.5 km) southwest of Parshall.

DRAINAGE AREA.--230 mi² (596 km²).

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

GAGE.--Nonrecording gage read once daily. Datum of gage is at mean sea level (levels by city engineer of Denver).

EXTREMES (at 0800).--Current year: Maximum contents, 93,650 acre-ft (115 hm³) July 27, 28 (elevation, 7,809.02 ft or 2,380.189 m); minimum, 52,620 acre-ft (64.9 hm³) Apr. 1 (elevation, 7,777.00 ft or 2,370.430 m).

Period of record: Maximum contents, 97,130 acre-ft (120 hm³) July 9, 1962 (elevation, 7,811.19 ft or 2,380.851 m); no contents at times in 1958 (construction) and 1966 (drained for repairs).

REMARKS.--Reservoir is formed by concrete-arch dam. Dam completed in October 1938; storage began in April 1939; dam was enlarged Dec. 5, 1956, to Apr. 22, 1959. Enlarged capacity of reservoir, 96,820 acre-ft (119 hm³) between elevations 7,634 ft or 2,326.8 m (invert of outlet pipes) and 7,811 ft or 2,380.8 m (top of radial gates on spillway). No dead storage. Figures given represent usable contents. Reservoir is used for power development and storage for replacement of water diverted through August P. Gumlick Tunnel (see sta. 09036000) during periods when flow of Colorado River is insufficient to supply decreed prior water rights below Williams Fork.

COOPERATION.--Records furnished by Denver Board of Water Commissioners.

REVISIONS.--WSP 2124: Drainage area.

MONTHEND ELEVATION AND CONTENTS AT 0800, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	ELEVATION (FEET)	CONTENTS (ACRE-FEET)	CHANGE IN CONTENTS (ACRE-FEET)
Sept. 30.....	7,800.59	81,140	-
Oct. 31.....	7,800.27	80,690	-450
Nov. 30.....	7,791.41	68,980	-11,710
Dec. 31.....	7,788.50	65,400	-3,580
CAL YR 1972.....	-	-	+2,980
Jan. 31.....	7,784.90	61,180	-4,220
Feb. 28.....	7,781.34	57,220	-3,960
Mar. 31.....	7,777.08	52,700	-4,520
Apr. 30.....	7,780.45	56,250	+3,550
May 31.....	7,785.96	62,400	+6,150
June 30.....	7,803.96	85,960	+23,560
July 31.....	7,808.82	93,340	+7,380
Aug. 31.....	7,805.04	87,560	-5,780
Sept. 30.....	7,797.75	77,240	-10,320
WTR YR 1973.....	-	-	-3,900

09038500 WILLIAMS FORK BELOW WILLIAMS FORK RESERVOIR, COLO.

LOCATION.--Lat 40°02'07", long 106°12'17", in SE¼ sec.23, T.1 N., R.79 W., Grand County, on left bank 400 ft (120 m) downstream from Williams Fork Reservoir, 2.1 mi (3.4 km) upstream from mouth, and 2.1 mi (3.4 km) southwest of Parshall.

DRAINAGE AREA.--230 mi² (596 km²).

PERIOD OF RECORD.--October 1948 to September 1954, August 1958 to current year. Monthly discharge only for some periods, published in WSP 1313. Prior to October 1958, published as Williams River below Williams Fork Reservoir.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 7,615.0 ft (2,321.05 m) above mean sea level (datum of Denver Board of Water Commissioners). See WSP 1713 or 1733 for history of changes prior to Oct. 21, 1959.

AVERAGE DISCHARGE.--21 years, 126 ft³/s (3.568 m³/s), 91,290 acre-ft/yr (113 hm³/yr), adjusted for storage in Williams Fork Reservoir.

EXTREMES.--Current year: Maximum discharge, 385 ft³/s (10.9 m³/s) July 21, 22, 23 (gage height, 2.99 ft or 0.911 m); minimum daily, 13 ft³/s (0.37 m³/s) Oct. 29.

Period of record: Maximum discharge, 2,640 ft³/s (74.8 m³/s) June 20, 1953 (gage height, 8.50 ft or 2.591 m, site and datum then in use), from rating curve extended above 1,500 ft³/s (42 m³/s); minimum daily, 0.3 ft³/s (0.008 m³/s) May 14, 1963.

REMARKS.--Records excellent. Flow regulated by Williams Fork Reservoir (see sta. 09038000). Transmountain diversion above station through August P. Gumlick Tunnel (see sta. 09036000). Diversions above station for irrigation of about 3,200 acres (13.0 km²) above station and about 100 acres (405,000 m²) below. About 450 acres (1.82 km²) above station irrigated by diversion into the drainage area.

REVISIONS.--WSP 2124: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	162	148	109	112	114	14	15	256	236	230	237
2	101	242	109	110	112	113	14	15	255	237	229	238
3	101	241	109	111	111	113	14	15	255	237	228	240
4	101	242	109	110	110	113	14	15	253	235	232	240
5	102	241	109	109	111	115	14	15	252	234	237	240
6	103	241	109	109	112	115	14	16	252	234	237	239
7	14	242	110	109	113	115	14	167	252	233	237	239
8	14	242	110	111	113	116	14	266	252	233	237	239
9	104	242	108	111	113	116	14	262	253	235	235	239
10	101	242	108	111	113	117	14	262	254	235	235	239
11	101	242	108	109	113	117	14	262	251	235	235	242
12	101	242	108	109	113	117	14	262	248	233	235	242
13	102	242	108	109	112	117	14	262	248	232	236	240
14	14	243	108	109	114	116	14	262	247	234	237	242
15	14	246	108	112	115	115	14	262	247	235	234	242
16	102	246	109	111	115	115	14	262	245	236	232	242
17	100	247	109	110	112	115	14	262	244	237	234	242
18	98	249	110	110	113	114	14	262	244	235	237	242
19	101	248	110	111	113	114	16	262	244	235	232	242
20	100	248	109	111	114	113	18	262	243	233	231	242
21	14	250	109	111	114	113	15	262	243	239	93	243
22	14	251	109	111	112	115	15	260	239	384	96	243
23	14	252	109	111	113	115	15	260	241	302	238	242
24	98	252	111	111	113	115	16	260	241	233	238	242
25	98	252	111	111	114	115	15	257	202	233	239	242
26	100	252	111	111	114	115	15	251	153	231	239	244
27	100	255	111	111	114	115	15	256	241	229	239	244
28	14	259	111	112	114	115	15	256	241	229	237	244
29	13	256	110	112	-----	115	15	256	237	232	237	244
30	100	254	109	112	-----	115	15	254	235	233	235	244
31	99	-----	109	112	-----	116	-----	258	-----	233	237	-----
TOTAL	2,252	7,323	3,426	3,426	3,162	3,564	437	6,498	7,268	7,562	7,008	7,240
MEAN	72.6	244	111	111	113	115	14.6	210	242	244	226	241
MAX	104	259	148	112	115	117	18	266	256	384	239	244
MIN	13	162	108	109	110	113	14	15	153	229	93	237
AC-FT	4,470	14,530	6,800	6,800	6,270	7,070	867	12,890	14,420	15,000	13,900	14,360

CAL YR 1972 TOTAL 35,592 MEAN 97.2 MAX 259 MIN 13 AC-FT 70,600
 ATD YR 1973 TOTAL 59,166 MEAN 162 MAX 384 MIN 13 AC-FT 117,400

TROUBLESOME CREEK BASIN

175

09039000 TROUBLESOME CREEK NEAR PEARMONT, COLO.

LOCATION.--Lat 40°13'03", long 106°18'45", in SE¼ sec.14, T.3 N., R.80 W., Grand County, on left bank 45 ft (14 m) downstream from small tributary, 3 mi (5 km) north of Pearmont, 4 mi (6 km) downstream from Rabbit Ear Creek, 5.2 mi (8.4 km) upstream from East Fork, and 12 mi (19 km) northeast of Kremmling.

DRAINAGE AREA.--44.6 mi² (115.5 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 8,049 ft (2,453.3 m) from topographic map.

AVERAGE DISCHARGE.--20 years, 28.5 ft³/s (0.807 m³/s), 20,650 acre-ft/yr (25.5 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 240 ft³/s (6.80 m³/s) June 11, 12 (gage height, 2.56 ft or 0.780 m); maximum gage height, 2.62 ft (0.799 m) Nov. 28 (backwater from ice); minimum daily discharge, 12 cfs (0.34 m³/s) Feb. 21.

Period of record: Maximum discharge, 503 ft³/s (14.2 m³/s) June 7, 1957 (gage height, 3.48 ft or 1.061 m); maximum gage height, 3.93 ft (1.198 m) Mar. 31, 1965 (backwater from ice); minimum daily discharge, 4.8 ft³/s (0.14 m³/s) Sept. 17, 1966.

REMARKS.--Records good except those for winter period, which are poor. One diversion above station for irrigation of about 250 acres (1.01 km²) below. Flow partly regulated during irrigation season by one reservoir (capacity, 1,070 acre-ft or 1.32 hm³) above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	13	13	13	13	13	13	17	124	58	23	17
2	14	13	13	13	13	13	13	16	161	58	23	17
3	14	13	13	13	13	13	13	18	161	57	21	17
4	14	13	13	13	13	13	14	21	145	52	21	16
5	14	13	13	13	13	13	14	23	123	48	26	16
6	14	13	13	13	13	13	14	27	104	45	25	16
7	14	13	13	13	13	13	14	26	100	44	24	17
8	16	14	13	13	13	13	13	25	123	42	23	16
9	15	14	13	13	13	13	13	30	160	39	21	15
10	14	14	13	13	13	13	14	39	211	36	20	16
11	14	14	13	13	13	13	14	46	231	33	19	17
12	13	14	13	13	13	13	14	47	223	38	19	17
13	13	14	13	13	13	13	14	48	205	39	18	16
14	13	14	13	13	13	13	15	49	203	41	18	15
15	15	14	13	13	13	13	14	50	195	35	17	15
16	15	14	13	13	13	13	14	56	166	34	17	15
17	14	14	13	13	13	13	14	61	140	30	18	15
18	14	14	13	13	13	13	14	84	121	28	18	15
19	14	14	13	13	13	13	14	158	107	34	17	15
20	14	14	13	13	13	13	14	184	94	36	16	14
21	15	14	13	13	12	13	13	199	84	31	17	14
22	14	14	13	13	13	13	13	183	76	25	19	14
23	14	14	13	13	13	13	13	171	73	24	18	14
24	14	14	13	13	13	13	13	167	72	23	18	15
25	14	14	13	13	13	13	14	154	72	22	18	15
26	14	14	13	13	13	13	14	142	73	21	17	16
27	14	14	13	13	13	13	15	123	72	21	17	15
28	14	13	13	13	13	13	16	102	71	21	17	15
29	14	13	13	13	-----	13	19	95	68	23	17	15
30	13	13	13	13	-----	13	20	95	63	25	17	15
31	13	-----	13	13	-----	13	-----	94	-----	24	17	-----
TOTAL	435	410	403	403	363	403	426	2,550	5,821	1,087	596	465
MEAN	14.0	13.7	13.0	13.0	13.0	13.0	14.2	82.3	127	35.1	19.2	15.5
MAX	16	14	13	13	13	13	20	199	231	58	26	17
MIN	13	13	13	13	12	13	13	16	63	21	16	14
AC-FT	863	813	799	799	720	799	845	5,060	7,580	2,160	1,180	922

CAL YR 1972 TOTAL 10,781 MEAN 29.5 MAX 208 MIN 10 AC-FT 21,380
 WTR YR 1973 TOTAL 11,362 MEAN 31.1 MAX 231 MIN 12 AC-FT 22,540

TROUBLESOME CREEK BASIN

09040000 EAST FORK TROUBLESOME CREEK NEAR TROUBLESOME, COLO.

LOCATION.--Lat 40°09'27", long 106°16'58", in NW¼ sec.7, T.2 N., R.79 W., Grand County, on right bank 400 ft (120 m) upstream from mouth and 6.5 mi (10.5 km) north of Troublesome.

DRAINAGE AREA.--76.0 mi² (197 km²).

PERIOD OF RECORD.--April 1937 to September 1943, October 1953 to current year. Monthly discharge only for some periods, published in WSP 1313.

GAGE.--Water-stage recorder. Altitude of gage is 7,670 ft (2,338 m) from topographic map. See WSP 1733 for history of changes prior to Oct. 1, 1953. Oct. 1, 1953, to July 21, 1966, at site 100 ft (30 m) downstream at present datum.

AVERAGE DISCHARGE.--26 years, 27.5 ft³/s (0.78 m³/s), 19,920 acre-ft/yr (24.6 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 468 ft³/s (13.3 m³/s) May 22 (gage height, 5.27 ft or 1.606 m); minimum daily, 5.0 ft³/s (0.14 m³/s) Feb. 16.

Period of record: Maximum discharge, 720 ft³/s (20.4 m³/s) May 9, 1962 (gage height, 5.11 ft or 1.558 m); maximum gage height, 5.63 ft (1.716 m) May 20, 1970; minimum daily discharge, 0.20 ft³/s (0.006 m³/s) Oct. 3, 1941, Sept. 2, 3, 26, 27, 1942.

REMARKS.--Records good except those for winter period, which are poor. Diversions above station for irrigation.

REVISIONS.--WSP 1924: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.1	9.0	7.4	5.2	5.4	6.2	7.8	35	152	54	17	7.7
2	5.3	8.8	7.2	5.2	5.4	6.2	7.6	28	258	50	15	7.7
3	5.3	8.6	7.2	5.2	5.4	6.2	7.8	29	235	43	14	8.0
4	5.3	7.4	7.0	5.2	5.4	6.2	7.6	45	207	40	14	7.4
5	5.6	6.0	6.6	5.2	5.4	6.4	7.6	52	178	35	17	7.2
6	6.0	9.3	6.6	5.2	5.4	6.4	7.6	64	160	33	32	7.0
7	5.4	8.6	6.6	5.2	5.4	6.4	8.4	61	157	31	21	7.2
8	7.2	9.9	6.4	5.2	5.4	6.4	12	62	181	35	19	7.0
9	8.0	9.0	6.2	5.4	5.4	6.4	10	77	210	30	14	6.6
10	7.2	8.8	6.2	5.6	5.4	6.4	7.4	111	239	26	13	7.0
11	6.8	8.6	5.8	5.6	5.4	6.4	7.4	128	235	24	13	8.6
12	6.6	9.0	5.6	5.6	5.4	6.8	8.6	136	217	26	12	9.9
13	6.6	8.8	5.6	5.6	5.4	6.8	10	149	197	40	10	8.3
14	7.0	8.8	5.4	5.6	5.4	6.8	14	155	207	43	10	7.2
15	7.7	8.2	5.1	5.6	5.4	6.8	16	155	214	31	9.9	6.8
16	12	7.8	5.3	5.6	5.0	7.4	12	178	181	30	9.3	6.8
17	9.0	7.8	5.4	5.6	5.2	7.4	14	172	146	26	9.3	6.6
18	9.9	7.8	5.6	5.6	5.4	7.4	16	214	126	26	9.3	6.4
19	9.6	7.8	5.6	5.6	5.4	7.8	13	300	114	35	9.0	6.4
20	9.0	7.8	5.6	5.6	5.4	7.8	13	300	103	40	8.3	6.4
21	10	7.4	5.6	5.6	5.4	7.8	14	395	90	36	13	6.4
22	12	7.4	5.6	5.4	5.4	7.8	12	309	88	32	17	6.4
23	9.9	7.4	5.6	5.4	5.4	8.2	12	262	86	29	12	6.4
24	8.6	7.4	5.1	5.4	5.4	8.8	15	221	84	26	10	7.0
25	6.0	7.4	5.6	5.4	5.6	8.4	19	187	79	23	10	7.4
26	6.6	7.4	5.3	5.4	5.6	7.8	17	184	77	20	6.6	8.3
27	9.0	7.4	5.6	5.4	6.0	7.8	21	155	75	19	6.0	8.0
28	9.6	7.4	5.8	5.4	6.2	7.8	31	141	70	20	7.7	8.0
29	9.3	7.4	5.8	5.4	-----	7.8	40	136	64	19	7.2	9.6
30	9.3	7.4	5.6	5.4	-----	7.8	42	138	56	24	7.2	9.0
31	9.3	-----	5.4	5.4	-----	7.8	-----	133	-----	19	7.4	-----
TOTAL	244.4	243.8	183.4	168.2	152.6	222.4	433.0	4,712	4,488	965	384.2	222.7
MEAN	8.05	8.13	5.92	5.43	5.45	7.17	14.4	152	150	31.1	12.4	7.42
MAX	12	9.9	7.4	5.6	6.2	8.8	42	395	258	54	32	9.9
MIN	5.1	7.4	5.1	5.2	5.0	6.2	7.4	28	58	19	7.2	6.4
AC-FT	495	484	364	334	303	441	859	9,350	8,900	1,910	762	442

CAL YR 1972 TOTAL 10,191.3 MEAN 27.8 MAX 239 MIN 4.7 AC-FT 20,210

WTR YR 1973 TOTAL 12,424.7 MEAN 34.0 MAX 345 MIN 5.0 AC-FT 24,640

PEAK DISCHARGE (BASE, 170 CFS).--May 22 (0100) 468 cfs (5.27 ft); June 2 (0030) 420 cfs (5.15 ft).

NOTE.--No gage-height record Dec. 29 to Apr. 7.

09041200 RED DIRT CREEK NEAR KREMMLING, COLO.

LOCATION.--Lat 40°09'41", long 106°33'32", in NE¼NE¼ sec.10, T.2 N., R.82 W., Grand County, on left bank 0.8 mi (1.3 km) upstream from Snow Shoe Ranch, 2.0 mi (3.2 km) downstream from McMahon (Red Dirt) Reservoir, 10.1 mi (16.3 km) upstream from mouth, and 11.5 mi (18.5 km) northwest of Kremmling.

DRAINAGE AREA.--19.0 mi² or 49.2 km² (includes 1.34 mi² or 3.47 km² in Yampa River basin).

PERIOD OF RECORD.--October 1955 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 8,961 ft (2,731.3 m) from topographic map.

AVERAGE DISCHARGE.--18 years, 18.9 ft³/s (0.535 m³/s), 13,690 acre-ft/yr (16.9 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 115 ft³/s (3.26 m³/s) May 21 (gage height, 2.52 ft or 0.768 m); maximum gage height, 3.26 ft (0.994 m) Nov. 2 (backwater from beaver dam); minimum daily discharge, 2.3 ft³/s (0.065 m³/s) Feb. 16.
Period of record: Maximum discharge, 343 ft³/s (9.71 m³/s) June 13, 1957 (gage height, 3.01 ft or 0.917 m); maximum gage height, 3.26 ft (0.994 m) Nov. 2, 1972 (backwater from beaver dam); minimum not determined.

REMARKS.--Records good except those for winter period, which are poor. No diversion above station. Flow regulated by McMahon (Red Dirt) Reservoir (capacity, about 4,500 acre-ft or 5.55 hm³).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.8	5.2	4.0	2.8	2.5	2.8	4.1	16	81	46	16	14
2	5.8	5.2	4.0	2.8	2.4	2.8	4.1	14	82	46	16	14
3	5.8	5.0	4.0	2.8	2.4	2.8	4.1	14	80	44	16	14
4	5.8	5.0	4.0	2.8	2.4	2.8	4.1	19	77	44	16	14
5	5.8	5.0	3.9	2.8	2.4	2.8	4.1	24	76	44	17	14
6	5.8	5.0	3.8	2.8	2.4	3.1	4.1	26	76	44	16	14
7	5.8	5.0	3.7	2.8	2.4	3.1	4.3	23	74	43	17	14
8	5.8	5.4	3.6	2.8	2.4	3.1	4.8	29	74	43	17	14
9	5.8	5.4	3.5	2.8	2.4	3.1	4.5	38	77	43	16	14
10	5.6	5.2	3.4	2.8	2.4	3.1	4.2	44	77	43	16	14
11	5.6	5.0	3.3	3.0	2.4	3.1	4.3	50	75	41	16	14
12	5.6	5.0	3.2	3.0	2.4	3.1	4.4	54	74	41	16	14
13	5.6	5.0	3.2	3.0	2.4	3.1	4.8	58	74	41	16	14
14	5.6	4.7	3.2	3.0	2.4	3.1	5.6	62	76	41	16	14
15	5.6	4.4	3.2	3.0	2.4	3.1	7.8	70	75	41	16	14
16	5.4	4.4	3.2	3.0	2.3	3.2	5.8	78	69	39	16	14
17	5.4	4.4	3.2	3.0	2.4	3.3	6.2	90	67	39	16	14
18	5.4	4.4	3.2	3.0	2.5	3.3	6.8	94	64	36	15	14
19	5.4	4.4	3.2	3.0	2.5	3.3	6.0	102	62	35	15	14
20	5.4	4.4	3.2	3.0	2.5	3.3	5.8	108	59	33	15	13
21	5.4	4.0	3.2	3.0	2.5	3.3	6.4	111	58	28	15	13
22	5.2	4.0	3.2	2.9	2.5	3.7	5.6	103	53	16	15	13
23	5.2	4.0	3.2	2.8	2.5	4.1	5.6	97	52	17	15	13
24	5.2	4.0	2.8	2.7	2.6	4.5	6.6	91	50	17	15	13
25	5.2	4.0	2.8	2.6	2.8	4.3	7.4	89	50	17	14	13
26	5.2	4.0	2.8	2.5	2.8	3.8	8.4	85	49	17	14	12
27	5.2	4.0	2.8	2.5	2.8	3.8	9.8	79	48	16	14	12
28	5.0	4.0	2.8	2.5	2.8	3.8	11	76	48	17	14	12
29	5.0	4.0	2.8	2.5	-----	3.8	13	76	48	18	14	11
30	4.9	4.0	2.8	2.5	-----	4.1	18	79	46	17	14	11
31	4.9	-----	2.8	2.5	-----	4.1	-----	80	-----	16	14	-----
TOTAL	169.2	137.5	102.0	87.0	69.6	104.7	191.7	1,979	1,971	1,023	478	402
MEAN	5.46	4.58	3.29	2.81	2.49	3.38	6.39	63.8	65.7	33.0	15.4	13.4
MAX	5.8	5.4	4.0	3.0	2.8	4.5	18	111	82	46	17	14
MIN	4.9	4.0	2.8	2.5	2.3	2.8	4.1	14	46	16	14	11
AC-FT	336	273	202	173	138	208	380	3,930	3,910	2,030	948	797

CAL YR 1972 TOTAL 6,312.4 MEAN 17.2 MAX 162 MIN 1.4 AC-FT 12,520
WTR YR 1973 TOTAL 6,714.7 MEAN 18.4 MAX 111 MIN 2.3 AC-FT 13,320

NOTE.--No gage-height record Oct. 30 to May 18.

LOCATION (REVISED).--Lat 39°22'51", long 106°04'15", in NE¼SE¼ sec.2, T.8 S., R.78 W., Summit County, on left bank at entrance to Hoosier Pass tunnel, 1,800 ft (550 m) downstream from diversion point, 1.4 mi (2.3 km) northwest of Hoosier Pass, and 7 mi (11 km) southwest of Breckenridge.

GAGE.--Water-stage recorder and Parshall flume. Altitude of gage is 10,986 ft (3,348.5 m) from topographic map.

EXTREMES.--Period of record: Maximum daily discharge, 70 ft³/s (1.98 m³/s) June 20, 1965; no flow for most of each year.

REMARKS.--Records good. 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 SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec.2, T.8 S., R.78 W. The entire flow is regulated by diversion gates.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	UC1	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1								0	4.9	.76	.84	29
2								0	4.6	.68	.84	29
3								0	4.3	.68	8.0	29
4								0	4.2	.68	13	29
5								0	3.6	.68	16	29
6								0	4.4	.60	17	28
7								0	7.7	.60	15	27
8								0	11	2.6	14	27
9								0	13	5.5	13	27
10								0	14	4.6	12	27
11								0	13	4.4	12	26
12								0	6.9	13	11	26
13								0	.92	39	9.3	26
14								0	.92	50	8.9	26
15								0	.76	26	8.5	26
16								4.2	.76	2.1	8.7	26
17								8.7	.76	2.2	8.5	25
18								12	.76	2.8	8.9	24
19								17	.76	9.8	7.5	24
20								19	.76	4.4	7.7	24
21								18	.76	2.2	7.9	25
22								15	3.3	2.1	8.3	25
23								9.1	5.5	1.2	5.2	25
24								5.4	5.5	1.3	11	25
25								4.9	3.2	1.3	12	29
26								4.3	.84	1.4	14	32
27								3.0	.76	1.2	16	32
28								3.0	.76	1.0	16	32
29					-----			3.1	.76	1.2	22	32
30					-----			3.7	.76	.92	30	32
31		-----			-----		-----	4.4	-----	.84	29	-----
TOTAL	0	0	0	0	0	0	0	134.8	120.14	185.74	372.08	823
MEAN	0	0	0	0	0	0	0	4.35	4.00	5.99	12.0	27.4
MAX	0	0	0	0	0	0	0	19	14	50	30	32
MIN	0	0	0	0	0	0	0	0	.76	.60	.84	24
AC=FT	0	0	0	0	0	0	0	267	238	368	738	1,630
CAL YR 1972	TOTAL	1,825.32	MEAN	4.99	MAX	38	MIN	0	AC=FT	3,620		
WTR YR 1973	TOTAL	1,635.76	MEAN	4.48	MAX	50	MIN	0	AC=FT	3,240		

LOCATION (REVISED).--Lat 39°22'50", long 106°04'13", in NE¼SE¼ sec.2, T.8 S., R.78 W., Summit County, on right bank at entrance to Hoosier Pass tunnel, 1.4 mi (2.3 km) northwest of Hoosier Pass, 1.6 mi (2.6 km) downstream from diversion point on Bemrose Creek, and 7 mi (11 km) southwest of Breckenridge.

EXTREMES.--Period of record: Maximum daily discharge, 44 ft³/s (1.25 m³/s) June 21, 1965; no flow for most of each year.

REMARKS.--Records good. 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 SW $\frac{1}{4}$ SW $\frac{1}{4}$ 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.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1								0	4.5	2.7	5.0	2.0
2								0	5.8	2.3	4.8	2.0
3								0	5.7	2.1	4.7	2.0
4								0	3.2	2.1	4.5	2.0
5								0	3.2	1.9	4.3	2.0
6								0	4.7	1.7	4.0	2.0
7								0	7.0	1.7	3.8	1.9
8								0	11	7.6	3.7	1.9
9								0	17	12	5.5	2.0
10								0	26	10	5.3	2.3
11								0	28	9.7	3.2	2.1
12								0	18	11	3.0	2.0
13								0	7.0	13	2.9	1.9
14								0	7.6	13	2.7	1.7
15								0	5.7	12	2.6	1.7
16								2.1	2.2	10	2.5	1.7
17								3.5	2.0	9.1	2.5	1.7
18								4.3	2.0	10	2.5	1.6
19								4.5	1.4	11	2.7	1.5
20								5.0	1.2	9.3	2.6	1.5
21								4.5	1.5	8.9	2.6	1.5
22								3.7	10	8.4	2.5	1.5
23								3.7	17	7.8	2.5	1.5
24								4.0	18	7.4	2.5	1.5
25								4.1	18	7.0	2.3	1.5
26								3.5	9.0	6.5	2.2	1.62
27								2.7	3.3	6.3	2.1	0
28								2.5	3.5	5.9	2.1	0
29					-----			3.3	3.3	5.7	2.1	0
30					-----			3.7	3.0	5.6	2.1	0
31		-----			-----		-----	4.5	-----	5.2	2.0	-----
TOTAL	0	0	0	0	0	0	0	59.6	243.8	226.9	93.8	45.62
MEAN	0	0	0	0	0	0	0	1.92	8.13	7.32	3.03	1.52
MAX	0	0	0	0	0	0	0	5.0	28	13	5.0	2.3
MIN	0	0	0	0	0	0	0	0	1.2	1.7	2.0	0
AC=FT	0	0	0	0	0	0	0	118	484	450	186	90
CAL YR 1972	TOTAL 771.42	MEAN 2.11	MAX 25	MIN 0	AC=FT 1,530							
WTR YR 1973	TOTAL 669.72	MEAN 1.83	MAX 28	MIN 0	AC=FT 1,330							

BLUE RIVER BASIN

09044800 MCCULLOUGH-SPRUCE-CRYSTAL DIVERSION NEAR HOOSIER PASS, COLO.

LOCATION (REVISED).--Lat 39°22'51", long 106°04'14", in NE¼SE¼ sec.2, T.8 S., R.78 W., Summit County, on left bank at entrance to Hoosier Pass tunnel, 1.4 mi (2.3 km) northwest of Hoosier Pass, 1.6 mi (2.6 km) downstream from diversion point on McCullough Gulch, and 7 mi (11 km) southwest of Breckenridge.

PERIOD OF RECORD.--October 1957 to current year. Prior to October 1961, published as McCullough diversion near Hoosier Pass.

GAGE.--Water-stage recorder and Parshall flume. Altitude of gage is 10,986 ft (3,348.5 m) from topographic map.

EXTREMES.--Period of record: Maximum daily discharge, 123 ft³/s (3.48 m³/s) June 20, 1968; no flow for most of each year.

REMARKS.--Records good. This is a transmountain diversion from McCullough Gulch, 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, 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.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JUL	AUG	SEP
1								0	9.0	2.2	.50	2.7
2								0	7.4	1.4	.50	2.7
3								0	6.5	.94	.50	2.3
4								0	5.9	.72	.50	1.9
5								0	5.6	.83	.50	1.7
6								0	8.1	.72	.50	1.7
7								0	16	.72	.50	1.6
8								0	31	6.6	.50	1.6
9								0	54	5.7	.50	1.7
10								0	70	.83	.50	1.9
11								0	83	.72	.50	2.0
12								0	50	.72	.50	1.9
13								0	11	1.2	1.2	1.6
14								0	7.0	1.6	4.7	1.5
15								0	.72	1.2	4.5	1.4
16								0	.35	.72	4.5	1.5
17								0	.35	.72	4.4	1.5
18								0	.40	.72	4.5	1.3
19								0	.40	1.3	4.2	1.7
20								0	.40	.83	4.2	2.7
21								0	.45	.72	4.2	2.4
22								1.9	19	.72	4.0	2.4
23								7.4	39	.72	4.0	2.3
24								10	46	.72	4.0	2.7
25								9.0	21	.72	4.0	1.2
26								7.8	6.2	.61	3.8	.25
27								5.8	6.5	.61	3.4	.25
28								5.0	4.9	.61	3.3	.20
29					-----			5.2	4.5	.61	3.2	.20
30					-----			5.8	2.3	.50	3.2	.20
31		-----			-----		-----	7.4	-----	.50	3.2	-----
TOTAL	0	0	0	0	0	0	0	65.3	516.97	37.43	78.50	49.00
MEAN	0	0	0	0	0	0	0	2.11	17.2	1.21	2.53	1.63
MAX	0	0	0	0	0	0	0	10	83	6.6	4.7	2.7
MIN	0	0	0	0	0	0	0	0	.35	.50	.50	.20
AC-FT	0	0	0	0	0	0	0	130	1,030	74	156	97
CAL YR 1972	TOTAL	1,878.47	MEAN	5.13	MAX	98	MIN	0	AC-FT	3,730		
WTR YR 1973	TOTAL	747.20	MEAN	2.05	MAX	83	MIN	0	AC-FT	1,480		

LOCATION.--Lat 39°32'55", long 106°02'19", in NW¼NE¼ sec.7, T.6 S., R.77 W., Summit County, on right bank 0.2 mi (0.3 km) downstream from Swan River and 5.5 mi (8.8 km) south of Dillon.

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

AVERAGE DISCHARGE.--16 years, 98.2 ft³/s (2.781 m³/s), 71,150 acre-ft/yr (87.7 hm³/yr), including diversion to Hoosier Pass tunnel.

EXTREMES.--Current year: Maximum discharge, 852 ft³/s (24.1 m³/s), June 14 (gage height, 5.02 ft or 1.530 m); minimum daily, 22 ft³/s (0.62 m³/s) Feb. 24, Feb. 26 to Mar. 2, Mar. 4-16.
Period of record: Maximum discharge, 1,250 ft³/s (35.4 m³/s) June 17, 1965 (gage height, 5.38 ft or 1.640 m), from rating curve extended above 610 ft³/s (17 m³/s); minimum daily, 17 ft³/s (0.48 m³/s) Mar. 21, 1961.

REMARKS.--Records good. Transmountain diversion above station by Boreas Pass ditch and Hoosier Pass tunnel (see elsewhere in this report).

REVISIONS.--WSP 2124: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	45	35	32	28	23	22	23	31	188	421	152	62
2	45	34	32	28	23	22	23	30	206	394	146	60
3	45	34	33	27	23	23	23	30	206	362	139	58
4	44	34	33	27	23	22	23	31	203	340	135	57
5	43	34	32	27	23	22	23	32	197	324	131	55
6	42	34	32	27	23	22	23	34	182	311	134	51
7	42	33	32	26	23	22	23	34	185	292	133	51
8	43	33	32	26	23	22	23	34	218	288	126	49
9	43	34	32	26	23	22	23	39	296	320	118	48
10	44	33	32	26	23	22	23	48	408	288	110	47
11	44	34	32	26	23	22	23	68	540	257	107	48
12	42	34	32	26	24	22	23	96	579	248	103	49
13	41	34	31	25	24	22	23	125	644	276	97	48
14	41	33	31	25	24	22	23	145	782	312	93	47
15	40	33	30	25	24	22	24	163	749	300	87	46
16	40	33	30	26	24	22	23	175	578	288	83	44
17	41	33	30	25	24	23	23	183	445	272	80	44
18	40	33	30	25	23	23	24	212	414	254	79	44
19	40	33	30	25	23	23	24	269	367	276	77	43
20	39	32	30	25	23	23	24	312	324	316	75	43
21	39	33	30	25	23	23	24	327	312	268	73	42
22	39	32	29	25	23	24	24	307	324	248	72	42
23	40	32	29	25	23	23	24	269	312	227	72	41
24	39	31	28	25	22	23	24	250	320	203	69	40
25	39	31	29	24	23	23	24	248	324	192	67	40
26	37	31	29	24	22	23	24	239	386	186	65	40
27	36	31	28	24	22	23	25	218	470	183	64	40
28	36	31	29	24	22	23	25	191	496	176	84	41
29	36	31	28	24	-----	23	27	176	480	167	61	42
30	35	33	28	23	-----	23	30	173	465	165	59	42
31	35	-----	27	23	-----	23	-----	176	-----	161	60	-----
TOTAL	1,255	986	942	787	646	699	715	4,665	11,600	8,315	2,951	1,404
MEAN	40.5	32.9	30.4	25.4	23.1	22.5	23.8	150	387	268	95.2	46.8
MAX	45	35	33	28	24	24	30	327	782	421	152	62
MIN	35	31	27	23	22	22	23	30	182	161	59	40
AC-FT	2,490	1,960	1,870	1,560	1,280	1,390	1,420	9,250	23,010	16,490	5,850	2,780
CAL YR 1972	TOTAL 29,945			MEAN 81.8	MAX 519	MIN 23	AC-FT 59,400					
WTR YR 1973	TOTAL 34,965			MEAN 95.8	MAX 782	MIN 22	AC-FT 69,350					

BLUE RIVER BASIN

09047500 SNAKE RIVER NEAR MONTEZUMA, COLO.

LOCATION.--Lat 39°36'20", long 105°56'33", in NW¼ sec.19, T.5 S., R.76 W. (projected), Summit County, on right bank 200 ft (61 m) downstream from North Fork and 4.5 mi (7.2 km) northwest of Montezuma.

DRAINAGE AREA.--57.7 mi² (149 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 9,320 ft (2,841 m) from topographic map. Prior to Oct. 14, 1943, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--26 years, 60.5 ft³/s (1.713 m³/s), 43,830 acre-ft/yr (54.0 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 665 ft³/s (18.8 m³/s) June 13 (gage height, 3.76 ft or 1.146 m); minimum daily, 7.0 ft³/s (0.20 m³/s) Feb. 15.

Period of record: Maximum discharge, 1,250 ft³/s (35.4 m³/s) June 10, 1952 (gage height, 3.51 ft or 1.070 m); maximum gage height, 3.88 ft (1.183 m) June 6, 1972; minimum not determined.

REMARKS.--Records good except those for winter period, which are poor. Small diversions above station for irrigation and domestic use.

REVISIONS.--WSP 2124: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33	24	18	15	11	7.4	7.2	14	113	262	84	41
2	32	23	18	14	11	7.4	7.2	14	99	240	80	41
3	31	25	18	14	10	7.4	7.2	16	96	218	80	39
4	31	25	18	14	10	7.4	7.2	16	88	200	87	37
5	30	25	18	14	10	7.4	7.2	17	84	191	84	35
6	30	24	18	14	10	7.4	7.2	15	98	179	61	33
7	30	24	18	14	10	7.4	7.2	15	143	169	76	32
8	30	24	18	14	10	7.4	7.2	16	228	171	70	32
9	32	24	17	14	10	7.4	7.2	19	320	175	66	34
10	30	24	16	14	10	7.4	7.2	27	398	158	63	35
11	29	24	16	14	10	7.4	7.2	36	454	148	62	35
12	28	24	16	14	9.0	7.4	7.4	42	444	143	59	32
13	29	24	16	14	8.0	7.4	7.6	46	495	166	57	31
14	28	24	16	14	7.2	7.4	8.0	48	491	198	56	29
15	30	24	16	14	7.0	7.4	8.0	51	349	188	54	28
16	31	24	16	14	7.2	7.4	8.0	60	265	171	51	31
17	29	23	16	14	7.4	7.4	8.0	69	240	150	51	31
18	30	22	16	14	7.4	7.4	8.0	88	240	154	52	28
19	30	21	16	14	7.4	7.4	8.0	114	193	193	49	26
20	28	20	16	13	7.4	7.4	8.2	129	195	173	48	26
21	27	20	16	12	7.4	7.4	8.4	131	215	162	48	25
22	27	20	16	11	7.4	7.4	8.0	122	240	143	48	25
23	26	20	16	11	7.4	7.4	9.2	104	248	127	46	24
24	25	20	16	11	7.4	7.4	9.8	99	250	122	45	26
25	26	19	16	11	7.4	7.4	9.2	98	272	113	45	26
26	25	18	16	11	7.4	7.4	9.2	92	311	108	45	27
27	23	18	16	11	7.4	7.4	10	76	317	106	43	24
28	24	18	16	11	7.4	7.4	11	74	302	104	40	27
29	24	18	16	11	-----	7.4	12	81	293	99	40	27
30	23	18	16	11	-----	7.4	13	86	275	94	42	28
31	23	-----	16	11	-----	7.4	-----	94	-----	90	44	-----
TOTAL	882	661	513	402	239.2	229.4	250.2	1,909	7,736	4,915	1,796	915
MEAN	28.5	22.0	16.5	13.0	8.54	7.40	8.34	61.6	258	159	57.9	30.5
MAX	38	25	18	15	11	7.4	13	131	495	262	88	41
MIN	23	18	16	11	7.0	7.4	7.2	14	84	90	40	24
AC-FT	1,750	1,310	1,020	797	474	455	496	3,790	15,340	9,750	3,560	1,810

CAL YR 1972 TOTAL 22,339.0 MEAN 61.0 MAX 575 MIN 10 AC-FT 44,310

WTH YR 1973 TOTAL 20,447.8 MEAN 56.0 MAX 495 MIN 7.0 AC-FT 40,560

PEAK DISCHARGE (BASE, 500 CFS).--June 13 (1900) 665 cfs (3.76 ft).

NOTE.--No gage-height record Dec. 7 to Apr. 9.

BLUE RIVER BASIN

183

09047700 KEYSTONE GULCH NEAR DILLON, COLO.

LOCATION.--Lat 39°35'40", long 105°58'19", in NE¼NE¼ sec.26, T.5 S., R.77 W., Summit County, on right bank 0.7 mi (1.1 km) upstream from mouth and 4.7 mi (7.6 km) southeast of Dillon.

DRAINAGE AREA.--9.10 mi² (23.6 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 9,350 ft (2,850 m) from topographic map.

AVERAGE DISCHARGE.--16 years, 5.62 ft³/s (0.16 m³/s), 4,070 acre-ft/yr (5.02 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 65 ft³/s (1.84 m³/s) June 13 (gage height, 2.58 ft or 0.786 m); minimum daily, 1.3 ft³/s (0.037 m³/s) Feb. 15.
Period of record: Maximum discharge, 90 ft³/s (2.55 m³/s) June 5, 1958 (gage height, 2.75 ft or 0.838 m), from rating curve extended above 28 ft³/s (0.80 m³/s; minimum not determined).

REMARKS.--Records good except those for winter period, which are poor. No known diversion above station.

REVISIONS.--WSP 2124: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.0	2.4	2.0	2.0	1.8	1.4	1.4	2.1	14	16	8.1	5.0
2	3.0	2.4	2.0	2.0	1.7	1.4	1.4	2.2	14	15	7.8	5.0
3	3.0	2.4	2.0	2.0	1.6	1.4	1.4	2.1	13	15	7.8	4.7
4	3.0	2.4	2.0	2.0	1.6	1.4	1.4	2.2	12	14	7.8	4.4
5	3.0	2.4	2.0	2.0	1.6	1.4	1.4	2.2	12	14	6.1	4.2
6	3.0	2.4	2.0	2.0	1.6	1.4	1.4	2.1	13	13	7.8	4.0
7	3.0	2.4	2.0	2.0	1.5	1.4	1.4	2.0	16	13	7.8	3.7
8	3.5	2.4	2.0	2.0	1.4	1.4	1.4	2.0	20	13	7.4	3.7
9	3.1	2.4	2.0	1.9	1.4	1.4	1.4	2.3	26	13	7.0	4.0
10	3.0	2.4	2.0	1.8	1.4	1.4	1.4	3.0	32	11	6.6	4.0
11	2.8	2.4	2.0	1.8	1.4	1.4	1.4	4.0	46	11	6.6	4.0
12	2.8	2.4	2.0	1.8	1.4	1.4	1.4	4.4	45	13	6.2	3.7
13	2.8	2.4	2.0	1.8	1.4	1.4	1.4	4.7	51	14	5.9	3.7
14	2.8	2.4	2.0	1.8	1.4	1.4	1.4	4.4	49	15	5.9	3.5
15	3.0	2.4	2.0	1.8	1.3	1.4	1.4	4.7	41	13	5.6	3.5
16	3.1	2.4	2.0	1.8	1.4	1.4	1.4	5.6	35	12	5.6	3.5
17	3.0	2.4	2.0	1.8	1.4	1.4	1.4	7.0	32	10	5.3	3.7
18	3.0	2.3	2.0	1.8	1.4	1.4	1.4	10	31	11	5.0	3.5
19	3.0	2.1	2.0	1.8	1.4	1.4	1.4	13	28	12	5.0	3.5
20	3.0	2.0	2.0	1.8	1.4	1.4	1.4	15	26	11	5.3	3.3
21	3.0	2.0	2.0	1.8	1.4	1.4	1.4	16	26	11	5.3	3.1
22	2.8	2.0	2.0	1.8	1.4	1.4	1.4	16	24	11	5.0	3.1
23	3.0	2.0	2.0	1.8	1.4	1.4	1.4	15	24	10	5.0	3.1
24	3.0	2.0	2.0	1.8	1.4	1.4	1.4	16	24	9.3	5.0	3.3
25	2.8	2.0	2.0	1.8	1.4	1.4	1.4	15	25	9.3	5.0	3.5
26	3.0	2.0	2.0	1.8	1.4	1.4	1.4	14	24	8.9	5.0	3.5
27	2.8	2.0	2.0	1.8	1.4	1.4	1.5	15	23	8.9	5.0	3.5
28	2.6	2.0	2.0	1.8	1.4	1.4	1.6	11	21	8.9	5.0	3.5
29	2.5	2.0	2.0	1.8	-----	1.4	1.8	12	20	8.5	4.7	3.5
30	2.6	2.0	2.0	1.8	-----	1.4	2.0	12	18	8.5	5.0	3.5
31	2.4	-----	2.0	1.8	-----	1.4	-----	13	-----	8.1	5.3	-----
TOTAL	90.4	67.2	62.0	57.5	40.7	43.4	43.3	248.0	785	361.4	187.9	112.2
MEAN	2.92	2.24	2.00	1.85	1.45	1.40	1.44	8.00	26.2	11.7	6.06	3.74
MAX	3.5	2.4	2.0	2.0	1.8	1.4	2.0	16	51	16	8.1	5.0
MIN	2.4	2.0	2.0	1.8	1.3	1.4	1.4	2.0	12	8.1	4.7	3.1
AC-FT	179	133	123	114	81	86	86	492	1,560	717	373	223

CAL YR 1972 TOTAL 2,093.3 MEAN 5.72 MAX 41 MIN 2.0 AC-FT 4,150
WTR YR 1973 TOTAL 2,099.0 MEAN 5.75 MAX 51 MIN 1.3 AC-FT 4,160

PEAK DISCHARGE (BASE, 35 CFS)--June 13 (2030) 65 cfs (2.58 ft).

NOTE.--No gage-height record Nov. 2 to May 4.

BLUE RIVER BASIN

09050100 TENMILE CREEK BELOW NORTH TENMILE CREEK, AT FRISCO, COLO.

LOCATION.--Lat 39°34'37", long 106°06'33", in SW¼NE¼ sec.34, T.5 S., R.78 W., Summit County, on left bank 600 ft (180 m) downstream from bridge on U.S. Highway 6, 850 ft (260 m) downstream from North Tenmile Creek, and 0.6 mi (1.0 km) west of Frisco.

DRAINAGE AREA.--93.3 mi² (241.6 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 9,090 ft (2,771 m) from topographic map.

AVERAGE DISCHARGE.--16 years, 91.7 ft³/s (2.597 m³/s), 66,440 acre-ft/yr (81.9 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 950 ft³/s (26.9 m³/s) June 14 (gage height, 5.22 ft or 1.591 m); maximum gage height, 5.33 ft (1.625 m) June 11 (backwater from debris); minimum daily discharge, 11 ft³/s (0.31 m³/s) Feb. 15.

Period of record: Maximum discharge, 1,910 ft³/s (54.1 m³/s) June 16, 1965 (gage height, 6.15 ft or 1.875 m), from rating curve extended above 750 ft³/s (21 m³/s); minimum daily, 7 ft³/s (0.20 m³/s) Mar. 8, 14, 1960.

REMARKS.--Records good except those for winter period, which are poor. Natural flow of stream affected by a few small diversions above station for irrigation and municipal use and transbasin diversion from Robinson Reservoir (capacity, 2,520 acre-ft or 3.11 hm³) in Eagle River basin.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	25	18	15	13	14	14	19	341	482	90	30
2	29	25	18	15	13	14	14	20	292	444	85	40
3	28	24	18	15	13	14	14	20	262	395	79	30
4	27	24	18	15	13	14	14	23	242	370	77	30
5	29	23	16	15	13	14	14	27	215	346	88	30
6	28	22	16	15	13	14	14	31	242	310	92	30
7	30	22	16	15	13	14	14	28	318	275	83	30
8	40	22	16	15	13	14	13	27	466	271	77	30
9	35	22	16	15	13	14	13	32	618	296	69	30
10	32	22	16	15	13	14	13	41	695	254	64	30
11	30	22	16	15	13	14	13	68	721	230	62	30
12	29	23	16	15	13	14	13	90	708	222	58	30
13	28	23	16	15	12	14	13	121	740	266	55	30
14	27	23	16	15	12	14	13	134	788	310	54	20
15	31	23	16	15	11	14	13	142	656	254	53	20
16	36	23	16	15	12	14	13	178	516	222	50	20
17	33	23	16	15	12	14	13	215	472	198	50	30
18	33	23	16	15	12	14	13	310	477	198	52	20
19	32	23	16	15	12	15	13	438	406	254	46	20
20	31	21	16	15	13	15	13	438	400	208	45	20
21	29	21	16	14	13	16	13	433	450	181	46	20
22	29	20	16	14	13	16	13	400	477	166	46	20
23	29	18	16	14	13	16	13	355	510	147	43	20
24	24	18	16	14	13	16	14	370	528	134	43	20
25	24	18	16	14	13	15	14	370	546	130	42	20
26	25	18	16	14	13	15	14	346	624	123	41	30
27	25	18	16	14	13	14	14	262	636	114	40	20
28	26	18	16	14	13	14	15	222	588	108	39	30
29	24	18	16	14	-----	14	17	226	546	108	38	30
30	23	18	15	14	-----	14	18	254	510	100	40	20
31	24	-----	15	14	-----	14	-----	284	-----	96	41	-----
TOTAL	898	643	502	454	356	446	412	5,924	14,990	7,212	1,788	930
MEAN	29.0	21.4	16.2	14.6	12.7	14.4	13.7	191	500	233	57.7	31.0
MAX	40	25	18	15	13	16	18	438	788	482	92	40
MIN	23	18	15	14	11	14	13	19	215	96	38	20
AC-FT	1,780	1,280	996	901	706	885	817	11,750	29,730	14,310	3,550	1,850

CAL YR 1972 TOTAL 34,447 MEAN 94.1 MAX 781 MIN 13 AC-FT 68,330
 WTR YR 1973 TOTAL 34,557 MEAN 94.7 MAX 788 MIN 11 AC-FT 68,540

PEAK DISCHARGE (BASE, 700 CFS).--June 14 (0030) 950 cfs (5.22 ft).

NOTE.--No gage-height record Dec. 8 to Apr. 8.

BLUE RIVER BASIN

185

09050600 DILLON RESERVOIR AT DILLON, COLO.

LOCATION.--Lat 39°37'14", long 106°03'53", in NE¼ sec.13, T.5 S., R.78 W., Summit County, in gatehouse at dam on Blue River, 0.8 mi (1.3 km) upstream from Straight Creek, about 1.3 mi (2.1 km) southwest of Dillon, and 3.5 mi (5.6 km) northeast of Frisco.

DRAINAGE AREA.--335 mi² (868 km²).

PERIOD OF RECORD.--September 1963 to current year.

GAGE.--Nonrecording gage read once daily. Datum of gage is at mean sea level (levels by Denver Board of Water Commissioners).

EXTREMES (at 0800).--Current year: Maximum contents, 260,700 acre-ft (321 hm³) June 27 (elevation, 9,019.02 ft or 2,748.997 m); minimum, 219,100 acre-ft (270 hm³) Feb. 20, Mar. 23-26 (elevation, 9,005.46 ft or 2,744.864 m). Period of record: Maximum contents, 261,300 acre-ft (322 hm³) June 25, 1971 (elevation, 9,019.20 ft or 2,749.052 m); minimum since appreciable storage was attained in July 1964, 45,310 acre-ft (55.9 hm³) Apr. 20, 1965 (elevation, 8,904.16 ft or 2,713.988 m).

REMARKS.--Reservoir is formed by earth and rockfill dam. Dam completed and storage began Sept. 3, 1963; dead storage pool filled Sept. 12, 1963. Capacity, 254,000 acre-ft (313 hm³) between elevations 8,829.00 ft or 2,691.079 m (invert of valves in outlet to Blue River) and 9,017.00 ft or 2,748.382 m (crest of spillway). Dead storage, 3,270 acre-ft (4.03 hm³). Reservoir is used to store water for transmountain diversion to South Platte River basin through Harold D. Roberts tunnel (see elsewhere in this report) for municipal use by city of Denver. Figures given represent usable contents.

COOPERATION.--Records furnished by Denver Board of Water Commissioners.

MONTHEND ELEVATION AND CONTENTS AT 0800, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	ELEVATION (FEET)	CONTENTS (ACRE-Feet)	CHANGE IN CONTENTS (ACRE-Feet)
Sept. 30.....	9,006.06	220,800	-
Oct. 31.....	9,006.01	220,600	-200
Nov. 30.....	9,006.16	221,100	+500
Dec. 31.....	9,005.83	220,100	-1,000
CAL YR 1972.....	-	-	-16,000
Jan. 31.....	9,005.53	219,300	-800
Feb. 28.....	9,005.52	219,300	0
Mar. 31.....	9,005.49	219,200	-100
Apr. 30.....	9,005.58	219,400	+200
May 31.....	9,009.10	229,600	+10,200
June 30.....	9,018.93	260,400	+30,800
July 31.....	9,017.83	256,800	-3,600
Aug. 31.....	9,017.43	255,400	-1,400
Sept. 30.....	9,017.34	255,200	-200
WTR YR 1973.....	-	-	+34,400

BLUE RIVER BASIN

09050700 BLUE RIVER BELOW DILLON, COLO.

LOCATION.--Lat 39°37'32", long 106°03'57", in SE¼SE¼ sec.12, T.5 S., R.78 W., Summit County, on right bank 0.3 mi (0.5 km) downstream from Dillon Dam, 0.1 mi (0.2 km) upstream from Straight Creek, and 1.1 mi (1.8 km) west of Dillon.

DRAINAGE AREA.--335 mi² (868 km²).

PERIOD OF RECORD.--January 1960 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 8,760 ft (2,670 m) from topographic map. Supplemental water-stage recorder and Parshall flume on Valear ditch about 300 ft (91 m) downstream from point of diversion.

AVERAGE DISCHARGE (COMBINED FLOW).--10 years (1963-73), 198 ft³/s (5.607 m³/s), 143,500 acre-ft/yr (177 hm³/yr), since completion of Dillon Reservoir.

EXTREMES (COMBINED FLOW).--Current year: Maximum discharge, 1,470 ft³/s (41.6 m³/s) June 29 (gage height, 3.39 ft or 1.033 m); minimum daily, 46 ft³/s (1.30 m³/s) Feb. 22 to Mar. 5.

Period of record: Maximum discharge, 1,800 ft³/s (51.0 m³/s) May 23, 1970 (gage height, 3.63 ft or 1.106 m); maximum gage height, 3.68 ft (1.122 m) June 26, 1971; no flow Sept. 4 to Nov. 19, 1963.

REMARKS.--Records good. Records show combined flow of river and Valear ditch. Flow regulated since Sept. 3, 1963, by Dillon Reservoir, 0.3 mi (0.5 km) upstream (see sta. 09050600). Natural flow of stream affected by transmountain diversions, transbasin diversions, and diversions above station for irrigation of about 400 acres (1.62 km²) of hay meadows. Valear ditch diverts water just below Dillon Dam for irrigation below station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

JAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	126	95	74	55	67	46	51	89	425	1,360	405	161
2	109	79	72	55	70	46	51	129	430	1,300	380	157
3	98	70	72	55	67	46	51	157	430	1,220	367	150
4	98	70	72	60	67	46	51	161	425	1,130	356	147
5	98	70	81	67	67	46	50	157	425	1,060	354	140
6	98	70	89	67	67	50	50	157	425	986	358	136
7	98	70	89	67	67	51	50	157	425	923	344	133
8	98	70	89	67	67	51	50	157	425	874	336	129
9	98	70	89	67	67	51	51	157	425	881	318	126
10	98	70	89	67	67	51	51	157	425	860	304	126
11	98	70	89	67	67	51	51	231	430	804	283	129
12	98	70	89	67	67	51	51	358	430	770	271	129
13	116	70	89	67	67	51	51	400	430	784	259	126
14	123	70	89	67	60	70	51	420	430	853	247	126
15	123	70	89	67	58	84	51	430	450	874	235	119
16	123	70	89	67	58	70	51	430	564	846	227	119
17	123	70	89	67	58	63	56	430	680	797	219	119
18	123	70	67	67	60	63	60	430	895	751	219	112
19	123	70	55	67	60	63	72	430	1,010	770	211	109
20	123	70	55	67	60	63	76	430	1,020	784	204	103
21	123	67	55	67	53	63	76	430	1,040	764	197	101
22	123	67	55	67	46	63	76	430	1,080	718	197	95
23	123	67	55	65	46	56	79	430	1,130	666	193	95
24	123	58	55	65	46	51	79	430	1,180	612	190	95
25	103	55	55	65	46	51	79	430	1,200	558	186	95
26	92	55	55	65	46	50	79	430	1,280	524	175	101
27	92	55	55	65	46	50	79	430	1,400	496	172	98
28	95	55	55	65	46	50	79	430	1,460	475	165	98
29	95	55	55	65	-----	51	76	430	1,450	455	161	103
30	95	65	55	65	-----	51	76	425	1,420	435	161	103
31	95	-----	55	65	-----	51	-----	425	-----	420	161	-----
TOTAL	3,351	2,033	2,221	2,016	1,663	1,700	1,854	10,187	23,239	24,750	7,857	3,580
MEAN	108	67.8	71.6	65.0	59.4	54.8	61.8	329	775	798	253	119
MAX	126	95	89	67	70	84	79	430	1,460	1,360	405	161
MIN	92	55	55	55	46	46	50	89	425	420	161	95
AC-FT	6,650	4,030	4,410	4,000	3,300	3,370	3,680	20,210	46,090	49,090	15,580	7,100

CAL YR 1972 TOTAL 85,997 MEAN 235 MAX 1,660 MIN 50 AC-FT 170,600
 MIN YR 1973 TOTAL 84,451 MEAN 231 MAX 1,460 MIN 46 AC-FT 167,500

BLUE RIVER BASIN

187

09052000 ROCK CREEK NEAR DILLON, COLO.

LOCATION.--Lat 39°43'23", long 106°07'41", in NE¼ sec.9, T.4 S., R.78 W., Summit County, on right bank 500 ft (150 m) upstream from bridge on State Highway 9, 1,100 ft (340 m) upstream from mouth, 1,200 ft (370 m) downstream from confluence of North and South Rock Creeks, and 8 mi (13 km) northwest of Dillon.

DRAINAGE AREA.--15.8 mi² (40.9 km²).

PERIOD OF RECORD.--July 1942 to September 1956, October 1966 to current year.

GAGE.--Water-stage recorder. Datum of gage is 8,502.52 ft (2,591.568 m) above mean sea level (State Highway Department bench mark). Prior to Apr. 21, 1943, nonrecording gage and Apr. 21, 1943, to Sept. 13, 1950, water-stage recorder, at site 500 ft (150 m) downstream at datum 28.76 ft (8.766 m) lower.

AVERAGE DISCHARGE.--21 years, 23.1 ft³/s (0.654 m³/s) 16,740 acre-ft/yr (20.6 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 289 ft³/s (8.18 m³/s) June 10 (gage height, 4.35 ft or 1.326 m), from rating curve extended above 154 ft³/s (4.4 m³/s); minimum daily, 3.7 ft³/s (0.10 m³/s) Mar. 2.

Period of record: Maximum discharge, 289 ft³/s (8.18 m³/s) June 10, 1973 (gage height, 4.35 ft or 1.326 m), from rating curve extended above 154 ft³/s (4.4 m³/s); maximum gage height, 4.36 ft (1.329 m) June 24, 1971; minimum daily discharge, 2.2 ft³/s (0.062 m³/s) Apr. 13, 17, 1945.

REMARKS.--Records good except those for winter period, which are poor. A few small diversions for irrigation of hay meadows above and below station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.9	8.4	6.4	5.6	4.7	3.8	4.0	8.4	62	127	31	14
2	9.1	8.6	6.4	5.4	4.7	3.7	4.0	7.8	57	119	31	13
3	8.4	7.8	6.4	5.0	4.5	3.9	4.0	9.0	45	109	30	12
4	8.2	7.6	6.4	4.8	4.1	3.9	4.0	11	39	100	33	10
5	8.2	7.6	6.5	4.6	3.9	3.9	4.0	12	35	89	46	9.6
6	8.1	7.4	6.5	4.6	3.9	3.9	4.0	8.5	40	88	57	9.4
7	8.4	7.4	6.4	4.6	3.9	3.9	4.0	7.9	62	87	42	10
8	15	7.4	6.4	4.6	3.9	3.9	4.2	8.4	96	87	41	9.6
9	16	7.4	6.4	4.6	3.9	3.9	4.1	12	131	86	38	9.2
10	14	7.2	6.4	4.6	3.9	3.9	4.1	18	186	84	34	9.6
11	12	7.0	6.5	4.6	3.9	3.9	4.2	24	182	77	31	11
12	11	7.0	6.5	4.6	3.9	3.9	4.3	30	152	76	30	11
13	10	7.0	6.3	4.6	3.9	3.9	4.7	35	170	81	28	9.8
14	10	6.8	6.2	4.6	3.9	3.9	5.1	35	178	104	25	9.1
15	12	6.8	6.2	4.6	3.9	3.9	5.1	44	130	84	24	8.6
16	17	6.8	6.2	4.6	3.9	3.9	4.7	51	92	81	23	8.9
17	14	6.8	6.2	4.6	3.9	3.9	4.7	56	65	63	25	9.5
18	15	6.7	6.2	4.6	3.9	4.0	4.7	68	64	59	31	8.4
19	15	6.8	6.2	4.6	3.9	4.0	4.5	87	54	71	26	7.8
20	14	6.6	6.2	4.6	3.9	4.0	4.2	93	53	75	23	7.5
21	13	6.4	6.2	4.6	3.9	4.0	4.1	89	71	66	23	7.2
22	13	6.2	6.2	4.6	3.9	4.0	4.0	67	94	51	24	7.0
23	12	6.1	6.2	4.6	3.9	4.0	4.2	50	106	41	23	7.0
24	11	6.4	6.0	4.6	3.9	4.0	4.2	49	110	40	21	7.9
25	9.9	6.4	5.8	4.6	3.9	4.0	4.3	58	120	40	20	8.6
26	9.4	6.4	5.8	4.6	3.9	4.0	4.6	50	145	39	18	8.7
27	9.3	6.4	5.8	4.6	3.9	4.0	5.2	35	145	41	17	7.9
28	9.8	6.0	5.8	4.6	3.9	4.0	6.2	29	138	37	16	8.2
29	9.5	6.0	5.8	4.6	-----	4.0	7.4	30	141	37	15	7.8
30	8.9	6.2	5.8	4.7	-----	4.0	9.0	36	134	37	14	7.3
31	8.6	-----	5.8	4.7	-----	4.0	-----	42	-----	33	14	-----
TOTAL	349.7	207.0	192.5	145.2	111.6	122.0	139.8	1,161.0	3,097	2,209	854	275.6
MEAN	11.3	6.90	6.21	4.68	3.99	3.94	4.66	37.5	103	71.3	27.5	9.19
MAX	17	8.4	6.8	5.6	4.7	4.0	9.0	93	186	127	57	14
MIN	8.1	6.0	5.8	4.6	3.9	3.7	4.0	7.8	35	33	14	7.0
AC-FT	694	411	382	288	221	242	277	2,300	6,140	4,380	1,690	547

CAL YR 1972 TOTAL 8,264.4 MEAN 22.6 MAX 164 MIN 3.3 AC-FT 16,390
WTR YR 1973 TOTAL 8,864.4 MEAN 24.3 MAX 186 MIN 3.7 AC-FT 17,580

PEAK DISCHARGE (BASE, 160 CFS).--June 10 (2300) 289 cfs (4.35 ft); June 26 (2300) 217 cfs (4.08 ft).

NOTE.--No gage-height record Dec. 24 to Apr. 8.

BLUE RIVER BASIN

09052400 BOULDER CREEK AT UPPER STATION, NEAR DILLON, COLO.

LOCATION.--Lat 39°43'41", long 106°10'22", in SW¼SW¼ sec.6, T.4 S., R.78 W., Summit County, on left bank 1.2 mi (1.9 km) downstream from Boulder Lake, 3.2 mi (5.1 km) upstream from mouth, and 9.4 mi (15.1 km) northwest of Dillon.

DRAINAGE AREA.--8.56 mi² (22.2 km²).

PERIOD OF RECORD.--October 1966 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 9,460 ft (2,883 m) from topographic map.

AVERAGE DISCHARGE.--7 years, 16.2 ft³/s (0.459 m³/s), 11,740 acre-ft/yr (14.5 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 159 ft³/s (4.50 m³/s) June 11 (gage height, 2.97 ft or 0.905 m, from recorded range in stage); minimum daily, 1.3 ft³/s (0.037 m³/s) Feb. 20.

Period of record: Maximum discharge, 178 ft³/s (5.04 m³/s) June 24, 1971 (gage height, 3.05 ft or 0.930 m); minimum daily, 1.2 ft³/s (0.034 m³/s) Feb. 22, 1968, Jan. 13-19, 21, 22, 25-29, Mar. 9, 1970.

REMARKS.--Records good except those for winter period, which are poor.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.1	4.5	2.7	2.0	1.7	1.4	1.4	4.8	40	93	24	9.6
2	5.9	4.5	2.7	2.0	1.7	1.4	1.4	4.3	44	81	23	9.2
3	5.5	4.5	2.9	2.0	1.7	1.4	1.4	3.8	38	73	23	8.9
4	5.2	4.5	3.0	2.2	1.6	1.4	1.4	4.5	32	67	24	7.8
5	5.0	4.2	2.9	2.2	1.6	1.4	1.4	6.0	27	62	32	7.2
6	5.0	4.1	2.8	2.1	1.6	1.4	1.4	7.4	26	64	40	6.3
7	5.0	4.0	2.8	2.0	1.6	1.4	1.4	6.8	37	62	30	6.3
8	7.2	5.9	3.0	1.9	1.5	1.4	1.4	6.6	50	59	26	6.3
9	8.9	5.8	2.9	1.9	1.4	1.4	1.4	8.6	74	58	25	6.3
10	9.2	3.7	2.8	2.0	1.4	1.4	1.4	10	103	60	22	6.3
11	8.0	3.5	2.6	1.8	1.4	1.4	1.4	14	111	56	20	6.9
12	7.5	3.5	2.6	1.7	1.4	1.4	1.4	20	98	53	19	7.5
13	7.2	3.4	2.5	1.6	1.4	1.4	1.4	24	98	56	18	7.2
14	6.6	3.3	2.5	1.6	1.4	1.4	1.4	23	106	75	18	6.3
15	6.9	3.2	2.3	1.6	1.4	1.4	1.4	21	84	52	18	5.9
16	8.6	3.2	2.2	1.6	1.4	1.4	1.4	24	52	56	18	5.7
17	8.0	3.1	2.1	1.6	1.4	1.4	1.4	27	40	47	16	5.7
18	8.0	3.0	2.1	1.6	1.4	1.4	1.4	40	32	46	18	5.2
19	8.0	2.9	2.1	1.7	1.4	1.4	1.4	50	30	56	18	4.8
20	8.0	2.8	2.1	1.8	1.3	1.4	1.4	58	31	58	16	4.6
21	7.8	2.7	2.1	1.8	1.4	1.4	1.5	52	41	49	15	4.4
22	7.5	2.7	2.1	1.7	1.4	1.4	1.6	45	58	38	15	4.1
23	6.9	2.7	2.1	1.7	1.4	1.4	1.8	41	69	31	15	3.9
24	6.1	2.7	2.1	1.7	1.4	1.4	2.0	42	69	31	15	3.9
25	5.9	2.7	2.1	1.7	1.4	1.4	2.4	48	76	31	15	4.4
26	5.7	2.7	2.1	1.7	1.4	1.4	2.5	38	100	30	14	4.2
27	5.5	2.7	2.1	1.7	1.4	1.4	2.5	29	109	30	13	4.2
28	5.5	2.7	2.1	1.7	1.4	1.4	2.7	25	102	28	12	4.2
29	5.2	2.7	2.1	1.7	-----	1.4	3.6	25	100	26	11	4.2
30	5.2	2.7	2.2	1.7	-----	1.4	4.0	26	93	26	11	3.8
31	5.0	-----	2.2	1.7	-----	1.4	-----	26	-----	25	9.6	-----
TOTAL	206.1	100.6	74.9	55.7	40.9	43.4	52.6	760.8	1,970	1,579	593.6	175.3
MEAN	6.65	3.35	2.42	1.80	1.46	1.40	1.75	24.5	65.7	50.9	19.1	5.88
MAX	9.2	4.5	3.0	2.2	1.7	1.4	4.0	58	111	93	40	9.6
MIN	5.0	2.7	2.1	1.6	1.3	1.4	1.4	3.8	26	25	9.6	3.8
AC-FT	409	200	149	110	81	86	104	1,510	3,910	3,150	1,180	348

CAL YR 1972 TOTAL 5,509.5 MEAN 15.1 MAX 109 MIN 1.7 AC-FT 10,930

WTR YR 1973 TOTAL 5,652.9 MEAN 15.5 MAX 111 MIN 1.3 AC-FT 11,210

PEAK DISCHARGE (BASE, 120 CFS).--June 11 (time unknown) 159 cfs (2.97 ft); June 26 (2230) 153 cfs (2.95 ft).

NOTE.--No gage-height record Oct. 30 to May 17, May 18 to June 18.

09052800 SLATE CREEK AT UPPER STATION, NEAR DILLON, COLO.

LOCATION.--Lat 39°45'47", long 106°11'31", in SW¼NW¼ sec.25, T.3 S., R.79 W., Summit County, on left bank 0.2 mi (0.3 km) upstream from unnamed tributary, 2.7 mi (4.3 km) upstream from mouth, and 12 mi (19.3 km) northwest of Dillon.

DRAINAGE AREA.--14.2 mi² (36.8 km²).

PERIOD OF RECORD.--October 1966 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 9,040 ft (2,755 m) from topographic map.

AVERAGE DISCHARGE.--7 years, 25.0 ft³/s (0.708 m³/s), 18,110 acre-ft/yr (22.3 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 231 ft³/s (6.54 m³/s) June 11 (gage height, 5.01 ft or 1.527 m); minimum daily, 2.4 ft³/s (0.068 m³/s) Feb. 15.
Period of record: Maximum discharge, 252 ft³/s (7.14 m³/s) May 25, 1967 (gage height, 5.15 ft or 1.570 m), from rating curve extended above 170 ft³/s (4.8 m³/s); minimum daily, 1.8 ft³/s (0.051 m³/s) Feb. 13, 1972.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	9.2	5.0	3.9	2.0	2.5	2.8	5.3	53	140	35	12
2	11	4.0	5.1	3.8	2.0	2.5	2.8	5.4	53	135	33	12
3	11	8.8	5.1	3.8	2.6	2.5	2.8	6.4	43	118	32	11
4	10	8.7	5.1	3.8	2.6	2.5	2.8	7.2	39	103	33	10
5	9.3	8.4	4.9	3.8	2.6	2.5	2.8	7.9	33	97	34	9.3
6	10	8.0	4.6	3.7	2.6	2.7	2.8	8.1	34	102	68	4.0
7	9.6	7.8	4.6	3.5	2.5	2.7	2.8	9.3	53	102	44	9.6
8	17	7.4	4.6	3.5	2.5	2.7	2.8	11	88	97	59	9.3
9	22	7.1	4.6	3.5	2.5	2.7	2.8	16	137	97	34	4.0
10	18	6.9	4.6	3.5	2.5	2.7	2.8	22	178	102	54	9.3
11	15	6.9	4.6	3.4	2.5	2.7	2.8	26	178	89	31	11
12	13	6.8	4.6	3.2	2.5	2.7	3.0	30	155	92	50	11
13	13	6.7	4.6	3.2	2.5	2.7	3.2	32	167	95	27	10
14	12	6.6	4.6	3.2	2.5	2.7	3.3	32	170	143	25	9.3
15	18	6.5	4.6	3.2	2.4	2.7	3.3	34	152	97	25	9.0
16	18	6.3	4.6	3.1	2.5	2.7	3.3	39	79	97	24	9.3
17	18	6.2	4.6	3.0	2.5	2.7	3.3	47	56	74	24	8.3
18	18	6.0	4.6	3.0	2.5	2.7	3.3	59	53	64	25	8.6
19	18	5.9	4.6	3.0	2.5	2.7	3.3	97	44	99	28	9.0
20	16	5.8	4.6	3.0	2.5	2.7	3.9	129	43	113	24	8.3
21	15	5.7	4.6	2.8	2.5	2.7	4.3	107	57	85	25	9.0
22	14	5.7	4.6	2.7	2.5	2.7	5.1	71	89	57	24	9.0
23	13	5.7	4.6	2.7	2.5	2.7	6.0	53	111	45	22	9.0
24	12	5.6	4.6	2.7	2.5	2.7	4.8	53	116	44	21	8.6
25	11	5.5	4.6	2.6	2.5	2.7	4.5	55	119	43	20	8.3
26	11	5.3	4.6	2.6	2.5	2.7	4.6	46	155	42	18	8.3
27	11	5.0	4.6	2.6	2.5	2.8	4.6	34	170	41	17	7.9
28	10	4.6	4.6	2.6	2.5	2.8	4.9	28	163	39	15	7.6
29	10	4.6	4.6	2.6	-----	2.8	4.9	28	153	39	14	7.6
30	9.3	4.8	4.4	2.6	-----	2.8	5.0	29	150	39	14	7.4
31	9.2	-----	4.2	2.6	-----	2.8	-----	33	-----	37	12	-----
TOTAL	414.4	197.5	144.2	97.2	70.5	83.2	109.4	1,161.1	3,071	2,567	871	277.0
MEAN	13.4	6.58	4.65	3.14	2.52	2.68	3.65	37.5	102	82.8	28.1	9.23
MAX	22	9.2	5.1	3.9	2.6	2.8	6.0	129	178	143	68	12
MIN	9.2	4.6	4.2	2.6	2.4	2.5	2.8	5.3	33	37	12	7.4
AC-FT	822	392	286	193	140	165	217	2,300	6,090	5,090	1,730	549

CAL YR 1972 TOTAL 8,747.7 MEAN 23.9 MAX 158 MIN 1.8 AC-FT 17,350
WTR YR 1973 TOTAL 9,063.5 MEAN 24.8 MAX 178 MIN 2.4 AC-FT 17,980

PEAK DISCHARGE (BASE, 160 CFS).--June 11 (0030) 231 cfs (5.01 ft); June 27 (0200) 214 cfs (4.93 ft).

NOTE.--No gage-height record Dec. 11 to Apr. 23.

BLUE RIVER BASIN

09054000- BLACK CREEK BELOW BLACK LAKE, NEAR DILLON, COLO.

LOCATION.--Lat 39°47'59", long 106°16'04", in SW¼SW¼ sec.8, T.3 S., R.79 W., Summit County, on right bank, 600 ft (180 m) upstream from bridge, 0.3 mi (0.5 km) downstream from Black Lake, 4.5 mi (7.2 km) upstream from high-water line of Green Mountain Reservoir at elevation 7,950 ft (2,423.2 m) and 17 mi (27 km) northwest of Dillon.

DRAINAGE AREA.--15.0 mi² (38.8 km²).

PERIOD OF RECORD.--July 1942 to September 1949, October 1966 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 8,750 ft (2,667 m) 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 600 ft (180 m) downstream at different datums.

AVERAGE DISCHARGE.--14 years, 32.1 ft³/s (0.909 m³/s), 23,260 acre-ft/yr (28.7 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 280 ft³/s (7.93 m³/s) June 10 (gage height, 3.94 ft or 1.201 m), from rating curve extended above 165 ft³/s (4.7 m³/s); minimum daily, 2.0 ft³/s (0.057 m³/s) Feb. 20. Period of record: Maximum discharge, 384 ft³/s (10.9 m³/s) July 1, 1943 (gage height, 4.72 ft or 1.439 m, site and datum then in use), from rating curve extended above 260 ft³/s (7.4 m³/s); minimum daily, 1.4 ft³/s (0.039 m³/s) Mar. 20, 1969.

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

REVISIONS.--WSP 2124: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	10	4.7	4.0	2.2	2.1	2.4	7.2	73	186	47	20
2	13	9.6	4.9	4.2	2.2	2.1	2.4	6.4	74	176	44	20
3	11	9.5	5.0	3.9	2.2	2.1	2.4	5.8	54	153	45	19
4	11	8.7	5.1	3.8	2.2	2.1	2.4	6.8	43	140	51	17
5	11	8.6	5.8	3.2	2.1	2.1	2.4	8.6	35	132	70	14
6	11	8.7	5.4	2.8	2.1	2.1	2.4	11	38	137	117	13
7	11	8.0	5.1	2.6	2.1	2.1	2.4	12	74	141	72	14
8	18	8.3	5.6	2.5	2.1	2.1	2.4	11	174	152	55	15
9	30	8.4	5.6	2.4	2.1	2.2	2.4	15	179	155	68	15
10	28	7.8	5.3	2.4	2.1	2.2	2.5	20	220	142	51	15
11	22	7.5	4.9	2.4	2.1	2.2	2.5	35	217	130	46	17
12	19	7.2	4.8	2.3	2.2	2.2	2.5	42	190	136	44	18
13	17	7.1	4.7	2.3	2.2	2.2	2.5	48	200	145	41	16
14	15	6.7	4.6	2.3	2.2	2.2	2.6	49	209	208	37	14
15	19	6.4	4.4	2.3	2.2	2.2	2.7	47	152	131	39	13
16	28	6.3	4.3	2.3	2.2	2.2	2.8	46	89	136	37	11
17	25	6.0	4.3	2.3	2.2	2.2	2.9	52	61	101	38	11
18	24	6.3	4.4	2.3	2.2	2.2	3.1	59	57	89	48	9.8
19	24	6.3	4.3	2.3	2.1	2.3	3.3	66	43	162	48	8.9
20	24	5.9	4.2	2.4	2.0	2.3	3.5	74	44	172	40	8.3
21	23	5.9	4.2	2.4	2.1	2.3	3.8	81	70	119	44	7.7
22	21	5.6	4.2	2.4	2.1	2.3	4.0	86	120	79	45	7.2
23	18	5.2	4.2	2.4	2.1	2.3	4.2	59	140	61	40	7.3
24	16	4.9	4.2	2.4	2.1	2.3	4.5	61	145	58	37	7.9
25	15	4.8	4.2	2.4	2.1	2.3	4.6	69	152	57	36	9.3
26	13	4.7	4.2	2.4	2.1	2.3	4.6	53	193	57	31	11
27	13	4.7	4.0	2.4	2.1	2.3	4.6	36	215	61	28	10
28	13	4.5	4.2	2.3	2.1	2.3	5.2	27	203	58	26	10
29	11	4.5	4.2	2.2	-----	2.3	5.8	26	190	55	24	10
30	11	4.5	4.2	2.2	-----	2.3	6.9	29	189	56	22	4.9
31	9.7	-----	4.0	2.2	-----	2.3	-----	37	-----	52	20	-----
TOTAL	537.7	202.6	143.2	80.7	59.8	68.7	100.7	1,179.8	3,793	3,637	1,391	379.3
MEAN	17.3	6.75	4.62	2.60	2.14	2.22	3.36	38.1	126	117	44.9	12.6
MAX	30	10	5.8	4.2	2.2	2.3	6.9	81	220	208	117	20
MIN	9.7	4.5	4.0	2.2	2.0	2.1	2.4	5.8	35	52	20	7.2
AC-FT	1,070	402	284	160	119	136	200	2,340	7,520	7,210	2,760	752

CAL YR 1972 TOTAL 11,487.4 MEAN 31.4 MAX 191 MIN 1.9 AC-FT 22,790

WTR YR 1973 TOTAL 11,573.5 MEAN 31.7 MAX 220 MIN 2.0 AC-FT 22,960

PEAK DISCHARGE (BASE, 160 CFS).--June 10 (2400) 280 cfs (3.94 ft); June 27 (0200) 262 cfs (3.88 ft).

BLUE RIVER BASIN

191

09055300 CATARACT CREEK NEAR KREMMLING, COLO.

LOCATION.--Lat 39°50'07", long 106°18'57", in SW¼NE¼ sec.35, T.2 S., R.80 W., Summit County, on right bank 70 ft (21 m) downstream from lower Cataract Lake, 2.8 mi (4.5 km) upstream from high-water line of Green Mountain Reservoir at elevation 7,950 ft (2,423.2 m), and 17 mi (27 km) south of Kremmling.

DRAINAGE AREA.--12.0 mi² (31.1 km²).

PERIOD OF RECORD.--October 1966 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 8,605 ft (2,623 m) from topographic map.

AVERAGE DISCHARGE.--7 years, 19.8 ft³/s (0.561 m³/s), 14,350 acre-ft/yr (17.7 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 194 ft³/s (5.49 m³/s) June 28 (gage height, 4.73 ft or 1.442 m); minimum daily, 1.0 ft³/s (0.028 m³/s) Feb. 22.

Period of record: Maximum discharge, 321 ft³/s (9.09 m³/s) June 21, 1967 (gage height, 5.43 ft or 1.655 m), from rating curve extended above 180 ft³/s (5.1 m³/s); minimum daily, 0.28 ft³/s (0.008 m³/s) Oct. 7, 1971.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.2	6.2	2.4	1.6	1.1	1.1	1.2	7.3	61	143	25	5.0
2	7.9	6.0	2.5	1.5	1.1	1.1	1.2	6.5	68	140	22	5.0
3	7.1	5.7	2.4	1.5	1.1	1.1	1.2	5.5	56	115	20	4.6
4	6.5	5.3	2.4	1.6	1.1	1.1	1.2	6.2	49	102	20	4.0
5	5.9	5.3	2.9	1.7	1.1	1.1	1.2	4.4	38	92	23	3.6
6	5.7	5.3	2.7	1.6	1.1	1.1	1.2	11	38	94	38	3.1
7	5.6	5.0	2.5	1.6	1.1	1.1	1.2	9.9	48	94	35	3.3
8	6.4	5.0	2.7	1.5	1.1	1.1	1.2	9.6	59	86	28	3.4
9	6.9	5.0	2.8	1.4	1.1	1.1	1.2	13	103	88	23	3.5
10	11	4.6	2.7	1.5	1.1	1.1	1.3	19	148	89	21	3.6
11	10	4.5	2.5	1.4	1.1	1.1	1.3	32	165	77	17	3.6
12	9.0	4.3	2.4	1.4	1.2	1.1	1.4	40	143	76	15	3.8
13	8.1	4.1	2.4	1.3	1.2	1.1	1.4	47	142	87	14	3.7
14	7.6	3.8	2.3	1.2	1.1	1.1	1.5	46	158	116	12	3.7
15	8.5	3.8	2.2	1.2	1.1	1.1	1.6	41	137	88	13	3.5
16	14	3.7	2.0	1.1	1.1	1.1	1.7	45	88	86	12	3.4
17	14	3.6	1.9	1.1	1.1	1.1	1.8	51	61	66	12	3.3
18	14	3.4	1.8	1.1	1.1	1.1	1.9	64	56	59	16	3.1
19	13	3.3	1.7	1.1	1.1	1.1	2.0	97	48	100	15	2.7
20	13	3.2	1.7	1.2	1.1	1.1	2.2	126	46	113	11	2.3
21	13	3.0	1.7	1.3	1.1	1.1	2.4	109	61	79	12	1.9
22	13	2.9	1.7	1.3	1.0	1.1	2.6	83	90	58	14	1.7
23	12	2.7	1.7	1.2	1.1	1.1	2.5	64	111	47	11	1.5
24	10	2.6	1.7	1.2	1.1	1.1	2.6	64	130	41	10	1.5
25	9.4	2.5	1.7	1.2	1.1	1.1	3.2	72	124	35	9.2	1.6
26	8.4	2.6	1.6	1.1	1.1	1.1	3.2	62	162	31	8.0	1.9
27	7.9	2.6	1.6	1.2	1.1	1.1	3.3	46	163	30	7.2	2.0
28	8.0	2.3	1.6	1.2	1.1	1.1	3.9	37	161	31	6.4	2.1
29	7.0	2.3	1.6	1.2	-----	1.1	5.5	36	137	28	6.0	2.3
30	6.5	2.4	1.7	1.1	-----	1.1	6.6	39	150	31	5.4	2.4
31	5.9	-----	1.6	1.1	-----	1.2	-----	38	-----	29	5.0	-----
TOTAL	285.3	117.0	65.1	40.7	30.9	34.2	64.7	1,335.4	3,011	2,351	486.2	91.1
MEAN	9.20	3.90	2.10	1.31	1.10	1.10	2.16	43.1	100	75.8	15.7	3.04
MAX	14	6.2	2.9	1.7	1.2	1.2	6.6	126	165	143	38	5.0
MIN	5.6	2.3	1.6	1.1	1.0	1.1	1.2	5.5	38	28	5.0	1.5
AC-FT	566	232	129	81	61	68	128	2,650	5,970	4,650	964	181

CAL YR 1972 TOTAL 6,901.03 MEAN 18.9 MAX 164 MIN 1.61 AC-FT 13,690
 WTR YR 1973 TOTAL 7,912.60 MEAN 21.7 MAX 165 MIN 1.0 AC-FT 15,690

PEAK DISCHARGE (BASE, 160 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
5-19	2400	4.36	170	6-28	0500	4.73	194
6-11	0300	4.59	185				

NOTE.--No gage-height record Feb. 18 to Apr. 22, Aug. 10 to Sept. 9.

BLUE RIVER BASIN

09057000 GREEN MOUNTAIN RESERVOIR NEAR KREMMLING, COLO.

LOCATION.--Lat 39°52'42", long 106°19'45", in NE¼ sec.15, T.2 S., R.80 W., Summit County, in hoist house at right end of Green Mountain Dam on Blue River, 0.6 mi (1.0 km) upstream from Elliott Creek and 13 mi (21 km) southeast of Kremmling.

DRAINAGE AREA.--598 mi² or 1,549 km² (includes 15.3 mi² or 39.6 km² of Elliott Creek above diversion for Elliott Creek feeder canal).

PERIOD OF RECORD.--November 1942 to current year.

GAGE.--Water-stage recorder. Datum of gage is 7,800 ft (2,377.4 m) above mean sea level (Bureau of Reclamation bench mark). Gage heights have been reduced to elevations above mean sea level. Prior to Sept. 25, 1951, nonrecording gage in powerhouse at same datum. Sept. 25, 1951, to Oct. 1, 1953, nonrecording gage at present site and datum.

EXTREMES (at 2400).--Current year: Maximum contents, 146,400 acre-ft (181 hm³) July 14 (elevation, 7,949.76 ft or 2,423.087 m); minimum, 57,620 acre-ft (71.0 hm³) May 3 (elevation, 7,894.55 ft or 2,406.259 m).
Period of record: Maximum contents, 148,900 acre-ft (184 hm³) July 10, 1947 (elevation, 7,950.95 ft or 2,423.450 m); minimum since appreciable storage was attained, 388 acre-ft (478,000 m³) Jan. 12, 1963 (elevation, 7,801.70 ft or 2,377.958 m).

REMARKS.--Reservoir is formed by an earth and rockfill dam. Dam completed and storage began in November 1942. Capacity of reservoir, 146,900 acre-ft (181 hm³) between elevations 7,800 ft or 2,377.4 m (sill of outlet gate) and 7,950 ft or 2,423.2 m (top of radial spillway gates). Dead storage, 7,760 acre-ft (9.57 hm³). Reservoir is used for power development and storage for replacement of water diverted to South Platte River basin during late irrigation season. Figures given represent usable contents.

COOPERATION.--Records furnished by Bureau of Reclamation.

REVISIONS.--WSP 2124: Drainage area.

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	ELEVATION (FEET)	CONTENTS (ACRE-Feet)	CHANGE IN CONTENTS (ACRE-Feet)
Sept. 30.....	7,940.47	127,500	-
Oct. 31.....	7,935.86	118,700	-8,800
Nov. 30.....	7,929.71	107,600	-11,100
Dec. 31.....	7,924.12	98,170	-9,430
CAL YR 1972.....	-	-	-2,230
Jan. 31.....	7,917.18	87,320	-10,850
Feb. 28.....	7,910.00	77,000	-10,320
Mar. 31.....	7,901.54	65,920	-11,080
Apr. 30.....	7,894.66	57,740	-8,180
May 31.....	7,910.48	77,660	+19,920
June 30.....	7,941.83	130,200	+52,540
July 31.....	7,948.88	144,500	+14,300
Aug. 31.....	7,947.33	141,300	-3,200
Sept. 30.....	7,940.96	128,500	-12,800
WTR YR 1973.....	-	-	+1,000

193

LOCATION.--Lat 39°52'49", long 106°20'00", in SW¼NE¼ sec.15, T.2 S., R.80 W., Summit County, on left bank 0.3 mi (0.5 km) upstream from Elliott Creek, 0.3 mi (0.5 km) downstream from Green Mountain Dam, and 13 mi (21 km) southeast of Kremmling.

PERIOD OF RECORD.--October 1937 to current year. Prior to October 1943, published as Blue River below Green Mountain Reservoir, near Kremmling.

GAGE.--Water-stage recorder. Datum of gage is 7,682.66 ft (2,341.675 m) above mean sea level (Bureau of Reclamation bench mark). Prior to Oct. 1, 1951, water-stage recorder at site 3.7 mi (6.0 km) downstream at different datum.

EXTREMES.--Current year: Maximum discharge, 1,980 ft³/s (56.1 m³/s) July 16 (gage height, 7.71 ft or 2.350 m); minimum daily, 285 ft³/s (8.07 m³/s) Dec. 12.
Period of record: Maximum discharge, 4,000 ft³/s (113 m³/s) June 4, 1938 (gage height, 5.93 ft or 1.807 m), site and datum then in use), from rating curve extended above 3,000 ft³/s (85 m³/s); minimum daily (prior to construction of Green Mountain Reservoir), 80 ft³/s (2.27 m³/s) Feb. 18-24, 1938, Feb. 18, 19, 1940: no flow at times in 1943.

REMARKS.--Records good. Flow regulated by Green Mountain Reservoir (see sta. 09057000). Diversions for irrigation of about 5,000 acres (20.2 km²) above station. Transmountain diversions above station (see elsewhere in this report).

REVISIONS.--WSP 2124: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	404	328	289	307	304	303	296	292	701	689	633	413
2	403	328	289	302	302	303	299	289	702	689	632	410
3	405	328	287	307	303	301	298	292	703	918	637	410
4	404	331	287	303	303	300	299	292	708	1,300	637	407
5	400	334	287	302	304	300	299	293	709	1,300	634	408
6	400	334	287	304	302	301	299	293	705	1,290	705	408
7	394	336	286	303	306	301	299	292	700	1,290	912	409
8	403	338	287	303	305	299	300	292	705	1,290	915	407
9	403	341	288	304	304	300	298	293	700	1,290	916	414
10	403	334	286	304	302	301	295	291	700	1,290	932	396
11	400	331	288	304	305	301	297	290	703	1,350	896	397
12	400	331	285	302	305	298	296	290	715	1,360	860	394
13	406	334	288	304	306	299	296	291	704	1,380	635	393
14	406	336	286	303	302	301	296	410	704	1,420	636	392
15	406	336	286	302	299	302	297	490	707	1,910	556	394
16	406	338	289	302	300	300	294	494	706	1,910	410	390
17	359	341	286	305	300	302	296	492	704	1,590	409	391
18	328	334	297	304	302	299	296	490	703	1,530	411	391
19	328	334	305	301	302	299	294	493	701	1,390	410	395
20	328	336	301	302	300	300	294	492	705	1,390	410	394
21	328	334	302	303	300	299	296	492	699	1,860	408	408
22	328	336	303	303	301	300	295	491	700	1,860	408	497
23	328	336	304	301	302	300	295	492	698	1,530	411	493
24	328	338	304	302	301	300	297	493	696	1,390	409	494
25	331	336	303	304	302	301	292	627	680	1,290	411	492
26	328	341	305	303	299	301	294	709	692	1,010	409	501
27	328	338	305	306	302	300	299	705	689	912	412	496
28	328	334	303	304	300	300	294	708	691	741	408	492
29	328	331	303	304	-----	299	293	706	692	630	410	494
30	328	313	304	305	-----	297	294	708	690	632	408	495
31	328	-----	304	303	-----	297	-----	706	-----	635	414	-----
TOTAL	11,400	10,020	9,124	9,401	8,463	9,304	8,887	13,988	21,012	39,056	17,694	12,913
MEAN	368	334	294	303	302	300	296	451	700	1,260	571	430
MAX	406	341	305	307	306	303	300	709	715	1,910	932	501
MIN	328	313	285	301	299	297	292	289	680	630	408	390
AC-FT	22,610	19,870	18,100	18,650	16,790	18,450	17,630	27,750	41,680	77,470	35,100	25,610
CAL YR 1972	TOTAL	166,516	MEAN	455	MAX	1,360	MIN	285	AC-FT	330,300		
WTR YR 1973	TOTAL	171,262	MEAN	469	MAX	1,910	MIN	285	AC-FT	339,700		

COLORADO RIVER MAIN STEM

09058000 COLORADO RIVER NEAR KREMMLING, COLO.

LOCATION.--Lat 40°02'12", long 106°26'22", in NE¼SW¼ sec.23, T.1 N., R.81 W., Grand County, on right bank at upstream end of Gore Canyon, 3.0 mi (4.8 km) southwest of Kremmling and 3.8 mi (6.1 km) downstream from Blue River.

DRAINAGE AREA.--2,382 mi² (6,169 km²).

PERIOD OF RECORD.--July 1904 to September 1918 (published as Grand River near Kremmling), October 1961 to September 1970, October 1971 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 7,320 ft (2,231 m) from topographic map. See WSP 1313 for history of changes prior to Oct. 1, 1961.

EXTREMES.--Current year: Maximum discharge, 4,370 ft³/s (124 m³/s) June 15 (gage height, 10.59 or 3.228 m); minimum daily, 490 ft³/s (13.9 m³/s) Dec. 10.

Period of record: Maximum discharge observed, 21,500 ft³/s (609 m³/s) June 7, 1912 (gage height, 21.8 ft or 6.64 m, datum then in use), from rating curve extended above 14,000 ft³/s (400 m³/s); minimum observed, 166 ft³/s (1.70 m³/s) Dec. 19, 1907.

REMARKS.--Records good except those for winter period, which are fair. Natural flow of stream affected by transmountain diversions, storage reservoirs, diversions for irrigation of about 40,000 acres (162 km²) above station, and return flow from irrigated areas.

REVISIONS.--WSP 2124: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	606	652	695	520	520	520	580	1,090	2,540	3,100	1,440	881
2	674	775	595	520	520	520	558	994	2,800	3,260	1,410	478
3	664	790	582	520	520	520	549	860	2,940	3,340	1,420	877
4	677	789	583	520	520	510	531	918	2,920	3,830	1,430	801
5	674	788	521	530	520	510	529	1,090	2,750	3,820	1,410	871
6	677	795	520	530	530	510	562	1,280	2,520	3,250	1,470	850
7	660	783	510	530	530	520	625	1,370	2,400	2,990	1,570	855
8	620	768	510	530	530	520	567	1,570	2,490	2,970	1,710	842
9	656	796	500	530	530	520	543	1,710	2,770	3,050	1,610	825
10	704	779	490	530	520	530	532	1,970	3,110	2,680	1,580	819
11	690	756	520	530	520	530	543	2,180	3,560	2,580	1,530	829
12	691	754	510	530	520	530	613	2,180	3,930	2,500	1,520	840
13	694	777	510	530	520	530	690	2,150	3,760	2,630	1,450	835
14	663	758	510	510	520	530	787	2,220	3,970	2,800	1,250	820
15	536	763	510	510	520	530	867	2,370	4,330	3,820	1,200	812
16	646	780	510	510	520	530	698	2,440	4,100	4,180	1,010	807
17	726	762	510	510	520	540	664	2,520	3,720	3,850	991	810
18	679	769	510	510	520	540	728	2,600	3,340	3,280	1,010	806
19	674	777	520	510	520	540	734	2,880	2,980	3,210	1,020	797
20	671	758	520	510	520	540	641	3,330	2,730	3,390	987	788
21	656	744	520	510	520	550	626	3,760	2,600	4,020	953	795
22	621	756	520	510	520	550	630	4,000	2,390	3,980	821	871
23	609	744	520	510	530	550	646	3,840	2,070	3,450	963	864
24	617	737	520	510	530	560	688	3,610	2,040	2,530	979	878
25	663	733	520	520	530	560	773	3,550	2,020	2,180	972	869
26	661	734	510	520	520	570	771	3,590	1,970	1,820	954	901
27	650	740	520	520	520	570	750	3,300	2,070	1,750	946	912
28	646	742	520	520	520	580	838	2,900	2,100	1,540	930	912
29	591	738	520	520	-----	580	1,040	2,690	2,480	1,490	905	925
30	599	745	520	520	-----	590	1,180	2,630	2,730	1,520	896	932
31	634	-----	520	520	-----	600	-----	2,620	-----	1,490	690	-----
TOTAL	20,318	22,782	16,346	16,100	14,630	16,780	20,503	74,232	66,140	90,300	37,227	25,666
MEAN	655	759	527	519	523	541	683	2,395	2,871	2,913	1,201	854
MAX	726	796	695	530	530	600	1,180	4,000	4,330	4,150	1,710	932
MIN	591	652	490	510	520	510	529	880	1,970	1,490	821	788
AC-FT	40,300	45,190	32,420	31,930	29,020	33,280	40,670	147,200	170,900	179,100	73,840	50,790

CAL YR 1972 TOTAL 346,020 MEAN 945 MAX 2,720 MIN 490 AC-FT 686,300

WTR YR 1973 TOTAL 440,964 MEAN 1,208 MAX 4,330 MIN 490 AC-FT 874,700

PINEY RIVER BASIN

195

09058500 PINEY RIVER BELOW PINEY LAKE, NEAR MINTURN, COLO.

LOCATION.--Lat 39°42'29", long 106°25'34", Eagle County, on left bank 1.4 mi (2.3 km) upstream from Dickson Creek, 2.0 mi (3.2 km) downstream from Piney Lake, and 8.5 mi (13.7 km) north of Minturn.

DRAINAGE AREA.--13.0 mi² (33.7 km²).

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 (2,787.472 m) above mean sea level (levels by Bureau of Reclamation). Prior to October 1963, water-stage recorder at site 15 ft (5 m) upstream at same datum.

AVERAGE DISCHARGE.--17 years, 24.3 ft³/s (0.688 m³/s), 17,610 acre-ft/yr (21.7 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 314 ft³/s (8.89 m³/s) June 11 (gage height, 5.33 ft or 1.625 m); minimum daily, 0.90 ft³/s (0.025 m³/s) Sept. 8.
Period of record: Maximum discharge, 396 ft³/s (11.2 m³/s) June 11, 1952 (gage height, 5.47 ft or 1.667 m); minimum not determined.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.7	9.6	2.2	1.3	1.4	1.6	2.0	4.6	89	178	27	5.5
2	7.8	9.1	2.3	1.4	1.5	1.5	1.8	5.2	79	183	24	5.0
3	7.3	8.7	2.4	1.5	1.2	1.4	1.6	5.2	63	164	23	6.4
4	6.4	8.7	2.5	1.6	1.0	1.4	1.5	6.8	50	142	22	5.5
5	6.4	8.7	2.5	1.7	1.4	1.4	1.4	8.6	45	136	26	4.9
6	6.4	8.7	2.0	1.6	1.4	1.4	1.3	10	50	137	50	4.3
7	6.4	7.0	1.9	1.4	1.3	1.3	1.3	10	49	134	34	2.2
8	15	4.5	1.7	1.3	1.3	1.3	1.8	11	102	126	26	4.90
9	21	4.0	1.5	1.3	1.4	1.3	1.8	12	162	118	24	1.8
10	20	4.0	1.4	1.3	1.5	1.3	1.3	18	235	124	22	4.9
11	15	4.0	1.3	1.3	1.5	1.5	1.5	29	230	102	20	6.9
12	12	4.9	1.4	1.2	1.7	2.0	1.9	44	193	100	18	4.6
13	11	3.7	1.5	1.3	1.5	2.6	2.0	51	199	99	16	4.3
14	9.6	3.9	1.6	1.3	1.4	2.0	2.1	57	205	136	14	3.7
15	11	5.0	1.7	1.3	1.4	1.4	2.3	61	164	88	14	3.4
16	17	4.0	1.8	1.3	1.6	1.3	2.2	66	113	88	13	5.4
17	17	4.0	1.9	1.3	1.6	1.5	1.9	76	81	68	13	3.4
18	18	3.9	1.9	1.3	1.6	1.8	1.9	99	86	64	14	2.8
19	20	3.8	1.9	1.3	1.6	1.9	2.0	140	73	105	14	2.5
20	19	3.7	2.0	1.3	1.6	2.0	2.2	142	70	102	12	2.4
21	19	2.4	1.8	1.4	1.5	2.1	2.2	116	90	73	12	2.2
22	17	2.2	1.7	1.5	1.4	2.3	2.0	87	121	58	12	2.2
23	15	2.1	1.7	1.6	1.4	2.5	2.0	68	144	46	11	2.2
24	14	2.3	1.7	1.7	1.4	2.2	2.2	66	152	43	9.6	2.5
25	14	2.4	1.7	1.8	1.4	2.0	2.4	66	153	39	9.1	3.4
26	13	2.1	1.8	1.6	1.4	1.8	2.5	57	203	38	8.2	4.3
27	12	1.8	1.9	1.5	1.4	1.8	2.8	42	208	37	7.3	4.3
28	12	1.6	2.0	1.5	1.5	1.8	3.4	35	212	34	6.9	4.6
29	11	1.8	1.9	1.5	-----	1.8	4.0	37	178	33	6.4	4.9
30	11	2.0	1.8	1.6	-----	1.8	4.3	44	181	32	6.0	4.6
31	9.6	-----	1.5	1.5	-----	1.8	-----	58	-----	30	5.5	-----
TOTAL	400.6	132.8	56.7	44.5	40.1	53.8	63.6	1,532.4	4,000	2,857	522.0	115.00
MEAN	12.9	4.43	1.83	1.44	1.43	1.74	2.12	49.4	135	92.2	16.8	3.83
MAX	21	9.6	2.5	1.9	1.7	2.6	4.3	142	235	183	50	6.9
MIN	6.4	1.6	1.3	1.2	1.0	1.3	1.3	4.6	45	30	5.5	1.90
AC-FT	795	263	112	88	80	107	126	3,040	7,930	5,670	1,040	228

CAL YR 1972 TOTAL 8,035.90 MEAN 22.0 MAX 191 MIN 1.3 AC-FT 15,940
WTR YR 1973 TOTAL 9,818.50 MEAN 26.9 MAX 235 MIN .90 AC-FT 19,470

PEAK DISCHARGE (BASE, 150 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
5-19	2200	4.68	162	6-28	0430	5.12	268
6-11	0400	5.33	314				

NOTE.--No gage-height record Nov. 7 to Apr. 24.

09058610 DICKSON CREEK NEAR VAIL, COLO.

LOCATION.--Lat 39°42'14", long 106°27'25", Eagle County, on right bank 0.6 mi (1.0 km) upstream from Freeman Creek, 1.0 mi (1.6 km) upstream from mouth, and 6 mi (9.7 km) northwest of Vail.

DRAINAGE AREA.--3.41 mi² (8.83 km²).

PERIOD OF RECORD.--October 1971 to current year. Prior to October 1972, published as "near Minturn."

GAGE.--Water-stage recorder. Altitude of gage is 9,245 ft (2,818 m) from topographic map.

EXTREMES.--Current year: Maximum discharge, 26 ft³/s (0.74 m³/s) June 12 (gage height, 2.62 ft or 0.799 m); no flow Oct. 2, 12, 14.

Period of record: Maximum discharge, 26 ft³/s (0.74 m³/s) June 12, 1973 (gage height, 2.62 ft or 0.799 m); no flow at times each year.

REMARKS.--Records good except those for period of no gage-height record, which are poor. Diversion 75 ft (23 m) above station by Willy N. ditch for irrigation of hay meadows below station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

CAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.02	.04	.17	.13	.10	.14	.25	1.7	11	7.3	2.0	1.6
2	0	.04	.18	.11	.08	.14	.26	1.7	12	6.4	2.0	1.7
3	.02	.04	.19	.11	.06	.15	.27	1.5	12	6.0	1.9	1.6
4	.02	.10	.18	.13	.06	.15	.27	1.3	11	5.7	2.3	1.6
5	.02	.10	.15	.14	.07	.15	.27	1.5	11	4.7	2.9	1.6
6	.02	.10	.14	.14	.09	.16	.38	1.5	11	4.4	2.4	1.6
7	.04	.10	.12	.12	.10	.18	.48	1.5	12	4.5	1.9	1.6
8	.14	.10	.09	.10	.10	.19	.50	1.6	14	4.5	1.9	1.5
9	.14	.10	.08	.10	.12	.20	.48	1.5	19	4.2	1.7	1.6
10	.04	.10	.07	.10	.16	.21	.46	1.5	24	3.9	1.7	1.7
11	.02	.04	.07	.10	.16	.21	.44	2.0	25	3.5	1.7	1.9
12	0	.04	.08	.10	.14	.22	.48	2.6	23	3.9	1.6	1.9
13	.02	.07	.09	.10	.12	.21	.62	3.3	21	4.4	1.6	1.7
14	0	.07	.10	.10	.14	.20	.76	3.3	22	4.4	1.6	1.6
15	.30	.07	.11	.10	.17	.20	.90	4.0	20	4.0	1.6	1.6
16	.26	.07	.12	.10	.17	.20	.78	4.5	18	3.9	1.6	1.7
17	.14	.07	.14	.10	.18	.21	.76	5.4	15	3.3	1.7	1.5
18	.10	.07	.15	.10	.18	.23	.80	8.4	14	3.3	1.9	1.5
19	.07	.07	.18	.10	.18	.24	1.2	13	12	3.9	1.7	1.5
20	.04	.07	.18	.10	.18	.27	1.1	15	12	3.2	1.7	1.5
21	.07	.07	.16	.11	.16	.30	1.0	14	11	3.2	1.9	1.5
22	.07	.10	.14	.12	.14	.32	1.3	12	11	2.9	1.7	1.5
23	.04	.14	.13	.13	.11	.32	1.1	11	11	2.6	1.6	1.6
24	.04	.15	.12	.14	.11	.31	1.7	12	11	2.4	1.7	1.9
25	.04	.14	.13	.14	.11	.30	1.6	13	10	2.4	1.7	1.7
26	.04	.12	.14	.14	.12	.29	1.5	12	10	2.4	1.6	1.6
27	.04	.10	.15	.12	.13	.28	1.5	9.2	10	2.3	1.6	1.5
28	.04	.12	.18	.11	.14	.27	1.7	8.0	10	2.3	1.5	1.6
29	.04	.14	.19	.10	-----	.27	2.0	7.3	8.8	2.2	1.5	1.5
30	.04	.15	.20	.10	-----	.26	1.9	7.3	7.7	2.2	1.5	1.5
31	.10	-----	.17	.10	-----	.25	-----	8.4	-----	2.2	1.5	-----
TOTAL	1.97	2.69	4.30	3.49	3.58	7.03	26.76	191.0	419.5	116.5	55.2	48.4
MEAN	.064	.090	.14	.11	.13	.23	.89	6.16	14.0	3.76	1.78	1.61
MAX	.30	.15	.20	.14	.18	.32	2.0	15	25	7.3	2.9	1.9
MIN	0	.04	.07	.10	.06	.14	.25	1.3	7.7	2.2	1.5	1.5
AC-FT	3.9	5.3	8.5	6.9	7.1	14	53	379	832	231	109	96

CAL YR 1972 TOTAL 963.63 MEAN 2.63 MAX 22 MIN 0 AC-FT 1,910
WTR YR 1973 TOTAL 880.42 MEAN 2.41 MAX 25 MIN 0 AC-FT 1,750

NOTE.--No gage-height record Nov. 24 to Apr. 23.

.09058700 FREEMAN CREEK NEAR MINTURN, COLO.

LOCATION.--Lat 39°41'55", long 106°26'41", Eagle County, on right bank 0.8 mi (1.3 km) upstream from mouth and 7.5 mi (12.1 km) north of Minturn.

DRAINAGE AREA.--2.94 mi² (7.61 km²).

PERIOD OF RECORD.--October 1964 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 9,335 ft (2,845 m) from topographic map.

AVERAGE DISCHARGE.--9 years, 1.22 ft³/s (0.0346 m³/s), 884 acre-ft/yr (1.09 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 19 ft³/s (0.54 m³/s) May 19 (gage height, 2.30 ft or 0.701 m); maximum gage height, 3.51 ft (1.070 m) May 18 (backwater from ice); minimum daily discharge, 0.04 ft³/s (0.001 m³/s) Feb. 3-10, 23.

Period of record: Maximum discharge, 29 ft³/s (0.82 m³/s) June 13, 1965 (gage height, 2.56 ft or 0.780 m); maximum gage height, 3.51 ft (1.070 m) May 18, 1973 (backwater from ice); no flow for many days most years.

REMARKS.--Records good except those for period of no gage-height record, which are poor. No regulation or diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.18	.14	.09	.05	.05	.05	.05	.37	13	2.8	.65	.30
2	.16	.14	.09	.05	.05	.05	.06	.41	13	2.5	.57	.36
3	.14	.14	.09	.05	.04	.05	.05	.50	12	2.3	.54	.30
4	.14	.13	.09	.06	.04	.05	.05	.58	11	2.2	.70	.28
5	.14	.13	.09	.05	.04	.05	.05	.70	11	2.2	1.5	.28
6	.14	.13	.08	.05	.04	.05	.05	.72	11	2.0	1.3	.24
7	.16	.13	.08	.05	.04	.05	.05	.62	11	2.1	.80	.24
8	.33	.12	.08	.05	.04	.05	.05	.78	13	2.4	.65	.34
9	.33	.12	.07	.05	.04	.05	.05	1.0	14	2.2	.57	.42
10	.24	.12	.06	.05	.04	.05	.05	2.2	15	1.9	.51	.45
11	.16	.12	.06	.05	.05	.05	.06	3.4	13	1.7	.48	.42
12	.14	.12	.06	.05	.05	.05	.06	4.9	12	1.9	.45	.36
13	.14	.12	.07	.05	.05	.05	.07	5.8	11	1.9	.39	.30
14	.14	.12	.07	.05	.05	.05	.10	6.9	10	2.1	.39	.28
15	.48	.12	.07	.05	.05	.05	.15	7.3	9.0	1.6	.39	.28
16	.48	.11	.07	.05	.05	.05	.13	8.5	6.6	1.6	.36	.30
17	.33	.11	.07	.05	.05	.05	.13	9.3	6.2	1.3	.39	.28
18	.36	.11	.07	.05	.05	.05	.14	12	6.8	1.4	.45	.28
19	.28	.11	.07	.05	.05	.05	.15	15	6.8	2.0	.39	.28
20	.24	.11	.07	.05	.05	.06	.15	16	6.0	1.5	.36	.29
21	.22	.10	.07	.05	.05	.06	.14	16	5.5	1.3	.39	.26
22	.20	.10	.07	.05	.05	.06	.17	14	5.3	1.2	.51	.21
23	.16	.09	.06	.05	.04	.06	.21	13	4.9	1.1	.39	.18
24	.15	.09	.06	.05	.05	.06	.22	14	4.7	.95	.39	.22
25	.15	.10	.06	.05	.05	.06	.20	16	4.3	.85	.30	.29
26	.16	.09	.06	.05	.05	.06	.23	13	4.0	.75	.30	.44
27	.16	.09	.06	.05	.05	.06	.29	9.9	3.7	.75	.28	.33
28	.16	.08	.06	.05	.05	.05	.37	9.7	3.5	.75	.28	.37
29	.15	.08	.06	.05	-----	.05	.44	10	3.3	.70	.26	.35
30	.14	.09	.06	.05	-----	.05	.45	11	3.0	.75	.28	.31
31	.14	-----	.05	.05	-----	.05	-----	11	-----	.65	.28	-----
TOTAL	6.50	3.36	2.17	1.56	1.31	1.63	4.37	234.58	253.6	49.35	15.50	9.24
MEAN	.21	.11	.070	.050	.047	.053	.15	7.57	8.45	1.59	.50	.31
MAX	.48	.14	.09	.06	.05	.06	.45	16	15	2.8	1.5	.45
MIN	.14	.08	.05	.05	.04	.05	.05	.37	3.0	.65	.26	.18
AC-FT	13	6.7	4.3	3.1	2.6	3.2	8.7	465	503	98	31	18

CAL YR 1972 TOTAL 418.96 MEAN 1.14 MAX 14 MIN 0 AC-FT 831
WTR YR 1973 TOTAL 583.17 MEAN 1.60 MAX 16 MIN .04 AC-FT 1,160

PEAK DISCHARGE (BASE, 25 CFS).--No peak above base.

NOTE.--No gage-height record Oct. 22 to May 9.

PINEY RIVER BASIN

09058800 EAST MEADOW CREEK NEAR MINTURN, COLO.

LOCATION.--Lat 39°43'54", long 106°25'34", Eagle County, on left bank 1.4 mi (2.3 km) upstream from mouth and 10 mi (16 km) north of Minturn.

DRAINAGE AREA.--3.61 mi² (9.35 km²).

PERIOD OF RECORD.--October 1964 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 9,455 ft (2,882 m) from topographic map.

AVERAGE DISCHARGE.--9 years, 4.56 ft³/s (0.129 m³/s), 3,300 acre-ft/yr (4.07 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 61 ft³/s (1.73 m³/s) June 10 (gage height, 1.95 ft or 0.594 m); minimum daily, 0.48 ft³/s (0.014 m³/s) Feb. 5.

Period of record: Maximum discharge, 61 ft³/s (1.73 m³/s) June 10, 1973 (gage height, 1.95 ft or 0.594 m); maximum gage height determined, 2.22 ft (0.677 m) May 12, 1970 (backwater from ice); minimum daily discharge determined, 0.45 ft³/s (0.013 m³/s) Jan. 8, 1967, Jan. 6, 1971.

REMARKS.--Records good except those for period of no gage-height record, which are poor. No regulation or diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.3	1.5	.98	.60	.56	.58	.62	1.7	17	34	5.4	1.6
2	1.3	1.6	1.0	.58	.54	.58	.64	1.5	16	31	4.6	1.8
3	1.2	1.6	1.0	.60	.49	.58	.64	1.6	15	28	4.4	1.8
4	1.1	1.6	1.0	.60	.49	.58	.64	1.9	13	26	4.2	1.6
5	1.2	1.6	1.0	.60	.48	.58	.62	2.1	13	23	6.0	1.5
6	1.1	1.5	1.0	.60	.49	.58	.60	2.4	16	21	7.7	1.5
7	1.3	1.5	.94	.58	.50	.58	.60	1.9	19	20	5.1	1.5
8	2.4	1.5	.88	.58	.50	.60	.58	1.8	29	19	4.9	1.5
9	2.1	1.4	.84	.58	.50	.60	.60	1.8	37	16	4.6	1.4
10	1.5	1.4	.82	.58	.52	.60	.60	4.4	51	15	3.9	1.5
11	1.3	1.4	.82	.58	.54	.60	.62	9.8	50	18	3.7	1.5
12	1.3	1.4	.80	.56	.54	.60	.64	12	49	16	3.4	1.5
13	1.3	1.4	.80	.56	.54	.60	.68	12	48	19	3.2	1.5
14	1.3	1.4	.80	.56	.54	.62	.74	8.5	45	19	3.0	1.3
15	1.8	1.4	.80	.54	.56	.60	.86	8.5	40	15	2.9	1.3
16	2.6	1.4	.80	.54	.58	.60	.88	11	32	15	2.7	1.3
17	1.9	1.3	.80	.54	.58	.62	.88	14	30	12	2.7	1.2
18	2.4	1.3	.80	.54	.58	.62	.86	19	28	13	2.9	1.2
19	2.2	1.3	.78	.54	.58	.64	.82	25	22	18	2.7	1.1
20	1.8	1.3	.80	.56	.58	.66	.82	23	24	13	2.6	1.1
21	1.8	1.2	.80	.56	.58	.68	.82	21	26	12	2.7	1.1
22	1.8	1.1	.78	.58	.56	.68	.82	17	27	9.8	3.0	1.1
23	1.5	1.1	.78	.58	.54	.68	.84	17	31	9.0	2.2	1.1
24	2.1	1.0	.76	.58	.54	.68	1.0	18	52	7.7	2.2	1.3
25	1.9	1.1	.72	.58	.56	.70	1.1	17	36	6.9	2.1	1.3
26	1.9	1.1	.70	.58	.56	.68	1.1	15	39	6.4	1.9	1.3
27	1.5	1.0	.70	.56	.56	.68	1.5	13	39	6.4	1.8	1.2
28	1.4	.96	.72	.56	.56	.66	1.6	12	40	6.0	1.6	1.1
29	1.8	.92	.72	.56	-----	.64	1.5	15	37	5.6	1.5	1.3
30	1.6	.96	.72	.56	-----	.64	1.7	13	34	5.6	1.5	1.3
31	1.5	-----	.66	.56	-----	.62	-----	18	-----	5.6	1.6	-----
TOTAL	51.2	39.24	25.52	17.68	15.15	19.36	25.92	339.9	935	470.0	102.7	41.0
MEAN	1.65	1.31	.82	.57	.54	.62	.86	11.0	31.2	15.2	3.31	1.37
MAX	2.6	1.6	1.0	.60	.58	.70	1.7	25	51	34	7.7	1.8
MIN	1.1	.92	.66	.54	.48	.58	.58	1.5	13	5.6	1.5	1.1
AC-FT	102	78	51	35	30	38	51	674	1,850	932	204	81

CAL YR 1972 TOTAL 1,342.05 MEAN 3.67 MAX 35 MIN .48 AC-FT 2,660
 MIN YR 1973 TOTAL 2,082.67 MEAN 5.71 MAX 51 MIN .48 AC-FT 4,130

PEAK DISCHARGE (BASE, 40 CFS)--June 10 (1700) 61 cfs (1.95 ft).

NOTE.--No gage-height record Oct. 31 to Apr. 24.

PINEY RIVER BASIN

199

09059500 PINEY RIVER NEAR STATE BRIDGE, COLO.

LOCATION.--Lat 39°48'00", long 106°35'00", in sec.16, T.3 S., R.82 W., Eagle County, on left bank at downstream side of private bridge at Perry Olsen Ranch just downstream from Rock Creek, 6.0 mi (9.7 km) southeast of State Bridge.

DRAINAGE AREA.--86.2 mi² (223.3 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 7,272.35 ft (2,216.612 m) above mean 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 (0.725 m) higher.

AVERAGE DISCHARGE.--29 years, 75.0 ft³/s (2.124 m³/s), 54,340 acre-ft/yr (67.0 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 874 ft³/s (24.8 m³/s) June 12 (gage height, 5.17 ft or 1.576 m, from recorded range in stage); minimum daily, 11 ft³/s (0.31 m³/s) Feb. 5.
Period of record: Maximum discharge, 1,110 ft³/s (31.4 m³/s) June 8, 1952 (gage height, 5.61 ft or 1.710 m); minimum daily, 1.9 ft³/s (0.054 m³/s) Sept. 1, 18, 19, 1954.

REMARKS.--Records poor. Diversions above station for irrigation of about 400 acres (1.62 km²) of hay meadows above and below station.

REVISIONS.--WSP 2124: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27	35	17	14	13	14	18	36	450	480	72	27
2	27	35	18	15	12	13	17	37	460	470	68	29
3	25	32	19	15	12	13	16	38	400	440	64	29
4	24	32	19	16	12	13	15	39	340	420	64	28
5	25	32	19	16	11	13	15	40	340	410	68	27
6	24	32	18	15	12	12	14	44	580	400	84	25
7	24	30	17	14	12	12	14	46	460	390	70	24
8	31	34	16	13	12	12	18	50	500	380	64	19
9	41	30	15	13	12	12	16	56	600	380	58	19
10	42	28	15	13	13	12	17	68	780	330	54	22
11	36	26	14	13	14	14	18	90	820	320	50	29
12	32	25	14	13	14	15	20	150	820	320	49	26
13	30	24	14	13	13	16	22	170	760	320	48	24
14	29	24	15	13	12	15	24	190	740	330	48	23
15	34	24	15	13	13	13	25	210	700	280	47	22
16	48	25	15	13	13	14	24	230	600	240	48	21
17	42	26	16	13	12	14	24	250	430	210	48	21
18	44	25	16	13	12	15	25	320	370	190	45	20
19	45	24	16	13	12	16	28	480	370	220	44	19
20	44	23	17	14	12	16	29	520	340	240	44	18
21	46	22	16	14	12	17	28	520	340	170	42	18
22	45	21	16	14	13	18	27	460	380	140	41	18
23	40	19	15	14	13	18	27	400	450	120	39	18
24	37	18	15	13	13	17	27	370	470	110	37	20
25	37	19	15	13	13	16	27	360	480	100	35	21
26	37	20	15	13	13	16	28	340	520	98	33	22
27	37	19	16	13	13	16	30	300	520	97	32	21
28	37	17	17	13	13	16	32	270	520	88	30	21
29	34	16	17	13	-----	16	34	300	500	86	29	21
30	34	17	16	13	-----	16	35	360	480	82	28	21
31	33	-----	15	14	-----	16	-----	410	-----	76	28	-----
TOTAL	1,091	754	498	422	351	456	696	7,154	15,520	7,937	1,511	673
MEAN	35.2	25.1	16.1	13.6	12.5	14.7	23.2	231	511	256	48.7	22.4
MAX	44	35	19	16	14	18	35	520	820	480	84	29
MIN	24	16	14	13	11	12	14	36	340	76	28	18
AC-FT	2,160	1,500	988	837	696	904	1,380	14,190	30,390	15,740	3,000	1,330

CAL YR 1972 TOTAL 27,025 MEAN 73.8 MAX 555 MIN 13 AC-FT 53,600
WTR YR 1973 TOTAL 36,863 MEAN 101 MAX 820 MIN 11 AC-FT 73,120

PEAK DISCHARGE (BASE, 520 CFS).--May 19 (time-unknown) 705 cfs (4.83 ft); June 12 (time-unknown) 874 cfs (5.17 ft).

NOTE.--No gage-height record Nov. 11 to Aug. 23.

09060500 ROCK CREEK NEAR TOPONAS, COLO.

LOCATION.--Lat 40°02'28", long 106°39'19", in NW¼ sec.24, T.1 N., R.83 E., Routt County, on right bank 0.1 mi (0.2 km) upstream from Horse Creek, 0.8 mi (1.3 km) downstream from Shoe and Stocking Creek, and 8 mi (13 km) east of Toponas.

DRAINAGE AREA.--47.6 mi² (123.3 km²).

PERIOD OF RECORD.--October 1952 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 8,544 ft (2,604 m) from topographic map.

AVERAGE DISCHARGE.--21 years, 32.6 ft³/s (0.923 m³/s), 23,620 acre-ft/yr (29.1 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 370 ft³/s (10.5 m³/s) May 18 (gage height, 4.41 ft or 1.344 m); minimum daily, 4.8 ft³/s (0.14 m³/s) Apr. 4.

Period of record: Maximum discharge, 482 ft³/s (13.7 m³/s) May 12, 1962 (gage height, 4.80 ft or 1.463 m), from rating curve extended above 300 ft³/s (8.5 m³/s); maximum gage height, 5.49 ft (1.673 m) Apr. 18, 1962 (backwater from ice); minimum daily discharge, 2.2 ft³/s (0.062 m³/s) Aug. 30, 31, Sept. 2, 1954.

REMARKS.--Records good except those for period of no gage-height record, which are poor. No regulation or diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.8	13	8.4	6.2	6.0	5.4	5.0	176	198	35	12	6.9
2	8.3	14	8.2	6.2	6.2	5.4	5.0	163	206	31	11	8.8
3	7.8	13	7.6	6.2	5.8	5.4	5.0	110	176	29	11	9.7
4	7.8	12	7.4	6.0	5.6	5.4	4.8	150	168	29	12	7.8
5	9.2	14	7.2	6.2	5.8	5.4	5.0	170	145	26	23	6.5
6	9.7	15	6.6	6.2	5.8	5.0	7.4	200	152	23	24	5.8
7	10	11	6.6	6.2	5.8	5.2	13	190	166	23	24	7.4
8	18	12	6.6	6.2	5.8	5.4	9.2	170	176	31	27	6.0
9	23	13	6.4	6.2	5.6	5.4	12	200	188	28	15	5.5
10	15	10	6.2	6.2	5.6	5.4	12	240	192	25	12	6.0
11	11	11	6.2	6.2	5.6	5.4	14	250	180	21	13	7.4
12	9.7	11	6.2	6.2	5.6	5.4	30	250	170	24	11	11
13	11	12	6.2	6.0	5.6	5.2	49	250	157	38	10	8.3
14	15	9.0	6.2	6.0	5.6	5.0	81	250	202	38	10	6.9
15	20	9.8	6.0	6.2	5.2	5.0	105	260	208	32	9.7	6.5
16	29	9.8	6.0	6.2	5.2	5.0	111	252	155	30	9.2	6.5
17	20	8.4	6.0	6.2	5.2	5.0	136	276	122	28	10	6.5
18	21	9.0	6.2	6.2	5.2	5.0	119	304	103	25	8.3	6.0
19	20	9.8	6.4	6.2	5.4	5.0	76	314	93	37	7.8	6.0
20	17	9.0	6.4	6.2	5.4	5.0	75	316	84	40	7.8	5.8
21	18	9.0	6.4	6.0	5.4	5.0	105	341	76	43	8.3	5.8
22	20	8.4	6.4	6.0	5.2	5.2	126	314	69	37	12	5.8
23	18	6.4	6.4	5.8	5.2	5.2	113	296	63	26	12	5.8
24	17	7.4	6.4	5.8	5.4	5.2	116	292	60	20	10	6.9
25	15	8.0	6.2	5.8	5.6	5.2	119	296	54	19	9.7	8.3
26	15	7.8	6.2	5.8	5.6	5.2	118	264	49	17	7.4	8.3
27	15	8.2	6.2	6.0	5.6	5.2	99	218	47	15	6.5	7.8
28	15	7.8	6.2	6.0	5.6	5.2	184	186	47	17	6.0	7.8
29	14	8.4	6.2	6.0	-----	5.2	232	184	49	17	6.0	8.8
30	10	8.4	6.0	5.8	-----	5.0	236	190	40	15	6.0	8.3
31	12	-----	6.2	5.8	-----	5.0	-----	186	-----	14	6.9	-----
TOTAL	460.3	305.6	201.8	188.2	155.6	161.0	2,322.4	7,258	3,795	833	358.6	214.9
MEAN	14.8	10.2	6.51	6.07	5.56	5.19	77.4	234	127	26.9	11.6	7.16
MAX	29	15	8.4	6.2	6.2	5.4	236	341	208	43	27	11
MIN	7.8	6.4	6.0	5.8	5.2	5.0	4.8	110	40	14	6.0	5.5
AC-FT	913	606	400	373	309	319	4,610	14,400	7,530	1,650	711	426

CAL YR 1972 TOTAL 11,818.4 MEAN 32.3 MAX 228 MIN 4.6 AC-FT 23,440

WTR YR 1973 TOTAL 16,254.4 MEAN 44.5 MAX 341 MIN 4.8 AC-FT 32,240

PEAK DISCHARGE (BASE, 200 CFS).--Apr. 30 (1100) 266 cfs (3.92 ft); May 18 (2230) 370 cfs (4.41 ft).

NOTE.--No gage-height record Nov. 6 to Mar. 21.

09060700 EGERIA CREEK NEAR TOPONAS, COLO.

LOCATION---Lat 40°02'50", long 106°51'54", in SE¼ sec.13, T.1 N., R.85 W., Routt County, on right upstream wingwall of county bridge, 5.0 mi (8.0 km) upstream from King Creek and 3.0 mi (4.8 km) west of Toponas.

DRAINAGE AREA.--29.4 mi² (76.1 km²).

PERIOD OF RECORD.--October 1965 to September 1973 (discontinued).

GAGE.--Water-stage recorder.

AVERAGE DISCHARGE.--8 years, 10.4 ft³/s (0.295 m³/s), 7,530 acre-ft/yr (9.28 hm³/yr).

EXTREMES---Current year: Maximum discharge, 255 ft³/s (7.22 m³/s) May 19 (gage height, 1.84 ft or 0.561 m); minimum daily, 1.6 ft³/s (0.045 m³/s) June 21-25.

Period of record: Maximum discharge, 255 ft³/s (7.22 m³/s) May 19, 1973 (gage height, 1.84 ft or 0.561 m); minimum daily, 0.3 ft³/s (0.008 m³/s) June 15, July 4-7, 1966.

REMARKS---Records good except those for period of no gage-height record, which are poor. Diversions above station for irrigation above and below. Water imported above station from Yampa River basin by Stillwater and Dome Creek ditches.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	UCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.6	5.6	4.3	4.4	4.3	4.3	6.0	15	30	1.9	2.1	4.5
2	3.2	5.8	4.4	4.4	4.4	4.4	6.5	14	29	2.1	2.4	4.9
3	3.2	5.8	4.5	4.4	4.1	4.5	6.1	17	29	2.1	2.9	4.9
4	3.2	5.8	4.4	4.2	4.0	4.6	6.2	21	31	1.9	3.6	4.5
5	3.2	6.0	4.3	4.4	4.0	4.2	6.2	27	29	1.9	5.7	4.0
6	3.2	6.2	4.1	4.4	4.1	4.0	6.3	35	24	2.1	5.3	3.6
7	3.0	5.4	3.8	4.4	4.1	4.7	6.4	40	24	2.2	4.9	4.0
8	4.0	6.2	4.3	4.4	4.1	4.6	6.4	59	20	3.2	4.0	4.0
9	4.0	6.4	4.3	4.4	4.0	4.5	7.0	103	13	2.7	3.0	3.6
10	3.2	5.2	4.3	4.4	3.6	4.3	6.8	109	6.1	2.1	2.7	3.6
11	2.9	5.4	4.5	4.4	3.5	4.4	7.0	115	4.0	1.9	2.9	5.7
12	2.9	5.6	4.7	4.4	3.8	4.4	7.3	109	3.0	2.7	2.4	6.6
13	3.0	5.2	4.7	4.3	3.9	4.4	7.3	98	2.9	3.5	2.2	4.9
14	3.0	4.4	4.6	4.3	3.9	4.6	7.4	103	3.0	4.0	2.2	4.0
15	4.0	5.2	4.4	4.4	3.6	4.7	7.9	112	4.9	4.5	2.4	3.6
16	5.3	5.2	4.4	4.4	3.7	4.8	7.7	115	3.2	4.7	3.6	3.6
17	4.0	4.4	4.6	4.4	3.7	5.0	6.8	115	2.1	4.0	3.8	3.2
18	4.0	4.9	4.7	4.4	3.7	4.7	6.2	148	1.9	4.9	4.0	3.0
19	4.0	5.0	4.7	4.4	3.8	4.3	6.5	158	2.1	8.7	4.4	3.2
20	4.0	4.3	4.9	4.3	3.8	5.1	7.0	130	1.8	7.0	4.7	3.0
21	4.9	4.2	4.8	4.2	3.8	4.9	4.6	144	1.6	7.4	4.9	3.0
22	4.9	3.9	4.7	4.2	3.7	4.8	4.4	98	1.6	5.7	5.7	3.0
23	4.5	3.2	4.7	3.7	3.9	4.5	4.6	70	1.6	6.1	5.3	3.2
24	4.0	3.4	4.5	3.7	4.0	4.8	5.3	61	1.6	4.9	4.9	3.6
25	4.5	3.9	4.4	3.8	4.0	5.0	6.0	66	1.6	5.3	4.9	3.6
26	4.5	3.8	4.3	3.9	4.3	5.0	5.2	59	2.2	4.9	4.9	4.0
27	4.0	4.0	4.5	4.0	4.4	5.2	6.4	50	2.4	4.5	4.9	3.6
28	4.5	3.9	4.4	4.2	4.3	5.2	8.8	41	2.9	4.5	4.5	3.6
29	5.7	4.2	4.3	4.1	-----	5.3	11	36	3.6	3.2	4.5	3.6
30	5.4	4.2	4.1	4.1	-----	5.4	16	34	2.1	2.7	4.5	3.6
31	5.2	-----	4.3	4.0	-----	5.6	-----	30	-----	2.1	4.5	-----
TOTAL	123.0	146.7	137.9	131.4	110.5	146.2	207.3	2,332	285.2	119.4	122.7	117.2
MEAN	3.97	4.69	4.45	4.24	3.95	4.72	6.91	75.2	9.51	3.85	3.96	3.91
MAX	5.7	6.4	4.9	4.4	4.4	5.6	16	158	31	8.7	5.7	6.6
MIN	2.9	3.2	3.8	3.7	3.5	4.0	4.4	14	1.6	1.9	2.1	3.0
AC=FT	244	291	274	261	219	290	411	4,630	566	237	243	232

CAL YR 1972 TOTAL 3,180.8 MEAN 8.69 MAX 53 MIN 1.3 AC=FT 6,310
WTR YR 1973 TOTAL 3,979.5 MEAN 10.9 MAX 158 MIN 1.6 AC=FT 7,890

NOTE---No gage-height record Oct. 30 to May 7.

09063000 EAGLE RIVER AT RED CLIFF, COLO.

LOCATION.--Lat 39°30'34", long 106°22'00", in NW¼SW¼ sec.20, T.6 S., R.80 W., Eagle County, on left bank at Red Cliff, 0.3 mi (0.5 km) upstream from Turkey Creek.

DRAINAGE AREA.--70.0 mi² (181.3 km²).

PERIOD OF RECORD.--October 1910 to September 1925, May 1944 to current year. Monthly discharge only for some periods, published in WSP 1313.

GAGE.--Water-stage recorder. Datum of gage is 8,648.48 ft (2,636.057 m) above mean sea level. Jan. 8, 1911, to Sept. 30, 1925, nonrecording gage at bridge 0.2 mi (0.3 km) downstream at different datum. May 25, 1944, to Oct. 12, 1952, water-stage recorder at site 200 ft (61 m) upstream at datum 3.54 ft (1.079 m) higher.

AVERAGE DISCHARGE.--44 years, 50.0 ft³/s (1.416 m³/s) 36,220 acre-ft/yr (44.7 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 415 ft³/s (11.8 m³/s) June 10 (gage height, 3.83 ft or 1.167 m); maximum gage height recorded, 4.23 ft (1.289 m) Nov. 28 (backwater from ice); minimum daily discharge, 8.0 ft³ (0.23 m³/s) Feb. 3.

Period of record: Maximum discharge observed, 1,010 ft³/s (28.6 m³/s) June 5, 1912 (gage height, 4.0 ft or 1.22 m, site and datum then in use), from rating curve extended above 500 ft³/s (14 m³/s); maximum gage height recorded, 4.23 ft (1.289 m) Nov. 28, 1972 (backwater from ice); minimum daily discharge, 1.0 ft³/s (0.028 m³/s) Oct. 15, 1917.

REMARKS.--Records good except those for winter period, which are poor. Transmountain diversions above station by Columbine, Ewing, and Wurtz ditches (see elsewhere in this report). Transbasin diversion above station from Robinson Reservoir (capacity, 2,520 acre-ft or 3.11 hm³) to Tenmile Creek for mining development. Small diversions for irrigation of 400 acres (1.62 km²) above station.

REVISIONS (WATER YEARS).--WSP 2124: Drainage area. WRD Colo. 1972: 1971.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	15	11	8.2	8.4	8.8	10	32	179	93	34	20
2	13	15	11	8.2	8.2	8.8	10	28	165	84	32	20
3	13	15	11	8.2	8.0	8.8	10	28	155	73	30	19
4	12	16	11	8.4	8.4	8.8	11	29	153	66	29	19
5	13	16	11	8.6	8.6	8.8	11	33	141	60	32	18
6	13	16	11	8.6	8.6	9.0	11	35	137	60	33	18
7	13	16	11	8.6	8.6	9.0	11	29	153	57	32	18
8	16	15	11	8.6	8.6	9.0	11	28	176	57	31	18
9	15	14	9.0	8.6	8.6	9.0	11	41	218	57	28	18
10	13	14	9.0	8.6	8.6	9.0	11	60	258	54	27	18
11	14	15	9.0	8.6	8.8	9.0	14	81	314	51	26	17
12	15	15	9.0	8.6	8.6	9.0	14	105	350	54	25	17
13	14	15	9.0	8.6	8.8	9.0	14	112	330	57	24	17
14	15	15	9.0	8.6	8.8	9.0	20	111	302	57	24	17
15	16	15	9.0	8.4	8.8	9.0	20	105	290	54	23	16
16	19	15	8.2	8.4	8.8	8.8	20	114	282	50	22	17
17	16	15	8.2	8.4	8.8	9.0	25	118	254	48	23	17
18	15	15	8.2	8.4	8.8	9.2	25	133	224	50	23	17
19	15	15	8.2	8.4	8.8	9.2	25	158	203	55	22	17
20	15	15	8.4	8.4	8.8	9.2	30	148	182	48	21	17
21	15	13	8.4	8.4	8.6	9.4	30	133	165	48	23	17
22	16	13	8.4	8.6	8.6	10	30	150	158	48	23	17
23	15	13	8.4	8.8	8.4	10	34	148	145	42	22	17
24	15	13	8.4	8.8	8.4	9.6	34	143	145	40	21	18
25	15	13	8.4	9.0	8.6	9.6	34	145	141	40	21	19
26	14	13	8.4	8.6	8.6	9.6	34	145	153	40	20	19
27	15	13	8.4	8.4	8.6	9.6	34	137	163	39	19	18
28	15	13	8.6	8.4	8.6	9.6	34	118	145	38	19	18
29	15	13	8.8	8.4	-----	9.6	36	121	135	37	19	18
30	15	11	8.6	8.4	-----	10	35	137	105	36	19	18
31	15	-----	8.4	8.4	-----	10	-----	143	-----	35	21	-----
TOTAL	453	430	285.4	263.6	240.8	286.4	649	3,048	5,921	1,628	768	534
MEAN	14.6	14.3	9.21	8.50	8.60	9.24	21.6	98.3	197	52.5	24.8	17.8
MAX	19	16	11	9.0	8.8	10	36	158	350	93	34	20
MIN	12	11	8.2	8.2	8.0	8.8	10	28	105	35	19	16
AC-FT	899	853	566	523	478	568	1,290	6,050	11,740	3,230	1,520	1,060

CAL YR 1972 TOTAL 11,610.5 MEAN 31.7 MAX 199 MIN 8.0 AC-FT 23,030

WTR YR 1973 TOTAL 14,507.2 MEAN 39.7 MAX 350 MIN 8.0 AC-FT 28,780

PEAK DISCHARGE (BASE, 280 CFS).--June 10 (2330) 415 cfs (3.83 ft).

NOTE.--No gage-height record Dec. 1 to Apr. 26.

EAGLE RIVER BASIN

203

09063200 WEARYMAN CREEK NEAR RED CLIFF, COLO.

LOCATION.--Lat 39°31'14", long 106°19'06", in SW¼SE¼ sec.15, T.6 S., R.80 W., Eagle County, on left bank 0.4 mi (0.6 km) upstream from mouth, and 2.5 mi (4.0 km) east of Red Cliff.

DRAINAGE AREA.--8.78 mi² (22.74 km²).

PERIOD OF RECORD.--October 1964 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 9,158 ft (2,791.4 m) from topographic map.

AVERAGE DISCHARGE.--9 years, 8.34 ft³/s (0.236 m³/s), 6,040 acre-ft/yr (7.45 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 130 ft³/s (3.68 m³/s) June 12 (gage height, 2.78 ft or 0.847 m), from rating curve extended above 58 ft³/s (1.6 m³/s); minimum daily, 1.0 ft³/s (0.028 m³/s) Jan. 1-3, 22, Feb. 2.

Period of record: Maximum discharge, about 140 ft³/s (4.0 m³/s) June 18, 1965 (gage height, 3.23 ft or 0.985 m); minimum daily, 0.30 ft³/s (0.008 m³/s) Feb. 21, 1967.

REMARKS.--Records good except those for period of no gage-height record, which are poor. No regulation or diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.5	2.1	2.0	1.0	1.2	1.6	1.6	1.4	12	65	14	4.3
2	2.5	2.0	2.0	1.0	1.0	1.6	1.6	1.4	12	76	12	4.3
3	2.4	1.9	1.8	1.0	1.2	1.4	1.6	1.4	12	65	11	4.0
4	2.4	2.0	1.6	1.2	1.4	1.4	1.6	1.5	11	56	11	3.6
5	2.3	1.9	1.4	1.2	1.4	1.4	1.6	1.6	11	47	12	3.6
6	2.3	1.8	1.4	1.2	1.6	1.4	1.6	1.6	11	47	11	3.6
7	2.4	2.0	1.4	1.2	1.6	1.6	1.6	1.4	12	47	11	3.6
8	2.8	1.9	1.4	1.2	1.6	1.6	1.6	1.3	19	41	11	3.3
9	2.5	1.9	1.4	1.2	1.6	1.6	1.6	1.3	25	39	9.7	3.6
10	2.4	2.0	1.4	1.2	1.6	1.6	1.6	1.3	33	37	9.7	3.3
11	2.3	1.9	1.4	1.2	1.6	1.6	1.6	1.3	56	37	10	3.3
12	2.3	1.8	1.4	1.2	1.6	1.6	1.6	1.2	76	33	10	3.0
13	2.3	1.8	1.4	1.4	1.6	1.4	1.6	1.7	84	33	9.1	3.0
14	2.3	1.8	1.4	1.4	1.6	1.4	1.6	2.2	90	35	8.5	3.3
15	2.4	1.7	1.4	1.4	1.4	1.4	1.6	3.7	75	28	7.9	3.3
16	2.5	1.7	1.4	1.4	1.4	1.6	1.6	5.8	62	24	7.4	3.3
17	2.4	1.7	1.4	1.4	1.4	1.6	1.6	5.8	56	22	7.9	3.0
18	2.4	1.7	1.4	1.4	1.4	1.6	1.4	5.8	65	24	7.4	2.9
19	2.4	1.7	1.4	1.4	1.2	1.6	1.4	8.8	53	24	6.2	2.9
20	2.3	1.7	1.4	1.4	1.2	1.6	1.4	12	47	21	6.8	3.0
21	2.3	1.7	1.4	1.2	1.4	1.6	1.2	12	39	21	6.8	2.9
22	2.3	1.8	1.6	1.0	1.4	1.6	1.2	8.8	41	21	6.8	2.9
23	2.2	1.8	1.6	1.2	1.6	1.6	1.2	7.7	53	20	4.9	2.9
24	2.1	1.8	1.6	1.2	1.6	1.6	1.2	8.8	59	19	4.9	3.0
25	2.1	1.8	1.6	1.2	1.6	1.6	1.2	8.8	65	18	4.6	2.9
26	2.1	1.7	1.4	1.2	1.6	1.6	1.3	8.8	71	16	4.9	2.9
27	2.1	1.6	1.4	1.2	1.6	1.6	1.4	8.5	81	15	4.6	2.9
28	2.1	1.6	1.4	1.2	1.6	1.6	1.5	7.7	76	15	4.3	3.0
29	2.1	1.6	1.2	1.2	-----	1.6	1.5	10	72	14	4.3	3.0
30	2.1	1.8	1.2	1.4	-----	1.6	1.5	11	60	15	4.6	2.9
31	2.1	-----	1.2	1.4	-----	1.6	-----	13	-----	14	4.3	-----
TOTAL	71.7	54.2	45.4	38.4	41.0	48.2	44.6	167.6	1,439	989	248.6	97.5
MEAN	2.31	1.81	1.46	1.24	1.46	1.55	1.49	5.41	48.0	31.9	8.02	3.25
MAX	2.8	2.1	2.0	1.4	1.6	1.6	1.6	13	90	76	14	4.3
MIN	2.1	1.6	1.2	1.0	1.0	1.4	1.2	1.2	11	14	4.3	2.9
AC-FT	142	108	90	76	81	96	88	332	2,850	1,960	493	193

CAL YR 1972 TOTAL 2,847.0 MEAN 7.78 MAX 70 MIN 1.0 AC-FT 5,650
WTR YR 1973 TOTAL 3,285.2 MEAN 9.00 MAX 90 MIN 1.0 AC-FT 6,520

PEAK DISCHARGE (BASE, 70 CFS).--June 12 (2230) 130 cfs (2.78 ft); June 27 (2030) 91 cfs (2.68 ft).

NOTE.--No gage-height record Nov. 27 to Apr. 25.

09063400 TURKEY CREEK NEAR RED CLIFF, COLO.

LOCATION.--Lat 39°31'22", long 106°20'08", in NW¼SW¼ sec.16, T.6 S., R.80 W., Eagle County, on right bank 400 ft (120 m) downstream from Lime Creek, 1.9 mi (3.1 km) northeast of Red Cliff, and 2.0 mi (3.2 km) upstream from mouth.

DRAINAGE AREA.--23.9 mi² (61.9 km²).

PERIOD OF RECORD.--October 1963 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 8,918 ft (2,718 m) from topographic map.

AVERAGE DISCHARGE.--10 years, 21.6 ft³/s (0.612 m³/s), 15,650 acre-ft/yr (19.3 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 300 ft³/s (8.50 m³/s) June 11 (gage height, 2.52 ft or 0.768 m); minimum daily, 2.0 ft³/s (0.057 m³/s) Feb. 20.

Period of record: Maximum discharge, 515 ft³/s (14.6 m³/s) June 17, 1965 (gage height, 3.03 ft or 0.924 m), from rating curve extended above 230 ft³/s (6.5 m³/s); minimum not determined.

REMARKS.--Records good except those for period of no gage-height record, which are poor. No diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.5	5.2	3.7	3.4	2.7	2.5	2.7	4.3	63	63	25	8.2
2	7.5	5.0	3.7	3.5	2.6	2.4	2.6	4.3	67	93	23	7.9
3	7.5	5.0	3.7	3.3	2.6	2.4	2.5	4.5	65	113	22	7.9
4	7.5	5.6	3.7	3.4	2.6	2.3	2.6	5.2	60	77	22	7.1
5	7.1	4.5	3.7	3.3	2.7	2.3	2.5	6.3	55	83	22	6.7
6	6.7	4.3	3.9	3.2	2.7	2.4	2.3	6.7	55	103	22	6.7
7	7.5	4.8	3.7	3.1	2.7	2.5	2.3	6.3	60	88	21	6.7
8	8.2	5.0	3.7	3.1	2.7	2.7	2.4	6.3	79	73	20	6.7
9	7.9	4.5	3.7	3.1	2.6	2.8	2.3	7.9	105	71	18	7.1
10	7.1	4.5	3.6	3.2	2.5	3.0	2.1	12	135	69	17	8.2
11	6.7	4.5	3.6	3.3	2.4	3.2	2.2	17	159	55	17	7.9
12	6.3	4.5	3.6	3.4	2.3	3.4	2.3	21	232	51	16	7.5
13	6.7	4.3	3.5	3.3	2.4	3.1	2.3	23	220	51	15	7.1
14	6.7	4.3	3.6	3.5	2.4	3.2	2.3	24	256	57	14	7.1
15	7.9	4.3	3.4	3.5	2.3	3.2	2.4	25	228	51	14	7.1
16	7.9	4.1	3.5	3.5	2.3	3.1	2.4	31	162	55	14	7.1
17	7.5	4.1	3.6	3.4	2.3	3.1	2.4	38	123	50	14	7.1
18	7.5	4.1	3.6	3.4	2.3	3.1	2.4	50	105	50	14	6.7
19	7.1	4.1	3.5	3.4	2.2	3.0	2.5	58	125	53	12	6.3
20	6.7	4.1	3.5	3.3	2.0	3.0	2.4	60	133	47	12	6.0
21	6.3	3.9	3.5	3.2	2.2	3.1	2.4	57	125	42	12	6.3
22	6.0	3.9	3.5	3.2	2.2	3.0	2.5	57	118	38	11	6.0
23	6.0	4.1	3.5	3.0	2.2	2.7	2.5	51	105	37	11	6.0
24	6.0	4.1	3.5	3.0	2.3	2.6	2.6	50	95	35	10	7.5
25	5.2	4.3	3.5	3.0	2.4	2.7	2.7	51	103	34	9.6	7.9
26	5.2	4.1	3.6	3.1	2.4	2.7	3.0	51	100	34	9.0	7.9
27	5.6	4.3	3.5	3.0	2.4	2.6	3.4	53	118	33	8.6	7.9
28	5.6	4.3	3.4	2.9	2.5	2.5	4.1	51	141	31	8.6	8.2
29	4.8	3.9	3.4	2.9	-----	2.6	4.3	47	98	29	8.2	8.2
30	4.8	3.9	3.5	2.8	-----	3.0	4.5	45	65	27	8.6	8.2
31	5.2	-----	3.4	2.8	-----	2.9	-----	51	-----	26	8.2	-----
TOTAL	206.2	131.6	110.8	99.5	67.9	87.1	79.9	974.8	3,555	1,719	458.8	217.2
MEAN	6.65	4.39	3.57	3.21	2.43	2.81	2.66	31.4	119	55.5	14.8	7.24
MAX	8.2	5.6	3.9	3.5	2.7	3.4	4.5	60	256	113	25	8.2
MIN	4.8	3.9	3.4	2.8	2.0	2.3	2.1	4.3	55	26	8.2	6.0
AC-FT	409	261	220	197	135	173	158	1,930	7,050	3,410	910	431

CAL YR 1972 TOTAL 7,767.6 MEAN 21.2 MAX 169 MIN 3.0 AC-FT 15,410

WTR YR 1973 TOTAL 7,707.8 MEAN 21.1 MAX 256 MIN 2.0 AC-FT 15,290

PEAK DISCHARGE (BASE, 160 CFS).--June 11 (1930) 300 cfs (2.52 ft).

NOTE.--No gage-height record Dec. 10 to Apr. 25.

EAGLE RIVER BASIN

205

09063900 MISSOURI CREEK NEAR GOLD PARK, COLO.

LOCATION.--Lat 39°23'25", long 106°28'10", Eagle County, on left bank 50 ft (15 m) downstream from road culvert, 0.6 mi (1.0 km) upstream from Fancy Creek, 2.2 mi (3.5 km) southwest of Gold Park, and 10 mi (16 km) southwest of Red Cliff.

DRAINAGE AREA.--6.42 mi² (16.63 km²).

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

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 9,980 ft (3,042 m) from topographic map.

EXTREMES.--August to September 1972: Maximum discharge not determined; minimum daily, 3.8 ft³/s (0.11 m³/s) Aug. 31, Sept. 18.

Water year 1973: Maximum discharge, 265 ft³/s (7.50 m³/s) June 28 (gage height, 3.10 ft or 0.945 m), from rating curve extended above 35 ft³/s (1.0 m³/s); minimum daily, 0.43 ft³/s (0.012 m³/s) Feb. 20.

REMARKS.--Records good except those for periods of no gage-height record, which are fair. Transmountain diversion above station to Arkansas River basin through Homestake tunnel (see elsewhere in this report).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1											4.1	5.8
2											4.2	7.0
3											4.1	8.2
4											5.6	6.0
5											12	5.2
6											9.2	11
7											7.7	18
8											6.9	12
9											6.4	9.0
10											6.0	9.6
11											5.4	9.2
12											5.0	8.4
13											4.7	7.6
14											4.8	6.8
15											4.7	5.6
16											4.4	5.0
17											4.2	4.4
18											4.3	3.8
19										†7.8	5.0	8.9
20											7.2	15
21											5.3	13
22											4.4	11
23											4.0	10
24											5.2	8.3
25											4.4	6.6
26											5.3	5.4
27											4.6	4.9
28											4.1	5.0
29											4.1	5.3
30											4.0	5.1
31		-----			-----		-----		-----		3.8	-----
TOTAL											165.1	241.1
MEAN											5.33	8.04
MAX											12	18
MIN											3.8	3.8
AC-FT											327	478

†Result of discharge measurement.

EAGLE RIVER BASIN

09063900 MISSOURI CREEK NEAR GOLD PARK, COLO.--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.9	4.5	1.7	.90	.52	.58	.60	1.6	18	63	8.9	5.5
2	4.5	4.5	1.6	.94	.52	.58	.60	1.5	18	44	9.5	5.4
3	4.2	4.3	1.6	.96	.52	.56	.60	1.6	16	30	9.2	4.8
4	3.8	3.8	1.6	1.0	.54	.54	.60	2.1	14	23	8.9	4.2
5	4.0	3.5	1.6	1.0	.56	.52	.60	2.6	13	21	16	3.9
6	3.7	3.5	1.5	1.0	.56	.54	.58	2.9	15	20	19	4.0
7	4.0	3.3	1.5	1.0	.56	.56	.56	2.8	24	14	15	4.0
8	6.7	3.1	1.5	1.0	.56	.58	.52	2.8	29	14	12	3.8
9	7.1	3.0	1.5	1.0	.54	.58	.58	5.9	32	19	11	3.7
10	6.5	2.9	1.5	1.0	.52	.60	.60	5.1	33	18	8.3	3.8
11	5.2	2.8	1.4	.92	.52	.60	.60	9.6	35	16	7.5	3.6
12	4.8	2.7	1.3	.98	.52	.58	.60	15	65	12	7.3	3.8
13	5.3	2.6	1.3	1.0	.50	.56	.60	22	115	11	6.6	3.9
14	5.9	2.4	1.3	.97	.50	.54	.62	26	104	38	8.0	3.5
15	9.2	2.3	1.3	.81	.50	.54	.62	27	32	16	9.0	3.2
16	13	2.3	1.3	.81	.50	.56	.62	26	15	8.6	8.0	3.5
17	11	2.3	1.3	.75	.48	.56	.62	26	12	7.3	9.6	3.2
18	11	2.2	1.3	.62	.48	.56	.78	25	12	7.2	12	2.7
19	10	2.2	1.4	.56	.46	.56	.88	26	10	11	11	2.5
20	8.9	2.1	1.5	.58	.43	.58	.88	27	11	10	9.6	2.3
21	7.7	2.1	1.4	.58	.46	.58	.89	24	17	7.5	13	2.1
22	6.9	2.0	1.4	.60	.50	.58	.97	19	24	6.7	12	2.1
23	6.5	1.9	1.3	.60	.52	.58	1.0	18	38	7.8	10	2.0
24	5.7	1.9	1.3	.60	.56	.58	.95	19	34	9.3	11	2.9
25	5.1	1.8	1.3	.60	.56	.58	.85	19	44	9.0	9.8	3.0
26	4.8	1.7	1.3	.60	.56	.60	1.1	17	83	8.8	8.7	3.1
27	4.5	1.7	1.2	.56	.56	.60	1.2	12	104	11	7.6	2.7
28	4.6	1.7	1.2	.52	.58	.60	1.3	11	110	12	6.7	2.8
29	4.5	1.7	1.1	.56	-----	.60	1.4	11	88	12	6.3	2.8
30	4.0	1.7	1.0	.58	-----	.60	1.6	13	70	11	5.8	2.7
31	4.2	-----	.96	.58	-----	.60	-----	16	-----	9.1	5.2	-----
TOTAL	192.2	78.5	42.46	24.18	14.59	17.78	23.92	437.5	1,235	507.3	302.5	101.5
MEAN	6.20	2.62	1.37	.78	.52	.57	.80	14.1	41.2	16.4	9.76	3.38
MAX	13	4.5	1.7	1.0	.58	.60	1.6	27	115	63	19	5.5
MIN	3.7	1.7	.96	.52	.43	.52	.52	1.5	10	6.7	5.2	2.0
AC-FT	381	156	84	48	29	35	47	868	2,450	1,010	600	201

WTR YR 1973 TOTAL 2,977.43 MEAN 8.16 MAX 115 MIN .43 AC-FT 5,910

NOTE.--No gage-height record Nov. 25 to Dec. 27, Jan. 19 to Apr. 13.

EAGLE RIVER BASIN

207

09064000 HOMESTAKE CREEK AT GOLD PARK, COLO.

LOCATION.--Lat 39°24'20", long 106°25'58", Eagle County, on left bank at Gold Park, 400 ft (120 m) downstream from ford, 0.5 mi (0.8 km) downstream from French Creek, and 8 mi (13 km) southwest of Red Cliff.

DRAINAGE AREA.--36.1 mi² (93.5 km²). Area at site used prior to Aug. 1, 1972, 34.3 mi² or 88.8 km² (revised).

PERIOD OF RECORD.--October 1947 to September 1954, August 1972 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 9,200 ft (2,804 m) from topographic map. Prior to Aug. 1, 1972, water-stage recorder at site 1,500 ft (460 m) upstream at datum 9,245 ft (2,817.9 m) above mean sea level (river-profile survey).

AVERAGE DISCHARGE.--7 years (1948-54), 63.4 ft³/s (1.795 m³/s), 45,930 acre-ft/yr (56.6 hm³/yr), prior to diversion to Homestake Tunnel.

EXTREMES.--August to September 1972: Maximum discharge during period, 101 ft³/s (2.86 m³/s) Sept. 6 (gage height, 4.62 ft or 1.408 m); minimum daily, 14 ft³/s (0.40 m³/s) Aug. 31.

Water year 1973: Maximum discharge, not determined; minimum daily, 4.6 ft³/s (0.13 m³/s) Feb. 18.

Period of record: Maximum discharge, 1,080 ft³/s (30.6 m³/s) June 13, 1953 (gage height, 6.84 ft or 2.085 m, site and datum then in use), from rating curve extended above 700 ft³/s (20 m³/s); minimum, not determined.

REMARKS.--Records good except those for periods of no gage-height record, which are poor. Flow regulated by Homestake Lake (capacity, 44,360 acre-ft or 54.7 hm³) since June 7, 1966. Transmountain diversion above station to Arkansas River basin through Homestake Tunnel (see elsewhere in this report) since June 6, 1967.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1											17	24
2											19	26
3											22	27
4											29	24
5											40	20
6											31	47
7											27	68
8											25	44
9											24	50
10											22	35
11											20	34
12											20	27
13											20	23
14											19	20
15											20	18
16											20	17
17											20	16
18											23	15
19											25	23
20										†20	32	42
21											25	32
22											22	29
23											20	27
24											23	25
25											17	20
26										†16	18	18
27											17	17
28											15	18
29											15	19
30						-----					15	18
31		-----			-----		-----		-----		14	-----
TOTAL											676	807
MEAN											21.8	26.9
MAX											40	68
MIN											14	15
AC-FT											1,340	1,600

†Result of discharge measurement.

EAGLE RIVER BASIN

09064000 HOMESTAKE CREEK AT GOLD PARK, COLO.--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	16	14	7.4	5.2	6.0	7.1	17	78	110	29	18
2	17	17	14	6.8	5.2	6.0	7.0	11	70	76	29	18
3	16	17	14	7.2	5.0	6.2	7.0	15	63	62	29	17
4	15	13	12	7.2	5.0	6.4	7.0	16	58	52	29	15
5	16	16	12	7.2	5.2	6.4	7.2	21	50	50	39	14
6	15	14	12	6.6	5.6	6.6	7.2	20	55	47	44	14
7	16	14	12	6.4	5.6	6.8	7.0	15	76	42	37	14
8	23	15	12	6.4	5.6	6.8	7.4	16	112	37	33	14
9	24	16	12	6.4	5.6	7.4	7.5	27	147	36	31	13
10	22	15	12	6.4	5.6	7.4	7.6	51	174	36	29	14
11	19	14	12	6.4	5.6	7.6	8.1	79	168	34	27	14
12	18	14	12	6.0	5.6	7.8	7.8	99	150	34	27	14
13	18	14	12	6.0	5.6	8.0	8.1	122	164	38	26	14
14	20	14	11	6.0	5.4	8.0	8.4	138	168	47	29	13
15	29	14	11	6.0	5.0	8.1	9.1	144	98	44	30	12
16	43	13	11	6.0	4.8	8.2	8.8	144	62	38	29	13
17	37	13	11	6.0	4.7	8.2	8.2	128	50	35	30	12
18	34	13	11	5.6	4.6	7.9	8.2	119	45	38	32	11
19	35	13	11	5.6	4.7	7.7	8.2	123	41	40	30	11
20	34	13	11	5.6	4.7	7.6	8.8	123	38	37	26	10
21	34	13	11	5.6	4.8	7.4	8.0	107	46	35	31	9.9
22	29	13	11	5.6	4.8	7.4	7.7	86	66	34	30	9.7
23	27	13	10	5.6	4.8	7.5	7.9	74	86	33	26	9.5
24	22	12	10	6.2	4.9	7.5	7.7	77	83	32	26	12
25	22	11	10	6.2	5.0	7.6	7.8	79	80	30	25	12
26	19	12	9.0	6.2	5.2	7.9	8.1	70	100	29	23	12
27	22	12	9.0	5.8	5.6	7.5	9.3	50	180	30	21	12
28	22	12	9.0	5.4	5.8	7.3	12	45	180	32	20	12
29	18	13	8.4	5.2	-----	7.2	20	49	160	31	19	12
30	16	14	8.2	5.2	-----	7.3	13	55	130	30	19	11
31	15	-----	8.2	5.2	-----	7.1	-----	66	-----	29	18	-----
TOTAL	715	413	342.8	189.4	145.4	226.8	257.2	2,186	2,978	1,278	873	387.1
MEAN	23.1	13.8	11.1	6.11	5.19	7.32	8.57	70.5	99.3	41.2	28.2	12.9
MAX	43	17	14	7.4	5.8	8.2	20	144	180	110	44	18
MIN	15	11	8.2	5.2	4.6	6.0	7.0	11	38	29	18	9.5
AC-FT	1,420	819	680	376	288	450	510	4,340	5,910	2,550	1,730	768

*TR YR 1973 TOTAL 9,991.7 MEAN 27.4 MAX 180 MIN 4.6 AC-FT 19,820

NOTE.--No gage-height record Oct. 20 to Feb. 5; June 26 to July 24.

09064500 HOMESTAKE CREEK NEAR RED CLIFF, COLO.

LOCATION.--Lat 39°28'24", long 106°22'02", in NE¼NE¼ sec.6, T.7 S., R.80 W., Eagle County, on right bank at downstream side of Forest Service road bridge, 2.4 mi (3.9 km) south of Red Cliff, and 3.0 mi (4.8 km) upstream from mouth.

DRAINAGE AREA.--58.3 mi² (151.0 km²).

PERIOD OF RECORD.--October 1910 to September 1918, May 1944 to current year. Published as "at Redcliff" October 1910 to September 1916.

GAGE.--Water-stage recorder. Datum of gage is 8,783 ft (2,677.1 m) above mean sea level (river-profile survey). See WSP 1713 or 1733 for history of changes prior to May 8, 1961.

AVERAGE DISCHARGE.--30 years (1910-18, 1944-66), 86.6 ft³/s (2.453 m³/s), 62,740 acre-ft/yr (77.4 hm³/yr), prior to diversion through Homestake tunnel; 7 years (1966-73), 39.0 ft³/s (1.104 m³/s), 28,260 acre-ft/yr (34.8 hm³/yr), subsequent to diversion through Homestake tunnel.

EXTREMES.--Current year: Maximum discharge, 491 ft³/s (13.9 m³/s) June 9 (gage height, 3.34 ft or 1.018 m); minimum daily, 6.4 ft³/s (0.18 m³/s) Feb. 18.
Period of record: Maximum discharge observed, 1,300 ft³/s (36.8 m³/s) June 24, 1918 (gage height, 6.2 ft or 1.18 m, site and datum then in use); minimum observed, 0.60 ft³/s (0.017 m³/s) Jan. 25, 1915 (discharge measurement).

REMARKS.--Records good except those for period of no gage-height record, which are poor. Flow regulated by Homestake Lake (capacity, 44,360 acre-ft or 54.7 hm³) since June 7, 1966. Transmountain diversions above station through Homestake tunnel (see elsewhere in this report) since June 6, 1967.

REVISIONS.--WSP 2124: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	17	17	10	7.2	8.2	8.6	51	131	149	41	31
2	25	18	17	9.2	7.2	8.4	8.6	43	124	128	41	31
3	20	18	17	10	7.0	8.6	8.6	43	121	98	39	29
4	19	14	15	10	7.0	8.6	8.6	58	121	86	41	25
5	19	20	15	10	8.0	8.6	8.6	72	107	83	53	22
6	18	17	15	9.4	8.6	8.8	8.6	72	107	73	60	20
7	18	17	15	9.0	8.6	9.0	8.6	60	124	68	53	20
8	26	20	15	9.0	8.6	9.0	8.6	65	173	63	51	19
9	26	19	15	9.0	8.6	9.2	8.6	98	275	63	43	18
10	25	18	15	9.0	8.6	9.2	8.6	142	390	63	41	20
11	22	18	15	9.0	8.6	9.4	9.0	190	345	53	41	20
12	19	17	15	8.4	8.6	9.5	10	216	265	53	37	20
13	18	17	15	8.4	8.4	9.8	12	235	305	63	35	20
14	20	17	14	8.4	8.4	9.8	13	235	305	86	37	18
15	23	17	14	8.4	7.8	9.2	15	235	208	80	39	17
16	41	17	14	8.4	7.4	9.4	16	240	138	63	37	17
17	35	16	14	8.4	7.0	9.6	15	221	114	58	35	17
18	34	16	14	8.2	6.4	9.8	13	221	104	60	41	15
19	35	16	14	8.0	6.6	10	13	245	95	70	39	14
20	32	16	14	8.0	6.8	10	14	240	89	68	35	13
21	32	16	14	8.0	7.0	10	13	208	95	58	39	13
22	29	16	14	8.0	7.4	10	14	169	101	53	39	13
23	28	16	13	8.0	7.6	11	16	138	128	49	35	12
24	23	15	13	8.6	7.6	11	18	138	128	49	34	17
25	23	14	13	8.8	8.0	10	19	142	131	45	35	20
26	20	15	12	8.4	8.2	10	20	145	185	45	32	22
27	22	15	12	8.0	8.2	10	28	114	226	43	31	19
28	22	16	12	7.8	8.2	10	37	101	226	43	29	19
29	19	16	11	7.6	-----	9.4	45	101	199	45	28	18
30	18	17	11	7.4	-----	9.4	47	104	173	43	29	18
31	17	-----	11	7.2	-----	9.4	-----	110	-----	41	31	-----
TOTAL	751	501	435	266.0	217.6	294.3	473.0	4,452	5,233	2,042	1,201	577
MEAN	24.2	16.7	14.0	8.58	7.77	9.49	15.8	144	174	65.9	38.7	19.2
MAX	41	20	17	10	8.6	11	47	245	390	149	60	31
MIN	17	14	11	7.2	6.4	8.2	8.6	43	89	41	28	12
AC-FT	1,490	994	863	528	432	584	938	8,830	10,380	4,050	2,380	1,140

CAL YR 1972 TOTAL 13,412.2 MEAN 36.6 MAX 350 MIN 8.2 AC-FT 26,600
WTR YR 1973 TOTAL 16,442.9 MEAN 45.0 MAX 390 MIN 6.4 AC-FT 32,610

NOTE.--No gage-height record Nov. 8 to Apr. 23.

EAGLE RIVER BASIN

09065100 CROSS CREEK NEAR MINTURN, COLO.

LOCATION.--Lat 39°34'05", long 106°24'45", in SW¼ sec.36, T.5 S., R.81 W., Eagle County, on right bank 0.4 mi (0.6 km) upstream from mouth and 1.5 mi (2.4 km) southeast of Minturn.

DRAINAGE AREA.--33.5 mi² (86.8 km²).

PERIOD OF RECORD.--May 1956 to September 1963, October 1967 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 7,990 ft (2,435 m) from topographic map. Prior to July 18, 1956, nonrecording gage at site 0.3 mi (0.5 km) downstream at different datum.

AVERAGE DISCHARGE.--13 years, 51.2 ft³/s (1,450 m³/s), 37,090 acre-ft/yr (45.7 hm³/s).

EXTREMES.--Current year: Maximum discharge, 650 ft³/s (18.4 m³/s) June 27 (gage height, 5.19 ft or 1.582 m); minimum daily, 1.5 ft³/s (0.042 m³/s) Feb. 16.

Period of record: Maximum discharge, 754 ft³/s (21.4 m³/s) June 30, 1957 (gage height, 5.45 ft or 1.661 m); maximum gage height, 5.54 ft (1.689 m) July 18, 1957; minimum daily discharge, 0.1 ft³/s (0.003 m³/s) Dec. 27-31, 1962, Jan. 6-8, 11-15, 1963.

REMARKS.--Records good except those for winter period, which are poor. Bolts ditch exports water from above station to tailing ponds and recreation lake along Eagle River. Diversion above station for water supply of school (located 0.2 mi or 0.3 km above station) and for municipal supply of Minturn.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	17	9.0	3.1	2.5	1.8	2.5	22	122	385	64	20
2	19	15	9.2	2.9	2.2	1.7	2.2	18	106	366	65	21
3	17	14	9.2	3.0	2.2	1.6	2.2	18	93	320	62	19
4	16	14	9.0	3.4	2.3	1.8	2.3	23	91	273	57	15
5	16	14	8.0	3.3	2.4	2.0	2.3	31	81	254	77	13
6	16	13	6.8	3.0	2.2	2.0	2.4	35	85	268	107	12
7	16	14	7.2	3.5	2.4	2.0	2.3	27	119	253	90	13
8	22	13	7.2	3.2	2.2	2.1	2.2	25	187	231	94	12
9	27	12	6.0	3.4	2.1	2.0	2.5	39	303	236	75	11
10	26	11	5.2	3.4	2.1	2.0	2.9	62	434	247	66	11
11	19	12	5.2	3.1	2.2	2.4	2.5	94	430	223	55	13
12	17	11	5.8	3.3	2.2	2.2	3.4	102	387	224	52	13
13	16	11	6.0	3.4	2.1	1.9	6.1	103	445	215	45	14
14	19	11	5.6	3.2	1.9	2.4	6.5	112	466	308	43	12
15	22	12	5.0	3.0	1.6	1.8	8.0	111	349	213	44	11
16	43	12	5.0	2.8	1.5	2.3	10	124	206	160	40	10
17	35	11	5.2	2.9	1.6	2.1	9.7	154	151	149	41	12
18	36	10	5.6	3.0	1.6	2.2	5.6	181	156	152	46	10
19	37	9.4	5.6	2.9	1.6	2.0	9.8	247	140	217	44	8.5
20	34	11	5.6	2.9	1.6	1.8	7.9	244	137	212	39	7.8
21	31	11	5.4	2.5	1.6	1.8	6.7	204	178	150	42	7.7
22	29	11	5.2	2.1	1.6	1.7	4.8	153	243	118	42	6.9
23	27	10	5.2	2.1	1.7	1.7	8.5	115	311	92	37	6.8
24	23	11	4.6	2.1	1.7	1.8	5.9	114	329	88	33	9.0
25	22	11	4.8	2.3	1.7	1.9	6.1	115	282	87	34	11
26	19	11	4.5	2.7	1.7	1.9	6.3	113	425	86	29	12
27	19	10	4.3	2.7	1.7	1.9	11	86	502	86	27	12
28	19	8.6	4.4	2.4	1.7	1.9	12	71	467	79	26	11
29	16	8.6	4.5	2.4	-----	1.9	18	73	424	77	23	12
30	16	9.4	4.2	2.4	-----	2.0	22	83	414	74	21	11
31	23	-----	3.5	2.5	-----	2.3	-----	87	-----	67	19	-----
TOTAL	721	349.0	182.0	88.9	53.9	60.9	190.6	2,986	8,063	5,910	1,539	357.7
MEAN	23.3	11.6	5.87	2.87	1.93	1.96	6.35	96.3	269	191	49.6	11.9
MAX	43	17	9.2	3.5	2.5	2.4	22	247	502	385	107	21
MIN	16	8.6	3.5	2.1	1.5	1.6	2.2	18	81	67	19	6.8
AC-FT	1,430	692	361	176	107	121	378	5,920	15,490	11,720	3,050	709

CAL YR 1972 TOTAL 16,557.3 MEAN 45.2 MAX 403 MIN 2.1 AC-FT 32,840

ATH YR 1973 TOTAL 20,502.0 MEAN 56.2 MAX 502 MIN 1.5 AC-FT 40,670

PEAK DISCHARGE (BASE, 400 CFS).--June 14 (0400) 534 cfs (4.93 ft); June 27 (0400) 650 cfs (5.19 ft).

09065500 GORE CREEK AT UPPER STATION, NEAR MINTURN, COLO.

LOCATION.--Lat 39°37'40", long 106°16'24", in NE¼NW¼ sec.18, T.5 S., R.79 W., Eagle County, on left bank 100 ft (30 m) downstream from bridge on U.S. Highway 6, 0.4 mi (0.6 km) upstream from Black Gore Creek, 4.5 mi (7.2 km) east of Vail and 8.5 mi (13.7 km) northeast of Minturn.

DRAINAGE AREA.--14.3 mi² (37.0 km²).

PERIOD OF RECORD.--October 1947 to September 1956, October 1963 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 8,675 ft (2,644 m) from topographic map. Prior to Aug. 26, 1952, at present site, Aug. 27, 1952, to Sept. 30, 1956, at site 20 ft (6 m) downstream, and Oct. 1, 1963, to Sept. 30, 1971, at site 40 ft (12 m) downstream; all at datum 1.45 ft (0.442 m) lower. Oct. 1, 1971, to June 9, 1973, at present site at datum 1.00 ft (0.305 m) higher.

AVERAGE DISCHARGE.--19 years, 27.9 ft³/s (0.790 m³/s), 20,210 acre-ft/yr (24.9 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 530 ft³/s (15.0 m³/s) June 10 (gage height, 3.73 ft or 1.137 m); minimum daily, 2.4 ft³/s (0.068 m³/s) Feb. 3-5.

Period of record: Maximum discharge, 588 ft³/s (16.7 m³/s) June 10, 1952 (gage height, 6.58 ft or 2.006 m, datum then in use), from rating curve extended above 260 ft³/s (7.4 m³/s); maximum gage height, 6.65 ft (2.027 m), datum then in use, June 18, 1951; minimum daily discharge, 1.4 ft³/s (0.040 m³/s) Feb. 27, Mar. 3-9, 1966.

REMARKS.--Records good. No diversion above station.

REVISIONS.--WSP 2124: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.5	7.4	5.0	2.7	2.6	2.7	3.0	6.4	78	139	31	8.7
2	7.8	7.6	5.2	2.8	2.5	2.7	3.0	6.0	64	115	28	9.0
3	7.3	7.8	5.3	3.1	2.4	2.7	3.0	6.4	54	110	26	9.2
4	7.0	7.6	5.3	3.1	2.4	2.7	2.9	8.5	45	109	27	8.7
5	7.3	7.4	5.0	3.0	2.4	2.8	2.8	11	39	106	34	7.6
6	7.0	7.2	4.7	2.8	2.5	2.8	2.8	12	41	103	37	7.1
7	7.0	7.2	4.5	2.7	2.5	2.9	2.7	10	63	94	32	7.3
8	14	6.8	4.3	2.7	2.5	2.9	2.9	9.9	125	91	32	6.8
9	15	6.5	4.0	2.7	2.5	2.9	2.8	13	249	91	28	6.6
10	14	6.6	3.6	2.7	2.6	2.9	2.8	22	409	92	25	8.2
11	12	6.6	3.3	2.7	2.7	2.9	2.9	50	325	92	24	9.4
12	11	6.6	3.4	2.7	2.7	3.0	3.2	37	321	91	23	9.0
13	9.9	6.6	3.7	2.6	2.6	3.0	3.6	41	321	91	20	8.2
14	9.5	6.6	3.7	2.6	2.6	2.9	4.3	41	278	97	17	7.3
15	11	6.5	3.7	2.6	2.8	2.8	5.0	47	227	94	18	6.6
16	14	6.4	3.7	2.6	2.8	2.9	4.5	55	159	92	17	6.4
17	13	6.4	3.7	2.6	2.8	3.0	4.2	61	135	82	16	6.8
18	15	6.3	3.7	2.6	2.8	3.0	3.6	71	143	78	24	5.7
19	15	6.2	3.8	2.6	2.8	3.1	3.6	105	124	87	20	5.0
20	13	5.9	4.0	2.7	2.8	3.1	3.8	105	124	86	17	4.6
21	13	5.6	3.9	2.7	2.8	3.3	3.6	91	155	77	17	4.4
22	12	5.2	3.8	2.8	2.6	3.6	3.6	79	178	61	17	4.3
23	12	5.0	3.7	2.9	2.5	3.6	3.5	61	208	49	17	4.1
24	10	5.2	3.5	2.9	2.6	3.3	4.3	62	213	47	15	4.4
25	8.0	5.5	3.3	2.9	2.6	3.3	4.3	63	242	43	14	4.6
26	8.0	5.1	3.3	2.7	2.6	3.2	4.0	57	230	43	12	5.3
27	8.2	4.8	3.4	2.6	2.6	3.1	4.7	46	239	45	11	5.0
28	8.2	4.4	3.4	2.6	2.7	3.1	5.8	38	221	43	10	5.5
29	8.0	4.7	3.3	2.6	-----	3.0	6.2	40	203	37	9.2	5.3
30	7.4	4.8	3.1	2.6	-----	3.0	6.8	46	149	35	9.2	5.0
31	7.0	-----	2.8	2.6	-----	3.0	-----	58	-----	33	9.5	-----
TOTAL	320.1	186.5	121.1	84.5	73.3	93.2	114.2	1,339.2	5,362	2,453	636.9	196.1
MEAN	10.3	6.22	3.91	2.73	2.62	3.01	3.81	43.2	179	79.1	20.5	6.54
MAX	15	7.8	5.3	3.1	2.8	3.6	6.8	105	409	139	37	9.4
MIN	7.0	4.4	2.8	2.6	2.4	2.7	2.7	6.0	39	33	9.2	4.1
AC=FT	635	370	240	168	145	185	227	2,660	10,640	4,870	1,260	389

CAL YR 1972 TOTAL 9,811.2 MEAN 26.8 MAX 225 MIN 1.9 AC=FT 19,460

WTR YR 1973 TOTAL 10,980.1 MEAN 30.1 MAX 409 MIN 2.4 AC=FT 21,780

PEAK DISCHARGE (BASE, 200 CFS).--June 10 (2100) 530 cfs (3.73 ft).

NOTE.--No gage-height record Nov. 10 to Jan. 3.

09066000 BLACK GORE CREEK NEAR MINTURN, COLO.

LOCATION.--Lat 39°35'47", long 106°15'52", Eagle County, on right bank 200 ft (61 m) from U.S. Highway 6, 0.3 mi (0.5 km) upstream from Timber Creek, 2.5 mi (4.0 km) upstream from mouth, and 9 mi (14 km) east of Minturn.

DRAINAGE AREA.--11.8 mi² (30.6 km²).

PERIOD OF RECORD.--October 1947 to September 1956, October 1963 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 9,150 ft (2,789 m) from topographic map. Prior to October 1963, at site 15 ft (5 m) upstream at same datum.

AVERAGE DISCHARGE.--19 years, 16.3 ft³/s (0.462 m³/s), 11,810 acre-ft/yr (14.6 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 220 ft³/s (6.23 m³/s) June 12 (gage height, 4.29 ft or 1.308 m); minimum daily, 1.4 ft³/s (0.040 m³/s) Feb. 5.

Period of record: Maximum discharge, 365 ft³/s (10.3 m³/s) June 7, 1952 (gage height, 5.42 ft or 1.652 m); maximum gage height, 6.00 ft (1.829 m) Mar. 30, 1968 (backwater from ice); minimum daily discharge, 0.90 ft³/s (0.025 m³/s) Feb. 22, 1968, Jan. 30, 1970.

REMARKS.--Records good except those for period of no gage-height record, which are poor. No diversion above station. Natural regulation by two small recreation lakes above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.6	3.1	2.1	1.9	1.8	2.3	2.6	4.3	74	77	10	4.1
2	2.9	3.1	2.1	1.6	1.8	2.3	2.5	4.1	68	68	9.5	4.3
3	1.8	3.3	2.2	1.7	1.7	2.4	2.5	4.8	63	63	9.0	4.3
4	1.7	3.1	2.2	1.9	1.5	2.4	2.5	5.3	58	56	9.0	3.6
5	1.8	3.0	2.2	2.2	1.4	2.4	2.5	7.0	53	52	9.9	3.3
6	2.0	3.0	2.2	2.1	1.5	2.5	2.5	7.3	55	47	9.9	3.3
7	2.1	3.0	2.1	2.1	1.8	2.5	2.5	6.6	70	43	9.0	3.3
8	4.1	2.9	2.1	2.0	1.9	2.5	2.5	6.6	98	40	8.3	3.1
9	3.6	2.7	1.9	2.0	2.0	2.4	2.5	7.9	134	36	7.6	3.1
10	2.8	2.6	1.7	2.0	2.0	2.3	2.6	12	158	32	7.3	3.3
11	2.2	2.6	1.5	2.1	2.1	2.3	2.6	19	165	29	6.6	3.6
12	2.2	2.6	1.6	2.1	2.1	2.3	2.7	24	175	28	6.3	3.6
13	2.2	2.6	1.7	2.0	2.0	2.4	2.9	30	190	28	5.6	3.3
14	2.2	2.5	1.8	2.0	1.9	2.4	3.1	30	178	32	5.6	3.1
15	2.7	2.5	1.8	2.0	1.8	2.5	3.3	33	150	27	5.6	2.8
16	6.0	2.4	1.9	2.0	1.8	2.5	3.1	37	126	24	5.3	3.3
17	3.8	2.5	1.9	2.0	1.7	2.5	2.8	44	114	23	5.6	3.6
18	3.8	2.2	2.0	2.0	1.7	2.5	2.6	60	110	22	6.0	3.6
19	3.3	2.2	2.0	2.0	1.7	2.6	2.4	80	97	23	5.3	3.6
20	3.1	2.1	2.0	2.0	1.7	2.6	2.3	82	95	22	5.1	3.1
21	2.8	2.1	2.0	1.9	1.7	2.6	2.5	80	93	20	5.1	2.7
22	2.8	2.1	2.0	1.7	1.8	2.7	2.7	73	92	18	5.3	2.7
23	2.8	2.1	2.0	1.6	1.9	2.7	2.8	70	97	16	4.8	2.7
24	2.5	2.1	2.1	1.7	2.0	2.7	2.8	71	95	15	4.8	3.6
25	2.5	2.1	2.0	1.9	2.0	2.7	2.7	71	95	14	4.6	3.8
26	2.4	2.1	2.0	2.0	2.1	2.6	3.1	68	102	13	4.3	4.3
27	2.5	2.1	2.0	2.0	2.2	2.7	3.6	53	98	12	4.6	3.8
28	2.5	2.0	2.2	1.9	2.2	2.6	3.8	46	95	11	4.3	4.3
29	2.8	1.9	2.4	1.8	-----	2.7	4.1	47	88	11	4.1	4.6
30	3.1	2.2	2.1	1.8	-----	2.6	4.6	50	85	11	4.3	4.6
31	3.0	-----	2.0	1.9	-----	2.6	-----	59	-----	11	4.1	-----
TOTAL	86.6	74.8	61.8	59.9	51.8	77.8	85.7	1,192.9	3,171	924	196.8	106.4
MEAN	2.79	2.49	1.99	1.93	1.85	2.51	2.86	38.5	106	29.8	6.35	3.55
MAX	6.0	3.3	2.4	2.2	2.2	2.7	4.6	82	190	77	10	4.6
MIN	1.7	1.9	1.5	1.6	1.4	2.3	2.3	4.1	53	11	4.1	2.7
AC=FT	172	148	123	119	103	154	170	2,370	6,290	1,830	390	211

CAL YR 1972 TOTAL 5,516.0 MEAN 15.1 MAX 170 MIN 1.5 AC=FT 10,940

WTR YR 1973 TOTAL 6,089.5 MEAN 16.7 MAX 190 MIN 1.4 AC=FT 12,080

PEAK DISCHARGE (BASE, 150 CFS).-- June 12 (2300) 220 cfs (4.29 ft).

NOTE.--No gage-height record Dec. 4 to Apr. 23.

09066100 BIGHORN CREEK NEAR MINTURN, COLO.

LOCATION.--Lat 39°38'24", long 106°17'34", in N½ sec.12, T.5 S., R.80 W., Eagle County, on left bank 0.3 mi (0.5 km) upstream from U.S. Highway 6, 0.4 mi (0.6 km) upstream from mouth, 4.5 mi (7.2 km) east of Vail, and 8.5 mi (13.7 km) northeast of Minturn.

DRAINAGE AREA.--4.37 mi² (11.32 km²).

PERIOD OF RECORD.--October 1963 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 8,625 ft (2,629 m) from topographic map.

AVERAGE DISCHARGE.--10 years, 8.01 ft³/s (0.227 m³/s), 5,800 acre-ft/ yr (7.15 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 225 ft³/s (6.37 m³/s) June 10 (gage height, 3.82 ft or 1.164 m), from rating curve extended above 82 ft³/s (2.3 m³/s); minimum daily, 0.65 ft³/s (0.018 m³/s) Feb. 5.
Period of record: Maximum discharge, 225 ft³/s (6.37 m³/s) June 10, 1973 (gage height, 3.82 ft or 1.164 m), from rating curve extended above 82 ft³/s (2.3 m³/s); minimum daily determined, 0.10 ft³/s (0.003 m³/s) Feb. 8, 1967, Jan. 30, 1970.

REMARKS.--Records good except those for period of no gage-height record, which are poor. No regulation or diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.4	3.1	1.8	1.0	.80	.90	.90	2.5	23	69	11	3.4
2	2.3	3.1	1.8	.90	.80	.90	.90	2.3	19	64	9.8	3.4
3	2.3	3.1	1.8	.95	.75	.95	.90	2.4	16	57	9.8	3.3
4	2.3	3.1	1.8	1.1	.70	.95	.85	3.1	13	48	11	2.9
5	2.4	2.9	1.8	1.0	.65	1.0	.80	4.2	11	46	15	2.9
6	2.3	2.7	1.6	1.0	.70	1.0	.80	4.5	13	45	17	2.9
7	2.5	2.6	1.5	1.0	.75	1.0	.75	3.9	19	41	14	3.0
8	3.7	2.5	1.4	1.0	.80	1.0	.80	3.4	30	38	14	2.9
9	4.2	2.4	1.2	1.0	.80	.95	.80	4.1	34	36	12	2.7
10	4.2	2.3	1.1	1.0	.85	.90	.85	6.1	66	35	10	3.0
11	3.7	2.3	1.0	1.1	.90	.85	1.0	9.8	125	32	9.4	3.1
12	3.6	2.3	1.2	1.1	.90	.80	1.2	14	125	30	8.8	3.0
13	3.6	2.2	1.2	1.1	.90	.80	1.4	16	101	29	8.1	2.6
14	3.3	2.2	1.3	1.1	.90	.80	1.5	17	87	34	7.6	2.5
15	3.7	2.1	1.3	1.1	.90	.85	1.7	18	60	29	7.4	2.5
16	4.1	2.1	1.3	1.2	.90	.85	1.6	19	38	25	7.4	2.7
17	4.2	2.0	1.4	1.2	.90	.90	1.4	19	30	22	7.2	2.6
18	4.4	2.0	1.4	1.2	.90	.90	1.3	22	30	22	7.2	2.3
19	4.5	2.0	1.3	1.2	.85	.95	1.3	30	26	27	6.5	2.3
20	4.4	1.9	1.3	1.1	.85	.95	1.2	30	28	26	6.3	2.3
21	4.4	1.8	1.3	1.1	.85	.95	1.2	28	38	22	6.1	2.1
22	4.2	1.8	1.2	1.0	.85	1.0	1.4	22	48	17	6.1	2.1
23	3.9	1.8	1.1	.85	.80	1.0	1.6	19	60	18	5.9	2.1
24	3.6	1.8	1.0	.90	.80	1.0	1.6	18	60	16	5.9	2.3
25	3.6	1.8	1.0	.95	.80	.95	1.7	18	69	14	5.7	2.4
26	3.6	1.7	1.0	1.1	.85	.95	1.6	16	80	14	5.3	2.5
27	3.6	1.7	1.0	1.0	.85	.90	1.7	11	80	14	4.5	2.4
28	3.3	1.6	1.1	1.0	.85	.90	2.3	9.4	82	13	4.4	2.5
29	3.0	1.7	1.1	.95	-----	.90	2.5	11	73	13	4.2	2.4
30	3.0	1.8	1.0	.85	-----	.90	2.6	14	76	12	3.9	2.5
31	3.1	-----	1.0	.80	-----	.90	-----	17	-----	11	3.6	-----
TOTAL	107.4	66.4	40.3	31.85	23.15	28.55	40.15	414.7	1,560	919	255.1	79.6
MEAN	3.46	2.21	1.30	1.03	.83	.92	1.34	13.4	52.0	29.6	8.23	2.65
MAX	4.5	3.1	1.8	1.2	.90	1.0	2.6	30	125	69	17	3.4
MIN	2.3	1.6	1.0	.80	.65	.80	.75	2.3	11	11	3.6	2.1
AC-FT	213	132	80	63	46	57	80	823	3,090	1,820	506	158

CAL YR 1972 TOTAL 2,702.95 MEAN 7.39 MAX 55 MIN .65 AC-FT 5,360
WTR YR 1973 TOTAL 3,566.20 MEAN 9.77 MAX 125 MIN .65 AC-FT 7,070

PEAK DISCHARGE (BASE, 50 CFS).--June 10 (2230) 225 cfs (3.82 ft); June 25 (0100) 115 cfs (3.55 ft).

NOTE.--No gage-height record Nov. 6 to Apr. 23.

EAGLE RIVER BASIN

09066150 PITKIN CREEK NEAR MINTURN, COLO.

LOCATION.--Lat 39°38'37", long 106°18'07", in SW¼SW¼ sec.1, T.5 S., R.80 W., Eagle County, on left bank 100 ft (30 m) downstream from Pitkin ditch headgate, 1,000 ft (300 m) upstream from U.S. Highway 6, 1,200 ft (370 m) upstream from mouth, 4.0 mi (6.4 km) east of Vail, and 8 mi (13 km) northeast of Minturn.

DRAINAGE AREA.--5.39 mi² (13.96 km²).

PERIOD OF RECORD.--Annual maximum and occasional low-flow measurements water year 1965-66. October 1966 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 8,525 ft (2,598 m) from topographic map. Oct. 1, 1964 to Sept. 30, 1966, crest-stage gage at datum 0.98 ft (0.299 m) lower.

AVERAGE DISCHARGE.--7 years, 9.86 ft³/s (0.279 m³/s), 7,140 acre-ft/yr (8.80 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 88 ft³/s (2.49 m³/s) June 10 (gage height, 2.62 ft or 0.799 m); minimum daily, 0.24 ft³/s (0.007 m³/s) Oct. 29 to Nov. 1.

Period of record: Maximum discharge, 126 ft³/s (3.57 m³/s) June 24, 1971 (gage height, 2.67 or 0.814 m); maximum gage height, 2.79 ft or 0.850 m, June 20, 1968; minimum daily discharge, 0.24 ft³/s (0.007 m³/s) Oct. 29 to Nov. 1, 1972.

REMARKS.--Records good except those for period of no gage-height record, which are poor. Diversions above station by Pitkin ditch for irrigation below (see table below for figures of diversion). A small amount of water bypassed station during highwater period in June 1973.

REVISIONS (WATER YEARS).--WRD Colo. 1971: 1967-70.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JUL	AUG	SEP
1	3.6	2.4	2.2	1.0	.94	1.1	1.3	2.1	31	50	14	5.2
2	3.3	1.7	2.2	.88	.92	1.2	1.3	2.1	26	48	13	5.2
3	3.1	2.8	2.1	.94	.88	1.2	1.3	2.2	21	44	13	5.2
4	3.1	3.7	2.1	1.1	.80	1.2	1.3	2.4	18	42	13	5.0
5	3.3	4.3	2.1	1.1	.76	1.2	1.3	2.7	15	41	17	4.7
6	3.3	4.7	2.1	1.1	.84	1.2	1.3	3.1	17	41	19	4.4
7	3.3	4.9	2.0	1.1	.90	1.1	1.3	2.8	23	39	15	4.4
8	7.3	4.8	1.9	1.0	1.0	1.1	1.3	2.8	31	36	14	4.4
9	7.8	4.4	1.8	1.0	1.1	.95	1.3	3.6	36	34	14	4.2
10	7.3	4.4	1.6	1.1	1.1	.90	1.3	5.0	64	32	13	4.7
11	6.0	4.3	1.4	1.1	1.1	.90	1.4	8.2	78	31	12	4.4
12	5.2	4.1	1.3	1.1	1.1	.90	1.5	12	78	29	12	4.4
13	5.0	3.9	1.3	1.0	1.0	.95	1.6	14	78	28	11	3.9
14	4.4	3.7	1.3	1.0	.98	1.0	1.6	18	78	27	10	3.9
15	5.5	3.6	1.3	1.0	.94	1.0	1.7	21	62	27	10	3.6
16	6.9	3.7	1.3	1.0	.90	1.1	1.5	22	47	30	9.6	3.6
17	6.9	3.5	1.3	1.0	.88	1.1	1.4	22	42	32	9.6	3.6
18	6.9	3.2	1.3	1.0	.88	1.1	1.3	29	42	27	9.6	3.3
19	7.3	3.1	1.2	1.0	.88	1.2	1.2	38	41	25	8.7	3.1
20	7.3	3.1	1.2	1.0	.88	1.2	1.2	35	41	21	7.8	3.1
21	8.2	2.9	1.2	.98	.90	1.2	1.4	31	45	20	7.3	3.1
22	7.8	2.7	1.2	.88	.94	1.2	1.4	28	53	23	7.9	3.1
23	6.9	2.7	1.2	.88	.98	1.3	1.4	23	62	21	7.8	3.1
24	1.8	2.6	1.1	.94	1.0	1.3	1.4	22	61	19	7.3	3.6
25	.28	2.5	1.1	1.0	1.0	1.3	1.4	24	61	19	6.9	3.9
26	.28	2.4	1.1	1.0	1.1	1.3	1.4	22	68	19	6.9	4.2
27	.28	2.3	1.1	1.0	1.1	1.3	1.4	18	61	17	6.0	3.9
28	.28	2.2	1.2	1.0	1.1	1.3	1.8	16	55	16	6.0	3.9
29	.24	2.1	1.3	.92	-----	1.3	2.1	17	53	15	5.5	3.9
30	.24	2.3	1.2	.94	-----	1.3	2.1	20	53	15	5.5	4.2
31	.24	-----	1.1	.98	-----	1.3	-----	25	-----	14	5.2	-----
TOTAL	133.34	96.84	45.8	31.04	26.90	35.70	43.2	494.0	1,442	882	317.5	121.2
MEAN	4.30	3.23	1.48	1.00	.96	1.15	1.44	15.9	48.1	28.5	10.2	4.04
MAX	8.2	4.9	2.2	1.1	1.1	1.3	2.1	38	78	50	19	5.2
MIN	.24	.24	1.1	.88	.76	.90	1.2	2.1	16	14	5.2	3.1
AC=FT	264	192	91	62	53	71	86	980	2,860	1,750	630	240
†	96	26	0	0	0	0	0	26	367	302	55	0

CAL YR 1972 TOTAL 3,329.98 MEAN 9.10 MAX 59 MIN .24 AC=FT 6,610 AC=FT †493
 WTR YR 1973 TOTAL 3,669.52 MEAN 10.1 MAX 78 MIN .24 AC=FT 7,280 AC=FT †874

PEAK DISCHARGE (BASE, 60 CFS).--June 10 (2000) 88 cfs (2.62 ft).

†Diversions, in acre-feet, by Pitkin ditch.

NOTE.--No gage-height record Oct. 30 to Apr. 23.

09066200 BOOTH CREEK NEAR MINTURN, COLO.

LOCATION.--Lat 39°39'02", long 106°19'16", at west line of sec.2, T.5 S., R.80 W., Eagle County, on left bank 0.2 mi (0.3 km) upstream from U.S. Highway 6, 0.4 mi (0.6 km) upstream from mouth, 3.0 mi (4.8 km) north-east of Vail, and 7.0 mi (11.3 km) northeast of Minturn.

DRAINAGE AREA.--6.03 mi² (15.62 km²).

PERIOD OF RECORD.--October 1964 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 8,413 ft (2,564 m) from topographic map.

AVERAGE DISCHARGE.--9 years, 11.3 ft³/s (0.320 m³/s), 190 acre-ft/yr (10.1 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 178 ft³/s (5.04 m³/s) June 27 (gage height, 3.74 ft or 1.140 m); minimum daily, 0.82 ft³/s (0.023 m³/s) Feb. 4.

Period of record: Maximum discharge, 182 ft³/s (5.15 m³/s) June 21, 1968 (gage height, 3.98 ft or 1.213 m); minimum daily, 0.20 ft³/s (0.006 m³/s) Feb. 8, 1967, Jan. 29, 1970.

REMARKS.--Records fair except those for periods of no gage-height record, which are poor. No diversion or regulation above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	UCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.9	2.7	1.4	1.2	1.0	1.0	1.1	2.5	42	114	10	2.1
2	2.7	3.0	1.5	1.2	.92	1.0	1.1	2.4	34	101	9.3	2.3
3	2.4	2.7	1.5	1.1	.86	1.0	1.1	2.3	26	99	8.9	2.2
4	2.3	2.5	1.4	1.2	.82	1.0	1.1	2.9	21	103	9.1	1.8
5	2.2	2.6	1.3	1.1	.84	1.1	1.1	3.7	19	93	14	1.7
6	2.1	2.6	1.3	1.1	.86	1.1	1.1	4.5	20	90	15	1.7
7	2.3	1.8	1.4	1.0	.88	1.1	1.0	3.6	33	82	11	1.7
8	5.1	2.3	1.3	1.0	.88	1.1	1.0	3.3	54	76	9.3	1.6
9	6.6	2.3	1.2	1.0	.88	1.1	1.1	4.6	76	74	8.5	1.6
10	5.6	1.8	1.2	1.0	.90	1.1	1.1	7.7	110	73	7.3	1.9
11	4.6	1.7	1.2	1.0	1.0	1.1	1.1	15	88	60	6.7	1.9
12	3.9	1.9	1.4	1.1	1.1	1.1	1.1	22	88	58	6.4	1.8
13	3.6	1.7	1.2	1.0	1.0	1.0	1.2	25	97	66	5.6	1.7
14	3.4	1.4	1.2	1.0	.98	1.1	1.4	25	110	60	5.4	1.6
15	4.3	1.6	1.2	1.0	1.1	1.1	1.7	25	103	55	5.1	1.5
16	5.4	1.7	1.2	1.0	1.1	1.0	1.9	30	73	46	4.8	1.6
17	5.4	1.4	1.2	1.0	1.1	1.1	1.7	32	62	31	5.0	1.6
18	5.8	1.6	1.2	1.0	1.1	1.1	1.5	42	63	19	5.3	1.4
19	5.8	1.6	1.2	1.0	1.1	1.2	1.4	60	56	15	4.6	1.4
20	5.6	1.6	1.3	1.1	1.1	1.2	1.4	63	59	18	4.2	1.3
21	5.6	1.4	1.3	1.1	1.1	1.2	1.4	51	71	20	4.0	1.3
22	5.4	1.5	1.3	1.1	1.1	1.3	1.3	37	90	19	4.2	1.3
23	5.0	1.6	1.3	1.1	1.0	1.4	1.3	27	107	18	3.8	1.3
24	4.5	1.5	1.3	1.1	.98	1.3	1.4	28	114	17	3.6	1.6
25	4.2	1.4	1.3	1.1	.98	1.3	1.6	29	114	16	3.3	1.7
26	4.2	1.4	1.3	1.0	1.0	1.3	1.6	25	101	15	2.9	1.7
27	3.9	1.5	1.3	1.0	1.0	1.2	1.5	19	103	14	2.7	1.6
28	3.8	1.7	1.3	1.0	1.0	1.2	1.9	16	114	13	2.6	1.8
29	3.5	1.6	1.3	1.0	-----	1.2	2.2	17	110	13	2.3	1.9
30	3.2	1.5	1.2	1.0	-----	1.1	2.4	21	103	13	2.2	2.1
31	3.2	-----	1.2	1.0	-----	1.1	-----	31	-----	11	2.1	-----
TOTAL	128.5	55.6	39.9	32.6	27.68	35.2	41.8	677.5	2,261	1,502	189.2	50.7
MEAN	4.15	1.85	1.29	1.05	.99	1.14	1.39	21.9	75.4	48.5	6.10	1.69
MAX	6.6	3.0	1.5	1.2	1.1	1.4	2.4	63	114	114	15	2.3
MIN	2.1	1.4	1.2	1.0	.82	1.0	1.0	2.3	19	11	2.1	1.3
AC=FT	255	110	79	65	55	70	83	1,340	4,480	2,980	375	101

CAL YR 1972 TOTAL 3,340.38 MEAN 9.13 MAX 73 MIN .45 AC=FT 6,630
 WTR YR 1973 TOTAL 5,041.68 MEAN 13.8 MAX 114 MIN .82 AC=FT 10,000

PEAK DISCHARGE (BASE, 80 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
5-19	1700	3.52	80	6-27	2100	3.74	178
6-10	2100	3.80	162				

NOTE.--No gage-height record Jan. 5 to Mar. 12, Mar. 14 to May 7.

09066300 MIDDLE CREEK NEAR MINTURN, COLO.

LOCATION.--Lat 39°38'50", long 106°22'48", in sec.6, T.5 S., R.80 W., Eagle County, on right bank 0.2 mi (0.3 km) upstream from Interstate Highway 70, 0.4 mi (0.6 km) upstream from mouth, and 5.0 mi (8.0 km) northeast of Minturn.

DRAINAGE AREA.--5.97 mi² (15.46 km²).

PERIOD OF RECORD.--October 1964 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 8,300 ft (2,530 m) from topographic map.

AVERAGE DISCHARGE.--9 years, 5.43 ft³/s (0.154 m³/s), 3,930 acre-ft/yr (4.84 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 90 ft³/s (2.55 m³/s) June 28 (gage height, 2.43 ft or 0.741 m); minimum daily, 0.14 ft³/s (0.004 m³/s) Apr. 9.

Period of record: Maximum discharge 112 ft³/s (3.17 m³/s) June 20, 1968 (gage height, 2.60 ft or 0.792 m); maximum gage height, 2.65 ft (0.808 m) June 21, 1971; no flow at times most years.

REMARKS.--Records good except those for period of no gage-height record, which are poor. No diversion or regulation above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.82	.90	.47	.26	.25	.26	.28	.94	11	80	5.5	2.0
2	.70	1.1	.49	.27	.24	.26	.28	.88	11	78	5.3	2.0
3	.64	1.3	.50	.29	.23	.26	.28	1.0	10	75	4.9	2.0
4	.58	1.5	.50	.29	.23	.26	.26	1.4	9.4	64	5.3	1.9
5	.64	1.6	.48	.28	.23	.27	.25	1.8	8.5	56	6.4	1.8
6	.64	1.8	.45	.27	.25	.27	.22	1.8	9.1	51	6.4	1.7
7	.70	1.9	.44	.26	.28	.28	.19	1.6	11	44	5.1	1.7
8	1.7	1.4	.40	.26	.27	.28	.17	1.6	16	43	4.7	1.6
9	1.6	1.1	.39	.26	.26	.28	.14	1.9	28	37	4.4	1.5
10	1.2	.98	.37	.26	.26	.28	.17	2.6	41	31	4.2	1.7
11	.88	.94	.31	.26	.25	.29	.21	4.2	54	27	3.9	1.8
12	.88	.90	.26	.26	.26	.30	.25	4.9	59	25	3.6	1.8
13	.88	.88	.25	.26	.26	.30	.32	5.3	65	25	3.4	1.7
14	.76	.84	.27	.25	.25	.28	.38	5.3	58	26	3.3	1.6
15	1.1	.82	.30	.25	.26	.28	.43	5.3	62	22	3.1	1.5
16	1.6	.74	.33	.25	.27	.27	.40	6.2	62	18	2.9	1.5
17	1.6	.68	.34	.25	.27	.28	.37	6.6	61	16	2.9	1.5
18	1.6	.66	.35	.25	.27	.29	.34	7.7	57	17	2.9	1.5
19	1.5	.62	.36	.25	.27	.30	.35	11	52	18	2.9	1.5
20	1.4	.60	.38	.26	.27	.31	.36	12	51	15	2.7	1.5
21	1.3	.56	.37	.26	.26	.31	.34	13	52	14	2.7	1.5
22	1.3	.52	.36	.27	.26	.33	.34	11	54	12	3.0	1.4
23	1.2	.48	.35	.27	.24	.34	.33	10	58	9.7	2.6	1.4
24	1.0	.50	.34	.28	.25	.33	.40	9.7	59	9.1	2.4	1.5
25	1.1	.52	.32	.28	.25	.31	.37	9.4	61	8.0	2.4	1.6
26	1.1	.50	.31	.27	.25	.30	.34	9.1	64	7.7	2.3	1.7
27	1.2	.45	.32	.25	.25	.29	.46	7.4	66	7.1	2.1	1.4
28	1.1	.42	.33	.25	.25	.29	.94	6.6	72	6.6	2.0	1.5
29	.94	.44	.31	.25	-----	.29	1.1	6.8	78	6.4	1.9	1.3
30	.76	.46	.30	.25	-----	.28	1.1	7.4	80	6.2	1.9	1.1
31	.76	-----	.28	.25	-----	.28	-----	8.3	-----	6.0	1.9	-----
TOTAL	33.18	26.11	11.21	8.12	7.14	8.95	11.37	182.72	1,380.0	860.8	109.0	48.2
MEAN	1.07	.87	.36	.26	.26	.29	.38	5.89	46.0	27.8	3.52	1.61
MAX	1.7	1.9	.50	.29	.28	.34	1.1	13	80	80	6.4	2.0
MIN	.58	.42	.23	.25	.23	.26	.14	.88	8.5	6.0	1.9	1.1
AC-FT	66	52	22	16	14	18	23	362	2,740	1,710	216	96

CAL YR 1972 TOTAL 1,588.75 MEAN 4.34 MAX 45 MIN .05 AC-FT 3,150

WTR YR 1973 TOTAL 2,686.80 MEAN 7.36 MAX 80 MIN .14 AC-FT 5,330

PEAK DISCHARGE (BASE, 60 CFS).--June 28 (2100) 90 cfs (2.43 ft).

NOTE.--No gage-height record Oct. 31 to Apr. 23.

09066400 RED SANDSTONE CREEK NEAR MINTURN, COLO.

LOCATION.--Lat 39°40'58", long 106°24'03", Eagle County, on left bank 150 ft (46 m) upstream from road culvert, 1,400 ft (430 m) upstream from Indian Creek, and 6.8 mi (10.9 km) north of Minturn.

DRAINAGE AREA.--7.27 mi² (18.83 km²).

PERIOD OF RECORD.--October 1963 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 9,150 ft (2,789 m) from topographic map.

AVERAGE DISCHARGE.--10 years, 8.58 ft³/s (0.243 m³/s), 6,220 acre-ft/yr (7.67 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 207 ft³/s (5.86 m³/s) June 10 (gage height, 4.41 ft or 1.344 m), from rating curve extended above 120 ft³/s (3.4 m³/s); minimum daily, 1.0 ft³/s (0.028 m³/s) Feb. 20.

Period of record: Maximum discharge, 207 ft³/s (5.86 m³/s) June 10, 1973 (gage height, 4.41 ft or 1.344 m), from rating curve extended above 120 ft³/s (3.4 m³/s); minimum daily, 0.20 ft³/s (0.006 m³/s) Jan. 30, 1970.

REMARKS.--Records good except those for winter period, which are poor. No regulation or diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.2	2.6	1.8	1.2	1.3	1.2	1.2	2.1	51	47	6.2	2.3
2	2.0	2.7	1.8	1.1	1.2	1.2	1.2	1.9	50	44	5.5	2.4
3	2.0	2.7	1.8	1.2	1.1	1.2	1.2	2.2	42	38	5.1	2.4
4	1.9	2.7	1.8	1.3	1.3	1.2	1.2	3.2	38	33	5.5	2.7
5	2.0	2.6	1.7	1.3	1.4	1.2	1.2	4.2	35	31	6.4	2.1
6	2.0	2.8	1.7	1.3	1.3	1.2	1.2	4.2	38	29	7.6	2.0
7	2.1	2.8	1.6	1.3	1.3	1.2	1.2	3.4	49	26	5.5	2.0
8	4.0	2.6	1.5	1.4	1.3	1.2	1.2	3.4	68	24	5.1	1.9
9	4.0	2.5	1.5	1.3	1.3	1.2	1.1	4.9	96	22	4.7	1.9
10	5.2	2.5	1.4	1.3	1.3	1.2	1.2	5.1	124	20	4.2	2.1
11	2.6	2.5	1.3	1.4	1.3	1.3	1.2	12	118	18	4.0	2.2
12	2.4	2.5	1.3	1.4	1.3	1.3	1.2	16	101	18	3.8	2.2
13	2.4	2.5	1.3	1.4	1.2	1.3	1.2	20	107	19	3.7	2.0
14	2.3	2.5	1.4	1.4	1.2	1.3	1.3	21	116	20	3.5	1.7
15	5.7	2.4	1.4	1.4	1.2	1.3	1.4	22	94	17	5.4	1.7
16	4.7	2.5	1.4	1.4	1.1	1.2	1.3	25	73	16	3.2	1.7
17	3.8	2.5	1.4	1.4	1.1	1.2	1.3	29	66	13	3.2	1.6
18	4.0	2.4	1.4	1.4	1.1	1.2	1.3	39	62	14	3.5	1.6
19	3.8	2.3	1.4	1.4	1.1	1.2	1.3	53	55	18	3.2	1.5
20	3.5	2.1	1.4	1.3	1.0	1.2	1.2	59	55	15	2.9	1.5
21	5.5	2.0	1.5	1.3	1.1	1.2	1.3	57	55	13	3.2	1.4
22	3.4	1.9	1.5	1.2	1.1	1.2	1.3	44	55	11	3.5	1.4
23	3.2	1.9	1.5	1.1	1.1	1.3	1.4	44	58	10	3.0	1.5
24	2.9	1.9	1.5	1.2	1.1	1.3	1.5	45	57	9.2	2.9	1.9
25	2.8	2.0	1.5	1.2	1.1	1.3	1.4	46	61	8.6	2.7	2.2
26	2.8	1.8	1.5	1.2	1.1	1.2	1.9	39	65	8.1	2.4	2.2
27	2.7	1.6	1.5	1.2	1.2	1.2	2.3	33	65	7.6	2.4	2.0
28	2.7	1.6	1.5	1.2	1.2	1.2	3.0	30	61	7.3	2.3	2.2
29	2.7	1.7	1.6	1.2	-----	1.2	2.9	33	54	6.7	2.2	2.2
30	2.7	1.8	1.5	1.3	-----	1.2	2.4	36	51	6.5	2.2	2.1
31	2.5	-----	1.4	1.3	-----	1.2	-----	44	-----	6.7	2.2	-----
TOTAL	90.5	69.1	46.8	39.9	33.4	38.0	44.0	788.6	2,020	576.7	121.2	58.1
MEAN	2.92	2.30	1.51	1.29	1.19	1.23	1.41	25.4	67.3	18.6	3.91	1.94
MAX	4.7	2.8	1.8	1.4	1.4	1.3	5.0	59	124	47	8.4	2.4
MIN	1.9	1.6	1.3	1.1	1.0	1.2	1.1	1.9	35	6.5	2.2	1.4
AC-FT	180	137	93	79	66	75	87	1,560	4,010	1,140	240	115

CAL YR 1972 TOTAL 3,318.68 MEAN 9.07 MAX 105 MIN .60 AC-FT 6,580

WTR YR 1973 TOTAL 3,926.30 MEAN 10.8 MAX 124 MIN 1.0 AC-FT 7,790

PEAK DISCHARGE (BASE, 70 CFS)--June 10 (1930) 207 cfs (4.41 ft).

NOTE.--No gage-height record Nov. 5 to Apr. 24.

EAGLE RIVER BASIN

09070000 EAGLE RIVER BELOW GYPSUM, COLO.

LOCATION.--Lat 39°38'58", long 106°57'11", in SW¼NW¼ sec.5, T.5 S., R.85 W., Eagle County, on right bank 30 ft (9 m) downstream from bridge on U.S. Highways 6 and 24 at Gypsum and 150 ft (46 m) downstream from Gypsum Creek.

DRAINAGE AREA.--944 mi² (2,445 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 6,275 ft (1,913 m) from topographic map.

AVERAGE DISCHARGE.--27 years, 567 ft³/s (16.06 m³/s), 410,800 acre-ft/yr (507 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 4,650 ft³/s (132 m³/s) June 11 (gage height, 7.92 ft or 2.414 m); minimum daily, 152 ft³/s (4.30 m³/s) Jan. 23.

Period of record: Maximum discharge, 6,580 ft³/s (186 m³/s) June 11, 1952 (gage height, 9.15 ft or 2.789 m); maximum gage height, 9.17 ft (2.795 m) June 29, 1957; minimum daily discharge, 110 ft³/s (3.12 m³/s) Feb. 21, 1955, Feb. 3, 1956, Dec. 26, 27, 1962.

REMARKS.--Records good. Transmountain diversions above station (see elsewhere in this report). Transbasin diversions above station from Robinson Reservoir (capacity, 2,520 acre-ft or 3.11 hm³) to Tenmile Creek for mining development. Many small diversions for irrigation of hay meadows above station. Water-quality records for the current year are published in Part 2 of this report as "at Gypsum".

REVISIONS.--WSP 2124: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	252	340	242	203	182	190	181	305	1,590	2,890	542	263
2	257	335	234	203	182	190	178	281	1,700	2,750	516	267
3	258	330	230	203	180	190	177	252	1,580	2,430	481	253
4	250	325	227	203	185	185	171	281	1,530	2,170	465	246
5	250	320	224	203	188	185	171	337	1,310	2,030	510	235
6	250	315	200	203	185	188	177	423	1,230	1,940	687	229
7	246	310	230	206	185	185	188	381	1,410	1,860	611	227
8	262	290	254	215	182	188	166	361	1,990	1,740	583	230
9	320	300	246	227	182	190	175	418	2,880	1,670	527	231
10	314	280	206	215	185	188	174	582	3,890	1,620	473	232
11	301	300	178	200	185	188	181	922	4,240	1,500	434	241
12	284	295	195	203	185	188	180	1,170	4,030	1,410	411	253
13	273	300	238	198	182	192	184	1,340	4,080	1,480	396	260
14	270	285	212	190	178	188	193	1,430	4,330	1,800	362	256
15	310	295	185	173	165	181	210	1,390	4,050	1,570	368	249
16	389	285	185	175	161	184	187	1,500	3,220	1,300	350	242
17	371	258	182	180	161	188	191	1,570	2,610	1,150	341	253
18	370	262	200	180	173	199	199	1,820	2,450	1,090	357	249
19	366	271	218	178	182	198	204	2,430	2,180	1,330	356	239
20	350	246	218	180	178	200	188	2,710	2,000	1,400	327	230
21	343	238	209	175	165	203	190	2,600	2,090	1,180	335	227
22	334	230	192	175	175	193	186	2,310	2,290	1,040	351	230
23	330	221	190	152	185	185	185	1,890	2,550	858	335	231
24	330	227	185	155	188	187	196	1,790	2,720	771	323	249
25	330	227	185	171	188	183	219	1,840	2,550	714	316	251
26	325	230	185	182	185	186	213	1,800	3,110	677	307	263
27	320	227	185	182	188	189	204	1,480	3,420	675	298	263
28	325	200	180	175	188	190	227	1,210	3,410	642	285	256
29	330	221	203	175	-----	190	263	1,130	3,180	611	277	265
30	325	242	203	185	-----	182	298	1,150	3,080	613	270	260
31	325	-----	203	185	-----	180	-----	1,170	-----	571	268	-----
TOTAL	9,560	8,205	6,424	5,850	5,048	5,853	5,856	38,273	80,700	43,482	12,462	7,380
MEAN	308	274	207	189	180	189	195	1,235	2,690	1,403	402	246
MAX	389	340	254	227	188	203	298	2,710	4,330	2,890	687	267
MIN	246	200	178	152	161	180	166	252	1,230	571	268	227
AC-FT	18,960	16,270	12,740	11,600	10,010	11,610	11,620	75,910	160,100	86,250	24,720	14,640

CAL YR 1972 TOTAL 184,858 MEAN 505 MAX 3,340 MIN 146 AC-FT 366,700
 WTR YR 1973 TOTAL 229,093 MEAN 628 MAX 4,330 MIN 152 AC-FT 454,400

PEAK DISCHARGE (BASE, 3,500 CFS).--June 11 (0700) 4,650 cfs (7.92 ft).

COLORADO RIVER MAIN STEM

219

09070500 COLORADO RIVER NEAR DOTSERO, COLO.

LOCATION.--Lat 39°38'40", long 107°04'40", in sec.6, T.5 S., R.86 W., Eagle County, on left bank about 500 ft (150 m) south of U.S. Highways 6 and 24, 1.5 mi (2.4 km) west of Dotsero, and 1.5 mi (2.4 km) downstream from Eagle River.

DRAINAGE AREA.--4,394 mi² (11,380 km²).

PERIOD OF RECORD.--October 1940 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,130 ft (1,868 m) from topographic map.

AVERAGE DISCHARGE.--33 years, 2,104 ft³/s (59.59 m³/s), 1,524,000 acre-ft/yr (1,880 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 11,300 ft³/s (320 m³/s) June 15 (gage height, 8.98 ft or 2.737 m); minimum daily, 670 ft³/s (19.0 m³/s) Dec. 17.
Period of record: Maximum discharge, 19,100 ft³/s (541 m³/s) June 8, 1952 (gage height, 11.56 ft or 3.523 m); minimum daily, 350 ft³/s (9.91 m³/s) Jan. 5, 1944.

REMARKS.--Records good except those for winter period, which are fair. Natural flow of stream affected by transmountain diversions, storage reservoirs, power development, diversions for irrigation of 68,000 acres (275 km²) above station, and return flow from irrigated areas. Water-quality records for the current year are published in Part 2 of this report.

COOPERATION.--Gage-height record collected in cooperation with the Public Service Co. of Colorado.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,290	1,300	1,500	940	870	1,080	1,090	2,530	5,470	6,570	2,690	1,530
2	1,210	1,320	1,400	820	1,050	1,140	1,050	2,170	5,820	6,700	2,600	1,520
3	1,180	1,440	1,380	820	980	1,120	1,000	1,880	5,850	6,390	2,520	1,500
4	1,250	1,490	1,190	870	1,100	1,080	984	1,900	5,720	6,330	2,500	1,490
5	1,300	1,500	1,190	1,000	1,080	1,140	963	2,200	5,380	6,440	2,590	1,480
6	1,300	1,510	869	1,040	940	1,080	992	2,600	4,990	6,190	2,880	1,440
7	1,290	1,480	980	930	1,100	1,050	1,070	2,770	4,940	5,520	2,830	1,410
8	1,310	1,460	1,170	970	1,090	1,080	1,040	2,680	5,510	5,280	2,910	1,480
9	1,330	1,470	1,110	970	1,070	1,080	1,030	3,070	6,890	5,340	2,860	1,380
10	1,390	1,450	970	1,050	1,080	1,110	1,020	3,710	8,900	5,370	2,680	1,360
11	1,410	1,420	830	1,090	1,070	1,120	1,010	4,520	10,100	4,910	2,600	1,390
12	1,360	1,420	750	1,040	1,070	1,100	1,040	5,070	10,200	4,730	2,510	1,400
13	1,330	1,430	970	1,120	1,090	1,130	1,140	5,210	10,100	4,950	2,470	1,420
14	1,330	1,410	1,050	1,230	1,050	1,080	1,270	5,300	10,500	5,240	2,270	1,380
15	1,380	1,400	910	1,180	980	1,050	1,490	5,300	11,000	5,520	2,100	1,350
16	1,500	1,410	750	1,130	940	1,070	1,480	5,510	9,650	6,220	1,970	1,330
17	1,520	1,400	670	1,140	910	1,120	1,300	5,760	8,270	6,010	1,770	1,320
18	1,550	1,380	800	1,180	920	1,170	1,330	6,240	7,340	5,490	1,780	1,330
19	1,500	1,410	1,100	1,190	960	1,160	1,450	7,380	6,540	5,380	1,810	1,310
20	1,460	1,390	1,230	1,180	990	1,170	1,320	8,460	5,900	5,590	1,760	1,280
21	1,490	1,360	1,290	1,140	920	1,190	1,220	9,060	5,710	5,780	1,730	1,260
22	1,460	1,320	1,170	990	940	1,130	1,200	9,000	5,760	5,930	1,720	1,270
23	1,400	1,280	1,240	910	910	1,090	1,200	8,090	5,780	5,530	1,590	1,360
24	1,390	1,290	1,180	940	1,030	1,100	1,280	7,480	5,760	4,690	1,750	1,390
25	1,350	1,330	1,130	870	1,030	1,090	1,470	7,460	5,510	5,930	1,740	1,410
26	1,390	1,340	1,070	960	1,080	1,100	1,550	7,330	6,070	3,500	1,690	1,430
27	1,370	1,380	940	1,120	1,080	1,110	1,490	6,580	6,460	3,220	1,650	1,480
28	1,400	1,230	940	980	1,090	1,120	1,580	5,690	6,550	3,080	1,620	1,450
29	1,400	1,400	1,060	1,040	-----	1,150	1,990	5,090	6,470	2,860	1,570	1,450
30	1,360	1,500	1,130	890	-----	1,110	2,450	5,010	6,530	2,820	1,540	1,460
31	1,300	-----	1,060	950	-----	1,080	-----	5,000	-----	2,800	1,530	-----
TOTAL	42,500	41,920	33,049	31,680	28,420	34,400	38,499	160,050	209,870	158,350	66,230	41,950
MEAN	1,371	1,397	1,066	1,022	1,015	1,110	1,283	5,163	6,996	5,108	2,136	1,398
MAX	1,550	1,510	1,500	1,230	1,100	1,190	2,450	9,060	11,000	6,700	2,910	1,530
MIN	1,180	1,230	670	820	870	1,050	963	1,880	4,940	2,800	1,530	1,260
AC-FT	84,300	83,150	65,550	62,840	56,370	68,230	76,360	317,500	416,300	314,100	131,400	83,210

CAL YR 1972 TOTAL 709,829 MEAN 1,939 MAX 7,900 MIN 670 AC-FT 1,408,000
WTR YR 1973 TOTAL 886,918 MEAN 2,430 MAX 11,000 MIN 670 AC-FT 1,759,000

NOTE.--No gage-height record Dec. 16 to Mar. 4.

09073400 ROARING FORK RIVER NEAR ASPEN, COLO.

LOCATION.--Lat 39°10'48", long 106°48'05", Pitkin County, on right bank 25 ft (8 m) upstream from private bridge, 115 ft (35 m) upstream from Salvation ditch headgate, 1.0 mi (1.6 km) southeast of Aspen, and 2.0 mi (3.2 km) upstream from Hunter Creek.

DRAINAGE AREA.--108 mi² (280 km²).

PERIOD OF RECORD.--October 1964 to current year.

GAGE.--Water-stage recorder. Datum of gage is 8,014.01 ft (2,442.670 m) above mean sea level. Prior to Apr. 25, 1968, at site 85 ft (26 m) upstream at datum 1.16 ft (0.354 m) higher.

AVERAGE DISCHARGE.--9 years, 149 ft³/s (4.220 m³/s), 108,000 acre-ft/yr (133 hm³/yr), including diversion by Twin Lakes tunnel.

EXTREMES.--Current year: Maximum discharge, 880 ft³/s (24.9 m³/s) June 27 (gage height, 3.68 ft or 1.122 m); minimum daily, 15 ft³/s (0.42 m³/s) Feb. 20.

Period of record: Maximum discharge, 1,310 ft³/s (37.1 m³/s) July 1, 1965 (gage height, 5.20 ft or 1.585 m, site and datum then in use), from rating curve extended above 770 ft³/s (22 m³/s); minimum daily, 15 ft³/s (0.42 m³/s) Feb. 20, 1973.

REMARKS.--Records good except those for winter period, which are fair. Transmountain diversion 14 mi (23 km) upstream through Twin Lakes tunnel to Arkansas River basin since May 24, 1935 (see elsewhere in this report).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	28	22	17	19	19	19	52	203	540	70	36
2	26	29	22	17	21	19	19	46	193	468	69	37
3	23	29	21	18	19	20	19	45	178	396	65	38
4	23	26	19	19	20	19	18	52	176	350	62	35
5	24	29	19	19	19	20	17	61	156	326	71	33
6	24	29	20	20	19	21	20	74	160	284	80	33
7	24	25	21	20	20	18	20	65	198	236	86	32
8	27	29	21	20	18	20	18	58	291	203	60	29
9	28	28	21	19	18	21	19	62	424	200	59	28
10	27	25	20	19	18	21	19	78	652	188	58	34
11	24	27	19	19	18	19	20	124	740	176	57	38
12	23	27	22	19	18	21	21	156	732	203	55	36
13	24	27	21	18	18	21	21	190	750	224	55	36
14	24	25	21	18	18	20	25	203	825	218	51	33
15	27	27	20	17	17	20	26	188	680	188	50	30
16	39	26	21	17	17	19	24	205	456	160	48	29
17	37	25	23	17	17	19	27	230	385	144	48	29
18	34	27	23	16	17	21	29	301	396	144	49	29
19	35	26	23	16	16	21	27	371	347	158	48	28
20	38	26	22	17	15	21	24	399	322	148	44	32
21	34	27	23	18	16	22	24	361	375	148	47	34
22	33	27	21	17	17	21	27	270	417	126	47	31
23	33	23	20	17	18	19	28	200	464	110	45	31
24	30	23	20	16	19	20	32	193	532	100	43	36
25	30	23	19	16	19	18	34	190	504	95	44	39
26	29	22	19	17	19	18	33	183	640	90	42	41
27	29	22	19	17	19	20	35	146	740	86	40	38
28	31	22	19	18	19	19	42	132	680	80	36	40
29	28	22	19	18	-----	19	47	132	600	77	36	37
30	28	22	17	19	-----	19	53	154	600	75	36	36
31	28	-----	17	19	-----	19	-----	166	-----	74	36	-----
TOTAL	890	773	634	554	508	614	787	5,087	13,816	6,015	1,617	1,018
MEAN	28.7	25.8	20.5	17.9	18.1	19.8	26.2	164	461	194	52.2	33.9
MAX	39	29	23	20	21	22	53	399	825	540	80	41
MIN	23	22	17	16	15	18	17	45	156	74	36	28
AC-FT	1,770	1,530	1,260	1,100	1,010	1,220	1,560	10,090	27,400	11,930	3,210	2,020

CAL YR 1972 TOTAL 23,769 MEAN 64.9 MAX 520 MIN 17 AC-FT 47,150
WTR YR 1973 TOTAL 32,313 MEAN 88.5 MAX 825 MIN 15 AC-FT 64,090

ROARING FORK RIVER BASIN

221

09073700 HUNTER CREEK ABOVE MIDWAY CREEK, NEAR ASPEN, COLO.

LOCATION.--Lat 39°12'50", long 106°39'19", Pitkin County, on right bank 2.8 mi (4.5 km) upstream from Midway Creek and 9 mi (14 km) east of Aspen.

DRAINAGE AREA.--6.18 mi² (16.01 km²).

PERIOD OF RECORD.--October 1964 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 10,500 ft (3,200 m) from topographic map.

AVERAGE DISCHARGE.--9 years, 15.7 ft³/s (0.445 m³/s), 11,370 acre-ft/yr (14.0 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 580 ft³/s (16.4 m³/s) June 26 (gage height, 3.18 ft or 0.969 m), from rating curve extended above 130 ft³/s (3.7 m³/s); minimum daily, 1.2 ft³/s (0.034 m³/s) Feb. 20.
Period of record: Maximum discharge, 580 ft³/s (16.4 m³/s) June 26, 1973 (gage height, 3.18 ft or 0.969 m), from rating curve extended above 130 ft³/s (3.7 m³/s); minimum daily determined, 1.1 ft³/s (0.031 m³/s) Feb. 3, 1972.

REMARKS.--Records good except those for period of no gage-height record, which are poor. No regulation or diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

CAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.3	3.8	2.7	1.6	1.6	1.7	1.8	2.4	36	164	15	4.4
2	4.8	3.8	2.6	1.4	1.5	1.7	1.7	2.2	23	134	16	5.1
3	4.4	3.7	2.6	1.5	1.5	1.7	1.7	2.3	17	114	14	4.2
4	4.2	3.6	2.6	1.5	1.5	1.7	1.7	2.4	15	104	13	3.1
5	4.6	3.6	2.6	1.5	1.6	1.7	1.7	2.9	12	101	19	2.9
6	4.2	3.5	2.5	1.5	1.6	1.6	1.7	3.3	17	80	25	2.6
7	4.6	3.5	2.4	1.6	1.6	1.6	1.6	3.2	39	72	17	2.9
8	8.3	3.4	2.6	1.6	1.7	1.6	1.5	3.2	78	66	13	2.4
9	9.6	3.4	2.6	1.6	1.7	1.7	1.6	4.5	128	60	12	2.1
10	7.2	3.3	2.6	1.6	1.7	1.7	1.6	6.0	188	58	11	2.6
11	5.7	3.3	2.6	1.7	1.7	1.7	1.7	11	198	55	10	3.5
12	5.3	3.3	2.5	1.7	1.7	1.7	1.7	18	193	52	9.2	4.4
13	5.1	3.2	2.5	1.7	1.7	1.7	1.7	25	213	52	8.6	5.1
14	4.8	3.2	2.4	1.8	1.6	1.7	1.7	26	188	52	8.3	3.3
15	6.6	3.2	2.3	1.8	1.6	1.6	1.8	27	103	45	8.1	2.9
16	9.9	3.2	2.3	1.9	1.5	1.6	1.8	28	61	38	7.5	2.6
17	8.9	3.2	2.2	2.0	1.5	1.7	1.8	29	54	36	7.5	2.4
18	7.8	3.0	2.2	2.1	1.4	1.7	1.9	35	56	36	8.1	2.1
19	8.9	3.0	2.1	2.1	1.3	1.8	1.8	43	50	46	6.6	2.0
20	8.3	3.0	2.1	2.0	1.2	1.8	1.8	50	55	43	6.6	1.8
21	6.9	2.9	2.1	2.0	1.3	1.9	1.7	43	81	38	7.2	1.7
22	6.4	2.8	2.0	2.0	1.3	1.8	1.7	30	101	28	6.4	1.6
23	6.2	2.8	2.0	1.9	1.4	1.8	1.7	22	135	24	5.9	1.7
24	5.8	2.8	1.9	1.9	1.4	1.8	1.8	29	132	22	7.2	2.6
25	5.4	2.8	1.9	1.9	1.5	1.7	1.8	27	177	21	6.4	3.1
26	5.0	2.9	1.9	1.8	1.6	1.7	1.8	21	267	21	6.2	3.3
27	4.2	2.8	1.9	1.8	1.6	1.8	1.9	14	310	20	4.8	3.5
28	3.9	2.7	1.9	1.7	1.7	1.8	2.0	11	219	18	4.8	3.1
29	3.9	2.6	1.9	1.7	-----	1.8	2.1	18	201	20	4.2	2.9
30	3.9	2.8	1.8	1.7	-----	1.8	2.3	24	181	18	4.2	2.9
31	3.5	-----	1.8	1.7	-----	1.8	-----	31	-----	16	4.2	-----
TOTAL	182.6	95.1	70.1	54.3	43.0	53.4	53.1	594.4	3,528	1,654	297.0	88.8
MEAN	5.89	3.17	2.26	1.75	1.54	1.72	1.77	19.2	118	53.4	9.58	2.96
MAX	9.9	3.8	2.7	2.1	1.7	1.9	2.3	50	310	164	25	5.1
MIN	3.5	2.6	1.8	1.4	1.2	1.6	1.5	2.2	12	16	4.2	1.6
AC-FT	362	189	139	108	85	106	105	1,180	7,000	3,280	589	176

CAL YR 1972 TOTAL 4,981.0 MEAN 13.6 MAX 202 MIN 1.1 AC-FT 9,880
WTR YR 1973 TOTAL 6,713.8 MEAN 18.4 MAX 310 MIN 1.2 AC-FT 13,320

PEAK DISCHARGE (BASE, 150 CFS).--June 12 (2200) 356 cfs (2.65 ft); June 26 (2100) 580 cfs (3.18 ft).

NOTE.--No gage-height record Oct. 30 to May 19.

ROARING FORK RIVER BASIN

09073800 MIDWAY CREEK NEAR ASPEN, COLO.

LOCATION.--Lat 39°11'47", long 106°41'22", Pitkin County, on right bank 1,700 ft (520 m) upstream from mouth and 5.7 mi (9.2 km) east of Aspen.

DRAINAGE AREA.--8.62 mi² (22.33 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 10,080 ft (3,072 m) from topographic map.

EXTREMES.--Current year: Maximum discharge, 190 ft³/s (5.38 m³/s) June 26 (gage height, 2.65 ft or 0.808 m), from rating curve extended above 140 ft³/s (4.0 m³/s); minimum daily, 1.1 ft³/s (0.031 m³/s) Feb. 20.
Period of record: Maximum discharge, 290 ft³/s (8.21 m³/s) June 17, 1971 (gage height, 3.17 ft or 0.966 m, from floodmarks), from rating curve extended above 140 ft³/s (4.0 m³/s); minimum daily, 1.1 ft³/s (0.031 m³/s) Feb. 20, 1973.

REMARKS.--Records good except those for period of no gage-height record, which are poor. No diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.0	3.3	2.4	1.4	1.5	1.6	1.7	2.0	28	97	13	3.7
2	3.8	3.4	2.3	1.2	1.4	1.6	1.6	1.9	19	88	13	4.2
3	3.7	3.3	2.3	1.3	1.4	1.6	1.6	2.0	15	80	12	3.7
4	3.5	3.2	2.3	1.3	1.4	1.6	1.6	2.1	13	74	12	3.1
5	3.8	3.2	2.3	1.3	1.5	1.6	1.6	2.3	13	69	14	2.8
6	3.7	3.2	2.2	1.3	1.5	1.5	1.6	2.9	17	60	17	2.8
7	3.8	3.2	2.1	1.4	1.5	1.5	1.5	2.8	35	51	13	2.6
8	6.0	3.1	2.3	1.4	1.6	1.5	1.4	3.1	59	48	11	2.5
9	6.0	3.0	2.3	1.4	1.6	1.6	1.5	3.8	94	45	10	2.4
10	5.2	2.9	2.3	1.5	1.6	1.6	1.5	5.0	121	40	9.1	2.8
11	4.3	2.9	2.3	1.5	1.6	1.6	1.5	7.2	124	39	7.7	3.1
12	4.2	2.9	2.2	1.5	1.6	1.6	1.5	10	123	39	6.7	3.3
13	4.2	2.8	2.2	1.6	1.6	1.6	1.5	15	134	48	6.3	4.0
14	4.0	2.8	2.2	1.6	1.5	1.6	1.6	17	141	43	6.3	3.1
15	5.6	2.8	2.1	1.7	1.5	1.5	1.6	17	98	35	6.0	2.6
16	9.1	2.8	2.1	1.7	1.4	1.5	1.6	17	74	29	5.6	2.6
17	6.7	2.8	2.0	1.7	1.4	1.6	1.6	21	64	28	5.4	2.5
18	6.3	2.7	2.0	1.6	1.3	1.6	1.7	33	63	32	5.6	2.4
19	6.7	2.7	1.9	1.5	1.2	1.7	1.6	43	56	39	5.2	2.3
20	6.0	2.7	1.9	1.5	1.1	1.7	1.6	43	61	35	4.9	2.0
21	5.2	2.6	1.9	1.5	1.2	1.8	1.5	36	78	28	5.2	2.0
22	4.7	2.5	1.8	1.5	1.2	1.7	1.5	23	87	24	4.7	2.0
23	4.6	2.5	1.8	1.5	1.3	1.7	1.5	20	118	22	4.3	1.9
24	4.4	2.5	1.7	1.5	1.3	1.7	1.5	23	120	21	5.2	2.6
25	4.0	2.5	1.7	1.5	1.4	1.6	1.5	21	160	20	4.7	2.6
26	3.9	2.6	1.7	1.6	1.5	1.6	1.5	16	133	19	4.5	2.7
27	3.8	2.5	1.7	1.6	1.5	1.7	1.5	12	133	17	4.0	3.5
28	3.7	2.4	1.7	1.6	1.6	1.7	1.6	14	125	17	3.7	2.7
29	3.7	2.3	1.7	1.6	-----	1.7	1.7	14	114	16	3.7	2.6
30	3.6	2.5	1.6	1.6	-----	1.7	2.0	18	106	15	3.7	2.7
31	3.2	-----	1.6	1.6	-----	1.7	-----	29	-----	14	3.5	-----
TOTAL	145.4	84.6	62.6	46.5	40.2	50.3	47.2	477.1	2,526	1,232	231.0	83.8
MEAN	4.69	2.82	2.02	1.50	1.44	1.62	1.57	15.4	84.2	39.7	7.45	2.79
MAX	9.1	3.4	2.4	1.7	1.6	1.8	2.0	43	160	97	17	4.2
MIN	3.2	2.3	1.6	1.2	1.1	1.5	1.4	1.9	13	14	3.5	1.9
AC-FT	288	168	124	92	80	100	94	946	5,010	2,440	458	166

CAL YR 1972 TOTAL 5,082.4 MEAN 13.9 MAX 177 MIN 1.5 AC-FT 10,080

WTR YR 1973 TOTAL 5,026.7 MEAN 13.8 MAX 160 MIN 1.1 AC-FT 9,970

PEAK DISCHARGE (BASE, 90 CFS).--June 13 (2100) 170 cfs (2.55 ft); June 26 (2100) 190 cfs (2.65 ft).

NOTE.--No gage-height record Oct. 30 to May 11.

ROARING FORK RIVER BASIN

223

09073900 NO NAME CREEK NEAR ASPEN, COLO.

LOCATION.--Lat 39°11'20", long 106°43'04", Pitkin County, on right bank 0.6 mi (1.0 km) upstream from mouth and 4.5 mi (7.2 km) east of Aspen.

DRAINAGE AREA.--6.54 mi² (16.94 km²).

PERIOD OF RECORD.--October 1970 to current year. Low-flow records not equivalent prior to Aug. 2, 1972, due to inflow between the sites.

GAGE.--Water-stage recorder. Altitude of gage is 10,000 ft (3,048 m) from topographic map. Prior to Aug. 2, 1972, at site 0.5 mi (0.8 km) downstream at different datum.

EXTREMES.--Current year: Maximum discharge, 90 ft³/s (2.55 m³/s) June 13 (gage height, 2.72 ft or 0.829 m), from rating curve extended above 48 ft³/s (1.4 m³/s); minimum daily, 0.50 ft³/s (0.014 m³/s) Feb. 20.

Period of record: Maximum discharge, 163 ft³/s (4.62 m³/s) June 17, 1971 (gage height, 5.48 ft or 1.670 m, site and datum then in use), from rating curve extended above 85 ft³/s (2.4 m³/s); minimum daily, 0.50 ft³/s (0.014 m³/s) Feb. 20, 1973.

REMARKS.--Records good except those for period of no gage-height record, which are poor. No diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	UCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.3	2.0	1.4	.70	.60	.60	.58	.74	39	51	5.5	1.9
2	2.2	2.1	1.3	.60	.54	.60	.58	.70	31	48	5.2	2.0
3	2.0	2.1	1.3	.64	.56	.60	.58	.80	28	43	5.0	2.0
4	2.0	2.1	1.3	.66	.56	.60	.58	1.0	25	41	4.8	1.8
5	2.1	2.1	1.3	.68	.56	.58	.58	1.3	23	37	6.0	1.7
6	2.0	2.2	1.3	.70	.58	.58	.58	1.6	27	33	8.7	1.5
7	2.1	2.2	1.3	.70	.58	.60	.56	1.4	40	30	5.7	1.5
8	3.0	2.1	1.2	.70	.58	.60	.54	1.8	52	28	4.5	1.4
9	3.3	2.0	1.2	.72	.60	.60	.56	2.8	65	26	4.0	1.4
10	2.8	1.9	1.2	.74	.62	.58	.58	3.5	72	23	3.7	1.7
11	2.4	1.9	1.2	.74	.62	.58	.58	4.6	73	20	3.4	2.0
12	2.3	1.9	1.2	.74	.62	.58	.60	6.6	73	23	3.1	2.0
13	2.3	1.8	1.2	.74	.62	.58	.60	8.8	74	25	2.8	2.2
14	2.2	1.8	1.2	.74	.60	.56	.60	10	70	26	2.7	1.7
15	2.7	1.8	1.2	.74	.60	.54	.58	10	60	23	2.6	1.6
16	4.5	1.8	1.1	.72	.60	.56	.58	13	55	19	2.5	1.4
17	4.3	1.7	1.1	.70	.60	.56	.58	22	53	15	2.6	1.5
18	3.8	1.7	1.1	.68	.58	.56	.58	32	54	16	2.6	1.4
19	4.0	1.7	1.1	.68	.54	.58	.64	45	53	24	2.5	1.3
20	3.9	1.7	1.0	.68	.50	.58	.60	45	53	21	2.3	1.3
21	3.3	1.6	.96	.70	.52	.60	.60	42	57	23	2.5	1.3
22	3.0	1.6	.94	.70	.54	.58	.60	36	60	15	2.4	1.2
23	2.9	1.6	.92	.68	.56	.58	.58	29	61	12	2.2	1.2
24	2.8	1.5	.92	.66	.56	.56	.58	31	58	10	2.3	1.5
25	2.7	1.5	.88	.66	.56	.54	.58	31	62	9.0	2.3	1.7
26	2.6	1.5	.88	.68	.56	.56	.58	27	64	8.0	2.1	1.7
27	2.5	1.4	.86	.68	.58	.56	.58	22	63	7.5	2.0	1.5
28	2.4	1.4	.86	.66	.60	.56	.60	20	60	7.3	1.9	1.9
29	2.4	1.4	.82	.64	-----	.56	.64	23	58	6.7	1.9	1.7
30	2.3	1.4	.80	.62	-----	.58	.60	28	54	6.2	1.9	1.5
31	2.0	-----	.75	.62	-----	.58	-----	35	-----	5.8	1.9	-----
TOTAL	85.1	53.5	33.79	21.30	16.14	17.88	17.80	536.64	1,617	682.5	103.6	48.5
MEAN	2.75	1.78	1.09	.69	.58	.58	.59	17.3	53.9	22.0	3.34	1.62
MAX	4.5	2.2	1.4	.74	.62	.60	.60	45	74	51	8.7	2.2
MIN	2.0	1.4	.75	.60	.50	.54	.54	.70	23	5.8	1.9	1.2
AC=FT	169	106	67	42	32	35	35	1,060	3,210	1,350	205	96

CAL YR 1972 TOTAL 3,478.19 MEAN 9.50 MAX 104 MIN .75 AC=FT 6,900
WTR YR 1973 TOTAL 3,233.75 MEAN 8.86 MAX 74 MIN .50 AC=FT 6,410

PEAK DISCHARGE (BASE, 90 CFS).--June 13 (2100) 90 cfs (2.72 ft).

NOTE.--No gage-height record Oct. 30 to May 18.

ROARING FORK RIVER BASIN

09074000 HUNTER CREEK NEAR ASPEN, COLO.

LOCATION.--Lat 39°12'21", long 106°47'49", Pitkin County, on right bank 280 ft (85 m) upstream from headgate of Red Mountain ditch, 1.5 mi (2.4 km) upstream from mouth, and 1.5 mi (2.4 km) northeast of Aspen.

DRAINAGE AREA.--41.1 mi² (106.4 km²).

PERIOD OF RECORD.--June 1950 to September 1956, September 1969 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 8,610 ft (2,624 m) from topographic map. Prior to Sept. 1, 1969, at site 220 ft (67 m) downstream at different datum.

AVERAGE DISCHARGE.--10 years, 53.5 ft³/s (1.515 m³/s), 38,760 acre-ft/yr (47.8 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 778 ft³/s (22.0 m³/s) June 11 (gage height, 2.70 ft or 0.823 m); minimum daily, 4.4 ft³/s (0.12 m³/s) Feb. 20.

Period of record: Maximum discharge, 1,010 ft³/s (28.6 m³/s) June 13, 1953 (gage height, 7.02 ft or 2.140 m, site and datum then in use), from rating curve extended above 580 ft³/s (16 m³/s); minimum not determined.

REMARKS.--Records good. Several small diversions above station for irrigation of hay meadows above and below station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	13	9.7	8.3	6.0	4.8	5.6	20	238	355	37	13
2	11	13	9.7	8.8	6.0	5.0	5.6	17	203	304	40	14
3	11	12	9.7	9.1	6.0	5.0	5.6	19	185	271	40	14
4	10	12	10	9.1	6.0	4.6	5.4	24	164	246	37	13
5	11	12	9.7	8.5	5.8	4.8	5.8	28	136	259	45	12
6	11	12	10	8.3	5.8	5.0	6.0	29	161	217	55	12
7	11	12	10	8.0	5.8	5.0	5.8	26	234	206	42	12
8	14	12	9.7	7.8	5.6	4.8	5.6	24	327	192	35	11
9	16	12	9.7	7.5	5.8	5.0	6.0	27	458	185	29	11
10	16	12	10	7.5	5.6	5.2	6.0	40	566	171	27	11
11	13	12	10	7.3	5.6	5.0	6.3	61	572	161	25	12
12	13	12	10	7.3	5.6	5.2	6.8	89	566	171	24	12
13	12	12	10	7.0	5.4	5.2	7.3	112	560	168	22	14
14	12	12	9.4	6.8	5.4	5.2	7.8	103	566	175	21	12
15	14	12	9.4	6.3	5.2	5.2	7.8	101	435	171	21	11
16	24	12	9.4	6.5	5.2	5.2	7.4	129	313	133	19	10
17	20	11	9.1	6.5	5.2	5.3	7.8	175	267	106	19	10
18	18	11	8.8	6.3	5.2	5.4	8.0	203	279	106	19	9.7
19	18	11	8.5	6.3	4.8	5.4	7.8	252	275	133	19	9.1
20	19	11	8.5	6.0	4.4	5.6	7.6	263	291	122	17	8.8
21	16	10	8.3	6.0	4.6	5.8	7.8	234	331	119	17	8.8
22	15	10	8.3	6.0	4.8	5.6	8.0	199	355	89	17	8.3
23	15	9.4	8.0	6.0	5.0	5.4	8.5	185	410	69	16	8.3
24	12	9.4	8.0	5.6	5.2	5.4	10	252	410	64	16	9.4
25	11	9.4	6.3	5.8	5.2	5.2	11	227	375	61	17	10
26	12	9.4	8.3	5.8	5.2	5.4	11	196	488	56	16	10
27	12	9.4	8.8	5.8	5.2	5.4	11	150	548	50	15	9.4
28	13	9.0	8.8	5.8	5.2	5.6	13	143	494	47	14	10
29	11	9.4	8.5	5.8	-----	5.4	17	164	415	49	14	9.4
30	13	9.6	8.3	6.0	-----	5.6	20	203	375	44	13	9.1
31	13	-----	8.3	6.0	-----	5.6	-----	227	-----	58	13	-----
TOTAL	429	333.0	283.2	213.8	150.8	162.3	249.3	3,922	10,997	4,540	761	324.3
MEAN	13.8	11.1	9.14	6.90	5.39	5.24	8.31	127	367	146	24.5	10.8
MAX	24	13	10	9.1	6.0	5.8	20	263	572	355	55	14
MIN	10	9.0	8.0	5.6	4.4	4.6	5.4	17	136	58	13	8.3
AC-FT	851	661	562	424	299	322	494	7,780	21,810	9,010	1,510	643

CAL YR 1972 TOTAL 17,017.4 MEAN 46.5 MAX 536 MIN 6.0 AC-FT 33,750
 WTR YR 1973 TOTAL 22,365.7 MEAN 61.3 MAX 572 MIN 4.4 AC-FT 44,360

PEAK DISCHARGE (BASE, 450 CFS).--June 11 (2200) 778 cfs (2.70 ft); June 26 (2300) 750 cfs (2.67 ft).

ROARING FORK RIVER BASIN

225

09074800 CASTLE CREEK ABOVE ASPEN, COLO.

LOCATION.--Lat 39°05'15", long 106°48'42", Pitkin County, on right bank 0.4 mi (0.6 km) downstream from Forest Service bridge, 0.4 mi (0.6 km) upstream from Sandy Creek, and 7 mi (11 km) south of Aspen.

DRAINAGE AREA.--32.2 mi² (83.4 km²).

GAGE.--Water-stage recorder. Altitude of gage is 9,100 ft (2,774 m) from topographic map.

PERIOD OF RECORD.--September 1969 to current year.

EXTREMES.--Current year: Maximum discharge, 428 ft³/s (12.1 m³/s) June 14 (gage height, 3.75 ft or 1.143 m); maximum gage height, 3.87 ft (1.180 m) June 14 (backwater from debris); minimum daily discharge, 7.8 ft³/s (0.22 m³/s) Feb. 20.

Period of record: Maximum discharge, 428 ft³/s (12.1 m³/s) June 14, 1973 (gage height, 3.75 ft or 1.143 m); maximum gage height, 3.88 ft (1.183 m) June 23, 1970; minimum daily discharge, 7.8 ft³/s (0.22 m³/s) Apr. 5, 1970, Feb. 20, 1973.

REMARKS.--Records good. No diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	20	15	10	10	9.0	8.5	13	71	229	59	35
2	21	20	15	10	11	9.0	8.7	12	62	207	56	35
3	21	19	15	10	11	9.0	8.7	13	58	193	59	33
4	21	18	15	10	10	8.5	8.7	15	56	181	59	31
5	23	18	13	11	10	9.3	8.5	16	52	173	67	30
6	22	18	12	12	10	8.7	8.7	17	52	165	76	30
7	22	18	13	12	11	8.5	8.5	16	68	149	68	30
8	25	17	15	13	11	8.7	7.9	16	103	140	59	30
9	25	17	15	14	10	9.0	8.5	18	165	155	55	29
10	24	17	16	13	10	9.0	8.7	23	261	147	53	35
11	23	17	14	13	10	8.5	8.7	32	293	135	51	40
12	22	17	15	13	9.6	9.0	8.7	46	277	158	50	37
13	22	16	15	13	9.6	9.3	8.7	56	327	140	48	35
14	22	16	14	13	9.6	8.7	9.0	60	370	122	47	32
15	25	17	13	13	9.0	8.7	9.3	62	231	117	45	31
16	31	16	14	12	9.0	8.2	8.5	64	156	103	44	30
17	29	16	15	11	8.8	8.5	9.7	68	141	92	45	30
18	27	16	14	11	8.6	9.0	10	78	141	99	47	28
19	29	16	14	11	8.4	9.0	9.7	98	125	161	46	27
20	30	16	14	11	7.8	8.7	9.0	110	126	128	44	26
21	29	15	14	11	8.0	9.3	9.0	104	156	106	44	25
22	28	15	14	11	8.2	9.0	9.3	86	193	84	43	25
23	28	15	13	11	8.4	8.5	9.7	71	225	73	42	25
24	27	15	13	11	8.6	9.0	10	70	231	73	46	25
25	25	15	13	11	8.6	8.7	10	67	247	74	45	26
26	24	16	13	11	8.8	8.7	10	62	293	72	44	25
27	22	15	13	11	8.8	9.0	11	54	309	68	40	23
28	22	13	13	11	9.0	9.0	11	49	293	76	40	23
29	22	15	13	11	-----	9.0	12	50	285	74	38	23
30	21	16	12	11	-----	8.5	13	54	255	72	38	22
31	19	-----	11	11	-----	8.7	-----	62	-----	60	35	-----
TOTAL	752	495	428	357	262.8	273.7	281.7	1,562	5,622	3,826	1,535	876
MEAN	24.3	16.5	13.8	11.5	9.39	8.83	9.39	50.4	187	123	49.5	29.2
MAX	31	20	16	14	11	9.3	13	110	370	229	76	40
MIN	19	13	11	10	7.8	8.2	7.9	12	52	60	35	22
AC-FT	1,490	982	849	708	521	543	559	3,100	11,150	7,590	3,040	1,740

CAL YR 1972 TOTAL 13,883.4 MEAN 37.9 MAX 253 MIN 9.4 AC-FT 27,540
 WTR YR 1973 TOTAL 16,271.2 MEAN 44.6 MAX 370 MIN 7.8 AC-FT 32,270

PEAK DISCHARGE (BASE, 200 CFS).--June 14 (0700) 428 cfs (3.75 ft); June 26 (2200) 410 cfs (3.84 ft).

ROARING FORK RIVER BASIN

09075700 MAROON CREEK ABOVE ASPEN, COLO.

LOCATION.--Lat 39°07'25", long 106°54'17", Pitkin County, on left bank 0.3 mi (0.5 km) upstream from Silver Queen Forest Service campground, 1.2 mi (1.9 km) downstream from confluence of East and West Maroon Creeks, and 7.2 mi (11.6 km) southwest of Aspen.

DRAINAGE AREA.--35.4 mi² (91.7 km²).

PERIOD OF RECORD.--September 1969 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 8,720 ft (2,658 m) from topographic map.

EXTREMES.--Current year: Maximum discharge, 716 ft³/s (20.3 m³/s) June 29 (gage height, 3.33 ft or 1.015 m), from rating curve extended above 350 ft³/s (9.9 m³/s); maximum gage height, 4.17 ft (1.271 m) Jan. 2 (backwater from ice); minimum daily discharge, 11 ft³/s (0.31 m³/s) Feb. 20.

Period of record: Maximum discharge, 716 ft³/s (20.3 m³/s) June 29, 1973 (gage height, 3.33 ft or 1.015 m), from rating curve extended above 350 ft³/s (9.9 m³/s); maximum gage height, 4.53 ft (1.381 m) Feb. 3, 1972 (backwater from ice); minimum daily discharge, 11 ft³/s (0.31 m³/s) Feb. 20, 1973.

REMARKS.--Records good. No diversion above station. Natural regulation by Maroon Lake.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36	34	22	18	14	13	13	18	97	296	129	63
2	36	34	22	19	14	13	13	18	91	305	121	61
3	37	34	22	19	14	13	13	18	88	296	121	60
4	37	33	21	19	14	13	13	19	83	269	121	60
5	37	33	21	20	13	14	14	20	76	260	125	58
6	36	32	21	20	13	13	13	21	74	251	129	57
7	37	31	22	20	13	13	14	21	80	251	125	55
8	36	31	23	20	13	13	13	21	100	251	121	54
9	37	31	23	19	13	13	13	22	146	251	116	52
10	36	31	22	19	13	13	13	24	176	251	112	52
11	36	31	22	19	13	13	13	26	196	233	108	52
12	36	31	22	18	13	13	14	30	202	251	105	51
13	36	31	21	18	13	13	14	33	269	233	102	49
14	36	30	21	17	13	13	14	39	305	233	100	48
15	38	30	21	16	13	12	15	43	296	233	94	49
16	37	29	21	16	13	13	14	46	269	215	91	48
17	37	29	21	15	13	13	14	49	224	189	88	48
18	38	28	21	15	13	12	14	32	196	183	88	46
19	38	28	20	14	12	12	14	31	176	202	83	45
20	38	28	20	14	11	12	14	51	150	189	80	45
21	39	27	20	15	12	12	14	105	157	183	78	44
22	39	27	20	14	12	13	14	116	183	170	80	44
23	37	26	20	14	12	13	14	116	215	157	76	43
24	36	26	20	13	12	13	15	125	242	157	76	43
25	36	25	19	14	12	13	15	129	278	150	74	44
26	35	25	19	14	12	12	15	125	351	150	74	44
27	35	25	19	14	13	13	16	108	449	150	72	44
28	35	24	19	14	13	13	16	102	507	142	69	44
29	35	23	18	14	-----	13	18	97	522	137	67	43
30	35	23	18	14	-----	13	18	91	340	133	65	43
31	35	-----	18	14	-----	13	-----	94	-----	133	63	-----
TOTAL	1,132	870	639	509	359	398	427	1,790	6,538	6,504	2,953	1,489
MEAN	36.5	29.0	20.6	16.4	12.8	12.8	14.2	57.7	218	210	95.3	49.6
MAX	39	34	23	20	14	14	18	129	522	305	129	63
MIN	35	23	18	13	11	12	13	18	74	133	63	43
AC-FT	2,250	1,730	1,270	1,010	712	789	847	3,550	12,970	12,900	5,860	2,950

CAL YR 1972 TOTAL 19,770 MEAN 54.0 MAX 386 MIN 13 AC-FT 39,210
WTR YR 1973 TOTAL 23,608 MEAN 64.7 MAX 522 MIN 11 AC-FT 46,830

PEAK DISCHARGE (BASE, 250 CFS).--June 14 (1200) 362 cfs (3.13 ft); June 29 (0030) 716 cfs (3.33 ft).

NOTE.--No gage-height record Jan. 4 to Feb. 14.

ROARING FORK RIVER BASIN

227

09077150 FRYINGPAN RIVER FEEDER CANAL NEAR NORRIE, COLO.

LOCATION.--Lat 39°14'42", long 106°31'47", Pitkin County, on right bank 210 ft (64 m) downstream from diversion point on Fryingpan River and 9.1 mi (14.6 km) southeast of Norrie.

PERIOD OF RECORD.--October 1971 to current year.

GAGE.--Water-stage recorder and Parshall flume. Datum of gage is 9,955.91 ft (3,034.561 m) above mean sea level (Bureau of Reclamation bench mark).

EXTREMES.--Period of record: Maximum daily discharge, 244 ft³/s (6.91 m³/s) June 6, 1972; no flow for most of each year.

REMARKS.--Records good. This is a transmountain diversion from Marten Creek and Fryingpan River in Roaring Fork River basin through Charles H. Boustead tunnel to Arkansas River basin. Water is for municipal and irrigation use in the Southeastern Colorado Water Conservancy District. The entire flow is regulated by diversion gates.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1								0	59	193	28	
2								0	47	176	29	
3								0	40	161	29	
4								0	33	155	29	
5								0	31	144	35	
6								0	37	136	39	
7								0	62	122	36	
8								0	106	118	30	
9								0	160	116	27	
10								0	201	113	24	
11								0	213	110	15	
12								5.6	210	113	4.0	
13								14	216	120	0	
14								19	218	100	6.4	
15								24	170	86	11	
16								29	126	76	8.4	
17								42	110	67	3.8	
18								84	108	67	.98	
19								103	93	89	0	
20								108	93	85	0	
21								93	109	74	0	
22								75	128	58	0	
23								56	151	49	0	
24								55	160	46	0	
25								53	172	44	0	
26								46	203	40	0	
27								30	226	39	0	
28								34	223	37	0	
29								35	213	35	0	
30								43	206	33	0	
31								52		27	0	
TOTAL	0	0	0	0	0	0	0	1,000.6	4,124	2,829	355.58	0
MEAN	0	0	0	0	0	0	0	32.3	137	91.3	11.5	0
MAX	0	0	0	0	0	0	0	108	226	193	39	0
MIN	0	0	0	0	0	0	0	0	31	27	0	0
AC-FT	0	0	0	0	0	0	0	1,980	8,180	5,610	705	0

CAL YR 1972 TOTAL 7,077.43 MEAN 19.3 MAX 244 MIN 0 AC-FT 14,040
 WTR YR 1973 TOTAL 8,309.18 MEAN 22.8 MAX 226 MIN 0 AC-FT 16,480

ROARING FORK RIVER BASIN

09077200 FRYINGPAN RIVER NEAR IVANHOE LAKE, COLO.

LOCATION.--Lat 39°14'54", long 106°31'53", Pitkin County, on right bank 1,100 ft (340 m) downstream from Marten Creek, 2.0 mi (3.2 km) southwest of Ivanhoe Lake, and 9 mi (14 km) southeast of Norrie.

DRAINAGE AREA.--18.7 mi² (48.4 km²).

PERIOD OF RECORD.--October 1963 to current year.

GAGE.--Water-stage recorder. Datum of gage is 9,892.49 ft (3,015.231 m) above mean sea level (Bureau of Reclamation bench mark). Prior to May 15, 1967, at site 900 ft (270 m) upstream at different datum. May 16 to Aug. 24, 1967, at site 37 ft (11 m) upstream at datum 2.52 ft (0.768 m) higher.

AVERAGE DISCHARGE.--8 years (1963-71), 34.2 ft³/s (0.969 m³/s), 24,780 acre-ft/yr (30.6 hm³/yr), prior to diversions through Charles H. Boustead tunnel.

EXTREMES.--Current year: Maximum discharge, 39 ft³/s (1.10 m³/s) Aug. 18 (gage height, 3.22 ft or 0.981 m); minimum daily 3.4 ft³/s (0.096 m³/s) Apr. 5.

Period of record: Maximum discharge, 391 ft³/s (11.1 m³/s) June 22, 1965 (gage height, 3.02 ft or 0.920 m, site and datum then in use), from rating curve extended above 230 ft³/s (6.5 m³/s); maximum gage height, 4.62 ft (1.408 m) June 19, 1971; minimum not determined.

REMARKS.--Records good except those for period of no gage-height record, which are poor. Transmountain diversion above station through Charles H. Boustead tunnel since May 16, 1972 (see sta. 09077150 for figures of diversion).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	14	10	8.0	6.4	5.2	4.5	7.6	14	14	18	17
2	18	14	10	8.2	6.2	5.2	4.3	7.6	13	14	15	18
3	17	14	9.7	8.5	6.2	5.2	4.1	7.9	14	14	14	16
4	16	13	9.7	8.8	6.4	5.2	3.8	8.8	14	14	14	15
5	16	13	9.4	9.0	6.6	5.4	3.4	9.1	13	14	14	15
6	16	13	9.4	8.6	6.5	5.4	3.5	10	14	14	14	14
7	16	12	9.4	7.8	6.4	5.4	3.6	8.5	14	14	14	13
8	20	12	9.4	8.2	6.4	5.4	3.8	7.9	14	14	14	13
9	20	12	9.4	8.2	6.2	5.4	3.8	8.5	14	14	14	13
10	18	12	9.2	8.4	6.0	5.4	3.9	11	14	14	14	12
11	16	12	9.0	8.4	6.0	5.4	4.0	16	16	14	19	13
12	15	12	9.0	8.0	5.8	5.2	4.1	18	16	14	29	14
13	15	12	9.0	7.4	5.8	5.2	4.1	17	16	14	33	14
14	15	12	9.2	7.4	5.8	5.2	4.2	15	15	14	25	12
15	19	12	9.2	7.4	5.6	5.2	4.3	13	15	14	19	12
16	22	12	9.2	7.4	5.4	5.0	4.2	15	14	14	19	12
17	20	12	9.6	7.2	5.0	5.0	4.0	13	14	14	22	11
18	19	12	9.8	7.0	4.5	5.0	3.8	12	13	14	27	10
19	19	12	10	6.4	4.4	5.0	3.9	12	13	14	26	10
20	19	11	10	6.6	4.2	5.0	4.8	12	14	14	26	10
21	17	11	10	7.0	4.3	5.0	5.0	12	14	15	26	9.4
22	17	11	9.8	6.6	4.6	5.0	5.1	12	14	14	25	9.4
23	17	11	9.6	6.4	4.9	5.0	5.4	12	14	14	22	9.7
24	15	10	9.4	6.6	5.2	5.0	5.6	12	14	14	25	11
25	15	10	9.4	6.8	5.4	5.0	5.6	12	14	14	23	10
26	15	10	9.2	7.0	5.4	4.8	5.6	12	14	17	22	11
27	14	10	9.2	7.2	5.4	4.8	6.0	12	15	18	19	10
28	15	10	9.0	7.2	5.4	4.8	6.4	9.1	15	15	19	10
29	14	10	9.0	6.8	-----	4.7	6.8	11	15	17	18	9.4
30	14	10	8.6	6.6	-----	4.7	7.3	11	15	20	18	9.4
31	14	-----	8.2	6.6	-----	4.6	-----	12	-----	21	17	-----
TOTAL	521	351	291.0	231.7	156.4	157.8	138.9	357.0	428	459	624	363.3
MEAN	16.8	11.7	9.39	7.47	5.59	5.09	4.63	11.5	14.3	14.8	20.1	12.1
MAX	22	14	10	9.0	6.6	5.4	7.3	18	16	21	33	18
MIN	14	10	8.2	6.4	4.2	4.6	3.4	7.6	13	14	14	9.4
AC-FT	1,030	696	577	460	310	313	276	708	849	910	1,240	721

CAL YR 1972 TOTAL 5,012.8 MEAN 13.7 MAX 40 MIN 4.7 AC-FT 9,940
 WTR YR 1973 TOTAL 4,079.1 MEAN 11.2 MAX 33 MIN 3.4 AC-FT 8,090

NOTE.--No gage-height record Dec. 6 to Apr. 19.

ROARING FORK RIVER BASIN

229

09077600 IVANHOE CREEK NEAR NORRIE, COLO.

LOCATION.--Lat 39°17'21", long 106°33'09", Pitkin County, on right bank near Public Service powerline cabin, 1.6 mi (2.6 km) downstream from Lyle Creek, 3.2 mi (5.1 km) upstream from mouth, and 6.5 mi (10.5 km) south-east of Norrie.

DRAINAGE AREA.--9.12 mi² (23.62 km²).

PERIOD OF RECORD.--October 1963 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 10,350 ft (3,155 m) from topographic map.

AVERAGE DISCHARGE.--10 years, 7.89 ft³/s (0.223 m³/s), 5,720 acre-ft/yr (7.05 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 197 ft³/s (5.58 m³/s) June 28 (gage height, 5.90 ft or 1.798 m), from rating curve extended above 90 ft³/s (2.6 m³/s); minimum daily, 0.45 ft³/s (0.013 m³/s) Sept. 21-23. Period of record: Maximum discharge, 197 ft³/s (5.58 m³/s) June 28, 1973 (gage height, 5.90 ft or 1.798 m), from rating curve extended above 90 ft³/s (2.6 m³/s); maximum gage height, 6.50 ft (1.981 m) May 17, 1964 (backwater from ice); minimum daily discharge, 0.35 ft³/s (0.010 m³/s) Oct. 1, 2, 1966.

REMARKS.--Records good except those for period of no gage-height record, which are poor. Transmountain diversions above station through Busk-Ivanhoe tunnel to Arkansas River basin (see elsewhere in this report).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.0	1.5	1.6	.94	.80	.90	1.1	3.1	38	148	2.6	1.0
2	.98	1.6	1.5	.96	.80	.90	1.1	2.7	28	134	2.5	1.2
3	.92	1.7	1.5	.96	.80	.88	1.1	2.4	23	97	2.5	1.1
4	.86	1.8	1.5	1.0	.82	.86	1.1	2.6	19	24	2.4	.92
5	.86	1.8	1.6	1.0	.86	.84	1.1	3.1	16	19	3.3	.80
6	.86	1.8	1.6	1.0	.86	.90	1.1	3.9	20	16	4.3	.75
7	.98	2.0	1.4	1.0	.86	1.0	1.1	3.6	34	14	3.0	.80
8	1.7	2.8	1.4	1.1	.86	.92	1.0	3.3	55	13	2.4	.70
9	1.6	2.9	1.4	1.1	.84	.96	1.1	4.0	73	11	2.2	.70
10	1.3	2.3	1.4	1.1	.78	.98	1.3	4.3	81	8.5	2.1	.70
11	1.2	1.9	1.3	1.0	.78	.98	1.3	8.5	77	7.3	2.0	.80
12	1.1	1.9	1.2	1.1	.78	.98	1.3	13	78	10	1.8	.98
13	1.1	1.9	1.2	1.1	.76	.94	1.3	19	90	13	1.7	1.0
14	1.2	1.9	1.2	1.2	.72	.94	1.3	28	85	12	1.7	.75
15	1.8	1.8	1.2	1.2	.70	.93	1.3	32	58	8.5	1.6	.65
16	3.7	1.8	1.2	1.1	.70	.90	1.4	37	36	8.0	1.3	.65
17	3.0	1.8	1.2	1.0	.70	.98	1.4	39	37	6.4	1.3	.65
18	2.8	1.8	1.2	.80	.66	.98	1.4	55	38	7.0	1.5	.55
19	2.5	1.8	1.3	.83	.64	.98	1.4	83	33	9.9	1.3	.50
20	2.3	1.8	1.4	.84	.60	1.0	1.4	78	38	8.0	1.2	.50
21	2.0	1.7	1.3	.84	.64	1.0	1.5	75	39	8.5	1.3	.45
22	1.9	1.7	1.3	.88	.72	1.0	1.7	52	42	6.4	1.5	.45
23	1.8	1.7	1.2	.90	.78	1.0	1.9	39	49	5.3	1.3	.45
24	1.7	1.7	1.2	.90	.84	1.0	2.0	43	45	4.7	1.3	.65
25	1.6	1.7	1.2	.90	.84	1.0	1.9	39	51	4.1	1.3	.86
26	1.6	1.7	1.2	.90	.86	1.1	2.0	34	62	3.7	1.2	.92
27	1.6	1.6	1.2	.84	.88	1.1	2.2	29	66	3.5	1.1	.80
28	1.6	1.6	1.3	.83	.90	1.1	2.9	23	87	3.4	.98	.92
29	1.6	1.6	1.2	.86	-----	1.1	3.1	23	148	3.2	.98	.98
30	1.5	1.6	1.1	.90	-----	1.1	3.2	28	149	2.9	1.0	.92
31	1.4	-----	1.0	.90	-----	1.1	-----	35	-----	2.8	1.1	-----
TOTAL	50.06	55.2	40.5	29.98	21.78	30.35	47.0	845.5	1,695	623.1	55.76	23.10
MEAN	1.61	1.84	1.31	.97	.78	.98	1.57	27.3	56.5	20.1	1.80	.77
MAX	3.7	2.9	1.6	1.2	.90	1.1	3.2	83	149	148	4.3	1.2
MIN	.86	1.5	1.0	.80	.60	.84	1.0	2.4	16	2.8	.98	.45
AC-FT	99	109	80	59	43	60	93	1,680	3,360	1,240	111	46

CAL YR 1972 TOTAL 2,176.27 MEAN 5.95 MAX 73 MIN .55 AC-FT 4,320
WTR YR 1973 TOTAL 3,517.33 MEAN 9.64 MAX 149 MIN .45 AC-FT 6,980

NOTE.--No gage-height record Oct. 29 to May 9.

LOCATION.--Lat 39°14'20", long 106°35'22", Pitkin County, on right bank 110 ft (34 m) downstream from diversion point on South Fork Fryingpan River and 7.2 mi (11.6 km) southeast of Norrie.

REMARKS.--Records good. This is a transmountain diversion from South Fork Fryngpan River in Roaring Fork River basin through Charles H. Boustead tunnel to Arkansas River basin. Water is for municipal and irrigation use in the Southeastern Colorado Water Conservancy District. The entire flow is regulated by diversion gates.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1								0	36	127	20	
2								0	26	117	18	
3								0	23	106	17	
4								0	19	105	17	
5								0	17	99	22	
6								0	21	89	26	
7								0	40	80	21	
8								0	70	77	17	
9								0	106	75	15	
10								0	137	71	14	
11								0	143	67	13	
12								0	144	69	11	
13								0	145	68	9.6	
14								5.4	147	63	3.5	
15								11	112	54	0	
16								15	83	46	0	
17								22	77	42	0	
18								31	77	40	0	
19								47	67	52	0	
20								52	71	48	0	
21								52	84	45	0	
22								42	102	34	0	
23								30	119	29	0	
24								30	116	27	0	
25								29	124	26	0	
26								25	153	25	0	
27								17	170	24	0	
28								16	152	23	0	
29					-----			17	152	26	0	
30					-----			23	139	22	0	
31		-----			-----		-----	31	-----	21	0	-----
TOTAL	0	0	0	0	0	0	0	495.4	2,872	1,797	224.1	0
MEAN	0	0	0	0	0	0	0	16.0	95.7	58.0	7.23	0
MAX	0	0	0	0	0	0	0	52	170	127	26	0
MIN	0	0	0	0	0	0	0	0	17	21	0	0
AC-FT	0	0	0	0	0	0	0	983	5,700	3,560	445	0
CAL YR 1972	TOTAL	4,905.10	MEAN	13.4	MAX	178	MIN	0	AC-FT	9,730		
WTR YR 1973	TOTAL	5,388.50	MEAN	14.8	MAX	170	MIN	0	AC-FT	10,690		

ROARING FORK RIVER BASIN

231

09077800 SOUTH FORK FRYINGPAN RIVER AT UPPER STATION, NEAR NORRIE, COLO.

LOCATION.--Lat 39°14'30", long 106°35'33", Pitkin County, on left bank 5.0 mi (8.0 km) upstream from mouth and 7 mi (11 km) southeast of Norrie.

DRAINAGE AREA.--11.5 mi² (29.8 km²).

PERIOD OF RECORD.--October 1963 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 9,960 ft (3,036 m) from topographic map.

AVERAGE DISCHARGE.--8 years (1963-71), 21.6 ft³/s (0.612 m³/s), 15,650 acre-ft/yr (19.3 hm³/yr), prior to diversions through Charles H. Boustead tunnel.

EXTREMES.--Current year: Maximum discharge, 31 ft³/s (0.88 m³/s) May 13 (gage height, 2.10 ft or 0.640 m); maximum gage height, 3.56 ft (1.085 m) May 12 (backwater from ice); minimum daily discharge, 2.0 ft³/s (0.057 m³/s) Feb. 20.

Period of record: Maximum discharge, 326 ft³/s (9.23 m³/s) June 24, 1971 (gage height, 3.35 ft or 1.021 m), from rating curve extended above 180 ft³/s (5.1 m³/s); maximum gage height, 3.56 ft (1.085 m) May 12, 1973 (backwater from ice); minimum daily discharge, 2.0 ft³/s (0.057 m³/s) Mar. 14, 1968, Feb. 20, 1973.

REMARKS.--Records good except those for period of no gage-height record, which are poor. Transmountain diversion above station through Charles H. Boustead tunnel since May 16, 1972 (see sta. 09077750 for figures of diversion).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.3	7.6	6.2	4.2	2.8	2.7	2.7	4.3	7.2	9.0	7.2	12
2	9.0	7.6	6.0	3.9	2.5	2.7	2.6	4.0	6.9	8.6	6.9	13
3	8.6	7.6	6.0	3.9	2.4	2.6	2.6	3.6	6.5	8.3	6.9	13
4	8.6	6.9	6.0	4.1	2.4	2.5	2.6	4.5	6.9	8.3	6.9	10
5	8.6	7.2	5.8	4.2	2.5	2.4	2.6	4.8	6.9	7.9	6.9	8.4
6	8.6	7.2	5.8	4.2	2.5	2.5	2.7	6.3	7.6	7.6	6.9	8.6
7	9.3	7.2	5.6	4.2	2.6	2.4	2.7	4.0	9.0	7.2	6.9	8.8
8	13	7.2	5.6	4.0	2.6	2.5	2.7	4.5	11	6.9	6.5	8.8
9	13	7.2	5.6	3.8	2.7	2.5	2.7	4.3	13	7.2	6.5	8.4
10	12	6.5	5.6	3.8	2.7	2.5	2.6	6.0	14	7.2	6.5	8.2
11	9.7	7.2	5.4	4.0	2.7	2.6	2.7	8.6	13	7.2	6.5	9.0
12	9.3	6.9	5.4	4.0	2.6	2.6	2.8	11	11	7.9	6.5	11
13	9.7	6.9	5.4	4.0	2.6	2.6	2.8	17	11	7.9	6.9	12
14	9.3	6.9	5.4	4.2	2.6	2.6	2.9	15	12	7.9	12	9.0
15	12	6.8	5.2	4.3	2.6	2.6	3.0	10	9.7	7.2	16	8.0
16	15	6.8	5.2	4.3	2.5	2.6	3.1	9.3	7.9	6.9	15	7.8
17	14	6.8	5.2	4.1	2.4	2.6	3.0	8.6	7.9	6.5	15	7.4
18	13	6.6	5.2	4.0	2.3	2.6	2.9	10	7.9	7.6	15	7.0
19	14	6.6	5.0	4.0	2.2	2.7	2.8	12	7.6	8.6	14	6.4
20	14	6.6	4.7	4.0	2.0	2.7	2.8	11	7.6	7.6	14	6.3
21	12	6.4	4.7	4.0	2.1	2.7	2.9	9.3	8.3	7.6	15	6.2
22	12	6.4	4.5	3.9	2.1	2.7	3.1	6.5	9.3	7.2	14	6.2
23	12	6.4	4.5	3.6	2.3	2.7	3.2	6.5	10	7.2	13	6.4
24	11	6.2	4.3	3.3	2.4	2.7	3.4	8.6	10	7.2	15	8.2
25	9.7	6.2	4.0	3.0	2.5	2.7	3.4	8.6	10	7.2	14	9.0
26	9.3	6.2	4.3	3.1	2.6	2.8	3.4	7.9	10	6.9	14	10
27	9.0	6.2	4.6	3.2	2.6	2.8	3.4	7.2	11	6.9	13	9.4
28	9.3	6.4	4.7	3.2	2.7	2.8	3.6	5.8	11	7.2	13	9.8
29	8.3	6.4	4.7	3.2	-----	2.8	3.8	6.3	10	7.2	13	9.4
30	8.3	6.2	4.5	3.2	-----	2.8	4.5	6.5	9.3	7.2	12	9.2
31	7.9	-----	4.5	3.2	-----	2.8	-----	6.5	-----	7.2	12	-----
TOTAL	328.8	203.3	159.6	118.1	69.5	81.6	90.0	238.5	283.5	232.5	337.0	266.9
MEAN	10.6	6.78	5.15	3.81	2.48	2.63	3.00	7.69	9.45	7.50	10.9	8.90
MAX	15	7.6	6.2	4.3	2.8	2.8	4.5	17	14	9.0	16	13
MIN	7.9	6.2	4.0	3.0	2.0	2.3	2.6	3.6	6.5	6.5	6.5	6.2
AC-FT	652	403	317	234	138	162	179	473	562	461	668	529

CAL YR 1972 TOTAL 2,874.3 MEAN 7.85 MAX 21 MIN 2.7 AC-FT 5,700
 WTR YR 1973 TOTAL 2,409.3 MEAN 6.60 MAX 17 MIN 2.0 AC-FT 4,780

NOTE.--No gage-height record Nov. 15 to Apr. 23, Aug. 29 to Sept. 30.

ROARING FORK RIVER BASIN

09077940 CHAPMAN GULCH FEEDER CANAL NEAR NORRIE, COLO.

LOCATION.--Lat 39°14'47", long 106°37'45", Pitkin County, on right bank 180 ft (55 m) downstream from diversion point on Chapman Gulch, and 4.9 mi (7.9 km) south of Norrie.

PERIOD OF RECORD.--October 1971 to current year.

GAGE.--Water-stage recorder and Parshall flume. Datum of gage is 10,032.60 ft (3,057.936 m) above mean sea level (Bureau of Reclamation bench mark).

EXTREMES.--Period of record: Maximum daily discharge, 142 ft³/s (4.02 m³/s) June 27, 1973; no flow for most of each year.

REMARKS.--Records good. This is a transmountain diversion from Chapman Gulch in Roaring Fork River basin through Charles H. Boustead tunnel to Arkansas River basin. Water is for municipal and irrigation use in the Southeastern Colorado Water Conservancy District. The entire flow is regulated by diversion gates.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1								0	27	111	8.5	
2								0	23	98	14	
3								0	20	88	12	
4								0	17	87	6.7	
5								0	15	81	7.4	
6								0	19	71	15	
7								0	31	63	16	
8								0	57	59	13	
9								0	88	56	9.4	
10								0	108	56	3.4	
11								0	114	51	0	
12								4.9	117	55	0	
13								12	121	51	0	
14								12	115	50	0	
15								11	86	42	0	
16								12	58	35	0	
17								16	53	32	0	
18								23	57	32	0	
19								36	52	39	0	
20								43	56	37	0	
21								40	69	37	0	
22								34	84	27	0	
23								27	98	22	0	
24								28	95	22	0	
25								27	108	16	0	
26								23	134	8.1	0	
27								17	142	12	0	
28								16	133	13	0	
29								18	127	14	0	
30								20	118	7.4	0	
31								23		2.6	0	
TOTAL	0	0	0	0	0	0	0	442.9	2,342	1,375.1	105.4	0
MEAN	0	0	0	0	0	0	0	14.3	78.1	44.4	3.40	0
MAX	0	0	0	0	0	0	0	43	142	111	16	0
MIN	0	0	0	0	0	0	0	0	15	2.6	0	0
AC-FT	0	0	0	0	0	0	0	878	4,650	2,730	209	0
CAL YR 1972	TOTAL	3,510.60	MEAN	9.59	MAX	123	MIN	0	AC-FT	6,960		
WTR YR 1973	TOTAL	4,265.40	MEAN	11.7	MAX	142	MIN	0	AC-FT	8,460		

09077945 CHAPMAN GULCH NEAR NAST, COLO.

LOCATION.--Lat 39°15'51", long 106°37'54", Pitkin County, on left bank 700 ft (210 m) downstream from Chapman diversion tunnel, 2.5 mi (4.0 km) northwest of Nast, 3.3 mi (5.3 km) upstream from mouth, and 4.3 mi (6.9 km) south of Norrie.

DRAINAGE AREA.--5.99 mi² (15.51 km²).

PERIOD OF RECORD.--October 1972 to September 1973.

EXTREMES.--Current year: Maximum discharge, 16 ft³/s (0.45 m³/s) June 9 (gage height, 2.76 ft or 0.841 m); minimum daily, 0.70 ft³/s (0.020 m³/s) Feb. 20.

REMARKS.--Records good except those for period of no gage-height record, which are poor. Transmountain diversion above station to Charles H. Boustead tunnel by Chapman Gulch feeder canal (see sta. 09077940).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.0	2.5	1.5	1.2	1.0	1.0	.94	1.2	5.6	4.7	6.8	6.2
2	3.6	2.5	1.5	1.2	1.0	.98	.92	1.1	4.1	5.4	4.2	6.8
3	3.5	2.4	1.5	1.2	1.0	.95	.92	1.1	4.2	5.2	4.1	5.9
4	3.5	2.4	1.5	1.3	1.1	.92	.90	1.4	4.1	4.6	6.5	5.4
5	3.6	2.4	1.5	1.3	1.1	.90	.90	1.7	3.6	4.6	6.3	4.8
6	3.5	2.4	1.4	1.3	1.1	.90	.90	1.8	4.2	4.4	5.8	5.1
7	3.8	2.4	1.4	1.2	1.1	.90	.90	1.4	7.3	4.4	4.1	5.1
8	5.4	2.4	1.4	1.2	1.1	.94	.90	1.3	6.8	4.6	3.9	4.8
9	6.1	2.3	1.4	1.2	1.0	.96	.90	1.6	7.8	4.6	3.6	4.7
10	5.4	2.2	1.4	1.2	1.0	.96	.90	2.8	7.3	4.4	6.8	4.8
11	4.4	2.2	1.4	1.1	.98	.98	.88	6.1	5.9	4.3	8.4	5.2
12	3.8	2.1	1.4	1.2	.98	.96	.88	4.9	5.6	4.3	8.1	5.8
13	4.2	2.1	1.4	1.2	.90	.94	.88	3.5	5.2	4.3	7.8	6.4
14	4.2	2.0	1.4	1.2	.85	.90	.88	3.0	4.9	4.3	7.5	5.1
15	6.1	2.0	1.4	1.2	.80	.90	.94	2.5	3.3	4.2	7.5	4.8
16	8.3	2.0	1.3	1.3	.78	.90	.96	3.5	3.6	5.1	7.3	4.8
17	6.1	1.9	1.3	1.3	.78	.90	.86	5.5	4.9	5.8	7.6	4.6
18	5.6	1.9	1.3	1.3	.78	.92	.84	6.5	4.9	5.6	6.1	4.4
19	6.1	1.9	1.3	1.3	.75	.94	.84	6.1	4.3	5.8	7.8	4.2
20	5.8	1.8	1.3	1.3	.70	.94	.85	5.4	4.3	5.8	7.6	4.2
21	4.8	1.7	1.3	1.2	.74	.94	.85	4.3	4.3	5.8	7.6	4.1
22	4.3	1.7	1.3	1.2	.76	.94	.85	2.4	3.9	5.6	7.5	4.1
23	3.8	1.7	1.3	1.2	.82	.94	.89	2.4	3.8	5.6	6.8	3.9
24	3.5	1.7	1.2	1.1	.90	.96	.99	3.1	3.7	5.8	7.5	5.4
25	3.2	1.6	1.2	1.1	.92	.98	.92	2.8	3.7	6.8	7.0	5.2
26	3.0	1.7	1.2	1.0	.94	.98	.96	2.7	3.2	9.6	7.2	5.2
27	2.7	1.7	1.3	1.1	.98	.98	1.0	2.5	3.2	7.2	6.2	4.7
28	2.7	1.7	1.3	1.1	1.0	1.0	1.3	2.5	5.5	4.8	6.1	4.9
29	2.7	1.6	1.3	1.1	-----	.98	1.3	2.8	5.9	4.8	5.9	4.8
30	2.7	1.6	1.3	1.2	-----	.96	1.4	3.5	4.7	8.1	5.6	4.7
31	2.5	-----	1.2	1.2	-----	.96	-----	5.6	-----	11	5.8	-----
TOTAL	132.9	60.5	41.9	37.2	25.86	29.31	28.35	97.0	143.8	171.5	205.2	150.1
MEAN	4.29	2.02	1.35	1.20	.92	.95	.95	3.13	4.79	5.53	6.62	5.00
MAX	8.3	2.5	1.5	1.3	1.1	1.0	1.4	6.5	7.8	11	8.4	6.8
MIN	2.5	1.6	1.2	1.0	.70	.90	.84	1.1	3.2	4.2	3.8	3.9
AC-FT	264	120	83	74	51	58	56	192	285	340	407	298

WTR YR 1973 TOTAL 1,123.62 MEAN 3.08 MAX 11 MIN .70 AC-FT 2,230

NOTE.--No gage-height record Dec. 11 to Apr. 19.

ROARING FORK RIVER BASIN

09077960 SAWYER CREEK FEEDER CANAL NEAR NORRIE, COLO.

LOCATION.--Lat 39°15'44", long 106°37'39", Pitkin County, on left bank 3,100 ft (940 m) downstream from diversion point on Sawyer Creek and 4.9 mi (7.9 km) south of Norrie.

PERIOD OF RECORD.--October 1971 to current year.

GAGE.--Water-stage recorder and Parshall flume. Datum of gage is 10,047.00 ft (3,062.326 m) above mean sea level (Bureau of Reclamation bench mark).

EXTREMES.--Period of record: Maximum daily discharge, 36 ft³/s (1.02 m³/s) June 7, 1972; no flow for most of each year.

REMARKS.--Records good. This is a transmountain diversion from Sawyer Creek in Roaring Fork River basin through Charles H. Boustead tunnel to Arkansas River basin. Water is diverted to Chapman Gulch and is rediverted by Chapman Gulch feeder canal. Water is for municipal and irrigation use in the Southeastern Colorado Water Conservancy District. The entire flow is regulated by diversion gates.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1								0	6.2	29	1.9	
2								0	5.8	25	3.1	
3								0	5.5	23	3.0	
4								0	4.9	21	1.1	
5								0	4.2	20	0	
6								0	4.7	18	2.0	
7								0	7.5	16	3.2	
8								0	13	14	2.8	
9								0	22	14	1.1	
10								0	30	14	0	
11								.90	33	12	0	
12								1.8	34	12	0	
13								1.8	33	13	0	
14								2.0	33	12	0	
15								1.9	27	11	0	
16								2.5	18	9.1	0	
17								3.2	16	8.1	0	
18								4.6	16	7.9	0	
19								6.3	15	9.0	0	
20								7.8	14	9.1	0	
21								8.2	17	9.6	0	
22								7.8	20	7.5	0	
23								7.3	25	6.3	0	
24								7.3	27	5.5	0	
25								7.1	29	.26	0	
26								6.3	34	0	0	
27								5.2	34	0	0	
28								4.7	35	0	0	
29								4.6	34	0	0	
30								4.7	32	0	0	
31								5.5		0	0	
TOTAL	0	0	0	0	0	0	0	101.50	629.8	326.36	18.2	0
MEAN	0	0	0	0	0	0	0	3.27	21.0	10.5	.59	0
MAX	0	0	0	0	0	0	0	8.2	35	29	3.2	0
MIN	0	0	0	0	0	0	0	0	4.2	0	0	0
AC-FT	0	0	0	0	0	0	0	201	1,250	647	36	0
CAL YR 1972	TOTAL	706.10	MEAN 1.93	MAX 36	MIN 0	AC-FT 1,400						
WTR YR 1973	TOTAL	1,075.86	MEAN 2.95	MAX 35	MIN 0	AC-FT 2,130						

ROARING FORK RIVER BASIN

235

09078000 FRYINGPAN RIVER AT NORRIE, COLO.

LOCATION.--Lat 39°19'51", long 106°39'27", in NE¼NE¼ sec.28, T.8 S., R.83 W., Pitkin County, on right bank 200 ft (61 m) west of county road at Norrie, 1.2 mi (1.9 km) upstream from North Fork, and 2.1 mi (3.4 km) downstream from Chapman Gulch.

DRAINAGE AREA.--90.6 mi² (234.7 km²).

PERIOD OF RECORD.--October 1910 to March 1917, October 1947 to current year. Prior to October 1960, published as Fryingpan Creek at Norrie.

GAGE.--Water-stage recorder. Altitude of gage is 8,410 ft (2,563 m) from topographic map. February 1911 to March 1917 nonrecording gages at site 200 ft (61 m) upstream at different datums.

AVERAGE DISCHARGE.--30 years (1910-16, 1947-71), 123 ft³/s (3.483 m³/s), 89,110 acre-ft/yr (110 hm³/yr), prior to diversions through Charles H. Boustead tunnel.

EXTREMES.--Current year: Maximum discharge, 480 ft³/s (13.6 m³/s) June 9 (gage height, 3.59 ft or 1.094 m); minimum daily, 13 ft³/s (0.37 m³/s) Feb. 20.

Period of record: Maximum discharge, 1,780 ft³/s (50.4 m³/s) June 30, 1957 (gage height, 5.37 ft or 1.637 m); maximum gage height, 5.55 ft (1.692 m) June 28, 1957; minimum daily discharge, 8.0 ft³/s (0.23 m³/s) Dec. 26, 1962, but may have been less during periods of no gage-height record.

REMARKS.--Records good except those for winter periods, which are fair. Transmountain diversions above 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).

REVISIONS.--WSP 1924: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	41	45	25	18	15	17	18	56	221	314	59	45
2	39	41	25	17	14	17	19	47	200	282	46	48
3	36	38	24	17	14	16	18	51	190	242	45	48
4	36	39	24	17	14	16	19	74	193	147	46	42
5	36	38	23	19	15	16	18	92	165	132	62	36
6	36	33	23	20	15	14	20	94	162	122	63	36
7	36	33	24	20	15	15	20	72	204	119	50	37
8	53	32	25	20	16	15	20	74	260	113	46	37
9	53	32	24	19	16	16	19	97	342	108	44	35
10	50	31	23	19	16	16	18	141	391	99	44	36
11	41	31	23	19	17	17	19	204	386	94	47	37
12	39	31	22	20	17	17	20	225	382	106	56	44
13	39	30	22	20	16	17	20	235	382	135	60	48
14	39	30	22	20	16	17	22	235	382	135	62	39
15	55	30	21	21	16	17	23	207	338	106	58	36
16	87	29	22	20	15	18	25	242	260	97	55	36
17	68	29	23	20	15	18	23	270	225	87	58	34
18	60	29	22	20	15	18	24	318	228	92	66	32
19	58	29	21	20	14	18	24	386	200	108	65	31
20	58	29	20	20	13	18	22	382	186	101	62	30
21	51	28	20	20	14	18	22	368	193	97	66	31
22	51	28	20	19	14	18	22	310	193	81	60	30
23	53	28	19	18	14	18	25	249	207	74	55	30
24	46	27	18	17	15	18	28	256	218	66	59	36
25	46	27	19	16	15	18	29	246	225	65	59	39
26	42	27	19	16	16	19	30	235	256	70	59	41
27	41	26	20	16	16	19	36	183	274	76	52	38
28	45	26	20	17	17	19	51	150	282	65	48	40
29	42	26	21	17	-----	19	60	156	338	62	47	39
30	41	26	20	17	-----	19	62	176	318	68	47	36
31	47	-----	19	16	-----	19	-----	186	-----	70	45	-----
TOTAL	1,465	928	673	575	425	537	776	6,017	7,801	3,535	1,691	1,127
MEAN	47.3	30.9	21.7	18.5	15.2	17.3	25.9	194	260	114	54.5	37.6
MAX	87	45	25	21	17	19	62	386	391	314	66	48
MIN	36	26	18	16	13	14	18	47	162	62	44	30
AC-FT	2,910	1,840	1,330	1,140	843	1,070	1,540	11,930	15,470	7,010	3,350	2,240

CAL YR 1972 TOTAL 24,957 MEAN 68.2 MAX 413 MIN 16 AC-FT 49,500

WTR YR 1973 TOTAL 25,550 MEAN 70.0 MAX 391 MIN 13 AC-FT 50,680

ROARING FORK RIVER BASIN

09078100 NORTH FORK FRYINGPAN RIVER ABOVE CUNNINGHAM CREEK, NEAR NORRIE, COLO.

LOCATION.--Lat 39°21'32", long 106°34'04", Pitkin County, on left bank 1.7 mi (2.7 km) upstream from Cunningham Creek and 5.5 mi (8.8 km) east of Norrie.

DRAINAGE AREA.--12.0 mi² (31.1 km²).

PERIOD OF RECORD.--October 1963 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 9,420 ft (2,871 m) from topographic map.

AVERAGE DISCHARGE.--10 years, 21.0 ft³/s (0.595 m³/s), 15,210 acre-ft/yr (18.8 hm³/yr).EXTREMES.--Current year: Maximum discharge, 319 ft³/s (9.03 m³/s) June 27 (gage height, 3.88 ft or 1.183 m); minimum daily, 1.2 ft³/s (0.034 m³/s) Feb. 20.Period of record: Maximum discharge, 319 ft³/s (9.03 m³/s) June 27, 1973 (gage height, 3.88 ft or 1.183 m); maximum gage height recorded, 4.24 ft (1.292 m) Apr. 22, 1965 (backwater from ice); minimum daily discharge, 0.70 ft³/s (0.020 m³/s) Jan. 26, 1967.

REMARKS.--Records good except those for period of no gage-height record, which are poor. No diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.1	5.6	3.6	1.9	1.6	1.6	1.5	7.0	65	196	22	5.6
2	6.5	5.8	3.9	1.7	1.3	1.6	1.5	6.0	51	181	21	5.6
3	5.6	6.0	3.9	1.8	1.4	1.6	1.5	7.2	41	165	20	5.6
4	5.5	6.0	3.6	1.9	1.4	1.5	1.5	9.0	35	150	19	4.7
5	5.3	6.0	3.3	2.1	1.4	1.5	1.5	11	29	139	26	4.3
6	5.0	5.8	3.4	2.2	1.5	1.5	1.5	14	36	159	38	4.1
7	5.0	5.6	3.6	2.2	1.5	1.4	1.5	12	67	127	26	4.6
8	9.4	5.4	3.4	2.2	1.5	1.5	1.4	9.0	118	118	22	4.4
9	11	5.2	3.2	2.1	1.6	1.5	1.5	13	172	121	21	4.1
10	10	5.2	2.8	2.0	1.6	1.5	1.6	25	225	120	18	4.1
11	8.4	5.0	2.9	2.0	1.7	1.5	1.7	29	225	111	17	4.3
12	7.4	4.8	2.9	1.9	1.7	1.6	1.8	36	221	106	17	4.4
13	7.4	4.8	2.8	2.0	1.6	1.6	2.1	50	240	98	17	4.6
14	8.4	4.7	2.6	2.1	1.5	1.6	2.6	47	235	121	14	3.8
15	10	4.7	2.3	2.2	1.5	1.5	3.0	50	184	99	13	3.7
16	17	4.6	2.4	2.1	1.5	1.4	2.6	55	128	76	12	3.5
17	15	4.6	2.4	2.1	1.5	1.5	2.9	71	114	69	12	3.5
18	14	4.5	2.5	2.2	1.4	1.5	3.4	89	116	72	13	3.1
19	14	4.4	2.6	2.1	1.3	1.6	3.2	109	99	90	12	3.0
20	12	4.4	2.6	2.0	1.2	1.6	3.0	100	102	85	11	2.9
21	12	4.3	2.7	1.8	1.4	1.6	3.0	90	125	69	11	2.7
22	11	4.3	2.7	1.7	1.4	1.6	3.0	72	142	53	11	2.6
23	10	4.3	2.6	1.6	1.4	1.5	3.5	54	159	41	9.8	2.6
24	9.1	4.2	2.5	1.6	1.5	1.5	4.3	53	168	41	9.4	3.3
25	8.7	4.2	2.3	1.7	1.5	1.6	5.0	48	187	38	9.4	3.5
26	8.0	4.0	2.2	1.8	1.5	1.8	4.7	43	226	36	8.4	4.0
27	7.7	3.6	2.4	1.8	1.6	1.7	5.2	33	244	34	7.7	3.7
28	7.4	3.4	2.6	1.8	1.6	1.6	6.4	29	228	30	6.8	3.8
29	7.3	3.3	2.4	1.9	-----	1.5	7.4	32	211	29	6.8	4.0
30	6.8	3.5	2.4	1.9	-----	1.5	8.0	37	208	28	6.5	3.7
31	5.4	-----	2.0	1.9	-----	1.5	-----	49	-----	23	5.9	-----
TOTAL	277.2	142.2	87.5	60.3	41.6	48.0	91.8	1,287.2	4,397	2,805	463.7	117.8
MEAN	8.94	4.74	2.82	1.95	1.49	1.55	3.06	41.5	147	90.5	15.0	3.93
MAX	17	6.0	3.9	2.2	1.7	1.8	8.0	109	244	196	38	5.6
MIN	5.0	3.3	2.0	1.6	1.2	1.4	1.4	6.0	29	23	5.9	2.6
AC-FT	550	282	174	120	83	95	182	2,550	8,720	5,560	920	234

CAL YR 1972 TOTAL 7,222.3 MEAN 19.7 MAX 215 MIN 1.2 AC-FT 14,350

WTR YR 1973 TOTAL 9,819.3 MEAN 26.9 MAX 244 MIN 1.2 AC-FT 19,480

PEAK DISCHARGE (BASE, 150 CFS).--June 12 (2330) 280 cfs (3.73 ft); June 27 (2230) 319 cfs (3.88 ft).

NOTE.--No gage-height record Oct. 31 to May 9.

ROARING FORK RIVER BASIN

237

09078200 CUNNINGHAM CREEK NEAR NORRIE, COLO.

LOCATION.--Lat 39°20'03", long 106°34'29", Pitkin County, on left bank 0.4 mi (0.6 km) upstream from unnamed tributary, 1.5 mi (2.4 km) upstream from mouth, and 4.5 mi (7.2 km) east of Norrie.

DRAINAGE AREA.--7.12 mi² (18.44 km²).

PERIOD OF RECORD.--October 1963 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 9,550 ft (2,911 m), from topographic map.

AVERAGE DISCHARGE.--10 years, 11.4 ft³/s (0.323 m³/s), 8,260 acre-ft/yr (10.2 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 194 ft³/s (5.49 m³/s) June 27 (gage height, 2.55 ft or 0.777 m, from recorded range in stage); minimum daily, 0.70 ft³/s (0.020 m³/s) Feb. 20.

Period of record: Maximum discharge, 218 ft³/s (6.17 m³/s) June 17, 1965 (gage height, 2.57 ft or 0.783 m), from rating curve extended above 120 ft³/s (3.4 m³/s); maximum gage height, 3.45 ft (1.052 m) Apr. 30, 1965 (backwater from ice); minimum daily discharge, 0.50 ft³/s (0.014 m³/s) Feb. 8, 1967.

REMARKS.--Records good except those for periods of no gage-height record, which are poor. No diversion or regulation above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.8	2.8	2.6	1.4	.94	.80	.76	3.4	44	110	5.8	2.1
2	2.4	2.9	2.6	1.3	.78	.78	.76	3.0	36	100	5.5	2.2
3	2.3	3.0	2.6	1.4	.82	.76	.76	3.4	29	90	5.3	2.3
4	2.2	3.0	2.6	1.4	.84	.76	.76	4.0	26	72	5.3	2.0
5	2.2	3.0	2.3	1.4	.84	.76	.76	5.8	24	66	8.7	1.9
6	2.2	2.9	2.4	1.4	.88	.76	.76	7.8	28	58	12	1.8
7	2.3	2.9	2.3	1.4	.90	.74	.76	6.6	46	52	7.1	1.8
8	6.4	2.9	2.4	1.3	.90	.76	.72	5.5	70	54	5.8	1.6
9	5.8	2.9	2.3	1.2	.92	.78	.76	7.2	95	54	5.3	1.5
10	4.6	2.9	2.3	1.2	.94	.78	.84	8.8	120	52	4.8	1.5
11	5.3	2.9	2.3	1.2	.94	.78	.90	11	123	47	4.6	1.7
12	3.1	2.8	2.2	1.2	.90	.80	1.0	13	130	45	4.3	1.8
13	3.0	2.8	2.2	1.2	.86	.80	1.1	16	150	42	4.1	1.9
14	3.1	2.8	2.2	1.3	.84	.80	1.4	19	140	50	4.3	1.6
15	4.6	2.8	2.2	1.3	.80	.76	1.5	22	120	39	4.1	1.4
16	9.8	2.8	2.3	1.2	.78	.74	1.3	28	110	28	4.1	1.4
17	7.9	2.8	2.3	1.2	.78	.76	1.4	34	90	22	3.8	1.5
18	7.1	2.7	2.3	1.3	.78	.78	1.6	46	94	25	4.1	1.3
19	7.1	2.7	2.3	1.3	.74	.80	1.5	59	80	30	3.8	1.2
20	6.4	2.7	2.4	1.2	.70	.80	1.5	64	86	28	3.6	1.2
21	5.3	2.7	2.4	1.2	.72	.80	1.5	56	92	24	3.5	1.1
22	5.0	2.7	2.4	1.1	.72	.78	1.5	43	100	22	3.5	1.1
23	4.6	2.7	2.2	1.1	.72	.76	1.9	35	110	19	3.4	1.1
24	4.4	2.6	2.0	1.1	.74	.76	2.4	38	120	16	3.1	1.5
25	4.2	2.6	1.9	1.1	.76	.76	2.8	34	130	15	3.1	1.8
26	4.0	2.6	1.8	1.2	.78	.76	2.6	30	140	14	2.6	1.9
27	3.9	2.6	1.8	1.2	.80	.76	2.8	22	150	12	2.2	1.9
28	3.7	2.5	1.9	1.2	.80	.76	3.1	21	140	11	2.0	1.9
29	3.5	2.4	1.8	1.2	-----	.76	3.4	22	130	9.0	2.1	1.9
30	3.3	2.5	1.6	1.2	-----	.76	3.7	27	120	8.0	2.1	1.9
31	2.7	-----	1.5	1.1	-----	.76	-----	35	-----	6.8	2.1	-----
TOTAL	133.2	82.9	68.6	38.5	22.92	23.92	46.54	730.5	2,873	1,220.8	136.1	49.8
MEAN	4.30	2.76	2.21	1.24	.82	.77	1.55	23.6	95.8	39.4	4.39	1.66
MAX	9.8	3.0	2.6	1.4	.94	.80	3.7	64	150	110	12	2.3
MIN	2.2	2.4	1.5	1.1	.70	.74	.72	3.0	24	6.8	2.0	1.1
AC-FT	264	164	136	76	45	47	92	1,450	5,700	2,420	270	99

CAL YR 1972 TOTAL 3,893.84 MEAN 10.6 MAX 113 MIN .70 AC-FT 7,720

WTR YR 1973 TOTAL 5,426.78 MEAN 14.9 MAX 150 MIN .70 AC-FT 10,760

PEAK DISCHARGE (BASE, 100 CFS).--June 27 (time unknown) 194 cfs (2.55 ft).

NOTE.--No gage-height record Oct. 30 to May 10, June 12 to July 31.

ROARING FORK RIVER BASIN

09078500 NORTH FORK FRYINGPAN RIVER NEAR NORRIE, COLO.

LOCATION.--Lat 39°20'34", long 106°39'55", in SE¼NW¼ sec.21, T.8 S., R.8e W., Pitkin County, on left bank 800 ft (240 m) upstream from bridge on county road, 0.4 mi (0.6 km) upstream from mouth, 0.5 mi (0.8 km) downstream from Last Chance Creek, and 1.3 mi (2.1 km) northwest of Norrie.

DRAINAGE AREA.--42.0 mi² (108.8 km²).

PERIOD OF RECORD.--October 1910 to March 1917, October 1947 to current year. Prior to October 1960, published as North Fork Fryingpan Creek near Norrie.

GAGE.--Water-stage recorder. Altitude of gage is 8,330 ft (2,539 m) from topographic map. Feb. 18, 1911, to Mar. 31, 1917, nonrecording gage at site 10 ft (3 m) downstream at different datum. Oct. 1, 1947, to Sept. 30, 1949, water-stage recorder at present site at datum 2.00 (0.610 m) higher.

AVERAGE DISCHARGE.--32 years (1910-16, 1947-73), 52.0 ft³/s (1.473 m³/s), 37,670 acre-ft/yr (46.4 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 693 ft³/s (19.6 m³/s) June 12 (gage height, 4.96 ft or 1.512 m); minimum daily, 3.7 ft³/s (0.105 m³/s) Feb. 20.

Period of record: Maximum discharge, 1,320 ft³/s (37.4 m³/s) June 6, 1958 (gage height, 4.98 ft or 1.518 m), from rating curve extended above 700 ft³/s (20 m³/s); maximum gage height, 5.80 ft (1.768 m) May 21, 1948 (present datum); minimum daily discharge, 0.5 ft³/s (0.014 m³/s) Nov. 1, 1950.

REMARKS.--Records good except those for period of no gage-height record, which are poor. One small diversion bypasses station for domestic use and irrigation of pasture. Low flow slightly regulated since 1968 by small recreation reservoir 2.0 (3.2 km) upstream.

REVISIONS.--WSP 1924: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	10	9.4	5.6	4.3	5.4	5.0	26	205	430	41	12
2	17	10	8.3	5.0	3.8	5.2	5.0	24	173	395	39	13
3	15	11	8.2	5.2	4.0	5.2	5.0	27	153	353	39	13
4	14	11	7.8	5.4	4.1	5.2	5.0	39	140	323	36	11
5	14	11	7.5	5.6	4.3	5.2	4.9	47	124	291	52	9.8
6	7.8	10	7.4	6.0	4.4	5.1	4.7	50	133	272	77	9.1
7	5.2	10	8.0	6.0	4.4	4.9	5.2	37	186	250	55	9.4
8	8.7	10	9.0	5.8	4.4	5.1	5.4	35	296	220	44	8.4
9	8.7	10	8.8	5.6	4.5	5.0	5.4	51	419	217	42	7.8
10	18	10	8.4	5.6	4.6	4.9	5.4	82	551	217	37	8.0
11	19	10	8.2	5.6	4.7	5.2	6.2	121	530	195	34	9.8
12	16	10	8.0	5.6	4.7	5.4	6.8	140	516	201	34	9.8
13	16	10	7.8	5.8	4.6	5.6	8.0	157	551	201	31	11
14	18	10	7.7	5.9	4.4	5.4	9.8	155	565	235	29	9.4
15	23	9.8	7.6	6.0	4.3	5.4	11	148	446	201	28	8.0
16	40	9.6	8.0	5.8	4.1	5.2	10	161	323	146	25	7.5
17	32	9.6	8.2	5.9	4.0	5.2	11	189	267	131	24	8.0
18	28	9.6	8.2	6.0	3.9	5.2	13	235	277	138	27	7.3
19	28	9.4	8.0	5.9	3.8	5.4	12	311	231	171	25	4.9
20	25	9.3	7.8	5.8	3.7	5.4	11	291	224	157	24	4.6
21	22	9.2	7.6	5.2	4.0	5.4	11	263	277	131	26	4.5
22	20	9.0	7.4	4.9	4.3	5.4	11	211	296	102	25	4.3
23	20	9.0	7.2	4.7	4.7	5.3	12	166	329	81	22	4.3
24	17	9.0	6.4	5.0	4.8	5.2	15	166	347	77	20	5.5
25	16	9.0	6.8	5.2	5.0	5.0	18	153	377	71	20	7.3
26	15	9.0	7.0	5.3	5.2	5.2	17	142	460	68	17	8.4
27	14	8.8	7.2	5.4	5.3	5.2	22	111	502	66	17	7.3
28	15	8.8	7.4	5.3	5.4	5.2	26	100	509	59	15	7.8
29	12	8.6	6.8	5.2	-----	5.0	30	111	474	55	13	7.8
30	12	8.5	6.4	5.0	-----	5.0	31	128	467	51	13	7.5
31	11	-----	6.0	4.6	-----	5.0	-----	155	-----	44	12	-----
TOTAL	546.4	289.2	237.5	169.9	123.7	161.5	342.8	4,032	10,348	5,558	943	246.5
MEAN	17.6	9.64	7.66	5.48	4.42	5.21	11.4	130	345	179	30.4	8.22
MAX	40	11	9.0	6.0	5.4	5.6	31	311	565	439	77	13
MIN	5.2	8.5	6.0	4.6	3.7	4.9	4.7	24	124	44	12	4.3
AC-FT	1,080	574	471	337	245	320	680	8,000	20,530	11,020	1,870	489

CAL YR 1972 TOTAL 15,426.9 MEAN 42.2 MAX 442 MIN 3.7 AC-FT 30,600
 WTR YR 1973 TOTAL 22,998.5 MEAN 63.0 MAX 565 MIN 3.7 AC-FT 45,620

PEAK DISCHARGE (BASE, 420 CFS).--June 12 (0200) 693 cfs (4.96 ft); June 27 (2400) 629 cfs (4.88 ft).

NOTE.--No gage-height record Nov. 8 to Apr. 20.

ROARING FORK RIVER BASIN

239

09080100 FRYINGPAN RIVER AT MEREDITH, COLO.

LOCATION.--Lat 39°21'45", long 106°43'55", in SE¼SE¼ sec.11, T.8 S., R.84 W., Eagle County, on left bank at Meredith, 0.1 mi (0.2 km) downstream from Waterbury Creek and 0.7 mi (1.1 km) downstream from Jakeman Creek.

DRAINAGE AREA.--191 mi² (495 km²).

PERIOD OF RECORD.--October 1966 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 7,780 ft (2,371 m) from topographic map.

AVERAGE DISCHARGE.--5 years (1966-71), 205 ft³/s (5.81 m³/s), 148,500 acre-ft/yr (183 hm³/yr) prior to diversions through Charles H. Boustead tunnel.

EXTREMES.--Current year: Maximum discharge, 1,470 ft³/s (41.6 m³/s) June 10 (gage height, 4.74 ft or 1.445 m); minimum daily, 29 ft³/s (0.82 m³/s) Feb. 20.

Period of record: Maximum discharge, 1,930 ft³/s (54.7 m³/s) June 25, 1971 (gage height, 5.20 ft or 1.585 m); maximum gage height, 5.29 ft (1.612 m) May 22, 1970; minimum daily discharge, 22 ft³/s (0.62 m³/s) Feb. 3, 1968.

REMARKS.--Records good except those for winter period, which are fair. Diversion for irrigation of hay meadows above station. Transmountain diversions above station to Arkansas River basin through Busk-Ivanhoe tunnel since June 1925 and Charles H. Boustead tunnel since May 16, 1972.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	64	67	50	31	31	32	36	94	560	961	137	73
2	61	65	50	30	31	32	35	79	536	898	115	74
3	54	64	50	32	31	32	34	87	485	786	111	74
4	57	59	50	34	32	31	35	123	465	632	109	67
5	55	64	50	36	32	32	35	155	421	554	140	64
6	53	62	49	36	32	32	38	163	412	525	172	62
7	49	54	52	36	32	32	36	130	485	485	137	62
8	62	67	52	36	32	31	39	125	702	450	125	61
9	65	64	50	36	32	32	37	169	1,000	426	115	59
10	71	49	46	36	32	32	36	244	1,310	417	107	61
11	65	64	47	36	32	32	37	363	1,280	403	105	64
12	64	61	47	34	32	32	38	430	1,210	399	109	65
13	64	58	47	35	32	33	40	490	1,280	408	109	70
14	67	52	46	36	31	32	43	495	1,270	440	109	64
15	83	58	42	36	30	32	45	455	1,150	408	103	59
16	140	54	45	36	31	32	42	520	856	312	96	58
17	118	55	46	36	31	33	45	590	702	285	96	58
18	107	55	46	36	31	33	48	730	695	289	105	55
19	105	52	44	36	30	34	46	954	597	332	105	53
20	100	54	40	36	29	33	44	961	566	328	98	51
21	90	54	36	35	30	37	44	912	632	292	109	51
22	87	54	49	34	31	36	44	772	674	244	105	48
23	88	54	43	30	31	36	47	604	737	210	94	48
24	78	54	41	31	31	36	45	590	793	187	94	57
25	74	54	42	31	31	36	58	560	814	175	96	61
26	73	52	41	32	30	35	59	530	982	169	90	65
27	70	52	38	34	30	36	65	426	1,070	172	85	61
28	78	52	35	33	32	36	83	376	1,060	158	79	64
29	73	50	32	32	-----	34	96	390	1,030	153	74	62
30	71	50	33	34	-----	34	105	417	1,000	153	74	59
31	65	-----	32	34	-----	36	-----	445	-----	150	71	-----
TOTAL	2,355	1,704	1,371	1,060	872	1,036	1,445	13,379	24,754	11,821	3,274	1,830
MEAN	76.0	56.8	44.2	34.2	31.1	33.4	48.2	432	825	381	106	61.0
MAX	140	67	52	36	32	37	105	961	1,310	961	172	74
MIN	49	49	32	30	29	31	34	79	412	150	71	48
AC-FT	4,670	3,380	2,720	2,100	1,730	2,050	2,870	26,540	49,100	23,450	6,490	3,630

CAL YR 1972 TOTAL 54,664 MEAN 149 MAX 1,210 MIN 24 AC-FT 108,400
 WTR YR 1973 TOTAL 64,901 MEAN 178 MAX 1,310 MIN 29 AC-FT 128,700

ROARING FORK RIVER BASIN

09080190 RUEDI RESERVOIR NEAR BASALT, COLO.

LOCATION.--Lat 39°21'50", long 106°49'05", in NW¼ sec.18, T.8 S., R.84 W., Pitkin County, in gatehouse of Ruedi Dam just upstream from Rocky Fork Creek and 13 mi (21 km) east of Basalt.

DRAINAGE AREA.--223 mi² (578 km²).

PERIOD OF RECORD.--May 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (Bureau of Reclamation bench mark).

EXTREMES (at 0800).--Current year: Maximum contents, 103,900 acre-ft (128 hm³) July 15 (elevation, 7,767.56 ft or 2,367.552 m); minimum, 53,470 acre-ft (65.9 hm³) Apr. 9-12 (elevation, 7,706.52 ft or 2,348.947 m).

Period of record: Maximum contents, 103,900 acre-ft (128 hm³) July 15, 1973 (elevation, 7,767.56 ft or 2,367.552 m); minimum after first filling, 48,000 acre-ft (59.2 hm³) May 13, 1971 (elevation, 7,698.03 ft or 2,346.360 m).

REMARKS.--Reservoir is formed by an earthfill dam. Storage began in May 1968; dam completed July 16, 1968. Capacity, 102,300 acre-ft or 126 hm³ (1969 survey) between elevations 7,540.00 ft or 2,298.192 m (sill of auxiliary outlet) and 7,766.00 ft or 2,367.077 m (crest of spillway). Dead storage below elevation 7,540.00 ft or 2,298.192 m, 61 acre-ft (75,200 m³). Figures given represent total contents.

COOPERATION.--Records furnished by Bureau of Reclamation.

MONTHEND ELEVATION AND CONTENTS AT 0800, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	ELEVATION (FEET)	CONTENTS (ACRE-Feet)	CHANGE IN CONTENTS (ACRE-Feet)
Sept. 30.....	7,759.23	95,760	-
Oct. 31.....	7,757.56	94,180	-1,580
Nov. 30.....	7,751.60	88,660	-5,520
Dec. 31.....	7,741.38	79,680	-8,980
CAL YR 1972	-	-	-2,390
Jan. 31.....	7,729.98	70,370	-9,310
Feb. 28.....	7,718.76	61,960	-8,410
Mar. 31.....	7,708.37	54,710	-7,250
Apr. 30.....	7,707.59	54,180	-530
May 31.....	7,721.54	63,980	+9,800
June 30.....	7,763.28	99,680	+35,700
July 31.....	7,763.89	100,300	+620
Aug. 31.....	7,761.94	98,370	-1,930
Sept. 30.....	7,759.75	96,260	-2,110
WTR YR 1973	-	-	+500

ROARING FORK RIVER BASIN

241

09080300 ROCKY FORK CREEK NEAR MEREDITH, COLO.

LOCATION.--Lat 39°21'42", long 106°49'12", in NW¼NW¼ sec.18, T.8 S., R.84 W., Pitkin County, on right bank at upstream end of flume constructed to carry Rocky Fork Creek across spillway and auxiliary outlet of Ruedi Dam on Fryngpan River and 4.6 mi (7.4 km) west of Meredith.

DRAINAGE AREA.--12.3 mi² (31.9 km²).

PERIOD OF RECORD.--September 1959 to July 1967 (discharge measurements only), October 1968 to current year.

GAGE.--Water-stage recorder and V-notch sharp-crested weir. Datum of gage is 7,494.50 ft (2,284.324 m) above mean sea level (Bureau of Reclamation bench mark).

AVERAGE DISCHARGE.--5 years, 9.83 ft³/s (0.278 m³/s), 7,120 acre-ft/yr (8.78 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 86 ft³/s (2.44 m³/s) June 11 (gage height, 1.63 ft or 0.497 m); minimum daily, 2.0 ft³/s (0.057 m³/s) Jan. 20 to Mar. 19, Apr. 9-11.
Since 1968: Maximum discharge, 86 ft³/s (2.44 m³/s) June 11, 1973 (gage height, 1.63 ft or 0.497 m); minimum daily, 1.7 ft³/s (0.048 m³/s) for many days in 1969-70.
A discharge of 82.1 ft³/s (2.33 m³/s) was measured June 7, 1962, and a discharge of 0.24 ft³/s (0.007 m³/s) was measured Apr. 26, 1966.

REMARKS.--Records good. No diversion or regulation above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.1	3.7	2.5	2.4	2.0	2.0	2.1	5.8	33	38	9.8	5.3
2	3.7	3.7	2.5	2.4	2.0	2.0	2.1	5.8	32	35	9.5	5.3
3	3.5	3.7	2.5	2.4	2.0	2.0	2.1	6.1	32	33	9.1	5.3
4	3.5	3.7	2.5	2.4	2.0	2.0	2.1	6.3	33	30	9.1	5.3
5	3.5	3.7	2.5	2.4	2.0	2.0	2.1	6.6	32	28	9.1	5.3
6	3.5	3.7	2.5	2.4	2.0	2.0	2.1	7.1	30	25	11	5.0
7	3.5	3.5	2.5	2.5	2.0	2.0	2.1	7.4	32	24	9.5	4.8
8	3.5	3.5	2.5	2.5	2.0	2.0	2.1	8.5	42	23	9.1	4.8
9	3.5	3.5	2.5	2.5	2.0	2.0	2.0	9.5	58	22	8.8	4.8
10	3.3	3.5	2.5	2.5	2.0	2.0	2.0	10	75	20	8.5	4.8
11	3.1	3.5	2.5	2.5	2.0	2.0	2.0	13	77	20	8.1	4.8
12	3.1	3.5	2.5	2.5	2.0	2.0	2.1	18	80	19	7.8	4.8
13	3.1	3.3	2.5	2.5	2.0	2.0	2.1	22	78	19	7.4	4.8
14	3.1	3.3	2.5	2.5	2.0	2.0	2.4	26	78	19	7.4	4.8
15	3.3	3.1	2.5	2.5	2.0	2.0	2.9	26	75	19	7.4	4.8
16	3.5	3.1	2.5	2.5	2.0	2.0	2.7	26	69	17	6.8	4.5
17	3.9	3.1	2.5	2.4	2.0	2.0	2.5	28	62	16	6.8	4.3
18	4.1	3.1	2.5	2.2	2.0	2.0	2.7	32	57	16	6.8	4.3
19	4.1	3.1	2.5	2.1	2.0	2.0	2.9	40	54	17	6.8	4.3
20	4.3	3.1	2.5	2.0	2.0	2.1	3.1	41	50	16	6.3	4.3
21	4.5	2.9	2.5	2.0	2.0	2.1	3.1	44	48	15	6.3	4.3
22	4.5	2.9	2.5	2.0	2.0	2.1	3.1	43	48	14	6.3	4.3
23	4.5	2.9	2.5	2.0	2.0	2.1	3.3	38	48	14	6.1	4.3
24	4.5	2.9	2.5	2.0	2.0	2.1	3.5	37	48	13	6.1	4.1
25	4.3	2.9	2.5	2.0	2.0	2.1	3.9	36	47	13	6.1	4.1
26	4.1	2.9	2.4	2.0	2.0	2.1	3.9	35	49	12	6.1	4.3
27	4.1	2.7	2.4	2.0	2.0	2.1	4.1	32	49	11	6.1	4.5
28	4.1	2.7	2.4	2.0	2.0	2.1	4.3	29	47	11	5.8	4.5
29	3.9	2.7	2.4	2.0	-----	2.1	4.5	26	45	9.8	5.5	4.5
30	3.9	2.7	2.4	2.0	-----	2.1	5.3	28	43	9.8	5.5	4.5
31	3.7	-----	2.4	2.0	-----	2.1	-----	28	-----	9.8	5.5	-----
TOTAL	117.3	96.6	76.9	70.1	56.0	63.2	85.2	721.1	1,551	588.4	230.5	139.8
MEAN	3.78	3.22	2.48	2.26	2.00	2.04	2.84	23.3	51.7	19.0	7.44	4.66
MAX	4.5	3.7	2.5	2.5	2.0	2.1	5.3	44	80	38	11	5.3
MIN	3.1	2.7	2.4	2.0	2.0	2.0	2.0	5.8	30	9.8	5.5	4.1
AC-FT	233	192	153	139	111	125	169	1,430	3,080	1,170	457	277

CAL YR 1972 TOTAL 3,417.4 MEAN 9.34 MAX 74 MIN 1.9 AC-FT 6,780
WTR YR 1973 TOTAL 3,796.1 MEAN 10.4 MAX 80 MIN 2.0 AC-FT 7,530

PEAK DISCHARGE (BASE, 50 CFS).--June 11 (2000) 86 cfs (1.63 ft).

LOCATION.--Lat 39°21'56", long 106°49'30", in SE¼SE¼ sec.12, T.8 S., R.85 W., Eagle County, on right bank 0.4 mi (0.6 km) downstream from Rocky Fork Creek and Ruedi Dam, 1.5 mi (2.4 km) west of former site of Ruedi, and 12.5 mi (20.1 km) east of Basalt.

PERIOD OF RECORD.--October 1964 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 7,473.25 ft (2,277.847 m) above mean sea level (Bureau of Reclamation bench mark). Prior to Nov. 7, 1970, at site 2.0 mi (3.2 km) downstream at different datum.

EXTREMES.--Current year: Maximum discharge, 1,000 ft³/s (28.3 m³/s) June 30 (gage height, 3.11 ft or 0.948 m); minimum daily, 53 ft³/s (1.50 m³/s) Apr. 10-14.

Period of record: Maximum discharge, 2,690 ft³/s (76.2 m³/s) June 18, 1965 (gage height, 5.16 ft or 1.573 m, site and datum then in use); minimum daily, 16 ft³/s (0.45 m³/s) Feb. 2, 1968 (result of storage in Ruedi Reservoir); minimum daily prior to construction of Ruedi Reservoir, 28 ft³/s (0.79 m³/s) Mar. 4, 1966.

REMARKS.--Records good. Diversions for irrigation of hay meadows above station. Transmountain diversions above 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 (see sta. 09080190) since May 28, 1968.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	125	110	185	195	195	188	162	84	382	976	185	157
2	128	105	188	195	195	172	162	105	335	850	172	157
3	224	107	188	195	195	152	162	185	335	648	160	157
4	162	107	188	195	195	152	147	213	330	648	160	157
5	110	107	188	192	192	152	133	213	304	551	160	107
6	107	107	192	192	178	152	101	213	304	415	160	96
7	107	105	188	192	178	158	61	220	304	410	160	97
8	107	107	181	192	178	158	61	224	294	375	160	97
9	110	107	181	192	178	158	57	224	299	286	160	97
10	110	107	181	192	181	158	53	224	324	254	160	97
11	110	107	181	192	181	158	53	240	330	254	160	97
12	110	107	181	192	181	158	53	294	144	296	160	97
13	107	107	181	192	181	158	53	319	212	318	157	99
14	110	107	181	192	181	158	53	371	370	346	160	99
15	107	121	185	192	185	158	54	382	370	375	160	99
16	107	168	185	192	185	158	54	377	366	405	160	97
17	107	178	188	192	185	158	54	377	358	516	160	97
18	107	181	192	192	188	158	54	382	358	506	160	97
19	107	178	192	192	192	158	54	393	354	476	160	97
20	107	178	192	192	188	158	54	398	350	455	160	97
21	110	178	192	192	188	158	54	409	350	440	160	97
22	107	178	192	192	188	162	54	415	346	430	160	97
23	107	178	195	192	188	162	54	420	346	425	160	97
24	110	178	195	192	188	162	76	426	346	420	160	97
25	107	178	195	192	188	162	86	432	346	420	160	97
26	107	181	195	192	188	158	86	432	346	420	160	97
27	107	185	195	192	188	162	86	438	346	318	160	97
28	107	185	195	195	188	162	88	438	346	220	157	97
29	107	185	195	195	-----	162	86	438	482	203	157	97
30	105	185	195	195	-----	162	84	444	820	189	157	97
31	107	-----	195	195	-----	162	-----	450	-----	185	157	-----
TOTAL	3,557	4,312	5,857	5,976	5,216	4,954	2,389	10,180	10,497	13,026	4,982	3,165
MEAN	115	144	189	193	186	160	79.6	328	350	420	161	106
MAX	224	185	195	195	195	188	162	450	820	976	185	157
MIN	105	105	181	192	178	152	53	84	144	185	157	96
AC-FY	7,960	8,550	11,620	11,850	10,350	9,830	4,740	20,190	20,820	25,840	9,880	6,280

CAL YR 1972	TOTAL 64,120	MEAN 175	MAX 560	MIN 55	AC-FIT 127,200
ATM YR 1973	TOTAL 74,111	MEAN 203	MAX 976	MIN 53	AC-FIT 147,000

ROARING FORK RIVER BASIN

243

09081550 CRYSTAL RIVER AT PLACITA, COLO.

LOCATION.--Lat 39°08'34", long 107°15'26", in SE¼ sec.31, T.10 S., R.88 W., Pitkin County, on right bank 0.1 mi (0.2 km) downstream from highway bridge, 0.4 mi (0.6 km) upstream from Bears Gulch, 0.7 mi (1.1 km) north of Placita, and 3.0 mi (4.8 km) upstream from Coal Creek.

DRAINAGE AREA.--107 mi² (277 km²).

PERIOD OF RECORD.--October 1959 to September 1973 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 7,371.89 ft (2,246.952 m) above mean sea level (levels by U.S. Bureau of Reclamation).

AVERAGE DISCHARGE.--14 years, 216 ft³/s (6.117 m³/s), 156,500 acre-ft/yr (193 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,930 ft³/s (54.7 m³/s) June 28 (gage height, 6.23 ft or 1.899 m); minimum daily, 28 ft³/s (0.79 m³/s) Feb. 16.

Period of record: Maximum discharge, 1,940 ft³/s (54.9 m³/s) June 24, 1971 (gage height, 6.00 ft or 1.829 m); maximum gage height, 6.23 ft (1.899 m) June 28, 1973; minimum daily discharge, 12 ft³/s (0.34 m³/s) Mar. 3, 1965.

REMARKS.--Records good except those for winter period, which are fair. A few small diversions above station for irrigation of hay meadows.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	76	91	50	36	32	36	37	132	626	1,550	328	130
2	75	88	52	35	31	35	37	123	566	1,430	304	128
3	70	85	50	39	32	36	37	121	520	1,410	304	118
4	66	83	46	41	32	35	36	141	475	1,370	300	110
5	73	88	45	42	31	36	37	159	403	1,300	390	109
6	70	88	44	41	31	37	40	178	494	1,240	426	107
7	70	79	47	39	32	36	43	164	495	1,180	354	105
8	88	80	45	40	32	35	43	161	698	1,160	304	101
9	105	77	46	41	32	34	40	172	947	1,150	272	100
10	100	73	43	39	32	33	39	233	1,150	1,100	253	107
11	90	72	41	37	32	33	39	376	1,300	1,040	241	110
12	82	69	49	39	31	34	41	480	1,340	1,160	235	112
13	85	67	48	41	31	35	46	578	1,390	1,060	221	110
14	79	65	44	39	31	34	50	626	1,580	904	214	103
15	136	65	39	39	29	34	55	644	1,380	791	202	101
16	186	64	42	38	28	34	50	668	1,050	698	197	100
17	159	62	44	37	30	34	54	704	812	656	204	94
18	150	60	45	37	31	35	60	798	777	692	207	91
19	168	58	46	36	31	36	56	938	722	1,060	197	88
20	182	58	48	36	29	38	54	1,000	780	956	186	85
21	161	56	46	35	31	41	53	1,000	872	740	188	82
22	148	54	46	33	32	39	54	826	1,050	572	193	82
23	137	52	46	30	32	37	62	662	1,170	485	180	83
24	127	52	45	32	33	39	72	626	1,240	475	190	90
25	118	54	45	32	33	37	83	584	1,250	465	184	91
26	110	54	39	34	33	38	83	554	1,430	450	178	94
27	109	52	40	34	34	39	94	450	1,660	445	170	86
28	109	47	44	32	36	38	116	372	1,690	385	154	85
29	101	49	45	33	-----	39	127	367	1,670	385	146	83
30	100	49	41	33	-----	38	134	426	1,620	367	139	80
31	93	-----	37	34	-----	36	-----	536	-----	340	134	-----
TOTAL	3,417	1,991	1,388	1,134	884	1,121	1,772	14,799	31,017	27,016	7,195	2,969
MEAN	110	64.4	44.8	36.6	31.6	36.2	59.1	477	1,034	871	232	99.0
MAX	186	91	52	42	36	41	134	1,000	1,690	1,550	426	134
MIN	66	47	37	30	28	33	36	121	304	340	134	80
AC-FT	6,780	3,950	2,750	2,250	1,750	2,220	3,510	29,350	61,520	53,590	14,270	5,890

CAL YR 1972 TOTAL 68,698 MEAN 188 MAX 1,390 MIN 29 AC-FT 136,300
 WTR YR 1973 TOTAL 94,703 MEAN 259 MAX 1,690 MIN 28 AC-FT 187,800

PEAK DISCHARGE (BASE, 1,200 CFS).--June 14 (1100) 1,670 cfs (5.98 ft); June 28 (2300) 1,930 cfs (6.23 ft).

ROARING FORK RIVER BASIN

09081600 CRYSTAL RIVER ABOVE AVALANCHE CREEK, NEAR REDSTONE, COLO.

LOCATION.--Lat 39°13'56", long 107°13'36", in SE¼SW¼ sec.33, T.9 S., R.88 W., Pitkin County, on right bank 1.2 mi (1.9 km) upstream from Avalanche Creek and 3.6 mi (5.8 km) north of Redstone.

DRAINAGE AREA.--167 mi² (433 km²).

PERIOD OF RECORD.--October 1955 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,905 ft (2,015 m) from river-profile map.

AVERAGE DISCHARGE.--18 years, 292 ft³/s (8.269 m³/s), 211,600 acre-ft/yr (261 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,980 ft³/s (84.4 m³/s) June 28 (gage height, 5.39 ft or 1.643 m); minimum daily, 41 ft³/s (1.16 m³/s) Feb. 16.

Period of record: Maximum discharge, 3,980 ft³/s (113 m³/s) July 1, 1957 (gage height, 5.65 ft or 1.722 m); minimum daily, 22 ft³/s (0.62 m³/s) Dec. 5, 1955, Feb. 15, 1964.

REMARKS.--Records good. A few small diversions for irrigation above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	87	115	66	47	57	59	63	213	900	2,070	390	153
2	83	111	70	45	50	59	62	189	844	1,990	350	153
3	90	111	68	52	52	55	60	189	802	1,820	345	140
4	78	105	62	57	59	60	59	229	732	1,720	350	150
5	85	115	60	55	55	57	62	284	627	1,820	490	125
6	81	113	59	52	54	57	69	336	614	1,550	536	123
7	81	100	63	54	55	62	76	280	753	1,490	440	120
8	105	105	60	53	53	65	69	280	1,020	1,420	380	118
9	123	100	61	55	51	65	68	335	1,430	1,320	340	113
10	118	92	58	57	52	49	65	506	1,840	1,340	315	118
11	105	96	54	53	51	50	68	739	1,950	1,250	292	125
12	98	92	65	58	52	52	66	893	1,860	1,350	288	128
13	107	92	65	60	51	54	73	996	1,950	1,290	268	125
14	100	87	58	58	47	52	89	996	2,560	1,100	257	120
15	201	87	51	55	42	53	92	948	2,200	980	236	115
16	253	85	55	57	41	52	85	996	1,450	872	229	118
17	216	83	59	58	44	53	92	1,060	1,100	781	239	113
18	204	83	60	57	48	57	96	1,210	1,050	795	243	107
19	243	81	60	57	48	58	98	1,410	980	1,130	225	105
20	250	78	63	57	42	62	96	1,460	980	1,220	210	98
21	210	78	61	50	46	68	83	1,460	1,120	996	213	98
22	189	73	61	43	49	63	83	1,310	1,290	760	225	96
23	171	70	61	42	49	62	96	1,030	1,450	620	204	94
24	155	70	58	49	50	63	115	948	1,540	584	216	109
25	148	70	58	52	49	66	125	916	1,550	566	213	109
26	135	72	52	55	52	87	125	872	1,890	554	204	111
27	133	72	57	55	52	75	148	711	2,310	530	198	102
28	135	62	61	48	55	65	189	602	2,410	475	180	102
29	125	64	62	49	-----	66	192	596	2,390	455	168	100
30	123	66	58	53	-----	65	216	676	2,190	435	160	96
31	115	-----	48	58	-----	63	-----	802	-----	400	153	-----
TOTAL	4,337	2,628	1,854	1,651	1,406	1,874	2,880	23,466	43,782	33,483	8,557	3,464
MEAN	140	87.6	59.8	53.3	50.2	60.5	96.0	757	1,459	1,080	276	115
MAX	253	115	70	60	59	87	216	1,460	2,560	2,070	536	153
MIN	78	62	48	42	41	49	59	189	614	400	153	94
AC-FT	8,600	5,210	3,680	3,270	2,790	3,720	5,710	46,540	86,840	66,410	16,970	6,870

CAL YR 1972 TOTAL 89,776 MEAN 245 MAX 1,750 MIN 41 AC-FT 178,100

WTR YR 1973 TOTAL 129,382 MEAN 354 MAX 2,560 MIN 41 AC-FT 256,600

PEAK DISCHARGE (BASE, 2,000 CFS).--June 15 (0130) 2,770 cfs (5.29 ft); June 28 (0130) 2,980 cfs (5.39 ft).

ROARING FORK RIVER BASIN

245

09082800 NORTH THOMPSON CREEK NEAR CARBONDALE, COLO.

LOCATION.--Lat 39°19'47", long 107°19'58", in NW¼SE¼ sec.28, T.8 S., R.89 W., Pitkin County, on right bank 0.4 mi (0.6 km) downstream from Yank Creek and 8.5 mi (13.7 km) southwest of Carbondale.

DRAINAGE AREA.--26.8 mi² (69.4 km²).

PERIOD OF RECORD.--October 1963 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 8,120 ft (2,475 m) from topographic map.

AVERAGE DISCHARGE.--10 years, 17.7 ft³/s (0.501 m³/s), 12,820 acre-ft/yr (15.8 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 308 ft³/s (8.72 m³/s) June 15 (gage height, 3.58 ft or 1.091 m); minimum daily, 1.1 ft³/s (0.031 m³/s) Sept. 22.

Period of record: Maximum discharge, 365 ft³/s (10.3 m³/s) May 22, 1970 (gage height, 4.00 ft or 1.219 m), from rating curve extended above 170 ft³/s (4.8 m³/s); maximum gage height, 4.05 ft (1.234 m) May 17, 1964; minimum daily discharge, 0.09 ft³/s (0.003 m³/s) Sept. 6, 7, 1967.

REMARKS.--Records good except those for period of no gage-height record, which are poor. Transbasin diversion above station by Thompson Creek feeder ditch for irrigation in West Divide Creek basin.

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.5	3.0	2.9	1.9	2.3	2.9	3.6	21	124	24	4.8	1.8
2	1.5	3.4	2.9	1.8	2.1	2.9	3.8	19	130	21	6.0	2.1
3	1.5	3.5	3.0	2.0	2.2	3.0	3.8	24	124	13	6.0	2.1
4	1.5	3.5	2.7	2.3	2.3	3.1	3.8	30	117	11	5.4	1.8
5	2.0	3.5	2.4	2.3	2.4	3.2	3.8	36	96	10	7.4	1.7
6	2.1	3.5	2.2	2.3	2.5	3.1	3.8	33	94	9.0	16	1.5
7	2.0	3.3	2.3	2.2	2.5	2.8	5.1	30	109	8.1	14	1.4
8	2.4	3.4	2.5	2.1	2.4	3.0	5.2	34	136	8.1	12	1.2
9	3.1	3.5	2.6	2.1	2.4	3.1	5.4	55	164	8.1	10	1.2
10	2.4	3.5	2.4	2.1	2.4	3.3	4.0	103	190	7.1	9.9	1.5
11	1.8	3.4	2.4	2.2	2.5	3.5	3.6	142	190	6.5	11	2.4
12	1.7	3.4	2.5	2.2	2.6	3.6	3.8	164	166	8.1	11	3.3
13	1.8	3.3	2.6	2.2	2.6	3.6	4.4	164	160	12	12	2.6
14	1.8	3.3	2.6	2.3	2.5	3.7	5.4	160	212	11	11	2.1
15	6.0	3.3	2.6	2.3	2.3	3.8	4.8	152	270	7.7	9.9	1.8
16	12	3.2	2.7	2.3	1.7	3.8	5.7	164	197	7.1	9.4	1.7
17	5.1	3.2	2.7	2.3	1.8	3.8	6.0	174	146	6.8	8.1	1.7
18	5.7	3.2	2.8	2.3	1.8	3.8	6.0	199	121	6.8	8.1	1.5
19	6.3	3.1	2.9	2.2	1.8	4.0	6.3	244	100	17	8.6	1.4
20	5.7	3.1	3.0	2.1	1.8	5.0	6.0	244	83	12	5.1	1.4
21	4.6	3.1	2.8	2.0	1.9	5.0	5.1	221	76	14	4.6	1.2
22	4.4	3.0	2.7	1.9	2.0	5.2	5.7	203	69	9.4	4.0	1.1
23	4.4	3.0	2.5	2.0	2.3	5.6	8.6	176	68	7.4	3.6	1.2
24	4.0	3.0	2.4	2.1	2.7	6.0	9.4	172	68	6.5	3.0	1.7
25	3.8	3.1	2.3	2.4	2.9	6.6	10	160	64	6.3	2.6	1.8
26	3.5	3.1	2.3	2.4	2.9	5.8	11	138	66	6.0	2.3	1.8
27	3.3	2.9	2.3	2.3	2.9	5.0	13	107	64	5.7	2.1	1.7
28	3.3	2.4	2.5	2.2	2.9	4.4	12	94	58	5.7	2.1	1.7
29	3.3	2.5	2.3	2.2	-----	3.9	18	94	53	5.4	2.0	1.7
30	3.1	2.8	2.1	2.3	-----	3.6	22	105	42	5.1	1.8	1.5
31	2.6	-----	2.0	2.3	-----	3.4	-----	111	-----	4.8	1.8	-----
TOTAL	108.2	95.5	78.9	67.6	65.4	123.5	209.1	3,773	3,557	290.7	215.6	51.6
MEAN	3.49	3.18	2.55	2.18	2.34	3.98	6.97	122	119	9.38	6.95	1.72
MAX	12	3.5	3.0	2.4	2.9	6.6	22	244	270	24	16	3.3
MIN	1.5	2.4	2.0	1.8	1.7	2.8	3.6	19	42	4.8	1.8	1.1
AC-FT	215	189	156	134	130	245	415	7,480	7,060	577	428	102

CAL YR 1972 TOTAL 4,524.2 MEAN 12.4 MAX 81 MIN 1.1 AC-FT 8,970
 MTR YR 1973 TOTAL 8,636.1 MEAN 23.7 MAX 270 MIN 1.1 AC-FT 17,130

PEAK DISCHARGE (BASE, 160 CFS).--May 18 (2100) 292 cfs (3.53 ft); June 15 (0600) 308 cfs (3.58 ft).

NOTE.--No gage-height record Oct. 30 to Apr. 4.

ROARING FORK RIVER BASIN

09085000 ROARING FORK RIVER AT GLENWOOD SPRINGS, COLO.

LOCATION.--Lat 39°32'37", long 107°19'44", in SW¼SE¼ sec.9, T.6 S., R.89 W., Garfield County, on left bank at Glenwood Springs, 2,100 ft (640 m) upstream from mouth.

DRAINAGE AREA.--1,451 mi² (3,758 km²).

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.

GAGE.--Water-stage recorder. Datum of gage is 5,720.73 ft (1,743.679 m) above mean sea level. Prior to Nov. 20, 1915, nonrecording gage on highway bridge 800 ft (240 m) downstream at different datum. Nov. 20, 1915, to Oct. 26, 1917, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--65 years (1905-9, 1910-71), 1,368 ft³/s (38.74 m³/s), 991,100 acre-ft/yr (1,220 hm³/yr), prior to diversion through Charles H. Boustead Tunnel.

EXTREMES.--Current year: Maximum discharge, 8,280 ft³/s (234 m³/s) June 15 (gage height, 5.92 ft or 1.804 m); minimum daily, 407 ft³/s (11.5 m³/s) Apr. 8, 11, 12.

Period of record: Maximum discharge, 19,000 ft³/s (538 m³/s) July 1, 1957 (gage height, 8.64 ft or 2.633 m); maximum gage height, 8.7 ft (2.65 m) June 14, 1921, from floodmarks; minimum discharge, 145 ft³/s (4.11 m³/s) Jan. 21, 1935 (gage height, 0.65 ft or 0.198 m); minimum daily, 179 ft³/s (5.07 m³/s) Jan. 21, 1935.

REMARKS.--Records good. Diversions above station for irrigation of about 35,000 acres (142 km²). Transmountain diversions to Arkansas River basin through Busk-Ivanhoe Tunnel since 1925, Twin Lakes Tunnel since 1935, and Charles H. Boustead Tunnel since 1972 (see elsewhere in this report). Natural flow of stream affected by storage in Ruedi Reservoir on Fryingpan River (see sta. 09080190) since May 1968.

REVISIONS.--WSP 2124: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	709	827	597	528	581	597	528	913	2,770	6,550	1,390	887
2	693	819	597	512	550	605	520	844	2,610	6,160	1,310	895
3	725	819	605	560	565	573	513	853	2,480	5,500	1,170	861
4	836	793	621	610	613	543	505	976	2,500	5,200	1,250	836
5	665	819	621	640	605	543	469	1,090	2,190	4,910	1,460	802
6	661	819	589	653	581	520	490	1,260	2,080	4,530	1,820	751
7	661	776	629	669	597	520	483	1,190	2,220	4,230	1,700	734
8	709	785	645	669	589	528	407	1,190	2,870	3,970	1,460	717
9	768	776	638	660	558	528	420	1,280	3,970	3,770	1,340	701
10	793	734	597	640	581	528	414	1,680	5,410	3,630	1,270	709
11	776	751	550	630	589	535	407	2,280	6,210	3,360	1,210	734
12	759	742	653	620	589	535	407	2,790	5,890	3,630	1,190	717
13	776	734	638	610	573	550	414	3,060	6,010	3,930	1,130	709
14	776	709	605	605	558	543	448	3,150	7,620	3,540	1,100	693
15	870	725	558	573	550	543	513	3,000	7,290	3,270	1,060	677
16	1,170	759	550	581	543	535	455	3,130	5,330	2,950	1,040	669
17	1,010	785	621	605	550	543	476	3,290	4,290	2,830	1,010	661
18	995	810	677	589	573	550	505	3,690	4,070	2,790	1,040	637
19	995	793	661	581	589	543	513	4,430	3,710	3,600	1,030	613
20	1,030	776	638	581	550	550	476	4,650	3,430	3,630	1,000	597
21	976	776	605	558	573	589	469	4,670	3,690	3,310	1,000	589
22	949	759	597	528	589	565	462	4,270	4,090	2,790	1,010	573
23	922	717	613	513	573	543	483	3,430	4,510	2,470	976	543
24	887	734	573	550	589	550	558	3,160	4,910	2,340	967	581
25	887	734	605	550	573	528	693	3,070	4,850	2,280	976	581
26	861	742	565	550	550	535	693	2,980	5,770	2,160	967	597
27	853	776	573	540	573	543	693	2,500	6,780	2,000	967	581
28	861	701	605	543	581	535	785	2,180	7,010	1,760	949	589
29	853	605	629	565	-----	550	853	2,080	6,600	1,670	922	589
30	853	653	589	580	-----	535	904	2,160	6,710	1,550	922	581
31	819	-----	535	580	-----	520	-----	2,340	-----	1,440	904	-----
TOTAL	26,118	22,748	18,779	18,173	16,085	16,905	15,956	77,586	137,870	105,750	35,540	20,404
MEAN	843	758	606	586	574	545	532	2,503	4,596	3,411	1,146	680
MAX	1,170	827	677	669	613	605	904	4,670	7,620	6,550	1,820	895
MIN	661	605	535	512	543	520	407	844	2,080	1,440	904	543
AC-FT	51,810	45,120	37,250	36,050	31,900	33,530	31,650	153,900	273,500	209,800	70,490	40,470

CAL YR 1972 TOTAL 404,558 MEAN 1,105 MAX 5,810 MIN 481 AC-FT 802,400
WTR YR 1973 TOTAL 511,914 MEAN 1,403 MAX 7,620 MIN 407 AC-FT 1,015,000

247

LOCATION.--Lat 39°33'18", long 107°20'13", in NW¼NW¼ sec.9, T.6 S., R.89 W., Garfield County, on left bank 0.6 mi (1.0 km) downstream from Roaring Fork River and 1.0 mi (1.6 km) northwest of Post Office in Glenwood Springs.

PERIOD OF RECORD.--October 1966 to current year.

GAGE.--Water-stage recorder. Datum of gage is 5,700.75 ft (1,737.589 m) above mean sea level (State Highway Department bench mark).

AVERAGE DISCHARGE.--7 years, 3,455 ft³/s (97.85 m³/s), 2,503,000 acre-ft/yr (3,090 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 20,500 ft³/s (581 m³/s) June 15 (gage height, 9.48 ft or 2.890 m); minimum daily, 1,430 ft³/s (40.5 m³/s) Dec. 17.

Period of record: Maximum discharge, 20,500 ft³/s (581 m³/s) June 15, 1973 (gage height, 9.48 ft or 2.890 m); minimum daily, 924 ft³/s (26.2 m³/s) Jan. 9, 1967.

REMARKS.--Records good. Natural flow of stream affected by transmountain diversions, storage reservoirs, power development, and diversions for irrigation of 110,000 acres (445 km²).

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

CAL YR 1972	TOTAL 1,173,140	MEAN 3,205	MAX 13,800	MIN 1,350	AC-FT 2,327,000
WTR YR 1973	TOTAL 1,461,360	MEAN 4,004	MAX 19,000	MIN 1,430	AC-FT 2,899,000

CANYON CREEK BASIN

09085200 CANYON CREEK ABOVE NEW CASTLE, COLO.

LOCATION.--Lat 39°36'19", long 107°24'21", in NW¼NW¼ sec.24, T.5 S., R.90 W., Garfield County, on right bank 200 ft (61 m) upstream from diversion headgate, 0.4 mi (0.6 km) upstream from East Canyon Creek, and 5.0 mi (8.0 km) northeast of New Castle.

DRAINAGE AREA.--23.8 mi² (61.6 km²).

PERIOD OF RECORD.--March 1969 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,180 ft (1,884 m) from topographic map.

EXTREMES.--Current year; Maximum discharge, 745 ft³/s (21.1 m³/s) June 15 (gage height, 4.70 ft or 1.433 m); minimum daily, 12 ft³/s (0.34 m³/s) Feb. 12.

Period of record: Maximum discharge, 745 ft³/s (21.1 m³/s) June 15, 1973 (gage height, 4.70 ft or 1.433 m); minimum daily, 9.2 ft³/s (0.26 m³/s) Feb. 22, 1971.

REVISIONS.--The maximum discharge for the water year 1972 has been revised to 618 ft³/s (17.5 m³/s) June 1, 1972 (gage height, 4.66 ft or 1.420 m), superseding figure published in WRD Colo. 1972.

REMARKS.--Records good. A few small diversions for irrigation of hay meadows above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	32	21	15	15	13	14	26	256	227	27	16
2	18	30	21	16	16	14	14	24	232	197	27	16
3	18	29	20	17	16	14	14	24	205	162	26	16
4	19	28	20	17	15	14	14	29	173	137	26	16
5	24	28	18	17	15	14	14	34	158	118	27	16
6	23	27	17	16	15	14	14	42	165	104	29	16
7	21	24	20	17	15	13	15	40	214	89	27	16
8	24	26	18	17	15	13	14	39	322	82	25	16
9	28	25	21	17	14	13	15	47	455	80	24	15
10	29	23	22	16	15	13	15	76	455	71	23	16
11	27	24	21	16	15	13	15	107	410	65	21	17
12	25	24	19	16	12	13	15	150	470	65	20	18
13	25	23	19	16	15	14	15	184	530	62	20	17
14	24	23	19	16	15	13	16	218	591	58	20	16
15	34	24	20	16	15	13	16	237	555	55	20	16
16	42	23	18	16	15	13	16	261	362	51	18	17
17	47	22	19	16	15	13	16	294	284	47	20	16
18	55	22	18	16	14	14	16	348	251	45	21	16
19	63	22	18	15	14	14	16	355	222	53	20	16
20	69	21	18	15	14	15	16	410	227	50	20	16
21	67	21	18	15	14	15	16	341	277	47	20	16
22	62	18	18	16	14	15	15	282	317	43	19	16
23	53	18	17	15	14	14	15	277	328	42	19	16
24	48	20	17	16	14	14	16	277	403	40	19	19
25	45	20	17	16	13	14	18	251	410	38	19	18
26	42	21	16	15	13	14	17	205	410	36	18	17
27	42	21	16	15	13	14	18	162	410	36	18	18
28	38	18	16	15	13	15	21	147	375	34	17	18
29	35	21	16	16	-----	15	24	162	311	31	16	18
30	33	21	16	16	-----	14	24	201	271	31	16	17
31	32	-----	16	15	-----	14	-----	261	-----	29	16	-----
TOTAL	1,130	699	570	493	403	428	484	5,511	10,053	2,225	658	497
MEAN	36.5	23.3	18.4	15.9	14.4	13.8	16.1	178	335	71.8	21.2	16.6
MAX	69	32	22	17	16	15	24	410	591	227	29	19
MIN	18	18	16	15	12	13	14	24	158	29	16	15
AC-FT	2,240	1,390	1,130	978	799	849	960	10,930	19,940	4,410	1,310	986

CAL YR 1972 TOTAL 18,252.4 MEAN 49.9 MAX 450 MIN 9.6 AC-FT 36,200

WTR YR 1973 TOTAL 23,151.0 MEAN 63.4 MAX 591 MIN 12 AC-FT 45,920

PEAK DISCHARGE (BASE, 350 CFS).--May 20 (1100) 462 cfs (4.39 ft); June 15 (0200) 745 cfs (4.70 ft).

CANYON CREEK BASIN

249

09085300 EAST CANYON CREEK NEAR NEW CASTLE, COLO.

LOCATION.--Lat 39°36'33", long 107°26'03", in SE4SE4 sec.13, T.5 S., R.90 W., Garfield County, on left bank at upstream side of Forest Service stock trail bridge, 0.6 mi (1.0 km) upstream from Possum Creek, 0.9 mi (1.4 km) upstream from mouth, and 6.0 mi (9.7 km) northeast of New Castle.

DRAINAGE AREA.--15.1 mi² (39.1 km²).

PERIOD OF RECORD.--March 1969 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,280 ft (1,914 m) from topographic map.

EXTREMES.--Current year: Maximum discharge, 372 ft³/s (10.5 m³/s) June 10 (gage height, 2.88 ft or 0.878 m); minimum daily, 4.4 ft³/s (0.12 m³/s) Feb. 12.

Period of record: Maximum discharge, 372 ft³/s (10.5 m³/s) June 10, 1973 (gage height, 2.88 ft or 0.878 m); minimum daily, 3.5 ft³/s (0.099 m³/s) Mar. 25, 1969.

REMARKS.--Records fair except those for period of no gage-height record, which are poor. Small diversions above station for irrigation of hay meadows.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.2	14	8.0	5.8	5.6	5.0	5.6	10	150	100	15	8.8
2	6.4	14	8.0	5.8	6.0	5.2	5.6	10	140	85	15	9.1
3	6.2	13	7.6	6.2	6.2	5.2	5.6	10	122	77	15	9.1
4	6.2	13	7.2	6.4	6.0	5.2	5.6	13	102	68	14	9.1
5	7.0	13	7.0	6.2	6.0	5.2	5.6	16	85	61	16	8.8
6	6.6	13	6.4	6.0	6.0	5.2	5.6	19	85	55	16	8.5
7	6.6	13	6.6	6.2	6.0	5.0	6.0	18	100	53	14	8.2
8	7.3	12	6.2	6.2	6.0	4.9	5.8	19	134	48	13	7.9
9	9.7	13	7.2	6.2	5.8	4.9	6.2	25	161	45	12	7.6
10	8.2	12	7.2	5.8	5.2	4.9	6.2	37	161	39	10	8.5
11	7.6	11	7.2	5.6	4.8	4.8	6.6	56	172	38	9.7	9.4
12	7.3	10	7.0	5.6	4.4	4.8	6.8	74	128	40	9.7	10
13	7.6	9.6	6.6	5.6	4.9	4.8	6.8	76	150	37	9.7	9.1
14	7.3	9.8	6.8	5.6	9.2	4.8	7.0	81	183	37	9.7	8.5
15	12	10	7.0	5.6	5.2	4.8	7.3	90	172	36	9.7	6.6
16	17	9.6	6.6	5.6	5.2	4.8	6.8	100	90	33	9.7	5.4
17	16	9.2	6.8	5.6	5.2	5.0	6.8	102	70	31	10	5.4
18	19	9.0	6.6	5.6	5.0	5.4	6.8	119	70	30	11	5.2
19	22	9.2	6.6	5.4	5.0	5.4	6.8	137	77	40	10	5.4
20	21	9.0	6.6	5.2	5.0	5.6	6.8	147	81	34	10	5.2
21	19	8.8	6.6	5.4	5.0	5.6	6.8	183	83	39	10	5.4
22	18	7.6	6.4	5.6	5.0	5.6	6.8	183	81	30	9.7	5.2
23	19	7.6	6.2	5.4	5.0	5.4	7.0	168	83	25	9.4	5.4
24	18	7.8	6.2	5.6	5.0	5.2	8.2	168	74	22	10	5.6
25	17	8.0	6.2	5.6	4.8	5.2	8.5	161	74	22	9.7	5.4
26	16	8.2	6.0	5.4	4.8	5.2	8.2	134	74	21	9.4	5.4
27	16	8.2	5.8	5.4	4.8	5.2	8.8	113	76	20	9.4	5.2
28	16	7.4	5.8	5.4	4.8	5.6	8.8	98	76	19	9.1	5.2
29	15	7.6	5.8	5.8	-----	5.6	8.5	92	85	18	8.8	5.0
30	14	8.0	5.8	5.8	-----	5.4	9.4	110	98	16	8.8	5.0
31	14	-----	5.8	5.4	-----	5.6	-----	134	-----	16	8.8	-----
TOTAL	389.2	305.6	205.8	177.0	147.9	160.5	207.3	2,703	3,237	1,235	342.3	208.6
EAN	12.6	10.2	6.64	5.71	5.28	5.18	6.91	87.2	108	39.8	11.0	6.95
AX	22	14	8.0	6.4	6.2	5.6	9.4	183	183	100	16	10
IN	6.2	7.4	5.8	5.2	4.4	4.8	5.6	10	70	16	8.8	5.0
C-FT	772	606	408	351	293	318	411	5,360	6,420	2,450	679	418

AL YR 1972 TOTAL 7,863.3 MEAN 21.5 MAX 215 MIN 4.7 AC-FT 15,600
TR YR 1973 TOTAL 9,319.2 MEAN 25.5 MAX 183 MIN 4.4 AC-FT 18,480

PEAK DISCHARGE (BASE, 150 CFS).--May 21 (2300) 220 cfs (2.47 ft); June 10 (2400) 372 cfs (2.88 ft).

NOTE.--No gage-height record Nov. 10 to Apr. 10.

CANYON CREEK BASIN

09085400 POSSUM CREEK NEAR NEW CASTLE, COLO.

LOCATION.--Lat 39°35'52", long 107°25'24", in SW¼ sec.19, T.5 S., R.89 W., Garfield County, on right bank 1.0 mi (1.6 km) upstream from mouth and 6.0 mi (9.7 km) northeast of New Castle.

DRAINAGE AREA.--6.41 mi² (16.60 km²).

PERIOD OF RECORD.--March 1969 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,410 ft (1,954 m) from topographic map.

EXTREMES.--Current year: Maximum discharge, 67 ft³/s (1.90 m³/s) June 10 (gage height, 2.38 ft or 0.725 m); minimum daily, 0.98 ft³/s (0.028 m³/s) Feb. 12.

Period of record: Maximum discharge, 67 ft³/s (1.90 m³/s) June 10, 1973 (gage height, 2.38 ft or 0.725 m), from rating curve extended above 25 ft³/s (0.7 m³/s); minimum daily, 0.94 ft³/s (0.027 m³/s) Nov. 20, 1971.

REMARKS.--Records good except those for period of no gage-height record, which are poor. No diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.5	2.2	1.8	1.1	1.2	1.0	1.2	3.5	29	20	7.1	5.3
2	2.2	2.5	1.8	1.2	1.2	1.1	1.2	3.7	27	17	7.1	5.6
3	2.2	2.5	1.7	1.3	1.2	1.1	1.2	3.5	25	15	6.8	5.3
4	2.3	2.4	1.7	1.3	1.1	1.1	1.2	3.7	24	12	6.8	5.3
5	2.4	2.4	1.6	1.3	1.1	1.1	1.2	3.9	22	11	7.1	5.0
6	2.3	2.3	1.4	1.2	1.1	1.1	1.2	4.8	21	11	7.1	5.0
7	2.3	2.3	1.5	1.3	1.1	1.1	1.3	4.8	22	10	6.8	4.9
8	2.3	2.3	1.6	1.3	1.1	1.1	1.3	4.8	28	10	6.8	4.8
9	2.4	2.1	1.6	1.3	1.0	1.1	1.3	5.0	39	9.6	6.8	4.8
10	2.2	2.0	1.6	1.2	1.1	1.1	1.4	6.5	57	9.2	6.8	4.8
11	2.2	2.1	1.4	1.2	1.1	1.1	1.5	10	61	8.8	6.5	4.7
12	2.2	2.0	1.3	1.2	.98	1.2	1.4	14	53	8.8	6.5	4.6
13	2.2	1.9	1.3	1.2	1.0	1.3	1.5	16	47	8.4	6.5	4.4
14	2.2	2.0	1.4	1.2	1.1	1.2	1.6	18	48	8.4	6.5	4.3
15	2.5	2.1	1.4	1.2	1.1	1.1	1.8	20	49	8.4	6.5	4.1
16	2.5	2.0	1.3	1.2	1.1	1.1	1.6	22	37	8.0	6.2	4.1
17	2.4	1.9	1.3	1.2	1.1	1.1	1.6	27	30	7.8	6.5	4.1
18	2.3	1.9	1.3	1.2	1.1	1.2	1.9	31	37	7.6	6.2	3.9
19	2.4	1.8	1.3	1.2	1.1	1.2	1.9	35	25	8.4	6.2	3.9
20	2.4	1.8	1.3	1.2	1.1	1.3	1.8	39	25	8.2	6.2	3.9
21	2.4	1.7	1.3	1.2	1.1	1.3	1.9	41	24	8.0	6.2	3.7
22	2.4	1.6	1.3	1.2	1.1	1.3	1.8	39	24	8.0	5.9	3.7
23	2.4	1.6	1.3	1.1	1.1	1.2	2.0	32	25	7.8	5.9	3.7
24	2.4	1.7	1.3	1.2	1.1	1.2	2.2	30	24	7.6	5.9	4.1
25	2.4	1.7	1.2	1.2	1.0	1.2	2.4	32	28	7.6	5.9	3.9
26	2.4	1.8	1.2	1.1	1.0	1.2	2.4	25	28	7.5	5.9	3.9
27	2.5	1.8	1.2	1.1	1.0	1.2	2.4	21	28	7.4	5.6	3.9
28	2.4	1.6	1.2	1.1	1.0	1.3	2.8	18	26	7.4	5.6	3.9
29	2.5	1.7	1.2	1.2	-----	1.3	3.2	17	24	7.1	5.3	3.7
30	2.4	1.8	1.2	1.2	-----	1.2	3.5	19	22	7.1	5.3	3.7
31	1.9	-----	1.2	1.1	-----	1.2	-----	23	-----	6.8	5.3	-----
TOTAL	72.3	59.5	43.2	37.2	30.38	36.3	53.7	573.2	959	289.9	195.8	131.0
MEAN	2.33	1.98	1.39	1.20	1.09	1.17	1.79	18.5	32.0	9.35	6.32	4.37
MAX	2.5	2.5	1.8	1.3	1.2	1.3	3.5	41	61	20	7.1	5.6
MIN	1.9	1.6	1.2	1.1	.98	1.0	1.2	3.5	21	6.8	5.3	3.7
AC-FT	143	118	86	74	60	72	107	1,140	1,900	575	388	260

CAL YR 1972 TOTAL 1,893.80 MEAN 5.17 MAX 40 MIN 1.2 AC-FT 3,760

WTR YR 1973 TOTAL 2,481.48 MEAN 6.80 MAX 61 MIN .98 AC-FT 4,920

PEAK DISCHARGE (BASE, 30 CFS).--May 21 (0500) 44 cfs (2.18 ft); June 10 (0600) 67 cfs (2.38 ft).

NOTE.--No gage-height record Nov. 9 to Apr. 10.

DIVIDE CREEK BASIN

251

09089500 WEST DIVIDE CREEK NEAR RAVEN, COLO.

LOCATION.--Lat 39°19'52", long 107°34'46", in W½ sec.29, T.8 S., R.91 W., Mesa County, on left bank 10 ft (3 m) downstream from private road bridge, 0.8 mi (1.3 km) upstream from Brook Creek, 8 mi (13 km) south of Raven, and 16 mi (26 km) south of Silt.

DRAINAGE AREA.--64.6 mi² (167.3 km²).

PERIOD OF RECORD.--October 1955 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 7,050 ft (2,149 m) from topographic map.

AVERAGE DISCHARGE.--18 years, 31.6 ft³/s (0.895 m³/s), 22,890 acre-ft/yr (28.2 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 601 ft³/s (17.0 m³/s) May 18 (gage height, 5.30 ft or 1.615 m); minimum daily, 0.36 ft³/s (0.10 m³/s) Oct. 1-3.

Period of record: Maximum discharge, 790 ft³/s (22.4 m³/s) May 12, 1962 (gage height, 5.41 ft or 1.649 m), from rating curve extended above 350 ft³/s (9.9 m³/s); maximum gage height, 5.45 ft (1.661 m) May 18, 1970; no flow at times in most years.

REMARKS.--Records good except those for period of no gage-height record, which are poor.

REVISIONS.--WSP 2124: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.36	2.1	2.0	2.4	1.8	2.7	5.7	61	282	108	13	2.8
2	.36	2.0	2.0	2.4	1.6	2.7	4.8	50	276	102	12	3.1
3	.36	2.0	2.1	2.1	1.8	2.8	4.8	55	276	98	10	3.4
4	.38	2.1	2.1	2.1	2.0	2.9	6.8	78	267	90	9.7	3.1
5	.45	2.2	2.1	2.0	2.1	3.0	6.8	112	230	84	15	3.0
6	.58	2.1	2.0	2.0	2.1	3.1	6.6	114	227	76	25	2.7
7	.72	2.0	1.8	2.1	2.0	3.2	7.9	93	250	72	16	2.5
8	.74	2.1	1.8	2.1	2.1	3.3	10	108	273	68	13	2.2
9	1.2	2.0	2.0	2.0	2.0	3.3	12	166	300	61	12	2.1
10	1.3	2.0	2.1	1.8	2.0	3.3	7.3	276	300	53	9.4	2.3
11	.84	2.1	2.1	1.6	1.8	3.4	6.8	322	273	48	8.2	2.9
12	.74	2.0	2.1	1.8	1.8	3.4	8.5	385	252	51	6.6	4.8
13	.74	2.0	2.1	2.0	1.8	3.5	11	431	247	66	5.7	4.2
14	.82	2.1	2.0	2.0	1.8	4.6	15	409	270	58	5.2	3.2
15	1.4	2.1	1.9	2.1	1.8	4.3	17	423	288	50	5.2	2.6
16	3.2	2.0	1.8	2.1	2.0	4.8	15	443	227	45	4.6	2.5
17	2.1	1.8	1.8	2.2	2.1	4.5	15	467	176	40	4.8	2.2
18	1.9	2.0	1.9	1.8	2.0	4.2	16	479	159	38	6.1	2.1
19	2.3	2.0	2.0	1.6	2.0	4.2	10	507	137	78	5.2	2.0
20	3.2	2.0	2.1	1.4	2.1	5.9	10	507	120	66	4.5	1.9
21	2.8	2.1	2.1	1.2	2.2	5.9	14	459	118	58	4.8	1.9
22	2.7	2.1	2.1	1.2	2.3	5.5	13	443	124	45	4.8	1.8
23	2.4	2.1	2.1	1.4	2.1	6.6	19	388	124	38	4.5	1.9
24	2.1	2.1	2.1	1.6	2.2	7.6	28	381	118	33	4.2	2.3
25	1.9	2.1	2.2	1.6	2.3	7.9	33	357	116	29	4.0	2.4
26	1.8	2.0	2.2	1.8	2.4	6.6	30	343	118	25	3.7	2.7
27	1.9	2.1	2.2	1.8	2.5	6.8	36	264	126	22	3.7	2.5
28	2.1	2.2	2.3	1.6	2.6	6.3	51	247	120	20	3.2	2.3
29	2.2	2.1	2.4	1.4	-----	5.2	60	250	112	17	3.0	2.3
30	2.1	2.1	2.4	1.6	-----	4.6	72	255	107	16	2.9	2.3
31	2.2	-----	2.4	1.8	-----	4.3	-----	270	-----	15	2.9	-----
TOTAL	47.89	61.7	64.3	56.6	57.3	140.4	553.0	9,143	6,013	1,670	232.9	78.0
MEAN	1.54	2.06	2.07	1.83	2.05	4.53	18.4	295	200	53.9	7.51	2.60
MAX	3.2	2.2	2.4	2.4	2.6	7.9	72	507	300	108	25	4.8
MIN	.36	1.8	1.8	1.2	1.6	2.7	4.8	50	107	15	2.4	1.8
AC=FT	95	122	128	112	114	278	1,100	18,140	11,930	3,310	462	155

CAL YR 1972 TOTAL 9,405.57 MEAN 25.7 MAX 159 MIN .05 AC=FT 18,660
WTR YR 1973 TOTAL 18,118.09 MEAN 49.6 MAX 507 MIN .36 AC=FT 35,940

PEAK DISCHARGE (BASE, 160 CFS).--May 18 (2330) 601 cfs (5.30 ft).

NOTE.--No gage-height record Jan. 3 to Mar. 12.

09092500 BEAVER CREEK NEAR RIFLE, COLO.

LOCATION.--Lat 39°28'19", long 107°49'55", in NW¼NE¼ sec.1, T.7 S., R.94 W., Garfield County, on left bank 150 ft (46 m) upstream from unnamed tributary, 200 ft (61 m) upstream from road bridge, 4.0 mi (6.4 km) upstream from mouth, and 4.8 mi (7.7 km) southwest of Rifle.

DRAINAGE AREA.--7.90 mi² (20.46 km²).

PERIOD OF RECORD.--October 1952 to current year.

GAGE.--Water-stage recorder and plank control. Altitude of gage is 6,685 ft (2,038 m) from topographic map.

AVERAGE DISCHARGE.--21 years, 4.60 ft³/s (0.130 m³/s), 3,330 acre-ft/yr (4.11 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 75 ft³/s (2.12 m³/s) June 10 (gage height, 3.87 ft or 1.180 m); minimum daily, 0.40 ft³/s (0.011 m³/s) Feb. 17.
Period of record: Maximum discharge, 85 ft³/s (2.41 m³/s) May 24, 1964 (gage height, 4.00 ft or 1.219 m), from rating curve extended above 52 ft³/s (1.5 m³/s); minimum daily, 0.3 ft³/s (0.008 m³/s) Jan. 4-6, 1959.

REMARKS.--Records good except those for period of no gage-height record, which are poor. Diversions above station for irrigation of about 170 acres (688,000 m²) below station and about 380 acres (1.54 km²) in Mann Creek basin.

REVISIONS.--WSP 1924: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.99	2.0	1.4	1.1	.74	.68	.80	3.7	34	22	4.4	1.9
2	.96	1.7	1.4	1.1	.72	.68	.82	3.2	31	20	4.2	2.0
3	.97	1.5	1.4	1.1	.68	.67	.74	3.3	31	17	4.1	1.9
4	1.1	1.4	1.3	1.1	.66	.60	.97	4.2	25	15	3.8	1.8
5	1.7	1.4	1.3	1.1	.64	.67	.93	5.2	21	15	3.9	1.8
6	1.3	1.5	1.3	1.1	.62	.62	.93	5.5	21	15	4.0	1.7
7	1.2	1.4	1.2	1.1	.60	.55	.89	4.9	25	13	3.7	1.7
8	1.4	1.2	1.2	1.1	.60	.59	1.4	5.2	37	13	3.6	1.7
9	1.9	1.2	1.2	1.1	.58	.67	1.3	7.3	52	11	3.5	1.7
10	1.5	1.3	1.1	1.0	.58	.68	.95	12	64	10	3.2	1.7
11	1.2	1.1	1.1	1.0	.56	.68	1.1	16	61	9.2	3.1	1.8
12	1.2	1.1	1.1	1.0	.56	.66	1.3	21	54	8.7	3.0	1.8
13	1.4	1.0	1.1	1.0	.56	.62	1.4	25	48	8.4	3.0	1.7
14	1.3	2.0	1.0	.94	.56	.55	1.6	31	56	7.7	2.9	1.6
15	4.8	1.1	.98	.92	.56	.57	1.5	31	65	6.9	2.9	1.5
16	5.1	.96	.96	.96	.49	.58	1.3	32	51	6.6	2.8	1.5
17	3.6	1.0	.96	.96	.40	.60	1.6	37	40	7.4	3.0	1.5
18	3.7	.96	1.0	.96	.46	.68	1.7	48	33	7.5	3.0	1.4
19	4.6	.95	1.0	.92	.41	.70	1.6	61	27	8.7	3.0	1.4
20	5.1	.94	1.0	.90	.45	.75	1.5	65	24	7.0	2.5	1.4
21	4.1	.95	1.0	.88	.46	.79	1.4	61	23	8.2	2.4	1.4
22	3.4	.96	1.1	.84	.43	.68	1.5	59	22	6.8	2.4	1.4
23	3.1	1.0	1.1	.78	.45	.71	1.9	47	21	6.3	2.3	1.4
24	2.6	1.0	1.1	.74	.60	.69	2.3	40	21	6.0	2.3	1.7
25	2.4	1.1	1.1	.74	.62	.78	2.6	40	23	6.0	2.2	1.6
26	2.2	1.1	1.1	.74	.59	.74	2.3	36	26	6.0	2.1	1.5
27	2.2	1.1	1.2	.74	.59	.82	2.5	26	27	5.7	2.2	1.5
28	2.0	1.1	1.2	.74	.68	.82	3.2	23	26	5.4	2.0	1.5
29	1.6	1.2	1.2	.74	-----	.81	3.9	24	26	5.1	2.0	1.4
30	1.5	1.3	1.2	.72	-----	.84	4.3	26	25	4.9	1.9	1.4
31	1.9	-----	1.2	.70	-----	.80	-----	29	-----	4.6	2.0	-----
TOTAL	72.02	36.52	35.50	28.82	15.85	21.28	50.23	832.5	1,040	294.1	91.4	48.3
MEAN	2.32	1.22	1.15	.93	.57	.69	1.67	26.9	34.7	9.49	2.95	1.61
MAX	5.1	2.0	1.4	1.1	.74	.84	4.3	65	65	22	4.4	2.0
MIN	.96	.94	.96	.70	.40	.55	.74	3.2	21	4.6	1.9	1.4
AC-FT	143	72	70	57	31	42	100	1,650	2,060	583	181	96

CAL YR 1972 TOTAL 1,133.05 MEAN 3.10 MAX 19 MIN .50 AC-FT 2,250

WTR YR 1973 TOTAL 2,566.52 MEAN 7.03 MAX 65 MIN .40 AC-FT 5,090

PEAK DISCHARGE (BASE, 25 CFS).--May 20 (0100) 71 cfs (3.78 ft); June 10 (2100) 75 cfs (3.87 ft).

NOTE.--No gage-height record Nov. 30 to Feb. 15.

COLORADO RIVER MAIN STEM

253

09093700 COLORADO RIVER NEAR DE BEQUE, COLO.

LOCATION.--Lat 39°21'45", long 108°09'07", in NE¼SW¼ sec.7, T.8 S., R.96 W., Mesa County, on left bank 3.0 mi (4.8 km) downstream from Alkali Creek and 3.8 mi (6.1 km) northeast of De Beque.

DRAINAGE AREA.--7,370 mi² (19,088 km²).

PERIOD OF RECORD.--October 1966 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 4,940 ft (1,506 m) from topographic map.

AVERAGE DISCHARGE.--7 years, 3,760 ft³/s (106.5 m³/s), 2,724,000 acre-ft/yr (3,360 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 22,500 ft³/s (637 m³/s) June 15 (gage height, 11.07 ft or 3.374 m); minimum daily, 1,500 ft³/s (42.5 m³/s) Dec. 17.

Period of record: Maximum discharge, 22,500 ft³/s (637 m³/s) June 15, 1973 (gage height, 11.07 ft or 3.374 m); minimum daily, 1,050 ft³/s (29.7 m³/s) Dec. 11, 1966.

REMARKS.--Records good. Natural flow of stream affected by transmountain diversions, storage reservoirs, power development, and diversions for irrigation of about 158,000 acres (639 km²).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,110	2,270	2,200	1,700	1,800	2,010	1,830	3,620	10,900	13,800	4,290	2,360
2	2,060	2,330	2,150	1,600	1,750	2,110	1,830	3,450	11,500	13,800	4,100	2,370
3	1,950	2,430	2,050	1,550	1,700	2,030	1,790	3,040	11,400	13,000	3,940	2,390
4	2,120	2,430	2,050	1,700	1,850	1,980	1,860	3,010	11,500	12,300	3,850	2,340
5	2,160	2,510	2,050	1,850	1,900	1,940	1,590	3,370	10,600	12,100	3,860	2,300
6	2,050	2,550	1,760	1,850	1,850	1,930	1,680	4,020	9,830	11,600	4,670	2,230
7	2,050	2,480	1,650	1,750	1,800	1,890	1,720	4,490	9,640	10,800	4,900	2,190
8	2,110	2,410	1,990	1,800	1,800	1,860	1,780	4,430	10,600	10,200	4,600	2,120
9	2,230	2,410	1,980	1,800	1,800	1,930	1,720	4,620	12,900	9,830	4,580	2,080
10	2,260	2,370	1,800	1,900	1,800	1,920	1,660	5,880	16,300	9,660	4,210	2,090
11	2,320	2,340	1,650	1,900	1,800	1,930	1,710	7,510	19,200	8,960	3,940	2,130
12	2,270	2,340	1,570	1,900	1,800	1,930	1,740	8,880	19,600	8,650	3,770	2,190
13	2,230	2,320	1,690	1,950	1,800	2,010	1,650	9,920	19,200	9,300	3,680	2,190
14	2,230	2,260	1,890	2,000	1,920	1,950	1,810	10,500	20,200	9,070	3,570	2,190
15	2,470	2,260	1,700	1,900	1,830	1,910	2,050	10,600	22,200	9,120	3,250	2,160
16	2,900	2,260	1,550	1,850	1,730	1,830	2,190	10,900	19,700	9,330	3,120	2,120
17	2,850	2,290	1,500	1,900	1,760	1,870	2,110	11,400	16,200	9,330	2,910	2,090
18	2,810	2,320	1,650	1,900	1,770	1,950	2,010	12,200	14,300	8,860	2,810	2,060
19	2,840	2,330	1,900	1,900	1,790	2,010	2,050	13,900	13,000	8,960	2,870	2,050
20	2,840	2,300	2,100	1,900	1,810	1,980	2,110	15,600	11,900	9,890	2,850	2,040
21	2,790	2,290	2,100	1,850	1,770	2,110	1,990	16,800	11,600	9,380	2,730	1,990
22	2,760	2,250	2,000	1,700	1,850	2,040	1,860	16,800	11,900	9,250	2,730	1,970
23	2,670	2,080	2,050	1,600	1,780	1,910	1,910	15,500	12,300	8,700	2,640	1,970
24	2,570	2,120	2,000	1,600	1,800	1,890	1,940	14,200	12,500	7,920	2,540	2,110
25	2,500	2,060	1,950	1,600	1,910	1,850	2,300	14,000	12,300	6,890	2,690	2,150
26	2,500	2,110	1,900	1,750	1,940	1,830	2,290	13,700	12,900	6,340	2,630	2,190
27	2,530	2,200	1,750	1,900	1,930	1,890	2,370	12,600	14,000	5,740	2,610	2,220
28	2,580	2,150	1,750	1,700	2,000	1,910	2,430	11,000	14,600	5,380	2,540	2,230
29	2,570	1,930	1,950	1,750	-----	1,910	2,720	9,940	14,100	4,900	2,480	2,230
30	2,510	2,050	1,950	1,650	-----	1,940	3,280	9,610	14,000	4,620	2,440	2,250
31	2,340	-----	1,850	1,750	-----	1,880	-----	9,970	-----	4,470	2,400	-----
TOTAL	75,180	68,450	58,130	55,450	50,940	60,130	59,980	295,460	420,870	282,150	104,200	65,000
MEAN	2,425	2,282	1,875	1,789	1,819	1,940	1,999	9,531	14,030	9,102	3,361	2,167
MAX	2,900	2,550	2,200	2,000	2,000	2,110	3,280	16,800	22,200	13,800	4,900	2,390
MIN	1,950	1,930	1,500	1,550	1,700	1,830	1,590	3,010	9,640	4,470	2,400	1,970
AC-FT	149,100	135,800	115,300	110,000	101,000	119,300	119,000	586,000	834,800	559,600	206,700	128,900

CAL YR 1972 TOTAL 1,224,290 MEAN 3,345 MAX 15,300 MIN 1,500 AC-FT 2,428,000
WTR YR 1973 TOTAL 1,595,940 MEAN 4,372 MAX 22,200 MIN 1,500 AC-FT 3,166,000

NOTE.--No gage-height record Dec. 22 to Feb. 13.

COLORADO RIVER MAIN STEM

09095500 COLORADO RIVER NEAR CAMEO, COLO.

LOCATION.--Lat 39°14'20", long 108°16'00", in SW¼SW¼ sec.30, T.9 S., R.97 W., Mesa County, on left bank 100 ft (30 m) north of U.S. Highways 6 and 24, 0.5 mi (0.8 km) upstream from Jackson Canyon, 5.9 mi (9.5 km) upstream from Grand Valley project diversion dam, and 7 mi (11 km) northeast of Cameo.

DRAINAGE AREA.--8,050 mi² (20,850 km²), approximately.

PERIOD OF RECORD.--October 1933 to current year.

GAGE.--Water-stage recorder. Datum of gage is 4,813.73 ft (1,467.225 m) above mean sea level. Prior to Oct. 10, 1934, nonrecording gage on river and water-stage recorder on highline canal, about 10 mi (16 km) downstream at different datum. Oct. 10, 1934, to Feb. 27, 1958, water-stage recorder at site 3.0 mi (4.8 km) downstream at datum 22.55 ft (6.873 m) lower.

AVERAGE DISCHARGE.--40 years, 3,860 ft³/s (109.3 m³/s), 2,797,000 acre-ft/yr (3,450 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 22,400 ft³/s (634 m³/s) June 15 (gage height, 10.57 ft or 3.222 m); minimum daily, 1,600 ft³/s (45.3 m³/s) Jan. 3.
 Period of record: Maximum discharge, 36,000 ft³/s (1,020 m³/s) June 16, 1935 (gage height, 10.91 ft or 3.325 m, site and datum then in use); maximum gage height, 11.60 ft or 3.536 m (site and datum then in use) June 8, 1952; minimum daily discharge, 700 ft³/s (19.8 m³/s) Dec. 29, 1939.
 REVISIONS.--The maximum discharge for the water year 1970 has been revised to 22,000 ft³/s (623 m³/s) May 23, 1970 (gage height, 10.39 ft or 3.167 m), superseding figure published in WSP 2124.

REMARKS.--Records good. Natural flow of stream affected by transmountain diversions, storage reservoirs, power developments, and diversion for irrigation of about 160,000 acres (648 km²). Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--Revised figures of discharge, in cubic feet per second, for highwater period in water year 1970, superseding figures published in WSP 2124, are given below:

DATE	DISCHARGE	DATE	DISCHARGE
1970		1970	
May 21	20,600	May 25	21,100
22	21,300	26	21,000
23	21,600	27	20,900
24	21,500	28	21,000
		29	20,400

MONTH	CFS/DAYS	MAXIMUM	MINIMUM	MEAN	RUNOFF IN ACRE-FEET
May 1970	421,450	21,600	3,140	13,600	835,900
WTR YR 1970	1,651,680	21,600	1,450	4,525	3,276,000
CAL YR 1970	1,671,930	21,600	1,450	4,581	3,316,000

COLORADO RIVER MAIN STEM

255

09095500 COLORADO RIVER NEAR CAMEO, COLO.--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,340	2,640	2,480	1,800	1,900	2,210	1,890	3,530	10,300	14,600	4,200	2,560
2	2,320	2,530	2,460	1,700	1,850	2,210	1,870	3,440	11,200	14,400	4,040	2,570
3	2,210	2,600	2,320	1,600	1,800	2,120	1,890	3,080	11,200	13,700	3,920	2,590
4	2,260	2,620	2,320	1,900	1,950	2,040	1,850	3,030	11,400	12,800	3,800	2,560
5	2,430	2,730	2,360	1,950	1,950	2,040	1,720	3,350	10,300	12,600	3,820	2,530
6	2,310	2,840	2,220	1,950	2,000	2,040	1,770	3,960	9,290	12,000	4,440	2,480
7	2,320	2,750	1,980	1,850	1,950	1,950	1,800	4,400	8,930	11,100	4,660	2,440
8	2,340	2,680	2,270	1,900	1,950	1,930	1,810	4,340	9,850	10,400	4,420	2,380
9	2,590	2,680	2,360	1,950	1,900	2,010	1,780	4,540	12,300	9,920	4,400	2,350
10	2,460	2,640	2,150	2,050	1,900	1,980	1,730	5,870	14,900	9,690	4,100	2,360
11	2,510	2,620	1,960	2,000	1,900	1,980	1,770	7,690	17,400	8,990	3,860	2,380
12	2,500	2,620	1,750	1,950	1,900	1,990	1,760	9,080	19,400	8,540	3,700	2,440
13	2,440	2,600	1,950	2,050	1,900	2,090	1,720	10,100	19,000	9,140	3,600	2,440
14	2,460	2,530	2,000	2,100	1,850	2,010	1,830	10,700	19,800	8,930	3,530	2,440
15	2,950	2,570	1,800	2,000	1,800	1,920	2,060	10,800	22,000	9,020	3,280	2,410
16	3,180	2,550	1,650	1,950	1,750	1,860	2,210	11,100	20,000	9,260	3,150	2,360
17	3,090	2,570	1,650	2,000	1,700	1,900	2,180	11,600	16,600	9,350	3,000	2,330
18	3,010	2,590	1,900	2,000	1,750	1,990	2,110	12,500	14,500	8,870	2,890	2,320
19	3,050	2,600	2,100	2,000	1,800	2,090	2,090	14,300	13,200	8,820	2,920	2,320
20	3,030	2,590	2,200	2,000	1,800	2,120	2,180	16,100	12,100	9,980	2,930	2,290
21	3,030	2,570	2,250	1,950	1,750	2,260	2,080	17,400	11,500	9,350	2,810	2,240
22	2,970	2,530	2,100	1,800	1,800	2,200	1,940	17,500	11,900	9,230	2,810	2,210
23	2,880	2,380	2,200	1,700	1,750	2,080	1,960	16,200	12,400	8,650	2,750	2,210
24	2,770	2,390	2,100	1,700	1,900	2,020	2,000	14,400	12,800	7,880	2,630	2,300
25	2,690	2,340	2,100	1,750	1,850	1,990	2,240	14,000	12,700	6,880	2,750	2,360
26	2,660	2,390	2,000	1,850	2,240	1,960	2,360	13,800	13,200	6,200	2,720	2,380
27	2,750	2,460	1,850	2,000	2,120	1,990	2,380	12,700	14,600	5,630	2,720	2,390
28	2,800	2,460	1,850	1,800	2,150	1,970	2,410	10,900	15,300	5,170	2,680	2,410
29	2,770	2,210	2,050	1,850	-----	1,990	2,620	9,560	14,900	4,760	2,630	2,420
30	2,770	2,380	2,050	1,750	-----	1,990	3,130	9,110	14,700	4,520	2,600	2,440
31	2,590	-----	1,950	1,850	-----	1,940	-----	9,440	-----	4,360	2,600	-----
TOTAL	82,480	76,660	64,380	58,700	52,860	62,870	61,140	298,520	417,670	284,740	104,360	71,910
MEAN	2,661	2,555	2,077	1,894	1,888	2,028	2,038	9,630	13,920	9,185	3,366	2,397
MAX	3,180	2,840	2,480	2,100	2,240	2,260	3,130	17,500	22,000	14,600	4,660	2,590
MIN	2,210	2,210	1,650	1,600	1,700	1,860	1,720	3,030	8,930	4,360	2,600	2,210
AC-FT	163,600	152,100	127,700	116,400	104,800	124,700	121,300	592,100	828,400	564,800	207,000	142,600
CAL YR 1972	TOTAL 1,303,090		MEAN 3,560		MAX 15,800		MIN 1,650		AC-FT 2,585,000			
WTR YR 1973	TOTAL 1,636,290		MEAN 4,483		MAX 22,000		MIN 1,600		AC-FT 3,246,000			

NOTE.--No gage-height record Dec. 14 to Feb. 13.

COLORADO RIVER BASIN

09095528 LATERAL NO. 48 NEAR MACK, COLO.

LOCATION.--Lat 39°16'17", long 108°49'59", in NE¼SE¼ sec.5, T.2 N., R.3 W., Ute meridian, Mesa County, on left bank 400 ft (120 m) downstream from headgate on Government Highline Canal and 3.7 mi (6.0 km) north of Mack.

PERIOD OF RECORD.--April to September 1973.

GAGE.--Water-stage recorder and sharp-crested weir. Altitude of gage is 4,720 ft (1,439 m) from topographic map.

EXTREMES.--Maximum daily discharge during period, 43 ft³/s (1.22 m³/s) June 30 to July 4; no flow Apr. 1-16.

REMARKS.--Records fair. Water is used for irrigation of lands below gage along Mack Wash and Reed Wash. One small ditch diverts water about 10 ft (3 m) above gage. The entire flow is regulated by diversion gates.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1							0	21	34	43	34	34
2							0	21	34	43	34	34
3							0	23	27	43	34	33
4							0	23	27	43	34	30
5							0	25	27	41	33	30
6							0	32	23	38	34	30
7							0	40	21	37	35	30
8							0	32	20	37	36	29
9							0	32	20	37	35	30
10							0	30	23	37	34	30
11							0	34	20	37	32	31
12							0	35	20	37	31	29
13							0	34	20	36	36	31
14							0	34	23	36	38	21
15							0	34	23	38	37	21
16							0	34	23	36	38	21
17							8.0	38	23	35	38	21
18							8.0	38	23	38	38	22
19							8.0	42	20	38	38	20
20							8.0	38	23	36	38	18
21							8.0	42	21	34	41	16
22							8.0	34	21	33	38	16
23							10	36	27	33	38	16
24							10	34	30	33	34	16
25							10	34	30	31	38	16
26							14	34	33	30	32	16
27							14	34	30	32	32	15
28							17	34	35	33	34	14
29					-----		17	34	40	33	34	14
30					-----		21	35	43	32	33	14
31		-----			-----		-----	36	-----	30	33	-----
TOTAL							161.0	1,027	784	1,120	1,093	698
MEAN							5.37	33.1	26.1	36.1	35.3	23.3
MAX							21	42	43	43	41	34
MIN							0	21	20	30	31	14
AC-FT							319	2,040	1,560	2,220	2,170	1,380

09095530 GOVERNMENT HIGHLINE CANAL NEAR MACK, COLO.

LOCATION.--Lat 39°17'09", long 108°49'46", in NE¼SE¼ sec.12, T.9 S., R.103 W., 6th principal meridian, Mesa County, on right bank 50 ft (15 m) upstream from flume over Mack Wash, 1.1 mi (1.8 km) downstream from headgate of Lateral No. 48, and 4.6 mi (7.4 km) north of Mack.

PERIOD OF RECORD.--April to September 1973.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 4,717 ft (1,438 m) from topographic map.

EXTREMES.--Maximum daily discharge during period, 165 ft³/s (4.67 m³/s) July 18; no flow Apr. 1-10, 12-15.

REMARKS.--Records fair. Government Highline Canal diverts water from the Colorado River in SE¼NW¼ sec.13, T.10 S., R.98 W. Water flowing past this gage is used for irrigation in Salt Creek basin. Surplus flows are wasted into West Salt Creek and Badger Wash. Water can be wasted into Mack Wash from flume below gage. The entire flow is regulated by diversion gates.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1							0	106	151	157	148	156
2							0	109	151	164	156	159
3							0	109	151	151	160	164
4							0	94	151	151	155	154
5							0	96	154	154	153	148
6							0	94	151	156	150	148
7							0	104	145	156	156	148
8							0	101	148	156	156	148
9							0	104	148	148	158	149
10							0	100	148	153	152	149
11							20	104	150	153	156	149
12							0	110	149	149	159	150
13							0	110	145	144	156	150
14							0	110	158	151	150	149
15							0	139	152	158	147	148
16							74	139	145	164	153	148
17							88	145	145	145	152	148
18							88	144	151	165	153	148
19							88	144	145	157	156	148
20							88	164	145	156	156	150
21							88	145	145	115	148	150
22							88	145	145	115	148	150
23							88	147	145	156	148	149
24							88	149	145	149	156	147
25							88	150	147	148	164	144
26							88	151	145	145	163	143
27							88	158	151	146	158	138
28							88	151	151	147	150	133
29					-----		88	151	151	146	146	133
30					-----		88	151	158	145	139	133
31	-----				-----		-----	151	-----	145	146	-----
TOTAL							1,326	3,975	4,466	4,645	4,748	4,431
MEAN							44.2	128	149	150	153	148
MAX							88	164	158	165	164	164
MIN							0	94	145	115	139	133
AC-FT							2,630	7,880	8,860	9,210	9,420	8,790

PLATEAU CREEK BASIN

09096100 VEGA RESERVOIR NEAR COLLBRAN, COLO.

LOCATION.--Lat 39°13'30", long 107°48'40", in sec.6, T.10 S., R.93 W., Mesa County, at dam on Plateau Creek, 10 mi (16 km) southeast of Collbran.

DRAINAGE AREA.--24.4 mi² (63.2 km²).

PERIOD OF RECORD.--April 1960 to current year.

GAGE.--Nonrecording gage read once daily. Datum of gage is 7,906 ft (2,409.7 m) above mean sea level (Bureau of Reclamation bench mark); gage readings have been reduced to elevations above mean sea level.

EXTREMES (at 0800).--Current year: Maximum contents, 35,130 acre-ft (43.3 hm³) June 10-13 (elevation, 7,986.4 ft or 2,434.25 m); minimum, 6,020 acre-ft (7.42 hm³) Oct. 1-4 (elevation, 7,938.0 ft or 2,419.50 m).
Period of record: Maximum contents, 35,130 acre-ft (43.3 hm³) June 10-13, 1973 (elevation, 7,986.4 ft or 2,434.25 m); minimum since first filling in May 1962, 946 acre-ft (1.17 hm³) Oct. 17-25, 1967 (elevation, 7,915.3 ft or 2,412.58 m).

REMARKS.--Reservoir is formed by an earth and rockfill dam. Dam completed by Bureau of Reclamation in 1960. Usable storage began in May 1958 while dam was under construction. Capacity of reservoir, 32,930 acre-ft (40.6 hm³) between elevations 7,906 ft or 2,409.7 m (bottom of outlet gate) and 7,984 ft or 2,433.5 m (crest of spillway). Dead storage, 823 acre-ft (1.01 hm³). Figures given are usable contents. Reservoir is used to store water for irrigation and power development.

COOPERATION.--Records furnished by Bureau of Reclamation.

MONTHEND ELEVATION AND CONTENTS AT 0800, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	ELEVATION (FEET)	CONTENTS (ACRE-FEET)	CHANGE IN CONTENTS (ACRE-FEET)
Sept. 30.....	7,938.0	6,020	-
Oct. 31.....	7,947.3	9,360	+3,340
Nov. 30.....	7,950.5	10,710	+1,350
Dec. 31.....	7,953.6	12,120	+1,410
CAL YR 1972	-	-	-390
Jan. 31.....	7,955.7	13,150	+1,030
Feb. 28.....	7,957.2	13,920	+770
Mar. 31.....	7,959.0	14,890	+970
Apr. 30.....	7,961.6	16,370	+1,480
May 31.....	7,986.0	34,760	+18,390
June 30.....	7,985.9	34,660	-100
July 31.....	7,979.1	28,700	-5,960
Aug. 31.....	7,965.3	18,630	-10,070
Sept. 30.....	7,951.5	11,150	-7,480
WTR YR 1973	-	-	+5,130

PLATEAU CREEK BASIN

259

09096500 PLATEAU CREEK NEAR COLLEBRAN, COLO.

LOCATION.--Lat 39°15'02", long 107°50'24", in SE4NE4 sec.26, T.9 S., R.94 W., Mesa County, on right bank 10 ft (3 m) downstream from private bridge, 1.5 mi (2.4 km) downstream from Leon Creek, and 6.6 mi (10.6 km) east of Collbran.

DRAINAGE AREA.--80.4 mi² (208.2 km²).

PERIOD OF RECORD.--September 1921 to current year. Prior to October 1933 monthly discharge only, published in WSP 1313.

GAGE.--Water-stage recorder. Altitude of gage is 7,130 ft (2,173 m) from topographic map.

EXTREMES.--Current year: Maximum discharge, 1,240 ft³/s (35.1 m³/s) June 14 (gage height, 5.26 ft or 1.603 m); minimum daily, 3.7 ft³/s (0.10 m³/s) Nov. 28.

Period of record: Maximum discharge, 3,080 ft³/s (87.2 m³/s) May 27, 1922 (gage height, 6.90 ft or 2.103 m), from rating curve extended above 1,300 ft³/s (37 m³/s); minimum daily, 1.9 ft³/s (0.054 m³/s) Feb. 26, 1961 (result of storage in Vega Reservoir); minimum daily prior to construction of Vega Reservoir, 3.0 ft³/s (0.085 m³/s) Sept. 21, 1926.

REMARKS.--Records good except those for winter period, which are fair. Natural flow of stream affected by storage in Vega Reservoir (see preceding page) since May 1958, transbasin diversion to Surface Creek in Gunnison River basin, diversions above station for irrigation of about 800 acres (3.24 km²) above and about 8,400 acres (34.0 km²) below station and about 550 acres (2.23 km²) in Buzzard Creek drainage, and for power development.

REVISIONS (WATER YEARS).--WSP 1243: 1922(M), 1935(M). WSP 1924: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.4	5.3	4.5	4.8	5.0	5.3	5.0	12	495	195	22	23
2	7.4	4.3	4.8	4.9	5.0	5.3	5.0	11	520	183	32	21
3	7.1	4.3	5.0	5.0	5.0	5.3	5.1	12	440	148	29	21
4	7.4	4.3	5.2	5.2	5.0	5.3	5.2	14	382	114	27	22
5	7.4	4.5	5.3	5.1	5.0	5.3	5.3	13	313	96	40	21
6	7.4	4.8	5.0	5.3	4.8	5.6	5.3	13	366	79	48	20
7	7.4	4.7	4.8	5.3	4.8	5.6	5.4	12	525	64	47	26
8	7.4	4.8	4.8	5.3	4.8	5.6	5.5	13	695	49	37	36
9	6.5	5.0	5.0	5.3	4.8	5.3	5.2	14	914	40	26	36
10	5.3	5.2	4.8	5.3	4.7	5.3	5.0	15	974	37	22	39
11	5.6	4.8	5.0	5.0	4.7	5.4	5.3	15	897	45	21	47
12	5.6	4.8	5.0	5.3	4.7	5.3	5.9	19	842	47	23	52
13	5.6	4.8	5.0	5.0	4.7	5.6	6.8	29	809	51	29	45
14	5.9	5.0	4.8	5.0	4.6	5.6	7.4	46	958	50	32	40
15	8.0	5.0	4.8	5.0	4.6	5.5	7.4	45	985	49	32	33
16	8.4	5.0	5.0	5.0	4.8	5.4	7.4	39	727	47	31	34
17	6.5	5.0	5.3	5.0	4.8	5.2	7.1	39	625	49	32	53
18	6.8	4.8	5.6	5.0	4.8	5.0	7.1	61	570	51	41	50
19	33	5.2	5.3	5.3	5.0	5.0	7.1	120	445	50	33	38
20	40	5.4	5.0	5.3	5.0	5.3	6.8	119	425	50	26	26
21	5.9	5.3	5.0	5.4	5.0	5.0	6.8	172	386	45	41	23
22	4.0	5.0	5.0	5.4	5.0	5.0	7.1	152	362	45	43	21
23	3.8	5.2	5.0	5.2	5.2	5.0	7.4	89	299	40	47	23
24	3.8	5.2	5.0	5.2	5.3	5.0	9.1	135	292	36	39	33
25	4.0	5.2	5.0	5.2	5.3	5.0	10	245	295	36	36	30
26	3.8	5.4	5.0	5.0	5.3	5.0	10	268	313	36	29	32
27	4.3	4.4	5.0	5.2	5.0	5.0	11	289	306	36	26	30
28	4.8	3.7	5.3	5.3	5.0	5.0	11	274	283	31	15	29
29	4.8	4.4	5.0	5.2	-----	5.0	13	265	263	28	10	27
30	5.3	4.7	4.8	5.1	-----	5.0	14	292	230	26	18	25
31	5.4	-----	4.8	5.0	-----	5.0	-----	378	-----	24	22	-----
TOTAL	246.0	145.5	154.9	159.6	137.7	162.2	219.7	3,220	15,936	1,877	956	956
MEAN	7.94	4.65	5.00	5.15	4.92	5.23	7.32	104	531	60.5	30.8	31.9
MAX	40	5.4	5.6	5.4	5.3	5.6	14	378	985	195	48	53
MIN	3.8	3.7	4.5	4.8	4.6	5.0	5.0	11	230	24	10	20
AC-FT	488	289	307	317	273	322	436	6,390	31,610	3,720	1,900	1,900

CAL YR 1972 TOTAL 5,934.6 MEAN 16.2 MAX 100 MIN 3.7 AC-FT 11,770

WTR YR 1973 TOTAL 24,170.6 MEAN 66.2 MAX 985 MIN 3.7 AC-FT 47,940

PLATEAU CREEK BASIN

09097500 BUZZARD CREEK NEAR COLLBRAN, COLO.

LOCATION.--Lat 39°16'20", long 107°51'00", in SE¼SW¼ sec.14, T.9 S., R.94 W., Mesa County, on right bank 150 ft (46 m) upstream from county bridge, 1.1 mi (1.8 km) upstream from Brush Creek, and 7 mi (11 km) east of Collbran.

DRAINAGE AREA.--143 mi² or 370 km² (revised).

PERIOD OF RECORD.--September 1921 to current year. Prior to October 1933 monthly discharge only, published in WSP 1313.

GAGE.--Water-stage recorder. Altitude of gage is 6,955 ft (2,120 m) from topographic map.

AVERAGE DISCHARGE.--52 years, 47.3 ft³/s (1.340 m³/s), 34,270 acre-ft/yr (423 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,260 ft³/s (35.7 m³/s) May 19 (gage height, 6.97 ft or 2.124 m); minimum daily, 0.42 ft³/s (0.12 m³/s) Aug. 27.

Period of record: Maximum discharge, 1,630 ft³/s (46.2 m³/s) May 14, 1941 (gage height, 7.80 ft or 2.377 m), from rating curve extended above 900 ft³/s (25 m³/s); no flow for many days in 1959-60, 1963.

REMARKS.--Records good. Diversions for irrigation of about 1,300 acres (5.26 km²) above station. Erie Canal imports water from Plateau Creek for irrigation of about 280 acres (1.13 km²) above station. Small diversions above station from Middleton and Uhl Creeks to West Mamm Creek (Mamm Creek basin).

REVISIONS (WATER YEARS).--WSP 1313: 1922(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.8	12	7.5	6.6	8.8	7.0	11	190	382	61	9.6	2.2
2	1.9	9.6	8.4	5.9	8.4	6.6	10	143	395	54	6.3	3.0
3	2.0	8.6	8.8	6.1	7.9	6.1	10	156	398	33	6.3	4.1
4	2.0	7.9	8.8	6.6	8.4	6.5	9.6	240	466	40	4.7	5.5
5	2.1	13	8.4	6.6	8.8	5.9	12	295	387	87	8.7	6.0
6	2.4	14	8.8	6.6	8.8	7.0	20	278	319	68	46	6.6
7	3.9	9.7	7.9	6.6	8.8	8.4	31	206	340	54	39	7.6
8	4.3	14	7.5	6.6	8.4	7.9	18	253	370	50	22	6.1
9	5.4	14	7.0	6.1	7.5	5.9	19	371	396	54	13	6.1
10	5.4	8.3	6.6	6.1	6.6	5.6	15	579	403	65	7.2	5.8
11	5.0	11	7.5	6.1	6.4	6.1	21	741	396	53	4.4	6.5
12	5.0	11	7.9	6.6	6.4	7.5	41	829	380	52	1.7	7.6
13	5.1	11	7.5	6.6	6.1	7.7	68	854	400	88	1.6	8.3
14	4.5	7.1	7.0	6.6	5.4	8.1	91	760	435	81	1.8	6.7
15	11	12	7.0	7.0	5.2	7.9	84	682	537	63	1.9	6.0
16	42	10	7.0	7.9	5.2	6.6	57	664	364	46	1.7	4.7
17	17	8.2	8.8	8.4	5.2	7.7	85	751	256	34	1.5	4.1
18	13	12	9.7	8.4	5.4	9.0	98	772	234	37	2.9	3.9
19	15	9.3	9.2	9.7	5.4	8.8	72	927	197	82	1.5	2.8
20	42	9.4	8.8	10	5.2	9.1	57	812	181	119	1.3	2.5
21	26	9.7	8.4	9.7	5.2	13	62	797	157	102	1.3	2.3
22	17	4.9	7.9	10	5.4	11	72	708	149	81	4.0	2.6
23	17	8.0	7.9	8.8	5.6	8.6	107	516	133	50	2.6	2.5
24	14	8.0	7.0	8.8	5.6	9.9	149	486	119	34	.74	3.6
25	10	6.6	7.0	8.4	5.9	10	169	485	111	26	.54	4.2
26	8.0	7.2	6.4	9.2	5.9	10	133	551	113	21	.45	5.8
27	7.6	6.6	6.4	9.2	7.0	12	157	404	110	19	.42	6.4
28	10	7.0	7.0	8.4	7.0	13	219	349	103	13	.48	6.3
29	11	8.8	7.5	7.9	-----	12	257	346	91	12	.48	5.9
30	9.2	7.5	7.5	7.9	-----	11	252	335	77	12	.60	5.8
31	7.9	-----	7.0	9.2	-----	8.1	-----	351	-----	13	1.2	-----
TOTAL	328.5	286.4	240.1	238.4	185.9	264.0	2,406.6	15,800	8,399	1,604	195.91	151.5
MEAN	10.6	9.55	7.75	7.69	6.64	8.52	80.2	510	280	51.7	6.32	5.05
MAX	42	14	9.7	10	8.8	13	257	927	537	119	46	8.3
MIN	1.8	4.9	6.4	5.9	5.2	5.6	9.6	143	77	12	.42	2.2
AC-FT	652	568	476	473	369	524	4,770	31,340	16,660	3,180	389	301

CAL YR 1972 TOTAL 10,756.94 MEAN 29.4 MAX 171 MIN .68 AC-FT 21,340
WTR YR 1973 TOTAL 30,100.31 MEAN 82.5 MAX 927 MIN .42 AC-FT 59,700

PEAK DISCHARGE (BASE, 350 CFS).--May 19 (0500) 1,260 cfs (6.97 ft).

PLATEAU CREEK BASIN

261

09105000 PLATEAU CREEK NEAR CAMEO, COLO.

LOCATION.--Lat 39°11'01", long 108°16'06", in NW¼SW¼ sec.18, T.10 S., R.97 W., Mesa County, on left bank 300 ft (91 m) from State Highway 65, 1.1 mi (1.8 km) upstream from mouth, and 4.0 mi (6.4 km) northeast of Cameo.

DRAINAGE AREA.--592 mi² (1,533 km²).

PERIOD OF RECORD.--October 1935 to current year. Prior to May 1936 monthly discharge only, published in WSP 1313.

GAGE.--Water-stage recorder. Altitude of gage is 4,836 ft (1,474 m) from topographic map. Prior to Aug. 27, 1936, nonrecording gage.

AVERAGE DISCHARGE.--38 years, 186 ft³/s (5.268 m³/s), 134,800 acre-ft/yr (166 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 5,580 ft³/s (158 m³/s) June 15 (gage height, 7.99 ft or 2.435 m); minimum daily, 70 ft³/s (1.98 m³/s) Jan. 2.
Period of record: Maximum discharge, 5,580 ft³/s (158 m³/s) June 15, 1973 (gage height, 7.99 ft or 2.435 m); minimum daily, 13 ft³/s (0.37 m³/s) July 31, 1959.

REMARKS.--Records good except those for winter period, which are fair. Natural flow of stream affected by storage reservoirs, diversions for irrigation of about 25,000 acres (101 km²), return flow from irrigated areas, and for power development. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 979: 1942. WSP 2124: Drainage area.

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	106	110	89	75	80	139	94	458	1,230	480	121	105
2	105	116	88	70	75	123	93	339	1,460	435	124	97
3	103	122	87	80	75	112	94	297	1,400	387	118	96
4	104	113	87	90	80	88	94	398	1,530	343	114	106
5	143	115	122	95	80	100	96	522	1,130	299	140	112
6	140	198	115	101	85	99	117	561	1,160	252	232	120
7	133	132	126	98	85	101	144	437	1,440	240	184	125
8	127	115	116	98	80	109	111	433	1,930	199	164	108
9	147	123	89	100	77	114	118	532	2,090	188	156	102
10	125	114	87	95	80	109	121	804	2,090	166	134	101
11	118	112	90	90	85	102	125	1,090	1,770	173	107	134
12	110	114	100	95	90	122	149	1,300	1,750	187	100	150
13	106	116	100	100	91	159	179	1,370	1,590	194	104	140
14	105	111	95	100	94	109	215	1,300	1,930	210	122	142
15	180	119	95	105	92	98	215	1,160	3,400	204	124	118
16	256	130	90	110	94	102	144	1,130	1,840	185	118	108
17	155	124	89	120	82	105	184	1,180	1,280	176	115	120
18	150	118	93	110	82	118	225	1,230	1,190	181	113	130
19	155	112	102	105	77	111	217	1,530	988	239	109	131
20	250	109	109	100	75	128	179	1,450	909	312	116	128
21	204	108	112	100	81	173	166	1,560	844	291	118	114
22	168	107	105	95	85	124	160	1,420	808	277	143	110
23	158	105	98	95	83	114	184	1,000	703	233	151	109
24	148	104	90	95	80	105	255	985	664	209	139	118
25	117	102	88	95	100	89	367	1,150	625	196	111	124
26	109	97	86	100	102	101	288	1,390	634	182	103	127
27	107	97	89	100	112	120	285	1,090	631	172	116	140
28	119	93	95	90	116	124	400	950	601	162	141	154
29	120	90	93	80	-----	125	475	873	572	156	136	151
30	120	89	91	80	-----	126	528	869	526	147	135	143
31	116	-----	80	85	-----	106	-----	974	-----	125	140	-----
TOTAL	4,304	3,415	2,994	2,952	2,418	3,555	6,022	29,782	38,715	7,200	4,048	3,663
MEAN	139	114	96.6	95.2	86.4	115	201	961	1,291	232	131	122
MAX	256	198	126	120	116	173	528	1,560	3,400	480	232	154
MIN	103	89	80	70	75	88	93	297	526	125	100	96
AC-FT	8,540	6,770	5,940	5,860	4,800	7,050	11,940	59,070	76,790	14,280	8,030	7,270

CAL YR 1972 TOTAL 42,936 MEAN 117 MAX 322 MIN 57 AC-FT 85,160
WTR YR 1973 TOTAL 109,068 MEAN 299 MAX 3,400 MIN 70 AC-FT 216,300

LEWIS WASH BASIN

09106200 LEWIS WASH NEAR GRAND JUNCTION, COLO.

LOCATION.--Lat 39°03'38", long 108°28'38", in NW¼NW¼ sec.22, T.1 S., R.1 E., Ute meridian, Mesa County, on left bank at upstream side of bridge on 31 Rd., 700 ft (210 m) upstream from mouth and 4.5 mi (7.2 km) east of city hall in Grand Junction.

DRAINAGE AREA.--4.72 mi² (12.22 km²).

PERIOD OF RECORD.--April to September 1973.

GAGE.--Water-stage recorder. Altitude of gage is 4,610 ft (1,405 m) from topographic map.

EXTREMES.--Maximum discharge during period, 33 ft³/s (0.93 m³/s) June 15 (gage height, 2.50 ft or 0.762 m); minimum daily, 0.30 ft³/s (0.008 m³/s) Apr. 1-3.

REMARKS.--Records good. Flow is mostly return flow and waste water from lands irrigated under the Government Highline Canal and Price and Stub ditches. At times overflow from water delivered by the Grand Valley Canal to Mesa County ditch flows past station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1							.30	12	15	10	20	18
2							.30	7.3	22	10	18	21
3							.30	7.9	23	9.3	17	18
4							.34	8.2	24	10	16	17
5							.40	5.6	21	11	17	19
6							.44	17	20	11	17	18
7							.64	17	21	10	17	20
8							.64	19	20	11	17	21
9							.66	17	19	11	17	22
10							.64	15	18	11	16	23
11							4.6	12	17	11	14	23
12							8.5	12	17	14	14	22
13							6.6	12	17	15	12	22
14							5.4	14	19	15	14	19
15							5.1	16	29	16	14	17
16							7.6	18	19	16	14	19
17							14	18	15	15	16	18
18							14	15	14	17	17	18
19							17	14	13	19	17	18
20							14	16	13	21	17	19
21							12	15	13	20	17	19
22							12	15	12	20	16	18
23							12	15	11	18	16	18
24							14	13	10	18	17	19
25							14	14	11	18	18	20
26							14	18	9.5	19	18	19
27							17	18	9.6	21	18	19
28							16	16	10	20	19	18
29							15	15	11	18	18	18
30							9.7	15	11	16	19	19
31		-----			-----		-----	13	-----	19	19	-----
TOTAL							237.16	440.0	484.1	470.3	516	579
MEAN							7.91	14.2	16.1	15.2	16.6	19.3
MAX							17	19	29	21	20	23
MIN							.30	5.6	9.5	9.3	12	17
AC-FT							470	873	960	933	1,020	1,150

GUNNISON RIVER BASIN

263

09108500 TAYLOR PARK RESERVOIR AT TAYLOR PARK, COLO.

LOCATION (REVISED).--Lat 38°49'07", long 106°36'24", Gunnison County, at dam on Taylor River just downstream from Taylor Park, 16 mi (26 km) northeast of Almont.

DRAINAGE AREA.--254 mi² (658 km²).

PERIOD OF RECORD.--October 1937 to current year. Prior to October 1938, published in WSP 1313.

GAGE.--Nonrecording gage read once or twice daily. Datum of gage is 9,187 ft (2,800.2 m) above mean sea level (Bureau of Reclamation bench mark); gage readings have been reduced to elevations above mean sea level.

EXTREMES (at 0800).--Current year: Maximum contents, 108,100 acre-ft (133 hm³) July 5-11 (elevation, 9,330.90 ft or 2,844.058 m); minimum, 33,650 acre-ft (41.5 hm³) Oct. 31, Nov. 1 (elevation, 9,281.00 ft or 2,828.849 m).

Period of record: Maximum contents, 111,000 acre-ft (137 hm³) July 1, 1957, (elevation, 9,332.35 ft or 2,844.500 m); minimum after first filling, 8,780 acre-ft (10.8 hm³) Oct. 19, 20, 1956 (elevation, 9,240.70 ft or 2,816.565 m).

REMARKS.--Reservoir is formed by an earth and rockfill dam. Dam completed by Bureau of Reclamation in September 1937. Capacity of reservoir, 106,200 acre-ft (131 hm³) between elevations 9,187 ft or 2,800.2 m (bottom of outlet gates) and 9,330 ft or 3,843.8 m (crest of spillway). No dead storage. Water used for irrigation in Uncompahgre Valley. Figures given herein are usable contents.

COOPERATION.--Records furnished by Uncompahgre Valley Water Users Association.

REVISIONS (WATER YEARS).--WSP 1089: 1940(m), 1942(M), 1945-46. WSP 1924: Drainage area.

MONTHEND ELEVATION AND CONTENTS AT 0800, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	ELEVATION (FEET)	CONTENTS (ACRE-Feet)	CHANGE IN CONTENTS (ACRE-Feet)
Sept. 30.....	9,294.30	48,020	-
Oct. 31.....	9,281.00	33,650	-14,370
Nov. 30.....	9,283.30	35,650	+2,000
Dec. 31.....	9,285.20	37,490	+1,840
CAL YR 1972	-	-	-27,490
Jan. 31.....	9,286.40	38,750	+1,260
Feb. 28.....	9,287.30	39,730	+980
Mar. 31.....	9,288.00	40,510	+780
Apr. 30.....	9,289.70	42,470	+1,960
May 31.....	9,306.40	64,030	+21,560
June 30.....	9,328.90	103,900	+39,870
July 31.....	9,330.50	107,300	+3,400
Aug. 31.....	9,328.20	102,500	-4,800
Sept. 30.....	9,324.10	94,370	-8,130
WTR YR 1973	-	-	+46,350

GUNNISON RIVER BASIN

09109000 TAYLOR RIVER BELOW TAYLOR PARK RESERVOIR, COLO.

LOCATION.--Lat 38°49'06", long 106°36'31", Gunnison County, on left bank 1,000 ft (300 m) downstream from Taylor Park Reservoir Dam, 3.4 mi (5.5 km) upstream from Lottis Creek, and 17 mi or 27 km (revised) northeast of Almont.

DRAINAGE AREA.--254 mi² (658 km²).

PERIOD OF RECORD.--June 1929 to September 1934 (monthly discharge only, published in WSP 1313), October 1938 to current year.

GAGE.--Water-stage recorder. Datum of gage is 9,169.67 ft (2,794.915 m) above mean sea level (Bureau of Reclamation bench mark). Prior to Nov. 11, 1952, at site 1,600 ft (490 m) downstream at datum 1.00 ft (0.305 m) 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.

AVERAGE DISCHARGE.--5 years (1929-34), 156 ft³/s (4.418 m³/s), 113,000 acre-ft/yr (139 hm³/yr); 35 years (1938-73), 195 ft³/s (5.522 m³/s), 141,300 acre-ft/yr (174 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 524 ft³/s (14.8 m³/s) Oct. 2 (gage height, 4.66 ft or 1.420 m); minimum daily, 46 ft³/s (1.30 m³/s) Nov. 1.

Period of record: Maximum discharge, 2,270 ft³/s (64.3 m³/s) July 1, 1957 (gage height, 7.56 ft or 2.304 m); no flow May 1 to July 3, 1940, May 7-22, 1942, May 5-21, 1943.

REMARKS.--Records good. Flow regulated by Taylor Park Reservoir (see sta. 09108500) since 1937. One small diversion for irrigation from Willow Creek above reservoir.

REVISIONS.--WSP 1924: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	515	46	48	53	54	50	49	52	59	121	214	247
2	516	47	48	53	54	49	49	53	59	124	223	247
3	520	47	49	53	54	49	49	53	59	244	223	247
4	512	47	49	53	54	48	49	54	59	391	223	247
5	512	47	47	53	54	48	49	54	59	460	223	247
6	512	47	49	53	54	48	49	53	59	476	229	247
7	512	47	49	53	54	48	49	54	59	476	229	238
8	512	47	49	53	54	48	49	53	59	468	226	229
9	508	48	49	53	54	48	49	53	68	476	220	247
10	433	48	49	53	54	50	49	54	103	468	208	247
11	381	48	51	53	54	50	49	54	106	440	200	247
12	381	48	51	52	54	50	49	54	109	430	198	247
13	398	48	51	52	54	50	49	54	111	464	223	247
14	395	49	51	52	53	50	49	56	111	472	244	247
15	388	48	51	52	53	50	49	56	114	472	244	244
16	374	48	51	52	52	50	49	56	114	444	244	247
17	374	48	51	52	54	50	49	56	114	405	244	232
18	428	48	51	52	54	50	50	57	114	384	244	250
19	297	48	51	52	53	50	50	57	114	426	244	250
20	297	48	51	52	53	50	50	58	114	456	247	250
21	297	48	51	52	53	50	50	58	114	437	247	250
22	238	48	51	52	52	50	50	58	116	412	247	250
23	203	48	51	52	52	50	50	59	116	363	247	238
24	200	48	51	52	51	50	50	59	116	321	247	238
25	200	48	51	52	51	50	50	59	117	290	247	238
26	200	48	51	52	51	49	50	59	117	262	247	238
27	200	48	51	52	50	49	50	59	119	238	247	241
28	200	48	51	52	50	49	50	59	119	238	247	244
29	198	48	51	52	-----	49	51	59	119	232	247	247
30	198	48	51	52	-----	49	51	59	121	232	247	247
31	108	-----	51	52	-----	49	-----	59	-----	232	247	-----
TOTAL	10,908	1,432	1,559	1,623	1,484	1,530	1,485	1,738	2,938	11,354	7,267	7,335
MEAN	352	47.7	50.3	52.4	51.0	49.4	49.5	56.1	97.9	366	234	245
MAX	520	49	51	53	54	50	51	59	121	476	247	250
MIN	108	46	48	52	50	48	49	52	59	121	198	229
AC-FT	21,640	2,840	3,090	3,220	2,940	3,030	2,950	3,450	5,830	22,520	14,410	14,550
CAL YR 1972	TOTAL 82,548		MEAN 226		MAX 1,010	MIN 46	AC-FT 163,700					
WTR YR 1973	TOTAL 50,653		MEAN 139		MAX 520	MIN 46	AC-FT 100,500					

09110000 TAYLOR RIVER AT ALMONT, COLO.

LOCATION.--Lat 38°39'52", long 106°50'41", in NW¼SE¼ sec.22, T.51 N., R.1 E., Gunnison County, on left bank at Almont, 15 ft (5 m) downstream from bridge on State Highway 306 and 800 ft (240 m) upstream from confluence with East River.

DRAINAGE AREA.--477 mi² (1,235 km²).

PERIOD OF RECORD.--July 1910 to current year. Monthly discharge only for some periods, published in WSP 1313.

GAGE.--Water-stage recorder. Datum of gage is 8,010.76 ft (2,441.680 m) above mean sea level. Prior to Apr. 16, 1922, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--63 years, 340 ft³/s (9.629 m³/s), 246,300 acre-ft/yr (304 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 926 ft³/s (26.2 m³/s) June 14 (gage height, 3.02 ft or 0.920 m); minimum daily, 82 ft³/s (2.32 m³/s) Apr. 9.

Period of record: Maximum discharge observed, 3,760 ft³/s (106 m³/s) June 9, 1920 (gage height, 5.00 ft or 1.524 m), from rating curve extended above 2,300 ft³/s (65 m³/s); maximum gage height, 5.32 ft (1.622 m) July 1, 1957; minimum discharge observed before storage began in Taylor Park Reservoir, 50 ft³/s (1.42 m³/s) for several days in August 1913 (gage height, 1.2 ft or 0.366 m); minimum daily, 24 ft³/s (0.68 m³/s) Mar. 12, 1938.

REMARKS.--Records good except those for period of no gage-height record, which are fair. Flow regulated since September 1937 by Taylor Park Reservoir (see sta. 09108500), 24 mi (39 km) above station. Diversions for irrigation of about 360 acres (1.46 km²) above station.

REVISIONS (WATER YEARS).--WSP 1213: 1911. WSP 1924: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	607	119	99	91	93	109	88	133	425	460	350	335
2	601	113	98	90	90	109	87	128	430	445	340	326
3	596	113	98	90	88	107	87	133	415	500	355	326
4	601	113	97	90	88	105	88	150	420	634	365	322
5	612	115	96	91	90	105	90	168	385	704	360	322
6	601	115	96	92	91	105	91	171	380	730	375	331
7	596	111	96	93	90	105	88	156	410	723	375	335
8	607	113	96	94	90	106	84	168	470	691	370	295
9	658	113	96	93	90	108	82	195	574	730	345	317
10	541	115	96	94	88	109	83	270	730	704	326	350
11	445	113	97	94	86	110	84	360	756	658	308	355
12	450	111	96	94	87	108	84	370	743	671	299	350
13	475	111	95	92	88	107	89	375	743	723	308	335
14	470	111	95	92	88	106	92	355	850	704	340	331
15	475	111	94	94	86	107	90	322	736	691	335	326
16	485	110	93	95	86	100	94	326	640	652	335	326
17	470	110	90	96	85	108	99	326	585	618	335	308
18	440	109	90	96	85	109	101	335	574	612	335	326
19	390	108	92	96	85	109	95	405	525	691	331	308
20	400	107	93	93	85	109	93	420	495	704	331	308
21	395	107	93	89	85	109	93	425	490	691	335	308
22	355	105	92	89	85	108	93	420	485	652	331	308
23	295	102	92	90	88	106	97	380	485	585	326	304
24	290	100	91	89	90	103	105	380	445	520	326	295
25	286	100	91	89	94	101	107	405	490	480	335	304
26	282	99	92	88	98	100	109	430	505	445	370	308
27	282	99	92	88	100	99	115	385	505	415	345	308
28	286	99	90	89	108	97	123	355	510	410	335	308
29	282	98	91	90	-----	94	128	350	520	400	331	313
30	286	98	93	92	-----	92	133	360	485	390	335	313
31	246	-----	91	94	-----	89	-----	375	-----	375	345	-----
TOTAL	13,805	3,248	2,911	2,847	2,507	3,239	2,892	9,531	16,256	18,408	10,532	9,601
MEAN	445	108	93.9	91.8	89.5	104	96.4	307	542	594	340	320
MAX	658	119	99	96	108	110	133	430	850	730	375	355
MIN	246	98	90	88	85	89	82	128	380	375	299	295
AC=FT	27,380	6,440	5,770	5,650	4,970	6,420	5,740	18,900	32,240	36,510	20,890	19,040

CAL YR 1972 TOTAL 126,456 MEAN 346 MAX 1,560 MIN 86 AC=FT 250,800
WTR YR 1973 TOTAL 95,777 MEAN 262 MAX 850 MIN 82 AC=FT 190,000

NOTE.--No gage-height record Nov. 14 to Apr. 16.

GUNNISON RIVER BASIN

09112500 EAST RIVER AT ALMONT, COLO.

LOCATION.--Lat 38°39'52", long 106°50'51", in NW¼SE¼ sec.22, T.51 N., R.1 E., Gunnison County, on left bank at Almont, 200 ft (61 m) upstream from bridge on State Highway 135 and 400 ft (120 m) upstream from confluence with Taylor River.

DRAINAGE AREA.--289 mi² (749 km²).

PERIOD OF RECORD.--April to October 1905, July 1910 to September 1922, October 1934 to current year. Monthly discharge only for some periods, published in WSP 1313.

GAGE.--Water-stage recorder. Datum of gage is 8,006.29 ft (2,440.317 m) above mean sea level. Apr. 16 to Sept. 30, 1965, and July 27, 1910, to Apr. 30, 1922, nonrecording gages at bridge 200 ft (61 m) downstream at different datums. Oct. 1, 1934, to Sept. 22, 1954, water-stage recorder at present site at datum 2.00 ft (0.610 m) higher.

AVERAGE DISCHARGE.--51 years, 341 ft³/s (9.657 m³/s), 247,100 acre-ft/yr (305 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,410 ft³/s (68.3 m³/s) June 14 (gage height, 6.00 ft or 1.829 m); minimum daily, 43 ft³/s (1.22 m³/s) Mar. 16.

Period of record: Maximum discharge observed, 6,500 ft³/s (184 m³/s) June 15, 1921 (gage height, 6.6 ft or 2.01 m, site and datum then in use), from rating curve extended above 3,000 ft³/s (85 m³/s); minimum daily, 19 ft³/s (0.54 m³/s) Aug. 13, 1913.

REMARKS.--Records good except those for winter period, which are fair. Diversions for irrigation of about 7,400 acres (29.9 km²) above station.

REVISIONS (WATER YEARS).--WSP 1213: 1911. WSP 1733: 1952. WSP 1924: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	130	143	94	62	63	60	57	299	1,040	1,460	382	188
2	124	137	94	62	57	57	57	287	1,010	1,340	369	184
3	118	133	89	61	56	57	55	287	980	1,230	360	174
4	112	124	86	60	60	55	52	355	990	1,180	373	160
5	124	140	80	62	62	57	55	418	865	1,110	382	147
6	121	133	75	63	60	55	62	432	815	1,060	459	140
7	115	115	76	64	59	55	67	382	865	968	409	109
8	109	130	78	65	61	55	47	445	1,070	926	364	78
9	133	130	80	68	55	57	60	575	1,410	908	339	83
10	153	109	72	64	55	52	60	780	1,840	908	323	106
11	140	124	72	64	61	52	62	986	2,140	825	303	133
12	133	130	75	66	61	55	65	1,090	2,020	855	291	143
13	124	121	76	68	58	57	72	1,200	1,970	880	275	124
14	115	109	72	65	56	52	80	1,240	2,250	780	271	118
15	121	121	69	66	55	50	86	1,240	1,980	745	271	121
16	231	115	73	72	52	43	70	1,270	1,560	685	267	121
17	202	112	76	76	52	47	83	1,350	1,280	635	259	118
18	191	124	78	78	54	55	92	1,410	1,220	615	255	109
19	213	109	79	76	54	50	86	1,630	1,110	730	251	106
20	263	100	77	72	52	52	80	1,740	1,080	795	251	106
21	224	97	72	65	51	57	83	1,670	1,130	730	263	97
22	191	83	73	58	53	52	86	1,460	1,220	635	251	97
23	177	86	77	54	57	50	97	1,220	1,320	575	231	100
24	156	106	72	57	60	52	118	1,140	1,420	525	228	106
25	156	100	70	66	64	52	124	1,100	1,420	481	239	112
26	150	100	69	72	70	52	140	1,130	1,510	480	228	118
27	150	86	70	63	65	55	153	974	1,630	460	220	106
28	170	97	73	58	60	55	205	835	1,690	440	209	118
29	163	109	74	58	-----	57	251	790	1,820	440	202	115
30	160	106	67	61	-----	52	303	800	1,600	425	202	118
31	147	-----	64	64	-----	52	-----	860	-----	400	195	-----
TOTAL	4,816	3,429	2,352	2,010	1,623	1,659	2,908	29,395	42,245	24,226	8,922	3,655
MEAN	155	114	75.9	64.8	58.0	53.5	96.9	948	1,408	781	288	122
MAX	263	143	94	78	70	60	303	1,740	2,250	1,460	459	188
MIN	109	83	64	54	51	43	47	287	815	400	195	78
AC=FT	9,550	6,800	4,670	3,990	3,220	3,290	5,770	58,300	83,790	48,050	17,700	7,250

CAL YR 1972 TOTAL 95,896 MEAN 262 MAX 1,630 MIN 58 AC=FT 190,200
WTR YR 1973 TOTAL 127,240 MEAN 349 MAX 2,250 MIN 43 AC=FT 252,400

PEAK DISCHARGE (BASE, 1,600 CFS).--May 20 (0500) 1,860 cfs (5.55 ft); June 14 (1300) 2,410 cfs (6.00 ft).

GUNNISON RIVER BASIN

267

09114500 GUNNISON RIVER NEAR GUNNISON, COLO.

LOCATION.--Lat 38°32'31", long 106°56'57", in NW¼NW¼ sec.2, T.49 N., R.1 W., Gunnison County, on right bank 0.7 mi (1.1 km) downstream from Antelope Creek and 1.2 mi (1.9 km) west of Gunnison.

DRAINAGE AREA.--1,012 mi² (2,621 km²).

PERIOD OF RECORD.--October 1910 to December 1928, October 1944 to current year. Monthly discharge only for some periods, published in WSP 1313.

GAGE.--Water-stage recorder. Altitude of gage is 7,655 ft (2,333 m) 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 (1.0 km) downstream at various datums. Oct. 1, 1944, to July 28, 1970, water-stage recorder at sites 0.4 mi (0.6 km) upstream at different datum.

AVERAGE DISCHARGE.--47 years, 774 ft³/s (21.92 m³/s), 560,800 acre-ft/yr (691 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 3,900 ft³/s (110 m³/s) June 14 (gage height, 4.46 ft or 1.359 m); maximum gage height, 5.17 ft (1.576 m) Mar. 10 (backwater from ice); minimum daily discharge, 148 ft³/s (4.19 m³/s) Jan. 23.

Period of record: Maximum discharge observed, 11,400 ft³/s (323 m³/s) June 13, 1918 (gage height, 4.05 ft or 1.234 m, site and datum then in use), from rating curve extended above 5,000 ft³/s (140 m³/s); minimum daily, 80 ft³/s (2.27 m³/s) Dec. 27, 1962.

REMARKS.--Records good except those for winter period, which are fair. Flow regulated by Taylor Park Reservoir (see sta. 09108500), 37 mi (60 km) above station. Diversions for irrigation of about 22,000 acres (89.0 km²) above station.

REVISIONS (WATER YEARS).--WSP 1313: 1911, 1916.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	681	353	253	179	170	210	201	522	1,530	2,310	910	488
2	674	318	250	177	161	210	209	477	1,550	2,120	880	526
3	654	323	250	175	162	210	190	464	1,510	2,010	860	518
4	655	246	248	175	169	208	183	569	1,520	2,080	860	494
5	684	316	245	181	171	203	191	668	1,330	2,060	870	464
6	683	301	243	181	167	205	209	706	1,170	1,980	980	447
7	674	253	243	183	169	205	230	620	1,190	1,860	950	416
8	682	274	240	188	171	209	192	676	1,410	1,850	868	356
9	696	273	236	189	152	210	212	804	1,960	1,830	804	529
10	693	245	212	182	160	200	198	1,090	2,730	1,790	763	438
11	587	259	208	181	170	202	209	1,440	2,980	1,610	720	464
12	576	272	225	185	172	207	228	1,640	2,950	1,660	676	464
13	584	273	225	188	162	211	248	1,960	2,730	1,900	641	441
14	584	255	208	182	158	203	279	2,130	3,200	1,930	636	410
15	593	280	171	179	158	192	296	1,970	3,370	1,770	651	398
16	737	269	177	182	158	191	234	1,920	2,830	1,580	639	406
17	696	259	183	183	159	194	255	1,910	2,280	1,480	632	394
18	657	283	190	187	162	199	277	2,080	2,080	1,430	634	369
19	655	259	195	180	160	198	247	2,310	1,800	1,650	638	382
20	700	254	197	176	153	205	216	2,530	1,690	1,760	627	378
21	660	247	197	188	155	220	212	2,410	1,710	1,750	628	361
22	588	250	195	152	163	205	217	2,100	1,770	1,770	613	358
23	525	226	200	148	172	193	254	1,750	1,970	1,610	583	366
24	512	228	202	157	182	192	297	1,580	2,130	1,480	570	365
25	490	237	193	161	192	188	301	1,540	2,140	1,250	588	374
26	483	240	193	170	203	200	321	1,720	2,290	1,150	611	389
27	473	250	192	167	208	217	356	1,480	2,530	1,100	581	394
28	506	219	193	160	216	210	431	1,290	2,620	1,060	558	398
29	494	255	197	168	-----	208	502	1,180	2,900	1,010	558	407
30	497	295	190	172	-----	190	572	1,130	2,560	980	554	414
31	466	-----	182	176	-----	193	-----	1,250	-----	920	558	-----
TOTAL	18,819	8,062	6,527	5,432	4,755	6,286	7,967	43,916	64,430	50,740	21,661	12,408
MEAN	607	269	211	175	170	203	266	1,417	2,148	1,637	699	414
MAX	737	353	253	189	216	220	572	2,530	3,370	2,310	980	526
MIN	466	219	171	148	152	188	183	464	1,170	920	554	329
AC-FT	37,330	15,990	12,950	10,770	9,430	12,470	15,800	87,110	127,800	100,600	42,960	24,610
CAL YR 1972	TOTAL 225,160	MEAN 615	MAX 3,460	MIN 165	AC-FT 446,600							
WTR YR 1973	TOTAL 251,005	MEAN 688	MAX 3,370	MIN 148	AC-FT 497,900							

NOTE.--No gage-height record Dec. 26 to Feb. 13.

09119000 TOMICHI CREEK AT GUNNISON, COLO.

LOCATION.--Lat 38°31'18", long 106°56'25", in NE¼SW¼ sec.11, T.49 N., R.1 W., Gunnison County, on right bank 300 ft (91 m) downstream from highway bridge, 1.8 mi (2.9 km) southwest of post office in Gunnison, and 2.0 mi (3.2 km) upstream from mouth.

DRAINAGE AREA.--1,061 mi² (2,748 km²).

PERIOD OF RECORD.--November and December 1910 (gage heights and discharge measurements only), October 1937 to current year. Monthly discharge only for some periods, published in WSP 1313. Published as "near Gunnison" 1910.

GAGE.--Water-stage recorder. Datum of gage is 7,628.58 ft (2,325.191 m) above mean sea level. Nov. 25 to Dec. 24, 1910, nonrecording gage 300 ft (91 m) upstream at different datum. Apr. 20, 1938, to Oct. 2, 1940, water-stage recorder at present site at datum 1.00 ft (0.305 m) higher.

AVERAGE DISCHARGE.--36 years, 171 ft³/s (4.843 m³/s), 123,900 acre-ft/yr (153 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,520 ft³/s (43.0 m³/s) June 15 (gage height, 4.14 ft or 1.262 m); minimum daily, 41 ft³/s (1.16 m³/s) Feb. 21.
Period of record: Maximum discharge, 1,900 ft³/s (53.8 m³/s) June 8, 1957 (gage height, 4.10 ft or 1.250 m); maximum gage height, 4.18 ft (1.274 m) May 23, 1970; minimum daily discharge, 4.5 ft³/s (0.13 m³/s) Apr. 30, 1967.

REMARKS.--Records good except those for period of no gage-height record, which are fair. Diversions for irrigation of about 24,000 acres (97.1 km²) above station. Water diverted above station by Larkspur ditch to Arkansas River basin since 1935 and by Tarbell ditch to Rio Grande basin since 1914 (see elsewhere in this report).

REVISIONS.--WSP 2124: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	52	126	82	59	63	89	92	308	522	490	238	198
2	53	113	78	60	64	86	93	256	620	446	217	170
3	52	146	72	62	66	83	96	227	653	408	214	151
4	52	136	77	64	65	80	100	245	711	381	231	146
5	56	133	77	63	61	80	105	260	718	346	227	141
6	60	146	70	60	63	80	98	264	627	300	234	131
7	64	121	66	58	64	81	100	249	544	279	234	117
8	70	117	68	62	59	84	108	268	522	275	221	101
9	76	136	72	65	56	86	118	279	596	295	198	101
10	84	115	72	66	56	88	118	308	744	291	182	117
11	85	107	66	63	60	91	129	359	898	271	173	156
12	98	123	67	64	59	88	135	446	979	287	168	148
13	98	133	68	68	55	88	130	470	1,140	359	165	133
14	96	115	69	69	52	86	132	511	1,300	446	159	126
15	99	117	64	66	49	89	150	516	1,480	359	159	119
16	138	115	61	68	47	92	210	485	1,430	312	162	117
17	168	101	65	71	45	96	210	490	1,180	295	159	117
18	154	107	67	75	50	95	217	495	938	316	151	107
19	148	105	69	77	47	91	231	578	834	432	148	90
20	146	92	70	75	44	90	170	685	737	436	148	72
21	136	90	68	66	41	92	179	785	646	408	159	62
22	123	105	66	61	43	92	159	848	602	408	162	61
23	119	101	69	60	52	93	182	862	572	381	148	64
24	121	79	67	62	62	95	249	778	544	346	133	65
25	115	86	63	66	73	98	264	685	549	287	136	65
26	113	84	60	69	71	98	260	799	522	252	168	65
27	111	77	62	67	78	96	252	914	505	245	170	69
28	119	74	66	62	85	93	279	771	527	245	156	70
29	123	68	69	60	-----	92	324	620	578	249	156	70
30	123	75	70	64	-----	90	368	544	549	252	162	75
31	126	-----	65	66	-----	90	-----	500	-----	264	192	-----
TOTAL	3,178	3,243	2,125	2,018	1,630	2,772	5,258	15,805	22,767	10,361	5,530	3,224
MEAN	103	108	68.5	65.1	58.2	89.4	175	510	759	334	178	107
MAX	168	146	82	77	85	98	368	914	1,480	490	238	198
MIN	52	68	60	58	41	80	92	227	505	245	133	61
AC-FT	6,300	6,430	4,210	4,000	3,230	5,500	10,430	31,350	45,160	20,550	10,970	6,390

CAL YR 1972 TOTAL 47,785 MEAN 131 MAX 555 MIN 41 AC-FT 94,780
WTR YR 1973 TOTAL 77,911 MEAN 213 MAX 1,480 MIN 41 AC-FT 154,500

NOTE.--No gage-height record Nov. 25 to Apr. 17.

09124500 LAKE FORK AT GATEVIEW, COLO.

LOCATION.--Lat 38°17'56", long 107°13'46", in SE¼NE¼ sec.29, T.47 N., R.3 W., Gunnison County, on left bank at old village of Gateview, 25 ft (8 m) downstream from private bridge, 0.2 mi (0.3 km) upstream from Indian Creek, and 6.3 mi (10.1 km) upstream from waterline of Blue Mesa Reservoir at elevation 7,519 ft (2,291.8 m).

DRAINAGE AREA.--334 mi² (865 km²).

PERIOD OF RECORD.--October 1937 to current year. Monthly discharge only for some periods, published in WSP 1313.

GAGE.--Water-stage recorder. Datum of gage is 7,827.66 ft (2,385.871 m) above mean sea level. Prior to Oct. 1, 1938, at datum 2.00 ft (0.610 m) higher and Oct. 1, 1938, to Sept. 30, 1945, at datum 1.00 ft (0.305 m) higher.

AVERAGE DISCHARGE.--36 years, 240 ft³/s (6.797 m³/s), 173,900 acre-ft/yr (214 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,080 ft³/s (58.9 m³/s) June 11 (gage height, 2.76 ft or 0.841 m); maximum gage height, 2.78 ft (0.847 m) June 28; minimum daily discharge, 38 ft³/s (1.08 m³/s) Jan. 23.

Period of record: Maximum discharge, 2,700 ft³/s (76.5 m³/s) June 29, 1957 (gage height, 4.30 ft or 1.311 m); minimum daily determined, 25 ft³/s (0.71 m³/s) Dec. 5, 1955, Jan. 10, 17, 18, 1957.

REMARKS.--Records good except those for winter period, which are fair. Diversions for irrigation of about 1,600 acres (6.48 km²) above station.

REVISIONS.--WSP 2124: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	88	82	64	52	50	58	65	102	720	1,510	266	175
2	85	78	63	52	47	61	66	98	690	1,360	252	146
3	82	76	62	53	45	63	63	98	617	1,260	241	153
4	81	75	64	56	45	58	63	109	582	1,170	241	127
5	83	78	62	57	44	61	63	125	526	1,170	248	125
6	85	76	57	56	43	59	66	130	518	1,100	252	120
7	83	71	55	58	44	55	71	121	599	1,020	259	125
8	83	77	60	58	44	56	67	116	830	924	245	120
9	82	76	60	60	44	59	67	125	1,210	935	227	116
10	81	71	58	62	43	58	67	161	1,580	957	224	129
11	78	76	57	60	43	60	69	250	1,820	924	220	136
12	76	83	61	59	43	63	72	350	1,680	1,110	210	133
13	76	75	62	61	41	66	75	410	1,670	1,030	200	127
14	77	75	62	62	40	62	77	435	1,670	860	194	125
15	80	81	58	63	39	59	68	395	1,320	850	197	118
16	96	78	55	62	40	58	60	405	957	700	200	114
17	101	81	58	54	40	62	60	450	880	608	175	108
18	98	77	60	51	41	66	69	525	880	558	167	105
19	98	81	63	48	43	67	63	730	870	550	173	101
20	102	81	65	46	41	72	57	1,030	870	590	187	98
21	101	75	64	47	43	78	59	1,110	968	558	181	90
22	98	78	63	43	44	69	59	913	1,070	461	181	87
23	95	58	60	38	45	66	65	740	1,180	416	178	87
24	90	58	56	39	47	67	70	730	1,350	380	181	93
25	88	66	60	47	49	63	71	850	1,360	365	187	93
26	86	66	56	54	49	67	75	820	1,610	350	170	93
27	85	69	58	50	52	72	78	635	1,740	322	161	90
28	83	65	62	48	55	68	86	496	1,680	310	156	87
29	80	64	60	47	-----	68	95	447	1,590	298	153	84
30	81	64	56	50	-----	67	104	489	1,580	290	158	82
31	80	-----	54	55	-----	67	-----	550	-----	280	178	-----
TOTAL	2,682	2,211	1,855	1,648	1,244	1,975	2,096	13,945	34,617	23,236	6,262	3,367
MEAN	86.5	73.7	59.8	53.2	44.4	63.7	69.9	450	1,154	750	202	112
MAX	102	83	65	63	55	78	104	1,110	1,820	1,510	266	175
MIN	76	58	54	38	39	55	57	98	518	280	153	82
AC-FT	5,320	4,390	3,680	3,270	2,470	3,920	4,160	27,660	68,660	46,090	12,420	6,680

CAL YR 1972 TOTAL 60,892 MEAN 166 MAX 1,040 MIN 38 AC-FT 120,800

WTR YR 1973 TOTAL 95,138 MEAN 261 MAX 1,820 MIN 38 AC-FT 188,700

PEAK DISCHARGE (BASE, 1,400 CFS).--June 11 (1330) 2,080 cfs (2.76 ft); June 28 (0300) 2,030 cfs (2.78 ft).

NOTE.--No gage-height record Dec. 24 to Feb. 28.

GUNNISON RIVER BASIN

09124600 BLUE MESA RESERVOIR NEAR SAPINERO, COLO.

LOCATION.--Lat 38°27'13", long 107°20'00", in NW¼ sec.4, T.48 N., R.4 W., Gunnison County, in intake tower of Blue Mesa Dam, 0.5 mi (0.8 km) upstream from Pine Creek and 1.7 mi (2.7 km) west of Sapinero.

DRAINAGE AREA.--3,426 mi² (8,873 km²).

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

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (Bureau of Reclamation bench mark).

EXTREMES (AT 2400).--Current year: Maximum contents, 829,300 acre-ft (1,020 hm³) July 22, 23 (elevation, 7,519.38 ft or 2,291.907 m); minimum, 303,300 acre-ft (374 hm³) Apr. 26 (elevation, 7,448.39 ft or 2,270.269 m).

Period of record: Maximum contents, 831,700 acre-ft (1,030 hm³) July 8, 1970 (elevation, 7,519.64 ft or 2,291.986 m); minimum since appreciable storage was attained, 187,800 acre-ft (232 hm³) Oct. 10-17, 1966 (elevation, 7,424.35 ft or 2,262.942 m).

REMARKS.--Reservoir is formed by earth and rockfill dam. Storage began Oct. 26, 1965. Usable capacity, 829,600 acre-ft (1,020 hm³) between elevations 7,358.00 ft or 2,242.718 m (sill of outlet gate) and 7,519.40 ft or 2,291.913 m (top of radial spillway gates). Dead storage, 111,200 acre-ft (137 hm³). Reservoir is used for power development and to provide storage replacement to meet downstream requirements under the Colorado River Compact of 1922. Figures given herein represent usable contents. Figures published prior to October 1969 represent total contents.

COOPERATION.--Records furnished by Bureau of Reclamation.

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	ELEVATION (FEET)	CONTENTS (ACRE-FEET)	CHANGE IN CONTENTS (ACRE-FEET)
Sept. 30.....	7,480.72	511,000	-
Oct. 31.....	7,483.65	532,700	+21,700
Nov. 30.....	7,478.61	495,600	-37,100
Dec. 31.....	7,467.07	415,900	-79,700
CAL YR 1972.....	-	-	-15,200
Jan. 31.....	7,453.74	333,500	-82,400
Feb. 28.....	7,450.51	315,000	-18,500
Mar. 31.....	7,449.40	308,900	-6,100
Apr. 30.....	7,449.36	308,600	-300
May 31.....	7,475.16	471,000	+162,400
June 30.....	7,507.54	724,400	+253,400
July 31.....	7,519.13	827,000	+102,600
Aug. 31.....	7,512.05	763,500	-63,500
Sept. 30.....	7,506.51	715,600	-47,900
WTR YR 1973.....	-	-	+204,600

GUNNISON RIVER BASIN

271

09125400 MORROW POINT RESERVOIR NEAR CIMARRON, COLO.

LOCATION.--Lat 38°27'05", long 107°32'12", in NW¼ sec.4, T.48 N., R.6 W., Montrose County, in recorder house at Morrow Point Dam on Gunnison River, 2,000 ft (610 m) upstream from Cimarron River and 1.2 mi (1.9 km) northeast of Cimarron.

DRAINAGE AREA.--3,637 mi² (9,420 km²).

PERIOD OF RECORD.--January 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (Bureau of Reclamation bench mark).

EXTREMES (at 0800).--Current year: Maximum contents, 117,100 acre-ft (144 hm³) May 10 (elevation, 7,160.09 ft or 2,182.395 m); minimum, 108,300 acre-ft (134 hm³) Oct. 20 (elevation, 7,149.09 ft or 2,179.043 m).
Period of record: Maximum contents, 118,900 acre-ft (147 hm³) May 19, 1970 (elevation, 7,162.27 ft or 2,183.060 m); minimum since appreciable storage was attained, 24,530 acre-ft (30.2 hm³) Nov. 6, 1969 (elevation, 6,988.10 ft or 2,129.973 m).

REMARKS.--Reservoir is formed by double-curvature thin concrete arch dam. Storage began Jan. 24, 1968. Capacity, 121,200 acre-ft (149 hm³) at elevation 7,165.00 ft or 2,183.892 m (crest of dam). Dead storage, 165 acre-ft (203,000 hm³) below elevation 6,808.00 ft or 2,075.078 m (invert of steel liner in outlet works). Reservoir is used for power development. Figures given herein represent usable contents.

COOPERATION.--Records furnished by Bureau of Reclamation.

MONTHEND ELEVATION AND CONTENTS AT 0800, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	ELEVATION (FEET)	CONTENTS (ACRE-FEET)	CHANGE IN CONTENTS (ACRE-FEET)
Sept. 30.....	7,158.89	116,100	-
Oct. 31.....	7,157.16	114,700	-1,400
Nov. 30.....	7,158.40	115,700	+1,000
Dec. 31.....	7,158.72	116,000	+300
CAL YR 1972	-	-	+800
Jan. 31.....	7,158.35	115,700	-300
Feb. 28.....	7,157.21	114,800	-900
Mar. 31.....	7,157.10	114,700	-100
Apr. 30.....	7,158.65	115,900	+1,200
May 31.....	7,158.48	115,800	-100
June 30.....	7,157.86	115,300	-500
July 31.....	7,156.62	114,300	-1,000
Aug. 31.....	7,157.32	114,800	+500
Sept. 30.....	7,157.66	115,100	+300
WTR YR 1973	-	-	-1,000

09128000 GUNNISON RIVER BELOW GUNNISON TUNNEL, COLO.

LOCATION.--Lat 38°31'45", long 107°38'54", in NE¼NW¼ sec.10, T.49 N., R.7 W., Montrose County, on left bank 0.4 mi (0.6 km) downstream from east portal of Gunnison tunnel, 4.7 mi (7.6 km) downstream from Crystal Creek, and 12 mi (19 km) northeast of Montrose.

DRAINAGE AREA.--3,965 mi² (10,269 km²).

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.

GAGE.--Water-stage recorder. Datum of gage is 6,526.06 ft (1,989.143 m) above mean sea level. Apr. 9, 1905, to Aug. 20, 1915, nonrecording gage at site 300 ft (91 m) 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 (150 m) downstream from diversion dam at east portal of Gunnison tunnel at different datum. Jan. 20, 1943, to Sept. 30, 1956, water-stage recorder at same site at datum 1.0 ft (0.30 m) higher.

AVERAGE DISCHARGE.--70 years, 1,406 ft³/s (39.82 m³/s), 1,019,000 acre-ft/yr (1,260 hm³/yr), unadjusted.

EXTREMES.--Current year: Maximum discharge, 4,080 ft³/s (116 m³/s) Dec. 23 (gage height, 6.82 ft or 2.079 m); minimum daily, 59 ft³/s (1.67 m³/s) Oct. 26.
Period of record: Maximum discharge observed, 19,000 ft³/s (538 m³/s) June 15, 1921 (gage height, about 15.8 ft or 4.81 m, present datum), from rating curve extended above 14,000 ft³/s (396 m³/s); no flow Sept. 25, 26, 1936, Oct. 8, 1949, Sept. 5, 6, 15, 16, 1950.

REMARKS.--Records good. Natural flow of stream affected by transmountain diversions, transbasin diversion through Gunnison tunnel for irrigation of about 75,000 acres (304 km²) in Uncompahgre Valley (see table below for figures of diversion), Taylor Park Reservoir (see sta. 09108500), Blue Mesa Reservoir (see sta. 09124600), Morrow Point Reservoir (see sta. 09125400), diversions for irrigation of about 63,000 acres (255 km²), and return flow from irrigated areas.

REVISIONS (WATER YEARS).--WSP 1313: 1906(M). WSP 1733: 1918-19, 1948. WSP 2124: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	121	950	1,740	1,660	817	616	619	342	1,550	1,290	1,430	1,090
2	110	1,050	1,690	2,500	932	606	757	334	1,990	1,230	1,000	565
3	116	780	789	2,730	1,010	606	549	293	1,990	1,110	1,480	205
4	113	911	1,490	2,730	600	601	459	367	2,130	1,050	1,680	878
5	135	909	1,710	2,610	938	603	405	405	1,940	1,070	558	1,180
6	125	1,020	1,960	2,620	951	602	350	398	1,490	1,100	1,380	1,510
7	99	897	2,090	1,920	1,020	601	347	670	1,280	800	1,460	1,530
8	101	963	1,860	2,830	1,050	608	315	858	1,850	649	1,430	936
9	101	1,030	2,000	2,760	1,040	611	982	1,470	1,810	629	1,410	1,440
10	96	1,020	979	2,540	861	608	521	2,070	2,220	743	1,420	1,530
11	192	1,000	2,290	2,640	736	611	349	1,760	2,290	677	1,280	1,580
12	291	1,020	2,050	2,800	1,040	897	424	1,100	2,230	941	549	486
13	369	1,290	2,540	2,720	481	614	391	1,110	2,040	711	1,490	638
14	464	1,110	1,770	1,490	298	600	407	1,160	2,260	498	1,340	600
15	479	1,370	2,510	2,410	774	602	400	1,280	1,980	432	1,490	1,030
16	554	1,790	1,790	2,270	1,270	604	548	1,570	1,740	885	1,600	464
17	515	1,730	858	1,540	1,010	607	474	1,600	1,580	1,130	1,690	259
18	508	1,670	1,800	1,860	608	613	240	1,730	1,390	558	1,680	250
19	507	1,030	2,180	2,100	871	966	550	1,680	1,210	442	1,470	343
20	448	1,320	1,670	1,150	1,220	731	346	1,480	1,160	699	1,560	394
21	207	1,680	2,240	825	729	1,620	352	1,510	1,200	744	1,690	397
22	198	1,840	2,350	1,140	566	1,080	374	1,900	1,250	350	2,000	395
23	196	633	2,570	1,150	584	606	415	1,720	1,300	755	1,640	395
24	190	1,610	1,740	1,030	585	607	343	1,650	1,320	979	1,760	399
25	125	1,660	719	940	589	603	387	1,520	1,150	1,030	1,420	379
26	59	762	2,100	1,030	595	610	520	1,740	1,170	940	1,340	381
27	253	1,740	2,070	1,010	594	618	370	1,500	1,470	1,810	1,670	378
28	378	1,820	2,320	852	595	544	380	1,350	1,530	705	639	367
29	376	1,830	2,200	999	-----	504	477	1,350	1,410	358	239	299
30	369	1,910	2,300	930	-----	614	585	1,280	1,420	1,010	866	297
31	1,060	-----	2,050	1,040	-----	640	-----	1,250	-----	1,210	1,390	-----
TOTAL	8,915	38,345	58,325	56,826	22,364	20,953	13,636	38,447	49,350	26,535	42,051	20,595
EAN	288	1,278	1,881	1,833	799	676	455	1,240	1,645	856	1,356	687
AX	1,060	1,910	2,570	2,830	1,270	1,620	982	2,070	2,290	1,810	2,000	1,580
IN	59	633	719	825	298	504	240	293	1,150	350	239	205
C=FT	17,680	76,060	115,700	112,700	44,360	41,560	27,050	76,260	97,890	52,630	83,410	40,850
	25,260	0	0	0	0	391	29,530	35,430	29,540	48,190	60,270	53,900
AL YR 1972	TOTAL 275,379	MEAN 752	MAX 2,610	MIN 59	AC=FT 546,200	AC=FT +371,600						
TR YR 1973	TOTAL 396,342	MEAN 1,086	MAX 2,830	MIN 59	AC=FT 786,100	AC=FT +282,500						

†Diversion, in acre-feet, through Gunnison tunnel; furnished by Uncompahgre Valley Water Users Association.

GUNNISON RIVER BASIN

09128500 SMITH FORK NEAR CRAWFORD, COLO.

LOCATION.--Lat 38°43'40", long 107°30'22", in SW¼SE¼ sec.24, T.15 S., R.91 W., Delta County, on left bank 20 ft (6 m) upstream from Forest Service bridge, 0.4 mi (0.6 km) upstream from Second Creek, 6 mi (10 km) north-east of Crawford, and 6.5 mi (10.5 km) upstream from Iron Creek.

DRAINAGE AREA.--43.7 mi² (113.2 km²).

PERIOD OF RECORD.--October 1935 to current year. Monthly discharge only for some periods, published in WSP 1313.

GAGE.--Water-stage recorder. Altitude of gage is 7,091 ft (2,161 m) from topographic map. Prior to Nov. 16, 1938, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--38 years, 41.1 ft³/s (1.164 m³/s), 29,780 acre-ft/yr (36.7 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 715 ft³/s (20.2 m³/s) May 20 (gage height, 6.02 ft or 1.835 m); minimum daily, 4.2 ft³/s (0.12 m³/s) Feb. 5.

Period of record: Maximum discharge, about 1,050 ft³/s (30 m³/s) June 6, 1957; maximum gage height, 6.02 ft (1.835 m) May 20, 1973; minimum daily discharge determined, 1.8 ft³/s (0.051 m³/s) July 30, 31, Aug. 1, 1963.

REMARKS.--Records good except those for winter period, which are fair. Diversions for irrigation of a few small hay meadows above station. Saddle Mountain ditch diverts water above station for irrigation of about 800 acres (3.24 km²) below. One small ditch diverts water from Virginia Creek to Iron Creek drainage, and Head and Ferrier ditch diverts water from Curecanti Creek drainage.

REVISIONS (WATER YEARS).--WSP 1313: 1941. WSP 2124: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	15	10	9.9	8.7	9.9	14	98	243	74	9.4	7.5
2	10	14	10	9.9	9.0	10	14	85	258	63	8.7	7.5
3	9.9	14	11	9.7	7.5	10	14	82	246	54	8.4	6.9
4	9.9	14	11	9.4	4.8	11	15	100	261	53	8.7	7.2
5	11	14	11	9.1	4.2	11	15	123	238	49	12	6.9
6	10	15	10	8.6	4.8	11	16	141	213	41	15	6.6
7	11	13	9.8	9.2	5.4	11	19	127	223	38	15	6.0
8	11	14	9.4	9.2	5.4	9.6	21	145	258	33	15	5.6
9	12	14	9.9	8.8	5.4	9.3	17	185	294	27	16	5.6
10	12	13	9.4	8.7	5.4	9.6	16	253	297	24	13	7.5
11	12	13	9.0	8.4	5.4	10	16	335	282	21	11	8.7
12	11	13	8.8	8.4	5.4	11	18	290	252	20	8.7	10
13	11	13	9.0	8.7	5.7	13	22	415	238	19	8.4	8.1
14	11	13	8.7	8.7	8.4	11	29	468	235	18	8.1	6.6
15	18	12	8.4	9.1	7.6	11	34	532	225	15	7.2	5.8
16	31	12	8.2	9.3	7.6	12	27	560	195	14	6.9	6.0
17	26	12	8.2	9.5	7.4	11	26	467	161	13	8.1	6.0
18	24	12	8.4	8.8	7.4	11	27	491	149	15	10	5.4
19	23	12	8.6	8.0	7.2	11	25	533	107	20	9.4	5.2
20	23	12	9.0	7.6	7.4	13	22	564	123	19	8.7	5.0
21	22	12	9.1	7.2	7.4	18	21	470	105	18	9.8	4.8
22	20	12	9.1	7.1	7.2	19	22	393	96	16	10	4.8
23	19	12	9.0	7.5	7.2	19	32	327	92	15	8.7	4.8
24	18	12	9.0	8.0	7.0	18	49	321	90	14	8.7	5.2
25	18	11	9.5	8.2	6.3	19	57	318	89	13	9.4	5.6
26	17	12	9.5	8.4	9.3	18	64	306	92	12	9.8	6.9
27	17	11	9.5	8.4	9.3	18	79	246	96	12	9.4	6.0
28	17	10	9.9	8.0	9.9	17	101	210	99	11	7.5	5.6
29	16	11	9.9	8.0	-----	17	121	195	95	11	6.9	5.6
30	16	11	9.9	8.0	-----	15	123	200	83	10	7.5	5.6
31	15	-----	9.9	8.5	-----	16	-----	215	-----	9.8	8.4	-----
TOTAL	491.8	378	292.1	266.3	193.7	410.4	1,076	9,195	5,435	771.8	303.8	189.6
MEAN	15.9	12.6	9.42	8.59	6.92	13.2	35.9	297	181	24.9	9.80	6.32
MAX	31	15	11	9.9	9.9	19	123	564	297	74	16	10
MIN	9.9	10	8.2	7.1	4.2	9.3	14	82	83	9.8	6.9	4.8
AC-FT	975	750	579	528	384	814	2,130	18,240	10,780	1,530	603	374

CAL YR 1972 TOTAL 9,151.8 MEAN 25.0 MAX 117 MIN 2.0 AC-FT 18,150
 WTR YR 1973 TOTAL 19,003.5 MEAN 52.1 MAX 564 MIN 4.2 AC-FT 37,690

PEAK DISCHARGE (BASE, 260 CFS).--May 20 (0330) 715 cfs (6.02 ft).

GUNNISON RIVER BASIN

275

09129800 CLEAR FORK NEAR RAGGED MOUNTAIN, COLO.

LOCATION.--Lat 39°08'37", long 107°25'49", in SW¼ sec.34, T.10 S., R.90 W. (projected), Gunnison County, on left bank near downstream wingwall of private bridge 700 ft (210 m) upstream from Little Muddy Creek and 3.0 mi (4.8 km) northwest of Ragged Mountain.

DRAINAGE AREA.--38.5 mi² (99.7 km²).

PERIOD OF RECORD.--October 1965 to September 1973 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 7,450 ft (2,271 m) from topographic map.

AVERAGE DISCHARGE.--8 years, 36.8 ft³/s (1.042 m³/s), 26,660 acre-ft/yr (32.9 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 760 ft³/s (21.5 m³/s) May 18 (gage height, 3.47 ft or 1.058 m); minimum daily, 1.8 ft³/s (0.051 m³/s) Oct. 3, 4.

Period of record: Maximum discharge, 792 ft³/s (22.4 m³/s) May 18, 1970 (gage height, 3.61 ft or 1.100 m), from rating curve extended above 370 ft³/s (10 m³/s); minimum daily, 0.40 ft³/s (0.011 m³/s) Oct. 31, 1967.

REMARKS.--Records fair except those for winter period, which are poor. Transbasin diversion above station by Clear Fork ditch for irrigation in West Divide Creek basin.

DISCHARGE, IN CUHIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.9	6.8	3.4	4.0	4.5	4.4	5.8	61	308	98	6.4	3.8
2	1.9	5.3	3.8	4.3	4.5	4.4	5.8	51	286	95	6.1	3.9
3	1.8	5.6	3.8	4.5	4.5	4.4	6.0	55	272	89	5.5	3.6
4	1.8	5.7	4.1	4.5	4.6	4.5	6.1	83	241	82	5.3	3.3
5	2.4	5.7	4.2	4.6	4.6	4.8	6.4	118	203	70	8.8	3.0
6	2.4	5.8	4.1	4.9	4.6	4.7	6.8	127	218	45	14	2.9
7	2.4	5.8	4.0	5.1	4.6	4.4	7.0	99	265	35	11	2.7
8	3.2	5.4	3.9	5.2	4.6	4.4	7.4	95	304	26	9.3	2.7
9	4.5	5.1	3.7	5.2	4.6	4.7	7.0	129	340	24	7.8	2.6
10	3.6	5.0	3.6	5.2	4.7	4.6	7.5	286	340	22	6.5	2.8
11	2.8	5.2	3.6	5.3	4.7	4.6	7.8	435	304	19	6.3	4.1
12	2.4	5.2	3.8	5.4	4.8	4.6	8.5	480	279	14	7.5	4.1
13	2.8	4.9	4.0	5.4	4.9	4.6	11	534	265	22	6.8	4.2
14	3.6	4.8	3.9	5.4	5.0	4.6	14	516	308	27	6.5	3.9
15	6.8	4.4	3.7	5.4	4.9	5.0	17	528	316	26	6.3	3.3
16	12	3.9	3.7	5.4	4.8	5.9	19	516	227	19	5.9	3.2
17	7.8	3.8	3.7	5.3	4.6	5.4	14	561	176	16	5.7	2.9
18	9.9	2.9	3.6	5.1	4.6	4.8	15	631	153	15	6.3	2.8
19	12	3.0	3.5	5.1	4.6	4.5	14	688	131	19	5.7	2.6
20	13	2.9	3.4	5.1	4.6	4.3	14	645	122	20	5.3	2.4
21	11	2.7	3.5	5.1	4.6	4.4	13	603	123	21	5.3	2.3
22	4.0	2.5	3.6	5.0	4.6	4.4	13	510	127	18	5.7	2.2
23	9.0	2.7	3.6	4.6	4.6	4.5	18	430	129	15	5.3	2.2
24	8.3	2.9	3.6	4.5	4.6	4.6	23	421	125	11	5.3	2.8
25	7.3	3.1	3.5	4.6	4.7	4.7	23	385	125	8.0	4.9	2.9
26	6.3	3.3	3.6	4.7	4.6	5.0	24	308	137	7.6	4.4	3.0
27	6.3	3.2	3.7	4.7	4.5	5.8	30	248	131	8.4	4.4	2.9
28	6.8	3.1	3.8	4.6	4.5	5.9	44	215	125	7.6	4.1	2.7
29	6.3	3.1	3.8	4.5	-----	5.3	55	221	117	7.4	3.8	2.8
30	5.5	3.3	3.9	4.5	-----	5.8	67	255	105	7.4	3.8	2.7
31	6.6	-----	3.9	4.5	-----	6.1	-----	297	-----	7.4	3.8	-----
TOTAL	181.4	127.1	116.0	151.7	130.0	150.1	510.1	10,531	6,302	901.8	193.8	91.3
MEAN	5.85	4.24	3.74	4.89	4.64	4.84	17.0	340	210	29.1	6.25	3.04
MAX	13	6.8	4.2	5.4	5.0	6.1	67	688	340	98	14	4.2
MIN	1.8	2.5	3.4	4.0	4.3	4.3	5.8	51	105	7.4	3.8	2.2
AC-FT	360	252	230	301	258	298	1,010	20,890	12,500	1,790	384	181

CAL YR 1972 TOTAL 8,772.8 MEAN 24.0 MAX 182 MIN 1.0 AC-FT 17,400
WTR YR 1973 TOTAL 19,386.3 MEAN 53.1 MAX 688 MIN 1.8 AC-FT 38,450

PEAK DISCHARGE (BASE, 200 CFS).--May 18 (2100) 760 cfs (3.47 ft).

NOTE.--No gage-height record Nov. 23 to Apr. 3.

GUNNISON RIVER BASIN

09130800 WEST MUDDY CREEK NEAR BOWIE, COLO.

LOCATION.--Lat 39°06'56", long 107°31'26", Delta County, on left bank 20 ft (6 m) downstream from Forest Service bridge, 0.5 mi (0.8 km) northwest of West Muddy Ranger station, 2.7 mi (4.3 km) upstream from Cow Creek, and 14 mi (23 km) north of Bowie.

DRAINAGE AREA.--26.5 mi² (68.6 km²).

PERIOD OF RECORD.--October 1968 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 8,240 ft (2,512 m) from topographic map.

AVERAGE DISCHARGE.--5 years, 20.8 ft³/s (0.589 m³/s), 15,070 acre-ft/yr (18.6 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 700 ft³/s (19.8 m³/s) May 16 (gage height, 4.56 ft or 1.390 m); minimum daily, 0.54 ft³/s (0.015 m³/s) Oct. 1-3.
Period of record: Maximum discharge, 700 ft³/s (19.8 m³/s) May 16, 1973 (gage height, 4.56 ft or 1.390 m); maximum gage height, 5.46 ft (1.664 m) Apr. 5, 1969 (backwater from ice); minimum daily discharge, 0.02 ft³/s (0.001 m³/s) Aug. 14, 1972.

REMARKS.--Records good except those for winter period, which are poor. A few small diversions above station for irrigation of hay meadows.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.54	2.4	2.6	3.3	2.1	3.4	5.3	30	105	18	3.0	4.4
2	.54	2.9	2.5	2.9	2.3	3.4	3.2	26	105	16	2.9	4.0
3	.54	3.0	2.6	2.7	2.1	3.3	3.1	33	98	13	2.3	3.3
4	.59	3.3	2.7	2.7	1.8	3.4	3.2	48	103	11	2.1	2.4
5	1.5	3.6	2.9	2.9	2.2	3.4	3.1	75	82	9.4	5.5	2.0
6	1.4	3.5	2.9	2.9	2.4	3.1	3.0	78	75	8.3	13	1.5
7	1.1	3.5	2.8	2.7	2.3	3.2	3.7	62	80	7.3	8.7	1.4
8	1.7	3.4	2.7	2.6	2.1	3.3	4.2	66	86	8.3	6.2	1.3
9	2.7	3.1	2.6	2.4	2.1	3.4	4.2	94	90	9.0	3.7	1.1
10	2.0	2.9	2.5	2.4	2.4	3.4	3.7	152	86	6.6	2.7	1.7
11	1.0	2.8	2.6	2.3	2.7	3.4	2.4	264	75	6.2	2.4	3.7
12	1.0	2.7	2.8	2.1	3.0	3.4	6.6	341	65	9.6	2.3	4.0
13	1.5	2.6	2.7	2.1	2.9	3.4	7.3	247	63	23	2.0	3.2
14	1.8	2.5	2.7	2.3	2.6	3.4	10	305	84	23	1.7	2.6
15	9.2	2.4	2.8	2.3	2.6	3.0	5.1	337	113	15	1.7	2.0
16	15	2.4	2.9	2.4	2.6	3.1	5.3	345	75	11	.70	1.7
17	6.2	2.4	3.0	2.4	2.9	3.2	7.3	257	57	11	1.1	1.6
18	5.9	2.6	2.9	2.4	2.9	3.3	4.2	233	49	9.4	1.5	1.4
19	12	2.6	2.9	2.3	3.1	3.3	6.9	264	42	18	1.5	1.0
20	16	2.4	3.0	2.3	3.4	2.9	8.7	261	38	21	1.6	1.0
21	8.7	2.4	2.9	2.4	3.2	3.0	7.3	212	35	22	8.7	.92
22	6.6	2.3	2.9	2.1	3.2	3.2	6.9	194	33	15	6.2	.92
23	6.6	2.3	3.0	2.0	2.8	3.3	9.0	170	30	9.4	5.5	.92
24	6.2	2.6	2.9	2.0	2.8	3.4	9.0	164	30	8.3	4.0	2.1
25	4.8	2.6	2.9	2.0	3.0	3.4	8.7	158	27	6.6	3.3	2.7
26	4.2	2.6	2.9	2.0	3.2	3.4	9.8	161	25	5.5	2.4	3.5
27	3.7	2.5	3.0	2.1	3.3	3.4	15	128	24	4.8	2.4	3.2
28	3.6	2.4	3.2	2.2	3.4	3.4	19	113	23	4.2	1.8	2.4
29	3.5	2.5	3.7	2.1	-----	3.4	23	105	23	4.2	1.6	2.1
30	3.2	2.6	3.5	1.8	-----	3.4	29	105	20	4.0	1.7	2.0
31	3.0	-----	3.3	1.6	-----	3.4	-----	108	-----	3.5	2.1	-----
TOTAL	136.31	82.2	89.4	72.6	75.4	102.4	235.2	5,136	1,843	341.8	106.30	66.06
MEAN	4.40	2.74	2.88	2.34	2.69	3.30	7.84	166	61.4	11.0	3.43	2.20
MAX	16	3.6	3.7	3.3	3.4	3.4	29	345	113	23	13	4.4
MIN	.54	2.3	2.5	1.6	1.8	2.9	2.4	26	20	3.5	.70	.92
AC-FT	270	163	177	144	150	203	467	10,190	3,660	678	211	131

CAL YR 1972 TOTAL 4,228.20 MEAN 11.6 MAX 82 MIN .02 AC-FT 8,390
WTR YR 1973 TOTAL 8,286.67 MEAN 22.7 MAX 345 MIN .54 AC-FT 16,440

PEAK DISCHARGE (BASE, 200 CFS).--May 16 (1900) 700 cfs (4.56 ft).

NOTE.--No gage-height record Jan. 28 to Apr. 5.

09131100 COW CREEK NEAR PAONIA, COLO.

LOCATION.--Lat 39°06'15", long 107°35'02", Delta County, on right bank 40 ft (12 m) upstream from road culvert, 1.8 mi (2.9 km) upstream from Beaver Creek and 16 mi (26 km) north of Paonia.

DRAINAGE AREA.--12.0 mi² (31.1 km²).

PERIOD OF RECORD.--October 1968 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 9,060 ft (2,761 m) from topographic map.

AVERAGE DISCHARGE.--5 years, 9.17 ft³/s (0.260 m³/s), 6,640 acre-ft/yr (8.19 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 143 ft³/s (4.05 m³/s) May 31 (gage height, 1.86 ft or 0.567 m); minimum daily, 0.15 ft³/s (0.004 m³/s) Oct. 1-3.
Period of record: Maximum discharge, 143 ft³/s (4.05 m³/s) May 31, 1973 (gage height, 1.86 ft or 0.567 m); minimum daily, 0.09 ft³/s (0.003 m³/s) Sept. 18, 1972.

REMARKS.--Records fair except those for winter period, which are poor. Flow regulated by Overland Reservoir (capacity, 6,280 acre-ft or 7.74 hm³). Diversions by Overland ditch 3.6 mi (5.8 km) above station for use outside drainage.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.15	5.4	22	4.0	3.3	2.8	2.7	1.7	133	18	.62	.62
2	.15	5.7	22	4.0	3.4	2.8	2.7	1.5	122	50	.70	.62
3	.15	5.2	20	3.9	3.4	2.8	2.7	1.7	117	53	.62	.62
4	.17	5.2	19	4.0	3.2	2.7	2.7	2.5	116	68	.62	.55
5	.32	5.2	19	3.9	3.2	2.8	2.5	3.6	113	61	.92	.55
6	.23	5.2	12	4.0	3.2	2.7	2.5	3.8	114	55	1.0	.62
7	.21	5.2	8.5	4.0	3.4	2.7	2.5	3.2	114	39	1.1	.77
8	3.3	5.2	6.5	4.0	3.3	2.8	2.5	3.3	114	8.5	.92	.62
9	3.8	5.2	6.5	4.0	3.2	2.8	2.4	4.9	117	5.4	.62	.77
10	3.5	5.2	6.2	4.0	3.2	2.8	2.4	8.5	116	5.2	.55	.77
11	3.5	5.4	5.7	4.0	3.3	2.7	2.4	14	113	8.9	.62	1.0
12	3.5	5.4	5.4	4.0	3.2	2.8	2.4	17	111	17	.70	.85
13	3.6	5.2	5.2	4.0	3.2	2.8	2.4	19	108	5.2	.62	.77
14	3.6	5.2	5.2	4.0	3.3	2.7	2.5	21	116	1.6	.62	1.8
15	7.3	5.2	4.6	3.9	3.3	2.7	2.5	22	125	1.4	.62	6.5
16	7.7	5.2	4.6	3.7	3.3	2.6	2.5	23	122	1.4	.55	6.5
17	5.7	5.0	4.3	3.5	3.3	2.7	2.4	26	117	1.8	.55	6.2
18	5.7	8.0	4.3	3.4	3.2	2.8	2.8	30	116	1.1	.62	6.2
19	7.7	17	4.3	3.4	3.1	2.8	3.0	35	117	1.4	.62	6.0
20	7.3	17	4.3	3.4	3.0	2.8	2.8	35	116	1.8	1.0	6.0
21	6.0	21	4.3	3.4	2.9	2.8	2.7	36	116	2.0	1.4	5.7
22	5.7	20	4.3	3.4	2.9	2.7	2.7	30	116	1.2	1.4	5.2
23	5.7	19	4.1	3.4	2.9	2.7	2.5	25	114	1.7	1.1	5.2
24	5.7	20	4.0	3.4	2.9	2.8	.85	28	111	2.5	1.0	5.2
25	5.4	21	4.0	3.4	2.9	2.7	.55	26	95	2.2	.85	5.2
26	5.2	21	4.1	3.4	2.9	2.7	.47	19	15	2.0	.70	5.2
27	5.2	21	4.0	3.4	2.9	2.8	.62	14	14	1.7	.70	4.6
28	5.2	22	4.0	3.4	2.8	2.8	1.1	12	13	.55	.70	4.6
29	5.2	23	4.0	3.4	-----	2.7	1.6	15	14	.62	.62	4.9
30	5.7	22	3.8	3.4	-----	2.6	1.7	20	13	.62	.62	4.9
31	5.7	-----	3.9	3.3	-----	2.7	-----	59	-----	.62	.62	-----
TOTAL	128.28	341.3	234.1	114.4	88.1	85.1	66.09	560.7	2,958	420.41	23.90	99.03
MEAN	4.14	11.4	7.55	3.69	3.15	2.75	2.20	18.1	98.6	13.6	.77	3.30
MAX	7.7	23	22	4.0	3.4	2.8	3.0	59	133	68	1.4	6.5
MIN	.15	5.0	3.8	3.3	2.8	2.6	.47	1.5	13	.55	.55	.55
AC-FT	254	677	464	227	175	169	131	1,110	5,870	834	47	196

CAL YR 1972 TOTAL 2,081.40 MEAN 5.69 MAX 23 MIN .09 AC-FT 4,130
WTR YR 1973 TOTAL 5,119.41 MEAN 14.0 MAX 133 MIN .15 AC-FT 10,150

NOTE.--No gage-height record Dec. 23 to Apr. 3.

GUNNISON RIVER BASIN

09131200 WEST MUDDY CREEK NEAR SOMERSET, COLO.

LOCATION.--Lat39°05'23", long 107°30'17", Delta County, on right bank 300 ft (91 m) downstream from Cow Creek, 1.5 mi (2.4 km) southeast of West Muddy Ranger Station, and 13 mi (21 km) north of Somerset.

DRAINAGE AREA.--50.1 mi² (129.8 km²).

PERIOD OF RECORD.--October 1961 to September 1973 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 8,020 ft (2,444 m) from topographic map.

AVERAGE DISCHARGE.--12 years, 31.6 ft³/s (0.895 m³/s), 22,890 acre-ft/yr (28.2 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,190 ft³/s (33.7 m³/s) May 14 (gage height, 3.97 ft or 1.210 m); minimum daily, 1.1 ft³/s (0.031 m³/s) Oct. 3, 4.

Period of record: Maximum discharge, 1,190 ft³/s (33.7 m³/s) May 14, 1973 (gage height, 3.97 ft or 1.210 m); minimum daily, 0.10 ft³/s (0.003 m³/s) Aug. 1, 1963.

REMARKS.--Records good except those for period of no gage-height record, which are poor. Small diversions above station for irrigation of hay meadows. Some regulation by Overland Reservoir (capacity, 6,280 acre-ft or 7.74 hm³) on Cow Creek above station. Diversion above station for use outside Muddy Creek drainage by Overland ditch.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.4	5.6	23	5.4	5.0	5.2	7.1	50	246	25	4.7	4.7
2	1.3	5.0	22	5.4	5.3	5.3	7.4	43	257	46	4.4	4.7
3	1.1	3.6	21	5.4	5.2	5.3	8.0	52	267	44	3.8	4.1
4	1.1	2.6	20	5.4	5.0	5.2	8.2	87	274	59	3.6	3.6
5	1.5	4.1	20	5.4	5.0	5.3	8.1	135	225	51	6.5	3.0
6	1.6	4.4	14	5.4	5.2	5.6	6.8	128	222	44	14	2.8
7	1.4	5.3	11	5.4	5.3	5.6	6.8	100	219	39	10	2.8
8	2.2	3.6	9.0	5.4	5.0	5.4	6.8	123	236	19	7.2	2.8
9	3.8	3.0	8.3	5.4	5.0	5.4	6.5	186	250	15	4.7	2.8
10	3.2	3.2	7.9	5.4	5.0	5.6	6.2	371	274	11	3.6	3.0
11	2.8	2.4	7.6	5.4	5.0	5.6	6.5	535	267	9.3	3.8	4.7
12	2.6	2.4	7.0	5.4	5.1	5.7	6.5	530	253	14	3.8	4.4
13	2.8	2.4	6.7	5.3	5.2	5.9	7.6	634	239	24	3.6	4.1
14	3.2	2.2	6.4	5.3	5.2	6.0	8.5	654	327	34	3.4	4.7
15	7.6	2.2	6.3	5.2	5.3	5.9	8.1	565	425	18	3.4	11
16	20	2.2	5.6	4.9	5.2	5.7	7.2	495	307	13	3.0	10
17	8.1	2.2	5.2	4.8	5.1	5.7	8.9	505	264	15	2.8	10
18	7.2	5.0	5.1	4.8	5.1	5.7	9.3	525	246	11	3.0	9.7
19	12	14	5.0	4.8	5.0	5.8	8.5	520	229	18	3.2	9.7
20	17	14	5.0	4.8	5.1	5.9	9.3	555	222	22	3.4	9.3
21	10	18	5.0	4.8	5.1	6.1	9.7	460	210	24	8.1	8.9
22	7.6	19	5.1	4.8	5.3	6.1	11	385	189	18	6.5	8.5
23	7.6	19	5.4	4.8	5.3	5.9	14	246	189	12	6.8	8.5
24	7.2	20	5.8	4.8	5.2	5.9	16	222	177	10	5.6	9.3
25	6.2	20	6.2	4.9	5.1	5.9	16	198	156	8.5	5.3	10
26	5.6	21	6.2	4.9	5.0	6.0	18	189	38	6.5	3.6	11
27	5.3	23	5.6	4.9	5.0	6.0	23	135	31	6.2	3.4	10
28	5.9	24	5.6	4.9	5.2	6.1	34	113	32	5.0	3.2	8.5
29	5.9	23	5.4	4.9	-----	6.1	45	104	33	4.4	3.0	8.9
30	5.6	23	5.2	5.0	-----	6.3	55	108	28	5.0	3.4	8.1
31	5.9	-----	5.3	4.8	-----	6.6	-----	156	-----	4.7	3.4	-----
TOTAL	174.7	299.4	276.9	158.2	143.5	178.8	394.0	9,109	6,332	655.6	148.2	203.6
MEAN	5.64	9.98	8.93	5.10	5.13	5.77	13.1	294	211	20.5	4.78	6.79
MAX	20	24	23	5.4	5.3	6.6	55	654	425	59	14	11
MIN	1.1	2.2	5.0	4.8	5.0	5.2	6.2	43	28	4.4	2.8	2.8
AC-FT	347	594	549	314	285	355	781	18,070	12,560	1,260	294	404

CAL YR 1972 TOTAL 6,079.0 MEAN 16.6 MAX 100 MIN 1.0 AC-FT 12,060

WTR YR 1973 TOTAL 18,053.9 MEAN 49.5 MAX 654 MIN 1.1 AC-FT 35,810

PEAK DISCHARGE (BASE, 250 CFS).--May 14 (1900) 1,190 cfs (3.97 ft); June 15 (0900) 485 cfs (3.25 ft).

NOTE.--No gage-height record Nov. 22 to Apr. 4.

GUNNISON RIVER BASIN

279

09132500 NORTH FORK GUNNISON RIVER NEAR SOMERSET, COLO.

LOCATION.--Lat 38°55'45", long 107°26'53", in SW¼SE¼ sec.9, T.13 S., R.90 W., Gunnison County, on right bank 1.5 mi (2.4 km) east of Somerset and 4.5 mi (7.2 km) upstream from Hubbard Creek.

DRAINAGE AREA.--531 mi² (1,375 km²).

PERIOD OF RECORD.--October 1933 to current year. Monthly discharge only for some periods, published in WSP 1313.

GAGE.--Water-stage recorder. Datum of gage is 6,038.91 ft (1,840.660 m) above mean sea level. Prior to July 22, 1971, at site 100 ft (30 m) downstream at datum 0.31 ft (0.094 m) lower.

AVERAGE DISCHARGE.--40 years, 435 ft³/s (12.32 m³/s), 315,200 acre-ft/yr (389 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 6,580 ft³/s (186 m³/s) May 21 (gage height, 5.83 ft or 1.777 m); minimum daily, 50 ft³/s (1.42 m³/s) Feb. 10.

Period of record: Maximum discharge, 7,860 ft³/s (223 m³/s) June 4, 1957 (gage height, 5.83 ft or 1.777 m, present datum); minimum daily, 17 ft³/s (0.48 m³/s) Nov. 10, 1950.

REMARKS.--Records fair except those for periods of no gage-height record, which are poor. Natural flow of stream affected by small diversions for irrigation in nearby drainage areas, irrigation of about 3,000 acres (12.1 km²) above station, storage in Overland Reservoir (capacity, 6,280 acre-ft or 7.74 hm³), and storage in Paonia Reservoir (capacity, 18,300 acre-ft or 22.6 hm³) since February 1961. See table below for contents of Paonia Reservoir.

REVISIONS.--WSP 2124: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	72	105	110	100	85	65	155	972	2,530	1,680	237	209
2	72	100	110	100	80	70	155	912	2,530	1,580	230	205
3	68	95	105	100	80	70	153	888	2,460	1,450	209	205
4	65	90	105	95	75	70	150	1,010	2,510	1,380	202	198
5	65	85	100	95	70	65	155	1,330	2,190	1,300	252	191
6	66	80	105	95	65	70	175	1,470	2,050	1,210	348	202
7	65	85	105	90	60	70	193	1,370	2,240	1,120	280	223
8	66	80	100	85	60	70	181	1,390	2,650	1,050	244	223
9	80	80	110	80	55	70	172	1,610	3,270	958	230	223
10	82	85	105	80	50	68	169	2,100	3,830	942	198	226
11	78	90	105	85	55	70	178	2,500	3,900	854	184	230
12	72	90	100	80	60	82	217	2,010	3,650	838	184	240
13	70	95	110	80	60	74	248	2,080	3,530	806	188	230
14	70	90	105	80	60	90	291	2,390	4,250	790	212	230
15	130	85	110	75	60	84	319	3,140	3,860	742	209	230
16	242	80	115	75	55	92	283	2,960	2,770	661	216	230
17	178	85	120	75	55	104	303	2,910	2,170	520	233	220
18	163	90	120	80	60	113	323	3,060	2,060	490	237	220
19	196	90	125	80	60	115	307	4,300	1,830	480	233	220
20	238	95	130	85	65	135	291	5,100	1,730	500	244	220
21	205	100	130	85	60	163	299	4,640	1,740	480	276	220
22	178	105	125	90	65	153	303	4,250	1,890	450	264	230
23	169	105	125	90	65	145	349	3,150	1,950	440	248	220
24	148	100	125	90	60	143	439	2,880	1,950	420	244	210
25	120	100	120	95	65	135	555	2,780	1,920	397	248	210
26	120	100	115	90	70	148	605	2,850	2,030	361	240	210
27	120	105	110	85	70	169	725	2,240	2,110	334	237	210
28	118	110	100	85	70	166	900	1,900	2,110	312	223	220
29	104	100	95	80	-----	166	1,040	1,880	2,160	285	216	210
30	110	105	90	80	-----	163	996	2,000	1,850	264	212	200
31	110	-----	95	85	-----	155	-----	2,210	-----	256	209	-----
TOTAL	3,640	2,805	3,425	2,670	1,795	3,353	10,629	74,282	75,720	23,350	7,187	6,515
MEAN	117	93.5	110	86.1	64.1	108	354	2,396	2,524	753	232	217
MAX	242	110	130	100	85	169	1,040	5,100	4,250	1,680	348	240
MIN	65	80	90	75	50	65	150	888	1,730	256	184	191
AC-FT	7,220	5,560	6,790	5,300	3,560	6,650	21,080	147,300	150,200	46,310	14,260	12,920
†	3,610	5,470	6,460	3,160	3,250	4,090	3,670	18,470	18,470	18,470	16,070	9,110

CAL YR 1972 TOTAL 112,603 MEAN 308 MAX 1,600 MIN 63 AC-FT 223,300
WTR YR 1973 TOTAL 215,371 MEAN 590 MAX 5,100 MIN 50 AC-FT 427,200

†Monthend contents, in acre-feet, in Paonia Reservoir; furnished by Bureau of Reclamation.

NOTE.--No gage-height record Oct. 30 to Dec. 12, Dec. 24 to Feb. 13.

09132900 WEST HUBBARD CREEK NEAR PAONIA, COLO.

LOCATION.--Lat 39°01'56", long 107°36'47", in NE¼ sec.12, T.12 S., R.92 W. (projected), Delta County, on left bank 75 ft (23 m) upstream from Overland ditch crossing, 3.0 mi (4.8 km) south of Hubbard Park, and 11 mi (18 km) north of Paonia.

DRAINAGE AREA.--2.36 mi² (6.11 km²).

PERIOD OF RECORD.--October 1960 to September 1973 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 9,640 ft (2,938 m) from topographic map.

AVERAGE DISCHARGE.--13 years, 3.54 ft³/s (0.100 m³/s), 2,560 acre-ft/yr (3.16 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 68 ft³/s (1.93 m³/s) June 15 (gage height, 4.52 ft or 1.378 m, from recorded range in stage), from rating curve extended above 23 ft³/s (0.6 m³/s); minimum daily, 0.30 ft³/s (0.008 m³/s) Feb. 19.

Period of record: Maximum discharge, 93 ft³/s (2.63 m³/s) July 30, 1969 (gage height, 4.80 ft or 1.463 m), from rating curve extended above 40 ft³/s (1.1 m³/s); minimum daily determined, 0.10 ft³/s (0.003 m³/s) Apr. 4, 8, 1964.

REMARKS.--Records fair except those for periods of no gage-height record, which are poor. No diversion above station.

REVISIONS.--WSP 2124: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.62	1.0	.70	.40	.45	.40	.40	1.2	11	29	2.9	1.4
2	.62	1.1	.80	.40	.40	.40	.45	1.2	9.1	25	2.7	1.3
3	.56	1.1	.80	.40	.40	.40	.45	1.4	15	21	2.7	1.3
4	.68	1.2	.80	.40	.45	.35	.45	1.5	17	18	2.7	1.3
5	.80	1.1	.70	.40	.50	.35	.45	1.7	20	16	3.9	1.3
6	.68	1.1	.70	.40	.50	.35	.45	1.5	25	14	4.9	1.1
7	.68	1.0	.70	.40	.50	.35	.40	1.6	29	13	3.9	1.1
8	.80	1.0	.60	.40	.45	.35	.40	2.2	34	12	3.4	1.1
9	1.3	1.0	.60	.40	.45	.40	.40	2.9	40	10	3.1	1.1
10	.98	1.1	.60	.40	.50	.40	.45	3.9	45	9.1	2.7	1.2
11	.80	1.0	.60	.40	.50	.40	.45	5.9	40	7.9	2.4	1.2
12	.74	.90	.50	.40	.50	.40	.45	5.9	34	8.2	2.3	1.2
13	.80	.90	.50	.40	.45	.40	.45	4.4	30	8.2	3.3	1.1
14	.80	1.0	.50	.40	.45	.40	.50	4.2	45	17	2.2	1.1
15	3.7	1.0	.50	.40	.40	.40	.50	6.2	60	13	2.2	1.0
16	4.2	.90	.50	.50	.40	.35	.50	7.6	40	8.5	2.0	1.0
17	3.7	.90	.40	.50	.35	.35	.50	11	30	7.0	1.9	1.0
18	3.1	.90	.50	.50	.35	.35	.50	12	26	5.9	2.0	.94
19	7.7	.90	.60	.40	.30	.35	.50	15	24	8.5	2.0	.88
20	4.8	.90	.60	.40	.35	.35	.55	13	24	7.6	1.9	.88
21	2.8	.80	.60	.40	.35	.40	.55	11	25	8.2	1.9	.88
22	2.3	.80	.60	.40	.35	.40	.60	11	27	5.4	2.0	.88
23	2.0	.80	.50	.40	.35	.40	.88	13	31	4.4	2.0	.88
24	1.8	.80	.50	.40	.40	.40	.76	9.8	34	4.2	2.3	.94
25	1.5	.70	.40	.45	.35	.40	.70	7.3	36	3.7	1.5	.94
26	1.4	.70	.50	.50	.40	.35	.70	5.6	40	3.7	1.3	.94
27	1.4	.70	.50	.50	.40	.35	1.3	5.1	40	3.4	1.4	.94
28	1.4	.60	.50	.50	.40	.35	1.6	8.5	38	3.2	1.5	.94
29	1.3	.60	.50	.50	-----	.35	1.4	11	35	4.6	1.5	.88
30	1.1	.70	.50	.50	-----	.40	1.3	13	32	4.2	1.6	.88
31	1.0	-----	.50	.50	-----	.40	-----	12	-----	3.2	1.5	-----
TOTAL	56.06	27.20	17.80	13.35	11.65	11.70	18.99	211.6	936.1	307.1	73.6	31.60
MEAN	1.81	.91	.57	.43	.42	.38	.63	6.83	31.2	9.91	2.37	1.05
MAX	7.7	1.2	.80	.50	.50	.40	1.6	15	60	29	4.9	1.4
MIN	.56	.60	.40	.40	.30	.35	.40	1.2	9.1	3.2	1.3	.88
AC-FT	111	54	35	26	23	23	38	420	1,860	609	146	63

CAL YR 1972 TOTAL 806.29 MEAN 2.20 MAX 18 MIN .26 AC-FT 1,600

WTR YR 1973 TOTAL 1,716.75 MEAN 4.70 MAX 60 MIN .30 AC-FT 3,410

PEAK DISCHARGE (BASE, 40 CFS).--June 15 (time unknown) 68 cfs (4.52 ft).

NOTE.--No gage-height record Oct. 28 to Apr. 22, June 3-18.

GUNNISON RIVER BASIN

281

09132920 HUBBARD CREEK NEAR BOWIE, COLO.

LOCATION.--Lat 39°02'41", long 107°33'58", in NW¼ sec.4, T.12 S., R.91 W., Delta County, on left bank 0.2 mi (0.3 km) downstream from West Hubbard Creek and 9 mi (14 km) north of Bowie.

DRAINAGE AREA.--20.6 mi² (53.4 km²).

PERIOD OF RECORD.--October 1968 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 8,440 ft (2,573 m) from topographic map.

AVERAGE DISCHARGE.--5 years, 18.2 ft³/s (0.515 m³/s), 13,190 acre-ft/yr (16.3 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 488 ft³/s (13.8 m³/s) June 15 (gage height, 2.41 ft or 0.735 m); minimum daily, 0.68 ft³/s (0.019 m³/s) Aug. 17.

Period of record: Maximum discharge, 853 ft³/s (24.2 m³/s) June 24, 1969 (gage height, 2.73 ft or 0.832 m), from rating curve extended above 140 ft³/s (4.0 m³/s); minimum daily, 0.68 ft³/s (0.019 m³/s) Aug. 17, 1973.

REMARKS.--Records good except those for period of no gage-height record, which are poor. Water diverted above station at times by Overland ditch.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.6	6.2	5.8	4.8	4.2	4.0	5.8	5.2	90	74	4.2	1.5
2	1.6	6.0	5.8	4.8	4.0	4.0	3.9	4.7	78	68	4.5	1.6
3	1.5	5.4	5.6	4.9	4.2	4.0	4.0	4.9	84	67	3.2	1.6
4	1.7	5.4	5.6	4.9	4.0	4.1	4.2	5.0	86	70	2.5	1.5
5	5.3	4.8	5.6	4.8	4.2	4.3	4.1	5.6	88	58	5.0	1.6
6	3.7	5.3	5.6	4.7	4.2	4.2	4.0	5.4	90	35	6.1	1.7
7	3.1	5.2	5.6	4.6	4.1	4.0	4.0	5.6	110	24	7.1	2.0
8	3.7	4.5	5.8	4.6	4.0	4.0	4.0	9.6	140	22	6.4	2.0
9	4.8	4.2	5.6	4.5	4.1	4.2	4.2	22	182	19	3.7	2.6
10	4.2	4.6	5.6	4.4	4.3	4.1	4.0	36	205	17	2.2	4.2
11	2.8	5.4	5.8	4.2	4.4	4.0	4.2	36	177	13	2.0	3.5
12	2.2	6.2	5.6	4.3	4.5	3.9	4.1	36	148	9.8	1.3	3.5
13	2.6	7.0	5.6	4.4	4.4	3.9	4.0	30	133	13	1.1	2.8
14	3.2	7.0	5.6	4.5	4.4	4.0	3.9	28	285	24	1.0	1.6
15	26	7.2	5.4	4.6	4.3	4.2	3.9	35	323	23	.76	1.9
16	24	7.0	5.4	4.7	4.2	4.1	4.0	58	148	16	.72	1.5
17	16	7.0	5.6	4.6	4.2	4.0	4.2	80	110	13	.68	1.4
18	14	7.0	5.4	4.6	4.2	4.0	4.2	94	102	12	.84	1.2
19	24	6.8	5.6	4.6	4.1	4.0	4.0	120	85	17	.84	1.1
20	26	6.6	5.6	4.4	4.0	3.9	4.1	110	83	17	.96	.96
21	13	6.6	5.4	4.4	3.9	3.9	4.4	98	81	19	.84	.96
22	10	6.8	5.6	4.6	4.1	4.0	4.7	100	81	13	1.1	.96
23	9.4	6.4	5.6	4.4	4.2	4.0	5.0	110	85	10	1.2	.96
24	8.4	6.0	5.6	4.4	4.2	4.0	5.0	96	90	9.4	1.4	1.5
25	7.1	6.2	5.4	4.6	4.3	4.1	4.9	74	95	7.1	1.2	1.6
26	6.1	6.4	5.2	4.6	4.2	4.1	5.0	64	108	6.8	.88	2.2
27	5.8	6.4	5.4	4.4	4.1	4.1	5.2	58	118	7.7	.96	1.7
28	6.1	6.6	5.4	4.4	4.1	4.2	5.4	68	124	6.8	1.0	1.6
29	5.5	6.4	5.2	4.5	-----	4.1	5.4	82	115	6.8	1.1	1.5
30	5.8	6.0	5.2	4.4	-----	4.0	5.4	98	92	6.8	1.4	1.5
31	6.0	-----	4.9	4.2	-----	3.9	-----	96	-----	5.0	1.1	-----
TOTAL	255.2	182.6	171.3	140.8	117.1	125.3	131.2	1,675.0	3,736	710.2	67.28	54.24
MEAN	8.23	6.09	5.53	4.54	4.18	4.04	4.37	54.0	125	22.9	2.17	1.81
MAX	26	7.2	5.8	4.9	4.5	4.3	5.4	120	323	74	7.1	4.2
MIN	1.5	4.2	4.9	4.2	3.9	3.9	3.8	4.7	78	5.0	.68	.96
AC=FT	506	362	340	279	232	249	260	3,320	7,410	1,410	133	108

CAL YR 1972 TOTAL 3,702.80 MEAN 10.1 MAX 46 MIN 1.1 AC=FT 7,340
WTR YR 1973 TOTAL 7,366.22 MEAN 20.2 MAX 323 MIN .68 AC=FT 14,610

PEAK DISCHARGE (BASE, 150 CFS).--June 15 (0300) 488 cfs (2.41 ft).

NOTE.--No gage-height record Nov. 15 to June 9.

LOCATION.--Lat 38°46'59", long 107°50'14", in NE¼NE¼ sec.1, T.15 S., R.94 W., Delta County, on left bank 300 ft (91 m) downstream from North Fork Gunnison River and 3.0 mi (4.8 km) west of Lazear.

PERIOD OF RECORD.--May 1962 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5,090 ft (1,551 m) from topographic map.

EXTREMES.--Current year: Maximum discharge, 9,800 ft³/s (278 m³/s) June 15 (gage height, 5.28 ft or 1.609 m); minimum daily, 256 ft³/s (7.25 m³/s) Oct. 8.

Period of record: Maximum discharge, 14,800 ft³/s (419 m³/s) May 13, 1962 (gage height, 6.30 ft or 1.920 m, from recorded range in stage); minimum daily, 115 ft³/s (3.26 m³/s) Oct. 6, 1963.

REMARKS.--Records good. Natural flow of stream affected by transmountain and transbasin diversions, storage reservoirs, power development, and diversions for irrigation of about 150,000 acres (607 km²), part of which is in the Uncompahgre River basin.

REVISIONS.--WSP 2124: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	UCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	293	1,240	1,940	2,100	1,300	934	881	1,740	4,520	3,140	1,580	1,040
2	275	1,220	1,800	2,290	1,100	933	891	1,380	5,330	2,940	1,530	1,180
3	267	1,050	1,400	3,110	1,200	941	927	1,340	5,570	2,660	1,220	480
4	273	999	1,140	3,090	1,300	864	841	1,570	6,200	2,420	1,890	442
5	288	1,070	1,730	2,750	1,200	861	650	2,080	5,420	2,320	1,200	1,090
6	285	1,090	1,980	2,900	1,150	833	661	2,470	4,790	2,200	988	1,500
7	277	1,150	2,030	2,600	1,160	816	678	2,090	4,220	2,020	1,580	1,540
8	256	1,080	1,920	3,100	1,190	815	642	2,520	5,390	1,620	1,530	1,200
9	266	1,130	2,000	3,000	1,210	820	788	3,360	6,660	1,560	1,480	1,200
10	273	1,100	1,560	2,900	1,160	804	1,200	5,010	8,080	1,510	1,480	1,540
11	266	1,120	1,590	2,900	934	797	678	6,740	8,400	1,460	1,330	1,640
12	383	1,260	2,130	3,100	1,080	798	664	5,430	7,720	1,590	1,100	1,250
13	417	1,300	2,470	3,200	1,010	1,140	765	5,230	7,040	1,540	1,050	548
14	534	1,260	2,050	2,800	509	830	785	4,980	8,800	1,220	1,340	760
15	713	1,380	2,320	2,400	518	798	869	5,370	8,800	1,200	1,530	820
16	1,110	1,630	2,040	2,600	1,450	769	824	5,430	6,340	1,190	1,620	1,100
17	834	1,670	1,470	2,500	1,200	768	837	5,830	4,910	1,730	1,710	540
18	779	1,810	1,380	2,280	1,030	770	821	6,250	4,400	1,160	1,710	450
19	825	1,560	2,180	2,300	935	961	709	7,360	3,850	1,020	1,510	450
20	914	1,200	1,840	1,880	1,280	1,080	804	7,790	3,680	1,330	1,590	525
21	657	1,690	2,140	1,460	1,120	1,360	643	7,750	3,510	1,480	1,750	532
22	524	1,790	2,410	1,140	799	1,780	637	8,400	3,570	1,190	2,080	532
23	509	1,310	2,600	1,580	175	869	706	7,160	3,680	952	1,730	525
24	474	1,160	2,360	1,400	780	830	909	6,250	3,710	1,290	1,770	540
25	448	1,710	1,120	1,400	795	821	974	5,750	3,570	1,320	1,450	548
26	367	1,380	1,510	1,200	801	815	1,060	6,250	3,430	1,220	1,390	555
27	341	1,230	2,010	1,300	810	862	1,210	5,060	3,790	1,460	1,770	525
28	603	1,850	2,430	1,300	849	849	1,470	3,990	3,880	1,440	1,150	548
29	598	1,910	2,460	1,200	-----	775	1,640	3,680	3,850	790	602	465
30	604	1,960	2,350	1,300	-----	833	1,800	3,710	3,540	820	400	472
31	767	-----	2,200	1,400	-----	858	-----	3,790	-----	1,120	1,500	-----
TOTAL	15,420	41,249	60,560	68,480	28,645	27,984	26,964	145,760	156,650	48,902	44,560	24,537
MEAN	497	1,375	1,954	2,209	1,023	903	899	4,702	5,222	1,577	1,437	818
MAX	1,110	1,960	2,600	3,200	1,450	1,780	1,800	8,400	8,800	3,140	2,080	1,640
MIN	256	999	1,120	1,140	509	768	637	1,340	3,430	790	400	442
AC-F T	30,590	81,820	120,100	135,800	56,820	55,510	53,480	289,100	310,700	97,000	88,380	48,670
CAL YR 1972	TOTAL	378,330	MEAN	1,034	MAX	2,600	MIN	237	AC-F T	750,400		
WIR YR 1973	TOTAL	689,711	MEAN	1,890	MAX	8,800	MIN	256	AC-F T	1,368,000		

GUNNISON RIVER BASIN

283

09143000 SURFACE CREEK NEAR CEDAREDDGE, COLO.

LOCATION.--Lat 38°59'05", long 107°51'13", in NW¼NW¼ sec.25, T.12 S., R.94 W., Delta County, on left bank 5 ft (2 m) downstream from private bridge, 1.4 mi (2.3 km) downstream from Caesar Creek, and 7.0 mi (11.3 km) northeast of Cedaredge.

DRAINAGE AREA.--26.7 mi² (69.2 km²).

PERIOD OF RECORD.--June 1939 to current year. Monthly discharge only for some periods, published in WSP 1313.

GAGE.--Water-stage recorder. Altitude of gage is 8,261 ft (2,518 m) from topographic map.

AVERAGE DISCHARGE.--34 years, 41.8 ft³/s (1.184 m³/s), 30,280 acre-ft/yr (37.3 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 624 ft³/s (17.7 m³/s) May 18 (gage height, 3.21 ft or 0.978 m), from rating curve extended above 310 ft³/s (8.8 m³/s); minimum daily, 5.0 ft³/s (0.14 m³/s) Jan. 19, 20, 23. Period of record: Maximum discharge, 624 ft³/s (17.7 m³/s) May 18, 1973 (gage height, 3.21 ft or 0.978 m), from rating curve extended above 310 ft³/s (8.8 m³/s); maximum gage height, 5.10 ft (1.554 m) Apr. 13, 1958 (ice jam); minimum daily discharge determined, 1.8 ft³/s (0.051 m³/s) Dec. 8, 1963.

REMARKS.--Records good. Flow regulated by many small reservoirs. Some water imported from Leon Lake in Plateau Creek drainage.

REVISIONS.--WSP 1924: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	28	6.8	5.8	5.5	5.8	6.8	36	245	150	80	52
2	10	12	6.8	5.8	5.5	5.8	6.5	31	256	138	74	56
3	17	10	6.5	6.0	5.8	5.8	6.8	36	221	143	74	54
4	21	10	6.5	6.0	5.5	6.0	7.0	58	204	130	91	36
5	35	7.9	6.8	5.8	5.5	6.3	7.6	69	180	114	98	33
6	24	8.5	6.5	5.5	5.5	6.0	8.2	62	186	104	98	42
7	16	8.6	6.8	5.5	5.5	5.8	8.5	49	217	103	86	44
8	17	8.5	6.5	5.5	5.5	5.5	8.4	52	256	101	83	52
9	17	8.5	6.5	5.5	5.3	5.8	8.0	74	280	99	76	54
10	14	8.8	6.5	5.5	5.3	5.8	6.8	138	315	103	73	56
11	12	8.8	6.5	5.8	5.5	5.5	6.8	214	291	110	60	53
12	11	8.6	6.3	5.5	5.5	5.8	7.0	280	291	130	56	56
13	13	8.6	6.3	5.3	5.8	6.0	8.2	273	280	138	54	58
14	15	8.6	6.3	5.3	5.5	5.8	9.7	235	382	128	68	58
15	41	8.6	6.3	5.3	6.0	6.0	9.7	252	462	119	68	57
16	41	8.3	6.0	5.3	6.5	6.0	9.6	242	315	114	73	56
17	31	7.9	6.0	5.5	6.8	6.0	9.4	277	284	108	76	54
18	26	7.6	6.0	5.3	6.5	6.0	10	333	266	101	73	37
19	49	7.6	6.0	5.0	6.3	6.0	9.7	319	242	130	69	34
20	40	7.3	6.0	5.0	6.3	6.8	10	322	221	117	68	29
21	28	7.3	5.8	5.8	6.3	6.8	9.4	305	214	98	61	28
22	23	7.9	5.8	5.8	6.0	7.0	10	287	201	83	61	33
23	20	8.2	6.0	5.0	5.8	7.0	14	259	198	76	61	34
24	18	8.2	6.0	5.8	5.5	7.0	19	256	198	74	59	34
25	17	8.2	5.8	6.0	5.5	7.0	22	245	195	68	69	35
26	20	9.1	5.8	5.8	5.5	7.0	23	214	195	66	69	36
27	20	8.8	5.8	5.5	5.5	6.8	34	168	195	64	69	34
28	20	8.2	6.0	5.5	5.8	6.8	43	133	189	80	57	32
29	18	7.9	5.8	5.8	-----	7.0	45	156	183	77	54	19
30	22	7.3	5.8	6.0	-----	6.8	44	189	165	74	42	16
31	31	-----	6.0	5.8	-----	6.8	-----	231	-----	83	40	-----
TOTAL	697	273.8	192.5	173.0	161.5	194.5	428.1	5,795	7,327	3,223	2,140	1,272
MEAN	22.5	9.13	6.21	5.58	5.77	6.27	14.3	187	244	104	69.0	42.4
MAX	49	28	6.8	6.0	6.8	7.0	45	333	462	150	98	58
MIN	10	7.3	5.8	5.0	5.3	5.5	6.5	31	165	64	40	16
AC=FT	1,380	543	382	343	320	386	849	11,490	14,530	6,390	4,240	2,520

CAL YR 1972 TOTAL 12,617.2 MEAN 34.5 MAX 159 MIN 4.5 AC=FT 25,030
 WTR YR 1973 TOTAL 21,877.4 MEAN 59.9 MAX 462 MIN 5.0 AC=FT 43,390

GUNNISON RIVER BASIN

09143500 SURFACE CREEK AT CEDAREGE, COLO.

LOCATION.--Lat 38°54'06", long 107°55'14", in SW¼SE¼ sec.20, T.13 S., R.94 W., Delta County, on left bank at Cedarege, 700 ft (210 m) east of State Highway 65 and 8.5 mi (13.7 km) upstream from mouth.

DRAINAGE AREA.--39.5 mi² (102.3 km²).

PERIOD OF RECORD.--October 1916 to current year. Monthly discharge only for some periods, published in WSP 1313.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 6,220 ft (1,896 m) from topographic map. Prior to June 8, 1917, nonrecording gage at same site at datum 0.50 ft (0.152 m) higher.

AVERAGE DISCHARGE.--57 years, 27.2 ft³/s (0.770 m³/s), 19,710 acre-ft/yr (24.3 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 730 ft³/s or 20 m³/s (estimated) May 18; maximum gage height, 2.31 ft (0.704 m) May 10; minimum daily discharge, 3.7 ft³/s (0.10 m³/s) Dec. 26-28, 30, 31.

Period of record: Maximum discharge, 1,190 ft³/s (33.7 m³/s) May 13, 1941 (gage height, 2.50 ft or 0.762 m), from rating curve extended above 640 ft³/s (18 m³/s); no flow Sept. 25, 1939, and practically no flow at times in some winters.

REMARKS.--Records good except those for winter period, which are fair. 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.

REVISIONS.--WSP 1924: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.5	22	6.0	4.1	5.4	5.5	7.0	27	153	93	36	23
2	7.0	14	6.0	4.0	5.4	5.5	7.5	21	168	89	35	25
3	6.0	11	6.0	4.1	5.6	5.1	7.0	34	138	75	35	24
4	7.5	12	5.1	4.1	6.0	4.8	8.0	58	125	65	36	20
5	29	12	5.1	4.1	6.0	5.1	8.0	55	99	67	41	19
6	15	13	5.6	4.1	6.0	4.4	8.0	49	97	63	42	20
7	12	12	5.8	4.2	6.0	5.1	7.8	41	121	61	35	20
8	14	10	6.0	4.2	6.0	5.1	7.8	40	160	61	30	21
9	15	7.0	6.0	4.2	6.2	5.1	7.6	83	195	58	29	21
10	13	7.5	6.0	4.2	6.2	5.1	7.5	150	244	55	24	23
11	11	8.7	6.2	4.2	6.4	4.8	7.5	247	229	63	29	17
12	9.5	7.5	6.2	4.1	6.6	5.1	8.7	278	218	71	30	17
13	11	7.0	6.2	4.1	6.6	5.5	12	278	213	73	30	15
14	15	10	6.2	4.1	6.8	5.1	15	241	268	73	37	15
15	45	8.0	6.0	4.1	7.3	5.1	16	244	411	67	36	13
16	60	8.0	6.0	4.4	8.2	6.0	13	257	244	63	43	11
17	37	8.0	6.0	4.4	9.8	5.5	15	244	190	60	46	11
18	34	8.0	5.8	4.4	6.6	6.5	15	313	173	55	39	11
19	50	8.0	5.8	4.4	5.2	5.5	13	305	155	83	33	10
20	49	7.5	5.8	4.4	5.2	6.0	10	357	136	71	31	8.7
21	29	7.5	4.8	4.1	5.2	7.5	8.7	271	130	71	28	8.7
22	22	8.0	4.4	4.5	5.1	7.0	8.0	244	123	63	28	8.7
23	20	8.6	4.4	4.2	4.8	7.0	14	193	109	57	21	8.0
24	16	7.8	4.1	4.6	4.8	7.0	27	180	103	50	19	8.0
25	15	7.2	4.1	5.0	5.1	8.7	34	165	99	45	18	9.3
26	23	7.8	3.7	5.2	4.4	7.5	29	148	97	42	17	10
27	22	8.0	3.7	5.0	5.1	8.0	41	109	93	40	16	10
28	23	7.6	3.7	5.0	5.5	7.5	57	107	91	42	22	11
29	21	7.0	4.1	5.2	-----	7.5	50	115	83	41	25	13
30	20	6.4	3.7	5.6	-----	7.5	37	123	79	37	21	13
31	23	-----	3.7	5.4	-----	7.0	-----	141	-----	40	19	-----
TOTAL	681.3	277.1	162.2	137.7	167.5	188.1	507.1	5,118	4,744	1,894	931	444.4
MEAN	22.0	9.24	5.23	4.44	5.98	6.07	16.9	165	158	61.1	30.0	14.8
MAX	60	22	6.2	5.6	9.8	8.7	57	357	411	93	46	25
MIN	6.0	6.4	3.7	4.0	4.4	4.4	7.0	21	79	37	16	8.0
AC-FT	1,350	550	322	273	332	373	1,010	10,150	9,410	3,760	1,850	881

CAL YR 1972 TOTAL 8,144.9 MEAN 22.3 MAX 73 MIN 3.7 AC-FT 16,160
WTR YR 1973 TOTAL 15,252.4 MEAN 41.8 MAX 411 MIN 3.7 AC-FT 30,250

09146200 UNCOMPAHGRE RIVER NEAR RIDGWAY, COLO.

LOCATION.--Lat 38°11'02", long 107°44'43", in SW¼NE¼ sec.4, T.45 N., R.8 W., Ouray County, on right bank 15 ft (5 m) upstream from bridge, 0.2 mi (0.3 km) downstream from Dry Creek, 0.5 mi (0.8 km) upstream from Dallas Creek, and 2.3 mi (3.7 km) north of Ridgway.

DRAINAGE AREA.--149 mi² (386 km²).

PERIOD OF RECORD.--October 1958 to current year.

GAGE.--Water-stage recorder. Datum of gage is 6,877.58 ft (2,096.286 m) above mean sea level (levels by Bureau of Reclamation).

AVERAGE DISCHARGE.--15 years, 159 ft³/s (4.503 m³/s), 115,200 acre-ft/yr (142 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,720 ft³/s (48.7 m³/s) June 28 (gage height, 5.25 ft or 1.600 m); minimum daily, 37 ft³/s (1.05 m³/s) Feb. 14-17.

Period of record: Maximum discharge, 1,890 ft³/s (53.5 m³/s) Sept. 6, 1970 (gage height, 5.38 ft or 1.640 m); minimum daily, 26 ft³/s (0.74 m³/s) Jan. 13, 1963.

REMARKS.--Records good. Diversions for irrigation above station. Water is imported above station in some years by Red Mountain ditch from Mineral Creek in San Juan River basin.

REVISIONS.--WSP 2124: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	70	91	55	44	41	48	49	122	466	944	258	132
2	68	98	56	43	40	52	49	105	454	896	246	120
3	67	101	58	42	41	54	47	105	438	782	243	114
4	64	96	60	38	41	50	49	143	494	728	243	108
5	83	92	59	40	42	50	48	158	426	716	261	103
6	70	92	58	44	42	47	51	147	438	670	279	101
7	68	81	56	44	42	47	54	126	525	620	319	98
8	84	84	56	42	42	48	47	122	665	600	267	96
9	78	86	56	42	42	50	51	154	890	700	243	94
10	75	78	54	43	42	49	58	220	1,060	716	223	101
11	78	78	50	42	42	50	56	362	1,050	690	215	112
12	77	78	49	42	42	59	59	422	1,060	710	210	116
13	78	78	48	43	39	58	63	426	1,140	685	200	108
14	75	77	47	43	37	50	65	434	1,080	640	193	108
15	95	72	46	44	37	48	65	390	740	540	181	105
16	255	70	46	44	37	48	59	418	515	474	172	103
17	174	72	46	44	37	54	58	426	478	426	163	103
18	143	75	47	43	40	55	61	502	525	438	154	98
19	167	72	49	43	39	58	61	625	530	490	150	92
20	165	72	50	43	38	64	59	635	555	525	150	91
21	128	72	49	42	40	68	61	585	655	462	156	86
22	112	67	51	40	39	58	59	482	746	394	165	84
23	107	61	49	38	38	54	64	398	830	347	143	83
24	103	59	50	40	40	47	72	442	836	333	143	86
25	105	60	49	43	42	48	80	446	860	326	145	88
26	101	60	47	46	42	51	75	454	1,080	329	145	114
27	105	59	46	42	46	56	86	343	1,290	322	132	114
28	107	55	48	40	47	55	120	297	1,350	303	132	116
29	98	58	47	41	-----	54	143	294	1,080	285	128	114
30	96	55	46	43	-----	52	156	336	1,110	282	136	107
31	89	-----	46	41	-----	49	-----	398	-----	264	150	-----
TOTAL	3,185	2,249	1,574	1,309	1,137	1,631	2,025	10,517	23,366	16,637	5,945	3,095
MEAN	103	75.0	50.8	42.2	40.6	52.6	67.5	339	779	537	192	103
MAX	255	101	60	46	47	68	156	635	1,350	944	319	132
MIN	64	55	46	38	37	47	47	105	426	264	128	83
C-FT	6,320	4,460	3,120	2,600	2,260	3,240	4,020	20,860	46,350	33,000	11,790	6,140

AL YR 1972 TOTAL 43,525 MEAN 119 MAX 585 MIN 36 AC-FT 86,330

YR 1973 TOTAL 72,670 MEAN 199 MAX 1,350 MIN 37 AC-FT 144,100

PEAK DISCHARGE (BASE, 1,000 CFS).--June 14 (0200) 1,260 cfs (4.85 ft); June 28 (0130) 1,720 cfs (5.25 ft).

GUNNISON RIVER BASIN

09147100 COW CREEK NEAR RIDGWAY, COLO.

LOCATION.--Lat 38°08'58", long 107°38'39", in NW¼SW¼ sec.16, T.45 N., R.7 W., Ouray County, on right bank 50 ft (15 m) downstream from Sneva ditch siphon, 500 ft (150 m) upstream from Flume Creek, and 6.2 mi (10.0 km) east of Ridgway.

DRAINAGE AREA.--45.4 mi² (117.6 km²).

PERIOD OF RECORD.--October 1955 to September 1973 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 7,620 ft (2,323 m) from topographic map. Oct. 1, 1955, to July 27, 1967, at site 0.8 mi (1.3 km) upstream at different datum. July 28, 1967, to June 6, 1968, at site 200 ft (61 m) upstream at different datum. Supplementary water-stage recorder on Sneva ditch, since July 28, 1967.

AVERAGE DISCHARGE (COMBINED FLOW).--18 years, 62.0 ft³/s (1.756 m³/s), 44,920 acre-ft/yr (55.4 hm³/yr).

EXTREMES (COMBINED FLOW).--Current year: Maximum discharge, about 1,100 ft³/s (31 m³/s) June 28; maximum gage height, 4.20 ft (1.280 m) June 29; minimum daily discharge, 2.4 ft³/s (0.068 m³/s) Oct. 27-29. Period of record: Maximum discharge, 1,360 ft³/s (38.5 m³/s) June 28, 1957 (gage height, 7.70 ft or 2.347 m, site and datum then in use); minimum daily, 2.0 ft³/s (0.057 m³/s) Jan. 9, 1957.

REMARKS.--Records good except those for winter period, which are fair. Sneva ditch diverts water above station for irrigation below. Records show combined flow of creek and Sneva ditch.

REVISIONS.--WSP 2124: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	7.4	8.4	4.6	3.9	6.0	6.0	39	188	698	84	26
2	10	3.9	8.0	4.6	4.2	6.0	6.2	36	190	604	79	23
3	9.9	3.4	8.0	4.4	4.4	6.5	5.9	42	200	554	76	21
4	10	11	8.0	4.2	4.3	6.5	6.5	49	203	491	75	21
5	15	13	6.8	4.6	4.3	6.0	7.0	48	198	524	73	20
6	11	12	7.5	4.6	4.8	5.5	7.5	44	195	447	81	18
7	11	18	7.5	4.1	4.3	5.5	8.0	41	220	399	96	17
8	21	12	7.7	4.1	4.1	5.5	7.5	43	376	376	75	17
9	14	11	6.2	4.1	3.9	6.0	8.0	54	478	413	67	16
10	11	24	5.9	4.1	3.9	6.5	8.0	80	500	405	60	21
11	6.8	16	6.5	3.9	5.9	6.5	9.2	116	520	388	56	21
12	6.2	11	6.2	3.9	3.9	7.0	12	142	520	387	52	23
13	6.8	11	5.6	4.1	3.9	7.0	17	162	542	371	46	19
14	7.7	12	5.3	4.6	4.0	6.8	20	156	418	333	44	16
15	13	11	5.0	5.0	4.0	7.1	19	148	350	298	44	15
16	44	11	5.6	5.3	4.0	8.0	16	158	290	254	42	13
17	26	11	5.3	5.3	4.0	8.5	16	166	296	227	40	13
18	20	10	5.3	4.6	4.2	8.8	18	213	333	214	40	12
19	17	10	5.0	4.3	4.2	10	16	215	325	231	40	12
20	14	12	5.0	4.1	4.0	12	15	240	342	227	38	12
21	9.6	10	5.0	4.6	4.2	12	14	230	364	191	37	11
22	8.0	7.1	5.0	4.2	4.2	9.2	18	223	388	159	38	10
23	7.1	6.5	5.3	3.8	4.6	8.0	27	195	398	143	32	10
24	5.5	6.5	5.3	4.0	4.6	7.4	27	174	429	139	33	13
25	2.7	6.5	4.8	4.4	4.8	7.5	24	164	434	135	31	14
26	2.5	6.5	4.8	5.0	4.8	9.0	28	160	494	128	30	21
27	2.4	6.8	5.0	4.6	5.0	10	38	144	646	117	26	31
28	2.4	7.4	5.5	4.4	5.5	8.4	45	142	809	108	25	28
29	2.4	7.7	5.3	4.6	-----	7.7	55	144	692	105	24	25
30	2.7	8.4	4.8	4.6	-----	7.1	50	154	713	99	27	26
31	6.2	-----	4.8	4.3	-----	6.5	-----	164	-----	90	34	-----
TOTAL	534.9	304.1	184.4	137.0	119.9	234.5	554.8	4,086	12,051	9,255	1,545	545
MEAN	10.8	10.1	5.95	4.42	4.28	7.56	18.5	137	402	299	49.8	18.2
MAX	44	24	8.4	5.3	5.5	12	55	240	809	698	96	31
MIN	2.4	3.4	4.8	3.8	3.9	5.5	5.9	36	188	90	24	10
AC-FT	664	603	366	272	238	465	1,100	8,100	23,900	18,360	3,060	1,080

CAL YR 1972 TOTAL 12,829.5 MEAN 35.1 MAX 295 MIN 2.4 AC-FT 25,450
 WTR YR 1973 TOTAL 29,351.6 MEAN 80.4 MAX 809 MIN 2.4 AC-FT 58,220

PEAK DISCHARGE (BASE, 500 CFS).--June 13 (time unknown) about 600 cfs; June 28 (time unknown) about 1,100 cfs.

GUNNISON RIVER BASIN

287

09147500 UNCOMPAHGRE RIVER AT COLONA, COLO.

LOCATION.--Lat 38°19'53", long 107°46'44", in NW¼NW¼ sec.17, T.47 N., R.8 W., Ouray County, on right bank 15 ft (5 m) downstream from county highway bridge, 0.2 mi (0.3 km) north of Colona, and 1.0 mi (1.6 km) upstream from Beaton Creek.

DRAINAGE AREA.--443 mi² (1,147 km²).

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.

GAGE.--Water-stage recorder. Datum of gage is 6,318.80 ft (1,925.970 m) above mean sea level. See WSP 1713 or 1733 for history of changes prior to Sept. 30, 1949.

AVERAGE DISCHARGE.--63 years (1903-5, 1912-73), 267 ft³/s (7.561 m³/s), 193,400 acre-ft/yr (238 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 3,200 ft³/s (90.6 m³/s) June 27 (gage height, 5.63 ft or 1.716 m); maximum gage height, 6.67 ft (2.033 m) June 11 (backwater from debris); minimum daily discharge, 62 ft³/s (1.76 m³/s) Jan. 23, Feb. 14, 16.

Period of record: Maximum daily discharge, 4,080 ft³/s (116 m³/s) June 13, 14, 1921; minimum daily, 12 ft³/s (0.34 m³/s) Sept. 19, 1956, May 7, 1967.

REMARKS.--Records good. Natural flow of stream affected by water diverted from West Fork Cimarron Creek, Mineral Creek (San Juan River basin), and Leopard Creek (Dolores River basin), diversions for irrigation of about 19,000 acres or 76.9 km² (part of which is below station) and return flow from irrigated areas.

REVISIONS (WATER YEARS).--WSP 1313: 1904. WSP 2124: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	87	163	111	87	80	93	100	385	706	1,270	322	190
2	84	168	109	86	73	100	103	330	774	1,150	322	170
3	80	168	111	87	74	102	99	338	760	1,020	314	165
4	75	170	112	96	74	94	99	475	1,090	994	322	160
5	93	170	108	94	72	97	99	550	886	928	346	150
6	90	168	93	93	70	91	112	470	837	914	410	148
7	88	155	109	97	72	87	123	390	942	986	500	139
8	106	168	108	96	72	90	105	410	1,110	994	430	136
9	106	168	103	103	70	94	111	586	1,550	1,110	358	134
10	97	155	91	97	69	93	132	754	2,370	1,030	322	134
11	96	160	93	99	69	93	141	970	2,100	1,060	294	141
12	96	158	94	97	69	102	160	1,060	1,620	1,020	278	143
13	99	150	99	100	67	108	175	1,080	1,740	960	266	139
14	100	148	102	105	62	96	180	1,010	1,770	880	241	134
15	106	145	88	106	66	93	185	942	1,420	760	238	130
16	322	130	88	102	62	91	145	949	1,350	680	229	123
17	286	137	96	88	63	102	150	928	1,270	620	213	124
18	244	143	100	81	67	108	173	1,000	1,380	650	205	121
19	241	137	109	80	69	108	160	1,150	1,340	680	195	118
20	247	136	102	76	64	121	155	1,250	1,390	730	208	114
21	213	137	109	76	72	137	173	1,190	1,560	620	215	112
22	203	130	106	68	70	112	170	1,030	1,650	530	223	112
23	193	114	96	62	72	106	193	823	1,820	470	205	108
24	183	121	91	68	73	103	220	809	1,910	455	203	109
25	178	118	100	72	76	96	244	802	1,940	445	203	111
26	173	121	91	76	78	103	250	921	2,260	440	200	134
27	170	123	99	77	84	118	290	682	2,560	425	193	132
28	175	109	102	76	91	109	354	568	1,850	390	188	139
29	168	112	96	76	-----	108	485	532	1,480	385	185	143
30	168	111	93	80	-----	106	526	556	1,470	370	185	137
31	158	-----	81	80	-----	102	-----	592	-----	345	208	-----
TOTAL	4,725	4,293	3,090	2,681	2,000	3,163	5,612	23,532	44,905	23,311	8,221	4,050
MEAN	152	143	99.7	86.5	71.4	102	187	759	1,497	752	265	135
MAX	322	170	112	106	91	137	526	1,250	2,560	1,270	500	190
MIN	75	109	81	62	62	87	99	330	706	345	185	108
AC-FT	9,370	8,520	6,130	5,320	3,970	6,270	11,130	46,680	89,070	46,240	16,310	8,030

CAL YR 1972 TOTAL 59,001 MEAN 161 MAX 900 MIN 50 AC-FT 117,000
WTR YR 1973 TOTAL 129,583 MEAN 355 MAX 2,560 MIN 62 AC-FT 257,000

GUNNISON RIVER BASIN

09149500 UNCOMPAHGRE RIVER AT DELTA, COLO.

LOCATION.--Lat 38°44'31", long 108°04'49", in SW¼SW¼ sec.13, T.15 S., R.96 W., Delta County, on right bank 525 ft (160 m) downstream from 5th Street Bridge at west edge of Delta and 1.1 mi (1.8 km) upstream from mouth.

DRAINAGE AREA.--1,129 mi² (2,924 km²).

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.

GAGE.--Water-stage recorder. Datum of gage is 4,926.49 ft (1,501.594 m) above mean sea level. Feb. 18, 1960, to Mar. 26, 1963, water-stage recorder at site 750 ft (230 m) upstream at datum 3.43 ft (1.045 m) higher. Mar. 27, 1963, to May 12, 1965, water-stage recorder at site 1,050 ft (320 m) upstream at datum 6.08 ft (1.045 m) higher. See WSP 1733 or 1924 for history of changes prior to Feb. 18, 1960.

AVERAGE DISCHARGE.--37 years (1907-8, 1920-21, 1938-73), 279 ft³/s (7.901 m³/s) 202,100 acre-ft/yr (249 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,000 ft³/s (56.6 m³/s) June 4 (gage height, 6.06 ft or 1.847 m); minimum daily, 74 ft³/s (2.10 m³/s) Apr. 3.

Period of record: Maximum discharge recorded, 3,730 ft³/s (106 m³/s) May 5, 1941 (gage height, 5.90 ft or 1.798 m, site and datum then in use), from rating curve extended above 1,900 ft³/s (54 m³/s); no flow at times in 1908; minimum daily determined since beginning of diversion through Gunnison tunnel, 7 ft³/s (0.20 m³/s) July 10-15, 17, 21, 24-28, 1910.

REMARKS.--Records good. Natural flow of stream affected by water diverted from Gunnison River (see record of diversion through Gunnison tunnel published with sta. 09128000) and other adjacent basins, diversions for irrigation of about 90,000 acres (364 km²) above station, and return flow from irrigated areas. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1243: 1904. WSP 2124: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	428	511	216	185	182	276	110	635	385	813	243	288
2	422	374	218	178	164	278	91	478	532	677	235	269
3	395	365	222	180	163	256	74	357	703	516	236	294
4	395	354	227	191	196	225	176	405	1,400	394	238	501
5	466	357	224	191	180	212	145	680	1,510	411	288	270
6	465	390	201	160	163	192	141	735	1,240	369	412	251
7	481	354	220	170	153	175	270	554	1,150	283	602	249
8	501	329	206	170	167	167	259	542	810	449	616	245
9	535	346	202	190	177	175	269	578	1,130	533	528	240
10	557	319	178	200	169	157	237	915	1,530	694	448	249
11	569	305	192	210	173	150	173	1,200	1,710	589	373	355
12	474	308	185	200	188	147	240	1,300	1,430	660	319	423
13	465	308	192	220	183	177	271	1,200	1,270	926	269	436
14	487	295	193	210	170	171	264	1,000	1,440	1,050	269	464
15	543	289	193	202	163	133	315	740	1,320	726	190	490
16	905	279	196	200	153	121	228	576	739	530	200	490
17	952	270	203	188	149	111	183	470	434	642	212	494
18	834	290	210	200	155	126	221	519	446	596	253	505
19	893	294	225	203	165	140	295	796	336	724	246	502
20	844	277	207	178	153	136	274	886	283	925	250	413
21	666	277	180	161	153	162	230	780	292	854	273	410
22	600	270	191	159	158	167	201	562	308	788	358	429
23	580	248	190	164	162	134	230	381	369	619	361	424
24	559	225	178	168	172	123	196	256	439	448	327	495
25	548	221	181	163	198	118	161	248	405	372	312	577
26	592	220	174	203	218	114	242	593	538	345	312	614
27	574	254	173	198	225	122	233	539	919	329	336	622
28	613	212	187	176	262	129	344	335	1,150	317	272	612
29	600	221	188	182	-----	158	580	274	1,050	282	242	458
30	626	209	177	192	-----	217	864	241	1,020	273	236	448
31	625	-----	168	211	-----	134	-----	283	-----	260	287	-----
TOTAL	18,194	8,971	6,102	5,803	4,914	5,103	7,517	19,058	26,288	17,394	9,683	12,367
MEAN	587	299	197	187	176	165	251	615	876	561	312	412
MAX	952	511	229	220	262	278	864	1,300	1,710	1,050	616	622
MIN	395	209	168	159	149	111	74	241	283	260	190	240
AC-FT	36,090	17,790	12,100	11,510	9,750	10,120	14,910	37,800	52,140	34,500	19,210	24,530

CAL YR 1972 TOTAL 89,983 MEAN 246 MAX 952 MIN 51 AC-FT 178,500
 WTR YR 1973 TOTAL 141,394 MEAN 387 MAX 1,710 MIN 74 AC-FT 280,500

09152000 KANNAH CREEK NEAR WHITEWATER, COLO.

LOCATION.--Lat 38°57'42", long 108°13'47", in NW¼SW¼ sec.34, T.12 S., R.97 W., Mesa County, on right bank at downstream side of county bridge, 0.2 mi (0.3 km) downstream from intake of pipeline for Grand Junction water supply and 12 mi (19 km) east of Whitewater.

DRAINAGE AREA.--61.9 mi² (160.3 km²).

PERIOD OF RECORD.--October 1917 to September 1921, September 1922 to current year. Monthly discharge only for some periods, published in WSP 1313. Prior to October 1960, published as Kannah Creek near Whitewater.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 6,060 ft (1,847 m) from topographic map. Prior to Sept. 30, 1932, nonrecording gage and Sept. 30, 1932, to Oct. 14, 1935, water-stage recorder, at site 300 ft (91 m) upstream at different datum.

AVERAGE DISCHARGE (COMBINED FLOW).--55 years, 38.5 ft³/s (1.09 m³/s) 27,890 acre-ft/yr (34.4 hm³/yr).

EXTREMES (COMBINED FLOW).--Current year: Maximum discharge, 487 ft³/s (13.8 m³/s) May 24 (gage height, 2.25 ft or 0.686 m); minimum daily, 8.1 ft³/s (0.23 m³/s) Mar. 15.

Period of record: Maximum discharge observed, 1,640 ft³/s (46.4 m³/s) June 6, 1921 (gage height, 4.5 ft or 1.37 m), site and datum then in use), from rating curve extended above 700 ft³/s (20 m³/s); minimum daily, 3.5 ft³/s (0.099 m³/s) Jan. 30, 1972.

REMARKS.--Records good except those for winter period, which are poor. Diversion above station for municipal supply of Grand Junction and minor diversion by Raber ditch for irrigation of about 60 acres (243,000 m²) below station. Records of municipal supply furnished by Colorado Division of Water Resources and monthly figures are adjusted to show total flow of streams. Daily figures are for stream below city and Raber ditch diversions. Regulation by a few small reservoirs above station.

REVISIONS.--WSP 1924: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.0	22	8.0	6.0	5.0	6.0	.40	25	297	48	16	12
2	2.2	19	9.0	5.0	4.0	4.0	.36	17	293	43	16	12
3	2.2	37	10	6.0	4.0	4.0	.34	17	253	39	16	14
4	3.9	40	11	6.0	5.0	3.0	.34	36	214	37	16	15
5	9.0	40	9.0	5.0	5.0	3.0	.34	40	189	34	18	14
6	5.4	38	8.0	5.0	5.0	2.0	.40	38	201	33	20	13
7	5.4	31	8.0	4.0	6.0	1.0	.45	38	217	32	22	9.0
8	7.5	27	8.0	5.0	6.0	.90	.50	44	293	31	19	10
9	11	25	8.0	5.0	5.0	.80	.60	61	361	31	17	12
10	7.0	22	6.0	4.0	4.0	.70	.64	90	375	27	16	13
11	5.7	21	6.0	3.0	5.0	.60	.88	116	343	22	16	10
12	5.1	19	7.0	4.0	6.0	.50	2.4	133	313	24	14	11
13	6.5	16	7.0	4.0	6.0	.40	5.7	148	309	23	13	8.5
14	5.7	15	6.0	4.0	5.0	.32	8.0	162	281	21	15	7.0
15	8.0	15	6.0	4.0	4.0	.30	6.5	198	293	18	16	6.0
16	38	14	6.0	4.0	3.0	.35	4.2	224	177	18	15	6.0
17	27	14	7.0	5.0	3.0	.30	5.4	261	130	15	16	5.7
18	27	14	9.0	5.0	3.0	.30	5.1	339	118	15	19	6.5
19	49	13	9.0	4.0	2.0	.30	6.5	361	114	28	16	7.0
20	67	13	9.0	3.0	2.0	.36	2.8	361	111	30	16	7.0
21	42	13	8.0	3.0	3.0	.52	2.0	440	104	31	21	8.0
22	34	11	8.0	3.0	3.0	.40	2.4	339	102	28	22	8.0
23	33	11	8.0	3.0	3.0	.38	8.0	265	98	26	19	7.5
24	30	11	9.0	3.0	4.0	.36	15	334	92	25	18	9.0
25	26	10	9.0	4.0	4.0	.36	19	317	79	22	17	12
26	23	10	9.0	5.0	4.0	.36	15	289	77	22	16	11
27	23	8.0	10	5.0	5.0	.36	18	235	77	20	16	10
28	24	8.0	10	4.0	6.0	.38	31	210	74	19	16	13
29	22	9.0	9.0	4.0	-----	.36	32	214	62	18	16	25
30	21	10	8.0	4.0	-----	.34	33	245	56	17	16	24
31	21	-----	7.0	5.0	-----	.38	-----	285	-----	17	13	-----
TOTAL	593.6	556.0	252.0	134.0	120.0	33.33	227.25	5,882	5,703	814	522	326.2
MEAN	19.1	18.5	8.13	4.32	4.29	1.08	7.58	190	190	26.3	16.8	10.9
MAX	67	40	11	6.0	6.0	6.0	33	440	375	48	22	25
MIN	2.0	8.0	6.0	3.0	2.0	.30	.34	17	56	15	13	5.7
AC-FT	1,180	1,100	500	266	238	66	451	11,670	11,310	1,610	1,040	647

ADJUSTED FOR DIVERSIONS

MEAN	25.6	23.4	14.9	9.95	11.3	9.27	16.5	200	200	37.8	27.9	21.9
AC-FT	1,580	1,390	919	612	630	570	983	12,290	11,920	2,320	1,720	1,300
ADJUSTED												
CAL YR 1972	TOTAL	5,184.76	MEAN	14.2	MAX	96	MIN	.56	AC-FT	10,280	MEAN	21.8
WTR YR 1973	TOTAL	15,163.38	MEAN	41.5	MAX	440	MIN	.30	AC-FT	30,080	MEAN	50.0
											AC-FT	15,820
												36,240

NOTE.--No gage-height record Dec. 6 to Mar. 13.

GUNNISON RIVER BASIN

09152500 GUNNISON RIVER NEAR GRAND JUNCTION, COLO.

LOCATION.--Lat 38°59'00", long 108°27'00", near center of sec.14, T.2 S., R.1 E., Ute meridian, Mesa County, on right bank 180 ft (55 m) upstream from bridge on State Highway 141, 0.4 mi (0.6 km) downstream from Whitewater Creek, 0.5 mi (0.8 km) south of Whitewater, and 8 mi (13 km) southeast of Grand Junction.

DRAINAGE AREA.--7,928 mi² (20,534 km²).

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.

GAGE.--Water-stage recorder. Datum of gage is 4,628.12 ft (1,410.651 m) above mean sea level. See WSP 1733 or 1924 for history of changes prior to October 1959.

AVERAGE DISCHARGE.--65 years (1896-99, 1901-6, 1916-73), 2,566 ft³/s (72.67 m³/s), 1,859,000 acre-ft/yr (2,290 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 12,000 ft³/s (340 m³/s) May 19, 20, 21 (gage height, 8.82 ft or 2.688 m); minimum daily, 716 ft³/s (20.3 m³/s) Feb. 14.

Period of record: Maximum discharge observed, 35,700 ft³/s (1,010 m³/s) May 23, 1920 (gage height, 14.95 ft or 4,557 m, site and datum then in use), from rating curve extended above 22,000 ft³/s (623 m³/s); minimum daily, 106 ft³/s (3.00 m³/s) July 20, 1934.

REMARKS.--Records good. Records show flow that enters Colorado River from Gunnison River basin except for about 60 ft³/s (1.7 m³/s) diverted below gage during irrigation season. Natural flow of river affected by diversions for irrigation of about 233,000 acres (943 km²) above station, storage reservoirs, and return flow from irrigated lands. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WSP 509: Drainage area at former site. WSP 2124: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,200	2,310	2,620	2,760	1,580	1,520	1,160	4,090	6,080	4,800	2,270	2,220
2	1,120	2,020	2,530	2,250	1,360	1,660	1,140	3,150	7,040	4,360	2,350	2,100
3	1,090	2,050	2,390	3,300	1,460	1,550	1,240	2,590	8,190	3,910	1,930	1,330
4	1,070	1,720	1,430	3,620	1,000	1,450	1,110	2,850	8,670	3,460	2,590	1,120
5	1,180	1,830	2,100	3,310	1,480	1,330	1,080	3,910	8,740	3,300	2,670	1,720
6	1,230	1,950	2,360	3,070	1,410	1,300	965	4,690	7,390	3,110	1,850	2,120
7	1,240	2,040	2,690	2,880	1,410	1,250	1,080	4,250	6,630	2,910	2,970	2,390
8	1,310	1,740	2,690	3,380	1,460	1,250	1,220	4,120	7,040	2,420	3,150	2,490
9	1,280	1,850	2,600	3,310	1,490	1,240	1,100	4,750	8,250	2,390	2,920	1,700
10	1,310	1,890	2,710	3,210	1,450	1,240	1,680	6,560	9,130	2,420	2,840	2,570
11	1,300	1,830	1,440	3,220	1,210	1,220	1,170	9,380	10,100	2,480	2,510	2,710
12	1,260	1,870	3,010	3,410	1,270	1,200	994	10,600	9,720	2,280	2,220	2,840
13	1,330	1,880	2,660	3,530	1,450	1,570	1,210	9,480	8,890	2,910	1,370	1,690
14	1,380	2,150	3,230	3,230	716	1,370	1,310	9,430	9,360	2,720	2,250	1,760
15	1,680	1,930	2,460	2,710	781	1,210	1,490	9,420	11,600	2,380	2,030	1,830
16	3,290	2,180	3,180	2,910	1,700	1,160	1,490	9,750	9,680	2,070	2,220	2,360
17	2,960	2,610	2,340	2,840	1,770	1,140	1,400	9,920	7,100	2,500	2,380	1,670
18	2,400	2,620	1,450	2,590	1,510	1,170	1,480	10,000	6,130	2,520	2,720	1,560
19	3,090	2,690	2,470	2,600	1,140	1,220	1,390	11,400	5,450	2,140	2,670	1,490
20	2,900	1,750	2,850	2,160	1,400	1,580	1,540	11,700	4,900	2,620	2,420	1,450
21	2,530	2,160	2,360	1,720	1,690	1,400	1,220	11,900	4,590	3,060	2,580	1,440
22	1,820	2,580	2,880	1,400	1,220	2,550	1,090	11,200	4,550	2,950	2,980	1,460
23	1,650	2,530	3,160	1,840	1,100	1,700	1,130	9,840	4,620	2,190	3,310	1,470
24	1,580	1,300	3,360	1,680	1,120	1,220	1,420	8,130	4,730	2,340	2,840	1,560
25	1,490	2,290	2,210	1,660	1,200	1,190	1,780	7,920	4,680	2,270	2,820	1,710
26	1,450	2,380	1,250	1,500	1,280	1,150	2,030	8,270	4,480	2,140	2,490	1,730
27	1,370	1,420	2,750	1,600	1,300	1,150	2,260	7,960	4,780	2,010	2,370	1,810
28	1,480	2,480	2,760	1,580	1,420	1,220	2,020	6,160	5,470	3,030	2,610	1,750
29	1,770	2,490	3,060	1,480	-----	1,140	3,650	5,440	5,630	1,680	1,480	1,690
30	1,790	2,600	2,910	1,590	-----	1,240	4,240	5,370	5,180	1,330	1,030	1,510
31	1,740	-----	2,990	1,710	-----	1,230	-----	5,480	-----	1,860	1,700	-----
TOTAL	52,290	63,140	79,120	78,050	37,957	41,820	46,889	229,710	208,800	82,560	74,540	55,250
MEAN	1,687	2,105	2,552	2,518	1,356	1,349	1,563	7,410	6,960	2,663	2,405	1,842
MAX	3,290	2,690	3,360	3,620	1,770	2,550	4,240	11,900	11,600	4,800	3,310	2,840
MIN	1,070	1,300	1,250	1,400	716	1,140	965	2,590	4,480	1,330	1,030	1,120
AC=FT	103,700	125,200	156,900	154,800	75,290	82,950	93,000	455,600	414,200	163,800	147,900	109,600

CAL YR 1972 TOTAL 599,702 MEAN 1,639 MAX 3,460 MIN 486 AC=FT 1,190,000
 MTR YR 1973 TOTAL 1,050,126 MEAN 2,877 MAX 11,900 MIN 716 AC=FT 2,083,000

NOTE.--No gage-height record Jan. 7 to Feb. 15.

GUNNISON RIVER BASIN

291

09152600 ORCHARD MESA DRAIN AT GRAND JUNCTION, COLO.

LOCATION.--Lat 39°02'49", long 108°34'17"; in NE¼NE¼ sec.27, T.1 S., R.1 W., Ute meridian, Mesa County, on right bank 350 ft (110 m) upstream from mouth and 1.6 mi (2.6 km) south of city hall in Grand Junction.

DRAINAGE AREA.--3.70 mi² (9.58 km²).

PERIOD OF RECORD.--April to September 1973.

GAGE.--Water-stage recorder. Altitude of gage is 4,565 ft (1,391 m) from topographic map.

EXTREMES.--Maximum discharge during period, 30 ft³/s (0.85 m³/s) May 6 (gage height, 4.95 ft or 1.509 m); minimum daily, 0.79 ft³/s (0.022 m³/s) Apr. 9.

REMARKS.--Records good. Orchard Mesa Canal imports water from the Colorado River into basin above station for irrigation. Flow is mostly waste water from canal and return flow from land irrigated under the canal.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1							1.2	24	17	15	11	14
2							1.2	25	21	15	11	15
3							1.0	21	24	13	12	15
4							1.1	19	28	13	11	15
5							.84	21	25	12	13	15
6							1.0	26	23	12	15	17
7							1.1	25	24	12	17	18
8							1.1	24	21	12	16	18
9							.79	21	22	11	14	20
10							4.1	16	22	11	13	19
11							10	17	20	11	12	20
12							9.2	22	17	16	11	21
13							8.1	19	19	17	9.0	19
14							8.2	17	21	18	9.6	17
15							8.7	17	20	18	10	17
16							9.0	17	19	16	11	15
17							11	19	19	14	11	15
18							14	19	15	16	11	15
19							15	20	17	22	11	16
20							15	18	17	23	10	17
21							14	17	16	25	9.9	15
22							13	18	11	24	16	15
23							12	15	11	22	15	15
24							12	16	12	20	13	17
25							14	19	12	19	10	19
26							14	24	11	16	10	17
27							13	24	11	15	11	16
28							11	20	11	13	12	13
29					-----		16	18	14	13	9.5	12
30					-----		17	18	14	12	11	11
31	-----				-----		-----	18	-----	9.5	14	-----
TOTAL							257.63	614	534	485.5	370.0	488
MEAN							8.59	19.8	17.8	15.7	11.9	16.3
MAX							17	26	28	25	17	21
MIN							.79	15	11	9.5	9.0	11
AC-FT							511	1,220	1,060	963	734	968

LEACH CREEK BASIN

09152650 LEACH CREEK AT DURHAM, COLO.

LOCATION.--Lat 39°05'27", long 108°36'25", in NW¼NW¼ sec.9, T.1 S., R.1 W., Ute meridian, Mesa County, on left bank 40 ft (12 m) downstream from culvert on U.S. Highways 6 and 50, 0.5 mi (0.8 km) northwest of Durham, and 2.9 mi (4.7 km) northwest of city hall in Grand Junction.

DRAINAGE AREA.--24.8 mi² (64.2 km²).

PERIOD OF RECORD.--April to September 1973.

GAGE.--Water-stage recorder. Altitude of gage is 4,540 ft (1,384 m) from topographic map.

EXTREMES.--Maximum discharge during period, 135 ft³/s (3.82 m³/s) Sept. 25 (gage height, 2.92 ft or 0.890 m), from rating curve extended above 68 ft³/s (1.9 m³/s); minimum daily, 4.7 ft³/s (0.13 m³/s) Apr. 3.

REMARKS.--Records good. Flow is mostly return flow and waste water from lands irrigated under the Government Highline and Grand Valley Canals.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1							4.8	42	38	33	62	60
2							4.8	46	50	33	62	63
3							4.7	52	54	36	60	63
4							4.8	46	68	39	60	63
5							4.8	42	64	38	73	58
6							5.0	64	62	38	73	57
7							49	54	60	35	70	57
8							65	51	54	37	65	57
9							27	52	44	35	66	58
10							35	54	48	34	65	61
11							32	54	47	35	61	66
12							19	52	47	44	62	67
13							27	28	45	54	63	64
14							29	46	50	56	60	63
15							27	41	61	61	57	61
16							25	50	60	63	52	62
17							27	54	58	61	52	63
18							29	49	58	60	54	59
19							48	47	48	67	52	61
20							28	51	42	75	58	62
21							25	50	41	92	50	59
22							25	52	41	93	49	54
23							25	48	41	86	51	55
24							25	42	42	76	49	78
25							35	44	39	77	50	94
26							29	51	38	72	51	66
27							25	49	37	68	49	67
28							25	41	37	63	49	66
29						-----	26	41	38	59	49	67
30						-----	33	39	37	56	55	66
31		-----				-----	-----	38	-----	60	59	-----
TOTAL							766.9	1,470	1,449	1,736	1,788	1,897
MEAN							25.6	47.4	48.3	56.0	57.7	63.2
MAX							65	64	68	93	73	94
MIN							4.7	28	37	33	49	54
AC-FT							1,530	2,920	2,870	3,440	3,550	3,760

09152900 ADOBE CREEK NEAR FRUITA, COLO.

LOCATION.--Lat 39°08'13", long 108°41'48", in SW¼SW¼ sec.22, T.1 N., R.2 W., Ute meridian, Mesa County, on right bank 30 ft (9 m) downstream from bridge on U.S. Highways 6 and 50, 0.8 mi (1.3 km) upstream from mouth, and 2.4 mi (3.9 km) southeast of Fruita.

DRAINAGE AREA.--15.4 mi² (39.9 km²).

PERIOD OF RECORD.--April to September 1973.

GAGE.--Water-stage recorder. Altitude of gage is 4,520 ft (1,378 m) from topographic map.

EXTREMES.--Maximum discharge during period, 139 ft³/s (3.94 m³/s) June 1 (gage height, 4.20 ft or 1.280 m), from rating curve extended above 39 ft³/s (1.1 m³/s); minimum daily, 1.7 ft³/s (0.048 m³/s) Apr. 3.

REMARKS.--Records good. Flow is mostly return flow and waste water from lands irrigated under the Government Highline and Grand Valley Canals.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1							1.8	35	47	34	36	32
2							1.8	31	45	28	38	36
3							1.7	35	29	35	37	36
4							2.0	38	32	38	39	38
5							2.3	35	23	31	35	41
6							2.5	51	23	28	34	39
7							2.5	34	25	32	32	39
8							2.3	28	26	34	29	38
9							2.4	28	28	35	34	36
10							2.8	30	23	29	32	37
11							5.2	31	23	26	37	38
12							5.0	34	24	30	35	41
13							6.1	29	28	35	35	36
14							5.1	30	30	36	40	32
15							8.0	31	22	37	36	30
16							9.6	31	22	35	42	30
17							19	25	21	42	36	26
18							18	28	23	49	41	24
19							16	30	29	53	36	26
20							17	36	33	54	34	29
21							17	40	35	43	36	28
22							18	42	36	35	36	32
23							19	39	38	34	40	29
24							23	39	35	34	40	25
25							23	37	36	30	37	24
26							21	37	37	30	38	27
27							18	36	32	31	36	30
28							23	40	29	36	38	33
29							24	45	33	40	33	27
30							26	45	35	34	30	28
31												
TOTAL							343.1	1,091	902	1,104	1,108	967
MEAN							11.4	35.2	30.1	35.6	35.7	32.2
MAX							26	51	47	54	42	41
MIN							1.7	25	21	26	26	24
AC=FT							681	2,160	1,790	2,190	2,200	1,920

BIG SALT WASH BASIN

09153270 BIG SALT WASH AT FRUITA, COLO.

LOCATION.--Lat 39°09'49", long 108°45'01", in NE¼NW¼ sec.18, T.1 N., R.2 W., Ute meridian, Mesa County, on right bank 107 ft (33 m) downstream from railroad bridge, 0.4 mi (0.6 km) upstream from mouth, and 1.0 mi (1.6 km) northwest of Fruita.

DRAINAGE AREA.--142 mi² (368 km²).

PERIOD OF RECORD.--March to September 1973.

GAGE.--Water-stage recorder. Altitude of gage is 4,480 ft (1,366 m) from topographic map.

EXTREMES.--Maximum discharge during period, 881 ft³/s (24.9 m³/s) July 21 (gage height, 8.77 ft or 2.673 m), from rating curve extended above 160 ft³/s (4.5 m³/s) on basis of contracted-opening measurement at gage height 13.08 ft (3.987 m); minimum daily, 10 ft³/s (0.28 m³/s) Mar. 29, 31, Apr. 4, 5, 8. Flood of Sept. 19, 1972, reached a stage of 13.08 ft (3.987 m), from floodmarks (discharge, 3,940 ft³/s or 112 m³/s), by contracted-opening measurement of peak flow.

REMARKS.--Records fair. Flow is mostly return flow and waste water from the Government Highline and Grand Valley Canals.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1						12	11	86	162	83	92	114
2						12	11	86	173	79	89	128
3						12	11	81	173	74	90	121
4						12	10	82	197	72	91	123
5						12	10	85	180	70	94	120
6						12	11	99	187	72	100	120
7						12	13	102	183	73	102	120
8						13	10	103	175	73	108	121
9						13	31	108	162	72	111	123
10						11	129	108	174	72	109	120
11						12	92	115	166	78	111	130
12						12	93	120	158	82	114	134
13						16	81	111	150	84	111	134
14						17	83	136	160	85	106	138
15						14	81	130	170	90	105	134
16						13	84	130	150	95	105	131
17						13	87	130	140	100	104	132
18						17	91	132	120	110	104	130
19						15	86	135	120	130	105	131
20						15	93	138	130	150	108	134
21						21	90	140	120	247	108	134
22						13	91	140	119	166	109	129
23						15	91	147	112	154	111	130
24						17	93	147	108	142	109	130
25						15	96	146	105	137	108	134
26						15	96	154	99	126	108	136
27						11	88	156	95	117	110	134
28						12	79	160	93	113	111	135
29					-----	10	76	159	90	108	107	135
30					-----	11	81	159	88	102	108	135
31		-----			-----	10	-----	158	-----	93	111	-----
TOTAL						415	1,999	3,883	4,259	3,249	3,259	3,884
MEAN						13.4	66.6	125	142	105	105	129
MAX						21	129	160	197	247	114	138
MIN						10	10	81	88	70	89	114
AC=FT						823	3,970	7,700	8,450	6,440	6,460	7,700

REED WASH BASIN

295

09153300 REED WASH NEAR LOMA, COLO.

LOCATION.--Lat 39°11'01", long 108°47'12", in NE¼SW¼ sec.2, T.1 N., R.3 W., Ute meridian, Mesa County, on right bank 40 ft (12 m) upstream from bridge on U.S. Highways 6 and 50, 1.6 mi (2.6 km) upstream from mouth, and 1.7 mi (2.7 km) southeast of Loma.

DRAINAGE AREA.--29.3 mi² (75.9 km²).

PERIOD OF RECORD.--April to September 1973.

GAGE.--Water-stage recorder. Altitude of gage is 4,470 ft (1,362 m) from topographic map.

EXTREMES.--Maximum discharge during period, 297 ft³/s (8.41 m³/s) July 21 (gage height, 6.48 ft or 1.975 m); minimum daily, 8.4 ft³/s (0.24 m³/s) Apr. 8.

REMARKS.--Records good. Flow is mostly return flow and waste water from lands irrigated under the Government Highline and Grand Valley Canals.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1							9.4	123	194	130	149	166
2							9.4	115	207	130	151	173
3							9.4	111	201	127	151	182
4							9.3	119	213	124	150	186
5							9.4	121	199	131	157	178
6							9.2	160	198	130	173	174
7							9.0	153	187	125	174	176
8							8.4	141	182	125	175	178
9							8.6	146	184	129	169	180
10							8.9	144	160	123	172	195
11							52	156	173	119	168	197
12							128	161	164	128	164	190
13							103	149	163	133	160	178
14							105	154	175	135	162	169
15							98	160	177	148	158	171
16							107	173	172	151	159	170
17							130	173	184	141	165	173
18							130	166	183	146	167	170
19							123	167	185	184	171	168
20							118	173	182	175	171	173
21							117	170	171	224	170	165
22							122	169	171	193	169	165
23							119	166	166	190	172	167
24							118	163	161	179	169	170
25							119	161	159	174	166	171
26							116	172	149	158	172	165
27							117	175	144	151	170	162
28							118	176	141	144	160	164
29							110	181	137	141	159	160
30							114	181	132	144	162	160
31												
TOTAL							2,355.0	4,866	5,214	4,562	5,102	5,196
MEAN							78.5	157	174	147	165	173
MAX							130	181	213	224	175	197
MIN							8.4	111	132	119	149	160
AC=FT							4,670	9,650	10,340	9,050	10,120	10,310

SALT CREEK BASIN

09163050 BADGER WASH NEAR MACK, COLO.

LOCATION.--Lat 39°17'36", long 108°55'59", in NE¼NW¼ sec.7, T.9 S., R.103 W., 6th principal meridian, Mesa County, on left bank 250 ft (76 m) upstream from bridge, 2.9 mi (4.7 km) upstream from mouth, and 6.0 mi (9.7 km) northwest of Mack.

DRAINAGE AREA.--6.51 mi² (16.86 km²).

PERIOD OF RECORD.--April to September 1973.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 4,690 ft (1,430 m) from topographic map.

EXTREMES.--Maximum discharge during period, 88 ft³/s (2.49 m³/s) Apr. 11 (gage height, 3.40 ft or 1.036 m); no flow Apr. 1-10, 14, 15.

REMARKS.--Records good. Flow is mostly water wasted into creek 300 ft (91 m) above gage from Government Highline Canal. Natural flow of stream affected by numerous small detention reservoirs on tributaries upstream. No known diversion above gage.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1							0	24	1.9	3.6	.38	.21
2							0	24	3.0	3.1	.24	3.2
3							0	23	4.8	.62	.54	4.5
4							0	19	6.6	.62	.07	2.2
5							0	17	7.0	1.9	.32	.01
6							0	16	6.8	.43	.23	.02
7							0	16	6.4	2.7	1.2	.17
8							0	13	10	6.4	2.3	.07
9							0	10	17	4.8	2.9	.20
10							0	9.5	19	3.0	1.2	.28
11							3.0	11	19	1.7	2.1	.11
12							7.0	12	19	.41	4.5	.62
13							.07	9.0	17	.02	2.5	.27
14							0	10	18	.21	.42	.49
15							0	13	19	3.0	.02	1.3
16							32	11	22	4.1	.27	2.2
17							76	11	24	.48	.37	3.6
18							73	9.8	25	2.0	.05	5.5
19							62	11	25	2.7	.07	6.1
20							45	13	20	3.0	.21	7.1
21							37	7.5	18	5.0	.04	8.1
22							36	6.6	18	6.6	.18	11
23							30	5.3	14	6.5	.06	15
24							26	2.9	13	4.8	.05	17
25							34	3.3	12	3.6	.51	18
26							36	1.9	7.5	3.5	1.1	18
27							28	.70	4.1	3.1	.83	19
28							26	.30	1.1	1.6	.21	18
29						-----	25	.43	1.8	1.2	.30	21
30						-----	20	.33	2.9	.63	.06	22
31		-----				-----	-----	.54	-----	.43	.07	-----
TOTAL							596.07	312.10	382.9	81.75	23.30	205.25
MEAN							19.9	10.1	12.8	2.64	.75	6.84
MAX							76	24	25	6.6	4.5	22
MIN							0	.30	1.1	.02	.02	.01
AC=FT							1,180	619	759	162	46	407

297

LOCATION. --Lat 39°17'50", long 108°51'58", in SE¼SE¼ sec.3, T.9 S., R.103 W., 6th principal meridian, Mesa County, on right bank 100 ft (30 m) upstream from bridge, 200 ft (61 m) downstream from Dry Canyon Wash, and 5.0 mi (8.0 km) north of Mack.

Flood of Sept. 19, 1972, reached a stage of 8.9 ft (2.71 m), from floodmarks (discharge not determined).

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1										.60	.55	.75
2										.60	.55	.70
3										.60	.50	.65
4										.65	.50	.55
5										.87	5.8	.55
6										.60	.18	.55
7										.60	.18	.50
8										.70	.19	.45
9										1.2	.21	.45
10										1.2	.21	.45
11										.87	.30	.40
12										1.0	.30	.40
13										1.2	.40	.35
14										1.0	.35	.35
15										1.0	.35	.35
16										1.0	.45	.30
17										.87	.40	.30
18										1.0	.40	.27
19										1.5	.40	.30
20										5.0	.50	.27
21										4.0	.45	.24
22										2.5	.35	.24
23										1.0	.35	.24
24										.60	.35	.21
25										.65	.35	.45
26										.55	.35	.40
27										.55	.70	.27
28										.55	.50	.24
29					-----					.55	.45	.40
30					-----					.60	.55	.45
31		-----			-----		-----		-----	.60	.65	-----
TOTAL										47.71	17.76	12.03
MEAN										1.54	.57	.40
MAX										15	5.8	.75
MIN										.55	.18	.21
AC=FT										95	35	24

SALT CREEK BASIN

09163490 SALT CREEK NEAR MACK, COLO.

LOCATION.--Lat 39°13'18", long 108°53'32", in NE¼NW¼ sec.4, T.10 S., R.103 W., 6th principal meridian, Mesa County, on right bank 800 ft (240 m) downstream from bridge on Interstate Highway 70, 1.4 mi (2.3 km) west of Mack, and 2.1 mi (3.4 km) upstream from mouth.

DRAINAGE AREA.--436 mi² (1,129 km²).

PERIOD OF RECORD.--April to September 1973.

GAGE.--Water-stage recorder. Altitude of gage is 4,440 ft (1,353 m) from topographic map.

EXTREMES.--Maximum discharge during period, 363 ft³/s (10.3 m³/s) June 14 (gage height, 3.17 ft or 0.966 m); minimum daily, 12 ft³/s (0.34 m³/s) Apr. 1-8.

Flood of Sept. 19, 1972, reached a stage of 5.69 ft (1.734 m), from floodmarks (discharge, 1,680 ft³/s or 47.6 m³/s), by slope-area measurement of peak flow.

REMARKS.--Records good. Flow is mostly return flow and waste water from lands irrigated under the Government Highline Canal. Some regulation by many small detention reservoirs and stock ponds on tributaries above station and by Highline Lake (capacity, 3,400 acre-ft or 4.19 hm³) on Mack Wash above station. A few small diversions for irrigation of hay meadows above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1							12	141	183	99	103	103
2							12	146	196	99	107	111
3							12	160	216	90	103	111
4							12	153	245	86	105	120
5							12	162	223	86	109	133
6							12	187	225	84	113	144
7							12	174	225	73	107	150
8							12	178	228	76	109	153
9							13	192	223	76	105	157
10							14	213	223	76	99	169
11							26	237	208	78	99	183
12							26	255	199	76	105	192
13							18	247	147	86	103	194
14							20	242	208	86	97	185
15							25	223	230	88	86	176
16							88	211	206	95	86	162
17							264	213	208	86	95	160
18							225	201	211	95	99	164
19							228	183	204	128	95	171
20							225	183	192	164	97	176
21							216	185	189	153	101	176
22							211	192	183	176	99	185
23							201	178	169	187	97	185
24							201	171	144	183	99	189
25							201	180	128	169	101	213
26							199	192	126	150	105	199
27							176	192	109	155	109	196
28							160	194	95	153	113	194
29					-----		141	187	97	144	109	194
30					-----		137	178	99	137	101	194
31		-----			-----		-----	176	-----	90	103	-----
TOTAL							3,053	5,930	5,579	3,530	3,159	5,041
MEAN							102	191	186	114	102	168
MAX							228	255	245	187	113	213
MIN							12	141	95	73	86	103
ΔC=FT							6,060	11,760	11,070	7,000	6,270	10,000

09163500 COLORADO RIVER NEAR COLORADO-UTAH STATE LINE

LOCATION.--Lat 39°10'00", long 108°57'26", in SE¼SE¼ sec.23, T.10 S., R.104 W., Mesa County, on right bank 4.8 mi (7.7 km) downstream from Salt Creek, 6.3 mi (10.1 km) southwest of Mack, Colo., and 7.2 mi (11.6 km) upstream from Colorado-Utah State line.

DRAINAGE AREA.--17,900 mi² (46,400 km²), approximately.

PERIOD OF RECORD.--May 1951 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 4,365 ft (1,330 m) from topographic map.

AVERAGE DISCHARGE.--22 years, 5,808 ft³/s (164.5 m³/s), 4,208,000 acre-ft/yr (5,190 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 35,000 ft³/s (991 m³/s) June 16 (gage height, 12.50 ft or 3.810 m); minimum daily, 2,880 ft³/s (81.6 m³/s) Sept. 5.

Period of record: Maximum discharge, 56,800 ft³/s (1,610 m³/s) June 9, 1957 (gage height, 16.40 ft or 4.999 m); minimum daily, 960 ft³/s (27.2 m³/s) Sept. 7, 1956.

REMARKS.--Records good. Natural flow of stream affected by transmountain diversions, storage reservoirs, power developments, and diversions for irrigation. (Records include all return flow from irrigated areas.) Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	UCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3,650	4,740	5,000	4,490	3,450	4,010	3,390	7,930	16,600	18,900	5,870	3,870
2	3,470	5,090	5,040	4,300	3,300	4,200	3,350	7,330	19,100	18,100	5,970	3,530
3	3,370	4,950	4,850	4,900	3,350	4,140	3,280	6,100	20,500	17,300	5,770	3,830
4	3,260	4,880	4,430	5,140	3,430	3,850	3,340	5,740	21,300	15,800	5,240	3,080
5	3,770	4,760	4,220	5,400	3,710	3,650	3,410	6,760	21,100	15,100	5,970	2,880
6	3,830	5,240	4,560	4,880	3,570	3,630	2,920	9,140	18,400	14,600	6,250	3,450
7	3,730	5,040	4,630	4,800	3,930	3,450	3,010	9,660	17,000	13,700	6,490	3,830
8	3,810	4,900	4,850	5,000	4,010	3,410	3,340	9,020	17,400	12,500	7,360	3,850
9	4,600	4,760	4,880	5,250	3,970	3,370	3,240	9,590	20,300	11,800	6,910	3,610
10	4,070	4,790	4,740	5,620	3,950	3,490	2,930	12,200	24,300	11,500	6,640	3,410
11	4,030	4,720	4,070	5,500	3,830	3,390	3,320	16,400	28,700	11,200	6,150	4,110
12	4,050	4,790	4,010	5,310	3,830	3,370	3,340	19,900	30,200	10,500	5,650	4,430
13	4,050	5,020	4,450	5,570	4,010	3,550	3,300	20,800	28,900	10,900	5,330	4,160
14	4,090	4,830	5,140	5,600	3,970	3,950	3,370	21,100	28,700	11,500	4,650	3,530
15	4,470	4,790	4,470	5,200	3,240	3,410	3,450	21,000	33,100	11,100	5,020	3,750
16	6,170	4,880	4,810	4,850	3,020	3,300	3,850	20,900	33,500	10,900	4,740	3,750
17	6,430	5,160	4,140	4,750	3,550	3,130	3,730	21,600	27,300	11,100	4,810	4,030
18	5,800	5,210	3,830	4,700	3,530	3,340	3,830	22,600	22,600	11,400	4,830	3,410
19	6,120	5,240	4,010	4,810	3,450	3,550	3,770	24,600	20,400	10,600	4,850	3,300
20	6,370	5,090	3,910	5,000	3,190	3,610	3,730	27,700	18,200	11,800	4,740	3,300
21	6,070	4,580	4,720	4,220	3,570	3,890	3,810	29,700	16,600	12,700	4,600	3,260
22	5,310	5,260	5,260	3,830	3,510	4,070	3,300	30,400	16,500	12,200	4,920	3,220
23	5,090	5,280	5,240	3,220	3,240	4,470	3,100	28,600	16,900	11,400	5,310	3,200
24	4,690	4,490	5,500	3,220	3,200	3,510	3,300	24,600	17,200	10,200	4,760	3,260
25	4,430	4,160	5,070	3,300	3,430	3,350	3,690	23,000	17,400	9,430	4,630	3,590
26	4,260	4,830	3,970	3,110	3,730	3,300	4,430	22,900	16,800	8,380	4,350	3,710
27	4,370	4,650	4,110	3,280	3,750	3,340	4,410	23,000	16,000	7,660	4,240	3,790
28	5,020	4,410	4,580	3,650	3,870	3,450	4,880	19,200	19,900	7,480	4,560	3,830
29	4,970	4,880	4,920	3,570	-----	3,490	5,900	16,500	20,100	7,090	3,890	3,830
30	5,140	4,740	5,070	3,400	-----	3,470	7,000	15,500	19,300	6,220	3,240	3,630
31	4,850	-----	5,020	3,500	-----	3,550	-----	15,400	-----	5,620	2,920	-----
TOTAL	143,340	146,160	143,500	139,370	100,590	111,690	111,920	548,870	646,300	358,680	160,660	108,430
MEAN	4,624	4,712	4,629	4,496	3,593	3,603	3,731	17,710	21,540	11,570	5,183	3,414
MAX	6,430	5,280	5,500	5,620	4,010	4,470	7,000	30,400	33,500	18,900	7,360	4,430
MIN	3,260	4,160	3,830	3,110	3,020	3,130	2,920	5,740	16,500	5,620	2,920	2,880
AC-FT	284,300	289,900	284,600	276,400	199,500	221,500	222,000	1,089M	1,262M	711,400	318,700	215,100
CAL YR 1972	TOTAL 1,746,880		MEAN 4,828		MAX 17,700		MIN 1,700		AC-FT 3,505,000			
NTR YR 1973	TOTAL 2,719,510		MEAN 7,451		MAX 33,500		MIN 2,880		AC-FT 5,394,000			

DOLORES RIVER BASIN

09165000 DOLORES RIVER BELOW RICO, COLO.

LOCATION.--Lat 37°38'20", long 108°03'35", Dolores County, on left bank at upstream side of Montelores bridge northwest of State Highway 145 (relocated), at Dolores-Montezuma County line, 0.5 mi (0.8 km) upstream from Ryman Creek, and 4.0 mi (6.4 km) southwest of Rico.

DRAINAGE AREA.--105 mi² (272 km²).

PERIOD OF RECORD.--October 1951 to current year.

GAGE.--Water-stage recorder. Datum of gage is 8,422.23 ft (2,567.096 m) above mean sea level.

AVERAGE DISCHARGE.--22 years, 132 ft³/s (3.738 m³/s), 95,630 acre-ft/yr (118 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,810 ft³/s (51.3 m³/s) June 11 (gage height, 5.69 ft or 1.734 m), from rating curve extended above 640 ft³/s (18 m³/s); minimum daily, 22 ft³/s (0.62 m³/s) Feb. 14-16.
Period of record: Maximum discharge, 2,120 ft³/s (60.0 m³/s) June 10, 1952 (gage height, 6.15 ft or 1.875 m); minimum daily, 7.0 ft³/s (0.20 m³/s) Nov. 16, 17, 1956, Feb. 6, 7, 1961.
Greatest flood since at least 1885 occurred Oct. 5, 1911.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	86	38	28	26	27	32	194	825	1,040	108	67
2	24	83	36	30	24	27	33	160	769	944	102	58
3	25	74	36	28	24	27	31	168	672	846	102	55
4	30	74	38	30	26	28	31	215	618	776	120	53
5	129	76	40	30	24	31	31	254	588	734	116	50
6	57	73	36	30	26	30	34	206	660	672	100	49
7	99	66	36	30	26	29	37	176	902	600	99	48
8	139	67	38	28	24	28	35	185	1,160	552	93	46
9	91	66	36	28	24	28	33	234	1,460	515	86	46
10	71	56	34	30	24	27	38	370	1,580	490	83	70
11	54	65	34	28	26	27	39	606	1,620	455	79	80
12	55	62	36	26	26	28	42	741	1,500	445	74	62
13	65	62	34	28	24	28	53	702	1,430	415	70	58
14	56	62	34	24	22	28	58	690	1,430	366	74	50
15	63	59	32	26	22	27	61	702	1,060	318	77	47
16	186	54	32	28	22	26	55	741	804	270	68	44
17	242	56	32	28	24	29	56	825	783	234	68	43
18	254	56	32	28	24	30	59	937	825	310	74	41
19	476	50	34	28	24	29	57	1,230	790	306	66	40
20	422	55	34	28	24	31	54	1,270	790	278	71	38
21	254	55	32	26	26	35	51	1,180	818	234	82	37
22	194	46	32	24	26	36	51	937	769	200	100	36
23	165	42	32	24	24	33	71	832	804	176	74	36
24	144	42	30	26	24	34	88	860	902	163	100	36
25	139	40	30	28	24	32	90	867	993	156	99	36
26	126	42	30	26	26	33	114	790	1,140	144	95	37
27	122	42	30	26	26	37	156	630	1,320	137	82	36
28	114	38	32	26	27	36	206	564	1,300	133	73	34
29	104	40	34	26	-----	35	242	606	1,230	124	66	33
30	95	40	32	28	-----	34	266	741	1,110	120	79	32
31	95	-----	30	26	-----	32	-----	846	-----	108	94	-----
TOTAL	4,121	1,729	1,046	852	689	942	2,204	19,459	30,652	12,261	2,674	1,394
MEAN	133	57.6	33.7	27.5	24.6	30.4	73.5	628	1,022	396	86.3	46.5
MAX	476	86	40	30	27	37	266	1,270	1,620	1,040	120	80
MIN	24	38	30	24	22	26	31	160	588	108	66	32
AC-FT	8,170	3,430	2,070	1,690	1,370	1,870	4,370	38,600	60,800	24,320	5,300	2,760

CAL YR 1972 TOTAL 36,570 MEAN 99.9 MAX 660 MIN 18 AC-FT 72,540
WTR YR 1973 TOTAL 78,023 MEAN 214 MAX 1,620 MIN 22 AC-FT 154,800

PEAK DISCHARGE (BASE, 800 CFS).--May 19 (2230) 1,420 cfs (5.23 ft); June 11 (0100) 1,810 cfs (5.69 ft).

NOTE.--No gage-height record Dec. 5 to Jan. 4.

09166500 DOLORES RIVER AT DOLORES, COLO.

LOCATION.--Lat 37°28'16", long 108°30'15", in NE¼NE¼ sec.16, T.37 N., R.15 W., Montezuma County, on left bank 70 ft (21 m) downstream from bridge on State Highway 184 in Dolores and 0.4 mi (0.6 km) upstream from Lost Canyon Creek.

DRAINAGE AREA.--504 mi² (1,305 km²).

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.

GAGE.--Water-stage recorder. Datum of gage is 6,918.74 ft (2,108.832 m) above mean sea level. See WSP 1713 or 1733 for history of changes prior to Oct. 7, 1952.

AVERAGE DISCHARGE.--62 years, 430 ft³/s (12.18 m³/s), 311,500 acre-ft/yr (384 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 5,750 ft³/s (163 m³/s) May 20 (gage height, 9.50 ft or 2.896 m); minimum daily, 45 ft³/s (1.27 m³/s) Oct. 1.
Period of record: Maximum discharge, 10,000 ft³/s (283 m³/s) Oct. 5, 1911 (gage height, 10.2 ft or 3.11 m, site and datum then in use), from rating curve extended above 2,800 ft³/s (79 m³/s); minimum daily, 8.0 ft³/s (0.23 m³/s) Aug. 16, 1896.
Maximum stage since at least 1885, that of Oct. 5, 1911.

REMARKS.--Records good except those for winter period, which are poor. Diversions for irrigation of about 2,000 acres (8.09 km²) above station. Flow partly regulated by Ground Hog Reservoir (capacity, 21,710 acre-ft or 26.8 hm³).

REVISIONS (WATER YEARS).--WSP 859: 1937. WRD Colo. 1972: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	45	252	85	80	85	95	187	1,600	2,700	1,910	249	226
2	95	233	85	85	80	95	184	1,240	2,690	1,750	260	196
3	110	216	80	85	80	95	170	1,270	2,530	1,480	253	178
4	100	212	90	85	90	95	163	1,640	2,820	1,300	281	205
5	272	230	95	90	85	100	175	1,910	2,480	1,220	277	199
6	205	212	85	85	85	95	211	1,620	2,410	1,110	260	193
7	172	184	85	85	85	90	249	1,330	2,760	1,020	246	190
8	410	202	90	85	85	95	217	1,510	3,200	942	274	184
9	288	193	85	80	85	95	223	1,930	3,840	864	246	202
10	209	151	85	90	85	90	263	2,640	4,350	876	246	232
11	175	196	85	85	90	90	329	3,810	4,400	810	256	295
12	151	184	90	80	95	90	408	4,110	4,030	828	246	217
13	166	160	85	85	90	95	535	3,580	3,690	810	235	160
14	169	160	85	85	90	90	625	3,270	3,810	780	256	122
15	163	175	80	85	85	90	600	3,430	2,970	670	281	107
16	374	145	80	85	85	100	520	3,580	2,390	610	277	101
17	712	166	80	90	85	110	610	3,810	2,180	570	256	97
18	724	160	85	90	90	120	665	4,140	2,260	650	295	92
19	1,190	127	85	90	90	130	550	4,920	2,100	705	277	86
20	1,500	157	90	90	90	140	480	5,060	1,950	640	239	83
21	806	145	85	85	95	160	448	4,510	2,030	590	270	94
22	590	103	85	85	95	160	430	3,600	2,030	516	302	103
23	495	95	85	80	95	160	570	2,970	1,980	462	274	103
24	425	95	85	80	90	150	768	2,940	2,030	426	253	104
25	415	90	80	95	90	160	870	2,930	2,150	403	321	106
26	374	90	80	90	90	178	1,070	3,360	2,310	381	267	110
27	352	90	80	90	90	217	1,340	2,690	2,580	365	242	109
28	334	86	90	85	95	211	1,670	2,190	2,580	337	223	106
29	304	90	95	85	-----	199	1,930	2,170	2,330	317	208	104
30	280	90	90	90	-----	181	2,070	2,460	2,210	291	208	103
31	252	-----	85	90	-----	178	-----	2,760	-----	270	270	-----
TOTAL	11,857	4,689	2,650	2,670	2,475	3,954	18,530	88,980	81,790	23,883	8,048	4,407
MEAN	382	156	85.5	86.1	88.4	128	618	2,870	2,726	770	260	147
MAX	1,500	252	95	95	95	217	2,070	5,060	4,400	1,910	321	295
MIN	45	86	80	80	80	90	163	1,240	1,950	270	208	83
AC-FT	23,520	9,300	5,260	5,300	4,910	7,840	36,750	176,500	162,200	47,370	15,960	8,740

CAL YR 1972 TOTAL 101,469 MEAN 277 MAX 1,500 MIN 36 AC-FT 201,300
WTR YR 1973 TOTAL 253,933 MEAN 696 MAX 5,060 MIN 45 AC-FT 503,700

PEAK DISCHARGE (BASE, 1,800 CFS)

NOTE.--No gage-height record Jan. 8 to Feb. 6.

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
10-19	2330	6.61	2,020	6-11	0530	9.13	5,070
5-20	0400	9.50	5,750				

09168100 DISAPPOINTMENT CREEK NEAR DOVE CREEK, COLO.

LOCATION.--Lat 37°52'36", long 108°34'57", Dolores County, 0.2 mi (0.3 km) downstream from ford, 6.5 mi (10.5 km) southeast of Cedar, and 19 mi (31 km) northeast of town of Dove Creek.

DRAINAGE AREA.--147 mi² (381 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 6,420 ft (1,957 m) from topographic map.

AVERAGE DISCHARGE.--16 years, 16.7 ft³/s (0.473 m³/s), 12,100 acre-ft/yr (14.9 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 560 ft³/s (15.9 m³/s) Oct. 19 (gage height, 5.50 ft or 1.676 m); minimum daily, 0.15 ft³/s (0.004 m³/s) Oct. 2, 3.

Period of record: Maximum discharge, 4,360 ft³/s (123 m³/s) July 13, 1965 (gage height, 13.54 ft or 4.127 m), from rating curve extended above 250 ft³/s (7.1 m³/s) on basis of slope-area measurements at gage heights 7.18, 9.86, 10.95, and 13.54 ft (2.188, 3.005, 3.338, and 4.127 m); no flow at times most years.

REMARKS.--Records good except those for winter period, which are poor. Several small reservoirs and ponds above station. Small diversions for irrigation above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.20	5.0	2.6	2.4	2.6	62	17	185	128	40	5.2	4.3
2	.15	4.6	2.8	2.4	2.4	44	17	120	155	30	4.9	3.8
3	.15	4.4	2.6	2.6	2.2	40	13	136	155	30	3.6	3.8
4	6.3	4.0	3.2	3.0	2.6	18	10	218	239	28	4.1	3.6
5	28	3.6	4.4	2.6	2.8	12	14	231	117	22	3.8	3.6
6	7.5	3.4	3.8	2.0	3.2	12	28	186	106	21	3.6	3.6
7	30	3.2	4.2	2.0	4.2	11	30	129	120	19	3.8	3.6
8	28	3.0	4.4	2.2	4.6	10	17	191	149	19	3.3	3.3
9	13	3.6	3.8	2.6	4.6	7.9	18	239	169	18	3.3	3.1
10	9.2	3.6	2.4	2.8	4.2	14	30	303	175	16	2.6	12
11	6.9	3.8	2.8	2.8	5.5	10	60	348	166	14	2.4	9.8
12	8.8	4.4	3.2	2.6	7.5	16	84	295	149	13	2.1	6.6
13	11	5.5	2.8	2.4	5.5	16	132	266	142	21	2.4	5.2
14	7.5	4.2	2.2	2.2	5.0	12	149	263	134	19	2.6	4.3
15	83	3.8	2.0	2.2	4.6	9.2	104	244	113	16	2.6	3.8
16	152	4.4	2.2	2.6	4.4	11	86	238	86	15	2.6	3.8
17	34	4.6	2.4	3.2	4.4	15	127	246	75	16	2.4	3.6
18	25	4.4	3.0	3.6	4.4	17	138	252	80	20	2.4	3.3
19	286	3.6	3.4	3.2	4.0	19	58	274	74	28	2.1	3.3
20	93	4.0	3.2	3.2	3.6	53	50	244	68	17	2.1	3.1
21	24	4.4	3.2	2.8	4.0	70	37	246	68	14	2.9	3.1
22	16	4.2	3.2	2.4	4.0	24	41	214	68	13	13	3.1
23	14	3.8	3.2	2.2	5.5	20	104	178	68	10	7.2	2.9
24	12	3.4	3.0	2.2	7.5	16	150	172	67	9.5	6.6	3.1
25	17	3.2	2.8	2.4	13	17	175	172	66	8.8	6.6	3.6
26	13	3.0	2.4	2.6	30	23	202	255	64	8.2	6.0	4.3
27	9.5	3.2	2.2	2.6	62	27	250	159	65	7.5	5.8	3.8
28	9.5	2.4	4.6	2.4	81	24	297	113	65	6.6	5.2	3.8
29	8.8	2.6	4.4	2.2	-----	22	317	106	59	6.0	4.9	3.6
30	7.5	2.4	3.0	2.4	-----	18	279	124	48	5.5	4.9	2.9
31	6.0	-----	2.2	2.4	-----	14	-----	143	-----	5.5	4.9	-----
TOTAL	967.00	113.7	95.6	79.2	289.3	684.1	3,034	6,490	3,238	516.6	129.9	125.7
MEAN	31.2	3.79	3.08	2.55	10.3	22.1	101	209	108	16.7	4.19	4.19
MAX	286	5.5	4.6	3.6	81	70	317	348	239	40	13	12
MIN	.15	2.4	2.0	2.0	2.2	7.9	10	106	48	5.5	2.1	2.9
AC=FT	1,920	226	190	157	574	1,360	6,020	12,870	6,420	1,020	258	249

CAL YR 1972 TOTAL 3,575.51 MEAN 9.77 MAX 286 MIN 0 AC=FT 7,090

WTR YR 1973 TOTAL 15,763.10 MEAN 43.2 MAX 348 MIN .15 AC=FT 51,270

PEAK DISCHARGE (BASE, 560 CFS).--Oct. 19 (1800) 560 cfs (5.50 ft).

NOTE.--No gage-height record Nov. 2 to Feb. 25.

09169500 DOLORES RIVER AT BEDROCK, COLO.

LOCATION.--Lat 38°18'37", long 108°53'05", in NW¼SW¼ sec.20, T.47 N., R.18 W., Montrose County, on right bank at upstream side of bridge, 0.4 mi (0.6 km) southeast of Bedrock and 3.1 mi (5.0 km) upstream from East Paradox Creek.

DRAINAGE AREA.--2,024 mi² (5,242 km²).

PERIOD OF RECORD.--October 1917 to September 1922 (monthly discharge only for some periods, published in WSP 1313), August 1971 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 4,940 ft (1,506 m) from topographic map. Prior to Aug. 1, 1971, nonrecording gage at different datum.

AVERAGE DISCHARGE.--7 years, 539 ft³/s (15.26 m³/s), 390,500 acre-ft/yr (481 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 9,280 ft³/s (263 m³/s) Apr. 30 (gage height, 12.09 ft or 3.685 m), from floodmarks, from rating curve extended above 8,700 ft³/s (250 m³/s); minimum daily, 7.5 ft³/s (0.21 m³/s) Oct. 3.

Period of record: Maximum discharge, 9,280 ft³/s (263 m³/s) Apr. 30, 1973 (gage height, 12.09 ft or 3.685 m), from floodmarks, from rating curve extended above 8,700 ft³/s (250 m³/s); minimum daily, 0.06 ft³/s (0.002 m³/s) July 17-19, 21, 22, 1972.

Flood of Sept. 6, 1970, reached a stage of 7.15 ft (2.179 m), present datum, from floodmarks (discharge not determined).

REMARKS.--Records good except those for winter period, which are poor. Diversions above station for irrigation of about 5,000 acres (20.2 km²) above station and about 33,000 acres (134 km²) in the San Juan River basin.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.2	233	102	80	130	258	400	6,240	3,100	1,880	23	58
2	7.8	293	93	65	120	256	414	4,260	3,000	1,590	21	24
3	7.5	278	114	75	130	268	425	3,320	3,000	1,380	20	18
4	10	260	120	110	130	260	404	3,880	3,200	1,170	21	16
5	15	240	114	120	130	262	379	5,190	4,100	955	19	15
6	11	245	97	110	130	253	397	4,940	3,000	850	46	15
7	28	234	82	100	130	242	509	3,800	3,000	730	55	15
8	64	216	77	95	140	249	644	3,530	3,300	616	29	14
9	171	184	79	110	150	272	526	3,860	3,800	533	23	13
10	86	174	88	120	150	270	502	4,590	4,500	474	22	12
11	108	176	106	130	150	245	616	5,440	4,700	421	19	23
12	82	166	126	110	160	247	935	6,450	4,600	391	17	13
13	108	134	104	120	160	256	1,350	6,720	4,300	376	16	12
14	95	159	93	120	160	275	2,110	6,270	4,000	394	17	11
15	536	187	88	130	160	256	2,740	5,820	4,200	340	19	17
16	733	187	79	120	140	229	2,350	5,650	3,100	310	18	21
17	427	193	77	130	140	216	2,150	5,650	2,200	249	17	18
18	459	157	84	140	130	231	2,950	5,580	2,000	195	82	15
19	1,870	164	95	140	140	303	2,970	5,740	1,900	404	61	13
20	1,170	178	110	140	140	316	2,000	6,020	1,900	473	23	13
21	1,110	168	130	130	150	391	1,660	6,580	1,710	245	16	11
22	730	168	130	130	150	526	1,430	6,540	1,800	206	23	11
23	540	178	140	120	160	446	1,540	6,210	1,790	161	20	10
24	367	155	130	120	170	400	2,920	4,920	1,690	118	15	24
25	278	130	110	120	190	394	4,030	3,800	1,740	80	16	21
26	231	124	110	120	200	385	4,990	3,800	1,800	58	29	18
27	214	126	110	130	220	397	5,970	4,900	1,900	40	22	15
28	238	149	110	120	223	505	6,990	3,600	2,200	31	18	13
29	199	166	120	120	-----	502	7,790	2,690	2,390	28	18	12
30	240	151	120	120	-----	470	8,150	2,520	2,100	26	18	11
31	212	-----	100	130	-----	428	-----	2,900	-----	24	139	-----
TOTAL	10,355.5	5,573	3,238	3,625	4,283	10,008	70,241	151,410	86,020	14,748	902	502
MEAN	334	186	104	117	153	323	2,341	4,884	2,867	476	29.1	16.7
MAX	1,870	293	140	140	223	526	8,150	6,720	4,700	1,880	139	58
MIN	7.5	124	77	65	120	216	379	2,520	1,690	24	15	10
AC=FT	20,540	11,050	6,420	7,190	8,500	19,850	139,300	300,300	170,600	29,250	1,790	996

CAL YR 1972 TOTAL 57,708.52 MEAN 158 MAX 1,870 MIN .06 AC=FT 114,500

WTR YR 1973 TOTAL 360,905.50 MEAN 989 MAX 8,150 MIN 7.5 AC=FT 715,900

DOLORES RIVER BASIN

09170800 WEST PARADOX CREEK ABOVE BEDROCK, COLO.

LOCATION.--Lat 38°19'54", long 108°53'59", in NE¼NW¼ sec.18, T.47 N., R.18 W., Montrose County, on left bank 150 ft (46 m) upstream from diversion ditch headgate, 1.3 mi (2.1 km) northwest of Bedrock, and 2.6 mi (4.2 km) upstream from mouth.

DRAINAGE AREA.--53.3 mi² (138.0 km²).

PERIOD OF RECORD.--August 1971 to September 1973 (discontinued).

GAGE.--Water-stage recorder. Sheet-piling control prior to Apr. 28, 1973. Altitude of age is 4,995 ft (1,522 m) from topographic map.

EXTREMES.--Current year: Maximum discharge, 140 ft³/s (3.96 m³/s) Oct. 19 (gage height, 4.65 ft or 1.417 m), from rating curve extended above 60 ft³/s (1.7 m³/s); minimum daily, 2.8 ft³/s (0.079 m³/s) Sept. 30.
Period of record: Maximum discharge, 264 ft³/s (7.48 m³/s) Aug. 29, 1971 (gage height, 4.06 ft or 1.237 m), from rating curve extended above 10 ft³/s (0.3 m³/s); maximum gage height, 4.65 ft (1.417 m) Oct. 19, 1972; minimum daily discharge, 2.5 ft³/s (0.071 m³/s) July 14, Aug. 23, 24, 29, 1972.

REMARKS.--Records fair. Natural flow of stream affected by water imported from Roc Creek basin through Buckeye Reservoir, diversions for irrigation of about 2,500 acres (10.1 km²), and return flow from irrigated areas.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.7	8.4	4.7	6.1	5.1	7.8	10	47	15	10	4.6	5.8
2	3.7	7.8	4.7	7.5	5.3	8.1	10	36	22	12	4.4	5.6
3	3.7	7.6	4.5	8.0	5.6	8.1	8.8	35	21	10	4.3	5.4
4	4.1	7.6	4.9	5.8	5.3	8.1	8.4	82	25	9.0	4.2	7.6
5	4.9	7.8	5.1	6.1	5.6	8.4	9.7	70	23	9.5	4.2	6.7
6	3.5	8.1	4.5	6.3	5.6	7.6	17	69	23	8.1	5.5	5.0
7	4.5	7.6	4.5	7.0	5.6	7.1	22	60	25	7.0	7.2	4.0
8	5.3	6.8	4.5	6.5	5.6	7.1	13	60	28	6.2	7.2	3.8
9	5.1	6.8	4.3	6.0	5.6	6.8	13	67	28	5.6	6.3	3.6
10	5.1	6.8	4.1	6.0	5.6	6.6	16	62	31	5.2	6.0	4.0
11	4.7	6.6	3.9	5.7	5.8	6.3	23	57	30	5.1	5.5	6.3
12	4.7	6.6	3.3	5.3	6.8	6.1	29	52	28	5.1	5.2	7.2
13	5.1	6.8	3.3	5.3	7.1	6.6	38	50	29	5.3	5.0	4.9
14	4.7	7.1	3.3	5.6	6.8	6.1	40	45	38	5.1	7.6	4.0
15	7.3	7.3	3.2	5.6	6.6	5.6	34	38	36	5.0	6.0	4.5
16	8.4	7.3	3.7	5.1	6.6	5.3	29	31	33	5.0	4.3	4.0
17	6.3	7.1	4.1	4.9	6.6	5.8	45	24	37	5.0	3.7	3.7
18	6.6	6.8	4.1	4.7	6.6	6.6	57	18	35	5.0	3.5	3.4
19	47	6.8	3.5	4.7	6.6	6.6	38	14	34	5.0	3.6	3.3
20	46	7.3	3.3	4.9	6.6	7.6	27	14	36	4.9	3.8	3.2
21	16	7.6	3.2	4.9	6.6	10	23	16	36	5.0	4.1	3.2
22	11	7.1	3.3	5.1	6.3	8.4	20	31	36	5.0	5.0	3.1
23	10	6.8	3.0	5.3	6.6	7.6	39	28	33	5.1	4.3	3.1
24	9.7	6.8	3.0	6.3	10	8.1	63	23	30	5.2	4.0	3.1
25	9.1	6.6	3.0	6.6	12	7.8	58	21	24	5.3	4.3	3.4
26	9.1	6.1	3.0	8.1	9.1	10	69	25	21	5.4	4.3	5.4
27	9.1	5.3	3.3	7.1	8.8	13	71	24	18	5.4	4.2	4.5
28	9.1	4.7	3.3	5.1	8.4	12	67	22	16	5.2	4.2	4.5
29	8.8	4.7	3.3	5.6	-----	10	75	21	11	5.2	4.4	3.1
30	9.7	4.7	3.3	6.6	-----	9.4	65	20	9.5	5.0	5.0	2.8
31	8.8	-----	3.7	6.1	-----	9.7	-----	18	-----	4.8	6.0	-----
TOTAL	294.8	205.4	116.9	183.9	188.8	244.3	1,037.9	1,180	811.5	189.7	151.9	132.2
MEAN	9.51	6.85	3.77	5.93	6.74	7.88	34.6	38.1	27.1	6.12	4.90	4.41
MAX	47	8.4	5.1	8.1	12	13	75	82	38	12	7.6	7.6
MIN	3.5	4.7	3.0	4.7	5.1	5.3	8.4	14	9.5	4.8	3.5	2.8
AC-FT	585	407	232	365	374	485	2,060	2,340	1,610	376	301	262

CAL YR 1972 TOTAL 1,784.8 MEAN 4.88 MAX 47 MIN 2.5 AC-FT 3,540
WTR YR 1973 TOTAL 4,737.3 MEAN 13.0 MAX 82 MIN 2.8 AC-FT 9,400

09171100 DOLORES RIVER NEAR BEDROCK, COLO.

LOCATION.--Lat 38°21'29", long 108°49'54", in SW¼NW¼ sec.2, T.47 N., R.18 W., Montrose County, on right bank 2.5 mi (4.0 km) downstream from West Paradox Creek and 4.3 mi (6.9 km) northeast of Bedrock.

DRAINAGE AREA.--2,145 mi² (5,556 km²).

PERIOD OF RECORD.--August 1971 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 4,910 ft (1,497 m) from topographic map. Prior to Feb. 1, 1972, at site 400 ft (120 m) upstream at datum 1.02 ft (0.311 m) higher.

EXTREMES.--Current year: Maximum discharge, 9,500 ft³/s (269 m³/s) Apr. 30 (gage height, 12.88 ft or 3.926 m, from floodmarks); minimum daily, 8.6 ft³/s (0.24 m³/s) Oct. 3.

Period of record: Maximum discharge, 9,500 ft³/s (269 m³/s) Apr. 30, 1973 (gage height, 12.88 ft or 3.926 m, from floodmarks); minimum daily, 0.44 ft³/s (0.012 m³/s) Aug. 1, 1972.

Flood of Sept. 6, 1970, reached a stage of 11.25 ft or 3.429 m (revised), site and datum in use prior to Feb. 1, 1972 (discharge, 5,710 ft³/s or 162 m³/s), by slope-area measurement at site 1,400 ft (430 m) upstream.

REMARKS.--Records good except those for winter period, which are poor. Diversions above station for irrigation of about 41,000 acres (166 km²), of which about 33,000 acres (134 km²) is in the San Juan River basin.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	198	102	85	129	293	424	6,270	3,160	1,950	25	70
2	9.5	300	105	67	120	324	460	4,950	3,060	1,740	23	30
3	8.6	296	123	80	129	331	460	4,110	3,110	1,600	20	22
4	9.5	275	145	110	131	307	456	4,590	3,240	1,200	20	19
5	16	261	129	120	129	310	388	5,550	4,140	1,040	20	17
6	13	275	104	110	129	296	396	5,160	3,140	886	34	17
7	16	264	87	104	131	265	468	4,170	2,910	770	68	18
8	39	244	104	97	143	258	700	3,550	3,330	650	33	17
9	151	198	93	110	149	296	530	4,240	3,830	560	22	15
10	105	171	114	120	151	300	488	5,060	4,550	500	19	15
11	92	171	95	131	153	261	670	5,790	4,810	440	17	26
12	80	163	116	116	159	265	1,270	6,040	4,780	408	14	15
13	105	125	95	120	165	275	1,940	6,620	4,400	370	13	12
14	90	153	77	120	161	307	2,690	5,940	4,050	416	13	11
15	579	185	76	127	159	282	3,290	5,540	4,200	338	15	14
16	1,050	183	59	123	147	244	5,060	5,470	3,170	328	16	27
17	522	190	73	133	139	228	2,960	5,510	2,330	219	14	21
18	415	159	93	141	135	216	3,400	5,800	2,010	161	60	17
19	2,330	155	100	145	141	328	3,230	5,970	1,980	345	94	15
20	1,630	175	120	141	143	400	2,370	6,770	1,940	618	29	13
21	1,630	171	133	135	153	484	1,780	6,690	1,730	247	18	12
22	989	159	137	133	153	615	1,600	6,300	1,740	195	20	12
23	645	179	141	121	155	500	1,600	6,200	1,740	167	31	11
24	440	157	133	120	169	424	3,000	4,900	1,690	139	16	31
25	303	120	116	120	195	400	4,140	3,960	1,740	95	13	31
26	213	130	111	125	208	380	4,890	3,940	1,820	76	36	27
27	181	140	111	127	234	424	6,250	4,960	1,970	55	29	22
28	216	160	120	125	234	615	6,780	3,650	2,270	40	24	19
29	171	170	118	125	-----	575	7,790	2,860	2,310	33	24	17
30	219	160	120	120	-----	520	8,300	2,780	2,100	29	24	16
31	195	-----	105	135	-----	460	-----	3,010	-----	26	160	-----
TOTAL	12,472.6	5,687	3,355	3,686	4,344	11,183	75,760	156,350	87,250	15,641	964	609
MEAN	402	190	108	119	155	361	2,525	5,044	2,908	505	31.1	20.3
MAX	2,330	300	145	145	234	615	8,300	6,770	4,810	1,950	160	70
MIN	8.6	120	59	67	120	216	388	2,780	1,690	26	13	11
AC=FT	24,740	11,280	6,650	7,310	8,620	22,180	150,300	310,100	173,100	31,020	1,910	1,210

CAL YR 1972 TOTAL 61,212.54 MEAN 167 MAX 2,330 MIN .44 AC=FT 121,400
 WTR YR 1973 TOTAL 377,301.60 MEAN 1,034 MAX 8,300 MIN 8.6 AC=FT 748,400

DOLORES RIVER BASIN

09172500 SAN MIGUEL RIVER NEAR PLACERVILLE, COLO.

LOCATION.--Lat 38°02'05", long 108°07'15", in NW¼SW¼ sec.30, T.44 N., R.11 W., San Miguel County, on right bank 0.7 mi (1.1 km) downstream from Specie Creek and 4.0 mi (6.4 km) northwest of Placerville.

DRAINAGE AREA.--308 mi² (798 km²).

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. Datum of gage is 7,055.80 ft (2,150.608 m) above mean sea level (Bureau of Reclamation bench mark). See WSP 1713 or 1733 for history of changes prior to Oct. 21, 1958.

AVERAGE DISCHARGE.--37 years (1910-12, 1930-34, 1942-73), 228 ft³/s (6.457 m³/s) 165,200 acre-ft/yr (204 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,660 ft³/s (75.3 m³/s) June 28 (gage height, 6.24 ft or 1.902 m); minimum daily, 40 ft³/s (1.13 m³/s) Feb. 16.

Period of record: Maximum discharge, 10,000 ft³/s (283 m³/s) Sept. 5, 1909 (result of failure of Trout and Middle Reservoir Dams); minimum daily, 26 ft³/s (0.74 m³/s) Jan. 5, 1960.

REMARKS.--Records good except those for winter period, which are poor. Diversions for irrigation of about 1,700 acres (6.88 km²) above station. One diversion from Fall Creek for irrigation of about 2,000 acres (8.09 km²) in Beaver and Saltado Creek basins. One small ditch diverts water from Leopard Creek to Uncompahgre River basin. Slight regulation by Lake Hope and Trout Lake of Western Colorado Co. (combined capacity, 5,040 acre-ft or 6.21 hm³).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	85	109	65	60	60	61	58	435	786	1,620	370	178
2	85	123	55	55	55	60	60	360	819	1,530	365	161
3	82	104	65	50	50	58	66	385	846	1,380	360	166
4	84	95	70	46	55	56	57	608	1,220	1,220	380	164
5	133	97	75	60	65	59	58	636	846	1,230	370	152
6	116	107	60	65	60	55	60	550	794	1,130	375	152
7	114	90	65	60	55	55	67	445	819	1,020	365	149
8	166	95	70	60	55	56	79	526	954	981	344	128
9	152	104	70	55	55	57	74	730	1,180	954	324	111
10	138	87	60	75	50	57	80	1,110	1,480	990	316	140
11	123	107	70	65	50	56	74	1,100	1,620	1,010	288	166
12	119	121	80	55	50	57	77	1,100	1,640	1,010	273	157
13	123	121	70	70	48	64	88	981	1,590	954	266	142
14	116	97	70	70	46	63	95	891	1,570	900	249	155
15	121	102	60	55	44	66	104	810	1,120	794	249	116
16	230	90	65	55	40	58	102	810	1,120	682	242	107
17	249	100	80	60	42	58	111	864	1,120	629	239	116
18	230	92	75	65	44	58	128	900	1,090	666	242	119
19	259	84	70	60	46	58	126	1,120	1,120	746	224	109
20	284	85	65	55	44	60	116	1,160	1,070	754	252	107
21	221	90	60	55	46	70	116	1,180	1,180	690	270	100
22	173	85	60	60	50	73	119	1,140	1,190	538	300	97
23	164	90	65	60	55	71	133	882	1,210	478	252	88
24	147	73	50	60	55	61	149	810	1,170	472	256	102
25	138	71	60	60	56	59	185	819	1,190	466	249	116
26	126	77	55	60	61	67	209	1,000	1,440	466	230	128
27	123	90	50	55	64	63	259	778	2,050	455	227	119
28	116	85	55	50	60	64	360	682	2,010	415	215	126
29	114	79	60	46	-----	63	612	643	1,790	390	197	102
30	114	74	50	50	-----	64	666	682	1,970	405	185	95
31	109	-----	46	55	-----	61	-----	746	-----	385	203	-----
TOTAL	4,554	2,824	1,971	1,807	1,461	1,888	4,488	24,883	38,004	25,360	8,677	3,848
MEAN	147	94.1	63.6	58.3	52.2	60.9	150	803	1,267	818	280	128
MAX	284	123	80	75	65	73	666	1,180	2,050	1,620	380	178
MIN	82	71	46	46	40	55	57	360	786	385	185	88
AC-FT	9,030	5,600	3,910	3,580	2,900	3,740	8,900	49,360	75,380	50,300	17,210	7,630

CAL YR 1972 TOTAL 57,387 MEAN 157 MAX 770 MIN 40 AC-FT 113,800
 WTR YR 1973 TOTAL 119,765 MEAN 328 MAX 2,050 MIN 40 AC-FT 237,600

PEAK DISCHARGE (BASE, 900 CFS).--June 28 (0400) 2,660 cfs (6.24 ft).

09175500 SAN MIGUEL RIVER AT NATURITA, COLO.

LOCATION.--Lat 38°13'04", long 108°33'57", in NE¼NW¼ sec.30, T.46 N., R.15 W., Montrose County, on left bank 20 ft (6 m) downstream from bridge on State Highway 97 in Naturita and 1.2 mi (1.9 km) downstream from Naturita Creek.

DRAINAGE AREA.--1,069 mi² (2,769 km²).

PERIOD OF RECORD.--October 1917 to September 1929, May 1940 to current year. Monthly discharge only for some periods, published in WSP 1313.

GAGE.--Water-stage recorder. Datum of gage is 5,392.85 ft (1,643.741 m) above mean sea level. Apr. 26, 1918, to Sept. 2, 1926, nonrecording gage and Sept. 3, 1926, to Sept. 30, 1929, water-stage recorder, at same site at different datums. Oct. 1, 1940, to Dec. 9, 1941, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--45 years, 339 ft³/s (9.600 m³/s), 245,600 acre-ft/yr (303 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 5,490 ft³/s (155 m³/s) Apr. 29 (gage height, 7.80 ft or 2.377 m); minimum daily, 4.0 ft³/s (1.13 m³/s) Oct. 3.
Period of record: Maximum discharge, 7,100 ft³/s (201 m³/s) Apr. 15, 1942 (gage height, 9.80 ft or 2.987 m), from rating curve extended above 3,800 ft³/s (110 m³/s); minimum daily, 5.0 ft³/s (0.14 m³/s) Aug. 11-13, 1972.

REMARKS.--Records good. Natural flow of stream affected by storage reservoirs, diversions for irrigation of about 22,000 acres (89.0 km²) above station and 4,000 acres (16.2 km²) below, and return flow from irrigated areas.

REVISIONS.--WRD Colo. 1972: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	46	163	97	99	107	134	134	1,800	1,370	1,640	315	137
2	43	167	89	93	99	132	137	1,480	1,530	1,560	299	115
3	40	167	100	90	88	127	134	1,470	1,640	1,440	288	109
4	46	141	110	75	99	117	127	1,960	3,300	1,300	295	118
5	79	151	125	103	115	117	117	2,330	2,070	1,300	299	106
6	110	169	90	89	96	109	145	1,880	1,600	1,240	323	103
7	122	147	109	62	100	106	167	1,410	1,540	1,130	307	103
8	220	141	113	61	100	112	171	1,480	1,680	1,070	303	96
9	200	153	110	72	97	107	163	2,180	2,030	1,010	267	74
10	180	134	96	132	94	107	191	2,820	2,420	1,110	254	73
11	170	139	107	118	93	101	220	3,280	2,560	1,040	228	117
12	150	169	127	93	93	106	274	2,950	2,400	1,040	210	128
13	157	177	113	118	88	127	447	2,520	2,340	1,050	198	106
14	165	147	110	120	85	125	660	2,320	2,380	984	188	99
15	219	151	99	96	84	112	710	2,120	2,000	835	183	89
16	363	137	103	97	75	115	501	2,020	1,540	745	179	68
17	452	134	139	104	76	106	615	2,180	1,300	680	205	64
18	416	161	127	113	85	93	805	2,130	1,270	685	210	75
19	596	115	107	103	88	79	524	2,550	1,240	984	175	72
20	528	84	121	100	83	80	465	2,600	1,210	840	191	66
21	402	78	96	83	81	112	447	2,800	1,280	755	215	60
22	311	72	97	69	101	110	443	2,530	1,280	596	260	57
23	254	84	109	58	104	156	665	1,990	1,340	524	236	51
24	239	123	79	75	103	151	996	1,720	1,370	483	188	48
25	215	100	97	106	109	127	1,110	1,650	1,440	461	210	63
26	193	100	92	106	101	136	1,430	2,200	1,600	452	181	87
27	186	132	85	104	110	161	1,950	1,810	1,880	434	175	81
28	183	113	87	96	130	161	2,600	1,420	2,090	384	173	81
29	173	117	106	80	-----	151	3,200	1,240	1,820	355	151	73
30	173	100	87	84	-----	149	2,970	1,220	1,840	351	143	58
31	163	-----	74	103	-----	139	-----	1,280	-----	335	151	-----
TOTAL	6,794	3,966	3,201	2,902	2,684	3,765	22,518	63,340	53,360	26,813	7,000	2,577
MEAN	219	132	103	93.6	95.9	121	751	2,043	1,779	865	226	85.9
MAX	596	177	139	132	130	161	3,200	3,280	3,300	1,640	323	137
MIN	40	72	74	58	75	79	117	1,220	1,210	335	143	48
AC=FT	13,480	7,870	6,350	5,760	5,320	7,470	44,660	125,600	105,800	53,180	13,880	5,110

CAL YR 1972 TOTAL 58,852.3 MEAN 161 MAX 770 MIN 5.0 AC=FT 116,700
WTR YR 1973 TOTAL 198,920.0 MEAN 545 MAX 3,300 MIN 40 AC=FT 394,600

PEAK DISCHARGE (BASE, 1,800 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
4-29	2400	7.80	5,490	6-4	0730	6.92	4,260
5-11	0130	7.40	4,900				

09175900 DRY CREEK NEAR NATURITA, COLO.

LOCATION.--Lat 38°05'32", long 108°37'17", in NE¼NW¼ sec.10, T.44 N., R.16 W., San Miguel County, on right bank 50 ft (15 m) upstream from ford, 0.3 mi (0.5 km) upstream from unnamed tributary, 1.2 mi (1.9 km) downstream from Dead Horse Creek, 5.0 mi (8.0 km) northwest of Basin, and 14 mi (23 km) south of Naturita.

DRAINAGE AREA.--78.6 mi² (203.6 km²).

PERIOD OF RECORD.--July 1966 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,270 ft (1,911 m) from topographic map.

AVERAGE DISCHARGE.--7 years, 2.88 ft³/s (0.0816 m³/s), 2,090 acre-ft/yr (2.58 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 519 ft³/s (14.7 m³/s) Oct. 19 (gage height, 4.71 ft or 1.436 m), from rating curve extended as explained below; no flow for many days.

Period of record: Maximum discharge, 5,660 ft³/s (160 m³/s) Sept. 5, 1970 (gage height, 8.31 ft or 2.533 m), from rating curve extended above 140 ft³/s (4.0 m³/s) on basis of slope-area measurements at gage heights 4.57 and 8.31 ft (1.393 and 2.533 m); no flow for many days each year.

REMARKS.--Records good except those for winter period, which are fair. Diversions for irrigation above station. Water is imported above station from Naturita Creek.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	.64			0	10	2.4	14	6.6	.19	0	
2	0	.88			0	8.0	2.6	8.9	7.2	.07	0	
3	0	1.0			0	6.5	1.5	7.2	30	0	0	
4	9.7	.82			0	6.0	.88	9.2	61	0	0	
5	16	.70			0	5.0	.94	15	22	0	0	
6	.13	.60			0	4.4	3.3	17	18	0	0	
7	13	.60			.10	3.8	3.4	12	16	0	17	
8	13	.50			.40	3.6	1.0	14	13	0	1.9	
9	.76	1.0			.40	3.4	1.5	19	11	0	0	
10	.13	1.0			.10	6.1	1.4	24	9.6	0	0	
11	.02	1.2			1.0	5.5	2.3	28	7.2	0	0	
12	2.4	1.6			1.8	6.5	6.8	50	2.2	0	0	
13	21	2.2			.60	5.4	8.9	44	.76	.10	0	
14	.46	1.6			.50	4.9	10	40	3.1	.46	0	
15	35	1.2			.30	2.2	7.4	36	3.4	.06	0	
16	103	1.6			.20	2.2	4.9	36	2.8	16	0	
17	9.4	1.6			.20	2.9	3.7	38	1.4	2.6	0	
18	9.9	1.6			.20	2.2	11	40	.76	15	0	
19	151	1.0			.10	2.2	7.7	44	1.9	13	0	
20	15	1.3			.10	8.9	5.6	46	2.3	5.1	0	
21	4.0	1.6			.10	13	4.7	44	1.3	1.0	.11	
22	1.0	1.5			.40	4.4	4.9	36	.82	.31	0	
23	.34	1.2			1.2	3.7	7.4	30	.94	0	0	
24	.22	.80			2.6	2.0	12	28	.88	0	0	
25	.13	.70			4.0	1.6	11	25	1.1	0	0	
26	.13	.40			7.0	1.5	11	32	1.0	0	0	
27	.75	.20			10	3.6	14	19	.94	0	0	
28	5.0	.10			13	2.8	16	13	.94	0	0	
29	.58	0			-----	2.2	19	12	1.2	0	0	
30	.76	0			-----	2.2	21	10	.58	0	0	
31	.76	-----			-----	2.0	-----	7.4	-----	0	0	-----
TOTAL	409.57	29.34	0	0	44.30	138.7	208.22	798.7	229.92	53.89	19.01	0
MEAN	13.2	.98	0	0	1.58	4.47	6.94	25.8	7.66	1.74	.61	0
MAX	151	2.2	0	0	13	13	21	50	61	16	17	0
MIN	0	0	0	0	0	1.5	.88	7.2	.58	0	0	0
AC-FT	812	58	0	0	88	275	413	1,580	456	107	38	0

CAL YR 1972 TOTAL 677.95 MEAN 1.85 MAX 151 MIN 0 AC-FT 1,340

WTR YR 1973 TOTAL 1,431.65 MEAN 5.29 MAX 151 MIN 0 AC-FT 3,830

PEAK DISCHARGE (BASE, 300 CFS).--Oct. 16 (0100) 436 cfs (4.25 ft); Oct. 19 (0430) 519 cfs (4.71 ft).

NOTE.--No gage-height record Nov. 5 to Mar. 8.

09236000 YAMPA RIVER NEAR TOPONAS, COLO.

LOCATION.--Lat 40°03'00", long 107°04'00", in NW¼ sec.20, T.1 N., R.86 W., Garfield County, on right bank just downstream from Yampa Reservoir Dam at Stillwater campground, 0.8 mi (1.3 km) downstream from Mandall Creek, 0.8 mi (1.3 km) upstream from Dome Creek, and 14 mi (23 km) west of Toponas.

DRAINAGE AREA.--23 mi² (60 km²), approximately.

PERIOD OF RECORD.--October 1952 to September 1962, October 1966 to current year.

GAGE.--Water-stage recorder and Parshall flume. Altitude of gage is 9,700 ft (2,957 m) from river profile map. Oct. 28, 1952, to Sept. 30, 1965, water-stage recorder at site 50 ft (15 m) upstream at different datum.

AVERAGE DISCHARGE.--20 years, 40.3 ft³/s (1.141 m³/s), 29,200 acre-ft/yr (36.0 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 175 ft³/s (4.96 m³/s) June 28 (gage height, 2.28 ft or 0.695 m); minimum daily, 12 ft³/s (0.34 m³/s) Mar. 23-28.

Period of record: Maximum discharge, 436 ft³/s (12.3 m³/s) July 2, 1957 (gage height, 6.39 ft or 1.948 m, site and datum then in use); minimum daily, 1.6 ft³/s (0.045 m³/s) Oct. 6-24, Nov. 18 to Dec. 8, 1966.

REMARKS.--Records good except those for periods of no gage-height record, which are fair. Flow regulated by Stillwater Reservoir (capacity, 6,200 acre-ft or 7.64 hm³) 3.5 mi (5.6 km) upstream and Yampa Reservoir (capacity, 620 acre-ft or 764,000 m³).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	21	19	16	14	13	14	24	62	152	45	29
2	23	21	19	16	14	13	14	25	57	146	51	30
3	23	21	19	16	14	13	15	27	54	131	54	29
4	23	20	19	16	14	13	15	28	52	110	59	29
5	22	21	19	16	14	13	15	29	48	123	63	28
6	21	21	18	16	14	13	15	29	49	122	56	28
7	21	19	18	16	14	13	15	29	52	123	44	29
8	22	20	18	16	14	13	15	29	70	122	40	28
9	22	20	18	16	14	14	15	30	84	119	37	27
10	21	20	18	16	14	14	15	31	96	120	35	28
11	20	20	18	16	14	14	16	32	88	125	35	28
12	20	20	17	16	14	14	16	34	90	127	35	29
13	20	20	17	16	14	14	16	35	92	131	33	28
14	20	20	17	15	13	14	17	36	96	125	33	26
15	26	20	17	15	13	14	17	38	98	117	33	26
16	27	20	17	15	13	14	17	40	92	111	32	26
17	23	20	17	15	13	14	17	46	88	105	33	25
18	23	20	17	15	13	14	17	54	87	103	32	25
19	22	20	18	15	13	14	17	64	91	103	32	25
20	22	20	18	15	13	14	18	76	100	101	31	25
21	23	20	18	15	13	14	18	82	103	101	31	25
22	22	20	18	15	13	13	18	69	105	98	32	25
23	22	20	18	15	13	12	18	68	107	96	30	25
24	21	20	18	15	13	12	18	69	111	105	29	26
25	21	20	18	14	13	12	20	69	118	102	28	26
26	21	20	17	14	13	12	20	61	139	91	28	26
27	21	20	17	14	13	12	20	52	159	88	28	25
28	21	20	17	14	13	12	20	48	171	69	28	25
29	21	20	17	14	-----	13	22	49	169	65	28	25
30	22	20	17	14	-----	13	24	51	163	45	28	25
31	21	-----	17	14	-----	13	-----	58	-----	41	28	-----
TOTAL	681	604	550	471	377	410	514	1,412	2,891	3,317	1,131	801
MEAN	22.0	20.1	17.7	15.2	13.5	13.2	17.1	45.5	96.4	107	36.5	26.7
MAX	27	21	19	16	14	14	24	82	171	152	63	30
MIN	20	19	17	14	13	12	14	24	48	41	28	25
AC-FT	1,350	1,200	1,090	934	748	813	1,020	2,800	5,730	6,580	2,240	1,590

CAL YR 1972 TOTAL 15,215 MEAN 41.6 MAX 220 MIN 15 AC-FT 30,180
WTR YR 1973 TOTAL 13,159 MEAN 36.1 MAX 171 MIN 12 AC-FT 26,100

NOTE.--No gage-height record Nov. 15 to Mar. 21, Mar. 26 to May 19.

09237800 SERVICE CREEK NEAR OAK CREEK, COLO.

LOCATION.--Lat 40°17'45", long 106°48'03", in NW¼NW¼ sec.27, T.4 N., R.84 W., (projected), Routt County, on left bank 0.2 mi (0.3 km) upstream from mouth, 8 mi (13 km) east of town of Oak Creek, and 13 mi (21 km) south of Steamboat Springs.

DRAINAGE AREA.--38.2 mi² (98.9 km²).

PERIOD OF RECORD.--October 1965 to September 1973 (discontinued).

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 6,988 ft (2,130 m) from topographic map.

AVERAGE DISCHARGE.--8 years, 45.2 ft³/s (1.280 m³/s), 32,750 acre-ft/yr (40.4 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 769 ft³/s (21.8 m³/s) May 20 (gage height, 5.57 ft or 1.698 m); minimum daily, 2.7 ft³/s (0.076 m³/s) Dec. 12.

Period of record: Maximum discharge, 769 ft³/s (21.8 m³/s) May 20, 1973 (gage height, 5.57 ft or 1.698 m); maximum gage height, 5.65 ft (1.722 m) May 21, 1970; minimum daily discharge, 2.0 ft³/s (0.057 m³/s) for many days in 1966.

REMARKS.--Records good. No diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.7	7.0	4.4	3.7	4.0	3.9	6.3	41	308	101	12	4.4
2	4.8	6.8	4.4	3.7	4.2	3.9	6.3	42	347	87	11	5.7
3	4.3	6.8	4.6	3.7	4.3	3.9	6.6	43	315	78	11	7.6
4	4.1	6.6	4.6	3.7	4.5	3.9	6.6	51	296	68	10	6.8
5	4.1	6.8	4.4	3.7	4.7	3.9	6.3	67	283	59	14	5.7
6	4.6	6.8	4.3	3.7	4.7	3.9	7.3	76	283	50	24	4.8
7	4.8	6.8	4.3	3.9	4.6	3.9	8.2	86	315	44	17	5.0
8	6.6	6.6	4.5	4.1	4.6	3.9	8.5	94	353	43	16	5.2
9	9.4	6.6	4.2	4.1	4.6	3.9	8.2	138	401	38	13	4.4
10	9.1	6.6	4.1	4.1	4.5	3.9	7.9	180	424	34	11	4.1
11	6.3	6.6	2.9	3.9	4.5	3.9	7.6	207	411	29	11	4.8
12	5.2	6.6	2.7	3.9	4.4	3.9	7.9	222	385	27	11	11
13	5.0	6.6	3.5	4.1	4.4	4.1	9.7	225	374	32	9.1	11
14	6.3	6.3	3.5	4.1	4.4	4.1	12	234	398	50	7.6	7.3
15	7.6	6.1	3.2	3.9	4.4	4.1	15	264	363	32	6.8	3.7
16	21	6.1	3.2	3.9	4.1	4.1	16	276	318	38	6.3	3.9
17	13	6.1	3.0	3.9	3.9	3.9	15	324	273	30	6.8	4.8
18	16	5.7	2.9	3.7	3.9	4.1	16	360	244	23	7.9	4.6
19	15	5.7	3.2	3.7	3.9	3.9	15	462	222	32	7.0	4.4
20	11	5.7	3.4	3.9	4.1	6.3	14	620	210	47	6.1	4.1
21	11	5.7	3.4	3.9	4.1	5.7	15	616	201	37	6.3	4.1
22	11	5.7	3.5	3.7	3.9	5.0	15	518	201	27	11	3.7
23	10	5.5	3.5	3.7	4.1	5.0	16	487	195	24	11	3.7
24	9.4	5.9	3.7	3.7	4.1	5.0	18	464	183	20	8.2	4.4
25	7.9	5.5	3.7	3.8	3.9	5.2	21	452	177	21	7.0	4.8
26	7.9	4.8	3.7	4.0	3.9	4.8	20	374	177	18	6.1	4.4
27	8.5	4.6	3.7	4.0	3.9	5.5	21	296	164	16	5.7	4.3
28	8.2	4.3	3.7	4.0	3.9	7.0	25	276	152	15	5.2	4.3
29	7.6	4.3	3.7	4.0	-----	7.0	33	273	141	14	4.6	4.4
30	5.7	4.4	3.7	4.0	-----	6.6	39	276	121	14	4.8	4.4
31	6.1	-----	3.7	4.0	-----	6.3	-----	289	-----	13	4.6	-----
TOTAL	257.2	179.6	115.3	120.2	118.5	146.5	423.4	8,334	8,250	1,161	293.3	155.8
MEAN	8.30	5.99	3.72	3.88	4.23	4.73	14.1	249	275	37.5	9.46	5.19
MAX	21	7.0	4.6	4.1	4.7	7.0	39	620	424	101	24	11
MIN	4.1	4.3	2.7	3.7	3.9	3.9	6.3	41	121	13	4.6	3.7
AC-FT	510	356	229	238	245	291	840	16,530	16,460	2,300	582	309

CAL YR 1972 TOTAL 16,127.0 MEAN 44.1 MAX 420 MIN 2.6 AC-FT 31,990

WTR YR 1973 TOTAL 19,550.8 MEAN 53.6 MAX 620 MIN 2.7 AC-FT 36,790

PEAK DISCHARGE (BASE, 350 CFS).--May 20 (0300) 769 cfs (5.57 ft).

GREEN RIVER BASIN

311

09238300 NORTH FORK WALTON CREEK NEAR RABBIT EARS PASS, COLO.

LOCATION.--Lat 40°23'44", long 106°38'57", in SW¼NW¼ sec.18, T.5 N., R.82 W., Routt County, on left bank 0.6 mi (1.0 km) upstream from mouth, 1.7 mi (2.7 km) west of Rabbit Ears Pass, and 11.5 mi (18.5 km) southeast of Steamboat Springs.

DRAINAGE AREA.--0.71 mi² (1.84 km²).

PERIOD OF RECORD.--October 1972 to September 1973.

GAGE.--Water-stage recorder. Altitude of gage is 9,550 ft (2,911 m) from topographic map.

EXTREMES.--Current year: Maximum discharge, 43 ft³/s (1.22 m³/s) June 10 (gage height, 2.43 ft or 0.741 m); maximum gage height, 2.88 ft (0.878 m) June 7 (ice jam); minimum daily discharge, 0.13 ft³/s (0.004 m³/s) Feb. 3-11.

REMARKS.--Records good. No diversion above station.

Discharge measurements made prior to beginning of continuous discharge record

Date			Discharge (ft ³ /s)									
Sept. 12, 1972			0.2									
DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.31	.24	.20	.18	.14	.15	.18	.80	11	2.7	.54	.21
2	.27	.22	.20	.18	.14	.15	.18	.55	9.1	2.3	.51	.33
3	.25	.20	.20	.18	.13	.15	.19	.45	6.4	2.1	.46	.42
4	.30	.21	.24	.18	.13	.16	.19	.40	6.3	1.9	.42	.35
5	.44	.21	.24	.18	.13	.16	.19	.88	6.1	1.7	1.0	.27
6	.37	.20	.24	.18	.13	.16	.19	1.2	7.1	1.5	.83	.24
7	.42	.22	.24	.18	.13	.16	.20	.88	9.3	1.4	.62	.28
8	.62	.20	.24	.18	.13	.16	.20	.97	14	1.3	.49	.29
9	.84	.19	.24	.17	.13	.15	.20	1.3	20	1.3	.38	.28
10	.36	.19	.27	.17	.13	.15	.20	1.9	24	1.1	.32	.28
11	.31	.20	.24	.17	.13	.15	.20	2.7	23	.94	.30	.37
12	.25	.19	.24	.17	.14	.15	.20	3.2	22	.97	.27	.44
13	.26	.19	.25	.17	.14	.16	.24	3.7	20	1.2	.25	.38
14	.27	.19	.24	.17	.14	.17	.27	4.2	22	1.3	.23	.32
15	.82	.18	.24	.16	.14	.17	.34	4.9	17	1.1	.22	.31
16	.68	.18	.24	.16	.14	.17	.28	5.6	11	1.0	.21	.30
17	.67	.18	.24	.16	.14	.17	.28	6.6	10	.85	.25	.29
18	.91	.19	.20	.16	.14	.17	.24	7.8	7.8	.93	.28	.29
19	.64	.19	.20	.16	.14	.17	.24	9.6	7.0	2.1	.22	.27
20	.45	.19	.20	.16	.14	.17	.20	13	6.9	1.8	.20	.26
21	.44	.19	.20	.15	.14	.17	.20	12	6.8	1.4	.21	.22
22	.40	.19	.20	.15	.15	.17	.20	12	6.6	1.1	.32	.20
23	.40	.19	.22	.15	.15	.17	.21	12	6.3	.86	.23	.20
24	.41	.20	.20	.15	.15	.18	.26	11	5.9	.86	.27	.31
25	.43	.20	.20	.15	.15	.18	.20	10	5.5	.86	.23	.32
26	.41	.20	.20	.15	.15	.18	.20	8.3	5.0	.66	.22	.29
27	.40	.20	.20	.15	.15	.18	.21	6.5	4.5	.57	.21	.25
28	.34	.20	.20	.15	.15	.18	.37	6.1	4.0	.54	.20	.26
29	.30	.24	.19	.15	-----	.18	.64	6.4	3.6	.52	.19	.30
30	.35	.24	.19	.15	-----	.18	.92	6.7	3.1	.59	.19	.27
31	.37	-----	.19	.15	-----	.18	-----	8.9	-----	.58	.19	-----
TOTAL	13.29	6.01	6.79	5.07	3.90	5.15	7.82	170.62	311.8	38.01	10.46	8.80
MEAN	.43	.20	.22	.16	.14	.17	.26	5.50	10.4	1.23	.34	.29
MAX	.91	.24	.27	.18	.15	.18	.92	13	24	2.7	1.0	.44
MIN	.25	.18	.19	.15	.13	.15	.18	.45	3.1	.52	.19	.20
AC-FT	26	12	13	10	7.7	10	16	338	618	75	21	17

WTR YR 1973 TOTAL 587.72 MEAN 1.61 MAX 24 MIN .13 AC-FT 1,170

PEAK DISCHARGE (BASE, 10 CFS).--May 22 (2100) 18 cfs (1.84 ft); June 10 (2000) 43 cfs (2.43 ft).

09238500 WALTON CREEK NEAR STEAMBOAT SPRINGS, COLO.

LOCATION.--Lat 40°24'29", long 106°47'11", in SW¼NW¼ sec.11, T.5 N., R.84 W., Routt County, on left bank 0.4 mi (0.6 km) downstream from Beaver Creek, 0.6 mi (1.0 km) downstream from Storm King Creek, 4.5 mi (7.2 km) upstream from mouth, and 6.0 mi (9.7 km) southeast of Steamboat Springs.

DRAINAGE AREA.--42.4 mi² (109.8 km²).

PERIOD OF RECORD.--October 1920 to September 1922, October 1965 to September 1973 (discontinued). Monthly discharge only prior to 1965, published in WSP 1313.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 7,050 ft (2,149 m) from topographic map. Prior to Oct. 1, 1965, water-stage recorder at site 0.2 mi (0.3 km) downstream at different datum. Supplementary water-stage recorder on Highline Canal since May 18, 1966.

AVERAGE DISCHARGE.--10 years, 87.4 ft³/s (2.475 m³/s), 63,320 acre-ft/yr (78.1 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,520 ft³/s (43.0 m³/s) June 10 (gage height, 2.90 ft or 0.884 m); minimum daily, 8.6 ft³/s (0.24 m³/s) Jan. 29, 30.

Period of record: Maximum daily discharge, 2,800 ft³/s (79.3 m³/s) June 15, 1921; minimum daily, 4.5 ft³/s (0.13 m³/s) Oct. 29, Nov. 7, 8, 1921, Aug. 28, 29, 1966.

REMARKS.--Records good. Diversions above station by Highline Canal from Beaver and Storm King Creeks for irrigation below station (see table below for figures of diversion). No other diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	16	13	12	10	12	14	56	478	216	38	11
2	12	16	12	12	10	12	15	50	485	182	37	14
3	10	15	12	12	10	12	15	48	390	158	32	21
4	9.7	14	12	12	10	13	15	55	300	135	28	20
5	15	14	12	12	10	13	14	64	295	118	71	12
6	15	15	12	13	11	13	15	77	372	104	82	11
7	12	16	12	13	11	13	15	84	536	97	58	12
8	26	15	12	12	11	13	15	84	744	92	48	10
9	21	15	12	12	11	13	15	104	940	77	28	9.7
10	15	15	11	12	12	13	15	126	1,120	66	23	9.7
11	12	14	10	12	12	14	15	161	1,000	56	21	12
12	11	14	12	12	12	14	17	189	991	56	18	19
13	10	13	12	12	11	14	18	216	1,000	77	16	15
14	10	13	12	11	11	14	21	228	1,160	77	15	12
15	23	14	11	12	12	14	25	260	790	66	14	11
16	43	14	11	11	12	15	24	280	432	69	13	11
17	35	14	12	11	14	15	21	325	438	50	14	10
18	51	13	12	12	15	15	21	402	384	41	18	9.7
19	47	13	12	12	14	15	19	506	325	102	14	10
20	27	13	12	12	13	16	18	576	360	138	12	9.7
21	29	13	12	12	13	16	18	536	384	118	12	9.3
22	27	13	12	12	13	15	18	520	414	94	18	9.3
23	24	13	12	12	12	15	19	552	414	82	14	10
24	24	13	12	10	13	15	25	499	384	64	14	14
25	22	13	12	9.5	12	15	28	450	396	75	14	18
26	22	13	12	9.0	12	15	26	384	390	51	12	18
27	23	14	13	9.0	12	15	29	280	360	46	12	15
28	21	14	14	9.0	12	15	41	264	305	43	11	14
29	19	14	14	8.6	-----	15	55	285	264	41	10	15
30	12	13	13	8.6	-----	15	60	310	248	46	9.7	14
31	15	-----	13	9.7	-----	14	-----	390	-----	51	9.7	-----
TOTAL	647.7	419	375	348.4	331	438	666	8,361	16,099	2,688	736.4	386.4
MEAN	20.9	14.0	12.1	11.2	11.8	14.1	22.2	270	537	86.7	23.8	12.9
MAX	51	16	14	13	15	16	60	576	1,160	216	82	21
MIN	9.7	13	10	8.6	10	12	14	48	248	41	9.7	9.3
AC=FT	1,280	831	744	691	657	869	1,320	16,580	31,930	5,330	1,460	766
†	0	0	0	0	0	0	0	0	51	2.3	0	0

CAL YR 1972 TOTAL 29,098.4 MEAN 79.5 MAX 970 MIN 7.3 AC=FT 57,720

WTR YR 1973 TOTAL 31,495.9 MEAN 86.3 MAX 1,160 MIN 8.6 AC=FT 62,470

PEAK DISCHARGE (BASE, 600 CFS).--May 22 (1930) 654 cfs (2.26 ft); June 10 (1900) 1,520 cfs (2.90 ft).

†Diversions, in acre-feet, by Highline Canal.

GREEN RIVER BASIN

313

09239500 YAMPA RIVER AT STEAMBOAT SPRINGS, COLO.

LOCATION.--Lat 40°29'01", long 106°49'54", in NW¼NE¼ sec.17, T.6 N., R.84 W., Routt County, on right bank 30 ft (9 m) downstream from Fifth (corrected) Street Bridge in Steamboat Springs and 0.6 mi (1.0 km) upstream from Soda Creek.

DRAINAGE AREA.--604 mi² (1,564 km²).

PERIOD OF RECORD.--May 1904 to October 1906, October 1909 to current year. Monthly discharge only for some periods, published in WSP 1313.

GAGE.--Water-stage recorder. Datum of gage is 6,695.47 ft (2,040.779 m) above mean sea level. Prior to May 8, 1905, nonrecording gage at bridge 0.2 mi (0.3 km) upstream at datum 4.16 ft (1.268 m) higher. May 8, 1905, to Oct. 31, 1906, nonrecording gage on bridge 30 ft (9 m) upstream at datum 0.44 ft (0.134 m) higher. Mar. 8, 1910, to Sept. 11, 1934, water-stage recorder at present site at datum 0.44 ft (0.134 m) higher.

AVERAGE DISCHARGE.--66 years, 467 ft³/s (13.23 m³/s), 338,300 acre-ft/yr (417 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 4,340 ft³/s (123 m³/s) June 14 (gage height, 6.14 ft or 1.871 m); minimum daily, 76 ft³/s (2.15 m³/s) Nov. 23.

Period of record: Maximum discharge, 6,820 ft³/s (193 m³/s) June 14 1921 (gage height, 7.08 ft or 2.158 m, present datum), from rating curve extended above 4,800 ft³/s (140 m³/s); minimum daily, 4.0 ft³/s (0.11 m³/s) Sept. 8, 1934, Sept. 10-13, 1944.

REMARKS.--Records good. Natural flow of stream affected by 2 diversions for irrigation to Egeria Creek in Colorado River basin, 1 diversion for irrigation from Trout Creek drainage to Oak Creek drainage, irrigation of about 19,700 acres (79.7 km²) above station and storage reservoirs.

REVISIONS.--WSP 764: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	124	144	105	103	101	101	168	1,410	2,450	1,170	254	115
2	113	159	105	103	103	107	177	990	2,460	974	244	128
3	103	150	107	103	97	107	180	943	2,160	845	234	150
4	101	138	104	101	95	111	180	1,210	1,930	754	223	168
5	111	153	102	105	95	103	192	1,380	1,680	692	289	135
6	117	162	107	107	97	95	227	1,620	1,720	602	455	122
7	113	131	90	107	97	113	220	1,530	2,050	536	395	122
8	133	150	101	107	97	109	216	1,370	2,480	554	360	122
9	156	153	101	107	95	107	209	1,620	2,910	518	277	111
10	156	124	101	107	88	102	206	1,910	3,370	460	227	105
11	122	126	105	105	83	106	227	2,080	3,500	395	213	113
12	107	133	108	105	91	118	277	2,150	3,200	370	216	156
13	105	141	111	101	91	129	355	2,140	2,980	450	206	165
14	109	105	111	103	93	110	450	2,130	3,510	662	186	131
15	124	122	105	103	86	124	578	2,180	3,680	560	177	117
16	258	126	103	105	88	120	405	2,300	2,560	620	162	111
17	216	103	109	103	88	122	430	2,430	2,110	542	159	107
18	248	115	110	103	88	124	470	2,700	1,950	435	186	103
19	230	120	112	103	90	135	440	3,110	1,570	578	174	101
20	195	101	117	101	91	156	297	3,840	1,560	943	156	95
21	234	103	115	99	91	141	297	3,750	1,580	740	147	90
22	234	101	115	99	90	141	314	3,500	1,680	650	199	88
23	209	76	111	86	93	144	360	3,270	1,790	548	195	86
24	192	79	111	90	95	153	536	3,110	1,710	435	162	93
25	174	93	103	90	95	147	728	2,940	1,730	480	162	111
26	162	91	103	93	101	144	656	2,720	1,780	380	138	117
27	171	97	107	97	105	156	722	2,430	1,720	319	131	113
28	177	93	107	99	101	156	1,050	2,120	1,530	319	124	103
29	174	101	105	99	-----	159	1,690	1,900	1,390	301	120	103
30	159	101	99	97	-----	168	1,920	1,900	1,330	293	115	99
31	124	-----	103	97	-----	165	-----	2,000	-----	297	117	-----
TOTAL	4,951	3,591	3,291	3,128	2,625	3,973	14,177	68,683	66,070	17,422	6,397	3,480
MEAN	160	120	106	101	93.8	128	473	2,216	2,202	562	206	116
MAX	258	162	117	107	105	168	1,920	3,840	3,680	1,170	455	168
MIN	101	76	90	86	83	95	168	943	1,330	293	115	86
AC-FT	9,820	7,120	6,530	6,200	5,210	7,880	28,120	136,200	131,000	34,560	12,690	6,900

CAL YR 1972 TOTAL 156,002 MEAN 426 MAX 3,720 MIN 76 AC-FT 309,400

WTR YR 1973 TOTAL 197,788 MEAN 542 MAX 3,840 MIN 76 AC-FT 392,300

PEAK DISCHARGE (BASE, 3,000 CFS).--May 20 (2100) 3,960 cfs (5.83 ft); June 14 (2330) 4,340 cfs (6.14 ft).

GREEN RIVER BASIN

09240800 SOUTH FORK ELK RIVER NEAR CLARK, COLO.

LOCATION.--Lat 40°44'43", long 106°48'24", in NE¼ sec.16, T.9 N., R.84 W., Routt County, on left bank 50 ft (15 m) downstream from unnamed tributary, 0.9 mi (1.4 km) upstream from mouth, and 6.5 mi (10.5 km) northeast of Clark.

DRAINAGE AREA.--33.7 mi² (87.3 km²).

PERIOD OF RECORD.--October 1966 to September 1973 (discontinued).

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 7,980 ft (2,432 m) from topographic map.

AVERAGE DISCHARGE.--7 years, 69.4 ft³/s (1.965 m³/s), 50,280 acre-ft/yr (62.0 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 736 ft³/s (20.8 m³/s) June 26 (gage height, 3.65 ft or 1.113 m); minimum daily, 8.9 ft³/s (0.25 m³/s) Feb. 20.

Period of record: Maximum discharge, 925 ft³/s (26.2 m³/s) June 25, 1971 (gage height, 4.25 ft or 1.295 m); minimum daily, 7.0 ft³/s (0.20 m³/s) Nov. 25, 1966.

REMARKS.--Records good. No regulation or diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	22	15	12	9.2	9.2	9.9	25	224	457	61	18
2	16	23	15	13	9.3	9.2	9.7	22	303	399	58	21
3	15	23	15	12	9.3	9.1	9.7	23	218	337	54	21
4	14	22	14	12	9.5	9.2	9.2	32	171	292	54	20
5	22	22	14	12	9.7	9.6	9.4	40	146	278	55	18
6	20	22	14	11	9.8	9.5	10	53	145	254	58	16
7	17	20	15	11	9.7	9.4	9.4	55	178	233	54	16
8	24	21	14	11	9.4	9.0	9.6	56	264	200	50	15
9	29	20	15	11	9.9	9.3	10	66	385	173	45	15
10	26	18	14	11	9.6	9.3	10	78	488	159	41	15
11	20	18	15	11	9.5	9.5	10	91	523	144	39	19
12	18	19	14	11	9.6	9.3	11	110	504	152	36	21
13	17	19	14	11	9.7	9.4	11	130	484	224	33	18
14	17	18	14	11	9.7	9.1	12	144	577	238	32	16
15	28	18	14	11	9.9	9.7	13	159	581	169	30	15
16	35	18	14	11	9.6	9.4	12	178	376	140	29	14
17	34	17	13	11	10	9.3	13	205	279	124	27	14
18	40	17	13	11	9.2	9.0	12	245	249	113	27	14
19	37	17	15	11	9.2	9.6	11	313	195	143	25	13
20	37	16	14	11	8.9	9.7	12	380	180	165	23	12
21	41	16	14	11	9.1	10	12	377	197	165	23	12
22	36	15	13	11	9.2	10	12	307	221	120	25	11
23	31	13	14	11	9.2	9.6	12	270	294	104	22	12
24	30	15	13	10	9.2	9.9	15	268	368	93	22	15
25	27	16	13	10	9.2	9.8	14	278	428	88	20	16
26	28	15	13	10	9.2	9.4	13	257	534	79	19	16
27	28	16	12	10	9.2	9.8	15	181	550	76	18	15
28	27	17	13	9.5	9.4	10	19	155	495	78	19	15
29	25	16	12	9.6	-----	10	25	153	487	72	17	14
30	21	16	13	9.3	-----	9.8	28	152	492	68	17	14
31	19	-----	12	9.3	-----	9.7	-----	174	-----	63	16	-----
TOTAL	795	545	426	336.7	264.4	295.7	378.9	4,977	10,536	5,402	1,050	471
MEAN	25.6	18.2	13.7	10.9	9.44	9.54	12.6	161	351	174	33.9	15.7
MAX	41	23	15	13	10	10	28	380	581	457	61	21
MIN	14	13	12	9.3	8.9	9.0	9.2	22	145	63	16	11
AC-FT	1,580	1,080	845	668	524	587	752	9,870	20,900	10,710	2,080	934

CAL YR 1972 TOTAL 20,920.1 MEAN 57.2 MAX 574 MIN 9.2 AC-FT 41,500
 WTR YR 1973 TOTAL 25,477.7 MEAN 69.8 MAX 581 MIN 8.9 AC-FT 50,540

PEAK DISCHARGE (BASE, 400 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
5-19	2300	2.70	427	6-26	2400	3.65	736
6-14	2400	3.57	692				

GREEN RIVER BASIN

315

09241000 ELK RIVER AT CLARK, COLO.

LOCATION.--Lat 40°43'03", long 106°54'55", in NW¼NW¼ sec.27, T.9 N., R.85 W., Routt County, on left bank 30 ft (9 m) downstream from bridge on State Highway 129, 0.8 mi (1.3 km) north of Clark, and 2.0 mi (3.2 km) upstream from Cottonwood Gulch.

DRAINAGE AREA.--206 mi² (534 km²).

PERIOD OF RECORD.--May 1910 to September 1922 (published as "near Clark"), April 1930 to current year. Monthly discharge only for some periods, published in WSP 1313.

GAGE.--Water-stage recorder. Datum of gage is 7,267.75 ft (2,215.210 m) above mean sea level (State Highway Department bench mark). May 1910 to September 1922, nonrecording gage at site 30 ft (9 m) upstream at datum 0.15 ft (0.046 m) lower. Apr. 23, 1930, to Sept. 27, 1934, water-stage recorder at present site at datum 0.15 ft (0.046 m) lower.

AVERAGE DISCHARGE.--55 years, 337 ft³/s (9.544 m³/s), 244,200 acre-ft/yr (301 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,580 ft³/s (73.1 m³/s) May 19 (gage height, 4.78 ft or 1.457 m); minimum daily, 49 ft³/s (1.39 m³/s) Feb. 11.
Period of record: Maximum daily discharge, 4,470 ft³/s (127 m³/s) June 6, 9, 1912; minimum daily determined, 22 ft³/s (0.62 m³/s) Dec. 12, 1963, but a lesser discharge may have occurred during periods of no gage-height record prior to 1939.

REMARKS.--Records good except those for winter period, which are fair. Diversions above station for irrigation of about 230 acres (931,000 m²) above and about 460 acres (1.86 km²) below station. Natural flow of stream affected by storage in Lester Creek Reservoir (known also as Pearl Lake), capacity, 5,660 acre-ft (6.98 hm³) since 1963 and Steamboat Lake (capacity, 23,060 acre-ft or 28.4 hm³) since 1968.

REVISIONS (WATER YEARS).--WSP 1733: 1956.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	65	61	73	68	58	59	68	272	1,270	1,340	222	76
2	62	72	73	68	62	61	70	246	1,560	1,210	218	94
3	59	79	74	68	58	63	71	221	1,230	1,060	202	96
4	57	76	73	64	56	64	74	247	1,020	947	225	93
5	61	76	72	66	56	60	78	348	903	911	247	78
6	71	74	71	67	57	58	90	510	931	850	226	71
7	71	55	64	67	57	52	90	570	1,080	806	207	68
8	73	59	70	67	57	60	88	585	1,290	724	195	66
9	82	67	70	66	55	62	86	749	1,630	655	174	63
10	88	56	71	66	53	60	84	877	1,910	609	163	64
11	85	51	73	66	49	59	83	901	1,970	558	157	85
12	77	50	74	64	51	59	87	994	1,980	531	148	91
13	70	55	77	62	54	60	90	1,100	1,780	671	139	75
14	68	52	77	62	54	57	98	1,170	2,010	716	131	68
15	71	52	74	64	51	62	118	1,220	2,010	588	124	65
16	99	56	72	64	51	60	82	1,310	1,510	510	118	62
17	108	56	74	62	52	61	90	1,430	1,230	460	115	62
18	124	51	76	63	51	58	99	1,610	1,120	414	116	60
19	134	54	78	63	53	54	98	1,960	932	511	109	57
20	134	52	78	62	53	54	90	2,110	860	648	102	56
21	140	55	78	62	53	59	98	2,010	894	688	101	55
22	151	57	78	60	52	57	99	1,740	938	487	108	55
23	146	53	78	52	55	58	95	1,620	1,100	432	103	56
24	130	55	77	53	56	61	121	1,570	1,220	385	100	69
25	116	65	74	54	56	60	139	1,570	1,260	355	95	74
26	108	64	72	55	59	59	133	1,490	1,460	306	88	76
27	112	67	73	57	61	62	138	1,200	1,500	280	86	68
28	112	65	74	59	60	64	159	1,060	1,430	282	83	70
29	106	70	73	59	-----	64	192	950	1,410	258	77	72
30	93	71	70	57	-----	67	240	968	1,410	258	71	69
31	65	-----	65	57	-----	67	-----	1,080	-----	252	71	-----
TOTAL	2,945	1,826	2,276	1,923	1,540	1,861	3,148	33,746	40,848	18,682	4,323	2,114
MEAN	94.9	60.9	73.4	62.0	55.0	60.0	105	1,089	1,362	603	139	70.5
MAX	151	79	78	68	62	67	240	2,110	2,010	1,340	247	96
MIN	57	50	64	52	49	52	68	221	860	232	71	55
AC-FT	5,840	3,620	4,510	3,810	3,050	3,690	6,240	66,940	81,020	37,060	8,570	4,190

CAL YR 1972 TOTAL 95,603 MEAN 261 MAX 2,020 MIN 50 AC-FT 189,600
 MIN YR 1973 TOTAL 115,230 MEAN 316 MAX 2,110 MIN 49 AC-FT 228,600

PEAK DISCHARGE (BASE, 1,900 CFS).--May 19 (2300) 2,580 cfs (4.78 ft); June 14 (1600) 2,540 cfs (4.68 ft).

09244100 FISH CREEK NEAR MILNER, COLO.

LOCATION.--Lat 40°20'10", long 107°08'20", in NW¼ sec.11, T.4 N., R.87 W., Routt County, on left bank 220 ft (67 m) downstream from highway bridge, 0.2 mi (0.3 km) upstream from Coyote Creek, and 12 mi (19 km) southwest of Milner.

DRAINAGE AREA.--34.5 mi² (89.4 km²).

PERIOD OF RECORD.--October 1955 to September 1973 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 6,911.53 ft (2,106.634 m) above mean sea level. Prior to Apr. 8, 1958, at site 220 ft (67 m) upstream at different datum. Apr. 8 to Aug. 14, 1958, at site 220 ft (67 m) upstream at datum 3.14 ft (0.957 m) higher.

AVERAGE DISCHARGE.--18 years, 12.7 ft³/s (0.360 m³/s), 9,200 acre-ft/yr (11.3 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 231 ft³/s (6.54 m³/s) May 20 (gage height, 4.84 ft or 1.475 m); minimum daily, 2.2 ft³/s (0.062 m³/s) Sept. 5.

Period of record: Maximum discharge, 342 ft³/s (9.69 m³/s) May 18, 1970 (gage height, 6.74 ft or 2.054 m), from rating curve extended above 170 ft³/s (4.8 m³/s); minimum daily, 0.40 ft³/s (0.011 m³/s) Sept. 22, 1964, July 30 to Aug. 1, 1966.

REMARKS.--Records good except those for winter period, which are poor. Diversions above station for irrigation.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.7	5.6	4.6	4.5	4.3	4.7	7.6	43	34	11	7.7	3.6
2	3.5	5.5	4.4	4.5	4.4	4.9	8.0	34	42	9.9	7.5	3.8
3	3.4	5.4	4.3	4.5	4.5	5.0	8.2	43	38	9.5	7.3	3.1
4	3.6	6.2	4.1	4.4	4.5	5.2	8.4	52	39	9.3	7.3	2.4
5	4.3	5.4	4.0	4.4	4.4	4.8	8.8	53	32	9.3	7.6	2.2
6	4.3	5.8	4.7	4.5	4.5	4.5	9.2	68	30	8.8	9.3	2.3
7	4.4	7.3	4.3	4.5	4.5	5.2	11	67	31	8.3	4.5	2.3
8	4.4	6.2	4.2	4.5	4.5	5.0	11	80	33	8.0	9.1	2.4
9	5.2	5.4	4.3	4.5	4.4	4.9	9.5	136	36	7.7	8.2	2.4
10	5.4	5.4	4.6	4.5	4.0	4.8	9.3	149	34	8.0	7.5	2.5
11	4.7	5.4	5.2	4.5	3.9	4.7	10	140	30	7.9	7.4	3.1
12	4.4	5.4	5.0	4.5	4.2	4.6	11	127	27	7.5	7.2	3.1
13	4.6	5.4	4.8	4.4	4.3	4.6	14	129	23	7.9	7.0	2.7
14	4.5	5.4	4.6	4.3	4.3	4.6	16	133	31	9.6	6.8	3.3
15	5.5	5.4	4.3	4.5	4.0	4.6	17	141	31	8.8	6.7	3.6
16	9.2	5.5	3.9	4.5	4.1	3.5	21	126	27	8.8	6.5	3.8
17	6.2	5.4	3.7	4.5	4.0	5.8	21	123	23	9.1	6.6	3.5
18	7.4	5.1	3.7	4.4	4.7	5.8	20	127	22	8.6	7.0	4.0
19	6.2	4.9	3.8	4.4	4.2	5.6	9.9	131	20	9.4	7.0	3.6
20	5.6	4.8	4.1	4.3	4.2	5.2	14	159	18	11	6.4	3.3
21	9.1	4.4	4.8	4.3	4.2	6.6	14	134	17	12	5.7	3.5
22	8.6	4.4	4.6	4.2	4.2	6.4	14	104	17	13	6.9	3.3
23	6.9	3.9	4.1	3.8	4.3	6.6	18	89	16	12	7.5	3.4
24	6.2	3.8	3.1	3.8	4.4	6.9	31	80	15	11	7.9	3.3
25	5.6	3.5	4.0	3.9	4.4	6.7	35	82	14	10	5.6	4.6
26	5.4	4.0	4.5	4.0	4.6	6.6	30	70	13	10	4.0	5.3
27	6.1	4.2	4.5	4.1	4.8	7.0	39	52	12	9.8	3.2	4.5
28	6.4	4.1	4.6	4.3	4.9	7.2	54	41	12	8.7	3.6	4.3
29	5.9	4.4	4.5	4.3	-----	7.2	91	39	12	8.3	2.9	4.2
30	5.9	4.5	4.4	4.2	-----	7.6	66	37	12	8.2	2.7	3.7
31	5.8	-----	4.3	4.2	-----	7.6	-----	35	-----	7.8	2.8	-----
TOTAL	173.2	152.1	134.4	134.2	121.7	174.4	636.9	2,828	743	289.2	202.4	101.1
MEAN	5.59	5.07	4.34	4.33	4.35	5.63	21.2	91.2	24.8	9.33	6.53	3.37
MAX	9.2	7.3	5.2	4.5	4.9	7.6	91	159	42	13	9.5	5.3
MIN	3.4	3.5	3.1	3.8	3.9	3.5	7.6	35	12	7.5	2.7	2.2
AC-FT	344	302	267	266	241	346	1,260	5,610	1,470	574	401	201

CAL YR 1972 TOTAL 3,651.9 MEAN 9.98 MAX 44 MIN 1.7 AC-FT 7,240

WTR YR 1973 TOTAL 5,690.6 MEAN 15.6 MAX 159 MIN 2.2 AC-FT 11,290

PEAK DISCHARGE (BASE, 180 CFS).--May 20 (0200) 231 cfs (4.84 ft).

NOTE.--No gage-height record Jan. 1 to Mar. 14.

09244410 YAMPA RIVER BELOW DIVERSION, NEAR HAYDEN, COLO.

LOCATION.--Lat 40°29'18", long 107°09'33", in NW¼SW¼ sec.9, T.6 N., R.87 W., Routt County, in bay of Colorado-Ute Electric Co. pumphouse on left bank 300 ft (91 m) downstream from U.S. Highway 40, 0.1 mi (0.2 km) upstream from Sage Creek, 0.5 mi (0.8 km) downstream from diversion point of Gibraltar Canal, and 4.7 mi (7.6 km) east of Hayden.

DRAINAGE AREA.--1,430 mi² (3,700 km²), approximately.

PERIOD OF RECORD.--October 1972 to September 1973.

GAGE.--Water-stage recorder. Altitude of gage is 6,380 ft (1,945 m) from topographic map.

EXTREMES.--Current year: Maximum discharge, 8,140 ft³/s (231 m³/s) June 15 (gage height, 9.88 ft or 3.011 m); minimum daily, 118 ft³/s (3.34 m³/s) Sept. 10.

REMARKS.--Records good except those for winter period, which are fair. Records show flow of river below Gibraltar Canal diversion. Natural flow of stream affected by diversions for irrigation of about 30,000 acres (121 km²) above and 200 acres (809,000 m²) below station, transbasin diversions, storage reservoirs, and return flow from irrigated areas.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	226	266	200	206	196	194	600	3,110	4,040	3,470	703	227
2	206	305	200	206	200	202	543	2,270	4,830	3,010	664	241
3	171	305	204	206	192	207	486	1,900	4,580	2,560	627	269
4	162	295	220	200	190	206	393	2,300	3,890	2,290	609	259
5	174	305	220	200	188	192	384	2,660	3,370	2,130	670	228
6	223	315	210	210	188	184	435	3,170	3,170	1,940	821	178
7	209	275	200	208	188	174	527	3,530	3,580	1,810	812	163
8	216	285	211	208	187	200	405	3,210	4,240	1,690	734	160
9	285	295	208	206	190	194	399	3,500	5,340	1,560	648	134
10	326	258	186	204	187	190	399	4,040	6,330	1,430	569	118
11	266	242	180	204	174	213	422	4,360	6,900	1,300	523	124
12	216	258	225	202	157	239	526	4,420	6,620	1,320	504	189
13	195	285	222	200	161	242	693	4,520	6,310	1,650	487	235
14	195	250	222	200	161	226	831	4,580	6,400	1,650	457	193
15	209	254	204	202	166	215	1,090	4,640	7,780	1,460	426	169
16	370	266	212	208	166	215	982	4,890	6,050	1,310	398	155
17	386	223	218	208	168	209	979	5,140	4,480	1,100	371	144
18	414	229	220	204	175	226	1,010	5,510	4,040	984	364	129
19	424	247	222	200	179	245	1,070	6,260	3,290	1,190	353	129
20	392	200	228	200	180	276	777	7,350	3,030	1,830	309	132
21	441	207	230	198	180	275	774	7,590	3,080	1,950	272	128
22	468	210	226	190	178	243	819	7,230	3,180	1,500	346	122
23	408	220	224	174	180	224	874	6,700	3,570	1,260	391	127
24	358	220	218	169	188	349	1,110	6,380	3,860	1,060	354	144
25	336	210	210	180	190	518	1,680	6,090	3,840	1,040	322	181
26	320	210	200	186	190	721	1,590	5,950	4,310	951	300	213
27	326	210	204	190	204	695	1,530	4,780	4,420	862	276	214
28	348	220	210	200	202	711	1,950	3,890	4,060	849	268	210
29	336	210	206	198	-----	734	2,800	3,520	3,850	827	254	214
30	331	210	200	190	-----	722	3,700	3,390	3,790	787	241	214
31	275	-----	198	190	-----	657	-----	3,470	-----	758	229	-----
TOTAL	9,212	7,485	6,538	6,147	5,105	10,098	29,778	140,350	136,230	47,528	14,302	5,343
MEAN	297	250	211	198	162	326	993	4,527	4,541	1,533	461	178
MAX	468	315	230	210	204	734	3,700	7,590	7,780	3,470	821	269
MIN	162	200	180	169	157	174	384	1,900	3,030	758	229	118
AC-FT	18,270	14,850	12,970	12,190	10,130	20,030	59,060	278,400	270,200	94,270	28,370	10,600

WTR YR 1973 TOTAL 418,116 MEAN 1,146 MAX 7,780 MIN 118 AC-FT 829,300

09244500 ELKHEAD CREEK NEAR CLARK, COLO.

LOCATION.--Lat 40°44'00", long 107°10'20", in SE¼ sec.17, T.9 N., R.87 W., Routt County, on left bank 0.5 mi (0.8 km) downstream from South Fork, 13 mi (21 km) west of Clark, and 17 mi (27 km) north of Hayden.

DRAINAGE AREA.--45.4 mi² (117.6 km²).

PERIOD OF RECORD.--October 1942 to March 1943 (monthly discharge only, published in WSP 1313), July 1943 to September 1944, October 1958 to September 1973 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 7,800 ft (2,377 m) from topographic map. Prior to October 1958, at site 40 ft (12 m) downstream at different datum.

AVERAGE DISCHARGE.--16 years (1943-44, 1958-73), 35.8 ft³/s (1.014 m³/s), 25,940 acre-ft/yr (320 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 862 ft³/s (24.4 m³/s) May 15 (gage height, 5.96 ft or 1.817 m); maximum gage height, 6.63 ft (2.021 m) May 5 (backwater from ice); minimum daily discharge, 2.7 ft³/s (0.076 m³/s) Oct. 3, Feb. 17-21.

Period of record: Maximum discharge, 1,060 ft³/s (30.0 m³/s) May 18, 1970 (gage height, 6.17 ft or 1.881 m); maximum gage height, 7.12 ft (2.170 m) Apr. 23, 1969 (backwater from ice); minimum daily discharge, 0.30 ft³/s (0.008 m³/s) Aug. 23, 28, 29, 1961.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.3	7.9	4.5	4.0	3.7	3.1	4.6	43	201	32	11	3.9
2	5.1	5.0	4.5	4.0	3.7	3.1	5.0	35	256	29	10	6.6
3	2.7	5.3	4.5	4.0	3.7	3.1	5.6	33	211	26	9.3	6.4
4	3.0	10	4.3	4.0	3.5	3.3	5.9	40	174	25	9.4	5.0
5	5.5	7.1	4.0	4.0	3.4	3.0	6.4	60	149	23	10	4.3
6	4.5	6.5	4.0	4.2	3.4	2.8	6.6	110	140	20	11	3.8
7	3.9	6.4	4.0	4.2	3.4	2.9	6.9	380	145	18	11	3.7
8	5.1	5.6	3.7	4.0	3.4	3.1	7.1	272	154	17	9.3	3.5
9	4.5	5.5	3.7	4.0	3.3	3.0	7.3	356	164	16	7.8	3.3
10	4.2	5.4	3.7	3.8	3.2	2.8	7.4	425	167	15	7.1	3.4
11	3.6	5.2	3.5	3.6	3.1	3.0	7.8	459	155	14	7.0	4.8
12	3.4	5.4	3.5	3.6	3.0	3.2	8.2	471	140	14	6.3	5.7
13	3.4	5.6	3.6	4.0	3.0	3.3	8.7	482	125	23	5.7	4.6
14	3.5	5.2	3.8	4.2	3.0	3.3	9.1	489	161	23	5.4	3.9
15	5.6	5.4	3.9	4.0	3.0	3.5	9.5	530	242	19	5.0	3.8
16	7.1	5.9	4.1	3.9	2.8	3.5	9.8	558	194	24	4.6	3.6
17	6.4	5.7	4.3	3.9	2.7	3.5	10	561	144	21	4.5	3.5
18	8.1	6.3	4.4	3.9	2.7	3.5	11	571	122	16	4.8	3.4
19	5.7	5.2	4.5	3.9	2.7	3.5	12	595	101	21	4.4	3.2
20	5.8	5.0	4.5	3.9	2.7	3.5	13	566	87	35	3.9	3.1
21	8.9	4.7	4.5	3.6	2.7	3.7	11	511	75	34	4.3	2.9
22	8.6	4.7	4.5	3.4	2.8	3.8	10	415	66	21	6.0	2.9
23	6.7	5.0	4.5	3.3	2.8	4.0	12	363	62	17	5.0	3.3
24	6.4	4.6	4.3	3.3	2.8	4.2	14	343	60	15	4.5	4.9
25	5.8	4.8	4.3	3.3	2.9	4.5	16	342	56	16	4.1	5.4
26	6.1	4.5	4.2	3.5	2.9	4.9	20	342	48	15	3.8	5.5
27	7.1	4.4	4.2	3.5	3.0	5.0	22	242	45	14	3.7	4.5
28	7.0	4.0	4.1	3.5	3.1	4.8	29	203	44	13	3.8	4.1
29	6.5	4.1	4.0	3.5	-----	4.5	40	190	42	13	3.5	4.1
30	6.5	4.3	4.0	3.6	-----	4.2	50	187	35	13	3.4	3.9
31	8.3	-----	4.0	3.7	-----	4.3	-----	189	-----	12	3.2	-----
TOTAL	170.3	164.7	127.6	117.3	86.4	111.9	385.9	10,365	3,765	614	192.8	125.2
MEAN	5.49	5.49	4.12	3.78	3.09	3.61	12.9	334	126	19.8	6.22	4.17
MAX	8.9	10	4.5	4.2	3.7	5.0	50	595	256	35	11	6.6
MIN	2.7	4.0	3.5	3.3	2.7	2.8	4.6	33	35	12	3.2	2.9
AC-FT	338	327	253	233	171	222	765	20,560	7,470	1,220	362	246

CAL YR 1972 TOTAL 11,089.4 MEAN 30.3 MAX 370 MIN 1.8 AC-FT 22,000

WTR YR 1973 TOTAL 16,226.1 MEAN 44.5 MAX 595 MIN 2.7 AC-FT 32,180

PEAK DISCHARGE (BASE, 300 CFS).--May 15 (1900) 862 cfs (5.96 ft).

NOTE.--No gage-height record Dec. 13 to Mar. 19.

09245000 ELKHEAD CREEK NEAR ELKHEAD, COLO.

LOCATION (REVISED).--Lat 40°40'11", long 107°17'04", in NW¼NE¼ sec.8, T.8 N., R.88 W., Routt County, on right bank 0.2 mi (0.3 km) upstream from North Fork Elkhead Creek, 4.5 mi (7.2 km) northwest of Elkhead, and 12 mi (19 km) north of Hayden.

DRAINAGE AREA.--64.2 mi² (166.3 km²).

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. Altitude of gage is 6,845 ft or 2,086 m (revised) from topographic map. Prior to Nov. 30, 1920, nonrecording gage or water-stage recorder 675 ft (210 m) upstream at different datum.

AVERAGE DISCHARGE.--20 years (1953-73), 51.7 ft³/s (1.464 m³/s), 37,460 acre-ft/yr (46.2 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,160 ft³/s (32.9 m³/s) May 15 (gage height, 5.93 ft or 1.807 m); minimum daily, 2.6 ft³/s (0.074 m³/s) Aug. 31, Sept. 22.
Period of record: Maximum daily discharge, 1,660 ft³/s (47.0 m³/s) May 22, 1920; no flow Sept. 1, 1954, Sept. 12-19, 24, 1955, Aug. 27-29, 1961.

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

REVISIONS.--WSP 1733: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.9	9.4	9.0	8.4	7.7	6.5	14	229	274	39	11	3.1
2	3.5	9.8	8.9	8.4	8.2	6.8	17	182	329	35	11	6.9
3	3.0	9.8	8.9	8.3	7.8	6.9	20	200	285	32	10	8.4
4	3.5	8.9	8.8	8.2	7.4	7.1	19	294	238	30	10	6.1
5	7.2	9.8	8.6	8.2	7.3	6.4	21	365	204	28	10	5.0
6	8.4	9.8	8.4	8.5	7.4	6.0	23	544	184	25	12	4.1
7	7.2	8.4	7.8	8.6	7.4	6.3	25	566	182	23	11	3.6
8	8.0	11	8.4	8.6	7.2	6.7	28	490	186	22	10	3.4
9	8.9	9.8	8.6	8.6	7.0	6.5	29	624	190	21	8.8	3.1
10	8.4	8.4	7.8	8.6	6.8	6.1	25	745	191	19	8.3	3.0
11	8.4	8.9	7.3	8.5	6.4	6.4	25	789	176	18	7.7	4.3
12	8.0	9.4	7.4	8.4	6.6	7.0	27	787	159	19	7.2	6.4
13	8.4	9.8	7.6	8.3	6.6	7.0	29	802	141	26	6.4	5.8
14	6.8	9.8	8.0	8.2	6.6	7.0	30	808	170	28	6.0	4.2
15	5.6	9.8	8.3	8.4	6.3	7.4	31	814	266	21	5.5	3.5
16	11	9.8	8.7	8.4	6.0	7.4	33	806	232	24	5.1	3.3
17	9.4	9.8	9.0	8.4	5.8	7.4	35	784	174	26	5.2	3.2
18	12	11	9.2	8.2	5.8	7.6	37	796	145	19	5.4	3.1
19	9.8	8.9	9.5	8.1	5.9	7.6	39	814	124	19	5.0	3.1
20	9.4	11	9.7	8.1	6.0	7.0	44	773	108	32	4.3	3.0
21	14	9.4	9.6	7.5	6.1	7.8	38	691	96	38	4.1	2.9
22	14	9.4	9.6	7.4	6.0	9.6	35	564	86	24	6.0	2.6
23	12	11	9.4	7.0	6.0	11	38	494	77	20	6.2	2.8
24	11	8.9	9.2	7.0	6.2	12	48	459	71	17	4.6	5.0
25	9.8	9.8	9.0	7.1	6.2	11	53	438	65	16	3.9	6.3
26	9.4	9.2	8.8	7.4	6.3	13	53	463	60	16	3.5	6.8
27	11	9.0	8.6	7.6	6.7	14	79	347	55	15	3.2	5.5
28	12	8.2	8.4	7.8	6.7	12	114	300	54	14	3.5	4.8
29	11	8.2	8.4	8.0	-----	11	198	283	54	13	3.2	4.7
30	9.8	8.8	8.2	7.7	-----	12	268	270	45	14	2.8	4.3
31	8.0	-----	8.3	7.6	-----	13	-----	264	-----	13	2.6	-----
TOTAL	272.8	285.2	267.4	249.5	186.4	263.5	1,475	16,785	4,621	706	203.5	132.3
MEAN	8.80	9.51	8.63	8.05	6.66	8.50	49.2	541	154	22.8	6.56	4.41
MAX	14	11	9.7	8.6	8.2	14	268	814	329	39	12	8.4
MIN	3.0	8.2	7.3	7.0	5.8	6.0	14	182	45	13	2.6	2.6
AC-FT	541	566	530	495	370	523	2,930	33,290	9,170	1,400	404	262

CAL YR 1972 TOTAL 16,645.3 MEAN 45.5 MAX 389 MIN 1.3 AC-FT 33,020
WIR YR 1973 TOTAL 25,447.6 MEAN 69.7 MAX 814 MIN 2.6 AC-FT 50,480

PEAK DISCHARGE (BASE, 800 cfs).--May 15 (2300) 1,160 cfs (5.93 ft).

NOTE.--No gage-height record Feb. 9 to Mar. 18.

09245500 NORTH FORK ELKHEAD CREEK NEAR ELKHEAD, COLO.

LOCATION.--Lat 40°40'50", long 107°17'10", in NW¼ sec.5, T.8 N., R.88 W., Routt County, on right bank 70 ft (21 m) upstream from small tributary, 0.8 mi (1.3 km) upstream from mouth, and 13 mi (21 km) north of Hayden.

DRAINAGE AREA.--21 mi² (54 km²), approximately.

PERIOD OF RECORD.--January to November 1910 and May to November 1920 (monthly discharge only, published in WSP 1313; published as "at Hayes Ranch"), October 1958 to September 1973 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 6,990 ft (2,131 m) from topographic map. January to November 1910 and May to September 1920, nonrecording gage and October to November 1920, water-stage recorder, at site 0.6 mi (1.0 km) downstream at different datum.

AVERAGE DISCHARGE.--15 years (1958-73), 17.2 ft³/s (0.487 m³/s) 12,460 acre-ft/yr (15.4 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 576 ft³/s (16.3 m³/s) May 19 (gage height, 3.97 ft or 1.210 m); minimum daily, 0.67 ft³/s (0.019 m³/s) Aug. 31.

Period of record: Maximum discharge, 1,100 ft³/s (31.2 m³/s) May 21, 1970 (gage height, 4.50 ft or 1.372 m), from rating curve extended above 490 ft³/s (14 m³/s); maximum gage height, 4.53 ft (1.381 m) May 19, 1964; no flow at times in 1910, 1959-63, 1966, 1972.

REMARKS.--Records good except those for winter period, which are fair. Diversions above station for irrigation of about 100 acres (404,700 m²) of hay meadows.

REVISIONS (WATER YEARS).--WSP 1633: Drainage area at former site. WSP 1925: 1959(M), 1960(P). WSP 2125: 1965.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.0	1.9	1.8	2.1	1.7	1.5	3.8	68	86	11	2.8	.82
2	1.0	1.7	1.8	2.1	1.7	1.6	5.1	53	155	9.1	2.6	2.2
3	.97	1.6	1.8	2.1	1.7	1.7	3.8	77	91	8.1	2.4	1.9
4	.98	1.5	1.8	2.1	1.7	1.8	3.8	125	73	7.4	2.4	1.7
5	1.8	1.5	1.8	2.1	1.7	1.8	4.6	157	64	6.7	3.0	1.1
6	1.3	1.4	1.8	2.1	1.7	1.7	5.8	255	65	5.9	5.6	.96
7	1.2	1.4	1.8	2.1	1.6	1.6	5.8	211	69	5.4	3.3	.92
8	1.8	1.4	1.7	2.1	1.5	1.7	7.8	213	73	5.1	2.6	.93
9	1.5	1.5	1.7	2.1	1.5	1.7	4.9	267	75	5.0	2.1	.87
10	1.3	1.5	1.7	2.0	1.5	1.7	3.5	312	72	4.5	1.9	.86
11	1.2	1.6	1.7	2.0	1.5	1.8	4.6	270	66	4.1	1.7	1.4
12	1.1	1.7	1.7	2.0	1.5	1.8	8.6	261	58	4.8	1.5	1.3
13	1.1	1.8	1.7	2.0	1.5	1.8	11	238	51	8.7	1.2	1.1
14	1.2	1.8	1.7	1.9	1.5	1.9	16	218	82	5.6	1.2	1.0
15	1.5	1.8	1.7	1.8	1.5	2.0	16	227	127	4.9	1.2	.98
16	2.5	2.0	1.7	1.7	1.5	2.0	15	220	95	5.5	1.1	.95
17	2.1	1.6	1.7	1.8	1.5	2.3	12	240	72	4.6	.97	1.1
18	3.3	1.7	1.7	1.8	1.5	2.6	14	268	56	3.9	1.1	1.1
19	2.1	1.8	1.8	1.8	1.5	2.2	12	322	46	6.1	1.0	1.0
20	2.2	1.5	1.8	1.8	1.5	3.4	9.4	255	39	17	.79	1.4
21	2.5	1.6	1.7	1.7	1.5	2.6	7.0	227	34	16	.83	1.1
22	2.9	1.7	1.7	1.7	1.5	3.0	6.6	176	31	8.1	1.6	1.0
23	2.4	1.7	1.7	1.7	1.5	3.7	13	145	29	6.2	1.1	1.0
24	1.8	1.7	1.8	1.7	1.5	5.0	32	130	27	5.2	.87	1.7
25	1.6	1.7	1.8	1.7	1.5	4.3	32	130	24	5.4	.84	1.8
26	1.8	1.7	1.8	1.7	1.5	4.1	27	115	21	4.3	.73	2.1
27	1.9	1.7	1.8	1.7	1.5	4.0	44	83	19	3.7	.70	1.8
28	2.2	1.7	1.8	1.7	1.5	3.9	68	77	18	3.7	.81	1.5
29	2.1	1.8	1.9	1.7	-----	3.6	122	77	15	6.0	.75	1.4
30	2.0	1.8	2.0	1.7	-----	3.5	93	77	13	6.0	.68	1.3
31	1.6	-----	2.1	1.7	-----	3.5	-----	83	-----	3.5	.67	-----
TOTAL	53.95	49.8	55.0	58.2	43.3	79.8	612.1	5,577	1,746	201.5	50.04	38.29
MEAN	1.74	1.66	1.77	1.88	1.55	2.57	20.4	180	58.2	6.50	1.61	1.28
MAX	3.3	2.0	2.1	2.1	1.7	5.0	122	322	155	17	5.6	2.2
MIN	.97	1.4	1.7	1.7	1.5	1.5	3.5	53	13	3.5	.67	.82
AC-FT	107	99	109	115	86	158	1,210	11,060	3,460	400	99	76

CAL YR 1972 TOTAL 4,322.28 MEAN 11.8 MAX 89 MIN 0 AC-FT 8,570
WTR YR 1973 TOTAL 8,564.98 MEAN 23.5 MAX 322 MIN .67 AC-FT 16,990

PEAK DISCHARGE (BASE, 200 CFS).--May 19 (2000) 576 cfs (3.97 ft); June 2 (0700) 275 cfs (3.56 ft).

09249200 SOUTH FORK OF WILLIAMS FORK NEAR PAGODA, COLO.

LOCATION.--Lat 40°12'44", long 107°26'32", in NE¼SE¼ sec.24, T.3 N., R.90 W., Rio Blanco County, on left bank at downstream side of private bridge, 1.5 mi (2.1 km) upstream from Pine Creek and 11 mi (18 km) south of Pagoda.

DRAINAGE AREA.--46.7 mi² (121.0 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 7,235 ft (2,205 m) from topographic map.

AVERAGE DISCHARGE.--8 years, 42.8 ft³/s (1.212 m³/s), 31,010 acre-ft/yr (38.2 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 656 ft³/s May 19 (gage height, 3.60 ft or 1.097 m, from flood-marks), from rating curve extended above 260 ft³/s (7.4 m³/s); minimum daily, 1.0 ft³/s (0.028 m³/s) Sept. 21.

Period of record: Maximum discharge, 878 ft³/s (24.8 m³/s) May 20, 1970 (gage height, 4.06 ft or 1.237 m); minimum daily, 0.02 ft³/s (0.001 m³/s) Aug. 18, 1970.

REMARKS.--Records good except those for periods of no gage-height record, which are poor. Diversions above station for irrigation of about 100 acres (405,000 m²) above and 50 acres (202,000 m²) below station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.0	8.4	6.6	7.0	6.6	6.8	9.8	62	330	62	6.4	3.5
2	4.6	10	6.4	7.0	6.4	7.2	10	49	334	49	6.6	11
3	4.4	11	6.4	7.0	6.2	7.4	10	59	260	40	6.8	8.5
4	4.6	12	6.2	7.2	6.2	7.2	11	102	208	32	7.0	9.6
5	8.8	12	6.6	7.2	6.6	7.0	11	133	160	25	8.0	6.2
6	8.5	12	7.1	7.2	6.0	7.0	12	145	178	22	10	4.6
7	6.6	13	6.4	7.2	6.2	7.4	14	118	246	18	10	3.5
8	13	12	6.4	7.2	6.4	7.4	13	138	334	16	7.8	2.8
9	16	11	6.4	7.4	6.6	7.4	9.6	223	375	16	7.0	2.0
10	11	13	6.2	7.4	6.6	7.4	7.8	290	365	14	6.6	2.3
11	7.1	12	6.4	7.4	6.2	7.6	10	314	334	12	6.4	6.6
12	6.0	12	6.6	7.4	5.6	8.0	15	338	306	11	6.2	6.2
13	6.0	11	6.4	7.4	5.4	8.8	22	342	286	11	6.2	5.2
14	6.4	12	6.0	7.2	5.2	9.0	20	346	346	18	6.2	3.7
15	21	11	5.6	7.0	5.0	8.6	17	365	346	16	6.4	2.8
16	29	9.9	5.8	6.4	5.0	8.2	16	365	226	13	5.0	2.6
17	18	10	5.6	6.2	4.9	9.0	16	385	190	12	5.0	2.3
18	25	9.0	5.6	6.0	5.0	10	17	395	173	10	7.8	2.1
19	21	8.3	5.6	6.4	5.0	11	14	410	140	14	5.4	1.6
20	17	8.5	5.4	6.0	5.2	9.6	13	410	145	27	4.2	1.3
21	20	7.8	4.9	6.0	5.6	9.2	11	395	145	22	5.6	1.0
22	19	8.8	4.7	6.0	5.6	9.2	11	380	148	16	6.0	2.1
23	13	8.6	5.0	6.6	5.8	9.6	13	385	148	12	5.4	2.3
24	14	8.6	5.0	7.0	6.2	10	22	375	138	11	3.9	7.1
25	12	8.6	5.0	7.2	6.2	11	22	350	140	8.8	3.2	7.1
26	11	8.8	5.2	7.4	6.2	12	20	310	148	8.6	2.1	6.8
27	12	8.8	5.4	7.4	6.0	12	25	217	133	8.4	2.1	5.4
28	13	8.2	5.8	7.4	6.4	12	41	173	114	8.0	2.6	5.6
29	9.3	8.3	6.0	7.2	-----	11	69	187	93	7.6	1.8	5.8
30	9.4	8.3	6.0	7.0	-----	9.8	80	232	77	7.2	1.6	5.4
31	8.8	-----	6.6	6.8	-----	9.0	-----	286	-----	6.2	1.6	-----
TOTAL	380.7	302.9	183.3	215.2	164.3	276.8	582.2	8,279	6,566	553.8	170.9	137.0
MEAN	12.3	10.1	5.91	6.94	5.87	8.93	19.4	267	219	17.9	5.51	4.57
MAX	29	13	7.1	7.4	6.6	12	80	410	375	62	10	11
MIN	4.4	7.8	4.7	6.0	4.9	6.8	7.8	49	77	6.2	1.6	1.0
AC-FT	755	601	364	427	326	549	1,150	16,420	13,020	1,100	339	272

CAL YR 1972 TOTAL 13,161.2 MEAN 36.0 MAX 422 MIN 1.6 AC-FT 26,110
WTR YR 1973 TOTAL 17,812.1 MEAN 48.8 MAX 410 MIN 1.0 AC-FT 35,330

PEAK DISCHARGE (BASE, 400 CFS).--May 19 (time unknown) 656 cfs (3.60 ft); June 9 (1900) 460 cfs (3.19 ft).

NOTE.--No gage-height record Dec. 14 to Apr. 17, May 19, 20.

GREEN RIVER BASIN

09250000 MILK CREEK NEAR THORNBURGH, COLO.

LOCATION.--Lat 40°11'37", long 107°43'57", in NE¼ sec.32, T.3 N., R.92 W., Rio Blanco County, on right bank 2.5 mi (4.0 km) northwest of Thornburgh and 3.0 mi (4.8 km) upstream from Little Creek.

DRAINAGE AREA.--62 mi² (168 km²), approximately.

PERIOD OF RECORD.--October 1952 to current year. Published as "near Thornburgh" October 1952 to September 1968.

GAGE.--Water-stage recorder. Datum of gage is 6,599.32 ft (2,011.473 m) above mean sea level (levels by U.S. Bureau of Reclamation).

AVERAGE DISCHARGE.--21 years, 23.5 ft³/s (0.666 m³/s), 17,030 acre-ft/yr (21.0 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 748 ft³/s (21.2 m³/s) May 21 (gage height, 4.92 ft or 1.500 m); minimum daily, 0.80 ft³/s (0.023 m³/s) Oct. 1, 2.

Period of record: Maximum discharge, 864 ft³/s (24.5 m³/s) May 19, 1970 (gage height, 4.94 ft or 1.506 m in gage well, 5.19 ft or 1.582 m from floodmark), from rating curve extended above 320 ft³/s (91 m³/s); maximum gage height, 5.52 ft (1.682 m) June 1, 1957; minimum daily discharge, 0.20 ft³/s (0.006 m³/s) for several days in 1956, 1963, and 1966.

REMARKS.--Records fair except those for winter period, which are poor. Diversion for irrigation of about 20,000 acres (80.9 km²) above station.

DISCHARGE. IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.80	4.1	2.6	3.5	4.6	9.3	15	109	208	22	7.6	4.1
2	.80	5.6	2.6	3.4	4.7	10	16	69	234	22	7.9	5.3
3	.91	6.2	2.6	3.3	4.7	10	16	60	218	21	7.6	6.2
4	1.1	5.6	2.6	3.3	4.8	9.3	16	101	190	19	7.6	4.4
5	1.5	6.5	3.4	3.3	4.9	9.3	17	155	147	19	8.3	4.1
6	1.5	7.9	4.1	3.4	5.0	9.7	26	203	141	18	9.3	3.3
7	2.6	7.2	4.1	3.5	5.2	9.7	37	183	137	17	7.9	3.0
8	2.8	6.9	4.7	3.6	5.4	9.7	33	178	139	17	7.2	2.8
9	2.8	6.9	4.7	4.0	5.4	9.7	20	200	135	16	6.5	2.6
10	3.3	5.9	4.4	4.7	5.4	9.7	20	310	130	16	6.2	2.6
11	3.3	5.6	4.4	5.4	5.4	9.7	29	450	114	14	6.2	2.6
12	2.8	5.0	4.7	6.0	5.2	11	41	461	88	14	5.9	3.8
13	2.2	4.7	5.0	6.0	5.0	12	46	480	80	15	5.9	3.8
14	2.0	4.4	5.3	6.0	4.6	12	57	440	95	15	5.6	3.3
15	2.4	5.0	5.5	6.0	4.5	11	42	364	151	15	5.6	2.6
16	4.4	4.4	4.7	6.0	4.2	11	30	352	95	13	5.3	2.6
17	5.3	5.0	5.0	6.0	4.1	12	32	384	74	13	5.3	2.6
18	4.4	4.4	5.0	6.0	4.1	15	37	400	63	12	5.9	2.2
19	5.9	4.7	5.0	5.8	4.1	14	27	490	54	14	6.2	2.0
20	5.0	3.8	4.7	4.5	4.1	14	24	556	49	15	5.3	1.8
21	6.9	3.5	4.4	3.8	4.2	13	26	525	47	15	5.6	1.8
22	7.2	2.8	4.4	3.6	4.2	13	32	364	42	13	6.2	1.8
23	7.6	2.6	3.8	3.9	4.5	13	36	320	42	11	5.9	2.0
24	5.9	2.8	3.0	4.5	5.2	14	39	282	40	10	5.0	2.4
25	5.6	2.6	3.3	5.0	6.4	15	87	285	38	10	5.0	3.0
26	4.4	2.8	3.3	5.2	7.4	16	61	352	37	9.3	4.4	4.4
27	5.0	2.8	3.4	5.6	7.9	17	41	228	35	9.3	4.4	4.1
28	6.2	2.8	3.4	5.0	8.3	17	51	183	29	7.6	4.1	3.3
29	5.9	2.8	3.5	4.7	-----	17	82	167	27	7.6	4.4	2.8
30	6.9	2.6	3.5	4.6	-----	15	137	175	24	6.9	4.4	3.0
31	4.1	-----	3.5	4.6	-----	14	-----	190	-----	6.2	4.4	-----
TOTAL	121.51	157.9	124.4	144.2	143.5	382.1	1,173	9,016	2,901	432.9	187.1	94.3
MEAN	3.92	4.60	4.01	4.65	5.13	12.3	39.1	291	96.7	14.0	6.04	3.14
MAX	7.6	7.9	5.3	6.0	8.3	17	137	556	234	22	9.3	6.2
MIN	.80	2.6	2.6	3.3	4.1	9.3	15	60	24	6.2	4.1	1.8
AC-FT	241	274	247	286	285	758	2,330	17,880	5,750	859	371	187

CAL YR 1972 TOTAL 5,751.98 MEAN 15.7 MAX 157 MIN .70 AC-FT 11,410
 WTR YR 1973 TOTAL 14,857.91 MEAN 40.7 MAX 556 MIN .80 AC-FT 29,470

PEAK DISCHARGE (BASE, 250 CFS).--May 21 (0530) 748 cfs (4.92 ft).

GREEN RIVER BASIN

323

09251000 YAMPA RIVER NEAR MAYBELL, COLO.

LOCATION.--Lat 40°30'10", long 108°01'45", in NW¼ sec.2, T.6 N., R.95 W., Moffat County, on left bank 100 ft (30 m) downstream from bridge on U.S. Highway 40, 2.0 mi (3.2 km) downstream from Lay Creek, and 3.0 mi (4.8 km) east of Maybell.

DRAINAGE AREA.--3,410 mi² (8,830 km²), approximately.

PERIOD OF RECORD.--April 1904 to October 1905, June 1910 to November 1912, April 1916 to current year. Monthly discharge only for some periods, published in WSP 1313. No winter records prior to 1917.

GAGE.--Water-stage recorder. Datum of gage is 5,900.23 ft (1,798.390 m) above mean sea level. See WSP 1733 for history of changes prior to Mar. 9, 1937.

AVERAGE DISCHARGE.--57 years (1916-73), 1,549 ft³/s (43.87 m³/s), 1,122,000 acre-ft/yr (1,380 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 12,100 ft³/s (343 m³/s) May 22 (gage height, 8.94 ft or 2.725 m); minimum daily, 152 ft³/s (4.30 m³/s) Sept. 21-23.
Period of record: Maximum discharge observed, 17,900 ft³/s (507 m³/s) May 19, 1917 (gage height, 10.4 ft or 3.17 m, from floodmarks, site and datum then in use), from rating curve extended above 12,000 ft³/s (340 m³/s); minimum daily, 2.0 ft³/s (0.057 m³/s) July 17-19, 1934.

REMARKS.--Records good except those for winter period, which are fair. Natural flow of stream affected by transbasin diversions, numerous storage reservoirs, and diversions above station for irrigation of about 65,000 acres (263 km²) above and about 800 acres (3.24 km²) below station. Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	191	464	325	320	250	340	516	5,960	5,500	4,560	873	195
2	226	405	350	320	250	360	540	4,810	6,270	4,240	603	219
3	226	447	370	340	240	330	576	3,540	7,360	4,050	719	230
4	205	480	350	360	280	370	588	3,310	4,690	3,420	698	244
5	191	480	330	340	300	400	656	4,340	5,520	3,130	677	268
6	198	492	320	340	270	380	656	5,770	4,800	2,910	782	268
7	209	510	340	350	300	400	789	6,110	4,630	2,650	929	237
8	285	504	370	350	280	420	1,010	6,250	5,230	2,410	915	188
9	298	447	340	360	260	400	733	5,870	6,090	2,240	789	164
10	307	480	300	360	290	400	705	6,670	7,270	2,050	726	174
11	350	464	320	330	310	420	698	7,690	8,260	1,770	614	164
12	355	410	320	360	310	440	747	8,310	8,670	1,560	552	177
13	307	380	350	400	280	440	1,070	8,480	8,290	1,500	546	170
14	272	415	320	380	290	410	1,520	8,670	7,900	1,870	522	223
15	260	415	320	350	270	410	2,030	8,740	8,480	2,410	492	272
16	260	365	330	320	250	430	2,380	8,840	9,990	1,980	469	240
17	360	410	340	290	280	460	1,740	9,150	8,170	1,860	442	216
18	582	405	380	280	280	460	1,740	9,490	5,900	1,630	410	195
19	546	365	360	290	280	490	1,840	9,940	5,160	1,440	405	184
20	614	380	380	270	280	490	1,750	10,700	4,340	1,570	405	164
21	600	380	360	240	270	490	1,240	11,400	4,000	2,440	365	152
22	607	340	370	240	270	470	1,240	12,000	4,000	2,750	325	152
23	684	276	390	240	290	440	1,370	11,500	4,050	2,140	316	152
24	621	252	370	240	290	440	1,590	10,400	4,410	1,680	345	155
25	540	212	380	250	320	440	2,530	9,630	4,720	1,400	340	170
26	504	252	360	270	320	460	3,450	9,440	4,690	1,290	307	188
27	469	250	370	270	320	470	2,780	8,960	5,230	1,170	285	230
28	486	226	370	240	320	420	2,800	6,830	5,340	1,020	268	260
29	540	260	390	240	-----	415	3,840	5,680	4,980	958	248	256
30	558	294	360	250	-----	475	5,660	5,320	4,710	958	233	252
31	552	-----	360	270	-----	475	-----	5,250	-----	901	212	-----
TOTAL	12,403	11,460	10,895	9,460	7,950	13,265	48,784	238,350	180,650	65,957	16,012	6,159
MEAN	400	382	351	305	284	428	1,626	7,689	6,022	2,128	517	205
MAX	684	510	390	400	320	490	5,660	12,000	9,990	4,560	929	272
MIN	191	212	300	240	240	330	516	3,310	4,000	901	212	152
AC-FT	24,690	22,730	21,610	18,760	15,770	26,310	96,760	472,800	358,300	130,800	31,760	12,220

CAL YR 1972 TOTAL 463,167 MEAN 1,265 MAX 8,220 MIN 100 AC-FT 918,700
WTR YR 1973 TOTAL 621,345 MEAN 1,702 MAX 12,000 MIN 152 AC-FT 1,232,000

PEAK DISCHARGE (BASE, 7,000 CFS).--May 22 (0400) 12,100 cfs (8.94 ft); June 16 (2000) 10,300 cfs (8.28 ft).

GREEN RIVER BASIN

09253000 LITTLE SNAKE RIVER NEAR SLATER, COLO.

LOCATION.--Lat 40°59'58", long 107°08'34", in SW¼NW¼ sec.15, T.12 N., R.87 W., Routt County, on left bank just downstream from highway bridge at Focus Ranch, 0.2 mi (0.3 km) downstream from Spring Creek and 12 mi (19 km) east of Slater.

DRAINAGE AREA.--285 mi² (738 km²).

PERIOD OF RECORD.--October 1942 to September 1947, October 1950 to current year.

GAGE.--Water-stage recorder. Datum of gage is 6,831.00 ft (2,082.089 m) above mean sea level.

AVERAGE DISCHARGE.--28 years, 220 ft³/s (6.230 m³/s), 159,400 acre-ft/yr (197 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,170 ft³/s (61.5 m³/s) June 2 (gage height, 7.24 ft or 2,207 m); minimum daily, 23 ft³/s (0.65 m³/s) Sept. 21, 22.
Period of record: Maximum discharge, 3,230 ft³/s (91.5 m³/s) June 7, 1957 (gage height, 8.27 ft or 2.521 m); minimum daily, 8.6 ft³/s (0.24 m³/s) Sept. 10, 1944.

REMARKS.--Records good except those for winter period, which are poor. Diversions for irrigation of about 2,000 acres (8.09 km²) above station.

REVISIONS (WATER YEARS).--WSP 1733: 1960.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	62	57	50	48	56	39	250	1,210	578	74	39
2	25	64	39	44	45	50	39	204	1,790	500	69	52
3	25	51	41	47	43	44	38	230	1,550	430	72	54
4	24	50	44	45	42	46	39	360	1,270	380	81	48
5	30	41	45	43	43	48	37	485	1,090	325	101	42
6	36	42	45	42	45	50	42	644	1,070	282	96	38
7	30	42	45	40	44	51	40	680	1,140	242	81	32
8	33	42	47	39	47	52	44	729	1,290	227	71	30
9	36	41	43	41	47	51	41	995	1,480	198	62	29
10	34	38	39	44	46	51	41	1,020	1,640	174	54	33
11	32	41	41	48	45	51	39	1,050	1,630	151	50	39
12	28	51	42	50	46	52	45	1,120	1,540	140	52	54
13	28	39	43	48	48	51	53	1,160	1,410	204	60	42
14	29	44	45	46	52	52	62	1,170	1,480	246	64	34
15	35	41	46	43	55	51	69	1,250	1,770	168	60	34
16	44	39	45	45	56	54	65	1,310	1,410	146	60	33
17	35	38	44	47	54	51	74	1,340	1,120	136	60	30
18	36	44	44	44	52	49	74	1,450	960	120	59	28
19	35	38	44	43	50	46	68	1,670	813	162	57	27
20	37	45	45	43	51	49	62	1,730	722	262	55	25
21	53	41	44	43	54	50	65	1,800	674	262	56	23
22	60	42	44	43	56	46	67	1,590	674	174	62	23
23	49	35	43	43	58	45	68	1,480	715	165	66	24
24	46	36	40	45	60	42	97	1,420	750	129	60	30
25	41	38	42	44	57	49	114	1,500	771	125	52	38
26	40	38	45	43	53	44	107	1,490	806	103	50	45
27	49	39	46	46	54	42	120	1,170	778	92	52	40
28	45	41	48	48	56	41	168	988	736	92	50	35
29	42	39	50	47	-----	40	238	953	680	87	47	35
30	36	36	51	46	-----	37	274	946	632	99	36	33
31	45	-----	52	47	-----	39	-----	1,020	-----	81	29	-----
TOTAL	1,147	1,278	1,368	1,391	1,411	1,480	2,329	33,204	33,601	6,480	1,898	1,069
MEAN	37.0	42.6	44.1	44.9	50.4	47.7	77.6	1,071	1,120	209	61.2	35.6
MAX	60	64	52	50	60	56	274	1,800	1,790	578	101	54
MIN	24	35	37	39	42	37	37	204	632	81	29	23
AC-FT	2,280	2,530	2,710	2,760	2,800	2,940	4,620	65,860	66,650	12,850	3,760	2,120

CAL YR 1972 TOTAL 75,119 MEAN 205 MAX 1,540 MIN 12 AC-FT 149,000

WTR YR 1973 TOTAL 86,656 MEAN 237 MAX 1,800 MIN 23 AC-FT 171,900

PEAK DISCHARGE (BASE, 1,600 CFS).--June 2 (1130) 2,170 cfs (7.24 ft).

NOTE.--No gage-height record Aug. 10 to Sept. 12.

09255000 SLATER FORK NEAR SLATER, COLO.

LOCATION.--Lat 40°58'57", long 107°22'56", in SW¼NE¼ sec.21, T.12 N., R.89 W., Moffat County, on right bank 15 ft (5 m) downstream from highway bridge, 1.0 mi (1.6 km) upstream from mouth, and 1.5 mi (2.4 km) south of Slater.

DRAINAGE AREA.--161 mi² (417 km²).

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.

GAGE.--Water-stage recorder. Altitude of gage is 6,600 ft (2,012 m) from river-profile map. May 28, 1910, to May 25, 1912, nonrecording gage at site 1.5 mi (2.4 km) upstream at different datum. July 9, 1931, to May 6, 1932, nonrecording gage at site 0.2 mi (0.3 km) downstream at different datum.

AVERAGE DISCHARGE.--42 years (1931-73), 72.7 ft³/s (2.059 m³/s), 52,670 acre-ft/yr (64.9 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 892 ft³/s (25.3 m³/s) June 15 (gage height, 8.74 ft or 2.664 m); minimum daily, 8.3 ft³/s (0.24 m³/s) Aug. 27.

Period of record: Maximum discharge observed, 1,700 ft³/s (48.1 m³/s) May 19, 1912 (gage height, 5.00 ft or 1.524 m, site and datum then in use); no flow Aug. 2-10, 1934, Aug. 18, 25-27, 1936, Aug. 29 to Sept. 3, 1954.

REMARKS.--Records good except those for winter period, which are fair. Diversions for irrigation of about 500 acres (2.02 km²) above station.

REVISIONS (WATER YEARS).--WSP 618: 1910-11. WSP 764: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR (OCTOBER 1972 TO SEPTEMBER 1973)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	29	17	20	22	26	32	120	467	143	31	9.6
2	17	25	17	19	20	25	25	93	632	122	29	16
3	16	26	16	21	21	24	25	106	531	103	25	20
4	15	24	17	21	22	22	23	172	374	93	25	17
5	23	21	19	20	21	24	24	209	312	82	31	15
6	23	23	18	19	22	26	30	277	329	70	36	12
7	20	21	19	19	22	27	31	298	389	61	26	10
8	22	23	19	18	22	26	26	339	449	53	21	9.7
9	22	22	19	19	20	26	28	499	512	47	19	9.1
10	22	20	16	22	21	28	27	617	556	49	16	8.8
11	20	19	17	19	21	26	26	687	537	46	16	11
12	17	23	18	23	22	26	32	698	487	37	15	15
13	17	21	22	22	23	26	42	633	413	93	13	16
14	20	20	18	21	24	26	49	645	549	83	11	15
15	25	26	17	20	25	26	46	659	872	62	10	14
16	31	21	18	21	22	24	40	698	636	55	9.7	14
17	26	20	20	22	23	25	45	715	404	50	10	14
18	31	19	20	21	24	25	50	773	319	40	12	14
19	28	18	20	20	26	24	38	819	243	42	12	14
20	30	16	21	20	23	23	35	835	203	93	10	13
21	35	18	20	20	25	23	37	843	193	123	10	13
22	36	14	20	22	26	24	38	742	198	80	11	12
23	31	16	19	20	27	23	46	657	207	61	12	13
24	29	18	18	21	27	25	69	608	215	44	11	15
25	26	19	19	21	26	23	67	645	208	52	12	19
26	26	17	20	22	25	28	53	722	215	39	11	25
27	28	18	21	22	25	28	71	447	209	35	8.3	22
28	28	17	22	20	27	25	104	351	192	35	9.0	20
29	28	17	22	21	-----	26	163	356	172	37	9.4	19
30	23	17	23	23	-----	25	160	364	162	38	9.4	18
31	22	-----	23	22	-----	26	-----	406	-----	35	8.6	-----
TOTAL	755	608	595	641	654	781	1,482	16,033	11,185	2,003	489.4	443.2
MEAN	24.4	20.3	19.2	20.7	23.4	25.2	49.4	517	373	64.6	15.8	14.8
MAX	36	29	23	23	27	28	163	843	872	143	36	25
MIN	15	14	16	18	20	22	23	93	162	35	8.3	8.8
AC=FT	1,500	1,210	1,180	1,270	1,300	1,550	2,940	31,800	22,190	3,970	971	879

CAL YR 1972 TOTAL 19,048.34 MEAN 52.0 MAX 307 MIN 8.60 AC=FT 37,780

WTR YR 1973 TOTAL 35,669.60 MEAN 97.7 MAX 872 MIN 8.3 AC=FT 70,750

PEAK DISCHARGE (BASE, 430 CFS).--May 22 (0600) 889 cfs (8.73 ft); June 15 (0300) 892 cfs (8.74 ft).

GREEN RIVER BASIN

09258000 WILLOW CREEK NEAR DIXON, WYO.

LOCATION.--Lat 40°54'56", long 107°31'16", on line between secs.8 and 17, T.11 N., R.90 W., Moffat County, Colorado, on right bank 6.2 mi (10.0 km) south of Colorado-Wyoming State line, 8.0 mi (12.9 km) upstream from mouth, and 8.3 mi (13.4 km) south of Dixon.

DRAINAGE AREA.--24 mi² (62 km²), approximately.

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

GAGE.--Water-stage recorder. Altitude of gage is 6,700 ft (2,042 m) from topographic map.

AVERAGE DISCHARGE.--20 years, 9.38 ft³/s (0.266 m³/s), 6,800 acre-ft/yr (8.38 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 242 ft³/s (6.85 m³/s) May 8 (gage height, 5.00 ft or 1.524 m, from highwater mark); minimum daily, 0.32 ft³/s (0.009 m³/s) Oct. 31.

Period of record: Maximum discharge, 267 ft³/s (7.56 m³/s) May 6, 1970 (gage height, 5.16 ft or 1.573 m); no flow Sept. 17-19, 1955.

REMARKS.--Records good except those for winter periods and periods of no gage-height record, which are fair. One small ditch diverts water above station for irrigation. Regulation by Elk Lake (capacity, 400 acre-ft or 493,000 m³).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.3	2.4	2.2	2.7	2.8	3.5	5.4	26	33	39	4.2	2.0
2	2.0	3.1	2.3	2.5	2.7	3.8	5.2	18	56	31	4.2	4.4
3	1.9	2.7	2.5	2.5	2.5	3.6	4.8	36	41	27	3.8	3.4
4	1.8	2.4	2.6	2.7	2.4	3.2	4.4	65	25	24	4.0	3.1
5	3.9	2.4	2.7	2.5	2.3	3.4	5.6	73	21	21	5.6	2.5
6	3.1	2.7	2.8	2.5	2.4	4.1	8.2	102	24	19	6.7	2.1
7	2.1	2.0	3.0	2.5	2.5	3.5	8.7	115	32	18	5.0	2.1
8	2.7	2.5	3.3	2.5	2.5	3.6	7.0	150	41	16	4.2	2.0
9	2.3	2.5	2.9	2.5	2.6	4.0	5.8	110	57	13	3.7	1.9
10	2.1	2.0	2.5	2.5	2.6	4.1	4.6	54	61	10	3.4	1.9
11	2.1	2.4	2.8	2.5	2.5	4.0	6.2	56	64	8.9	3.4	2.8
12	1.7	3.1	2.6	2.7	2.5	4.1	9.4	54	61	9.2	3.2	4.0
13	1.7	2.5	2.9	2.5	2.6	4.2	13	50	60	17	4.6	3.0
14	1.8	2.4	2.8	2.8	2.7	4.1	18	47	88	9.2	4.4	2.4
15	3.1	3.4	2.5	2.8	2.7	3.7	14	46	130	7.7	4.2	2.4
16	2.5	3.0	2.7	2.8	2.8	3.8	13	47	62	7.0	4.2	2.3
17	2.0	2.4	2.8	2.7	2.8	3.9	15	46	40	6.0	4.2	2.1
18	2.4	2.4	3.0	2.7	2.8	4.0	14	49	32	5.2	4.2	2.0
19	2.1	2.0	2.9	2.8	2.9	4.2	8.9	51	24	7.0	3.8	1.9
20	2.8	2.2	2.8	2.8	3.0	4.5	13	53	23	17	3.8	1.9
21	3.6	2.4	2.7	2.7	3.1	4.5	11	53	26	15	3.8	1.8
22	3.7	2.4	2.5	2.5	3.2	4.3	9.7	41	31	8.2	5.0	1.9
23	2.7	2.4	2.5	2.5	3.2	4.2	23	37	36	7.4	4.4	1.8
24	2.8	2.3	2.4	2.5	3.2	4.0	40	35	43	8.9	3.7	2.6
25	2.1	2.3	2.4	2.7	3.3	4.2	27	40	44	8.7	3.6	3.2
26	2.1	2.4	2.1	2.8	3.3	4.9	18	57	47	7.2	3.4	3.6
27	1.9	2.7	2.3	2.8	3.3	5.3	31	28	49	6.5	3.4	3.2
28	1.2	2.5	2.5	2.7	3.3	5.0	54	22	46	5.8	3.6	3.2
29	.76	2.1	2.7	2.6	-----	4.7	128	22	41	5.4	3.1	3.1
30	.49	2.0	2.7	2.7	-----	5.0	108	22	41	5.2	2.0	3.1
31	.32	-----	3.0	2.7	-----	5.4	-----	28	-----	4.6	1.7	-----
TOTAL	68.07	74.0	82.4	81.7	78.5	128.8	633.9	1,633	1,379	395.1	122.5	77.7
MEAN	2.20	2.47	2.66	2.64	2.80	4.15	21.1	52.7	46.0	12.7	3.95	2.59
MAX	3.9	3.4	3.3	2.8	3.3	5.4	128	150	130	39	6.7	4.4
MIN	.32	2.0	2.1	2.5	2.3	3.2	4.4	18	21	4.6	1.7	1.8
AC-FT	135	147	163	162	156	255	1,260	3,240	2,740	784	243	154

CAL YR 1972 TOTAL 2,182.35 MEAN 5.96 MAX 56 MIN .32 AC-FT 4,330
 WTR YR 1973 TOTAL 4,754.67 MEAN 13.0 MAX 150 MIN .32 AC-FT 9,430

PEAK DISCHARGE (BASE, 70 CFS)

NOTE.--No gage-height record May 7-14.

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
4-29	1800	4.75	203	6-15	0130	4.38	158
5- 8	Unknown	5.00	242				

GREEN RIVER BASIN

327

09260000 LITTLE SNAKE RIVER NEAR LILY, COLO.

LOCATION.--Lat 40°32'50", long 108°25'25", in NW¼NE¼ sec.20, T.7 N., R.98 W., Moffat County, on left bank 170 ft (52 m) downstream from highway bridge, 6.0 mi (9.7 km) north of Lily, and 10 mi (16 km) upstream from mouth.

DRAINAGE AREA.--3,730 mi² (9,660 km²), approximately.

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.

GAGE.--Water-stage recorder. Altitude of gage is 5,685 ft (1,733 m) 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 (91 m) upstream at different datums.

AVERAGE DISCHARGE.--52 years (1921-73), 571 ft³/s (16.17 m³/s), 413,700 acre-ft/yr (510 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 5,860 ft³/s (166 m³/s) May 23 (gage height, 6.10 ft or 1.859 m); minimum daily, 1.8 ft³/s (0.051 m³/s) Oct. 1.

Period of record: Maximum discharge, 14,200 ft³/s (402 m³/s) May 27, 1926 (gage height, 10.5 ft or 3.20 m, site and datum then in use), from rating curve extended above 3,600 ft³/s (100 m³/s); maximum gage height, 11.1 ft or 3.38 m (from floodmark, backwater from ice), Feb. 13, 1962; no flow at times in most years.

REMARKS.--Records fair except those for winter period, which are poor. Diversions for irrigation of about 21,000 acres (85.0 km²) above station. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1713: 1959.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.8	116	110	105	95	100	260	3,260	2,390	1,290	240	19
2	2.2	150	110	105	100	105	300	2,660	2,600	1,180	243	58
3	2.2	140	110	105	100	105	340	1,830	3,280	1,060	226	47
4	2.9	200	110	100	90	110	370	1,360	4,530	975	191	343
5	6.1	191	100	105	85	105	432	1,450	3,230	817	164	150
6	15	226	100	105	90	95	395	2,000	2,630	722	161	80
7	18	215	90	105	80	95	610	2,460	2,300	657	158	78
8	23	233	100	105	85	100	1,080	2,990	2,290	610	161	68
9	25	226	100	105	90	95	808	2,960	2,440	550	176	58
10	23	176	100	105	85	95	515	3,320	2,910	474	182	53
11	37	206	105	105	85	95	450	3,600	3,450	370	182	68
12	47	194	110	105	85	95	835	4,090	3,780	343	179	82
13	51	161	110	105	90	100	947	4,010	3,650	325	164	105
14	60	158	110	100	85	110	1,330	4,140	3,260	321	140	94
15	70	148	105	105	85	115	1,100	4,160	3,020	330	116	90
16	70	182	105	105	90	115	1,200	4,140	4,110	572	94	74
17	70	148	110	100	90	115	1,100	4,240	4,160	432	80	84
18	84	150	110	100	90	115	1,100	4,270	2,840	348	68	84
19	107	158	110	105	90	110	1,150	4,420	2,260	313	62	82
20	125	148	115	100	90	110	1,100	4,630	1,910	321	60	82
21	109	140	115	95	90	120	900	5,050	1,660	657	60	80
22	119	121	115	95	90	130	900	5,270	1,500	1,180	51	78
23	119	103	110	95	85	140	1,000	5,640	1,410	826	37	78
24	145	53	105	95	90	150	1,100	4,650	1,360	641	21	78
25	188	116	100	95	95	160	1,500	4,060	1,390	618	17	76
26	185	105	105	90	100	160	2,000	4,040	1,460	480	17	72
27	158	105	105	90	105	170	1,800	4,530	1,490	432	16	68
28	148	120	105	95	105	190	1,900	3,840	1,520	380	18	62
29	145	95	100	95	-----	200	2,400	2,820	1,480	348	22	58
30	78	100	100	95	-----	200	2,900	2,490	1,390	313	26	60
31	42	-----	100	90	-----	230	-----	2,360	-----	271	22	-----
TOTAL	2,276.2	4,584	3,280	3,105	2,540	3,935	31,822	110,740	75,500	18,156	3,364	2,509
MEAN	73.4	153	106	100	90.7	127	1,061	3,572	2,517	586	109	83.6
MAX	188	233	115	105	105	230	2,900	5,640	4,530	1,290	250	343
MIN	1.8	53	90	90	80	95	260	1,360	1,360	271	16	19
AC-FT	4,510	9,090	6,510	6,160	5,040	7,810	63,120	219,700	149,800	36,010	6,670	4,980

CAL YR 1972 TOTAL 179,125.30 MEAN 489 MAX 2,870 MIN .16 AC-FT 355,300
WTH YR 1973 TOTAL 261,811.20 MEAN 717 MAX 5,640 MIN 1.8 AC-FT 519,300

PEAK DISCHARGE (BASE, 3,500 CFS).--May 23 (0800) 5,860 cfs (6.10 ft).

GREEN RIVER BASIN

09302420 NORTH FORK WHITE RIVER ABOVE RIPPLE CREEK, NEAR TRAPPER'S LAKE, COLO.

LOCATION.--Lat 40°02'50", long 107°18'32", in NW¼ sec.19, T.1 N., R.88 W., Garfield County, on right bank 10 ft (3 m) downstream from private bridge, 0.7 mi (1.1 km) downstream from Bear Creek, 2.0 mi (3.2 km) upstream from Ripple Creek, and 6.0 mi (9.7 km) northwest of Trapper's Lake.

DRAINAGE AREA.--62.3 mi² (161.4 km²).

PERIOD OF RECORD.--October 1965 to September 1973 (discontinued). Prior to October 1967, published as White River above Ripple Creek, near Trapper's Lake.

GAGE.--Water-stage recorder. Altitude of gage is 8,600 ft (2,620 m) by barometer.

AVERAGE DISCHARGE.--8 years, 96.0 ft³/s (2.719 m³/s), 69,550 acre-ft/yr (85.8 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 504 ft³/s (14.3 m³/s) June 28 (gage height, 4.31 ft or 1.314 m); minimum daily, 47 ft³/s (1.33 m³/s) Apr. 1-3, 9-12.
Period of record: Maximum discharge, 580 ft³/s (16.4 m³/s) June 24, 1971 (gage height, 4.43 ft or 1.350 m); maximum gage height, 4.49 ft (1.369 m) June 22, 1968; minimum daily discharge, 36 ft³/s (1.02 m³/s) Mar. 7-9, 1967.

REMARKS.--Records good. Natural regulation by Trapper's Lake.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	74	68	59	58	54	51	47	59	201	356	132	87
2	72	68	59	54	52	51	47	57	202	316	126	87
3	71	68	59	56	54	51	47	58	199	293	126	84
4	70	67	59	59	55	51	49	63	193	260	126	84
5	75	68	54	58	56	51	54	66	190	245	129	82
6	70	68	56	56	55	50	47	69	188	233	123	82
7	69	66	59	58	54	50	48	65	196	222	120	82
8	72	71	60	56	52	50	51	64	213	214	113	78
9	72	67	60	56	52	50	49	71	244	204	110	76
10	70	63	62	57	54	50	47	79	288	194	110	78
11	69	64	58	54	56	50	47	91	346	188	110	78
12	67	64	58	56	56	49	47	99	361	181	107	80
13	68	62	59	56	57	50	48	106	370	185	107	78
14	68	62	60	56	60	50	49	110	415	183	105	74
15	80	62	56	56	63	50	50	118	430	176	102	76
16	78	62	58	56	63	50	49	131	346	175	102	76
17	74	62	58	57	67	49	48	145	325	171	105	82
18	76	61	58	57	64	49	49	160	301	168	105	80
19	74	61	57	56	55	49	50	179	269	172	102	76
20	74	61	59	57	65	49	50	197	240	175	102	76
21	77	61	59	59	63	49	50	224	238	176	100	78
22	77	60	60	56	65	48	50	220	236	166	100	78
23	75	58	61	54	58	54	51	221	256	156	97	80
24	74	58	64	54	53	48	52	225	289	156	94	82
25	73	59	61	54	53	51	53	229	292	153	94	80
26	74	60	59	56	53	51	53	219	355	146	92	80
27	73	60	59	55	51	48	54	203	430	142	89	80
28	71	60	60	54	51	48	57	193	436	142	89	80
29	71	60	61	52	-----	48	60	186	378	139	89	80
30	69	59	62	54	-----	48	60	141	369	136	89	80
31	68	-----	62	54	-----	51	-----	193	-----	132	89	-----
TOTAL	2,245	1,890	1,836	1,731	1,591	1,544	1,513	4,281	8,796	5,955	3,284	2,394
MEAN	72.4	63.0	59.2	55.8	56.8	49.8	50.4	138	293	192	106	79.8
MAX	80	71	64	59	67	54	60	229	436	356	132	87
MIN	67	58	54	52	51	48	47	57	188	132	89	74
AC-FT	4,450	3,750	3,640	3,430	3,180	3,060	3,000	8,490	17,450	11,810	6,510	4,750

CAL YR 1972 TOTAL 32,222 MEAN 88.0 MAX 490 MIN 54 AC-FT 63,910
WTR YR 1973 TOTAL 37,060 MEAN 102 MAX 436 MIN 47 AC-FT 73,510

GREEN RIVER BASIN

329

09302450 LOST CREEK NEAR BUFORD, COLO.

LOCATION.--Lat 40°03'00", long 107°28'06", in SE¼SE¼ sec.15, T.1 N., R.90 W., Rio Blanco County, on left bank at downstream side of highway bridge, 540 ft (160 m) upstream from mouth, 0.5 mi (0.8 km) downstream from Long Park Creek, and 9 mi (14 km) northeast of Buford.

DRAINAGE AREA.--21.6 mi² (55.9 km²).

PERIOD OF RECORD.--October 1964 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 7,560 ft (2,304 m) from topographic map.

AVERAGE DISCHARGE.--9 years, 22.3 ft³/s (0.632 m³/s), 16,160 acre-ft/yr (19.9 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 570 ft³/s (16.1 m³/s) May 17 (gage height, 4.68 ft or 1.426 m); minimum daily, 1.5 ft³/s (0.042 m³/s) Oct. 1.

Period of record: Maximum discharge, 818 ft³/s (23.2 m³/s) May 18, 1970 (gage height, 4.85 ft or 1.478 m); minimum daily, 0.80 ft³/s (0.023 m³/s) Aug. 17, 18, 1966.

REMARKS.--Records fair except those for period of no gage-height record, which are poor. No diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.5	4.6	2.9	3.0	2.9	3.2	2.9	54	120	17	4.3	2.5
2	1.6	4.8	2.9	3.0	2.9	3.2	3.2	44	154	14	5.9	2.6
3	1.7	4.8	3.0	3.0	2.9	2.1	3.2	55	126	12	3.4	2.8
4	1.7	4.3	2.7	3.0	2.9	2.2	2.5	102	113	11	3.5	3.0
5	3.0	5.1	2.7	3.0	2.9	3.0	2.6	158	92	9.5	5.6	3.1
6	3.0	4.8	2.9	2.9	2.9	3.0	4.3	164	90	8.6	5.1	3.2
7	3.4	3.9	3.0	2.9	2.9	2.9	4.3	138	98	7.6	4.3	2.8
8	5.6	4.6	3.0	2.9	2.7	2.6	3.4	152	104	7.1	5.5	2.3
9	6.3	4.3	2.9	2.9	2.4	3.0	3.7	222	104	6.6	2.9	2.1
10	4.1	3.2	2.9	2.7	2.9	2.9	3.7	256	102	5.3	2.7	2.3
11	2.9	3.7	2.9	2.6	3.0	2.9	3.9	318	86	4.6	3.0	2.6
12	2.7	3.5	3.0	2.7	2.9	3.4	5.3	326	72	5.6	2.7	2.7
13	3.2	3.4	3.0	2.7	2.7	3.5	7.6	322	66	7.3	2.6	2.6
14	5.9	3.4	3.0	2.6	2.7	3.4	9.5	318	95	8.9	2.6	2.5
15	4.4	3.9	3.0	2.7	2.9	3.0	11	307	108	5.8	2.6	2.4
16	6.6	3.5	3.0	2.7	2.9	2.6	11	338	74	5.6	2.6	2.2
17	4.4	3.5	3.0	2.9	2.9	3.0	10	346	59	4.8	2.6	2.0
18	5.3	3.5	3.0	2.7	2.9	3.9	11	362	50	5.1	2.7	1.9
19	4.4	3.4	3.0	2.7	2.9	3.5	12	374	44	10	2.9	1.8
20	4.4	3.4	3.0	2.7	2.9	3.2	12	370	42	16	2.8	1.8
21	5.8	3.4	3.0	2.4	2.9	4.1	12	338	40	9.5	2.8	1.9
22	7.6	3.2	2.9	2.9	2.9	3.2	13	268	38	7.6	2.9	2.2
23	7.1	2.7	2.9	2.7	2.9	2.6	16	233	36	5.8	2.8	2.6
24	6.8	2.6	2.9	2.7	3.0	2.9	21	205	33	4.8	2.7	2.9
25	6.1	2.6	2.9	2.7	3.0	2.2	26	200	31	4.4	2.6	3.2
26	6.1	2.7	2.9	2.7	2.6	2.5	26	182	30	4.1	2.5	3.6
27	6.6	2.7	3.2	2.7	2.7	3.5	26	126	28	4.1	2.4	3.0
28	6.6	2.9	3.2	2.6	3.0	3.4	38	105	27	4.6	2.3	2.5
29	5.8	3.0	3.2	2.6	-----	3.4	60	110	24	4.6	2.3	2.2
30	5.1	2.9	3.2	2.7	-----	2.9	53	116	21	4.4	2.3	2.1
31	5.3	-----	3.2	2.9	-----	2.4	-----	120	-----	4.4	2.3	-----
TOTAL	145.0	108.3	92.3	85.9	80.0	93.6	418.1	6,729	2,107	230.7	94.2	75.4
MEAN	4.61	3.61	2.98	2.77	2.86	3.02	13.9	217	70.2	7.44	3.04	2.51
MAX	7.6	5.1	3.2	3.0	3.0	4.1	60	374	154	17	5.6	3.6
MIN	1.5	2.6	2.7	2.4	2.4	2.1	2.5	44	21	4.1	2.3	1.8
AC-FT	284	215	183	170	159	186	829	13,350	4,180	458	187	150

CAL YR 1972 TOTAL 6,826.9 MEAN 18.7 MAX 164 MIN 1.5 AC-FT 13,540
WTR YR 1973 TOTAL 10,257.5 MEAN 28.1 MAX 374 MIN 1.5 AC-FT 20,350

PEAK DISCHARGE (BASE, 150 CFS).--May 17 (1700) 570 cfs (4.68 ft).

NOTE.--No gage-height record Aug. 13 to Sept. 30.

GREEN RIVER BASIN

09302500 MARVINE CREEK NEAR BUFORD, COLO.

LOCATION.--Lat 40°02'20", long 107°29'15", in NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.21, T.1 N., R.90 W., Rio Blanco County, on left bank just downstream from county road bridge, 1,600 ft (490 m) upstream from mouth and 8 mi (13 km) northeast of Buford.

DRAINAGE AREA.--59.4 mi² (153.8 km²).

PERIOD OF RECORD.--July 1903 to September 1906, September 1972 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 7,500 ft (2,286 m) from topographic map. July 28, 1903, to Sept. 30, 1906, nonrecording gage at approximately same site at different datum.

EXTREMES.--September 1972: Maximum discharge during period, 94 ft³/s (2.66 m³/s) Sept. 19 (gage height, 2.84 ft or 0.866 m); minimum daily, 65 ft³/s (1.84 m³/s) Sept. 30.

Water year 1973: Maximum discharge, 328 ft³/s (9.29 m³/s) June 27 (gage height, 3.79 ft or 1.155 m); maximum gage height recorded, 5.39 ft (1.643 m) Dec. 17 (backwater from ice); minimum daily discharge, 42 ft³/s (1.19 m³/s) Jan. 2.

Period of record: Maximum discharge observed, 723 ft³/s (20.5 m³/s) June 17, 1905 (gage height, 3.50 ft or 1.067 m, datum then in use); maximum gage height recorded, 5.39 ft (1.643 m) Dec. 17, 1972 (backwater from ice); minimum discharge not determined, probably occurred during period of no gage-height record.

REMARKS.--Records good except those for winter period and period of no gage-height record; which are poor. Diversions above station for irrigation of 310 acres (1.25 km²) of hay meadows. One small transbasin diversion above station to Ute Creek basin.

REVISIONS (WATER YEARS).--WSP 1313: 1905-6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1												73
2												77
3												75
4												75
5												74
6												81
7												77
8												76
9												75
10												75
11												76
12												73
13												72
14												72
15												71
16												70
17												69
18												68
19												78
20												78
21												73
22											†71	71
23												70
24												68
25												66
26												66
27												66
28												66
29												66
30												65
31		-----			-----		-----		-----			-----
TOTAL												2,162
MEAN												72.1
MAX												81
MIN												65
AC-FT												4,290

†Result of discharge measurement.

GREEN RIVER BASIN

331

09302500 MARVINE CREEK NEAR BUFORD, COLO.--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	65	67	58	45	55	55	50	69	177	238	95	73
2	62	66	58	42	55	55	50	68	179	218	94	74
3	62	66	60	47	55	55	50	70	173	200	91	72
4	62	66	62	52	55	57	50	75	169	183	91	72
5	66	66	66	52	55	56	50	78	161	169	94	70
6	62	64	68	52	55	55	50	79	159	151	94	70
7	62	65	66	54	55	56	50	76	171	142	95	68
8	63	64	63	56	54	56	50	77	183	133	91	67
9	64	63	63	56	62	55	50	86	200	130	89	68
10	62	64	60	56	54	55	49	93	224	126	89	74
11	61	65	62	54	54	55	49	110	227	124	88	78
12	62	65	62	52	55	55	49	124	227	129	87	78
13	62	63	60	58	60	55	50	128	233	127	86	76
14	62	65	58	58	57	55	51	136	253	127	85	74
15	70	63	54	56	54	55	52	144	260	120	86	72
16	69	62	54	56	54	56	51	150	227	121	82	70
17	66	62	58	58	54	54	52	163	202	118	82	70
18	67	62	60	57	56	54	52	177	194	114	80	70
19	69	62	62	56	58	53	53	192	185	118	80	68
20	69	62	60	56	58	53	53	202	187	118	78	67
21	70	62	58	56	56	53	52	220	194	129	78	66
22	70	62	56	56	56	52	54	207	202	117	78	66
23	68	60	54	56	56	54	56	196	209	109	80	68
24	66	62	54	55	55	52	57	194	213	108	78	70
25	66	61	50	55	55	53	57	194	218	108	75	72
26	66	60	52	54	55	53	58	187	250	104	73	72
27	66	58	54	55	55	52	59	169	274	100	72	72
28	66	62	56	55	55	52	63	159	274	100	72	71
29	66	60	54	55	-----	52	67	155	262	97	71	70
30	66	56	50	56	-----	51	69	163	250	96	71	70
31	66	-----	46	55	-----	52	-----	171	-----	95	72	-----
TOTAL	2,023	1,885	1,798	1,681	1,558	1,676	1,603	4,316	6,337	4,069	2,575	2,128
MEAN	65.3	62.8	58.0	54.2	55.6	54.1	53.4	139	211	131	83.1	70.9
MAX	70	67	68	58	62	57	69	220	274	238	95	78
MIN	61	56	46	42	54	51	49	68	159	95	71	66
AC-FT	4,010	3,740	3,570	3,330	3,090	3,320	3,180	8,560	12,570	8,070	5,110	4,220

WTR YR 1973 TOTAL 31,649 MEAN 86.7 MAX 274 MIN 42 AC-FT 62,780

PEAK DISCHARGE (BASE, 300 CFS).--June 27 (2200) 328 cfs (3.79 ft).

NOTE.--No gage-height record Aug. 15 to Sept. 30.

GREEN RIVER BASIN

09302800 NORTH FORK WHITE RIVER NEAR BUFORD, COLO.

LOCATION.--Lat 40°02'08", long 107°31'13", in SW¼SW¼ sec.20, T.1 N., R.90 W., Rio Blanco County, on right bank 0.3 mi (0.5 km) upstream from highway bridge, 0.5 mi (0.8 km) downstream from Ute Creek, and 6.1 mi (9.8 km) northeast of Buford.

DRAINAGE AREA.--223 mi² (578 km²).

PERIOD OF RECORD.--July 1903 to December 1906, October 1956 to September 1973 (discontinued). Monthly discharge only for some periods, published in WSP 1313. Published as White River near Buford 1956-67. Records for May 1910 to December 1915 and July 1919 to December 1920 at site 6.5 mi (10.5 km) downstream not equivalent owing to inflow between the sites.

GAGE.--Water-stage recorder. Altitude of gage is 7,340 ft (2,237 m) from topographic map. Prior to October 1956, nonrecording gage at highway bridge 0.3 mi (0.5 km) downstream at different datum.

AVERAGE DISCHARGE.--20 years, 290 ft³/s (8,213 m³/s), 210,000 acre-ft/yr (259 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,450 ft³/s (41.1 m³/s) May 18 (gage height, 4.91 ft or 1.497 m); minimum daily, 85 ft³/s (2.41 m³/s) Feb. 22.
Period of record: Maximum daily discharge, 1,950 ft³/s (55.2 m³/s), June 8, 1905; minimum daily, 85 ft³/s (2.41 m³/s) Feb. 22, 1973.

REMARKS.--Records good except those for winter period, which are fair. Diversions above station for irrigation of a few hay meadows.

REVISIONS.--WSP 1513: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	UCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	181	181	155	140	145	100	115	250	826	728	260	195
2	177	185	158	130	140	100	115	232	834	687	250	200
3	177	181	151	121	160	100	115	241	794	642	250	205
4	175	181	151	130	130	103	121	310	749	599	250	200
5	193	185	144	140	120	98	121	380	700	575	265	195
6	177	185	155	130	125	98	124	406	707	545	260	197
7	177	177	155	109	135	109	124	365	763	521	246	193
8	193	185	160	120	137	115	121	365	850	491	246	193
9	197	185	170	140	158	112	121	509	922	467	241	189
10	177	177	175	160	127	115	121	605	994	450	237	189
11	169	173	160	170	118	112	121	721	985	433	237	197
12	169	173	145	170	115	112	124	786	967	410	232	201
13	173	169	144	150	124	112	130	794	976	420	228	197
14	173	173	109	137	137	115	141	810	1,100	420	228	193
15	214	169	100	121	140	118	144	850	1,120	400	223	189
16	223	169	140	130	130	118	137	922	931	390	223	193
17	197	169	150	140	125	115	144	985	834	370	232	197
18	214	165	150	140	120	115	144	1,110	778	360	232	197
19	201	165	155	130	115	115	144	1,180	721	390	219	189
20	193	162	140	140	110	118	148	1,170	707	420	214	185
21	197	162	130	150	90	118	144	1,190	700	390	214	181
22	201	162	121	135	85	118	148	1,030	707	360	219	181
23	193	169	118	130	88	121	155	985	721	340	214	185
24	193	173	120	130	124	115	169	958	728	330	205	193
25	189	169	115	150	106	118	177	949	728	325	197	189
26	189	162	120	145	106	118	169	895	763	310	197	189
27	189	155	130	130	103	115	185	786	810	295	193	193
28	185	165	125	120	100	115	201	707	810	300	193	193
29	181	173	115	120	-----	118	241	714	763	300	189	193
30	185	169	130	125	-----	118	265	749	749	290	190	193
31	181	-----	135	150	-----	118	-----	794	-----	275	190	-----
TOTAL	5,831	5,168	4,326	4,233	3,413	3,492	4,429	22,748	24,737	13,233	6,974	5,784
MEAN	188	172	140	137	122	113	148	734	825	427	225	193
MAX	223	185	175	170	160	121	265	1,190	1,120	728	265	205
MIN	169	155	100	109	85	98	115	232	700	275	189	181
AC-FT	11,570	10,250	8,580	8,400	6,770	6,930	8,780	45,120	49,070	26,250	13,830	11,470

CAL YR 1972 TOTAL 98,663 MEAN 270 MAX 1,330 MIN 100 AC-FT 195,700
WTR YR 1973 TOTAL 104,368 MEAN 286 MAX 1,190 MIN 85 AC-FT 207,000

PEAK DISCHARGE (BASE, 1,000 CFS).--May 18 (2100) 1,450 cfs (4.91 ft).

09303000 NORTH FORK WHITE RIVER AT BUFORD, COLO.

LOCATION.--Lat 39°59'15", long 107°36'50", in NW¼NW¼ sec.9, T.1 S., R.91 W., Rio Blanco County, on right bank 600 ft (180 m) east of Buford and 1.2 mi (1.9 km) upstream from South Fork White River.

DRAINAGE AREA.--254 mi² (658 km²).

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 (10.5 km) upstream not equivalent owing to inflow between sites.

GAGE.--Water-stage recorder. Altitude of gage is 7,010 ft (2,137 m) from topographic map. May 24, 1910, to May 27, 1914, nonrecording gage at site 1.5 mi (2.4 km) 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.

AVERAGE DISCHARGE.--28 years, 311 ft³/s (8.808 m³/s) 225,300 acre-ft/yr (278 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,600 ft³/s (45.3 m³/s) May 18 (gage height, 6.23 ft or 1.899 m); minimum daily, 100 ft³/s (2.83 m³/s) Mar. 2. Period of record: Maximum daily discharge, 3,150 ft³/s (89.2 m³/s) May 30, 1912; maximum gage height, 7.22 ft (2.201 m) Jan. 9, 1961 (backwater from ice); minimum daily discharge, 90 ft³/s (2.55 m³/s) Feb. 21, 1955.

REMARKS.--Records good except those for winter period, which are fair. Diversions above station for irrigation of about 900 acres (3.64 km²) above and 300 acres (1.21 km²) below station.

REVISIONS (WATER YEARS).--WSP 1343: 1912. WSP 1513: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	194	223	190	160	160	105	120	314	900	817	275	216
2	189	219	190	150	160	100	125	282	880	754	268	244
3	186	216	185	155	170	105	130	293	860	692	268	226
4	189	212	185	160	160	110	130	382	800	626	268	216
5	216	219	176	155	150	115	135	453	760	595	296	209
6	197	216	171	150	180	130	135	493	800	550	286	202
7	197	205	192	140	180	150	135	435	880	525	275	202
8	219	219	200	160	180	140	135	435	971	498	268	197
9	237	216	192	180	170	135	135	595	1,080	480	258	197
10	205	202	181	190	160	130	140	768	1,170	453	254	197
11	197	205	180	200	150	125	140	929	1,190	435	251	209
12	192	205	175	190	140	125	150	999	1,150	430	247	212
13	200	202	170	170	160	130	160	1,010	1,150	444	240	202
14	200	200	160	180	170	130	170	1,040	1,260	448	233	194
15	265	200	160	185	170	130	175	1,080	1,300	410	233	194
16	275	197	160	190	160	130	180	1,130	1,120	406	230	186
17	237	197	170	180	150	125	169	1,190	992	390	244	189
18	258	197	170	170	150	125	173	1,290	922	382	244	192
19	244	197	170	160	140	125	178	1,300	859	439	226	186
20	233	194	165	160	130	130	169	1,250	831	448	223	183
21	247	192	160	160	120	130	164	1,300	824	430	223	181
22	254	178	150	155	120	130	164	1,200	824	398	230	183
23	240	181	140	150	130	130	176	1,100	845	366	219	192
24	226	192	135	155	130	125	202	1,000	845	350	216	212
25	223	192	140	160	120	120	205	980	859	342	216	212
26	223	205	140	160	120	120	197	960	922	322	223	205
27	230	194	150	155	115	120	212	940	964	303	223	205
28	223	189	150	150	110	120	265	860	950	310	223	205
29	219	190	140	140	-----	125	314	900	887	303	216	202
30	212	200	150	150	-----	125	338	920	859	296	209	200
31	212	-----	150	160	-----	125	-----	960	-----	282	209	-----
TOTAL	6,839	6,054	5,145	5,080	4,155	3,865	5,221	26,788	28,654	13,924	7,494	6,050
MEAN	221	202	166	164	148	125	174	864	955	449	242	202
MAX	275	223	200	200	180	150	338	1,300	1,300	817	296	244
MIN	186	178	135	140	110	100	120	282	760	282	209	181
AC-FT	13,570	12,010	10,210	10,080	8,240	7,670	10,360	53,130	56,840	27,620	14,860	12,000

CAL YR 1972 TOTAL 113,693 MEAN 311 MAX 1,420 MIN 135 AC-FT 225,500
WTR YR 1973 TOTAL 119,269 MEAN 327 MAX 1,300 MIN 100 AC-FT 236,600

PEAK DISCHARGE (BASE, 1,000 CFS).--May 18 (2330) 1,600 cfs (6.23 ft).

NOTE.--No gage-height record Jan. 9 to Apr. 16.

09303500 SOUTH FORK WHITE RIVER NEAR BUFORD, COLO.

LOCATION.--Lat 39°55'18", long 107°33'04", in NW¼SE¼ sec.36, T.1 S., R.91 W., Rio Blanco County, on left bank at upstream side of county bridge, 10 ft (3 m) downstream from Peltier Creek, and 5.6 mi (9.0 km) southeast of Buford.

DRAINAGE AREA.--157 mi² (407 km²).

PERIOD OF RECORD.--August 1903 to October 1906, June 1910 to December 1915, October 1942 to September 1947, April 1967 to current year. Monthly discharge only for some periods, published in WSP 1313.

GAGE.--Water-stage recorder. Altitude of gage is 7,480 ft (2,280 m) from topographic map. July 26, 1903, to Oct. 31, 1906, nonrecording gage and Oct. 1, 1942, to Sept. 30, 1947, water-stage recorder, at site 60 ft (18 m) upstream at different datums. Records for 1919-20, at site 6.0 mi (9.7 km) downstream not equivalent.

AVERAGE DISCHARGE.--19 years, 263 ft³/s (7.448 m³/s), 190,500 acre-ft/yr (235 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,330 ft³/s (66.0 m³/s) June 11 (gage height, 6.92 ft or 2.109 m); minimum daily, 87 ft³/s (2.46 m³/s) Jan. 2, 23.

Period of record: Maximum discharge observed, 3,230 ft³/s (91.5 m³/s) June 17, 1906 (gage height, 8.2 ft or 2.50 m, site and datum then in use), from rating curve extended above 1,600 ft³/s (45 m³/s); minimum discharge recorded, 56 ft³/s (1.59 m³/s) Dec. 18, 1946 (gage height, 1.01 ft (0.308 m), site and datum then in use), but may have been less during periods of no gage-height record.

REMARKS.--Records good except those for winter period, which are fair. Diversions for irrigation of about 600 acres (2.43 km²) of hay meadows above station.

REVISIONS.--WSP 1059: 1944-45.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	130	136	114	90	100	97	94	147	1,020	754	184	142
2	127	147	117	87	99	100	91	141	940	664	181	151
3	127	142	121	105	106	97	91	145	870	576	180	149
4	130	141	121	111	111	94	91	162	785	512	180	145
5	142	141	102	107	108	101	93	177	688	465	192	141
6	137	140	97	107	107	94	95	194	648	430	210	138
7	136	128	112	114	110	106	96	187	736	395	189	137
8	142	140	117	115	105	107	94	181	1,070	371	181	136
9	149	137	115	116	121	95	101	196	1,520	354	172	133
10	146	122	112	115	111	91	94	234	1,990	323	172	134
11	136	130	120	103	106	94	94	311	2,140	308	171	138
12	133	130	124	116	106	91	93	388	2,010	300	166	141
13	132	130	127	120	105	94	96	455	1,950	303	160	136
14	133	128	112	116	120	94	101	497	2,060	300	159	132
15	158	132	107	112	130	100	103	556	1,990	282	159	130
16	175	128	117	111	94	103	96	628	1,510	294	158	128
17	166	124	123	114	90	101	101	716	1,150	268	162	128
18	171	127	125	114	92	94	105	812	1,100	254	164	124
19	169	125	123	114	94	93	105	1,070	946	282	158	123
20	174	125	123	116	96	94	102	1,170	910	277	155	121
21	174	121	123	94	99	95	102	1,370	982	268	155	120
22	168	108	120	97	96	94	101	1,260	1,100	248	158	119
23	162	98	115	87	99	95	103	1,170	1,130	232	156	121
24	158	110	108	103	101	95	110	1,240	1,150	230	155	133
25	154	112	116	106	100	99	110	1,270	1,120	221	155	128
26	151	114	103	110	106	96	108	1,060	1,220	212	149	125
27	151	117	112	101	110	95	114	835	1,240	202	149	121
28	149	106	120	93	105	94	128	716	1,090	208	146	121
29	149	110	115	99	-----	95	145	664	904	208	145	120
30	142	117	105	105	-----	94	150	704	835	197	143	117
31	130	-----	99	106	-----	93	-----	835	-----	187	143	-----
TOTAL	4,601	3,766	3,565	3,304	2,927	2,985	3,107	19,491	36,804	10,125	5,107	3,932
MEAN	148	126	115	107	105	96.3	104	629	1,227	327	165	131
MAX	175	147	127	120	130	107	150	1,370	2,140	754	210	151
MIN	127	98	97	87	90	91	91	141	648	187	143	117
AC-FT	9,130	7,470	7,070	6,550	5,810	5,920	6,160	38,660	73,000	20,080	10,130	7,800

CAL YR 1972 TOTAL 88,352 MEAN 241 MAX 1,830 MIN 94 AC-FT 175,200
 WTR YR 1973 TOTAL 99,714 MEAN 273 MAX 2,140 MIN 87 AC-FT 197,800

PEAK DISCHARGE (BASE, 1,200 CFS).--May 21 (0700) 1,390 cfs (5.74 ft); June 11 (0400) 2,330 cfs (6.92 ft).

09304000 SOUTH FORK WHITE RIVER AT BUFORD, COLO.

LOCATION.--Lat 39°58'28", long 107°37'30", in NW¼NE¼ sec.17, T.1 S., R.91 W., Rio Blanco County, on left bank 300 ft (91 m) downstream from highway bridge, 0.8 mi (1.3 km) upstream from mouth, and 1.0 mi (1.6 km) south of Buford.

DRAINAGE AREA.--170 mi² (440 km²), approximately.

PERIOD OF RECORD.--July 1919 to December 1920 (monthly discharge only, published in WSP 1313), October 1951 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,970 ft (2,124 m) from topographic map. Prior to Nov. 30, 1920, nonrecording gage at site 300 ft (91 m) upstream at different datum.

AVERAGE DISCHARGE.--23 years, 256 ft³/s (7.250 m³/s), 185,500 acre-ft/yr (229 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,150 ft³/s (60.9 m³/s) June 11 (gage height, 6.43 ft or 1.960 m); minimum daily, 94 ft³/s (2.66 m³/s) Jan. 2.

Period of record: Maximum discharge, about 3,000 ft³/s (85.0 m³/s) June 30, 1957; maximum gage height, 7.07 ft (2.155 m) June 30, 1957; minimum daily discharge, 60 ft³/s (1.70 m³/s) Feb. 21, 1955.

REMARKS.--Records good except those for winter period, which are fair. Diversions above station for irrigation of about 1,100 acres (4.45 km²) above station and a small area below.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	132	141	134	97	125	125	114	198	1,110	760	183	135
2	131	155	136	94	130	115	111	188	1,060	650	185	147
3	129	151	130	110	150	130	113	193	987	570	185	147
4	131	135	124	120	155	125	108	213	910	500	185	149
5	141	147	104	125	150	125	111	237	778	450	205	149
6	137	147	99	120	150	140	117	267	724	410	218	145
7	134	131	125	120	145	130	119	261	808	386	193	145
8	139	143	122	125	140	120	105	246	1,130	358	188	147
9	147	143	120	120	135	123	116	264	1,500	340	183	141
10	147	125	110	120	125	122	116	306	1,880	319	183	134
11	143	137	123	125	120	117	114	382	1,980	303	180	137
12	137	135	130	130	120	116	113	480	1,880	297	175	141
13	137	132	135	135	130	119	119	550	1,840	303	169	135
14	137	126	130	140	136	117	125	600	1,910	297	165	134
15	161	134	120	130	140	113	129	655	1,850	282	165	134
16	195	131	130	130	140	113	119	748	1,430	288	161	131
17	178	126	135	130	130	117	126	820	1,150	267	165	131
18	183	131	135	130	120	119	129	980	1,110	252	167	128
19	180	131	135	125	110	116	131	1,160	987	270	159	126
20	185	128	135	120	105	117	126	1,240	952	273	149	126
21	188	129	135	110	110	122	126	1,420	1,020	267	145	125
22	185	104	130	120	110	117	126	1,330	1,100	252	147	125
23	175	99	130	98	115	113	129	1,240	1,140	237	147	126
24	169	118	125	110	120	119	139	1,290	1,140	228	149	139
25	163	120	115	120	125	116	145	1,300	1,110	218	145	134
26	159	120	120	126	125	114	141	1,150	1,190	205	137	132
27	157	122	125	124	125	117	151	945	1,190	195	135	129
28	157	110	120	120	125	113	167	796	1,070	198	131	129
29	157	125	115	120	-----	116	193	724	931	198	129	129
30	151	130	105	130	-----	113	203	766	862	188	129	128
31	131	-----	98	135	-----	108	-----	904	-----	180	131	-----
TOTAL	4,796	3,906	3,830	3,759	3,611	3,687	3,881	21,873	36,729	9,941	5,088	4,058
MEAN	155	130	124	121	129	119	129	706	1,224	321	164	135
MAX	195	155	136	140	155	140	203	1,420	1,980	760	218	149
MIN	129	99	98	94	105	108	105	188	724	180	129	125
AC-FT	9,510	7,750	7,600	7,460	7,160	7,310	7,700	43,390	72,850	19,720	10,090	8,050

CAL YR 1972 TOTAL 89,095 MEAN 243 MAX 1,770 MIN 87 AC-FT 176,700
WTR YR 1973 TOTAL 105,159 MEAN 288 MAX 1,980 MIN 94 AC-FT 208,600

PEAK DISCHARGE (BASE, 1,300 CFS).--June 11 (0500) 2,150 cfs (6.43 ft).

GREEN RIVER BASIN

09304150 MILLER CREEK NEAR MEEKER, COLO.

LOCATION.--Lat 39°55'52", long 107°46'10", in NW¼NW¼ sec.31, T.1 S., R.92 W., Rio Blanco County, on left bank 200 ft (61 m) downstream from bridge, 1.1 mi (1.8 km) upstream from mouth, and 11 mi (18 km) southeast of Meeker.

DRAINAGE AREA.--57.6 mi² (149.2 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 6,710 ft (2,045 m) from topographic map.

EXTREMES.--Current year: Maximum discharge, 200 ft³/s (5.66 m³/s) May 20 (gage height, 3.95 ft or 1,204 m), from rating curve extended above 47 ft³/s (1.3 m³/s); minimum daily, 13 ft³/s (0.37 m³/s) Mar. 28 to Apr. 7, Apr. 9, 10.

Period of record: Maximum discharge, 200 ft³/s (5.66 m³/s) May 20, 1973 (gage height, 3.95 ft or 1,204 m), from rating curve extended above 47 ft³/s (1.3 m³/s); minimum daily, 8.0 ft³/s (0.23 m³/s) June 7, 1972.

REMARKS.--Records good. One small diversion above station for irrigation below.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	18	16	15	15	15	13	15	57	18	16	24
2	20	18	16	15	15	16	13	15	63	18	17	24
3	21	18	16	15	16	16	13	15	65	18	16	22
4	21	19	16	16	16	16	13	15	61	18	16	22
5	22	19	16	16	15	16	13	15	50	17	19	21
6	21	19	15	16	15	16	13	15	40	17	18	21
7	21	18	14	16	15	16	13	16	40	17	17	21
8	22	19	16	16	14	16	14	16	37	17	17	20
9	21	19	17	15	15	15	13	15	36	18	18	20
10	20	18	17	16	15	15	13	15	33	18	18	20
11	20	18	17	16	15	15	14	16	31	18	17	21
12	20	18	16	16	15	15	14	16	27	18	17	20
13	20	18	17	16	15	15	14	20	28	19	17	20
14	20	18	16	16	15	15	14	33	31	18	18	20
15	21	17	15	16	15	15	14	40	33	19	17	21
16	20	18	15	16	15	14	14	53	33	19	16	24
17	19	18	15	16	15	15	14	63	31	19	17	23
18	20	18	16	15	15	15	14	82	30	17	17	23
19	20	18	16	15	15	15	14	117	30	19	16	22
20	20	18	16	15	15	14	14	146	30	18	16	22
21	21	18	16	16	16	15	14	168	27	17	16	21
22	21	17	16	16	15	14	14	145	26	17	17	19
23	20	17	16	16	15	14	14	129	26	17	17	20
24	19	17	16	16	15	14	15	124	26	17	16	20
25	20	16	16	15	15	14	15	114	25	17	16	21
26	19	17	16	15	15	14	15	105	23	17	15	20
27	20	17	16	15	15	14	15	87	22	17	15	21
28	20	17	16	15	15	13	15	75	20	17	15	23
29	19	16	16	15	-----	13	15	67	20	18	17	23
30	19	16	16	15	-----	13	15	60	18	19	23	23
31	19	-----	16	15	-----	13	-----	55	-----	19	23	-----
TOTAL	626	532	494	482	422	456	418	1,867	1,019	552	530	642
MEAN	20.2	17.7	15.9	15.5	15.1	14.7	13.9	60.2	34.0	17.8	17.1	21.4
MAX	22	19	17	16	16	16	15	168	65	19	23	24
MIN	19	16	14	15	14	13	13	15	18	17	15	19
AC=FT	1,240	1,060	980	956	837	904	829	3,700	2,020	1,090	1,050	1,270

CAL YR 1972 TOTAL 6,019.7 MEAN 16.4 MAX 53 MIN 8.0 AC=FT 11,940
WTR YR 1973 TOTAL 8,040.0 MEAN 22.0 MAX 168 MIN 13 AC=FT 15,950

PEAK DISCHARGE (BASE, 60 CFS).--May 20 (1830) 200 cfs (3.95 ft).

09304200 WHITE RIVER ABOVE COAL CREEK, NEAR MEEKER, COLO.

LOCATION.--Lat 40°00'18", long 107°49'29", in NW¼NW¼ sec.3, T.1 S., R.93 W., Rio Blanco County, on right bank 16 ft (5 m) upstream from county road bridge, 2.3 mi (3.7 km) upstream from Coal Creek, and 5.0 mi (8.0 km) southeast of Meeker.

DRAINAGE AREA.--660 mi² (1,710 km²), approximately.

PERIOD OF RECORD.--October 1961 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,400 ft (1,951 m) from topographic map.

AVERAGE DISCHARGE.--12 years, 556 ft³/s (15.75 m³/s), 402,800 acre-ft/yr (497 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 3,530 ft³/s (100 m³/s) May 21 (gage height, 4.81 ft or 1.466 m); minimum daily, 240 ft³/s (6.80 m³/s) Aug. 31, Sept. 21, 22.

Period of record: Maximum discharge, 3,850 ft³/s (109 m³/s) May 21, 1970 (gage height, 5.02 ft or 1.530 m); maximum gage height, 5.41 ft (1.649 m) May 13, 1962; minimum daily discharge, 66 ft³/s (1.87 m³/s) Aug. 26, 1966.

REMARKS.--Records good except those for winter period, which are fair. Diversions above station for irrigation of about 8,000 acres (32.4 km²) above station and about 4,000 acres (16.2 km²) below. Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	362	380	380	290	280	320	300	645	2,050	1,380	345	244
2	350	416	368	280	270	320	300	582	2,100	1,230	340	276
3	340	404	368	290	280	310	290	575	1,950	1,070	330	272
4	345	386	380	300	300	300	280	694	1,800	962	335	268
5	592	404	525	290	290	310	300	813	1,550	862	386	260
6	380	410	300	280	280	300	310	922	1,550	778	440	256
7	368	362	345	300	270	290	280	862	1,670	708	380	252
8	410	404	368	320	280	290	260	834	2,080	659	374	248
9	428	410	368	340	270	290	260	1,030	2,570	624	350	252
10	416	368	310	320	280	290	260	1,290	3,010	561	340	256
11	404	386	310	310	290	290	260	1,610	3,250	533	345	284
12	380	392	330	330	280	290	270	1,840	3,220	512	345	300
13	398	392	380	360	270	300	280	2,000	3,040	526	325	284
14	410	368	335	380	270	290	280	2,080	3,050	554	315	276
15	464	392	296	360	270	290	290	2,250	3,170	477	315	276
16	582	380	325	340	280	290	320	2,360	2,670	498	296	268
17	505	362	330	330	290	290	330	2,570	2,160	477	305	264
18	526	380	360	320	290	310	340	2,900	1,980	470	345	264
19	512	380	390	310	290	310	345	3,230	1,680	568	325	256
20	512	368	380	300	290	310	335	3,270	1,620	624	315	244
21	526	368	400	290	290	330	330	3,410	1,710	631	296	240
22	526	335	380	280	300	310	325	3,200	1,720	589	300	240
23	498	335	370	270	310	300	340	2,900	1,770	519	300	244
24	470	356	350	280	310	310	386	2,750	1,790	505	288	288
25	452	404	340	290	300	290	416	2,700	1,790	512	280	300
26	440	386	330	300	300	300	592	2,400	1,890	484	264	305
27	446	386	340	270	310	300	416	2,100	1,950	440	268	300
28	440	345	360	260	320	290	491	1,800	1,880	440	268	296
29	434	368	350	280	-----	280	589	1,600	1,640	434	264	292
30	416	386	330	300	-----	290	652	1,700	1,510	398	248	296
31	368	-----	310	290	-----	300	-----	1,800	-----	374	240	-----
TOTAL	13,500	11,413	10,778	9,460	8,060	9,290	10,227	58,717	63,820	19,399	9,867	8,101
MEAN	435	380	348	305	288	300	341	1,894	2,127	626	318	270
MAX	582	416	400	380	320	330	652	3,410	3,250	1,380	440	305
MIN	340	335	296	260	270	280	260	575	1,510	374	240	240
AC=FT	26,780	22,640	21,380	18,760	15,990	18,430	20,290	116,500	126,600	38,480	19,570	16,070

CAL YR 1972 TOTAL 190,922 MEAN 522 MAX 2,760 MIN 97 AC=FT 378,700
WTR YR 1973 TOTAL 232,632 MEAN 637 MAX 3,410 MIN 240 AC=FT 461,400

PEAK DISCHARGE (BASE, 2,000 CFS).--May 21 (0200) 3,530 cfs (4.81 ft); June 12 (0600) 3,350 cfs (4.45 ft).

NOTE.--No gage-height record Dec. 28 to Apr. 16.

09304500 WHITE RIVER NEAR MEEKER, COLO.

LOCATION.--Lat 40°02'01", long 107°51'42", in NE¼ sec.30, T.1 N., R.93 W., Rio Blanco County, on left bank 1.0 mi (1.6 km) upstream from Curtis Creek and 2.5 mi (4.0 km) east of Meeker.

DRAINAGE AREA.--762 mi² (1,974 km²).

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.

GAGE.--Water-stage recorder. Altitude of gage is 6,300 ft (1,920 m) 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 (4.0 km) downstream at different datum. Oct. 20, 1913, to Sept. 30, 1971, water-stage recorder at present site, at datum 3.00 ft (0.914 m) higher prior to Oct. 1, 1933, and at datum 2.00 ft (0.610 m) higher thereafter.

AVERAGE DISCHARGE.--69 years, 622 ft³/s (17.62 m³/s), 450,600 acre-ft/yr (556 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 3,910 ft³/s (111 m³/s) May 21 (gage height, 5.76 ft or 1.756 m); minimum daily, 274 ft³/s (7.76 m³/s) Feb. 9.

Period of record: Maximum discharge observed, 6,370 ft³/s (180 m³/s) June 16, 1921 (gage height, 7.60 ft or 2.316 m, present datum), from rating curve extended above 4,700 ft³/s (130 m³/s); minimum daily, 112 ft³/s (3.17 m³/s) July 17, 1934.

REMARKS.--Records good. Diversions above station for irrigation of about 12,000 acres (48.6 km²) above station and about 3,000 acres (12.1 km²) below. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WSP 764: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	353	375	385	289	310	337	333	711	2,110	1,440	443	316
2	341	400	385	289	290	337	337	615	2,200	1,280	432	349
3	322	395	440	300	300	333	333	579	2,000	1,120	400	349
4	325	380	410	310	320	307	319	687	1,970	1,010	405	337
5	385	410	445	320	310	341	329	807	1,670	931	492	333
6	365	426	313	300	290	322	357	867	1,480	837	537	329
7	353	361	349	320	300	304	380	819	1,580	759	470	325
8	400	395	405	340	290	304	322	777	1,960	735	465	329
9	415	405	390	360	274	307	357	918	2,400	699	432	333
10	395	345	329	330	341	298	345	1,140	3,000	639	405	337
11	375	375	337	330	313	298	357	1,460	3,390	669	410	365
12	361	375	345	350	313	301	365	1,710	3,370	699	415	395
13	375	385	432	370	292	316	380	1,890	3,170	711	390	385
14	380	349	465	390	286	313	432	2,010	3,270	753	395	370
15	448	390	316	380	286	301	481	2,130	3,430	657	400	365
16	585	380	320	370	292	298	390	2,350	2,750	681	370	361
17	492	365	350	360	307	313	400	2,560	2,170	645	380	353
18	514	375	380	340	325	325	400	2,870	2,020	627	448	353
19	503	380	400	320	329	322	421	3,410	1,740	753	395	345
20	509	365	420	310	310	329	400	3,470	1,670	843	370	337
21	531	375	420	300	310	353	395	3,830	1,770	789	361	319
22	531	329	410	286	316	333	385	3,290	1,790	723	361	304
23	509	316	400	283	329	313	390	2,910	1,860	633	370	301
24	476	357	380	290	337	325	448	2,820	1,890	603	349	357
25	448	421	370	300	337	310	509	2,820	1,890	603	349	370
26	426	390	341	320	313	325	476	2,680	1,930	567	333	365
27	443	390	360	290	322	341	476	2,160	2,060	525	333	361
28	443	341	390	275	333	337	555	1,800	1,970	520	329	375
29	432	370	370	290	-----	337	651	1,680	1,750	525	319	380
30	410	395	353	300	-----	333	735	1,720	1,630	476	310	375
31	361	-----	337	320	-----	322	-----	1,860	-----	432	304	-----
TOTAL	13,206	11,315	11,487	9,932	8,675	9,935	12,458	59,350	65,990	22,884	12,172	10,473
MEAN	426	377	371	320	310	320	415	1,915	2,200	738	393	349
MAX	585	426	432	390	341	353	735	3,830	3,430	1,440	537	395
MIN	322	316	313	275	274	298	319	579	1,480	432	304	301
AC-FT	26,190	22,440	22,780	19,700	17,210	19,710	24,710	117,700	130,900	45,390	24,140	20,770
CAL YR 1972	TOTAL 201,035	MEAN 549	MAX 2,850	MIN 153	AC-FT 398,800							
WTR YR 1973	TOTAL 247,877	MEAN 679	MAX 3,830	MIN 274	AC-FT 491,700							

PEAK DISCHARGE (BASE, 2,100 CFS).--May 21 (0530) 3,910 cfs (5.76 ft); June 15 (1000) 3,650 cfs (5.57 ft).

09304800 WHITE RIVER BELOW MEEKER, COLO.

LOCATION.--Lat 40°00'48", long 108°05'33", in center of sec.31, T.1 N., R.95 W., Rio Blanco County, on left bank 30 ft (9 m) downstream from county bridge, 4.5 mi (7.2 km) downstream from Strawberry Creek, and 10 mi (16 km) west of Meeker.

DRAINAGE AREA.--1,040 mi² (2,690 km²), approximately.

PERIOD OF RECORD.--October 1961 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5,928 ft (1,807 m) from topographic map.

AVERAGE DISCHARGE.--12 years, 625 ft³/s (17.70 m³/s), 452,800 acre-ft/yr (558 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 3,660 ft³/s (104 m³/s) May 21 (gage height, 3.78 ft or 1.152 m); minimum daily, 300 ft³/s (8.50 m³/s) Jan. 28.

Period of record: Maximum discharge, 4,010 ft³/s (114 m³/s) June 15, 1965 (gage height, 4.09 ft or 1.247 m); minimum daily, 141 ft³/s (3.99 m³/s) July 8, 1966.

REMARKS.--Records good except those for winter period, which are fair. Diversion above station for irrigation of about 22,000 acres (89.0 km²) above station and a few small hay meadows below.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	410	448	410	375	340	370	380	718	2,180	1,610	466	355
2	400	472	415	375	330	370	380	648	2,320	1,450	466	430
3	390	472	430	380	320	370	375	599	2,200	1,300	436	425
4	395	466	415	400	330	380	350	662	2,200	1,190	420	405
5	442	502	375	410	320	370	365	781	1,890	1,110	496	395
6	442	538	345	380	330	380	405	886	1,700	999	550	395
7	425	460	375	370	330	360	425	870	1,730	902	520	395
8	472	472	400	390	320	350	345	823	2,040	862	490	395
9	496	490	415	400	320	340	370	902	2,440	830	478	385
10	472	430	370	390	370	330	375	1,220	2,920	767	442	390
11	448	425	355	360	350	340	390	1,530	3,270	732	442	425
12	430	442	380	370	340	350	400	1,790	3,300	690	430	454
13	436	448	448	390	330	365	405	2,020	3,140	725	415	442
14	442	410	436	410	310	350	454	2,160	3,110	753	400	425
15	484	454	335	430	310	326	478	2,170	3,410	669	405	420
16	634	430	370	430	320	326	420	2,290	2,970	718	400	420
17	538	420	390	420	340	350	415	2,470	2,440	697	410	410
18	544	430	420	400	360	380	425	2,710	2,230	662	472	405
19	544	430	450	390	360	400	448	3,070	1,980	781	448	390
20	538	410	470	380	360	425	430	3,390	1,860	934	415	380
21	557	410	460	360	340	490	436	3,490	1,930	838	430	370
22	564	385	450	340	350	415	425	3,450	1,890	795	430	355
23	550	360	440	310	360	380	425	3,090	1,960	711	430	345
24	514	380	430	310	370	380	460	2,930	2,020	676	405	400
25	502	415	420	330	360	360	520	2,880	2,040	676	405	415
26	484	410	425	350	350	390	514	2,820	2,070	641	395	436
27	502	415	430	340	350	415	496	2,340	2,170	599	400	425
28	520	390	460	300	360	405	538	1,960	2,130	592	395	430
29	490	385	460	310	-----	395	620	1,780	1,930	578	375	425
30	496	410	420	340	-----	380	711	1,790	1,760	520	370	425
31	448	-----	400	350	-----	365	-----	1,950	-----	490	355	-----
TOTAL	15,009	13,009	12,799	11,490	9,530	11,607	13,180	60,189	69,230	25,497	13,391	12,167
MEAN	484	434	413	371	340	374	439	1,942	2,308	822	432	406
MAX	634	538	470	430	370	490	711	3,490	3,410	1,610	550	454
MIN	390	360	335	300	310	326	345	599	1,700	490	355	345
AC-FT	29,770	25,800	25,390	22,790	18,900	23,020	26,140	119,400	137,300	50,570	26,560	24,130

CAL YR 1972 TOTAL 217,538 MEAN 594 MAX 3,070 MIN 235 AC-FT 431,500

WTR YR 1973 TOTAL 267,098 MEAN 732 MAX 3,490 MIN 300 AC-FT 529,800

PEAK DISCHARGE (BASE, 2,000 CFS).--May 21 (1400) 3,660 cfs (3.78 ft); June 15 (1700) 3,600 cfs (3.74 ft).

09306200 PICEANCE CREEK BELOW RYAN GULCH, NEAR RIO BLANCO, COLO.

LOCATION.--Lat 39°55'16", long 108°17'49", in sec.32, T.1 S., R.97 W., Rio Blanco County, on left bank at downstream side of bridge, 40 ft (12 m) downstream from Ryan Gulch and 23 mi (37 km) northwest of Rio Blanco.

DRAINAGE AREA.--485 mi² (1,256 km²).

PERIOD OF RECORD.--October 1964 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 6,070 ft (1,850 m) from topographic map.

AVERAGE DISCHARGE.--9 years, 16.6 ft³/s (0.470 m³/s), 12,030 acre-ft/yr (14.8 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 100 ft³/s (2.83 m³/s) May 26 (gage height, 4.21 ft or 1.283 m); minimum daily, 3.7 ft³/s (0.10 m³/s) Oct. 12.

Period of record: Maximum discharge, 400 ft³/s or 11 m³/s (estimated) Mar. 9, 1966 (gage height, 6.23 ft or 1.899 m); minimum daily, 0.21 ft³/s (0.006 m³/s) May 21, 1972.

REVISIONS.--The maximum discharge for the water year 1972 has been revised to 105 ft³/s (2.97 m³/s) Feb. 23, 1972 (gage height, 4.26 ft or 1.298 m), superseding figure published in WRD Colo. 1972.

REMARKS.--Records good except those for winter period, which are fair. Diversions for irrigation above station. Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.0	19	18	9.0	11	27	19	46	61	26	45	51
2	6.0	18	19	9.0	11	27	19	41	73	25	43	52
3	5.5	17	17	10	12	22	15	35	69	26	43	52
4	6.9	18	17	11	14	21	15	33	75	26	44	51
5	7.7	19	19	10	15	21	13	37	76	26	46	50
6	9.4	19	17	10	14	19	11	49	69	23	47	49
7	8.6	18	17	11	15	18	12	60	65	21	45	50
8	9.0	18	19	11	15	18	14	57	65	21	43	49
9	9.0	18	16	11	15	19	14	54	61	21	42	48
10	6.5	17	11	11	15	19	15	63	59	23	42	46
11	5.1	19	11	10	16	20	12	76	58	25	42	46
12	5.7	18	11	11	16	25	11	82	51	26	42	46
13	3.9	18	11	12	15	27	11	89	44	30	41	42
14	4.3	17	10	11	15	21	13	91	44	32	42	36
15	5.5	18	11	11	14	20	20	85	45	31	42	35
16	6.0	16	11	11	14	21	18	86	38	34	42	38
17	5.7	16	12	11	13	28	17	88	36	34	48	39
18	5.7	17	12	10	12	31	19	90	34	34	51	40
19	5.7	18	11	11	12	28	21	83	33	45	58	39
20	5.5	18	12	11	13	31	18	93	33	46	56	37
21	5.5	18	11	9.0	13	35	10	89	33	46	58	35
22	5.7	18	12	9.0	15	26	9.4	83	32	47	61	30
23	5.7	18	12	9.0	21	24	11	82	33	45	64	31
24	5.7	19	11	9.0	24	22	12	79	33	47	58	32
25	5.7	19	11	10	19	22	17	83	33	53	57	34
26	5.5	18	10	11	19	22	21	96	29	60	55	36
27	6.3	19	11	11	20	22	19	95	28	58	53	38
28	7.7	17	11	9.0	22	21	21	84	28	55	53	35
29	9.0	16	11	10	-----	21	22	81	28	54	52	35
30	12	19	10	11	-----	20	32	73	26	54	51	35
31	17	-----	10	12	-----	19	-----	67	-----	47	52	-----
TOTAL	211.3	537	402	322.0	430	717	481.4	2,250	1,392	1,141	1,518	1,237
MEAN	6.82	17.9	13.0	10.4	15.4	23.1	16.0	72.6	46.4	36.8	49.0	41.2
MAX	17	19	19	12	24	35	32	96	76	60	64	52
MIN	3.7	16	10	9.0	11	18	9.4	33	26	21	41	30
AC=FT	419	1,070	797	639	853	1,420	955	4,460	2,760	2,260	3,010	2,450

CAL YR 1972 TOTAL 3,610.74 MEAN 9.87 MAX 68 MIN .21 AC=FT 7,160
 WTR YR 1973 TOTAL 10,638.70 MEAN 29.1 MAX 96 MIN 3.7 AC=FT 21,100

09306222 PICEANCE CREEK AT WHITE RIVER, COLO.

LOCATION.--Lat 40°04'39", long 108°14'09", in SE¼SE¼ sec.2, T.1 N., R.97 W., Rio Blanco County, on left bank 100 ft (30 m) downstream from county highway bridge, 1.0 mi (1.6 km) southwest of White River City, 1.3 mi (2.1 km) upstream from mouth and 17 mi (27 km) west of Meeker. Prior to Nov. 15, 1972, at site 100 ft (30 m) upstream.

DRAINAGE AREA.--629 mi² (1,629 km²).

PERIOD OF RECORD.--October 1964 to September 1966, October 1970 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5,730 ft (1,747 m) from topographic map. Oct. 1, 1964, to Sept. 30, 1966, at site 15 ft (5 m) upstream at datum 1.00 ft (0.305 m) higher. Oct. 1, 1970, to Nov. 14, 1972, at site 100 ft (30 m) upstream at datum 1.00 ft (0.305 m) higher.

AVERAGE DISCHARGE.--5 years, 19.3 ft³/s (0.547 m³/s), 13,980 acre-ft/yr (17.2 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 284 ft³/s (8.04 m³/s) July 20 (gage height, 3.88 ft or 1.183 m); minimum daily, 3.6 ft³/s (0.10 m³/s) Oct. 1.
Period of record: Maximum discharge, 407 ft³/s (11.5 m³/s) Mar. 9, 1966 (gage height, 4.20 ft or 1.280 m, from floodmarks, site and datum then in use); minimum daily, 0.50 ft³/s (0.014 m³/s) July 21, 22 1966.

REMARKS.--Records good except those for winter period, which are poor. Diversions for irrigation of about 5,500 acres (22.3 km²) above station. One small diversion above station for irrigation of hay meadow below station. Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.6	19	19	10	12	29	23	56	57	27	51	52
2	3.9	22	20	10	12	28	23	59	69	26	48	52
3	4.1	21	18	11	11	26	20	43	66	26	49	52
4	4.5	21	18	12	14	26	18	38	81	25	50	50
5	7.5	23	20	11	16	29	18	42	81	24	54	51
6	8.9	24	18	11	14	27	16	52	73	20	57	51
7	9.6	22	18	12	17	26	14	71	65	20	54	52
8	9.3	21	19	12	16	26	16	71	64	21	52	52
9	10	21	17	12	15	25	16	65	58	21	51	49
10	9.3	21	12	12	16	27	17	72	54	19	50	48
11	9.3	22	12	11	18	28	16	97	56	19	50	52
12	7.5	22	12	12	18	29	13	95	50	19	50	52
13	7.5	21	12	13	16	29	13	111	45	24	49	47
14	7.2	20	11	12	16	27	15	115	48	33	49	41
15	7.9	23	12	12	14	24	20	101	55	36	48	38
16	9.3	22	12	12	13	25	23	99	49	40	48	40
17	8.2	21	13	12	15	29	20	92	43	41	52	40
18	8.2	22	13	11	15	31	22	93	43	37	60	42
19	8.6	23	12	12	15	31	26	81	43	67	64	42
20	8.6	22	13	12	15	32	25	86	42	113	65	39
21	7.5	21	12	10	14	34	20	83	41	66	68	38
22	7.5	20	13	10	15	38	13	79	37	60	67	34
23	7.9	18	13	10	17	33	15	74	38	58	68	34
24	7.9	18	12	10	19	29	16	75	40	54	60	38
25	7.9	19	12	11	21	28	21	79	40	71	57	41
26	7.5	23	11	12	22	29	25	93	37	70	55	42
27	8.2	21	12	12	24	29	25	98	35	65	53	43
28	8.6	16	12	10	27	28	24	90	31	60	51	41
29	12	18	12	11	-----	27	28	79	33	59	48	40
30	12	20	11	12	-----	26	36	78	27	62	49	39
31	18	-----	11	13	-----	26	-----	66	-----	56	50	-----
TOTAL	258.0	627	432	353	457	881	597	2,433	1,501	1,339	1,677	1,332
MEAN	8.32	20.9	13.9	11.4	16.3	28.4	19.9	78.5	50.0	43.2	54.1	44.4
MAX	18	24	20	13	27	38	36	115	81	113	68	52
MIN	3.6	16	11	10	11	24	13	38	27	19	48	34
AC-FT	512	1,240	857	700	906	1,750	1,180	4,830	2,980	2,660	3,330	2,640
CAL YR 1972	TOTAL	4,266.84	MEAN	11.7	MAX	100	MIN	.84	AC-FT	8,460		
WTR YR 1973	TOTAL	11,887.00	MEAN	32.6	MAX	115	MIN	3.6	AC-FT	23,580		

09306255 YELLOW CREEK NEAR WHITE RIVER, COLO.

LOCATION.--Lat 40°10'07", long 108°24'02", in NE¼SW¼ sec.4, T.2 N., R.98 W., Rio Blanco County, on left bank 160 ft (49 m) downstream from bridge on State Highway 64, 0.3 mi (0.5 km) upstream from mouth, and 10 mi (16 km) northwest of White River City.

DRAINAGE AREA.--262 mi² (679 km²).

PERIOD OF RECORD.--October 1972 to September 1973.

GAGE.--Water-stage recorder. Altitude of gage is 5,535 ft (1,687 m) from topographic map.

EXTREMES.--Current year: Maximum discharge, 468 ft³/s (13.3 m³/s) Aug. 21 (gage height, 7.66 ft or 2.335 m, from floodmarks), from rating curve extended above 1.9 ft³/s (0.05 m³/s) on basis of step-backwater method; minimum daily, 0.02 ft³/s (0.001 m³/s) Feb. 8.

Flood of July 25, 1965, reached a discharge of 1,050 ft³/s (29.7 m³/s), by slope-area measurement of peak flow.

REMARKS.--Records good except those for winter period and periods of no gage-height record, which are poor. Diversions for irrigation of about 300 acres (1.21 km²) above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.70	.80	1.0	.06	.20	2.1	2.6	1.7	2.0	.40	.68	1.4
2	.70	1.2	1.2	.06	.20	1.8	2.6	1.5	2.1	.40	.68	1.4
3	.60	1.1	1.3	.06	.10	1.8	2.4	1.4	2.1	.35	.54	1.2
4	.60	1.1	1.4	.08	.13	1.5	2.4	1.4	2.0	.35	.54	1.0
5	.60	1.3	1.7	.08	.16	1.5	2.3	1.5	1.7	.40	.68	1.0
6	.80	1.4	1.4	.08	.16	1.4	2.3	2.1	1.5	.82	.68	1.2
7	.80	1.3	1.0	.08	.13	1.1	2.1	1.8	1.4	.68	.54	.82
8	.70	1.2	1.2	.08	.02	1.4	1.5	1.7	1.1	.82	.54	.68
9	.80	1.1	1.4	.08	.03	1.5	1.5	1.7	.96	.68	.35	.40
10	1.0	1.0	1.0	.08	.20	1.4	1.8	1.5	.96	.54	.35	.82
11	.80	1.2	.40	.08	.54	1.5	2.0	1.4	.82	.54	.35	2.1
12	.70	1.2	.20	.08	1.4	2.7	2.0	1.4	.82	.54	.35	1.5
13	.50	1.3	.20	.08	1.7	3.7	1.8	1.4	1.1	.96	.30	1.1
14	.40	1.0	.10	.06	2.3	2.3	1.8	1.4	1.7	.82	.30	.96
15	.60	1.2	.10	.06	3.3	2.1	1.8	1.4	2.1	.82	.30	.82
16	.80	1.1	.10	.06	3.7	2.1	1.5	1.4	1.5	.96	.35	.82
17	.90	1.4	.20	.06	4.0	4.0	1.4	1.2	1.4	.82	.35	.82
18	.60	1.5	.30	.06	4.2	5.1	1.5	1.2	1.5	.96	.40	.82
19	.50	1.5	.40	.06	6.1	5.3	1.7	1.4	1.5	1.1	.60	.82
20	.60	1.5	.20	.06	4.4	5.7	1.5	1.4	1.4	1.2	15	.82
21	.50	1.4	.40	.08	3.7	6.1	1.5	1.5	1.2	1.1	90	.96
22	.40	1.1	.30	.08	4.7	4.2	1.4	1.7	1.1	1.1	10	.96
23	.60	.68	.40	.13	5.1	3.3	1.4	1.5	1.1	1.1	.60	1.2
24	.60	1.7	.30	.10	5.1	3.0	1.4	1.5	1.1	.96	.35	1.4
25	.50	1.5	.20	.10	6.7	2.9	1.7	1.8	1.1	.96	.35	1.6
26	.40	2.1	.05	.13	5.5	3.0	1.4	2.3	.96	.82	.40	1.7
27	.60	2.0	.05	.13	4.7	3.0	1.4	2.0	.82	.82	1.2	1.8
28	.80	1.7	.05	.16	2.9	2.7	1.4	1.8	.82	.82	1.7	1.4
29	1.0	1.4	.06	.16	-----	2.6	1.5	1.7	.82	.82	1.8	1.2
30	.80	.90	.06	.16	-----	2.6	2.1	1.7	.54	.96	1.7	1.2
31	.70	-----	.06	.20	-----	2.6	-----	1.7	-----	.82	1.4	-----
TOTAL	20.60	38.88	16.73	2.83	71.43	86.0	53.7	49.1	39.08	24.44	133.38	33.92
MEAN	.66	1.30	.54	.091	2.55	2.77	1.79	1.58	1.30	.79	4.30	1.13
MAX	1.0	2.1	1.7	.20	6.7	6.1	2.6	2.3	2.1	1.2	.90	2.1
MIN	.40	.68	.05	.06	.02	1.1	1.4	1.2	.54	.35	.30	.40
AC-FT	41	77	33	5.6	142	171	107	97	78	48	265	67

WTR YR 1973 TOTAL 570.09 MEAN 1.56 MAX 90 MIN .02 AC-FT 1,130

PEAK DISCHARGE (BASE, 100 CFS).--Aug. 21 (time unknown) 468 cfs (7.66 ft).

NOTE.--No gage-height record Oct. 1 to Nov. 16, Aug. 18-23.

GREEN RIVER BASIN

343

09306300 WHITE RIVER ABOVE RANGELY, COLO.

LOCATION.--Lat 40°06'26", long 108°42'44", in SW¼SE¼ sec.27, T.2 N., R.101 W., Rio Blanco County, on left bank 80 ft (24 m) upstream from Taylor Draw and 4.7 mi (7.6 km) east of Rangely.

DRAINAGE AREA.--2,790 mi² (7,230 km²), approximately.

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

GAGE.--Water-stage recorder. Altitude of gage is 5,270 ft (1,606 m) from topographic map.

EXTREMES.--Current year: Maximum discharge, 3,780 ft³/s (107 m³/s) May 22 (gage height, 6.58 ft or 2.006 m); minimum daily, 330 ft³/s (9.35 m³/s) Feb. 15.

Period of record: Maximum discharge, 3,780 ft³/s (107 m³/s) May 22, 1973 (gage height, 6.58 ft or 2.006 m); minimum daily, 250 ft³/s (7.08 m³/s) July 21, 22, 1972.

REMARKS.--Records good except those for period of no gage-height record, which are fair. Diversions above station for irrigation of about 31,900 acres (129 km²). Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	421	450	426	410	350	410	510	828	2,060	1,620	497	374
2	421	470	441	410	350	420	480	777	2,330	1,480	485	385
3	412	470	469	420	360	420	450	697	2,350	1,320	480	430
4	408	490	474	430	380	420	420	675	2,270	1,180	463	426
5	430	500	450	450	380	420	400	762	2,010	1,080	463	408
6	458	540	400	430	370	420	390	900	1,760	977	527	399
7	447	460	358	410	370	410	395	1,040	1,660	849	558	390
8	447	470	426	430	380	410	460	985	1,830	806	527	390
9	474	490	474	460	390	390	410	960	2,240	777	509	390
10	497	440	460	480	390	395	380	1,130	2,680	748	485	385
11	480	430	410	400	380	400	420	1,470	3,110	661	469	399
12	463	440	440	410	370	410	460	1,790	3,310	639	469	452
13	458	469	480	450	360	430	490	1,990	3,200	690	469	447
14	469	469	490	490	340	430	503	2,120	3,040	770	441	436
15	469	447	410	500	330	430	515	2,210	3,340	704	430	421
16	558	463	420	490	340	430	533	2,360	3,310	617	436	417
17	610	452	460	490	350	440	480	2,530	2,580	704	441	412
18	552	441	490	480	370	460	474	2,750	2,220	646	469	412
19	552	441	520	450	370	490	485	2,980	2,040	683	491	408
20	552	441	510	430	370	520	503	3,330	1,840	1,100	474	403
21	539	430	490	410	370	560	491	3,510	1,830	900	545	399
22	552	426	520	390	370	620	491	3,740	1,830	835	610	385
23	558	408	500	370	380	660	474	3,390	1,860	755	458	374
24	539	399	460	340	390	620	469	3,090	1,910	675	447	374
25	509	412	450	360	390	580	527	3,010	1,930	668	417	399
26	497	447	460	380	380	550	558	3,070	1,920	661	408	436
27	485	452	450	390	390	560	545	2,760	2,010	632	403	436
28	521	474	470	340	410	710	533	2,220	2,040	591	408	430
29	515	441	480	350	-----	710	591	1,940	1,970	584	394	436
30	500	382	470	370	-----	630	704	1,850	1,770	552	377	436
31	480	-----	440	360	-----	570	-----	1,910	-----	521	377	-----
TOTAL	15,273	13,564	14,198	12,980	10,380	15,325	14,541	62,774	68,250	25,425	14,427	12,289
MEAN	493	452	458	419	371	494	485	2,025	2,275	820	465	410
MAX	610	540	520	500	410	710	704	3,740	3,340	1,620	610	452
MIN	408	382	358	340	330	390	380	675	1,660	521	377	374
AC-FT	30,290	26,900	28,160	25,750	20,590	30,400	28,840	124,500	135,400	50,430	28,620	24,380

WTR YR 1973 TOTAL 279,426 MEAN 766 MAX 3,740 MIN 330 AC-FT 554,200

PEAK DISCHARGE (BASE, 2,800 CFS).--May 22 (1800) 3,780 cfs (6.58 ft); June 16 (0500) 3,560 cfs (6.48 ft).

NOTE.--No gage-height record Dec. 10 to Apr. 13.

09306500 WHITE RIVER NEAR WATSON, UTAH

LOCATION.--Lat 39°58'46", long 109°10'41", in SE¼SW¼NE¼ sec.2, T.10 S., R.24 E., Uintah County, on right bank 350 ft (110 m) downstream from bridge on State Highway 45, 1 mi (2 km) downstream from Evacuation Creek, and 7 mi (11 km) north of Watson.

DRAINAGE AREA.--4,020 mi² (10,410 km²), approximately.

PERIOD OF RECORD.--April 1904 to October 1906 (no winter records), May to November 1918, April 1923 to current year. Monthly discharge only for some periods, published in WSP 1313. Published as "near Dragon" 1906 and as "near Rangely, Colo." 1904-05, 1918.

GAGE.--Water-stage recorder. Datum of gage is 4,946.78 ft (1,507.779 m) above mean sea level. See WSP 1733 for history of changes prior to Oct. 27, 1959.

AVERAGE DISCHARGE.--50 years (1923-73), 702 ft³/s (19.88 m³/s), 508,600 acre-ft/yr (627 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 4,200 ft³/s (119 m³/s) May 22 (gage height, 6.64 ft or 2.024 m); minimum discharge, 11 ft³/s (0.31 m³/s) Dec. 6, result of freezeup.

Period of record: Maximum daily discharge, 8,160 ft³/s (231 m³/s) July 15, 1929; maximum gage height, 13.1 ft (3.99 m) Feb. 11, 1962, from floodmark in well (backwater from ice); minimum discharge, 11 ft³/s (0.31 m³/s) Dec. 6, 1972, result of freezeup; minimum daily, 45 ft³/s (1.27 m³/s) Dec. 6, 1972, result of freezeup.

REMARKS.--Records good except those for winter periods, which are poor. Diversions for irrigation of about 31,900 acres (129 km²) above station. Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	365	440	243	430	560	420	537	814	1,890	1,640	511	362
2	568	468	384	420	370	430	489	866	2,220	1,510	484	402
3	359	490	440	430	580	430	476	789	2,410	1,390	463	446
4	546	497	468	450	400	430	453	707	2,280	1,260	454	473
5	547	497	344	460	400	430	397	882	2,210	1,180	461	453
6	307	518	45	450	340	420	401	897	1,850	1,070	633	420
7	428	585	129	430	380	410	470	1,040	1,620	962	591	413
8	411	525	74	450	480	410	496	1,030	1,600	874	566	411
9	437	482	227	460	410	410	405	973	1,920	852	494	408
10	471	497	377	460	400	410	371	1,030	2,460	828	461	404
11	461	462	497	450	380	420	398	1,260	3,040	766	437	457
12	437	447	447	430	360	430	431	1,650	3,430	706	418	523
13	459	447	306	470	360	440	448	1,920	4,560	1,010	424	512
14	530	454	450	500	350	450	446	2,160	3,380	1,070	384	492
15	444	433	450	520	350	450	487	2,260	3,430	830	356	463
16	466	426	460	520	360	440	503	2,400	3,760	698	361	440
17	615	433	500	510	370	460	486	2,570	3,190	734	352	439
18	630	419	520	500	380	520	449	2,680	2,430	755	385	437
19	542	419	530	480	380	550	461	3,020	2,160	931	457	431
20	562	426	540	450	380	600	490	3,380	1,870	1,150	466	419
21	547	412	550	420	380	660	475	3,650	1,710	1,160	460	402
22	555	398	550	400	380	700	454	3,960	1,760	944	791	395
23	578	371	520	360	390	799	440	3,930	1,730	853	503	371
24	562	281	500	370	400	693	433	3,380	1,800	733	473	358
25	518	344	470	390	400	603	461	3,200	1,860	667	432	395
26	497	377	470	400	400	574	540	3,260	1,840	676	402	462
27	475	419	475	410	410	726	548	3,140	1,860	651	391	492
28	482	384	480	390	420	782	525	2,490	2,010	625	406	462
29	548	398	480	360	-----	778	555	2,050	1,960	607	396	470
30	525	233	480	360	-----	654	660	1,790	1,800	598	375	471
31	475	-----	460	360	-----	620	-----	1,770	-----	548	372	-----
TOTAL	14,917	13,002	12,816	13,490	10,740	16,549	14,185	64,848	69,040	28,278	14,159	13,083
MEAN	481	433	413	435	384	534	473	2,092	2,301	912	457	436
MAX	630	585	550	520	420	799	660	3,960	3,760	1,640	791	523
MIN	346	233	45	360	350	410	371	707	1,600	548	352	358
AC-FT	29,590	25,790	25,420	26,760	21,300	32,820	28,140	128,600	136,900	56,090	28,080	25,950

CAL YR 1972 TOTAL 213,210 MEAN 583 MAX 3,310 MIN 45 AC-FT 422,900

WTR YR 1973 TOTAL 285,107 MEAN 781 MAX 3,960 MIN 45 AC-FT 565,500

PEAK DISCHARGE (BASE, 2,900 CFS).--May 22 (1900) 4,200 cfs (6.64 ft); June 16 (1900) 3,860 cfs (6.26 ft).

09339900 EAST FORK SAN JUAN RIVER ABOVE SAND CREEK, NEAR PAGOSA SPRINGS, COLO.

LOCATION.--Lat 37°23'25", long 106°50'25", Archuleta County, on right bank 0.3 mi (0.5 km) upstream from Sand Creek, 4.0 mi (6.4 km) upstream from West Fork San Juan River, and 13 mi (21 km) northeast of Pagosa Springs.

DRAINAGE AREA.--64.1 mi² (166.0 km²).

PERIOD OF RECORD.--October 1956 to current year. Prior to October 1959, published as San Juan River above Sand Creek, near Pagosa Springs.

GAGE.--Water-stage recorder. Altitude of gage is 8,900 ft (2,713 m) from topographic map.

AVERAGE DISCHARGE.--17 years, 85.4 ft³/s (2.419 m³/s), 61,870 acre-ft/yr (76.3 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,180 ft³/s (33.4 m³/s) June 11 (gage height, 6.02 ft or 1.835 m); minimum daily, 13 ft³/s (0.37 m³/s) Oct. 2, 3.
 Period of record: Maximum discharge, 2,260 ft³/s (64.0 m³/s) Sept. 14, 1970 (gage height, 6.75 ft or 2.057 m), from rating curve extended above 460 ft³/s (13 m³/s) on basis of slope-area measurement at gage height 6.13 ft or 1.868 m; minimum daily determined, 3.4 ft³/s (0.096 m³/s) Dec. 26, 1958.
 Greatest flood since at least 1885 occurred Oct. 5, 1911.

REMARKS.--Records good except those for winter period, which are poor. Diversions above station for irrigation of about 500 acres (2.02 km²) of hay meadows above station.

REVISIONS (WATER YEARS).--WSP 1713: 1957.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	60	30	22	22	22	25	153	590	500	67	62
2	13	56	29	22	22	23	25	124	495	515	68	50
3	13	56	29	24	22	23	25	126	425	450	70	44
4	14	56	27	24	22	23	24	153	465	420	64	39
5	141	56	23	24	20	23	24	172	420	380	64	36
6	55	54	26	22	20	22	28	155	400	365	68	36
7	123	52	26	22	20	22	28	131	460	335	68	38
8	120	51	28	22	19	21	26	153	566	306	62	33
9	80	50	26	22	19	21	26	238	828	350	56	32
10	63	46	24	22	19	21	28	400	834	325	53	46
11	54	47	24	19	20	23	30	495	870	298	50	71
12	51	47	26	19	20	22	35	495	850	266	49	44
13	82	43	24	20	20	23	40	490	619	238	46	38
14	58	41	24	22	19	22	45	584	614	238	46	33
15	75	42	22	22	15	21	46	550	505	226	46	28
16	111	40	24	22	16	22	44	555	470	190	42	22
17	110	41	24	22	17	23	49	560	445	169	40	24
18	110	41	24	22	18	23	56	664	455	181	34	23
19	274	39	24	22	19	24	51	832	445	210	41	23
20	335	39	24	22	18	26	46	872	435	178	44	23
21	184	36	24	20	20	28	46	776	395	158	53	22
22	131	30	24	19	20	28	49	584	350	133	46	22
23	111	31	24	20	20	27	62	480	330	117	40	21
24	95	33	24	22	20	26	72	485	330	108	41	21
25	83	29	22	22	20	25	83	535	350	103	42	22
26	75	30	22	22	20	26	103	747	380	100	42	23
27	74	30	22	22	20	26	140	545	470	92	36	22
28	70	28	24	22	20	26	206	445	552	85	35	21
29	65	29	24	22	-----	26	246	420	500	79	39	21
30	64	29	24	22	-----	25	226	475	490	75	73	20
31	64	-----	22	22	-----	24	-----	550	-----	71	80	-----
TOTAL	2,912	1,262	764	673	547	737	1,934	13,944	15,338	7,241	1,610	960
MEAN	93.9	42.1	24.6	21.7	19.5	23.8	64.5	450	511	234	51.9	32.0
MAX	335	60	30	24	22	28	246	872	870	515	80	71
MIN	13	28	22	19	15	21	24	124	330	71	35	20
AC-FT	5,780	2,500	1,520	1,330	1,080	1,460	5,840	27,660	30,420	14,360	3,190	1,900

CAL YR 1972 TOTAL 22,084 MEAN 60.3 MAX 335 MIN 11 AC-FT 43,800
 WTR YR 1973 TOTAL 47,922 MEAN 131 MAX 872 MIN 13 AC-FT 95,050

PEAK DISCHARGE (BASE, 500 CFS).--May 20 (0100) 989 cfs (5.42 ft); June 11 (2200) 1,180 cfs (6.02 ft).

NOTE.--No gage-height record Jan. 23 to Feb. 28.

09340000 EAST FORK SAN JUAN RIVER NEAR PAGOSA SPRINGS, COLO.

LOCATION.--Lat 37°22'10", long 106°53'30", Archuleta County, on right bank 0.2 mi (0.3 km) upstream from private highway bridge, 0.5 mi (0.8 km) upstream from West Fork, and 9.5 mi (15.3 km) northeast of Pagosa Springs.

DRAINAGE AREA.--86.9 mi² (225.1 km²).

PERIOD OF RECORD.--May 1935 to current year. Prior to October 1959, published as San Juan River near Pagosa Springs.

GAGE.--Water-stage recorder. Datum of gage is 7,597.63 ft (2,315.758 m) above mean sea level. Prior to Sept. 8, 1938, at site 0.2 mi (0.3 km) downstream at different datum.

AVERAGE DISCHARGE.--38 years, 119 ft³/s (3.370 m³/s), 86,220 acre-ft/yr (106 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,340 ft³/s (37.9 m³/s) June 11 (gage height, 4.42 ft or 1.347 m); minimum daily, 18 ft³/s (0.51 m³/s) Oct. 1-3.
Period of record: Maximum discharge, 2,460 ft³/s (69.7 m³/s) Sept. 14, 1970 (gage height, 4.85 ft or 1.478 m); maximum gage height, 5.08 ft (1.548 m) Sept. 6, 1970; minimum daily discharge, 5.5 ft³/s (0.16 m³/s) Dec. 20, 1939.
Greatest flood since at least 1885 occurred Oct. 5, 1911.

REMARKS.--Records good except those for winter period, which are poor. Diversions above station for irrigation of about 500 acres (2.02 km²) of hay meadows above station and a few small hay meadows below station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	85	34	28	28	37	39	269	790	720	95	89
2	18	80	34	30	26	40	39	212	696	702	97	67
3	18	78	34	30	28	40	38	209	576	636	97	57
4	26	78	32	30	28	38	37	258	666	588	87	51
5	249	78	30	30	26	38	38	293	600	515	91	47
6	67	74	32	28	26	36	42	269	588	470	93	44
7	209	69	34	30	28	35	48	234	678	440	91	48
8	188	67	36	26	26	34	44	265	811	409	80	39
9	119	66	34	30	26	34	42	400	1,010	422	71	37
10	89	61	30	28	24	35	44	588	1,190	413	66	64
11	74	61	30	24	24	35	48	783	1,200	373	64	108
12	67	61	34	26	26	35	60	783	1,190	341	61	60
13	115	57	32	26	24	36	71	734	1,060	289	60	51
14	83	52	30	28	22	34	87	776	1,070	305	58	43
15	105	54	30	30	20	33	93	797	818	281	57	38
16	155	51	30	30	22	34	81	811	696	262	51	33
17	153	52	32	30	22	37	93	811	666	234	48	33
18	153	51	32	28	24	39	111	916	672	265	47	32
19	532	48	32	28	24	40	97	1,070	654	293	51	32
20	656	49	34	28	22	47	83	1,110	612	244	55	31
21	346	51	32	28	24	54	80	979	612	215	72	31
22	230	44	30	26	24	49	85	790	612	185	60	29
23	188	38	30	26	25	46	111	678	630	163	51	29
24	155	38	30	28	25	43	139	678	624	153	52	29
25	135	38	30	28	26	40	158	654	696	145	54	30
26	123	36	30	28	28	42	188	1,040	755	137	55	33
27	115	40	32	28	30	44	248	797	902	131	44	32
28	111	32	32	28	34	44	328	612	916	121	40	30
29	99	36	32	28	-----	43	382	612	853	115	51	29
30	93	32	30	28	-----	40	373	678	811	109	111	28
31	93	-----	28	28	-----	38	-----	776	-----	101	117	-----
TOTAL	4,782	1,657	982	872	712	1,220	3,327	19,882	23,654	9,777	2,127	1,304
MEAN	154	55.2	31.7	28.1	25.4	39.4	111	641	788	315	68.6	43.5
MAX	656	85	36	30	34	54	382	1,110	1,200	720	117	108
MIN	18	32	28	24	20	33	37	209	576	101	40	28
AC-FT	9,490	3,290	1,950	1,730	1,410	2,420	6,600	39,440	46,920	19,390	4,220	2,590
CAL YR 1972	TOTAL 30,510	MEAN 83.4	MAX 656	MIN 14	AC-FT 60,520							
WTR YR 1973	TOTAL 70,296	MEAN 193	MAX 1,200	MIN 18	AC-FT 139,400							

PEAK DISCHARGE (BASE, 600 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
10-5	0530	3.44	624	6-11	2230	4.42	1,340
10-19	1900	3.69	909				

09341200 WOLF CREEK NEAR PAGOSA SPRINGS, COLO.

LOCATION.--Lat 37°26'47", long 106°53'00", Mineral County, on right bank 0.3 mi (0.5 km) upstream from Fall Creek and 14 mi (23 km) northeast of Pagosa Springs.

DRAINAGE AREA.--14.0 mi² (36.3 km²).

PERIOD OF RECORD.--October 1968 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 7,900 ft (2,408 m) from topographic map.

AVERAGE DISCHARGE.--5 years, 31.0 ft³/s (0.878 m³/yr), 22,460 acre-ft/yr (27.7 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 537 ft³/s (15.2 m³/s) June 11 (gage height, 2.58 ft or 0.786 m); minimum daily, 3.4 ft³/s (0.096 m³/s) Oct. 1, 2.
Period of record: Maximum discharge, 585 ft³/s (16.6 m³/s) Sept. 6, 1970 (gage height, 2.80 ft or 0.853 m), from rating curve extended above 170 ft³/s (4.8 m³/s) on basis of slope-area measurement of peak flow; minimum daily, 2.6 ft³/s (0.074 m³/s) Jan. 24, 1969.

REMARKS.--Records good. No regulation. Small transmountain diversion above station by Treasure Pass diversion ditch to South Fork Rio Grande drainage and small diversion by U.S. Forest Service for fish pond just below station. Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.4	26	9.4	6.2	5.3	8.0	4.7	21	198	250	24	14
2	3.4	24	9.4	6.0	5.0	8.3	4.7	19	158	245	21	13
3	3.5	21	9.4	5.8	5.3	7.8	4.6	19	125	198	20	11
4	7.8	20	7.6	5.7	5.0	7.1	4.4	23	120	188	21	11
5	42	20	7.3	5.8	5.0	6.7	5.2	26	113	177	19	9.7
6	15	18	11	5.7	5.3	6.2	5.7	23	125	167	22	8.7
7	72	17	9.4	5.5	5.3	6.0	5.8	20	161	152	23	8.0
8	86	17	8.7	5.3	5.3	5.8	5.0	23	191	146	21	7.8
9	51	16	8.3	5.3	5.2	5.5	5.0	37	225	135	18	7.3
10	33	15	8.0	5.3	5.0	5.7	5.3	54	233	118	17	11
11	27	14	7.8	5.0	5.0	5.5	5.7	74	313	100	16	15
12	23	13	7.3	5.3	4.7	5.2	6.9	78	369	93	15	11
13	32	13	7.1	5.7	5.3	5.0	9.4	84	343	80	14	9.4
14	26	14	6.9	6.4	5.0	5.0	11	90	383	88	14	8.5
15	76	13	6.7	6.7	5.0	5.0	11	88	349	84	14	7.8
16	110	13	6.7	6.7	5.0	5.0	9.2	95	295	74	13	7.3
17	86	13	6.9	6.7	5.2	6.2	10	100	313	62	12	6.9
18	80	12	6.9	6.4	5.5	6.0	12	140	325	82	12	6.7
19	189	12	6.9	6.0	5.5	6.0	10	164	290	76	12	6.4
20	171	11	6.9	5.8	5.5	7.3	8.9	181	270	64	12	6.2
21	70	11	7.3	5.7	5.5	7.8	8.7	184	275	56	14	5.7
22	53	11	7.3	5.5	5.3	6.6	10	140	275	48	14	5.5
23	46	11	7.3	5.5	5.3	6.0	13	130	285	43	12	5.7
24	40	11	7.1	5.5	5.7	5.7	15	140	285	39	11	5.7
25	40	10	6.9	5.7	6.0	5.3	15	146	313	33	12	5.7
26	40	10	6.7	5.7	6.6	5.8	17	167	313	32	12	6.6
27	36	10	7.1	5.7	7.3	6.0	23	128	390	31	10	5.8
28	32	9.7	7.1	5.5	8.0	5.7	28	123	362	28	9.4	5.2
29	28	9.4	6.9	5.5	-----	5.3	30	135	280	27	11	4.6
30	26	9.4	6.9	5.3	-----	5.2	28	152	265	27	20	4.3
31	27	-----	6.5	5.3	-----	4.9	-----	167	-----	26	18	-----
TOTAL	1,575.1	424.5	235.7	178.2	153.1	187.6	332.2	2,971	7,942	2,969	483.4	241.5
MEAN	50.8	14.2	7.60	5.75	5.47	6.05	11.1	95.8	265	95.8	15.6	8.05
MAX	189	26	11	6.7	8.0	8.3	30	184	390	250	24	15
MIN	3.4	9.4	6.5	5.0	4.7	4.9	4.4	19	113	26	9.4	4.3
AC-FT	3,120	842	468	353	304	372	659	5,890	15,750	5,890	959	479

CAL YR 1972 TOTAL 8,820.0 MEAN 24.1 MAX 189 MIN 3.3 AC-FT 17,490

WTR YR 1973 TOTAL 17,693.3 MEAN 48.5 MAX 390 MIN 3.4 AC-FT 35,090

PEAK DISCHARGE (BASE, 180 CFS).--Oct. 20 (1100) 265 cfs (2.25 ft); June 11 (2100) 537 cfs (2.58 ft).

SAN JUAN RIVER BASIN

09342500 SAN JUAN RIVER AT PAGOSA SPRINGS, COLO.

LOCATION.--Lat 37°15'58", long 107°00'37", in NE¼SW¼ sec.13, T.35 N., R.2 W., Archuleta County, on right bank at former bridge site in Pagosa Springs, 0.2 mi (0.3 km) upstream from McCabe Creek, 0.6 mi (1.0 km) downstream from bridge on U.S. Highway 160, and 2.0 mi (3.2 km) upstream from Mill Creek.

DRAINAGE AREA.--298 mi² (772 km²).

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. Datum of gage is 7,052.04 ft (2,149.462 m) above mean sea level. Jan. 29 to Mar. 6, 1911, nonrecording gage at site 0.5 mi (0.8 km) 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 (91 m) downstream at different datum.

AVERAGE DISCHARGE.--42 years, 369 ft³/s (10.45 m³/s), 267,300 acre-ft/yr (330 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 4,310 m³/s (122 m³/s) June 12 (gage height, 7.38 ft or 2.249 m); minimum daily, 33 ft³/s (0.93 m³/s) Oct. 2, 3.
Period of record: Maximum discharge, about 25,000 ft³/s (708 m³/s) Oct. 5, 1911 (gage height, 17.8 ft or 5.43 m, from floodmarks), from velocity-area study; minimum daily, 9.7 ft³/s (0.27 m³/s) Oct. 5, 6, 1956. Maximum stage known since at least 1885, that of Oct. 5, 1911. Floods of June 29, 1927, reached a stage of 13.5 ft or 4.11 m (discharge, about 16,000 ft³/s or 453 m³/s), from information by local residents.

REMARKS.--Records good except those for winter period, which are fair. Diversions for irrigation of large areas above station.

REVISIONS (WATER YEARS).--WSP 1313: 1914(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36	308	124	100	106	161	159	992	2,610	2,430	227	210
2	33	280	122	110	104	178	159	818	2,350	2,270	215	161
3	33	277	122	110	104	178	146	812	2,090	2,070	233	139
4	35	273	119	106	108	170	139	980	2,210	1,900	208	129
5	640	270	104	110	100	159	159	1,060	1,880	1,700	205	119
6	205	256	114	100	95	145	205	986	1,840	1,530	210	113
7	548	236	120	110	100	140	239	824	2,160	1,410	213	113
8	723	233	130	100	100	139	193	920	2,650	1,280	190	104
9	390	224	120	110	95	136	186	1,280	3,360	1,310	166	98
10	287	208	110	108	95	127	218	1,850	3,850	1,260	151	122
11	233	208	110	90	95	136	294	2,440	3,860	1,110	140	243
12	210	205	120	90	100	136	370	2,450	3,690	992	137	143
13	343	190	110	99	95	143	442	2,380	3,350	890	134	122
14	280	182	110	104	90	136	550	2,590	3,670	878	130	111
15	485	184	100	113	75	127	510	2,300	2,670	830	129	100
16	806	174	110	111	76	134	418	2,370	2,080	752	119	95
17	722	176	110	110	86	149	505	2,350	1,960	692	111	93
18	650	174	110	109	90	157	580	2,710	2,030	830	109	90
19	2,200	165	110	106	95	165	422	3,390	2,090	908	115	86
20	2,600	165	120	109	85	203	340	3,540	2,020	758	106	83
21	1,350	156	110	105	100	245	333	3,230	2,080	656	130	80
22	878	137	110	96	100	195	390	2,630	2,100	570	130	78
23	698	131	110	99	98	172	550	2,180	2,160	500	120	76
24	575	140	110	104	102	163	680	2,190	2,210	438	114	77
25	495	133	110	105	106	157	758	2,330	2,410	402	140	76
26	434	129	110	106	110	178	848	3,110	2,630	382	140	82
27	402	143	110	108	122	193	1,020	2,350	3,070	366	120	80
28	394	111	120	104	142	174	1,230	1,860	3,030	336	109	77
29	354	122	120	104	-----	166	1,360	1,860	2,760	322	122	71
30	347	115	110	105	-----	159	1,320	2,140	2,630	308	225	69
31	333	-----	110	109	-----	152	-----	2,440	-----	287	337	-----
TOTAL	17,719	5,705	5,525	3,250	2,774	4,973	14,723	63,362	77,500	30,367	4,935	3,240
MEAN	572	190	114	105	99.1	160	491	2,044	2,583	980	159	108
MAX	2,600	308	130	113	142	245	1,360	3,540	3,860	2,430	337	243
MIN	33	111	100	90	75	127	139	812	1,840	287	106	69
AC-FT	35,150	11,320	6,990	6,450	5,500	9,860	29,200	125,700	153,700	60,230	9,790	6,430

CAL YR 1972 TOTAL 94,619 MEAN 259 MAX 2,600 MIN 19 AC-FT 187,700
WTR YR 1973 TOTAL 232,073 MEAN 636 MAX 3,860 MIN 33 AC-FT 460,300

PEAK DISCHARGE (BASE, 1,500 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
10-5	0700	5.20	1,610	6-12	0030	7.38	4,310
10-19	2100	7.00	3,470				

09344000 NAVAJO RIVER AT BANDED PEAK RANCH, NEAR CHROMO, COLO.

LOCATION.--Lat 37°05'07", long 106°41'20", in NW¼ sec.24, T.33 N., R.2 E., Archuleta County, on left bank at downstream side of private bridge on Banded Peak Ranch, 0.5 mi (0.8 km) downstream from Aspen Creek, 4.0 mi (6.4 km) downstream from East Fork, and 9 mi (14 km) northeast of Chromo.

DRAINAGE AREA.--69.8 mi² (181 km²).

PERIOD OF RECORD.--October 1936 to current year. Monthly discharge only for some periods, published in WSP 1313.

GAGE.--Water-stage recorder. Datum of gage is 7,940.6 ft (2,420.29 m) above mean sea level (river-profile survey). Prior to Oct. 1, 1949, at datum 3.00 ft (0.914 m) higher.

AVERAGE DISCHARGE.--37 years, 104 ft³/s (2.945 m³/s), 75,350 acre-ft/yr (92.9 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,250 ft³/s (35.4 m³/s) June 11 (gage height, 4.70 ft or 1.433 m); maximum gage height, 4.83 ft (1.472 m) Oct. 19; minimum daily discharge, 26 ft³/s (0.74 m³/s) Oct. 3.
Period of record: Maximum discharge, 1,350 ft³/s (38.2 m³/s) Sept. 14, 1970 (gage height, 4.50 ft or 1.372 m), from rating curve extended above 840 ft³/s (24 m³/s) on basis of float-area measurement at gage height 4.44 ft (1.353 m); maximum gage height, 7.02 ft or 2.140 m (present datum) May 13, 1941; minimum daily discharge, 8.4 ft³/s (0.24 m³/s) Sept. 29, 1960, result of temporary blockage by channel alteration upstream.
A major flood occurred on Oct. 5, 1911.

REMARKS.--Records good except those for winter period, which are fair. Diversions for irrigation of about 430 acres (1.74 km²) above station.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	96	44	34	37	39	38	157	688	850	112	92
2	28	89	46	36	37	40	39	139	630	821	116	75
3	26	89	48	38	36	39	35	163	576	793	124	68
4	41	88	45	39	37	39	34	250	643	751	109	64
5	217	86	46	40	38	38	35	246	552	695	114	60
6	96	83	42	42	38	38	38	230	588	643	111	56
7	221	80	45	42	38	38	39	202	702	570	107	56
8	217	81	45	42	37	37	33	282	821	528	100	52
9	123	80	48	42	36	36	30	410	895	546	92	48
10	96	76	45	43	36	32	35	538	958	552	88	86
11	84	76	44	42	36	37	39	554	1,040	466	82	118
12	83	75	43	43	36	37	43	538	1,020	410	79	75
13	159	72	43	45	35	38	53	505	934	374	79	65
14	105	69	45	44	38	36	64	483	958	356	75	60
15	134	68	45	44	35	33	70	478	765	344	72	56
16	163	66	45	43	33	34	64	560	688	304	68	54
17	187	66	48	40	37	37	75	614	676	266	63	52
18	198	64	49	38	37	38	84	706	682	300	59	51
19	472	62	45	37	39	39	70	830	662	304	60	50
20	590	63	44	36	36	42	66	800	630	245	65	47
21	410	60	45	35	39	44	62	770	643	227	71	46
22	310	54	44	32	39	35	64	672	669	197	68	45
23	270	53	44	32	38	36	76	549	669	169	62	45
24	214	53	42	33	38	34	88	554	636	148	63	44
25	175	50	39	34	38	31	99	572	737	148	72	47
26	150	48	38	35	36	37	119	699	828	145	74	47
27	139	50	39	36	38	39	155	500	934	138	60	45
28	125	46	40	34	38	38	194	405	990	138	53	44
29	116	44	35	35	-----	40	222	410	950	136	60	43
30	107	43	34	36	-----	38	190	510	888	128	136	43
31	103	-----	32	38	-----	36	-----	633	-----	118	109	-----
TOTAL	5,388	2,030	1,337	1,190	1,038	1,155	2,253	14,959	23,052	11,810	2,603	1,734
MEAN	174	67.7	43.1	38.4	37.1	37.3	75.1	483	768	381	84.0	57.8
MAX	590	96	49	45	39	44	222	830	1,040	850	136	118
MIN	26	43	32	32	33	31	30	139	552	118	53	43
AC-FT	10,690	4,030	2,650	2,360	2,060	2,290	4,470	29,670	45,720	23,430	5,160	3,440

CAL YR 1972 TOTAL 27,026 MEAN 73.8 MAX 590 MIN 22 AC-FT 53,610
WTR YR 1973 TOTAL 68,549 MEAN 188 MAX 1,040 MIN 26 AC-FT 136,000

PEAK DISCHARGE (BASE, 500 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
0-19	2100	4.83	778	6-11	2000	4.70	1,250
5-19	2000	4.80	1,040				

SAN JUAN RIVER BASIN

09346000 NAVAJO RIVER AT EDITH, COLO.

LOCATION.--Lat 37°00'10", long 106°54'25", in NW¼NW¼ sec.24, T.32 N., R.1 W., Archuleta County, on right bank 290 ft (88 m) downstream from highway bridge, 0.2 mi (0.3 km) southeast of Edith, 0.5 mi (0.8 km) upstream from Colorado-New Mexico State line, and 1.3 mi (2.1 km) upstream from Coyote Creek.

DRAINAGE AREA.--172 mi² (445 km²).

PERIOD OF RECORD.--September 1912 to current year. Monthly or yearly discharge only for some periods, published in WSP 1313.

GAGE.--Water-stage recorder. Datum of gage is 7,033.00 ft (2,143.658 m) above mean sea level (Bureau of Reclamation bench mark). Prior to Jan. 1, 1929, nonrecording gage at site 240 ft (73 m) upstream at different datum. June 2, 1935, to June 27, 1941, water-stage recorder at sites 200 and 240 ft (61 and 73 m) upstream at datum 2.0 ft (0.61 m) higher. June 28, 1941, to June 20, 1961, at site 50 ft (15 m) downstream at same datum.

AVERAGE DISCHARGE.--58 years (1912-70), 155 ft³/s (4.390 m³/s), 112,300 acre-ft/yr (138 hm³/yr) prior to diversions through Azotea tunnel.

EXTREMES.--Current year: Maximum discharge, 1,090 ft³/s (30.9 m³/s) May 20 (gage height, 5.17 ft or 1.576 m); minimum daily, 34 ft³/s (0.96 m³/s) Oct. 2, Jan. 5.

Period of record: Maximum discharge, 2,840 ft³/s (80.4 m³/s) Apr. 23, 1942 (gage height, 6.55 ft or 1.996 m), from rating curve extended above 1,100 ft³/s (31 m³/s); minimum daily, 8.0 ft³/s (0.23 m³/s) Sept. 25, 1953.

Flood of Oct. 5, 1911, exceeded all other observed floods at this location.

REMARKS.--Records good except those for winter period, which are poor. Diversions for irrigation of about 1,700 acres (6.88 km²) above station. Highwater diversions above station into Heron Reservoir through Azotea tunnel began in March 1971.

REVISIONS (WATER YEARS).--WSP 1243: 1943, 1945. WSP 1633: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35	63	43	36	40	60	66	290	334	238	61	61
2	34	59	42	40	46	63	66	226	262	215	66	61
3	35	63	42	40	40	64	61	215	179	182	61	61
4	36	57	43	36	42	68	61	233	286	176	59	61
5	51	56	44	34	42	61	67	222	133	115	63	61
6	42	56	43	36	42	57	87	215	112	97	70	61
7	55	54	42	38	44	56	97	185	170	74	57	51
8	50	55	42	38	44	57	74	200	262	70	55	51
9	44	61	40	36	44	57	70	245	379	94	57	51
10	40	56	40	36	44	54	85	403	530	67	57	61
11	40	55	40	38	44	55	139	626	558	74	52	61
12	43	55	38	38	44	57	214	670	586	71	52	61
13	52	54	38	38	42	61	229	581	494	73	52	51
14	46	51	36	40	42	57	297	453	593	79	54	51
15	47	51	36	40	40	55	197	338	310	80	55	51
16	46	51	36	40	40	56	150	445	191	77	57	51
17	47	51	36	40	40	59	235	573	170	79	55	51
18	67	51	36	40	42	60	206	635	161	97	48	51
19	269	51	38	40	44	64	123	786	161	101	51	51
20	504	51	40	40	42	79	94	894	187	80	61	51
21	90	50	40	40	44	92	108	822	245	74	82	51
22	56	46	40	40	44	73	153	663	243	76	70	51
23	50	45	40	38	42	64	195	394	219	74	63	51
24	51	48	40	36	44	64	229	350	173	77	61	51
25	48	44	40	40	48	71	258	366	356	70	68	41
26	50	44	40	44	50	77	226	685	460	64	66	51
27	52	47	38	42	55	82	229	362	369	68	59	51
28	59	43	38	38	55	74	219	231	350	64	59	41
29	56	46	40	40	-----	70	209	164	338	59	55	41
30	57	44	40	42	-----	66	236	215	298	56	92	31
31	63	-----	38	40	-----	64	-----	294	-----	63	71	-----
TOTAL	2,215	1,558	1,224	1,204	1,224	1,997	4,680	12,981	9,109	2,904	1,889	1,661
MEAN	71.5	51.9	39.6	38.8	43.7	64.4	156	419	304	93.7	60.9	55.5
MAX	504	63	44	44	55	92	297	894	593	238	92	61
MIN	34	43	36	34	40	54	61	164	112	56	48	31
AC-FT	4,390	3,090	2,440	2,390	2,430	3,960	9,280	25,750	18,070	5,760	3,750	3,311

CAL YR 1972 TOTAL 17,816 MEAN 48.7 MAX 504 MIN 17 AC-FT 35,340

ATR YR 1973 TOTAL 42,658 MEAN 117 MAX 894 MIN 34 AC-FT 84,610

09346400 SAN JUAN RIVER NEAR CARRACAS, COLO.

LOCATION.--Lat 37°00'49", long 107°18'42", in SE¼SW¼ sec.17, T.32 N., R.4 W., Archuleta County, on right bank just upstream from flow line of Navajo Reservoir, 3 mi (5 km) northwest of Carracas, 7.2 mi (11.6 km) upstream from Piedra River, and at mile 178.8 (287.7 km).

DRAINAGE AREA.--1,230 mi² (3,190 km²), approximately.

PERIOD OF RECORD.--October 1961 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,090 ft (1,856 m) from river-profile map.

AVERAGE DISCHARGE.--12 years, 617 ft³/s (17.47 m³/s), 447,000 acre-ft/yr (551 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 7,690 ft³/s (218 m³/s) Oct. 20 (gage height, 7.12 ft or 2.170 m); minimum, 78 ft³/s (2.21 m³/s) Oct. 3, 4.

Period of record: Maximum discharge, 9,730 ft³/s (276 m³/s) Sept. 6, 1970 (gage height, 8.34 ft or 2.542 m), from rating curve extended above 5,700 ft³/s (160 m³/s) on basis of slope-area measurement of peak flow; minimum, about 5 ft³/s (0.1 m³/s) Dec. 10, 1961, result of freezeup.

Other major floods occurred Sept. 5 or 6, 1909; Oct. 5, 1911; June 29, 1927.

REMARKS.--Records good except those for winter periods, which are poor. Diversions for irrigation of about 11,000 acres (44.5 km²) above station. Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	83	648	208	180	185	480	970	2,260	3,610	3,100	371	407
2	85	551	216	190	180	500	930	1,960	3,310	2,930	355	315
3	84	573	204	185	180	540	900	1,780	3,330	2,650	376	267
4	83	513	197	185	190	560	910	1,910	3,420	2,440	355	246
5	702	476	197	190	180	584	950	2,070	2,740	2,160	356	225
6	491	457	150	180	170	488	1,050	2,020	2,460	1,910	351	209
7	379	447	170	190	175	498	1,180	1,800	2,730	1,750	385	207
8	1,030	429	180	180	180	530	1,240	1,820	3,250	1,550	360	207
9	603	463	190	190	170	512	1,300	2,080	4,000	1,550	307	207
10	509	427	170	180	170	455	1,380	2,490	5,560	1,870	293	268
11	368	397	160	170	170	480	1,450	3,470	5,610	1,690	272	541
12	322	407	150	170	180	506	1,700	3,450	5,500	1,480	251	334
13	547	375	130	180	170	626	2,100	3,480	4,940	1,270	237	298
14	451	353	120	190	160	500	2,410	3,540	5,080	1,090	232	278
15	427	364	110	200	140	480	2,440	3,960	3,860	1,090	245	260
16	868	338	120	190	140	512	1,700	4,010	2,900	1,000	257	238
17	885	337	140	190	150	596	1,960	4,030	2,590	914	230	224
18	918	349	150	185	160	680	2,310	4,060	2,590	1,030	205	207
19	2,800	334	130	180	170	728	1,690	5,250	2,630	1,100	224	193
20	4,990	329	130	190	150	916	1,300	5,360	2,460	1,000	223	179
21	2,010	308	120	180	170	1,290	1,310	4,920	2,540	900	295	162
22	1,250	261	120	170	165	892	1,430	4,220	2,660	800	329	151
23	951	245	130	175	180	723	1,780	3,560	2,690	698	243	150
24	750	259	130	180	190	735	2,050	3,360	2,800	632	230	147
25	659	255	130	180	200	860	2,110	3,430	3,110	578	253	156
26	628	246	130	185	250	831	2,130	3,110	3,470	530	313	165
27	584	240	140	190	300	1,000	2,160	3,790	3,830	500	247	169
28	674	233	150	180	400	930	2,350	2,920	3,960	465	214	160
29	574	217	170	180	-----	980	2,330	2,640	3,520	445	201	155
30	552	206	150	185	-----	970	2,430	2,900	3,510	425	311	150
31	656	-----	140	190	-----	960	-----	3,390	-----	425	545	-----
TOTAL	25,913	11,037	4,732	5,690	5,225	21,342	49,950	99,040	104,660	39,972	9,066	6,875
MEAN	836	368	153	184	187	688	1,665	3,195	3,489	1,289	292	229
MAX	4,990	648	216	200	400	1,290	2,440	5,360	5,610	3,100	545	541
MIN	83	206	110	170	140	455	900	1,780	2,460	425	201	147
AC-FT	51,400	21,890	9,390	11,290	10,360	42,330	99,080	196,400	207,600	79,280	17,980	13,640
CAL YR 1972	TOTAL 133,733	MEAN 365	MAX 4,990	MIN 48	AC-FT 265,300							
WTR YR 1973	TOTAL 383,502	MEAN 1,051	MAX 5,610	MIN 83	AC-FT 760,700							

PEAK DISCHARGE (BASE, 2,500 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
10-20	0100	7.12	7,690	6-10	1215	6.85	6,630
5-19	0530	6.71	6,720				

09347200 MIDDLE FORK PIEDRA RIVER NEAR PAGOSA SPRINGS, COLO.

LOCATION.--Lat 37°29'12", long 107°09'46", in SW¼NW¼ sec.35, T.38 N., R.3 W., Hinsdale County, on right bank 0.6 mi (1.0 km) upstream from headgate on Toner-Taylor ditch, 4.1 mi (6.6 km) northeast of Piedra guard station, and 17 mi (27 km) northwest of Pagosa Springs.

DRAINAGE AREA.--32.2 mi² (83.4 km²).

PERIOD OF RECORD.--October 1969 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 8,210 ft (2,502 m) from topographic map.

EXTREMES.--Current year: Maximum discharge, 699 ft³/s (19.8 m³/s) June 10 (gage height, 2.47 ft or 0.753 m); maximum gage height, 3.26 ft (0.994 m) Dec. 27 (backwater from ice); minimum daily discharge, 6.2 ft³/s (0.18 m³/s) Oct. 1.

Period of record: Maximum discharge, 2,520 ft³/s (71.4 m³/s) Sept. 5, 1970 (gage height, 4.39 ft or 1.338 m, from floodmarks), from rating curve extended above 200 ft³/s (5.7 m³/s) on basis of slope-area measurement of peak flow; minimum daily, 5.0 ft³/s (0.14 m³/s) Jan. 6, 1971.

REMARKS.--Records good except those for winter period, which are poor. No diversion above station. Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.2	44	24	16	11	9.8	7.2	55	230	338	30	24
2	6.5	41	24	15	11	9.5	7.7	51	226	268	28	22
3	6.5	41	24	14	11	9.0	7.2	53	207	246	27	19
4	16	41	22	14	11	9.2	6.7	62	193	235	26	19
5	149	39	22	14	11	8.7	6.9	63	180	226	27	16
6	48	37	24	13	11	8.7	8.2	60	188	207	30	15
7	184	36	26	13	11	8.5	8.7	57	226	172	26	14
8	165	36	26	13	11	8.2	8.0	65	268	161	24	14
9	90	35	26	13	11	7.4	11	92	363	180	23	14
10	49	33	24	13	11	7.7	11	143	515	153	21	26
11	41	33	22	12	11	8.2	12	188	493	133	21	31
12	39	33	22	13	11	7.9	13	193	436	123	20	28
13	53	31	22	13	10	7.7	15	193	415	100	20	24
14	43	32	22	13	10	7.4	18	202	478	95	20	21
15	59	32	20	13	9.5	7.2	19	197	370	95	20	20
16	107	31	20	13	9.8	6.9	18	180	263	86	18	19
17	102	31	19	14	11	8.2	19	193	252	82	17	18
18	95	31	19	13	11	8.7	23	193	274	90	17	17
19	212	30	19	13	9.8	8.5	21	246	279	92	18	16
20	216	29	18	13	10	9.2	19	252	268	74	20	15
21	139	28	19	12	9.8	10	18	221	263	63	24	15
22	107	27	18	11	11	9.2	19	207	268	55	22	14
23	95	24	19	12	9.5	8.7	27	184	285	48	20	14
24	80	26	18	13	9.0	8.2	34	193	308	43	20	15
25	76	26	17	12	8.7	7.4	35	193	320	41	21	14
26	63	26	16	12	9.0	8.2	42	212	350	39	22	15
27	59	26	16	12	9.8	8.2	53	172	409	37	19	14
28	56	23	16	11	10	8.2	59	157	396	37	18	14
29	51	24	16	12	-----	8.2	63	176	370	36	18	13
30	46	23	16	12	-----	7.7	65	221	363	34	34	13
31	45	-----	16	12	-----	7.2	-----	226	-----	33	30	-----
TOTAL	2,504.2	949	632	399	289.9	257.8	674.6	4,900	9,456	3,622	701	533
MEAN	80.8	31.6	20.4	12.9	10.4	8.32	22.5	158	315	117	22.6	17.8
MAX	216	44	26	16	11	10	65	252	515	338	34	31
MIN	6.2	23	16	11	8.7	6.9	6.7	51	180	33	17	13
AC-FT	4,970	1,880	1,250	791	575	511	1,340	9,720	18,760	7,180	1,390	1,060

CAL YR 1972 TOTAL 14,835.2 MEAN 40.5 MAX 235 MIN 6.2 AC-FT 29,430
WTR YR 1973 TOTAL 24,918.5 MEAN 68.3 MAX 515 MIN 6.2 AC-FT 49,430

PEAK DISCHARGE (BASE, 250 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
10- 5	0530	1.98	302	10-19	1330	1.85	302
10- 7	1630	2.08	363	6-10	2130	2.47	699

SAN JUAN RIVER BASIN

353

09349500 PIEDRA RIVER NEAR PIEDRA, COLO.

LOCATION.--Lat 37°13'20", long 107°20'32", in NW¼NW¼ sec.17, T.34 N., R.4 W., Archuleta County, on right bank 0.1 mi (0.2 km) downstream from bridge on U.S. Highway 160, 0.4 mi (0.6 km) upstream from Yellow Jacket Creek, and 1.5 mi (2.4 km) northwest of Piedra.

DRAINAGE AREA.--371 mi² (961 km²).

PERIOD OF RECORD.--October 1911 to September 1912, October 1938 to June 1973 (discontinued). Monthly discharge only for some periods, published in WSP 1313. Published as "at Piedra" 1912.

GAGE.--Water-stage recorder. Altitude of gage is 6,510 ft (1,984 m) from topographic map. See WSP 1713 or 1733 for history of changes prior to Sept. 19, 1962.

AVERAGE DISCHARGE.--35 years (1912, 1938-72), 309 ft³/s (8.751 m³/s), 223,900 acre-ft/yr (276 hm³/yr).

EXTREMES.--Maximum discharge during period October 1972 to June 1973 (also maximum for water year), 4,080 ft³/s (116 m³/s) May 18 (gage height, 6.05 ft or 1.844 m); minimum daily, 32 ft³/s (0.91 m³/s) Oct. 1-3.

Period of record: Maximum discharge not determined, occurred Oct. 5, 1911. Maximum discharge determined, 7,980 ft³/s (226 m³/s) Sept. 6, 1970 (gage height, 7.92 ft or 2.414 m in gage well, 9.40 ft or 2.865 m, from floodmarks), from rating curve extended above 2,300 ft³/s (65 m³/s) on basis of slope-area measurement of peak flow; minimum daily, 17 ft³/s (0.48 m³/s) Nov. 11, 1950.

Greatest flood since at least 1885, that of Oct. 5, 1911. Another major flood occurred June 29, 1927.

REMARKS.--Records fair. Diversions for irrigation of about 2,220 acres (8.98 km²) above station. Also two small ditches divert water above station for irrigation below. Don LaFont and Williams Creek-Squaw Pass ditches (see elsewhere in this report) export small amount of water above station to Rio Grande basin. Slight regulation at times by Williams Creek Reservoir (capacity, 1,080 acre-ft or 1.33 hm³).

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

REVISIONS (WATER YEARS).--WSP 1313: 1927(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32	358	130	110	103	112	185	1,490	2,000			
2	32	344	145	112	92	118	190	1,320	1,980			
3	32	334	152	116	97	120	178	1,310	1,920			
4	35	327	160	112	105	122	168	1,590	2,000			
5	455	314	148	116	101	122	175	1,530	1,840			
6	245	290	132	106	101	118	190	1,370	1,790			
7	428	260	172	110	103	120	218	1,230	2,000			
8	745	257	182	106	103	122	210	1,360	1,990			
9	442	251	168	108	99	122	205	1,600	2,030			
10	514	239	142	112	99	112	212	1,990	2,090			
11	248	248	145	99	99	132	225	2,740	2,130			
12	220	248	158	103	103	126	260	2,440	2,140			
13	296	228	138	105	97	128	330	2,210	2,090			
14	260	228	142	106	97	124	446	2,880	2,140			
15	284	228	128	108	87	116	520	2,870	1,990			
16	638	212	124	112	86	122	450	2,950	1,870			
17	698	225	138	112	92	132	500	2,950	1,740			
18	650	222	148	114	92	142	626	3,160	1,770			
19	1,910	212	132	106	92	142	500	3,190	1,760			
20	2,350	215	130	106	87	155	434	3,020	1,710			
21	1,290	210	120	100	96	190	418	2,500	1,680			
22	842	178	114	95	96	185	434	2,420	1,690			
23	692	165	118	95	96	175	600	2,220	1,780			
24	615	175	110	90	97	172	828	2,180	1,810			
25	550	165	110	90	97	168	968	2,520	1,800			
26	490	162	108	92	97	175	1,200	2,900	1,860			
27	470	168	110	94	101	192	1,480	2,140	1,910			
28	462	135	118	95	110	192	1,760	1,790	1,880			
29	422	140	120	95	-----	190	1,860	1,660	1,880			
30	398	135	118	99	-----	185	1,780	1,870	1,810			
31	386	-----	108	106	-----	185	-----	2,000	-----			
TOTAL	16,931	6,893	4,168	3,230	2,725	4,516	17,550	67,420	57,080			
MEAN	546	230	134	104	97.5	146	585	2,175	1,903			
MAX	2,350	358	182	116	110	192	1,860	3,190	2,140			
MIN	32	135	108	90	86	112	168	1,230	1,680			
AC-FT	33,580	13,670	8,270	6,410	5,410	8,960	34,810	133,700	113,200			

CAL YR 1972 TOTAL 96,790 MEAN 264 MAX 2,350 MIN 25 AC-FT 192,000

PEAK DISCHARGE (BASE, 1,500 CFS).--Oct. 20 (0700) 3,150 cfs (5.43 ft); May 18 (2400) 4,080 cfs (6.05 ft).

09349800 PIEDRA RIVER NEAR ARBOLES, COLO.

LOCATION.--Lat 37°05'18", long 107°23'50", in NE¼SW¼ sec.21, T.33 N., R.5 W., Archuleta County, on left bank 3 mi (5 km) downstream from Ignacio Creek, 5.2 mi (8.4 km) northeast of Arboles Post Office, and 8 mi (13 km) upstream from mouth.

DRAINAGE AREA.--629 mi² (1,629 km²).

PERIOD OF RECORD.--August 1962 to current year. Gage operated 1895-99, 1910-27 at a site 7.5 mi (12.1 km) downstream at altitude 6,000 ft (1,829 m). Low flow records probably not equivalent.

GAGE.--Water-stage recorder. Datum of gage is 6,147.52 ft (1,873.764 m) above mean sea level (from Colorado State Highway Department bench mark).

AVERAGE DISCHARGE.--11 years, 352 ft³/s (9.969 m³/s), 255,000 acre-ft/yr (314 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 5,580 ft³/s (158 m³/s) Oct. 19 (gage height, 5.55 ft or 1.692 m); minimum, 35 ft³/s (0.99 m³/s) Oct. 4.

Period of record: Maximum discharge, 8,370 ft³/s (237 m³/s) Sept. 6, 1970 (gage height, 6.38 ft or 1.945 m recorded, 7.55 ft or 2.301 m, from floodmarks), from rating curve extended above 3,300 ft³/s (93 m³/s) on basis of slope-area measurement of peak flow; minimum, 11 ft³/s (0.31 m³/s) Dec. 9, 1963, Oct. 1, 1966.

Other major floods occurred Sept. 5 or 6, 1909; Oct. 5, 1911.

REMARKS.--Records good except those for winter periods, which are poor. Diversions for irrigation of about 2,800 acres (11.3 km²) above station. Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34	558	350	142	122	370	552	2,490	2,460	1,820	241	211
2	38	516	300	145	120	390	534	2,070	2,300	1,710	220	164
3	38	534	300	154	133	390	492	2,020	2,100	1,530	214	154
4	38	496	310	142	130	360	450	2,310	2,340	1,310	208	142
5	250	476	330	145	125	345	500	2,470	1,960	1,220	205	128
6	185	448	250	139	128	305	590	2,120	1,840	1,140	211	122
7	215	395	260	139	139	296	700	1,750	2,050	1,000	208	118
8	520	375	270	139	145	310	580	1,890	2,380	924	211	110
9	345	365	210	151	145	315	550	2,260	2,780	933	178	106
10	256	326	200	157	145	296	750	2,780	3,180	942	166	133
11	199	312	200	136	151	345	888	3,320	3,160	814	157	244
12	167	321	210	128	157	350	1,120	3,460	3,050	726	151	214
13	220	290	140	136	157	385	1,350	3,220	2,920	661	145	187
14	210	294	170	148	160	340	1,670	3,670	3,320	577	136	163
15	202	294	140	157	145	305	1,820	3,440	2,700	577	139	145
16	470	273	150	163	145	315	1,260	3,360	2,020	534	133	133
17	550	286	160	166	160	365	1,350	3,360	1,750	480	125	124
18	538	277	180	163	166	380	1,850	3,380	1,740	516	118	116
19	2,370	273	160	157	166	390	1,360	4,000	1,750	584	118	108
20	4,140	537	170	151	184	468	1,010	3,950	1,610	516	120	104
21	1,570	524	140	139	163	640	942	3,630	1,640	445	125	102
22	1,020	238	130	130	160	498	915	3,290	1,670	400	160	96
23	614	217	140	145	157	425	1,270	2,840	1,720	355	145	92
24	702	231	150	142	163	420	1,880	2,700	1,790	305	133	94
25	664	220	150	142	178	415	2,130	2,710	1,810	284	151	92
26	612	203	150	142	205	462	2,420	3,180	1,920	268	181	96
27	572	217	140	148	241	528	2,600	2,740	2,140	260	172	96
28	633	178	150	130	305	522	3,090	2,160	2,220	244	145	92
29	540	190	180	133	-----	522	3,290	2,070	2,030	232	133	92
30	496	169	160	133	-----	552	3,270	2,220	1,980	235	151	92
31	540	-----	130	128	-----	540	-----	2,390	-----	244	229	-----
TOTAL	19,150	10,055	6,130	4,470	4,495	12,564	41,183	87,250	66,330	21,786	5,129	3,840
MEAN	618	335	198	144	161	405	1,373	2,815	2,211	703	165	130
MAX	4,140	558	350	166	305	640	3,290	4,000	3,320	1,820	241	244
MIN	34	169	130	128	120	296	450	1,750	1,610	232	118	92
AC-FT	37,980	19,900	12,160	8,870	8,920	24,920	81,690	173,100	131,600	43,210	10,170	7,720

CAL YR 1972 TOTAL 103,930 MEAN 284 MAX 4,140 MIN 29 AC-FT 206,100

WTH YR 1973 TOTAL 282,412 MEAN 774 MAX 4,140 MIN 34 AC-FT 560,200

PEAK DISCHARGE (BASE, 1,500 CFS).--Oct. 19 (2230) 5,580 cfs (5.55 ft); May 19 (0530) 4,380 cfs (5.15 ft).

SAN JUAN RIVER BASIN

355

09352900 VALLECITO CREEK NEAR BAYFIELD, COLO.
(Hydrologic bench-mark station)

LOCATION.--Lat 37°28'39", long 107°32'35", in NE¼NW¼ sec.16, T.37 N., R.6 W., La Plata County, on right bank 60 ft (18 m) upstream from Fall Creek, 0.8 mi (1.3 km) downstream from Bear Creek, 6.7 mi (10.8 km) north of Vallecito Dam, and 18 mi (29 km) north of Bayfield.

DRAINAGE AREA.--72.1 mi² (186.7 km²).

PERIOD OF RECORD.--October 1962 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 7,906.08 ft (2,409.773 m) above mean sea level.

AVERAGE DISCHARGE.--11 years, 145 ft³/s (4.106 m³/s), 105,100 acre-ft/yr (130 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,490 ft³/s (42.2 m³/s) June 9 (gage height, 3.28 ft or 1.000 m); minimum daily, 22 ft³/s (0.62 m³/s) Feb. 26.

Period of record: Maximum discharge 7,050 ft³/s (200 m³/s) Sept. 6, 1970 (gage height, 5.51 ft or 1.679 m from water-stage recorder, 6.76 or 2.060 m from floodmarks), from rating curve extended above 1,400 ft³/s (40 m³/s) on basis of slope-area measurement of peak flow; minimum daily, 10 ft³/s (0.28 m³/s) Dec. 21, 1967, Dec. 28, 1968.

Major floods occurred in October 1911 and June 1927.

REMARKS.--Records good. No diversion above station. Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	54	157	58	36	29	25	30	157	696	1,020	180	160
2	51	147	57	36	28	26	32	134	576	952	180	127
3	49	134	56	36	28	26	30	130	466	820	192	107
4	84	130	52	35	30	26	29	153	424	784	188	94
5	537	130	51	34	29	26	29	172	398	768	192	90
6	240	125	50	35	29	26	30	164	445	696	184	88
7	453	117	50	34	29	26	34	150	664	624	180	84
8	452	115	54	34	28	26	31	172	916	600	172	80
9	308	110	50	35	27	24	31	250	1,210	592	157	77
10	236	102	50	37	26	26	31	424	1,250	608	157	170
11	188	102	56	37	28	28	30	648	1,170	584	147	208
12	157	102	54	37	26	28	32	704	1,140	544	134	176
13	164	100	52	38	26	28	37	688	1,110	438	127	160
14	153	96	49	35	24	28	40	728	1,110	410	122	144
15	212	92	48	37	26	26	40	728	784	417	115	122
16	350	92	46	36	28	27	38	768	568	392	107	110
17	410	90	45	36	28	27	39	840	592	326	102	98
18	380	88	44	36	28	29	46	988	680	380	110	92
19	326	82	44	36	26	27	44	1,110	704	445	134	84
20	656	86	42	36	28	29	41	1,030	752	417	134	80
21	424	80	40	34	26	31	39	907	856	344	153	74
22	338	77	40	32	24	31	39	728	916	265	153	71
23	285	74	39	30	24	29	50	632	1,020	224	127	68
24	260	74	38	32	24	29	60	728	1,040	228	140	66
25	240	72	39	32	23	29	71	760	1,030	236	176	65
26	224	74	38	33	22	30	90	672	1,130	232	255	63
27	220	68	38	32	24	32	122	504	1,150	212	188	60
28	204	60	37	32	24	31	172	410	1,060	200	140	57
29	188	60	38	32	-----	32	184	417	1,080	196	125	53
30	172	62	36	32	-----	32	192	528	1,040	192	125	51
31	160	-----	34	30	-----	31	-----	632	-----	180	176	-----
TOTAL	8,674	2,898	1,429	1,067	742	871	1,713	17,056	25,977	14,330	4,752	2,979
MEAN	280	96.6	46.1	34.4	26.5	28.1	57.1	550	866	462	153	99.3
MAX	826	157	58	38	30	32	192	1,110	1,250	1,020	255	208
MIN	49	60	34	30	22	24	29	130	398	180	102	51
AC-FT	17,200	5,750	2,830	2,120	1,470	1,730	3,400	33,830	51,530	28,420	9,430	5,910

CAL YR 1972 TOTAL 49,401 MEAN 135 MAX 826 MIN 15 AC-FT 97,990
WTR YR 1973 TOTAL 82,488 MEAN 226 MAX 1,250 MIN 22 AC-FT 163,600

PEAK DISCHARGE (BASE, 1,000 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
10-19	1300	2.91	1,070	6-9	2230	3.28	1,490
5-18	2300	3.15	1,310	6-26	2130	3.20	1,470

SAN JUAN RIVER BASIN

09353000 VALLECITO RESERVOIR NEAR BAYFIELD, COLO.

LOCATION.--Lat 37°23'00", long 107°34'30", in SW¼SW¼ sec.18, T.36 N., R.6 W., La Plata County, in gagehouse above outlet gates at Vallecito Dam on Los Pinos (Pine) River, 300 ft (91 m) left of spillway, 0.4 mi (0.6 km) upstream from Jack Creek, and 11 mi (18 km) northeast of Bayfield.

PERIOD OF RECORD.--April 1941 to current year.

GAGE.--Water-stage recorder. Datum of gage is 7,580 ft (2,310.4 m) above mean sea level (Bureau of Reclamation bench mark); gage readings have been reduced to elevations above mean sea level.

EXTREMES (at 0800).--Current year: Maximum contents, 123,100 acre-ft (152 hm³) July 6 (elevation, 7,663.83 ft or 2,335.935 m); minimum, 24,160 acre-ft (29.8 hm³) Oct. 4 (elevation, 7,615.35 ft or 2,321.159 m).
Period of record: Maximum contents, 128,200 acre-ft (158 hm³) July 27, 1957 (elevation, 7,665.72 ft or 2,336.511 m); minimum, 1,520 acre-ft (1.87 hm³) Oct. 24, 25, 1944 (elevation, 7,584.10 ft or 2,311.634 m).
No usable storage prior to April 1941.

REMARKS.--Reservoir is formed by an earth and rockfill dam; dam completed in March 1941. Capacity of reservoir, 126,300 acre-ft (156 hm³) between elevations 7,580 ft or 2,310.4 m (sill of outlet gate) and 7,665 ft or 2,336.3 m (top of spillway gates). Dead storage, 3,395 acre-ft (4.19 hm³). Figures given herein represent usable contents. Reservoir is used to store water for irrigation in Los Pinos (Pine) River basin.

COOPERATION.--Records furnished by Bureau of Reclamation.

REVISIONS (WATER YEARS).--WSP 959: 1941. WSP 1513: 1956.

MONTHEND ELEVATION AND CONTENTS AT 0800, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	ELEVATION (FEET)	CONTENTS (ACRE-Feet)	CHANGE IN CONTENTS (ACRE-Feet)
Sept. 30.....	7,616.03	24,960	-
Oct. 31.....	7,634.91	54,720	+29,760
Nov. 30.....	7,640.99	67,210	+12,490
Dec. 31.....	7,643.64	73,030	+5,820
CAL YR 1972	-	-	+21,210
Jan. 31.....	7,644.23	74,350	+1,320
Feb. 28.....	7,644.15	74,170	-180
Mar. 31.....	7,643.74	73,250	-920
Apr. 30.....	7,636.99	58,850	-14,400
May 31.....	7,648.16	83,400	+24,550
June 30.....	7,663.37	121,900	+38,500
July 31.....	7,660.09	113,200	-8,700
Aug. 31.....	7,651.47	91,340	-21,860
Sept. 30.....	7,641.46	68,230	-23,110
WTR YR 1973	-	-	+43,270

SAN JUAN RIVER BASIN

357

09353500 LOS PINOS RIVER NEAR BAYFIELD, COLO.
(LOCALLY KNOWN AS PINE RIVER)

LOCATION.--Lat 37°22'58", long 107°34'37", in SW¼ sec.18, T.36 N., R.6 W., La Plata County, on left side of outlet flume from Vallecito Reservoir, 0.4 mi (0.6 km) upstream from Jack Creek, 2.0 mi (3.2 km) upstream from Red Creek, and 11 mi (18 km) north of Bayfield.

DRAINAGE AREA.--270 mi² (700 km²), approximately.

PERIOD OF RECORD.--October 1927 to current year. Monthly discharge only for some periods, published in WSP 1313.

GAGE.--Water-stage recorder and concrete weir. Datum of gage is 7,582.54 ft (2,311.158 m) above mean sea level (Bureau of Reclamation bench mark). See WSP 1713 or 1733 for history of changes prior to Aug. 18, 1956.

AVERAGE DISCHARGE.--46 years, 350 ft³/s (9.912 m³/s), 253,600 acre-ft/yr (313 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,390 ft³/s (67.7 m³/s) July 26, 27, 28, 29 (gage height, 4.48 ft or 1.366 m); minimum daily, 47 ft³/s (1.33 m³/s) Oct. 26-29.

Period of record: Maximum discharge, 13,800 ft³/s (391 m³/s) July 27, 1957 (gage height, 12.2 ft or 3.72 m, from floodmarks at supplementary gage), from rating curve extended above 2,500 ft³/s (71 m³/s) on basis of slope-area measurement of peak flow (result of automatic spillway gates releasing from Vallecito Reservoir); minimum daily, 3.2 ft³/s (0.091 m³/s) Feb. 11, 1951 (result of storage in Vallecito Reservoir); minimum daily prior to construction of Vallecito Reservoir, 38 ft³/s (1.08 m³/s) Dec. 21, 22, 1937.

Greatest flood since at least 1885 occurred Oct. 5, 1911.

REMARKS.--Records good. Flow regulated by Vallecito Reservoir since April 1941 (see preceding page). Transmountain diversions above station by Weminuche Pass and Pine River-Weminuche Pass ditches (see elsewhere in this report).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	208	49	51	98	98	131	161	589	1,310	2,060	720	631
2	208	49	51	98	98	131	161	655	1,460	2,060	662	604
3	208	49	51	98	100	131	206	694	1,460	1,950	646	576
4	208	49	51	98	100	134	340	689	1,460	1,630	674	531
5	208	49	51	98	102	134	496	689	1,460	1,480	674	496
6	241	49	51	98	102	134	546	684	1,180	1,480	669	496
7	237	49	51	98	102	134	588	684	92	1,480	669	496
8	182	49	51	98	102	134	613	377	679	1,480	669	491
9	161	49	51	98	102	134	502	261	1,320	1,330	664	491
10	146	49	51	98	102	134	542	340	1,560	1,240	664	491
11	139	51	51	98	102	134	809	314	1,720	1,240	664	491
12	139	51	53	98	100	134	804	734	1,920	1,240	664	491
13	139	51	53	98	100	134	670	1,060	2,200	1,240	664	491
14	139	51	53	98	98	134	584	1,350	2,320	1,240	659	490
15	139	51	53	98	98	131	584	1,460	2,200	1,240	659	490
16	116	51	53	98	98	128	580	1,580	1,810	1,050	659	490
17	102	51	53	98	98	128	580	1,660	1,520	938	667	490
18	105	51	53	98	98	128	454	1,670	1,300	938	679	450
19	80	51	53	98	98	128	381	1,690	1,300	938	679	822
20	64	51	53	98	98	126	381	1,710	1,310	938	679	1,160
21	64	51	53	98	98	126	377	1,990	1,310	932	674	1,220
22	64	51	79	98	98	126	377	2,140	1,560	926	674	1,220
23	66	51	98	98	116	146	377	2,140	1,930	807	674	1,050
24	66	51	98	98	128	161	377	2,140	2,050	736	669	750
25	54	51	98	98	128	161	377	2,140	2,050	731	692	633
26	47	51	98	98	128	161	377	2,140	2,250	731	705	644
27	47	51	98	98	128	161	377	1,950	2,390	731	705	546
28	47	51	98	98	128	161	377	1,330	2,390	731	686	491
29	47	51	98	98	-----	161	510	1,090	2,180	726	674	487
30	49	51	98	98	-----	161	589	1,010	2,060	726	669	487
31	49	-----	98	98	-----	161	-----	1,010	-----	726	669	-----
TOTAL	3,769	1,510	2,052	3,038	2,948	4,322	14,097	37,970	49,751	35,695	20,875	18,696
MEAN	122	50.3	66.2	98.0	105	139	470	1,225	1,658	1,151	673	623
MAX	241	51	98	98	128	161	809	2,140	2,390	2,060	720	1,220
MIN	47	49	51	98	98	126	161	261	92	726	646	450
AC-FT	7,480	3,000	4,070	6,030	5,850	8,570	27,960	75,310	98,680	70,800	41,410	37,080

CAL YR 1972 TOTAL 105,482 MEAN 288 MAX 715 MIN 22 AC-FT 209,200
WTR YR 1973 TOTAL 194,723 MEAN 533 MAX 2,390 MIN 47 AC-FT 386,200

09354500 LOS PINOS RIVER AT LA BOCA, COLO.

LOCATION.--Lat 37°00'37", long 107°35'49", in S½ sec.15, T.32 N., R.7 W., La Plata County, on downstream end of right abutment of the Denver & Rio Grande Western Railroad Co. bridge, at southeast edge of La Boca, 0.1 mi (0.2 km) upstream from Spring Creek, and 13 mi (21 km) upstream from mouth.

DRAINAGE AREA.--510 mi² (1,320 km²), approximately.

PERIOD OF RECORD.--October 1950 to current year. Monthly discharge only for some periods, published in WSP 1733.

GAGE.--Water-stage recorder. Datum of gage is 6,143.58 ft (1,872.563 m) above mean sea level.

AVERAGE DISCHARGE.--23 years, 204 ft³/s (5.777 m³/s), 147,800 acre-ft/yr (182 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 3,360 ft³/s (95.2 m³/s) Oct. 20 (gage height, 7.52 ft or 2.292 m); minimum, 67 ft³/s (1.90 m³/s) Oct. 2, 3.
Period of record: Maximum discharge, 6,400 ft³/s (181 m³/s) July 27, 1957 (gage height, 8.95 ft or 2.728 m), from rating curve extended above 5,100 ft³/s (140 m³/s); minimum determined, 13 ft³/s (0.37 m³/s) Apr. 23, 1951 (may have been lower during periods of freezeup).
A major flood occurred Oct. 5, 1911 at this location.

REMARKS.--Records good except those for winter periods, which are poor. Flow regulated by Vallecito Reservoir 24 mi (39 km) upstream since April 1941 (see sta. 09353000). Diversions for irrigation of about 33,000 acres (134 km²) above station. Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	85	229	129	150	160	290	626	1,480	1,080	1,790	267	434
2	74	230	127	130	150	340	554	1,370	1,420	1,790	255	355
3	74	236	124	130	130	404	480	1,320	1,430	1,740	207	336
4	74	187	129	140	150	421	515	1,340	1,680	1,480	207	269
5	75	165	144	145	150	397	748	1,410	1,450	1,180	221	206
6	76	148	105	130	160	340	1,000	1,370	1,320	1,140	310	182
7	99	148	115	130	180	326	1,110	1,220	549	1,140	407	181
8	180	139	128	130	170	355	956	1,000	254	1,190	224	175
9	140	139	140	120	160	322	853	776	1,040	1,130	204	165
10	337	155	100	150	170	310	908	940	1,130	946	192	269
11	278	148	115	150	180	302	1,320	980	1,280	924	187	374
12	150	155	90	140	160	322	1,490	1,360	1,280	970	174	263
13	119	165	96	150	140	430	1,510	1,650	1,710	992	169	236
14	196	157	110	140	140	375	1,340	2,010	2,290	974	155	231
15	130	180	93	145	130	360	1,360	2,330	2,230	977	168	245
16	310	190	96	150	130	375	1,090	2,090	1,800	904	163	231
17	290	181	100	150	140	422	1,100	2,090	1,500	701	155	215
18	284	180	110	160	130	479	1,190	2,100	1,160	734	168	196
19	448	169	110	160	130	617	948	2,130	1,090	706	177	309
20	2,200	164	120	180	140	852	804	2,140	1,060	657	210	749
21	458	160	105	170	141	1,320	762	2,190	1,040	613	242	948
22	185	156	110	150	139	584	714	2,440	1,140	601	288	961
23	164	152	110	130	140	437	781	2,390	1,500	550	224	882
24	141	148	114	130	169	462	901	2,280	1,760	428	259	625
25	132	146	110	140	178	618	962	2,290	1,780	393	298	441
26	105	149	106	140	187	706	1,040	2,290	1,840	351	371	456
27	287	135	108	150	203	692	1,090	2,170	2,170	290	324	388
28	187	122	118	150	236	572	1,190	1,800	2,180	267	308	253
29	139	131	105	140	-----	542	1,250	1,500	2,080	282	284	257
30	153	128	105	140	-----	626	1,520	1,250	1,800	286	431	273
31	224	-----	108	140	-----	706	-----	972	-----	287	533	-----
TOTAL	7,794	4,892	3,480	4,460	4,393	15,304	30,112	52,678	44,043	26,463	7,782	11,145
MEAN	251	163	112	144	157	494	1,004	1,699	1,468	854	251	372
MAX	2,200	236	144	180	236	1,320	1,520	2,440	2,290	1,790	533	961
MIN	74	122	90	120	130	290	480	776	254	267	155	165
AC-FT	15,460	9,700	6,900	8,850	8,710	30,360	59,730	104,500	87,360	52,490	15,440	22,110

CAL YR 1972 TOTAL 45,782 MEAN 125 MAX 2,200 MIN 26 AC-FT 90,810
 WTR YR 1973 TOTAL 212,546 MEAN 582 MAX 2,440 MIN 74 AC-FT 421,600

SAN JUAN RIVER BASIN

359

09355000 SPRING CREEK AT LA BOCA, COLO.

LOCATION.--Lat 37°00'46", long 107°35'42", in S½ sec.15, T.32 N., R.7 W., La Plata County, on right bank in an excavated channel, 0.2 mi (0.3 km) upstream from mouth, and 0.2 mi (0.3 km) east of La Boca.

DRAINAGE AREA.--58 mi² (150 km²), approximately.

PERIOD OF RECORD.--October 1950 to current year. Monthly discharge only for some periods, published in WSP 1733.

GAGE.--Water-stage recorder. Altitude of gage is 6,160 ft (1,878 m) from topographic map.

AVERAGE DISCHARGE.--23 years, 29.7 ft³/s (0.841 m³/s), 21,520 acre-ft/yr (26.5 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,640 ft³/s (46.4 m³/s) Oct. 19 (gage height, 4.19 ft or 1.277 m); minimum, 1.5 ft³/s (0.042 m³/s) Jan. 8.

Period of record: Maximum discharge, 1,980 ft³/s (56.1 m³/s) Sept. 6, 1970 (gage height, 4.62 ft or 1.408 m), from rating curve extended above 160 ft³/s (4.5 m³/s) on basis of field estimate of peak flow; maximum gage height, 5.98 ft (1.823 m) Mar. 9, 1960 (backwater from ice); minimum discharge, 0.6 ft³/s (0.017 m³/s) Nov. 27, 1959.

REMARKS.--Records good except those for winter periods, which are poor. Part of flow is return waste from irrigation.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	22	2.9	2.1	2.2	89	57	72	36	70	70	70
2	20	22	3.0	1.8	2.0	80	49	68	53	69	70	69
3	17	20	3.1	1.9	2.0	84	40	66	62	67	66	66
4	26	19	3.4	2.1	2.2	72	33	66	109	69	66	64
5	77	21	2.8	2.0	2.1	52	28	70	63	70	76	73
6	39	16	2.5	1.8	2.5	46	23	68	67	69	70	73
7	106	15	3.7	1.7	2.6	50	19	59	56	69	31	72
8	63	15	5.2	1.5	2.4	55	16	48	42	70	41	69
9	28	14	6.4	1.9	2.1	41	13	40	43	72	69	70
10	23	14	4.7	2.0	2.3	41	19	45	57	76	70	113
11	16	14	5.2	2.1	2.5	47	35	50	62	69	70	128
12	14	15	4.0	1.9	1.9	51	51	64	57	69	72	76
13	111	17	4.5	2.2	2.0	89	55	80	69	72	69	66
14	22	16	4.8	2.0	1.8	55	51	100	88	72	64	67
15	55	21	4.2	2.1	1.8	51	51	66	73	72	63	67
16	160	18	4.4	2.2	2.0	64	24	46	69	70	63	64
17	74	18	4.6	2.3	1.9	80	28	33	64	72	60	64
18	131	25	4.7	2.4	1.9	94	44	35	67	83	62	60
19	702	17	5.0	2.2	2.0	116	36	35	66	88	60	56
20	442	17	4.8	2.5	2.1	111	21	35	67	80	69	60
21	42	13	4.8	2.5	3.0	146	20	37	69	75	76	60
22	32	11	4.8	1.9	4.0	62	16	43	69	76	118	62
23	51	8.6	4.7	1.8	8.1	47	24	47	70	76	83	62
24	30	6.8	4.7	1.9	12	39	37	59	75	72	68	60
25	40	5.5	4.8	2.0	46	39	45	57	73	69	81	69
26	35	4.5	4.6	2.0	66	37	51	69	72	70	86	89
27	63	3.5	5.0	2.1	81	42	54	67	69	67	83	84
28	138	2.8	5.0	2.2	107	36	58	62	69	67	76	67
29	80	2.8	4.5	2.1	-----	67	62	52	66	76	75	66
30	40	2.8	4.5	1.9	-----	152	78	47	69	78	99	56
31	22	-----	4.7	2.0	-----	76	-----	36	-----	76	86	-----
TOTAL	2,724	417.3	136.0	63.1	369.4	2,111	1,138	1,722	1,971	2,250	2,232	2,122
MEAN	87.9	13.9	4.39	2.04	13.2	68.1	37.9	55.5	65.7	72.6	72.0	70.7
MAX	702	25	6.4	2.5	107	152	78	100	109	88	118	128
MIN	14	2.8	2.5	1.5	1.8	36	13	33	36	67	31	56
AC-FT	5,400	828	270	125	733	4,190	2,260	3,420	3,910	4,460	4,430	4,210

CAL YR 1972 TOTAL 12,982.1 MEAN 35.5 MAX 702 MIN 1.1 AC-FT 25,750
 WTR YR 1973 TOTAL 17,255.8 MEAN 47.3 MAX 702 MIN 1.5 AC-FT 34,230

PEAK DISCHARGE (BASE, 180 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
10-13	0930	1.88	259	10-19	1915	4.19	1,640	3-30	1900	2.23	370
10-16	0145	2.23	382	10-28	0045	2.10	342	8-22	0615	1.75	208
10-18	1900	2.31	414	3-19	2000	1.96	271	9-11	0200	1.84	226

09357500 ANIMAS RIVER AT HOWARDSVILLE, COLO.

LOCATION.--Lat 37°49'59", long 107°35'56"; San Juan County, on right bank 1,000 ft (300 m) downstream from bridge on State Highway 110, 0.4 mi (0.6 km) southwest of Howardsville, and 0.4 mi (0.6 km) downstream from Cunningham Creek.

DRAINAGE AREA.--55.9 mi² (145 km²).

PERIOD OF RECORD.--October 1935 to current year. Monthly discharge only for some periods, published in WSP 1313.

GAGE.--Water-stage recorder. Datum of gage is 9,616.98 ft (2,931.256 m) above mean sea level. Prior to Aug. 18, 1939, at datum 1.00 ft (0.305 m) higher.

AVERAGE DISCHARGE.--38 years, 104 ft³/s (2.945 m³/s), 75,350 acre-ft/yr (92.9 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,530 ft³/s (43.3 m³/s) June 27 (gage height, 3.87 ft or 1.180 m); minimum daily, 13 ft³/s (0.37 m³/s) Mar. 16.

Period of record: Maximum discharge, 1,980 ft³/s (56.1 m³/s) June 18, 1949 (gage height, 4.36 ft or 1.329 m, from rating curve extended above 950 ft³/s (27 m³/s); maximum gage height, 5.24 ft (1.597 m) Feb. 18, 1958 (backwater from snowslide); minimum daily discharge, 9.0 ft³/s (0.25 m³/s) Jan. 10, 1957, Feb. 15, Mar. 9, 1964, Feb. 13, 1965.

Greatest flood since at least 1885 occurred Oct. 5, 1911.

REMARKS.--Records good except those for winter period, which are fair. No diversion above station. Water-quality records for the current year are published in Part 2 of this report.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	39	49	26	20	16	15	15	35	329	805	150	105
2	40	49	26	20	17	15	15	32	278	735	145	85
3	39	44	25	20	17	15	15	36	244	651	140	70
4	39	41	23	20	17	15	15	49	229	637	134	60
5	54	45	22	20	17	15	15	58	208	644	136	50
6	45	43	23	20	17	15	15	52	220	594	140	47
7	46	36	24	19	17	15	15	47	274	510	130	47
8	52	37	25	19	17	15	15	51	396	500	125	45
9	49	36	25	20	16	15	15	68	606	534	120	44
10	47	34	24	19	16	15	15	108	763	546	110	68
11	45	35	24	19	16	15	15	162	756	564	110	68
12	44	35	24	19	16	14	15	223	763	564	115	60
13	45	34	23	18	16	14	16	235	791	445	100	58
14	44	34	23	18	16	14	16	257	714	396	95	56
15	52	34	23	18	16	14	16	254	500	383	90	52
16	81	32	22	18	16	13	16	313	388	341	85	51
17	88	33	22	18	16	14	16	345	388	297	90	50
18	85	33	22	18	16	14	17	406	450	297	95	45
19	104	30	22	18	16	14	16	495	455	337	100	43
20	106	31	22	17	16	14	16	500	495	333	100	40
21	90	31	22	17	16	14	16	430	558	282	110	39
22	81	30	21	19	15	15	17	337	624	244	110	38
23	74	29	21	18	15	14	18	305	686	226	100	38
24	66	29	21	18	15	14	18	353	693	220	110	38
25	68	29	21	18	15	14	19	383	749	214	120	37
26	62	28	21	18	15	14	20	313	864	202	130	37
27	62	27	20	18	15	15	24	241	1,060	190	110	34
28	60	27	20	18	15	15	28	208	947	180	100	33
29	54	27	20	18	-----	14	34	211	912	168	100	33
30	52	27	20	18	-----	14	40	247	896	170	100	33
31	51	-----	20	18	-----	15	-----	289	-----	155	110	-----
TOTAL	1,864	1,029	697	576	448	448	543	7,043	17,236	12,364	3,510	1,504
MEAN	60.1	34.3	22.5	18.6	16.0	14.5	18.1	227	575	399	113	50.1
MAX	106	49	26	20	17	15	40	500	1,060	805	150	105
MIN	39	27	20	17	15	13	15	32	208	155	85	33
AC-FT	3,700	2,040	1,380	1,140	889	889	1,080	13,970	34,190	24,520	6,960	2,980

CAL YR 1972 TOTAL 29,279 MEAN 80.0 MAX 600 MIN 16 AC-FT 58,070

WTR YR 1973 TOTAL 47,262 MEAN 129 MAX 1,060 MIN 13 AC-FT 93,740

PEAK DISCHARGE (BASE, 700 CFS).--June 27 (2100) 1,530 cfs (3.87 ft).

NOTE.--No gage-height record Aug. 7 to Sept. 5.

SAN JUAN RIVER BASIN

361

09358900 MINERAL CREEK ABOVE SILVERTON, COLO.

LOCATION.--Lat 37°51'04", long 107°43'31", San Juan County, on right bank 200 ft (61 m) upstream from bridge, 0.6 mi (1.0 km) upstream from Middle Fork, and 4.3 mi (6.9 km) northwest of Silverton.

DRAINAGE AREA.--11.0 mi² (28.5 km²).

PERIOD OF RECORD.--October 1968 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 9,980 ft (3,042 m) from topographic map.

AVERAGE DISCHARGE.--5 years, 22.8 ft³/s (0.646 m³/s), 16,520 acre-ft/yr (20.4 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 244 ft³/s (6.91 m³/s) June 27 (gage height, 1.96 ft or 0.597 m); minimum daily, 2.3 ft³/s (0.065 m³/s) Mar. 10.

Period of record: Maximum discharge, 750 ft³/s (21.2 m³/s) Sept. 5, 1970 (gage height, 4.50 ft or 1.372 m, from floodmark), by slope-area measurement of peak flow; minimum daily, 1.7 ft³/s (0.048 m³/s) Mar. 4, 1969.

REMARKS.--Records poor. No regulation. Red Mountain ditch diverts water above station in some years to Uncompahgre River drainage. Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.4	9.5	5.4	4.6	3.2	2.6	5.4	8.5	53	163	31	19
2	5.2	9.0	5.4	4.7	3.2	2.6	3.5	7.5	56	158	31	16
3	5.0	8.0	5.7	4.7	3.2	2.6	3.6	9.8	46	150	31	13
4	11	6.8	5.2	4.5	3.2	2.6	3.6	12	40	142	30	11
5	18	8.3	5.7	4.5	3.2	2.6	3.6	13	38	131	34	10
6	12	7.2	5.0	4.4	3.2	2.6	3.3	11	41	124	35	11
7	20	6.8	5.0	4.1	3.2	2.5	3.2	8.7	58	117	30	9.8
8	21	6.3	5.0	3.8	3.0	2.4	3.0	9.4	67	117	26	9.0
9	14	5.9	5.4	3.6	3.0	2.5	3.0	13	75	114	23	9.4
10	16	6.3	5.2	3.5	3.0	2.3	3.2	20	85	107	18	20
11	13	6.3	5.0	3.5	3.0	2.4	3.4	38	124	102	17	16
12	12	7.2	4.7	3.6	3.0	2.5	3.4	60	135	117	16	14
13	14	6.8	4.7	3.6	2.9	2.5	3.6	60	150	114	16	14
14	14	6.6	4.5	3.6	2.8	2.6	3.6	71	128	110	16	14
15	16	6.8	4.7	3.6	2.8	2.6	3.4	85	80	107	15	13
16	26	6.6	4.7	3.6	2.7	2.6	3.2	88	71	95	15	12
17	27	7.2	4.5	3.6	2.7	2.6	3.5	96	80	75	15	11
18	27	6.8	4.5	3.6	2.7	2.6	3.8	102	85	95	15	9.8
19	31	6.3	4.4	3.5	2.7	2.8	3.5	120	88	95	15	9.4
20	28	5.9	4.5	3.5	2.5	2.9	3.4	124	93	85	15	9.8
21	23	5.5	4.4	3.6	2.5	3.0	3.4	102	104	75	19	9.0
22	20	5.5	4.4	3.6	2.5	3.2	3.6	78	134	60	26	8.3
23	19	5.5	4.4	3.6	2.4	3.5	3.9	64	145	55	22	8.3
24	17	5.7	4.5	3.5	2.5	3.3	4.2	67	154	50	26	9.0
25	17	5.4	4.2	3.5	2.5	3.3	3.9	60	176	46	25	9.4
26	15	5.4	4.2	3.5	2.6	3.3	4.4	51	196	44	23	10
27	15	5.0	4.5	3.3	2.7	3.5	6.0	40	220	42	18	9.4
28	13	5.4	4.6	3.3	2.6	3.5	9.0	37	202	40	17	8.7
29	11	5.7	4.6	3.3	-----	3.3	11	40	176	38	15	9.0
30	11	5.4	4.7	3.3	-----	3.3	9.0	47	168	36	17	8.7
31	10	-----	4.7	3.2	-----	3.5	-----	62	-----	32	20	-----
TOTAL	511.6	195.1	148.4	115.8	79.5	88.2	126.6	1,604.9	3,268	2,836	672	341.0
MEAN	16.5	6.50	4.79	3.74	2.84	2.85	4.22	51.8	109	91.5	21.7	11.4
MAX	31	9.5	5.7	4.7	3.2	3.5	11	124	220	163	35	20
MIN	5.0	5.0	4.2	3.2	2.4	2.3	3.0	7.5	38	32	15	8.3
AC-FT	1,010	387	294	230	158	175	251	3,180	6,480	5,630	1,330	676

CAL YR 1972 TOTAL 6,465.3 MEAN 17.7 MAX 142 MIN 1.8 AC-FT 12,820
WTR YR 1973 TOTAL 9,987.1 MEAN 27.4 MAX 220 MIN 2.3 AC-FT 19,810

SAN JUAN RIVER BASIN

09361000 HERMOSA CREEK NEAR HERMOSA, COLO.

LOCATION.--Lat 37°25'19", long 107°50'40", in NE¼NW¼ sec.3, T.36 N., R.9 W., La Plata County, on right bank 20 ft (6 m) downstream from private bridge, 0.8 mi (1.3 km) northwest of Hermosa, and 2.2 mi (3.5 km) upstream from mouth.

DRAINAGE AREA.--172 mi² (445 km²).

PERIOD OF RECORD.--November and December 1911 (gage heights and discharge measurements only), January 1912 to September 1914, October 1919 to September 1928, October 1939 to current year. Monthly discharge only for some periods, published in WSP 1313.

GAGE.--Water-stage recorder. Datum of gage is 6,705.88 ft (2,043.952 m) above mean sea level. Prior to September 1914, nonrecording gage and April 1920 to September 1928, water-stage recorder (nonrecording gage for short periods), within 0.5 mi (0.8 km) at different datums.

AVERAGE DISCHARGE.--45 years, 138 ft³/s (3.908 m³/s), 99,980 acre-ft/yr (123 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,680 ft³/s (75.9 m³/s) May 19 (gage height, 5.15 ft or 1.570 m); maximum gage height, 5.60 ft (1.707 m) May 19 (backwater from log jam); minimum daily discharge, 20 ft³/s (0.57 m³/s) Oct. 3.

Period of record: Maximum discharge, 2,980 ft³/s (84.4 m³/s) May 12, 1941 (gage height, 6.02 ft or 1.835 m); maximum gage height, 8.50 ft (2.591 m) Sept. 12, 1927, from floodmarks, site and datum then in use; minimum daily discharge, 4.0 ft³/s (0.11 m³/s) Dec. 9, 1956.

REMARKS.--Records good except those for winter period, which are poor. Diversions for irrigation of a few hay meadows above station.

REVISIONS (WATER YEARS).--WSP 1313: 1927(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	159	75	60	62	67	105	565	1,100	486	84	56
2	21	153	75	65	55	75	105	454	1,070	445	78	50
3	20	130	75	60	55	82	98	463	997	396	77	46
4	29	136	80	65	59	85	94	610	1,020	560	80	44
5	100	142	80	65	57	89	93	695	960	332	82	42
6	51	136	75	60	57	82	100	585	960	308	74	41
7	91	125	75	65	58	82	117	505	1,120	280	72	41
8	120	130	75	60	56	80	112	545	1,390	263	70	38
9	72	122	70	60	56	80	115	864	1,720	238	64	38
10	57	103	70	65	54	77	125	1,320	1,690	221	62	63
11	49	115	70	60	56	77	139	1,740	1,570	231	58	75
12	45	110	75	55	56	75	171	1,860	1,380	224	56	57
13	47	96	70	60	52	74	245	1,570	1,310	231	54	49
14	44	98	70	60	50	70	280	1,330	1,430	214	54	46
15	50	98	65	55	48	66	280	1,420	990	177	56	44
16	107	89	65	55	48	69	252	1,520	780	168	51	42
17	245	96	65	60	50	77	245	1,560	723	159	50	41
18	249	93	70	60	55	85	277	1,770	706	224	50	40
19	1,040	84	70	60	55	85	252	2,320	657	195	49	39
20	1,120	94	70	60	50	94	221	2,150	615	174	46	38
21	575	89	65	55	56	117	201	1,940	600	153	48	38
22	388	84	70	55	54	112	195	1,500	585	139	58	37
23	300	80	65	55	53	103	224	1,210	580	122	48	36
24	252	80	65	60	53	98	284	1,190	585	112	54	37
25	249	80	65	65	54	94	304	1,200	610	105	59	37
26	224	75	65	60	54	103	409	1,350	635	96	57	39
27	231	75	65	55	59	122	560	1,080	662	96	50	38
28	214	78	70	55	66	117	679	894	640	94	47	37
29	198	75	70	55	-----	112	734	858	590	93	47	36
30	186	75	65	60	-----	105	774	966	535	93	56	35
31	177	-----	60	60	-----	105	-----	1,070	-----	93	84	-----
TOTAL	6,572	3,100	2,165	1,845	1,538	2,759	7,790	37,104	28,210	6,522	1,875	1,300
MEAN	212	103	69.8	59.5	54.9	89.0	260	1,197	940	210	60.5	45.3
MAX	1,120	159	80	65	66	122	774	2,320	1,720	486	84	75
MIN	20	75	60	55	48	66	93	454	535	93	46	35
AC-FT	13,040	6,150	4,290	3,660	3,050	5,470	15,450	73,600	55,950	12,940	3,720	2,580

CAL YR 1972 TOTAL 37,600 MEAN 103 MAX 1,120 MIN 19 AC-FT 74,580
 WITH YR 1973 TOTAL 100,780 MEAN 276 MAX 2,320 MIN 20 AC-FT 199,900

PEAK DISCHARGE (BASE, 800 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
10-19	1600	4.31	1,770	6-10	0030	4.29	1,870
5-19	2330	5.15	2,680				

09361500 ANIMAS RIVER AT DURANGO, COLO.

LOCATION.--Lat 37°16'45", long 107°52'47", in SW¼SW¼ sec.20, T.35 N., R.9 W., La Plata County, on left bank at Western Colorado Power Co.'s plant at Durango, 0.8 mi (1.3 km) upstream from Lightner Creek.

DRAINAGE AREA.--692 mi² (1,792 km²).

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.

GAGE.--Water-stage recorder. Datum of gage is 6,501.57 ft (1,981.679 m) above mean sea level. See WSP 1713 or 1733 for history of changes prior to Mar. 2, 1921.

AVERAGE DISCHARGE.--68 years (1896-1900, 1904-5, 1910-73), 845 ft³/s (23.93 m³/s), 612,200 acre-ft/yr (755 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 7,590 ft³/s (215 m³/s) June 11 (gage height, 7.17 ft or 2.185 m); minimum daily, 215 ft³/s (6.09 m³/s) Oct. 3.

Period of record: Maximum discharge, 25,000 ft³/s (708 m³/s) Oct. 5, 1911 (gage height, 11 ft or 3.4 m, present site and datum), from rating curve extended above 13,000 ft³/s (370 m³/s); minimum daily, 94 ft³/s (2.66 m³/s) Mar. 2, 1913.

Maximum stage since at least 1885, that of Oct. 5, 1911.

REMARKS.--Records good. Diversions for irrigation of about 4,000 acres (16.2 km²) above station. Natural regulation by many lakes and regulation for power above station.

REVISIONS (WATER YEARS).--WSP 764: Drainage area. WSP 929: 1927(M). WSP 1243: 1911, 1918(m). WSP 1563: 1911-25 (monthly figures only).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	224	810	401	326	310	356	474	1,860	3,920	4,860	930	637
2	218	760	394	344	295	362	474	1,560	3,740	4,520	910	570
3	215	720	387	332	300	380	458	1,460	3,420	4,190	880	522
4	221	691	422	344	326	387	436	1,690	3,370	3,610	900	490
5	551	673	436	350	315	394	429	2,090	3,110	3,580	880	466
6	602	673	387	332	310	380	458	1,910	3,000	3,380	880	443
7	628	637	387	338	315	368	490	1,640	3,430	3,060	880	429
8	990	646	408	320	310	380	474	1,660	4,350	2,880	840	415
9	810	628	394	320	310	380	466	1,980	5,370	2,720	780	401
10	628	578	362	344	300	362	490	2,640	6,690	2,980	760	466
11	530	594	368	320	310	362	522	3,970	7,110	2,910	730	646
12	458	602	394	315	320	356	578	4,460	7,000	3,030	682	619
13	458	546	362	338	305	362	700	4,190	6,560	2,640	646	578
14	443	538	368	320	290	350	820	3,810	6,760	2,360	619	538
15	436	538	350	320	275	344	870	4,010	5,640	2,260	619	514
16	700	506	356	320	280	344	810	4,210	3,860	2,140	594	482
17	1,340	522	356	338	295	362	780	4,420	3,340	1,830	562	474
18	1,460	498	368	338	305	374	850	4,840	3,540	1,910	570	458
19	3,030	482	368	332	305	380	820	6,010	3,540	2,220	554	436
20	4,310	498	374	332	300	408	730	6,410	3,480	2,190	546	422
21	2,560	490	362	315	315	498	691	5,790	3,700	1,910	554	408
22	1,780	458	362	305	320	482	646	4,700	3,830	1,620	602	401
23	1,430	436	368	295	320	466	720	3,850	4,120	1,420	586	387
24	1,190	436	350	305	310	443	890	3,790	4,390	1,320	554	387
25	1,200	422	350	344	310	443	970	3,970	4,420	1,260	646	394
26	1,110	422	344	326	315	450	1,140	4,100	4,780	1,200	710	387
27	1,080	450	344	326	320	482	1,450	3,540	5,610	1,120	682	387
28	1,010	408	380	310	338	498	1,840	2,940	6,030	1,070	594	374
29	930	429	380	310	-----	506	2,000	2,780	5,350	1,020	554	356
30	880	415	362	326	-----	482	2,280	3,060	5,350	990	530	338
31	850	-----	338	326	-----	474	-----	3,580	-----	970	682	-----
TOTAL	32,272	16,506	11,582	10,111	8,624	12,615	24,756	106,920	138,810	73,170	21,456	13,825
MEAN	1,041	550	374	326	308	407	825	3,449	4,627	2,360	692	461
MAX	4,310	810	436	350	338	506	2,280	6,410	7,110	4,860	930	646
MIN	215	408	338	295	275	344	429	1,460	3,000	970	530	338
AC-FT	64,010	32,740	22,970	20,060	17,110	25,020	49,100	212,100	275,300	145,100	42,560	27,420

CAL YR 1972 TOTAL 234,479 MEAN 641 MAX 4,310 MIN 178 AC-FT 465,100
WTR YR 1973 TOTAL 470,647 MEAN 1,289 MAX 7,110 MIN 215 AC-FT 933,500

PEAK DISCHARGE (BASE, 4,000 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
10-20	0500	5.93	4,960	6-11	1430	7.17	7,590
5-20	1000	6.76	6,710				

09363050 FLORIDA RIVER BELOW FLORIDA FARMERS DITCH, NEAR DURANGO, COLO.

LOCATION.--Lat 37°17'42", long 107°47'28", in SW¼SW¼ sec.18, T.35 N., R.8 W., La Plata County, on right bank 30 ft (9 m) downstream from diversion dam for Florida Farmers ditch and 4.0 mi (6.4 km) east of Riverview School in Durango.

DRAINAGE AREA.--108 mi² (280 km²).

PERIOD OF RECORD.--October 1967 to current year.

GAGE.--Water-stage recorder. Datum of gage is 7,065.35 ft (2,153.519 m) above mean sea level (levels by Bureau of Reclamation).

AVERAGE DISCHARGE.--6 years, 42.0 ft³/s (1.189 m³/s) 30,430 acre-ft/yr (37.5 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,100 ft³/s (31.2 m³/s) May 19 (gage height, 5.70 ft or 1.737 m); minimum daily, 2.7 ft³/s (0.076 m³/s) Oct. 14.

Period of record: Maximum discharge, 1,100 ft³/s (31.2 m³/s) May 19, 1973 (gage height, 5.70 ft or 1.737 m); minimum daily, 0.70 ft³/s (0.020 m³/s) Oct. 14, 1968.

REMARKS.--Records good except those for winter period, which are poor. Flow regulated by Lemon Reservoir (capacity, 40,100 acre-ft or 49.4 hm³). Diversions above station for irrigation above and below station and for municipal supply of Durango.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.5	17	23	18	17	26	87	441	204	605	5.0	9.6
2	3.5	14	23	19	16	28	88	429	174	489	4.8	9.6
3	4.5	16	22	18	17	30	90	438	157	444	4.6	9.6
4	3.5	17	21	20	18	30	91	450	154	393	4.6	9.9
5	3.2	19	24	19	18	30	102	462	166	320	4.3	9.9
6	5.0	16	22	19	18	28	127	450	214	270	6.0	10
7	5.6	15	22	19	18	27	137	438	206	234	11	10
8	6.6	15	22	18	17	28	139	453	220	204	11	10
9	2.8	17	20	18	17	27	143	486	345	174	11	10
10	2.8	18	20	19	17	24	148	542	486	140	11	10
11	5.0	18	20	18	18	26	158	636	524	91	9.6	9.9
12	3.0	20	22	18	18	27	176	720	510	82	9.6	8.9
13	2.8	17	20	19	17	27	206	717	431	77	9.6	7.9
14	2.7	13	20	18	16	26	218	720	654	79	9.2	7.9
15	3.4	8.9	20	18	15	25	218	756	631	83	8.3	7.6
16	9.2	7.9	20	18	16	26	198	713	144	70	8.3	7.3
17	6.1	12	20	19	17	28	212	675	134	60	8.3	6.3
18	3.7	20	20	19	17	30	224	789	142	66	8.3	7.0
19	75	19	20	19	17	43	208	1,000	142	39	8.6	8.6
20	196	20	22	18	17	68	194	1,070	142	36	8.3	7.9
21	82	23	20	18	18	78	232	1,030	143	27	12	7.9
22	47	22	20	17	20	77	280	908	143	27	15	8.3
23	35	26	20	17	19	76	318	820	140	21	14	8.3
24	27	24	19	16	18	75	360	652	137	8.6	11	7.9
25	30	22	19	19	18	76	405	450	223	8.9	10	9.2
26	25	24	19	18	19	79	450	423	415	7.0	9.9	9.9
27	22	20	20	18	21	79	489	438	566	16	9.6	8.9
28	24	23	22	17	24	81	521	385	615	7.0	9.6	8.9
29	22	24	22	18	-----	81	483	355	633	7.9	9.9	8.9
30	20	24	20	18	-----	81	456	338	643	7.3	9.9	8.9
31	16	-----	19	18	-----	83	-----	269	-----	6.6	9.9	-----
TOTAL	690.9	551.8	643	565	498	1,470	7,158	18,453	9,438	4,100.3	282.2	265.0
MEAN	22.3	18.4	20.7	18.2	17.8	47.4	239	595	315	132	9.10	8.83
MAX	196	26	24	20	24	83	521	1,070	654	605	15	10
MIN	2.7	7.9	19	16	15	24	87	269	134	6.6	4.3	6.3
AC-FT	1,370	1,090	1,280	1,120	988	2,920	14,200	36,600	18,720	8,130	560	526
CAL YR 1972	TOTAL	308,785.70	MEAN	844	MAX	196	MIN	90	AC-FT	612,500		
WTR YR 1973	TOTAL	44,115.20	MEAN	121	MAX	1,070	MIN	2.7	AC-FT	87,500		

09363100 SALT CREEK NEAR OXFORD, COLO.

LOCATION.--Lat 37°08'23", long 107°45'10", in NE¼NE¼ sec.6, T.33 N., R.8 W., La Plata County, on right bank 2.9 mi (4.7 km) upstream from mouth, 3.0 mi (4.8 km) southwest of Oxford, and 11 mi (18 km) southeast of Durango.

DRAINAGE AREA.--16.7 mi² (43.3 km²).

PERIOD OF RECORD.--October 1956 to September 1963, October 1967 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,470 ft (1,972 m) from topographic map. Prior to October 1967 at site 0.2 mi (0.3 km) upstream at different datum.

AVERAGE DISCHARGE.--13 years, 12.6 ft³/s (0.357 m³/s), 9,130 acre-ft/yr (11.3 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 811 ft³/s (23.0 m³/s) Oct. 19 (gage height, 5.24 ft or 1.597 m), from rating curve extended as explained below; minimum daily, 0.88 ft³/s (0.025 m³/s) Dec. 26, 27.
Period of record: Maximum discharge, 811 ft³/s (23.0 m³/s) Oct. 19, 1972 (gage height, 5.24 ft or 1.597 m), from rating curve extended above 200 ft³/s (5.7 m³/s) on basis of slope-area measurements at gage heights 3.54 and 5.24 ft (1.079 and 1.597 m); no flow at times in 1959-60, 1962.

REMARKS.--Records good except those for winter period, which are fair. Most of flow is return flow from areas irrigated by water imported from Los Pinos River.

REVISIONS (WATER YEARS).--WSP 1925: 1960.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.3	33	2.8	1.3	1.8	30	72	4.9	9.9	17	29	33
2	7.0	25	2.8	1.3	1.8	36	56	2.9	15	16	24	27
3	8.3	24	2.8	1.3	1.8	45	39	2.1	39	14	24	26
4	9.3	26	2.6	1.2	1.8	53	28	2.0	82	12	23	26
5	15	9.6	2.6	1.2	2.0	31	35	2.1	37	18	32	26
6	10	6.5	2.4	1.3	2.0	23	53	2.9	38	23	29	25
7	54	5.5	2.4	1.3	2.0	22	42	2.4	28	20	27	25
8	38	6.1	2.1	1.2	2.1	28	19	1.8	4.8	29	26	25
9	13	7.2	2.3	1.2	2.1	16	14	1.7	9.4	30	26	27
10	11	5.4	2.4	1.2	2.2	12	20	1.5	12	28	25	55
11	11	5.3	2.3	1.3	2.6	13	17	1.4	9.0	26	25	58
12	10	5.1	2.1	1.3	2.9	20	8.3	1.5	8.8	26	24	37
13	19	4.9	1.9	1.3	3.2	47	4.9	2.0	21	30	23	37
14	13	4.9	1.8	1.3	3.2	29	4.1	1.8	36	31	23	37
15	28	5.7	1.5	1.3	2.8	28	4.1	4.7	33	27	23	33
16	76	5.1	1.4	1.4	2.6	27	3.8	2.0	33	29	22	23
17	55	6.3	1.3	1.4	2.6	45	3.4	1.5	27	23	20	22
18	48	9.3	1.4	1.4	2.5	65	4.3	9.1	23	23	22	23
19	315	8.5	1.4	1.4	2.4	109	5.9	1.9	20	24	22	21
20	248	7.0	1.4	1.4	2.2	147	4.6	1.6	20	27	25	23
21	17	6.1	1.4	1.2	2.1	174	3.4	1.5	18	37	29	20
22	9.6	4.6	1.2	1.2	3.0	49	3.1	1.8	15	37	33	17
23	34	4.0	1.2	1.0	3.0	25	2.7	4.0	20	33	28	17
24	7.8	3.8	1.1	1.0	2.8	48	2.9	12	27	19	32	19
25	9.9	3.6	1.1	1.2	3.2	89	2.9	11	25	10	36	18
26	6.8	3.4	.88	1.4	4.6	100	2.5	8.5	23	8.5	42	22
27	25	3.2	.88	1.4	6.5	76	2.4	7.5	23	14	32	21
28	57	3.2	.96	1.2	14	57	2.2	6.3	22	25	31	21
29	11	3.0	1.3	1.2	-----	46	2.1	6.8	20	28	33	22
30	9.9	2.8	1.4	1.4	-----	70	2.8	5.3	19	28	44	23
31	17	-----	1.4	1.6	-----	102	-----	4.6	-----	28	59	-----
TOTAL	1,201.9	248.1	54.52	39.8	85.8	1,662	465.4	121.1	717.9	740.5	893	809
MEAN	38.8	8.27	1.76	1.28	3.06	53.6	15.5	3.91	23.9	23.9	28.8	27.0
MAX	315	33	2.8	1.6	14	174	72	12	82	37	59	58
MIN	6.8	2.8	.88	1.0	1.8	12	2.1	1.4	4.8	8.5	20	17
AC=FT	2,380	492	108	79	170	3,300	923	240	1,420	1,470	1,770	1,600

CAL YR 1972 TOTAL 3,789.83 MEAN 10.4 MAX 315 MIN .03 AC=FT 7,520
WTR YR 1973 TOTAL 7,039.02 MEAN 19.3 MAX 315 MIN .88 AC=FT 13,960

09363200 FLORIDA RIVER AT BONDAD, COLO.

LOCATION.--Lat 37°03'24", long 107°52'09", in NE¼SW¼ sec.31, T.33 N., R.9 W., La Plata County, on left bank 20 ft (6 m) downstream from railroad trestle, 0.6 mi (1.0 km) upstream from mouth, 0.7 mi (1.1 km) north-east of Bondad, and 15 mi (24 km) south of Durango.

DRAINAGE AREA.--221 mi² (572 km²).

PERIOD OF RECORD.--October 1956 to September 1963, October 1967 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,000 ft (1,829 m) from topographic map. Prior to Sept. 11, 1958, at site 300 ft (91 m) upstream at datum 2.39 ft (0.728 m) higher.

AVERAGE DISCHARGE.--7 years (1956-63), 77.8 ft³/s (2.203 m³/s), 56,370 acre-ft/yr (69.5 hm³/yr), prior to completion of Lemon Reservoir; 6 years (1967-73), 74.1 ft³/s (2.099 m³/s), 53,690 acre-ft/yr (66.2 hm³/yr), subsequent to completion of Lemon Reservoir. 5 years (1967-72), 54.4 ft³/s (1.541 m³/s), 39,410 acre-ft/yr (48.6 hm³/yr), subsequent to completion of Lemon Reservoir; figure published in Water Resources Data for Colorado, 1972, in error.

EXTREMES.--Current year: Maximum discharge, 1,640 ft³/s (46.4 m³/s) Oct. 19 (gage height, 6.30 ft or 1.920 m), from rating curve extended as explained below; minimum daily, 18 ft³/s (0.51 m³/s) Oct. 2.

Period of record: Maximum discharge, 1,640 ft³/s (46.4 m³/s) Oct. 19, 1972 (gage height, 6.30 ft or 1.920 m), from rating curve extended above 1,100 ft³/s (31 m³/s) on basis of slope-area measurement of peak flow; minimum daily, 4.6 ft³/s (0.13 m³/s) July 24, 1959.

REMARKS.--Records good except those for winter period, which are poor. Diversion for irrigation of about 20,000 acres (80.9 km²) above station. Flow regulated by Lemon Reservoir (capacity, 40,100 acre-ft or 49.4 hm³) since November 1963. Most of flow is return flow from irrigated areas.

REVISIONS (WATER YEARS).--WSP 1713: 1958.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	UCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	114	44	36	34	82	278	545	235	610	62	76
2	18	99	41	36	32	97	229	474	203	550	57	70
3	19	90	42	36	34	124	208	462	210	462	60	70
4	23	90	43	38	36	138	185	482	259	450	52	69
5	39	72	44	38	34	124	209	498	190	370	62	63
6	34	65	35	36	34	106	282	486	241	308	66	60
7	77	58	49	36	34	105	300	442	241	280	62	57
8	109	57	47	34	34	122	229	438	226	244	61	56
9	54	62	45	36	32	106	215	458	287	229	57	62
10	41	58	32	36	32	96	238	510	454	193	58	108
11	38	56	46	34	34	96	253	595	520	156	54	138
12	38	58	39	34	34	101	265	685	502	138	48	96
13	51	55	41	36	35	140	312	690	515	144	48	86
14	45	57	40	34	32	116	315	685	720	154	48	82
15	50	54	38	34	32	114	315	730	730	148	51	81
16	162	45	38	36	30	120	265	740	397	142	47	72
17	110	49	38	36	36	146	262	705	198	128	44	68
18	105	60	40	36	34	166	305	725	198	138	44	68
19	485	62	40	36	34	215	277	914	183	126	46	63
20	788	61	40	34	32	363	238	1,080	185	112	48	60
21	256	58	38	34	39	540	241	1,080	183	105	56	63
22	150	58	40	32	42	235	322	1,030	185	99	69	58
23	152	51	40	32	39	183	350	896	183	94	58	58
24	96	54	36	34	39	180	386	835	180	72	61	62
25	97	49	36	36	43	241	402	595	200	54	70	63
26	87	47	36	36	46	295	426	458	358	48	82	76
27	86	56	38	34	55	305	450	434	545	55	69	72
28	165	41	40	34	69	256	482	406	615	69	66	73
29	86	44	40	34	-----	238	486	358	635	65	61	72
30	81	40	38	36	-----	274	555	340	630	73	73	73
31	82	-----	36	36	-----	305	-----	305	-----	68	101	-----
TOTAL	3,644	1,820	1,239	1,090	1,041	5,729	9,280	19,081	10,408	5,864	1,841	2,175
MEAN	118	60.7	40.0	35.2	37.2	185	309	616	347	189	59.4	72.5
MAX	788	114	49	38	69	540	555	1,080	730	610	101	138
MIN	18	40	32	32	30	82	185	305	180	48	44	56
AC-FT	7,230	3,610	2,460	2,160	2,060	11,360	18,410	37,850	20,640	11,630	3,650	4,310

CAL YR 1972 TOTAL 14,758.8 MEAN 40.3 MAX 788 MIN 7.5 AC-FT 29,270
WTR YR 1973 TOTAL 63,212.0 MEAN 173 MAX 1,080 MIN 18 AC-FT 125,400

09363500 ANIMAS RIVER NEAR CEDAR HILL, N. MEX.

LOCATION.--Lat 37°02'17", long 107°52'25", in sec.7, T.32 N., R.9 W., La Plata County, Colorado, on right bank 0.8 mi (1.3 km) downstream from Florida River, 2.5 mi (4.0 km) upstream from Colorado-New Mexico State line, and 8.5 mi (13.7 km) north of Cedar Hill.

DRAINAGE AREA.--1,090 mi² (2,820 km²), approximately.

PERIOD OF RECORD.--October 1933 to current year. Monthly discharge only for October and November 1933, published in WSP 1313.

GAGE.--Water-stage recorder. Altitude of gage is 5,960 ft (1,817 m) from topographic map. Prior to Sept. 14, 1937, at datum between 1.52 ft (0.463 m) and 1.36 ft (0.415 m) higher. Sept. 15, 1937, to Sept. 30, 1946, at datum 1.36 ft (0.415 m) higher.

AVERAGE DISCHARGE.--40 years, 898 ft³/s (25.43 m³/s), 650,600 acre-ft/yr (802 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 10,600 ft³/s (300 m³/s) Oct. 20 (gage height, 10.56 ft or 3.219 m); minimum, 274 ft³/s (7.76 m³/s) Oct. 2.
Period of record: Maximum discharge, 13,100 ft³/s (371 m³/s) June 19, 1949 (gage height, 11.45 ft or 3.490 m); minimum, 63 ft³/s (1.78 m³/s) Jan. 21, 1935.
A flood in October 1911 exceeded all other known floods at this location.

REMARKS.--Records fair except those for winter periods, which are poor. Diversions for irrigation of about 20,000 acres (80.9 km²) above station. During water years 1944-49, Twin Rocks Canal diverted above station for irrigation below. Slight regulation by Lemon Dam about 30 mi (48 km) upstream on Florida River since November 1963 (capacity, 40,100 acre-ft or 49.4 hm³). Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1563: 1940 and 1946 (monthly figures only).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	298	1,040	455	385	374	554	1,030	2,730	4,490	6,000	1,080	880
2	288	960	450	392	353	571	962	2,280	4,210	5,800	1,030	776
3	292	968	430	400	345	645	907	2,120	3,850	5,200	1,010	725
4	318	920	430	405	372	661	834	2,340	3,850	4,800	1,010	676
5	544	832	500	400	376	630	880	2,780	3,410	4,400	1,000	641
6	724	816	440	390	378	581	1,100	2,710	3,270	4,010	993	602
7	1,050	784	420	390	390	560	1,210	2,350	3,550	3,680	982	584
8	1,040	768	450	380	388	595	1,010	2,340	4,200	3,420	979	566
9	858	760	410	380	372	591	951	2,700	5,230	3,260	912	554
10	697	711	410	390	362	592	1,100	3,470	7,200	3,450	864	620
11	604	676	390	400	369	579	1,310	4,830	8,200	3,340	832	864
12	555	704	430	365	387	583	1,450	5,720	8,000	3,320	784	824
13	568	662	370	360	372	606	1,550	5,420	7,150	3,060	760	739
14	552	641	365	385	351	599	1,650	5,160	7,500	2,780	725	704
15	591	627	350	375	333	590	1,610	5,230	6,860	2,650	732	662
16	959	596	360	385	326	619	1,430	5,340	4,850	2,500	703	620
17	1,450	608	360	395	336	668	1,470	5,360	3,960	2,270	692	602
18	1,540	596	400	380	343	728	1,580	6,130	4,120	2,250	661	578
19	5,030	590	410	380	346	818	1,450	7,750	4,180	2,510	645	554
20	7,390	596	420	390	342	1,060	1,270	8,850	4,120	2,530	643	530
21	3,170	596	446	385	345	1,490	1,230	8,390	4,350	2,290	680	518
22	1,980	566	418	365	370	930	1,290	7,260	4,520	2,010	728	500
23	1,550	560	418	355	370	816	1,400	5,810	4,640	1,740	734	482
24	1,280	540	412	355	372	779	1,660	5,320	4,770	1,540	675	482
25	1,550	520	407	365	390	864	1,750	5,300	4,830	1,410	760	470
26	1,290	500	402	385	412	983	1,920	5,190	5,280	1,350	840	488
27	1,210	520	405	390	440	1,040	2,180	4,630	5,620	1,290	872	464
28	1,340	500	405	375	501	951	2,610	3,880	6,600	1,240	760	452
29	1,170	460	415	390	-----	942	2,710	3,580	6,700	1,170	725	434
30	1,120	455	405	540	-----	1,070	3,050	3,810	6,300	1,140	760	424
31	1,090	-----	390	405	-----	1,080	-----	4,300	-----	1,110	888	-----
TOTAL	42,138	20,072	12,773	12,037	10,415	23,775	44,554	143,080	155,810	87,520	25,459	18,015
MEAN	1,359	669	412	388	372	767	1,485	4,615	5,194	2,823	821	601
MAX	7,390	1,040	500	540	501	1,490	3,050	8,850	8,200	6,000	1,080	880
MIN	288	455	350	355	326	554	834	2,120	3,270	1,110	643	424
AC-FT	83,580	39,810	25,340	23,880	20,660	47,160	88,370	283,800	309,000	173,600	50,500	35,730
CAL YR 1972	TOTAL 261,033	MEAN 713	MAX 7,390	MIN 208	AC-FT 517,800							
WTR YR 1973	TOTAL 595,648	MEAN 1,632	MAX 8,850	MIN 288	AC-FT 1,181,000							

PEAK DISCHARGE (BASE, 4,000 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
10-20	0600	10.56	10,600	6-14	1815	9.72	8,130
5-20	1715	10.00	9,410				

09365500 LA PLATA RIVER AT HESPERUS, COLO.

LOCATION.--Lat 37°17'23", long 108°02'24", in NE¼SW¼ sec.14, T.35 N., R.11 W., La Plata County, on right bank at Hesperus 700 ft (213 m) downstream from U.S. Highway 160.

DRAINAGE AREA.--37 mi² (96 km²), 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.

GAGE.--Water-stage recorder. Datum of gage is 8,104.71 ft (2,470.316 m) above mean 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 (180 m) downstream at different datums. May 25, 1927, to Sept. 30, 1938, water-stage recorder at site 60 ft (18 m) downstream and Oct. 1, 1938, to Sept. 30, 1941, at present site at datum 1.00 ft (0.305 m) higher.

AVERAGE DISCHARGE.--57 years (1905-6, 1917-73), 45.1 ft³/s (1.277 m³/s), 32,670 acre-ft/yr (40.3 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 806 ft³/s (22.8 m³/s) Oct. 19 (gage height, 4.31 ft or 1.314 m); minimum daily, 10 ft³/s (0.28 m³/s) Feb. 14.

Period of record: Maximum discharge, 1,880 ft³/s (53.2 m³/s) Sept. 22, 1941 (gage height, 4.30 ft or 1.311 m, present datum), from rating curve extended above 620 ft³/s (18 m³/s) on basis of slope-area measurement of peak flow; maximum gage height, 5.13 ft (1.564 m) Sept. 6, 1970; no flow part of Oct. 24, 1966, caused by filling of pond upstream.

Maximum flood observed occurred Oct. 5, 1911.

REMARKS.--Records good except those for winter period, which are fair. Cherry Creek ditch exports water above station for irrigation of about 2,000 acres (8.09 km²) in Cherry Creek drainage.

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

REVISIONS (WATER YEARS).--WSP 1243: 1906(m). WSP 1563: 1923 (monthly figures only). See also PERIOD OF RECORD.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	48	24	17	12	12	17	153	329	233	32	33
2	12	41	24	18	11	13	17	126	285	217	31	30
3	12	40	24	18	12	13	18	126	253	194	31	28
4	15	41	24	19	13	13	17	156	233	168	32	25
5	68	40	26	17	14	13	17	179	202	153	31	24
6	31	39	24	15	14	13	19	149	217	139	30	23
7	106	37	28	14	15	14	21	142	301	136	30	21
8	114	36	24	14	14	14	19	164	404	119	30	20
9	58	35	22	15	13	14	19	213	500	107	27	20
10	39	35	15	16	12	14	20	289	510	102	26	22
11	35	34	23	13	12	14	24	376	466	102	26	20
12	37	34	19	14	12	14	31	390	368	85	27	17
13	42	31	21	15	11	14	40	281	376	85	28	18
14	39	31	19	16	10	14	51	249	500	78	28	18
15	40	31	16	18	11	13	52	249	333	76	27	18
16	53	30	16	17	12	13	45	281	249	72	26	18
17	97	30	22	16	12	13	51	305	253	62	26	18
18	108	29	25	15	12	14	55	368	281	83	25	17
19	430	28	19	14	12	13	46	495	265	76	24	17
20	393	29	16	13	12	14	46	453	269	67	24	17
21	194	28	16	13	12	16	45	390	281	62	25	16
22	129	27	16	12	11	16	48	313	285	54	25	16
23	99	26	17	13	11	15	57	277	285	49	24	16
24	83	26	18	13	11	15	65	305	301	46	27	15
25	85	27	16	13	11	15	78	341	313	44	29	16
26	74	27	14	14	11	15	107	341	317	44	30	15
27	72	23	18	13	12	16	168	249	325	40	28	14
28	65	22	18	11	12	17	202	213	333	37	27	14
29	60	21	16	12	-----	17	213	225	285	36	25	14
30	55	20	13	13	-----	16	209	285	241	33	27	14
31	51	-----	15	14	-----	17	-----	325	-----	32	33	-----
TOTAL	2,709	946	608	455	337	444	1,817	8,408	9,560	2,831	861	574
MEAN	87.4	31.5	19.6	14.7	12.0	14.3	60.6	271	319	91.3	27.8	19.1
MAX	430	48	28	19	15	17	213	495	510	233	33	33
MIN	12	20	13	11	10	12	17	126	202	32	24	14
AC-FT	5,370	1,880	1,210	902	668	881	3,600	16,680	18,960	5,620	1,710	1,140

CAL YR 1972 TOTAL 10,524.9 MEAN 28.8 MAX 430 MIN 6.5 AC-FT 20,880
 WTR YR 1973 TOTAL 29,550.0 MEAN 81.0 MAX 510 MIN 10 AC-FT 58,610

PEAK DISCHARGE (BASE, 230 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
10-19	1630	4.31	806	6-9	2300	3.93	663
5-19	0030	3.95	630				

NOTE.--No gage-height record Nov. 26 to Mar. 6.

SAN JUAN RIVER BASIN

369

09366500 LA PLATA RIVER AT COLORADO-NEW MEXICO STATE LINE

LOCATION.--Lat 36°59'51", long 108°11'17", in NW¼SE¼ sec.10, T.32 N., R.13 W., La Plata County, Colorado, on right bank at Colorado-New Mexico State line, 0.2 mi (0.3 km) downstream from Ponds Arroyo, and 4.8 mi (7.7 km) north of La Plata, N. Mex.

DRAINAGE AREA.--331 mi² (857 km²).

PERIOD OF RECORD.--January 1920 to current year. Monthly discharge only for some periods, published in WSP 1313.

GAGE.--Water-stage recorder. Datum of gage is 5,975.15 ft (1,821.226 m) above mean sea level. See WSP 1713 or 1733 for history of changes prior to Mar. 17, 1934.

AVERAGE DISCHARGE.--53 years, 33.9 ft³/s (0.960 m³/s), 24,560 acre-ft/yr (30.3 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,520 ft³/s (43.0 m³/s) Oct. 20 (gage height, 5.73 ft or 1.747 m); minimum daily, 0.40 ft³/s (0.011 m³/s) Oct. 1.

Period of record: Maximum discharge, 4,750 ft³/s (135 m³/s) Aug. 24, 1927 (gage height, 11.36 ft or 3.463 m, present datum), from rating curve extended above 750 ft³/s (21 m³/s) on basis of slope-area measurement of peak flow; no flow at times in many years.

REMARKS.--Records good except those for winter period, which are fair. Diversions above station for irrigation of about 15,000 acres (60.7 km²), mostly above station. Water-quality records for the current year are published in Part 2 of this report.

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

REVISIONS (WATER YEARS).--WSP 1313: 1934(M), 1936(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.40	64	30	23	21	36	70	509	288	131	12	19
2	.80	53	30	24	19	39	73	405	270	111	13	15
3	1.2	52	30	24	25	43	82	382	220	94	12	14
4	15	47	30	28	30	40	78	422	285	74	12	12
5	8.7	44	34	24	34	41	78	470	192	61	14	8.5
6	2.3	42	30	20	32	40	88	443	169	66	14	7.0
7	8.1	39	36	19	34	42	117	370	210	90	14	5.8
8	42	39	32	19	32	44	104	370	315	82	15	5.8
9	11	38	29	21	28	45	101	446	413	63	13	6.2
10	3.4	36	20	23	26	47	114	544	512	74	10	12
11	12	34	33	16	26	47	150	638	530	69	9.5	20
12	19	38	25	18	27	48	236	680	437	62	8.5	15
13	26	35	28	20	25	48	325	562	368	63	11	11
14	26	34	25	23	24	43	388	467	479	64	10	9.5
15	28	36	18	26	25	39	446	388	355	50	14	8.5
16	66	32	18	25	25	41	305	378	279	50	14	7.0
17	88	36	30	24	28	44	332	382	188	51	13	5.8
18	131	35	34	23	26	49	419	390	198	49	13	5.8
19	644	31	25	22	26	47	282	512	200	51	12	5.8
20	1,000	33	22	20	25	50	250	582	176	40	11	6.2
21	276	32	22	19	28	66	242	558	175	32	13	6.6
22	150	31	22	17	26	66	228	410	184	26	16	6.2
23	117	34	24	19	25	62	300	320	176	22	16	6.6
24	103	34	26	20	25	61	378	288	180	23	15	7.0
25	185	31	22	20	29	58	390	320	188	21	15	9.0
26	114	33	19	22	30	60	458	395	206	21	13	12
27	96	34	26	21	35	72	506	305	222	19	8.5	11
28	96	30	26	18	36	70	590	212	242	19	8.0	10
29	86	31	23	21	-----	72	604	176	208	16	8.0	7.5
30	73	30	17	24	-----	70	635	208	159	18	11	6.6
31	69	-----	19	27	-----	67	-----	260	-----	13	19	-----
TOTAL	3,497.90	1,118	805	670	772	1,597	8,369	12,792	7,973	1,625	387.5	281.4
MEAN	113	37.3	26.0	21.6	27.6	51.5	279	413	266	52.4	12.5	9.38
MAX	1,000	64	36	28	36	72	635	680	530	131	19	20
MIN	.40	30	17	16	19	36	70	176	159	13	8.0	5.8
AC-FT	6,940	2,220	1,600	1,330	1,530	3,170	16,600	25,370	15,810	3,220	769	558

CAL YR 1972 TOTAL 9,189.24 MEAN 25.1 MAX 1,000 MIN 0 AC-FT 18,230
 WTR YR 1973 TOTAL 39,867.80 MEAN 109 MAX 1,000 MIN .40 AC-FT 79,120

09371000 MANCOS RIVER NEAR TOWAOC, COLO.

LOCATION.--Lat 37°01'39", long 108°44'27", Montezuma County, on left bank 700 ft (210 m) upstream from bridge on U.S. Highway 666, 2.0 mi (3.2 km) north of Colorado-New Mexico State line, 6.0 mi (9.7 km) upstream from Aztec Creek, and 12 mi (19 km) south of Towaoc.

DRAINAGE AREA.--550 mi² (1,420 km²), approximately.

PERIOD OF RECORD.--October 1920 to September 1943, February 1951 to current year. Monthly discharge only for some periods, published in WSP 1313.

GAGE.--Water-stage recorder. Datum of gage is 5,055.98 ft (1,541.063 m) above mean sea level. See WSP 1713 or 1733 for history of changes prior to Mar. 11, 1954.

AVERAGE DISCHARGE.--45 years, 51.1 ft³/s (14.47 m³/s), 37,020 acre-ft/yr (45.6 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,320 ft³/s (37.4 m³/s) May 27 (gage height, 5.18 ft or 1.579 m), from rating curve extended above 250 ft³/s (7.1 m³/s) on basis of slope-area measurement at gage height 8.50 ft (2.591 m); maximum gage height, 5.27 ft (1.606 m) May 20; minimum daily discharge, 0.74 ft³/s (0.021 m³/s) Oct. 3.

Period of record: Maximum discharge, 5,300 ft³/s (150 m³/s) Oct. 14, 1941 (gage height, 7.30 ft or 2.225 m, present site and datum), from rating curve extended above 200 ft³/s (5.7 m³/s) on basis of slope-area measurement of peak flow; maximum gage height, 8.50 ft (2.591 m) Sept. 6, 1970; no flow at times in most years.

REMARKS.--Records good except those for winter period, which are poor. Diversions for irrigation of about 10,000 acres (40.5 km²) above station. One diversion above station for irrigation of about 100 acres (405,000 m²) below. Flow regulated by Jackson Gulch Reservoir (capacity, 10,000 acre-ft (12.3 hm³) since March 1949.

REVISIONS (WATER YEARS).--WSP 1733: 1924 (monthly figures only).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.5	81	18	15	16	69	139	465	420	185	6.5	34
2	1.0	78	17	16	15	78	122	412	440	160	6.5	34
3	.74	81	18	15	14	86	110	248	445	130	6.2	29
4	1.09	65	27	18	16	96	108	344	719	118	8.7	24
5	183	59	35	16	17	82	98	505	500	101	1.9	22
6	26	61	27	17	19	54	127	445	340	90	4.0	13
7	20	54	26	13	26	48	257	380	420	79	3.4	8.4
8	47	49	30	14	28	48	120	316	440	70	3.3	8.4
9	29	52	24	17	28	56	94	420	460	63	2.9	8.2
10	17	47	17	17	24	48	110	644	555	46	2.4	19
11	13	41	18	17	30	52	217	836	644	24	2.0	98
12	22	46	20	15	44	49	304	937	550	32	1.7	25
13	129	46	18	14	34	66	372	800	425	17	2.2	13
14	18	46	15	13	28	62	460	770	510	20	2.2	10
15	12	46	12	15	34	52	485	728	520	12	9.8	9.4
16	355	46	13	17	26	48	284	746	336	10	33	9.0
17	265	46	14	20	25	63	230	734	239	11	7.9	8.7
18	329	49	18	23	26	93	360	740	236	121	7.9	8.4
19	295	47	22	20	23	84	292	881	248	122	7.3	8.2
20	545	44	20	20	20	122	221	1,100	236	48	6.8	8.2
21	261	42	20	17	21	274	212	1,100	221	28	8.2	7.9
22	103	40	20	15	28	155	158	782	224	23	15	7.9
23	56	33	20	13	26	106	203	550	215	17	27	7.6
24	41	33	19	14	27	82	336	460	212	14	16	8.4
25	252	51	17	15	32	81	340	460	212	11	16	10
26	216	23	15	16	37	118	465	713	209	9.4	19	14
27	62	22	14	16	38	172	455	905	218	8.7	19	15
28	111	16	28	15	57	136	535	408	239	7.6	17	14
29	78	16	24	14	-----	128	540	344	239	7.9	15	13
30	56	16	20	15	-----	118	585	380	203	7.3	15	12
31	73	-----	13	16	-----	139	-----	490	-----	7.0	46	-----
TOTAL	5,722.04	1,356	619	493	757	2,865	8,139	19,043	10,875	1,599.9	345.8	507.7
MEAN	120	45.2	20.0	15.9	27.0	92.4	278	614	363	51.6	11.2	16.9
MAX	545	81	35	23	57	274	585	1,100	719	185	46	98
MIN	.74	16	12	12	14	48	94	248	203	7.0	1.7	7.6
AC-FT	7,380	2,690	1,230	978	1,500	5,680	16,540	37,770	21,570	3,170	686	1,010

CAL YR 1972 TOTAL 7,434.49 MEAN 21.7 MAX 545 MIN 0 AC-FT 15,740
 MIN YR 1973 TOTAL 50,522.44 MEAN 138 MAX 1,100 MIN .74 AC-FT 100,200

PEAK DISCHARGE (BASE, 700 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
10-16	0030	4.56	818	5-20	1930	5.27	1,310
4-28	1400	4.45	770	5-27	0600	5.18	1,320

SAN JUAN RIVER BASIN

371

09371420 MCELMO CREEK ABOVE ALKALI CANYON, NEAR CORTEZ, COLO.

LOCATION.--Lat 37°19'38", long 108°38'55", in SE¼SE¼ sec.31, T.36 N., R.16 W., Montezuma County, on left bank 0.9 mi (1.4 km) upstream from Alkali Canyon and 4.0 mi (6.4 km) southwest of Cortez.

DRAINAGE AREA.--147 mi² (381 km²).

PERIOD OF RECORD.--October 1972 to September 1973.

GAGE.--Water-stage recorder. Altitude of gage is 5,750 ft (1,753 m) from topographic map.

EXTREMES.--Current year: Maximum discharge, 472 ft³/s (13.4 m³/s) Oct. 18 (gage height, 4.65 ft or 1.417 m), from rating curve extended above 190 ft³/s (5.4 m³/s) on basis of step-backwater method; minimum daily, 2.8 ft³/s (0.079 m³/s) Oct. 3.

REMARKS.--Records good except those for winter period and period of no gage-height record, which are poor. Diversions from tributaries above station for irrigation. Low flows are mainly return flow from irrigated areas. Water is imported above station from Dolores River basin for irrigation of about 33,000 acres (134 km²) above and below station in Montezuma Irrigation District and for municipal use by city of Cortez. A small amount of water is diverted at times to Mancos River basin.

Discharge measurements made prior to beginning of continuous discharge record

Date	Discharge (ft ³ /s)	Date	Discharge (ft ³ /s)	Date	Discharge (ft ³ /s)
July 6, 1972	9.8	July 31, 1972	4.8	Sept. 1, 1972	3.9

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.4	37	20	12	18	108	123	71	34	36	41	38
2	3.2	35	17	13	14	147	113	87	38	38	40	33
3	2.8	31	18	14	14	175	129	52	53	38	39	31
4	20	27	20	16	18	118	132	44	223	34	40	30
5	50	24	30	15	17	47	93	38	105	34	40	29
6	34	22	22	10	21	64	102	58	62	36	42	27
7	44	21	24	11	22	66	104	55	51	35	40	27
8	48	21	24	12	26	71	84	44	49	33	46	27
9	24	20	22	13	28	83	71	40	46	36	39	27
10	18	22	15	15	27	99	82	40	41	37	35	69
11	11	24	16	15	27	89	123	36	39	38	33	122
12	13	28	20	13	29	77	138	35	36	42	36	63
13	20	32	16	12	24	120	135	35	39	50	38	54
14	22	28	13	11	25	98	137	47	63	55	39	49
15	80	24	11	12	22	90	116	40	59	50	39	45
16	270	30	12	14	23	80	95	34	51	65	47	38
17	280	28	14	16	23	96	76	31	49	65	41	36
18	140	26	19	18	21	111	82	36	47	100	43	36
19	250	24	19	16	19	92	96	38	52	150	42	25
20	240	26	17	15	18	110	89	40	52	100	40	22
21	85	28	17	13	18	192	72	38	53	90	41	21
22	40	26	17	12	20	113	61	24	49	80	66	21
23	32	26	17	11	24	87	58	25	46	75	50	21
24	28	26	17	12	33	76	53	29	42	65	44	22
25	85	24	16	12	56	71	48	33	42	55	38	25
26	85	24	14	14	66	80	44	95	39	50	37	36
27	50	22	12	13	71	116	41	79	38	46	37	27
28	55	20	22	13	104	132	42	53	36	40	35	26
29	50	19	20	13	-----	168	42	43	36	44	32	25
30	46	20	16	16	-----	161	41	34	37	55	35	23
31	40	-----	11	19	-----	159	-----	34	-----	47	54	-----
TOTAL	2,170.4	765	548	421	828	3,296	2,662	1,388	1,607	1,719	1,269	1,075
MEAN	70.0	25.5	17.7	13.6	29.6	106	88.7	48.8	53.6	55.5	40.9	35.8
MAX	280	37	30	19	104	192	144	95	223	150	66	122
MIN	2.8	19	11	10	14	47	41	24	34	33	32	21
AC-FT	4,300	1,520	1,090	835	1,640	6,540	5,280	2,750	3,190	3,410	2,520	2,130

WTR YR 1973 TOTAL 17,748.4 MEAN 48.6 MAX 280 MIN 2.8 AC-FT 55,200

NOTE.--No gage-height record Oct. 1-30.

SAN JUAN RIVER BASIN

09371700 MCELMO CREEK BELOW CORTEZ, COLO.

LOCATION.--Lat 37°20'26", long 108°48'19", in NW¼NW¼ sec.35, T.36 N., R.18 W., Montezuma County, on left bank 100 ft (30 m) downstream from bridge on State Highway 32, 150 ft (46 m) downstream from Sand Canyon, and 11.7 mi (18.8 km) west of Cortez.

DRAINAGE AREA.--283 mi² (733 km²).

PERIOD OF RECORD.--October 1972 to September 1973.

GAGE.--Water-stage recorder. Altitude of gage is 5,430 ft (1,655 m) from topographic map.

EXTREMES.--Current year: Maximum discharge, 1,020 ft³/s (28.9 m³/s) Oct. 18 (gage height, 6.50 ft or 1.981 m), from rating curve extended above 400 ft³/s (11 m³/s) on basis of step-backwater method; minimum daily, 5.0 ft³/s (0.14 m³/s) Oct. 3.

REMARKS.--Records good except those for winter period and period of no gage-height record, which are poor. Diversions above station by Black Dike ditch for irrigation of 310 acres (1.25 km²) above station and Rock Creek ditch for irrigation of 650 acres (2.63 km²) below station. Low flows are mainly return flows from irrigated areas. Water is imported above station from Dolores River basin for irrigation of about 33,000 acres (134 km²) above and below station in Montezuma Irrigation District and for municipal use by city of Cortez. A small amount of water is diverted at times to Mancos River basin.

Discharge measurements made prior to beginning of continuous discharge record

Date	Discharge (ft ³ /s)	Date	Discharge (ft ³ /s)	Date	Discharge (ft ³ /s)
June 23, 1972	163	July 31, 1972	1.2	Sept. 1, 1972	0.39
July 6	17				

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.5	60	37	22	26	168	214	104	42	62	56	55
2	6.0	54	32	24	22	206	198	139	47	62	53	49
3	5.0	52	33	24	22	257	210	83	102	63	56	45
4	56	46	36	30	23	216	244	68	358	62	56	47
5	90	44	56	28	24	139	176	51	220	66	55	47
6	60	42	40	19	24	107	175	70	115	69	60	42
7	75	39	46	20	29	110	226	74	73	69	55	40
8	85	39	46	22	32	104	153	56	69	69	63	39
9	46	44	40	24	33	124	135	46	64	66	58	39
10	30	42	28	26	30	153	135	45	58	57	50	92
11	20	44	30	26	32	144	192	43	56	57	42	240
12	20	53	36	24	33	120	204	49	43	57	43	133
13	36	60	26	22	33	188	192	60	43	74	46	112
14	36	49	22	20	29	158	198	78	81	78	50	96
15	130	45	20	22	29	142	171	65	97	75	54	83
16	450	55	22	26	29	124	158	65	84	92	64	69
17	470	53	28	30	30	153	124	50	83	92	57	63
18	240	47	34	34	30	190	130	42	77	131	66	51
19	440	44	34	30	29	160	158	41	70	220	60	36
20	430	48	32	28	27	180	144	42	60	155	56	32
21	140	50	32	24	30	272	112	39	81	130	50	31
22	70	48	32	22	29	173	99	39	77	116	80	31
23	55	48	32	20	29	142	92	41	77	108	68	28
24	50	46	32	22	36	130	84	39	72	91	57	28
25	150	46	30	22	62	121	66	40	56	78	51	29
26	150	44	24	24	87	137	57	121	61	73	50	41
27	85	41	22	22	114	180	53	110	62	70	51	40
28	100	37	40	20	163	218	54	70	60	58	49	39
29	85	35	38	20	-----	278	50	58	65	62	41	37
30	75	37	30	24	-----	244	50	49	64	81	43	37
31	65	-----	20	24	-----	264	-----	47	-----	63	73	-----
TOTAL	3,737.5	1,392	1,010	745	1,116	5,302	4,254	1,924	2,517	2,606	1,713	1,751
MEAN	121	46.4	32.6	24.0	39.9	171	142	62.1	83.9	84.1	55.3	58.4
MAX	470	60	56	34	163	278	244	139	358	220	80	240
MIN	5.0	35	20	19	22	104	50	39	42	57	41	28
AC-FT	7,410	2,760	2,000	1,480	2,210	10,520	8,440	3,820	4,990	5,170	3,400	3,470

WTR YR 1973 TOTAL 28,067.5 MEAN 76.9 MAX 470 MIN 5.0 AC-FT 55,670

NOTE.--No gage-height record Oct. 1-30.

09372000 MCELMO CREEK NEAR COLORADO-UTAH STATE LINE

LOCATION.--Lat 37°19'27", long 109°00'54", in NE¼ sec.2, T.35 N., R.20 W., Montezuma County, on right bank 1.5 mi (2.4 km) upstream from Colorado-Utah State line, 2.0 mi (3.2 km) upstream from Yellowjacket Creek, and 2.0 mi (3.2 km) west of former town of McElmo.

DRAINAGE AREA.--346 mi² (896 km²).

PERIOD OF RECORD.--March 1951 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 4,890 ft (1,490 m) from topographic map.

AVERAGE DISCHARGE.--22 years, 46.4 ft³/s (1.314 m³/s) 33,620 acre-ft/yr (41.5 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,800 ft³/s (51.0 m³/s) Oct. 19 (gage height, 7.15 ft or 2.179 m); minimum daily, 6.0 ft³/s (0.17 m³/s) Oct. 3.

Period of record: Maximum discharge, 3,040 ft³/s (86.1 m³/s) Aug. 7, 1967 (gage height, 7.58 ft or 2.310 m, from floodmark in gage well), from rating curve extended above 2,100 ft³/s (59 m³/s); maximum gage height, 8.13 ft (2.478 m) Sept. 6, 1970; minimum daily discharge, 0.1 ft³/s (0.003 m³/s) for several days in 1951, 1956.

REMARKS.--Records good. Diversions for irrigation of about 1,780 acres (7.20 km²) above station. One diversion above station for irrigation of about 60 acres (243,000 m²) below. Part of flow is return water from irrigated lands of Montezuma irrigation district (water imported from Dolores River basin).

REVISIONS (WATER YEARS).--WSP 1925: 1951-52(M), 1957(M). WRD Colo. 1972: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR (OCTOBER 1972 TO SEPTEMBER 1973)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.0	81	37	32	35	205	205	160	62	65	65	75
2	6.5	71	39	35	32	222	191	184	67	65	55	58
3	6.0	67	37	32	29	355	193	119	123	68	56	55
4	37	59	44	39	35	251	242	99	368	71	65	52
5	111	53	75	36	36	167	174	95	247	73	73	52
6	76	50	52	27	39	129	168	121	170	70	76	52
7	94	47	59	28	59	128	207	121	111	67	75	44
8	102	44	61	29	61	124	168	99	102	68	81	52
9	56	52	53	36	61	172	123	86	100	78	75	53
10	36	50	33	37	53	175	126	86	92	61	67	191
11	26	52	39	37	67	167	163	83	86	59	58	254
12	25	61	47	35	95	126	196	83	70	59	53	158
13	43	76	36	31	78	205	198	123	61	79	59	107
14	44	58	33	29	64	182	204	116	87	89	65	84
15	150	55	26	31	58	175	177	107	119	91	75	75
16	830	64	28	34	56	155	172	104	95	99	86	71
17	595	67	31	44	56	184	134	76	104	91	73	68
18	297	65	44	50	56	222	133	58	99	123	78	67
19	564	52	46	43	55	204	170	62	94	220	76	64
20	556	55	42	42	44	228	167	73	79	167	76	58
21	189	62	44	35	52	285	126	70	89	143	75	50
22	94	59	43	32	52	204	106	58	92	134	104	44
23	68	52	44	29	64	167	99	49	76	121	102	40
24	61	49	42	31	79	153	95	39	71	100	87	37
25	189	46	40	32	117	143	87	35	64	86	79	36
26	189	40	32	35	143	148	81	112	59	87	71	40
27	104	46	29	35	155	200	73	157	59	79	73	46
28	124	33	61	31	211	263	83	97	59	56	73	47
29	106	36	56	29	-----	298	83	76	64	56	62	47
30	97	33	40	33	-----	242	89	65	65	75	52	47
31	92	-----	28	34	-----	238	-----	70	-----	70	83	-----
TOTAL	4,976.5	1,635	1,321	1,063	1,942	6,117	4,433	2,883	3,034	2,770	2,248	2,124
MEAN	161	54.5	42.6	34.3	69.4	197	148	93.0	101	89.4	72.5	70.8
MAX	830	81	75	50	211	355	242	184	368	220	104	254
MIN	6.0	33	26	27	29	124	73	35	59	56	52	36
AC-FT	9,870	3,240	2,620	2,110	3,850	12,130	8,790	5,720	6,020	5,490	4,460	4,210

CAL YR 1972 TOTAL 16,715.55 MEAN 45.7 MAX 830 MIN .80 AC-FT 33,160
WTR YR 1973 TOTAL 34,546.50 MEAN 94.6 MAX 830 MIN 6.0 AC-FT 68,520

PEAK DISCHARGE (BASE, 620 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
10-16	1930	7.04	1,710	9-10	1330	5.82	872
10-19	0230	7.15	1,800				

TRANSMOUNTAIN DIVERSIONS

TRANSMOUNTAIN DIVERSIONS FROM ARKANSAS RIVER BASIN TO SOUTH PLATTE RIVER BASIN IN COLORADO

07086300 Aurora-Homestake pipeline diverts water from Arkansas River in sec.8, T.12 S., R.79 W., to Eleven-mile Canyon Reservoir (South Platte River) in sec.29, T.13 S., R.72 W., in South Platte River basin. Diversion began Aug. 24, 1967. Pipeline is equipped with a discharge recorder and venturi meter. Records furnished by Colorado Division of Water Resources. Diversions for water year October 1972 to September 1973 are given below.

DIVERSIONS, IN ACRE-FEET, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Water year
0	479	0	883	178	823	0	0	0	1,350	723	2,130	6,570

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 furnished by Colorado Division of Water Resources. The locations of these diversions are given in the following list.

09010000 Grand River ditch diverts water from tributaries of Colorado River to La Poudre Pass Creek (tributary to Cache la Poudre River) in NW $\frac{1}{4}$ 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.

09012000 Eureka ditch diverts water from tributaries of Tonahutu Creek between headgate in sec.7, T.4 N., R.74 W., and Sprague Pass, in Colorado River basin, to Spruce Creek (tributary to Big Thompson River) in sec.16, T.4 N., R.74 W., in Platte River basin.

REVISIONS (WATER YEARS).--WSP 1313: 1949.

09013000 Alva B. Adams tunnel diverts water from Grand Lake and Shadow Mountain Lake in NW $\frac{1}{4}$ 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.

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.

09022500 Moffat water tunnel diverts water from tributaries of Williams Fork (via August P. Gumlick and Vasquez tunnels, beginning in 1959) between headgates (in secs.20 and 29, T.3 S., R.76 W.) and west portal of August P. Gumlick tunnel (in sec.28, T.3 S., R.76 W.) and from the main stem and tributaries of Fraser River between headgates (in sec.8, T.2 S., R.76 W., and sec.24, T.1 S., R.75 W.) and west portal of Moffat tunnel (in sec.11, T.2 S., R.75 W.), in Colorado River basin, to South Boulder Creek, in sec.2, T.2 S., R.74 W., in Platte River basin. (See sta. 09036000 for diversions by August P. Gumlick tunnel.)

09042000 Hoosier Pass tunnel diverts water from tributaries of Blue River in Colorado River basin to Montgomery Reservoir (Middle Fork South Platte River) in sec.14, T.8 S., R.78 W., in Platte River basin; this water is again diverted to South Catamount Creek (tributary to Catamount Creek) in SE $\frac{1}{4}$ sec.14, T.13 S., R.69 W., in the Arkansas River basin. Collection conduits extending from the right bank of Crystal Creek (tributary to Spruce Creek) in sec.14, T.7 S., R.78 W., right bank of Spruce Creek in sec.23, T.7 S., R.78 W., right bank of McCullough Gulch in sec.26, T.7 S., R.78 W., right bank of Monte Cristo Creek in SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec.2, T.8 S., R.78 W., left bank of Bemrose Creek in SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.6, T.8 S., R.77 W., and intercepting intermediate tributaries, transport diversions to north portal of the tunnel.

09046000 Boreas Pass ditch diverts water from tributaries of Blue River between headgate in sec.26, T.7 S., R.77 W., and Boreas Pass, in Colorado River basin, to Tarryall Creek in sec.26, T.7 S., R.77 W., in Platte River basin.

REVISIONS (WATER YEARS).--WSP 1733: 1958.

09047300 Vidler tunnel diverts water from tributaries of Peru Creek (tributary to Snake River) in sec.9, T.5 S., R.75 W., in Blue River basin, to Leavenworth Creek (tributary to South Clear Creek) in sec.10, T.5 S., R.75 W., in Platte River basin.

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 SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.4, T.7 S., R.74 W., in Platte River basin. Figures include a small amount of groundwater inflow between Dillon Reservoir and east portal of tunnel.

09061500 Columbine ditch diverts water from tributaries of Eagle River in sec.5, T.8 S., R.79 W., in Colorado River basin to Chalk Creek (tributary to East Fork Arkansas River) in NW $\frac{1}{4}$ sec.9, T.8 S., R.79 W., in Arkansas River basin.

09062000 Ewing ditch diverts water from Piney Creek in sec.11, T.8 S., R.80 W., in Eagle River basin, to Thayer Gulch (tributary to Tennessee Creek) in sec.11, T.8 S., R.80 W., in Arkansas River basin.

TRANSMOUNTAIN DIVERSIONS FROM COLORADO RIVER BASIN IN COLORADO--Continued

09062500 Wurtz ditch diverts water from tributaries of Eagle River between headgate in sec.32, T.7 S., R.80 W., and Tennessee Pass, in Colorado River basin, to West Tennessee Creek (tributary to Tennessee Creek) in sec.17, T.8 S., R.80 W., in Arkansas River basin.

09063700 Homestake tunnel diverts water from Homestake Lake (Middle Fork Homestake Creek), in sec.17, T.8 S., R.81 W., in Eagle River basin, to Lake Fork in sec.9, T.9 S., R.81 W., in Arkansas River basin. Water is imported to Homestake Lake from tributaries of Homestake Creek by collection conduits that extend from right bank of French Creek in sec.28, T.7 S., R.81 W., and left bank of East Fork Homestake Creek in sec.9, T.8 S., R.81 W., and intercept intermediate tributaries.

09073000 Twin Lakes tunnel diverts water from tributaries of Roaring Fork River between headgates (in sec.21, T.11 S., R.83 W., and sec.2, T.11 S., R.83 W.), and west portal of Twin Lakes tunnel (in sec.24, T.11 S., R.83 W.), in Colorado River basin, to North Fork Lake Creek in sec.22, T.11 S., R.82 W., in Arkansas River basin.

09077160 Charles H. Boustead Tunnel diverts water from the main stem and tributaries of Fryingpan River (tributary to Roaring Fork River), in Colorado River basin, to Lake Fork in sec.10, T.9 S., R.81 W., in Arkansas River basin. Water is transported to west portal of tunnel (at lat 39°14'44", long 106°31'47"), by a series of collection conduits extending between headgates on right bank of Sawyer Creek at lat 39°15'58", long 106°38'19", and right bank of Fryingpan River at lat 39°14'40", long 106°31'49", and intercepting intermediate tributaries.

09077500 Busk-Ivanhoe tunnel diverts water from Ivanhoe Lake (Ivanhoe Creek), tributary to Fryingpan River in sec.13, T.9 S., R.82 W., in Roaring Fork River basin, to Busk Creek (tributary to Lake Fork) in sec.20, T.9 S., R.81 W., in Arkansas River basin.

09115000 Larkspur ditch diverts water from tributaries of Tomichi Creek between headgates (in sec.11, T.48 N., R.6 E., and sec.1, T.47 N., R.6 E.), and Marshall Pass, in Gunnison River basin, to Poncha Creek (tributary to South Arkansas River) in SE¼ sec.24, T.48 N., R.6 E., in Arkansas River basin.

09118200 Tarbell ditch diverts water from Lake Fork Cochetopa Creek (tributary to Cochetopa Creek), in NW¼ sec.18, T.43 N., R.2 E., in Gunnison River basin, to Lake Fork Saguache Creek (tributary to Middle Fork Saguache Creek) in NE¼ sec.18, T.43 N., R.2 E., in Rio Grande basin. All records available prior to October 1960 published in WSP 1733.

REVISIONS (WATER YEARS).--WSP 1733: 1949-51.

09121000 Tabor ditch diverts water from tributaries of Cebolla Creek in secs.29 and 36, T.43 N., R.3 W., in Gunnison River basin, to Big Spring Creek (tributary to North Clear Creek) in sec.35, T.43 N., R.3 W., in Rio Grande basin.

09341000 Treasure Pass diversion ditch diverts water from tributaries of Wolf Creek between headgates (in sec.31, T.38 N., R.2 E., and sec.6, T.37 N., R.3 E.), and Wolf Creek Pass, in San Juan River basin, to tributary of South Fork Rio Grande in sec.31, T.38 N., R.2 E., in Rio Grande basin.

09347000 Don La Font ditches 1 and 2 divert water from tributaries of Piedra River between headgates in NW¼ sec.4, T.38 N., R.1 W., and SW¼ sec.33, T.39 N., R.1 W.), and Piedra Pass, in San Juan River basin, to South River in sec.4, T.38 N., R.1 W., in Rio Grande basin.

09348000 Williams Creek-Squaw Pass ditch diverts water from Williams Creek (tributary to Piedra River) in sec.13, T.39 N., R.3 W., in San Juan River basin, to Squaw Creek in sec.10, T.39 N., R.3 W., in Rio Grande basin.

09351000 Pine River-Weminuche Pass ditch diverts water from North Fork Los Pinos River (tributary to Los Pinos River) in sec.4, T.39 N., R.4 W., in San Juan River basin, to Weminuche Creek in sec.33, T.40 N., R.4 W., in Rio Grande basin.

09351500 Weminuche Pass ditch diverts water from left bank of Rincon la Vaca Creek (tributary to Los Pinos River) in sec.5, T.39 N., R.4 W., in San Juan River basin, to Weminuche Creek in sec.33, T.40 N., R.4 W., in Rio Grande basin.

TRANSMOUNTAIN DIVERSIONS FROM COLORADO RIVER BASIN IN COLORADO

DIVERSIONS, IN ACRE-FEET, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

Diversion	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Wa- y
TO PLATTE RIVER BASIN													
09010000 Grand River ditch...	0	0	0	0	0	0	0	0	2,930	9,320	2,510	0	1
09012000 Eureka ditch.....	0	0	0	0	0	0	0	0	0	0	0	0	
09013000 Alva B. Adams tunnel	20,100	20,750	27,560	24,260	23,970	16,030	19,500	15,230	7,910	31,380	17,070	6,940	23
09021500 Berthoud Pass ditch.	0	0	0	0	0	0	0	0	186	443	109	16	
09022500 Moffat water tunnel.	1,870	1,490	1,030	754	571	496	473	3,680	6,400	10,030	4,310	2,070	3
09046000 Boreas Pass ditch...	0	0	0	0	0	0	0	0	0	0	0	0	
09047300 Vidler tunnel.....	0	0	0	0	0	0	0	0	0	30	27	0	
09050590 Harold D. Roberts tunnel.....	0	0	1,140	873	0	0	232	0	0	0	0	0	
Total.....	21,970	22,240	29,730	25,890	24,540	16,530	20,210	18,910	17,430	51,200	24,030	9,030	28
TO ARKANSAS RIVER BASIN													
09042000 Hoosier Pass tunnel.	0	0	0	0	0	0	0	345	1,710	879	1,090	1,810	
09061500 Columbine ditch.....	0	0	0	0	0	0	0	127	1,240	468	631	0	
09062000 Ewing ditch.....	0	0	0	0	0	0	0	110	620	268	116	0	
09062500 Wurtz ditch.....	0	0	0	0	0	0	0	450	2,090	609	94	0	
09063700 Homestake tunnel....	0	748	2,290	3,410	2,620	1,730	4,330	4,910	1,980	1,380	0	0	2
09073000 Twin Lakes tunnel...	1,480	841	476	307	300	331	232	5,390	23,050	18,540	3,630	1,330	5
09077160 Charles H. Boustead Tunnel.....	0	0	0	0	0	0	0	4,010	18,740	12,230	1,600	0	3
09077500 Busk-Ivanhoe tunnel.	139	0	0	0	0	0	0	266	3,640	1,910	316	63	
09115000 Larkspur ditch.....	37	0	0	0	0	0	0	104	321	155	82	60	
Total.....	1,660	1,590	2,770	3,720	2,920	2,060	4,560	15,710	53,390	36,440	7,560	3,260	13
TO RIO GRANDE BASIN													
09118200 Tarbell ditch.....	0	0	0	0	0	0	0	0	0	0	50	24	
09121000 Tabor ditch.....	0	0	0	0	0	0	0	176	678	345	102	32	
09341000 Treasure Pass diver- sion ditch.....	0	0	0	0	0	0	0	13	420	271	6.1	0	
09347000 Don La Font ditches No. 1 and 2.....	0	0	0	0	0	0	0	0	88	293	7.4	0	
09348000 Williams Creek-Squaw Pass ditch.....	0	0	0	0	0	0	0	0	0	168	46	0	
09351000 Pine River-Weminuche Pass ditch.....	0	0	0	0	0	0	0	0	242	238	148	73	
09351500 Weminuche Pass ditch	0	0	0	0	0	0	0	0	816	644	384	140	
Total.....	0	0	0	0	0	0	0	189	2,240	1,960	744	269	
Grand Total.....	23,630	23,830	32,500	29,600	27,460	18,590	24,770	34,810	73,060	89,600	32,330	12,560	42

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 storm precipitation and related runoff from storm-runoff partial-record stations. 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 groundwater 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 1973

Station number	Station name	Location	Drainage area (sq mi)	Period of record	Measurements	
					Date	Discharge (cfs)
*09058900	Moniger Creek near Minturn, Colo.	Lat 39°43'37", long 106°28'50", Eagle County, on left bank 1.5 mi (2.4 km) upstream from mouth and 7.5 mi (12.1 km) north of Minturn.	0.76	1965-73	10- 3-72	0.04
					7-24-73	.36
					8-23-73	.08
					9-12-73	.05

* Also a crest-stage partial-record station.

CREST-STAGE PARTIAL-RECORD STATIONS

The following table contains annual maximum discharge for crest-stage stations. A crest-stage gage is a device which will register the peak stage occurring between inspections of the gage. 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.

ANNUAL MAXIMUM DISCHARGE AT CREST-STAGE PARTIAL-RECORD STATIONS DURING WATER YEAR 1973

Station number	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Dis-charge (cfs)
PLATTE RIVER BASIN							
06710200	Big Dry Creek tributary at Littleton, Colo.	Lat 39°35'46", long 104°57'06", in SE½SW¼ sec.24, T.5 S., R.68 W., Arapahoe County, 500 ft (150 m) upstream from S. Clayton St., 1 mi (2 km) east of Littleton.	al.0	1969-73	8-21-73	10.88	55
06710250	South Platte River tributary at Englewood, Colo.	Lat 39°38'08", long 104°59'48", in NW¼NW¼ sec.10, T.5 S., R.68 W., Arapahoe County, at culvert at S. Huron St., 250 ft (76 m) north of W. Stanford Ave. in Englewood.	al	1971-73	5- 6-73	12.35	115
06711450	Bear Creek tributary at Denver, Colo.	Lat 39°39'14", long 105°02'46", in SE½SW¼ sec.31, T.4 S., R.68 W., Denver County, at culvert at W. Hampden Ave. (U.S. Highway 285), 400 ft (120 m) upstream from mouth, 1,800 ft (550 m) east of S. Sheridan Blvd. in Denver.	a .2	1971-73	9- 9-73	10.78	5.3
06711580	Harvard Gulch tributary at Englewood, Colo.	Lat 39°39'34", long 104°58'16", in NE½SW¼ sec.35, T.4 S., R.68 W., Arapahoe County, 400 ft (120 m) south of E. Dartmouth Ave., 470 ft (140 m) east of S. Downing St. in Englewood.	al	1971-73	6-11-73	11.99	(f)
06711600	Sanderson Gulch tributary at Lakewood, Colo.	Lat 39°41'19", long 105°04'54", in NE½SW¼ sec.23, T.4 S., R.69 W., Jefferson County, 300 ft (91 m) upstream from S. Wadsworth Blvd., 300 ft (91 m) south of W. Florida Ave. in Lakewood.	a .5	1969-73	8-24-73	12.47	86
06711650	Lakewood Gulch tributary at Lakewood, Colo.	Lat 39°42'17", long 105°06'33", in SE½NE¼ sec.16, T.4 S., R.69 W., Jefferson County, at culvert at S. Kipling St. and W. Exposition Ave., in Lakewood.	a .3	1971-73	8- 5-73	10.60	9.4
06711700	Dry Gulch at Lakewood, Colo.	Lat 39°44'29", long 105°06'43", in SE½SE¼ sec.33, T.3 S., R.69 W., Jefferson County, 800 ft (240 m) upstream from storm drain at Kipling St., 500 ft (150 m) east of intersection of Miller St. and W. 15th Pl. in Lakewood.	a .2	1971-73	6-12-73	15.63	209
06714210	South Platte River tributary at Denver, Colo.	Lat 39°47'18", long 104°56'32", in NE½SE¼ sec.13, T.3 S., R.68 W., Denver County, 350 ft (110 m) north of intersection of Jackson St. and E. 50th Ave., 3,000 ft (910 m) northwest of intersection of Interstate Highway 70 and Colorado Blvd. in Denver.	a .5	1971-73	7-19-73	b18.16	105

ANNUAL MAXIMUM DISCHARGE AT CREST-STAGE PARTIAL-RECORD STATIONS DURING WATER YEAR 1973--Continued

Station number	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Dis-charge (cfs)
PLATTE RIVER BASIN--Continued							
06714230	Toll Gate Creek tributary at Aurora, Colo.	Lat 39°44'10", long 104°48'39", in SE½NE¼ sec.6, T.4 S., R.66 W., Arapahoe County, 180 ft (55 m) downstream from intersection of 13th Ave. and Granby St. in Aurora.	a0.3	1970-73	8- 7-73	12.15	131
06714240	Sand Creek tributary at Aurora, Colo.	Lat 39°45'41", long 104°49'36", in NW¼SW¼ sec.30, T.3 S., R.66 W., Adams County, at culvert at Interstate Highway 225, 300 ft (91 m) west of intersection of E. 32nd Ave. and Zion St. in Aurora.	a .3	1971-73	7-12-73	11.32	39
06714300	Concourse D Drain at Stapleton Airport, at Denver, Colo.	Lat 39°46'08", long 104°53'12", in NE½NE¼ sec.28, T.3 S., R.67 W., Denver County, in storm sewer 125 ft (38 m) south of Stapleton Airport Firehouse, at Denver.	.12	1970-73	7-19-73	14.87	197
06714310	Sand Creek tributary at Denver, Colo.	Lat 39°47'07", long 104°50'31", in SW¼SW¼ sec.13, T.3 S., R.67 W., Denver County, in median of Andrews Drive Parkway, 50 ft (15 m) downstream from Troy St. in Denver.	a .6	1971-73	8- 7-73	12.77	236
06719750	Ralston Creek tributary at Arvada, Colo.	Lat 39°48'53", long 105°08'15", in SE½SW¼ sec.5, T.3 S., R.69 W., Jefferson County, at culvert at Ward Rd., 600 ft (180 m) north of Ralston Rd. in Arvada.	a .6	1970-73	5- 5-73	11.51	44
06719760	Van Bibber Creek at Arvada, Colo.	Lat 39°47'54", long 105°08'20", in SE½SW¼ sec.8, T.3 S., R.69 W., Jefferson County, 300 ft (91 m) downstream from culvert at Ward Rd., 1,300 ft (400 m) south of W. 58th Ave. in Arvada.	a .9	1970-73	5- 6-73	11.33	(†)
06719770	Clear Creek tributary at Arvada, Colo.	Lat 39°49'20", long 105°03'11", in SE½NE¼ sec.1, T.3 S., R.69 W., Jefferson County, at culvert at Sheridan Blvd., 100 ft (30 m) north of W. 69th Ave. in Arvada.	a .7	1970-73	5- 6-73	12.60	193
06719880	Clear Creek tributary No. 1 at Westminster, Colo.	Lat 39°49'54", long 105°00'24", in NE½SW¼ sec.33, T.2 S., R.68 W., Adams County, at culvert at entrance ramp from Pecos St. to westbound U.S. Highway 36 in Westminster.	a1	1971-73	7-24-73	13.34	84
06719960	Clear Creek tributary No. 2 at Westminster, Colo.	Lat 39°49'50", long 104°58'59", in NW¼SE¼ sec.34, T.2 S., R.68 W., Adams County, on west side of Interstate Highway 25 right-of-way, 500 ft (150 m) north of W. 73rd Ave. in Westminster.	a .7	1971-73	5- 6-73	10.77	50
06720100	Tuck Drain at Northglenn, Colo.	Lat 39°52'35", long 104°59'16", in NE½SW¼ sec.15, T.2 S., R.68 W., Adams County, 145 ft (44 m) downstream from intersection of Belford and Melody Sts. in Northglenn.	a .07	1968-73	7-24-73	12.03	49

ANNUAL MAXIMUM DISCHARGE AT CREST-STAGE PARTIAL-RECORD STATIONS DURING WATER YEAR 1973--Continued

Station number	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Dis-charge (cfs)
PLATTE RIVER BASIN--Continued							
06720200	South Platte River tributary No. 2 at Northglenn, Colo.	Lat 39°51'57", long 105°00'27", in SE¼NW¼ sec.21, T.2 S., R.68 W., Adams County, at culvert at Holiday Terrace 50 ft (15 m) south of Holiday Parkway, in Holiday Hills Trailer Park in Northglenn.	a0.5	1968-73	5- 6-73	14.49	93
06720300	Hillcrest Drain at Northglenn, Colo.	Lat 39°52'57", long 104°59'36", in NW¼NW¼ sec.15, T.2 S., R.68 W., Adams County, 180 ft (55 m) upstream from Tuck lateral at Northglenn High School.	.28	1968-73	7-24-73	11.05	35
06720400	Kennedy Drive Drain at Northglenn, Colo.	Lat 39°53'26", long 104°59'12", in NE¼SW¼ sec.10, T.2 S., R.68 W., Adams County, below culvert at Interstate Highway 25, 0.3 mi (0.5 km) north of 104th Ave. in Northglenn.	.10	1968-71, 1973	7-24-73	12.74	(†)
06720420	South Platte River tributary No. 5 at Northglenn, Colo.	Lat 39°54'23", long 104°57'34", in NE¼SE¼ sec.2, T.2 S., R.68 W., Adams County, 100 ft (30 m) east of intersection of E. 116th Ave. and Claude Ct. in Northglenn.	a .5	1971-73	8- 7-73	13.06	70
06720800	Big Dry Creek tributary at Westminster, Colo.	Lat 39°52'03", long 105°02'12", in NE¼NE¼ sec.19, T.2 S., R.68 W., Adams County, at culvert at intersection of W. 94th Ave. and Newton St. in Westminster.	a .4	1972-73	9- 9-73	11.03	30
06728200	Skunk Creek at Boulder, Colo.	Lat 39°59'28", long 105°16'07", in NE¼SW¼ sec.6, T.1 S., R.70 W., Boulder County, 900 ft (270 m) northeast of Kohler Reservoir, 2,000 ft (610 m) upstream from Anderson Extension Ditch crossing in Boulder.	a .7	1970-73	6-15-73	10.57	(†)
06728300	Twomile Canyon at Boulder, Colo.	Lat 40°02'59", long 105°18'16", in NE¼SE¼ sec.14, T.1 N., R.71 W., Boulder County, at culvert at Linden Dr. 1 mi (2 km) northwest of intersection of 4th St. and Kalmia Ave. in Boulder.	a .8	1970-73	5- 6-73	10.52	26
06728350	Goose Creek at Boulder, Colo.	Lat 40°01'35", long 105°16'19", in NW¼NE¼ sec.30, T.1 N., R.70 W., Boulder County, 30 ft (9 m) downstream from 19th St., 150 ft (46 m) south of Balsam Ave. in Boulder.	a .6	1971-73	7-29-73	10.89	23
06728400	Boulder Creek tributary at Boulder, Colo.	Lat 39°58'48", long 105°14'41", in SE¼NE¼ sec.8, T.1 S., R.70 W., Boulder County, at culvert at State Highway 93 (Broadway), 2,400 ft (730 m) southeast of intersection of Broadway and Table Mesa Drive in Boulder.	a .2	1970-73	5- 6-73	11.13	30
06730450	Rock Creek tributary at Broomfield, Colo.	Lat 39°54'52", long 105°06'51", in SW¼SE¼ sec.33, T.1 S., R.69 W., Boulder County, at culvert at State Highway 128 (W. 120th Ave.), 5,000 ft (1,520 m) west of Wadsworth Blvd. in Broomfield.	a .2	1971-73	5- 6-73	11.35	11

ANNUAL MAXIMUM DISCHARGE AT CREST-STAGE PARTIAL-RECORD STATIONS DURING WATER YEAR 1973--Continued

Station number	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Dis-charge (cfs)
PLATTE RIVER BASIN--Continued							
06753800	Owl Creek tributary near Rockport, Colo.	Lat 40°55'07", long 104°46'01", in SW¼ sec.15, T.11 N., R.66 W., Weld County, 1,300 ft (400 m) upstream from county road bridge, 2 mi (3 km) east of Rockport.	4.56	1969-73	6-28-73	15.03	2,620
06756200	Geary Creek tributary near Rockport, Colo.	Lat 40°58'00", long 104°33'50", in NE¼ sec.32, T.12 N., R.64 W., Weld County, 0.4 mi (0.6 km) upstream from mouth, 13 mi (21 km) northeast of Rockport.	5.70	1969-73	7-19-73	10.73	144
06758150	Kiowa Creek tributary near Elbert, Colo.	Lat 39°12'06", long 104°30'14", in NW¼NE¼ sec.12, T.10 S., R.64 W., Elbert County, at culvert on county road, 2.2 mi (3.5 km) southeast of Elbert.	1.21	1970-73	5- 6-73	12.44	84
06758250	Kiowa Creek tributary near Bennett, Colo.	Lat 39°36'47", long 104°27'01", in NW¼SW¼ sec.16, T.5 S., R.63 W., Arapahoe County, 3,500 ft (1,070 m) downstream from bridge on county road, 10 mi (16 km) south of Bennett.	6.41	1970-73	5- 6-73	13.70	346
06758400	Goose Creek near Hoyt, Colo.	Lat 40°02'10", long 104°13'06", in NE¼SW¼ sec.21, T.1 N., R.61 W., Weld County, 500 ft (150 m) upstream from bridge on county road, 7.7 mi (12.4 km) west of Hoyt.	3.75	1969-73	8- 3-72 5- 6-73	bc17.13 12.98	d874 57
06758700	Middle Bijou Creek tributary near Deer Trail, Colo.	Lat 39°29'33", long 104°09'46", in SE¼SE¼ sec.25, T.6 S., R.61 W., Elbert County, 300 ft (91 m) downstream from gas line crossing, 10.4 mi (16.7 km) southwest of Deer Trail.	2.27	1970-73	9-11-73	11.13	264
06759700	Sand Creek tributary near Lindon, Colo.	Lat 39°43'54", long 103°21'18", in NE¼ sec.6, T.4 S., R.53 W., Washington County, 0.5 mi (0.8 km) upstream from bridge on U.S. Highway 36, 3 mi (5 km) east of Lindon.	3.85	1969-73	1973	(e)	<9
06759900	Antelope Draw near Union, Colo.	Lat 40°25'48", long 103°36'01", in SE¼NE¼ sec.2, T.5 N., R.56 W., Morgan County, 0.2 mi (0.3 km) upstream from bridge on State Highway 71, 6.5 mi (10.5 km) northwest of Union.	3.61	1969-73	1973	(e)	<23
06760200	Igo Creek tributary near Keota, Colo.	Lat 40°47'24", long 103°57'18", in SW¼SW¼ sec.34, T.10 N., R.59 W., Weld County, 0.3 mi (0.5 km) upstream from bridge on county road, 8.5 mi (13.7 km) northeast of Keota.	a2.3	1969-73	6-19-72 9-11-73	10.52 10.81	d35 57
06760300	Darby Creek near Buchanan, Colo.	Lat 40°52'48", long 103°19'12", in SW¼ sec.32, T.11 N., R.53 W., Logan County, 1.2 mi (1.9 km) north of section road, 8.8 mi (14.2 km) northwest of Buchanan.	7.39	1969-73	9- 9-73	12.77	363
06760430	Spring Canyon Creek near Peetz, Colo.	Lat 40°58'12", long 103°00'34", in NW¼SE¼ sec.36, T.12 N., R.51 W., Logan County, 500 ft (150 m) downstream from access road to windmill, 5 mi (8 km) east of Peetz.	22.3	1969-73	9-11-73	10.54	23

ANNUAL MAXIMUM DISCHARGE AT CREST-STAGE PARTIAL-RECORD STATIONS DURING WATER YEAR 1973--Continued

Station number	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Dis-charge (cfs)
KANSAS RIVER BASIN							
06821300	North Fork Arikaree River tributary near Shaw, Colo.	Lat 39°31'12", long 103°26'35", in NE¼ sec.21, T.6 S., R.54 W., Lincoln County, 800 ft (240 m) upstream from section road, 5 mi (8 km) southwest of Shaw.	5.72	1969-73	1973	(e)	<50
06821400	North Fork Black Wolf Creek near Vernon, Colo.	Lat 39°54'24", long 102°16'08", in SW¼SE¼ sec.2, T.2 S., R.44 W., Yuma County, 50 ft (15 m) downstream from unnamed tributary, 4 mi (6 km) southeast of Vernon.	17.1	1969-73	7-19-73	11.30	221
06822600	Patent Creek near St. Petersburg, Colo.	Lat 40°29'50", long 102°46'30", in SW¼ sec.7, T.6 N., R.48 W., Logan County, 0.2 mi (0.3 km) downstream from fence line, 4.5 mi (7.2 km) southeast of St. Petersburg.	2.17	1969-73	9-11-73	11.83	93
06825000	South Fork Republican River near Idalia, Colo.	Lat 39°36'59", long 102°14'32", in SE¼SW¼ sec.13, T.5 S., R.44 W., Yuma County, 0.7 mi (1.1 km) east of U.S. Highway 385 and 6.5 mi (10.5 km) southeast of Idalia.	1,300	1950-71†, 1972-73	6-27-72 7-24-73	9.99 10.11	3,080 3,430
06825100	Landsman Creek tributary near Stratton, Colo.	Lat 39°06'43", long 102°40'25", in NE¼NE¼ sec.9, T.11 S., R.47 W., Kit Carson County, 800 ft (240 m) upstream from county road, 14 mi (23 km) southwest of Stratton.	7.09	1972-73	1973	(e)	<4
06826900	Sand Creek near Hale, Colo.	Lat 39°41'50", long 102°10'37", in SW¼NW¼ sec.22, T.4 S., R.43 W., Yuma County, 1,000 ft (300 m) downstream from bridge, 5 mi (8 km) northwest of Hale.	24.2	1969-73	9-11-73	15.55	725
06834200	Spring Creek tributary near Amherst, Colo.	Lat 40°45'09", long 102°16'12", in Sedgwick County, 800 ft (240 m) upstream from road and 7.5 mi (12.1 km) northwest of Amherst.	47.8	1969-73	9-10-73	13.97	480
06857500	Big Timber Creek tributary near Arapahoe, Colo.	Lat 38°59'18", long 102°16'50" (revised), in NE¼ sec.24, T.12 S., R.44 W., Cheyenne County, 800 ft (240 m) upstream from unnamed tributary, 11.5 mi (18.5 km) northwest of Arapahoe.	7.84	1969-73	8- -73	12.00	h325
ARKANSAS RIVER BASIN							
07099250	Soda Creek near Livesey, Colo.	Lat 38°11'46", long 104°50'44", in SW¼NW¼ sec.25, T.21 S., R.67 W., Pueblo County, 500 ft (150 m) south of Red Creek Rd., 6.6 mi (10.6 km) southwest of Livesey.	8.35	1970-73	5- 6-73	10.22	19
07107600	St. Charles River tributary near Goodpasture, Colo.	Lat 38°04'05", long 104°46'33", in NE¼NE¼ sec.9, T.23 S., R.66 W., Pueblo County, 600 ft (180 m) upstream from bridge on Burnt Mill Rd., 8 mi (13 km) southeast of Goodpasture.	2.87	1970-73	8- 8-73	10.81	192
07112700	Butte Creek near Delcarbon, Colo.	Lat 37°42'24", long 104°51'58", in SE¼SE¼ sec.10, T.27 S., R.67 W., Huerfano County, 1,200 ft (370 m) downstream from culvert at State Highway 69, 7.0 mi (11.3 km) northwest of Walsenburg.	3.20	1970-73	1973	(e)	<85

ANNUAL MAXIMUM DISCHARGE AT CREST-STAGE PARTIAL-RECORD STATIONS DURING WATER YEAR 1973--Continued

Station number	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Dis-charge (cfs)
ARKANSAS RIVER BASIN--Continued							
07120600	Timpas Creek tri- butary near Thatcher, Colo.	Lat 37°34'18", long 104°06'10", in NE¼ sec.34, T.28 S., R.60 W., Las Animas County, 150 ft (46 m) downstream from county road, 1.5 mi (2.4 km) north of Thatcher.	7.13	1970-73	9-26-73	10.89	84
07123700	Mustang Creek near Karvel, Colo.	Lat 38°33'54", long 103°31'18", in SW¼ sec.13, T.17 S., R.55 W., Lincoln County, 0.3 mi (0.5 km) upstream from bridge on county road, 12 mi (19 km) south of Karvel.	6.93	1969-73	7-31-73	10.33	48
07124700	Gray Creek near Engleville, Colo.	Lat 37°09'36", long 104°25'38", in NW¼ sec.23, T.33 S., R.63 W., Las Animas County, 1,000 ft (300 m) downstream from bridge on county road, 2.8 mi (4.5 km) north- east of Engleville.	4.95	1970-73	8- 9-73	10.89	176
07125050	Tingley Canyon Creek near Ludlow, Colo.	Lat 37°16'48", long 104°32'04", in SW¼SW¼ sec.2, T.32 S., R.64 W., Las Animas County, 400 ft (120 m) upstream from county road crossing, 4.5 mi (7.2 km) southeast of Ludlow.	6.49	1970-73	7-13-73	10.24	16
07126400	Red Rock Canyon Creek near Bloom, Colo.	Lat 37°33'24", long 103°50'20", in SE¼SE¼ sec.36, T.28 S., R.58 W., Las Animas County, 1,000 ft (300 m) upstream from county road crossing, 11 mi (18 km) southeast of Bloom.	4.27	1970-73	7-19-73	12.79	250
07126450	Tobe Arroyo near Tobe, Colo.	Lat 37°11'43", long 103°36'33", in sec.5, T.33 S., R.55 W., Las Animas County, 550 ft (170 m) upstream from county road, 1.6 mi (2.6 km) south of Tobe.	8.45	1970-73	7-25-73	10.26	36
07129100	Rule Creek near Ninaview, Colo.	Lat 37°33'57", long 103°10'26", in sec.31, T.28 S., R.51 W., Las Animas County, 100 ft (30 m) down- stream from farm access road, 1.3 mi (2.1 km) south of county road, 6.7 mi (10.8 km) southeast of Ninaview.	7.69	1970-73	1973	(e)	<39
07129200	Muddy Creek tri- butary near Ninaview, Colo.	Lat 37°35'56", long 103°19'48", in SE¼SE¼ sec.15, T.28 S., R.53 W., Las Animas County, 0.2 mi (0.3 km) upstream from bridge on county road, 5.8 mi (9.3 km) southwest of Ninaview.	3.70	1970-73	7-30-73	10.48	76
07133200	Clay Creek tribu- tary near Deora, Colo.	Lat 37°43'27", long 102°44'24", in NW¼ sec.6, T.27 S., R.47 W., Prowers County, 1,000 ft (300 m) upstream from mouth, 13 mi (21 km) northeast of Deora.	1.60	1969-73	1973	(e)	<15
07134300	Wolf Creek near Carlton, Colo.	Lat 37°52'30", long 102°28'54", in NW¼NW¼ sec.21, T.25 S., R.45 W., Prowers County, 0.3 mi (0.5 km) upstream from road to windmill, 15 mi (24 km) southwest of Carlton.	15.7	1969-73	8- 9-73	12.12	487

ANNUAL MAXIMUM DISCHARGE AT CREST-STAGE PARTIAL-RECORD STATIONS DURING WATER YEAR 1973--Continued

Station number	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Dis-charge (cfs)
ARKANSAS RIVER BASIN--Continued							
07135800	Wild Horse Creek tributary near Hartman, Colo.	Lat 38°15'45", long 102°09'42", in NE¼ sec.5, T.21 S., R.42 W., Prowers County, 0.2 mi (0.3 km) upstream from bridge on county road, 10.5 mi (16.9 km) northeast of Hartman.	7.35	1969-73	7-30-73	b19.25	2,520
07138520	Little Bear Creek tributary near Lycan, Colo.	Lat 37°37'48", long 102°07'30", in SW¼ sec.2, T.28 S., R.42 W., Baca County, 1,100 ft (340 m) downstream from bridge on State Highway 89, 5 mi (8 km) north of Lycan.	20.6	1969-73	9-25-73	10.52	57
07153450	Longs Canyon Creek near Tobe, Colo.	Lat 37°05'24", long 103°41'09", in SW¼ sec.10, T.34 S., R.56 W., Las Animas County, 1,500 ft (460 m) upstream from bridge on county road, 10 mi (16 km) southwest of Tobe.	5.44	1970-73	7-24-73	11.00	22
07154800	Cimarron River tributary near Edler, Colo.	Lat 37°05'10", long 102°45'38", in NE¼ sec.13, T.34 S., R.48 W., Baca County, at culvert at county road, 6.3 mi (10.1 km) south of Edler.	3.52	1970-73	9-24-73	14.55	130
PINEY RIVER BASIN							
*09058900	Moniger Creek near Minturn, Colo.	Lat 39°43'37", long 106°28'50", in Eagle County, on left bank 1.5 mi (2.4 km) upstream from mouth, 7.5 mi (12.1 km) north of Minturn.	.76	1965-73	6-10-73	b1.85	(†)
GUNNISON RIVER BASIN							
09151700	Deer Creek tributary near Dominguez, Colo.	Lat 38°51'30", long 108°18'53", in NE¼ sec.36, T.3 S., R.2 E., Ute Meridian, Mesa County, at culvert at U.S. Highway 50, 4 mi (6 km) north of Dominguez.	a4	1971-73	1973	(e)	<12
LITTLE SALT WASH BASIN							
09153200	Little Salt Wash tributary near Fruita, Colo.	Lat 39°13'16", long 108°38'57", in NE¼NE¼ sec.25, T.2 N., R.2 W., Ute Meridian, Mesa County, 200 ft (61 m) below bridge on 21 Rd., 6 mi (10 km) northeast of Fruita.	2.88	1971-73	1973	(e)	<15
SALT CREEK BASIN							
09163300	East Salt Creek tributary near Mack, Colo.	Lat 39°21'24", long 108°48'58", in SW¼SE¼ sec.18, T.8 S., R.102 W., Mesa County, at culvert at State Highway 139, 10 mi (16 km) northeast of Mack.	1.67	1971-73	10-9-73	10.19	13

ANNUAL MAXIMUM DISCHARGE AT CREST-STAGE PARTIAL-RECORD STATIONS DURING WATER YEAR 1973--Continued

Station number	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Dis-charge (cfs)
DOLORES RIVER BASIN							
09168700	Disappointment Creek tributary near Slick Rock, Colo.	Lat 38°01'33", long 108°48'51", in SW¼SW¼ sec.36, T.43 N., R.18 W., San Miguel County, at twin culverts at State Highway 141, 5 mi (8 km) southeast of Slick Rock.	1.93	1970-73	1973	(e)	<36
09169800	East Paradox Creek tributary near Bedrock, Colo.	Lat 38°16'53", long 108°48'21", in NE¼SW¼ sec.36, T.47 N., R.18 W., Montrose County, at culvert at State Highway 90, 5.5 mi (8.8 km) southeast of Bedrock.	c3.96	1970-73	1973	(e)	<27
09175800	Dead Horse Creek near Naturita, Colo.	Lat 38°02'37", long 108°34'38", in NE¼SE¼ sec.25, T.44 N., R.16 W., San Miguel County, at culvert at State Highway 141, 12.1 mi (19.5 km) south of Naturita.	5.33	1970-73	9- -70 8-27-71 8- 7-73	b21.95 10.44 17.58	d590 d11 373
09179400	West Creek tributary near Gateway, Colo.	Lat 38°43'01", long 108°55'28", in NW¼SE¼ sec.29, T.15 S., R.103 W., Mesa County, on box culvert at State Highway 141, 3 mi (5 km) northeast of Gateway.	2.17	1973	8-21-73	10.92	82
SAN JUAN RIVER BASIN							
09371300	McElmo Creek tributary near Cortez, Colo.	Lat 37°20'51", long 108°28'56", in NE¼SE¼ sec.27, T.36 N., R.15 W., Montezuma County, at bridge on U.S. Highway 160, 5.8 mi (9.3 km) east of Cortez.	4.43	1971-73	6-13-73	10.63	47

* Also a low-flow partial-record station.

† Discharge not determined.

‡ Operated as a continuous-record gaging station.

a Approximately.

b From floodmarks.

c Revised.

d Not previously published.

e Peak stage did not reach bottom of gage.

f of which 6.94 mi² are probably noncontributing.g of which 24.2 mi² are probably noncontributing.

h Estimated.

STORM-RUNOFF PARTIAL-RECORD STATIONS

The following table contains storm precipitation over the basin and related runoff for the days indicated and the annual maximum inflow to small reservoirs. Each reservoir is equipped with a water-stage recorder operated only during the summer months. There was no or very little flow on other days of the year. Volume and rate of inflow are computed from a stage-capacity curve of the reservoir which is redefined periodically by topographic surveys of the reservoirs. The annual maximum inflow (average for 5-minute interval) is computed from outflow and change in reservoir contents, adjusted for rainfall on reservoir surface during time of peak inflow. The precipitation is determined from recording gages in the area using polygons drawn by the Thiessen method to determine the average precipitation over each drainage basin. Additional information on hydrologic and biotic characteristics of these small drainage basins has been obtained but is not published herein.

STORM PRECIPITATION AND RELATED RUNOFF FROM STORM-RUNOFF PARTIAL-RECORD STATIONS DURING WATER YEAR 1972-73

Station number	Station name	Location	Drainage area (sq mi)	Period of record	Date	Storm precipitation (inches)	Storm runoff (ac-ft)	Annual peak inflow (cfs)
09067320	Boco Mountain Reservoir 1, near Wolcott, Colo.	Lat 39°44'27", long 106°40'49", in NE¼NW¼ sec.3, T.4 S., R.83 W., Eagle County, 2.8 mi (4.5 km) north of Wolcott. Reservoir capacity, 2.66 ac-ft (3,280 m³).	0.012	1965-73	10-15-72 10-20-72 4-25-73 5- 6-73	0.60 .26 .32 .40	0.023 .017 .001 .002	0.2
09067330	Boco Mountain Reservoir 2, near Wolcott, Colo.	Lat 39°44'32", long 106°40'57", in SW¼SW¼ sec.34, T.3 S., R.83 W., Eagle County, 3 mi (5 km) north of Wolcott. Reservoir capacity, 1.55 ac-ft (1,910 m³).	.015	1965-73	4-15-73 4-25-73 5- 1-73 5- 6-73 5-19-73	.17 .35 .23 .40 .34	.003 .002 .002 .004 .002	.2
09067340	Boco Mountain Reservoir 3, near Wolcott, Colo.	Lat 39°44'31", long 106°40'59", in SW¼SW¼ sec.34, T.3 S., R.83 W., Eagle County, 3 mi (5 km) north of Wolcott. Reservoir capacity, 1.604 ac-ft (1,978 m³).	.008	1965-73	10-15-72 10-20,21-72 4-15-73 4-25-73 5- 1-73 5- 6-73 6-14,15-73 7-18-73 7-21-73	.58 .38 .35 .38 .23 .42 .79 .16 .13	.015 .017 .002 .002 .002 .003 .002 .002 .001	.2
09067350	Boco Mountain Reservoir 4, near Wolcott, Colo.	Lat 39°44'28", long 106°41'00", in NW¼NW¼ sec.3, T.4 S., R.83 W., Eagle County, 2.8 mi (4.5 km) north of Wolcott. Reservoir capacity, 2.29 ac-ft (2,820 m³).	.013	1965-73	6- 2-73 6- 3-73 6- 4-73	.21 .42 .22	.001 .002 .001	.1
09155000	Badger Wash Observation Reservoir 1-A, near Mack, Colo.	Lat 39°20'48", long 108°56'19", in SE¼SW¼ sec.24, T.8 S., R.104 W., Mesa County, 9 mi (14 km) northwest of Mack. Reservoir capacity, 5.00 ac-ft (6,160 m³).	.066	1954-73	10- 4-72 10- 5-72 10- 8-72 10-15-72 10-16-72 6- 3-73 6-14-73 7-19-73	.44 .17 .33 .44 .44 .43 .59 .47	.005 .100 .248 .221 .020 .099 .295 .124	26.6
09155500	Badger Wash Observation Reservoir 1-B, near Mack, Colo.	Lat 39°20'34", long 108°56'10", in NW¼NE¼ sec.25, T.8 S., R.104 W., Mesa County, 9 mi (14 km) northwest of Mack. Reservoir capacity, 17.4 ac-ft (21,500 m³).	.084	1954-73	10- 8-72 10-15-72 10-18-72 10-19-72 5- 6-73 6-14-73	.33 .44 .11 .39 .70 .60	.051 .087 .018 .130 .018 .034	3.9
09156500	Badger Wash Observation Reservoir 3-A, near Mack, Colo.	Lat 39°20'45", long 108°55'54", in NE¼NE¼ sec.25, T.8 S., R.104 W., Mesa County, 9 mi (14 km) northwest of Mack. Reservoir capacity, 10.6 ac-ft (13,100 m³).	.059	1954-73	10- 5-72 10- 8-72 10-15-72 10-16-72 10-18-72 10-19-72 6- 3-73 6-14-73 7-19-73 7-20-73	.15 .40 .50 .10 .14 .45 .51 .46 .40 .15	.005 .109 .142 .030 .045 .179 .049 .035 .012 .018	3.6

STORM PRECIPITATION AND RELATED RUNOFF FROM STORM-RUNOFF PARTIAL-RECORD STATIONS
DURING WATER YEAR 1972-73--Continued

Station number	Station name	Location	Drainage area (sq mi)	Period of record	Date	Storm precipitation (inches)	Storm runoff (ac-ft)	Annual peak inflow (cfs)
09157000	Badger Wash Observation Reservoir 3-B, near Mack, Colo.	Lat 39°20'36", long 108°55'50", in NE¼NE¼ sec.25, T.8 S., R.104 W., Mesa County, 9 mi (14 km) northwest of Mack. Reservoir capacity, 5.92 ac-ft (7,300 m³).	0.048	1954-73	10- 8-72	0.42	0.199	7.3
					10-15-72	.52	.197	
					10-16-72	.11	.061	
					10-18-72	.15	.072	
					10-19-72	.45	.234	
					5- 7-73	.44	.008	
					6- 3-73	.51	.083	
					6-14-73	.48	.025	
					7-20-73	.15	.009	
09159000	Badger Wash Observation Reservoir 2-B, near Mack, Colo.	Lat 39°20'06", long 108°56'26", in SE¼SW¼ sec.25, T.8 S., R.104 W., Mesa County, 9 mi (14 km) northwest of Mack. Reservoir capacity, 21.5 ac-ft (26,510 m³).	.158	1954-73	10- 8-72	.30	.027	7.3
					10-15-72	.54	.095	
					10-19-72	.44	.150	
					10-22-72	.17	.043	
09159500	Badger Wash Observation Reservoir 4-B, near Mack, Colo.	Lat 39°19'57", long 108°55'54", in SE¼SE¼ sec.25, T.8 S., R.104 W., Mesa County, 9 mi (14 km) northwest of Mack. Reservoir capacity, 3.77 ac-ft (4,650 m³).	.019	1954-73	10- 8-72	.52	.109	3.7
					10-15-72	.55	.035	
					10-16-72	.14	.031	
					10-18-72	.20	.011	
					10-19-72	.40	.044	
					10-22-72	.09	.026	
09160000	Badger Wash Observation Reservoir 4-A, near Mack, Colo.	Lat 39°19'50", long 108°55'51", in NE¼NE¼ sec.36, T.8 S., R.104 W., Mesa County, 9 mi (14 km) northwest of Mack. Reservoir capacity, 2.43 ac-ft (3,000 m³).	.022	1954-73	10- 5-72	.16	.035	4.7
					10- 8-72	.52	.179	
					10-15-72	.52	.049	
					10-16-72	.16	.034	
					10-18-72	.19	.012	
					10-19-72	.40	.051	
09161000	Badger Wash Observation Reservoir 2-A, near Mack, Colo.	Lat 39°19'41", long 108°56'33", in SW¼NW¼ sec.36, T.8 S., R.104 W., Mesa County, 9 mi (14 km) northwest of Mack. Reservoir capacity, 10.4 ac-ft (12,800 m³).	.148	1954-73	10-15-72	.56	.008	7.3
					10-19-72	.43	.178	
					10-22-72	.15	.034	
09162800	Badger Wash Observation Reservoir 14, near Mack, Colo.	Lat 39°19'20", long 108°56'41", in SW¼SW¼ sec.31, T.8 S., R.103 W., Mesa County, 9 mi (14 km) northwest of Mack. Reservoir capacity, 98.7 ac-ft (121,700 m³).	1.53	1957-73	10- 5-72	.60	.568	73.4
					10- 8-72	.32	5.952	
					10-15-72	.50	3.932	
					10-16-72	.10	1.004	
					10-19-72	.40	4.879	
					10-22-72	.10	.565	
					6-15-73	--	.096	

DISCHARGE MEASUREMENTS AT MISCELLANEOUS SITES

Measurements of streamflow at points other than gaging stations are given in the following table. Those that are measurements of base flow are designated by an asterisk (*); measurements of peak flow by a dagger (†).

DISCHARGE MEASUREMENTS MADE AT MISCELLANEOUS SITES DURING WATER YEAR 1973

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Dis-charge (cfs)
PART 6		PLATTE RIVER BASIN				
West Creek	Trout Creek	Lat 39°07'44", long 105°09'42", in NW¼NW¼ sec.6, T.11 S., R.69 W., Teller County, 0.6 mi (1.0 km) upstream from Trail Creek, and 1.7 mi (2.7 km) south of Westcreek, Colo.	38.0		5- 7-73	†240
Trail Creek	West Creek	Lat 39°08'06", long 105°09'41", in NW¼SW¼ sec.31, T.10 S., R.69 W., Douglas County, at culvert 700 ft (210 m) upstream from mouth and 1.2 mi (1.9 km) south of Westcreek, Colo.	16.7		5- 7-73	†78
West Creek	Trout Creek	Lat 39°09'22", long 105°09'45", in NE¼NE¼ sec.25, T.10 S., R.70 W., Douglas County, 0.2 mi (0.3 km) north of Westcreek, Colo., and 0.4 mi (0.6 km) up-stream from Westcreek Lake dam.	60.0		5- 7-73	†2,020
West Creek	Trout Creek	Lat 39°10'32", long 105°09'56", in SE¼SE¼ sec.13, T.10 S., R.70 W., Douglas County, 1.0 mi (1.6 km) downstream from West-creek Lake dam and 1.6 mi (2.6 km) north of Westcreek, Colo.	62.3		5- 7-73	†3,080
Big Dry Creek	South Platte River	Lat 39°37'45", long 105°00'03", in NE¼SW¼ sec.9, T.5 S., R.68 W., Arapahoe County, at bridge on S. Santa Fe Drive in Littleton, Colo.	a19		5- 6-73	†b4,400
Little Dry Creek	South Platte River	Lat 39°39'11", long 104°59'14", in NE¼NW¼ sec.3, T.5 S., R.68 W., Arapahoe County, at S. Broadway St. in Englewood, Colo., 1.1 mi (1.8 km) upstream from mouth.	a15		5- 6-73	†1,510
Sanderson Gulch	South Platte River	Lat 39°41'29", long 105°00'20", in SE¼NE¼ sec.21, T.4 S., R.68 W., Denver County, at W. Arkansas Ave., 200 ft (61 m) east of S. Pecos St. in Denver, Colo.	a7		5- 6-73	†320
Weir Gulch	South Platte River	Lat 39°43'50", long 105°01'20", in NW¼SE¼ sec.5, T.4 S., R.68 W., Denver County, 150 ft (46 m) west of Decatur St., and 300 ft (91 m) south of W. 9th Ave. in Denver, Colo., and 1,500 ft (460 m) upstream from mouth.	a8		5- 6-73	†430
Westerly Creek	Sand Creek	Lat 39°44'46", long 104°52'46", in NW¼SW¼ sec.34, T.3 S., R.67 W., Adams County, 200 ft (61 m) north of intersection of E. 18th Ave. and Boston St. in Aurora, Colo.	a6		5- 6-73	†290

DISCHARGE MEASUREMENTS MADE AT MISCELLANEOUS SITES DURING WATER YEAR 1973--Continued

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Dis-charge (cfs)
PART 6		PLATTE RIVER BASIN--Continued				
Sand Creek	South Platte River	Lat 39°47'07", long 104°54'13", in SE½SE¼ sec.17, T.3 S., R.67 W., Adams County, at intersection of E. 49th Drive and Pontiac St. in Commerce City, Colo., and 3.4 mi (5.4 km) upstream from mouth.	187	1957,1963, 1965	5- 6-73	†5,630
Lena Gulch	Clear Creek	Lat 39°45'53", long 105°07'50", in SE½NE¼ sec.29, T.3 S., R.69 W., Jefferson County, 600 ft (180 m) west of Simms St., and 800 ft (240 m) east of Taft St. in Wheatridge, Colo.	all		5- 6-73	†820
Niver Creek	South Platte River	Lat 39°50'28", long 104°57'00", in NE½NW¼ sec.36, T.2 S., R.68 W., Adams County, 200 ft (61 m) upstream from Steele St. Bridge, 0.3 mi (0.5 km) upstream from mouth and 0.5 mi (0.8 km) north-east of Welby, Colo.	a6		5- 6-73	†550
Big Dry Creek	South Platte River	Lat 39°59'35", long 104°56'27", in NE½SE¼ sec.1, T.1 S., R.68 W., Adams County, at railroad culvert 350 ft (110 m) upstream from Colorado Blvd. and 4.9 mi (7.9 km) north of Eastlake, Colo.	a65		5- 6-73	†740
PART 9		SAN JUAN RIVER BASIN				
Junction Creek	Animas River	Lat 37°17'23", long 107°52'23", in NE½NE¼ sec.20, T.35 N., R.9 W., La Plata County, at 24th St. in Durango, Colo.	38.4		10-19-72	†1,780
Wildcat Canyon Creek	Lightner Creek	Lat 37°15'56", long 107°55'15", in NE½NE¼ sec.26, T.35 N., R.10 W., La Plata County, 500 ft (150 m) upstream from mouth, 2.0 mi (3.2 km) west of Durango, Colo.	8.85		10-19-72	†870
Lightner Creek	Animas River	Lat 37°16'13", long 107°53'58", in SW½NW¼ sec.30, T.35 N., R.9 W., La Plata County, 0.8 mi (1.3 km) west of Durango, Colo., 1.0 mi (1.6 km) upstream from mouth.	62.9	1903-6, 1927-49	10-19-72	†2,830

† Operated as a continuous-record gaging station.

a Approximately.

b Estimated.

	Page		Page
Adobe Creek near Fruita.....	293	Cheesman Lake near Deckers, contents of.....	58, 59
Alamosa Creek above Terrace Reservoir.....	130	Cherry Creek, below Cherry Creek Lake.....	30
Alva B. Adams tunnel at east portal, near		near Franktown.....	29
Estes Park.....	151	Cherry Creek Lake near Denver, contents of.....	30
diversion by.....	374, 376	Chicosa Creek near Fowler.....	93
Animas River, at Durango.....	363	Cimarron River near Cimarron.....	272
at Howardsville.....	360	Clear Creek (Arkansas River basin) above Clear	
near Cedar Hill, N. Mex.....	367	Creek Reservoir.....	68
Apishapa River near Fowler.....	94	Clear Creek (Platte River basin) at mouth, near	
Arkansas River, above Pueblo.....	80	Derby.....	34
at Buena Vista.....	69	near Golden.....	33
at Canon City.....	76	near Lawson.....	32
at Catlin Dam, near Fowler.....	95	Clear Fork near Ragged Mountain.....	275
at Granite.....	67	Coal Creek near Plainview.....	41
at La Junta.....	99	Colorado River, at Hot Sulphur Springs.....	164
at Lamar.....	111	below Baker Gulch, near Grand Lake.....	149
at Las Animas.....	100	below Glenwood Springs.....	247
at Parkdale.....	74	below Lake Granby.....	154
at Salida.....	72	near Cameo.....	254, 255
below John Martin Reservoir.....	110	near Colorado-Utah State line.....	299
near Avondale.....	89	near De Beque.....	253
near Coolidge, Kans.....	114	near Dotsero.....	219
near Leadville.....	63	near Granby.....	155
near Nathrop.....	71	near Grand Lake.....	150
near Nepesta.....	92	near Kremmling.....	194
near Portland.....	79	Columbine ditch at Deadman Hill, diversion by.....	51
near Pueblo.....	81	Columbine ditch near Fremont Pass, diversion by.....	374, 376
near Wellsville.....	73	Conejos River, below Platoro Reservoir.....	138
August P. Gumlick Tunnel, diversion by.....	170, 171	near Lasauces.....	143
Aurora Homestake pipeline near Lake George,		near Mogote.....	139
diversion by.....	374	Cottonwood Creek below Hot Springs, near Bucna	
Badger Wash near Mack.....	296	Vista.....	70
Bear Creek, at Morrison.....	27	Cow Creek (tributary to Uncompahgre River) near	
at mouth, at Sheridan.....	28	Ridgway.....	286
Beaver Creek (Arkansas River basin) near Portland...	78	Cow Creek (tributary to West Muddy Creek) near	
Beaver Creek (Colorado River basin) near Rifle.....	252	Paonia.....	277
Bemrose-Hoosier diversion near Hoosier Pass.....	179	Crest-stage partial-record stations.....	378-385
Berthoud Pass ditch at Berthoud Pass,		Crooked Arroyo near Swink.....	98
diversion by.....	158, 374, 376	Cross Creek near Minturn.....	210
Big Salt Wash near Fruita.....	294	Crystal River, above Avalanche Creek, near	
Big Sandy Creek near Lamar.....	112	Redstone.....	244
Big Thompson River, at Estes Park.....	43	at Placita.....	243
at mouth, near La Salle.....	46	Cucharas River at Boyd Ranch, near La Veta.....	91
at mouth of canyon, near Drake.....	45	Culebra Creek at San Luis.....	144
near Estes Park.....	44	Cunningham Creek near Norrie.....	237
Bighorn Creek near Minturn.....	213	Darling Creek near Leal.....	168
Black Creek below Black Lake, near Dillon.....	190	Dickson Creek near Vail.....	196
Black Gore Creek near Minturn.....	212	Dillon Reservoir at Dillon.....	185
Blue Mesa Reservoir near Sapinero.....	270	Disappointment Creek near Dove Creek.....	302
Blue River, below Dillon.....	186	Dolores River, at Bedrock.....	303
below Green Mountain Reservoir.....	193	at Dolores.....	301
near Dillon.....	181	below Rico.....	300
Bob Creek ditch near Glendevy, diversion by.....	51	near Bedrock.....	305
Bobtail Creek near Jones Pass.....	165	Don La Font ditches 1 and 2 at Piedra Pass,	
Bonny Reservoir near Hale.....	61	diversion by.....	375, 376
Booth Creek near Minturn.....	215	Dry Creek near Naturita.....	308
Boreas Pass ditch at Boreas Pass, diversion by.....	374, 376	Eagle River, at Red Cliff.....	202
Boulder Creek (Colorado River basin) at upper		below Gypsum.....	218
station, near Dillon.....	188	East Canyon Creek near New Castle.....	249
Boulder Creek (Platte River basin) near Orodell.....	39	East Meadow Creek near Minturn.....	198
Busk-Ivanhoe tunnel at east portal, near Malta,		East River at Almont.....	266
diversion by.....	375, 376	East Salt Creek near Mack.....	297
Buzzard Creek near Collbran.....	260	Egeria Creek near Toponas.....	201
Cache la Poudre River, at mouth of canyon, near		Elevenmile Canyon Reservoir near Lake George,	
Fort Collins.....	52	contents of.....	58, 59
near Greeley.....	53	Elk Creek near Fraser.....	161
South Fork, near Rustic.....	50	Elk River, at Clark.....	315
Cameron Pass ditch at Cameron Pass,		South Fork, near Clark.....	314
diversion by.....	51	Elkhead Creek, near Clark.....	318
Canyon Creek above New Castle.....	248	near Elkhead.....	319
Carnero Creek near La Garita.....	128	North Fork, near Elkhead.....	320
Carter Lake near Berthoud, contents of.....	58, 59	Eureka ditch near Flattop Mountain, diversion by....	374, 376
Castle Creek above Aspen.....	225	Ewing ditch at Tennessee Pass,	
Cataract Creek near Kremmling.....	191	diversion by.....	374, 376
Chapman Gulch, Feeder Canal, near Norrie.....	232	Fall Creek near Rustic.....	47
near Nast.....	233	Fish Creek near Milner.....	316
Charles H. Boustead tunnel near Leadville,		Florida River, at Bondad.....	366
diversion by.....	375, 376		

	Page		Page
Florida River, below Florida Farmers ditch, near Durango.....	364	Lateral No. 48 near Mack.....	256
Fort Lyon Canal near Hasty.....	97	Leach Creek near Durham.....	292
Fountain Creek, at Pueblo.....	87	Lewis Wash near Grand Junction.....	262
at Security.....	85	Little Beaver Creek, near Idylwilde.....	48
near Colorado Springs.....	82	near Rustic.....	49
near Pinon.....	86	Little Grizzly Creek near Coalmont.....	13
Fournile Creek at Canon City.....	77	Little Snake River, near Lily.....	327
Fraser River, at upper station, near Winter Park....	158	near Slater.....	324
near Winter Park.....	159	Long Canyon Creek near Madrid.....	102
Freeman Creek near Minturn.....	197	Los Pinos River (Rio Grande basin) near Ortiz.....	141
Frontier ditch near Coolidge, Kans.....	113	Los Pinos River (San Juan River basin), at La Boca..	358
Fryingpan River, at Meredith.....	239	near Bayfield.....	357
at Norrie.....	235	Lost Creek near Buford.....	329
Feeder Canal, near Norrie.....	227	Low-flow partial-record stations, discharge measurements at.....	377
near Ivanhoe Lake.....	228	Luning Arroyo near Model.....	104
near Ruedi.....	242		
North Fork, above Cunningham Creek, near Norrie...	236	McCullough-Spruce-Crystal diversion near Hoosier Pass.....	180
North Fork, near Norrie.....	238	McElmo Creek, above Alkali Canyon, near Cortez.....	371
South Fork, at upper station, near Norrie.....	231	below Cortez.....	372
South Fork, Feeder Canal, near Norrie.....	230	near Colorado-Utah State line.....	373
Goose Creek (Platte River basin) above Cheesman Lake.....	19	Mancos River near Towaoc.....	370
Goose Creek (Rio Grande basin) at Wagonwheel Cap....	119	Maroon Creek above Aspen.....	226
Gore Creek at upper station, near Minturn.....	211	Marvine Creek near Buford.....	330, 331
Government Highline Canal near Mack.....	257	Michigan ditch at Cameron Pass, diversion by.....	51
Grand River ditch at La Poudre Pass, diversion by...	374, 376	Michigan River, North Fork, near Gould.....	14
Grape Creek near Westcliffe.....	75	Middle Boulder Creek near Nederland.....	38
Green Mountain Reservoir near Kremmling.....	192	Middle Creek near Minturn.....	216
Gunnison River, below Gunnison tunnel.....	273	Midway Creek near Aspen.....	222
near Grand Junction.....	290	Milk Creek near Thornburgh.....	322
near Gunnison.....	267	Miller Creek near Meeker.....	336
near Lazear.....	282	Mineral Creek above Silverton.....	361
North Fork, near Somerset.....	279	Miscellaneous sites, discharge measurements at....	388, 389
Gunnison tunnel, diversion by.....	273	Missouri Creek near Gold Park.....	205, 206
		Moffat water tunnel at east portal, diversion by....	374, 376
		Monte Cristo diversion near Hoosier Pass.....	178
		Morrow Point Reservoir near Cimarron.....	271
Halfmoon Creek near Malta.....	65		
Harold D. Roberts tunnel at Grant, diversion by....	374, 376	Navajo River, at Banded Peak Ranch, near Chromo....	349
Hermosa Creek near Hermosa.....	362	at Edith.....	350
Highline Canal, diversion by.....	312	No Name Creek near Aspen.....	223
Homestake Creek, at Gold Park.....	207, 208	North Clear Creek below Continental Reservoir.....	116
near Red Cliff.....	209	North Crestone Creek near Crestone.....	127
Homestake tunnel near Gold Park, diversion by.....	375, 376	North Platte River near Northgate.....	15
Hoosier Pass tunnel at Hoosier Pass, diversion by.....	374, 376	North Thompson Creek near Carbondale.....	245
Horsetooth Reservoir near Fort Collins, contents of.....	58, 59		
Hubbard Creek near Bowie.....	281	Orchard Mesa Drain at Grand Junction.....	291
Huerfano River at Manzanares Crossing, near Redwing.....	90		
Hunter Creek, above Midway Creek, near Aspen.....	221	Paonia Reservoir, contents of.....	279
near Aspen.....	224	Piceance Creek, at White River.....	341
		below Ryan Gulch, near Rio Blanco.....	340
Ivanhoe Creek near Norrie.....	229	Piedra River, Middle Fork, near Pagosa Springs.....	352
		near Arboles.....	354
Jimmy Creek near Grand Lake.....	148	near Piedra.....	353
John Martin Reservoir at Caddoa.....	109	Pine River-Weminuche Pass ditch at Weminuche Pass, diversion by.....	375, 376
		Piney River, below Piney Lake, near Minturn.....	195
Kannah Creek near Whitewater.....	289	near State Bridge.....	199
Kerber Creek at Ashley Ranch, near Villa Grove.....	125	Pinos Creek near Del Norte.....	122
Keystone Gulch near Dillon.....	183	Pitkin Creek near Minturn.....	214
		Pitkin ditch, diversion by.....	214
La Garita Creek near La Garita.....	129	Plateau Creek, near Cameo.....	261
La Jara Creek at Gallegos Ranch, near Capulin.....	131	near Collibran.....	259
La Plata River, at Colorado-New Mexico State line...	369	Platoro Reservoir at Platoro.....	137
at Hesperus.....	368	Plum Creek near Louviers.....	25
Lady Creek near Grand Lake.....	147	Possum Creek near New Castle.....	250
Lake Creek above Twin Lakes Reservoir.....	66	Purgatoire River, at Madrid.....	101
Lake Fork at Gateview.....	269	at Ninemile Dam, near Higbee.....	107
Lake Granby near Granby.....	153	at Trinidad.....	103
Landsman Creek near Hale.....	60	near Las Animas.....	108
Laramie River near Glendevy.....	16	near Thatcher.....	106
Laramie-Poudre tunnel near Chambers Lake, diversion by.....	51		
Larkspur ditch at Marshall Pass, diversion by.....	375, 376	Ranch Creek near Fraser.....	163
		Red Dirt Creek near Kremmling.....	177
		Red Sandstone Creek near Minturn.....	217

	Page		Page
Reed Wash near Loma.....	295	Transmountain diversions from Arkansas River basin to South Platte River basin in Colorado.....	374
Republican River, South Fork, near Hale.....	62	Transmountain diversions from Colorado River basin in Colorado.....	374-376
Reservoirs in South Platte River basin.....	58, 59	Treasure Pass diversion ditch at Wolf Creek Pass, diversion by.....	375-376
Rio Grande, above mouth of Trinchera Creek, near Lasauces.....	132	Trinchera Creek, above Turners Ranch, near Fort Garland.....	133
at Alamosa.....	124	below Smith Reservoir, near Blanca.....	136
at Colorado-New Mexico State line.....	146	Troublesome Creek, East Fork, near Troublesome.....	176
at Thirtymile Bridge, near Creede.....	115	near Pearmont.....	175
at Wagonwheel Gap.....	118	Turkey Creek near Red Cliff.....	204
near Del Norte.....	121	Turquoise Lake near Leadville.....	64
near Lobatos.....	145	Twin Lakes tunnel at east portal, near Twin Lakes, diversion by.....	375, 376
near Monte Vista.....	123	Uncompahgre River, at Colona.....	287
South Fork, at South Fork.....	120	at Delta.....	288
Roaring Fork River, at Glenwood Springs.....	246	near Ridgway.....	285
near Aspen.....	220	Ute Creek near Fort Garland.....	135
Rock Creek (tributary to Blue River) near Dillon....	187	Vallecito Creek near Bayfield.....	355
Rock Creek (tributary to Colorado River) near Toponas.....	200	Vallecito Reservoir near Bayfield.....	356
Rocky Fork Creek near Meredith.....	241	Van Bremer Arroyo near Model.....	105
Ruedi Reservoir near Basalt.....	240	Vasquez Creek near Winter Park.....	160
Saguache Creek near Saguache.....	126	Vega Reservoir near Collbran.....	258
St. Charles River near Vineland.....	88	Vidler tunnel, diversion by.....	374, 376
St. Louis Creek near Fraser.....	162	Walton Creek, near Steamboat Springs.....	312
St. Vrain Creek, at Lyons.....	37	North Fork, near Rabbit Ears Pass.....	311
at mouth, near Platteville.....	42	Wearyman Creek near Red Cliff.....	203
Salt Creek (tributary to Colorado River) near Mack..	298	Weminuche Pass ditch at Weminuche Pass, diversion by.....	375, 376
Salt Creek (tributary to Florida River) near Oxford.....	365	West Divide Creek near Raven.....	251
San Antonio River, at mouth, near Manassa.....	142	West Hubbard Creek near Paonia.....	280
at Ortiz.....	140	West Monument Creek at U.S. Air Force Academy.....	83
San Juan River, at Pagosa Springs.....	348	West Muddy Creek, near Bowle.....	276
East Fork, above Sand Creek, near Pagosa Springs..	345	near Somerset.....	278
East Fork, near Pagosa Springs.....	346	West Paradox Creek above Bedrock.....	304
near Carracas.....	351	White River, above Coal Creek, near Meeker.....	337
San Miguel River, at Naturita.....	307	above Rangely.....	343
near Placerville.....	306	below Meeker.....	339
Sangre de Cristo Creek near Fort Garland.....	134	near Meeker.....	338
Sawyer Creek Feeder Canal near Norrie.....	234	near Watson, Utah.....	344
Service Creek near Oak Creek.....	310	North Fork, above Ripple Creek, near Trapper's Lake.....	328
Shadow Mountain Lake near Grand Lake.....	152	North Fork, at Buford.....	333
Skyline ditch at Chambers Lake, diversion by.....	51	North Fork, near Buford.....	332
Slate Creek at upper station, near Dillon.....	189	South Fork, at Buford.....	335
Slater Fork near Slater.....	325	South Fork, near Buford.....	334
Smith Fork near Crawford.....	274	Williams Creek-Squaw Pass ditch at Squaw Pass, diversion by.....	375, 376
Snake River near Montezuma.....	182	Williams Fork (tributary to Colorado River), above Darling Creek, near Leal.....	167
South Boulder Creek near Eldorado Springs.....	40	below Steelman Creek.....	166
South Platte River, above Elevenmile Canyon Reservoir, near Hartsel.....	17	below Williams Fork Reservoir.....	174
at Balzac.....	56	near Leal.....	170, 171
at Denver.....	31	near Parshall.....	172
at Henderson.....	35	South Fork of, near Leal.....	169
at Julesburg.....	57	Williams Fork (tributary to Yampa River), South Fork of, near Pagoda.....	321
at Littleton.....	26	Williams Fork Reservoir near Parshall.....	173
at South Platte.....	23	Willow Creek (tributary to Colorado River) below Willow Creek Reservoir.....	157
at Waterton.....	24	Willow Creek (tributary to Little Snake River) near Dixon, Wyo.....	326
below Cheesman Lake.....	20	Willow Creek (tributary to Rio Grande) at Creede....	117
near Kersey.....	54	Willow Creek Pump Canal, diversion by.....	157
near Lake George.....	18	Willow Creek Reservoir near Granby.....	156
near Weldona.....	55	Wilson supply ditch near Eaton Reservoir, diversion by.....	51
North Fork, at South Platte.....	22	Wolf Creek near Pagosa Springs.....	347
North Fork, below Geneva Creek, at Grant.....	21	Wurtz ditch near Tennessee Pass, diversion by.....	375, 376
South St. Vrain Creek near Ward.....	36	Yampa River, at Steamboat Springs.....	313
Spring Creek at La Boca.....	359	below diversion, near Hayden.....	317
Storm-runoff partial-record stations.....	386, 387	near Maybell.....	323
Surface Creek, at Cedaredge.....	284	near Toponas.....	309
near Cedaredge.....	283	Yellow Creek near White River.....	342
Tabor ditch at Spring Creek Pass, diversion by.....	375, 376		
Tarbell ditch near Cochetopa Pass, diversion by.....	375, 376		
Taylor Park Reservoir at Taylor Park.....	263		
Taylor River, at Almont.....	265		
below Taylor Park Reservoir.....	264		
Templeton Gap Floodway at Colorado Springs.....	84		
Temple Creek below North Temple Creek, at Frisco..	184		
Timpas Creek at mouth, near Swink.....	96		
Tonichi Creek at Gunnison.....	268		
Transbasin diversions from North Platte River basin to Cache la Poudre River basin in Colorado....	51		

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