

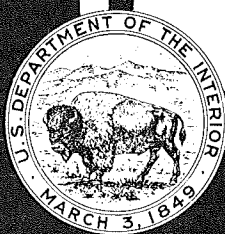
1974

JN Rodles
Rec'd 4-22-76

Water Resources Data for California

Part 1. Surface Water Records

Volume 2: Northern Great Basin and Central Valley



**UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY**

**Prepared in cooperation with the California Department
of Water Resources and with other agencies**

CALENDAR FOR WATER YEAR 1974

1973

OCTOBER

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

NOVEMBER

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

DECEMBER

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

1974

JANUARY

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

FEBRUARY

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

MARCH

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

APRIL

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

MAY

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

JUNE

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

JULY

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

AUGUST

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

SEPTEMBER

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

1974

**Water Resources Data
for
California**

Part 1. Surface Water Records

Volume 2: Northern Great Basin and Central Valley



**UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY**

Prepared in cooperation with the California Department
of Water Resources and with other agencies

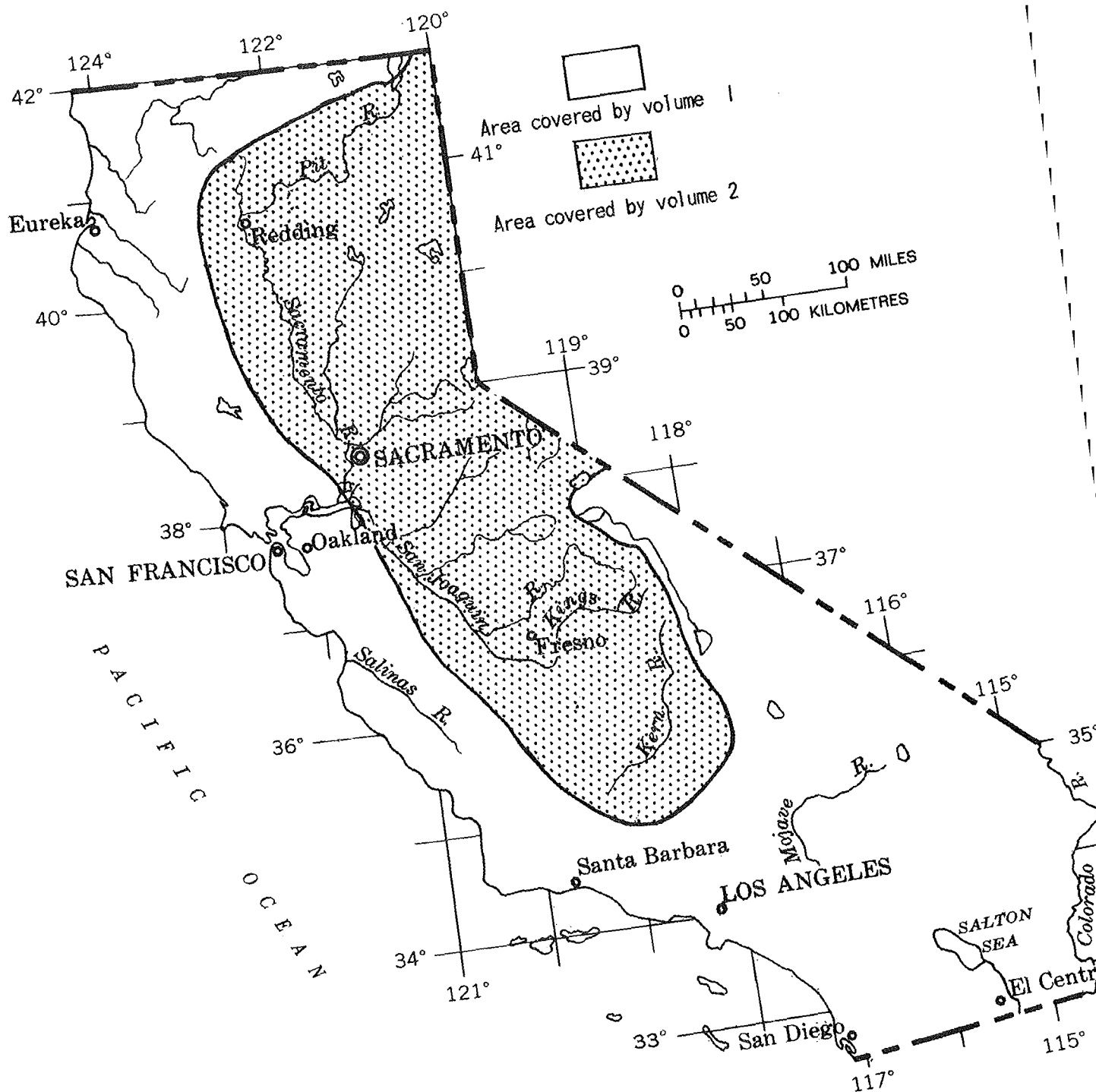
Water-resources records, 1974, for California are in the following reports of the U.S. Geological Survey:

1. Water Resources Data for California
Part 1: Surface Water Records
Volume 1: Colorado River Basin, Southern Great Basin, and Pacific Slope Basins excluding Central Valley
2. Water Resources Data for California
Part 1: Surface Water Records
Volume 2: Northern Great Basin and Central Valley
3. Water Resources Data for California
Part 2: Water Quality Records

Copies of these reports may be obtained from District Chief,
Water Resources Division
U.S. Geological Survey
855 Oak Grove Avenue
Menlo Park, California 94025

Prepared in cooperation with

California Department of Water Resources
California Department of Transportation
Alameda County Flood Control and Water Conservation District
Alameda County Water District
Berrenda Mesa Water District
Casitas Municipal Water District
Coachella Valley County Water District
Contra Costa County Flood Control and Water Conservation District
Desert Water Agency
East Bay Municipal Utility District
Georgetown Divide Public Utility District
Imperial Irrigation District
Kern County Water Agency
Lake County Flood and Water Conservation District
Los Angeles County Flood Control District
Los Angeles Department of Water and Power
Madera Irrigation District
Merced Irrigation District
Modoc County Department of Public Works
Montecito County Water District
Monterey County Flood Control and Water Conservation District
Napa County Flood Control and Water Conservation District
Orange County Flood Control District
Orange County Water District
Oroville-Wyandotte Irrigation District
Paradise Irrigation District
Rio San Diego Municipal Water District
Riverside County Flood Control and Water Conservation District
Sacramento County Department of Public Works, Water Resources Division
San Benito County Water Conservation and Flood Control District
San Bernardino Valley Municipal Water District
San Diego (city) Water Utilities
San Diego (county) Department of Sanitation and Flood Control
San Francisco, City and County, Hetch-Hetchy Water and Power
San Francisco, City and County Water Department
San Luis Obispo County Flood Control and Water Conservation District
San Mateo County
San Rafael, City of, Department of Public Works
Santa Barbara City Water Department
Santa Barbara County Flood Control and Water Conservation District
Santa Barbara County Water Agency
Santa Clara County Flood Control and Water District
Santa Cruz County Flood Control and Water Conservation District
Santa Maria Valley Water Conservation District
Santa Ynez River Water Conservation District
Siskiyou County Flood Control and Water Conservation District
Tehachapi-Cummings County Water District
Terra Bella Irrigation District
Tulare County Flood Control District
Turlock Irrigation District
United Water Conservation District
University of California (Berkeley)
University of California (Davis), Division of Environmental Studies
Ventura County Department of Public Works
Western Municipal Water District
Woodbridge Irrigation District
Yolo County Flood Control and Water Conservation District
Corps of Engineers, U.S. Army
Bureau of Reclamation, U.S. Department of the Interior
National Park Service, U.S. Department of the Interior
Forest Service, U.S. Department of Agriculture
Soil Conservation Service, U.S. Department of Agriculture
U.S. Atomic Energy Commission



CONTENTS

	Page
List of gaging stations, in downstream order, for which records are published.....	VI
Introduction.....	1
Cooperation.....	2
Definition of terms.....	3
Special networks and programs.....	4
Downstream order and station numbers.....	5
Explanation of surface-water data.....	5
Collection and computation of data.....	5
Accuracy of data.....	8
Publications.....	9
Other data available.....	9
Records of discharge collected by agencies other than the Geological Survey.....	10
Hydrologic conditions.....	10
Selected references.....	11
Gaging-station records.....	14
Sacramento-San Joaquin Delta, inflows and diversions.....	495
Discharge at partial-record stations.....	496
Low-flow partial-record stations.....	496
Crest-stage partial-record stations.....	498
Discharge measurements at miscellaneous sites.....	502
Index.....	505

ILLUSTRATIONS

	Page
Figure 1. Map showing runoff for the current water year.....	12
2-17. Schematic diagrams showing diversions and storage:	
2. Kern River basin.....	71
3. Tule River basin.....	92
4. Kaweah River basin.....	100
5. Kings River basin.....	116
6. San Joaquin River basin.....	129
7. Tuolumne River basin.....	181
8. Stanislaus River basin.....	208
9. Mokelumne River basin.....	237
10. Pit and McCloud river basins.....	265
11. South Fork Feather River basin.....	332
12. North Fork Feather River basin.....	345
13. Feather River at Lake Oroville.....	358
14. Yuba River basin.....	373
15. Bear River basin.....	404
16. Middle Fork American and Rubicon river basins.....	425
17. South Fork American River basin.....	453
18. Schematic diagram showing principal inflows and diversions, Sacramento-San Joaquin Delta.....	494

TABLES

	Page
Table 1. Factors for converting English units to International System (SI) units.....	13

VI GAGING STATIONS, IN DOWNSTREAM ORDER, FOR WHICH RECORDS ARE PUBLISHED

	Page
<u>THE GREAT BASIN</u>	
<u>WALKER LAKE BASIN</u>	
Virginia Creek (head of Walker River) near Bridgeport.....	14
Green Creek near Bridgeport.....	15
Upper Twin Lake near Bridgeport.....	16
Lower Twin Lake near Bridgeport.....	17
Robinson Creek at Twin Lakes Outlet, near Bridgeport.....	18
Buckeye Creek near Bridgeport.....	19
Swauger Creek near Bridgeport.....	20
East Walker River (continuation of Virginia Creek):	
Bridgeport Reservoir near Bridgeport.....	21
East Walker River near Bridgeport.....	22
East Walker River below Sweetwater Creek, near Bridgeport.....	23
East Walker River above Strosnider ditch, near Mason, Nev.....	24
West Walker River:	
Little Walker River near Bridgeport.....	25
West Walker River below Little Walker River, near Coleville.....	26
West Walker River near Coleville.....	27
Topaz Lake near Topaz.....	28
West Walker River at Hoyer Bridge, near Wellington, Nev.....	29
<u>HUMBOLDT-CARSON SINK BASIN</u>	
<u>CARSON RIVER BASIN</u>	
East Fork Carson River (head of Carson River) below Markleeville	
Creek, near Markleeville.....	30
East Fork Carson River near Gardnerville, Nev.....	31
West Fork Carson River at Woodfords.....	32
<u>PYRAMID AND WINNEMUCCA LAKES BASIN</u>	
Pyramid Lake near Nixon, Nev.....	33
Upper Truckee River (head of Truckee River):	
Grass Lake Creek near Meyers.....	34
Upper Truckee River near Meyers.....	35
Upper Truckee River at South Lake Tahoe.....	36
Lake Tahoe:	
Taylor Creek:	
Fallen Leaf Lake near Camp Richardson.....	37
Taylor Creek near Camp Richardson.....	38
Eagle Creek near Camp Richardson.....	39
Meeks Creek at Meeks Bay.....	40
Quail Lake Creek near Homewood.....	41
Blackwood Creek near Tahoe City.....	42
Ward Creek near Tahoe Pines.....	43
Ward Creek tributary near Tahoe Pines.....	44
Ward Creek at State Highway 89, near Tahoe Pines.....	45
Dollar Creek near Tahoe City.....	46
Marlette Lake near Carson City, Nev.....	47
Marlette Creek near Carson City, Nev.....	48
Glenbrook Creek at Glenbrook, Nev.....	49
Trout Creek near Tahoe Valley.....	50
Trout Creek at South Lake Tahoe.....	51
Lake Tahoe at Tahoe City.....	52
Truckee River at Tahoe City.....	53
Donner Creek at Donner Lake, near Truckee.....	54
Martis Creek Lake near Truckee.....	55
Martis Creek near Truckee.....	56
Prosser Creek Reservoir near Boca.....	57
Prosser Creek near Boca.....	58
Independence Creek near Truckee.....	59
Sagehen Creek near Truckee.....	60
Stampede Reservoir near Boca.....	61
Little Truckee River above Boca Reservoir, near Boca.....	62
Boca Reservoir at Boca.....	63
Little Truckee River at Boca.....	64
Truckee River at Farad.....	65
Truckee River at Reno, Nev.....	66

THE GREAT BASIN--Continued

HONEY LAKE BASIN

Susan River at Susanville.....	67
Willow Creek near Susanville.....	68

EAGLE LAKE BASIN

Pine Creek near Susanville.....	69
---------------------------------	----

SURPRISE VALLEY BASIN

Bidwell Creek below Mill Creek, near Fort Bidwell.....	70
--	----

PACIFIC SLOPE BASINS IN CALIFORNIA

BUENA VISTA LAKE BASIN

Kern River near Quaking Aspen Camp.....	72
Kern River near Kernville.....	73
Kern River at Kernville.....	75
Borel Canal below Isabella Dam.....	76
South Fork Kern River near Onyx.....	77
Isabella Lake near Lake Isabella.....	78
Kern River below Isabella Dam.....	79
Kern River near Democrat Springs.....	80
Kern River near Bakersfield.....	82
San Emigdio Creek at San Emigdio Ranchhouse.....	83
Caliente Creek above Tehachapi Creek, near Caliente.....	84
Tehachapi Creek near Tehachapi.....	85

TULARE LAKE BASIN

Tulare Lake in Kings County.....	86
Avenal Creek near Avenal.....	87
Poso Creek near Oildale.....	88
White River near Ducor.....	89
Deer Creek near Fountain Springs.....	90
Deer Creek diversion near Terra Bella.....	91
Middle Fork Tule River (head of Tule River):	
North Fork of Middle Fork Tule River near Springville.....	93
Tule River near Springville.....	95
South Fork Tule River near Success.....	96
Pioneer ditch below Success Dam.....	97
Success Lake near Success.....	98
Tule River below Success Dam.....	99
Middle Fork Kaweah River (head of Kaweah River) near Potwisha Camp...	101
Marble Fork Kaweah River at Potwisha Camp.....	103
East Fork Kaweah River near Three Rivers.....	105
Kaweah River at Three Rivers.....	107
South Fork Kaweah River at Three Rivers.....	108
Lemoncove ditch below Terminus Dam.....	109
Lake Kaweah near Lemoncove.....	110
Foothill ditch below Terminus Dam.....	111
Kaweah River below Terminus Dam.....	112
Dry Creek near Lemoncove.....	113
Cottonwood Creek near Elderwood.....	114
Sand Creek near Orange Cove.....	115
Kings River above North Fork, near Trimmer.....	117
North Fork Kings River below Meadow Brook.....	118
Reservoirs in Tulare Lake basin.....	119
Helms Creek below Courtright Dam.....	120
North Fork Kings River near Cliff Camp.....	121
North Fork Kings River above Dinkey Creek, at Balch Camp.....	122
North Fork Kings River below Dinkey Creek, near Balch Camp.....	123
Kings River below North Fork, near Trimmer.....	124
Pine Flat Lake near Piedra.....	125
Kings River below Pine Flat Dam.....	126
Mill Creek near Piedra.....	127
Los Gatos Creek above Nunez Canyon, near Coalinga.....	128

SAN JOAQUIN RIVER BASIN

San Joaquin River at Miller Crossing.....	130
Granite Creek near Cattle Mountain.....	131

PACIFIC SLOPE BASINS IN CALIFORNIA--Continued

SAN JOAQUIN RIVER BASIN--Continued

South Fork San Joaquin River:

Florence Lake:

Ward tunnel intake at Florence Lake..... 132

Florence Lake near Big Creek..... 133

South Fork San Joaquin River near Florence Lake..... 134

Bear Creek near Lake Thomas A. Edison..... 135

Lake Thomas A. Edison near Big Creek..... 136

Mono Creek below Lake Thomas A. Edison..... 137

Mammoth Pool Reservoir near Big Creek..... 138

San Joaquin River above Shakeflat Creek, near Big Creek..... 139

Big Creek:

Ward tunnel outlet at Huntington Lake..... 140

Huntington Lake near Big Creek..... 141

Big Creek:

Pitman Creek below Tamarack Creek..... 142

Stevenson Creek:

Huntington-Shaver conduit outlet near Shaver Lake..... 143

Shaver Lake near Big Creek..... 144

Redinger Lake near Auberry..... 145

San Joaquin River above Willow Creek, near Auberry..... 146

North Fork Willow Creek (head of Willow Creek):

Soquel diversion near Sugar Pine..... 147

North Fork Willow Creek near Sugar Pine..... 148

Bass Lake near Bass Lake..... 149

Pacific Gas and Electric Co. conduit No. 3 near Bass Lake..... 150

North Fork Willow Creek near Bass Lake..... 151

Willow Creek at mouth, near Auberry..... 152

San Joaquin River below Kerckhoff powerhouse, near Prather..... 153

Millerton Lake:

Madera Canal at Friant..... 154

Friant-Kern Canal at Friant..... 155

Millerton Lake at Friant..... 156

San Joaquin River below Friant..... 157

Cantua Creek near Cantua Creek..... 158

James Bypass near San Joaquin..... 159

Fresno River:

Miami Creek near Oakhurst..... 160

Fresno River near Knowles..... 161

Fresno River near Daulton..... 162

Chowchilla River:

West Fork Chowchilla River near Mariposa..... 163

Chowchilla River near Raymond..... 164

Chowchilla River below Raynor Creek, near Raymond..... 165

Mariposa Creek near Catheys Valley..... 166

Merced River at Happy Isles Bridge, near Yosemite..... 167

Merced River at Pohono Bridge, near Yosemite..... 168

South Fork Merced River:

Big Creek:

Big Creek diversion near Fish Camp..... 169

South Fork Merced River near El Portal..... 170

Merced River near Briceburg..... 171

Maxwell Creek at Coulterville..... 172

Lake McClure at Exchequer..... 173

Merced River below Merced Falls Dam, near Snelling..... 174

Merced River at Shaffer bridge, near Cressey..... 175

Dry Creek near Snelling..... 176

Merced River near Stevinson..... 177

San Joaquin River near Newman..... 178

Orestimba Creek near Newman..... 179

Del Puerto Creek near Patterson..... 180

Falls Creek near Hetch Hetchy..... 182

Hetch Hetchy Reservoir at Hetch Hetchy..... 183

PACIFIC SLOPE BASINS IN CALIFORNIA--Continued

SAN JOAQUIN RIVER BASIN--Continued

Page

Tuolumne River near Hetch Hetchy.....	184
Tuolumne River above Early Intake, near Mather.....	185
Tuolumne River below Early Intake, near Mather.....	186
Cherry Creek:	
Cherry Lake near Hetch Hetchy.....	187
Cherry Creek below Cherry Valley Dam, near Hetch Hetchy.....	188
Eleanor Creek:	
Lake Eleanor near Hetch Hetchy.....	189
Eleanor Creek near Hetch Hetchy.....	190
Cherry Creek near Early Intake.....	191
Cherry Creek below Dion R. Holm powerhouse, near Mather.....	192
South Fork Tuolumne River near Oakland Recreation Camp.....	193
Middle Tuolumne River at Oakland Recreation Camp.....	194
Lily Creek (head of Clavey River) near Pinecrest.....	195
Bell Creek near Pinecrest.....	197
Clavey River near Buck Meadows.....	198
Big Creek above Whites Gulch, near Groveland.....	199
Big Creek near Groveland.....	200
North Fork Tuolumne River near Long Barn.....	201
Don Pedro Reservoir near La Grange.....	202
Tuolumne River:	
Modesto Canal near La Grange.....	203
Turlock Canal near La Grange.....	204
Tuolumne River below La Grange Dam, near La Grange.....	205
Tuolumne River at Modesto.....	207
Middle Fork Stanislaus River (head of Stanislaus River) at Kennedy Meadows, near Dardanelle.....	209
Clark Fork Stanislaus River near Dardanelle.....	210
Donnell Lake near Dardanelle.....	211
Middle Fork Stanislaus River at Hells Half Acre Bridge, near Pinecrest.....	212
Beardsley Lake near Strawberry.....	213
Middle Fork Stanislaus River below Beardsley Dam.....	214
North Fork Stanislaus River below Silver Creek.....	215
Highland Creek below Spicer Meadows Reservoir.....	216
North Fork Stanislaus River near Avery.....	217
Stanislaus River near Hathaway Pines.....	218
South Fork Stanislaus River at Strawberry.....	220
Philadelphia Canal near Strawberry.....	221
Tuolumne Canal near Long Barn.....	222
South Fork Stanislaus River near Long Barn.....	223
Melones Lake near Sonora.....	224
Tulloch Reservoir near Knights Ferry.....	225
South San Joaquin Canal near Knights Ferry.....	226
Oakdale Canal near Knights Ferry.....	227
Stanislaus River below Goodwin Dam, near Knights Ferry.....	228
Stanislaus River at Ripon.....	229
San Joaquin River near Vernalis.....	230
South Fork Calaveras River (head of Calaveras River) near San Andreas	231
North Fork Calaveras River near San Andreas.....	232
Calaveras River:	
New Hogan Lake near Valley Springs.....	233
Calaveras River below New Hogan Dam, near Valley Springs.....	234
Bear Creek near Lockeford.....	235
Delta-Mendota Canal at Tracy pumping plant, near Tracy.....	236
North Fork Mokelumne River (head of Mokelumne River):	
Salt Springs Reservoir near West Point.....	238
Tiger Creek powerhouse conduit below Salt Springs Dam.....	239
North Fork Mokelumne River below Salt Springs Dam.....	240
Cole Creek near Salt Springs Dam.....	241
Bear River near Salt Springs Dam.....	242

PACIFIC SLOPE BASINS IN CALIFORNIA--Continued

SAN JOAQUIN RIVER BASIN--Continued

Mokelumne River:

Middle Fork Mokelumne River:

Forest Creek near Wilseyville.....	243
Middle Fork Mokelumne River at West Point.....	244
South Fork Mokelumne River near West Point.....	245
Mokelumne River near Mokelumne Hill.....	246
Pardee Reservoir near Valley Springs.....	247
Camanche Reservoir near Clements.....	248
Mokelumne River below Camanche Dam.....	249
Woodbridge Canal at Woodbridge.....	250
Mokelumne River at Woodbridge.....	251

Dry Creek:

Sutter Creek near Sutter Creek.....	252
Dry Creek near Galt.....	253
North Fork Cosumnes River (head of Cosumnes River):	
Camp Creek near Somerset.....	254
North Fork Cosumnes River near El Dorado.....	255

Middle Fork:

South Fork Cosumnes River near River Pines.....	256
Cosumnes River at Michigan Bar.....	257
Deer Creek near Sloughhouse.....	258
Cosumnes River at McConnell.....	259

Beach Lake:

Morrison Creek near Sacramento.....	260
Contra Costa Canal near Oakley.....	261

Dutch Slough:

Marsh Creek near Byron.....	262
-----------------------------	-----

SACRAMENTO RIVER BASIN

Sacramento River near Mt Shasta.....	263
Sacramento River at Delta.....	264
North Fork Pit River (head of Pit River) at Alturas.....	266
South Fork Pit River near Likely.....	267
Pit River near Canby.....	268
Ash Creek at Adin.....	269
Pit River near Bieber.....	270
Hat Creek near Hat Creek.....	271
Burney Creek near Burney.....	272
Reservoirs in Pit and McCloud river basins.....	273
Pit River below Pit No. 4 Dam.....	274
Pit River at Big Bend.....	275
James B. Black powerplant near Big Bend.....	276
Iron Canyon Creek below Iron Canyon Dam, near Big Bend.....	277
Pit River near Montgomery Creek.....	278
McCloud River near McCloud.....	279
McCloud-Iron Canyon diversion tunnel near McCloud.....	280
McCloud River below McCloud Dam, near McCloud.....	281
McCloud River at Ah-Di-Na, near McCloud.....	282
McCloud River above Shasta Lake.....	283
Shasta Lake near Redding.....	284
Sacramento River at Keswick.....	285
Clear Creek at French Gulch.....	286
Judge Francis Carr powerplant near French Gulch.....	287
Spring Creek powerplant at Keswick.....	288
Whiskeytown Lake near Igo.....	289
Clear Creek near Igo.....	290
Cow Creek near Millville.....	291
Bear Creek:	
Middle Fork Cottonwood Creek near Ono.....	292
North Fork Cottonwood Creek near Igo.....	293
Cottonwood Creek near Olinda.....	294
South Fork Cottonwood Creek near Cottonwood.....	295
Cottonwood Creek near Cottonwood.....	296
Battle Creek below Coleman Fish Hatchery, near Cottonwood.....	297

PACIFIC SLOPE BASINS 'IN CALIFORNIA--Continued

Page

SACRAMENTO RIVER BASIN--Continued

Sacramento River above Bend Bridge, near Red Bluff.....	298
Red Bank Creek near Red Bluff.....	299
Antelope Creek near Red Bluff.....	300
Elder Creek near Paskenta.....	301
Mill Creek near Los Molinos.....	302
Thomes Creek at Paskenta.....	303
Deer Creek near Vina.....	304
Big Chico Creek near Chico.....	305
Mud Creek near Chico.....	306
Stony Creek:	
Little Stony Creek above East Park Reservoir, near Lodoga.....	307
Reservoirs in Stony Creek basin.....	308
Stony Creek near Fruto.....	309
South Diversion Canal near Orland.....	310
Black Butte Lake near Orland.....	311
Stony Creek below Black Butte Dam, near Orland.....	312
Sacramento River at Butte City.....	313
Sacramento River at Colusa.....	314
Butte Creek at Butte Meadows.....	315
Little Butte Creek near Magalia.....	316
Butte Creek near Chico.....	317
Cherokee Canal near Nelson.....	318
Sacramento River below Wilkins Slough, near Grimes.....	319
Colusa Drain:	
South Fork Willow Creek (head of Willow Creek) near Fruto.....	320
Walker Creek at Artois.....	321
Stone Corral Creek near Sites.....	322
Sacramento River at Knights Landing.....	323
Reservoirs in Feather River basin.....	324
Middle Fork Feather River (head of Feather River):	
Little Last Chance Creek below Frenchman Dam, near Chilcoot.....	325
Berry Creek near Sattley.....	326
Big Grizzly Creek at Grizzly Valley Dam, near Portola.....	327
Middle Fork Feather River near Portola.....	328
Middle Fork Feather River near Clio.....	329
Middle Fork Feather River near Merrimac.....	330
Fall River near Feather Falls.....	331
South Fork Feather River above Little Grass Valley Reservoir.....	333
Little Grass Valley Reservoir near La Porte.....	334
South Fork Feather River below Little Grass Valley Dam.....	335
South Fork Feather River below diversion dam, near Strawberry Valley.....	336
Lost Creek:	
Sly Creek Reservoir near Strawberry Valley.....	337
Oroville-Wyandotte Canal near Clipper Mills.....	338
Lost Creek near Clipper Mills.....	339
South Fork Feather River below Forbestown Dam.....	340
Miners Ranch Canal below Ponderosa Dam, near Forbestown.....	341
Bangor Canal below Miners Ranch Reservoir, near Oroville.....	342
South Fork Feather River at Ponderosa Dam.....	343
Sucker Run near Forbestown.....	344
North Fork Feather River:	
Lake Almanor at Prattville.....	346
North Fork Feather River near Prattville.....	347
Butt Creek below Almanor-Butt Creek tunnel, near Prattville.....	348
North Fork Feather River below Belden Dam.....	349
Indian Creek (head of East Branch of North Fork Feather River):	
Indian Creek near Boulder Creek Guard Station, near Taylorsville.....	350
Little Grizzly Creek near Genesee.....	351
Indian Creek near Crescent Mills.....	352
Spanish Creek above Blackhawk Creek, at Keddie.....	353
East Branch of North Fork Feather River near Rich Bar.....	354

PACIFIC SLOPE BASINS IN CALIFORNIA--Continued

SACRAMENTO RIVER BASIN--Continued

Middle Fork Feather River--Continued

North Fork Feather River--Continued

Bucks Creek:

Bucks Lake near Bucks Lodge..... 355

North Fork Feather River at Pulga..... 356

West Branch Feather River near Paradise..... 357

Feather River:

Lake Oroville near Oroville..... 359

Palermo Canal near Oroville..... 360

Thermalito Afterbay near Oroville..... 361

Western Canal at intake, near Oroville..... 362

Richvale Canal at intake, near Oroville..... 363

Pacific Gas and Electric Co. lateral at intake, near Oroville.... 364

Sutter-Butte Canal at intake, near Oroville..... 365

Thermalito Afterbay release to Feather River, near Oroville..... 366

Feather River at Oroville..... 367

Feather River near Gridley..... 369

Honcut Creek:

North Honcut Creek near Bangor..... 370

South Honcut Creek near Bangor..... 371

Feather River at Yuba City..... 372

Middle Yuba River (head of Yuba River):

Jackson Meadows Reservoir near Sierra City..... 374

Middle Yuba River below Jackson Meadows Dam, near Sierra City..... 375

Milton-Bowman tunnel outlet near Graniteville..... 376

Middle Yuba River near Camptonville..... 377

Middle Yuba River below Our House Dam..... 378

Oregon Creek at Camptonville..... 379

Oregon Creek below Log Cabin Dam, near Camptonville..... 380

North Yuba River below Goodyears Bar..... 381

North Yuba River above Slate Creek, near Strawberry Valley..... 382

Slate Creek:

Slate Creek tunnel near Strawberry Valley..... 383

Slate Creek below diversion dam, near Strawberry Valley..... 384

New Colgate powerplant near French Corral..... 385

New Bullards Bar Reservoir near North San Juan..... 386

North Yuba River below New Bullards Bar Dam, near North San Juan. 387

Yuba River:

South Yuba River:

South Yuba River near Cisco..... 388

Fordyce Creek below Fordyce Dam, near Cisco..... 389

Lake Spaulding near Emigrant Gap..... 390

Drum Canal at tunnel outlet, near Emigrant Gap..... 391

Drum Canal above Drum Forebay, near Blue Canyon..... 392

South Yuba Canal near Emigrant Gap..... 393

South Yuba River at Langs Crossing, near Emigrant Gap..... 394

Canyon Creek:

Bowman Lake near Graniteville..... 395

Bowman-Spaulding Canal intake near Graniteville..... 396

Bowman-Spaulding Canal at Jordan Creek siphon venturi, near

Emigrant Gap..... 397

Canyon Creek below Bowman Lake..... 398

South Yuba River at Jones Bar, near Grass Valley..... 399

Yuba River below Englebright Dam, near Smartville..... 400

Deer Creek near Smartville..... 401

Dry Creek near Browns Valley..... 402

Yuba River near Marysville..... 403

Feather River below Shanghai Bend, near Olivehurst..... 405

Bear River:

Boardman Canal near Emigrant Gap..... 406

Dutch Flat No. 1 powerplant near Dutch Flat..... 407

Dutch Flat No. 2 flume near Blue Canyon..... 408

Bear River below Drum Afterbay, near Blue Canyon..... 409

PACIFIC SLOPE BASINS IN CALIFORNIA--Continued

SACRAMENTO RIVER BASIN--Continued

Feather River--Continued

Bear River--Continued

Chicago Park flume near Dutch Flat.....	410
Bear River below Dutch Flat Afterbay, near Dutch Flat.....	411
Rollins Reservoir near Colfax.....	412
Bear River Canal intake near Colfax.....	413
Bear River below Rollins Dam, near Colfax.....	414
New Camp Far West Reservoir near Wheatland.....	415
Bear River near Wheatland.....	416
Feather River at Nicolaus.....	417
Sacramento River at Verona.....	418
Sacramento Weir spill to Yolo Bypass, near Sacramento.....	419
North Fork American River (head of American River):	
Onion Creek near Soda Springs.....	420
North Fork of North Fork American River:	
Lake Valley Canal near Emigrant Gap.....	421
Shirrtail Creek:	
North Shirrtail Creek:	
Forbes Creek:	
North Fork Forbes Creek near Dutch Flat.....	422
North Shirrtail Creek near Dutch Flat.....	423
North Fork American River at North Fork Dam.....	424
Middle Fork American River:	
French Meadows Reservoir near Foresthill.....	426
Middle Fork American River at French Meadows.....	427
Duncan Creek near French Meadows.....	428
Duncan Creek below diversion dam, near French Meadows.....	429
Middle Fork American River above Middle Fork powerhouse, near Foresthill.....	430
Middle Fork American River below interbay dam, near Foresthill.....	431
Rubicon River:	
Rubicon-Rockbound tunnel near Meeks Bay.....	432
Rubicon River at Rubicon Springs, near Meeks Bay.....	433
Little Rubicon River:	
Buck Island Lake:	
Buck-Loon tunnel near Meeks Bay.....	434
Hell Hole Reservoir near Meeks Bay.....	435
Rubicon River below Hell Hole Dam, near Meeks Bay.....	436
South Fork Rubicon River:	
Robbs Peak Reservoir:	
Robbs Peak powerplant near Kyburz.....	437
Gerle Creek:	
Loon Lake near Meeks Bay.....	438
Gerle Creek below Loon Lake Dam, near Meeks Bay.....	439
South Fork Rubicon River below Gerle Creek, near Georgetown....	440
Pilot Creek above Stumpy Meadows Lake.....	441
Pilot Creek below Mutton Canyon, near Georgetown.....	442
Long Canyon Creek:	
South Fork Long Canyon Creek diversion tunnel near Volcanoville.....	443
North Fork Long Canyon Creek diversion tunnel near Volcanoville.....	444
Long Canyon Creek near French Meadows.....	445
Rubicon River near Foresthill.....	446
North Fork of Middle Fork American River near Foresthill.....	447
Middle Fork American River near Foresthill.....	448
Canyon Creek near Georgetown.....	449
Maine Bar Canyon Creek near Greenwood.....	450
Middle Fork American River near Auburn.....	451
North Fork American River below Auburn damsite, near Auburn.....	452
South Fork American River:	
Echo Lake conduit near Phillips.....	454
Pyramid Creek at Twin Bridges.....	455

PACIFIC SLOPE BASINS IN CALIFORNIA--Continued

SACRAMENTO RIVER BASIN--Continued

North Fork American River (head of American River)--Continued

South Fork American River--Continued

Silver Lake Outlet (head of Silver Fork of South Fork American River) near Kirkwood..... 456

Caples Lake Outlet near Kirkwood..... 457

South Fork American River near Kyburz..... 458

Alder Creek near White Hall..... 460

Silver Creek:

Union Valley Reservoir near Riverton..... 461

South Fork Silver Creek:

Ice House Reservoir near Kyburz..... 462

South Fork Silver Creek near Ice House..... 463

Silver Creek below Camino diversion dam..... 464

South Fork American River below Silver Creek, near Pollock Pines... 465

South Fork American River near Camino..... 466

South Fork American River near Placerville..... 467

South Fork American River near Lotus..... 468

American River:

Folsom Lake near Folsom..... 469

American River at Fair Oaks..... 470

Strong Ranch Slough at Sacramento..... 471

Natomas East Main Drainage Canal:

Arcade Creek near Del Paso Heights..... 472

Sacramento River at Sacramento..... 473

Yolo Bypass:

Clear Lake (head of Cache Creek):

Adobe Creek near Kelseyville..... 474

Highland Creek above Highland Creek Dam..... 475

Highland Creek below Highland Creek Dam, near Kelseyville..... 476

Middle Creek:

Scotts Creek near Lakeport..... 477

Kelsey Creek near Kelseyville..... 478

Clear Lake at Lakeport..... 479

Cache Creek near Lower Lake..... 480

North Fork Cache Creek at Hough Springs, near Clearlake Oaks..... 481

North Fork Cache Creek near Lower Lake..... 482

Bear Creek near Rumsey..... 483

Cache Creek near Capay..... 484

Cache Creek at Yolo..... 485

Yolo Bypass near Woodland..... 486

Putah Creek near Guenoc..... 487

Hunting Creek near Knoxville..... 488

Eticuera Creek:

Adams Creek near Knoxville..... 489

Nevada Creek near Knoxville..... 490

Pope Creek near Pope Valley..... 491

Lake Berryessa near Winters..... 492

Putah Creek near Winters..... 493

WATER RESOURCES DATA FOR CALIFORNIA, 1974

PART 1. SURFACE-WATER RECORDS

INTRODUCTION

Surface-water records for the 1974 water year for California, including records of streamflow or reservoir storage at gaging stations, partial-record stations, and miscellaneous sites, are given in this report. Records for a few pertinent gaging stations in bordering States also are included. The records were collected and computed by the Water Resources Division of the U.S. Geological Survey under the direction of Lee R. Peterson, district chief. These data represent that portion of the National Water Data System collected by the Geological Survey and cooperating State and Federal agencies in California.

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 9.

COOPERATION

The U.S. Geological Survey and organizations of the State of California have had cooperative agreements for the systematic collection of surface-water records since 1903. Organizations that supplied data are acknowledged in station descriptions. Organizations that assisted in collecting data through cooperative agreement with the Survey are:

California Department of Water Resources, J. R. Teerink, director.
California Department of Transportation, Sam Helwer, director.
Alameda County Flood Control and Water Conservation District,
P. E. Lanferman, engineer-manager.
Alameda County Water District, M. P. Whitfield, general manager-chief engineer.
Berrenda Mesa Water District, H. R. Lampson, engineer-manager.
Casitas Municipal Water District, Robert McKinney, general manager-chief engineer.
Coachella Valley County Water District, L. O. Weeks, general manager-chief engineer.
Contra Costa County Flood Control and Water Conservation District,
C. C. Rich, chief engineer.
Desert Water Agency, P. G. Payne, general manager.
East Bay Municipal Utility District, J. S. Harnett, general manager.
Georgetown Divide Public Utility District, C. F. Gierau, general manager.
Imperial Irrigation District, R. F. Carter, general manager.
Kern County Water Agency, S. T. Pyle, engineer-manager.
Lake County Flood Control and Water Conservation District, W. D. Hansen, manager.
Los Angeles County Flood Control District, C. F. Eshelby, division engineer.
Los Angeles Department of Water and Power, J. V. Phillips, general manager and chief engineer.
Madera Irrigation District, F. G. Bandy, secretary-manager.
Merced Irrigation District, K. R. McSwain, chief engineer and manager.
Modoc County Department of Public Works, J. K. Grove, director.
Montecito County Water District, H. O. Neil Mendenall, general manager.
Monterey County Flood Control and Water Conservation District,
Loran Bunte, Jr., district engineer.
Napa County Flood Control and Water Conservation District, Gene Norris, chairman.
Orange County Flood Control District, H. G. Osborne, chief engineer.
Orange County Water District, Neil G. Cline, secretary-manager.
Oroville-Wyandotte Irrigation District, J. W. McDonald, general manager.
Paradise Irrigation District, C. P. Kelly, manager.
Rio San Diego Municipal Water District, E. W. Houser, manager-engineer.
Riverside County Flood Control and Water Conservation District,
J. W. Bryant, chief engineer.
Sacramento County Department of Public Works, Water Resources Division,
J. P. Alessandri, chief.
San Benito County Water Conservation and Flood Control District,
R. G. Towle, secretary.
San Bernardino Valley Municipal Water District, J. A. Beaver, general manager.
San Diego, City of, Water Utilities, R. E. Dodson, director.
San Diego, County of, Department of Sanitation and Flood Control,
C. J. Houson, director.
San Francisco, City and County, Hetch-Hetchy Water and Power, O. L. Moore, general manager.
San Francisco, City and County Water Department, A. H. Frye, Jr., general manager and chief engineer.
San Luis Obispo County Engineering Department, G. C. Protopapas, county engineer.
San Mateo County Flood Control District, V. K. Sanders, manager.

San Rafael, City of, Department of Public Works, Ely Caillovette, Jr., director.
 Santa Barbara City Water Department, R. W. Puddicombe, director.
 Santa Barbara County Flood Control and Water Conservation District, James Stubchaer, flood-control engineer.
 Santa Barbara County Water Agency, F. H. Beattie, board of directors chairman.
 Santa Clara Valley Water District, J. T. O'Halloran, general manager.
 Santa Cruz County Flood Control and Water conservation District, D. A. Porath, district engineer.
 Santa Maria Valley Water Conservation District, M. F. Twitchell, secretary.
 Santa Ynez River Conservation District, A. T. Petersen, president.
 Siskiyou County Flood Control and Water Conservation District, D. A. Gravenkamp, director of public works.
 Tehachapi-Cummings County Water District, R. J. Jasper, general manager.
 Terra Bella Irrigation District, J. E. Boudreau, engineer-manager.
 Tulare County Flood Control District, J. L. Carlsen, flood-control engineer.
 Turlock Irrigation District, R. S. Tillner, secretary-general manager.
 United Water Conservation District, R. A. Smith, general manager-chief engineer.
 University of California (Berkeley), A. S. Leopold, professor of zoology.
 University of California (Davis), Division of Environmental Studies, Dr. Robert Leonard, department of zoology.
 Ventura County Department of Public Works, J. B. Quinn, deputy director.
 Western Municipal Water District, H. A. Hicks, general manager.
 Woodbridge Irrigation District, Mabel Hall, secretary.
 Yolo County Flood Control and Water Conservation District, W. L. McAnlis, manager.

Assistance in the form of funds or services was given by the Corps of Engineers, U.S. Army; U.S. Navy; Bureau of Reclamation and National Park Service, U.S. Department of the Interior; Forest Service and Soil Conservation Service, U.S. Department of Agriculture; U.S. Atomic Energy Commission.

The following organizations aided in collecting records: Pacific Power and Light Co., Bear Valley Mutual Water Co., Metropolitan Water District of Southern California, Fontana Union Water Co., Rancho California, Pacific Gas and Electric Co., Placer County Water Agency, Sacramento Municipal Utility District, Southern California Edison Co., Merced, Modesto, Nevada, Oroville-Wyandotte, Oakdale-South San Joaquin, and Vista Irrigation Districts, and Yuba County Water Agency.

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 International System of units (SI) on page 13.

Acre-foot (AC-FT, acre-ft) is the quantity of water required to cover 1 acre to a depth of 1 foot and is equivalent to 43,560 cubic feet or 325,851 gallons or 1,233 cubic metres.

Ft³/s-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, 1.9835 acre-feet, or 646,317 gallons or 2,445 cubic metres. It represents a runoff of 0.0372 inch from 1 square mile or 0.3468 millimetre from 1 square kilometre.

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

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

Cubic foot per second (FT^3/S , 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 7.48 gallons per second or 448.8 gallons per minute or 0.02832 cubic metres per second.

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

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

Instantaneous discharge is the discharge at a given 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 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 references 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.

International Hydrological Decade (IHD) River Stations provide a general index of runoff and materials in the water balance (discharge of water, and dissolved and transported solids) of the world. In the United State, IHD Stations provide indices of runoff and of the general distribution of water in the principal river basins of the conterminous United States and Alaska.

DOWNSTREAM ORDER AND STATION NUMBERS

Records 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 indentation, each indentation 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 series numbers to allow for new stations that may be established; hence the numbers are not consecutive. The complete 8-digit station number for each station, such as 11120800, which appears to the left of the station name includes the 2-digit part number "11" plus the 6-digit number "120800." 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 9 (Colorado River Basin), Part 10 (The Great Basin), and Part 11 (Pacific slope basins in California). 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.

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

At some stream-gaging stations the stage-discharge relation is affected by 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 determining discharge. The slope or fall is obtained by means of an auxiliary gage set at some distance from the base gage. At some stations the stage-discharge relation is affected by changing stage; at these stations the rate of change in stage is used as a factor in computing discharge.

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 basic data. 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. Tables of daily mean gage heights are included for some streamflow stations and for some reservoir stations. 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 station gives the location, drainage area, period of record, type and history of gages, average discharge, extremes of discharge or contents, general remarks, and notations of revisions of previously published records. The location of the gaging station and the drainage area are obtained from the most accurate maps available. River mileage, given under "LOCATIONS" for some stations, is that determined and used by the Corps of Engineers or other agencies. Periods for which there are published records for the present station or for stations generally equivalent to the present one are given under "PERIOD OF RECORD." The type of gage currently in use, the datum of the present gage above mean sea level, and a condensed history of the types, locations, and datums of previous gages used during the period of record are given under "GAGE." In references to datum of gage, the phrase "mean sea level" denotes "Sea Level Datum of 1929" as used by the Topographic Division of the Geological Survey, unless otherwise qualified. The average discharge for the number of years indicated is given under "AVERAGE DISCHARGE"; it is not given for stations having fewer than 5 complete years of record or for stations where changes in water development during the period of record cause the figure to have little significance. The maximum discharge (or contents) and the maximum gage height, the minimum discharge if there is little or no regulation (or the minimum contents), and the minimum gage height if it is significant are given under "EXTREMES." The minimum daily discharge is given if there is extensive regulation (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 the 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 maximum contents, it is given separately. Information pertaining to the accuracy of the discharge records, to conditions that affect the natural flow at the gaging station, and availability of water-quality records, is given under "REMARKS"; for reservoir stations information on the dam forming the reservoir, the capacity, outlet works and spillway, and purpose and use of the reservoir, is also given under "REMARKS."

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

Skeleton rating tables are published for stream-gaging stations where they serve a useful purpose and the dates of applicability can be easily identified.

Skeleton capacity tables are published for all reservoirs for which records of contents are published on a daily basis.

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

Accuracy of data

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

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

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

Discharge at many stations, as indicated by the monthly mean, may not reflect natural runoff due to the effects of diversion, consumptive use, regulation, evaporation, or other factors. Evaporation from a reservoir is not included in the adjustments for changes in reservoir contents, unless it is so stated. Even at those stations where adjustments are made, large errors in computed runoff may occur if adjustments or unadjusted losses (consumptive use, evaporation, seepage, etc.) 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 California for the period October 1960 to September 1965, are in Water-Supply Papers 1926, 1927, 1928, 1929, 1930, and 1931.

Two series of summary reports entitled, "Compilation of Records of Surface Waters of the United States" have been published; the first series covers the entire period of record through September 1950, and the second series covers the period October 1950 to September 1960. These reports contain summaries of monthly and annual discharge and monthend storage for all previously published records, as well as some records not contained in the annual series of water-supply papers. All records were reexamined and revised where warranted. Estimates of discharge were made to fill short gaps whenever practical. The yearly summary table for each gaging station lists the numbers of the water-supply papers in which daily records were published for that station. Records for stations in California are compiled in Water-Supply Papers 1313, 1314, 1315-A, and 1315-B through September 1950, and in 1733, 1734, and 1735 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

Occasionally, discharge measurements are made within a short time period to investigate the seepage gains or losses along a reach of a stream or to determine the low-flow characteristics of an area. Such measurements are also at the end of this report.

More detailed information than that published for most of the gaging stations, such as discharge measurements, gage-height records, and rating tables, is on file in the district office. Many gaging-station records in California through 1968 have been analyzed to give several statistical

summaries: (1) the number of days in each year that the daily discharge was between selected limits (duration tables); (2) the lowest mean discharge for selected numbers of consecutive days in each year; and (3) the highest mean discharge for selected numbers of consecutive days in each year.

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, on suspended-sediment concentration, and on the particle-size distribution of suspended sediment and bed material. 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 have been collected at numerous sites by many other Federal, State, County, City, and local agencies, and by private organizations. A listing of stream-gaging stations and the agencies operating them is published in California Department of Water Resources Bulletin 157, "Index of Stream-Gaging Stations in and Adjacent to California." The Office of Water Data Coordination, Water Resources Division, U.S. Geological Survey, Reston, Virginia, 22092, maintains an index of such sites. Information on records at specific sites can be obtained upon request.

HYDROLOGIC CONDITIONS

Runoff during the water year was significantly above normal in all parts of the state north of the Santa Ana River basin. However, concern was evident during the early months of the water year as the generally deficient flows of the late months of the previous water year continued through October and into January.

Conditions changed abruptly early in January with the onset of a series of heavy storms. The first storm occurred along the south and central coast and produced serious mudflows and slides. This was followed by heavy storms in late January and in mid-March which moved across northern California and extended, in diminishing intensity, to the southern part of the Sierra Nevada. These storms contributed to near record precipitation over the northern watersheds. A high of 176.8 in (449 cm) of rain, the highest annual water year total ever recorded, was registered at Blue Creek Mountain in the Klamath River basin. Resulting runoff was excessive in the north coastal basins and in the north central valley producing extensive floods in the lower Eel River basin and in the Dunsmuir area of the upper Sacramento River basin. Seven counties were declared disaster areas.

Periodic cold storms in April increased the snowpack and maintained high runoff at the lower elevations. At the end of April, the snowpack varied from well above normal in northern California to near normal at the southern end of the Sierra Nevada Mountains.

Runoff from the northern Sierra Nevada was excessive during May, June, July, and August as the delayed warm weather melted the above normal snowpack. In contrast, runoff from the southern Sierras decreased to near normal by the end of August. Elsewhere, flows decreased seasonally to about normal except for the desert areas and the extreme south coastal basins which had not been significantly affected by the winter storms and remained below normal during most of the water year.

At the end of the water year, the runoff from the northern part of the Sierra Nevada remained above normal, but it was generally below normal in other areas in the State.

The areal trend in the total runoff in California for the 1974 water year is shown in figure 1, where the runoff is given as a percentage of the median runoff for the 30-year period, 1941-70. The circled figures on the map are the percentages for index stream-gaging stations in the various hydrographic areas. Runoff from river basins in the north coastal, north Central Valley, and the San Francisco Bay areas ranged from 180 to 380 percent. For the state, as a whole, the average was about 200 percent. Only in the area south of the Santa Ana River basin was the average runoff below the median figure.

SELECTED REFERENCES

- Carter, R. W., and Davidian, Jacob, 1968, General procedure 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.

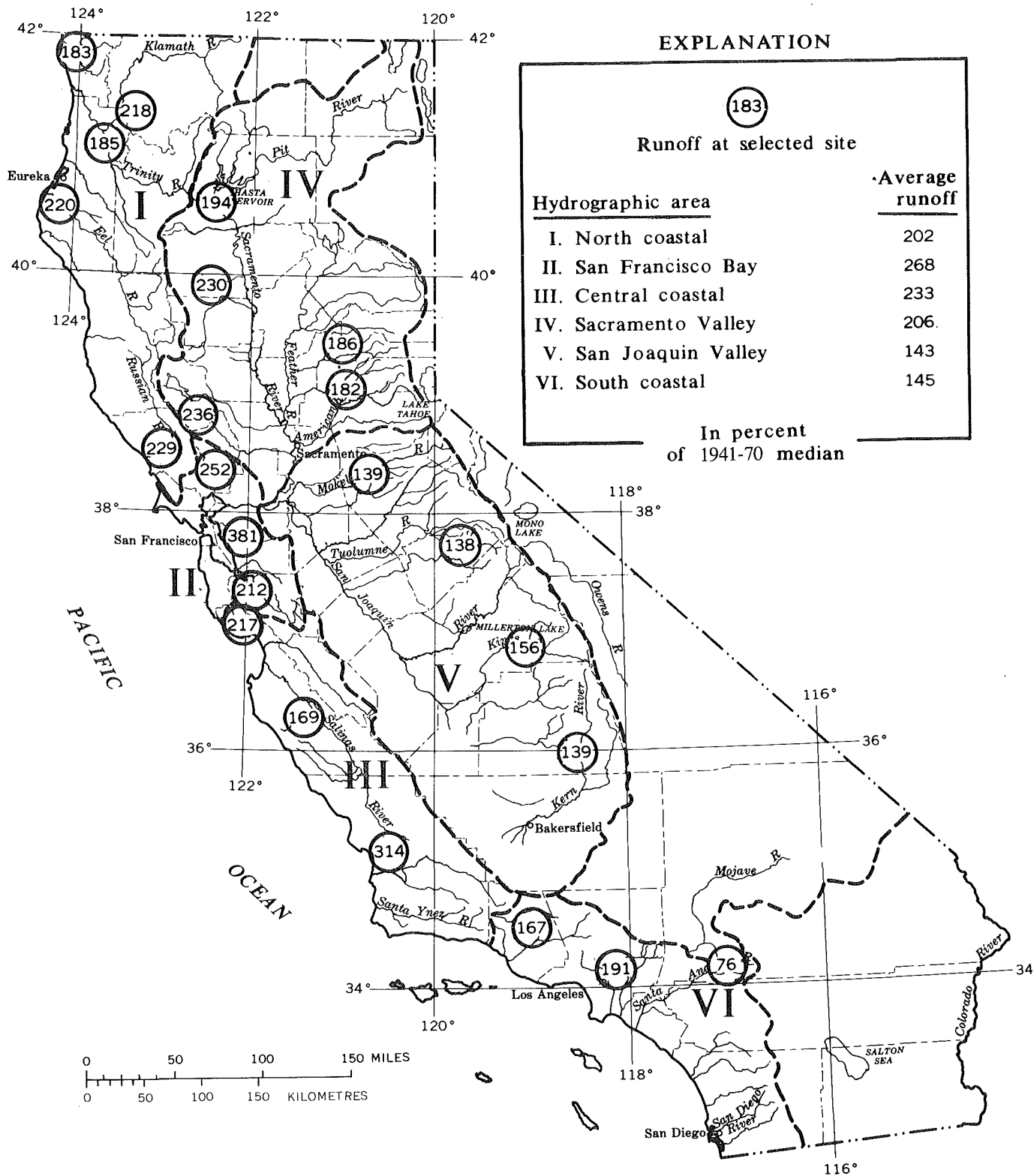


FIGURE 1.--Runoff for the current water year.

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

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

Multiply English units	By	To obtain SI units
<i>Length</i>		
inches (in)	25.4	millimetres (mm)
	.0254	metres (m)
feet (ft)	.3048	metres (m)
yards (yd)	.9144	metres (m)
rods	5.0292	metres (m)
miles (mi)	1.609	kilometres (km)
<i>Area</i>		
acres	4047	square metres (m ²)
	.4047	*hectares (ha)
	.4047	square hectometres (hm ²)
	.004047	square kilometres (km ²)
square miles (mi ²)	2.590	square kilometres (km ²)
<i>Volume</i>		
gallons (gal)	3.785	**litres (l)
	3.785	cubic decimetres (dm ³)
	3.785x10 ⁻³	cubic metres (m ³)
million gallons (10 ⁶ gal)	3785	cubic metres (m ³)
	3.785x10 ⁻³	cubic hectometres (hm ³)
cubic feet (ft ³)	28.32	cubic decimetres (dm ³)
	.02832	cubic metres (m ³)
cfs-days [(ft ³ /s) · d]	2447	cubic metres (m ³)
	2.447x10 ⁻³	cubic hectometres (hm ³)
acre-feet (acre-ft)	1233	cubic metres (m ³)
	1.233x10 ⁻³	cubic hectometres (hm ³)
	1.233x10 ⁻⁶	cubic kilometres (km ³)
<i>Flow</i>		
cubic feet per second (ft ³ /s)	28.32	litres per second (l/s)
	28.32	cubic decimetres per second (dm ³ /s)
	.02832	cubic metres per second (m ³ /s)
gallons per minute (gpm)	.06309	litres per second (l/s)
	.06309	cubic decimetres per second (dm ³ /s)
	6.309x10 ⁻⁵	cubic metres per second (m ³ /s)
million gallons per day (mgd)	43.81	cubic decimetres per second (dm ³ /s)
	.04381	cubic metres per second (m ³ /s)
<i>Mass</i>		
tons (short)	.9072	tonnes (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.

10289000 VIRGINIA CREEK NEAR BRIDGEPORT, CALIF.

LOCATION.--Lat 38°11'30", long 119°12'30", near center of W $\frac{1}{2}$ sec.22, T.4 N., R.25 E., Mono County, on right bank 1.2 mi (1.9 km) downstream from Clearwater Creek, 3 mi (5 km) upstream from mouth, and 4.2 mi (6.8 km) south-east of Bridgeport.

DRAINAGE AREA.--63.6 mi² (164.7 km²).

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.--21 years, 16.5 ft³/s (0.467 m³/s), 11,950 acre-ft/yr (14.7 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 146 ft³/s (4.13 m³/s) Aug. 5 (gage height, 4.51 ft or 1.375 m, from peak-stage indicator); minimum, 3.4 ft³/s (0.096 m³/s) Nov. 4.
Period of record: Maximum discharge, 1,300 ft³/s (36.8 m³/s) Dec. 23, 1955 (gage height, 8.40 ft or 2.560 m), from rating curve extended above 170 ft³/s (4.81 m³/s) on basis of slope-area measurement of peak flow; minimum, 1.0 ft³/s (0.028 m³/s) Aug. 18, 1960, July 28, 1961.

REMARKS.--Records good except those for winter periods, which are fair. Flow partly regulated by Virginia Lakes and other lakes near headwaters. Diversions for irrigation of about 3,000 acres (12.1 km²) above station.

REVISIONS.--WSP 1927: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.1	13	13	14	14	14	22	21	42	33	21	11
2	9.2	12	10	10	13	15	20	21	43	31	18	11
3	9.3	10	10	11	13	13	18	24	40	31	16	11
4	9.5	9.4	11	12	13	13	17	25	41	30	17	11
5	9.8	12	11	12	13	15	20	24	41	31	27	10
6	9.8	13	12	13	13	17	23	27	46	30	18	9.9
7	10	13	15	13	13	16	24	30	52	28	15	12
8	11	12	13	13	13	15	27	36	50	28	14	11
9	10	12	12	13	12	14	23	40	44	27	12	11
10	9.9	16	12	10	12	14	19	41	43	29	12	11
11	10	34	13	11	12	15	21	40	43	24	12	11
12	10	49	15	14	12	16	25	42	47	22	10	11
13	10	22	15	14	12	17	24	38	46	19	9.0	11
14	9.9	18	15	13	12	23	25	37	44	19	9.9	11
15	9.8	18	15	18	12	26	28	35	44	19	10	11
16	9.8	17	15	24	12	22	29	33	43	19	9.9	11
17	9.8	17	15	26	12	20	31	30	40	18	9.4	11
18	9.8	16	13	29	12	22	27	29	36	16	8.2	10
19	9.8	17	15	32	13	20	21	32	34	16	7.7	10
20	9.8	17	15	23	13	20	22	27	30	13	8.2	10
21	10	14	14	18	12	19	23	23	29	14	8.9	10
22	10	15	14	16	12	19	26	21	32	16	9.5	10
23	13	14	15	18	12	20	22	23	34	18	9.5	10
24	13	14	14	16	12	21	21	25	34	20	9.4	10
25	13	13	15	16	12	21	18	28	31	27	9.7	10
26	13	12	14	13	12	20	18	35	28	22	12	10
27	13	15	14	12	12	21	17	44	28	19	12	10
28	13	14	16	14	12	22	18	52	29	16	12	8.4
29	12	15	21	14	-----	23	18	49	30	16	12	7.9
30	12	15	19	13	-----	24	19	44	31	18	12	8.4
31	13	-----	15	14	-----	20	-----	41	-----	25	11	-----
TOTAL	331.3	488.4	436	489	347	577	666	1,017	1,155	694	382.3	310.6
MEAN	10.7	16.3	14.1	15.8	12.4	18.6	22.2	32.8	38.5	22.4	12.3	10.4
MAX	13	49	21	32	14	26	31	52	52	33	27	12
MIN	9.1	9.4	10	10	12	13	17	21	28	13	7.7	7.9
AC-FT	657	969	865	970	688	1,140	1,320	2,020	2,290	1,380	758	616

CAL YR 1973 TOTAL 6,824.9 MEAN 18.7 MAX 80 MIN 7.0 AC-FT 13,540
WTR YR 1974 TOTAL 6,893.6 MEAN 18.9 MAX 52 MIN 7.7 AC-FT 13,670

PEAK DISCHARGE (BASE, 50 FT³/S)
DATE TIME G.H. DISCHARGE DATE TIME G.H. DISCHARGE
11-12 0100 3.75 72 6-7 1200 3.63 56
5-28 0600 3.57 54 8-5 1500 a 4.51 146

a Gage height taken from P.S.I.

10289500 GREEN CREEK NEAR BRIDGEPORT, CALIF.

LOCATION.--Lat 38°10'25", long 119°14'00", in NE¼SE¼ sec.29, T.4 N., R.25 E., Mono County, on right bank 130 ft (40 m) downstream from county road bridge, 0.1 mi (0.2 km) upstream from diversion to Summers Creek, and 5.5 mi (8.8 km) south of Bridgeport.

DRAINAGE AREA.--19.5 mi² (50.5 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 6,850 ft (2,088 m), from topographic map.

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

EXTREMES.--Current year: Maximum discharge, 186 ft³/s (5.27 m³/s) June 12 (gage height, 2.81 ft or 0.856 m); maximum gage height, 3.50 ft (1.067 m) Dec. 4 (backwater from ice); minimum discharge, 3.9 ft³/s (0.11 m³/s) Nov. 3.
Period of record: Maximum discharge, 351 ft³/s (9.94 m³/s) July 4, 1967 (gage height, 3.26 ft or 0.994 m); maximum gage height, 4.09 ft (1.247 m) Feb. 25, 1962 (backwater from ice); minimum discharge, 1.4 ft³/s (0.040 m³/s) Apr. 4, 1964.

REMARKS.--Records good except those for winter periods, which are fair. Flow regulated by West, Green, East, Summit, and other lakes.

REVISIONS.--WSP 1927: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.9	8.9	14	13	13	9.8	16	36	107	118	59	16
2	6.9	8.4	11	10	12	11	15	39	110	120	54	16
3	6.6	6.5	9.0	11	12	9.0	16	47	107	112	51	16
4	6.6	7.9	9.5	11	12	8.5	17	48	115	107	49	15
5	6.6	8.2	10	11	12	9.5	18	44	118	109	48	15
6	6.6	8.4	11	12	11	12	18	51	136	106	46	15
7	6.3	10	15	12	10	13	19	57	162	97	45	14
8	7.2	10	13	13	9.0	14	20	68	169	90	42	14
9	6.9	10	12	11	9.0	13	20	78	158	84	40	13
10	6.6	14	11	10	9.0	13	18	81	160	85	38	13
11	6.6	36	13	11	9.0	12	18	80	165	75	35	13
12	6.8	67	12	13	9.5	12	20	88	171	63	33	13
13	7.0	33	13	13	8.0	11	20	92	167	57	31	12
14	7.5	25	13	13	9.0	11	22	82	163	59	29	12
15	8.0	27	12	14	9.9	12	24	81	166	63	27	11
16	8.3	23	14	16	9.9	13	26	72	151	65	25	11
17	8.2	21	13	17	9.5	12	28	61	130	64	25	11
18	8.0	19	11	19	9.5	13	30	54	117	61	24	11
19	8.1	24	11	23	10	12	26	52	110	60	23	10
20	8.4	22	13	28	8.0	11	26	45	105	59	22	10
21	8.1	21	12	23	9.0	12	25	42	104	59	21	9.8
22	8.0	23	12	15	10	12	29	42	111	61	20	9.8
23	11	18	13	15	9.0	12	31	43	124	63	19	9.9
24	11	18	13	15	9.5	14	29	47	123	63	19	9.8
25	11	17	13	16	10	14	26	57	115	65	18	9.8
26	10	16	13	15	9.7	14	25	75	109	69	18	10
27	9.6	16	12	12	9.3	15	24	100	102	65	18	10
28	9.6	17	12	13	9.5	15	24	118	101	61	17	10
29	9.1	16	15	13	-----	16	25	133	105	60	17	10
30	8.9	15	15	14	-----	16	28	117	111	58	17	10
31	9.0	-----	14	13	-----	16	-----	107	-----	62	16	-----
TOTAL	249.4	566.3	384.5	445	277.3	387.8	683	2,137	3,892	2,340	946	360.1
MEAN	8.05	18.9	12.4	14.4	9.90	12.5	22.8	68.9	130	75.5	30.5	12.0
MAX	11	67	15	28	13	16	31	133	171	120	59	16
MIN	6.3	6.5	9.0	10	8.0	8.5	15	36	101	57	16	9.8
AC-FT	495	1,120	763	883	550	769	1,350	4,240	7,720	4,640	1,880	714
CAL YR 1973	TOTAL	11,619.3	MEAN	31.8	MAX	166	MIN	5.2	AC-FT	23,050		
WTR YR 1974	TOTAL	12,668.4	MEAN	34.7	MAX	171	MIN	6.3	AC-FT	25,130		

WALKER LAKE BASIN

10290300 UPPER TWIN LAKE NEAR BRIDGEPORT, CALIF.

LOCATION.--Lat 38°09'15", long 119°20'58", in NW¼NE¼ sec.5, T.3 N., R.24 E., Mono County, at outlet of upper lake dam on Robinson Creek, and 10 mi (16 km) southwest of Bridgeport.

DRAINAGE AREA.--29.5 mi² (76.4 km²).

PERIOD OF RECORD.--December 1961 to February 1964, September 1964 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (project datum of U.S. Indian Irrigation Service).

EXTREMES.--Current year: Maximum contents, 2,700 acre-ft (3.33 hm³) June 14 (elevation, 7,208.98 ft or 2,197.297 m); minimum, 311 acre-ft (383,000 m³) Sept. 30 (elevation, 7,201.11 ft or 2,194.898 m).
 Period of record: Maximum contents observed, 2,900 acre-ft (3.58 hm³) June 22, July 5, 6, 1967 (elevation, 7,209.58 ft or 2,197.480 m); minimum observed, 62 acre-ft (76,400 m³) Oct. 31, Nov. 1, 1964 (elevation, 7,200.22 ft or 2,194.627 m).
 No contents Oct. 17, 1961.

REMARKS.--Contents regulated by dam at outlet. Figures given herein represent usable contents. Usable contents, 2,070 acre-ft (2.55 hm³) between elevations 7,200 ft (2,194.6 m), natural rim and 7,207 ft (2,196.7 m), spillway crest.

ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	7,202.15	602	--
Oct. 31.....	7,202.50	700	+98
Nov. 30.....	7,207.30	2,170	+1,470
Dec. 31.....	7,207.25	2,150	-20
CAL YR 1973.....	--	--	+30
Jan. 31.....	7,207.24	2,150	0
Feb. 28.....	7,207.18	2,130	-20
Mar. 31.....	7,207.18	2,130	0
Apr. 30.....	7,207.43	2,210	+80
May 31.....	7,208.53	2,560	+350
June 30.....	7,208.54	2,560	0
July 31.....	7,208.10	2,420	-140
Aug. 31.....	7,207.45	2,210	-210
Sept. 30.....	7,201.11	311	-1,899
WTR YR 1974.....	--	--	-291

10290400 LOWER TWIN LAKE NEAR BRIDGEPORT, CALIF.

LOCATION.--Lat 38°10'05", long 119°19'33", in NE¼NE¼ sec.33, T.4 N., R.24 E., Mono County, at outlet of lower lake dam on Robinson Creek, and 8 mi (13 km) southwest of Bridgeport.

DRAINAGE AREA.--38.9 mi² (100.8 km²).

PERIOD OF RECORD.--December 1961 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (project datum of U.S. Indian Irrigation Service).

EXTREMES.--Current year: Maximum contents, 5,160 acre-ft (6.36 hm³) June 19 (elevation, 7,202.67 ft or 2,195.374 m); minimum observed, 872 acre-ft (1.08 hm³) Oct. 2 (elevation, 7,192.18 ft or 2,192.176 m).
Period of record: Maximum contents, 5,490 acre-ft (6.77 hm³) June 6, 1969 (elevation, 7,203.51 ft or 2,195.630 m); no contents Nov. 17, 1966.

REMARKS.--Contents regulated by dam at outlet and by Upper Twin Lake. Figures given herein represent usable contents. Usable contents, 4,010 acre-ft (4.94 hm³) between elevations 7,190 ft (2,192 m), natural rim and 7,200 ft (2,195 m), spillway crest. One transarea diversion out of Tamarack Creek into Summers Creek.

ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	7,192.35	940	--
Oct. 31.....	7,192.90	1,160	+220
Nov. 30.....	7,194.98	1,990	+830
Dec. 31.....	7,198.55	3,420	+1,430
CAL YR 1973.....	--	--	+2,420
Jan. 31.....	7,200.68	4,300	+880
Feb. 28.....	7,200.53	4,230	-70
Mar. 31.....	7,200.63	4,280	+50
Apr. 30.....	7,197.73	3,090	-1,190
May 31.....	7,201.13	4,490	+1,400
June 30.....	7,202.50	5,080	+590
July 31.....	7,201.96	4,840	-240
Aug. 31.....	7,197.31	2,920	-1,920
Sept. 30.....	7,193.96	1,580	-1,340
WTR YR 1974.....	--	--	+640

10290500 ROBINSON CREEK AT TWIN LAKES OUTLET, NEAR BRIDGEPORT, CALIF.

LOCATION.--Lat 38°10'20", long 119°19'25", in SE¼SE¼ sec.28, T.4 N., R.24 E., Mono County, on left bank 0.2 mi (0.3 km) downstream from Twin Lakes, and 8 mi (13 km) southwest of Bridgeport.

DRAINAGE AREA.--39.1 mi² (101.3 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 7,050 ft (2,149 m), from topographic map.

AVERAGE DISCHARGE (unadjusted).--21 years, 59.8 ft³/s (1.694 m³/s), 43,330 acre-ft/yr (53.4 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 320 ft³/s (9.06 m³/s) June 14, 15 (gage height, 3.87 ft or 1.180 m); minimum daily, 0.82 ft³/s (0.023 m³/s) Dec. 23.

Period of record: Maximum discharge, 492 ft³/s (13.9 m³/s) June 20, 1963; maximum gage height, 4.62 ft (1.408 m) June 6, 1969; no flow many days in some years.

Maximum discharge known, 660 ft³/s (18.7 m³/s) June 21, 1911 (gage height, 5.2 ft or 1.58 m), at site 2.5 mi (4.0 km) downstream.

REMARKS.--Records good except those for period of no gage-height record, which are poor. Flow regulated by Twin Lakes.

REVISIONS.--WSP 1927: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	15	10	1.0	26	24	30	84	223	223	146	94
2	28	15	10	1.0	27	30	30	83	231	230	139	92
3	29	14	10	1.0	27	33	28	90	225	230	133	90
4	25	13	10	1.0	26	32	26	102	226	222	127	88
5	16	12	11	1.4	25	30	27	102	248	217	126	85
6	16	12	11	1.4	24	28	26	102	228	200	128	83
7	16	11	9.0	1.4	24	26	25	102	258	190	124	81
8	16	11	6.8	1.4	23	26	25	102	259	180	119	78
9	16	11	7.2	1.4	23	25	26	102	241	160	113	77
10	16	11	7.4	2.0	23	23	26	105	256	190	107	75
11	15	12	6.7	5.0	22	22	25	108	279	220	100	75
12	15	12	6.0	9.5	19	22	36	111	296	190	105	77
13	14	12	4.9	12	22	21	42	111	307	170	103	96
14	14	12	4.4	14	21	20	41	113	315	160	101	98
15	14	12	4.4	13	21	20	60	114	317	145	114	99
16	14	12	4.4	21	17	20	61	117	314	130	99	100
17	14	12	2.8	29	21	20	69	121	297	130	89	101
18	14	13	1.2	33	19	20	76	121	277	130	104	101
19	14	13	1.2	39	17	20	75	121	255	130	109	101
20	14	13	1.2	41	21	20	74	122	237	130	100	100
21	14	14	1.2	44	20	21	74	117	225	125	103	99
22	14	14	1.1	42	20	21	73	116	223	125	112	97
23	14	15	.82	40	19	21	72	116	232	125	110	95
24	14	13	.86	38	18	21	75	115	240	130	111	93
25	14	12	1.0	36	18	22	76	114	239	150	111	90
26	14	10	1.1	34	17	23	84	117	231	165	108	87
27	14	10	.99	32	20	24	90	118	221	165	106	84
28	14	10	1.1	31	16	27	89	123	213	160	103	80
29	14	10	1.1	30	-----	30	86	141	212	154	102	78
30	14	10	.98	30	-----	30	85	180	215	150	99	75
31	14	-----	1.0	29	-----	28	-----	207	-----	148	96	-----
TOTAL	502	366	140.85	615.5	596	750	1,632	3,597	7,540	5,174	3,447	2,669
MEAN	16.2	12.2	4.54	19.9	21.3	24.2	54.4	116	251	167	111	89.0
MAX	29	15	11	44	27	33	90	207	317	230	146	101
MIN	14	10	.82	1.0	16	20	25	83	212	125	89	75
AC-FT	996	726	279	1,220	1,180	1,490	3,240	7,130	14,960	10,260	6,840	5,290

CAL YR 1973 TOTAL 23,585.95 MEAN 64.6 MAX 314 MIN .82 AC-FT 46,780
WTR YR 1974 TOTAL 27,029.35 MEAN 74.1 MAX 317 MIN .82 AC-FT 53,610

NOTE.--No gage-height record June 19 to July 25.

10291500 BUCKEYE CREEK NEAR BRIDGEPORT, CALIF.

LOCATION.--Lat 38°14'20", long 119°19'30", in NE¼NE¼ sec.4, T.4 N., R.24 E., Mono County, on right bank at Buckeye Hot Springs, 0.6 mi (1.0 km) downstream from Eagle Creek, and 5.5 mi (8.8 km) southwest of Bridgeport.

DRAINAGE AREA.--44.1 mi² (114.2 km²).

PERIOD OF RECORD.--November 1910 to September 1914 (fragmentary), October 1953 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,900 ft (2,103 m), from topographic map. November 1910 to September 1914, nonrecording gage at site 0.5 mi (0.8 km) downstream at different datum.

AVERAGE DISCHARGE.--22 years (1911-12, 1953-74), 59.8 ft³/s (1.694 m³/s), 43,330 acre-ft/yr (53.4 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 384 ft³/s (10.9 m³/s) June 12 (gage height, 3.36 ft or 1.024 m); minimum, 9.9 ft³/s (0.28 m³/s) Dec. 1, result of freezeup.

Period of record (1953 to current year): Maximum discharge, 947 ft³/s (26.8 m³/s) Feb. 1, 1963 (gage height, 4.41 ft or 1.344 m), from rating curve extended above 360 ft³/s (10.2 m³/s) on basis of slope-area measurement at gage height 4.00 ft (1.219 m) and logarithmic plotting; minimum, 3.3 ft³/s (0.094 m³/s) Dec. 12, 1959, result of freezeup.

Flood of June 21, 1911, reached an observed stage of 4.8 ft (1.46 m), discharge not determined, site and datum then in use.

REMARKS.--Records excellent except those for winter periods, which are poor. No regulation or diversion above station.

REVISIONS.--WSP 1927: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	20	27	31	29	25	34	84	259	212	104	39
2	21	19	25	28	28	23	33	92	262	201	101	38
3	21	18	25	27	29	23	32	118	265	182	99	38
4	21	17	26	26	29	22	32	121	274	178	100	37
5	21	22	28	26	30	24	34	123	285	175	110	37
6	21	24	28	28	38	26	34	148	324	162	102	36
7	22	24	29	30	30	25	36	176	325	153	95	36
8	24	25	30	30	28	24	39	209	286	147	85	35
9	23	23	28	28	26	23	39	226	276	153	78	34
10	22	47	27	25	26	23	36	223	297	186	75	34
11	22	193	29	26	26	23	37	218	317	128	70	33
12	22	165	32	27	26	24	41	225	338	112	67	33
13	22	67	31	28	25	24	43	208	334	109	64	33
14	22	53	31	28	25	27	46	193	339	106	61	32
15	21	46	30	42	26	29	52	201	326	107	57	31
16	21	43	30	43	25	30	59	182	302	108	55	31
17	21	41	30	41	24	30	67	154	267	108	53	30
18	20	38	30	47	24	30	72	136	250	121	51	29
19	20	39	28	57	25	29	62	120	238	115	50	29
20	22	40	28	44	23	30	58	107	220	111	49	28
21	21	40	29	37	24	31	58	104	228	110	47	28
22	21	40	30	35	24	32	68	115	246	110	47	28
23	26	43	30	36	23	33	74	140	252	110	46	27
24	23	35	29	37	23	35	65	164	233	106	46	27
25	24	42	29	39	24	37	58	211	218	114	45	27
26	23	35	29	33	24	36	55	250	207	109	44	27
27	22	37	28	32	23	36	54	291	198	109	43	26
28	22	32	31	32	24	37	54	308	196	101	43	26
29	21	32	44	32	-----	37	57	295	202	98	42	26
30	20	32	35	30	-----	37	67	255	208	99	42	26
31	21	-----	37	30	-----	35	-----	256	-----	107	40	-----
TOTAL	674	1,332	923	1,035	731	900	1,496	5,653	7,972	4,047	2,011	941
MEAN	21.7	44.4	29.8	33.4	26.1	29.0	49.9	182	266	131	64.9	31.4
MAX	26	193	44	57	38	37	74	308	339	212	110	39
MIN	20	17	25	25	23	22	32	84	196	98	40	26
AC-FT	1,340	2,640	1,830	2,050	1,450	1,790	2,970	11,210	15,810	8,030	3,990	1,870

CAL YR 1973 TOTAL 22,828 MEAN 62.5 MAX 334 MIN 13 AC-FT 45,280
WTR YR 1974 TOTAL 27,715 MEAN 75.9 MAX 339 MIN 17 AC-FT 54,970

PEAK DISCHARGE (BASE, 100 FT ³ /S)							
DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-12	0200	3.14	298	6-23	0100	3.16	305
5-10	0100	3.04	256	7-10	0200	2.94	221
6-12	0200	3.36	384				

WALKER LAKE BASIN

10292000 SWAUGER CREEK NEAR BRIDGEPORT, CALIF.

LOCATION.--Lat 38°17'00", long 119°17'50", in SE¼NW¼ sec.23, T.5 N., R.24 E., Mono County, on right bank 0.8 mi (1.3 km) downstream from Yaney Canyon, and 4 mi (6 km) northwest of Bridgeport.

DRAINAGE AREA.--52.8 mi² (136.8 km²).

PERIOD OF RECORD.--June 1911 to September 1915 (fragmentary), October 1953 to current year. Prior to October 1971, published as Swager Creek near Bridgeport.

GAGE.--Water-stage recorder. Altitude of gage is 6,620 ft (2,018 m), from topographic map. June 1911 to September 1915 nonrecording gages at approximately same site at different datums.

AVERAGE DISCHARGE.--22 years (1911-12, 1953-74), 12.5 ft³/s (0.354 m³/s), 9,060 acre-ft/yr (11.2 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 58 ft³/s (1.64 m³/s) Jan. 18 (gage height, 2.62 ft or 0.799 m); maximum gage height, 2.70 ft (0.823 m) Jan. 3 (backwater from ice); minimum discharge, 3.3 ft³/s (0.093 m³/s) Aug. 25.

Period of record: Maximum discharge, 585 ft³/s (16.6 m³/s) Dec. 23, 1955 (gage height, 6.24 ft or 1.902 m), from rating curve extended above 175 ft³/s (4.96 m³/s) on basis of slope-area measurement of peak flow; minimum observed, 0.50 ft³/s (0.014 m³/s) Apr. 20, 1912, Feb. 28, 1969.

REMARKS.--Records excellent except those for winter periods, which are poor. Diversions for irrigation of about 1,000 acres (4.0 km²) above station.

REVISIONS.--WSP 1927: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.4	8.5	6.9	9.0	10	13	22	28	28	8.0	7.1	5.6
2	6.9	8.4	6.0	6.0	11	12	17	28	29	6.9	6.4	5.4
3	7.3	7.8	7.0	6.5	11	11	14	30	29	6.7	7.2	5.4
4	7.2	7.5	8.0	6.5	11	10	15	29	27	7.1	7.7	6.1
5	7.2	8.8	9.0	6.5	11	12	17	29	28	7.2	20	7.1
6	7.1	8.9	9.5	8.0	11	13	18	29	28	5.8	14	7.1
7	7.7	8.7	10	10	11	12	19	29	26	5.6	10	7.0
8	8.1	8.4	9.0	9.0	11	12	20	33	19	5.9	6.1	7.0
9	7.7	8.7	9.0	7.0	11	13	21	36	19	7.7	5.6	6.8
10	7.4	10	14	6.0	11	14	18	34	19	9.5	4.7	6.7
11	7.7	13	9.8	7.0	11	18	18	34	17	7.5	4.6	6.6
12	7.7	23	11	10	11	18	21	34	16	5.5	5.8	7.1
13	7.4	12	11	9.9	10	17	21	34	15	6.1	8.4	6.8
14	7.5	11	10	10	11	19	23	33	15	5.7	8.4	6.4
15	7.3	11	10	15	11	20	26	32	13	5.4	8.2	6.6
16	7.4	11	10	21	11	20	29	31	14	6.2	7.9	6.6
17	7.4	11	11	26	10	18	34	30	14	5.6	7.7	6.5
18	7.4	9.1	9.1	31	11	18	33	31	12	5.1	7.6	6.4
19	7.5	9.8	9.0	25	11	17	27	33	10	5.1	6.9	6.3
20	7.7	10	10	19	9.0	15	26	29	9.7	4.6	5.8	6.4
21	7.5	9.8	11	16	10	12	28	27	10	5.3	5.2	6.3
22	7.8	9.1	10	13	10	14	33	26	9.5	5.4	6.6	6.5
23	9.5	9.7	10	15	9.8	16	31	27	9.2	5.6	7.5	7.0
24	9.1	9.9	9.9	14	9.8	17	27	27	9.0	7.1	6.9	7.1
25	9.2	9.6	10	14	10	18	24	27	9.0	5.4	5.1	7.2
26	9.4	10	10	12	10	19	23	28	8.2	5.8	3.8	7.2
27	9.2	10	11	11	10	19	22	30	8.7	5.3	4.5	7.2
28	8.9	10	13	13	10	20	24	31	7.1	5.5	4.7	7.3
29	8.6	10	21	12	-----	21	24	29	7.4	4.8	4.7	7.3
30	8.7	11	14	13	-----	22	27	28	7.6	6.2	5.3	7.2
31	8.6	-----	11	13	-----	19	-----	28	-----	8.8	5.7	-----
TOTAL	244.5	305.7	320.2	394.4	294.6	499	702	934	473.4	192.4	220.1	200.2
MEAN	7.89	10.2	10.3	12.7	10.5	16.1	23.4	30.1	15.8	6.21	7.10	6.67
MAX	9.5	23	21	31	11	22	34	36	29	9.5	20	7.3
MIN	6.4	7.5	6.0	6.0	9.0	10	14	26	7.1	4.6	3.8	5.4
AC-FT	485	606	635	782	584	990	1,390	1,850	939	382	437	397
CAL YR 1973	TOTAL 5,280.7 MEAN 14.5 MAX 70 MIN 3.3 AC-FT 10,470											
WTR YR 1974	TOTAL 4,780.5 MEAN 13.1 MAX 36 MIN 3.8 AC-FT 9,480											

PEAK DISCHARGE (BASE, 25 FT ³ /S)							
DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-12	0700	2.39	40	4-22	2100	2.51	46
12-29	1600	2.23	29	5-9	1500	2.40	36
1-18	1800	2.62	58	8-5	1700	2.49	47
3-11	1700	2.27	30				

10292500 BRIDGEPORT RESERVOIR NEAR BRIDGEPORT, CALIF.

LOCATION.--Lat 38°19'30", long 119°12'40", in SE¼NE¼ sec.34, T.6 N., R.25 E., Mono County, at Bridgeport Dam on East Walker River, 4.5 mi (7.2 km) north of Bridgeport.

DRAINAGE AREA.--358 mi² (927 km²).

PERIOD OF RECORD.--March 1926 to current year. Monthend contents only for some periods, published in WSP 1314.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (project datum).

EXTREMES.--Current year: Maximum contents, 44,880 acre-ft (55.3 hm³) June 16 (elevation, 6,460.78 ft or 1,969.246 m); minimum, 11,760 acre-ft (14.5 hm³) Oct. 3, 4 (elevation, 6,445.31 ft or 1,964.530 m).
Period of record: Maximum contents, 44,880 acre-ft (55.3 hm³) June 16, 1974 (elevation, 6,460.78 ft or 1,969.246 m); no contents during fall of 1929-30, 1960.

REMARKS.--Reservoir is formed by earthfill, rock-faced dam. Storage began Dec. 8, 1923. Dam completed in November 1924. Capacity, 42,460 acre-ft (52.4 hm³) between elevations 6,415 ft (1,955.3 m), approximate elevation of bottom of reservoir and 6,461 ft (1,969.3 m), crest of spillway is at elevation 6,460.75 ft (1,969.237 m), however, there are four siphons that become operative prior to reaching the spillway. Elevation of sill of outlet gate, 6,412 ft (1,954.4 m). No dead storage. Figures given herein represent total contents. Water is used for irrigation by Walker River Irrigation District.

REVISIONS (WATER YEARS).--WSP 1180: 1949. WSP 1927: Drainage area.

CAPACITY TABLE (ELEVATION, IN FEET, AND CONTENTS, IN ACRE-FEET)

6,445	11,380	6,453	24,660
6,447	13,990	6,456	31,570
6,450	18,780	6,461	45,490

CONTENTS, IN ACRF-FEET, AT 2400, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11,880	13,310	21,400	28,010	37,180	41,580	42,310	36,100	37,040	43,370	41,440	27,090
2	11,820	13,580	21,500	28,240	37,460	41,880	42,170	35,830	37,320	43,520	41,440	26,310
3	11,760	13,650	21,700	28,360	37,590	42,020	42,170	35,570	37,870	43,670	41,440	25,650
4	11,820	13,790	21,890	28,470	37,870	42,310	42,020	35,440	38,290	43,670	41,440	24,990
5	11,820	13,850	22,090	28,580	37,870	42,610	41,880	35,300	38,710	43,820	41,730	24,550
6	11,820	13,920	22,290	28,820	38,150	42,920	41,730	35,170	39,400	43,820	41,880	23,720
7	11,820	14,060	22,580	28,930	38,290	43,070	41,730	35,040	39,980	43,820	41,580	23,200
8	11,880	14,140	22,680	28,930	38,570	43,070	41,440	34,900	40,560	43,820	41,290	22,680
9	11,940	14,210	22,890	29,280	38,010	43,070	41,150	34,900	41,150	43,670	41,000	22,150
10	12,000	14,510	23,100	29,520	38,840	43,070	41,000	35,040	41,580	43,520	40,710	21,700
11	12,130	14,880	23,310	29,760	38,980	42,920	40,850	35,040	42,170	43,370	40,270	21,210
12	12,260	15,400	23,410	29,880	39,120	42,920	40,710	35,040	42,760	43,220	39,980	20,820
13	12,380	16,580	23,720	30,000	39,400	42,920	40,560	35,300	43,370	43,220	39,540	20,440
14	12,500	16,900	23,830	30,360	39,540	42,760	40,270	35,440	44,130	42,920	39,120	20,250
15	12,630	17,140	23,930	31,210	39,830	42,610	40,120	35,440	44,430	42,610	38,710	20,070
16	12,700	17,490	24,140	31,820	39,830	42,610	39,980	35,440	44,430	42,310	38,150	19,980
17	12,700	17,830	24,350	32,590	39,980	42,460	39,690	35,300	44,280	42,020	37,730	19,880
18	12,700	18,260	24,560	33,090	40,120	42,460	39,400	35,300	44,130	41,880	37,040	19,800
19	12,700	18,440	24,770	33,600	40,120	42,310	39,120	35,300	43,980	41,580	36,630	19,700
20	12,630	18,690	24,880	33,980	40,270	42,310	38,980	35,300	43,820	41,440	35,960	19,610
21	12,500	19,150	25,100	34,240	40,270	42,310	38,710	35,300	43,820	41,290	35,440	19,520
22	12,570	19,420	25,430	34,510	40,270	42,460	38,430	35,170	43,820	41,150	34,900	19,420
23	12,500	19,700	25,430	34,900	40,420	42,460	38,150	35,170	43,820	41,000	34,380	19,420
24	12,500	19,800	25,760	35,170	40,560	42,460	38,010	35,170	43,820	40,850	33,730	19,330
25	12,500	20,070	25,870	35,440	40,710	42,460	37,730	35,300	43,670	41,150	33,350	19,240
26	12,500	20,250	26,200	35,700	40,850	42,610	37,460	35,440	43,670	41,440	32,460	19,060
27	12,570	20,440	26,420	35,960	41,000	42,460	37,180	35,700	43,670	41,290	31,570	18,960
28	12,770	20,720	26,750	36,230	41,150	42,460	37,040	35,960	43,520	41,290	31,240	18,870
29	12,900	20,920	27,440	36,500	-----	42,460	36,760	36,360	43,370	41,150	29,400	18,690
30	13,040	21,210	27,780	36,630	-----	42,460	36,500	36,630	43,370	41,150	28,580	18,610
31	13,120	-----	27,900	37,040	-----	42,310	-----	36,760	-----	41,290	27,780	-----
MAX	13,120	21,210	27,900	37,040	41,150	43,070	42,310	36,760	44,430	43,820	41,880	27,090
MIN	11,760	13,310	21,400	28,010	37,180	41,580	36,500	34,900	37,040	40,850	27,780	18,610
(a)	6,446.38	6,451.30	6,454.47	6,458.09	6,459.55	6,459.96	6,457.89	6,458.00	6,460.30	6,459.60	6,454.42	6,449.91
(b)	+1,180	+8,090	+6,690	+9,140	+4,110	+1,160	-5,810	+260	+6,610	-2,080	-13,510	-9,170
CAL YR 1973	b +9,980											
WTR YR 1974	b +6,670											

a Elevation, in feet, at end of month.

b Change in contents, in acre-feet.

10293000 EAST WALKER RIVER NEAR BRIDGEPORT, CALIF.

LOCATION.--Lat 38°19'40", long 119°12'50", in SW¼NE¼ sec.34, T.6 N., R.25 E., Mono County, on right bank 1,500 ft (457 m) downstream from Bridgeport Reservoir, 5 mi (8 km) north of Bridgeport, and 10 mi (16 km) upstream from Sweetwater Creek.

DRAINAGE AREA, --359 mi² (930 km²).

PERIOD OF RECORD.--July 1911 to September 1914 (gage heights only), October 1921 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,400 ft (1,951 m), from topographic map. Prior to Oct. 1, 1921, nonrecording gage at site 0.5 mi (0.8 km) upstream at different datum. Oct. 1, 1921, to Feb. 21, 1924, water-stage recorder at site 1 mi (2 km) downstream at different datum. Feb. 22, 1924, to Sept. 30, 1931, water-stage recorder and Oct. 1, 1931, to May 25, 1939, nonrecording gage at present site at datum 2.34 ft (0.713 m) lower.

AVERAGE DISCHARGE (unadjusted).--51 years (1922-24, 1925-74), 138 ft³/s (3.908 m³/s), 99,980 acre-ft/yr (123 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 728 ft³/s (20.6 m³/s) June 16 (gage height, 3.32 ft or 1.012 m); minimum daily, 14 ft³/s (0.40 m³/s) Oct. 28 to Nov. 10.

Period of record (1921 to current year): Maximum discharge, 1,390 ft³/s (39.4 m³/s) June 19, 1963 (gage height, 4.64 ft or 1.414 m); maximum gage height, 4.95 ft (1.509 m) Jan. 22, 1943 (top of surge); minimum daily discharge, 0.2 ft³/s [0.006 m³/s] Nov. 2-29, Dec. 1-22, 25-28, 1955, Jan. 17-25, 1956.

REMARKS.--Records good. Diversions for irrigation of meadow pasture lands near Bridgeport. Flow regulated by Bridgeport Reservoir. Records of chemical analyses for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1927: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	115	14	16	17	16	32	109	250	316	336	285	470
2	110	14	16	17	17	32	131	267	316	323	285	450
3	84	14	16	17	17	32	144	246	316	356	288	423
4	75	14	16	17	17	32	144	254	316	360	288	442
5	68	14	16	17	17	32	145	254	317	334	297	417
6	66	14	16	17	17	34	144	257	317	322	328	362
7	66	14	16	17	17	38	148	271	328	320	331	344
8	62	14	16	17	17	123	166	277	345	332	316	343
9	49	14	16	17	17	155	165	259	345	353	287	339
10	39	14	16	17	17	164	165	250	346	376	283	326
11	17	15	16	17	17	172	165	244	346	368	269	283
12	17	15	16	17	17	171	164	245	349	349	270	265
13	17	15	16	17	17	168	171	243	358	363	269	235
14	17	15	17	17	17	169	184	240	372	358	285	190
15	19	15	17	17	17	168	184	249	479	343	313	172
16	40	15	16	17	34	168	187	253	600	307	334	172
17	61	15	17	17	50	168	205	262	598	299	334	170
18	83	15	17	17	50	158	225	265	573	277	361	163
19	83	15	17	17	57	137	222	271	531	278	361	130
20	89	15	17	17	65	117	214	268	484	270	403	130
21	124	16	16	17	65	106	218	255	454	230	430	128
22	120	16	17	17	65	105	225	242	454	233	443	128
23	97	16	17	16	65	105	221	249	461	246	426	128
24	89	16	17	16	46	105	210	263	456	265	461	128
25	69	16	17	16	30	105	225	266	447	275	493	126
26	69	16	17	17	31	106	225	273	428	282	490	126
27	38	16	17	17	30	107	224	273	417	290	489	125
28	14	16	17	17	31	106	224	275	403	304	525	125
29	14	16	17	17	-----	108	223	289	388	299	545	124
30	14	16	17	17	-----	107	230	307	384	283	474	117
31	14	-----	17	16	-----	105	-----	316	-----	285	472	-----
TOTAL	1,839	450	512	523	873	3,435	5,607	8,133	12,244	9,616	11,435	7,081
MEAN	59.3	15.0	16.5	16.9	31.2	111	187	262	408	310	369	236
MAX	124	16	17	17	65	172	230	316	600	376	545	470
MIN	14	14	16	16	16	32	109	240	316	230	269	117
AC=FT	3,650	893	1,020	1,040	1,730	6,810	11,120	16,130	24,290	19,070	22,680	14,050

CAL YR 1973	TOTAL 56,202	MEAN 154	MAX 628	MIN 13	AC=FT 111,500
WTR YR 1974	TOTAL 61,748	MEAN 169	MAX 600	MIN 14	AC=FT 122,500

10293050 EAST WALKER RIVER BELOW SWEETWATER CREEK, NEAR BRIDGEPORT, CALIF.

LOCATION.--Lat 38°26'27", long 119°06'18", in NW¼NW¼ sec.29, T.7 N., R.26 E., Lyon County, on left bank 10 ft (3 m) downstream from bridge, 1.8 mi (2.9 km) downstream from Sweetwater Creek, and about 16 mi (26 km) north-northeast of Bridgeport.

DRAINAGE AREA.--467 mi² (1,210 km²).

PERIOD OF RECORD.--March to September 1974.

GAGE.--Water-stage recorder. Altitude of gage is 5,760 ft (1,760 m), from topographic map.

EXTREMES.--Maximum discharge during period, 1,040 ft³/s (29.5 m³/s) Aug. 5 (gage height, 7.43 ft or 2.265 m); minimum daily, 37 ft³/s (1.05 m³/s) Mar. 1-5.

REMARKS.--Records good. Diversions for irrigation above station. Flow regulated by Bridgeport Reservoir.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1						37	98	244	337	382	294	488
2						37	118	276	333	337	304	488
3						37	137	244	333	371	294	443
4						37	137	258	337	378	294	469
5						37	137	264	364	371	359	435
6						40	133	267	317	340	347	396
7						45	133	288	368	337	337	364
8						135	155	301	399	337	333	357
9						165	157	288	421	368	294	364
10						175	150	279	399	388	283	360
11						180	150	270	399	388	261	304
12						180	148	273	424	357	261	301
13						175	148	270	414	371	255	270
14						175	168	261	492	371	264	216
15						175	168	264	542	360	301	188
16						173	168	264	615	317	317	208
17						166	180	270	636	317	320	195
18						164	202	270	631	290	340	192
19						135	202	276	644	290	349	153
20						118	192	279	388	290	382	148
21						98	198	261	357	252	414	148
22					a 65	96	208	244	343	246	428	148
23						98	210	246	340	249	410	148
24						96	192	264	337	264	417	148
25						98	208	273	323	273	465	148
26						100	208	294	443	282	473	139
27						100	205	320	424	282	480	137
28						112	210	317	410	304	515	139
29					-----	98	213	326	399	307	607	144
30					-----	94	218	337	392	294	519	139
31		-----			-----	94	-----	337	-----	290	488	-----
TOTAL						3,470	5,151	8,625	12,561	10,003	11,405	7,777
MEAN						112	172	278	419	323	368	259
MAX						180	218	337	644	388	607	488
MIN						37	98	244	317	246	255	137
AC-FT						6,880	10,220	17,110	24,910	19,840	22,620	15,430

a Result of discharge measurement.

10295500 LITTLE WALKER RIVER NEAR BRIDGEPORT, CALIF.

LOCATION.--Lat 38°21'30", long 119°26'30", in NW¼NW¼ sec.22, T.6 N., R.23 E., Mono County, on right bank 0.8 mi (1.3 km) north of Sonora Junction, 1.5 mi (2.4 km) upstream from mouth, and 14 mi (23 km) northwest of Bridgeport.

DRAINAGE AREA.--63.0 mi² (163.2 km²).

PERIOD OF RECORD.--April to August 1910, October 1944 to current year. Prior to October 1958, published as East Fork West Walker River near Bridgeport.

GAGE.--Water-stage recorder. Altitude of gage is 6,790 ft (2,070 m), from topographic map. April to August 1910, nonrecording gage at site 1 mi (2 km) upstream at different datum.

AVERAGE DISCHARGE.--30 years (1944-74), 51.3 ft³/s (1.453 m³/s), 37,170 acre-ft/yr (45.8 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 352 ft³/s (9.97 m³/s) June 12 (gage height, 2.13 ft or 0.649 m); minimum, 13 ft³/s (0.37 m³/s) Nov. 3.
Period of record: Maximum discharge, 1,510 ft³/s (42.8 m³/s) Jan. 31, 1963 (gage height, 3.22 ft or 0.982 m), from rating curve extended above 350 ft³/s (9.91 m³/s) on basis of slope-area measurement at gage height 2.80 ft (0.853 m) and logarithmic plotting; maximum gage height recorded, 3.63 ft (1.106 m) Jan. 3, 1945 (backwater from ice); minimum discharge recorded, 4.9 ft³/s (0.14 m³/s) Nov. 17, 1948, but may have been less during periods of ice effect.

REMARKS.--Records good except those for winter periods, which are poor. Small diversions above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	20	24	27	25	40	42	65	210	173	72	25
2	17	19	23	23	23	26	41	69	218	168	67	25
3	17	17	21	22	23	27	36	78	220	155	76	24
4	17	16	21	20	23	25	34	78	224	152	76	24
5	17	19	22	21	23	27	36	81	238	147	84	24
6	17	22	23	22	25	28	37	94	268	138	79	23
7	19	21	25	24	24	26	39	113	285	129	65	23
8	20	19	23	28	24	24	41	136	259	124	58	22
9	19	20	22	23	24	24	43	154	246	138	53	23
10	18	34	21	22	24	24	39	161	255	147	49	23
11	19	106	23	23	25	26	40	162	276	112	47	22
12	20	109	23	26	26	28	43	167	295	100	44	23
13	20	53	25	22	22	30	44	158	295	96	43	22
14	20	44	25	24	23	36	46	152	295	94	42	22
15	19	41	23	60	24	38	52	151	300	91	41	22
16	19	38	24	62	21	37	57	138	272	89	39	21
17	19	41	25	63	20	35	63	124	242	86	36	22
18	18	40	22	73	20	34	65	115	220	84	35	22
19	18	36	21	66	21	33	58	110	205	82	34	22
20	22	35	21	46	20	33	55	98	191	79	34	22
21	19	33	22	39	23	34	56	92	192	81	32	21
22	20	33	21	35	22	34	63	95	203	81	31	21
23	26	33	21	32	20	36	64	104	210	81	30	21
24	23	28	20	31	21	38	61	116	194	81	29	21
25	23	30	20	31	21	39	54	146	182	85	29	21
26	22	25	20	33	20	40	49	186	172	82	28	21
27	22	26	22	29	22	40	48	233	162	77	28	21
28	21	25	25	28	20	42	49	271	161	72	27	21
29	20	27	44	26	-----	41	51	257	165	70	26	21
30	20	27	38	24	-----	42	58	214	168	81	26	21
31	20	-----	37	24	-----	37	-----	206	-----	88	25	-----
TOTAL	608	1,037	747	1,029	629	1,024	1,464	4,324	6,823	3,263	1,385	666
MEAN	19.6	34.6	24.1	33.2	22.5	33.0	48.8	139	227	105	44.7	22.2
MAX	26	109	44	73	26	42	65	271	300	173	84	25
MIN	17	16	20	20	20	24	34	65	161	70	25	21
AC-FT	1,210	2,060	1,480	2,040	1,250	2,030	2,900	8,580	13,530	6,470	2,750	1,320

CAL YR 1973 TOTAL 20,982 MEAN 57.5 MAX 350 MIN 12 AC-FT 41,620
WTR YR 1974 TOTAL 22,999 MEAN 63.0 MAX 300 MIN 16 AC-FT 45,620

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
5-28	2100	2.09	330	6-12	2200	2.13	352
6-6	2300	2.07	320				

10296000 WEST WALKER RIVER BELOW LITTLE WALKER RIVER, NEAR COLEVILLE, CALIF.

LOCATION.--Lat 38°22'47", long 119°26'57", in NE¼SE¼ sec.9, T.6 N., R.23 E., Mono County, on right bank 150 ft (46 m) downstream from Little Walker River, 60 ft (18 m) upstream from bridge on U.S. Highway 395, and 13 mi (21 km) southeast of Coleville.

DRAINAGE AREA.--180 mi² (466 km²).

PERIOD OF RECORD.--April 1938 to current year. Prior to October 1958, published as "below East Fork."

GAGE.--Water-stage recorder. Datum of gage is 6,591.39 ft (2,009.056 m) above mean sea level, supplementary adjustment of 1958. Oct. 1, 1939, to Sept. 30, 1969, at site 100 ft (30 m) upstream at same datum. Prior to Oct. 1, 1939, at site 25 ft (8 m) downstream at datum 1.00 ft (0.305 m) higher.

AVERAGE DISCHARGE.--36 years, 260 ft³/s (7.363 m³/s), 188,400 acre-ft/yr (232 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,090 ft³/s (59.2 m³/s) June 7 (gage height, 5.01 ft or 1.527 m); minimum, 12 ft³/s (0.34 m³/s) Nov. 4.
Period of record: Maximum discharge, 6,220 ft³/s (176 m³/s) Nov. 20, 1950 (gage height, 8.10 ft or 2.469 m), from rating curve extended above 1,900 ft³/s (53.8 m³/s) on basis of slope-area measurement of peak flow; minimum, 4.0 ft³/s (0.11 m³/s) Nov. 18, 1948, result of freezeup.
Maximum discharge observed prior to 1938, 5,800 ft³/s (164 m³/s) Dec. 11, 1937, by slope-area measurement.

REMARKS.--Records good except those for winter periods, which are fair. Station is above diversions except for a few small ranch ditches. Flow very slightly regulated by Poor Lake Reservoir (capacity unknown) 7 mi (11 km) upstream. Records of chemical analyses for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1927: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	53	58	70	136	116	115	186	392	1,270	947	360	105
2	52	54	60	70	107	109	174	469	1,300	871	324	103
3	52	44	65	75	110	90	165	579	1,300	745	346	100
4	52	39	65	80	100	80	155	593	1,360	734	377	97
5	50	48	70	100	95	90	166	622	1,410	723	356	95
6	48	61	90	100	90	95	167	728	1,690	641	391	95
7	48	71	120	100	97	99	171	873	1,760	590	308	94
8	53	84	110	100	90	96	184	1,050	1,420	563	270	91
9	50	78	105	80	90	92	192	1,150	1,340	617	240	89
10	46	218	100	72	85	91	176	1,170	1,450	940	222	88
11	48	926	102	90	82	94	176	1,120	1,560	563	210	86
12	51	944	116	100	87	102	189	1,170	1,680	466	193	88
13	50	386	109	104	80	107	200	1,050	1,630	450	182	85
14	48	281	105	105	85	122	220	952	1,640	470	169	85
15	47	243	100	226	90	134	251	985	1,590	482	158	83
16	46	211	104	234	87	141	283	859	1,440	478	148	81
17	43	205	105	258	75	143	318	706	1,190	439	140	79
18	42	185	96	278	80	141	358	590	1,060	416	135	77
19	42	187	102	316	87	137	309	518	967	408	129	74
20	52	177	104	256	75	140	280	451	852	398	125	73
21	50	159	98	213	80	147	280	434	930	420	120	71
22	48	148	95	173	82	150	330	497	1,050	420	117	70
23	74	136	90	182	76	157	363	601	1,110	431	112	68
24	61	140	85	163	77	167	328	712	981	439	108	67
25	67	137	90	155	80	176	292	997	888	416	107	67
26	64	128	93	140	79	176	264	1,280	834	387	103	67
27	63	124	94	138	78	178	246	1,560	774	373	102	66
28	63	121	109	133	75	182	248	1,770	794	356	98	66
29	57	122	199	126	-----	183	256	1,630	852	353	100	64
30	56	120	176	124	-----	192	309	1,260	908	416	110	63
31	59	-----	146	120	-----	176	-----	1,230	-----	494	108	-----
TOTAL	1,635	5,835	3,173	4,547	2,435	4,102	7,236	27,998	37,030	16,446	5,968	2,437
MEAN	52.7	195	102	147	87.0	132	241	903	1,234	531	193	81.2
MAX	74	944	199	316	116	192	363	1,770	1,760	947	391	105
MIN	42	39	60	70	75	80	155	392	774	353	98	63
AC-FT	3,240	11,570	6,290	9,020	4,830	8,140	14,350	55,530	73,450	32,620	11,840	4,830
CAL YR 1973	TOTAL 105,388 MEAN 289 MAX 1,990 MIN 38 AC-FT 209,000											
WTR YR 1974	TOTAL 118,842 MEAN 326 MAX 1,770 MIN 39 AC-FT 235,700											

PEAK DISCHARGE (BASE, 1,120 FT³/S)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-12	0500	4.39	1,500	5-28	2400	4.99	2,070
5-9	2400	4.25	1,390	6-7	0200	5.01	2,090

10296500 WEST WALKER RIVER NEAR COLEVILLE, CALIF.

LOCATION.--Lat 38°30'55", long 119°27'15", in NW¼NE¼ sec.28, T.8 N., R.23 E., Mono County, on left bank 0.2 mi (0.3 km) downstream from Rock Creek, and 5 mi (8 km) southeast of Coleville.

DRAINAGE AREA.--271 mi² (702 km²).

PERIOD OF RECORD.--October 1902 to July 1908 (published as West Fork of Walker River near Coleville 1903, 1905-8 and as Walker River, West Fork, near Coleville 1904), March 1909 to September 1910, June 1915 to March 1938, May 1957 to current year. Monthly discharge only for some periods, published in WSP 1314.

GAGE.--Water-stage recorder. Altitude of gage is 5,520 ft (1,682 m), from topographic map. Prior to July 31, 1908, nonrecording gage at site 0.5 mi (0.8 km) upstream at different datum. Mar. 1, 1909, to Aug. 31, 1910, nonrecording gage, and June 18, 1915, to Aug. 15, 1919, water-stage recorder near present site at different datums. Aug. 16, 1919, to Mar. 31, 1938, water-stage recorder at site 1,000 ft (300 m) upstream at different datum. May 26, 1957, to Sept. 10, 1963, water-stage recorder at site 10 ft (3 m) downstream at datum 0.38 ft (0.116 m) lower.

AVERAGE DISCHARGE.--45 years (1902-7, 1909-10, 1915-37, 1957-74), 275 ft³/s (7.788 m³/s), 199,200 acre-ft/yr (246 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,980 ft³/s (56.1 m³/s) June 7 (gage height, 3.80 ft or 1.158 m); minimum daily, 50 ft³/s (1.42 m³/s) Nov. 4.
Period of record (1915-38, 1957 to current year): Maximum discharge, 6,500 ft³/s (184 m³/s) Dec. 11, 1937, from slope-area measurement of peak flow; minimum, 5 ft³/s (0.14 m³/s) Dec. 3, 1924, Aug. 27, 1931.

REMARKS.--Records good except those for period of no gage-height record, which are poor. Station is above diversions except for a few small ranch ditches. Flow very slightly regulated by Poor Lake Reservoir (capacity unknown) 17 mi (27 km) upstream.

REVISIONS (WATER YEARS).--WSP 880: 1917 (runoff in acre-feet). WSP 1514: 1918, 1923. WSP 1927: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	59	72	105	149	149	117	206	411	1,330	954	363	118
2	59	67	90	115	136	138	193	469	1,330	898	325	117
3	59	58	95	100	138	110	183	595	1,330	767	322	115
4	59	50	95	105	136	110	173	612	1,390	748	387	111
5	59	59	100	115	130	117	183	646	1,380	754	337	107
6	57	72	120	120	118	122	183	767	1,590	663	407	105
7	57	80	147	120	122	117	186	926	1,700	617	311	103
8	63	95	138	120	120	115	200	1,090	1,410	584	273	101
9	59	100	133	110	117	107	213	1,160	1,330	595	245	96
10	55	235	130	105	117	107	196	1,180	1,420	947	229	94
11	57	932	133	110	115	107	196	1,160	1,500	595	217	92
12	61	972	130	115	105	115	206	1,210	1,660	479	201	93
13	59	407	138	117	105	117	213	1,120	1,610	444	191	92
14	57	297	130	117	112	130	235	1,020	1,580	469	180	93
15	55	265	128	220	110	147	265	1,080	1,560	479	171	92
16	57	235	130	261	105	152	293	961	1,450	484	162	90
17	55	229	133	293	95	158	326	799	1,250	440	155	88
18	53	210	120	297	105	155	384	657	1,100	402	149	87
19	53	212	115	352	105	149	331	567	1,030	393	143	85
20	59	202	122	293	91	152	301	489	912	375	140	83
21	61	184	122	253	100	158	293	464	968	411	136	81
22	59	170	122	196	97	161	344	514	1,050	416	129	79
23	87	159	120	210	91	167	393	640	1,120	421	126	77
24	72	166	120	193	93	177	352	729	1,020	440	123	76
25	78	160	115	186	97	190	314	1,030	926	411	122	76
26	76	151	115	173	95	186	289	1,260	871	397	120	74
27	74	143	115	161	91	190	269	1,520	786	388	119	74
28	74	149	125	164	93	196	269	1,680	799	366	118	74
29	70	149	200	158	-----	196	273	1,640	851	361	116	72
30	72	147	203	155	-----	210	318	1,320	905	379	120	70
31	72	-----	167	149	-----	193	-----	1,270	-----	502	120	-----
TOTAL	1,947	6,427	3,956	5,332	3,088	4,566	7,780	28,986	37,158	16,579	6,257	2,715
MEAN	62.8	214	128	172	110	147	259	935	1,239	535	202	90.5
MAX	87	972	203	352	149	210	393	1,680	1,700	954	407	118
MIN	53	50	90	100	91	107	173	411	786	361	116	70
AC-FT	3,860	12,750	7,850	10,580	6,130	9,060	15,430	57,490	73,700	32,880	12,410	5,390
CAL YR 1973	TOTAL 112,752	MEAN 309	MAX 1,910	MIN 27	AC-FT 223,600							
WTR YR 1974	TOTAL 124,791	MEAN 342	MAX 1,700	MIN 50	AC-FT 247,500							

DATE TIME PEAK DISCHARGE (BASE, 1,120 FT³/S) NOTE.--No gage-height record Oct. 30 to Nov. 28.

11-12	--	G.H. 3.37	DISCHARGE 1,590	DATE 5-29	TIME 0600	G.H. 3.79	DISCHARGE 1,970
5-10	0200	G.H. 3.15	DISCHARGE 1,360	DATE 6-7	TIME 0500	G.H. 3.80	DISCHARGE 1,980

WALKER LAKE BASIN

10297000 TOPAZ LAKE NEAR TOPAZ, CALIF.

LOCATION.--Lat 38°41'35", long 119°31'10", in NW¼NE¼ sec.33, T.10 N., R.22 E., Douglas County, Nevada, at outlet works of Topaz Lake on West Walker River, 5.5 mi (8.8 km) north of Topaz.

PERIOD OF RECORD.--December 1921 to September 1931 (monthly contents only published in WSP 1734), October 1931 to current year.

GAGE.--Float and nonrecording gages read once daily. Datum of gage is at mean sea level (levels by Walker River Irrigation District).

EXTREMES.--Current year: Maximum contents, 60,310 acre-ft (74.4 hm³) June 23 (elevation, 5,005.38 ft or 1,525.640 m); minimum, 10,530 acre-ft (13.0 hm³) Oct. 22-25 (elevation, 4,979.01 ft or 1,517.602 m).
Period of record: Maximum contents, 60,310 acre-ft (74.4 hm³) June 23, 1974 (elevation, 5,005.38 ft or 1,525.640 m); no contents Oct. 31, 1924, Sept. 22, 24-30, Oct. 1-15, 1960.

REMARKS.--Topaz Lake, formerly known as Alkali Lake and Topaz Reservoir, was formed by the diversion of water from West Walker River through a feeder canal and the construction of an outlet tunnel through a low saddle in rim of lake. Storage began about December 1921. Usable capacity, 59,440 acre-ft (73.3 hm³) between elevations 4,972.3 ft (1,515.56 m), lowest practical elevation for diversion through tunnel, bottom of outlet tunnel at elevation, 4,970 ft (1,515 m) and 5,005 ft (1,526 m), 3 ft (0.9 m) below top of levee. Usable capacity of reservoir was increased from about 45,000 to 59,440 acre-ft (55.5 to 73.3 hm³) in October 1937 by an earthfill, rock-faced levee at south end. Figures given herein represent usable contents. There is 65,000 acre-ft (80.1 hm³) of lake volume below the point of controllable storage. Water is used for irrigation in Walker River Irrigation District.

COOPERATION.--Elevations furnished by Walker River Irrigation District.

CAPACITY TABLE (ELEVATION, IN FEET, AND CONTENTS, IN ACRE-FEET)

4,978	8,910	4,995	38,100
4,980	12,130	5,000	48,350
4,985	20,390	5,006	61,750
4,990	28,970		

CONTENTS, IN ACRE-FEET, AT 0000, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11,710	11,130	25,050	35,150	48,600	55,270	59,600	48,560	58,410	60,240	51,660	36,010
2	11,600	11,240	25,400	35,450	48,920	55,670	59,670	48,170	58,640	60,200	51,660	35,520
3	11,480	11,340	25,690	35,630	49,230	56,100	59,690	47,980	58,870	59,940	51,500	35,020
4	11,450	11,430	26,070	35,900	49,530	56,370	59,690	47,960	59,070	59,850	51,420	34,400
5	11,430	11,600	26,410	36,140	49,810	56,640	59,600	47,980	59,280	59,830	51,440	33,850
6	11,430	11,680	26,760	36,400	50,050	56,930	59,530	48,030	59,390	59,830	51,530	33,220
7	11,430	11,790	27,090	36,690	50,330	57,300	59,530	48,150	59,720	59,740	51,770	32,570
8	11,420	11,970	27,490	37,010	50,570	57,570	59,460	48,670	59,650	59,460	51,960	31,870
9	11,420	12,150	27,840	37,210	50,850	57,840	59,230	49,400	59,190	59,160	52,100	31,170
10	11,400	12,360	28,170	37,460	51,110	58,110	58,710	50,090	58,870	59,260	52,120	30,460
11	11,400	12,700	28,570	37,710	51,370	58,340	58,180	50,830	58,710	59,720	51,990	29,760
12	11,420	14,860	28,800	37,980	51,630	58,520	57,820	51,740	58,660	59,760	51,810	29,040
13	11,420	16,220	29,150	38,290	51,830	58,710	57,390	52,540	58,620	59,620	51,420	28,450
14	11,400	17,270	29,440	38,580	52,050	58,940	56,890	53,130	58,710	59,370	50,850	27,870
15	11,390	17,980	29,760	39,010	52,290	59,140	56,440	53,640	58,800	59,160	50,240	27,260
16	11,340	18,530	30,080	39,630	52,510	59,300	55,920	53,970	58,750	58,640	49,510	26,740
17	11,270	19,070	30,380	40,530	52,730	59,320	55,310	54,170	58,910	58,250	49,080	26,290
18	11,180	19,870	30,680	41,330	52,980	59,350	54,820	53,970	59,210	57,660	47,960	26,020
19	11,050	20,330	30,920	42,320	53,240	59,370	54,330	53,730	59,600	57,050	47,030	25,620
20	10,950	20,850	31,190	43,150	53,420	59,370	53,840	53,350	59,880	56,440	45,990	25,590
21	10,790	21,300	31,470	43,970	53,640	59,370	53,330	53,240	60,060	55,850	44,970	25,330
22	10,530	21,740	31,830	44,550	53,800	59,390	52,780	52,290	60,290	55,240	43,930	25,110
23	10,530	22,100	32,170	45,050	54,000	59,420	52,290	51,960	60,310	54,750	42,980	24,880
24	10,530	22,490	32,420	45,530	54,200	59,460	51,520	51,900	59,900	54,280	42,060	24,690
25	10,530	22,860	32,710	46,080	54,400	59,510	51,480	52,010	59,650	53,950	41,150	24,450
26	10,560	23,200	32,960	46,480	54,640	59,550	51,020	52,600	59,830	53,310	40,360	24,210
27	10,640	23,550	33,270	46,790	54,800	59,580	50,540	53,600	60,060	52,840	39,570	23,960
28	10,760	23,870	33,490	47,220	55,000	59,550	50,070	54,930	60,060	52,360	38,760	23,620
29	10,820	24,210	33,850	47,600	-----	59,550	49,590	55,760	60,130	52,030	37,980	23,500
30	10,920	24,520	34,290	47,960	-----	59,550	49,100	57,840	60,220	51,630	37,240	23,260
31	11,010	-----	34,730	48,300	-----	59,600	-----	58,250	-----	51,590	36,650	-----
MAX	11,710	24,520	34,730	48,300	55,000	59,600	59,690	58,250	60,310	60,240	52,120	36,010
MIN	10,530	11,130	25,050	35,150	48,600	55,270	49,100	47,960	58,410	51,590	36,650	23,260
(a)	4,979.31	4,987.43	4,993.22	4,999.98	5,003.04	5,005.07	5,000.35	5,004.48	5,005.34	5,001.50	4,994.25	4,986.69
(b)	-760	+13,510	+10,210	+13,570	+6,700	+4,600	-10,500	+9,150	+1,970	-8,630	-14,940	-13,390
CAL YR 1973	b +13,750											
WTR YR 1974	b +11,490											

a Elevation, in feet, at end of month.
b Change in contents, in acre-feet.

10297500 WEST WALKER RIVER AT HOYE BRIDGE, NEAR WELLINGTON, NEV.

LOCATION.--Lat 38°43'40", long 119°25'40", in NE¼SE¼ sec.17, T.10 N., R.23 E., Douglas County, on left bank 20 ft (6 m) upstream from Hoyer bridge, 2 mi (3 km) upstream from head of Saroni Canal, and 4 mi (6 km) southwest of Wellington.

DRAINAGE AREA.--533 mi² (1,380 km²).

PERIOD OF RECORD.--May to August 1910 (published as West Walker River near Wellington), July 1920 to September 1923, March 1924 to August 1925, October 1925 to September 1932, October 1957 to current year. Monthly discharge only for some periods published in WSP 1314.

GAGE.--Water-stage recorder. Altitude of gage is 4,980 ft (1,518 m), from topographic map. May to August 1910, nonrecording gage at same site at different datum. July 1, 1920, to Sept. 30, 1923, water-stage recorder at site 3 mi (5 km) downstream, 1 mi (2 km) downstream from Saroni Canal, at different datum, and supplemental nonrecording gage on Saroni Canal 1 mi (2 km) downstream from head. Mar. 1, 1924, to Sept. 30, 1932, water-stage recorder at same site at different datum.

AVERAGE DISCHARGE (unadjusted).--27 years (1920-23, 1925-32, 1957-74), 235 ft³/s (6.655 m³/s), 170,300 acre-ft/yr (210 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,580 ft³/s (44.7 m³/s) June 7 (gage height, 7.65 ft or 2.332 m); minimum, 24 ft³/s (0.68 m³/s) Jan. 3, but may have been less during period of ice effect.

Period of record: Maximum discharge, 2,180 ft³/s (61.7 m³/s) June 6, 1922; minimum observed, 4.8 ft³/s (0.14 m³/s) Jan. 5, 1961.

REMARKS.--Records good. Flow regulated by off-channel storage in Topaz Lake since Jan. 30, 1922. Diversions for irrigation of about 10,500 acres (42.5 km²) above station. Records include releases from Topaz Lake and all return flow from Antelope Valley.

REVISIONS.--WSP 2127: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	88	55	27	29	32	32	216	486	1,060	772	540	320
2	89	42	25	27	33	34	191	481	1,080	828	520	321
3	88	39	25	25	33	35	191	500	1,090	749	500	321
4	78	38	25	28	32	34	195	521	1,120	633	480	326
5	68	38	27	28	33	34	224	525	1,180	613	460	341
6	67	38	29	28	33	36	253	538	1,300	587	430	357
7	66	38	29	28	32	40	266	577	1,450	603	400	345
8	66	38	30	29	32	39	299	645	1,550	622	350	366
9	64	38	31	28	32	38	351	719	1,480	513	300	367
10	63	32	30	26	32	37	352	762	1,430	565	270	377
11	63	44	30	28	32	44	358	745	1,440	549	320	385
12	64	277	30	29	31	59	359	725	1,490	481	340	355
13	69	132	30	30	32	59	378	728	1,520	506	360	337
14	69	63	30	32	32	65	403	705	1,450	494	380	331
15	70	53	30	37	32	78	410	723	1,430	496	400	326
16	78	43	30	35	32	145	469	710	1,330	531	420	297
17	93	32	30	46	32	175	480	698	1,070	555	430	216
18	107	36	29	42	32	178	475	692	818	551	460	185
19	106	33	29	40	32	179	487	675	717	564	505	163
20	110	30	29	39	32	180	461	664	670	561	541	159
21	126	28	29	41	32	180	462	645	681	557	497	169
22	128	27	30	40	32	179	461	632	877	546	491	167
23	129	27	30	37	33	180	462	598	1,070	497	472	149
24	116	27	30	36	33	180	470	613	1,050	525	451	150
25	96	27	30	35	33	181	472	610	831	538	420	170
26	87	27	30	35	32	199	464	672	655	525	415	170
27	74	27	29	34	32	218	450	747	648	491	412	168
28	72	27	28	34	31	222	433	773	653	490	409	158
29	71	27	28	33	-----	198	449	835	649	500	393	166
30	64	26	29	33	-----	198	473	874	707	520	343	164
31	58	-----	30	33	-----	201	-----	1,050	-----	540	319	-----
TOTAL	2,587	1,409	898	1,025	901	3,657	11,424	20,869	32,496	17,502	13,028	7,826
MEAN	83.5	47.0	29.0	33.1	32.2	118	381	673	1,083	565	420	261
MAX	129	277	31	46	33	222	487	1,050	1,550	828	541	385
MIN	58	26	25	25	31	32	191	481	648	481	270	149
AC-FT	5,130	2,790	1,780	2,030	1,790	7,250	22,660	41,390	64,460	34,720	25,840	15,520

CAL YR 1973 TOTAL 97,923 MEAN 268 MAX 1,700 MIN 20 AC-FT 194,200
WTR YR 1974 TOTAL 113,622 MEAN 311 MAX 1,550 MIN 25 AC-FT 225,400

CARSON RIVER BASIN

10308200 EAST FORK CARSON RIVER BELOW MARKLEEVILLE CREEK, NEAR MARKLEEVILLE, CALIF.

LOCATION.--Lat 38°42'50", long 119°45'50", in SW¼NE¼ sec.15, T.10 N., R.20 E., Alpine County, on right bank 0.5 mi (0.8 km) downstream from Markleeville Creek, and 1.5 mi (2.4 km) north-northeast of Markleeville.

DRAINAGE AREA.--276 mi² (715 km²).

PERIOD OF RECORD.--August 1960 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5,400 ft (1,646 m), from topographic map. Prior to Oct. 1, 1967, at present site at datum 2.00 ft (0.610 m) higher.

AVERAGE DISCHARGE.--13 years, 369 ft³/s (10.45 m³/s), 267,300 acre-ft/yr (330 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 3,540 ft³/s (100 m³/s) Nov. 12 (gage height, 6.34 ft or 1.932 m); minimum, 37 ft³/s (1.05 m³/s) Nov. 4.

Period of record: Maximum discharge, 15,100 ft³/s (428 m³/s) Jan. 31, 1963 (gage height, 10.21 ft or 3.112 m, present datum); minimum, 16 ft³/s (0.45 m³/s) Nov. 17, 1961.

REMARKS.--Records good except those for winter months, which are poor. A few small diversions for irrigation above station. Flow slightly regulated by several small reservoirs, total capacity, about 5,000 acre-ft (6.16 hm³).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	60	72	144	240	275	411	494	938	1,730	670	222	128
2	59	68	144	190	249	363	424	1,120	1,640	677	227	124
3	59	57	134	174	250	239	372	1,290	1,630	558	244	117
4	59	49	140	172	247	268	352	1,250	1,720	524	243	128
5	62	66	137	164	238	266	380	1,290	1,720	501	258	121
6	59	104	135	160	219	308	367	1,420	1,840	472	269	121
7	68	147	148	170	221	289	372	1,660	1,810	440	195	118
8	80	175	142	165	220	254	394	1,930	1,530	420	175	110
9	69	121	140	160	214	241	413	2,020	1,460	687	161	110
10	67	434	140	160	214	249	368	1,990	1,530	820	147	109
11	66	2,030	150	170	210	251	365	1,880	1,620	529	134	107
12	68	2,020	168	180	203	287	399	1,840	1,670	439	125	105
13	69	600	183	185	194	283	428	1,670	1,590	399	127	105
14	68	399	168	213	205	320	454	1,600	1,530	376	148	101
15	70	340	164	775	193	359	537	1,570	1,470	344	160	98
16	68	299	172	784	193	363	617	1,370	1,350	332	157	89
17	67	355	206	1,070	181	353	693	1,170	1,220	311	153	77
18	65	329	160	1,040	193	341	771	992	1,090	291	149	75
19	64	267	148	1,080	193	309	613	854	1,000	277	145	74
20	69	244	160	722	173	311	587	751	895	267	144	72
21	74	219	179	580	186	323	614	736	887	268	140	69
22	70	194	172	458	180	333	781	854	930	255	137	67
23	115	179	168	470	170	342	829	1,060	930	242	133	68
24	92	186	164	415	170	365	688	1,260	846	238	128	67
25	93	175	164	392	182	387	598	1,510	767	243	125	66
26	86	168	164	355	181	361	547	1,860	706	269	124	66
27	82	164	202	325	175	364	507	2,220	670	233	123	65
28	83	168	231	326	176	394	503	2,400	655	236	137	64
29	78	168	862	305	-----	410	511	2,060	670	225	135	63
30	75	183	507	296	-----	464	642	1,750	670	218	131	65
31	75	-----	345	286	-----	393	-----	1,720	-----	240	128	-----
TOTAL	2,239	9,980	6,241	12,182	5,705	10,201	15,620	46,035	37,776	12,001	5,024	2,749
MEAN	72.2	333	201	393	204	329	521	1,485	1,259	387	162	91.6
MAX	115	2,030	862	1,080	275	464	829	2,400	1,840	820	269	128
MIN	59	49	134	160	170	239	352	736	655	218	123	63
AC-FT	4,440	19,800	12,380	24,160	11,320	20,230	30,980	91,310	74,930	23,800	9,970	5,450
CAL YR 1973	TOTAL 141,989 MEAN 389 MAX 2,740 MIN 49 AC-FT 281,600											
WTR YR 1974	TOTAL 165,753 MEAN 454 MAX 2,400 MIN 49 AC-FT 328,800											

PEAK DISCHARGE (BASE, 1,300 FT³/S)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-12	0600	6.34	3,540	5-9	2200	5.57	2,460
12-29	1300	4.52	1,410	5-27	2200	5.85	2,810
1-18	1900	4.68	1,590	7-9	2100	4.60	1,320

10309000 EAST FORK CARSON RIVER NEAR GARDNERVILLE, NEV.

LOCATION.--Lat 38°50'50", long 119°42'10", in SW¼NE¼ sec.2, T.11 N., R.20 E., Douglas County, on left bank 0.1 mi (0.2 km) downstream from Horseshoe Bend, 2 mi (3 km) east of Mud Lake Reservoir, 4.5 mi (7.2 km) downstream from Bryant Creek, and 7 mi (11 km) southeast of Gardnerville.

DRAINAGE AREA.--341 mi² (883 km²).

PERIOD OF RECORD.--January 1890 to December 1893, October 1900 to December 1906 (gage heights only August to December 1904 and July to December 1905), January 1908 to December 1910, June to October 1917, December 1924 to September 1928, June to September 1929, October 1935 to December 1937, May 1939 to current year. Monthly discharge only for some periods published in WSP 1314.

GAGE.--Water-stage recorder. Datum of gage is 4,985.11 ft (1,519.462 m) above mean sea level (levels by Bureau of Reclamation). Prior to May 19, 1939, nonrecording gages at several sites within 2 mi (3 km) of present site at various datums.

AVERAGE DISCHARGE.--48 years (1890-93, 1900-1903, 1908-10, 1925-28, 1935-37, 1939-74), 392 ft³/s (11.10 m³/s), 284,000 acre-ft/yr (350 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 3,250 ft³/s (92.0 m³/s) Nov. 12 (gage height, 4.97 ft or 1.515 m); minimum, 51 ft³/s (1.44 m³/s) Nov.5.

Period of record: Maximum discharge, 17,600 ft³/s (498 m³/s) Dec. 23, 1955 (gage height, 11.88 ft or 3.621 m), from rating curve extended above 6,000 ft³/s (170 m³/s), on basis of slope-area measurements at gage heights 9.66 ft (2.944 m) and 11.88 ft (3.621 m); minimum observed, 8 ft³/s (0.23 m³/s) Dec. 4-10, 19-23, 1904.

REMARKS.--Records good. Station is above all diversions in Carson Valley. Diversions for irrigation above station. Flow slightly regulated by several small reservoirs, total capacity, about 5,000 acre-ft (6.16 hm³).

REVISIONS (WATER YEARS).--WSP 1214: 1938(M), 1942-43(M), 1945(M). WSP 1514: 1909-10. WSP 1927: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	64	90	220	280	288	322	515	936	1,740	712	232	143
2	63	88	167	230	258	444	489	1,140	1,670	677	202	142
3	63	81	160	200	262	260	411	1,330	1,610	595	249	130
4	65	66	170	190	263	253	384	1,320	1,740	553	254	142
5	65	73	160	185	254	280	412	1,330	1,700	531	248	138
6	64	110	160	180	230	336	403	1,470	1,830	495	298	133
7	67	142	170	190	226	329	401	1,670	1,830	465	208	131
8	88	221	160	185	228	292	421	1,910	1,580	443	185	123
9	81	141	160	180	222	260	451	2,010	1,480	657	169	123
10	77	388	162	180	223	272	405	2,010	1,550	958	159	122
11	75	1,750	175	190	218	271	395	1,890	1,620	585	142	119
12	76	2,150	190	200	209	308	425	1,870	1,690	473	134	117
13	79	716	216	200	200	309	458	1,740	1,610	420	129	116
14	79	466	198	212	215	342	479	1,610	1,560	393	152	114
15	79	400	189	681	202	391	546	1,630	1,510	368	167	112
16	79	348	198	790	202	391	643	1,450	1,400	345	169	107
17	77	379	224	1,140	182	379	716	1,260	1,270	326	166	90
18	75	409	180	931	199	369	833	1,080	1,150	307	161	84
19	73	318	165	1,140	202	340	661	940	1,060	294	156	83
20	78	289	180	758	171	337	632	821	947	278	152	82
21	83	273	200	599	192	345	635	785	930	276	153	78
22	79	240	193	465	186	356	808	876	969	263	151	77
23	147	226	186	460	173	367	898	1,100	991	245	147	75
24	111	238	179	423	176	386	751	1,290	907	239	146	74
25	113	215	179	403	186	419	645	1,530	815	245	141	72
26	107	211	176	370	182	386	589	1,780	763	271	138	73
27	101	206	209	331	175	395	543	2,140	704	240	136	73
28	101	207	236	339	178	426	538	2,320	690	231	148	71
29	98	211	808	317	-----	437	534	2,090	703	238	151	70
30	92	207	568	309	-----	499	644	1,770	706	225	147	73
31	91	-----	365	299	-----	438	-----	1,720	-----	258	144	-----
TOTAL	2,590	10,859	6,903	12,557	5,902	10,939	16,665	46,818	38,725	12,606	5,334	3,087
MEAN	83.5	362	223	405	211	353	556	1,510	1,291	407	172	103
MAX	147	2,150	808	1,140	288	499	898	2,320	1,830	958	298	143
MIN	63	66	160	180	171	253	384	785	690	225	129	70
AC=FT	5,140	21,540	13,690	24,910	11,710	21,700	33,060	92,860	76,810	25,000	10,580	6,120
CAL YR 1973	TOTAL 145,570 MEAN 399 MAX 2,590 MIN 63 AC=FT 288,700											
WTR YR 1974	TOTAL 172,985 MEAN 474 MAX 2,320 MIN 63 AC=FT 343,100											

PEAK DISCHARGE (BASE, 1,300 FT ³ /S)							
DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-12	0800	4.97	3,250	5-10	0200	4.28	2,370
12-29	1500	3.34	1,440	5-28	0100	4.57	2,710
1-18	2200	3.46	1,520	7-9	2300	3.30	1,390

CARSON RIVER BASIN

10310000 WEST FORK CARSON RIVER AT WOODFORDS, CALIF.

LOCATION.--Lat 38°46'10", long 119°49'55", in NW¼SE¼ sec.34, T.11 N., R.19 E., Alpine County, on left bank 0.3 mi (0.5 km) downstream from bridge on State Highway 88-89, 0.6 mi (1.0 km) southwest of Woodfords, and 3.8 mi (6.1 km) downstream from Willow Creek.

DRAINAGE AREA.--65.6 mi² (169.9 km²).

PERIOD OF RECORD.--October 1900 to May 1907, 1910-11 (fragmentary), October 1938 to current year. Monthly discharge only for some periods, published in WSP 1314. January 1890 to March 1892, June 1907 to September 1920 (except portions of 1910-11), at site 0.7 mi (1.1 km) downstream; records not equivalent owing to diversions for irrigation.

GAGE.--Water-stage recorder. Altitude of gage is 5,760 ft (1,756 m), from river-profile map. Prior to Oct. 1, 1938, nonrecording gage at same site at different datum. Oct. 1, 1938, to Nov. 11, 1958, water-stage recorder at same site at datum 1.02 ft (0.311 m) lower. Nov. 13, 1958, to Jan. 30, 1963, water-stage recorder at site 150 ft (46 m) downstream at datum 3.06 ft (0.933 m) lower.

AVERAGE DISCHARGE.--43 years (1900-1907, 1938-74), 115 ft³/s (3.257 m³/s), 83,320 acre-ft/yr (103 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,100 ft³/s (31.2 m³/s) Nov. 11 (gage height, 4.28 ft or 1.305 m); minimum, 14 ft³/s (0.40 m³/s) Nov. 4.
Period of record: Maximum discharge, 4,890 ft³/s (138 m³/s) Feb. 1, 1963 (gage height, 9.0 ft or 2.74 m), on basis of slope-area measurement of peak flow; minimum, about 5 ft³/s (0.14 m³/s) Dec. 23, 1961.
Flood of Dec. 11, 1937, reached a stage of 8.0 ft (2.44 m), present datum, from floodmarks (discharge, 3,500 ft³/s or 99.1 m³/s by slope-area measurement).

REMARKS.--Records fair. One small diversion above station for irrigation. Flow slightly regulated by several small reservoirs, total capacity, about 1,500 acre-ft (1.85 hm³). Records of chemical analyses for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1927: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	26	30	116	81	56	111	380	408	158	111	60
2	22	25	28	80	72	52	102	436	394	154	99	39
3	22	22	30	60	75	63	101	462	390	137	85	35
4	22	21	45	64	72	67	99	454	394	129	81	33
5	22	24	52	62	71	65	116	466	373	125	84	32
6	22	45	56	64	65	66	116	490	390	114	72	31
7	27	53	60	66	60	63	121	542	370	109	65	31
8	29	54	60	64	60	58	135	610	328	111	61	30
9	26	41	61	62	58	57	143	620	310	256	57	44
10	25	149	60	63	58	57	121	620	317	278	55	60
11	24	684	56	65	57	58	127	580	324	165	51	58
12	24	529	58	64	56	61	158	580	331	133	74	57
13	24	190	54	61	56	61	174	560	320	120	87	52
14	24	139	60	69	56	73	223	500	310	111	85	50
15	23	147	60	206	54	88	241	490	292	121	80	48
16	23	123	60	247	55	97	262	450	277	121	73	28
17	22	116	62	259	50	99	292	400	262	114	71	25
18	22	88	58	265	54	91	289	330	244	109	66	24
19	22	91	58	286	52	88	253	320	232	105	46	29
20	24	84	56	203	50	94	265	300	200	101	43	34
21	24	80	54	180	51	101	295	290	198	97	42	34
22	24	72	55	147	49	105	352	350	209	78	41	31
23	35	69	54	154	50	112	348	400	212	73	40	39
24	31	72	53	139	48	125	283	490	195	71	39	42
25	34	64	54	133	50	135	244	550	174	71	39	43
26	32	64	55	109	50	123	226	650	165	70	52	55
27	31	66	55	96	48	133	229	700	152	64	67	53
28	30	64	61	96	47	121	235	510	145	62	69	50
29	29	65	150	88	-----	135	253	474	154	81	69	37
30	27	64	170	88	-----	125	307	412	156	87	67	23
31	26	-----	143	85	-----	116	-----	401	-----	112	66	-----
TOTAL	794	3,331	1,968	3,741	1,605	2,745	6,221	14,817	8,226	3,637	2,037	1,207
MEAN	25.6	111	63.5	121	57.3	88.5	207	478	274	117	65.7	40.2
MAX	35	684	170	286	81	135	352	700	408	278	111	60
MIN	22	21	28	60	47	52	99	290	145	62	39	23
AC-FT	1,570	6,610	3,900	7,420	3,180	5,440	12,340	29,390	16,320	7,210	4,040	2,390

CAL YR 1973 TOTAL 40,800 MEAN 112 MAX 684 MIN 21 AC-FT 80,930
WTR YR 1974 TOTAL 50,329 MEAN 138 MAX 700 MIN 21 AC-FT 99,830

DATE	TIME	PEAK DISCHARGE (BASE, 500 FT ³ /S)	DATE	TIME	PEAK DISCHARGE (BASE, 500 FT ³ /S)
11-11	1100	G.H. 4.28 DISCHARGE 1,100	5-27	unknown	G.H. -- DISCHARGE about 800
5-7	2200	G.H. 3.56 DISCHARGE 740	7-9	2400	G.H. 3.16 DISCHARGE 514

PYRAMID AND WINNEMUCCA LAKES BASIN

33

10336500 PYRAMID LAKE NEAR NIXON, NEV.

LOCATION.--Lat 39°59'05", long 119°30'00", in NE¼NW¼ sec.3, T.24 N., R.22 E., Washoe County, 0.25 mi (0.40 km) north of the Pyramid, 1.6 mi (2.6 km) northeast of Anaho Island, and 13 mi (21 km) northwest of Nixon.

DRAINAGE AREA.--2,720 mi² (7,040 km²).

PERIOD OF RECORD.--1867-1925 (occasional elevations in some years), June 1926 to current year (occasional elevations in each year).

GAGE.--Nonrecording gage. Datum of gage is at mean sea level, U.S. Coast and Geodetic Survey bench mark N-21, elevation, 3,940.29 ft (1,201.000 m), datum of 1929, supplementary adjustment of 1956. Prior to January 1934, elevations were determined from bench mark No. 1 of General Land Office using elevation of 3,882.26 ft (1,183.313 m), adjustment of 1912; to convert these records to present datum, add 0.81 ft (0.247 m). January 1934 to September 1955, elevations were determined from bench mark N-21 using elevation of 3,940.04 ft (1,200.924 m); to convert these records to present datum, add 0.25 ft (0.076 m). October 1955 to August 1968, nonrecording gages along southwest lake shore at present datum.

EXTREMES.--Period of record: Maximum elevation observed, 3,884.9 ft (1,184.12 m) in 1871 (see REMARKS); minimum observed, 3,783.9 ft (1,153.33 m) Feb. 6, Mar. 6, 1967.

REMARKS.--Truckee Canal diverts water out of the basin to Lahontan Reservoir. Elevations published for 1867 and 1871 may have been 9 ft (2.7 m) lower because of uncertainty of date of photograph on which they were based.

REVISIONS (WATER YEARS).--WSP 880: 1934-38 (bench mark). WSP 1090: 1926(M). WRD Nev. 1967: 1966.

ELEVATION, IN FEET, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

Oct.	3.....	3,793.4	Apr.	2.....	3,794.7
Nov.	5.....	3,793.0	May	6.....	3,795.8
Dec.	4.....	3,793.0	June	4.....	3,796.4
Jan.	4.....	3,793.2	July	2.....	3,796.5
Feb.	6.....	3,793.7	Aug.	8.....	3,796.6
Mar.	5.....	3,794.0	Sept.	3.....	3,796.3

AREA TABLE (ELEVATION, IN FEET, AND AREA, IN THOUSANDS OF ACRES)

3,880	144.3	3,845	131.7	3,810	114.7
3,875	143.4	3,840	129.1	3,805	113.0
3,870	142.4	3,835	126.4	3,800	111.3
3,865	140.9	3,830	123.8	3,795	109.7
3,860	139.0	3,825	121.2	3,790	108.2
3,855	136.8	3,820	118.6	3,785	107.0
3,850	134.3	3,815	116.6	3,780	105.9

VOLUME TABLE (ELEVATION, IN FEET, AND VOLUME, IN THOUSANDS OF ACRE-Feet)

3,880	32,020	3,845	27,140	3,810	22,850
3,875	31,300	3,840	26,490	3,805	22,280
3,870	30,580	3,835	25,850	3,800	21,720
3,865	29,880	3,830	25,230	3,795	21,170
3,860	29,180	3,825	24,620	3,790	20,620
3,855	28,490	3,820	24,020	3,785	20,080
3,850	27,810	3,815	23,430	3,780	19,550

PYRAMID AND WINNEMUCCA LAKES BASIN

10336593 GRASS LAKE CREEK NEAR MEYERS, CALIF.

LOCATION.--Lat 38°48'07", long 120°00'54", in SE¼NW¼ sec.11, T.11 N., R.18 E., El Dorado County, on left bank 60 ft (18 m) upstream from Grass Lake Way, 500 ft (91 m) upstream from confluence with Upper Truckee River, and 3.8 mi (6.1 km) south of Meyers.

DRAINAGE AREA.--6.99 mi² (18.1 km²).

PERIOD OF RECORD.--October 1971 to September 1974 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 6,470 ft (1,972 m) from topographic map.

EXTREMES.--Current year: Maximum discharge, 94 ft³/s (2.66 m³/s) May 9 (gage height, 2.60 ft or 0.792 m); minimum daily, 1.0 ft³/s (0.028 m³/s) Sept. 24-29.
Period of record: Maximum discharge, 102 ft³/s (2.89 m³/s) June 4, 1972 (gage height, 2.72 ft or 0.829 m); minimum daily, 1.0 ft³/s (0.028 m³/s) Sept. 24-29, 1974.

REMARKS.--Records good. No regulation or diversion above station. Records of water temperatures and sediment discharge for the water year 1974 are published in Part 2 of this report.

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.4	3.1	5.2	7.6	9.7	10	9.7	28	62	19	6.2	2.0
2	1.4	3.0	5.3	6.9	10	9.2	9.7	31	60	19	5.3	2.0
3	1.6	2.5	5.0	6.4	9.7	9.2	9.7	33	60	18	5.3	2.0
4	1.6	2.5	4.4	6.0	9.2	9.2	10	36	61	17	5.6	1.8
5	1.6	2.8	4.3	5.6	8.8	8.8	11	41	61	16	6.5	1.8
6	1.6	6.2	4.1	5.3	11	8.8	11	49	63	16	5.3	1.8
7	3.0	12	4.1	4.8	9.7	8.4	12	63	62	14	4.8	1.8
8	2.8	7.2	4.1	4.4	8.8	8.4	14	70	56	14	4.4	1.8
9	2.4	9.2	4.1	4.3	8.4	7.6	14	75	53	28	4.3	1.6
10	2.2	14	4.1	4.3	8.4	7.6	13	80	53	26	3.9	1.6
11	2.2	43	4.1	4.3	8.4	7.6	14	78	53	21	3.7	1.6
12	2.4	37	4.1	4.3	8.8	7.2	15	74	52	17	3.7	1.6
13	2.4	19	4.1	4.3	8.4	7.2	16	68	49	15	3.5	1.4
14	2.2	12	3.9	6.6	8.0	8.0	17	66	47	13	3.3	1.4
15	2.0	10	3.9	19	8.0	9.2	19	61	44	12	3.3	1.4
16	2.0	9.7	3.9	17	8.4	10	20	53	42	11	3.1	1.4
17	2.0	8.8	4.4	18	8.8	10	22	44	39	10	3.1	1.4
18	2.0	7.6	4.3	19	8.4	9.2	23	39	36	9.7	3.0	1.4
19	2.0	6.5	4.1	21	8.0	9.2	21	36	34	9.7	3.0	1.4
20	2.4	6.5	3.9	18	9.2	9.7	22	34	32	8.8	2.8	1.2
21	2.4	6.2	3.9	16	7.6	10	24	35	30	8.0	2.8	1.1
22	2.6	6.2	3.9	17	7.2	10	27	38	29	7.2	2.8	1.1
23	3.7	6.2	3.9	15	7.2	11	26	42	29	6.8	2.6	1.1
24	3.1	5.6	3.7	14	7.6	11	21	46	26	6.5	2.6	1.0
25	3.3	5.3	3.7	13	7.6	12	21	50	24	6.5	2.6	1.0
26	3.3	5.0	3.9	12	7.6	11	20	61	23	6.5	2.5	1.0
27	3.5	5.0	3.9	12	7.2	11	20	70	21	6.2	2.5	1.0
28	3.5	5.0	4.8	12	6.8	11	20	73	21	5.6	2.5	1.0
29	3.3	5.0	15	11	-----	12	21	66	21	5.3	2.4	1.0
30	3.1	5.0	11	11	-----	10	25	62	20	5.0	2.2	1.1
31	3.3	-----	8.0	11	-----	11	-----	62	-----	5.9	2.2	-----
TOTAL	76.3	277.1	151.1	331.1	236.9	294.5	528.1	1,664	1,263	383.7	111.8	42.8
MEAN	2.46	9.24	4.87	10.7	8.46	9.50	17.6	53.7	42.1	12.4	3.61	1.43
MAX	3.7	43	15	21	11	12	27	80	63	28	6.5	2.0
MIN	1.4	2.5	3.7	4.3	6.8	7.2	9.7	28	20	5.0	2.2	1.0
AC-FT	151	550	300	657	470	584	1,050	3,300	2,510	761	222	85

CAL YR 1973 TOTAL 4,284.1 MEAN 11.7 MAX 73 MIN 1.4 AC-FT 8,500
WTR YR 1974 TOTAL 5,360.4 MEAN 14.7 MAX 80 MIN 1.0 AC-FT 10,630

PEAK DISCHARGE (BASE, 40 FT ³ /S)							
DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-12	0430	2.30	68	5-27	2100	2.47	82
5-9	1830	2.60	94	7-9	1930	2.02	42

10336600 UPPER TRUCKEE RIVER NEAR MEYERS, CALIF.

LOCATION.--Lat 38°50'35", long 120°01'25", in NE¼SE¼ sec.31, T.12 N., R.18 E., El Dorado County, on left bank 0.4 mi (0.6 km) upstream from mouth of Echo Lake outlet, 1.1 mi (1.8 km) southwest of Meyers, and 2.5 mi (4.0 km) upstream from Angora Creek.

DRAINAGE AREA.--33.1 mi² (85.7 km²).

PERIOD OF RECORD.--October 1960 to current year.

GAGE.--Water-stage recorder. Datum of gage is 6,325 ft (1,928 m) from topographic map.

AVERAGE DISCHARGE.--14 years, 67.6 ft³/s (1.914 m³/s) 48,980 acre-ft/yr (60.4 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 776 ft³/s (22.0 m³/s) Nov. 11 (gage height, 8.84 ft or 2.694 m); minimum daily, 5.1 ft³/s (0.144 m³/s) Sept. 29.

Period of record: Maximum discharge, 2,550 ft³/s (72.2 m³/s) Feb. 1, 1963 (gage height, 12.41 ft or 3.783 m); minimum, 2.0 ft³/s (0.057 m³/s) Jan. 13, 1961.

REMARKS.--Records good. No regulation. Some small diversions above station for domestic use.

DISCHARGE IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.2	12	35	58	51	39	66	176	374	119	30	9.3
2	5.2	11	37	48	48	46	64	205	361	107	28	8.5
3	5.2	9.9	37	46	48	48	56	221	369	95	28	8.4
4	5.2	8.9	35	43	47	45	54	218	370	89	27	7.7
5	5.2	11	35	41	45	40	59	241	377	84	30	7.1
6	5.3	31	33	39	44	40	58	280	390	77	28	7.4
7	9.5	105	34	38	42	38	59	336	367	71	25	7.4
8	11	55	32	37	42	36	64	370	313	73	23	7.3
9	8.8	56	32	37	41	35	65	384	214	252	21	7.5
10	8.3	179	33	38	40	35	59	384	330	190	20	7.2
11	8.2	525	32	36	40	34	60	383	345	112	20	8.0
12	8.4	374	32	35	30	36	66	378	345	90	21	7.4
13	9.1	131	33	34	38	36	71	345	326	78	19	7.8
14	9.8	84	32	42	37	46	78	346	306	71	19	7.7
15	9.6	71	32	154	36	47	94	334	276	65	18	7.9
16	8.7	62	30	150	36	52	107	294	257	61	17	7.9
17	8.1	62	36	169	36	53	124	234	232	56	17	7.8
18	7.7	56	35	160	35	50	132	197	213	52	16	7.0
19	7.4	48	35	178	36	49	103	171	183	49	15	7.2
20	8.6	46	31	112	36	50	103	154	164	46	15	7.0
21	8.9	43	31	88	33	53	117	159	168	44	15	7.5
22	8.9	42	31	77	32	54	147	194	175	42	14	7.0
23	15	42	29	73	32	55	146	259	171	40	13	7.2
24	12	37	20	69	32	58	113	313	154	39	13	7.2
25	13	39	24	66	32	62	100	352	140	37	13	7.6
26	12	38	29	62	32	54	92	415	127	36	13	7.3
27	13	35	35	60	31	60	99	462	118	34	13	7.1
28	13	35	42	58	30	58	90	473	117	32	13	5.3
29	13	35	122	56	-----	73	96	398	123	30	12	5.1
30	12	35	107	54	-----	68	120	357	121	29	11	5.6
31	12	-----	72	52	-----	59	-----	363	-----	30	11	-----
TOTAL	287.3	2,318.8	1,226	2,210	1,071	1,598	2,652	9,386	7,626	2,230	578	220.4
MEAN	9.27	77.3	39.5	71.3	38.3	43.6	88.4	303	254	71.9	18.6	7.35
MAX	15	525	122	178	51	73	147	473	390	252	30	9.3
MIN	5.2	8.9	28	34	30	34	54	154	117	29	11	5.1
AC-FT	570	4,600	2,430	4,380	2,120	2,490	5,260	18,620	15,130	4,420	1,150	437

CAL YR 1973 TOTAL 24,863.8 MEAN 68.1 MAX 525 MIN 4.8 AC-FT 49,320
WTR YR 1974 TOTAL 31,313.5 MEAN 85.8 MAX 525 MIN 5.1 AC-FT 62,110

PEAK DISCHARGE (BASE, 200 FT ³ /S)							
DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-11	1315	8.84	776	5-9	2145	7.73	491
1-15	1600	6.00	200	5-27	2230	8.21	595
1-18	2230	6.36	260	7-9	2000	7.73	491

10336610 UPPER TRUCKEE RIVER AT SOUTH LAKE TAHOE, CALIF.

LOCATION.--Lat 38°55'22", long 119°59'23", in NW¼SE¼ sec.4, T.12 N., R.18 E., El Dorado County, on right bank on downstream side of U.S. Highway 50 bridge, 1.0 mi (1.6 km) northeast of South Lake Tahoe Post Office, and 1.4 mi (2.3 km) upstream from Lake Tahoe.

DRAINAGE AREA.--54.8 mi² (141.9 km²).

PERIOD OF RECORD.--October 1971 to September 1974 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 6,240 ft (1,902 m) from topographic map.

EXTREMES.--Current year: Maximum discharge, 1,070 ft³/s (30.3 m³/s) Nov. 12 (gage height, 5.94 ft or 1.811 m); minimum daily, 8.0 ft³/s (0.23 m³/s) Oct. 2.
Period of record: Maximum discharge, 1,070 ft³/s (30.3 m³/s) Nov. 12, 1973 (gage height, 5.94 ft or 1.811 m); minimum daily, 8.0 ft³/s (0.23 m³/s) Oct. 2, 1973.

REMARKS.--Records good except those for the winter months, which are fair. Two small dams may cause slight regulation at times. Some small diversions above station for domestic use. Records of water temperatures and sediment discharge for water year 1974 are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.6	19	73	155	93	66	166	241	457	160	43	16
2	8.0	19	78	110	93	80	172	280	470	158	39	15
3	8.2	17	81	95	92	104	158	323	490	138	39	14
4	12	16	82	88	87	110	143	327	503	128	39	14
5	8.6	15	80	82	82	108	150	341	481	118	43	13
6	9.4	58	80	77	82	98	143	386	520	96	39	12
7	12	98	82	74	83	91	140	440	514	91	36	13
8	16	100	80	72	82	86	150	520	448	92	35	13
9	13	90	77	72	80	85	150	547	420	248	32	13
10	12	232	73	72	77	85	127	564	438	477	28	20
11	12	697	70	71	75	85	126	547	442	153	27	20
12	11	875	70	68	75	96	132	545	470	120	27	15
13	12	358	73	67	71	96	129	498	465	108	26	14
14	12	203	73	110	71	105	135	461	440	99	24	13
15	13	158	71	430	67	114	148	465	406	92	25	13
16	12	136	69	444	68	117	168	392	374	88	24	12
17	12	142	71	484	70	120	182	343	336	83	23	12
18	12	132	80	391	69	115	204	305	301	79	22	12
19	11	103	77	439	71	109	172	257	256	75	26	12
20	12	90	68	265	72	109	168	232	211	70	22	12
21	13	87	59	206	66	112	174	220	201	70	20	12
22	13	82	57	179	62	115	208	230	222	62	20	12
23	27	76	56	167	60	117	232	275	227	59	22	11
24	19	70	56	141	59	121	214	330	219	55	20	11
25	19	69	53	127	58	124	195	398	200	51	19	11
26	19	68	53	118	57	127	175	479	181	54	18	10
27	19	67	74	121	57	129	167	601	162	46	16	11
28	20	67	95	108	57	138	164	630	153	44	16	11
29	20	69	332	105	-----	192	162	542	153	43	17	11
30	19	69	324	98	-----	176	172	463	157	42	16	11
31	19	-----	190	94	-----	150	-----	446	-----	41	16	-----
TOTAL	433.8	4,282	2,857	5,130	2,036	3,480	4,926	12,628	10,317	3,240	819	389
MEAN	14.0	143	92.2	165	72.7	112	164	407	344	105	26.4	13.0
MAX	27	875	332	484	93	192	232	630	520	477	43	20
MIN	8.0	15	53	67	57	66	126	220	153	41	16	10
AC-FT	860	8,490	5,670	10,180	4,040	6,900	9,770	25,050	20,460	6,430	1,620	772
CAL YR 1973	TOTAL 39,995.4	MEAN 110	MAX 875	MIN 8.0	AC-FT 79,330							
WTR YR 1974	TOTAL 50,537.8	MEAN 138	MAX 875	MIN 8.0	AC-FT 100,200							

PEAK DISCHARGE (BASE, 300 FT ³ /S)							
DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-12	1130	5.94	1,070	4-1	2100	3.56	343
12-29	1800	4.16	534	5-10	0500	4.94	640
1-15	2000	4.45	612	5-28	0700	5.29	728
1-18	2200	4.59	558	7-10	0400	5.04	665

37

LOCATION.--Lat 38°54'00", long 120°04'14", in NE¼SW¼ sec.11, T.12 N., R.17 E., El Dorado County, Eldorado National Forest, on left bank near center of lake, 200 ft (61 m) north of Cathedral Creek, 2.9 mi (4.7 km) southwest of Camp Richardson, and 3.7 mi (6.0 km) west of South Lake Tahoe Post Office.

PERIOD OF RECORD.--October 1968 to current year. Prior to October 1973, published as "near Tahoe Valley."

EXTREMES.--Current year: Maximum gage height, 5.00 ft (1.524 m) Nov. 11; minimum, 2.28 ft (0.695 m) Nov. 4.
Period of record: Maximum gage height, 5.51 ft (1.679 m) Jan. 22, 1970; minimum, 1.84 ft (0.561 m)
Nov. 10, 1971.

GAGE HEIGHT, IN FEET, AT 2400, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

CAL YR 1973	MAX 5.00	MIN 2.28
WTR YR 1974	MAX 5.00	MIN 2.28

LOCATION.--Lat 38°55'18", long 120°03'27", in NE¼NW¼ sec.2, T.12 N., R.17 E., El Dorado County, Eldorado National Forest, on left bank 0.1 mi (0.2 km) downstream from Fallen Leaf Lake outlet, and 1.4 mi (2.3 km) southwest of Camp Richardson.

EXTREMES.--Current year: Maximum discharge, 1,180 ft³/s (33.42 m³/s) Nov. 12 (gage height, 5.72 ft or 1.743 m); minimum daily, 4.9 ft³/s (0.139 m³/s) Oct. 3.
Period of record: Maximum discharge, 1,180 ft³/s (33.42 m³/s) Nov. 12, 1973 (gage height, 5.72 ft or 1.743 m); minimum daily, 0.20 ft³/s (0.006 m³/s) Oct. 4-7, 1970.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.1	11	48	68	45	36	76	67	221	33	20	8.2
2	5.0	11	50	60	42	50	79	84	221	18	12	8.0
3	4.9	11	48	54	39	59	68	106	226	15	10	7.4
4	5.1	11	44	49	37	54	60	123	234	15	10	10
5	5.1	11	41	49	35	51	56	135	228	15	11	15
6	5.3	14	39	50	32	47	51	151	235	14	11	17
7	5.3	22	36	47	31	44	48	173	237	14	10	18
8	5.3	38	34	43	29	39	47	208	220	19	9.7	19
9	5.1	48	32	40	28	37	45	233	202	139	9.5	19
10	9.5	97	31	37	27	34	42	247	201	375	8.8	19
11	13	435	32	35	26	33	40	241	175	208	7.1	18
12	12	987	32	37	26	34	39	235	127	103	6.4	19
13	12	605	33	35	25	31	39	213	143	48	6.1	19
14	12	465	32	36	24	29	39	196	157	27	6.2	19
15	12	327	31	110	23	29	41	186	164	26	6.4	19
16	11	228	30	187	24	29	43	163	166	26	6.3	19
17	11	167	32	217	22	29	47	138	162	26	6.0	19
18	11	137	30	220	22	29	52	122	159	26	6.0	19
19	11	102	29	260	27	29	55	103	153	26	6.0	19
20	11	87	29	217	27	29	57	90	141	24	5.9	19
21	11	75	30	168	28	29	59	79	132	24	6.0	19
22	11	64	30	125	27	29	62	77	108	16	6.0	18
23	11	57	29	100	25	30	72	85	75	5.7	6.0	19
24	11	54	28	86	24	31	87	105	75	10	6.0	19
25	12	50	27	73	23	33	87	136	75	15	6.0	18
26	12	47	27	64	24	34	77	176	73	17	6.3	19
27	11	43	34	58	27	38	69	229	73	22	6.1	21
28	11	41	34	53	24	45	63	266	71	26	6.1	21
29	11	39	56	50	-----	56	60	261	62	24	6.0	21
30	11	36	76	47	-----	61	59	237	55	21	6.0	21
31	11	-----	73	47	-----	64	-----	222	-----	14	6.7	-----
TOTAL	294.7	4,320	1,157	2,722	793	1,202	1,719	5,087	4,571	1,391.7	241.6	525.6
MEAN	9.51	144	37.3	87.8	28.3	38.8	57.3	164	152	44.9	7.79	17.5
MAX	13	987	76	260	45	64	87	266	237	375	20	21
MIN	4.9	11	27	35	22	29	39	67	55	5.7	5.9	7.4
AC-FT	585	8,570	2,290	5,400	1,570	2,380	3,410	10,090	9,070	2,760	479	1,040
CAL YR 1973	TOTAL	18,957.1	MEAN	51.9	MAX	987	MIN	4.7	AC-FT	37,600		
WTR YR 1974	TOTAL	24,024.6	MEAN	65.8	MAX	987	MIN	4.9	AC-FT	47,650		

10336630 EAGLE CREEK NEAR CAMP RICHARDSON, CALIF.

LOCATION.--Lat 38°57'05", long 120°06'38", in SW¼SW¼ sec.21, T.13 N., R.17 E., El Dorado County, Eldorado National Forest, on right bank at downstream edge of culvert on State Highway 89, 0.7 mi (1.3 km) northwest of Bay View Guard Station, and 4.0 mi (6.4 km) northwest of Camp Richardson.

DRAINAGE AREA.--6.38 mi² (16.5 km²).

PERIOD OF RECORD.--October 1971 to September 1974 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 6,560 ft (1,999 m) from topographic map.

EXTREMES.--Current year: Maximum discharge, 343 ft³/s (9.71 m³/s) Nov. 12 (gage height, 3.82 ft or 1.164 m); minimum daily, 0.33 ft³/s (0.009 m³/s) Oct. 3.
Period of record: Maximum discharge, 343 ft³/s (9.71 m³/s) Nov. 12, 1973 (gage height, 3.82 ft or 1.164 m); minimum daily, 0.23 ft³/s (0.007 m³/s) Sept. 25, 1972.

REMARKS.--Records good except those for July to September, which are poor. Some minor natural regulation by Eagle Lake and other small lakes in the basin. Minor diversion above station for domestic use. Records of water temperatures and sediment discharge for the water year 1974 are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FFB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.39	4.2	10	22	11	13	16	51	133	71	14	9.1
2	.37	4.0	13	17	11	15	16	64	138	64	13	15
3	.33	3.6	14	14	10	16	14	64	151	54	16	14
4	.42	2.9	12	13	9.6	17	12	66	145	50	25	13
5	.47	4.0	9.9	12	9.3	16	12	72	143	46	22	12
6	.58	22	9.3	13	8.8	12	11	86	157	42	17	12
7	1.1	117	9.1	13	8.1	9.6	11	113	149	39	14	10
8	2.2	78	8.8	12	7.8	8.6	12	126	116	45	12	9.1
9	2.9	67	8.8	10	7.8	7.6	13	138	114	330	10	8.6
10	3.1	213	8.8	9.3	7.8	7.3	12	122	130	190	9.5	7.8
11	2.9	287	9.1	8.6	7.8	7.1	12	112	135	100	9.0	6.6
12	2.7	253	9.3	8.8	7.6	7.3	14	101	142	75	8.5	6.1
13	2.7	89	10	8.3	7.8	7.3	16	87	136	64	8.0	5.5
14	2.7	56	10	16	7.6	7.6	18	86	126	57	7.7	5.2
15	2.9	36	9.3	182	7.1	10	25	84	116	51	7.4	4.6
16	2.9	28	8.6	138	7.3	12	31	63	105	47	7.0	4.6
17	2.9	27	12	94	7.6	12	36	46	95	42	6.8	4.4
18	2.7	27	11	112	7.3	11	39	34	90	39	6.6	4.0
19	2.5	23	9.6	114	9.3	10	26	27	76	36	6.4	3.8
20	2.4	19	8.6	57	8.3	11	24	24	60	33	6.2	3.4
21	2.7	18	8.3	35	7.6	12	29	29	63	30	5.9	3.3
22	3.8	16	9.1	26	7.3	13	43	48	76	28	5.7	2.7
23	9.9	15	8.8	21	6.6	14	43	77	79	26	5.5	2.4
24	10	14	8.1	18	6.1	16	31	100	72	24	5.3	2.4
25	8.3	13	7.6	17	6.1	18	24	116	64	23	5.1	2.2
26	6.9	13	7.3	15	6.6	16	19	145	59	21	4.8	2.2
27	6.4	12	9.9	14	6.6	15	17	167	52	20	4.0	2.2
28	6.1	12	10	13	6.4	15	17	167	52	18	5.0	2.2
29	5.7	12	63	12	-----	18	19	131	60	17	5.0	2.2
30	4.6	10	44	11	-----	16	27	113	67	16	5.7	2.2
31	4.2	-----	30	11	-----	15	-----	120	-----	15	7.3	-----
TOTAL	107.76	1,495.7	407.3	1,067.0	222.2	385.4	639	2,779	3,101	1,713	285.4	182.8
MEAN	3.48	49.9	13.1	34.4	7.94	12.4	21.3	89.6	103	55.3	9.21	6.09
MAX	10	287	63	182	11	18	43	167	157	330	25	15
MIN	.33	2.9	7.3	8.3	6.1	7.1	11	24	52	15	4.0	2.2
AC-FT	214	2,970	808	2,120	441	764	1,270	5,510	6,150	3,400	566	363
CAL YR 1973	TOTAL	8,732.00	MEAN	23.9	MAX	287	MIN	.27	AC-FT	17,320		
WTR YR 1974	TOTAL	12,385.56	MEAN	33.9	MAX	330	MIN	.33	AC-FT	24,570		

NOTE.--No gage-height record July 9 to Aug. 2.

10336640 MEEKS CREEK AT MEEKS BAY, CALIF.

LOCATION.--Lat 39°02'09", long 120°07'23", in NE¼NW¼ sec.29, T.14 N., R.17 E., El Dorado County, Eldorado National Forest, on left bank on upstream side of State Highway 89 culvert, 0.1 mi (0.2 km) north of Meeks Bay Fire Department.

DRAINAGE AREA.--8.08 mi² (20.93 km²).

PERIOD OF RECORD.--October 1971 to September 1974 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 6,230 ft (1,899 m) from topographic map.

EXTREMES.--Current year: Maximum discharge, 526 ft³/s (14.9 m³/s) Nov. 12 (gage height, 4.09 ft or 1.247 m); minimum daily, 0.02 ft³/s (0.001 m³/s) Oct. 1-7.
Period of record: Maximum discharge, 526 ft³/s (14.9 m³/s) Nov. 12, 1973 (gage height, 4.09 ft or 1.247 m); minimum daily, 0.02 ft³/s (0.001 m³/s) Sept. 27-30, Oct. 1-7, 1973.

REMARKS.--Records good. No regulation or diversion above station. Records of water temperatures and sediment discharge for the water year 1974 are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.02	.58	10	23	18	22	32	50	100	27	3.0	.10
2	.02	.43	16	21	17	24	32	68	106	24	2.4	.10
3	.02	.30	16	18	16	24	24	75	103	20	2.1	.05
4	.02	.20	13	16	15	22	22	74	103	18	2.7	.05
5	.02	.43	12	15	14	18	22	78	93	15	4.3	.05
6	.02	2.4	10	14	14	14	22	86	99	13	3.4	.05
7	.02	3.0	11	14	13	14	21	104	96	12	2.7	.05
8	.04	11	10	14	12	13	23	121	74	12	2.1	.05
9	.04	6.8	9.2	13	12	12	25	128	67	82	1.5	.05
10	.04	38	9.2	12	11	11	22	120	78	87	1.2	.04
11	.05	209	10	11	11	11	22	106	78	36	.96	.05
12	.05	262	11	12	10	12	25	100	83	24	.73	.05
13	.10	58	11	11	10	12	27	86	76	19	.58	.10
14	.10	37	12	12	10	13	28	83	72	16	.43	.10
15	.20	28	11	47	10	15	32	86	64	13	.43	.10
16	.05	25	9.2	116	10	16	38	74	56	12	.43	.10
17	.05	29	14	113	10	18	42	58	52	10	.30	.10
18	.10	28	17	79	10	18	48	47	51	9.2	.30	.10
19	.20	20	13	130	11	17	40	40	47	7.8	.30	.10
20	.58	14	12	67	12	17	36	36	39	8.5	.20	.10
21	.58	14	12	43	10	18	38	36	36	11	.20	.10
22	.73	13	14	35	10	20	47	46	40	8.5	.20	.10
23	1.5	12	12	30	8.5	20	55	67	40	5.3	.20	.10
24	1.5	12	11	27	8.5	22	45	86	35	4.3	.20	.10
25	1.2	10	11	24	8.5	24	40	97	32	3.8	.20	.10
26	.96	12	12	24	8.5	24	32	117	29	3.4	.10	.05
27	.96	11	17	21	9.2	24	29	137	26	2.7	.10	.05
28	.73	10	20	20	8.5	25	29	132	25	2.7	.10	.05
29	.73	11	49	19	-----	36	31	107	27	2.7	.10	.05
30	.73	12	62	19	-----	37	35	86	28	3.8	.10	.05
31	.58	-----	32	18	-----	28	-----	90	-----	3.4	.10	-----
TOTAL	11.94	890.14	488.6	1,038	317.7	601	964	2,621	1,855	517.1	31.66	2.24
MEAN	.39	29.7	15.8	33.5	11.3	19.4	32.1	84.5	61.8	16.7	1.02	.075
MAX	1.5	262	62	130	18	37	55	137	106	87	4.3	.10
MIN	.02	.20	9.2	11	8.5	11	21	36	25	2.7	.10	.04
AC-FT	24	1,770	969	2,060	630	1,190	1,910	5,200	3,680	1,030	63	4.4

CAL YR 1973 TOTAL 6,716.29 MEAN 18.4 MAX 262 MIN .02 AC-FT 13,320
WTR YR 1974 TOTAL 9,338.38 MEAN 25.6 MAX 262 MIN .02 AC-FT 18,520

PEAK DISCHARGE (BASE, 30 FT ³ /S)							
DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-12	0700	4.09	526	5-10	0100	2.79	158
12-30	1300	2.23	72	5-27	0200	2.90	180
1-16	1200	2.65	132	7-9	2230	2.79	158
1-19	0400	2.76	152				

10336650 QUAIL LAKE CREEK NEAR HOMEWOOD, CALIF.

LOCATION.--Lat 39°04'34", long 120°09'06", in SW¼NW¼ sec.7, T.14 N., R.17 E., Placer County, Tahoe National Forest, on left bank 93 ft (28 m) upstream from Highway 89, and 0.5 mi (0.80 km) southeast of Homewood.

DRAINAGE AREA.--0.95 mi² (2.46 km²).

PERIOD OF RECORD.--October 1971 to September 1974 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 6,330 ft (1,929 m) from topographic map.

EXTREMES.--Current year: Maximum discharge, 18 ft³/s (0.51 m³/s) May 7 (gage height, 2.35 ft or 0.716 m); minimum daily, 0.24 ft³/s (0.007 m³/s) Sept. 19, 20.

Period of record: Maximum discharge, 24 ft³/s (0.68 m³/s) May 14, 1973 (gage height, 2.42 ft or 0.738 m); minimum daily, 0.17 ft³/s (0.005 m³/s) Aug. 9-15, 23-28, 1972.

REMARKS.--Records good. Slight regulation at times from Quail Lake. No known diversions above station. Records of water temperatures and sediment discharge for the water year 1974 are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.32	.36	1.0	3.2	1.8	1.0	3.4	6.1	12	2.7	.67	.32
2	.32	.42	1.2	2.6	1.6	1.8	3.2	7.7	12	2.6	.60	.32
3	.36	.36	1.0	2.1	1.6	2.0	2.6	9.4	13	2.2	.60	.32
4	.36	.36	.95	2.0	1.4	2.0	2.2	10	12	1.8	.67	.32
5	.36	.42	.76	1.6	1.4	1.6	2.1	11	12	1.6	.85	.32
6	.36	1.2	.76	1.6	1.2	1.4	2.1	12	8.1	1.4	.67	.32
7	.54	2.1	.76	1.5	1.2	1.2	2.1	14	2.8	1.4	.60	.32
8	.54	.95	.67	1.4	1.0	1.2	2.2	16	3.0	1.8	.54	.28
9	.48	.85	.67	1.2	1.0	1.0	2.2	16	6.1	9.3	.48	.28
10	.42	1.4	.67	1.0	.95	1.0	2.1	15	8.2	7.3	.48	.28
11	.42	4.0	.67	.95	.95	.95	2.1	15	9.4	4.0	.48	.28
12	.42	11	.67	.95	.95	1.0	2.2	14	11	2.4	.42	.28
13	.36	7.5	.67	.95	.95	1.0	2.4	13	9.9	1.2	.36	.28
14	.36	4.8	.67	1.3	.85	1.0	2.6	12	9.4	.76	.36	.28
15	.36	2.8	.67	4.6	.85	1.4	2.8	12	9.9	.48	.36	.28
16	.36	2.7	.60	6.1	.85	1.6	3.6	11	8.7	.28	.36	.28
17	.36	3.0	1.0	9.7	.85	1.6	4.2	9.9	7.7	.54	.36	.28
18	.36	2.8	1.0	9.2	.76	1.6	4.6	8.0	7.0	1.4	.36	.32
19	.36	2.1	.85	12	.85	1.6	4.0	6.5	6.1	1.2	.32	.24
20	.42	1.8	.76	8.2	.94	1.6	4.2	5.6	5.2	1.2	.32	.24
21	.42	1.6	.76	5.4	1.0	1.6	4.4	6.1	4.8	1.0	.32	.32
22	.48	1.4	.76	4.0	.90	1.8	5.2	8.2	4.6	.95	.32	.32
23	.67	1.2	.76	3.4	.85	2.0	5.9	9.4	4.6	.85	.32	.32
24	.54	1.2	.76	3.0	.76	2.1	5.2	10	4.2	.76	.32	.48
25	.48	1.2	.67	2.7	.67	2.2	4.2	12	3.8	.76	.32	.54
26	.42	.95	.67	2.6	.60	2.4	3.8	15	3.4	.76	.32	.28
27	.42	.85	1.0	2.2	.67	2.7	3.2	15	3.2	.76	.32	.48
28	.42	.85	1.8	2.1	.67	2.7	3.4	15	3.0	.76	.32	.54
29	.42	.85	10	2.0	-----	4.2	3.8	14	2.8	.76	.32	.67
30	.36	.76	6.5	1.8	-----	3.8	4.6	12	2.8	.67	.32	.67
31	.36	-----	4.0	1.6	-----	3.2	-----	12	-----	.67	.32	-----
TOTAL	12.83	61.78	43.68	102.95	28.07	56.25	100.6	352.9	210.7	54.26	13.38	10.46
MEAN	.41	2.06	1.41	3.32	1.00	1.81	3.35	11.4	7.02	1.75	.43	.35
MAX	.67	11	10	12	1.8	4.2	5.9	16	13	9.3	.85	.67
MIN	.32	.36	.60	.95	.60	.95	2.1	5.6	2.8	.28	.32	.24
AC-FT	25	123	87	204	56	112	200	700	418	108	27	21
CAL YR 1973	TOTAL	822.97	MEAN	2.25	MAX	22	MIN	.26	AC-FT	1,630		
WTR YR 1974	TOTAL	1,047.86	MEAN	2.87	MAX	16	MIN	.24	AC-FT	2,080		

PYRAMID AND WINNEMUCCA LAKES BASIN

10336660 BLACKWOOD CREEK NEAR TAHOE CITY, CALIF.

LOCATION.--Lat 39°06'26", long 120°09'40", in NE¼NW¼ sec.36, T.15 N., R.16 E., Placer County, on right bank 300 ft (91 m) upstream from bridge on State Highway 89, 1,000 ft (305 m) upstream from Lake Tahoe, and 4.6 mi (7.4 km) south of Tahoe City.

DRAINAGE AREA.--11.2 mi² (29.0 km²).

PERIOD OF RECORD.--October 1960 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,240 ft (1,902 m) from topographic map. Oct. 1, 1964, to Aug. 27, 1970, at site 400 ft (122 m) downstream at datum 12 ft (3.658 m) lower. Prior to Oct. 1, 1964, at site 400 ft (122 m) downstream at datum 10.25 ft (3.124 m) lower.

AVERAGE DISCHARGE.--14 years, 38.9 ft³/s (1.102 m³/s), 28,180 acre-ft/yr (34.7 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 704 ft³/s (19.9 m³/s) Nov. 12 (gage height, 3.64 ft or 1.109 m); minimum daily, 2.0 ft³/s (0.057 m³/s) Oct. 1.
Period of record: Maximum discharge, 2,100 ft³/s (59.5 m³/s) Dec. 22 or 24, 1964, from indirect measurement of peak flow; maximum gage height, 9.90 ft (3.018 m) Dec. 22, 1964; minimum discharge, 0.30 ft³/s (0.008 m³/s) Sept. 19, 1968.

REMARKS.--Records good except those for winter months, which are fair. No known diversion or regulation. Records of sediment discharge for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.0	4.1	19	35	35	25	40	112	197	57	11	3.8
2	2.1	4.1	22	31	32	30	37	130	201	50	10	3.8
3	2.1	3.9	18	30	31	29	34	140	232	46	11	3.9
4	2.1	3.5	17	29	30	26	33	145	216	43	18	3.6
5	2.3	8.5	17	28	30	24	34	155	216	40	18	3.5
6	2.3	10	16	27	28	23	33	174	216	36	12	3.4
7	2.8	72	16	25	28	23	33	217	188	33	10	3.4
8	2.8	34	16	23	26	21	35	251	152	50	9.6	3.2
9	2.7	28	16	22	26	20	37	259	152	302	8.7	3.2
10	2.7	109	15	22	25	20	33	244	167	124	7.8	3.1
11	2.7	311	15	21	24	20	34	229	180	78	7.2	3.1
12	2.5	318	15	20	23	20	39	213	173	62	6.7	3.1
13	2.6	99	16	20	22	19	42	188	171	55	6.3	3.2
14	2.7	69	16	31	21	22	45	186	169	48	6.1	3.2
15	2.7	57	14	169	20	25	56	180	144	44	6.0	3.2
16	2.7	55	13	137	19	27	66	149	126	40	5.7	3.1
17	2.7	56	20	208	19	28	75	119	117	37	5.7	3.0
18	2.8	41	18	186	19	28	81	98	109	34	5.4	2.9
19	2.9	33	17	188	19	28	66	86	94	30	5.1	2.9
20	3.3	31	16	113	20	30	68	79	82	28	5.4	2.7
21	3.0	28	16	86	18	32	77	89	88	26	5.3	2.7
22	4.0	25	15	69	17	34	95	113	92	25	5.0	2.6
23	5.6	22	14	60	17	36	97	139	88	22	4.8	2.5
24	4.3	22	14	55	16	41	74	169	76	20	4.6	2.5
25	4.6	21	14	50	16	43	61	204	68	19	4.5	2.7
26	4.8	21	14	46	16	41	55	255	61	17	4.3	2.7
27	4.9	20	16	43	16	42	51	268	56	16	4.1	2.7
28	5.0	20	19	41	15	37	54	261	57	16	3.9	2.6
29	4.8	20	118	39	-----	57	62	225	61	14	3.8	2.6
30	4.2	20	60	38	-----	55	79	184	62	13	3.7	2.6
31	4.1	-----	45	37	-----	42	-----	184	-----	12	3.6	-----
TOTAL	100.8	1,566.1	677	1,929	628	946	1,626	5,445	4,011	1,437	223.3	91.5
MEAN	3.25	52.2	21.8	62.2	22.4	30.6	54.2	176	134	46.4	7.20	3.05
MAX	5.6	318	118	208	35	57	97	268	232	302	18	3.9
MIN	2.0	3.5	13	20	15	19	33	79	56	12	3.6	2.5
AC-FT	200	3,110	1,340	3,830	1,250	1,880	3,230	10,800	7,960	2,850	443	181

CAL YR 1973 TOTAL 13,718.5 MEAN 37.6 MAX 318 MIN 1.8 AC-FT 27,210
WTR YR 1974 TOTAL 18,682.7 MEAN 51.2 MAX 318 MIN 2.0 AC-FT 37,060

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-12	0500	3.64	704	5-9	2000	2.46	341
1-17	0400	2.29	293	5-28	2000	2.62	385
1-18	2130	2.28	290	7-9	1630	3.02	517

PYRAMID AND WINNEMUCCA LAKES BASIN

43

10336670 WARD CREEK NEAR TAHOE PINES, CALIF.

LOCATION.--Lat 39°08'09", long 120°13'11", in SE¼NW¼ sec.21, T.15 N., R.16 E., Placer County, Tahoe National Forest, on right bank 0.5 mi (0.8 km) upstream from confluence with tributary, 3.9 mi (6.3 km) northwest of Tahoe Pines, and 4.8 mi (7.7 km) southwest of Tahoe City.

DRAINAGE AREA.--2.03 mi² (5.26 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 6,740 ft (2,054 m) from topographic map.

EXTREMES.--Current year: Maximum discharge, 199 ft³/s (5.63 m³/s) Nov. 12 (gage height, 3.12 ft or 0.951 m); maximum gage height, 3.34 ft (1.018 m) Mar. 1 (backwater from ice); minimum daily discharge, 0.34 ft³/s (0.01 m³/s) Oct. 1-4.

Period of record: Maximum discharge, 199 ft³/s (5.63 m³/s) Nov. 12, 1973 (gage height, 3.12 ft or 0.951 m); maximum gage height, 4.12 ft (1.256 m) Jan. 12, 1973 (backwater from ice); minimum daily discharge, 0.34 ft³/s (0.01 m³/s) Sept. 7-19, 27-30, Oct. 1-4, 1973.

REMARKS.--Records good except those for the winter period, which are fair. No regulation or diversion above station. Records of water temperatures and sediment discharge for the current year are published in Part 2 of this report.

COOPERATION.--Selected sediment samples and temperature observations furnished by University of California at Davis.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.34	.93	3.15	4.8	5.1	3.1	3.8	14	55	23	3.8	.78
2	.34	.81	3.3	4.5	4.5	3.4	3.6	17	56	21	3.5	.78
3	.34	.81	3.3	4.2	4.2	3.5	3.3	18	56	19	3.3	.78
4	.34	.81	3.3	4.0	4.2	3.2	3.3	18	49	17	6.7	.71
5	.38	.93	3.3	4.0	4.0	3.1	3.5	20	53	16	3.8	.71
6	.38	3.8	3.3	3.8	4.0	2.9	3.5	24	54	14	2.9	.71
7	.75	2.2	3.3	3.5	3.8	2.9	3.5	32	50	14	2.6	.71
8	.75	4.3	3.1	3.3	3.8	2.8	4.0	37	43	24	2.4	.65
9	.75	8.5	3.1	3.3	3.8	2.6	4.2	38	45	89	2.2	.65
10	.58	2.9	3.1	3.1	3.8	2.8	3.8	36	52	35	2.0	.65
11	.58	8.9	3.1	3.1	3.8	2.6	4.0	35	58	22	1.9	.65
12	.58	61	3.0	2.9	3.8	2.6	4.5	33	58	18	1.7	.65
13	.63	15	3.0	2.9	3.5	2.4	5.1	31	57	16	1.6	.65
14	.58	11	2.9	5.3	3.5	2.6	6.0	32	56	14	1.6	.59
15	.53	9.8	2.8	2.4	3.3	3.1	7.8	30	48	12	1.5	.59
16	.53	8.2	2.8	15	3.3	3.3	8.2	25	43	11	1.4	.54
17	.53	7.8	3.8	22	3.3	3.3	9.4	20	40	10	1.3	.54
18	.48	7.0	3.3	21	3.2	3.1	9.0	16	37	9.4	1.3	.54
19	.53	5.7	3.1	20	3.1	2.9	6.6	14	32	9.0	1.2	.54
20	.81	5.4	2.9	14	3.1	3.1	7.0	13	29	8.2	1.2	.49
21	.63	4.8	3.1	11	2.9	3.8	8.6	17	29	7.8	1.1	.49
22	1.4	4.5	2.8	9.0	2.9	4.2	12	23	30	7.0	1.1	.49
23	1.4	4.5	2.8	8.2	2.8	4.5	11	29	29	6.6	1.0	.49
24	2.3	4.2	2.6	7.8	2.8	5.1	7.8	36	27	6.0	1.0	.49
25	1.2	4.1	2.9	7.4	2.9	5.1	6.6	42	25	5.7	.92	.49
26	1.2	4.0	2.8	6.3	2.9	4.0	6.0	57	23	5.4	.92	.49
27	1.2	3.8	2.8	6.0	2.9	4.0	5.7	63	20	5.1	.92	.49
28	1.0	4.0	3.1	5.7	2.9	5.1	6.0	66	22	4.5	.92	.49
29	.87	4.0	2.9	5.7	-----	4.8	6.6	52	24	4.2	.85	.49
30	.87	3.5	9.0	5.4	-----	6.3	9.8	48	24	4.0	.85	.49
31	.93	-----	6.0	5.1	-----	4.8	-----	50	-----	3.8	.85	-----
TOTAL	23.73	333.19	130.2	246.3	98.1	111.2	184.2	986	1,224	461.7	58.33	17.81
MEAN	.77	11.1	4.20	7.95	3.50	3.59	6.14	31.8	40.8	14.9	1.88	.59
MAX	2.3	.89	.29	.24	5.1	6.3	12	66	58	.89	6.7	.78
MIN	.34	.81	2.6	2.9	2.8	2.4	3.3	13	20	3.8	.85	.49
AC-FT	47	661	258	489	195	221	365	1,960	2,430	916	116	35

CAL YR 1973 TOTAL 3,074.65 MEAN 8.42 MAX 89 MTN .34 AC-FT 6,100
WTR YR 1974 TOTAL 3,874.76 MEAN 10.6 MAX 89 MTN .34 AC-FT 7,690

PEAK DISCHARGE (BASE, 20 FT³/S)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-12	0230	3.12	199	1-18	2000	2.40	34
12-29	1000	2.76	82	5-9	1830	2.58	54
1-15	0600	2.36	31	5-27	1830	2.83	95
1-17	0200	2.38	32	7-9	1500	3.09	162

PYRAMID AND WINNEMUCCA LAKES BASIN

10336672 WARD CREEK TRIBUTARY NEAR TAHOE PINES, CALIF.

LOCATION.--Lat 39°08'29", long 120°13'06", in SE¼SW¼ sec.16, T.15 N., R.16 E., Placer County, on left bank 0.3 mi (0.5 km) upstream from confluence with Ward Creek, 4.0 mi (6.4 km) northwest of Tahoe Pines, and 4.5 mi (7.2 km) southwest of Tahoe City.

DRAINAGE AREA.--0.91 mi² (2.4 km²).

PERIOD OF RECORD.--October 1972 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, 116 ft³/s (3.29 m³/s) Nov. 12 (gage height, 3.30 ft or 1.006 m), from rating curve extended above 50 ft³/s (1.416 m³/s); no flow many days in October and September.
Period of record: Maximum discharge, 116 ft³/s (3.29 m³/s) Nov. 12, 1973 (gage height, 3.30 ft or 1.006 m), from rating curve extended above 50 ft³/s (1.416 m³/s); no flow at times each year.

REMARKS.--Records good. No regulation or diversion above station. Records of water temperatures and sediment discharge for the current year are published in Part 2 of this report.

COOPERATION.--Ninety-seven sediment samples and 68 water temperature readings were furnished by University of California at Davis.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	.15	2.3	2.9	2.0	1.4	2.0	10	23	8.6	.50	.01
2	0	.11	2.1	2.6	1.8	1.5	1.8	12	25	7.3	.33	.01
3	.01	.05	1.8	2.4	1.8	1.4	1.8	14	25	6.3	.33	.01
4	.01	.02	1.6	2.3	1.7	1.3	1.8	14	24	5.9	1.2	.01
5	.02	.01	1.6	2.1	1.7	1.2	1.9	14	24	5.3	.91	.01
6	0	2.1	1.6	2.0	1.6	1.2	1.8	16	24	4.9	.56	.01
7	.01	12	1.6	1.9	1.5	1.1	1.8	22	20	4.4	.44	.01
8	.01	4.5	1.5	1.8	1.5	1.1	1.9	24	16	7.9	.38	0
9	0	6.0	1.5	1.8	1.4	1.0	2.0	25	18	38	.33	0
10	0	19	1.5	1.7	1.4	1.0	1.9	23	20	17	.28	0
11	0	63	1.5	1.7	1.3	1.0	2.0	22	22	9.4	.23	0
12	0	38	1.5	1.6	1.3	.98	2.2	19	23	7.3	.19	0
13	0	9.4	1.5	1.6	1.2	.98	2.5	16	22	6.1	.19	0
14	0	6.3	1.5	2.6	1.2	1.1	2.6	18	23	5.1	.19	0
15	0	5.3	1.5	12	1.2	1.3	2.4	16	18	4.5	.15	0
16	0	4.4	1.5	7.6	1.1	1.5	4.7	13	16	3.9	.15	0
17	0	4.0	1.9	8.8	1.1	1.5	5.7	10	15	3.6	.11	0
18	0	3.8	1.6	9.1	1.1	1.5	6.3	8.0	14	3.2	.11	0
19	0	3.4	1.5	9.4	1.1	1.5	4.7	6.6	11	2.5	.11	0
20	0	3.3	1.4	5.9	1.1	1.5	4.4	5.9	10	2.6	.11	0
21	0	3.0	1.4	4.5	1.0	1.8	4.7	7.3	11	2.4	.11	0
22	.03	2.7	1.3	3.9	1.0	2.0	7.0	12	12	2.0	.08	0
23	.08	2.6	1.2	3.4	1.0	2.2	7.8	16	11	1.8	.08	0
24	.01	2.4	1.2	3.0	1.0	2.6	5.5	20	10	1.7	.05	0
25	.03	2.3	1.2	2.9	1.0	3.2	4.4	23	8.8	1.5	.05	0
26	.05	2.1	1.2	2.6	1.0	2.7	3.6	29	7.6	1.2	.05	0
27	.08	2.0	1.2	2.5	.98	2.5	3.4	33	7.0	1.1	.03	0
28	.15	2.0	1.6	2.3	1.0	2.3	3.6	30	7.8	1.0	.03	0
29	.05	2.0	8.9	2.3	-----	2.5	3.9	23	8.8	.77	.02	0
30	.03	2.0	4.4	2.2	-----	2.4	5.5	20	8.6	.70	.02	0
31	.03	-----	3.3	2.0	-----	2.2	-----	20	-----	.66	.02	-----
TOTAL	.60	207.94	59.4	113.4	36.08	51.46	105.6	541.8	485.6	169.03	7.34	.07
MEAN	.019	6.93	1.92	3.66	1.29	1.66	3.52	17.5	16.2	5.45	.24	.002
MAX	.15	63	8.9	12	2.0	3.2	7.8	33	25	38	1.2	.01
MIN	0	.01	1.2	1.6	.98	.98	1.8	5.9	7.0	.66	.02	0
AC-FT	1.2	412	118	225	72	102	209	1,070	963	335	15	.1

CAL YR 1973 TOTAL 1,365.27 MEAN 3.74 MAX 63 MIN 0 AC-FT 2,710
WTR YR 1974 TOTAL 1,778.32 MEAN 4.87 MAX 63 MIN 0 AC-FT 3,530

PEAK DISCHARGE (BASE, 10 FT ³ /S)							
DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-12	0200	3.30	116	1-18	1900	2.33	16
12-29	1200	2.32	15	5-9	1800	2.62	36
1-15	1400	2.28	14	5-27	1800	2.76	47
1-16	0300	2.24	14	7-9	1530	2.95	66

1033676 WARD CREEK AT STATE HIGHWAY 89, NEAR TAHOE PINES, CALIF.

LOCATION.--Lat 39°07'56", long 120°09'24", in NW¼SE¼ sec.24, T.15 N., R.16 E., Placer County, Tahoe National Forest, on right bank 165 ft (50 m) downstream from State Highway 89 bridge, 2.1 mi (3.4 km) north of Tahoe Pines, and 2.6 mi (4.2 km) southwest of Tahoe City.

DRAINAGE AREA.--9.70 mi² (25.1 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 6,230 ft (1,899 m) from topographic map.

EXTREMES.--Current year: Maximum discharge, 800 ft³/s (22.7 m³/s) Nov. 12 (gage height, 6.65 ft or 2.027 m), from rating extended above 310 ft³/s (8.78 m³/s); minimum daily, 1.4 ft³/s (0.040 m³/s) Oct. 1, 2.
Period of record: Maximum discharge, 800 ft³/s (22.7 m³/s) Nov. 12, 1973 (gage height, 6.65 ft or 2.027 m), from rating extended above 310 ft³/s (8.78 m³/s); maximum gage height, 7.18 ft (2.188 m) Dec. 17, 1972 (backwater from ice); minimum daily discharge, 1.0 ft³/s (0.028 m³/s) Aug. 19-21, Sept. 4-19, 1973.

REMARKS.--Records good. No regulation or diversion above station. Records of water temperatures and sediment discharge for the current year are published in Part 2 of this report.

COOPERATION.--Selected sediment samples and temperature observations furnished by University of California at Davis.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.4	2.1	18	30	24	24	25	71	162	44	8.9	2.4
2	1.4	2.1	20	29	23	26	25	87	180	40	8.3	2.4
3	1.6	1.9	16	28	24	24	22	95	186	35	7.6	2.4
4	1.6	1.8	14	27	22	22	22	101	165	33	11	2.2
5	1.6	2.5	14	26	20	20	22	109	165	30	11	2.2
6	1.6	8.8	14	24	20	19	22	123	162	27	8.3	2.2
7	2.5	37	14	20	19	18	22	151	149	25	7.3	2.2
8	3.1	16	14	18	19	18	24	165	125	43	6.8	2.1
9	2.6	16	14	18	18	17	25	172	123	281	6.0	2.1
10	2.5	59	14	17	18	17	23	165	133	112	5.8	2.1
11	2.4	229	14	17	18	17	24	160	143	60	5.6	2.1
12	2.2	245	15	17	18	17	25	153	141	45	5.1	2.1
13	2.1	53	15	17	17	16	27	139	139	38	4.9	2.1
14	2.1	39	14	23	17	17	29	139	135	30	4.7	2.1
15	2.1	31	14	108	16	18	35	133	119	26	4.7	1.9
16	2.2	27	13	81	16	20	41	109	103	22	4.5	1.9
17	2.2	26	18	126	16	20	45	89	93	22	4.1	1.9
18	2.2	25	16	119	16	20	49	69	89	22	3.8	1.9
19	2.2	21	14	121	16	20	41	60	75	19	3.6	1.9
20	2.6	20	14	75	17	20	41	55	64	18	3.6	1.9
21	2.8	20	14	57	16	22	45	66	63	16	3.6	1.8
22	3.2	18	13	47	15	23	57	89	65	16	3.6	1.8
23	4.6	17	13	40	14	25	59	113	61	15	3.3	1.8
24	2.8	18	13	36	14	28	46	133	57	14	3.0	1.8
25	2.9	17	13	33	14	30	39	153	50	13	2.8	1.8
26	3.0	18	13	31	14	27	35	198	45	13	2.8	1.8
27	2.9	16	13	29	14	26	32	217	41	12	2.6	1.7
28	2.6	16	16	27	14	24	34	217	41	11	2.6	1.7
29	2.2	17	104	26	-----	33	39	165	44	10	2.6	1.7
30	2.1	16	51	25	-----	33	50	149	45	9.2	2.5	1.8
31	2.1	-----	35	24	-----	27	-----	151	-----	8.9	2.5	-----
TOTAL	73.2	1,036.2	597	1,316	489	688	1,025	3,996	3,163	1,110.1	157.5	59.8
MEAN	2.36	34.5	19.3	42.5	17.5	22.2	34.2	129	105	35.8	5.08	1.99
MAX	4.6	245	104	126	24	33	59	217	186	281	11	2.4
MIN	1.4	1.8	13	17	14	16	22	55	41	8.9	2.5	1.7
AC-FT	145	2,060	1,180	2,610	970	1,360	2,030	7,930	6,270	2,200	312	119

CAL YR 1973 TOTAL 9,846.2 MEAN 27.0 MAX 245 MIN 1.0 AC-FT 19,530
WTR YR 1974 TOTAL 13,710.8 MEAN 37.6 MAX 281 MIN 1.4 AC-FT 27,200

PEAK DISCHARGE (BASE, 100 FT ³ /S)							
DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-12	0330	6.65	800	1-18	2000	5.52	186
12-29	1200	5.54	192	5-9	1800	5.71	249
1-15	0600	5.32	139	5-27	2000	5.87	313
1-17	0400	5.44	165	7-9	1600	6.30	540

10336684 DOLLAR CREEK NEAR TAHOE CITY, CALIF.

LOCATION.--Lat 39°11'55", long 120°05'50", in SE¼SW¼ sec.28, T.16 N., R.17 E., Placer County, on right bank 30 ft (9 m) upstream from culvert on State Highway 28, 1,000 ft (300 m) upstream from Lake Tahoe, and 2.8 mi (4.5 km) northeast of Tahoe City.

DRAINAGE AREA.--1.07 mi² (2.77 km²).

PERIOD OF RECORD.--June 1972 to September 1974 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 6,310 ft (1,923 m) from topographic map.

EXTREMES.--Current year: Maximum discharge, 9.1 ft³/s (0.26 m³/s) Apr. 17 (gage height, 1.87 ft or 0.570 m); minimum daily, 0.03 ft³/s (0.85 m³/s) Aug. 8-10, 15, 20, 22-24, 27-31.

Period of record: Maximum discharge, 32 ft³/s (0.91 m³/s) Apr. 27, 1973 (gage height, 2.02 ft or 0.616 m), from rating curve extended above 10 ft³/s (0.28 m³/s); no flow Aug. 1, 2, 19-22, 1973.

REMARKS.--Records good. Regulation and diversion for local water supply at Dollar Reservoir and return flow from a storage tank just upstream from the station. Records of water temperatures and sediment discharge for the water year 1974 are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.09	.20	.35	.80	.85	1.2	3.6	5.4	.60	.07	.05	.05
2	.08	.24	.32	.52	.75	1.6	3.5	5.9	.65	.06	.04	.05
3	.07	.24	.28	.48	.75	1.3	3.0	5.7	.48	.05	.08	.04
4	.06	.20	.28	.44	.75	1.1	2.7	5.4	.40	.06	.15	.05
5	.08	.17	.28	.44	.70	1.1	2.8	5.0	.36	.05	.09	.05
6	.07	.44	.28	.40	.65	1.1	3.0	4.8	.32	.10	.07	.11
7	.10	.52	.28	.36	.60	1.1	3.2	5.0	.32	.11	.05	.13
8	.12	.36	.28	.36	.56	1.1	3.5	5.0	.36	.15	.03	.17
9	.12	.32	.28	.40	.56	1.0	3.9	4.4	.40	.60	.03	.13
10	.13	.40	.28	.40	.60	.95	3.4	3.8	.20	.48	.03	.12
11	.15	.94	.32	.32	.60	.95	3.6	3.6	.24	.20	.09	.12
12	.15	1.7	.28	.32	.60	.95	4.1	3.4	.24	.12	.06	.13
13	.15	.80	.32	.32	.56	.95	4.2	2.7	.17	.10	.04	.13
14	.15	.60	.24	.42	.56	1.2	4.4	2.4	.17	.13	.04	.13
15	.12	.48	.24	1.8	.52	1.6	5.4	2.4	.36	.09	.03	.15
16	.11	.52	.24	2.4	.52	2.1	6.7	2.0	.40	.08	.04	.12
17	.11	.65	.48	4.1	.48	2.5	7.5	1.8	.28	.09	.05	.10
18	.11	.65	.40	4.4	.48	2.4	7.9	1.6	.24	.08	.08	.11
19	.11	.44	.32	5.7	.52	2.4	6.4	1.4	.28	.07	.05	.12
20	.13	.40	.28	3.8	.52	2.5	6.2	1.3	.24	.10	.03	.11
21	.13	.40	.28	2.4	.48	3.0	6.2	1.2	.20	.12	.04	.11
22	.20	.36	.28	1.8	.48	3.2	7.5	1.1	.24	.08	.03	.12
23	.44	.20	.24	1.5	.48	3.6	7.5	1.0	.28	.06	.03	.08
24	.40	.20	.20	1.3	.48	3.9	5.9	.95	.12	.06	.03	.05
25	.40	.28	.20	1.2	.52	4.1	4.6	1.0	.11	.05	.08	.08
26	.28	.28	.20	1.1	.56	3.9	3.9	1.0	.11	.05	.06	.10
27	.20	.32	.24	1.0	.56	3.9	3.5	.90	.09	.06	.03	.11
28	.15	.32	.28	.95	.56	3.5	3.6	.90	.08	.10	.03	.10
29	.17	.36	2.0	.95	-----	4.2	3.9	.80	.09	.07	.03	.11
30	.17	.36	1.6	.90	-----	5.0	4.8	.75	.11	.04	.03	.08
31	.20	-----	1.0	.85	-----	3.8	-----	.63	-----	.05	.03	-----
TOTAL	4.95	13.35	12.55	42.13	16.25	71.20	140.4	83.23	8.14	3.53	1.55	3.06
MEAN	.16	.45	.40	1.36	.58	2.30	4.68	2.68	.27	.11	.050	.10
MAX	.44	1.7	2.0	5.7	.85	5.0	7.9	5.9	.65	.60	.15	.17
MIN	.06	.17	.20	.32	.48	.95	2.7	.63	.08	.04	.03	.04
AC-FT	9.8	26	25	84	32	141	278	165	16	7.0	3.1	6.1

CAL YR 1973 TOTAL 400.81 MEAN 1.10 MAX 20 MIN 0 AC-FT 795
WTR YR 1974 TOTAL 400.34 MEAN 1.10 MAX 7.9 MIN .03 AC-FT 794

PEAK DISCHARGE (BASE, 5 FT³/S).--Jan. 18 (2200) 7.1 ft³/s (1.85 ft); Apr. 17 (2000) 9.1 ft³/s (1.87 ft).

10336710 MARLETTE LAKE NEAR CARSON CITY, NEV.

LOCATION.--Lat 39°10'22", long 119°54'15", in SW¼SE¼ sec.12, T.15 N., R.18 E., Washoe County, on west shore about 1,000 ft (305 m) upstream from left side of dam, and 7.5 mi (12.1 km) west of Carson City.

DRAINAGE AREA.--2.91 mi² (7.54 km²).

PERIOD OF RECORD.--November 1973 to September 1974.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (spillway elevation furnished in written communication from Walter Reid, 1971).

EXTREMES.--Maximum contents observed during period, 11,710 acre-ft (14.4 hm³) on many days May to August (elevation, 7,837.8 ft or 2,388.96 m); minimum observed, 11,180 acre-ft (13.8 hm³) Nov. 11 (elevation, 7,836.4 ft or 2,388.53 m).

REMARKS.--Lake is formed by earthfill dam across the outlet of a small natural lake (at one time called Goodwin Lake) on Marlette Creek, built in 1873 to provide water for fluming lumber from Spooner Summit to Carson City. The dam was built higher in 1876 and used to divert water by flume and siphon to Virginia City, until the flume was abandoned prior to 1963. The dam was raised to its present elevation in 1959. Present capacity, 11,780 acre-ft (14.5 hm³) at spillway elevation 7,838.0 ft (2,389.02 m). Figures given herein represent total contents. Stored water is used for spawning fish for Pyramid and Walker Lakes and in dry years is pumped over the mountain to the Hobart system for municipal and domestic use outside the basin in Virginia City and Carson City. Lake freezes over in winter.

AREA TABLE (ELEVATION, IN FEET, AND AREA IN ACRES)^{1/}

7,831	355	7,833	362	7,835	370	7,837	377
7,832	358	7,834	366	7,836	374	7,838	381

CAPACITY TABLE (ELEVATION, IN FEET, AND CONTENTS, IN ACRE-FEET)^{1/}

7,831	9,200	7,833	9,930	7,835	10,680	7,837	11,410
7,832	9,570	7,834	10,300	7,836	11,030	7,838	11,780

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		--		--	--	11,410	11,450	11,450	11,710	--	11,710	11,630
2		--		--	--	--	11,450	11,450	11,670	--	11,710	11,630
3		--		--	11,410	--	11,450	11,450	11,670	--	11,710	11,630
4		--		--	11,410	--	11,450	11,450	11,670	--	11,710	11,630
5		--		--	11,410	--	11,450	11,450	11,670	--	11,710	11,630
6		--		--	11,410	--	11,450	11,450	--	--	11,710	11,630
7		--		--	11,410	--	11,450	11,480	--	--	11,710	11,630
8		--		--	11,410	--	11,450	11,480	--	--	11,710	11,630
9		--		--	11,410	--	11,450	11,480	--	--	11,710	11,630
10		--		--	11,410	--	11,450	11,520	--	--	11,710	11,630
11	11,180			11,370	11,410	--	11,450	11,520	--	11,710	11,710	11,590
12	--			--	11,410	--	11,450	11,550	--	11,710	11,710	11,590
13	--			--	11,410	--	11,450	11,590	--	11,710	11,710	11,590
14	--			--	11,410	11,450	11,450	11,590	--	11,710	11,710	11,590
15	--			--	11,410	11,450	11,450	11,630	--	11,710	11,670	11,590
16	--			--	11,410	11,450	11,450	11,630	--	11,710	11,670	11,590
17	--			--	11,410	11,450	11,450	11,630	--	11,710	11,670	11,590
18	--			--	11,410	11,450	11,450	11,630	--	11,710	11,670	11,550
19	--			--	11,410	11,450	11,450	11,630	--	11,710	11,670	11,550
20	--			--	11,410	11,450	11,450	11,630	--	11,710	11,670	11,550
21	--			--	11,410	11,450	11,450	11,630	--	11,710	11,670	11,550
22	--			--	11,410	11,450	11,450	11,630	--	11,710	11,670	11,550
23	--			--	11,410	11,450	11,450	11,630	--	11,710	11,670	11,550
24	--			--	11,410	11,450	11,450	11,670	--	11,710	11,630	11,550
25	--			--	11,410	11,450	11,450	11,670	--	11,710	11,630	11,550
26	--			--	11,410	11,450	11,450	11,670	--	11,750	11,630	11,550
27	11,260			--	11,410	11,450	11,450	11,670	--	11,750	11,630	11,550
28	--			--	11,410	11,450	11,450	11,710	--	11,710	11,630	11,550
29	--			--	-----	11,450	11,450	11,710	--	11,710	11,630	11,550
30	c11,260			--	-----	11,450	11,450	11,710	c11,710	11,710	11,630	11,550
31	-----	c11,330	c11,410	-----	-----	11,450	-----	-----	-----	11,710	11,630	-----
MAX							11,450	11,710			11,710	11,630
MIN							11,450	11,450			11,630	11,550
(a)	--	7,836.6	7,836.6	7,836.9	7,837.0	7,837.1	7,837.1	7,837.8	7,837.7	7,837.8	7,837.6	7,837.4
(b)	--	--	+70	+80	0	+40	0	+260	0	0	-80	-80

1. Based on bathymetric survey by the Geological Survey, 1972.

a Elevation, in feet, at end of month.

b Change in contents, in acre-feet.

c Contents interpolated.

PYRAMID AND WINNEMUCCA LAKES BASIN

10336715 MARLETTE CREEK NEAR CARSON CITY, NEV.

LOCATION.--Lat 39°10'20", long 119°54'25", in SE¼SW¼ sec.12, T.15 N., R.18 E., Washoe County, on left bank about 300 ft (91 m) below dam on Marlette Lake, 0.7 mi (1.1 km) upstream from Marlette Reservoir, and 7 mi (11 km) west of Carson City.

DRAINAGE AREA.--2.91 mi² (7.54 km²).

PERIOD OF RECORD.--October 1973 to September 1974.

GAGE.--Water-stage recorder. Altitude of gage is 7,760 ft (2,365 m), from topographic map.

EXTREMES.--Current year: Maximum discharge, 8.2 ft³/s (0.23 m³/s) July 30 (gage height, 2.14 ft or 0.652 m); minimum daily, 0.03 ft³/s (0.001 m³/s) Aug. 24, 25.

REMARKS.--Records good. Flow regulated by Marlette Lake.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.0	3.0	3.6	3.5	3.6	4.3	4.5	4.3	6.8	.07	.11	.06
2	3.0	3.0	3.6	3.5	3.6	4.3	4.5	4.3	6.9	.07	.11	.06
3	3.0	3.0	3.6	3.5	3.7	4.3	4.4	4.2	6.9	.07	.09	.06
4	3.0	3.0	3.6	3.5	3.7	4.3	4.4	4.2	5.6	.07	.09	.06
5	3.0	3.0	3.6	3.5	3.7	4.3	4.5	4.2	5.0	.07	.08	.06
6	3.0	3.0	3.6	3.5	3.8	4.4	4.5	4.2	1.9	.07	.08	.07
7	3.0	3.0	3.6	3.5	3.8	4.4	4.5	4.2	.07	.07	.07	.07
8	3.0	3.0	3.6	3.5	3.9	4.3	4.5	4.2	.07	.07	.08	.07
9	3.0	3.0	3.6	3.5	3.9	4.3	4.5	4.2	.07	3.1	.07	.07
10	3.0	3.0	3.6	3.5	3.9	4.3	4.5	4.2	.07	6.2	.07	.07
11	3.0	3.5	3.6	3.5	3.9	4.3	4.5	4.2	.07	6.2	.06	.07
12	3.0	3.5	3.6	3.6	4.0	4.4	4.5	4.2	.07	2.6	.07	.07
13	3.0	3.5	3.6	3.6	4.0	4.4	4.5	4.2	.07	.09	.07	.07
14	3.0	3.5	3.6	3.6	4.0	4.5	4.5	4.2	.07	.09	.06	.06
15	3.0	3.5	3.6	3.6	4.0	4.5	4.4	4.2	.07	.09	.04	.06
16	3.0	3.5	3.6	3.7	4.0	4.5	4.4	4.2	.07	.09	.04	.06
17	3.0	3.5	3.6	3.7	4.0	4.5	4.3	4.2	.07	.09	.04	.06
18	3.0	3.5	3.6	3.7	4.1	4.5	4.3	3.7	.07	.11	.04	.06
19	3.0	3.5	3.6	3.7	4.1	4.5	4.3	3.2	.07	.09	.04	.06
20	3.0	3.5	3.6	3.7	4.1	4.5	4.3	3.2	.07	.11	.05	.06
21	3.0	3.5	3.6	3.7	4.1	4.5	4.3	3.2	.07	.11	.06	.06
22	3.0	3.5	3.6	3.7	4.2	4.5	4.3	3.2	.07	.11	.05	.06
23	3.0	3.5	3.6	3.6	4.2	4.5	4.3	3.2	.07	.11	.05	.06
24	3.0	3.5	3.6	3.6	4.2	4.5	4.3	3.2	.07	.11	.03	.06
25	3.0	3.5	3.6	3.6	4.2	4.5	4.3	3.2	.07	.13	.03	.06
26	3.0	3.5	3.7	3.6	4.2	4.5	4.3	2.9	.07	.13	.04	.06
27	3.0	3.5	3.7	3.6	4.2	4.5	4.3	3.0	.07	.13	.05	.06
28	3.0	3.5	3.7	3.6	4.2	4.5	4.3	1.4	.07	.16	.05	.06
29	3.0	3.5	3.7	3.7	-----	4.5	4.3	3.8	.07	.16	.05	.06
30	3.0	3.5	3.6	3.7	-----	4.5	4.3	7.0	.07	.81	.05	.06
31	3.0	-----	3.6	3.6	-----	4.5	-----	6.8	-----	.11	.05	-----
TOTAL	93.0	100.0	112.0	111.4	111.3	137.3	131.8	122.6	34.78	21.49	1.87	1.88
MEAN	3.00	3.33	3.61	3.59	3.98	4.43	4.39	3.95	1.16	.69	.060	.063
MAX	3.0	3.5	3.7	3.7	4.2	4.5	4.5	7.0	6.9	6.2	.11	.07
MIN	3.0	3.0	3.6	3.5	3.6	4.3	4.3	1.4	.07	.07	.03	.06
AC-FT	184	198	222	221	221	272	261	243	69	43	3.7	3.7

WTR YR 1974 TOTAL 979.42 MEAN 2.68 MAX 7.0 MIN .03 AC-FT 1,940

PYRAMID AND WINNEMUCCA LAKES BASIN

49

10336730 GLENBROOK CREEK AT GLENBROOK, NEV.

LOCATION.--Lat 39°05'15", long 119°56'20", in SW¼NE¼SE¼ sec.10, T.14 N., R.18 E., Douglas County, on left bank 50 ft (15 m) upstream from culvert at gas station, 100 ft (30 m) upstream from mouth at Glenbrook.

DRAINAGE AREA.--4.07 mi² (10.54 km²).

PERIOD OF RECORD.--October 1971 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,240 ft (1,902 m), from topographic map.

EXTREMES.--Current year: Maximum discharge, 10 ft³/s (0.28 m³/s) May 8 (gage height, 1.67 ft or 0.509 m); minimum, 0.18 ft³/s (0.005 m³/s) part of each day Aug. 18-22.
Period of record: Maximum discharge, 10 ft³/s (0.28 m³/s) May 8, 1974 (gage height, 1.67 ft or 0.509 m); minimum, 0.09 ft³/s (0.003 m³/s) July 18, 1972, Aug. 16, 17, 1973.

REMARKS.--Records good. Flow may be affected by pumping or diverting for irrigation above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.51	1.6	.94	1.4	.84	2.2	3.2	5.2	3.0	.84	.75	.28
2	.51	1.5	1.4	1.4	.84	1.8	2.8	5.4	2.6	.84	.66	.28
3	.51	1.2	1.4	1.2	1.2	1.5	2.2	5.8	2.2	.75	.58	.28
4	.58	1.2	1.2	1.2	.75	1.5	2.4	6.0	2.1	.66	.75	.24
5	.58	1.2	1.2	1.1	.75	1.6	2.8	5.8	2.0	.58	1.0	.24
6	.75	1.6	1.2	1.1	.58	1.6	2.8	6.0	1.5	.58	.66	.24
7	1.0	1.6	1.4	1.1	.75	1.6	2.8	6.4	1.2	.58	.66	.24
8	1.1	1.0	1.5	.94	.84	1.4	3.0	7.0	1.1	.75	.58	.24
9	1.0	1.2	1.5	.94	1.1	1.5	3.2	7.6	1.1	2.4	.45	.24
10	1.0	1.5	1.4	.84	1.1	1.4	2.8	7.4	1.2	1.1	.45	.24
11	1.2	1.4	1.5	.75	1.1	1.4	2.8	7.0	1.4	1.1	.40	.24
12	1.2	1.2	1.5	.75	1.1	1.6	3.0	6.6	1.2	1.1	.32	.24
13	1.2	1.2	1.6	.75	1.0	1.6	3.0	6.0	1.2	.94	.28	.24
14	1.1	1.2	1.6	2.0	1.1	2.0	3.0	5.8	1.0	.94	.28	.24
15	1.1	1.2	1.6	4.8	1.1	2.1	3.3	5.6	1.1	.94	.28	.28
16	1.1	1.4	1.5	3.9	1.1	2.1	3.9	5.2	1.2	.94	.24	.28
17	1.0	1.6	2.1	3.9	1.0	2.2	4.1	4.6	1.4	.84	.24	.28
18	1.0	1.4	1.8	3.7	1.1	2.1	4.6	4.6	1.4	.75	.24	.28
19	1.0	1.2	1.6	3.9	.94	2.0	4.2	4.2	1.4	.75	.21	.28
20	1.1	1.2	1.6	2.6	1.0	2.1	3.9	4.1	1.4	.75	.21	.28
21	1.1	1.1	1.6	2.0	1.0	2.1	4.1	4.1	1.5	.84	.24	.28
22	1.2	1.1	1.6	1.8	.94	2.2	4.6	4.1	1.5	.75	.21	.28
23	2.1	1.1	1.6	1.5	.94	2.2	4.8	4.1	1.4	.75	.21	.24
24	1.4	1.1	1.6	1.4	.94	2.4	4.4	4.1	1.4	.75	.28	.24
25	1.4	1.1	1.6	1.4	1.1	2.4	4.1	4.1	1.2	.84	.28	.24
26	1.4	1.1	1.6	1.1	1.0	2.2	3.5	3.9	1.2	.84	.28	.28
27	1.2	1.1	2.0	1.2	1.1	2.2	3.3	3.7	1.0	.84	.24	.28
28	1.2	1.2	2.1	1.1	1.0	2.4	3.3	3.5	1.0	.84	.24	.32
29	1.2	1.2	4.9	1.0	-----	2.8	3.5	3.0	.94	.84	.24	.36
30	1.1	1.2	2.6	.94	-----	3.2	4.4	3.0	.94	.75	.24	.36
31	1.4	-----	1.6	.84	-----	2.8	-----	3.2	-----	.75	.28	-----
TOTAL	33.24	37.9	52.34	52.55	27.31	62.2	103.8	157.1	42.78	26.92	11.98	8.04
MEAN	1.07	1.26	1.69	1.70	.98	2.01	3.46	5.07	1.43	.87	.39	.27
MAX	2.1	1.6	4.9	4.8	1.2	3.2	4.8	7.6	3.0	2.4	1.0	.36
MIN	.51	1.0	.94	.75	.58	1.4	2.2	3.0	.94	.58	.21	.24
AC-FT	66	75	104	104	54	123	206	312	85	53	24	16

CAL YR 1973 TOTAL 563.59 MEAN 1.54 MAX 5.7 MIN .12 AC-FT 1,120

WTR YR 1974 TOTAL 616.16 MEAN 1.69 MAX 7.6 MIN .21 AC-FT 1,220

PEAK DISCHARGE (BASE, 5.0 FT ³ /S)							
DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
12-29	1200	1.55	7.6	4-22	2100	1.45	5.6
1-15	1400	1.48	6.2	5-8	1900	1.67	10

PYRAMID AND WINNEMUCCA LAKES BASIN

10336780 TROUT CREEK NEAR TAHOE VALLEY, CALIF.

LOCATION.--Lat 38°55'12", long 119°58'17", in NW¼SE¼ sec.3, T.12 N., R.18 E., El Dorado County, on left bank 5 ft (1.52 m) upstream from Martin Avenue Bridge, 500 ft (152 m) upstream from Heavenly Valley Creek, and 1.8 mi (2.9 km) east of Tahoe Valley.

DRAINAGE AREA.--36.7 mi² (95.05 km²).

PERIOD OF RECORD.--October 1960 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,250 ft (1,905 m) from topographic map.

AVERAGE DISCHARGE.--14 years, 38.0 ft³/s (1.08 m³/s), 27,530 acre-ft/yr (33.9 hm³/s).

EXTREMES.--Current year: Maximum discharge, 163 ft³/s (4.62 m³/s) June 7 (gage height, 8.28 ft or 2.524 m); minimum daily, 14 ft³/s (0.396 m³/s) Oct. 18, 19, Nov. 3, 4.

Period of record: Maximum discharge, 535 ft³/s (15.2 m³/s) Feb. 1, 1963 (gage height, 11.14 ft or 3.395 m), from rating curve extended above 110 ft³/s (3.12 m³/s) on basis of computation of peak flow (weir formula) and logarithmic projection; no flow for part of Sept. 11, 1966.

REMARKS.--Records good except those for winter period, which are fair. Minor diversion for local water supply. Records of water temperatures and sediment discharge for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	18	18	24	29	39	60	74	138	68	34	22
2	15	17	22	29	28	33	64	79	139	65	32	21
3	15	14	25	29	27	34	51	85	141	62	33	21
4	16	14	25	27	26	39	48	86	145	59	33	20
5	15	19	24	26	26	35	52	90	148	57	35	20
6	15	29	24	25	27	32	51	97	153	55	31	20
7	19	33	24	25	26	30	48	106	155	53	31	20
8	20	26	23	24	26	29	50	115	148	55	30	19
9	18	22	23	22	25	29	52	120	145	92	29	19
10	18	29	22	21	25	28	47	121	147	82	28	19
11	18	62	23	20	25	28	47	121	147	63	28	20
12	18	69	23	23	24	29	50	123	149	57	27	20
13	17	34	22	23	24	29	51	117	147	52	27	19
14	16	29	22	26	24	33	52	114	143	51	27	18
15	16	28	22	60	24	36	57	113	138	48	26	18
16	15	27	22	58	24	37	60	107	133	46	29	18
17	15	28	25	71	24	37	65	103	126	45	26	17
18	14	28	25	70	24	36	69	98	119	44	24	17
19	14	23	24	74	24	35	62	91	114	43	24	16
20	16	23	24	52	26	36	61	88	106	42	25	16
21	16	22	23	41	25	38	64	87	100	41	25	16
22	17	23	23	42	24	42	71	87	97	40	24	16
23	24	22	22	40	24	41	69	91	92	38	23	16
24	22	21	22	36	24	41	63	96	88	37	22	16
25	22	21	21	33	25	41	58	105	84	37	22	16
26	20	21	21	31	25	40	55	116	81	37	23	16
27	20	21	24	31	25	43	54	130	77	36	23	16
28	20	22	26	30	24	45	55	134	74	36	22	16
29	19	22	53	30	-----	55	56	134	71	35	22	16
30	17	22	43	29	-----	57	64	133	69	33	22	16
31	18	-----	33	29	-----	48	-----	137	-----	33	22	-----
TOTAL	540	789	773	1,101	704	1,155	1,706	3,298	3,614	1,542	829	540
MEAN	17.4	26.3	24.9	35.5	25.1	37.3	56.9	106	120	49.7	26.7	18.0
MAX	24	69	53	74	29	57	71	137	155	92	35	22
MIN	14	14	18	20	24	28	47	74	69	33	22	16
AC-FT	1,070	1,560	1,530	2,180	1,400	2,290	3,380	6,540	7,170	3,060	1,640	1,070

CAL YR 1973 TOTAL 13,641 MEAN 37.4 MAX 155 MIN 14 AC-FT 27,060
WTR YR 1974 TOTAL 16,591 MEAN 45.5 MAX 155 MIN 14 AC-FT 32,910

PEAK DISCHARGE (BASE, 100 FT³/S)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
5-9	2230	7.96	139	7-9	2045	7.97	135
6-7	0215	8.28	163				

10336790 TROUT CREEK AT SOUTH LAKE TAHOE, CALIF.

LOCATION.--Lat 38°55'56", long 119°58'40", in SE¼NW¼ sec.3, T.12 N., R.18 E., El Dorado County, on right bank on upstream side of U.S. Highway 50 bridge, 1.2 mi (1.9 km) upstream from Lake Tahoe, and 1.9 mi (3.1 km) north-east of South Lake Tahoe Post Office.

DRAINAGE AREA.--40.4 mi² (105 km²).

PERIOD OF RECORD.--October 1971 to September 1974 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 6,240 ft (1,902 m) from topographic map.

EXTREMES.--Current year: Maximum discharge, 164 ft³/s (4.64 m³/s) June 7 (gage height, 3.69 ft or 1.125 m); minimum daily, 14 ft³/s (0.40 m³/s) Oct. 1, 3; Nov. 3, 4, Sept. 21-26, 28.
Period of record: Maximum discharge, 190 ft³/s (5.38 m³/s) May 31, 1973 (gage height, 4.08 ft or 1.244 m); minimum daily, 11 ft³/s (0.31 m³/s) Dec. 6-10, 1972.

REMARKS.--Records good except those for the winter period, which are fair. Minor diversion for local water supply. Records of sediment discharge for the water year 1974 are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	17	20	26	32	45	65	80	142	67	36	20
2	15	16	22	30	31	36	69	86	142	65	34	20
3	14	14	26	32	32	36	54	92	144	62	35	20
4	16	14	26	30	30	40	50	92	148	59	35	19
5	16	21	25	28	32	38	53	95	150	58	37	18
6	17	29	25	27	30	34	52	102	155	55	33	18
7	20	31	25	27	29	32	48	114	156	55	33	18
8	20	26	25	26	29	32	50	125	149	55	32	18
9	18	22	24	24	30	32	52	129	145	98	31	18
10	18	29	24	23	30	31	48	131	147	89	30	17
11	18	67	24	22	30	31	48	130	149	65	30	17
12	18	81	25	24	30	32	50	131	151	61	29	17
13	17	38	24	25	27	32	52	124	148	55	28	17
14	16	32	23	30	27	36	52	122	141	52	28	17
15	16	29	23	64	27	38	57	120	138	50	27	16
16	16	29	24	62	27	38	62	115	135	48	26	16
17	16	32	25	80	24	38	68	109	128	46	26	16
18	15	33	28	80	27	37	71	104	121	46	26	16
19	15	26	27	84	27	37	63	97	114	44	25	15
20	16	24	28	62	28	38	63	94	107	44	25	15
21	16	23	25	53	26	40	65	94	101	42	24	14
22	17	23	24	46	26	43	73	94	98	42	24	14
23	26	23	23	46	26	42	74	97	94	40	24	14
24	20	23	23	42	26	42	69	101	89	40	23	14
25	22	22	22	38	26	42	64	112	85	40	23	14
26	22	22	22	36	28	42	59	122	82	40	23	14
27	21	20	26	35	28	44	58	138	77	39	22	15
28	22	23	27	34	27	46	59	141	74	38	22	14
29	21	21	64	34	-----	55	61	140	70	37	21	15
30	18	22	51	33	-----	59	69	137	68	36	21	15
31	18	-----	36	33	-----	50	-----	140	-----	35	20	-----
TOTAL	554	832	836	1,236	792	1,218	1,778	3,508	3,648	1,603	853	491
MEAN	17.9	27.7	27.0	39.9	28.3	39.3	59.3	113	122	51.7	27.5	16.4
MAX	26	81	64	84	32	59	74	141	156	98	37	20
MIN	14	14	20	22	24	31	48	80	68	35	20	14
AC-FT	1,100	1,650	1,660	2,450	1,570	2,420	3,530	6,960	7,240	3,180	1,690	974

CAL YR 1973 TOTAL 14,449 MEAN 39.6 MAX 167 MIN 14 AC-FT 28,660
WTR YR 1974 TOTAL 17,349 MEAN 47.5 MAX 156 MIN 14 AC-FT 34,410

		PEAK DISCHARGE (BASE, 100 FT ³ /S)					
DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-12	0600	2.98	119	6-7	0600	3.69	164
1-18	2200	2.95	117	7-9	2200	3.46	148
5-10	0030	3.45	151				

10337000 LAKE TAHOE AT TAHOE CITY, CALIF.

LOCATION.--Lat 39°10'50", long 120°06'55", in NE¼SE¼NE¼ sec.5, T.15 N., R.17 E., Placer County, on U.S. Coast Guard pier at Lake Forest, and 1.8 mi (2.9 km) northeast of Lake Tahoe outlet dam on Truckee River at Tahoe City.

DRAINAGE AREA.--505 mi² (1,308 km²), at lake outlet.

PERIOD OF RECORD.--April 1900 to current year. Monthend elevations only for October 1943 to September 1957, published in WSP 1734. Prior to October 1961, published as "at Tahoe."

GAGE.--Water-stage recorder. Datum of gage is 6,220.00 ft (1,895.856 m) above mean sea level, datum of Bureau of Reclamation, 6,218.86 ft (1,895.508 m), supplementary adjustment of 1959. Prior to Oct. 1, 1957, non-recording gages at several sites near outlet of lake at same datum. Oct. 1, 1957, to May 8, 1958, water-stage recorder on left wingwall of dam at outlet of lake at same datum. May 9, 1958, to Sept. 30, 1968, water-stage recorder on pier, 1,000 ft (300 m) east of dam at lake outlet.

EXTREMES.--Current year: Maximum elevation, 6,228.92 ft (1,898.575 m) July 9; minimum, 6,226.63 ft (1,897.877 m) Nov. 4.

Period of record: Maximum elevation, 6,231.26 ft (1,899.288 m) July 14, 15, 17, 18, 1907; minimum, 6,221.74 ft (1,896.386 m) Dec. 26, 1934.

REMARKS.--Lake levels regulated by a 17-gate concrete dam at outlet of lake; storage began about 1874. Figures given herein represent usable contents. Usable capacity, 744,600 acre-ft (918 hm³) between elevations 6,223 ft (1,896.8 m), natural rim of lake and 6,229.1 ft (1,898.63 m), maximum permissible elevation by Federal Court decree. Water is used for domestic and recreational purposes in Lake Tahoe area and for irrigation and power in downstream areas. Lake elevations are referred to Bureau of Reclamation datum because that datum is used as the official reference point by all local, State, and Federal agencies. Some flow is diverted from Third Creek into Ophir Creek, stored in Price Lakes and used for irrigation. There are two intermittent transmountain diversions, one from Echo Lake to South Fork American River for power and irrigation and the other (by pumping, in dry years) from Marlette Lake to Hobart Creek for municipal supply to Virginia City and Carson City. Intermittent pumping of effluent from Lake Tahoe basin by Douglas County Sewer Improvement District No. 1 occurred February 1969 to November 1971.

REVISIONS.--WRD 1967: Drainage area.

CAPACITY TABLE (ELEVATION, IN FEET, AND CONTENTS, IN ACRE-FEET)

6,226	364,800	6,228	609,300
6,227	486,800	6,229	732,300

ELEVATION, IN FEET, AT 2400, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.05	6.68	7.35	7.64	8.06	8.12	8.28	8.10	8.57	8.84	8.64	8.18
2	7.04	6.67	7.34	7.60	8.06	8.21	8.26	8.12	8.58	8.85	8.63	8.16
3	6.98	6.64	7.32	7.63	8.05	8.20	8.26	8.12	8.60	8.84	8.62	8.15
4	6.98	6.63	7.34	7.64	8.05	8.20	8.25	8.14	8.61	8.84	8.60	8.13
5	6.95	6.77	7.34	7.66	8.02	8.18	8.27	8.14	8.64	8.81	8.60	8.11
6	6.92	6.68	7.33	7.69	8.01	8.17	8.23	8.15	8.67	8.80	8.59	8.10
7	6.92	6.67	7.34	7.68	8.00	8.15	8.23	8.18	8.70	8.76	8.58	8.08
8	6.89	6.66	7.33	7.69	8.00	8.15	8.23	8.20	8.69	8.82	8.57	8.06
9	6.88	6.70	7.33	7.68	8.00	8.14	8.22	8.19	8.70	8.91	8.57	8.05
10	6.85	6.77	7.31	7.67	8.00	8.11	8.19	8.22	8.73	8.90	8.56	8.03
11	6.84	6.90	7.33	7.67	7.98	8.13	8.19	8.23	8.75	8.90	8.54	8.00
12	6.83	7.02	7.30	7.66	7.99	8.10	8.18	8.23	8.76	8.87	8.50	7.98
13	6.83	7.13	7.37	7.68	7.98	8.10	8.16	8.25	8.77	8.88	8.47	7.95
14	6.82	7.14	7.36	7.73	7.98	8.10	8.17	8.26	8.78	8.86	8.44	7.92
15	6.82	7.10	7.37	7.75	7.97	8.09	8.15	8.25	8.79	8.83	8.46	7.89
16	6.81	7.15	7.35	7.83	7.97	8.08	8.15	8.31	8.80	8.81	8.41	7.88
17	6.80	7.20	7.38	7.90	7.97	8.08	8.16	8.28	8.80	8.81	8.41	7.86
18	6.79	7.20	7.39	7.99	7.97	8.07	8.13	8.29	8.81	8.79	8.37	7.85
19	6.78	7.20	7.40	8.04	8.01	8.07	8.13	8.29	8.81	8.78	8.35	7.85
20	6.78	7.20	7.37	8.08	8.00	8.07	8.13	8.29	8.83	8.76	8.33	7.84
21	6.73	7.20	7.42	8.08	8.00	8.06	8.13	8.30	8.83	8.76	8.31	7.84
22	6.80	7.20	7.45	8.09	7.98	8.05	8.16	8.32	8.85	8.75	8.31	7.83
23	6.84	7.19	7.43	8.08	7.97	8.05	8.13	8.33	8.85	8.75	8.28	7.82
24	6.80	7.19	7.45	8.09	7.97	8.04	8.16	8.36	8.83	8.73	8.27	7.82
25	6.81	7.18	7.44	8.08	7.94	8.03	8.14	8.38	8.83	8.72	8.26	7.81
26	6.78	7.18	7.48	8.06	7.97	8.02	8.14	8.41	8.83	8.70	8.25	7.80
27	6.78	7.18	7.51	8.07	8.01	8.07	8.13	8.44	8.83	8.69	8.24	7.78
28	6.76	7.15	7.50	8.07	8.03	8.08	8.14	8.50	8.85	8.67	8.22	7.76
29	6.75	7.12	7.62	8.07	-----	8.16	8.13	8.50	8.86	8.67	8.22	7.74
30	6.73	7.17	7.64	8.06	-----	8.18	8.11	8.53	8.85	8.65	8.20	7.74
31	6.71	-----	7.64	8.06	-----	8.20	-----	8.54	-----	8.65	8.19	-----
MEAN	6.84	7.00	7.40	7.86	8.00	8.11	8.18	8.29	8.76	8.79	8.42	7.93
MAX	7.05	7.20	7.64	8.09	8.06	8.21	8.28	8.54	8.86	8.91	8.64	8.18
MIN	6.71	6.63	7.30	7.60	7.94	8.02	8.11	8.10	8.57	8.65	8.19	7.74
(a)	451,400	507,600	565,200	616,700	613,000	633,900	622,800	675,700	713,800	689,200	632,700	577,500
(b)	-43,900	+56,200	+57,600	+51,500	-3,700	+20,900	-11,100	+52,900	+38,100	-24,600	-56,500	-55,200

a Contents, in acre-feet, at end of month.

b Change in contents, in acre-feet.

NOTE.--Add 6,220 ft to obtain elevation above mean sea level, Bureau of Reclamation datum, at 2400 hours.

53

LOCATION.--Lat 39°10'00", long 120°08'40", in NE¼NW¼ sec.7, T.15 N., R.17 E., Placer County, on left bank 510 ft (155 m) downstream from dam at outlet of Lake Tahoe at Tahoe City.

PERIOD OF RECORD.--July 1895 to February 1896, March 1900 to current year. Monthly discharge only for some periods, published in WSP 1314 and 1734. Prior to October 1961, published as "at Tahoe."

AVERAGE DISCHARGE (unadjusted).--74 years (1900-74), 248 ft³/s (7.02 m³/s), 179,700 acre-ft/yr (222 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,190 ft³/s (33.7 m³/s) July 11-14 (gage height, 6.65 ft or 2.027 m); minimum daily, 49 ft³/s (1.39 m³/s) Nov. 10.
Period of record: Maximum discharge, 2,630 ft³/s (74.5 m³/s) June 19, 1969 (gage height, 9.32 ft or 2.841 m); no flow for parts of many years.

REVISIONS.--WSP 2127: Drainage area.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	343	270	63	64	290	595	734	954	323	176	338	320
2	345	270	63	64	290	595	734	946	323	119	336	320
3	314	270	63	62	288	595	728	938	228	117	336	345
4	294	270	63	64	288	595	724	938	162	117	336	369
5	296	272	64	63	286	595	728	938	255	99	274	369
6	301	274	65	64	284	598	846	938	323	82	232	369
7	301	256	65	64	284	598	846	942	323	82	232	369
8	301	236	65	63	284	654	950	942	316	83	230	367
9	301	148	65	63	284	724	950	946	316	308	230	367
10	298	49	65	63	282	724	950	954	318	870	230	367
11	298	56	66	63	282	720	946	950	318	1,190	230	367
12	298	58	65	64	282	720	946	750	415	1,190	264	364
13	299	49	65	64	282	720	950	600	567	1,190	323	362
14	298	53	64	65	282	720	954	600	625	1,190	345	362
15	298	65	64	72	282	720	958	600	625	1,050	336	362
16	296	64	64	74	282	717	962	450	628	954	320	343
17	296	66	65	78	282	717	958	300	442	950	318	343
18	296	66	64	81	282	717	954	300	312	950	318	275
19	296	65	63	80	284	717	954	300	312	885	360	204
20	270	64	63	72	345	717	950	300	312	836	386	144
21	264	64	63	68	448	717	954	300	712	832	386	101
22	266	64	63	125	545	717	950	292	309	836	386	80
23	270	64	64	294	583	717	950	292	309	782	384	80
24	264	63	64	294	583	717	954	292	309	690	384	80
25	272	63	64	292	580	717	954	292	309	604	384	78
26	284	63	64	292	583	717	950	292	318	513	384	78
27	284	63	65	292	583	714	950	292	331	470	384	78
28	284	62	64	290	586	720	954	166	267	470	340	77
29	276	62	74	290	-----	728	954	205	250	388	320	76
30	272	62	68	290	-----	728	954	323	250	338	320	154
31	270	-----	65	290	-----	724	-----	323	-----	338	320	-----
TOTAL	9,048	3,551	2,002	4,164	10,236	21,374	27,346	17,655	10,407	18,699	9,966	7,570
MEAN	292	118	64.6	134	366	689	912	570	347	603	321	252
MAX	345	274	74	294	586	728	962	954	628	1,190	386	369
MIN	264	49	63	62	282	595	724	166	162	82	230	76
AC-FT	17,950	7,040	3,970	8,260	20,300	42,400	54,240	35,020	20,640	37,090	19,770	15,020
CAL YR 1973	TOTAL	68,265	MEAN 187	MAX 422	MIN 49	AC-FT 135,400						
WTR YR 19												

10339380 MARTIS CREEK LAKE NEAR TRUCKEE, CALIF.

LOCATION.--Lat 39°19'38", long 120°06'48", in NE¼NW¼ sec.17, T.17 N., R.17 E., Nevada County, in control house at Martis Creek Dam, 2.0 mi (3.2 km) upstream from mouth, and 3.5 mi (5.6 km) east of Truckee.

DRAINAGE AREA.--40.0 mi² (103.6 km²).

PERIOD OF RECORD.--March 1972 to current year (occasional readings only prior to June 15, 1972).

GAGE.--Water-stage recorder and a precipitation recorder. Datum of gage is at mean sea level (Corps of Engineers project datum).

EXTREMES.--Current year: Maximum contents, 4,450 acre-ft (5.49 hm³) Apr. 2 (elevation, 5,805.14 or 1,769.407 m); minimum, 829 acre-ft (1.02 hm³) Oct. 6, Sept. 6, 13 (elevation, 5,780.17 ft or 1,761.796 m).
Period of record: Maximum contents, 4,450 acre-ft (5.49 hm³) Apr. 2, 1974 (elevation, 5,805.14 ft or 1,769.407 m); minimum, 823 acre-ft (1.01 hm³) July 19, Aug. 1, 1972 (elevation, 5,780.09 ft or 1,761.771 m).

REMARKS.--Lake is formed by rolled-earthfill dam. Storage began Oct. 7, 1971. Total capacity, 20,400 acre-ft (25.2 hm³) between elevations 5,745 ft (1,751.1 m), streambed elevation at dam and 5,838 ft (1,779.4 m), elevation of spillway crest. Figures given herein represent total contents, which include 817 acre-ft (1.01 hm³) of inactive storage below elevation, 5,780 ft (1,761.7 m), intake crest. Reservoir is used for flood control, enhancement of fishery, and recreation.

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	829	831	--	--	856	1,160	4,360	898	858	836	834	832
2	830	834	--	849	854	1,260	4,100	903	858	836	834	832
3	830	--	854	--	853	1,340	3,510	904	857	836	834	832
4	830	--	--	851	849	1,400	2,880	905	856	836	835	831
5	830	835	849	--	844	1,460	2,310	906	855	835	837	830
6	829	--	848	--	845	1,510	1,900	901	853	835	835	830
7	832	849	847	846	848	1,570	1,510	903	851	835	833	829
8	832	--	848	--	848	1,610	1,130	902	851	844	833	830
9	832	842	847	842	850	1,660	960	899	848	865	832	830
10	832	--	842	--	850	1,700	909	895	847	849	832	830
11	832	--	--	840	849	1,760	894	893	845	843	832	830
12	832	921	843	--	848	1,850	893	889	846	840	832	831
13	832	--	--	--	848	1,930	--	886	847	839	833	829
14	832	854	843	853	849	2,020	--	884	846	837	834	830
15	831	852	--	--	848	2,120	891	879	845	837	833	830
16	831	849	--	916	848	2,200	--	876	846	836	833	830
17	831	--	851	--	848	2,290	891	874	846	836	832	831
18	831	--	--	1,020	848	2,380	--	873	845	836	830	831
19	831	856	848	967	848	2,460	899	869	847	835	831	831
20	831	--	--	928	846	2,540	898	866	850	836	831	831
21	830	849	849	906	842	2,620	901	865	850	836	831	832
22	838	--	--	888	846	2,710	906	862	848	836	831	831
23	841	842	--	886	847	2,800	905	862	848	835	830	831
24	836	--	847	884	848	2,900	902	863	845	835	830	831
25	834	--	--	875	849	2,990	894	864	842	835	831	831
26	832	841	845	861	846	3,080	888	865	840	835	832	832
27	832	--	--	864	846	3,190	886	867	839	835	832	832
28	832	842	861	865	861	3,320	884	864	838	835	832	833
29	832	--	--	862	-----	3,540	887	862	837	835	832	833
30	832	842	--	861	-----	3,920	892	861	837	833	832	832
31	c 832	-----	874	860	-----	4,100	-----	859	-----	834	832	-----
MAX	841	--	--	--	861	4,100	--	906	858	865	837	833
MIN	829	--	--	--	842	1,160	--	859	837	833	830	829
(a) c	5,780.21	5,780.35	5,780.79	5,780.60	5,780.61	5,803.83	5,781.03	5,780.59	5,780.29	5,780.24	5,780.21	5,780.22
(b)	+1	+10	+32	-14	+1	+3,239	-3,208	-33	-22	-3	-2	0

CAL YR 1973 b +37

WTR YR 1974 b +1

a Elevation, in feet, at end of month.

b Change in contents, in acre-feet.

c Interpolated.

10339400 MARTIS CREEK NEAR TRUCKEE, CALIF.

LOCATION.--Lat 39°19'10", long 120°07'00", in NE¼NW¼ sec.17, T.17 N., R.17 E., Nevada County, on left bank 0.2 mi (0.3 km) downstream from Martis Creek Lake Dam, 1.8 mi (2.9 km) upstream from mouth, and 3.5 mi (5.6 km) east of Truckee.

DRAINAGE AREA.--40.0 mi² (103.6 km²).

PERIOD OF RECORD.--October 1958 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5,730 ft (1,747 m), from topographic map. Prior to July 10, 1972, at site 1.0 mi (1.6 km) downstream at different datum.

AVERAGE DISCHARGE (unadjusted).--16 years, 24.4 ft³/s (0.691 m³/s), 17,680 acre-ft/yr (21.8 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 648 ft³/s (18.4 m³/s) Apr. 2 (gage height, 6.01 ft or 1.832 m); minimum, 0.92 ft³/s (0.026 m³/s) Aug. 29, result of regulation at Martis Creek Lake Dam.
Period of record: Maximum discharge, 1,880 ft³/s (53.2 m³/s) Feb. 1, 1963 (gage height, 6.16 ft or 1.878 m); minimum, 0.46 ft³/s (0.013 m³/s) Oct. 21, 22, 1971, result of regulation at Martis Creek Lake Dam.

REMARKS.--Records excellent. Flow subject to regulation by Martis Creek Lake Dam since Oct. 7, 1971.

REVISIONS.--WSP 2127: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.1	9.0	27	35	30	10	9.0	73	29	11	10	8.8
2	8.1	9.0	26	24	26	9.5	228	83	29	10	10	8.5
3	8.1	8.7	24	26	25	9.5	367	88	29	10	10	8.8
4	8.1	8.1	20	25	26	9.5	379	85	27	10	10	8.5
5	8.1	10	20	24	25	9.3	362	86	26	10	12	8.5
6	8.4	15	18	23	20	9.3	271	85	25	9.7	11	8.5
7	8.1	18	18	23	20	9.3	255	82	23	9.7	10	8.5
8	9.0	16	18	22	21	9.3	236	82	22	12	10	8.5
9	9.0	13	16	20	20	9.3	145	79	22	24	9.7	8.5
10	8.7	16	16	18	20	9.0	86	74	20	26	9.4	8.5
11	8.7	34	16	18	20	8.4	70	70	19	17	9.4	8.8
12	8.7	82	16	18	20	8.4	66	65	19	14	8.8	8.8
13	8.7	33	17	22	19	8.4	65	61	20	12	8.8	8.8
14	8.7	22	16	27	20	8.7	68	56	19	12	8.8	8.2
15	8.7	22	17	171	20	8.1	70	53	18	11	9.1	8.5
16	8.4	20	17	140	20	7.6	77	49	18	10	8.8	8.8
17	8.4	40	25	225	18	7.6	80	45	18	10	8.5	8.5
18	8.4	40	31	184	20	7.8	84	43	18	10	8.5	8.8
19	8.7	23	22	222	22	7.8	80	41	18	9.7	8.5	8.8
20	9.0	19	20	137	17	7.6	72	37	20	9.7	8.5	8.2
21	9.0	18	21	91	17	7.3	73	35	20	9.7	8.5	8.5
22	9.6	16	23	65	16	7.0	80	33	20	9.7	8.5	8.8
23	16	14	20	60	17	7.0	86	33	20	9.7	8.5	8.8
24	12	14	19	51	17	7.6	85	33	18	9.7	8.5	8.5
25	11	13	18	47	18	7.8	74	33	16	9.7	8.2	8.5
26	11	13	18	40	19	8.4	68	35	14	9.7	8.5	8.5
27	10	13	24	35	18	7.6	62	36	13	9.7	8.5	8.8
28	9.6	14	32	36	12	7.6	61	35	12	9.7	8.5	8.8
29	9.3	16	119	33	-----	7.6	61	33	12	9.7	8.5	9.1
30	9.0	18	88	32	-----	8.1	66	32	12	9.7	8.8	9.4
31	9.0	-----	46	30	-----	8.4	-----	31	-----	9.7	8.8	-----
TOTAL	285.6	606.8	828	1,924	563	258.8	3,786.0	1,706	596	354.5	283.6	259.5
MEAN	9.21	20.2	26.7	62.1	20.1	8.35	126	55.0	19.9	11.4	9.15	8.65
MAX	16	82	119	225	30	10	379	88	29	26	12	9.4
MIN	8.1	8.1	16	18	12	7.0	9.0	31	12	9.7	8.2	8.2
AC-FT	566	1,200	1,640	3,820	1,120	513	7,510	3,380	1,180	703	563	515

CAL YR 1973 TOTAL 9,956.2 MEAN 27.3 MAX 279 MIN 3.0 AC-FT 19,750
WTR YR 1974 TOTAL 11,451.8 MEAN 31.4 MAX 379 MIN 7.0 AC-FT 22,710

PYRAMID AND WINNEMUCCA LAKES BASIN

57

10340300 PROSSER CREEK RESERVOIR NEAR BOCA, CALIF.

LOCATION.--Lat 39°22'45", long 120°08'25", in NW¼SW¼ sec.30, T.18 N., R.17 E., Nevada County, in control house at Prosser Creek Dam on Prosser Creek, 1.5 mi (2.4 km) upstream from mouth, and 3 mi (5 km) west of Boca.

DRAINAGE AREA.--50.5 mi² (130.8 km²).

PERIOD OF RECORD.--January 1963 to current year.

GAGE.--Water-stage recorder with surface follower and telemark. Datum of gage is at mean sea level (levels by Bureau of Reclamation).

EXTREMES.--Current year: Maximum contents observed, 30,800 acre-ft (38.0 hm³) July 10 (elevation, 5,744.00 ft or 1,750.771 m); minimum observed, 6,480 acre-ft (7.99 hm³) Jan. 28 (elevation, 5,696.77 ft or 1,736.375 m).
Period of record: Maximum contents observed, 31,070 acre-ft (38.3 hm³) June 1, 1973 (elevation, 5,744.33 ft or 1,750.872 m); minimum observed, 1,350 acre-ft (1.66 hm³) Apr. 9, 1969 (elevation, 5,672.30 ft or 1,728.917 m).

REMARKS.--Reservoir is formed by rolled-earth and rockfill dam. Storage began Jan. 30, 1963. Usable capacity, 28,640 acre-ft (35.3 hm³) between elevations, 5,660.6 ft (1,725.35 m), top of inactive storage and 5,741.2 ft (1,749.92 m), spillway crest. Inactive storage, 1,200 acre-ft (1.48 hm³), includes 83 acre-ft (102,000 m³) dead storage, below elevation 5,660.6 ft (1,725.35 m). Elevation of streambed at dam axis, 5,622 ft (1,713.6 m). Figures given herein represent usable contents. Reservoir is used for flood control, enhancement of fishery, and recreation.

COOPERATION.--Records furnished by Bureau of Reclamation.

MONTHEND ELEVATION AND CONTENTS, AT 0800, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

	Elevation	Contents	Change in contents
Sept. 30.....	5,709.07	10,580	--
Oct. 31.....	5,699.09	7,160	-3,420
Nov. 30.....	5,700.14	7,480	+320
Dec. 31.....	5,702.40	8,200	+720
CAL YR 1973.....	--	--	+630
Jan. 31.....	5,697.19	6,600	-1,600
Feb. 28.....	5,700.01	7,440	+840
Mar. 31.....	5,705.00	9,080	+1,640
Apr. 30.....	5,721.99	16,470	+7,390
May 31.....	5,735.50	24,570	+8,100
June 30.....	5,742.49	29,620	+5,050
July 31.....	5,741.90	29,170	-450
Aug. 31.....	5,740.82	28,360	-810
Sept. 30.....	5,718.21	14,560	-13,800
WTR YR 1974.....	--	--	+3,980

10340500 PROSSER CREEK NEAR BOCA, CALIF.

LOCATION.--Lat 39°22'10", long 120°07'10", in SW¼NW¼ sec.32, T.18 N., R.17 E., Nevada County, on left bank 0.2 mi (0.3 km) upstream from mouth, 1.0 mi (1.6 km) downstream from Prosser Creek Dam, and 2 mi (3 km) southwest of Boca.

DRAINAGE AREA.--53.6 mi² (138.8 km²).

PERIOD OF RECORD.--October 1902 to June 1903 (gage heights only), October 1942 to December 1950, June 1951 to current year. Monthly discharge only for October 1942 to December 1950, published in WSP 1734. Records for April 1889 to November 1890, published in the 11th and 12th annual reports, Part 2, have been found to be unreliable and should not be used.

GAGE.--Water-stage recorder. Datum of gage is 5,572.62 ft (1,698.535 m) above mean sea level (levels by Bureau of Reclamation). April 1889 to November 1890 and October 1902 to June 1903, nonrecording gages at same site at different datums. October 1942 to December 1950, water-stage recorder at approximately same site at different datum. June 1951 to September 1956, water-stage recorder at present site at datum 2.00 ft (0.610 m) higher.

AVERAGE DISCHARGE (adjusted for storage).--31 years (1942-50, 1951-74), 88.3 ft³/s (2.501 m³/s), 63,970 acre-ft/yr (78.9 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 870 ft³/s (24.6 m³/s) Nov. 12 (gage height, 5.10 ft or 1.554 m); minimum, 7.8 ft³/s (0.22 m³/s) May 29.
Period of record (1942 to current year): Maximum discharge, 4,560 ft³/s (129 m³/s) Dec. 23, 1955 (gage height, 10.13 ft or 3.088 m, present datum), from rating curve extended above 910 ft³/s (25.8 m³/s) on basis of slope-area measurement of peak flow; maximum gage height, 11.0 ft (3.35 m), from floodmarks, present datum, Nov. 20, 1950 (discharge, 4,320 ft³/s or 122 m³/s, by slope-area measurement); minimum discharge, 0.4 ft³/s (0.011 m³/s) July 18, 1961, result of work on dam upstream.

REMARKS.--Records good. Flow regulated by Prosser Creek Dam since Jan. 31, 1963.

REVISIONS.--WSP 2127: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	145	9.7	61	65	58	66	467	13	455	108	46	137
2	145	9.7	59	81	58	61	453	13	454	111	45	174
3	157	9.7	59	93	58	60	328	13	338	110	44	197
4	164	9.7	59	93	57	60	250	13	282	110	44	231
5	163	10	59	94	57	66	215	13	101	106	47	252
6	161	10	59	94	57	145	197	13	15	101	47	251
7	160	10	59	94	57	144	197	13	117	97	45	251
8	146	10	59	94	57	145	180	13	168	143	42	250
9	136	10	59	94	57	145	171	13	168	248	39	250
10	110	69	59	94	57	127	77	113	246	241	37	249
11	93	118	59	94	57	62	17	183	283	207	35	249
12	93	559	59	94	57	62	16	184	283	166	33	248
13	94	850	60	94	57	64	16	368	284	139	30	248
14	93	585	60	74	57	85	16	492	233	124	29	247
15	43	304	60	68	57	148	16	420	142	112	27	247
16	9.7	174	60	339	57	147	15	373	142	103	32	246
17	9.6	138	61	510	57	147	15	340	99	93	34	245
18	9.5	136	60	643	57	147	15	318	15	83	32	244
19	9.5	107	60	722	57	147	15	317	15	74	29	243
20	9.6	88	60	711	57	147	14	238	15	67	27	242
21	9.5	69	61	611	57	147	14	188	15	65	26	241
22	9.8	56	60	546	57	175	14	189	14	65	25	239
23	10	75	60	363	57	194	14	190	14	65	24	238
24	9.8	88	60	254	57	196	15	137	20	65	23	237
25	9.7	88	60	197	57	196	14	136	35	64	22	236
26	9.6	71	61	160	57	196	14	138	41	61	21	235
27	9.3	59	61	159	57	196	14	286	55	59	21	234
28	9.3	59	62	132	58	201	14	355	69	56	31	233
29	9.3	59	70	115	-----	222	13	394	84	54	48	231
30	9.3	60	65	80	-----	243	13	496	100	51	86	181
31	9.3	-----	65	58	-----	372	-----	468	-----	47	124	-----
TOTAL	2,055.8	3,900.8	1,876	6,920	1,600	4,513	2,829	6,440	4,302	3,195	1,195	7,006
MEAN	66.3	130	60.5	223	57.1	146	94.3	208	143	103	38.5	234
MAX	164	850	70	722	58	372	467	496	455	248	124	252
MIN	9.3	9.7	59	58	57	60	13	13	14	47	21	137
AC-FT	4,080	7,740	3,720	13,730	3,170	8,950	5,610	12,770	8,530	6,340	2,370	13,900
MEAN a	10.7	135	72.2	197	72.2	172	218	339	228	95.8	25.4	1.68
AC-FT a	660	8,060	4,440	12,130	4,010	10,590	13,000	20,870	13,580	5,890	1,560	100

CAL YR 1973 TOTAL 35,630.6 MEAN 97.6 MAX 850 MIN 9.3 AC-FT 70,670 MEAN a 98.5 AC-FT a 71,300
WTR YR 1974 TOTAL 45,832.6 MEAN 126 MAX 850 MIN 9.3 AC-FT 90,910 MEAN a 131 AC-FT a 94,890

a Adjusted for change in storage in Prosser Creek Reservoir.

10343000 INDEPENDENCE CREEK NEAR TRUCKEE, CALIF.

LOCATION.--Lat 39°27'20", long 120°17'15", in NW¼SW¼ sec.35, T.19 N., R.15 E., Sierra County, on left bank 0.3 mi (0.5 km) downstream from Independence Lake outlet, 6.5 mi (10.5 km) northwest of Hobart Mills, and 10 mi (16 km) north-northwest of Truckee.

DRAINAGE AREA.--7.63 mi² (19.76 km²).

PERIOD OF RECORD.--November 1902 to September 1907, November 1909 to June 1910, August 1968 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,940 ft (2,115 m), from topographic map. July 1, 1904, to June 30, 1910, water-stage recorder 75 ft (25 m) downstream from Independence Lake outlet; prior to July 1, 1904, water-stage recorder 600 ft (180 m) downstream at approximately same datum.

AVERAGE DISCHARGE (unadjusted).--11 years (1902-7, 1968-74), 32.8 ft³/s (0.929 m³/s), 23,760 acre-ft/yr (29.3 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 243 ft³/s (6.88 m³/s) July 9 (gage height, 5.60 ft or 1.707 m); minimum daily, 0.02 ft³/s (0.001 m³/s) Oct. 1-14.

Period of record: Maximum discharge observed, 286 ft³/s (8.10 m³/s) June 23, 1907 (gage height, 3.9 ft or 1.19 m, site and datum then in use); no flow Sept. 28 to Nov. 10, 1905, June 1, 1906.

REMARKS.--Records good. Flow regulated by Independence Lake, usable capacity, 17,500 acre-ft (21.6 hm³).

REVISIONS.--WSP 2127: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.02	1.6	23	.90	.60	11	5.3	7.6	83	51	12	7.9
2	.02	1.4	19	.55	.62	13	4.4	9.8	64	49	12	13
3	.02	1.0	8.7	.55	.62	4.6	3.0	15	76	47	11	15
4	.02	.90	1.6	.62	.62	2.4	4.2	30	87	41	11	15
5	.02	4.0	.62	.55	.62	1.8	3.4	50	95	37	10	15
6	.02	.91	.90	.55	.62	1.6	2.1	68	103	36	9.8	25
7	.02	.45	.62	.58	.62	1.5	1.8	93	110	30	9.8	41
8	.02	.32	.62	.62	.53	1.4	2.1	115	107	36	9.8	50
9	.02	.32	.62	.53	.53	1.2	5.0	124	90	173	10	56
10	.02	.38	.62	.62	.53	.90	2.0	126	86	194	10	55
11	.02	4.6	4.6	.62	.53	1.0	1.8	123	95	88	10	55
12	.02	5.2	2.6	.62	.53	3.2	2.0	123	103	32	9.8	55
13	.02	4.8	2.7	1.0	.53	.90	2.1	113	107	32	9.5	54
14	.02	6.3	2.1	.90	.53	.74	2.4	110	110	31	9.2	54
15	30	1.5	1.4	2.4	.53	.74	2.8	101	109	30	9.0	54
16	55	4.0	1.4	5.1	1.6	.90	3.3	91	106	28	9.0	53
17	43	5.0	4.0	18	.53	.90	3.6	83	103	28	9.0	53
18	31	7.4	2.1	3.6	.53	.90	3.8	76	97	26	9.0	52
19	26	1.8	1.0	3.8	2.6	.90	3.3	69	90	26	9.0	62
20	24	.90	.62	2.7	.62	.90	3.3	64	76	26	8.7	69
21	22	.90	1.4	2.2	2.7	.90	3.6	60	56	20	8.7	69
22	19	.90	.74	1.6	4.2	1.0	4.6	62	56	18	8.7	77
23	20	.90	.62	1.5	1.4	1.0	4.4	74	60	18	8.4	85
24	20	.74	.62	1.4	.74	1.2	3.3	95	59	17	8.4	85
25	20	.62	.62	1.4	.62	1.4	2.8	103	56	17	8.2	84
26	17	.62	1.4	1.2	2.0	1.2	2.7	111	52	17	8.2	83
27	16	.62	2.1	1.0	2.2	4.0	2.6	127	50	16	8.2	82
28	9.2	.62	.62	.74	1.6	7.2	3.4	133	49	15	7.9	81
29	2.2	.62	3.9	.74	-----	4.5	4.4	135	50	14	7.9	80
30	3.6	2.7	2.1	.74	-----	21	5.9	128	51	12	7.9	80
31	3.0	-----	1.5	1.0	-----	9.4	-----	124	-----	12	7.9	-----
TOTAL	361.28	62.02	94.44	58.33	29.90	103.28	99.4	2,743.4	2,436	1,217	288.0	1,659.9
MEAN	11.7	2.07	3.05	1.88	1.07	3.33	3.31	88.5	81.2	39.3	9.29	55.3
MAX	55	7.4	23	18	4.2	21	5.9	135	110	194	12	85
MIN	.02	.32	.62	.53	.53	.74	1.8	7.6	49	12	7.9	7.9
AC-FT	717	123	187	116	59	205	197	5,440	4,830	2,410	571	3,290
CAL YR 1973	TOTAL	11,064.04	MEAN	30.3	MAX	179	MIN	.02	AC-FT	21,950		
WTR YR 1974	TOTAL	9,152.95	MEAN	25.1	MAX	194	MIN	.02	AC-FT	18,150		

10343500 SAGEHEN CREEK NEAR TRUCKEE, CALIF.

LOCATION.--Lat 39°25'54", long 120°14'07", in NE¼NE¼ sec.7, T.18 N., R.16 E., Nevada County, on left bank 2.2 mi (3.5 km) upstream from bridge on State Highway 89, and 7.5 mi (12.1 km) north of Truckee.

DRAINAGE AREA.--10.8 mi² (28.0 km²).

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

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 6,320 ft (1,926 m) from topographic map. Prior to Dec. 2, 1953, nonrecording gage at site 100 ft (30 m) upstream at different datum.

AVERAGE DISCHARGE.--21 years, 12.8 ft³/s (0.36 m³/s), 9,270 acre-ft/yr (11.4 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 189 ft³/s (5.35 m³/s) Nov. 12 (gage height, 3.49 ft or 1.064 m); minimum daily, 2.6 ft³/s (0.074 m³/s) Oct. 3.

Period of record: Maximum discharge, 765 ft³/s (21.7 m³/s) Feb. 1, 1963 (gage height, 4.64 ft or 1.414 m, from floodmarks), from rating curve extended above 110 ft³/s (3.12 m³/s) on basis of slope-area measurement at gage height 4.28 ft (1.305 m); minimum, 0.6 ft³/s (0.017 m³/s) Aug. 8, 1960, Aug. 7, 1961, result of temporary regulation.

REMARKS.--Records good. No storage or diversion above station. Records of chemical analyses, water temperatures, and sediment discharge for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.8	3.6	9.0	12	13	19	27	62	58	13	6.2	3.9
2	2.7	3.6	11	10	12	18	25	68	57	12	5.8	3.8
3	2.6	3.4	6.5	10	12	13	22	72	58	11	5.9	3.8
4	2.7	3.2	6.2	9.9	12	12	22	73	56	11	6.0	3.8
5	2.7	3.4	6.2	9.1	11	11	22	78	55	10	6.9	3.8
6	2.7	9.1	6.4	8.6	11	12	22	84	52	9.8	5.8	3.8
7	3.5	17	6.6	8.3	10	11	22	94	49	9.4	5.4	3.8
8	3.8	8.0	6.3	7.9	9.7	10	24	100	45	18	5.3	3.7
9	3.3	7.3	6.1	7.6	9.4	9.9	24	101	43	47	5.3	3.7
10	3.1	13	6.1	8.2	9.1	9.9	21	96	42	23	5.2	3.6
11	3.1	48	6.0	7.4	8.9	9.7	23	93	40	16	5.0	3.7
12	3.0	62	6.0	7.1	8.7	9.6	26	87	39	13	4.8	3.7
13	2.9	17	6.1	7.0	8.4	9.7	26	79	39	11	4.7	3.8
14	2.8	13	5.8	10	8.1	11	28	77	37	10	4.7	3.8
15	2.8	11	5.7	49	7.9	14	36	73	35	9.4	4.7	3.7
16	2.7	10	5.9	47	7.8	16	39	64	33	8.8	4.6	3.7
17	2.7	11	8.6	61	7.6	17	44	58	32	8.6	4.5	3.6
18	2.7	10	7.7	67	7.5	17	43	55	29	8.1	4.5	3.5
19	2.8	8.8	6.8	71	7.6	16	39	48	29	7.7	4.5	3.5
20	3.2	8.2	6.5	45	7.4	17	40	44	26	7.4	4.5	3.4
21	3.1	7.8	6.4	32	7.2	17	46	45	24	7.1	4.4	3.5
22	5.5	7.3	6.2	26	7.1	18	55	48	22	6.8	4.3	3.5
23	6.5	6.8	6.1	25	7.0	19	54	50	21	6.8	4.2	3.5
24	4.4	6.6	5.9	22	6.9	21	44	53	19	6.5	4.2	3.3
25	4.5	6.3	5.9	21	6.9	21	38	56	18	6.3	4.1	3.3
26	4.3	6.2	5.9	19	6.9	23	34	62	17	6.1	4.1	3.3
27	4.2	6.1	6.1	17	6.8	23	34	65	16	5.9	4.1	3.4
28	4.1	6.2	6.4	16	6.4	20	38	68	15	5.8	4.0	3.4
29	3.9	6.6	27	15	-----	37	43	64	14	5.6	4.0	3.4
30	3.6	6.5	20	15	-----	39	52	61	14	5.5	4.0	3.4
31	3.6	-----	14	14	-----	28	-----	59	-----	6.0	4.0	-----
TOTAL	106.3	337.0	245.4	685.1	244.3	528.8	1,013	2,137	1,034	332.6	149.7	108.1
MEAN	3.43	11.2	7.92	22.1	8.73	17.1	33.8	68.9	34.5	10.7	4.83	3.60
MAX	6.5	62	27	71	13	39	55	101	58	47	6.9	3.9
MIN	2.6	3.2	5.7	7.0	6.4	9.6	21	44	14	5.5	4.0	3.3
AC-FT	211	668	487	1,360	485	1,050	2,010	4,240	2,050	660	297	214

CAL YR 1973 TOTAL 4,979.4 MEAN 13.6 MAX 86 MIN 2.6 AC-FT 9,880
WTR YR 1974 TOTAL 6,921.3 MEAN 19.0 MAX 101 MIN 2.6 AC-FT 13,730

PEAK DISCHARGE (BASE, 50 FT ³ /S)					
DATE	TIME	G.H.	DISCHARGE	DATE	TIME
11-12	0600	3.49	189	5-7	1900
1-18	1900	3.00	97	7-9	1600
3-29	2330	2.63	54		

PYRAMID AND WINNEMUCCA LAKES BASIN

61

10344300 STAMPEDE RESERVOIR NEAR BOCA, CALIF.

LOCATION.--Lat 39°28'24", long 120°06'06", in SW¼NW¼NW¼ sec.28, T.19 N., R.17 E., Sierra County, in control house on Stampede Dam on Little Truckee River, just downstream from mouth of Davies Creek, and 6.2 mi (10.0 km) north of Boca.

DRAINAGE AREA.--136 mi² (352 km²).

PERIOD OF RECORD.--August 1969 to current year.

GAGE.--Water-stage recorder with mercury-column manometer. Datum of gage is at mean sea level (levels by Bureau of Reclamation).

EXTREMES.--Current year: Maximum contents, 226,500 acre-ft (279 hm³) June 19, 21 (elevation, 5,948.7 ft or 1,813.16 m); minimum, 161,100 acre-ft (199 hm³) Nov. 7, 9, 10 (elevation, 5,927.8 ft or 1,806.79 m).
Period of record: Maximum contents, 226,500 acre-ft (279 hm³) June 19, 21, 1974 (elevation, 5,948.7 ft or 1,813.16 m); minimum (since July 1971), 115,400 acre-ft (142 hm³) Sept. 20-27, 1972 (elevation, 5,909.8 ft or 1,801.31 m).

REMARKS.--Reservoir is formed by rolled-earth and rockfill dam. Storage began Aug. 1, 1969. Total capacity, 226,500 acre-ft (279 hm³) at elevation, 5,948.7 ft (1,813.16 m), spillway crest. Inactive storage, 5,010 acre-ft (6.18 hm³), includes 660 acre-ft (814,000 m³) dead storage below elevation 5,798.3 ft (1,767.32 m). Elevation of streambed at dam axis, 5,737.0 ft (1,748.64 m). Figures given herein represent total contents. Reservoir is used for flood control, municipal water supply, enhancement of fishery, and recreation.

COOPERATION.--Records furnished by Bureau of Reclamation.

MONTHEND ELEVATION AND CONTENTS, AT 0800, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	5,939.2	194,900	--
Oct. 31.....	5,930.0	167,400	-27,500
Nov. 30.....	5,930.8	169,700	+2,300
Dec. 31.....	5,931.8	172,600	+2,900
CAL YR 1973.....	--	--	+49,800
Jan. 31.....	5,937.3	189,200	+16,600
Feb. 28.....	5,938.6	193,000	+3,800
Mar. 31.....	5,942.0	204,000	+11,000
Apr. 30.....	5,942.3	205,200	+1,200
May 31.....	5,946.9	220,200	+15,000
June 30.....	5,948.2	224,900	+4,700
July 31.....	5,946.3	218,300	-6,600
Aug. 31.....	5,939.2	195,200	-23,100
Sept. 30.....	5,938.5	192,900	-2,300
WTR YR 1974.....	--	--	-2,000

10344400 LITTLE TRUCKEE RIVER ABOVE BOCA RESERVOIR, NEAR BOCA, CALIF.

LOCATION.--Lat 39°26'10", long 120°05'00", in SW¼SW¼ sec.3, T.18 N., R.17 E., Nevada County, on left bank 1 mi (1.6 km) upstream from Boca Reservoir, 1.5 mi (2.4 km) upstream from Dry Creek, 3.0 mi (4.8 km) downstream from Stampede Dam on Little Truckee River, and 3.5 mi (5.6 km) north of Boca.

DRAINAGE AREA.--146 mi² (378 km²).

PERIOD OF RECORD.--June 1903 to October 1910, September 1939 to current year. Monthly discharge only for some periods, published in WSP 1314 and 1734. Published as "at Pine Station" June 1903 to December 1907 and as "at Starr" January 1908 to October 1910.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 5,618.67 ft (1,712.571 m) above mean sea level (Bureau of Reclamation bench mark). June 1903 to October 1910, nonrecording gages at different sites and datums.

AVERAGE DISCHARGE (adjusted for storage).--42 years (1903-10, 1939-74), 195 ft³/s (5.522 m³/s), 141,300 acre-ft/yr (174 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,060 ft³/s (30.0 m³/s) Mar. 31 (gage height, 2.70 ft or 0.823 m); maximum gage height, 2.75 ft (0.838 m) Apr. 1; minimum discharge, 36 ft³/s (1.02 m³/s) for part or all of each day Jan. 7-10, Sept. 28-30.

Period of record: Maximum discharge, 13,300 ft³/s (377 m³/s) Feb. 1, 1963 (gage height, 9.00 ft or 2.743 m), from rating curve extended above 1,600 ft³/s (45.3 m³/s) on basis of slope-area measurement of peak flow; minimum daily, 0.30 ft³/s (0.008 m³/s) Sept. 16-21, 1969.

REMARKS.--Records excellent. Flow regulated by Independence Lake, capacity, 17,500 acre-ft (21.6 hm³) and one transmountain diversion to Sierra Valley and Stampede Reservoir, capacity, 226,500 acre-ft (279 hm³).

REVISIONS (WATER YEARS).--WSP 1564: 1903-4, 1906-7, 1910, drainage area at site used 1903-7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	494	343	76	40	40	61	985	442	640	543	428	108
2	497	180	73	33	40	54	873	310	641	587	398	107
3	497	118	73	31	40	48	871	313	783	543	398	107
4	503	115	73	33	40	46	496	311	969	586	398	106
5	500	117	73	33	40	45	234	311	758	586	398	83
6	497	118	73	33	40	46	232	311	523	586	397	60
7	509	118	73	33	39	46	230	312	390	585	397	59
8	504	109	73	33	38	44	230	312	238	586	370	59
9	503	104	73	31	38	45	231	227	238	330	330	59
10	503	104	73	65	38	46	227	153	313	44	299	59
11	500	108	74	103	38	46	330	152	414	40	298	59
12	500	93	73	103	38	51	405	151	415	39	340	59
13	503	42	74	105	38	51	404	336	462	39	396	59
14	502	40	73	85	38	54	404	562	510	38	397	59
15	502	39	73	69	38	56	405	689	471	38	398	59
16	503	40	73	74	39	58	408	789	112	38	398	59
17	503	43	76	94	38	58	409	789	110	38	397	59
18	503	41	75	84	38	57	352	789	296	38	396	59
19	503	39	73	80	39	57	313	789	458	38	397	106
20	503	38	73	65	38	56	313	709	308	38	397	39
21	503	38	74	55	38	56	312	590	394	38	396	37
22	506	56	73	50	38	57	329	589	516	61	396	56
23	508	88	73	47	38	57	364	549	381	103	397	194
24	508	128	73	45	38	57	364	512	192	103	397	144
25	508	128	72	44	38	197	389	514	146	126	396	99
26	505	135	72	43	39	438	409	515	145	242	395	83
27	504	144	73	41	39	439	409	514	320	346	396	38
28	503	145	74	41	39	442	409	515	499	348	397	37
29	504	117	88	41	-----	458	366	625	500	394	276	37
30	503	74	81	41	-----	474	417	801	498	457	198	36
31	503	-----	62	40	-----	829	-----	735	-----	457	152	-----
TOTAL	15,584	3,002	2,285	1,715	1,082	4,529	12,120	15,216	12,640	8,035	11,423	2,185
MEAN	503	100	73.7	55.3	38.6	146	404	491	421	259	368	72.8
MAX	509	343	88	105	40	829	985	801	969	587	428	194
MIN	494	38	62	31	38	44	227	151	110	38	152	36
AC-FT	30,910	5,950	4,530	3,400	2,150	8,980	24,040	30,180	25,070	15,940	22,660	4,330
MEAN a	55.5	139	121	325	107	325	424	735	500	152	-7.16	34.1
AC-FT a	3,410	8,250	7,430	20,000	5,950	19,980	25,240	45,180	29,770	9,340	-440	2,030

CAL YR 1973 TOTAL 46,203.9 MEAN 127 MAX 523 MIN 1.6 AC-FT 91,650 MEAN a 195 AC-FT a 141,450
WTR YR 1974 TOTAL 89,816.0 MEAN 246 MAX 985 MIN 31 AC-FT 178,200 MEAN a 243 AC-FT a 176,200

a Adjusted for change in storage in Stampede Reservoir.

NOTE.--Negative values may occur occasionally (meaningless, of course) because reservoir evaporation is not considered in the adjustment.

10344490 BOCA RESERVOIR AT BOCA, CALIF.

LOCATION.--Lat 39°23'20", long 120°05'40", in NE¼NW¼ sec.28, T.18 N., R.17 E., Nevada County, in control house at Boca Dam on Little Truckee River 1,800 ft (549 m) upstream from mouth, and 0.5 mi (0.8 km) northwest of Boca.

DRAINAGE AREA.--172 mi² (445 km²).

PERIOD OF RECORD.--December 1938 to current year. Monthend contents only for December 1938 to September 1957, published in WSP 1734.

GAGE.--Pressure gage with mercury column read once daily. Datum of gage is at mean sea level (levels by Bureau of Reclamation).

EXTREMES.--Current year: Maximum contents, 40,870 acre-ft (50.4 hm³) June 19 to July 29 (elevation, 5,605.0 ft or 1,708.40 m); minimum, 5,430 acre-ft (6.70 hm³) Oct. 1 (elevation, 5,551.4 ft or 1,692.07 m).
Period of record: Maximum contents, 41,440 acre-ft (51.1 hm³) Dec. 23, 1955 (elevation, 5,605.55 ft or 1,708.57 m); minimum, 37 acre-ft (45,600 m³) Mar. 4-9, 1955 (elevation, 5,521.65 ft or 1,682.999 m).

REMARKS.--Reservoir is formed by earthfill, rock-faced dam. Storage began Dec. 8, 1938. Usable capacity, 40,870 acre-ft (50.4 hm³) between elevations 5,521 ft (1,682.8 m), outlet sill and 5,605 ft (1,708.4 m), top of spillway gates. Elevation of spillway (gate open) is 5,589.01 ft (1,703.530 m). Dead storage, 241 acre-ft (297,000 m³) below outlet sill. Figures given herein represent usable contents. Water is used for irrigation in the State of Nevada and for power development.

COOPERATION.--Daily elevations furnished by Washoe County Water Conservation District.

REVISIONS.--WSP 1634: Drainage area.

CAPACITY TABLE (ELEVATION, IN FEET, AND CONTENTS, IN ACRE-FEET)

5,550	4,970
5,560	8,780
5,570	13,770
5,580	20,000
5,590	27,510
5,600	36,150
5,605	40,870

CONTENTS, IN ACRE-FEET, AT 0800, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5,430	32,980	32,540	32,200	32,020	31,520	32,630	33,160	39,320	40,870	40,380	38,270
2	6,460	33,070	32,540	32,280	32,020	31,850	33,070	33,250	39,610	40,870	40,280	38,180
3	7,470	33,070	32,540	32,280	32,020	31,850	32,890	33,250	39,900	40,870	40,190	37,990
4	8,460	32,890	32,540	32,020	32,020	31,850	32,890	33,420	39,900	40,870	40,090	37,900
5	9,590	32,890	32,460	31,850	31,940	31,940	32,890	33,420	39,900	40,870	39,990	37,990
6	10,680	32,890	32,460	31,700	31,940	32,020	32,720	33,600	40,090	40,870	39,900	37,990
7	11,680	32,890	32,370	31,000	31,850	32,110	32,540	33,600	40,090	40,870	39,800	37,990
8	12,720	32,810	32,370	31,520	31,850	32,020	32,370	33,960	40,090	40,870	39,700	37,990
9	13,770	32,630	32,370	31,520	31,850	32,020	32,200	34,310	40,090	40,870	39,420	37,990
10	14,860	32,540	32,370	31,260	31,850	32,020	32,020	34,580	40,090	40,870	39,320	37,990
11	15,930	32,460	32,370	31,180	31,850	31,940	32,020	34,850	40,090	40,870	39,130	37,990
12	16,980	32,460	32,370	31,180	31,760	31,940	31,940	35,220	40,090	40,870	38,940	37,990
13	18,000	32,460	32,370	31,180	31,700	32,020	31,850	35,400	40,190	40,870	38,750	37,990
14	19,190	32,460	32,370	31,260	31,700	32,020	31,850	36,310	40,280	40,870	38,560	37,990
15	20,070	32,460	32,280	31,520	31,700	32,020	31,850	37,430	40,480	40,870	38,650	37,990
16	20,840	32,460	32,280	31,850	31,700	32,110	31,850	38,270	40,670	40,870	38,650	37,990
17	21,540	32,460	32,200	32,540	31,700	32,200	31,850	39,130	40,670	40,870	38,560	37,990
18	22,190	32,460	32,200	32,980	31,610	32,200	32,110	39,130	40,770	40,870	38,460	37,990
19	22,850	32,460	32,200	33,340	31,610	32,200	32,200	39,320	40,870	40,870	38,460	37,990
20	23,660	32,370	32,200	32,250	31,520	32,370	32,370	39,320	40,870	40,870	38,370	38,180
21	24,340	32,370	32,200	33,160	31,520	32,280	32,370	39,130	40,870	40,870	38,080	38,270
22	25,030	32,370	32,200	32,540	31,520	32,200	32,460	38,940	40,870	40,870	38,080	38,370
23	25,970	32,280	32,200	32,370	31,520	32,200	32,540	38,940	40,870	40,870	38,080	38,560
24	26,760	32,370	32,110	32,370	31,440	32,200	32,540	38,840	40,870	40,870	38,080	38,940
25	27,490	32,370	32,110	32,110	31,350	32,110	32,630	38,840	40,870	40,870	38,180	39,130
26	28,300	32,370	32,020	32,110	31,440	31,940	32,720	38,840	40,870	40,870	38,080	39,130
27	29,140	32,370	32,020	32,110	31,520	31,850	32,810	38,940	40,870	40,870	38,080	39,130
28	29,980	32,370	32,020	32,110	31,520	31,850	32,890	38,940	40,870	40,870	38,080	39,220
29	30,830	32,460	32,110	32,020	-----	32,020	32,980	38,940	40,870	40,870	38,370	39,320
30	31,610	32,460	32,200	32,020	-----	32,110	33,070	38,940	40,870	40,480	38,270	39,320
31	32,200	-----	32,200	32,020	-----	32,280	-----	38,940	-----	40,280	38,370	-----
MAX	32,200	33,070	32,540	33,340	32,020	32,370	33,070	39,320	40,870	40,870	40,380	39,320
MIN	5,430	32,280	32,020	31,000	31,350	31,520	31,850	33,160	39,320	40,280	38,080	37,900
(a)	5,595.60	5,595.90	5,595.60	5,595.40	5,594.80	5,595.70	5,596.60	5,603.00	5,605.00	5,604.45	5,602.35	5,603.40
(b)	+27,900	+260	-260	-180	-500	+760	+790	+5,870	+1,930	-590	-1,910	+950

CAL YR 1973 b +2,480
WTR YR 1974 b +35,000

a Elevation, in feet, at end of month.
b Change in contents, in acre-feet.

LOCATION.--Lat 39°23'10", long 120°05'40", in NE¼NW¼ sec.28, T.18 N., R.17 E., Nevada County, on right bank 800 ft (244 m) upstream from mouth, 1,000 ft (305 m) downstream from Boca Dam, and 0.3 mi (0.5 km) northwest of Boca.

PERIOD OF RECORD.--April to October 1890 (monthly discharge only), January 1911 to September 1915, January 1939 to current year. Monthly discharge only for January 1939 to September 1957, published in WSP 1734.

AVERAGE DISCHARGE (unadjusted).--39 years (1911-15, 1939-74), 186 ft³/s (5.268 m³/s), 134,800 acre-ft/yr (166 hm³/yr).

REMARKS.--Records good. Flow regulated by Boca Reservoir, capacity, 40,870 acre-ft (50.4 hm³), Independence Lake, capacity, 17,500 acre-ft (21.6 hm³), one transmountain diversion to Sierra Valley, and Stampede Reservoir, capacity, 226,500 acre-ft (279 hm³).

REVISIONS.--WSP 1564: Drainage area.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.06	165	82	32	62	57	955	379	479	542	427	148
2	.06	167	82	35	62	57	1,020	254	482	598	433	148
3	.06	163	83	165	62	58	1,040	255	725	596	433	148
4	.08	127	83	165	62	58	606	258	974	596	440	97
5	.08	135	83	163	62	57	376	260	740	596	440	46
6	.35	165	83	163	62	57	376	262	494	596	440	46
7	.41	165	83	87	62	90	376	188	376	600	440	47
8	.41	165	83	.68	62	105	353	129	235	600	440	47
9	.08	163	85	86	62	105	330	52	233	292	413	35
10	.08	163	86	159	62	105	330	.1	314	26	376	25
11	.10	163	86	159	63	99	417	.1	379	27	379	38
12	.10	110	86	159	63	82	444	.1	356	38	410	49
13	.10	53	86	77	63	82	437	.2	423	40	444	49
14	.08	54	86	11	63	81	433	.2	444	40	407	50
15	102	53	86	26	63	86	430	188	391	40	379	50
16	163	54	86	12	64	104	430	367	53	40	410	46
17	167	55	86	1.4	59	104	356	568	29	39	444	28
18	169	56	87	110	55	104	261	760	242	39	444	17
19	159	56	87	211	55	104	270	735	427	39	444	1.3
20	161	57	87	216	55	133	275	740	278	38	444	1.4
21	165	60	87	270	55	153	275	740	403	38	410	1.4
22	137	61	87	328	55	151	296	656	486	61	388	1.3
23	108	74	87	228	56	151	328	568	358	90	388	1.4
24	113	107	87	151	56	151	317	516	214	90	391	1.4
25	108	107	87	117	57	339	347	465	142	116	391	25
26	111	135	89	56	57	539	358	465	144	238	391	49
27	108	161	90	63	57	539	356	465	350	322	391	31
28	111	125	91	63	57	539	353	468	490	330	311	1.6
29	139	82	91	63	-----	562	303	638	486	472	242	1.6
30	167	82	93	63	-----	590	397	745	483	556	189	25
31	167	-----	63	62	-----	812	-----	608	-----	458	148	-----
TOTAL	2,357.05	3,283	2,648	3,502.08	1,673	6,254	12,845	11,729.7	11,630	8,193	12,127	1,255.4
MEAN	76.0	109	85.4	113	59.8	202	428	378	388	264	391	41.8
MAX	169	167	93	328	64	812	1,040	760	974	600	444	148
MIN	.06	53	63	.68	55	57	261	.10	29	26	148	1.3
AC-FT	4,680	6,510	5,250	6,950	3,320	12,400	25,480	23,270	23,070	16,250	24,050	2,490
CAL YR 1973	TOTAL 50,491.74			MEAN 138	MAX 596	MIN .04	AC-FT 100,200					
WTR YR 1974	TOTAL 77,497.23			MEAN 212								

LOCATION.--Lat 39°25'41", long 120°01'59", in NE¼ sec.12, T.18 N., R.17 E., Nevada County, on left bank 0.5 mi (0.8 km) upstream from Mystic Canyon, 0.7 mi (1.1 km) downstream from Farad powerplant, 2.5 mi (4.0 km) north of Floriston, 3.4 mi (5.5 km) downstream from Bronco Creek, and 3.5 mi (5.6 km) upstream from California-Nevada State line.

PERIOD OF RECORD.--March to October 1890 (monthly discharge only), September 1899 to current year. Monthly discharge only for January 1944 to July 1957, published in WSP 1734. Published as "near Boca" March to October 1890, "at or near Nevada-California State line" September 1899 to August 1912, and as "at Iceland" August 1912 to December 1937.

EXTREMES.--Current year: Maximum discharge, 3,410 ft³/s (96.6 m³/s) Apr. 2 (gage height, 6.31 ft or 1.923 m); minimum, 359 ft³/s (10.2 m³/s) Jan. 14.
Period of record (1899 to current year): Maximum discharge, 17,500 ft³/s (496 m³/s) Nov. 21, 1950 (gage height, 14.5 ft or 4.420 m, present datum, from floodmarks), from slope-area measurement of peak flow; minimum, 28 ft³/s (0.793 m³/s) Dec. 18, 1930.

REVISIONS.--WSP 1714: Drainage area.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	616	505	434	547	724	1,030	2,760	2,080	2,420	1,180	921	658
2	627	502	425	489	699	1,120	2,950	2,050	2,440	1,140	924	681
3	699	497	415	608	687	1,020	3,040	2,090	2,510	1,100	920	712
4	666	467	406	603	679	979	2,470	2,100	2,510	1,060	925	739
5	667	473	399	590	668	968	2,150	2,150	2,160	1,040	944	702
6	682	555	395	578	650	1,000	2,050	2,220	1,830	983	834	705
7	668	720	397	522	643	1,060	2,220	2,330	1,790	961	821	703
8	651	665	391	412	637	1,090	2,190	2,540	1,550	984	813	698
9	624	541	387	451	631	1,170	2,090	2,520	1,500	1,700	789	689
10	602	619	384	520	627	1,170	1,870	2,530	1,620	1,950	739	675
11	565	1,640	391	516	623	1,130	1,850	2,550	1,770	1,780	733	682
12	550	2,210	386	517	622	1,090	1,910	2,490	1,820	1,670	753	694
13	539	1,560	394	476	618	1,090	1,910	2,460	2,050	1,610	832	688
14	529	1,200	383	386	615	1,100	1,930	2,240	2,080	1,580	842	684
15	556	840	379	1,180	612	1,180	1,980	2,310	1,910	1,490	810	683
16	578	670	380	1,460	615	1,260	2,030	2,350	1,510	1,290	816	674
17	572	638	415	2,210	603	1,280	1,970	2,010	1,310	1,270	848	646
18	571	652	435	2,140	600	1,280	1,900	2,110	1,100	1,250	845	640
19	560	560	409	2,830	614	1,270	1,810	2,000	1,250	1,220	851	604
20	546	505	402	2,230	605	1,300	1,800	1,850	1,070	1,120	895	624
21	522	476	408	1,850	695	1,340	1,820	1,780	1,100	1,110	871	619
22	506	438	407	1,640	785	1,370	1,940	1,770	1,290	1,120	844	570
23	530	437	397	1,520	845	1,410	2,040	1,750	1,140	1,130	842	557
24	491	482	391	1,230	847	1,420	1,940	1,770	976	1,020	841	554
25	488	466	390	1,110	852	1,590	1,890	1,790	864	952	838	563
26	495	467	392	951	860	1,810	1,850	2,010	828	961	836	595
27	495	471	412	908	852	1,840	1,800	2,270	983	973	834	551
28	491	446	428	869	853	1,840	1,800	2,420	1,140	973	774	512
29	505	405	820	821	-----	2,000	1,760	2,400	1,110	1,050	663	490
30	507	409	870	782	-----	2,260	1,900	2,750	1,130	1,060	649	469
31	509	-----	649	739	-----	2,420	-----	2,600	-----	968	641	-----
TOTAL	17,607	20,516	13,571	31,685	19,361	41,887	61,620	68,290	46,761	37,695	25,488	19,061
MEAN	568	684	438	1,022	691	1,351	2,054	2,203	1,559	1,216	822	635
MAX	699	2,210	870	2,830	860	2,420	3,040	2,750	2,510	1,950	944	739
MIN	488	405	3									

PYRAMID AND WINNEMUCCA LAKES BASIN

10348000 TRUCKEE RIVER AT RENO, NEV.

LOCATION.--Lat 39°31'55", long 119°47'05", in NW¼ sec.7, T.19 N., R.20 E., Washoe County, on left bank 400 ft (122 m) downstream from Kietzke Lane bridge, 0.5 mi (0.8 km) downstream from Scott Island, 1.5 mi (2.4 km) east of Reno Post Office, and 5 mi (8 km) upstream from Steamboat Creek.

DRAINAGE AREA.--1,067 mi² (2,764 km²).

PERIOD OF RECORD.--July 1906 to September 1921, June 1925 to September 1926, January 1930 to December 1935, January to December 1943, January 1946 to current year. Monthly discharge only for some periods, published in WSP 1314 and 1734.

GAGE.--Water-stage recorder. Datum of gage is 4,431.97 ft (1,350.864 m) above mean sea level (levels by Corps of Engineers). July 1906 to September 1946, nonrecording gage at site 1 mi (2 km) upstream at different datum.

AVERAGE DISCHARGE.--48 years (1906-21, 1925-26, 1930-34, 1946-74), 680 ft³/s (19.26 m³/s), 492,700 acre-ft/yr (607 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 3,590 ft³/s (102 m³/s) Jan. 19 (gage height, 6.54 ft or 1.993 m); minimum, 153 ft³/s (4.33 m³/s) Sept. 30.

Period of record: Maximum discharge, 20,800 ft³/s (589 m³/s) Dec. 23, 1955; maximum gage height, 13.83 ft (4.215 m) Nov. 21, 1950; no flow Sept. 12, 14-24, 26-30, 1926.

REMARKS.--Records good. Flow regulated by Lake Tahoe, Prosser Creek, Stampede and Boca Reservoirs, Donner and Independence Lakes, and by several powerplants. Many diversions above station.

REVISIONS.--WSP 1714: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	348	420	522	572	717	1,230	2,840	1,860	2,060	901	664	342
2	340	410	425	450	686	1,400	2,970	1,790	2,100	854	690	357
3	424	410	441	500	672	1,130	3,100	1,790	2,170	816	641	394
4	419	410	420	560	663	1,050	2,510	1,780	2,190	784	643	442
5	402	434	409	600	650	1,060	2,190	1,810	1,940	802	685	418
6	433	508	408	585	618	1,100	2,030	1,880	1,590	745	572	410
7	433	630	409	559	618	1,150	2,200	1,950	1,600	711	519	410
8	433	715	405	380	609	1,140	2,160	2,170	1,380	770	507	410
9	419	521	397	360	599	1,230	2,100	2,210	1,290	1,490	493	405
10	415	554	391	400	595	1,240	1,870	2,190	1,360	1,850	444	387
11	369	1,490	398	450	590	1,210	1,770	2,250	1,550	1,620	415	391
12	357	2,290	396	495	587	1,150	1,840	2,210	1,530	1,490	409	420
13	340	1,680	430	539	583	1,150	1,800	2,180	1,730	1,420	487	412
14	328	1,340	405	414	581	1,180	1,810	1,960	1,840	1,360	538	413
15	328	918	394	1,200	571	1,270	1,850	2,010	1,690	1,300	488	403
16	377	699	391	1,580	568	1,380	1,880	2,080	1,340	1,040	482	407
17	369	675	420	2,750	568	1,390	1,820	1,750	1,190	1,010	529	380
18	357	712	461	2,280	563	1,400	1,770	1,870	921	982	527	382
19	357	584	406	3,110	580	1,380	1,680	1,750	1,120	961	523	403
20	352	498	394	2,390	566	1,390	1,630	1,640	914	842	576	331
21	336	476	423	1,950	653	1,430	1,620	1,540	765	826	568	338
22	336	428	440	1,710	745	1,450	1,690	1,550	1,100	824	528	312
23	415	409	406	1,620	831	1,480	1,810	1,490	903	848	522	293
24	357	454	392	1,300	844	1,480	1,760	1,550	753	746	519	294
25	352	452	384	1,200	853	1,590	1,680	1,490	589	654	515	278
26	348	447	381	991	870	1,830	1,660	1,640	561	647	510	317
27	360	457	419	937	857	1,870	1,590	1,910	615	670	510	310
28	370	462	430	895	862	1,890	1,570	2,060	875	682	492	276
29	370	401	764	830	-----	2,040	1,540	1,990	825	755	369	255
30	390	401	1,040	793	-----	2,430	1,600	2,360	843	823	351	243
31	410	-----	714	727	-----	2,410	-----	2,270	-----	720	315	-----
TOTAL	11,644	20,285	14,115	33,127	18,699	44,530	58,340	58,980	39,334	29,943	16,031	10,833
MEAN	376	676	455	1,069	668	1,436	1,945	1,903	1,311	966	517	361
MAX	433	2,290	1,040	3,110	870	2,430	3,100	2,360	2,190	1,850	690	442
MIN	328	401	381	360	563	1,050	1,540	1,490	561	647	315	243
AC-FT	23,100	40,240	28,000	65,710	37,090	88,330	115,700	117,000	78,020	59,390	31,800	21,490

CAL YR 1973 TOTAL 208,710 MEAN 572 MAX 2,290 MIN 328 AC-FT 414,000
WTR YR 1974 TOTAL 355,861 MEAN 975 MAX 3,110 MIN 243 AC-FT 705,900

10356500 SUSAN RIVER AT SUSANVILLE, CALIF.

LOCATION.--Lat 40°25'03", long 120°40'15", in SW¼NE¼ sec.31, T.30 N., R.12 E., Lassen County, on left bank 0.5 mi (0.8 km) west of Susanville, and 1.1 mi (1.8 km) upstream from Piute Creek.

DRAINAGE AREA.--184 mi² (477 km²).

PERIOD OF RECORD.--June 1900 to December 1905 (gage heights only August 1901 to January 1903), March to May 1913 (gage heights only), February 1917 to June 1921, October 1950 to current year. Published as "near Susanville" 1900-1905. Discharge records for August to December 1901 and January 1903, published in WSP 300, have been found to be unreliable and should not be used.

GAGE.--Water-stage recorder. Datum of gage is 4,225.72 ft (1,287.999 m) above mean sea level. Prior to Oct. 1, 1950, nonrecording gages at several sites in vicinity of old powerplant 0.9 mi (1.4 km) upstream at various datums.

AVERAGE DISCHARGE.--30 years (1900-1901, 1903-5, 1917-20, 1950-74), 101 ft³/s (2.860 m³/s), 73,170 acre-ft/yr (90.2 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 3,200 ft³/s (90.6 m³/s) Mar. 30 (gage height, 6.69 ft or 2.039 m); minimum daily, 8.4 ft³/s (0.24 m³/s) Oct. 2.

Period of record: Maximum discharge, 5,850 ft³/s (166 m³/s) Jan. 24, 1970 (gage height, 8.89 ft or 2.710 m, 10.4 ft or 3.17 m, from floodmarks), from rating curve extended above 1,000 ft³/s (28.3 m³/s) on basis of slope-area measurement at gage height 6.62 ft (2.018 m) and contracted-opening measurement at gage height 8.89 ft or 2.710 m; no flow Aug. 15, 1961.

REMARKS.--Records good except those for the period Dec. 7 to Mar. 14, which are fair. Flow regulated by McCoy Flat Reservoir and Hog Flat Reservoir, combined usable capacity, 25,300 acre-ft (31.2 hm³). Diversions for irrigation of 1,400 acres (567 hm²) above station. Records of chemical analyses for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.9	12	170	145	78	460	888	473	317	98	77	94
2	8.4	12	103	115	71	360	747	516	305	93	64	92
3	9.4	12	87	102	67	270	652	550	294	88	73	93
4	11	11	79	57	63	225	565	570	285	85	73	92
5	9.8	13	72	91	61	185	525	598	277	81	80	91
6	9.6	23	75	87	62	162	471	664	265	78	78	90
7	12	54	85	84	67	155	435	765	249	75	73	47
8	13	46	81	82	71	152	424	813	229	97	74	17
9	11	61	78	80	74	148	428	837	211	93	74	12
10	9.8	130	76	77	77	155	382	795	185	91	74	11
11	9.9	536	75	75	78	170	368	724	145	77	73	11
12	9.7	613	74	86	77	182	372	658	127	73	75	10
13	9.8	215	73	110	75	200	356	592	124	70	76	11
14	9.8	125	72	160	73	235	350	459	120	67	77	11
15	9.8	94	71	425	70	344	362	256	118	66	80	11
16	9.6	113	74	570	73	372	382	247	117	71	81	11
17	9.8	158	92	700	67	414	420	263	113	78	81	10
18	11	148	110	580	68	498	459	277	105	87	81	10
19	10	54	80	980	74	414	430	292	109	86	82	10
20	12	79	75	730	75	359	423	282	159	86	75	10
21	12	70	72	450	76	320	433	263	149	83	67	10
22	18	63	71	310	78	302	475	254	144	81	60	10
23	43	56	70	245	80	290	520	248	139	82	55	10
24	22	53	68	200	79	287	498	251	134	79	50	9.8
25	17	50	67	170	78	302	457	254	129	76	45	9.8
26	16	47	80	155	78	323	410	268	124	73	40	9.8
27	14	45	105	135	80	435	377	289	118	69	35	10
28	14	48	170	115	86	459	359	307	114	66	29	11
29	13	53	410	103	-----	1,100	368	319	107	62	74	10
30	13	114	265	94	-----	2,270	405	326	103	59	95	10
31	13	-----	200	87	-----	1,040	-----	338	-----	62	96	-----
TOTAL	399.3	3,148	3,280	7,440	2,056	12,588	13,741	13,748	5,115	2,432	2,167	844.4
MEAN	12.9	105	106	240	73.4	406	458	443	171	78.5	69.9	28.1
MAX	43	613	410	980	86	2,270	888	837	317	98	96	94
MIN	8.4	11	67	75	61	148	350	247	103	59	29	9.8
AC-FT	792	6,240	6,510	14,760	4,080	24,970	27,260	27,270	10,150	4,820	4,300	1,670

CAL YR 1973 TOTAL 28,642.6 MEAN 78.5 MAX 613 MIN 4.4 AC-FT 56,810
 WTR YR 1974 TOTAL 66,958.7 MEAN 183 MAX 2,270 MIN 8.4 AC-FT 132,800

NOTE.--No gage-height record Dec. 7 to Jan. 9, Jan. 15 to Feb. 12.

HONEY LAKE BASIN

10358500 WILLOW CREEK NEAR SUSANVILLE, CALIF.

LOCATION.--Lat 40°29'21", long 120°32'10", in SW¼NE¼ sec.5, T.30 N., R.13 E., Lassen County, on left bank 4 mi (6 km) upstream from Peters Valley Creek, and 8 mi (13 km) northeast of Susanville.

DRAINAGE AREA.--90.4 mi² (234.1 km²), revised, excludes that of Eagle Lake basin.

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

GAGE.--Water-stage recorder. Datum of gage is 4,836.27 ft (1,474.095 m) above mean sea level, unadjusted.

AVERAGE DISCHARGE.--24 years, 34.8 ft³/s (0.986 m³/s), 25,210 acre-ft/yr (31.1 hm³/yr).

EXTREMES.--Current year; Maximum discharge, 294 ft³/s (8.33 m³/s) Mar. 2 (gage height, 4.20 ft or 1.280 m); minimum daily, 12 ft³/s (0.34 m³/s) many days.

Period of record: Maximum discharge, 816 ft³/s (23.1 m³/s) Feb. 1, 1963 (gage height, 5.59 ft or 1.704 m), from rating curve extended above 540 ft³/s (15.3 m³/s); minimum, 8.1 ft³/s (0.23 m³/s) Nov. 16, 1951.

REMARKS.--Records good. Diversions for irrigation of 5,200 acres (2,100 km²) above station. Some flow at times. enters Willow Creek from Eagle Lake through an abandoned tunnel.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	30	59	36	44	146	166	26	17	13	13	16
2	30	30	61	33	43	265	189	20	16	12	13	16
3	30	30	57	34	42	206	155	17	15	12	13	16
4	30	30	53	33	42	175	121	16	14	12	13	16
5	30	30	51	34	40	152	102	16	14	12	14	16
6	30	32	53	35	38	170	89	17	14	12	14	16
7	30	32	55	35	40	203	77	17	14	12	13	16
8	30	32	52	35	40	176	68	16	14	13	15	16
9	30	33	50	34	40	149	61	16	13	14	16	15
10	30	35	49	34	40	136	57	15	13	16	15	14
11	30	39	51	34	40	136	53	15	13	16	16	13
12	30	50	52	34	40	155	51	16	13	19	16	12
13	30	51	51	52	40	155	48	15	12	20	16	12
14	29	46	52	74	40	152	46	15	12	18	16	12
15	28	43	50	140	39	134	43	16	12	16	16	12
16	28	41	49	143	40	121	41	15	12	16	16	12
17	28	41	67	188	40	112	24	16	12	16	16	12
18	28	47	55	160	40	121	21	16	13	16	16	12
19	28	39	51	229	43	98	21	16	13	15	16	12
20	28	39	49	173	43	83	21	17	15	15	16	13
21	28	38	49	108	43	73	22	19	15	15	18	13
22	29	37	50	95	44	66	22	21	15	14	17	13
23	31	36	46	83	43	59	21	23	14	14	18	13
24	32	35	44	74	43	55	21	24	14	14	18	13
25	31	35	43	66	43	52	22	24	14	13	18	13
26	30	35	42	57	42	50	26	23	13	13	19	13
27	32	35	43	53	44	30	30	22	12	13	19	13
28	32	33	44	51	44	29	33	20	13	13	19	12
29	30	35	47	48	-----	43	32	19	12	13	18	12
30	30	35	42	46	-----	135	29	18	13	13	16	12
31	30	-----	39	45	-----	166	-----	18	-----	13	16	-----
TOTAL	921	1,104	1,556	2,296	1,160	3,803	1,712	564	406	443	495	406
MEAN	29.7	36.8	50.2	74.1	41.4	123	57.1	18.2	13.5	14.3	16.0	13.5
MAX	32	51	67	229	44	265	189	26	17	20	19	16
MIN	28	30	39	33	38	29	21	15	12	12	13	12
AC-FT	1,830	2,190	3,090	4,550	2,300	7,540	3,400	1,120	805	879	982	805
CAL YR 1973	TOTAL	13,077	MEAN	35.8	MAX	199	MIN	10	AC-FT	25,940		
WTR YR 1974	TOTAL	14,866	MEAN	40.7	MAX	265	MIN	12	AC-FT	29,490		

PEAK DISCHARGE (BASE, 200 FT ³ /S)							
DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
1-16	2100	3.82	209	3-7	2300	3.83	211
1-19	0900	3.96	239	4-1	2200	3.88	222
3-2	1830	4.20	294				

10359300 PINE CREEK NEAR SUSANVILLE, CALIF.

LOCATION.--Lat 40°39'54", long 120°47'25", in NE¼SE¼ sec.1, T.32 N., R.10 E., Lassen County, on right bank 0.3 mi (0.5 km) upstream from Eagle Lake, and 18 mi (29 km) northwest of Susanville.

DRAINAGE AREA.--226 mi² (585 km²).

PERIOD OF RECORD.--October 1960 to September 1966, October 1967 to September 1968, October 1969 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5,120 ft (1,561 m), from topographic map. Prior to September 1968, at site 1.0 mi (1.6 km) upstream at different datum.

AVERAGE DISCHARGE.--12 years (1960-66, 1967-68, 1969-74), 22.2 ft³/s (0.629 m³/s), 16,080 acre-ft/yr (19.8 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 656 ft³/s (18.6 m³/s) Mar. 30 (gage height, 5.25 ft or 1.600 m); no flow for several months.
Period of record: Maximum discharge, 936 ft³/s (26.5 m³/s) Jan. 24, 1970 (gage height, 5.60 ft or 1.707 m), from rating curve extended above 360 ft³/s (10.2 m³/s) on basis of computation of peak flow over weir; no flow for several months in each year.
Flood of May 18, 1967, reached a stage of 5.29 ft (1.612 m), discharge, 826 ft³/s (23.4 m³/s).

REMARKS.--No storage or diversion above station except for minor stock ponds.

COOPERATION.--Records furnished by California Department of Water Resources and reviewed by Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	9.1	32	17	1.1	355	94	45			
2		0	5.5	29	23	0	297	97	41			
3		0	5.3	29	17	0	261	96	38			
4		0	5.0	28	16	0	205	93	34			
5		0	4.7	27	19	.30	203	93	31			
6		0	4.3	26	19	1.9	204	92	30			
7		0	10	26	16	3.4	185	95	29			
8		0	25	24	7.2	2.7	196	99	27			
9		0	33	23	3.7	1.0	232	105	25			
10		0	52	22	3.0	1.7	223	113	23			
11		0	38	26	3.2	1.7	192	117	20			
12		0	29	31	3.5	2.3	196	116	18			
13		23	14	40	4.0	3.5	208	111	15			
14		91	8.2	61	4.6	10	204	107	13			
15		73	8.3	177	4.4	24	204	98	11			
16		51	6.2	434	5.6	75	216	89	9.6			
17		48	8.1	388	5.1	173	232	86	9.3			
18		43	16	490	5.6	266	256	87	7.9			
19		27	20	550	5.7	218	264	89	6.8			
20		24	22	484	3.2	159	196	85	7.0			
21		22	19	341	4.1	114	177	74	5.8			
22		18	16	282	3.7	115	188	62	4.4			
23		15	15	234	2.1	131	212	51	3.5			
24		12	14	134	1.0	152	216	44	2.3			
25		9.0	11	92	.40	189	180	41	.80			
26		6.0	11	75	3.0	224	131	39	0			
27		3.1	10	66	3.4	270	109	38	0			
28		1.9	10	36	5.9	246	96	40	0			
29		9.8	21	38	-----	297	92	43	0			
30		19	36	29	-----	559	94	46	0			
31		-----	34	25	-----	567	-----	47	-----			
TOTAL	0	495.8	520.7	4,299	209.40	3,808.60	6,024	2,487	457.40	0	0	0
MEAN	0	16.5	16.8	139	7.48	123	201	80.2	15.2	0	0	0
MAX	0	91	52	550	23	567	355	117	45	0	0	0
MIN	0	0	4.3	22	.40	0	92	38	0	0	0	0
AC-FT	0	983	1,030	8,530	415	7,550	11,950	4,930	907	0	0	0

CAL YR 1973 TOTAL 5,143.30 MEAN 14.1 MAX 190 MIN 0 AC-FT 10,200

WTR YR 1974 TOTAL 18,301.90 MEAN 50.1 MAX 567 MIN 0 AC-FT 36,300

SURPRISE VALLEY BASIN

10360900 BIDWELL CREEK BELOW MILL CREEK, NEAR FORT BIDWELL, CALIF.

LOCATION.--Lat 41°52'57", long 120°10'26", in NE¼SE¼ sec.6, T.46 N., R.16 E., Modoc County, on right bank 0.9 mi (1.4 km) downstream from Mill Creek, and 2.0 mi (3.2 km) northwest of Fort Bidwell.

DRAINAGE AREA.--25.6 mi² (66.3 km²).

PERIOD OF RECORD.--October 1960 to current year. Prior to October 1961, published as Bidwell Creek near Fort Bidwell.

GAGE.--Water-stage recorder. Altitude of gage is 5,000 ft (1,524 m), from topographic map.

AVERAGE DISCHARGE.--14 years, 23.0 ft³/s (0.651 m³/s), 16,660 acre-ft/yr (20.5 hm³/yr); 13 years, 22.6 ft³/s (0.640 m³/s), 16,370 acre-ft/yr (20.2 hm³/yr); figure published in Water Resources Data for Calif., 1973 in error.

EXTREMES.--Current year: Maximum discharge, 261 ft³/s (7.39 m³/s) May 8 (gage height, 4.33 ft or 1.320 m); minimum daily, 4.6 ft³/s (0.13 m³/s) Oct. 1, 2.
Period of record: Maximum discharge, 682 ft³/s (19.3 m³/s) Dec. 24, 1964 (gage height, 5.64 ft or 1.719 m), from rating curve extended above 105 ft³/s (2.97 m³/s) on basis of slope-area measurement of maximum flow; minimum, 1.4 ft³/s (0.040 m³/s) Nov. 5, 1960.

REMARKS.--Less than 2 ft³/s (0.057 m³/s) diverted upstream for irrigation. No storage above station.

COOPERATION.--Records furnished by the California Department of Water Resources and reviewed by Geological Survey.

REVISIONS (WATER YEARS).--WRD Calif. 1971: 1969-70.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.6	7.0	12	10	17	12	42	79	102	25	11	6.5
2	4.6	6.8	11	10	17	12	37	84	103	24	11	6.5
3	4.8	6.5	11	10	15	12	33	77	104	22	11	6.5
4	4.8	6.5	11	9.6	16	12	32	69	102	21	10	6.5
5	4.8	6.4	10	9.6	14	12	33	77	106	21	10	6.5
6	4.9	6.4	11	9.6	15	13	32	117	104	21	11	6.4
7	6.5	7.3	12	9.6	14	12	33	155	101	20	10	6.1
8	6.5	9.2	12	9.6	15	11	35	230	93	20	10	6.1
9	6.2	11	13	9.6	14	13	36	237	85	21	9.6	6.1
10	5.8	13	13	9.6	13	11	34	194	82	21	9.6	6.1
11	5.6	14	12	9.7	13	11	34	162	83	21	9.4	6.1
12	5.4	26	12	9.3	13	11	34	146	82	19	9.3	6.1
13	5.4	23	12	9.6	13	11	33	121	81	18	9.0	6.0
14	5.2	19	11	10	13	15	34	96	76	18	8.7	5.8
15	5.2	16	11	13	13	23	39	92	73	17	8.6	5.8
16	5.2	16	11	17	13	29	46	91	68	16	8.6	5.5
17	5.2	16	11	19	13	53	55	90	64	16	8.3	5.4
18	5.2	15	11	21	12	47	63	82	59	15	8.3	5.4
19	5.0	14	11	24	12	43	56	74	55	15	8.3	5.0
20	5.4	13	11	24	12	40	52	67	50	14	8.3	5.0
21	5.7	13	11	25	12	37	54	63	43	14	8.3	5.0
22	6.1	12	11	23	12	37	63	64	39	14	8.0	5.0
23	6.6	12	11	21	13	37	68	72	36	13	8.0	5.0
24	6.9	12	10	20	11	40	61	84	33	13	7.8	5.0
25	7.7	11	11	20	11	42	53	103	30	13	7.7	5.0
26	7.7	11	9.6	19	11	41	48	125	28	12	7.5	5.0
27	7.3	11	9.8	18	11	42	44	139	28	12	7.3	4.8
28	7.1	11	10	17	11	38	43	141	26	12	7.0	4.9
29	7.1	11	11	17	-----	42	45	113	25	12	6.8	5.0
30	7.1	12	11	17	-----	49	60	102	24	11	6.8	5.0
31	6.8	-----	10	17	-----	44	-----	97	-----	11	6.5	-----
TOTAL	182.4	368.1	344.4	467.8	369	852	1,332	3,443	1,985	522	271.7	169.1
MEAN	5.88	12.3	11.1	15.1	13.2	27.5	44.4	111	66.2	16.8	8.76	5.64
MAX	7.7	26	13	25	17	53	68	237	106	25	11	6.5
MIN	4.6	6.4	9.6	9.3	11	11	32	63	24	11	6.5	4.8
AC-FT	362	730	683	928	732	1,690	2,640	6,830	3,940	1,040	539	335
CAL YR 1973	TOTAL	7,201.0	MEAN	19.7	MAX	145	MIN	4.0	AC-FT	14,280		
WTR YR 1974	TOTAL	10,306.5	MEAN	28.2	MAX	237	MIN	4.6	AC-FT	20,440		

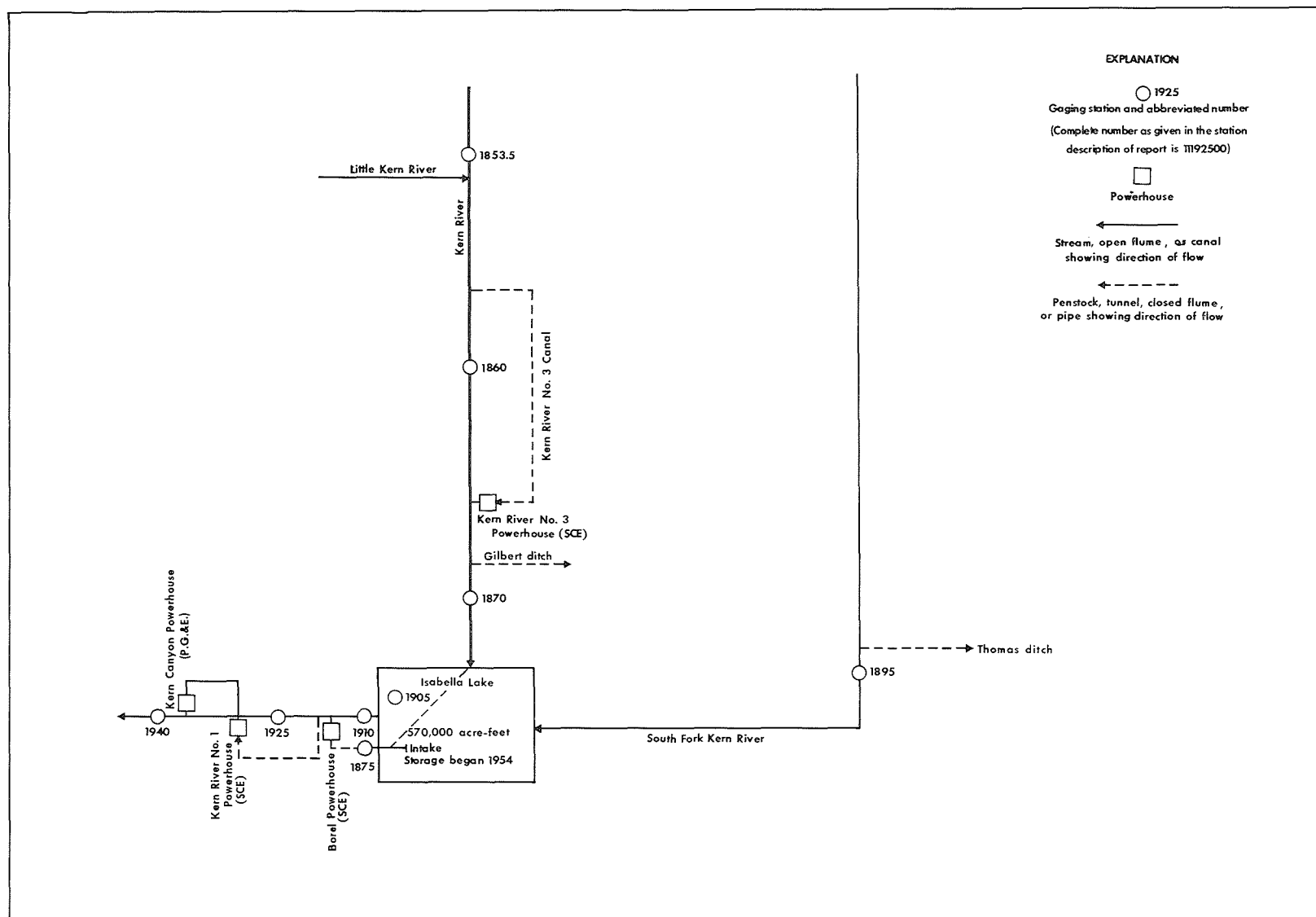


FIGURE 2.--Schematic diagram showing diversions and storage in Kern River basin.

11185350 KERN RIVER NEAR QUAKING ASPEN CAMP, CALIF.

LOCATION.--Lat 36°08'04", long 118°25'49", in SW¼SW¼ sec.32, T.20 S., R.33 E., Tulare County, Sequoia National Forest, on right bank 0.4 mi (0.6 km) upstream from Little Kern River, and 6.8 mi (10.9 km) east of Quaking Aspen Camp.

DRAINAGE AREA.--530 mi² (1,373 km²).

PERIOD OF RECORD.--October 1960 to September 1974 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 4,693 ft (1,430.4 m) above mean sea level (river-profile survey).

AVERAGE DISCHARGE.--14 years, 554 ft³/s (15.69 m³/s), 401,400 acre-ft/yr (495 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 4,050 ft³/s (115 m³/s) June 7 (gage height, 7.67 ft or 2.338 m); minimum daily, 166 ft³/s (4.70 m³/s) Nov. 4.
Period of record: Maximum discharge, 9,360 ft³/s (265 m³/s) Dec. 6, 1966 (gage height, 10.89 ft or 3.319 m in gage well, 12.9 ft or 3.93 m, outside from floodmarks), from rating curve extended above 6,600 ft³/s (187 m³/s) on basis of slope-area measurement of maximum flow; minimum, 61 ft³/s (1.7 m³/s) Jan. 20, 1962.

REMARKS.--Records good. No regulation or diversion above station. Records of water temperatures for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	178	178	223	227	252	258	472	885	2,690	1,580	850	280
2	178	176	201	212	241	419	559	1,050	2,570	1,540	740	270
3	180	176	221	184	245	275	504	1,210	2,460	1,350	670	265
4	180	166	223	212	243	270	497	1,310	2,600	1,310	650	260
5	180	174	216	232	243	314	494	1,160	2,840	1,260	740	250
6	180	176	214	243	238	330	494	1,130	3,210	1,210	740	225
7	184	182	214	236	230	327	500	1,280	3,540	1,070	630	215
8	201	178	216	252	238	317	517	1,580	3,240	975	540	210
9	210	172	214	256	234	299	548	1,930	3,020	915	500	220
10	210	174	212	243	232	299	500	2,110	2,900	826	465	221
11	208	180	214	241	232	302	504	2,270	2,900	727	445	221
12	203	304	214	266	234	309	506	2,440	2,850	680	430	219
13	203	253	225	254	232	314	542	2,350	2,750	684	415	216
14	201	245	223	243	230	336	576	2,300	2,660	704	400	212
15	199	232	221	245	230	375	620	2,520	2,500	740	385	208
16	194	227	223	268	227	401	660	2,410	2,310	776	370	205
17	192	231	221	383	221	395	709	2,130	1,990	727	350	201
18	190	302	216	352	223	407	768	1,810	1,700	688	335	197
19	188	236	205	369	230	416	709	1,610	1,570	644	325	192
20	188	256	205	364	214	416	684	1,410	1,480	624	320	186
21	186	252	214	330	223	422	656	1,320	1,600	680	300	184
22	186	227	221	294	221	425	700	1,320	1,770	652	300	182
23	192	227	219	304	216	422	709	1,430	1,820	650	290	182
24	194	223	223	290	219	428	704	1,340	1,670	730	285	184
25	194	216	219	285	221	437	680	1,640	1,640	810	280	186
26	190	216	216	275	223	425	656	2,090	1,510	790	275	188
27	186	210	223	256	223	419	648	2,540	1,380	700	280	186
28	184	212	227	270	227	446	668	2,760	1,360	620	290	182
29	182	212	241	261	-----	443	660	2,790	1,410	610	285	178
30	180	210	247	256	-----	481	740	2,600	1,440	640	280	178
31	178	-----	236	254	-----	452	-----	2,670	-----	850	275	-----
TOTAL	5,899	6,423	6,807	8,357	6,442	11,579	18,184	57,395	67,380	26,762	13,440	6,303
MEAN	190	214	220	270	230	374	606	1,851	2,246	863	434	210
MAX	210	304	247	383	252	481	768	2,790	3,540	1,580	850	280
MIN	178	166	201	184	214	258	472	885	1,360	610	275	178
AC-FT	11,700	12,740	13,500	16,580	12,780	22,970	36,070	113,800	133,600	53,080	26,660	12,500
CAL YR 1973	TOTAL 263,178	MEAN 721	MAX 4,000	MIN 123	AC-FT 522,000							
WTR YR 1974	TOTAL 234,971	MEAN 644	MAX 3,540	MIN 166	AC-FT 466,100							

PEAK DISCHARGE (BASE, 1,300 FT³/S)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
5-4	0700	4.66	1,370	5-29	0630	6.73	3,050
5-15	0630	6.33	2,670	6-7	0430	7.67	4,050

LOCATION.--Lat 35°56'43", long 118°28'36", in SW¼ sec.12, T.23 S., R.32 E. (unsurveyed), Tulare County, on left bank at Packsaddle Canyon Creek, 30 ft (9 m) upstream from sand trap sluice gates, 100 ft (30 m) downstream from diversion dam, and 13.4 mi (21.6 km) north of Kernville.

PERIOD OF RECORD.--January 1912 to current year. Records for water year 1912 incomplete, yearly estimates published in WSP 1315-A. Prior to October 1953, records for river and canal published separately; combined flow only, October 1953 to September 1960.

GAGE.--Water-stage recorder on river; water-stage recorder and rectangular concrete-line flume for canal diversion. Altitude of gage is 3,620 ft (1,103 m), from topographic map. Prior to Apr. 1, 1913, at site 1.4 mi (2.3 km) downstream at different datum. Apr. 1 to Sept. 14, 1913, nonrecording gage and Sept. 15, 1913, to Sept. 30, 1967, water-stage recorder, at site 1.2 mi (1.9 km) downstream at different datum.

AVERAGE DISCHARGE (River only).--9 years (1911-20), 790 ft³/s (22.37 m³/s), 571,900 acre-ft/yr (705 hm³/yr); 53 years (1921-74), 347 ft³/s (9.827 m³/s), 251,400 acre-ft/yr (310 hm³/yr).
(Combined river and diversion).--63 years (1911-74), 724 ft³/s (20.50 m³/s), 524,500 acre-ft/yr (647 hm³/yr).

EXTREMES (River only).--Current year: Maximum discharge, 4,160 ft³/s (118 m³/s) June 7 (gage height, 8.30 ft or 2.530 m); minimum daily, 32 ft³/s (0.91 m³/s) Jan. 11.

Period of record: Maximum discharge, 60,000 ft³/s (1,700 m³/s) Dec. 6, 1966 (gage height, 22.77 ft or 6.940 m, site and datum then in use, from floodmarks), from rating curve extended above 6,000 ft³/s (170 m³/s) on basis of computed flow over dam at gage height 17.55 ft (5.349 m), basic data for computation furnished by Southern California Edison Co., and slope-area measurement of maximum flow; no flow July 31 to Nov. 7, Nov. 12 to Dec. 7, 1924, Jan. 16 to Feb. 7, 1925.

(Combined flow).--Current year: Maximum discharge, 4,730 ft³/s (134 m³/s) June 7; minimum daily, 209 ft³/s (5.92 m³/s) Nov. 5, Sept. 29, 30.

Period of record: Maximum discharge, 60,000 ft³/s (1,700 m³/s) Dec. 6, 1966; minimum daily, 78 ft³/s (2.21 m³/s) Aug. 30, 31, Sept. 17, 19, 1924.

REMARKS.--Records good. Since 1921 Kern River No. 3 Canal diverts up to 630 ft³/s (17.8 m³/s) 100 ft (30 m) upstream from station, from left bank of Kern River in sec.12, T.23 S., R.32 E. (unsurveyed), for power development; water is returned to river 15 mi (24 km) downstream from station. See schematic diagram of Kern River basin. For records of combined discharge of river and canal, see following page.

COOPERATION.--Gage-height record and 20 discharge measurements for Kern River and gage-height record and 12 discharge measurements for canal furnished by Southern California Edison Co., in connection with a Federal Power Commission project.

REVISIONS (WATER YEARS).--WSP 1445: 1912, 1916(M). WSP 1930: 1914(M), 1918(M).

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	62	45	44	42	41	90	473	867	3,590	1,070	348	89
2	52	40	43	41	41	924	1,420	1,110	2,680	1,070	224	81
3	54	41	44	37	41	251	672	1,250	2,470	861	146	81
4	56	42	43	51	40	95	530	1,370	2,670	807	162	77
5	55	41	43	50	40	99	518	1,180	3,040	760	297	76
6	55	42	43	43	40	114	480	1,130	3,440	715	220	76
7	56	42	43	71	39	114	473	1,300	3,710	592	115	75
8	57	42	43	49	40	85	499	1,700	3,460	499	113	75
9	55	42	43	42	39	66	542	2,220	3,130	441	111	74
10	55	41	43	40	40	67	466	2,390	2,950	369	111	74
11	56	42	43	32	39	68	438	2,590	2,940	297	111	73
12	55	45	43	44	39	74	438	2,750	2,870	235	110	72
13	56	38	43	44	39	74	488	2,640	2,700	220	109	71
14	56	40	43	42	39	94	538	2,520	2,530	233	107	70
15	56	39	43	42	39	198	588	2,780	2,310	272	107	70
16	57	40	43	61	39	253	631	2,600	2,070	310	102	70
17	57	44	43	558	39	231	710	2,220	1,810	262	99	70
18	57	91	43	307	39	249	781	1,850	1,360	214	99	70
19	56	44	42	237	39	267	682	1,650	1,230	170	99	70
20	56	44	43	202	40	262	631	1,350	1,140	132	98	70
21	56	44	43	105	41	279	583	1,250	1,190	181	104	70
22	55	43	43	43	41	279	649	1,250	1,320	167	104	70
23	57	43	42	43	41	255	658	1,320	1,420	198	101	70
24	56	43	42	42	41	249	663	1,230	1,240	297	101	70
25	56	43	43	42	42	260	605	1,480	1,190	360	101	70
26	55	43	41	41	42	242	571	2,050	1,080	305	101	70
27	56	43	42	40	42	240	554	2,640	942	179	100	70
28	56	43	42	41	70	318	588	3,060	906	125	99	70
29	55	44	43	40	-----	340	571	3,070	942	123	98	70
30	55	43	42	40	-----	427	682	2,770	978	233	98	70
31	55	-----	42	41	-----	378	-----	2,830	-----	522	98	-----
TOTAL	1,731	1,317	1,326	2,553	1,152	6,942	18,122	60,417	63,308	12,219	3,993	2,184
MEAN	55.8	43.9	42.8	82.4	41.1	224	604	1,949	2,110	394	129	72.8
MAX	62	91	44	558	70	924	1,420	3,070	3,710	1,070	348	89
MIN	52	38	41	32	39	66	438	867	906	123	98	70
AC=FT	3,430	2,610	2,630	5,060	2,280	13,770	35,940	119,800	125,600	24,240	7,920	4,330
CAL YR 1973	TOTAL 237,578											
WTR YR 1974	TOTAL 175,264											

BUENA VISTA LAKE BASIN

11186000 KERN RIVER NEAR KERNVILLE, CALIF.--Continued

COMBINED DISCHARGE, IN CUBIC FEET PER SECOND, OF KERN RIVER AND KERN RIVER
NO. 3 CANAL NEAR KERNVILLE, CALIF., WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	216	219	317	351	415	422	1,040	1,420	4,150	1,630	948	287
2	218	220	285	317	402	1,480	1,990	1,660	3,240	1,630	829	282
3	219	219	295	286	399	815	1,240	1,800	3,030	1,420	749	278
4	220	216	307	354	399	660	1,100	1,920	3,240	1,370	766	275
5	218	209	293	341	396	678	1,090	1,730	3,600	1,320	903	273
6	218	221	287	357	389	688	1,070	1,680	3,990	1,280	822	272
7	220	225	288	341	367	687	1,070	1,850	4,280	1,160	704	270
8	258	229	294	343	384	658	1,070	2,250	4,020	1,070	643	270
9	280	221	292	376	377	617	1,110	2,770	3,690	1,010	590	274
10	265	217	290	349	375	610	1,030	2,950	3,510	938	560	264
11	258	223	288	341	370	608	997	3,170	3,500	871	538	259
12	253	354	289	485	369	624	997	3,350	3,430	808	518	257
13	253	387	303	521	375	634	1,050	3,240	3,260	794	499	254
14	252	319	354	439	362	663	1,100	3,120	3,090	807	483	250
15	250	303	315	430	363	769	1,150	3,370	2,870	848	462	245
16	247	292	308	528	368	824	1,200	3,190	2,630	886	435	241
17	242	300	303	1,130	364	806	1,280	2,790	2,370	838	413	236
18	238	564	299	881	353	825	1,340	2,410	1,920	793	399	231
19	234	361	283	812	378	842	1,240	2,210	1,780	750	388	226
20	234	338	277	778	361	836	1,190	1,910	1,690	713	376	220
21	232	349	289	680	359	853	1,140	1,810	1,750	765	364	217
22	229	307	320	578	359	853	1,210	1,810	1,880	754	348	213
23	235	301	301	551	354	828	1,220	1,880	1,980	786	340	213
24	254	291	308	511	355	822	1,220	1,790	1,800	886	333	213
25	245	287	297	495	360	833	1,160	2,040	1,750	950	327	216
26	239	285	295	477	367	815	1,130	2,620	1,640	893	320	220
27	236	270	346	431	370	813	1,110	3,210	1,500	770	314	220
28	230	275	382	445	384	891	1,140	3,630	1,460	718	310	213
29	227	283	401	434	-----	912	1,130	3,640	1,500	717	303	209
30	224	280	405	425	-----	998	1,240	3,340	1,540	829	296	209
31	223	-----	362	419	-----	949	-----	3,390	-----	1,120	294	-----
TOTAL	7,367	8,565	9,673	15,206	10,474	24,313	35,054	77,950	80,090	30,124	15,574	7,307
MEAN	238	286	312	491	374	784	1,168	2,515	2,670	972	502	244
MAX	280	564	405	1,130	415	1,480	1,990	3,640	4,280	1,630	948	287
MIN	216	209	277	286	353	422	997	1,420	1,460	713	294	209
AC-FT	14,610	16,990	19,190	30,160	20,780	48,220	69,530	154,600	158,900	59,750	30,890	14,490
CAL YR 1973	TOTAL	381,081	MEAN	1,044	MAX	5,080	MIN	179	AC-FT	755,900		
WTR YR 1974	TOTAL	321,697	MEAN	881	MAX	4,280	MIN	209	AC-FT	638,100		

11187000 KERN RIVER AT KERNVILLE, CALIF.

LOCATION.--Lat 35°45'34", long 118°25'12", in NE¼NW¼ sec.15, T.25 S., R.33 E., Kern County, on left bank 0.5 mi (0.8 km) upstream from highway bridge at Kernville, 1.7 mi (2.7 km) upstream from Caldwell Creek, 9.5 mi (15.3 km) upstream from Isabella Dam, and 42 mi (68 km) northeast of Bakersfield.

DRAINAGE AREA.--1,009 mi² (2,613 km²).

PERIOD OF RECORD.--January 1905 to December 1912, October 1953 to current year. Monthly discharge only for some periods, published in WSP 1315-A.

GAGE.--Water-stage recorder. Datum of gage is 2,634.57 ft (803.017 m) above mean sea level. January 1905 to September 1912, nonrecording gage at two sites 3.5 mi (5.6 km) downstream at different datums. October 1953 to Feb. 20, 1967, water-stage recorder 0.6 mi (1.0 km) downstream at datum 2,621.57 ft (799.055 m) above mean sea level.

AVERAGE DISCHARGE.--28 years, 868 ft³/s (24.58 m³/s), 628,900 acre-ft/yr (775 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 5,320 ft³/s (151 m³/s) Apr. 2 (gage height, 8.31 ft or 2.533 m); minimum daily, 194 ft³/s (5.49 m³/s) Sept. 21.

Period of record: Maximum discharge, 74,000 ft³/s (2,100 m³/s) Dec. 6, 1966 (gage height, 19.32 ft or 5.889 m, from floodmarks, present site), from rating curve extended above 11,000 ft³/s (312 m³/s) on basis of slope-area measurement of maximum flow; minimum, 74 ft³/s (2.10 m³/s) Oct. 27, 1954, Aug. 1, Oct. 4, 1961.

Maximum stage known from at least 1912 to December 1966, 18.4 ft (5.61 m), from floodmarks, Nov. 19, 1950, site and datum then in use (discharge, 38,700 ft³/s or 1,100 m³/s).

REMARKS.--Records good. Slight regulation at times by operation of Kern River No. 3 canal and powerplant. A few small diversions for irrigation above station. Gilbert irrigation ditch diverts up to 7 ft³/s (0.20 m³/s) around station during irrigation season. Records of water temperatures for the current year are published in Part 2 of this report.

COOPERATION.--Nine discharge measurements furnished by Southern California Edison Co.

REVISIONS.--WSP 1930: Drainage area.

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NCV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	224	240	320	410	425	440	1,150	1,530	3,630	1,660	999	312
2	217	236	291	351	410	2,710	3,230	1,780	3,460	1,690	854	302
3	215	235	289	330	405	998	1,690	1,980	3,280	1,480	768	294
4	217	233	301	376	405	759	1,400	2,130	3,420	1,390	752	290
5	217	234	287	386	400	761	1,310	1,970	3,750	1,350	857	278
6	217	246	283	402	395	793	1,280	1,860	4,180	1,310	851	249
7	223	254	283	380	360	796	1,270	2,030	4,680	1,200	719	235
8	290	246	290	413	380	771	1,280	2,410	4,440	1,090	615	232
9	319	224	289	432	380	701	1,330	2,930	3,970	1,030	563	238
10	287	227	289	397	380	692	1,260	3,230	3,730	964	526	232
11	275	255	288	389	375	685	1,200	3,410	3,680	896	501	224
12	269	384	289	586	375	708	1,190	3,580	3,640	825	482	228
13	268	415	310	684	375	731	1,230	3,520	3,430	794	465	218
14	262	323	395	550	365	760	1,270	3,340	3,280	820	450	232
15	253	313	339	526	363	836	1,330	3,590	3,050	860	431	224
16	244	298	329	661	367	925	1,380	3,490	2,790	900	414	221
17	241	315	325	1,410	363	924	1,430	3,060	2,430	840	394	214
18	233	639	321	1,250	350	934	1,520	2,640	2,040	765	376	224
19	231	393	307	1,020	380	960	1,420	2,370	1,850	759	363	221
20	231	356	298	986	360	954	1,350	2,110	1,740	715	354	207
21	230	369	309	913	358	966	1,280	2,000	1,790	728	338	194
22	230	329	354	713	358	966	1,340	1,920	1,960	754	332	195
23	237	321	328	6.9	354	940	1,370	2,010	2,050	756	323	195
24	257	305	335	605	355	927	1,370	1,950	1,890	843	318	200
25	248	303	324	580	360	931	1,290	2,170	1,800	948	311	200
26	247	300	324	561	367	905	1,240	2,730	1,690	915	306	205
27	244	282	377	508	370	909	1,220	3,350	1,530	801	314	200
28	241	290	458	495	386	988	1,250	3,740	1,490	719	325	200
29	235	285	465	500	-----	1,080	1,240	3,830	1,520	698	320	195
30	233	281	470	480	-----	1,150	1,340	3,530	1,550	740	310	195
31	234	-----	407	470	-----	1,160	-----	3,580	-----	991	307	-----
TOTAL	7,569	9,131	10,274	18,413	10,521	28,760	41,460	83,770	83,740	30,231	15,238	6,854
MEAN	244	304	331	594	376	928	1,382	2,702	2,791	975	492	228
MAX	319	639	470	1,410	425	2,710	3,230	3,830	4,680	1,690	999	312
MIN	215	224	283	330	350	440	1,150	1,530	1,490	698	306	194
AC-FT	15,010	18,110	20,380	36,520	20,870	57,050	82,240	166,200	166,100	59,960	30,220	13,590

CAL YR 1973 TOTAL 407,652 MEAN 1,117 MAX 5,740 MIN 170 AC-FT 808,600
WTR YR 1974 TOTAL 345,961 MEAN 948 MAX 4,680 MIN 194 AC-FT 686,200

DATE	TIME	PEAK DISCHARGE (BASE, 2,000 FT ³ /S)	DATE	TIME	DISCHARGE
3-2	unknown	--	5-15	0930	7.34 3,810
4-2	0330	8.31 5,320	6-7	1330	8.24 5,200
5-4	1300	6.39 2,550	6-23	1430	6.13 2,250

BUENA VISTA LAKE BASIN

11187500 BOREL CANAL BELOW ISABELLA DAM, CALIF.

LOCATION.--Lat 35°38'32", long 118°28'09", in SW¼NE¼ sec.30, T.26 S., R.33 E., Kern County, on right bank 500 ft (152 m) downstream from Isabella Dam, and 3 mi (5 km) upstream from point where canal crosses Erskine Creek.

PERIOD OF RECORD.--January 1910 to September 1914, October 1925 to current year. Monthly discharge only for some periods, published in WSP 1315-A. Published as Kern River Power Co.'s Canal at or near Kernville 1910-14. Published as "at Tillie Creek" 1925-51.

GAGE.--Water-stage recorder. Altitude of gage is 2,540 ft (774 m) from topographic map. Prior to Apr. 29, 1952, at site 4 mi (6 km) upstream at different datum.

AVERAGE DISCHARGE.--53 years, 372 ft³/s (10.54 m³/s), 269,500 acre-ft/yr (332 hm³/yr).

EXTREMES.--Period of record: Maximum daily discharge, 634 ft³/s (18.0 m³/s) Mar. 13, 14, 1952; no flow at times in each year.

REMARKS.--Records excellent. Canal diverts from right bank of Kern River 5.5 mi (8.8 km) upstream from Isabella Dam, and above South Fork Kern River. When capacity of Isabella Reservoir is above 110,000 acre-ft (136 hm³), the diversion is at the dam. Canal is used to supply Borel powerplant of Southern California Edison Co., 6 mi (10 km) downstream from station, at which point water is returned to the Kern River. Records of water temperatures for the current year are published in Part 2 of this report.

COOPERATION.--Water-stage recorder graph and 14 discharge measurements furnished by Southern California Edison Co., in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	570	416	386	414	540	564	571	570	571	557	556	545
2	571	434	410	414	520	583	572	570	571	557	556	547
3	571	434	402	414	529	584	574	570	570	557	556	545
4	571	425	390	414	539	583	573	570	569	556	556	543
5	571	413	390	414	559	583	571	572	569	556	557	542
6	571	413	389	414	571	583	570	573	570	556	557	543
7	516	470	389	414	576	583	568	572	570	556	556	544
8	422	513	389	414	574	584	569	571	570	556	555	542
9	525	444	389	414	573	585	571	569	571	556	551	543
10	444	377	389	414	573	583	573	569	570	559	552	543
11	375	335	389	414	573	581	571	574	570	559	546	543
12	365	297	263	414	573	583	573	573	570	558	543	543
13	331	332	11	414	574	584	573	570	571	559	547	549
14	318	350	261	414	574	585	573	569	570	555	544	550
15	306	350	386	475	573	584	571	570	570	555	543	547
16	290	350	386	530	573	582	571	568	571	556	543	555
17	304	332	386	559	573	583	571	569	571	556	543	558
18	299	369	384	577	573	582	571	570	569	556	543	559
19	278	411	384	580	573	582	571	569	569	556	544	568
20	278	410	384	580	573	579	570	571	569	556	542	573
21	314	388	384	585	573	573	571	569	568	554	544	571
22	290	400	384	589	573	569	571	570	472	556	544	570
23	269	413	384	583	573	572	570	570	253	556	544	569
24	331	366	384	581	573	573	571	570	548	557	547	569
25	349	334	385	581	150	573	570	570	557	559	544	569
26	342	319	386	581	3.0	570	570	572	558	556	544	569
27	314	316	386	581	319	569	569	571	557	557	544	569
28	302	350	386	583	542	569	569	571	557	556	546	569
29	314	357	402	583	-----	571	571	570	558	557	544	572
30	314	374	414	583	-----	571	569	570	559	556	544	572
31	380	-----	414	582	-----	571	-----	571	-----	558	545	-----
TOTAL	11,995	11,492	11,466	15,509	14,592.0	17,921	17,128	17,683	16,588	17,254	16,980	16,681
MEAN	387	383	370	500	521	578	571	570	553	557	548	556
MAX	571	513	414	589	576	585	574	574	571	559	557	573
MIN	269	297	11	414	3.0	564	568	568	253	554	542	542
AC-FT	23,790	22,790	22,740	30,760	28,940	35,550	33,970	35,070	32,900	34,220	33,680	33,090
CAL YR 1973	TOTAL	129,859.00	MEAN	356	MAX	604	MIN	0	AC-FT	257,600		
WTR YR 1974	TOTAL	185,289.00	MEAN	508	MAX	589	MIN	3.0	AC-FT	367,500		

11189500 SOUTH FORK KERN RIVER NEAR ONYX, CALIF.

LOCATION.--Lat 35°44'22", long 118°10'33", unsurveyed, T.25 S., R.35 E., Kern County, on left bank 0.8 mi (1.3 km) north of State Highway 178, 1.6 mi (2.6 km) upstream from Canebrake Creek, and 5 mi (8 km) north-east of Onyx.

DRAINAGE AREA.--530 mi² (1,370 km²).

PERIOD OF RECORD.--September 1911 to August 1914, January 1919 to September 1942, October 1947 to current year. Yearly estimate for water year 1927 (incomplete) and monthly discharge only for some periods, published in WSP 1315-A.

GAGE.--Water-stage recorder. Altitude of gage is 2,900 ft (884 m), from topographic map. Sept. 12, 1911, to Aug. 31, 1914, nonrecording gage and Jan. 23, 1919, to Apr. 17, 1936, water-stage recorder, at site 140 ft (43 m) upstream at datum 2.88 ft (0.878 m) lower. Apr. 18, 1936, to September 1942, and October 1947 to Feb. 8, 1967, at datum 6.88 ft (2.097 m) higher. Feb. 9, 1967, to May 31, 1972, at datum 2.00 ft (0.610 m) higher.

AVERAGE DISCHARGE.--50 years (1911-13, 1919-25, 1926-27, 1929-42, 1946-74), 114 ft³/s (3.228 m³/s), 82,590 acre-ft/yr (102 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 747 ft³/s (21.2 m³/s) Apr. 2 (gage height, 6.12 ft or 1.865 m); minimum daily, 12 ft³/s (0.34 m³/s) Sept. 20-23.
Period of record: Maximum discharge, 28,700 ft³/s (813 m³/s) Dec. 6, 1966 (gage height, 18.9 ft or 5.76 m, from floodmarks, present datum), from rating curve extended above 3,300 ft³/s (93.5 m³/s) on basis of slope-area measurement of maximum flow; no flow for several days in 1929, 1934, 1960-61.

REMARKS.--Records good. Lowell and Thomas ditches divert above station for irrigation of 160 acres (648,000 m²) below station; combined capacity, 7 ft³/s (0.20 m³/s).

REVISIONS (WATER YEARS).--WSP 1151: 1948(M). WSP 1445: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	24	44	54	74	56	324	525	260	57	44	14
2	13	24	41	36	69	235	539	600	248	53	62	14
3	13	24	33	23	65	161	359	632	240	52	52	13
4	14	24	33	37	66	119	311	632	238	49	48	14
5	14	24	38	42	65	112	285	585	233	48	58	14
6	18	24	39	54	60	114	293	540	218	45	59	14
7	22	33	40	54	53	118	320	530	216	44	52	13
8	24	34	41	49	60	129	369	535	203	43	45	13
9	28	32	40	54	57	129	406	565	188	42	38	13
10	29	31	39	41	57	147	355	585	176	42	32	13
11	30	31	38	48	56	148	344	580	162	42	29	13
12	28	37	40	66	54	141	352	570	148	40	27	13
13	24	50	40	73	55	144	406	560	139	38	26	13
14	23	50	44	73	52	153	446	525	129	37	24	13
15	23	44	40	80	53	174	466	505	122	36	24	13
16	23	42	40	118	54	178	480	475	115	36	23	13
17	23	40	41	224	52	184	515	442	108	35	21	13
18	20	71	42	214	49	184	560	410	106	34	20	13
19	18	54	36	227	49	186	520	390	102	31	20	13
20	22	39	33	176	48	192	490	376	97	30	19	12
21	26	41	38	139	47	194	462	352	92	29	18	12
22	24	44	48	114	48	200	485	334	88	30	18	12
23	23	42	39	103	48	209	505	320	83	32	17	12
24	23	42	34	96	48	216	490	308	76	34	16	13
25	26	40	36	95	48	227	458	299	70	40	16	14
26	27	40	38	89	49	229	438	290	67	51	16	15
27	24	37	42	79	50	229	430	288	65	42	16	16
28	23	37	47	80	52	242	450	288	62	36	16	16
29	23	37	48	81	-----	290	442	285	60	32	15	15
30	23	38	49	79	-----	338	446	278	58	31	15	15
31	23	-----	52	76	-----	330	-----	262	-----	32	14	-----
TOTAL	687	1,130	1,253	2,774	1,538	5,708	12,746	13,866	4,169	1,223	900	404
MEAN	22.2	37.7	40.4	89.5	54.9	184	425	447	139	39.5	29.0	13.5
MAX	30	71	52	227	74	338	560	632	260	57	62	16
MIN	13	24	33	23	47	56	285	262	58	29	14	12
AC-FT	1,360	2,240	2,490	5,500	3,050	11,320	25,280	27,500	8,270	2,430	1,790	801
CAL YR 1973	TOTAL 60,886		MEAN 167	MAX 1,520	MIN 13	AC-FT 120,800						
WTR YR 1974	TOTAL 46,398		MEAN 127	MAX 632	MIN 12	AC-FT 92,030						

PEAK DISCHARGE (BASE, 180 FT ³ /S)							
DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
1-17	2400	4.99	317	4-9	1500	5.47	430
1-19	0800	4.74	250	4-18	1600	5.86	605
3-2	1030	5.22	334	5-2	1800	5.98	674
4-2	0300	6.12	747				

BUENA VISTA LAKE BASIN

11190500 ISABELLA LAKE NEAR LAKE ISABELLA, CALIF.

LOCATION.--Lat 35°38'46", long 118°28'41", in SE¼SW¼ sec.19, T.26 S., R.33 E., Kern County, in main control tower near left abutment of main dam on Kern River, 1.5 mi (2.4 km) north of town of Lake Isabella, and 2.8 mi (4.5 km) upstream from Erskine Creek.

DRAINAGE AREA.--2,074 mi² (5,372 km²).

PERIOD OF RECORD.--October 1953 to current year. Prior to October 1968, published as Isabella Reservoir near Isabella. October 1968 to September 1970 published as "Isabella Reservoir."

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Corps of Engineers).

EXTREMES.--Current year: Maximum contents, 475,881 acre-ft (587 hm³) June 23 (elevation, 2,596.85 ft or 791,520 m); minimum, 201,710 acre-ft (249 hm³) Mar. 1 (elevation, 2,564.59 ft or 781,687 m).

Period of record: Maximum contents, 578,100 acre-ft (713 hm³) July 14, 1969 (elevation, 2,606.21 ft or 794,373 m); minimum since reservoir first filled, 50,030 acre-ft (61.7 hm³) Oct. 16, 1972 (elevation, 2,531.06 ft or 771,467 m).

REMARKS.--Reservoir is formed by earthfill dam with sidehill spillway and auxiliary earthfill dam completed in 1954. Regulation began Apr. 15, 1954. Usable capacity, 569,679 acre-ft (702 hm³) between elevations 2,470.0 ft (752.86 m), invert of main outlet and 2,605.5 ft (794.16 m), spillway crest, above mean sea level. Dead storage, 326 acre-ft (402,000 m³). Surcharge flood control storage, 271,800 acre-ft (335 hm³) between ungated spillway crest and elevation 2,627.0 ft (800.71 m), maximum design spillway flood pool. Records, including extremes, represent total contents at 2400 hours. Water is released to Kern River through tunnel in left abutment of main dam and to Borel Canal (see sta 11187500) through concrete conduit in auxiliary dam.

COOPERATION.--Records furnished by Corps of Engineers, not rounded to Geological Survey standards.

REVISIONS.--WSP 1930: Drainage area.

CAPACITY TABLE (ELEVATION IN FEET, AND CONTENTS, IN ACRE-FEET)

2,500	5,850	2,540	77,336
2,505	8,862	2,550	118,540
2,510	13,091	2,570	239,041
2,515	18,895	2,590	407,545
2,520	26,430	2,620	747,393
2,530	47,317		

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	222,261	208,754	204,884	206,280	220,047	201,710	227,780	291,683	414,565	470,913	409,174	330,869
2	220,876	208,218	204,817	206,347	220,116	203,757	234,729	294,274	418,827	470,191	407,545	328,802
3	219,633	207,749	204,751	206,414	220,116	204,618	237,959	297,286	422,819	469,160	404,677	326,399
4	218,463	207,281	204,685	206,347	219,909	204,618	240,344	300,888	426,732	468,028	402,201	323,834
5	217,091	206,480	204,618	206,414	219,909	204,419	242,159	304,183	431,157	466,588	399,922	321,280
6	215,791	206,147	204,552	206,747	219,633	204,220	244,128	306,750	435,705	465,049	397,649	318,905
7	214,769	205,814	204,486	207,148	219,427	204,287	246,253	309,578	441,574	463,512	395,007	316,707
8	214,292	205,349	204,353	207,281	219,151	205,083	247,946	312,923	446,278	461,262	392,373	314,434
9	212,226	204,751	204,353	207,415	218,738	205,681	250,461	317,129	450,302	459,426	389,842	312,169
10	212,140	204,486	204,287	207,549	218,394	206,214	252,393	322,215	454,345	457,187	386,760	309,912
11	212,031	204,353	204,022	207,615	217,845	206,547	254,109	327,514	458,102	455,055	384,247	307,747
12	211,922	204,486	204,088	208,151	217,296	207,014	256,058	333,029	461,160	452,726	381,465	305,590
13	211,820	204,685	204,751	208,955	216,954	207,415	258,014	338,502	463,921	450,504	378,694	303,440
14	211,712	204,618	205,482	209,425	216,201	208,084	260,131	343,404	468,748	448,288	375,932	301,464
15	211,605	204,552	205,415	209,761	215,587	208,754	262,334	348,872	470,810	446,178	373,181	299,740
16	211,468	204,353	205,415	210,434	214,632	209,761	264,318	354,025	472,256	444,073	370,348	297,939
17	212,257	204,618	205,349	212,595	213,952	210,636	266,387	358,677	472,980	441,773	367,617	296,307
18	212,054	205,216	205,349	214,428	212,866	211,581	268,619	362,547	472,980	439,579	364,806	295,005
19	211,986	205,282	205,282	215,860	211,783	212,392	270,785	366,256	472,773	437,391	361,735	293,625
20	211,783	204,884	205,216	217,022	210,906	213,205	272,727	369,346	472,566	434,912	359,216	292,491
21	211,581	205,149	205,017	218,257	209,828	214,020	274,520	372,266	472,566	432,341	356,616	291,521
22	211,446	205,083	205,083	218,807	208,821	214,973	276,320	375,014	473,912	430,172	354,115	290,392
23	211,243	204,950	205,083	219,220	208,084	215,860	278,127	377,864	475,881	427,910	351,800	289,667
24	210,973	204,817	205,083	219,633	207,081	216,885	279,940	380,263	475,778	425,948	349,847	288,381
25	210,771	204,685	205,017	219,633	205,814	218,051	281,443	382,948	475,155	424,382	347,634	287,018
26	210,501	204,685	204,950	219,978	204,486	219,151	282,871	386,667	474,740	422,331	345,340	285,579
27	210,367	204,751	204,751	219,978	203,624	219,978	284,462	391,153	473,912	420,091	342,702	284,223
28	210,097	204,751	205,282	212,004	202,501	220,945	286,058	396,138	473,083	417,663	340,161	282,791
29	209,963	204,751	205,216	222,011	-----	222,469	287,820	400,871	472,463	415,242	337,543	281,285
30	209,761	204,685	205,748	222,011	-----	224,069	289,587	405,345	471,739	412,925	335,109	279,624
31	209,156	-----	205,947	221,970	-----	225,605	-----	409,846	-----	410,999	332,942	-----
MAX	222,261	208,754	205,947	222,011	220,116	225,605	289,587	409,846	475,881	470,913	409,174	330,869
MIN	209,156	204,353	204,022	206,280	202,501	201,710	227,780	291,683	414,565	410,999	332,942	279,624
(a)	2,565.71	2,565.04	2,565.23	2,567.26	2,564.71	2,568.11	2,576.62	2,590.24	2,596.45	2,590.36	2,581.81	2,575.37
(b)	-14,286	-4,471	+1,262	+13,755	-17,201	+23,104	+63,982	+120,259	+61,893	-60,740	-78,057	-53,318
(c)	3,565	1,982	964	818	1,346	1,624	3,015	6,122	9,050	9,632	8,903	7,079

CAL YR 1973 b -150,358
WTR YR 1974 b -56,182

a Elevation, in feet, at end of month.
b Change in contents, in acre-feet
c Evaporation, in acre-feet.

11191000 KERN RIVER BELOW ISABELLA DAM, CALIF.

LOCATION.--Lat 35°38'21", long 118°29'02", in SW¼NW¼ sec.30, T.26 S., R.33 E., Kern County, on right bank 200 ft (61 m) downstream from highway bridge, 0.6 mi (1.0 km) downstream from Isabella Dam, and 1.6 mi (2.6 km) south-west of town of Lake Isabella.

DRAINAGE AREA.--2,074 mi² (5,372 km²).

PERIOD OF RECORD.--April 1945 to current year. Prior to October 1952, published as "below Isabella damsite."

GAGE.--Water-stage recorder. Datum of gage is 2,435.07 ft (742.209 m) above mean sea level (levels by Corps of Engineers). Prior to Mar. 12, 1952, water-stage recorder at site 0.6 mi (1.0 km) upstream at different datum. Mar. 12, 1952, to July 26, 1953, nonrecording gage at present site and datum.

AVERAGE DISCHARGE (adjusted for diversion to Borel Canal since 1945 and for change in contents in and evaporation from Isabella Lake since 1954).--29 years, 887 ft³/s (25.12 m³/s) 642,600 acre-ft/yr (792 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,480 ft³/s (41.9 m³/s) June 23 (gage height, 8.77 ft or 2.673 m); no flow Dec. 13.

Period of record: Maximum discharge, 39,000 ft³/s (1,100 m³/s) Nov. 19, 1950 (gage height, 28.6 ft or 8.72 m, from floodmarks, present site and datum), from rating curve extended above 1,100 ft³/s (31.2 m³/s) on basis of slope-area measurement of maximum flow; minimum, 2.1 ft³/s (0.059 m³/s), regulated, Nov. 27, 1951. Maximum discharge since construction of Isabella Dam in 1954, 7,300 ft³/s (207 m³/s) May 3, 1969 (gage height, 17.67 ft or 5.386 m); no flow Oct. 29, 1954, Mar. 22, 1960, Dec. 2-4, 1970, Dec. 13, 1973.

REMARKS.--Records excellent. Flow regulated by Isabella Lake (see sta 11190500) beginning Apr. 15, 1954. Borel Canal (see sta 11187500) diverts above station. Diversion for irrigation of 3,500 acres (14.2 km²) between head of Isabella Lake and upstream stations. An additional 6,500 acres (26.3 km²) in lake can be irrigated when lake stage is low. Records of water temperatures for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1515: 1956. WSP 1930: Drainage area. WRD Calif. 1967: 1958(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	218	3.0	2.1	2.2	6.1	413	7.1	268	621	1,320	1,420	752
2	228	3.8	2.0	2.1	5.9	366	6.5	280	623	1,410	1,430	796
3	259	4.0	2.1	2.3	5.3	408	5.3	280	623	1,450	1,420	932
4	280	3.0	2.1	2.2	5.0	419	3.4	281	632	1,430	1,420	1,010
5	280	2.6	2.0	2.2	52	419	5.3	305	727	1,410	1,440	1,010
6	264	2.2	1.8	2.2	55	419	6.1	359	871	1,420	1,420	930
7	170	2.0	1.8	2.2	46	386	5.5	414	838	1,420	1,380	851
8	44	1.9	1.8	4.2	65	109	5.2	433	828	1,430	1,410	849
9	21	1.9	1.8	4.9	115	3.2	6.6	408	855	1,430	1,380	855
10	3.7	1.8	1.9	3.9	136	45	6.7	374	909	1,390	1,350	796
11	4.3	2.0	1.9	4.9	141	103	6.1	348	946	1,370	1,340	791
12	5.2	2.0	2.0	5.8	152	98	5.4	336	1,110	1,380	1,330	764
13	4.8	2.0	0	5.8	152	89	4.9	337	1,280	1,380	1,290	738
14	4.7	1.9	1.7	5.5	183	107	4.7	333	1,340	1,370	1,270	631
15	4.3	1.8	2.9	5.5	254	97	32	312	1,270	1,390	1,260	548
16	4.0	1.8	2.6	5.5	284	44	141	281	1,290	1,390	1,210	563
17	4.0	1.9	2.6	5.5	298	30	224	244	1,330	1,390	1,150	556
18	4.5	2.0	2.5	5.5	366	78	243	215	1,330	1,370	1,130	368
19	5.0	2.0	2.3	5.5	436	126	219	161	1,260	1,340	1,130	293
20	5.0	2.0	2.2	5.1	406	131	208	130	1,180	1,350	1,130	209
21	4.7	1.9	1.6	5.1	385	131	230	140	1,180	1,380	1,120	148
22	4.2	1.9	1.8	5.0	367	117	260	191	889	1,430	1,060	120
23	3.5	1.9	3.0	4.9	338	79	272	269	565	1,390	949	116
24	3.1	1.8	3.4	5.7	346	45	272	304	1,370	1,350	877	225
25	5.2	1.9	3.4	6.3	808	22	273	313	1,300	1,370	864	318
26	4.9	1.8	2.9	6.2	972	3.2	249	384	1,300	1,380	892	318
27	4.1	1.8	2.5	6.2	687	2.8	224	417	1,310	1,380	973	318
28	3.7	1.9	4.3	6.2	508	3.7	209	497	1,340	1,390	1,000	318
29	3.4	1.8	3.5	6.2	-----	6.2	217	584	1,310	1,390	1,010	329
30	3.0	1.9	3.0	6.2	-----	7.4	240	619	1,290	1,380	958	443
31	3.7	-----	2.6	6.2	-----	6.9	-----	619	-----	1,400	811	-----
TOTAL	1,857.0	64.2	69.40	147.2	7,574.3	4,314.4	3,591.8	10,436	31,717	43,080	36,824	16,895
MEAN	59.9	2.14	2.24	4.75	271	139	120	337	1,057	1,390	1,188	563
MAX	280	4.0	4.3	6.3	972	419	273	619	1,370	1,450	1,440	1,010
MIN	3.0	1.8	0	2.1	5.0	2.8	3.4	130	565	1,320	811	116
AC-FT	3,680	127	138	292	15,020	8,560	7,120	20,700	62,910	85,450	73,040	33,510
MEAN a	272	343	408	742	506	1,120	1,817	2,963	2,803	1,115	611	292
AC-FT a	16,750	20,430	25,100	45,620	28,100	68,840	108,100	182,200	166,800	68,560	37,570	17,560

CAL YR 1973 TOTAL 241,336.30 MEAN 661 MAX 2,170 MIN 0 AC-FT 478,700 MEAN a 1,285 AC-FT a 930,000
WTR YR 1974 TOTAL 156,570.30 MEAN 429 MAX 1,450 MIN 0 AC-FT 310,600 MEAN a 1,085 AC-FT a 785,400

a Adjusted for change in contents in and evaporation from Isabella Lake and for diversion to Borel Canal.

11192500 KERN RIVER NEAR DEMOCRAT SPRINGS, CALIF.

LOCATION.--Lat 35°31'15", long 118°40'34", in NE&SE¼ sec.6, T.28 S., R.31 E., Kern County, on left bank 1.0 mi (1.6 km) southwest of Democrat Springs, and 2.1 mi (3.4 km) upstream from Cow Creek.

DRAINAGE AREA.--2,258 mi² (5,848 km²).

PERIOD OF RECORD.--July 1950 to current year. Prior to October 1954, records for river and conduit published separately; combined flow only, October 1954 to September 1960.

GAGE.--Water-stage recorder on river; water-stage recorder for conduit diversion. Datum of gage is 1,837.7 ft (560.13 m) above mean sea level.

AVERAGE DISCHARGE (River only, unadjusted).--24 years, 579 ft³/s (16.40 m³/s), 419,500 acre-ft/yr (517 hm³/yr). (Combined river and diversion, adjusted for storage).--24 years, 927 ft³/s (26.25 m³/s), 671,600 acre-ft/yr (828 hm³/yr).

EXTREMES (River only).--Current year: Maximum discharge, 1,620 ft³/s (45.9 m³/s) July 2 (gage height, 10.05 ft or 3.063 m); minimum daily, 0.39 ft³/s (0.011 m³/s) Nov. 13-15.

Period of record (prior to regulation by Isabella Lake): Maximum discharge, 40,000 ft³/s (1,130 m³/s) Nov. 19, 1950 (gage height, 30.7 ft or 9.36 m), from rating curve extended above 8,700 ft³/s (246 m³/s) on basis of computation of maximum flow over dam (basic data for computation furnished by Southern California Edison Co.); minimum daily, 0.7 ft³/s (0.020 m³/s) Nov. 17-19, 1951.

1954 to current year: Maximum discharge, 10,100 ft³/s (286 m³/s) Dec. 6, 1966 (gage height, 18.55 ft or 5.654 m); minimum daily, 0.09 ft³/s (0.003 m³/s) Dec. 15, 1970, Feb. 12-14, 1972.

(Combined flow).--Current year: Maximum discharge, 2,030 ft³/s (57.5 m³/s) July 2; minimum daily, 89 ft³/s (2.52 m³/s) Dec. 13.

Period of record (prior to regulation by Isabella Lake): Maximum discharge, 40,000 ft³/s (1,130 m³/s) Nov. 19, 1950; minimum daily, 123 ft³/s (3.48 m³/s) Sept. 22, 1951.

1954 to current year: Maximum discharge, 10,100 ft³/s (286 m³/s) Dec. 6, 1966; minimum daily, 10 ft³/s (0.28 m³/s) Dec. 17, 1968.

REMARKS.--Records good. Kern River No. 1 conduit diverts up to about 420 ft³/s (11.9 m³/s) from left bank of Kern River 0.4 mi (0.6 km) upstream from station in sec.13, T.28 S., R.30 E., for power development; water is returned to river 10 mi (16 km) below station. Flow regulated by Isabella Lake 22 mi (35 km) upstream beginning in 1954 (see sta 11190500). Many diversions above station for irrigation. See schematic diagram of Kern River basin. For records of combined discharge of river and conduit, see following page.

COOPERATION.--Gage-height record and 13 discharge measurements for river and gage-height record and 14 discharge measurements for conduit furnished by Southern California Edison Co., in connection with a Federal Power Commission project.

REVISIONS.--WSP 1930: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	395	50	3.7	55	169	597	203	420	744	1,460	1,550	876
2	400	74	30	39	131	525	618	438	744	1,550	1,570	890
3	420	64	23	31	143	588	320	436	741	1,610	1,560	1,040
4	449	59	3.4	36	144	579	266	438	741	1,610	1,550	1,150
5	449	36	.93	34	169	576	248	445	785	1,590	1,580	1,180
6	445	28	.82	36	228	579	233	495	1,020	1,590	1,560	1,090
7	409	35	.63	50	219	563	224	548	981	1,600	1,500	988
8	124	136	1.5	60	217	415	217	579	964	1,610	1,540	967
9	233	95	3.1	51	264	213	233	558	974	1,610	1,530	1,000
10	132	14	.82	45	292	212	235	525	1,060	1,580	1,470	922
11	18	.82	1.6	41	294	292	230	493	1,060	1,540	1,470	922
12	.82	.54	44	47	308	300	224	473	1,230	1,540	1,460	894
13	.72	.39	45	56	310	290	217	470	1,400	1,550	1,410	887
14	.63	.39	73	50	318	290	210	468	1,500	1,520	1,380	789
15	.54	.39	46	65	380	312	206	449	1,420	1,550	1,380	660
16	.54	.46	6.9	157	413	255	292	424	1,440	1,540	1,360	666
17	.54	.54	1.8	208	422	219	391	389	1,480	1,540	1,300	693
18	.54	1.3	1.1	222	461	237	429	374	1,490	1,520	1,270	553
19	.54	34	.82	221	563	298	409	342	1,450	1,490	1,270	454
20	.54	26	.72	221	538	310	391	296	1,340	1,490	1,270	393
21	.54	16	.72	239	510	306	395	294	1,340	1,500	1,270	332
22	.54	2.6	5.2	226	505	296	422	320	1,320	1,580	1,230	288
23	.54	23	2.0	206	465	267	436	398	202	1,550	1,110	294
24	.63	19	.82	202	465	226	438	440	1,540	1,490	1,010	308
25	.63	1.2	.72	200	533	206	438	438	1,460	1,520	992	475
26	.63	.72	.72	197	550	181	426	510	1,450	1,520	1,000	478
27	.63	.63	5.2	195	535	170	398	555	1,450	1,520	1,100	475
28	.63	.63	20	195	609	172	380	618	1,490	1,520	1,150	475
29	.63	.63	21	192	-----	175	382	717	1,480	1,520	1,150	478
30	.63	.72	35	192	-----	182	393	744	1,450	1,520	1,170	530
31	11	-----	31	190	-----	187	-----	744	-----	1,550	967	-----
TOTAL	3,496.44	720.96	411.22	3,959	10,155	10,018	9,904	14,838	35,746	47,880	41,129	21,147
MEAN	113	24.0	13.3	128	363	323	330	479	1,192	1,545	1,327	705
MAX	449	136	73	239	609	597	618	744	1,540	1,610	1,580	1,180
MIN	.54	.39	.63	31	131	170	203	294	202	1,460	967	288
AC-FT	6,940	1,430	816	7,850	20,140	19,870	19,640	29,430	70,900	94,970	81,580	41,950

CAL YR 1973 TOTAL 238,812.67 MEAN 654 MAX 2,300 MIN .39 AC-FT 473,700
WTR YR 1974 TOTAL 199,404.62 MEAN 546 MAX 1,610 MIN .39 AC-FT 395,500

COMBINED DISCHARGE, IN CUBIC FEET PER SECOND, OF KERN RIVER AND KERN RIVER
NO. 1 CONDUIT NEAR DEMOCRAT SPRINGS, CALIF., WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FER	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	790	422	393	459	573	1,000	609	831	1,160	1,870	1,960	1,280
2	790	453	428	441	536	932	1,020	848	1,160	1,960	1,980	1,290
3	811	450	424	433	548	994	724	846	1,150	2,020	1,960	1,440
4	842	449	403	438	549	986	671	847	1,150	2,020	1,950	1,550
5	843	427	400	438	575	983	653	855	1,200	2,000	1,980	1,580
6	841	422	398	439	633	986	639	904	1,430	2,000	1,960	1,490
7	806	434	398	445	625	970	630	956	1,390	2,010	1,900	1,390
8	479	539	399	451	623	821	624	987	1,370	2,020	1,940	1,370
9	620	496	399	445	672	619	640	965	1,380	2,020	1,930	1,400
10	519	403	399	442	702	618	641	934	1,460	1,990	1,870	1,320
11	406	366	396	441	704	698	637	904	1,470	1,950	1,870	1,320
12	386	311	396	450	717	705	632	884	1,640	1,950	1,860	1,300
13	358	312	89	458	720	695	625	881	1,810	1,960	1,810	1,290
14	327	353	92	452	728	695	618	879	1,910	1,930	1,780	1,190
15	326	353	407	468	789	717	614	860	1,830	1,950	1,780	1,060
16	294	353	398	560	822	657	700	835	1,850	1,940	1,760	1,070
17	302	352	398	611	831	623	799	800	1,890	1,940	1,700	1,090
18	317	354	397	623	870	643	836	785	1,900	1,930	1,670	953
19	293	428	396	622	971	703	817	753	1,860	1,900	1,670	854
20	285	425	395	624	946	713	799	708	1,750	1,890	1,670	794
21	301	415	395	642	919	708	804	706	1,750	1,900	1,670	732
22	336	390	406	630	914	699	831	732	1,720	1,990	1,630	688
23	248	424	400	611	874	671	845	811	402	1,960	1,510	694
24	322	415	398	606	874	630	848	853	1,920	1,900	1,410	708
25	349	342	398	604	942	610	848	851	1,860	1,920	1,390	875
26	355	337	400	600	958	586	835	923	1,860	1,920	1,400	879
27	333	308	407	598	943	576	807	967	1,860	1,930	1,500	876
28	302	344	425	599	1,020	577	790	1,030	1,900	1,930	1,550	875
29	316	356	422	597	-----	579	792	1,130	1,890	1,930	1,550	878
30	318	379	437	597	-----	587	804	1,160	1,860	1,930	1,570	929
31	337	-----	436	594	-----	592	-----	1,160	-----	1,960	1,370	-----
TOTAL	14,152	11,812	11,929	16,418	21,578	22,573	22,132	27,585	47,782	60,520	53,550	33,165
MEAN	457	394	385	530	771	728	738	890	1,593	1,952	1,727	1,106
MAX	843	539	437	642	1,020	1,000	1,020	1,160	1,920	2,020	1,980	1,580
MIN	248	308	89	433	536	576	609	706	402	1,870	1,370	688

BUENA VISTA LAKE BASIN

11194000 KERN RIVER NEAR BAKERSFIELD, CALIF.

LOCATION.--Lat 35°25'54", long 118°56'43", in NW¼SW¼ sec.2, T.29 S., R.28 E., Kern County, on left bank 0.8 mi (1.3 km) northeast of Oil City, 1.9 mi (3.1 km) upstream from Sacramento Gulch, and 5.8 mi (9.3 km) northeast of Bakersfield Post Office.

DRAINAGE AREA.--2,407 mi² (6,234 km²).

PERIOD OF RECORD.--October 1893 to current year. Daily discharges for period October 1953 to September 1963 are in files of California district office of Geological Survey. Monthly discharge only for some periods, published in WSP 1315-A.

GAGE.--Water-stage recorder and prior to Jan. 24, 1969, a wooden control. Datum of gage is at mean sea level.

AVERAGE DISCHARGE.--81 years, 953 ft³/s (26.99 m³/s), 690,500 acre-ft/yr (851 hm³/yr).

EXTREMES.--Current year: Maximum daily discharge, 2,010 ft³/s (56.9 m³/s) July 4; minimum daily, 87 ft³/s (2.46 m³/s) Dec. 14.

Period of record: Maximum discharge, 36,000 ft³/s (1,020 m³/s) Nov. 19, 1950 (elevation, 461.37 ft or 140.626 m); minimum daily, 74 ft³/s (2.1 m³/s) Sept. 19, 1948. Maximum discharge since construction of Isabella Dam in 1954, 9,290 ft³/s (263 m³/s) Dec. 6, 1966 (elevation, 454.94 ft or 138.666 m); minimum daily, 26 ft³/s (0.74 m³/s) Dec. 11, 1970.

REMARKS.--Flow regulated by Isabella Reservoir beginning in 1954 (see sta 11190500) and three powerplants; many diversions above station for irrigation. Daily discharge computed from 1200 to 1200 hours.

COOPERATION.--Records furnished by Kern County Canal and Water Co. and reviewed by the Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	802	447	435	462	642	1,060	778	846	1,240	1,870	2,000	1,350
2	803	462	453	490	610	1,020	1,230	867	1,270	1,950	1,990	1,360
3	833	474	459	512	608	1,090	732	864	1,220	2,000	1,980	1,480
4	866	460	447	540	603	1,080	657	875	1,210	2,010	1,970	1,560
5	876	461	443	546	615	1,080	689	888	1,260	1,990	2,000	1,580
6	876	449	436	535	631	1,080	679	951	1,470	1,990	1,970	1,520
7	796	444	429	465	631	1,070	658	1,020	1,450	1,980	1,960	1,450
8	504	525	424	477	629	905	645	1,050	1,440	1,980	1,970	1,420
9	560	484	429	486	644	698	721	1,020	1,480	1,980	1,960	1,440
10	510	435	434	474	651	676	699	995	1,510	1,970	1,920	1,380
11	455	380	444	477	648	762	678	953	1,520	1,950	1,900	1,370
12	405	336	389	479	742	778	683	937	1,660	1,950	1,900	1,390
13	350	372	179	488	749	770	653	924	1,810	1,960	1,860	1,380
14	359	378	87	462	825	768	663	929	1,890	1,940	1,820	1,250
15	340	400	441	511	878	774	687	902	1,850	1,950	1,820	1,140
16	324	431	422	563	880	746	819	866	1,860	1,960	1,790	1,120
17	334	378	417	659	949	727	888	830	1,880	1,960	1,740	1,140
18	327	390	419	677	1,070	731	897	832	1,880	1,940	1,720	1,010
19	311	438	423	663	1,070	771	872	805	1,860	1,930	1,710	939
20	311	349	425	660	1,040	781	852	744	1,790	1,920	1,700	897
21	350	393	428	722	1,000	776	882	730	1,780	1,940	1,690	843
22	314	419	431	703	1,000	767	898	752	1,650	1,980	1,660	805
23	326	446	431	660	938	738	896	842	739	1,970	1,600	794
24	372	438	434	652	946	694	896	879	1,870	1,930	1,550	810
25	392	390	430	640	1,030	671	888	899	1,860	1,960	1,530	930
26	385	379	430	634	1,050	663	848	1,010	1,860	1,950	1,530	940
27	338	353	433	666	984	637	830	1,030	1,860	1,960	1,570	937
28	342	389	447	634	1,100	628	802	1,090	1,900	1,950	1,600	936
29	352	393	460	639	-----	620	814	1,210	1,880	1,960	1,600	939
30	351	416	462	644	-----	636	836	1,220	1,850	1,980	1,570	1,010
31	387	-----	475	651	-----	636	-----	1,230	-----	1,970	1,430	-----
TOTAL	14,851	12,509	12,896	17,871	23,163	24,833	23,770	28,990	48,799	60,730	55,010	35,120
MEAN	479	417	416	576	827	801	792	935	1,627	1,959	1,775	1,171
MAX	876	525	475	722	1,100	1,090	1,230	1,230	1,900	2,010	2,000	1,580
MIN	311	336	87	462	603	620	645	730	739	1,870	1,430	794
AC-FT	29,460	24,810	25,580	35,450	45,940	49,260	47,150	57,500	96,790	120,500	109,100	69,660
CAL YR 1973	TOTAL	395,800	MEAN	1,084	MAX	2,870	MIN	87	AC-FT	785,100		
WTR YR 1974	TOTAL	358,542	MEAN	982	MAX	2,010	MIN	87	AC-FT	711,200		

11195500 SAN EMIGDIO CREEK AT SAN EMIGDIO RANCHHOUSE, CALIF.

LOCATION.--Lat 34°58'54", long 119°11'03", in San Emigdio Grant, Kern County, on left bank 50 ft (15 m) downstream from unnamed tributary, 0.8 mi (1.3 km) upstream from San Emigdio Ranchhouse, and 13 mi (21 km) west of Wheeler Ridge.

DRAINAGE AREA.--48.8 mi² (126.4 km²).

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

GAGE.--Water-stage recorder and sharp-crested weir with rectangular flume for flows below 7 ft³/s (0.2 m³/s). Datum of gage is 1,617.57 ft (493.035 m) above mean sea level.

AVERAGE DISCHARGE.--15 years, 1.60 ft³/s (0.045 m³/s), 1,160 acre-ft/yr (1.43 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 17 ft³/s (0.48 m³/s) July 25 (gage height, 9.56 ft or 2.914 m, from floodmarks), from rating curve extended above 20 ft³/s (0.57 m³/s) as explained below; minimum daily, 1.6 ft³/s (0.045 m³/s) June 9-16.

Period of record: Maximum discharge, 6,690 ft³/s (189 m³/s) Aug. 5, 1961 (gage height, 19.87 ft or 6.056 m, from floodmarks), from rating curve extended above 20 ft³/s (0.57 m³/s) on basis of slope-area measurements at gage heights 10.94 ft (3.335 m) and 19.87 ft (6.056 m); minimum daily, 0.30 ft³/s (0.008 m³/s) Apr. 23, 24, 1962 and many days in 1965-66.

Maximum stage known since at least 1938 (from information by local residents), that of Aug. 5, 1961.

REMARKS.--Records good. Small diversions for stock and domestic use above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.7	2.0	3.9	2.7	1.9	2.0	3.4	1.8	1.8	1.8	2.4	1.8
2	1.8	2.0	2.6	2.8	1.9	4.5	5.7	1.8	1.7	1.8	3.3	1.8
3	1.8	2.2	2.5	2.8	1.9	2.1	1.9	1.8	1.7	1.9	2.3	1.8
4	1.8	2.2	2.4	3.2	1.9	2.1	1.8	1.8	1.7	1.9	1.9	1.8
5	1.8	2.2	2.5	2.7	1.9	2.1	1.8	1.8	1.7	1.8	1.8	1.8
6	1.7	2.2	2.5	2.6	1.9	2.1	1.9	1.7	1.7	1.9	1.8	1.8
7	1.9	2.2	2.5	3.0	1.9	2.1	2.0	1.7	1.7	1.9	1.8	1.8
8	2.4	2.2	2.5	2.6	1.9	4.9	1.9	1.7	1.7	1.9	1.8	1.8
9	2.2	2.2	2.5	2.4	1.9	3.6	2.0	1.7	1.6	2.0	1.8	1.8
10	2.2	2.0	2.5	2.4	1.9	3.8	4.6	1.8	1.6	2.0	1.8	1.8
11	2.1	2.0	2.4	2.4	1.9	2.5	2.7	1.8	1.6	2.0	1.8	1.8
12	2.0	2.0	2.4	5.8	2.0	2.1	1.9	1.8	1.6	2.0	1.8	1.8
13	2.0	2.2	2.5	3.7	2.0	2.1	2.0	1.8	1.6	2.0	1.8	1.8
14	1.8	2.2	2.8	2.3	2.0	2.0	1.8	1.9	1.6	2.1	1.8	1.8
15	1.8	2.3	2.5	2.3	1.9	2.0	1.8	1.9	1.6	2.0	1.8	1.8
16	1.8	2.3	2.4	4.6	1.9	1.9	1.8	2.0	1.6	2.0	1.8	1.8
17	1.8	2.4	2.5	5.8	1.9	2.0	1.9	2.1	1.7	2.0	1.8	1.8
18	1.9	4.9	2.6	1.8	1.9	2.0	2.0	2.2	1.7	2.0	1.8	1.8
19	1.8	2.4	2.6	1.7	2.0	2.0	2.4	2.4	1.8	2.0	1.8	1.9
20	1.9	2.4	2.6	2.4	2.0	2.0	2.2	2.3	1.8	2.0	1.8	1.8
21	2.0	2.4	2.6	4.7	2.0	2.0	2.0	2.2	1.7	2.0	1.8	1.8
22	2.0	2.4	2.8	2.4	2.0	2.0	1.9	2.0	1.7	2.0	1.8	1.8
23	2.2	2.6	2.7	2.2	2.1	2.1	2.0	1.9	1.7	3.0	1.8	1.8
24	2.2	2.5	2.7	2.0	2.0	2.0	2.1	1.9	1.7	2.0	1.9	1.8
25	2.2	2.5	2.7	1.9	2.0	2.0	2.2	1.8	1.7	3.4	1.9	1.8
26	2.2	2.4	2.7	2.0	1.9	2.0	2.2	1.8	1.8	2.1	1.9	1.8
27	2.2	2.3	2.8	2.0	2.0	2.0	2.1	1.7	1.8	2.2	1.9	1.8
28	2.2	2.3	2.9	1.9	2.0	2.0	2.1	1.8	1.8	2.2	1.9	1.8
29	2.2	2.3	2.6	1.9	-----	2.0	2.0	1.8	1.7	2.2	1.9	1.8
30	2.1	2.3	2.6	1.9	-----	2.2	1.8	1.9	1.8	2.2	1.8	1.8
31	2.0	-----	2.6	1.9	-----	2.2	-----	1.8	-----	2.0	1.8	-----
TOTAL	61.7	70.5	81.4	84.8	54.5	72.4	67.9	58.4	50.9	64.3	59.1	54.1
MEAN	1.99	2.35	2.63	2.74	1.95	2.34	2.26	1.88	1.70	2.07	1.91	1.80
MAX	2.4	4.9	3.9	5.8	2.1	4.9	5.7	2.4	1.8	3.4	3.3	1.9
MIN	1.7	2.0	2.4	1.7	1.9	1.9	1.8	1.7	1.6	1.8	1.8	1.8
AC-FT	122	140	161	168	108	144	135	116	101	128	117	107

CAL YR 1973 TOTAL 748.42 MEAN 2.05 MAX 14 MIN .96 AC-FT 1,480
WTR YR 1974 TOTAL 780.00 MEAN 2.14 MAX 5.8 MIN 1.6 AC-FT 1,550

PEAK DISCHARGE (BASE, 25 FT³/S).--No peak above base.

11196400 CALIENTE CREEK ABOVE TEHACHAPI CREEK, NEAR CALIENTE, CALIF.

LOCATION.--Lat 35°18'41", long 118°34'10", in SE¼SW¼ sec.17, T.30 S., R.32 E., Kern County, on right bank 0.5 mi (0.8 km) upstream from Harper Canyon, 1.0 mi (1.6 km) upstream from Oiler Canyon, and 3.6 mi (5.8 km) north-east of Caliente.

DRAINAGE AREA.--165 mi² (427 km²).

PERIOD OF RECORD.--October 1961 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,617.27 ft (492.944 m) above mean sea level.

AVERAGE DISCHARGE.--13 years, 2.60 ft³/s (0.074 m³/s), 1,880 acre-ft/yr (2.32 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 93 ft³/s (2.63 m³/s) Apr. 2 (gage height, 2.28 ft or 0.695 m); no flow for many days in October.
Period of record: Maximum discharge, 1,410 ft³/s (39.9 m³/s) Aug. 8, 1963 (gage height, 7.48 ft or 2.280 m, from floodmarks), from rating curve extended above 51 ft³/s (1.44 m³/s) on basis of slope-area measurement of maximum flow; no flow for several months in most years.

REMARKS.--Records good. Small diversions above station for stock and domestic use.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	.67	3.2	9.6	3.4	2.5	6.6	3.1	1.5	.40	.12	.24
2	0	.61	3.2	5.9	3.2	4.5	50	2.9	1.4	.40	.12	.21
3	0	.73	2.6	4.6	3.2	4.2	22	2.8	1.3	.34	.12	.21
4	0	.80	2.5	4.4	3.2	3.6	15	3.1	1.3	.34	.10	.24
5	0	.80	2.3	4.0	3.2	3.2	10	3.6	1.4	.34	.14	.21
6	0	.87	2.2	3.6	3.2	3.1	10	4.0	1.4	.37	.14	.21
7	0	.87	2.1	3.6	3.1	2.9	8.9	3.1	1.4	.46	.12	.21
8	0	.87	2.1	3.4	2.9	5.4	8.4	2.9	1.2	.50	.12	.18
9	0	.94	2.1	3.2	2.9	4.6	10	2.8	1.0	.46	.12	.16
10	0	.94	2.0	3.2	2.8	4.4	10	2.8	.96	.53	.16	.14
11	0	.94	2.0	3.1	2.8	4.2	8.4	2.6	.96	.56	.14	.14
12	0	1.2	1.9	3.4	2.8	4.0	7.5	2.5	.89	.56	.16	.14
13	0	1.2	2.0	3.1	2.9	3.6	7.1	2.5	.89	.56	.18	.16
14	0	1.3	2.2	3.1	2.8	3.4	6.7	2.5	.89	.56	.18	.21
15	0	1.3	2.0	3.1	2.8	3.4	6.3	2.3	.89	.53	.18	.24
16	0	1.4	1.9	3.2	2.8	3.2	5.9	2.3	.89	.50	.18	.24
17	0	1.3	2.0	3.6	2.8	3.2	5.6	2.5	.88	.46	.18	.24
18	0	3.3	2.0	3.4	2.6	3.4	5.6	2.6	.89	.46	.18	.24
19	0	2.5	1.9	3.4	2.9	3.2	5.6	2.9	.96	.40	.18	.21
20	0	2.2	1.9	5.0	2.9	3.1	5.4	2.6	.89	.37	.18	.21
21	0	2.0	1.9	11	2.6	3.1	4.8	2.5	.89	.37	.18	.21
22	0	1.9	2.3	6.7	2.6	3.1	4.6	2.3	.75	.34	.18	.21
23	.15	1.9	2.1	5.6	2.5	3.1	4.4	2.3	.66	.28	.17	.21
24	.45	1.9	2.1	4.8	2.3	3.1	4.4	2.2	.62	.24	.18	.21
25	.50	1.9	2.1	4.4	2.3	2.9	4.6	2.0	.62	.40	.16	.18
26	.55	2.2	2.1	4.2	2.3	2.9	4.6	1.7	.62	.28	.18	.28
27	.55	2.0	5.4	4.0	2.3	2.9	4.6	1.6	.59	.24	.20	.31
28	.55	1.9	9.5	3.8	2.5	2.9	4.0	1.5	.53	.21	.18	.34
29	.67	1.9	6.3	3.8	-----	2.8	3.8	1.6	.46	.18	.21	.31
30	.73	1.8	4.6	3.6	-----	3.2	3.6	1.6	.40	.18	.21	.34
31	.67	-----	4.0	3.4	-----	3.2	-----	1.5	-----	.16	.24	-----
TOTAL	4.82	44.14	86.5	135.2	78.6	106.3	258.4	77.2	28.03	11.98	5.09	6.64
MEAN	.16	1.47	2.79	4.36	2.81	3.43	8.61	2.49	.93	.39	.16	.22
MAX	.73	3.3	9.5	11	3.4	5.4	50	4.0	1.5	.56	.24	.34
MIN	0	.61	1.9	3.1	2.3	2.5	3.6	1.5	.40	.16	.10	.14
AC-FT	9.6	88	172	268	156	211	513	153	56	24	10	13

CAL YR 1973 TOTAL 1,536.33 MEAN 4.21 MAX 46 MIN 0 AC-FT 3,050
WTR YR 1974 TOTAL 842.90 MEAN 2.31 MAX 50 MIN 0 AC-FT 1,670

PEAK DISCHARGE (BASE, 50 FT³/S).--Apr. 2 (0230) 93 ft³/s (2.28 ft).

11196420 TEHACHAPI CREEK NEAR TEHACHAPI, CALIF.

LOCATION.--Lat 35°10'26", long 118°28'43", in NE¼SW¼ sec.6, T.32 S., R.33 E., Kern County, on right bank 1.3 mi (2.1 km) downstream from Brite Creek, and 3.2 mi (5.1 km) northwest of Tehachapi.

DRAINAGE AREA.--53.2 mi² (137.8 km²).

PERIOD OF RECORD.--September 1962 to current year.

GAGE.--Water-stage recorder. Datum of gage is 3,534.48 ft (1,077.310 m) above mean sea level. Prior to Aug. 5, 1964, at site 0.2 mi (0.3 km) upstream at different datum.

AVERAGE DISCHARGE.--12 years, 0.40 ft³/s (0.0113 m³/s), 290 acre-ft/yr (358,000 m³/yr).

EXTREMES.--Current year: Maximum discharge, 55 ft³/s (1.56 m³/s) Apr. 2 (gage height, 0.94 ft or 0.287 m); no flow Sept. 22-27.

Period of record: Maximum discharge, 1,700 ft³/s (48.1 m³/s) Aug. 8, 1963 (gage height, 5.30 ft or 1.615 m in gage well, 6.40 ft or 1.951 m, from floodmarks, site and datum then in use), from slope-area measurement of maximum flow; no flow for parts of most years.

REMARKS.--Records fair.

REVISIONS (WATER YEARS).--WRD Calif. 1969: 1967(M) WRD Calif. 1972: 1967.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.02	.08	1.6	4.1	1.9	.26	5.0	1.2	.96	.04	.04	.01
2	.02	.14	.08	1.1	1.6	1.2	20	1.2	.96	.04	.04	.01
3	.02	.14	.08	1.1	.82	2.3	4.0	1.2	.96	.02	.02	.01
4	.01	.14	.08	1.1	.96	.96	2.4	1.2	.82	.02	.04	.01
5	.02	.14	.08	1.2	.96	.82	2.2	1.2	.82	.02	.04	.01
6	.02	.14	.04	1.1	.54	.68	1.8	1.1	.82	.02	.04	.01
7	.04	.14	.08	5.8	.68	.68	1.6	.96	.82	.02	.04	.01
8	.02	.14	.08	11	.54	5.3	1.8	.96	.68	.04	.08	.03
9	.02	.14	.04	2.9	.68	3.4	3.4	.82	.54	.04	.14	.03
10	.02	.14	.04	1.4	.82	1.1	2.8	.82	.40	.04	.02	.03
11	.02	.08	.04	.96	1.4	1.1	2.1	.82	.40	.04	.04	.03
12	.02	.44	.04	1.4	1.4	.96	1.8	.82	.40	.04	.04	.03
13	.01	.04	.08	1.1	1.2	.96	1.4	.82	.68	.04	.02	.03
14	.01	.08	.14	.96	1.3	.96	1.6	.82	.68	.04	.02	.03
15	.01	.08	.14	.82	1.2	.82	1.8	.82	.26	.04	.01	.03
16	.01	.14	.14	1.8	1.1	.82	1.6	.82	.08	.04	.01	.03
17	.01	.14	.26	3.8	1.4	.82	1.2	.82	.06	.02	.01	.03
18	.02	2.6	.26	1.4	.96	.82	1.4	.82	.08	.02	.01	.02
19	.02	.14	.26	1.1	.96	1.0	1.4	1.4	.14	.02	.01	.02
20	.02	.08	.26	3.1	.82	.96	1.4	.68	.14	.02	.01	.01
21	.02	.08	.40	7.1	.68	1.1	1.4	.68	.14	.02	.01	.01
22	.02	.08	.54	1.8	.40	1.1	1.4	.68	.14	.02	.01	0
23	.04	.08	.40	1.4	.54	1.1	1.4	.82	.14	.02	.01	0
24	.04	.14	.40	1.1	.26	1.1	1.4	.82	.08	2.3	.01	0
25	.04	.08	.40	1.1	.26	1.1	1.2	.82	.08	.08	.01	0
26	.04	.14	.54	1.1	.26	1.1	1.2	.82	.08	.04	.01	0
27	.04	.08	1.6	1.2	.26	1.1	1.4	.82	.08	.02	.01	0
28	.04	.04	2.9	1.2	.26	1.1	1.4	.82	.04	.04	.01	.01
29	.08	.04	1.1	1.3	-----	1.1	1.2	.82	.04	.04	.01	.01
30	.08	.04	.82	1.2	-----	1.4	1.2	.82	.04	.02	.01	.01
31	.14	-----	.82	3.1	-----	1.4	-----	.82	-----	.02	.01	-----
TOTAL	.94	5.96	13.74	68.84	24.16	38.62	73.9	28.04	11.56	3.24	.79	.46
MEAN	.030	.20	.44	2.22	.86	1.25	2.46	.90	.39	.10	.026	.015
MAX	.14	2.6	2.9	11	1.9	5.3	20	1.4	.96	2.3	.14	.03
MIN	.01	.04	.04	.82	.26	.26	1.2	.68	.04	.02	.01	0
AC-FT	1.9	12	27	137	48	77	147	56	23	6.4	1.6	.9
CAL YR 1973	TOTAL 424.96	MEAN 1.16	MAX 21	MIN .01	AC-FT 843							
WTR YR 1974	TOTAL 270.25	MEAN .74	MAX 20	MIN 0	AC-FT 536							

PEAK DISCHARGE (BASE, 10 FT ³ /S)							
DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-18	0500	0.64	14	1-21	0100	0.68	18
12-1	1430	.62	12	3-8	1700	.63	12
1-1	0330	.63	12	4-2	0130	.94	55
1-7	1730	.66	16	7-24	1800	.78	31
1-8	1630	.77	29				

TULARE LAKE BASIN

11197000 TULARE LAKE IN KINGS COUNTY, CALIF.

LOCATION.--Lat 36°02'36", long 119°38'34", in SE¼NE¼ sec.1, T.22 S., R.21 E., Kings County, at El Rico Ranch, 6.0 mi (9.7 km) southwest of Corcoran, and 14.2 mi (22.8 km) southeast of Stratford.

PERIOD OF RECORD.--March 1906 to September 1920 (incomplete), February 1937 to September 1961 (elevations only), January 1969 to current year.

GAGE.--Nonrecording gage. Datum of gage is at mean sea level. March 1906 to September 1920 nonrecording gages at various sites at different datums. February 1937 to September 1958 water-stage recorder or nonrecording gage at various sites.

EXTREMES.--Current year: Lake dry all year.

Period of record: Maximum elevation, 196.8 ft (59.98 m) June 27, 28, 1941; lake dry or practically dry for parts of 1906, 1914-16, 1919, 1937, 1946, 1950-53, 1955-56, 1958, 1969, 1971; lake dry for entire years 1920-22, 1924-36, 1947-49, 1954, 1957, 1959-61, 1972-74. Lake elevation of June 27, 28, 1941, was highest known since about 1890. Historical accounts indicate that Tulare Lake under natural conditions reached an elevation of 216 ft (65.8 m) above mean sea level in 1862 and 1868. This lake elevation was the highest since at least the early 1800's.

REMARKS.--Tulare Lake receives water from Kings, Kaweah, and Tule Rivers during high-water periods and occasionally from Kern River, Deer Creek, and several small intermittent streams. Its natural boundary has been greatly altered by construction of levees and other reclamation work. Elevation at lowest point of lakebed is now about 175 ft (53.3 m) above mean sea level, lower than previously determined because of variable subsidence.

COOPERATION.--Records of elevation furnished by J. G. Boswell Co. Area-capacity curves furnished by J. B. Summers, civil engineer, Corcoran, based on surveys in 1966.

TULARE LAKE BASIN

87

11197250 AVENAL CREEK NEAR AVENAL, CALIF.

LOCATION.--Lat 35°51'15", long 120°07'34", in SW¼NW¼ sec.10, T.24 S., R.17 E., Kings County, on right bank 550 ft (168 m) downstream from road ford, 0.4 mi (0.6 km) downstream from unnamed tributary, and 10 mi (16 km) south of Avenal.

DRAINAGE AREA.--57.1 mi² (147.9 km²).

PERIOD OF RECORD.--October 1961 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 825 ft (251.5 m) from topographic map.

AVERAGE DISCHARGE.--13 years, 3.00 ft³/s (0.085 m³/s), 2,170 acre-ft/yr (2.68 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 183 ft³/s (5.18 m³/s) Jan. 7 (gage height, 3.01 ft or 0.917 m); no flow most of year.

Period of record: Maximum discharge, 2,600 ft³/s (74.6 m³/s) Feb. 24, 1969 (gage height, 7.89 ft or 2.405 m), from rating curve extended above 510 ft³/s (14.4 m³/s) on basis of slope-area measurements at gage heights 5.72 ft (1.743 m) and 7.54 ft (2.298 m); no flow for several months in each year.

REMARKS.--Records good. Minor diversions for stock above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1			.18	0	.73	.03	.98					
2			0	0	.73	.77	1.0					
3			0	0	.68	14	1.1					
4			0	.88	.68	3.8	1.0					
5			0	1.0	.63	1.4	.83					
6			0	5.0	.63	1.1	.78					
7			0	114	.58	1.1	.73					
8			0	59	.58	34	.68					
9			0	24	.50	21	.68					
10			0	12	.46	15	.73					
11			0	2.7	.38	12	.63					
12			0	9.5	.30	7.0	.50					
13			0	14	.38	4.4	.42					
14			0	2.3	.42	2.7	.38					
15			0	1.2	.30	2.3	.27					
16			0	.93	.24	2.0	.24					
17			0	17	.30	1.7	.21					
18			0	20	.24	1.6	.04					
19			0	8.6	.21	1.6	.24					
20			0	5.4	.18	1.3	.30					
21			0	4.4	.12	1.3	.21					
22			0	2.3	.03	1.2	.03					
23			0	1.7	.04	1.2	.06					
24			0	1.4	.06	1.1	.30					
25			0	1.2	.02	1.0	.38					
26			0	1.1	0	1.0	.34					
27			0	1.0	0	.98	.21					
28			0	.98	0	1.2	.15					
29			0	.98	-----	1.1	.02					
30			0	.88	-----	1.1	0					
31		-----	0	.83	-----	.98	-----		-----			-----
TOTAL	0	0	.18	314.28	9.42	140.96	13.44	0	0	0	0	0
MEAN	0	0	.006	10.1	.34	4.55	.45	0	0	0	0	0
MAX	0	0	.18	114	.73	34	1.1	0	0	0	0	0
MIN	0	0	0	0	0	.03	0	0	0	0	0	0
AC-FT	0	0	.4	623	19	280	27	0	0	0	0	0
CAL YR 1973	TOTAL	1,389.91	MEAN	3.81	MAX	255	MIN	0	AC-FT	2,760		
WTR YR 1974	TOTAL	478.28	MEAN	1.31	MAX	114	MIN	0	AC-FT	949		

PEAK DISCHARGE (BASE, 30 FT³/S)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
1-7	2030	3.01	183	3-3	0900	2.20	35
1-17	1300	2.24	42	3-8	0400	2.39	59

TULARE LAKE BASIN

11197800 POSO CREEK NEAR OILDALE, CALIF.

LOCATION.--Lat 35°30'50", long 118°54'17", in SW¼SW¼ sec.6, T.28 S., R.29 E., Kern County, on downstream side of highway bridge opposite mouth of Hillvale Canyon, 10 mi (16 km) northeast of Oildale, and 12 mi (19 km) north-east of Bakersfield.

DRAINAGE AREA.--230 mi² (600 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 700 ft (213 m) from topographic map.

AVERAGE DISCHARGE.--15 years, 30.1 ft³/s (0.852 m³/s), 21,810 acre-ft/yr (26.9 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,590 ft³/s (73.3 m³/s) Apr. 2 (gage height, 11.87 ft or 3.618 m); minimum daily, 0.14 ft³/s (0.004 m³/s) Aug. 4-7.

Period of record: Maximum discharge, 6,700 ft³/s (190 m³/s) Feb. 25, 1969 (gage height, 12.85 ft or 3.917 m), from rating curve extended above 820 ft³/s (23.2 m³/s) on basis of contracted-opening measurement at gage height 11.57 ft (3.527 m); minimum daily, 0.14 ft³/s (0.004 m³/s) Aug. 4-7, 1974.

Flood of Apr. 4, 1958, reached a stage of 8.6 ft (2.62 m), from floodmarks (discharge, 2,750 ft³/s or 77.9 m³/s), furnished by Kern County Land Co.

REMARKS.--Records good. Oilfield waste comprises most of low flow.

REVISIONS.--WSP 1735: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.42	8.2	34	72	58	42	95	76	27	9.0	.54	1.5
2	.81	8.2	63	119	58	91	960	70	27	8.6	.26	.54
3	1.0	8.2	50	111	55	240	472	69	27	7.8	.18	.54
4	3.0	8.6	40	100	52	152	297	68	27	7.4	.14	.54
5	3.0	9.0	36	82	50	102	225	70	26	7.0	.14	.54
6	3.0	9.0	34	70	48	98	192	70	25	6.6	.14	.54
7	4.2	9.4	30	64	46	93	172	68	25	6.2	.14	1.0
8	7.0	9.4	30	72	46	105	153	63	24	5.8	.18	1.0
9	12	9.8	29	86	44	103	153	60	22	5.8	.26	1.5
10	12	9.0	29	75	42	109	180	59	21	7.0	.26	1.5
11	12	9.8	29	70	41	109	165	58	20	8.6	.18	1.9
12	11	10	28	74	40	100	161	56	19	9.0	.18	1.5
13	10	21	29	86	41	98	149	54	18	7.0	.18	1.5
14	9.4	21	39	100	45	98	137	53	18	6.6	.18	1.5
15	9.0	19	54	85	44	98	127	48	18	7.0	.36	1.0
16	8.6	17	44	74	42	96	121	47	18	5.8	.36	.54
17	7.0	18	38	100	41	95	115	46	17	5.8	.36	.54
18	7.4	45	35	305	41	90	113	44	17	5.0	.36	.54
19	7.4	70	32	215	44	86	115	50	16	4.5	.36	.36
20	6.6	45	31	182	46	84	113	55	16	3.2	.26	.36
21	7.4	33	29	170	44	78	109	53	17	2.3	.18	.36
22	6.6	29	40	285	41	73	103	49	15	2.8	.26	.36
23	7.4	27	120	135	40	72	96	46	14	1.0	1.5	.26
24	9.0	25	110	119	40	70	95	44	13	1.5	.31	.26
25	10	25	90	102	39	65	95	41	12	2.3	.26	.36
26	9.4	25	70	88	39	65	93	38	11	1.5	.43	.36
27	9.0	24	63	82	39	66	90	35	10	1.5	.41	1.0
28	9.0	24	85	74	39	65	88	32	11	1.9	.36	.54
29	8.6	25	85	70	-----	72	84	30	9.8	1.9	.54	1.0
30	9.4	25	74	65	-----	70	78	30	9.0	2.3	.36	1.0
31	8.6	-----	69	63	-----	102	-----	29	-----	1.5	1.0	-----
TOTAL	229.23	626.6	1,569	3,395	1,245	2,887	5,146	1,611	549.8	154.2	10.63	24.44
MEAN	7.39	20.9	50.6	110	44.5	93.1	172	52.0	18.3	4.97	.34	.81
MAX	12	70	120	305	58	240	960	76	27	9.0	1.5	1.9
MIN	.42	8.2	28	63	39	42	78	29	9.0	1.0	.14	.26
AC-FT	455	1,240	3,110	6,730	2,470	5,730	10,210	3,200	1,090	306	21	48
CAL YR 1973	TOTAL 26,731.88	MEAN 73.2	MAX 875	MIN .42	AC-FT 53,020							
WTR YR 1974	TOTAL 17,447.90	MEAN 47.8	MAX 960	MIN .14	AC-FT 34,610							

		PEAK DISCHARGE (BASE, 70 FT ³ /S)					
DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-19	0100	7.62	84	1-18	unknown	8.66	318
12-23	unknown	7.93	131	3-3	0200	8.60	300
1-2	1230	7.94	133	4-2	1000	11.87	2,590

11199500 WHITE RIVER NEAR DUCOR, CALIF.

LOCATION.--Lat, 35°48'53", long 118°55'42", in SE¼NE¼ sec. 27, T. 24 S., R. 28 E., Tulare County, on right bank 0.1 mi (0.2 km) downstream from Tyler Gulch, and 8.3 mi (13.4 km) southeast of Ducor.

DRAINAGE AREA.--92.9 mi² (240.6 km²).

PERIOD OF RECORD.--October 1942 to September 1953, February 1971 to current year. Monthly discharge only for October 1942 to September 1944, published in WSP 1315-A.

GAGE.--Water-stage recorder. Altitude of gage is 695 ft (212 m), from topographic map. October 1942 to September 1946, at site 200 ft (61 m) upstream and October 1946 to September 1953, at site 300 ft (91 m) downstream at different datum.

AVERAGE DISCHARGE.--14 years (1942-53, 1972-74), 10.5 ft³/s (0.297 m³/s), 7,610 acre-ft/yr (9.38 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 870 ft³/s (24.6 m³/s) Apr. 2 (gage height, 5.76 ft or 1.756 m); no flow for several months.

Period of record: Maximum discharge, 2,300 ft³/s (65.1 m³/s), estimated by Bureau of Reclamation, Mar. 9, 1943; no flow for several months in each year.

REMARKS.--Records good except those for flows above 380 ft³/s (10.8 m³/s), which are poor. Small diversions above station for irrigation.

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	8.1	17	11	12	29	16	6.2	.56			
2	0	10	14	10	67	280	16	5.6	.56			
3	0	7.5	10	10	65	105	17	5.1	.44			
4	0	6.4	9.6	9.6	51	79	17	4.6	.44			
5	0	5.8	9.6	9.6	33	68	17	5.1	.34			
6	0	5.2	8.8	9.6	26	61	16	5.1	.27			
7	0	5.0	10	9.2	23	56	15	4.6	.22			
8	0	4.8	12	8.8	42	52	15	4.2	.27			
9	0	4.8	10	8.5	37	49	15	3.8	.34			
10	0	4.8	10	8.5	30	44	15	3.5	.70			
11		.19	4.8	10	8.2	24	32	14	3.2	1.7		
12		1.0	4.6	12	8.2	22	29	14	2.8	1.9		
13		1.9	5.0	14	8.8	21	27	13	2.5	1.2		
14		1.7	7.5	12	8.8	20	25	13	2.5	.86		
15		1.5	7.5	11	8.5	20	24	12	2.5	.70		
16		1.4	6.1	12	8.5	19	23	12	2.5	.56		
17		1.5	5.8	56	8.8	19	22	12	2.5	.34		
18		8.2	5.4	38	8.8	18	22	12	2.5	.10		
19		7.5	5.2	23	9.2	19	23	12	2.5	0		
20		5.6	4.8	23	9.6	18	22	12	2.8	0		
21		4.8	4.8	53	9.2	18	21	12	2.5	0		
22		4.6	5.8	30	8.8	18	20	11	2.2	0		
23		4.4	7.2	22	9.2	19	20	10	1.9	0		
24		4.4	6.4	18	9.2	18	20	9.4	1.7	0		
25		4.6	5.6	16	9.2	18	20	8.7	1.5	0		
26		4.4	5.4	14	9.2	18	20	8.0	1.5	0		
27		4.2	5.8	14	9.6	18	18	7.4	1.2	0		
28		4.1	8.5	13	10	20	18	6.2	1.0	0		
29		4.4	8.8	12	-----	22	17	6.8	.86	0		
30		4.4	7.8	12	-----	24	16	6.8	.70	0		
31		-----	7.2	11	-----	31	-----	6.2	-----	0		
TOTAL	0	74.79	192.4	537.0	256.6	810	1,262	377.5	89.16	11.50	0	0
MEAN	0	2.49	6.21	17.3	9.16	26.1	42.1	12.2	2.97	.37	0	0
MAX	0	8.2	10	56	11	67	280	17	6.2	1.9	0	0
MIN	0	0	4.6	8.8	8.2	12	16	6.2	.70	0	0	0
AC-FT	0	148	382	1,070	509	1,610	2,500	749	177	23	0	0

CAL YR 1973 TOTAL 5,744.71 MEAN 15.7 MAX 418 MIN 0 AC-FT 11,390
WTR YR 1974 TOTAL 3,610.95 MEAN 9.89 MAX 280 MIN 0 AC-FT 7,160

PEAK DISCHARGE (BASE, 30 FT ³ /S)							
DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
1-1	1230	4.09	40	3-2	1300	4.66	184
1-17	1500	4.58	142	3-8	1300	4.11	52
1-21	0300	4.29	78	4-2	0400	5.76	870

TULARE LAKE BASIN

11200800 DEER CREEK NEAR FOUNTAIN SPRINGS, CALIF.

LOCATION.--Lat 35°56'30", long 118°49'19", in SE¼NE¼ sec.10, T.23 S., R.29 E., Tulare County, on left bank 1.0 mi (1.6 km) upstream from Pothole Creek, 6.3 mi (10.1 km) northeast of Fountain Springs, and 12 mi (19 km) east of Terra Bella.

DRAINAGE AREA.--83.3 mi² (215.7 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 980 ft (299 m) from topographic map.

AVERAGE DISCHARGE.--6 years, 40.1 ft³/s (1.14 m³/s), 29,050 acre-ft/yr (35.8 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,380 ft³/s (67.4 m³/s) Apr. 2 (gage height, 8.67 ft or 2.643 m); minimum daily, 1.6 ft³/s (0.045 m³/s) Sept. 10, 11.
 Period of record: Maximum discharge, 3,340 ft³/s (94.6 m³/s) Feb. 24, 1969 (gage height, 9.85 ft or 3.002 m), from rating curve extended above 600 ft³/s (17.0 m³/s) on basis of slope-area measurements at gage heights 8.83 ft (2.691 m) in gage well, 9.18 ft (2.798 m), from floodmarks, and 12.54 ft (3.822 m), from floodmarks; no flow Aug. 14-22, 1968, for several months in 1972.
 Flood of Dec. 6, 1966, reached a stage of 12.54 ft (3.822 m), from floodmarks (discharge, 5,330 ft³/s or 151 m³/s).

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.4	7.0	46	77	35	26	205	53	30	12	4.1	2.6
2	3.4	7.3	39	47	34	201	811	53	28	11	3.8	2.3
3	3.7	7.6	26	36	33	138	255	53	27	11	3.7	1.9
4	4.1	8.0	25	33	31	98	191	53	27	10	3.8	1.9
5	3.9	8.0	23	33	31	86	161	53	26	10	3.5	2.3
6	3.7	7.6	21	30	30	84	143	52	27	9.9	3.3	2.2
7	3.9	7.3	20	38	29	78	130	50	26	9.7	3.4	2.0
8	17	7.4	20	48	28	95	120	49	25	9.6	3.4	1.8
9	16	7.2	20	38	26	80	123	49	23	9.5	3.4	1.7
10	10	6.9	20	35	26	79	118	49	21	9.5	3.2	1.6
11	8.3	6.8	19	32	25	73	108	49	20	11	3.1	1.6
12	8.0	15	18	72	24	70	104	48	20	11	3.5	1.7
13	7.6	16	20	75	30	69	98	46	19	10	3.4	1.9
14	6.7	13	43	56	26	70	91	46	18	9.4	3.2	2.1
15	6.1	11	30	52	26	70	85	45	18	9.5	3.2	2.4
16	6.1	10	25	69	25	69	81	45	18	8.7	3.2	2.3
17	6.4	14	23	215	26	65	77	45	19	8.2	3.4	2.1
18	6.1	67	21	122	24	62	77	45	18	7.9	3.3	1.8
19	5.8	32	20	89	26	60	79	46	18	7.1	3.2	1.8
20	6.1	22	18	104	30	58	74	45	19	6.5	3.4	2.2
21	6.4	21	18	146	26	55	71	44	19	6.3	3.2	2.4
22	7.3	19	29	92	24	54	67	41	17	6.1	3.1	2.2
23	8.3	18	26	78	24	52	65	39	16	6.3	3.1	2.3
24	10	17	23	66	24	51	65	38	16	6.4	3.1	2.4
25	9.0	18	23	58	23	49	64	36	15	6.4	2.8	2.2
26	9.0	18	21	52	22	48	62	34	15	5.5	2.5	2.0
27	8.6	17	27	48	22	50	60	32	14	4.9	2.3	2.4
28	7.6	18	40	44	23	59	58	31	13	4.6	2.4	2.4
29	7.3	20	35	42	-----	56	56	32	13	5.1	2.5	2.2
30	7.3	20	31	40	-----	66	54	31	12	5.1	2.5	2.2
31	7.0	-----	28	37	-----	65	-----	31	-----	4.6	2.6	-----
TOTAL	224.1	467.1	798	2,004	753	2,236	3,753	1,363	597	252.8	98.6	62.9
MEAN	7.23	15.6	25.7	64.6	26.9	72.1	125	44.0	19.9	8.15	3.18	2.10
MAX	17	67	46	215	35	201	811	53	30	12	4.1	2.6
MIN	3.4	6.8	18	30	22	26	54	31	12	4.6	2.3	1.6
AC-FT	445	926	1,580	3,970	1,490	4,440	7,440	2,700	1,180	501	196	125

CAL YR 1973 TOTAL 17,103.7 MEAN 46.9 MAX 404 MIN 2.5 AC-FT 33,930
 WTR YR 1974 TOTAL 12,609.5 MEAN 34.5 MAX 811 MIN 1.6 AC-FT 25,010

		PEAK DISCHARGE (BASE, 100 FT ³ /S)					
DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-18	0645	3.74	109	1-20	2345	4.37	224
12-1	1615	3.73	111	3-2	1015	5.23	434
1-1	0915	4.11	176	3-8	0915	3.78	116
1-12	1600	3.81	122	4-2	0030	8.67	2,380
1-17	1145	5.11	395				

TULARE LAKE BASIN

91

11201200 DEER CREEK DIVERSION NEAR TERRA BELLA, CALIF.

LOCATION.--Lat 35°50'40", long 118°59'06", in NE¼NE¼ sec.30, T.22 S., R.28 E., Tulare County, on right bank 1,000 ft (305 m) downstream from diversion structure, 3.8 mi (6.1 km) northeast of Terra Bella.

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

GAGE.--Water-stage recorder and Parshall flume. Altitude of gage is 510 ft (155 m), from topographic map.

EXTREMES.--Period of record: Maximum daily discharge, 14 ft³/s (0.40 m³/s) Dec. 2, 1973; no flow for several months in each year.

REMARKS.--Records good. Diversion receives water from Deer Creek 1,000 ft (305 m) upstream. Water is used for ground-water recharge.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	12	2.6	2.5	.22	2.5	1.4	2.4	.57		
2		0	14	2.8	3.8	1.4	5.0	1.8	2.4	.26		
3		0	11	3.2	3.1	.92	2.1	1.2	2.3	.03		
4		0	10	3.0	1.8	.80	.58	.80	2.2	.02		
5		0	12	2.7	2.1	.71	.32	1.2	2.1	0		
6		0	12	2.5	1.8	.68	.20	.88	1.9	0		
7		0	8.4	2.2	1.9	.45	.16	.95	1.9	0		
8		0	7.5	1.8	1.9	1.1	.03	.80	1.6	0		
9		0	7.7	1.0	1.7	.73	0	.54	1.4	0		
10		0	5.7	.84	1.8	.29	0	.77	.84	0		
11		0	4.3	.40	1.4	.18	0	.32	.51	0		
12		0	2.8	1.2	1.5	0	0	.51	.32	0		
13		0	4.0	2.7	1.3	0	0	.29	.18	0		
14		0	2.7	2.0	1.2	0	0	.04	.11	0		
15		0	.03	1.6	1.4	0	0	.09	0	0		
16		0	.01	1.4	1.6	0	0	.29	0	0		
17		1.0	0	2.3	1.3	0	2.7	.13	0	0		
18		13	0	2.5	1.2	0	5.2	.03	0	0		
19		8.0	0	2.4	1.3	0	5.3	.29	1.0	0		
20		5.4	0	1.4	1.4	0	4.8	.64	3.0	0		
21		5.7	0	3.0	.74	0	3.9	3.1	3.0	0		
22		6.9	0	1.7	.64	2.6	3.5	4.0	2.9	0		
23		6.3	0	.35	.54	4.3	3.1	4.0	2.5	0		
24		6.8	0	.20	.54	4.2	2.8	3.8	2.4	0		
25		7.6	0	.10	.29	3.1	2.1	3.8	1.9	0		
26		6.9	0	0	.05	2.9	1.3	3.2	1.4	0		
27		7.1	1.3	0	0	2.7	.92	3.1	1.2	0		
28		7.2	2.8	0	.01	3.2	1.6	2.8	.95	0		
29		9.0	2.8	0	-----	3.0	1.2	2.7	.64	0		
30		9.2	1.9	0	-----	2.6	.88	2.6	.52	0		
31		-----	1.5	0	-----	2.9	-----	2.5	-----	0		-----
TOTAL	0	100.1	124.44	45.89	38.81	38.98	50.19	48.57	41.57	.88	0	0
MEAN	0	3.34	4.01	1.48	1.39	1.26	1.67	1.57	1.39	.028	0	0
MAX	0	13	14	3.2	3.8	4.3	5.3	4.0	3.0	.57	0	0
MIN	0	0	0	0	0	0	0	.03	0	0	0	0
AC-FT	0	199	247	91	77	77	100	96	82	1.7	0	0
CAL YR 1973	TOTAL	751.65	MEAN	2.06	MAX	14	MIN	0	AC-FT	1,490		
WTR YR 1974	TOTAL	489.43	MEAN	1.34	MAX	14	MIN	0	AC-FT	971		

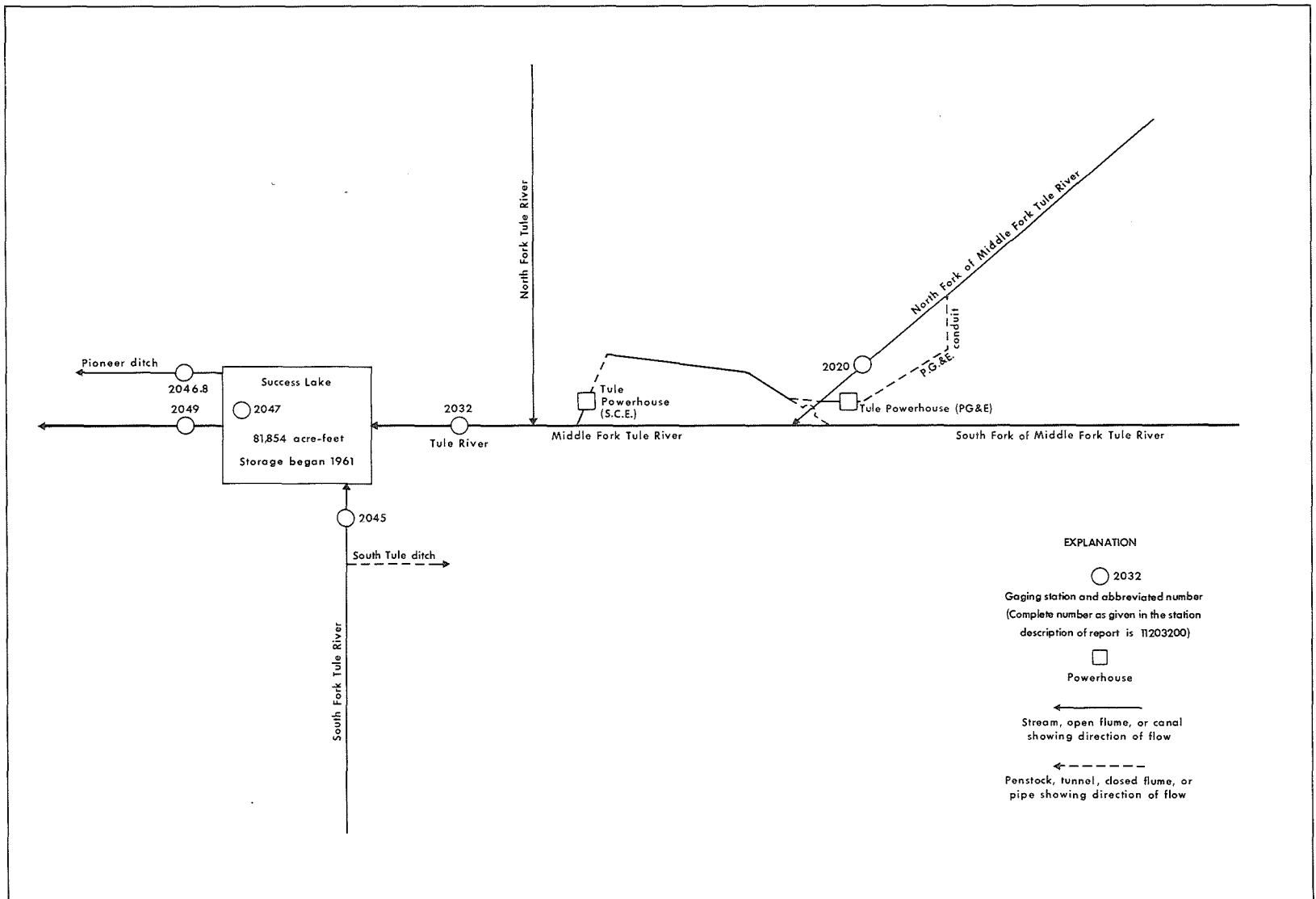


FIGURE 3.--Schematic diagram showing diversions and storage in Tule River basin.

LOCATION.--Lat 36°10'29", long 118°41'41", in T.20 S., R.30 E. (unsurveyed), Tulare County, on right bank 1.2 mi (1.9 km) upstream from mouth, 2.2 mi (3.5 km) downstream from Hossack Creek, and 7.4 mi (11.9 km) northeast of Springville.

PERIOD OF RECORD.--October 1939 to current year. Monthly discharge only for some periods, published in WSP 1315-A. January 1909 to December 1912 at site 2 mi (3 km) upstream, records not equivalent. Prior to October 1954, records for river and conduit published separately; combined flow only, October 1954 to September 1960.

AVERAGE DISCHARGE (River only), --35 years, 26.5 ft³/s (0.750 m³/s), 19,200 acre-ft/yr (23.7 hm³/yr).
(Combined river and diversion), --35 years, 58.1 ft³/s (1.645 m³/s), 42,090 acre-ft/yr (51.9 hm³/yr).

EXTREMES (River only).--Current year: Maximum discharge, 494 ft³/s (14.0 m³/s) Apr. 2 (gage height, 5.19 ft or 1.582 m); minimum daily, 2.3 ft³/s (0.065 m³/s) Sept. 28-30.
Period of record: Maximum discharge, 16,900 ft³/s (479 m³/s) Dec. 6, 1966 (gage height, 13.83 ft or 4.215 m, from floodmarks), from rating curve extended above 270 ft³/s (7.65 m³/s) on basis of critical-depth determinations at gage heights 9.67 ft (2.947 m) and 12.47 ft (3.801 m); no flow Sept. 10, 11, 1955.
(Combined flow).--Current year: Maximum discharge, 544 ft³/s (15.4 m³/s) Apr. 2; minimum daily, 17 ft³/s (0.48 m³/s) Sept. 18-24, 27-30.
Period of record: Maximum discharge, 16,900 ft³/s (479 m³/s) Dec. 6, 1966; minimum daily, 7.2 ft³/s (0.20 m³/s) Aug. 18, Oct. 17, 1961.

REMARKS.--Pacific Gas and Electric Co. conduit diverts 2.5 mi (4.0 km) upstream from station; water is returned to North Fork of Middle Fork Tule River 1.1 mi (1.8 km) downstream from station. See schematic diagram of Tule River basin. For records of combined discharge of river and conduit, see following page.

REVISIONS (WATER YEARS).--WSP 1445: 1951.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.7	2.8	11	10	4.9	7.3	82	54	90	4.1	2.9	2.8
2	2.7	2.8	5.8	6.2	4.7	126	235	73	77	4.1	2.8	2.7
3	2.6	2.8	4.4	5.3	4.5	65	105	81	73	3.9	2.8	2.8
4	2.6	2.8	3.9	4.9	4.5	33	76	77	83	3.9	2.8	2.7
5	2.6	2.7	3.6	5.0	5.4	24	64	70	85	3.8	12	2.7
6	2.6	2.7	3.3	5.4	5.3	20	57	74	90	3.8	22	2.6
7	2.9	2.7	3.1	9.8	5.9	18	54	96	90	3.8	22	2.6
8	4.9	2.7	3.0	7.8	4.6	15	53	126	81	3.7	22	2.6
9	3.4	2.6	2.9	7.0	4.5	11	57	140	67	3.8	21	2.6
10	2.8	2.6	2.8	6.1	4.4	11	44	140	60	4.0	21	2.6
11	2.7	2.7	2.8	5.6	4.2	10	40	141	56	3.9	21	2.6
12	2.6	7.6	2.7	21	4.2	9.8	40	138	49	3.8	18	2.6
13	2.7	5.0	4.8	13	5.3	9.5	43	126	42	3.7	11	2.6
14	3.2	3.7	5.6	10	4.6	10	48	119	34	3.6	7.1	2.6
15	3.1	3.4	4.0	9.5	4.6	15	53	119	28	3.5	6.9	2.6
16	3.1	3.3	3.5	10	4.6	21	57	111	21	3.4	6.3	2.5
17	3.0	5.2	3.3	76	4.6	18	62	96	16	3.3	3.2	2.5
18	2.9	35	3.1	36	4.4	19	65	82	11	3.2	3.1	2.4
19	2.9	5.2	3.0	27	5.2	17	51	72	8.4	3.2	3.1	2.4
20	2.7	4.0	2.9	27	5.2	16	43	60	27	3.1	3.1	2.4
21	2.8	3.9	3.0	27	4.9	17	37	52	9.0	3.1	3.0	2.4
22	2.7	3.2	9.7	15	4.6	15	41	50	5.4	3.1	2.9	2.4
23	4.0	3.1	5.2	11	4.5	14	44	54	5.0	3.2	2.8	2.4
24	3.3	3.3	4.5	9.2	4.4	13	43	50	4.7	3.3	2.7	2.4
25	3.0	3.2	4.2	7.9	4.3	13	34	69	4.5	3.1	2.7	2.4
26	2.8	3.3	3.9	7.3	4.2	12	28	92	4.4	3.1	2.6	2.4
27	2.7	3.1	6.9	6.6	4.2	12	25	108	4.3	3.1	2.7	2.4
28	2.6	3.2	6.2	6.1	4.3	22	25	116	4.3	3.1	2.6	2.3
29	2.6	3.2	5.4	5.7	-----	18	26	108	4.2	3.1	2.6	2.3
30	2.7	3.0	4.9	5.4	-----	35	35	98	4.1	3.1	2.6	2.3
31	2.8	-----	5.0	5.1	-----	27	-----	93	-----	3.0	2.5	-----
TOTAL	90.7	134.8	138.4	408.9	131.0	673.6	1,667	2,885	1,138.3	107.9	243.8	75.6
MEAN	2.93	4.49	4.46	13.2	4.68	21.7	55.6	93.1	37.9	3.48	7.86	2.52
MAX	4.9	35	11	76	5.9	126	235	141	90	4.1	22	2.8
MIN	2.6	2.6	2.7	4.9	4.2	7.3	25	50	4.1	3.0	2.5	2.3
AC=FT	180	267	275	811	260	1,340	3,310	5,720	2,260	214	484	153

CAL YR 1973	TOTAL	13,426.2	MEAN	36.8	MAX	297	MIN	1.6	AC-FT	26,630
WTR YR 1974	TOTAL	7,695.0	MEAN	21.1	MAX	235	MIN	2.3	AC-FT	15,260

TULARE LAKE BASIN

11202000 NORTH FORK OF MIDDLE FORK TULE RIVER NEAR SPRINGVILLE, CALIF.--Continued

COMBINED DISCHARGE, IN CUBIC FEET PER SECOND, OF NORTH FORK OF MIDDLE FORK TULE RIVER AND
PACIFIC GAS AND ELECTRIC CO. CONDUIT NEAR SPRINGVILLE, CALIF., WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	20	41	42	43	52	151	120	157	44	26	19
2	20	20	30	36	41	190	283	139	143	44	26	19
3	20	20	28	32	41	128	173	147	139	42	26	19
4	20	20	28	32	41	94	144	144	149	41	26	19
5	20	20	26	32	41	86	132	137	151	40	21	19
6	20	20	25	32	39	83	124	141	156	39	22	19
7	20	20	26	39	39	80	121	163	156	39	22	19
8	34	19	27	36	39	76	120	193	147	38	22	19
9	25	19	27	34	39	69	124	207	133	38	21	19
10	23	19	27	32	38	68	111	207	124	39	21	19
11	22	19	27	31	38	67	107	207	119	38	21	19
12	22	38	25	74	38	69	107	204	114	36	21	19
13	21	26	27	56	40	70	110	192	107	35	22	19
14	20	23	46	48	38	75	115	185	98	35	22	19
15	20	21	31	51	38	86	120	185	92	35	22	19
16	20	21	30	62	38	90	124	176	85	33	22	19
17	20	24	27	145	38	86	129	161	80	32	21	18
18	20	72	27	103	36	87	131	147	75	31	21	17
19	20	32	25	94	38	85	117	137	71	31	21	17
20	20	28	25	93	37	84	109	125	64	30	21	17
21	20	28	26	88	37	85	103	117	68	30	21	17
22	20	25	37	69	37	83	107	115	63	31	21	17
23	26	24	30	62	37	82	110	119	60	31	20	17
24	22	24	30	57	37	80	109	114	57	31	20	17
25	21	23	29	54	38	80	100	133	55	30	20	18
26	21	24	28	51	39	77	93	156	52	29	20	18
27	21	23	45	48	39	77	90	172	50	28	20	18
28	20	26	46	46	39	89	90	180	48	28	20	17
29	20	28	44	46	-----	86	91	172	47	28	20	17
30	20	26	40	44	-----	104	100	163	46	28	20	17
31	20	-----	37	44	-----	96	-----	160	-----	28	20	-----
TOTAL	658	752	967	1,713	1,083	2,664	3,645	4,918	2,906	1,062	669	546
MEAN	21.2	25.1	31.2	55.3	38.7	85.9	122	159	96.9	34.3	21.6	18.2
MAX	34	72	46	145	43	190	283	207	157	44	26	19
MIN	20	19	25	31	36	52	90	114	46	28	20	17
AC-FT	1,310	1,490	1,920	3,400	2,150	5,280	7,230	9,750	5,760	2,110	1,330	1,080
CAL YR 1973	TOTAL	27,024	MEAN	74.0	MAX	364	MIN	18	AC-FT	53,600		
WTR YR 1974	TOTAL	21,583	MEAN	59.1	MAX	283	MIN	17	AC-FT	42,810		

11203200 TULE RIVER NEAR SPRINGVILLE, CALIF.

LOCATION.--Lat 36°06'02", long 118°52'07", in NE¼SW¼ sec.17, T.21 S., R.29 E., Tulare County, on left bank 10 ft (3 m) downstream from highway bridge, 3.5 mi (5.6 km) southwest of Springville, and 4.1 mi (6.6 km) upstream from Success Dam.

DRAINAGE AREA.--247 mi² (640 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 680 ft (207 m) from topographic map. Prior to Mar. 20, 1968, at site 1.9 mi (3.1 km) upstream at different datum.

AVERAGE DISCHARGE.--17 years, 144 ft³/s (4.08 m³/s), 104,300 acre-ft/yr (129 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 6,340 ft³/s (180 m³/s) Apr. 2; minimum daily, 9.8 ft³/s (0.28 m³/s) Sept. 15.

Period of record: Maximum discharge, 49,600 ft³/s (1,400 m³/s) Dec. 6, 1966 (gage height, 17.18 ft or 5.236 m in gage well, 19.7 ft or 6.00 m, from floodmarks, site and datum then in use), from rating curve extended above 7,400 ft³/s (210 m³/s) on basis of slope-area measurement of maximum flow; no flow many days in 1961.

Flood in December 1955 reached a stage of 13.7 ft (4.18 m), previous site and datum, from floodmarks (discharge, 21,000 ft³/s or 595 m³/s).

REMARKS.--Records good. Many small diversions above station for irrigation. Power is developed on Middle Fork and tributaries. Diversion to Tule River diversion ditch starts 400 ft (122 m) upstream most of which is returned to the river 0.5 mi (0.8 km) downstream. Records since Mar. 20, 1968, include flow diverted to Tule River diversion ditch. Records of water temperatures for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1930: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	34	278	189	146	116	613	248	262	54	23	13
2	24	34	186	146	144	1,240	2,420	278	250	54	21	12
3	24	34	118	119	136	730	764	298	232	55	20	12
4	24	34	106	111	134	471	544	289	242	49	20	12
5	23	35	102	114	128	384	475	278	246	45	21	11
6	24	36	93	116	128	355	429	278	246	44	18	11
7	24	36	91	175	120	331	398	310	253	43	18	11
8	63	36	90	211	120	347	376	370	242	43	15	12
9	80	36	90	161	117	286	403	421	217	42	15	12
10	57	36	90	140	115	262	371	427	191	45	16	15
11	46	36	88	124	113	248	337	416	179	49	16	11
12	44	86	85	357	111	241	328	416	171	47	16	9.9
13	41	97	91	321	124	241	323	389	160	44	16	11
14	38	62	180	232	117	244	319	356	149	40	17	10
15	35	54	135	203	112	262	319	356	141	39	16	9.8
16	33	49	113	236	110	274	319	338	128	38	16	11
17	33	53	104	1,030	110	266	319	314	116	35	16	11
18	33	317	95	586	110	259	328	290	112	34	16	11
19	34	137	90	440	112	251	307	277	106	32	16	10
20	32	93	84	600	122	244	286	252	100	30	16	11
21	28	87	81	659	110	241	270	242	103	28	16	12
22	31	78	158	387	109	232	267	224	93	26	16	12
23	39	74	123	309	107	229	267	224	87	28	15	11
24	56	70	106	266	107	222	273	212	80	30	13	12
25	46	72	104	236	107	214	262	234	73	28	15	12
26	43	72	99	217	105	208	248	263	68	25	15	12
27	39	69	127	195	105	217	237	290	63	23	15	13
28	37	69	160	179	105	270	233	308	60	19	13	13
29	36	74	158	171	-----	277	225	300	59	21	13	12
30	35	74	148	163	-----	305	229	281	57	23	13	12
31	34	-----	131	157	-----	322	-----	274	-----	22	12	-----
TOTAL	1,158	2,074	3,704	8,550	3,284	9,789	12,489	9,453	4,486	1,135	504	347.7
MEAN	37.4	69.1	119	276	117	316	416	305	150	36.6	16.3	11.6
MAX	80	317	278	1,030	146	1,240	2,420	427	262	55	23	15
MIN	22	34	81	111	105	116	225	212	57	19	12	9.8
AC-FT	2,300	4,110	7,350	16,960	6,510	19,420	24,770	18,750	8,900	2,250	1,000	690

CAL YR 1973 TOTAL 83,352.0 MEAN 228 MAX 2,220 MIN 19 AC-FT 165,300
WTR YR 1974 TOTAL 56,973.7 MEAN 156 MAX 2,420 MIN 9.8 AC-FT 113,000

PEAK DISCHARGE (BASE, 350 FT ³ /S)					
DATE	TIME	DISCHARGE	DATE	TIME	DISCHARGE
11-18	0600	619	3-8	1130	409
12-1	1400	621	3-28	1900	359
1-12	1400	545	3-30	1830	399
1-17	1200	1,600	4-2	0130	6,340
1-20	2300	1,140	4-9	1400	474
3-2	0900	2,520	5-10	0400	444

TULARE LAKE BASIN

11204500 SOUTH FORK TULE RIVER NEAR SUCCESS, CALIF.

LOCATION.--Lat 36°02'33", long 118°51'24", in NW¼SW¼ sec.4, T.22 S., R.29 E., Tulare County, on left bank 0.5 mi (0.8 km) upstream from Crew Creek, 4 mi (6 km) southeast of Success, and 5 mi (8 km) upstream from mouth.

DRAINAGE AREA.--109 mi² (282 km²).

PERIOD OF RECORD.--June 1930 to December 1954, January 1956 to current year. Monthly and yearly discharge only for some periods, published in WSP 1735.

GAGE.--Water-stage recorder. Altitude of gage is 770 ft (235 m) from topographic map. Prior to June 26, 1951, at site 0.4 mi (0.6 km) downstream at different datum.

AVERAGE DISCHARGE.--42 years, 41.9 ft³/s (1.187 m³/s), 30,360 acre-ft/yr (37.4 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 4,240 ft³/s (120 m³/s) Apr. 2 (gage height, 8.04 ft or 2.451 m); minimum daily, 1.7 ft³/s (0.05 m³/s) Sept. 30.

Period of record: Maximum discharge, 14,300 ft³/s (405 m³/s) Dec. 6, 1966 (gage height, 12.50 ft or 3.810 m in gage well, 13.3 ft or 4.05 m, from floodmarks), from rating curve extended above 4,300 ft³/s (122 m³/s) on basis of slope-area measurement of maximum flow; no flow at times in most years.

REMARKS.--Records excellent. Diversions for irrigation of about 640 acres (2.59 km²) above station.

REVISIONS (WATER YEARS).--WSP 1315-A: 1931-32(M). WSP 1445: 1952-53(P), drainage area.

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.2	6.6	83	65	55	44	247	98	50	17	5.9	2.9
2	3.2	6.8	53	49	53	359	1,280	93	50	17	5.8	2.5
3	3.0	6.9	34	38	51	214	341	90	47	16	5.8	2.6
4	3.3	7.0	31	39	49	143	252	87	45	15	6.0	2.7
5	3.3	7.1	27	39	48	130	207	87	46	15	6.3	2.5
6	3.3	6.9	24	37	46	128	193	85	45	15	5.9	2.2
7	4.1	7.1	24	56	44	124	166	85	45	14	5.2	2.1
8	27	7.4	24	72	44	148	154	87	42	12	4.8	2.0
9	21	7.3	25	54	42	121	167	90	40	12	4.8	2.3
10	13	6.8	23	48	42	115	151	91	37	13	4.6	2.2
11	11	6.7	22	43	40	107	145	88	35	15	4.3	2.1
12	11	36	21	152	40	104	145	86	35	13	4.3	2.1
13	10	24	30	119	46	100	144	83	33	12	4.5	2.0
14	9.5	16	70	82	41	101	142	80	32	13	4.5	2.2
15	7.2	14	40	77	41	105	137	78	32	12	4.2	2.2
16	5.6	13	33	105	40	105	134	77	30	11	4.2	2.2
17	5.3	19	29	422	41	99	131	75	28	10	4.3	2.0
18	4.8	107	26	193	39	96	131	74	27	10	4.2	2.2
19	5.1	38	24	145	43	94	133	76	27	9.2	4.2	2.6
20	5.3	24	22	221	44	92	129	73	27	8.0	4.1	2.1
21	5.6	26	21	250	41	91	123	71	26	7.8	4.0	2.0
22	5.5	21	41	150	40	89	119	65	25	7.6	4.5	1.9
23	10	20	31	123	38	86	118	62	25	7.3	3.3	1.9
24	14	19	27	103	38	83	120	60	24	7.6	3.0	1.9
25	9.6	20	27	90	37	81	120	57	23	7.4	2.9	2.1
26	9.1	21	25	82	37	79	118	56	22	6.9	3.0	2.1
27	8.7	18	42	74	37	84	113	54	21	6.7	3.1	2.2
28	8.2	21	51	69	38	107	107	54	20	6.7	3.0	2.0
29	8.1	24	45	65	-----	100	105	54	19	6.9	2.9	1.8
30	7.3	23	40	61	-----	111	102	54	18	7.0	3.0	1.7
31	6.5	-----	35	58	-----	107	-----	52	-----	6.0	2.9	-----
TOTAL	251.8	580.6	1,050	3,181	1,195	3,547	5,664	2,322	976	337.1	133.5	65.3
MEAN	8.12	19.4	33.9	103	42.7	114	189	74.9	32.5	10.9	4.31	2.18
MAX	27	107	83	422	55	359	1,280	98	50	17	6.3	2.9
MIN	3.0	6.6	21	37	37	44	102	52	18	6.0	2.9	1.7
AC-FT	499	1,150	2,080	6,310	2,370	7,040	11,230	4,610	1,940	669	265	130

CAL YR 1973 TOTAL 28,730.7 MEAN 78.7 MAX 630 MIN 2.9 AC-FT 56,990
WTR YR 1974 TOTAL 19,303.3 MEAN 52.9 MAX 1,280 MIN 1.7 AC-FT 38,290

PEAK DISCHARGE (BASE, 200 FT³/S)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-18	0515	3.69	248	1-20	2215	4.21	435
12-1	1415	3.53	208	3-2	1000	4.98	866
1-12	1330	3.64	235	4-2	0130	8.04	4,240
1-17	0945	4.84	774				

11204680 PIONEER DITCH BELOW SUCCESS DAM, CALIF.

LOCATION.--Lat 36°03'34", long 118°55'22", in SW¼NW¼ sec.35, T.21 S., R.28 E., Tulare County, on left bank 0.1 mi (0.2 km) downstream from Success Dam, and 5.5 mi (8.8 km) east of Porterville.

PERIOD OF RECORD.--April 1959 to current year. Prior to October 1960, monthly diversions only, published with Tule River near Porterville.

GAGE.--Water-stage recorder and Parshall flume. Datum of gage is 549.00 ft (167.335 m) above mean sea level (levels by Corps of Engineers). Prior to Feb. 1, 1961, at site 0.5 mi (0.8 m) downstream at different datum.

AVERAGE DISCHARGE.--15 years, 7.13 ft³/s (0.202 m³/s), 5,170 acre-ft/yr (6.37 hm³/yr).

EXTREMES.--Period of record: Maximum daily discharge, 29 ft³/s (0.82 m³/s) Apr. 15, 1961; no flow at times in most years.

REMARKS.--Records excellent except those for December and January, which are good. Ditch receives water from Success Lake (see sta 11204700).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.1	6.9	2.2	0	0			0	14	14	14	15
2	7.7	6.7	2.2	.50	0			.70	14	14	13	15
3	9.2	6.7	2.2	1.2	0			2.0	14	14	13	15
4	10	6.7	2.0	1.2	0			3.7	14	14	13	13
5	10	6.7	1.7	1.3	0			3.5	14	14	14	13
6	10	6.7	1.6	1.2	0			3.0	14	14	14	14
7	10	6.7	1.7	1.1	0			4.0	14	14	14	14
8	4.2	6.7	1.7	1.1	0			3.8	14	14	14	14
9	.10	6.7	1.7	1.1	0			1.6	14	14	14	14
10	.10	6.7	1.7	1.1	0			0	14	14	14	14
11	0	6.7	1.7	1.1	0			0	14	14	14	14
12	1.2	3.8	1.7	1.1	0			0	14	14	14	14
13	2.1	1.8	1.7	1.1	0			0	14	14	14	14
14	2.1	1.8	1.7	1.1	0			1.5	14	14	14	14
15	2.1	1.7	1.8	1.1	0			2.9	15	14	14	14
16	2.1	1.7	1.8	1.1	0			6.7	15	15	14	15
17	2.1	1.7	1.9	.50	0			11	15	16	14	15
18	2.1	1.7	2.0	.10	0			12	15	16	14	15
19	2.1	1.8	2.1	.10	.40			12	15	16	14	14
20	2.1	1.8	2.1	0	.90			12	14	16	14	14
21	2.1	1.8	2.1	0	0			12	14	16	14	14
22	2.1	1.8	2.2	0	0			12	14	15	14	14
23	1.8	1.8	2.2	0	0			12	14	14	14	14
24	1.7	1.9	2.2	0	0			12	14	14	14	14
25	1.7	2.0	2.2	0	0			12	14	14	14	14
26	1.7	2.1	2.1	0	0			12	14	14	14	15
27	1.7	2.1	.70	0	0			13	14	14	14	14
28	3.9	2.1	0	0	0			14	14	14	15	14
29	5.0	2.1	0	0	-----			14	14	14	16	15
30	5.0	2.1	0	0	-----			14	14	14	16	14
31	6.3	-----	0	0	-----		-----	14	-----	14	15	-----
TOTAL	120.40	111.5	50.90	17.10	1.30	0	0	221.40	425	446	437	426
MEAN	3.88	3.72	1.64	.55	.046	0	0	7.14	14.2	14.4	14.1	14.2
MAX	10	6.9	2.2	1.3	.90	0	0	14	15	16	16	15
MIN	0	1.7	0	0	0	0	0	0	14	14	13	13
AC-FT	239	221	101	34	2.6	0	0	439	843	885	867	845

CAL YR 1973 TOTAL 1,872.50 MEAN 5.13 MAX 14 MIN 0 AC-FT 3,710
WTR YR 1974 TOTAL 2,256.60 MEAN 6.18 MAX 16 MIN 0 AC-FT 4,480

TULARE LAKE BASIN

11204700 SUCCESS LAKE NEAR SUCCESS, CALIF.

LOCATION.--Lat 36°03'40", long 118°55'18", in SE¼NW¼ sec.35, T.21 S., R.28 E., Tulare County, in control tower near right abutment of Success Dam on Tule River, 5 mi (8 km) east of Porterville.

DRAINAGE AREA.--391 mi² (1,013 km²).

PERIOD OF RECORD.--November 1961 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Corps of Engineers).

EXTREMES.--Current year: Maximum contents, 81,775 acre-ft (101 hm³) June 13-16 (elevation, 652.47 ft or 198.873 m); minimum, 7,505 acre-ft (9.25 hm³) Dec. 20 (elevation, 590.68 ft or 180.039 m).
Period of record: Maximum contents, 101,300 acre-ft (125 hm³) Dec. 7, 1966 (elevation, 658.63 ft or 200.750 m); minimum since reservoir first filled, 3,406 acre-ft (4.20 hm³) Oct. 17, 1972 (elevation, 579.52 ft or 176.638 m).

REMARKS.--Lake is formed by earthfill dam and dike. Storage began November 1961. Usable capacity, 81,854 acre-ft (101 hm³) between elevations 559.0 ft (170.38 m), invert of outlet structure and 652.5 ft (198.88 m), spillway crest. Surcharge flood control storage, 117,402 acre-ft (145 hm³) between ungated spillway crest and elevation 686.8 ft (209.34 m), maximum spillway design flood pool. No dead storage. Siltation in the reservoir has eliminated dead storage. Records, including extremes, represent total contents at 2400 hours.

COOPERATION.--Records furnished by Corps of Engineers, not rounded to Geological Survey standards.

CAPACITY TABLE (ELEVATION, IN FEET, AND CONTENTS, IN ACRE-Feet)

575	2,281	620	28,717
580	3,543	640	55,952
585	5,170	660	101,553
590	7,197	690	213,567
600	12,528		

CONTENTS, IN ACRE-Feet, AT 2400, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13,287	10,451	12,025	11,415	13,171	19,096	38,758	63,663	79,870	75,580	48,701	21,519
2	13,088	10,401	12,007	11,796	12,466	21,885	45,221	64,214	80,177	74,772	47,777	20,832
3	12,898	10,418	11,808	12,122	11,952	23,715	47,374	64,749	80,461	74,038	46,943	20,239
4	12,709	10,479	11,575	12,435	12,013	24,879	49,033	65,247	80,699	73,199	46,106	19,727
5	12,565	10,535	11,321	12,734	12,293	25,628	50,348	65,829	80,985	72,390	45,072	19,294
6	12,386	10,603	11,036	13,043	12,578	25,921	51,525	66,294	81,200	71,544	43,882	18,961
7	12,226	10,648	10,733	13,267	12,860	26,035	52,605	66,864	81,391	70,707	42,619	18,663
8	12,232	10,710	10,429	13,416	13,126	26,313	53,584	67,602	81,511	69,836	41,390	18,358
9	12,226	10,773	10,130	13,364	13,383	26,389	54,715	68,409	81,559	69,098	40,167	18,033
10	12,140	10,836	9,809	13,114	13,643	26,428	55,637	69,245	81,607	68,368	38,940	17,696
11	12,031	10,881	9,495	12,621	13,880	26,438	56,093	70,090	81,655	67,664	37,760	17,364
12	11,922	11,112	9,161	12,621	14,125	26,825	56,375	70,900	81,751	66,925	36,574	17,036
13	11,820	11,362	8,900	12,547	14,461	27,324	56,641	71,674	81,775	66,193	35,395	16,748
14	11,712	11,522	8,865	12,244	14,795	27,819	56,926	72,303	81,775	65,467	34,318	16,456
15	11,605	11,640	8,683	11,850	15,120	28,422	57,123	72,958	81,775	64,709	33,223	16,159
16	11,468	11,760	8,450	11,605	15,441	28,993	57,230	73,529	81,775	63,957	32,422	15,866
17	11,333	11,952	8,182	11,409	15,738	29,563	57,445	74,082	81,751	63,174	31,713	15,568
18	11,205	12,659	7,905	14,192	16,052	30,088	57,950	74,571	81,679	62,380	31,006	15,266
19	11,100	12,993	7,610	14,679	16,376	30,608	58,496	75,063	81,559	61,594	30,289	14,974
20	11,008	13,229	7,505	15,455	18,712	31,114	58,972	75,490	81,343	60,797	29,573	14,679
21	10,916	13,422	7,698	16,522	17,021	31,571	59,415	75,897	81,247	59,991	28,850	14,394
22	10,824	13,624	8,057	16,895	17,304	32,077	59,860	76,282	81,104	59,175	28,130	14,099
23	10,767	13,801	8,357	16,984	17,621	32,612	60,290	76,600	80,985	58,386	27,432	13,820
24	10,750	13,959	8,618	16,955	17,895	33,132	60,778	76,920	80,818	57,571	26,776	13,520
25	10,739	13,722	8,875	16,748	18,172	33,623	61,251	77,264	80,177	56,517	26,131	13,235
26	10,716	13,319	9,115	16,471	18,382	34,062	61,708	77,655	79,376	55,392	25,524	12,936
27	10,688	12,942	9,432	16,152	18,600	34,588	62,110	78,048	78,628	54,268	25,113	12,640
28	10,642	12,571	9,852	15,681	18,819	35,252	62,495	78,465	77,909	53,161	24,733	12,342
29	10,603	12,201	10,246	15,106	-----	35,902	62,902	78,838	77,172	52,038	23,967	12,049
30	10,552	11,874	10,603	14,468	-----	36,635	63,291	79,235	76,396	50,917	23,118	11,724
31	10,502	-----	10,933	13,834	-----	37,356	-----	79,611	-----	49,799	22,297	-----
MAX	13,287	13,959	12,025	16,984	18,819	37,356	63,291	79,611	81,775	75,580	48,701	21,519
MIN	10,502	10,401	7,505	11,415	11,952	19,096	38,758	63,663	76,396	49,799	22,297	11,724
(a)	596.57	598.93	597.33	602.04	608.94	627.64	643.96	651.56	650.17	636.34	613.16	598.68
(b)	-2,992	+1,372	-941	+2,901	+4,985	+18,537	+25,935	+16,320	-3,215	-26,597	-27,502	-10,573
(c)	236	112	43	63	92	208	609	1,314	1,752	1,620	973	504

CAL YR 1973 b +1,818
WTR YR 1974 b -1,770

a Elevation, in feet, at end of month.
b Change in contents, in acre-feet.
c Evaporation, in acre-feet.

TULARE LAKE BASIN

99

11204900 TULE RIVER BELOW SUCCESS DAM, CALIF.

LOCATION.--Lat 36°03'23", long 118°55'22", in NW¼SW¼ sec.35, T.21 S., R.28 E., Tulare County, on right bank 1,000 ft (300 m) downstream from Success Dam, and 5 mi (8 km) east of Porterville.

DRAINAGE AREA.--393 mi² (1,018 km²).

PERIOD OF RECORD.--October 1953 to current year. Prior to October 1960, published as "at Worth Bridge, near Porterville."

GAGE.--Water-stage recorder and broad-crested weir. Datum of gage is 536.00 ft (163.373 m) above mean sea level (levels by Corps of Engineers). Prior to October 1960, at site 0.5 mi (0.8 km) downstream at different datum.

AVERAGE DISCHARGE (adjusted for change in contents, evaporation, and diversion).--21 years, 180 ft³/s (5.098 m³/s), 130,400 acre-ft/yr (161 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 650 ft³/s (18.4 m³/s) Aug. 6 (gage height, 6.31 ft or 1.923 m); minimum daily, 0.30 ft³/s (0.008 m³/s) Jan. 4.

Period of record: Maximum discharge, 27,000 ft³/s (765 m³/s) Dec. 23, 1955 (gage height, 21.65 ft or 6.599 m, site and datum then in use), from rating curve extended above 1,400 ft³/s (39.6 m³/s) on basis of studies of upstream peaks; no flow at times in 1954-57, 1959-61. Maximum discharge since construction of Success Dam in 1961, 9,050 ft³/s (256 m³/s) Dec. 6, 1966 (includes flow through spillway); no flow at times in 1962, 1965.

Flood of Nov. 19, 1950, reached a stage of 26 ft (7.9 m), from floodmarks, site and datum then in use (discharge, 32,000 ft³/s or 906 m³/s).

REMARKS.--Records good. Flow regulated by Success Lake beginning Nov. 23, 1961 (see sta 11204700). Discharge records during periods of high flow include flow over spillway that bypasses the gaging station. Pioneer ditch (see sta 11204680) diverts above station for irrigation. Records of chemical analyses and water temperatures for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	112	58	249	.7	576	51	50	96	96	472	594	414
2	112	59	249	.7	581	38	51	93	95	477	506	377
3	112	27	249	.7	505	28	55	93	94	477	440	320
4	104	8.9	246	.3	164	31	58	94	98	477	438	272
5	95	9.0	247	.4	53	138	58	94	106	477	563	226
6	93	9.4	248	.4	39	359	58	94	123	477	626	174
7	93	10	254	121	37	424	59	72	138	477	645	153
8	88	10	257	203	37	410	60	44	173	477	641	153
9	99	9.8	256	230	37	395	59	35	187	437	641	154
10	108	9.7	257	311	37	397	52	35	166	418	641	164
11	107	9.9	258	437	38	380	263	35	143	427	638	161
12	106	5.6	257	499	38	156	352	35	124	427	632	155
13	99	1.3	254	501	11	99	341	35	133	425	632	137
14	95	1.3	254	498	.60	92	331	52	132	424	595	133
15	98	1.3	254	499	.60	74	366	63	120	426	582	141
16	100	1.3	252	498	.60	79	404	56	115	434	437	141
17	104	1.4	254	451	.50	87	326	52	114	433	392	138
18	98	1.3	258	382	.50	86	183	53	114	440	392	138
19	84	1.2	255	352	.50	86	145	53	163	443	391	138
20	80	1.2	172	354	.50	86	145	53	184	443	394	137
21	80	1.2	1.2	357	.60	86	145	53	167	443	398	136
22	79	1.2	.90	362	.70	60	146	64	143	443	394	136
23	79	1.2	.90	413	.70	48	146	71	140	440	392	134
24	67	1.2	.90	415	.70	48	115	75	142	440	358	137
25	59	208	.80	453	10	48	100	75	407	544	346	131
26	59	284	.70	473	29	49	100	74	475	601	331	140
27	59	284	.70	473	32	49	100	74	469	601	212	140
28	58	282	.70	516	29	50	100	84	463	597	186	139
29	58	276	.70	563	-----	50	100	92	463	597	395	139
30	58	258	.70	574	-----	50	100	92	463	595	461	157
31	58	-----	.80	575	-----	50	-----	96	-----	594	438	-----
TOTAL	2,701	1,833.4	4,989.00	10,513.2	2,259.50	4,084	4,568	2,087	5,950	14,883	14,731	5,215
MEAN	87.1	61.1	161	339	80.7	132	152	67.3	198	480	475	174
MAX	112	284	258	575	581	424	404	96	475	601	645	414
MIN	58	1.2	.70	.30	.50	28	50	35	94	418	186	131
AC-FT	5,360	3,640	9,900	20,850	4,480	8,100	9,060	4,140	11,800	29,520	29,220	10,340
MEAN a	46.2	89.7	148	388	172	437	598	361	188	88.3	57.9	18.8
AC-FT a	2,840	5,340	9,100	23,850	9,560	26,840	35,600	22,210	11,180	5,430	3,560	1,120

CAL YR 1973 TOTAL 110,335.40 MEAN 302 MAX 1,020 MIN .70 AC-FT 218,900 MEAN a 320 AC-FT a 231,400
WTR YR 1974 TOTAL 73,814.10 MEAN 202 MAX 645 MIN .30 AC-FT 146,400 MEAN a 216 AC-FT a 156,600

a Adjusted for change in contents and evaporation in Success Lake and for diversion to Pioneer ditch.

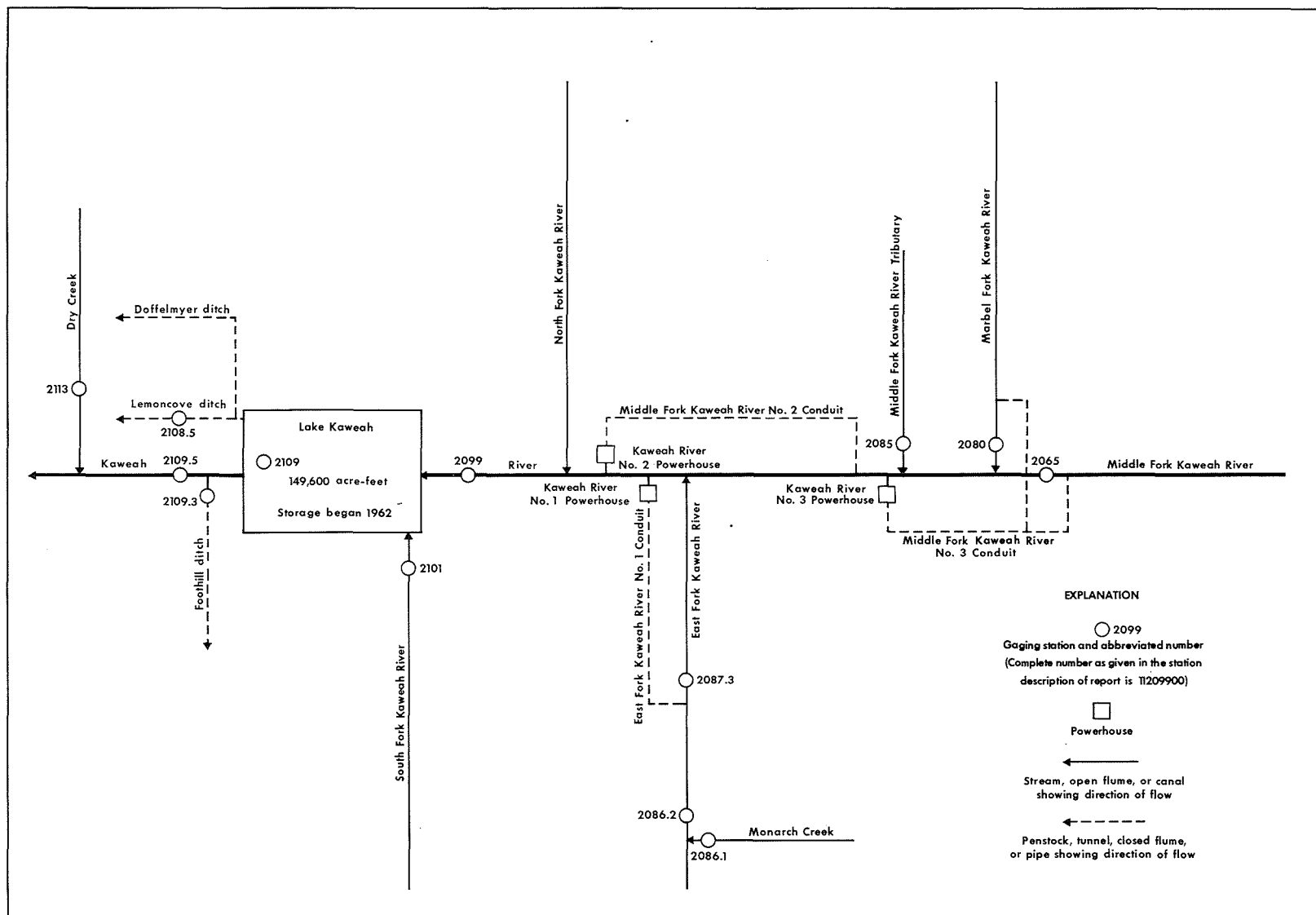


FIGURE 4.--Schematic diagram showing diversions and storage in Kaweah River basin.

LOCATION.--Lat 36°30'46", long 118°47'25", in NW¼NW¼ sec.25, T.16 S., R.29 E.: (unsurveyed), Tulare County, Sequoia National Park, on right bank 0.7 mi (1.1 km) southeast of Potwisha Camp, and 0.9 mi (1.4 km) upstream from confluence with Marble Fork Kaweah River.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	10	66	45	59	125	305	348	730	250	55	19
2	12	10	33	33	53	610	590	427	666	228	41	19
3	11	10	29	27	51	234	287	460	626	203	34	19
4	11	10	25	35	51	194	250	436	718	195	38	15
5	11	10	18	32	51	167	242	363	734	185	37	13
6	11	10	17	31	49	168	238	398	834	167	22	13
7	11	11	18	57	45	159	238	522	810	147	15	14
8	27	11	20	66	44	140	234	690	734	129	12	14
9	17	11	20	58	45	126	256	758	694	114	18	14
10	14	11	20	50	43	123	220	754	674	108	27	14
11	14	16	17	40	43	120	203	774	714	90	26	14
12	13	171	12	113	43	125	216	762	698	79	24	13
13	12	50	29	83	51	129	238	702	658	81	20	13
14	12	30	26	70	42	144	262	678	634	83	17	13
15	11	17	17	87	40	165	282	718	566	77	15	13
16	10	14	15	144	42	171	291	662	506	78	17	13
17	10	74	14	363	40	162	315	558	403	72	17	13
18	11	188	11	234	35	164	325	442	348	66	16	12
19	11	50	10	226	46	168	262	363	318	58	15	12
20	11	37	11	207	35	165	228	320	315	54	18	12
21	11	36	12	170	33	161	216	308	338	55	36	12
22	10	21	36	131	32	153	252	330	370	59	27	12
23	20	15	19	113	30	156	262	385	353	59	15	12
24	14	14	16	99	32	159	256	383	323	67	16	13
25	12	13	16	93	34	162	218	558	300	81	16	13
26	11	13	15	87	36	155	190	718	262	60	16	13
27	11	13	58	83	35	161	178	838	236	48	19	13
28	11	16	48	78	34	258	186	855	232	42	19	13
29	11	17	51	71	-----	203	203	770	238	41	18	13
30	10	14	40	63	-----	268	270	722	244	69	19	13
31	11	-----	34	62	-----	207	-----	730	-----	96	20	-----
TOTAL	383	923	773	3,051	1,174	5,602	7,713	17,732	15,276	3,141	705	409
MEAN	12.4	30.8	24.9	98.4	41.9	181	257	572	509	101	22.7	13.6
MAX	27	188	66	363	59	610	590	855	834	250	55	19
MIN	10	10	10	27	30	120	178	308	232	41	12	12
AC=FT	760	1,830	1,530	6,050	2,330	11,110	15,300	35,170	30,300	6,230	1,400	811
WAL YR 1973	TOTAL 70,282		MEAN 193	MAX 1,290	MIN 10	AC=FT 139,400						
CAL YR 1974	TOTAL 56,882		MEAN 156	MAX 855	MIN 10	AC=FT 112,800						

COMBINED DISCHARGE, IN CUBIC FEET PER SECOND, OF MIDDLE FORK KAWEAH RIVER AND MIDDLE FORK KAWEAH RIVER NO. 3 CONDUIT NEAR POTWISHA CAMP, CALIF., WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	25	131	113	115	185	365	410	791	313	118	28
2	18	25	97	101	109	669	637	489	723	291	103	28
3	18	26	93	94	107	292	346	521	674	266	95	28
4	17	25	90	103	107	252	309	490	779	258	90	28
5	17	25	82	99	107	225	302	424	794	247	91	28
6	17	25	82	98	105	227	298	459	895	229	87	28
7	19	30	84	123	101	218	298	584	865	209	81	27
8	75	27	87	131	100	199	294	751	785	191	75	26
9	53	27	87	123	101	185	316	818	741	176	65	26
10	42	27	87	115	99	182	281	801	727	170	61	26
11	41	38	84	105	99	179	264	836	776	151	60	25
12	40	232	78	179	99	184	278	819	761	140	60	24
13	41	115	96	148	107	188	300	761	720	142	57	24
14	42	95	93	135	98	203	324	740	687	145	54	24
15	39	80	84	152	96	225	344	779	629	139	50	23
16	37	72	82	208	98	231	353	723	569	140	48	23
17	34	129	80	419	96	222	378	618	465	134	46	23
18	32	243	76	283	91	224	387	502	410	128	45	21
19	31	110	72	275	92	228	324	422	380	120	43	21
20	28	102	68	256	90	225	289	379	377	116	42	21
21	27	101	69	219	93	221	278	367	400	117	36	20
22	26	85	102	185	92	213	314	389	432	121	38	20
23	56	77	85	171	90	216	324	444	415	121	38	19
24	48	74	82	157	92	219	318	442	385	130	36	19
25	38	68	83	151	94	222	280	618	363	144	35	19
26	35	68	81	145	96	215	251	779	325	123	33	20
27	33	64	127	141	95	221	239	899	299	111	33	19
28	31	75	116	135	93	318	248	913	295	105	33	19
29	30	80	120	128	-----	263	265	830	301	104	31	18
30	27	76	108	120	-----	328	332	778	307	132	30	18
31	26	-----	102	119	-----	267	-----	787	-----	160	30	-----
TOTAL	1,036	2,246	2,808	4,931	2,762	7,446	9,536	19,572	17,070	5,073	1,744	693
MEAN	33.4	74.9	90.6	159	98.6	240	318	631	569	164	56.3	23.1
MAX	75	243	131	419	115	669	637	913	895	313	118	28
MIN	17	25	68	94	90	179	239	367	295	104	30	18
AC=FT	2,050	4,450	5,570	9,780	5,480	14,770	18,910	38,820	33,860	10,060	3,460	1,370
CAL YR 1973	TOTAL 89,115		MEAN 244	MAX 1,350	MIN 17	AC=FT 176,800						
WTR YR 1974	TOTAL 74,917		MEAN 205	MAX 913	MIN 17	AC=FT 148,600						

LOCATION.--Lat 36°31'08", long 118°48'03", in SE¼ sec.23, T.16 S., R.29 E. (unsurveyed), Tulare County, Sequoia National Park, on left bank 0.1 mi (0.2 km) north of Potwisha Camp, 0.3 mi (0.5 km) upstream from confluence with Middle Fork Kaweah River, and 7.9 mi (12.7 km) northeast of Three Rivers.

PERIOD OF RECORD.--March 1950 to current year. Monthly discharge only for March 1950, published in WSP 1315-A. Prior to October 1954, records for river and conduit published separately; combined flow only, October 1954 to September 1960.

EXTREMES (River only).--Current year: Maximum discharge, 797 ft³/s (22.6 m³/s) May 27 (gage height, 6.10 ft or 1.859 m); minimum daily, 1.3 ft³/s (0.037 m³/s) Sept. 18.
Period of record: Maximum discharge, 12,500 ft³/s (354 m³/s) Dec. 23, 1955 (gage height, 13.4 ft or 4.08 m), from rating curve extended above 1,100 ft³/s (31.2 m³/s) on basis of slope-area measurement of maximum flow; no flow Sept. 5-15, Oct. 24-28, 1953, Oct. 26-31, 1957.
(Combined flow).--Current year: Maximum discharge, 838 ft³/s (23.7 m³/s) May 27; minimum daily, 5.1 ft³/s (0.14 m³/s) Sept. 29, 30.
Period of record: Maximum discharge, 12,500 ft³/s (354 m³/s) Dec. 23, 1955; minimum daily, 1.6 ft³/s (0.045 m³/s) July 30, Sept. 14-16, 1961, Aug. 25, 1968.

COOPERATION.--Gage-height record and 15 discharge measurements for river and gage-height record and 13 discharge measurements for conduit furnished by Southern California Edison Co., in connection with a Federal Power Commission project.

[illegible]

COMBINED DISCHARGE, IN CUBIC FEET PER SECOND, OF MARBLE FORK KAWEAH RIVER AND MARBLE FORK KAWEAH RIVER NO. 3 CONDUIT AT POTWISHA CAMP, CALIF., WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	12	43	43	48	78	176	302	522	192	49	17
2	8,6	12	34	40	47	371	256	341	462	167	39	17
3	8,3	12	35	34	48	145	160	362	459	156	53	15
4	8,0	11	31	38	50	120	141	343	522	148	96	13
5	7,8	11	29	37	51	104	150	303	525	141	60	7.7
6	7,7	11	29	37	49	102	150	346	601	123	35	7.2
7	12	19	30	42	47	94	155	409	564	106	26	8.1
8	49	17	32	63	48	84	162	479	512	95	23	7.6
9	37	13	33	45	48	77	169	526	472	86	23	7.4
10	30	12	34	34	48	77	141	534	465	92	22	7.2
11	29	37	33	33	48	78	134	574	491	79	16	6.8
12	27	158	31	55	47	83	155	549	468	72	16	7.0
13	32	79	40	53	47	84	182	507	436	72	15	6.7
14	37	53	39	46	45	101	198	521	414	69	13	6.7
15	34	37	33	49	44	120	219	538	376	63	13	6.6
16	28	34	33	66	46	124	231	480	342	66	12	6.5
17	24	76	31	150	44	116	253	413	292	58	12	6.2
18	17	119	30	116	42	120	256	347	260	51	12	6.0
19	14	50	29	126	45	122	190	290	242	46	12	5.9
20	13	42	29	110	42	120	168	260	231	42	7.7	6.0
21	12	37	27	89	43	121	166	248	260	44	11	6.0
22	11	32	34	75	42	121	209	289	278	43	7.1	5.8
23	32	30	31	67	41	121	212	348	259	52	8.0	5.6
24	27	29	29	62	43	122	194	332	238	75	13	5.5
25	18	27	29	62	45	122	162	443	219	91	13	5.5
26	17	27	29	62	48	116	146	539	189	46	16	5.5
27	16	24	51	54	47	116	146	601	183	47	11	5.5
28	13	27	52	53	44	152	160	601	186	42	10	5.3
29	13	28	53	51	-----	142	177	546	187	39	11	5.1
30	12	28	46	50	-----	167	234	525	194	44	12	5.1
31	11	-----	42	49	-----	145	-----	532	-----	91	14	-----
TOTAL	615.4	1,104	1,081	1,891	1,287	3,765	5,452	13,428	10,849	2,538	680.8	226.5
MEAN	19.9	36.8	34.9	61.0	46.0	121	182	433	362	81.9	22.0	7.55
MAX	49	158	53	150	51	371	256	601	601	192	96	17
MIN	7.7	11	27	33	41	77	134	248	183	39	7.1	5.1
AC=FT	1,220	2,190	2,140	3,750	2,550	7,470	10,810	26,630	21,520	5,030	1,350	449
C&L YR 1973	TOTAL 47,686.4		MEAN 131	MAX 819	MIN 7.7	AC=FT 94,590						
WTR YR 1974	TOTAL 42,917.7		MEAN 118	MAX 601	MIN 5.1	AC=FT 85,130						

11208730 EAST FORK KAWEAH RIVER NEAR THREE RIVERS, CALIF.

LOCATION.--Lat 36°27'05", long 118°47'15", in NW¼NW¼ sec.14, T.17 S., R.29 E., Tulare County, on left bank just downstream from diversion dam, and 6.6 mi (10.6 km) east of Three Rivers.

DRAINAGE AREA.--85.8 mi² (222.2 km²).

PERIOD OF RECORD.--May 1952 to September 1955, October 1957 to current year. Prior to October 1962, combined only.

GAGE.--Water-stage recorder and Parshall flume on river; water-stage recorder and Parshall flume for conduit diversion. Altitude of gage is 2,500 ft (762 m), from topographic map. May 15, 1952, to Sept. 30, 1955, at site 200 ft (61 m) downstream at different datum.

AVERAGE DISCHARGE (River only).--20 years, 95.3 ft³/s (2.699 m³/s), 69,040 acre-ft/yr (85.1 hm³/yr).
(Combined river and conduit).--20 years, 120 ft³/s (3.398 m³/s), 86,940 acre-ft/yr (107 hm³/yr).

EXTREMES (River only).--Current year: Maximum discharge, 876 ft³/s (24.8 m³/s) June 6 (gage height, 6.30 ft or 1.920 m); minimum daily, 0.80 ft³/s (0.023 m³/s) Oct. 18.

Period of record: Maximum discharge, 13,000 ft³/s (368 m³/s) Dec. 6, 1966 (gage height, 21 ft or 6.4 m, from floodmarks), from rating curve extended as explained below; no flow Jan. 22, Oct. 18-20, 1962.

(Combined flow).--Current year: Maximum discharge, 904 ft³/s (25.6 m³/s) June 6; minimum daily, 15 ft³/s (0.42 m³/s) Sept. 18.

Period of record: Maximum discharge, 13,000 ft³/s (368 m³/s) Dec. 6, 1966 (gage height, 21 ft or 6.4 m, from floodmarks), from rating curve extended above 850 ft³/s (24.1 m³/s) on basis of critical-depth measurement of maximum flow over diversion dam; minimum daily, 3.5 ft³/s (0.099 m³/s) Sept. 28, 29, 1960.

REMARKS.--East Fork Kaweah River No. 1 conduit diverts up to 30 ft³/s (0.85 m³/s) from left bank of river near diversion dam. Flow from this conduit passes through Kaweah River No. 1 powerplant of Southern California Edison Co.; water is returned to Middle Fork Kaweah River in sec.8, T.17 S., R.29 E., 1.9 mi (3.1 km) downstream from mouth of East Fork. For records of combined discharge of river and conduit, see following page. Records of water temperatures for the current year are published in Part 2 of this report.

COOPERATION.--Records furnished by Southern California Edison Co. and reviewed by Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	1.1	47	30	45	156	331	276	577	197	30	2.2
2	17	1.1	24	24	38	444	363	336	607	186	26	1.9
3	17	1.1	23	26	36	144	218	358	601	170	30	1.5
4	17	1.1	20	41	36	118	186	352	624	161	45	1.0
5	17	1.1	15	53	36	108	176	336	624	148	41	1.2
6	17	1.1	14	55	35	104	170	352	682	139	30	2.1
7	21	1.1	15	83	38	100	170	390	682	126	24	4.5
8	57	1.1	17	59	35	90	170	642	630	115	22	3.4
9	36	1.0	16	38	32	83	192	589	589	111	19	5.0
10	28	1.0	16	28	30	78	165	618	583	104	18	3.6
11	26	1.8	15	39	32	75	156	653	589	93	16	1.0
12	5.3	51	14	90	38	75	165	612	578	81	15	1.0
13	4.8	18	26	67	41	75	174	601	572	78	15	9.6
14	5.5	13	29	47	38	81	192	624	493	75	15	15
15	3.6	7.6	19	57	38	90	202	618	433	72	15	15
16	2.0	6.8	17	90	41	100	213	618	379	67	13	15
17	1.0	10	15	249	41	97	231	572	342	62	12	15
18	.80	86	13	148	36	97	240	428	315	59	11	14
19	1.2	22	11	144	43	93	207	368	305	55	11	5.9
20	1.7	19	10	148	38	90	192	336	291	51	9.7	1.2
21	1.7	21	12	122	38	93	181	326	305	51	8.7	1.4
22	1.7	13	32	90	38	93	202	336	300	53	7.4	1.6
23	5.4	12	18	83	38	93	207	358	281	55	6.1	1.6
24	4.5	11	16	75	38	90	213	368	258	62	5.4	1.6
25	1.9	9.7	15	67	38	93	186	482	244	83	4.8	1.5
26	1.4	11	14	64	41	90	176	636	227	67	3.9	1.5
27	1.4	9.0	33	57	41	100	170	677	207	51	3.4	1.4
28	1.3	12	38	55	41	161	176	700	202	41	3.3	1.4
29	1.2	13	38	51	-----	122	176	618	197	36	2.6	1.3
30	1.1	12	29	49	-----	148	218	630	202	39	2.9	1.3
31	1.1	-----	25	47	-----	126	-----	630	-----	38	3.1	-----
TOTAL	312.60	369.7	646	2,276	1,060	3,507	6,020	15,340	12,919	2,726	469.3	133.7
MEAN	10.1	12.3	20.8	73.4	37.9	113	201	495	431	87.9	15.1	4.46
MAX	57	86	47	249	45	444	363	700	682	197	45	15
MIN	.80	1.0	10	24	30	75	156	276	197	36	2.6	1.0
AC-FT	620	733	1,280	4,510	2,100	6,960	11,940	30,430	25,620	5,410	931	265

CAL YR 1973 TOTAL 58,437.10 MEAN 160 MAX 943 MIN .80 AC-FT 115,900
WTR YR 1974 TOTAL 45,779.30 MEAN 125 MAX 700 MIN .80 AC-FT 90,800

TULARE LAKE BASIN

11208730 EAST FORK KAWEAH RIVER NEAR THREE RIVERS, CALIF.--Continued

COMBINED DISCHARGE, IN CUBIC FEET PER SECOND, OF EAST FORK KAWEAH RIVER AND EAST FORK KAWEAH RIVER NO. 1 CONDUIT NEAR THREE RIVERS, CALIF., WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	22	72	58	70	173	353	302	604	224	56	24
2	24	22	49	52	64	458	380	362	634	213	52	24
3	24	22	48	32	62	158	242	384	628	196	56	24
4	24	21	45	44	62	134	211	378	651	186	72	23
5	24	22	40	56	62	124	201	362	651	173	68	22
6	24	23	40	58	60	120	195	378	709	164	57	22
7	28	25	41	86	60	116	195	416	709	151	50	24
8	64	23	43	74	59	106	195	568	657	139	47	22
9	43	22	42	60	58	99	217	616	615	136	43	24
10	35	23	42	52	56	94	190	645	609	129	42	23
11	33	26	41	63	57	93	181	680	616	118	40	19
12	17	76	40	114	59	94	190	639	605	107	39	19
13	31	43	52	91	62	94	201	628	599	104	38	16
14	32	38	55	71	58	101	217	651	516	101	38	16
15	30	33	45	81	58	111	227	644	459	98	39	16
16	27	32	43	115	61	122	240	643	405	94	37	16
17	26	34	41	272	61	119	258	595	368	89	36	16
18	25	108	39	172	56	120	267	454	341	86	34	15
19	24	47	38	168	62	116	233	394	331	82	34	17
20	24	44	37	172	56	113	218	362	317	77	34	17
21	24	46	39	146	56	117	207	352	332	77	33	16
22	24	38	60	114	56	117	228	362	327	79	30	17
23	30	37	46	107	56	117	233	385	308	81	30	17
24	30	36	44	99	56	114	239	395	285	88	29	17
25	27	35	43	91	55	116	212	509	271	110	29	16
26	25	36	42	88	58	114	202	663	254	94	27	18
27	24	34	60	81	58	125	196	704	234	78	27	18
28	23	37	65	79	58	185	202	727	229	68	27	16
29	23	38	65	75	-----	146	202	645	224	63	27	16
30	22	37	56	73	-----	172	244	657	229	65	26	16
31	22	-----	52	71	-----	150	-----	657	-----	64	25	-----
TOTAL	852	1,080	1,465	2,915	1,656	4,138	6,776	16,157	13,717	3,534	1,222	566
MEAN	27.5	36.0	47.3	94.0	59.1	133	226	521	457	114	39.4	18.9
MAX	64	108	72	272	70	458	380	727	709	224	72	24
MIN	17	21	37	32	55	93	181	302	224	63	25	15
AC-FT	1,690	2,140	2,910	5,780	3,280	8,210	13,440	32,050	27,210	7,010	2,420	1,120
CAL YR 1973	TOTAL 66,593		MEAN 182	MAX 968	MIN 17	AC-FT 132,100						
WTR YR 1974	TOTAL 54,078		MEAN 148	MAX 727	MIN 15	AC-FT 107,300						

TULARE LAKE BASIN

107

11209900 KAWEAH RIVER AT THREE RIVERS, CALIF.

LOCATION.--Lat 36°26'38", long 118°54'09", in SW¼SW¼ sec.13, T.17 S., R.28 E., Tulare County, on right bank opposite schoolhouse in Three Rivers, 0.2 mi (0.3 km) downstream from North Fork Kaweah River.

DRAINAGE AREA.--418 mi² (1,083 km²).

PERIOD OF RECORD.--October 1958 to current year.

GAGE.--Water-stage recorder. Datum of gage is 809.62 ft (246.772 m) above mean sea level.

AVERAGE DISCHARGE.--16 years, 514 ft³/s (14.56 m³/s), 372,400 acre-ft/yr (459 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 6,330 ft³/s (179 m³/s) Apr. 2 (gage height, 8.41 ft or 2.563 m); minimum daily, 41 ft³/s (1.16 m³/s) Sept. 23.
 Period of record: Maximum discharge, 73,000 ft³/s (2,070 m³/s) Dec. 5, 1966 (gage height, 16.69 ft or 5.087 m in gage well, 19.0 ft or 5.79 m, from floodmarks), from rating curve extended above 13,000 ft³/s (368 m³/s) on basis of slope-area measurements at gage heights 13.68 ft (4.170 m) and 16.69 ft (5.087 m); minimum, 14 ft³/s (0.40 m³/s) Sept. 9, 10, 1959, Oct. 16, 1961.
 Flood of Dec. 23, 1955, reached a stage of 17.9 ft (5.46 m), from floodmarks.

REMARKS.--Records good. Diversions for 200 acres (809,000 m²) above station. Power is developed on the Middle and East Fork Kaweah River. Records of water temperatures for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	41	71	411	355	344	320	1,390	1,320	2,270	730	236	68
2	43	70	314	289	320	2,830	3,000	1,570	2,050	688	204	66
3	47	71	258	247	318	1,350	1,410	1,720	1,940	614	186	64
4	48	69	247	280	316	904	1,130	1,640	2,210	594	241	64
5	47	69	220	276	313	798	1,080	1,440	2,240	562	217	62
6	46	70	207	320	316	776	1,020	1,570	2,520	528	186	63
7	50	77	209	516	296	742	1,010	1,880	2,460	469	168	61
8	140	76	218	442	294	677	1,010	2,290	2,230	428	154	59
9	166	72	218	375	291	605	1,110	2,530	2,050	394	139	58
10	107	71	218	327	289	585	949	2,520	1,980	391	134	56
11	97	77	212	295	283	577	882	2,610	2,040	366	130	55
12	101	466	197	509	285	594	916	2,610	2,000	335	126	55
13	103	339	248	489	316	597	991	2,380	1,870	325	122	49
14	105	229	257	403	287	643	1,050	2,320	1,760	324	119	51
15	101	189	221	402	276	725	1,120	2,440	1,620	316	116	53
16	94	162	211	524	276	757	1,120	2,260	1,460	320	110	52
17	86	159	203	1,320	278	712	1,230	1,970	1,240	298	107	50
18	81	940	186	909	261	721	1,310	1,650	1,050	283	101	49
19	77	340	188	895	280	723	1,060	1,400	999	265	98	52
20	73	264	174	1,010	272	716	946	1,240	944	252	95	49
21	73	265	174	894	269	713	879	1,180	1,010	254	87	44
22	72	217	303	643	258	701	1,030	1,220	1,070	256	88	43
23	101	197	239	568	252	694	1,060	1,440	1,030	265	85	41
24	160	182	219	508	254	696	1,060	1,340	928	289	82	42
25	107	174	210	466	263	710	913	1,790	881	342	79	43
26	95	172	206	446	272	676	833	2,240	783	283	68	45
27	88	159	300	408	267	716	796	2,560	721	241	75	44
28	82	169	335	395	263	1,070	824	2,680	708	225	80	43
29	79	185	324	375	-----	875	857	2,440	709	212	76	42
30	76	181	296	360	-----	1,070	1,050	2,290	718	214	72	42
31	72	-----	278	351	-----	971	-----	2,300	-----	316	71	-----
TOTAL	2,658	5,782	7,501	15,597	8,009	25,244	33,036	60,840	45,491	11,379	3,852	1,565
MEAN	85.7	193	242	503	286	814	1,101	1,963	1,516	367	124	52.2
MAX	166	940	411	1,320	344	2,830	3,000	2,680	2,520	730	241	68
MIN	41	69	174	247	252	320	796	1,180	708	212	68	41
AC-FT	5,270	11,470	14,880	30,940	15,890	50,070	65,530	120,700	90,230	22,570	7,640	3,100
CAL YR 1973	TOTAL 279,086 MEAN 765 MAX 4,120 MIN 41 AC-FT 553,600											
WTR YR 1974	TOTAL 220,954 MEAN 605 MAX 3,000 MIN 41 AC-FT 438,300											

PEAK DISCHARGE (BASE, 1,800 FT³/S)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-8	0245	6.76	2,460	5-12	0015	7.19	3,180
3-2	0745	8.07	5,310	5-27	2315	7.28	3,360
4-2	0100	8.41	6,330	6-6	2200	7.22	3,240

TULARE LAKE BASIN

11210100 SOUTH FORK KAWEAH RIVER AT THREE RIVERS, CALIF.

LOCATION.--Lat 36°25'00", long 118°54'48", in SW¼SE¼ sec.26, T.17 S., R.28 E., Tulare County, on right bank 200 ft (61 m) upstream from unnamed tributary, 0.5 mi (0.8 km) upstream from mouth, and 1.8 mi (2.9 km) southwest of Three Rivers.

DRAINAGE AREA.--86.7 mi² (224.6 km²).

PERIOD OF RECORD.--October 1958 to current year.

GAGE.--Water-stage recorder. Datum of gage is 807.22 ft (246.041 m) above mean sea level.

AVERAGE DISCHARGE.--16 years, 67.8 ft³/s (1,920 m³/s), 49,120 acre-ft/yr (60.6 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,700 ft³/s (48.1 m³/s) Apr. 2 (gage height, 4.97 ft or 1.515 m); minimum daily, 1.1 ft³/s (0.031 m³/s) Sept. 2, 12.
 Period of record: Maximum discharge, 11,600 ft³/s (329 m³/s) Dec. 6, 1966 (gage height, 9.30 ft or 2.835 m, in gage well, 10.4 ft or 3.17 m, from floodmarks), from rating curve extended above 2,600 ft³/s (73.6 m³/s) on basis of slope-area measurement of maximum flow; no flow at times in 1960-62.
 Flood of December 23, 1955, reached a stage of 9.5 ft (2.90 m), from floodmarks (discharge, 10,000 ft³/s or 283 m³/s).

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.1	6.2	65	45	42	32	261	141	398	45	9.2	1.5
2	2.5	6.4	43	36	40	291	683	180	324	42	7.8	1.1
3	2.5	7.1	32	32	38	162	252	206	333	37	6.5	1.2
4	2.6	7.3	28	35	36	107	177	206	421	33	7.7	1.4
5	2.6	7.1	24	35	35	93	148	169	443	30	12	1.4
6	2.5	6.9	23	40	35	93	132	176	477	28	9.6	1.7
7	3.2	7.0	22	65	34	88	123	247	479	26	7.7	1.7
8	15	7.2	22	56	34	88	118	327	422	25	6.6	1.5
9	16	6.9	22	47	33	77	132	376	359	25	5.9	1.4
10	10	6.2	21	42	32	71	115	395	340	25	5.6	1.3
11	8.5	6.5	20	39	31	68	104	402	337	25	6.1	1.2
12	7.8	21	20	81	31	66	101	395	319	22	5.4	1.1
13	6.9	20	23	77	37	65	103	367	288	20	4.7	1.2
14	7.1	14	37	61	32	65	104	364	253	18	3.8	1.4
15	6.8	12	28	57	32	68	109	400	216	18	3.5	1.5
16	6.7	11	25	74	31	72	113	364	185	17	3.2	1.7
17	6.2	12	23	248	32	69	120	302	154	15	3.2	1.8
18	5.5	73	22	143	30	68	127	240	128	13	3.0	2.0
19	5.0	31	20	121	33	67	108	183	119	12	3.0	2.2
20	5.7	25	19	213	33	66	98	154	105	12	3.5	2.7
21	6.0	25	19	186	32	66	91	148	100	11	4.1	2.7
22	5.3	20	34	112	31	65	101	178	97	11	4.1	2.2
23	8.0	21	28	90	30	64	106	227	91	12	3.5	2.1
24	11	19	25	78	29	62	112	191	78	21	3.2	2.1
25	8.6	19	24	69	29	61	102	312	71	20	3.0	2.4
26	7.5	19	23	62	29	61	94	409	65	18	2.7	2.2
27	7.0	17	32	56	29	69	88	472	58	16	2.2	2.4
28	6.6	18	38	53	29	97	91	489	54	12	2.0	2.7
29	6.3	19	38	48	-----	87	88	441	50	10	2.0	2.4
30	6.2	19	35	46	-----	102	105	412	47	9.2	1.8	2.2
31	6.1	-----	31	43	-----	103	-----	419	-----	10	1.8	-----
TOTAL	203.8	489.8	866	2,390	919	2,613	4,206	9,292	6,811	638.2	148.4	54.4
MEAN	6.57	16.3	27.9	77.1	32.8	84.3	140	300	227	20.6	4.79	1.81
MAX	16	73	65	248	42	291	683	489	479	45	12	2.7
MIN	2.1	6.2	19	32	29	32	88	141	47	9.2	1.8	1.1
AC-FT	404	972	1,720	4,740	1,820	5,180	8,340	18,430	13,510	1,270	294	108

CAL YR 1973 TOTAL 41,791.3 MEAN 114 MAX 910 MIN 2.1 AC-FT 82,890
 WTR YR 1974 TOTAL 28,631.6 MEAN 78.4 MAX 683 MIN 1.1 AC-FT 56,790

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
3-2	0830	3.72	552	5-27	2300	3.94	688
4-2	0045	4.97	1,700	6-6	2245	3.93	681

TULARE LAKE BASIN

109

11210850 LEMONCOVE DITCH BELOW TERMINUS DAM, CALIF.

LOCATION.--Lat 36°24'55", long 119°00'22", in SW¼SW¼ sec.25, T.17 S., R.27 E., Tulare County, on left bank 250 ft (76 m) downstream from outlet tunnel of Terminus Dam, and 2.4 mi (3.9 km) northeast of Lemoncove.

PERIOD OF RECORD.--June 1962 to current year.

GAGE.--Water-stage recorder and Parshall flume. Datum of gage is 546.3 ft (166.51 m) above mean sea level (levels by Corps of Engineers).

AVERAGE DISCHARGE.--12 years, 5.00 ft³/s (0.142 m³/s), 3,620 acre-ft/yr (4.46 hm³/yr).

EXTREMES.--Period of record: Maximum daily discharge, 8.8 ft³/s (0.25 m³/s) May 5, 1970; no flow many days in 1962, 1969.

REMARKS.--Records excellent. Ditch receives water from Lake Kaweah (see sta 11210900) which is used for irrigation. At times up to 3 ft³/s (0.085 m³/s) is diverted 200 ft (61 m) upstream into Doffelmyer ditch for irrigation.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.2	3.0	.90	1.5	1.4	1.5	1.2	8.2	8.1	8.2	8.1	8.2
2	7.5	3.0	.90	1.5	1.4	1.5	1.1	8.2	8.1	8.2	8.1	8.2
3	6.9	3.0	.70	1.5	1.4	1.4	1.0	8.2	8.1	8.2	8.1	8.1
4	7.0	3.0	1.1	1.5	1.4	1.4	1.0	8.2	8.1	8.2	8.0	8.1
5	7.0	3.7	1.3	1.5	1.4	1.4	1.2	8.2	8.0	8.2	8.0	8.2
6	6.5	4.0	1.3	1.5	1.4	1.4	1.4	8.2	8.1	8.2	8.1	8.2
7	6.2	4.0	1.3	1.5	1.4	1.4	1.4	8.1	8.2	8.2	8.3	8.2
8	2.9	4.0	1.2	1.5	1.4	1.4	1.4	8.0	8.2	8.2	8.4	8.1
9	1.3	4.1	1.3	1.5	1.4	1.4	1.3	8.0	8.3	8.2	8.3	8.1
10	1.2	4.1	1.4	1.3	1.4	1.4	1.3	8.0	8.3	8.2	8.3	8.2
11	1.2	4.1	1.4	1.3	1.4	1.4	1.3	8.0	8.3	8.2	8.3	8.0
12	1.8	2.1	1.4	1.3	1.4	1.4	1.4	8.0	8.3	8.2	8.3	8.1
13	2.2	1.0	1.4	1.4	1.4	1.2	1.4	8.0	8.3	8.2	8.3	8.2
14	2.2	1.0	1.4	1.4	1.4	1.2	1.4	8.0	8.3	8.1	8.2	8.2
15	2.2	1.0	1.4	1.4	1.4	1.2	1.4	8.1	8.3	8.2	8.2	8.1
16	2.8	1.0	1.4	1.4	1.4	1.2	1.4	8.2	8.3	8.2	8.2	8.0
17	3.2	1.2	1.4	1.4	1.4	1.2	1.4	8.2	8.3	8.1	8.2	8.0
18	4.4	1.1	1.4	1.4	1.4	1.2	1.9	8.2	8.3	8.1	8.2	8.1
19	7.1	1.0	1.4	1.4	1.4	1.2	2.2	8.2	8.3	8.1	8.2	8.2
20	8.1	1.0	1.4	1.3	1.4	1.3	2.2	8.2	8.3	8.1	8.2	8.3
21	8.1	1.1	1.5	1.2	1.3	1.4	2.2	8.2	8.3	8.1	8.2	8.4
22	8.1	1.1	1.5	1.2	1.2	1.1	2.9	8.2	8.3	8.1	8.3	8.4
23	4.2	.90	1.5	1.2	1.2	1.1	3.3	8.2	8.3	8.2	8.2	8.4
24	2.2	.90	1.5	1.4	1.2	1.1	4.4	8.2	8.3	8.2	8.2	8.4
25	2.2	.80	1.5	1.4	1.2	1.0	5.1	8.2	8.3	8.1	8.2	8.4
26	2.2	.90	1.5	1.4	1.2	1.0	6.5	8.2	8.3	8.1	8.2	8.4
27	2.7	1.0	1.5	1.4	1.2	1.0	7.2	8.2	8.3	8.1	8.2	8.4
28	3.0	.90	1.5	1.4	1.4	.90	7.1	8.1	8.3	8.1	8.2	8.4
29	3.0	.90	1.5	1.4	-----	1.0	7.8	8.1	8.3	8.2	8.2	8.4
30	3.0	.90	1.6	1.4	-----	1.2	8.2	8.1	8.3	8.2	8.2	8.4
31	3.0	-----	1.6	1.4	-----	1.1	-----	8.1	-----	8.2	8.2	-----
TOTAL	131.6	59.80	42.10	43.3	37.9	38.60	83.0	252.2	247.5	253.1	254.3	246.8
MEAN	4.25	1.99	1.36	1.40	1.35	1.25	2.77	8.14	8.25	8.16	8.20	8.23
MAX	8.2	4.1	1.6	1.5	1.4	1.5	8.2	8.2	8.3	8.2	8.4	8.4
MIN	1.2	.80	.70	1.2	1.2	.90	1.0	8.0	8.0	8.1	8.0	8.0
AC-FT	261	119	84	86	75	77	165	500	491	502	504	490

CAL YR 1973 TOTAL 1,641.80 MEAN 4.50 MAX 8.3 MIN .70 AC-FT 3,260
WTR YR 1974 TOTAL 1,690.20 MEAN 4.63 MAX 8.4 MIN .70 AC-FT 3,350

TULARE LAKE BASIN

11210900 LAKE KAWEAH NEAR LEMONCOVE, CALIF.

LOCATION.--Lat 36°24'53", long 119°00'07", in SE¼SW¼ sec.25, T.17 S., R.27 E., Tulare County, in control tower near left abutment of Terminus Dam on Kaweah River, 2.1 mi (3.4 km) northeast of Lemoncove.

DRAINAGE AREA.--560 mi² (1,450 km²).

PERIOD OF RECORD.--October 1961 to current year. Fragmentary prior to March 1962.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Corps of Engineers). Prior to May 22, 1962, nonrecording gage at same site and datum.

EXTREMES.--Current year: Maximum contents, 152,234 acre-ft (188 hm³) June 7 (elevation, 695.35 ft or 211.943 m); minimum, 7,866 acre-ft (9.70 hm³) Feb. 4 (elevation, 569.30 ft or 173.523 m).

Period of record: Maximum contents, 160,200 acre-ft (198 hm³) July 3, 4, 1967 (elevation, 699.39 ft or 213.174 m), storage increased by a temporary sandbag dam in the ungated spillway; minimum since reservoir first filled, 7,559 acre-ft (9.32 hm³) Oct. 20, 1970 (elevation, 568.38 ft or 173.242 m).

REMARKS.--Reservoir is formed by earthfill dam and earthfill auxiliary dam; completed and storage began in February 1962. Usable capacity, 149,433 acre-ft (184 hm³) between elevations 520.0 ft (158.50 m), invert of outlet structure, and 694.0 ft (211.53 m), spillway crest. Dead storage, 166 acre-ft (205,000 m³). Spillway design flood pool elevation, 745.1 ft (227.11 m), capacity, 266,000 acre-ft (328 hm³). Records, including extremes, represent total contents at 2400 hours.

COOPERATION.--Records furnished by Corps of Engineers, not rounded to Geological Survey standards.

CAPACITY TABLE (ELEVATION, IN FEET, AND CONTENTS, IN ACRE-FEET)

520	166	580	11,966
525	343	600	22,767
530	598	620	39,354
535	954	640	61,695
540	1,464	660	89,818
550	2,937	680	123,423
560	5,093	700	161,476
570	8,105	720	204,327

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9,321	13,372	9,601	10,190	8,081	8,160	22,194	81,651	150,456	130,966	42,683	12,804
2	9,325	13,475	10,056	10,305	8,029	13,974	29,670	84,427	150,319	128,510	40,704	12,202
3	9,351	13,577	10,052	10,305	7,951	16,483	32,032	87,556	150,124	125,964	38,785	11,467
4	9,385	13,666	9,842	10,364	7,866	17,884	33,886	90,489	150,651	123,369	37,054	10,630
5	9,412	13,765	9,643	10,428	7,958	18,429	35,823	92,960	151,256	120,795	35,200	9,746
6	9,438	13,869	9,430	10,521	8,146	18,463	37,765	95,638	152,058	118,136	33,161	9,003
7	9,491	13,974	9,176	10,662	8,274	18,435	39,581	99,065	152,234	115,396	31,061	8,414
8	9,742	14,088	8,916	10,317	8,341	18,333	41,318	103,260	151,901	112,509	28,968	8,208
9	10,131	14,194	8,666	9,727	8,341	18,029	43,271	108,040	151,412	109,623	27,083	8,188
10	10,297	14,290	8,414	8,970	8,334	17,683	45,051	112,699	150,826	106,705	25,594	8,184
11	10,440	14,406	8,150	8,453	8,250	17,518	46,698	117,607	150,612	103,725	24,250	8,177
12	10,585	15,266	7,988	8,771	8,163	17,485	48,368	122,455	150,417	100,635	22,944	8,167
13	10,760	15,592	7,951	9,136	8,271	17,474	50,206	126,236	150,144	97,571	21,573	8,153
14	10,932	15,510	8,163	8,742	8,302	17,523	52,114	129,351	150,007	94,550	20,160	8,119
15	11,102	15,332	8,212	8,167	8,299	17,595	54,088	132,812	149,774	91,446	18,823	8,105
16	11,256	15,105	8,208	8,306	8,288	17,628	56,086	135,657	149,152	88,312	17,872	8,098
17	11,386	14,906	8,181	10,723	8,264	17,551	58,206	137,378	148,221	85,155	17,238	8,101
18	11,509	16,361	8,132	11,526	8,184	17,474	60,491	138,186	147,003	81,919	16,788	8,098
19	11,607	15,849	8,046	12,096	8,126	17,435	62,308	138,393	145,962	78,690	16,483	8,091
20	11,702	14,758	8,012	13,077	8,070	17,408	63,902	138,280	144,945	75,408	15,984	8,101
21	11,792	13,761	8,043	13,728	8,026	17,408	65,364	138,129	144,064	72,029	15,489	8,091
22	11,883	12,687	8,400	13,054	8,002	17,397	64,095	138,092	143,242	68,653	15,090	8,077
23	12,035	11,595	8,649	11,996	7,978	17,369	68,893	138,506	142,347	65,338	14,782	8,060
24	12,343	10,428	8,814	11,093	7,951	17,342	70,693	138,807	141,283	62,120	14,605	8,043
25	12,516	9,169	8,945	10,333	7,988	17,364	72,248	140,203	140,128	59,092	14,522	8,029
26	12,664	8,735	8,970	9,673	8,057	17,331	73,616	142,632	138,788	56,276	14,483	8,016
27	12,800	8,814	9,132	8,992	8,081	17,397	74,873	145,578	137,322	53,589	14,474	8,009
28	12,931	8,861	9,419	8,302	8,067	18,186	76,243	147,930	135,862	50,963	14,459	7,992
29	13,054	8,908	9,643	8,050	-----	18,646	77,630	148,880	134,352	48,777	14,449	7,971
30	13,164	8,916	9,804	8,067	-----	19,473	79,412	149,463	132,923	46,741	13,993	7,954
31	13,270	-----	9,877	8,081	-----	20,256	-----	150,105	-----	44,776	13,400	-----
MAX	13,270	16,361	10,056	13,728	8,341	20,256	79,412	150,105	152,234	130,966	42,683	12,804
MIN	9,321	8,735	7,951	8,050	7,866	8,160	22,184	81,651	132,923	44,776	13,400	7,954
(a)	582.84	572.29	574.85	569.93	569.89	596.00	653.12	694.26	685.21	625.32	583.12	569.56
(b)	+3,960	-4,354	+961	-1,796	-14	+12,189	+59,156	+70,693	-17,183	-88,147	-31,376	-5,446
(c)	182	105	33	43	45	84	355	1,064	1,511	1,327	588	299

CAL YR 1973 +1,012
WTR YR 1974 -1,356

a Elevation, in feet, at end of month.
b Change in contents, in acre-feet.
c Evaporation, in acre-feet.

11210930 FOOTHILL DITCH BELOW TERMINUS DAM, CALIF.

LOCATION.--Lat 36°24'48", long 119°00'47", in NW¼NE¼ sec.35, T.17 S., R.27 E., Tulare County, on left bank 0.7 mi (1.1 km) downstream from Terminus Dam, and 2.1 mi (3.4 km) northeast of Lemoncove.

PERIOD OF RECORD.--October 1961 to current year.

GAGE.--Water-stage recorder and Parshall flume. Datum of gage is 492.8 ft (150.21 m) above mean sea level (levels by Corps of Engineers).

AVERAGE DISCHARGE.--13 years, 18.9 ft³/s (0.535 m³/s), 13,690 acre-ft/yr (16.9 hm³/yr).

EXTREMES.--Period of record: Maximum daily discharge, 50 ft³/s (1.4 m³/s) Feb. 10, 1962; minimum daily, 1.0 ft³/s (0.028 m³/s) Feb. 1, 2, 1962.

REMARKS.--Records excellent except those for the period May 13 to June 18, which are good. Ditch receives water from Lake Kaweah (see sta 11210900) which is used for irrigation.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	23	3.0	14	30	30	33	27	38	37	34	28
2	28	23	3.1	27	30	30	23	27	38	37	34	28
3	28	23	3.4	29	30	30	31	28	37	37	34	29
4	28	23	3.6	29	30	30	30	28	35	37	34	30
5	28	23	3.6	29	29	33	27	28	35	37	34	30
6	28	23	3.3	29	29	34	27	28	35	37	34	29
7	28	23	3.3	31	29	34	27	28	36	37	34	28
8	28	23	3.3	32	29	34	28	29	36	36	34	25
9	27	23	3.3	32	29	34	28	29	36	37	34	22
10	29	23	3.4	33	30	34	26	29	36	37	32	22
11	30	23	3.3	32	30	33	26	29	35	37	32	22
12	28	25	3.0	31	30	33	26	29	35	37	32	22
13	27	29	3.0	31	30	33	26	31	35	37	32	22
14	27	21	3.0	31	30	33	26	33	34	37	32	22
15	27	8.0	3.0	33	30	34	26	33	34	37	32	22
16	27	7.6	3.0	32	30	34	27	34	34	37	31	22
17	27	7.5	3.0	32	30	34	27	35	34	37	30	21
18	24	7.5	3.0	33	30	34	27	35	34	37	28	21
19	22	7.8	3.0	33	30	34	27	35	34	36	27	21
20	23	7.9	3.0	33	30	34	27	35	34	36	28	21
21	23	7.7	3.0	34	30	34	27	35	36	36	29	21
22	23	7.6	3.0	35	30	34	27	35	36	36	28	21
23	23	5.8	3.0	35	30	34	27	35	36	36	28	21
24	23	3.8	3.0	34	30	34	27	34	36	36	26	22
25	24	3.6	3.0	34	30	34	27	35	36	36	24	21
26	24	3.4	3.0	33	30	34	27	35	36	36	24	22
27	24	3.0	3.0	33	30	34	27	35	36	36	23	21
28	24	2.8	3.1	33	30	34	27	36	36	35	23	21
29	23	2.8	3.2	31	-----	34	27	38	36	34	23	21
30	23	2.9	3.3	30	-----	34	27	38	36	34	27	21
31	23	-----	3.4	30	-----	34	-----	38	-----	34	29	-----
TOTAL	799	417.7	97.6	968	835	1,033	815	1,004	1,065	1,126	926	699
MEAN	25.8	13.9	3.15	31.2	29.8	33.3	27.2	32.4	35.5	36.3	29.9	23.3
MAX	30	29	3.6	35	30	34	33	38	38	37	34	30
MIN	22	2.8	3.0	14	29	30	23	27	34	34	23	21
AC-FT	1,580	829	194	1,920	1,660	2,050	1,620	1,990	2,110	2,230	1,840	1,390

CAL YR 1973 TOTAL 9,581.9 MEAN 26.3 MAX 40 MIN 2.8 AC-FT 19,010

WTR YR 1974 TOTAL 9,785.3 MEAN 26.8 MAX 38 MIN 2.8 AC-FT 19,410

NOTE.--Stage-discharge relation affected by backwater May 13 to June 18.

TULARE LAKE BASIN

11210950 KAWEAH RIVER BELOW TERMINUS DAM, CALIF.

LOCATION.--Lat 36°24'51", long 119°00'42", in SE¼SE¼ sec.26, T.17 S., R.27 E., Tulare County, on left bank 0.6 mi (1.0 km) downstream from Terminus Dam, and 2.2 mi (3.5 km) northeast of Lemoncove.

DRAINAGE AREA.--561 mi² (1,453 km²).

PERIOD OF RECORD.--October 1961 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 495.90 ft (151.150 m) above mean sea level (levels by Corps of Engineers).

AVERAGE DISCHARGE (adjusted for change in contents, evaporation, and diversion).--13 years, 667 ft³/s (18.89 m³/s), 483,200 acre-ft/yr (596 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,740 ft³/s (77.6 m³/s) June 7 (gage height, 6.77 ft or 2.063 m); minimum daily, 0.40 ft³/s (0.01 m³/s) Oct. 18.

Period of record: Maximum discharge, 5,610 ft³/s (159 m³/s) June 3, 1969 (gage height, 8.77 ft or 2.673 m); no flow at times in most years.

REMARKS.--Records excellent. Flow regulated by Lake Kaweah (see sta 11210900). Lemoncove ditch (see sta 11210850) diverts water from Lake Kaweah for irrigation. Foothill ditch (see sta 11210930) diverts water from the gage pool for irrigation. Doffelmyer ditch diverts up to 3 ft³/s (0.085 m³/s) above the station for irrigation. At times some of this water is returned to the river above the station. Records of chemical analyses and water temperatures for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WRD Calif. 1969: 1967(M). WRD Calif. 1971: 1963.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	2.8	1.4	205	264	377	276	622	205	2,290	1,700	1,280	318		
2	3.4	1.5	207	257	377	290	90	216	2,280	1,900	1,190	315		
3	3.5	1.5	285	257	375	317	468	234	2,180	1,880	1,120	362		
4	3.4	1.4	365	257	374	327	405	245	2,150	1,840	1,120	398		
5	3.4	1.2	336	257	310	582	208	247	2,180	1,820	1,110	399		
6	3.4	.70	314	258	273	809	210	241	2,330	1,820	1,160	321		
7	3.4	.60	329	468	273	808	211	251	2,620	1,820	1,190	244		
8	3.2	.60	336	676	284	785	214	283	2,610	1,830	1,160	118		
9	2.2	.80	333	661	305	785	218	325	2,500	1,830	1,040	29		
10	12	.80	330	646	305	785	177	351	2,420	1,820	850	23		
11	15	.80	333	518	324	683	142	359	2,320	1,830	779	23		
12	5.6	31	287	422	330	616	156	360	2,240	1,840	760	23		
13	1.6	173	243	426	310	616	157	644	2,130	1,830	790	23		
14	1.0	263	245	583	294	616	158	881	1,930	1,830	812	23		
15	.70	277	243	649	294	695	170	888	1,820	1,840	760	23		
16	.80	277	243	505	296	753	192	990	1,820	1,840	571	20		
17	.90	272	243	532	302	765	201	1,260	1,780	1,860	400	14		
18	.40	277	243	706	306	765	208	1,380	1,720	1,870	294	14		
19	2.0	604	242	752	314	749	210	1,380	1,510	1,850	225	14		
20	2.9	816	214	764	318	738	207	1,350	1,510	1,850	299	14		
21	2.7	764	182	861	304	717	204	1,330	1,500	1,900	318	14		
22	1.4	733	178	1,070	284	707	204	1,320	1,500	1,910	256	14		
23	1.9	727	178	1,140	279	707	205	1,330	1,500	1,900	220	14		
24	3.0	723	178	989	279	707	207	1,270	1,510	1,890	141	13		
25	7.4	712	180	866	264	695	204	1,230	1,490	1,800	82	12		
26	7.6	387	214	775	257	689	201	1,250	1,460	1,690	59	14		
27	6.3	149	241	726	272	689	201	1,340	1,460	1,580	46	13		
28	6.0	160	258	703	281	693	201	1,740	1,460	1,510	46	13		
29	4.2	180	267	525	-----	701	201	2,190	1,460	1,320	48	13		
30	1.7	198	269	398	-----	676	204	2,210	1,450	1,220	216	12		
31	1.6	-----	271	385	-----	661	-----	2,190	-----	1,260	323	-----		
TOTAL	115.40	7,734.30	7,992	18,296	8,561	20,402	6,656	29,490	57,130	54,680	18,665	2,850		
MEAN	3.72	258	258	590	306	658	222	951	1,904	1,764	602	95.0		
MAX	15	816	365	1,140	377	809	622	2,210	2,620	1,910	1,280	399		
MIN	.40	.60	178	257	257	276	90	205	1,450	1,220	46	12		
AC-FT	229	15,340	15,850	36,290	16,980	40,470	13,200	58,490	113,300	108,500	37,020	5,650		
MEAN a	101	202	278	594	338	892	1,252	2,158	1,684	397	140	40.0		
AC-FT a	6,210	12,040	17,120	36,540	18,750	54,870	74,500	132,700	100,230	24,410	8,580	2,380		
CAL YR 1973	TOTAL	302,089.30	MEAN	828	MAX	3,050	MIN	.40	AC-FT	599,200	MEAN a	867	AC-FT a	628,000
WTR YR 1974	TOTAL	232,571.70	MEAN	637	MAX	2,620	MIN	.40	AC-FT	461,300	MEAN a	674	AC-FT a	488,300

a Adjusted for change in contents in and evaporation from Lake Kaweah and diversion to Lemoncove and Foothill ditches.

TULARE LAKE BASIN

113

11211300 DRY CREEK NEAR LEMONCOVE, CALIF.

LOCATION.--Lat 36°26'51", long 119°01'38", in NE¼SE¼ sec.15, T.17 S., R.27 E., Tulare County, on right bank 0.5 mi (0.8 km) downstream from Bequette Canyon, 2.9 mi (4.7 km) upstream from mouth, and 4.4 mi (7.1 km) north of Lemoncove.

DRAINAGE AREA.--75.6 mi² (195.8 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 570 ft (174 m), from topographic map. Prior to Mar. 8, 1969, 1.6 mi (2.6 km) downstream at different datum.

AVERAGE DISCHARGE.--15 years, 20.8 ft³/s (0.589 m³/s) 15,070 acre-ft/yr (18.6 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,030 ft³/s (57.5 m³/s) Apr. 2 (gage height, 6.23 ft or 1.899 m); no flow for several months.

Period of record: Maximum discharge, 14,500 ft³/s (411 m³/s) Dec. 6, 1966 (gage height, 7.30 ft or 2.225 m in gage well, 8.94 ft or 2.725 m, from floodmarks, site and datum then in use); no flow for several months in each year.

Flood of Dec. 23, 1955, reached a discharge of 6,070 ft³/s (172 m³/s) from slope-area measurement. Flood of 1867 is believed to have exceeded that of December 1955, from information by local residents.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NCV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	35	37	25	16	223	27	8.2	1.0		
2		0	34	26	24	182	800	26	7.8	.90		
3		0	13	16	23	219	214	25	7.4	.75		
4		0	9.0	16	22	151	138	23	6.6	.90		
5		0	7.4	22	22	113	111	23	6.6	.90		
6		0	5.8	28	25	100	92	23	6.2	.90		
7		0	5.1	150	23	88	84	22	5.8	.75		
8		0	4.8	106	20	85	78	20	5.4	.75		
9		0	4.4	58	19	70	94	19	4.8	.75		
10		0	4.1	40	18	60	86	18	4.1	1.0		
11		0	3.8	32	17	54	72	18	3.8	1.4		
12		2.0	3.8	66	17	50	65	17	3.5	1.9		
13		10	4.8	61	27	45	61	16	3.2	1.9		
14		3.5	7.8	42	22	44	54	15	3.0	1.7		
15		2.3	7.4	36	20	42	50	15	3.0	1.7		
16		1.9	5.8	37	18	39	48	16	3.0	1.4		
17		2.4	5.1	92	18	37	46	16	3.2	1.0		
18		59	4.8	74	18	36	44	16	3.2	.90		
19		17	4.4	59	19	34	45	18	3.2	.65		
20		6.6	4.1	125	22	33	43	18	3.2	.55		
21		4.4	4.1	170	18	31	40	16	3.2	.45		
22		3.8	20	90	17	31	37	14	3.2	.35		
23		3.5	14	67	17	32	36	13	2.5	.25		
24		3.0	9.0	56	16	31	39	13	2.1	.20		
25		2.8	7.8	45	14	29	40	12	1.9	.10		
26		3.0	6.6	39	14	29	36	11	1.9	.07		
27		2.5	14	36	14	31	35	10	2.1	.04		
28		2.3	21	33	14	74	34	9.0	2.1	.04		
29		2.3	13	31	-----	65	32	8.6	1.9	.02		
30		2.3	10	28	-----	66	30	8.6	1.7	.04		
31		-----	10	26	-----	89	-----	8.2	-----	.02		-----
TOTAL	0	134.6	303.9	1,744	543	2,006	2,807	514.4	117.8	23.28	0	0
MEAN	0	4.49	9.80	56.3	19.4	64.7	93.6	16.6	3.93	.75	0	0
MAX	0	59	35	170	27	219	800	27	8.2	1.9	0	0
MIN	0	0	3.8	16	14	16	30	8.2	1.7	.02	0	0
AC-FT	0	267	603	3,460	1,080	3,980	5,570	1,020	234	46	0	0

CAL YR 1973 TOTAL 12,461.21 MEAN 34.1 MAX 817 MIN 0 AC-FT 24,720
WTR YR 1974 TOTAL 8,193.98 MEAN 22.4 MAX 800 MIN 0 AC-FT 16,250

PEAK DISCHARGE (BASE, 50 FT³/S)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-18	1230	2.87	103	1-21	0030	3.69	278
12-1	1900	2.75	85	3-2	1130	3.79	307
1-1	1400	2.65	71	3-3	1100	3.69	278
1-7	1400	3.36	195	3-28	1830	3.12	144
1-12	1300	2.80	91	3-31	0200	3.01	126
1-17	1600	2.95	116	4-2	0130	6.23	2,030

TULARE LAKE BASIN

11211790 COTTONWOOD CREEK NEAR ELDERWOOD, CALIF.

LOCATION.--Lat 36°31'47", long 119°07'33", in SE¼SE¼ sec.15, T.16 S., R.26 E., Tulare County, on left bank 25 ft (8 m) upstream from State Highway 65 bridge, 4.0 mi (6.4 km) north of Elderwood, and 8.0 mi (12.9 km) north of Woodlake.

DRAINAGE AREA.--60.4 mi² (156.4 km²).

PERIOD OF RECORD.--February 1971 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 575 ft (175.3 m), from topographic map.

EXTREMES.--Current year: Maximum discharge, 1,660 ft³/s (47.0 m³/s) Apr. 1 (gage height, 5.56 ft or 1.695 m); no flow for several months.

Period of record: Maximum discharge, 1,660 ft³/s (47.0 m³/s) Apr. 1, 1974 (gage height, 5.56 ft or 1.695 m); no flow for several months in each year.

Flood of February 24, 1969, reached a stage of 10.4 ft (3.17 m), from floodmarks.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	13	16	16	12	144	15	4.1	1.3	.60	0
2		0	15	14	16	58	348	16	3.4	.32	.05	0
3		0	7.5	10	15	209	100	16	3.7	.06	0	0
4		0	4.1	11	15	107	67	16	4.1	0	0	0
5		0	3.7	14	14	63	51	17	3.7	0	0	0
6		0	3.7	27	18	49	40	16	4.5	.05	0	.10
7		0	3.7	169	16	44	34	15	4.1	.27	0	0
8		0	3.7	76	12	53	32	13	3.4	.17	0	0
9		0	3.7	32	13	43	33	10	3.4	1.3	0	0
10		.35	3.4	20	14	36	32	10	3.0	.82	0	0
11		.40	3.0	14	14	33	27	9.2	2.7	1.1	0	0
12		1.1	3.0	37	14	32	26	9.2	2.7	.37	0	0
13		3.3	3.7	23	18	29	24	8.6	2.4	.09	0	0
14		2.7	4.5	17	15	28	24	8.6	2.1	0	0	.12
15		2.6	3.7	15	12	26	21	8.0	2.1	0	0	.82
16		2.9	3.0	15	11	25	21	9.2	2.7	0	0	1.6
17		3.7	2.7	71	12	25	19	11	3.0	.20	.93	0
18		20	2.4	33	12	24	19	10	3.4	.37	1.6	0
19		7.4	2.1	27	15	24	19	10	3.4	.17	2.1	0
20		4.2	1.8	113	15	22	19	9.2	3.0	.60	.60	0
21		4.1	2.1	127	12	22	19	8.6	2.1	1.1	.22	0
22		3.7	5.8	60	12	22	18	7.4	1.8	1.8	0	0
23		3.4	4.5	40	11	22	18	6.3	.82	2.4	0	0
24		3.4	3.4	32	13	22	19	6.3	0	1.8	0	0
25		3.0	3.4	27	12	22	19	7.4	0	1.3	0	0
26		3.0	3.0	24	11	22	18	6.8	.18	1.3	.12	1.0
27		3.0	7.6	20	11	22	17	6.3	1.1	1.1	1.1	.79
28		3.4	8.7	19	11	28	17	4.9	.40	.35	.81	0
29		3.7	5.3	18	-----	31	16	4.1	.60	.23	0	0
30		4.1	3.7	18	-----	26	16	4.1	.82	1.1	0	0
31		-----	3.7	17	-----	32	-----	4.5	-----	1.3	0	-----
TOTAL	0	83.45	142.6	1,156	380	1,213	1,277	303.7	72.72	20.97	8.13	4.43
MEAN	0	2.78	4.60	37.3	13.6	39.1	42.6	9.80	2.42	.68	.26	.15
MAX	0	20	15	169	18	209	348	17	4.5	2.4	2.1	1.6
MIN	0	0	1.8	10	11	12	16	4.1	0	0	0	0
AC-FT	0	166	283	2,290	754	2,410	2,530	602	144	42	16	8.8

CAL YR 1973 TOTAL 7,666.24 MEAN 21.0 MAX 499 MIN 0 AC-FT 15,210
WTR YR 1974 TOTAL 4,662.00 MEAN 12.8 MAX 348 MIN 0 AC-FT 9,250

PEAK DISCHARGE (BASE, 40 FT³/S)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-18	0915	2.59	43	1-20	2015	3.60	340
1-7	1000	3.35	248	3-3	1200	3.72	388
1-12	1200	2.68	63	3-8	1500	2.60	58
1-17	1230	3.15	181	4-1	2315	5.56	1,660

11212000 SAND CREEK NEAR ORANGE COVE, CALIF.

LOCATION.--Lat 36°37'36", long 119°14'48", in SW¼NW¼ sec.15, T.15 S., R.25 E., Tulare County, on right bank 3.8 mi (6.1 km) east of Orange Cove.

DRAINAGE AREA.--31.6 mi² (81.8 km²).

PERIOD OF RECORD.--October 1944 to September 1954, annual maximum, water years 1956, 1967, 1969, February 1971 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 490 ft (149 m), from topographic map.

AVERAGE DISCHARGE.--13 years (1944-54, 1971-74), 2.30 ft³/s (0.065 m³/s), 1,670 acre-ft/yr (2.06 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 805 ft³/s (22.8 m³/s) Apr. 1 (gage height, 4.96 ft or 1.512 m), from rating curve extended as explained below; no flow for several months.

Period of record: Maximum discharge, 805 ft³/s (22.8 m³/s) Apr. 1, 1974 (gage height, 4.96 ft or 1.512 m), from rating curve extended above 56 ft³/s (1.6 m³/s) on basis of slope-area measurements at gage heights 4.00 ft (1.219 m), 4.80 ft (1.463 m), and 8.75 ft (2.667 m); no flow for several months in each year.

Maximum discharge since 1944, 3,520 ft³/s (99.7 m³/s) Jan. 25, 1969 (gage height, 8.75 ft or 2.667 m, from floodmarks).

Flood of Feb. 25, 1969, reached a stage of 8.35 ft (2.545 m), from floodmarks (discharge, 2,900 ft³/s or 82.1 m³/s).

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	.40	12	14	8.3	5.3	134	2.3	2.4	.24		
2	0	.43	8.9	6.8	7.7	18	202	1.4	2.2	.22		
3	0	.46	3.1	4.3	7.0	28	35	1.1	2.1	.20		
4	0	.49	2.4	5.0	6.8	16	23	1.3	1.9	.16		
5	0	.53	2.0	7.7	6.8	8.7	18	2.1	1.7	.13		
6	0	.56	1.9	15	9.0	7.9	14	2.1	1.6	.10		
7	0	.59	1.8	59	7.1	8.7	12	2.0	1.6	.08		
8	0	.64	1.7	34	6.5	14	11	1.9	1.4	.06		
9	0	.68	1.7	16	6.2	9.0	11	2.0	1.2	.05		
10	0	.67	1.7	11	6.0	7.4	10	1.8	.98	.04		
11	0	.73	1.7	9.4	5.7	7.0	8.1	1.6	.84	.05		
12	0	6.7	1.5	18	5.7	6.8	7.4	1.4	.77	.11		
13	0	6.7	1.9	12	6.9	6.8	6.6	1.4	.75	.11		
14	0	3.7	2.6	9.5	5.8	6.6	6.2	1.4	.71	.09		
15	0	2.5	2.1	8.3	5.5	6.3	5.7	1.3	.69	.09		
16	0	2.2	1.9	9.3	5.3	6.1	5.4	1.5	.76	.07		
17	0	2.8	1.8	30	5.3	5.9	5.1	1.6	.84	.05		
18	0	2.3	1.7	22	5.1	5.9	4.9	1.8	.85	.03		
19	0	8.5	1.7	17	5.7	5.9	4.8	2.2	.87	.02		
20	0	3.6	1.7	32	6.0	6.0	4.9	2.4	.89	.01		
21	0	2.7	1.9	36	5.1	6.0	4.3	2.4	.85	.01		
22	0	2.3	4.6	20	5.0	6.6	4.1	2.7	.72	0		
23	0	2.0	3.2	15	4.8	6.8	4.2	2.8	.61	0		
24	0	1.8	2.4	14	4.7	6.9	4.7	3.0	.50	0		
25	0	1.8	2.3	12	4.5	7.1	4.0	3.1	.45	0		
26	0	1.9	2.1	11	4.5	7.1	3.7	3.2	.38	0		
27	0	1.6	9.7	9.8	4.5	7.9	3.5	2.9	.36	0		
28	0	1.4	6.8	9.1	4.5	21	3.3	2.7	.33	0		
29	0	1.6	4.3	8.7	-----	10	3.0	2.6	.29	0		
30	.15	1.6	3.2	8.3	-----	13	2.1	2.8	.27	0		
31	.34	-----	3.1	7.7	-----	14	-----	2.8	-----	0		
TOTAL	.49	84.58	99.4	491.9	166.0	292.7	566.0	65.6	29.81	1.92	0	0
MEAN	.016	2.82	3.21	15.9	5.93	9.44	18.9	2.12	.99	.062	0	0
MAX	.34	23	12	59	9.0	28	202	3.2	2.4	.24	0	0
MIN	0	.40	1.5	4.3	4.5	5.3	2.1	1.1	.27	0	0	0
AC-FT	1.0	168	197	976	329	581	1,120	130	59	3.8	0	0
CAL YR 1973	TOTAL	2,693.72	MEAN	7.38	MAX	152	MIN	0	AC-FT	5,340		
WTR YR 1974	TOTAL	1,798.40	MEAN	4.93	MAX	202	MIN	0	AC-FT	3,570		

PEAK DISCHARGE (BASE, 20 FT ³ /S)							
DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-18	1500	3.50	39	1-17	1130	3.60	53
12-1	1645	3.41	29	1-20	2030	3.72	78
1-1	0915	3.39	27	3-3	1445	3.60	53
1-7	1200	3.74	83	3-28	1445	3.52	42
1-12	1000	3.39	27	4-1	2345	4.96	805

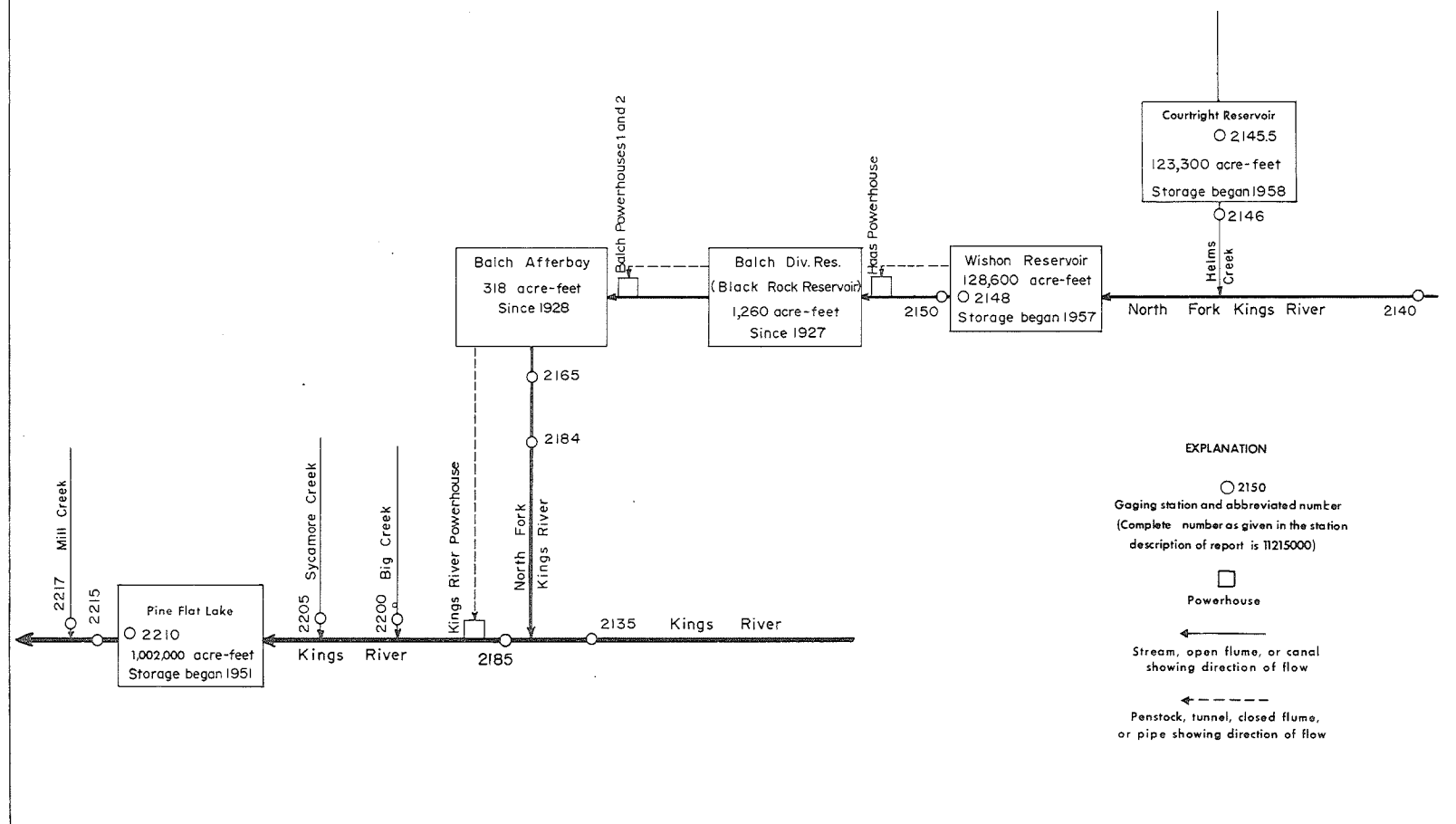


FIGURE 5.--Schematic diagram showing diversions and storage in Kings River basin.

11213500 KINGS RIVER ABOVE NORTH FORK, NEAR TRIMMER, CALIF.

LOCATION.--Lat 36°51'48", long 119°07'24", in NW¼NE¼ sec.27, T.12 S., R.26 E., Fresno County, on right bank at Rogers Crossing, 0.9 mi (1.4 km) upstream from North Fork, 2.9 mi (4.7 km) south of Balch Camp, and 9.6 mi (15.4 km) southeast of Trimmer.

DRAINAGE AREA.--952 mi² (2,466 km²).

PERIOD OF RECORD.--October 1926 to December 1928, October 1931 to current year. Monthly figures only for some periods, published in WSP 1315-A. Prior to September 1965, published as Kings River above North Fork.

GAGE.--Water-stage recorder. Datum of gage is 1,001.5 ft (305.26 m) above mean sea level (river-profile survey). March 1927 to December 1928, at site 0.5 mi (0.8 km) downstream at different datum. October 1931 to September 1965, on left bank at datum 2.00 ft (0.610 m) higher.

AVERAGE DISCHARGE.--45 years, 1,438 ft³/s (40.72 m³/s), 1,042,000 acre-ft/yr (1,285 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 12,100 ft³/s (343 m³/s) June 7 (gage height, 9.42 ft or 2.871 m); minimum daily, 198 ft³/s (5.61 m³/s) Oct. 6.

Period of record: Maximum discharge, 59,100 ft³/s (1,670 m³/s) Dec. 23, 1955 (gage height, 18.26 ft or 5.566 m, present datum), from rating curve extended above 19,000 ft³/s (538 m³/s) on basis of slope-area measurement of maximum flow; minimum daily, 70 ft³/s (1.98 m³/s) Jan. 14, 1963.

REMARKS.--Records good. No diversion or regulation above station. See schematic diagram of Kings River basin. Records of water temperatures for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1395: 1938(M), 1951(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	205	230	776	746	704	741	2,370	3,320	7,860	4,200	1,920	361
2	202	225	585	625	670	3,030	3,630	4,060	7,560	4,100	1,670	354
3	202	220	600	566	660	1,610	2,220	4,560	7,260	3,560	1,490	347
4	202	215	590	615	645	1,330	1,880	4,580	7,620	3,480	1,480	344
5	200	200	548	630	640	1,330	1,820	4,010	8,130	3,360	1,480	340
6	198	205	522	670	640	1,310	1,770	4,340	9,300	3,210	1,350	336
7	200	240	522	914	605	1,280	1,780	5,050	10,300	2,900	1,180	333
8	303	242	526	908	615	1,180	1,820	6,250	9,360	2,610	1,060	330
9	316	232	522	854	600	1,070	1,940	7,440	8,580	2,220	974	326
10	278	235	522	728	590	1,030	1,740	7,710	8,250	2,010	920	322
11	266	311	517	680	585	1,000	1,660	7,710	8,340	1,810	872	319
12	263	1,500	508	932	576	1,010	1,680	7,890	8,160	1,670	830	312
13	269	897	526	908	585	1,000	1,800	7,410	7,920	1,730	788	308
14	281	752	605	818	558	1,020	1,950	7,060	7,710	1,810	758	302
15	284	630	562	836	553	1,130	2,160	7,380	7,260	1,920	716	296
16	263	566	544	1,020	544	1,220	2,290	6,950	6,480	1,940	660	284
17	251	554	530	1,820	535	1,200	2,510	6,280	5,670	1,920	615	275
18	240	1,230	508	1,560	517	1,220	2,760	4,970	4,760	1,800	580	263
19	238	770	478	1,700	553	1,250	2,340	4,200	4,610	1,670	553	254
20	238	692	474	1,660	526	1,260	2,100	3,620	4,170	1,600	530	248
21	235	655	474	1,460	530	1,280	2,060	3,380	4,530	1,630	504	240
22	230	558	600	1,170	512	1,260	2,360	3,600	5,000	1,650	474	232
23	283	522	540	1,080	504	1,260	2,430	4,410	5,050	1,690	458	230
24	296	499	544	987	499	1,280	2,370	4,480	4,580	1,990	446	242
25	275	470	522	932	512	1,330	2,110	5,960	4,410	2,250	430	242
26	272	470	508	896	526	1,260	1,960	7,350	3,920	1,940	418	242
27	266	438	665	824	526	1,260	1,880	8,550	3,660	1,670	406	242
28	257	450	698	812	517	1,730	2,000	9,120	3,600	1,540	392	228
29	254	454	704	776	-----	1,560	2,120	8,640	3,770	1,480	389	218
30	248	446	692	746	-----	1,890	2,620	7,740	3,880	1,540	378	212
31	238	-----	650	722	-----	1,770	-----	7,860	-----	2,450	375	-----
TOTAL	7,753	15,108	17,562	29,595	16,027	41,101	64,130	185,880	191,700	69,350	25,096	8,582
MEAN	250	504	567	955	572	1,326	2,138	5,996	6,390	2,237	810	286
MAX	316	1,500	776	1,820	704	3,030	3,630	9,120	10,300	4,200	1,920	361
MIN	198	200	474	566	499	741	1,660	3,320	3,600	1,480	375	212
AC-FT	15,380	29,970	34,830	58,700	31,790	81,520	127,200	368,700	380,200	137,600	49,780	17,020

CAL YR 1973 TOTAL 681,235 MEAN 1,866 MAX 10,600 MIN 198 AC-FT 1,351,000
WTR YR 1974 TOTAL 671,884 MEAN 1,841 MAX 10,300 MIN 198 AC-FT 1,333,000

PEAK DISCHARGE (BASE, 6,300 FT³/S)
DATE TIME G.H. DISCHARGE DATE TIME G.H. DISCHARGE
5-12 0100 8.32 8,820 6-7 0130 9.42 12,100
5-28 0200 8.82 10,300

11214000 NORTH FORK KINGS RIVER BELOW MEADOW BROOK, CALIF.

LOCATION.--Lat 37°04'53", long 118°51'43", in NE¼NE¼ sec.12, T.10 S., R.28 E., Fresno County, Sierra National Forest, on left bank 800 ft (244 m) downstream from Nichols Canyon, 0.6 mi (1.0 km) downstream from Meadow Brook, 3.9 mi (6.3 km) west of Blackcap Mountain, 5.9 mi (9.5 km) east of Courtright Dam, and 23 mi (37 km) southeast of town of Huntington Lake.

DRAINAGE AREA.--37.7 mi² (97.6 km²).

PERIOD OF RECORD.--October 1921 to September 1935, October 1956 to current year. Monthly discharge only for some periods and yearly estimates for some incomplete years, published in WSP 1315-A. Records for Jan. 1-23, and Dec. 1-21, 1934, published in WSP 551 and 766, respectively, have been found to be unreliable and should not be used.

GAGE.--Water-stage recorder. Datum of gage is 8,144.66 ft (2,482.492 m) above mean sea level, unadjusted (levels by Pacific Gas and Electric Co.).

AVERAGE DISCHARGE.--32 years, 72.6 ft³/s (2.056 m³/s), 52,600 acre-ft/yr (64.9 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 976 ft³/s (27.6 m³/s) June 6 (gage height, 4.86 ft or 1.481 m); minimum daily, 1.5 ft³/s (0.042 m³/s) Sept. 22, 23.

Period of record: Maximum discharge, 2,040 ft³/s (57.8 m³/s) June 2, 1969 (gage height, 5.65 ft or 1.722 m), from rating curve extended above 800 ft³/s (22.7 m³/s); minimum recorded, 0.3 ft³/s (0.008 m³/s) Sept. 12-14, 1924.

Flood of Dec. 23, 1955, reached a stage of 5.85 ft (1.783 m), from floodmarks (discharge, 2,000 ft³/s or 56.6 m³/s).

REMARKS.--No regulation or diversion above station. See schematic diagram of Kings River basin.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

REVISIONS (WATER YEARS).--WSP 1315-A: 1922(M). WSP 1515: Drainage area. See also PERIOD OF RECORD.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.0	8.3	23	25	21	17	32	223	528	176	76	3.1
2	1.9	7.7	40	27	20	29	42	261	508	159	48	3.0
3	1.9	6.8	40	28	20	40	37	273	493	132	42	2.9
4	1.9	4.3	30	28	20	46	34	257	523	124	34	2.7
5	2.0	6.2	26	29	20	50	44	265	576	115	28	2.6
6	2.0	11	25	30	20	43	49	324	658	105	24	2.5
7	2.5	16	26	39	19	32	54	381	622	90	21	2.4
8	6.8	11	27	54	19	26	60	463	555	79	19	2.4
9	6.4	9.6	27	47	20	23	51	536	528	67	16	2.3
10	6.5	28	28	34	20	21	43	540	518	60	15	2.3
11	7.2	85	27	27	20	21	43	534	528	51	13	2.2
12	7.9	85	24	26	20	20	59	525	518	44	12	2.2
13	10	67	27	27	19	20	74	502	503	41	11	2.1
14	9.8	51	30	23	18	25	92	500	488	43	11	2.1
15	8.7	43	28	22	18	36	106	505	450	45	9.9	2.0
16	7.6	37	27	22	18	41	113	447	405	44	8.9	2.0
17	6.8	33	25	25	17	35	129	369	352	43	8.1	1.9
18	6.0	35	23	33	17	38	122	265	309	39	7.2	1.8
19	5.5	48	23	47	17	37	86	214	279	35	6.9	1.7
20	5.0	41	22	36	17	39	86	192	248	34	6.2	1.7
21	4.5	33	22	31	16	43	104	187	272	35	5.6	1.6
22	4.3	28	27	27	16	47	127	221	289	41	5.3	1.5
23	11	27	32	26	16	49	115	272	267	55	4.7	1.5
24	15	26	26	25	16	54	96	344	229	68	4.5	1.6
25	15	24	23	25	17	56	78	472	208	116	4.3	1.6
26	12	23	22	24	18	42	74	588	185	130	4.0	1.7
27	11	22	23	23	17	39	89	633	173	72	3.8	1.9
28	11	24	25	22	17	40	112	605	170	50	3.7	1.7
29	9.7	25	29	22	-----	40	142	544	171	41	3.5	1.6
30	9.0	23	26	22	-----	40	181	533	174	40	3.3	1.6
31	8.7	-----	24	21	-----	37	-----	539	-----	51	3.2	-----
TOTAL	219.6	888.9	827	897	513	1,126	2,474	12,514	11,727	2,225	463.1	62.2
MEAN	7.08	29.6	26.7	28.9	18.3	36.3	82.5	404	391	71.8	14.9	2.07
MAX	15	85	40	54	21	56	181	633	658	176	76	3.1
MIN	1.9	4.3	22	21	16	17	32	187	170	34	3.2	1.5
AC-FT	436	1,760	1,640	1,780	1,020	2,230	4,910	24,820	23,260	4,410	919	123
CAL YR 1973	TOTAL 37,609.4	MEAN 103	MAX 819	MIN 1.9	AC-FT 74,600							
WTR YR 1974	TOTAL 33,936.8	MEAN 93.0	MAX 658	MIN 1.5	AC-FT 67,310							

PEAK DISCHARGE (BASE, 400 FT ³ /S)							
DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
5-9	1915	4.50	716	6-6	2030	4.86	976
5-27	2115	4.72	897	6-11	2045	4.45	683

RESERVOIRS IN TULARE LAKE BASIN, CALIF.

11214550 COURTRIGHT RESERVOIR.--Lat 37°04'40", long 118°58'05", in NW¼ sec.7, T.10 S., R.28 E., Fresno County, Sierra National Forest, at left end of dam on Helms Creek 2.5 mi (4.0 km) upstream from mouth, 4.6 mi (7.4 km) east of Nelson Mountain, and 9.7 mi (15.6 km) west of Blackcap Mountain. Drainage area, 39.7 mi² (102.8 km²). Period of record, October 1958 to current year. Water-stage recorder. Datum of gage is at mean sea level (levels by Pacific Gas and Electric Co.). Extremes for current year: Maximum contents, 115,900 acre-ft (143 hm³) July 5 (elevation, 8,179.36 ft or 2,493.069 m); minimum, 50,960 acre-ft (62.8 hm³) Nov. 5 (elevation, 8,125.59 ft or 2,476.680 m). Extremes for period of record: Maximum contents, 124,200 acre-ft (153 hm³) July 13, 1967 (elevation, 8,184.55 ft or 2,494.651 m); no contents in 1961-62, 1968, 1970.

Reservoir is formed by rockfill dam completed in 1958. Usable capacity, 123,300 acre-ft (152 hm³) between elevations 7,902 ft (2,408.5 m), invert of tunnel and 8,184 ft (2,494.5 m), elevation of spillway. Dead storage negligible. See schematic diagram of Kings River basin. Record of contents furnished by Pacific Gas and Electric Co. in connection with a Federal Power Commission project.

11214800 WISHON RESERVOIR.--Lat 37°00'20", long 118°58'00", in NW¼ sec.6, T.11 S., R.28 E., Fresno County, Sierra National Forest, on right end of dam on North Fork Kings River 1.2 mi (1.9 km) north of Cliff Camp, 1.3 mi (2.1 km) upstream from Cliff Camp gaging station, and 20 mi (32 km) southeast of town of Big Creek. Drainage area, 177 mi² (458 km²). Period of record, December 1957 to current year. Water-stage recorder. Datum of gage is at mean sea level (levels by Pacific Gas and Electric Co.). Extremes for current year: Maximum contents, 126,600 acre-ft (156 hm³) Oct. 1 (elevation, 6,548.03 ft or 1,995.840 m); minimum, 14,200 acre-ft (17.5 hm³) Apr. 29 (elevation, 6,390.85 ft or 1,947.931 m). Extremes for period of record: Maximum contents, 129,700 acre-ft (160 hm³) July 29, 1958 (elevation, 6,551.1 ft or 1,996.78 m); no contents in 1960.

Reservoir is formed by rockfill dam completed in 1957. Capacity, 128,600 acre-ft (159 hm³) between elevations 6,317 ft (1,925.4 m), bottom of slide gates and 6,550 ft (1,996.4 m), operating crest of spillway gates. Dead storage negligible. Water is diverted to Haas powerhouse for power. See schematic diagram of Kings River basin. Record of contents furnished by Pacific Gas and Electric Co. in connection with a Federal Power Commission project.

MONTHEND ELEVATION AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Courtright Reservoir				Wishon Reservoir		
Sept. 30.....	8,135.2	60,000	--	6,548.1	126,600	--
Oct. 31.....	8,125.6	51,000	-9,000	6,543.0	121,600	-5,000
Nov. 30.....	8,127.6	52,800	+1,800	6,536.3	115,000	-6,600
Dec. 31.....	8,129.2	54,200	+1,400	6,524.1	103,500	-11,500
CAL YR 1973.....	--	--	+2,500	--	--	+73,200
Jan. 31.....	8,131.4	56,200	+2,000	6,497.5	80,300	-23,200
Feb. 28.....	8,132.5	57,300	+1,100	6,454.5	48,300	-32,000
Mar. 31.....	8,135.8	60,500	+3,200	6,416.3	26,400	-21,900
Apr. 30.....	8,142.9	68,000	+7,500	6,392.2	14,800	-11,600
May 31.....	8,171.0	103,200	+35,200	6,505.2	86,800	+72,000
June 30.....	8,179.3	115,700	+12,500	6,543.1	121,600	+34,800
July 31.....	8,179.2	115,500	-200	6,520.8	100,500	-21,100
Aug. 31.....	8,153.7	80,300	-35,200	6,528.8	107,900	+7,400
Sept. 30.....	8,135.7	60,500	-19,800	6,520.1	99,900	-8,000
WTR YR 1974.....	--	--	+500	--	--	-26,700

11214600 HELMS CREEK BELOW COURTRIGHT DAM, CALIF.

LOCATION.--Lat 37°04'35", long 118°58'04", in SW¼NW¼ sec.7, T.10 S., R.28 E., Fresno County, Sierra National Forest, on left bank 500 ft (152 m) downstream from Courtright Dam, 2.5 mi (4.0 km) upstream from North Fork Kings River, and 17 mi (27 km) southeast of town of Huntington Lake.

DRAINAGE AREA.--39.7 mi² (102.8 km²).

PERIOD OF RECORD.--October 1958 to current year.

GAGE.--Water-stage recorder and broad-crested weir with V-notch. Altitude of gage is 7,840 ft (2,390 m), from Pacific Gas and Electric Co. survey.

AVERAGE DISCHARGE (adjusted for storage).--16 years, 76.5 ft³/s (2.166 m³/s), 55,420 acre-ft/yr (68.3 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 602 ft³/s (17.0 m³/s) Aug. 6 (gage height, 6.56 ft or 1.999 m); minimum daily, 2.4 ft³/s (0.068 m³/s) Jan. 6 to Feb. 17.

Period of record: Maximum discharge, 1,340 ft³/s (37.9 m³/s) Aug. 29, 1969 (gage height, 5.81 ft or 1.771 m); maximum gage height, 6.52 ft (1.987 m) June 2, 1961, Sept. 16, 1971; no flow Nov. 21-24, Dec. 1, 3-6, 1970.

REMARKS.--Flow regulated by Courtright Reservoir 500 ft (152 m) upstream since October 1958 (see sta 11214550). No diversion above station. See schematic diagram of Kings River basin.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

REVISIONS (WATER YEARS).--WSP 1715: 1959.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.4	4.3	4.7	2.5	2.4	2.5	2.5	3.5	6.4	9.2	225	550
2	3.4	4.1	4.7	2.5	2.4	2.5	2.5	3.7	6.4	9.3	589	548
3	3.4	4.1	4.7	2.5	2.4	2.5	2.5	3.7	6.4	9.3	585	545
4	3.4	4.1	4.7	2.5	2.4	2.6	2.5	3.5	6.5	9.3	585	545
5	3.4	4.1	4.7	2.5	2.4	2.6	2.5	3.6	6.5	9.3	585	543
6	3.4	4.1	3.9	2.4	2.4	2.6	2.5	3.7	6.5	9.3	582	540
7	3.4	4.1	2.5	2.4	2.4	2.6	2.7	4.0	6.7	9.3	582	539
8	131	4.2	2.5	2.4	2.4	2.6	2.7	4.3	6.7	9.3	579	539
9	248	4.6	2.5	2.4	2.4	2.6	2.6	4.4	6.7	9.4	576	538
10	247	4.7	2.5	2.4	2.4	2.6	2.6	4.4	6.7	9.5	576	535
11	248	5.7	2.5	2.4	2.4	2.6	2.6	4.4	6.7	9.7	572	533
12	247	5.7	2.5	2.4	2.4	2.6	2.7	4.5	6.7	9.9	572	432
13	246	5.1	2.5	2.4	2.4	2.6	2.9	4.6	6.7	9.9	572	250
14	246	4.9	2.5	2.4	2.4	2.7	3.0	4.8	6.7	9.9	572	250
15	245	4.9	2.5	2.4	2.4	2.8	3.0	4.9	6.8	9.9	574	250
16	244	4.9	2.5	2.4	2.4	2.8	3.0	4.9	6.9	9.9	580	250
17	244	4.9	2.5	2.4	2.4	2.8	3.1	4.9	5.4	10	580	250
18	244	4.8	2.5	2.4	2.5	2.8	2.9	4.8	4.4	11	574	250
19	244	4.7	2.5	2.4	2.5	2.9	2.9	4.7	6.1	11	575	250
20	243	4.7	2.5	2.4	2.5	2.9	2.9	4.7	6.9	11	572	248
21	243	4.7	2.5	2.4	2.5	3.1	3.0	4.8	6.7	11	573	248
22	243	4.7	2.5	2.4	2.5	3.0	3.0	5.1	6.7	11	569	248
23	243	4.7	2.5	2.4	2.5	3.0	3.0	5.3	7.1	11	569	247
24	243	4.7	2.5	2.4	2.5	3.0	2.9	5.5	8.1	11	565	90
25	109	4.7	2.5	2.4	2.5	3.0	2.9	5.6	8.1	11	561	4.6
26	4.5	4.7	2.5	2.4	2.5	2.9	2.9	5.8	8.2	11	561	5.5
27	4.4	4.7	2.5	2.4	2.5	2.9	3.0	6.0	8.7	11	558	5.5
28	4.4	4.6	2.5	2.4	2.5	2.9	3.1	6.0	9.1	11	555	5.5
29	4.4	4.7	2.5	2.4	-----	2.6	3.4	6.1	9.1	11	554	5.5
30	4.4	4.7	2.5	2.4	-----	2.5	3.5	6.1	9.1	11	552	5.5
31	4.4	-----	2.5	2.4	-----	2.5	-----	6.3	-----	11	552	-----
TOTAL	4,208.3	139.6	89.9	74.9	68.3	84.6	85.3	148.6	209.7	316.4	17,376	9,250.1
MEAN	136	4.65	2.90	2.42	2.44	2.73	2.84	4.79	6.99	10.2	561	308
MAX	248	5.7	4.7	2.5	2.5	3.1	3.5	6.3	9.1	11	589	550
MIN	3.4	4.1	2.5	2.4	2.4	2.5	2.5	3.5	4.4	9.2	225	4.6
AC-FT	8,350	277	178	149	135	168	169	295	416	628	34,470	18,350

CAL YR 1973 TOTAL 33,371.2 MEAN 91.4 MAX 522 MIN 2.2 AC-FT 66,190
WTR YR 1974 TOTAL 32,051.7 MEAN 87.8 MAX 589 MIN 2.4 AC-FT 63,570

121

DAY	OCT	NOV	DEC	JAN	FER	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	22	30	26	24	33	30	29	22	22	20	20
2	23	22	27	24	23	37	30	30	22	22	20	20
3	23	22	27	24	23	35	25	29	22	22	21	20
4	23	22	26	24	23	28	27	27	22	22	20	20
5	23	21	25	24	23	26	31	27	22	22	20	20
6	23	22	25	24	22	26	31	28	23	21	20	20
7	24	21	26	24	22	25	32	29	23	21	20	20
8	25	21	26	23	22	23	31	29	23	21	20	20
9	23	21	25	23	22	22	30	28	23	21	20	20
10	23	21	25	23	22	23	25	27	23	22	20	20
11	23	25	24	23	22	25	25	26	23	22	20	20
12	23	35	24	24	21	28	29	25	23	22	20	20
13	22	24	27	25	21	28	32	24	23	21	20	20
14	22	26	27	24	21	33	34	23	23	21	20	20
15	22	24	25	25	21	35	34	23	23	21	20	20
16	22	24	25	29	21	32	33	23	23	21	20	20
17	22	29	24	42	20	33	34	22	23	21	20	20
18	22	37	24	40	20	35	31	22	23	21	20	20
19	22	28	23	41	20	36	24	23	23	21	20	20
20	22	26	23	34	20	37	23	23	23	21	20	20
21	22	26	23	30	19	37	26	22	23	21	20	20
22	22	24	23	28	19	34	28	21	23	20	20	20
23	28	23	23	27	19	32	27	22	23	20	20	20
24	22	23	23	26	20	31	27	21	23	21	20	20
25	22	23	24	26	20	28	23	21	23	20	20	20
26	22	23	24	26	20	30	21	22	23	20	20	19
27	22	22	29	25	19	33	21	22	22	20	20	19
28	22	23	33	24	19	34	23	22	22	20	20	19
29	22	23	33	24	-----	36	26	22	22	20	20	19
30	22	23	29	24	-----	37	28	22	22	20	20	19
31	22	-----	26	24	-----	31	-----	22	-----	20	20	-----
TOTAL	703	726	798	830	588	963	841	756	681	650	621	595
MEAN	22.7	24.2	25.7	26.8	21.0	31.1	28.0	24.4	22.7	21.0	20.0	19.8
MAX	28	37	33	42	24	37	34	30	23	22	21	20
MIN	22	21	23	23	19	22	21	21	22	20	20	19
AC-FT	1,390	1,440	1,580	1,650	1,170	1,910	1,670	1,500	1,350	1,290	1,230	1,180
CAL YR 1973	TOTAL	15,111.6	MEAN	41.4	MAX	1,410	MIN	9.5	AC-FT	29,970		
WTR YR 1974	TOTAL	8,752.0	MEAN	24.0	MAX	42	MIN	19	AC-FT	17,360		

11218400 NORTH FORK KINGS RIVER BELOW DINKEY CREEK, NEAR BALCH CAMP, CALIF.

LOCATION.--Lat 36°52'47", long 119°07'40", in NW¼ sec.22, T.12 S., R.26 E., Fresno County, Sierra National Forest, on right bank 1.1 mi (1.8 km) upstream from mouth, 1.7 mi (2.7 km) south of Balch Camp, 2.1 mi (3.4 km) downstream from Dinkey Creek, and 9 mi (14 km) east of Trimmer.

DRAINAGE AREA.--387 mi² (1,002 km²).

PERIOD OF RECORD.--March 1960 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,035 ft (315.5 m), from river-profile map.

EXTREMES.--Current year: Maximum discharge, 2,590 ft³/s (73.3 m³/s) Mar. 2 (gage height, 7.45 ft or 2.271 m); minimum daily, 28 ft³/s (0.79 m³/s) Sept. 25, 29.
Period of record: Maximum discharge, 27,400 ft³/s (776 m³/s) Feb. 1, 1963 (gage height, 19.20 ft or 5.852 m), from rating curve extended above 4,900 ft³/s (139 m³/s); minimum daily, 14 ft³/s (0.40 m³/s) Aug. 26-30, 1964, Sept. 1-4, 6-23, Sept. 26 to Oct. 6, 1968.

REMARKS.--Flow regulated by Courtright Reservoir (see sta 11214550), Wishon Reservoir (see sta 11214800), Black Rock Reservoir, capacity, 1,260 acre-ft (1.55 hm³), Balch Afterbay, capacity, 318 acre-ft (392,000 m³), and Haas and Balch powerplants. Diversion from Balch Afterbay to Kings River powerhouse began Mar. 1, 1962. See schematic diagram of Kings River basin.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

REVISIONS (WATER YEARS).--WRD Calif. 1967: 1963.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30	42	196	183	168	291	527	902	980	139	55	34
2	29	41	134	148	155	1,430	947	1,070	911	133	53	34
3	30	40	141	138	159	543	488	1,140	1,020	126	52	34
4	30	39	140	150	162	384	418	1,090	997	119	60	33
5	30	38	124	150	160	348	443	1,160	1,020	114	62	33
6	30	40	122	166	163	337	448	1,340	1,010	109	56	32
7	32	50	126	265	151	324	488	1,550	863	105	52	32
8	71	48	129	211	153	299	498	1,770	754	103	50	31
9	67	43	130	172	155	268	492	1,750	653	104	49	30
10	46	50	133	145	155	270	423	1,660	603	117	47	31
11	41	151	133	136	152	267	397	1,630	583	115	46	31
12	37	829	120	168	153	295	448	1,610	544	102	44	31
13	36	246	130	166	149	303	542	1,450	494	94	44	31
14	36	173	144	150	145	340	590	1,410	453	88	43	31
15	37	139	129	156	140	399	643	1,400	412	87	43	31
16	36	120	127	206	147	405	663	1,240	370	84	42	31
17	35	197	126	388	141	375	736	1,360	334	80	41	30
18	34	761	119	363	138	393	752	1,080	302	78	41	30
19	34	233	115	401	148	423	534	930	287	74	40	30
20	32	183	110	376	132	439	462	847	268	72	40	30
21	33	168	112	301	144	453	469	851	251	70	40	29
22	33	137	138	243	135	425	601	994	238	69	38	29
23	226	125	124	226	133	419	620	1,160	228	66	38	29
24	108	118	117	210	138	433	588	1,260	212	65	37	29
25	66	108	117	206	148	450	482	1,580	195	71	36	28
26	55	112	117	201	155	382	438	1,780	182	68	36	29
27	50	99	176	179	145	410	417	1,850	170	63	36	29
28	47	109	220	180	140	506	440	1,830	160	60	36	29
29	46	118	221	176	-----	442	498	1,520	150	59	36	28
30	44	112	203	171	-----	524	711	1,140	143	59	35	29
31	42	-----	173	170	-----	470	-----	1,110	-----	57	35	-----
TOTAL	1,503	4,669	4,346	6,501	4,164	13,047	16,203	41,464	14,787	2,750	1,363	918
MEAN	48.5	156	140	210	149	421	540	1,338	493	88.7	44.0	30.6
MAX	226	829	221	401	168	1,430	947	1,850	1,020	139	62	34
MIN	29	38	110	136	132	267	397	847	143	57	35	28
AC-FT	2,980	9,260	8,620	12,890	8,260	25,880	32,140	82,240	29,330	5,450	2,700	1,820
CAL YR 1973	TOTAL 137,656		MEAN 377	MAX 2,680	MIN 29	AC-FT 273,000						
WTR YR 1974	TOTAL 111,715		MEAN 306	MAX 1,850	MIN 28	AC-FT 221,600						

TULARE LAKE BASIN

11218500 KINGS RIVER BELOW NORTH FORK, NEAR TRIMMER, CALIF.

LOCATION.--Lat 36°52'29", long 119°08'27", in SW¼NE¼ sec.21, T.12 S., R.26 E., Fresno County, on right bank 0.8 mi (1.3 km) downstream from North Fork, 2.4 mi (3.9 km) southwest of Balch Camp, and 8.5 mi (13.7 km) southeast of Trimmer.

DRAINAGE AREA.--1,342 mi² (3,476 km²).

PERIOD OF RECORD.--October 1951 to current year. Prior to January 1952 monthly discharge only, published in WSP 1735. Published as Kings River below North Fork, October 1951 to September 1965.

GAGE.--Water-stage recorder. Datum of gage is 942.42 ft (287.250 m) above mean sea level (levels by Corps of Engineers).

AVERAGE DISCHARGE (adjusted for change in contents in Wishon and Courtright Reservoirs).--23 years, 2,184 ft³/s (61.85 m³/s), 1,582,000 acre-ft/yr (1,950 hm³/yr).

EXTREMES.--Current year: Maximum daily discharge, 12,400 ft³/s (351 m³/s) May 28; minimum daily, 223 ft³/s (6.32 m³/s) Oct. 5.

Period of record: Maximum discharge, 85,200 ft³/s (2,410 m³/s) Dec. 23, 1955 (gage height, 23.08 ft or 7.035 m), from rating curve extended above 22,000 ft³/s (623 m³/s) on basis of slope-area measurement of maximum flow; minimum daily, 97 ft³/s (2.75 m³/s) Jan. 13, 1963.

Flood of Nov. 19, 1950, reached a stage of 21.6 ft (6.58 m), from floodmarks (discharge, 74,200 ft³/s or 2,100 m³/s).

REMARKS.--Records good. Flow regulated by Courtright and Wishon Reservoirs (see sta 11214550, 11214800). Records include flow diverted to Kings River powerplant since Mar. 1, 1962. This station measures inflow to Pine Flat Lake. See schematic diagram of Kings River basin. Records of water temperatures for the current year are published in Part 2 of this report.

COOPERATION.--Records of diversion to Kings River powerplant and contents for Courtright and Wishon Reservoirs furnished by Pacific Gas and Electric Co.

REVISIONS (WATER YEARS).--WSP 1930: Drainage area. WRD Calif. 1972: Adjusted data for 1971.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NCV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	235	397	1,600	1,500	1,610	1,950	3,940	5,000	10,100	4,930	2,640	909
2	230	423	746	1,540	1,600	5,540	5,670	5,870	8,970	4,890	2,660	764
3	228	271	1,140	1,400	1,520	3,080	3,730	6,510	8,930	4,340	2,100	969
4	226	282	1,290	1,670	1,520	2,710	3,260	6,560	9,770	4,210	2,070	998
5	223	608	1,210	1,690	1,550	2,600	3,200	6,020	10,000	4,040	2,250	874
6	230	361	1,210	1,710	1,500	2,430	3,170	6,380	11,200	3,660	2,030	975
7	468	383	1,160	2,080	1,350	2,250	3,160	7,300	12,000	3,330	1,950	494
8	679	460	730	2,010	1,440	2,190	3,240	8,600	10,900	3,260	1,760	366
9	800	428	664	1,650	1,420	1,700	3,300	10,200	10,100	2,900	1,710	359
10	705	295	1,070	1,530	1,500	1,760	3,080	10,500	9,680	2,650	1,290	1,100
11	703	534	1,170	1,490	1,540	1,960	2,970	10,400	9,750	2,500	1,170	1,120
12	666	3,140	1,370	1,400	1,480	2,240	3,050	10,700	9,540	2,410	1,360	1,040
13	327	2,060	1,450	1,360	1,590	2,250	3,290	9,880	9,250	2,240	1,470	953
14	892	1,830	1,480	1,480	1,300	2,260	3,470	9,370	9,000	2,220	1,320	621
15	701	1,650	1,050	1,600	1,390	2,500	3,730	9,960	8,510	2,600	1,400	669
16	645	1,550	823	1,940	1,350	2,610	3,890	9,200	7,690	2,610	1,310	984
17	652	1,640	983	2,930	1,140	2,540	4,140	8,480	6,840	2,640	1,060	808
18	508	3,000	877	2,760	1,350	2,590	4,430	7,040	5,910	2,550	952	724
19	645	1,270	808	2,660	1,550	2,650	3,800	6,080	5,740	2,530	1,100	800
20	314	909	876	2,560	1,490	2,670	3,510	5,400	5,280	1,950	1,090	749
21	294	854	1,080	2,510	1,510	2,710	3,440	5,170	5,460	2,160	1,080	687
22	330	715	884	2,340	1,480	2,690	3,860	5,360	5,890	2,310	1,070	612
23	988	660	906	1,940	1,370	2,640	3,990	6,320	6,060	2,350	1,010	672
24	1,110	630	727	1,930	1,390	2,690	3,930	6,530	5,400	2,640	772	694
25	931	742	683	1,800	1,480	2,750	3,550	8,160	5,280	2,870	734	497
26	710	605	902	1,750	1,550	2,610	3,310	10,000	4,700	2,590	986	684
27	519	532	1,170	1,520	1,570	2,670	3,220	11,700	4,410	2,070	955	804
28	320	570	1,440	1,640	1,530	3,310	3,360	12,400	4,320	1,950	1,050	592
29	487	585	1,240	1,670	-----	3,020	3,560	11,500	4,250	2,070	1,030	478
30	410	727	944	1,680	-----	3,440	4,210	10,100	4,310	2,270	1,040	639
31	437	-----	1,300	1,650	-----	3,250	-----	10,100	-----	3,130	797	-----
TOTAL	16,613	28,111	32,983	57,390	41,070	82,260	108,460	256,790	229,240	88,770	43,216	22,635
MEAN	536	937	1,064	1,851	1,467	2,654	3,615	8,284	7,641	2,864	1,394	755
MAX	1,110	3,140	1,600	2,930	1,610	5,540	5,670	12,400	12,000	4,930	2,660	1,120
MIN	223	271	664	1,360	1,140	1,700	2,970	5,000	4,250	1,950	734	359
AC-FT	32,950	55,760	65,420	113,800	81,460	163,200	215,100	509,300	454,700	176,100	85,720	44,900
MEAN a	308	856	902	1,505	911	2,350	3,544	10,030	8,438	2,518	940	287
AC-FT a	18,950	50,930	55,450	92,540	50,590	144,500	210,900	616,600	502,100	154,800	57,790	17,100
CAL YR 1973 TOTAL	982,263			MEAN 2,691		MAX 14,200	MIN 223	AC-FT 1,948,000	MEAN a 2,796	AC-FT a2,024,000		
WTR YR 1974 TOTAL	1,007,538			MEAN 2,760		MAX 12,400	MIN 223	AC-FT 1,998,000	MEAN a 2,724	AC-FT a1,972,000		

a Adjusted for change in contents in Wishon and Courtright Reservoirs.

11221000 PINE FLAT LAKE NEAR PIEDRA, CALIF.

LOCATION.--Lat 36°49'58", long 119°19'29", in SE¼NE¼ sec.2, T.13 S., R.24 E., Fresno County, near center of Pine Flat Dam on Kings River, 1.9 mi (3.1 km) upstream from Mill Creek, 3.5 mi (5.6 km) northeast of Piedra, and 16 mi (26 km) northeast of Sanger.

DRAINAGE AREA.--1,545 mi² (4,002 km²).

PERIOD OF RECORD.--October 1951 to current year. Prior to October 1970, published as "Pine Flat Reservoir."

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Corps of Engineers). Prior to Apr. 8, 1952, nonrecording mercury gage on dam at same datum.

EXTREMES.--Current year: Maximum contents, 1,009,000 acre-ft (1.24 km³) June 8, 9 (elevation, 952.75 ft or 290.398 m); minimum, 425,200 acre-ft (524 hm³) Oct. 1 (elevation, 831.44 ft or 253.423 m).

Period of record: Maximum contents, 1,009,000 acre-ft (1.24 km³) July 15, 1967, June 8, 9, 1974 (elevation, 952.76 ft or 290.401 m); minimum since gross pool elevation first obtained, 194,342 acre-ft (240 hm³) Sept. 5, 1972 (elevation, 757.18 ft or 230.788 m).

REMARKS.--Reservoir is formed by gravity-type concrete dam; regulation of discharge from reservoir began Dec. 4, 1951. Total capacity, 1,002,000 acre-ft (1.24 km³) between elevations 565.5 ft (172.36 m), bottom of lower tier of river outlets and 951.5 ft (290.02 m), gross pool elevation. No dead storage. Reservoir is used for flood control and conservation storage. Water is released down Kings River for diversion by the Kings River Water Association. Records, including extremes, represent contents at 2400 hours. See schematic diagram of Kings River basin.

COOPERATION.--Records furnished by Corps of Engineers, rounded to Geological Survey standards.

REVISIONS.--WSP 1930: Drainage area.

CAPACITY TABLE (ELEVATION, IN FEET, AND CONTENTS, IN ACRE-FEET)

715	104,400	840	457,750
720	113,400	860	538,750
740	154,000	890	673,401
760	201,424	920	824,151
780	255,450	950	992,551
800	316,150	960	1,053,000
820	383,550		

BW @ 980,000 ± @ 942.72

CONTENTS, IN THOUSANDS OF ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	425.2	453.3	513.2	545.3	657.2	690.5	793.3	813.2	975.9	949.4	713.8	525.6
2	425.3	454.0	514.9	547.1	660.3	699.6	808.1	811.8	980.6	944.5	705.8	523.1
3	425.5	454.5	517.2	547.9	663.3	704.7	816.4	812.2	985.1	938.4	697.4	521.1
4	425.7	454.9	519.9	548.8	666.3	707.4	823.4	813.9	989.8	932.6	689.1	519.2
5	425.9	456.0	522.0	552.4	669.4	709.3	829.9	814.7	994.1	926.4	681.3	516.9
6	426.1	456.6	523.8	555.8	672.4	710.7	836.6	816.4	999.3	919.8	673.5	515.0
7	426.9	457.4	525.4	561.8	674.9	712.0	843.3	820.2	1,005	912.6	664.9	512.3
8	428.2	458.1	526.3	566.6	677.6	713.7	849.8	826.4	1,009	905.3	656.2	509.3
9	429.6	459.0	527.0	570.3	680.4	714.5	856.5	835.0	1,009	898.3	647.7	506.2
10	430.9	459.5	528.3	573.7	683.2	715.3	862.5	844.4	1,008	891.1	638.9	504.3
11	432.2	460.4	529.5	577.0	686.2	716.6	867.9	854.8	1,008	884.0	631.1	502.6
12	433.4	462.2	531.2	580.2	689.2	718.2	873.2	865.9	1,008	876.9	625.1	500.7
13	434.0	471.2	533.1	583.3	692.2	719.7	876.7	876.0	1,008	869.5	619.1	498.7
14	435.6	474.9	535.1	586.5	694.5	721.7	879.1	885.6	1,007	862.0	613.0	496.2
15	436.8	478.2	536.2	590.0	696.7	724.1	880.8	896.1	1,006	855.2	606.8	493.6
16	438.0	481.0	536.8	594.4	698.7	726.6	881.6	904.6	1,003	848.1	600.8	491.6
17	439.2	484.3	537.5	601.3	700.1	728.9	880.0	910.2	999.9	841.0	594.0	489.4
18	440.0	491.2	537.2	607.4	701.7	731.7	878.0	912.3	996.9	833.4	587.1	487.1
19	441.1	493.8	536.9	613.0	702.4	735.5	874.2	912.8	994.3	825.5	580.8	485.1
20	441.5	495.6	536.6	619.5	701.8	739.8	869.5	912.0	990.8	816.7	575.1	483.3
21	442.0	497.4	536.8	625.4	701.3	744.1	864.2	910.7	988.0	808.0	569.4	481.4
22	442.7	498.9	537.0	630.5	700.8	748.3	859.6	910.0	986.1	799.8	564.0	479.5
23	444.6	500.2	537.1	634.8	700.1	751.9	854.6	910.6	984.6	791.7	559.1	477.8
24	446.5	501.6	536.7	638.9	699.1	754.8	849.5	911.6	981.9	784.0	554.3	476.5
25	448.1	503.0	536.4	642.5	697.5	757.2	843.7	915.9	979.1	775.9	549.3	474.7
26	449.3	504.3	536.5	645.2	695.4	758.9	837.7	923.8	975.1	766.7	545.1	473.0
27	450.1	505.5	537.8	647.5	692.9	761.0	831.6	934.1	970.3	756.9	541.2	471.4
28	450.6	506.6	539.7	649.8	690.8	766.3	825.9	945.6	965.2	747.1	537.4	469.3
29	451.0	507.8	541.0	651.2	-----	770.6	820.8	955.8	959.7	737.9	534.1	467.2
30	452.0	509.1	541.7	652.7	-----	778.8	816.3	963.5	954.2	728.9	530.5	465.8
31	452.6	-----	543.2	654.3	-----	782.1	-----	970.3	-----	721.6	527.9	-----
MAX	452.6	509.1	543.2	654.3	702.4	782.1	881.6	970.3	1,009	949.4	713.8	525.6
MIN	425.2	453.3	513.2	545.3	657.2	690.5	793.3	811.8	954.2	721.6	527.9	465.8
(a)	838.66	852.87	861.04	885.95	893.64	911.98	918.52	946.21	943.44	899.97	857.42	842.06
(b)	+26,883	+56,528	+34,055	+111,153	+36,503	+91,323	+34,171	+153,967	-16,098	-232,565	-193,684	-62,140
(c)	1,257	512	245	249	451	683	1,471	2,793	3,862	3,939	3,133	2,638

CAL YR 1973 b +217,420

WTR YR 1974 b +40,096

a Elevation, in feet, at end of month.

b Change in contents, in acre-feet.

c Evaporation, in acre-feet.

TULARE LAKE BASIN

11221500 KINGS RIVER BELOW PINE FLAT DAM, CALIF.

LOCATION.--Lat 36°49'50", long 119°20'07", in SW¼NW¼ sec.2, T.13 S., R.24 E., Fresno County, on right bank 3,200 ft (975 m) downstream from Pine Flat Dam, and 2.9 mi (4.7 km) northeast of Piedra.

DRAINAGE AREA.--1,545 mi² (4,002 km²).

PERIOD OF RECORD.--October 1953 to current year. Monthly and yearly discharges only and adjusted flow for some periods published in WSP 1735.

GAGE.--Water-stage recorder and concrete control since Sept. 1, 1956. Datum of gage is 556.97 ft (169.764 m) above mean sea level (levels by Corps of Engineers). Prior to Oct. 1, 1956, at site 0.2 mi (0.3 km) downstream at datum 3.48 ft (1.061 m) lower.

AVERAGE DISCHARGE (adjusted for change in contents and evaporation).--21 years, 2,247 ft³/s (63.64 m³/s), 1,628,000 acre-ft/yr (2.01 km³/yr).

EXTREMES.--Current year: Maximum discharge, 11,200 ft³/s (317 m³/s) June 9 (gage height, 8.99 ft or 2.740 m); minimum daily, 24 ft³/s (0.68 m³/s) Jan. 19.
Period of record: Maximum discharge, 17,100 (484 m³/s) June 3, 4, 8, 9, 1969 (gage height, 10.73 ft or 3.271 m); minimum, 1.1 ft³/s (0.031 m³/s) Feb. 26, 27, 1962.

REMARKS.--Records excellent. Flow regulated by Pine Flat Lake 0.6 mi (1.0 km) upstream (see sta 11221000) and Wishon and Courtright Reservoirs (see sta 11214550 and 11214800). See schematic diagram of Kings River basin. Records of water temperatures for the current year are published in Part 2 of this report.

COOPERATION.--One discharge measurement furnished by Kings River Water Association.

REVISIONS.--WSP 1930: Drainage area. WRD Calif. 1972: Adjusted discharge.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	483	76	49	635	314	2,560	613	6,630	7,140	7,270	6,590	1,980
2	155	74	30	758	109	2,250	89	6,680	7,190	7,340	6,430	1,920
3	150	74	45	982	117	1,750	190	6,360	7,180	7,330	6,160	1,910
4	112	74	61	817	110	1,770	254	5,800	7,420	7,120	6,090	1,900
5	124	74	184	607	97	1,900	283	5,670	8,150	7,080	6,050	1,880
6	152	74	366	573	105	1,970	171	5,570	8,770	6,930	6,010	1,850
7	165	74	366	129	131	1,900	158	5,490	9,190	6,890	6,060	1,800
8	144	74	379	31	144	1,690	148	5,580	9,570	6,840	6,060	1,780
9	90	74	396	32	97	1,560	275	5,750	10,700	6,400	5,850	1,880
10	88	75	470	49	100	1,560	341	5,610	10,000	6,190	5,690	1,910
11	84	76	538	55	100	1,570	448	5,070	10,300	6,030	5,080	1,860
12	70	74	542	27	100	1,560	582	4,880	10,000	5,920	4,370	1,850
13	80	58	542	28	108	1,610	1,730	4,830	9,480	5,840	4,430	1,850
14	83	47	525	28	201	1,490	2,390	4,590	9,480	5,890	4,390	1,820
15	83	71	539	28	321	1,440	3,000	4,570	9,500	5,980	4,300	1,820
16	83	70	581	28	446	1,440	3,680	4,900	9,500	6,140	4,390	1,870
17	84	120	666	27	506	1,530	5,030	5,630	8,680	6,180	4,420	1,860
18	84	93	952	25	558	1,260	5,530	5,940	7,530	6,270	4,340	1,820
19	83	110	968	24	1,260	815	5,890	5,870	7,080	6,290	4,210	1,760
20	83	78	968	26	1,750	613	6,090	5,850	7,030	6,300	4,010	1,640
21	83	42	950	26	1,780	638	6,290	5,860	6,930	6,360	3,960	1,550
22	84	42	883	26	1,730	650	6,360	5,880	6,770	6,370	3,760	1,520
23	97	42	868	26	1,710	884	6,710	6,090	6,760	6,300	3,460	1,440
24	111	42	880	26	1,870	1,290	6,770	6,120	6,680	6,500	3,190	1,310
25	110	42	892	113	2,300	1,530	6,670	6,130	6,650	6,900	3,180	1,340
26	106	42	909	502	2,560	1,790	6,520	6,100	6,730	7,120	3,020	1,460
27	103	42	808	502	2,800	1,700	6,480	6,120	6,790	7,040	2,900	1,580
28	103	42	605	617	2,610	1,200	6,370	6,130	6,940	6,880	2,880	1,540
29	103	42	631	998	-----	1,010	6,380	6,120	7,020	6,750	2,670	1,510
30	104	52	666	1,000	-----	755	6,580	6,130	7,130	6,800	2,830	1,310
31	104	-----	695	839	-----	694	-----	6,660	-----	6,730	2,020	-----
TOTAL	3,588	1,970	17,954	9,584	24,039	44,379	102,022	178,610	242,290	203,980	138,800	51,520
MEAN	116	65.7	579	309	859	1,432	3,401	5,762	8,076	6,580	4,477	1,717
MAX	483	120	968	1,000	2,800	2,560	6,770	6,680	10,700	7,340	6,590	1,980
MIN	70	42	30	24	97	613	89	4,570	6,650	5,840	2,020	1,310
AC-FT	7,120	3,910	35,610	19,010	47,680	88,030	202,400	354,300	480,600	404,600	275,300	102,200
MEAN a	346	943	975	1,774	968	2,623	3,929	10,060	8,668	2,514	924	250
AC-FT a	21,260	56,120	59,940	109,100	53,760	161,300	233,800	618,300	515,800	154,600	56,820	14,890
CAL YR 1973 TOTAL	919,590			MEAN 2,519	MAX 7,870	MIN 27	AC-FT 1,824,000	MEAN a 2,952	AC-FT a 2,137,000			
WTR YR 1974 TOTAL	1,018,736			MEAN 2,791	MAX 10,700	MIN 24	AC-FT 2,021,000	MEAN a 2,840	AC-FT a 2,056,000			

a Adjusted for change in contents in Wishon and Courtright Reservoirs, Pine Flat Lake, and evaporation from Pine Flat Lake.

11221700 MILL CREEK NEAR PIEDRA, CALIF.

LOCATION.--Lat 36°49'07", long 119°20'27", in NE¼NE¼ sec.10, T.13 S., R.24 E., Fresno County, on left bank 150 ft (46 m) upstream from road bridge, 0.7 mi (1.1 km) upstream from mouth, and 2.3 mi (3.7 km) east of Piedra.

DRAINAGE AREA.--127 mi² (329 km²).

PERIOD OF RECORD.--October 1957 to current year in reports of Geological Survey. November 1938 to September 1957 in reports of Kings River Water Association.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 550 ft (168 m), from topographic map. Prior to July 14, 1958, at site 150 ft (46 m) upstream at same datum.

AVERAGE DISCHARGE.--17 years, 40.9 ft³/s (1.158 m³/s), 29,630 acre-ft/yr (36.5 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 5,700 ft³/s (161 m³/s) Apr. 1 (gage height, 6.89 ft or 2.100 m); no flow for several months.
Period of record: Maximum discharge, 11,000 ft³/s (311 m³/s) Dec. 6, 1966 (gage height, 9.53 ft or 2.905 m in gage well, 10.2 ft or 3.11 m, from floodmarks); maximum gage height, 9.65 ft (2.941 m) in gage well, Jan. 19, 1969 (backwater from debris); no flow for several months in most years.

REMARKS.--Records good. Some small diversions above station for irrigation. See schematic diagram of Kings River basin.

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	45	94	56	35	811	48	14	1.6		
2		0	58	60	54	236	1,810	46	14	1.4		
3		0	26	43	50	382	354	44	13	1.1		
4		0	19	43	48	222	238	44	12	1.1		
5		0	16	64	46	159	186	44	12	.90		
6		0	14	107	52	148	156	43	11	.70		
7		0	13	405	44	142	139	39	10	.50		
8		0	12	211	41	159	129	38	10	.50		
9		0	12	116	39	132	132	35	8.8	.50		
10		0	12	88	38	119	126	33	7.6	.50		
11		0	11	72	36	111	114	33	7.0	.50		
12		7.2	10	117	35	102	104	31	6.4	1.4		
13		15	11	109	43	97	97	28	5.9	1.4		
14		8.2	14	85	38	92	90	28	5.9	1.1		
15		7.0	13	77	36	83	83	27	5.9	.90		
16		5.4	12	79	35	79	81	27	5.4	.70		
17		5.9	12	174	35	74	74	27	5.4	.35		
18		65	11	129	33	68	72	27	5.9	.10		
19		35	11	111	36	66	74	28	5.9	.10		
20		18	10	254	41	60	72	28	5.9	.05		
21		14	11	313	33	56	68	27	5.9	0		
22		12	27	164	30	54	64	24	5.4	0		
23		10	26	132	30	54	62	23	4.6	0		
24		9.5	18	111	28	50	68	23	3.8	0		
25		9.5	15	97	27	46	66	20	3.4	0		
26		9.5	14	90	27	46	62	18	3.1	0		
27		8.8	52	79	27	50	58	16	2.8	0		
28		8.2	48	74	27	134	56	15	2.8	0		
29		8.2	30	68	-----	114	54	15	2.5	0		
30		8.2	26	64	-----	125	52	15	1.9	0		
31		-----	24	60	-----	144	-----	14	-----	0		-----
TOTAL	0	264.6	633	3,690	1,065	3,439	5,552	908	208.2	15.40	0	0
MEAN	0	8.82	20.4	119	38.0	111	185	29.3	6.94	.50	0	0
MAX	0	65	58	405	56	382	1,810	48	14	1.6	0	0
MIN	0	0	10	43	27	35	52	14	1.9	0	0	0
AC-FT	0	525	1,260	7,320	2,110	6,820	11,010	1,800	413	31	0	0
CAL YR 1973	TOTAL	20,028.89	MEAN	54.9	MAX	1,150	MIN	0	AC-FT	39,730		
WTR YR 1974	TOTAL	15,775.20	MEAN	43.2	MAX	1,810	MIN	0	AC-FT	31,290		

PEAK DISCHARGE (BASE, 250 FT ³ /S)							
DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
1-7	1000	4.10	566	3-2	1200	3.80	376
1-17	1300	3.58	270	3-3	1100	4.10	566
1-20	2200	4.23	665	4-1	2400	6.89	5,700

TULARE LAKE BASIN

11224500 LOS GATOS CREEK ABOVE NUNEZ CANYON, NEAR COALINGA, CALIF.

LOCATION.--Lat 36°12'53", long 120°28'11", in NW¼SE¼ sec.5, T.20 S., R.14 E., Fresno County, on right bank 50 ft (15 m) downstream from highway bridge, 1.1 mi (1.8 km) upstream from Nunez Canyon, 3.0 mi (4.8 km) downstream from White Creek, and 8.1 mi (13.0 km) northwest of Coalinga.

DRAINAGE AREA.--95.8 mi² (248.1 km²).

PERIOD OF RECORD.--May 1945 to current year. Prior to October 1949 monthly discharge only, published in WSP 1315-A.

GAGE.--Water-stage recorder. Datum of gage is 1,067.2 ft (325.28 m) above mean sea level. Prior to Aug. 2, 1959, at site 100 ft (30 m) downstream at same datum.

AVERAGE DISCHARGE.--29 years, 4.18 ft³/s (0.118 m³/s), 3,030 acre-ft/yr (3.74 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 312 ft³/s (8.84 m³/s) Jan. 7 (gage height, 6.25 ft or 1.905 m), from rating curve extended above 149 ft³/s (4.22 m³/s); no flow for several months.
Period of record (1949 to current year): Maximum discharge, 4,360 ft³/s (123 m³/s) Feb. 24, 1969 (gage height, 10.34 ft or 3.152 m in gage well, 11.30 ft or 3.444 m, from floodmarks), from rating curve extended above 800 ft³/s (22 m³/s) on basis of slope-area measurement at gage height 10.34 ft (3.152 m); no flow for several months in each year.

REMARKS.--Records good. Minor diversion for irrigation and stock ponds.

REVISIONS (WATER YEARS).--WSP 1215: 1950. WSP 1735: 1952(M), 1956(M). WSP 1930: Drainage area.
WRD Calif. 1972: 1970(P), 1971(P).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NCV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	75	.80	3.3	2.1	11	2.6	.36	.01		
2		0	25	.65	3.3	18	18	2.6	.36	.01		
3		0	10	.65	3.3	34	11	2.6	.22	.01		
4		0	5.0	1.4	3.3	16	9.9	2.9	.16	.01		
5		0	3.5	1.8	3.3	8.9	8.4	2.9	.10	.01		
6		0	2.5	11	3.3	7.4	7.9	2.9	.05	.02		
7		0	1.5	128	2.9	15	7.0	2.6	.03	.02		
8		0	1.0	86	2.9	49	6.6	2.3	.03	.03		
9		0	.80	32	2.9	20	7.0	2.0	.03	.10		
10		0	.60	17	2.6	17	7.0	2.0	.02	.16		
11		0	.50	12	2.6	13	6.6	2.0	.01	.16		
12		0	.43	22	2.6	11	5.7	1.8	.02	.16		
13		0	.37	23	2.9	9.9	5.7	1.8	.02	.10		
14		0	.21	15	2.6	8.9	4.5	1.8	.02	.10		
15		0	.21	12	2.6	8.4	5.3	1.6	.02	.05		
16		0	.21	12	2.6	7.9	4.9	1.6	.03	.05		
17		0	.21	34	2.3	7.4	4.9	1.8	.05	.03		
18		.02	.37	17	2.3	7.4	4.9	2.0	.03	.02		
19		0	.45	11	2.0	10	5.7	2.3	.05	.01		
20		0	.45	10	2.0	7.9	5.3	2.0	.05	0		
21		0	.55	9.4	1.8	6.6	3.7	1.8	.05	0		
22		0	1.2	7.4	1.6	6.1	4.1	1.6	.03	0		
23		0	1.1	7.0	1.6	6.1	4.5	1.2	.02	0		
24		0	.80	6.1	1.6	5.7	6.1	1.0	.01	0		
25		0	.65	5.7	1.4	7.0	5.7	.85	.01	0		
26		0	.65	5.3	1.4	7.9	5.3	.55	.01	0		
27		0	.65	4.9	1.4	6.1	4.5	.45	.01	0		
28		0	.55	4.9	1.2	27	3.7	.36	.01	0		
29		0	.55	4.5	-----	16	3.3	.45	.01	0		
30		0	.55	4.1	-----	16	2.9	.55	.01	0		
31		-----	.65	3.7	-----	13	-----	.45	-----	0		-----
TOTAL	0	.02	136.21	510.30	67.6	396.7	191.1	53.36	1.83	1.06	0	0
MEAN	0	.0007	4.39	16.5	2.41	12.8	6.37	1.72	.061	.034	0	0
MAX	0	.02	75	128	3.3	49	18	2.9	.36	.16	0	0
MIN	0	0	.21	.65	1.2	2.1	2.9	.36	.01	0	0	0
AC-FT	0	.04	270	1,010	134	787	379	106	3.6	2.1	0	0

CAL YR 1973 TOTAL 2,783.05 MEAN 7.62 MAX 255 MIN 0 AC-FT 5,520
WTR YR 1974 TOTAL 1,358.18 MEAN 3.72 MAX 128 MIN 0 AC-FT 2,690

PEAK DISCHARGE (BASE, 40 FT ³ /S)							
DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
12-1	unknown	5.97	186	3-3	0730	5.10	69
1-7	2200	6.25	312	3-8	0200	5.27	96
1-12	2400	4.88	41	3-28	1500	4.95	49
1-17	1300	5.18	81				

SAN JOAQUIN RIVER BASIN

11226500 SAN JOAQUIN RIVER AT MILLER CROSSING, CALIF.

LOCATION.--Lat 37°30'38", long 119°11'47", in SE¼NE¼ sec.11, T.5 S., R.25 E., Madera County, Sierra National Forest, on right bank at Miller Crossing, 2.4 mi (3.9 km) downstream from North Fork San Joaquin River, 4.6 mi (7.4 km) east of Clover Meadow Ranger Station, and 23 mi (37 km) northeast of town of Bass Lake.

DRAINAGE AREA.--249 mi² (645 km²).

PERIOD OF RECORD.--October 1921 to September 1928, October 1951 to current year. Monthly discharge only for some periods, published in WSP 1315-A. Prior to October 1954, published as Middle Fork San Joaquin River at Miller Bridge.

GAGE.--Water-stage recorder. Altitude of gage is 4,570 ft (1,393 m), from topographic map. Prior to Mar. 24, 1922, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--30 years, 599 ft³/s (16.96 m³/s), 434,000 acre-ft/yr (535 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 5,210 ft³/s (148 m³/s) May 27 (gage height, 16.72 ft or 5.096 m); minimum daily, 52 ft³/s (1.47 m³/s) Oct. 5, 6.
Period of record: Maximum discharge, 16,600 ft³/s (470 m³/s) Dec. 23, 1955 (gage height, 21.28 ft or 6.486 m), from rating curve extended above 5,200 ft³/s (147 m³/s) on basis of contracted-opening measurement of maximum flow; minimum, 19 ft³/s (0.54 m³/s) Nov. 17, 1961.

REMARKS.--Records good. No regulation or diversion above station. See schematic diagram of San Joaquin River basin.

COOPERATION.--Gage-height record and nine discharge measurements furnished by Southern California Edison Co., in connection with a Federal Power Commission project.

REVISIONS.--WSP 1930: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	55	107	269	290	243	586	525	1,470	3,160	1,680	935	141
2	55	95	278	232	228	684	561	1,690	2,830	1,520	649	136
3	54	81	303	310	230	349	484	1,840	3,050	1,430	615	134
4	53	63	274	280	234	352	467	1,720	3,090	1,320	565	134
5	52	80	258	260	230	428	525	1,900	3,410	1,300	641	134
6	52	99	260	250	220	425	557	2,380	4,030	1,200	549	133
7	63	126	265	270	218	376	615	2,870	4,010	1,060	470	131
8	94	116	265	260	212	340	636	3,430	3,460	968	418	128
9	80	101	267	250	214	320	602	3,530	3,130	887	379	125
10	74	549	269	245	214	314	506	3,330	3,210	1,130	358	122
11	80	2,470	269	234	212	312	506	3,300	3,410	825	334	120
12	84	1,930	251	256	210	361	590	3,460	3,420	684	314	117
13	94	680	271	260	203	370	689	3,090	3,260	667	295	114
14	93	525	278	247	197	418	835	2,960	3,190	707	276	108
15	88	431	265	312	193	502	980	3,090	2,930	720	254	101
16	82	403	265	473	195	521	1,020	2,650	2,620	748	234	96
17	77	598	256	654	179	491	1,150	2,060	2,270	711	220	92
18	73	565	241	615	181	495	1,150	1,600	2,020	662	212	87
19	70	447	226	767	199	484	820	1,350	1,840	641	208	83
20	70	391	218	561	184	502	739	1,200	1,710	628	197	80
21	76	343	220	447	182	537	786	1,200	1,890	649	186	77
22	78	295	230	370	181	541	1,050	1,430	2,030	693	175	76
23	212	267	243	349	172	557	1,080	1,640	2,010	675	172	75
24	145	262	234	323	182	615	877	2,060	1,830	684	170	75
25	142	243	228	317	191	611	711	2,940	1,690	980	170	74
26	125	238	226	295	197	521	628	3,640	1,560	914	165	75
27	120	228	290	276	184	514	590	4,000	1,490	734	159	75
28	124	243	379	269	181	557	671	4,150	1,520	645	156	73
29	114	254	502	260	-----	561	800	3,740	1,610	624	154	71
30	100	238	412	256	-----	654	1,100	3,350	1,670	919	154	70
31	111	-----	326	254	-----	518	-----	3,350	-----	1,100	150	-----
TOTAL	2,790	12,468	8,538	10,442	5,666	14,816	22,250	80,420	77,350	28,105	9,934	3,057
MEAN	90.0	416	275	337	202	478	742	2,594	2,578	907	320	102
MAX	212	2,470	502	767	243	684	1,150	4,150	4,030	1,680	935	141
MIN	52	63	218	232	172	312	467	1,200	1,490	624	150	70
AC-FT	5,530	24,730	16,940	20,710	11,240	29,390	44,130	159,500	153,400	55,750	19,700	6,060

CAL YR 1973 TOTAL 260,595 MEAN 714 MAX 4,520 MIN 52 AC-FT 516,900
WTR YR 1974 TOTAL 275,836 MEAN 756 MAX 4,150 MIN 52 AC-FT 547,100

PEAK DISCHARGE (BASE, 2,000 FT ³ /S)							
DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-11	2100	15.65	3,640	6-6	2130	16.68	5,150
5-8	2100	16.37	4,660	6-22	2230	14.58	2,400
5-27	2130	16.72	5,210	7-30	1900	14.56	2,380

11228500 GRANITE CREEK NEAR CATTLE MOUNTAIN, CALIF.

LOCATION.--Lat 37°31'36", long 119°15'28", in NE¼ sec.5, T.5 S., R.25 E., Madera County, Sierra National Forest, on right bank 0.7 mi (1.1 km) downstream from confluence of East and West Forks of Granite Creek, 1.6 mi (2.6 km) northwest of Cattle Mountain, and 21 mi (34 km) northeast of town of Bass Lake.

DRAINAGE AREA.--47.8 mi² (123.8 km²).

PERIOD OF RECORD.--October 1921 to September 1928, May 1952 to current year (no winter records). Monthly discharge only for some periods, published in WSP 1315-A.

GAGE.--Water-stage recorder. Altitude of gage is 6,800 ft (2,073 m), from topographic map. Prior to May 14, 1922, nonrecording gage at same site at different datum.

AVERAGE DISCHARGE.--7 years (1921-28), 110 ft³/s (3.115 m³/s), 79,640 acre-ft/yr (98.2 hm³/yr).

EXTREMES.--Current year: Maximum discharge recorded, 1,500 ft³/s (42.5 m³/s) June 7 (gage height, unknown); minimum daily, 0.44 ft³/s (0.012 m³/s) Sept. 23-25.
Period of record: Maximum discharge recorded, 3,140 ft³/s (88.9 m³/s) Dec. 23, 1964 (gage height, 9.49 ft or 2.893 m), from rating curve extended above 1,100 ft³/s (31.2 m³/s); no flow at times in 1924, 1926.

REMARKS.--Records poor. Some regulation by manipulation of stoplogs in controls for fishwater purposes; no diversion above station. See schematic diagram of San Joaquin River basin.

COOPERATION.--Gage-height record and four discharge measurements furnished by Southern California Edison Co., in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.7	30	60		59	38	75	300	700	348	52	1.8
2	1.7	25	66		58	61	76	370	700	339	30	1.8
3	1.7	16	72		83	80	70	400	700	333	56	1.8
4	1.7	9.4	70		49	110	68	370	800	305	63	1.8
5	1.7	9.8	64		64	84	83	370	900	291	70	1.6
6	4.2	19	58		59	59	100	450	1,000	269	51	1.6
7	7.8	45	54		63	52	132	580	1,000	247	29	1.6
8	4.5	37	54		53	49	140	700	900	234	22	1.6
9	4.5	26	54		54	48	124	850	800	242	17	1.4
10	4.5	163	54		51	46	100	850	800	333	14	1.4
11	4.5	212	54		54	43	103	820	720	285	12	1.4
12	4.5	193	54		59	43	146	820	720	219	10	1.4
13	4.5	174	54		52	48	161	820	650	195	7.8	1.2
14	4.5	119	54		46	67	190	820	580	150	6.4	1.2
15	4.5	37	54		44	95	220	750	500	100	5.6	1.2
16	4.5	31	53		44	100	240	650	400	70	4.9	1.2
17	4.5	27	53		45	92	250	550	300	50	4.2	.91
18	4.5	130	53		46	90	250	450	300	31	3.6	.84
19	4.5	103	52		42	101	250	400	350	29	3.0	.77
20	3.3	90	48		46	108	200	370	364	26	2.7	.54
21	3.3	84	46		45	134	220	300	358	27	2.3	.54
22	3.3	74	51		38	138	250	350	358	27	2.0	.54
23	15	68	53		39	142	250	470	355	35	2.3	.44
24	15	62	53		42	154	220	600	345	46	2.0	.44
25	18	56	53		45	150	200	750	345	64	2.3	.44
26	20	52	51		48	132	170	850	345	44	2.3	.65
27	27	50	49		45	98	160	950	351	29	2.0	.91
28	35	50	54		44	89	170	850	348	22	2.0	.77
29	31	50	103		-----	87	200	800	345	20	2.0	.77
30	27	50	95		-----	90	250	750	348	70	2.0	.54
31	31	-----	79		-----	79	-----	720	-----	106	2.0	-----
TOTAL	303.4	2,092.2	1,822		1,417	2,707	5,068	19,080	16,682	4,586	487.4	33.10
MEAN	9.79	69.7	58.8		50.6	87.3	169	615	556	148	15.7	1.10
MAX	35	212	103		83	154	250	950	1,000	348	70	1.8
MIN	1.7	9.4	46		38	38	68	300	300	20	2.0	.44
AC-FT	602	4,150	3,610		2,810	5,370	10,050	37,850	33,090	9,100	967	66

NOTE.--No gage-height record Apr. 13 to June 30.

SAN JOAQUIN RIVER BASIN

11229500 WARD TUNNEL INTAKE AT FLORENCE LAKE, CALIF.

LOCATION.--Lat 37°16'27", long 118°58'23", in NW¼ sec.1, T.8 S., R.27 E., Fresno County, Sierra National Forest, in gatehouse at entrance to tunnel.

PERIOD OF RECORD.--April 1925 to current year. Monthly discharge only for some periods, published in WSP 1315-A. Published as Florence Lake tunnel at intake 1925-36 and as Ward tunnel at intake 1937-60.

GAGE.--Water-stage recorder, concrete control, and Venturi meter. Datum of gage is 7,213.89 ft (2,198.794 m) above mean sea level (levels by Southern California Edison Co.).

AVERAGE DISCHARGE.--49 years, 280 ft³/s (7.930 m³/s), 202,900 acre-ft/yr (250 hm³/yr).

EXTREMES.--Period of record: Maximum daily discharge, 1,990 ft³/s (56.4 m³/s) Apr. 30, 1926; no flow at times.

REMARKS.--Records good. Ward tunnel diverts from Florence Lake, a reservoir on South Fork San Joaquin River, to Huntington Lake for use in Big Creek powerplants. See schematic diagram of San Joaquin River basin.

COOPERATION.--Gage-height record and rating table for Venturi meter furnished by Southern California Edison Co., in connection with a Federal Power Commission project.

REVISIONS (WATER YEARS).--WSP 1515: 1931. WRD Calif. 1967: 1966.

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	475	348	92	127	103	77	192	416	1,220	1,250	546	239
2	174	337	100	112	94	99	191	480	1,180	1,180	540	239
3	5.0	321	139	113	96	106	204	546	1,120	1,050	491	235
4	324	306	134	120	95	133	194	572	1,130	1,000	491	230
5	598	363	122	118	92	156	213	584	1,140	720	421	230
6	591	385	119	117	90	186	225	615	1,100	840	380	230
7	582	298	120	116	90	196	233	670	1,050	1,050	531	225
8	580	152	122	150	90	168	246	741	1,000	710	701	225
9	312	67	118	160	87	151	243	807	1,020	452	752	225
10	3.7	64	117	133	89	143	208	850	1,100	480	852	225
11	3.7	170	115	126	85	136	200	888	1,150	598	893	432
12	223	96	105	126	86	140	220	923	1,090	489	888	544
13	593	1.5	114	127	82	143	246	949	1,070	443	621	542
14	584	174	122	122	82	161	282	967	1,080	593	450	542
15	576	482	117	126	82	195	316	993	1,090	528	484	540
16	495	410	117	143	81	205	335	1,010	1,140	526	482	536
17	383	282	115	182	73	192	363	1,020	1,200	577	480	595
18	378	214	104	196	77	197	388	1,030	1,200	560	480	617
19	371	196	97	240	79	201	364	1,030	1,200	495	477	614
20	366	181	95	210	72	199	329	1,010	1,240	475	477	611
21	363	160	94	175	77	200	309	1,250	1,220	475	412	607
22	358	135	96	148	75	199	334	1,470	1,210	473	473	604
23	355	124	108	148	72	200	351	1,410	1,210	581	471	598
24	350	119	114	137	73	209	340	1,250	1,210	722	471	595
25	376	111	107	134	77	218	300	1,170	1,210	704	469	591
26	407	111	106	126	80	199	260	1,200	1,240	1,050	385	590
27	398	101	112	116	78	192	241	1,030	1,250	807	296	586
28	390	105	135	116	75	201	261	1,030	1,250	564	265	582
29	380	107	173	111	-----	212	297	1,150	1,250	524	239	581
30	371	105	166	108	-----	218	345	1,180	1,250	532	239	577
31	359	-----	136	105	-----	195	-----	1,190	-----	495	239	-----
TOTAL	11,724.4	6,025.5	3,631	4,288	2,332	5,427	8,230	29,431	34,820	20,943	15,396	13,787
MEAN	378	201	117	138	83.3	175	274	949	1,161	676	497	460
MAX	598	482	173	240	103	218	388	1,470	1,250	1,250	893	617
MIN	3.7	1.5	92	105	72	77	191	416	1,000	443	239	225
AC-FT	23,260	11,950	7,200	8,510	4,630	10,760	16,320	58,380	69,070	41,540	30,540	27,350

CAL YR 1973 TOTAL 135,665.9 MEAN 372 MAX 1,500 MIN 1.5 AC-FT 269,100
 WTR YR 1974 TOTAL 156,034.9 MEAN 427 MAX 1,470 MIN 1.5 AC-FT 309,500

11229600 FLORENCE LAKE NEAR BIG CREEK, CALIF.

LOCATION.--Lat 37°16'26", long 118°58'23", in NW¼ sec.1, T.8 S., R.27 E., Fresno County, Sierra National Forest, in gatehouse of Ward tunnel intake near dam on South Fork San Joaquin River, 16 mi (26 km) northeast of town of Big Creek.

DRAINAGE AREA.--171 mi² (443 km²).

PERIOD OF RECORD.--November 1925 to current year. Prior to October 1931, published in WSP 721.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Southern California Edison Co.).

EXTREMES.--Current year: Maximum contents, 64,400 acre-ft (79.4 hm³) July 26 (elevation, 7,327.52 ft or 2,233.428 m); minimum, 291 acre-ft (359,000 m³) Nov. 9 (elevation, 7,225.10 ft or 2,202.210 m).

Period of record: Maximum contents, 66,000 acre-ft (81.4 hm³) July 3, 1932 (elevation, 7,329.14 ft or 2,233.922 m); minimum occurred during period of no record, Oct. 2-4, 1926, or Nov. 30 to Dec. 2, 1927.

NOTE.--Prior to 1960, maximum and minimum daily contents were published. Maximum and minimum daily contents (1926-39) were summarized in WSP 881.

REMARKS.--Lake is formed by multiple-arch concrete dam; storage began in April 1925. Usable capacity, 64,400 acre-ft (79.4 hm³) between elevations 7,220.9 ft (2,200.93 m), throat of Venturi tube in Ward tunnel intake and 7,327.5 ft (2,233.42 m), top of spillway drum gates, above mean sea level. Additional storage of 168 acre-ft (207,000 m³) is not available for diversion. Water is diverted through Ward tunnel to Huntington Lake and used for power development in Big Creek plants. See schematic diagram of San Joaquin River basin. Figures given herein represent usable contents.

COOPERATION.--Records of contents furnished by Southern California Edison Co. in connection with a Federal Power Commission project.

CAPACITY TABLE (ELEVATION, IN FEET, AND CONTENTS, IN ACRE-FEET)

7,220.9	0	7,235	1,770	7,260	11,600	7,290	32,000
7,222	63	7,240	2,980	7,265	14,600	7,300	39,900
7,224	201	7,245	4,670	7,270	17,800	7,310	48,300
7,227	495	7,250	6,650	7,275	21,100	7,320	57,300
7,230	887	7,255	8,950	7,280	24,600	7,330	66,800

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25,195	4,203	332	361	357	349	435	1,037	25,590	61,274	63,954	47,008
2	24,816	3,519	371	359	357	350	446	1,623	26,923	61,464	63,877	46,680
3	24,838	2,856	387	356	355	376	441	2,010	28,369	61,663	63,935	46,370
4	24,234	2,308	371	363	356	376	436	2,156	29,977	61,910	63,829	46,062
5	23,057	1,678	361	362	356	396	458	2,327	32,464	62,700	63,772	45,762
6	21,902	1,031	358	362	356	434	467	2,816	35,735	63,264	63,820	45,446
7	20,784	549	363	360	356	418	485	3,743	39,453	63,312	63,523	45,139
8	19,703	327	360	410	356	409	497	5,223	42,671	63,580	62,729	44,833
9	19,128	291	359	395	355	396	470	6,619	45,437	63,964	61,805	44,511
10	19,174	316	357	374	355	388	439	7,846	48,188	64,243	60,659	44,198
11	19,235	684	351	373	354	386	440	9,182	50,860	64,146	59,377	43,457
12	18,895	1,417	348	373	353	389	473	10,503	53,378	64,118	58,066	42,513
13	17,768	1,838	359	373	352	396	518	11,602	55,593	64,146	57,266	41,558
14	16,677	1,878	361	372	352	424	585	12,707	57,145	64,252	56,793	40,619
15	15,590	1,255	360	372	352	444	657	13,994	58,066	64,233	56,229	39,672
16	14,661	761	356	375	352	439	717	14,946	58,795	64,272	55,639	38,708
17	13,976	520	353	435	351	432	811	15,370	59,330	64,233	55,005	37,623
18	13,296	459	344	484	351	436	831	15,213	59,828	64,146	54,354	36,509
19	12,619	446	342	492	351	439	703	14,636	60,129	64,137	53,687	35,398
20	11,953	427	340	439	351	434	612	13,958	60,035	64,146	53,006	34,271
21	11,297	396	333	409	351	433	614	12,684	60,281	64,146	52,446	33,156
22	10,688	380	343	400	351	431	692	11,352	60,923	64,214	51,736	32,058
23	10,124	371	359	389	350	438	717	10,433	61,483	64,252	51,038	30,949
24	9,532	362	353	381	350	451	640	10,311	61,720	64,098	50,326	29,857
25	8,887	362	348	381	350	444	547	11,191	61,767	64,195	49,610	28,769
26	8,178	351	345	374	349	425	501	12,849	61,530	64,002	49,020	27,691
27	7,461	353	359	373	349	421	505	15,357	61,217	63,714	48,626	26,625
28	6,756	353	387	364	348	447	550	18,214	60,961	63,714	48,284	25,554
29	6,081	353	425	362	-----	452	636	20,356	60,876	63,772	47,971	24,531
30	5,435	346	383	359	-----	454	831	22,110	60,961	63,810	47,666	23,542
31	4,763	-----	369	357	-----	421	-----	23,943	-----	63,906	47,336	-----
MAX	25,195	4,203	425	492	357	454	831	23,943	61,767	64,272	63,954	47,008
MIN	4,763	291	332	356	348	349	435	1,037	25,590	61,274	47,336	23,542
(a)	7,245.26	7,225.66	7,225.89	7,225.77	7,255.68	7,226.36	7,229.60	7,279.09	7,323.89	7,326.98	7,308.91	7,278.52
(b)	-21,300	-4,420	+23	-12	-9	+73	+410	+23,100	+37,000	+2,950	-16,600	-23,800
CAL YR 1973	b	+52										
WTR YR 1974	b	-2,570										

a Elevation, in feet, at end of month.

b Change in contents, in acre-feet, rounded to Geological Survey standards.

SAN JOAQUIN RIVER BASIN

11230000 SOUTH FORK SAN JOAQUIN RIVER NEAR FLORENCE LAKE, CALIF.

LOCATION.--Lat 37°16'24", long 118°57'54", in SE¼ sec.36, T.7 S., R.27 E., Fresno County, Sierra National Forest, on left bank 0.1 mi (0.2 km) downstream from spillway of Florence Lake Dam, 6 mi (10 km) upstream from Bear Creek, and 14.7 mi (23.7 km) east of Big Creek.

DRAINAGE AREA.--171 mi² (443 km²).

PERIOD OF RECORD.--October 1921 to current year. Monthly discharge only for some periods, published in WSP 1315-A. Prior to October 1925, published as "near Lake Florence."

GAGE.--Water-stage recorder, Parshall flume, and concrete control. Altitude of gage is 7,200 ft (2,195 m), from topographic map.

AVERAGE DISCHARGE (combined flow of South Fork San Joaquin River and Ward tunnel at intake).--53 years, 318 ft³/s (9.006 m³/s), 230,400 acre-ft/yr (284 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 865 ft³/s (24.5 m³/s) June 15 (gage height, 11.83 ft or 3.606 m); minimum daily, 3.6 ft³/s (0.10 m³/s) Dec. 10, 11.
Period of record: Maximum discharge, 4,320 ft³/s (122 m³/s) June 6, 1940 (gage height, 15.38 ft or 4.688 m); no flow at times.

REMARKS.--Records fair. Flow regulated by Florence Lake 0.1 mi (0.2 km) upstream beginning in 1925 (see sta 11229600) and by diversion into Ward tunnel (see sta 11229500). See schematic diagram of San Joaquin River basin.

COOPERATION.--Gage-height record and one discharge measurement furnished by Southern California Edison Co., in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.6	6.1	3.9	3.9	4.0	4.5	4.7	4.8	9.2	11	11	9.6
2	6.6	5.4	3.9	3.9	4.0	4.7	4.7	4.9	9.3	11	11	9.4
3	6.6	5.3	3.9	3.9	4.0	4.4	4.5	5.1	9.4	11	11	9.4
4	6.7	5.2	3.9	4.0	4.0	4.3	4.6	5.2	9.4	11	11	9.4
5	6.7	5.1	3.8	4.0	4.1	4.3	4.6	5.2	9.6	11	11	9.4
6	6.7	4.9	3.7	3.9	4.0	4.4	4.6	5.3	9.9	11	11	9.4
7	6.8	4.7	3.7	3.9	4.0	4.5	4.6	5.4	10	11	11	9.4
8	7.0	4.4	3.7	3.9	4.0	4.5	4.6	5.5	10	11	11	9.4
9	6.8	4.2	3.7	4.0	4.1	4.5	4.6	5.7	10	11	11	9.4
10	6.8	4.3	3.6	4.0	4.0	4.4	4.5	5.8	11	11	11	9.4
11	6.2	5.4	3.6	4.0	4.0	4.4	4.7	5.9	11	11	11	7.6
12	6.2	5.7	3.7	4.0	4.0	4.5	4.7	6.0	12	11	11	6.3
13	6.0	4.7	3.9	4.0	4.1	4.5	4.7	6.2	167	11	10	6.5
14	6.0	4.9	3.8	4.0	4.2	4.6	4.6	6.2	465	11	10	6.6
15	5.8	4.8	3.8	4.1	4.1	4.6	4.7	6.2	623	11	10	6.6
16	7.2	4.9	3.8	4.3	4.1	4.6	4.7	6.6	446	12	10	6.6
17	8.5	5.0	3.8	4.1	4.1	4.6	4.7	8.0	202	11	10	6.5
18	8.5	4.5	3.7	4.5	4.1	4.7	4.8	8.2	11	11	10	6.7
19	8.4	4.3	3.7	4.2	4.1	4.7	4.7	8.3	11	11	10	7.1
20	8.3	4.2	3.7	4.2	4.1	4.7	4.6	8.2	11	11	10	7.0
21	8.2	4.1	3.7	4.1	4.1	4.7	4.6	8.0	11	11	10	7.0
22	8.0	4.1	3.7	4.1	4.1	4.6	4.6	7.9	11	11	9.9	6.8
23	8.2	4.0	3.8	4.1	4.1	4.6	4.6	8.0	11	12	9.9	6.7
24	7.8	4.0	3.8	4.1	4.1	4.7	4.7	7.9	11	11	9.9	6.7
25	7.6	4.0	3.8	4.1	4.3	4.6	4.6	7.9	11	11	9.8	7.3
26	7.5	4.0	3.8	4.1	4.3	4.7	4.6	7.9	11	13	9.7	7.4
27	7.4	4.0	3.9	4.1	4.2	4.7	4.6	8.3	11	11	9.6	7.3
28	7.4	3.9	4.1	4.0	4.2	4.7	4.6	8.6	11	11	9.6	7.3
29	7.3	3.9	4.2	4.0	-----	4.8	4.6	8.7	11	11	9.6	7.2
30	7.2	3.9	4.0	4.0	-----	4.7	4.7	8.8	11	11	9.6	6.7
31	7.1	-----	3.9	4.0	-----	4.6	-----	9.0	-----	11	9.6	-----
TOTAL	222.1	137.9	118.0	125.5	114.5	141.8	139.1	213.7	2,166.8	345	319.2	232.1
MEAN	7.16	4.60	3.81	4.05	4.09	4.57	4.64	6.89	72.2	11.1	10.3	7.74
MAX	8.5	6.1	4.2	4.5	4.3	4.8	4.8	9.0	623	13	11	9.6
MTN	5.8	3.9	3.6	3.9	4.0	4.3	4.5	4.8	9.2	11	9.6	6.3
AC=FT	441	274	234	249	227	281	276	424	4,300	684	633	460
CAL YR 1973	TOTAL	18,481.5	MEAN	50.6	MAX	1,450	MIN	1.6	AC=FT	36,660		
WTR YR 1974	TOTAL	4,275.7	MEAN	11.7	MAX	623	MIN	3.6	AC=FT	8,480		

11230500 BEAR CREEK NEAR LAKE THOMAS A. EDISON, CALIF.

LOCATION.--Lat 37°20'18", long 118°58'23", in SW¼ sec.12, T.7 S., R.27 E. (unsurveyed), Fresno County, Sierra National Forest, on right bank 0.2 mi (0.3 km) upstream from diversion dam, 1.7 mi (2.7 km) upstream from mouth, 2.1 mi (3.4 km) south of Lake Thomas A. Edison, and 2.4 mi (3.9 km) northeast of Mono Hot Springs.

DRAINAGE AREA.--52.5 mi² (136.0 km²).

PERIOD OF RECORD.--October 1921 to current year. Monthly discharge only for some periods, published in WSP 1315-A. Prior to October 1954, published as "near Vermilion Valley."

GAGE.--Water-stage recorder. Datum of gage is 7,366.94 ft (2,245.443 m) above mean sea level (levels by Southern California Edison Co.).

AVERAGE DISCHARGE.--53 years, 89.8 ft³/s (2.543 m³/s), 65,060 acre-ft/yr (80.2 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 875 ft³/s (24.8 m³/s) June 6 (gage height, 5.75 ft or 1.753 m); minimum daily, 6.9 ft³/s (0.20 m³/s) Oct. 7, Nov. 4.

Period of record: Maximum discharge, 1,800 ft³/s (51.0 m³/s) Sept. 5, 1972 (gage height, 6.98 ft or 2.128 m); maximum gage height, 7.12 ft (2.170 m) July 26, 1956; minimum discharge recorded, 1.2 ft³/s (0.034 m³/s) Sept. 29 to Oct. 5, 1924.

REMARKS.--Records good except those for winter periods, which are fair. No storage or diversion above station. See schematic diagram of San Joaquin River basin.

COOPERATION.--Gage-height record and nine discharge measurements furnished by Southern California Edison Co., in connection with a Federal Power Commission project.

REVISIONS (WATER YEARS).--WSP 611: 1922(M). WSP 1345: 1931-35. WSP 1515: 1922-30. WSP 1930: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.0	13	28	36	27	21	42	176	490	367	176	25
2	8.5	12	56	39	27	22	46	213	419	338	182	25
3	8.5	9.9	40	38	29	30	47	204	432	295	160	25
4	8.1	6.9	37	35	28	36	46	171	458	292	128	25
5	7.3	12	35	30	28	38	56	182	536	281	111	25
6	7.3	18	33	32	28	46	56	234	644	264	105	25
7	6.9	24	31	37	28	47	60	281	764	225	95	24
8	13	21	31	35	28	37	63	350	683	204	85	24
9	15	17	31	33	28	36	52	397	606	160	76	23
10	15	29	31	31	27	33	43	388	622	140	71	23
11	14	85	31	30	27	31	43	406	633	117	68	23
12	13	90	31	33	25	32	53	401	580	111	62	22
13	15	68	31	32	26	33	65	384	601	120	57	21
14	15	56	34	34	24	38	70	388	591	138	53	20
15	14	49	32	35	22	49	92	410	550	138	49	18
16	13	42	31	37	22	47	99	367	485	145	43	18
17	12	38	31	46	21	43	115	318	424	148	41	17
18	12	40	30	53	23	45	105	244	388	140	38	15
19	11	56	30	65	20	52	75	201	367	131	36	15
20	11	52	28	50	21	52	71	184	330	122	34	13
21	10	41	25	45	22	53	83	174	371	126	32	13
22	9.9	35	30	41	21	52	107	179	397	133	30	13
23	13	34	30	38	21	53	95	204	393	145	30	13
24	23	34	29	36	21	57	80	278	367	158	29	13
25	20	34	29	35	22	57	63	384	338	207	29	12
26	17	30	28	33	22	45	59	472	303	330	28	12
27	17	33	29	32	21	42	67	541	303	201	28	13
28	16	33	40	31	19	45	83	565	310	158	27	12
29	14	33	52	29	-----	46	101	527	326	138	26	12
30	15	33	43	29	-----	46	135	513	342	234	27	11
31	14	-----	37	28	-----	42	-----	527	-----	210	26	-----
TOTAL	397.5	1,078.8	1,034	1,138	678	1,306	2,172	10,263	14,053	5,916	1,982	550
MEAN	12.8	36.0	33.4	36.7	24.2	42.1	72.4	331	468	191	63.9	18.3
MAX	23	90	56	65	29	57	135	565	764	367	182	25
MIN	6.9	6.9	25	28	19	21	42	171	303	111	26	11
AC-FT	788	2,140	2,050	2,260	1,340	2,590	4,310	20,360	27,870	11,730	3,930	1,090

CAL YR 1973 TOTAL 39,685.7 MEAN 109 MAX 630 MIN 6.9 AC-FT 78,720
WTR YR 1974 TOTAL 40,568.3 MEAN 111 MAX 764 MIN 6.9 AC-FT 80,470

DATE	TIME	PEAK DISCHARGE (BASE, 440 FT ³ /S)	DATE	TIME	G.H.	DISCHARGE
5-8	2000	5.14 523	6-23	0100	4.97	447
5-27	2100	5.40 650	7-30	1600	5.52	722
6-6	2130	5.75 875				

SAN JOAQUIN RIVER BASIN

11231000 LAKE THOMAS A. EDISON NEAR BIG CREEK, CALIF.

LOCATION.--Lat 37°22'13", long 118°59'13", in sec.26, T.6 S., R.27 E. (unsurveyed), Fresno County, Sierra National Forest, in outlet works of dam on Mono Creek at lower end of Vermilion Valley, 18.1 mi (29.1 km) northeast of town of Big Creek.

DRAINAGE AREA.--90.0 mi² (233.1 km²).

PERIOD OF RECORD.--October 1954 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Southern California Edison Co.).

EXTREMES.--Current year: Maximum contents, 125,700 acre-ft (155 hm³) July 25 (elevation, 7,642.87 ft or 2,329.547 m); minimum, 23,300 acre-ft (28.7 hm³) Mar. 23, 24 (elevation, 7,575.16 ft or 2,308.909 m).
Period of record: Maximum contents, 125,900 acre-ft (155 hm³) Aug. 18, 1958 (elevation, 7,642.95 ft or 2,329.571 m); minimum since appreciable storage was attained, 5,080 acre-ft (6.26 hm³) Mar. 27, 1969 (elevation, 7,553.09 ft or 2,302.182 m).

NOTE.--Prior to 1960, maximum and minimum daily contents were published.

REMARKS.--Lake is formed by earthfill dam; dam completed and storage began on Oct. 12, 1954. Usable capacity, 125,000 acre-ft (154 hm³) between elevations 7,508.9 ft (2,288.71 m), invert of outlet works and 7,642.5 ft (2,329.43 m), top of gates in service spillway, above mean sea level. Dead storage negligible. Water is released for diversion to Ward tunnel via Mono Creek diversion works. See schematic diagram of San Joaquin River basin. Figures given herein represent usable contents.

COOPERATION.--Records of contents furnished by Southern California Edison Co. in connection with a Federal Power Commission project.

CAPACITY TABLE (ELEVATION, IN FEET, AND CONTENTS, IN ACRE-FEET)

7,508.9	0	7,535	513	7,560	9,520	7,610	68,600
7,515	18	7,540	928	7,570	18,100	7,620	85,000
7,520	64	7,545	1,830	7,580	28,500	7,630	102,400
7,525	156	7,550	3,570	7,590	40,500	7,640	120,400
7,530	297	7,555	6,150	7,600	53,800	7,643	126,000

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	92,346	85,023	74,191	54,446	39,070	29,738	24,238	33,208	70,817	122,835	124,979	118,664
2	92,277	84,735	73,527	53,755	38,335	29,659	24,419	33,886	72,448	123,851	124,831	118,207
3	92,207	84,431	72,915	53,099	37,616	29,468	24,578	34,556	74,175	124,442	124,739	117,512
4	92,000	84,126	72,255	52,514	36,889	29,288	24,780	35,039	75,998	124,868	124,702	116,854
5	91,861	83,906	71,582	51,891	36,131	29,064	24,972	35,328	78,233	124,850	124,572	116,162
6	91,740	83,754	70,944	51,409	35,376	28,784	25,164	35,839	80,728	124,683	124,683	115,488
7	91,723	83,568	70,291	50,831	34,617	28,515	25,367	36,693	83,585	124,720	124,591	114,796
8	91,688	83,314	69,627	50,258	34,005	28,194	25,583	37,826	86,027	124,979	124,202	114,069
9	91,309	83,028	68,963	49,618	33,815	27,862	25,809	39,133	88,297	125,016	123,832	113,397
10	90,929	82,927	68,288	48,956	33,613	27,541	25,993	40,543	90,601	124,924	123,500	112,691
11	90,532	82,994	67,647	48,713	33,410	27,190	26,154	41,919	92,900	124,850	123,186	112,419
12	90,221	83,348	67,022	48,821	33,208	26,873	26,360	43,452	95,158	124,905	123,057	112,419
13	90,083	83,230	66,466	48,902	32,995	26,491	26,589	44,820	97,483	125,035	123,020	112,456
14	89,946	82,809	65,817	48,997	32,796	26,100	26,862	46,242	99,751	125,072	122,983	112,456
15	89,706	82,523	65,172	48,929	32,585	25,723	27,211	47,947	101,836	125,239	122,946	112,456
16	89,293	82,186	64,515	48,524	32,397	25,303	27,574	49,442	103,771	125,405	122,909	112,456
17	88,646	81,867	63,875	48,268	32,163	24,919	27,928	50,695	105,411	125,461	122,854	112,456
18	88,041	81,883	63,181	47,760	31,963	24,557	28,305	51,574	106,877	125,368	122,761	112,456
19	87,425	81,380	62,472	47,693	31,789	24,195	28,672	52,236	108,257	125,239	122,706	112,456
20	86,741	80,828	61,756	47,345	31,570	23,838	28,963	52,737	109,532	125,239	122,706	112,456
21	86,027	80,227	61,190	46,812	31,362	23,482	29,311	53,323	110,920	125,220	122,706	112,474
22	85,414	79,610	60,539	46,136	31,143	23,303	29,727	54,037	112,438	125,294	122,706	112,456
23	85,227	78,996	59,934	45,515	30,912	23,293	30,114	54,771	113,833	125,368	122,669	112,456
24	84,972	78,365	59,245	44,833	30,705	23,293	30,466	55,822	115,160	125,313	122,392	112,438
25	84,972	77,723	58,574	44,140	30,477	23,314	30,762	57,155	116,344	125,702	122,116	112,419
26	85,006	77,097	57,934	43,426	30,239	23,314	31,108	58,865	117,421	125,294	121,675	112,401
27	85,006	76,456	57,429	42,715	30,034	23,314	31,420	60,834	118,536	125,313	121,012	112,383
28	85,040	75,851	56,867	41,983	29,807	23,440	31,766	63,076	119,581	125,350	120,590	112,365
29	85,040	75,263	56,307	41,255	-----	23,513	32,139	64,989	120,571	125,183	120,131	112,347
30	85,057	74,580	55,665	40,530	-----	23,723	32,620	66,929	121,638	125,109	119,617	112,347
31	85,057	-----	55,081	39,799	-----	23,901	-----	68,853	-----	125,072	119,141	-----
MAX	92,346	85,023	74,191	54,446	39,070	29,738	32,620	68,853	121,638	125,702	124,979	118,664
MIN	84,972	74,580	55,081	39,799	29,807	23,293	24,238	33,208	70,817	122,835	119,141	112,347
(a)	7,620.03	7,613.73	7,600.93	7,589.48	7,581.15	7,575.74	7,583.59	7,610.15	7,640.66	7,642.52	7,639.30	7,635.57
(b)	-7,430	-10,500	-19,500	-15,300	-9,990	-5,910	+8,720	+36,200	+52,800	+3,430	-5,930	-6,790

CAL YR 1973 b -16,900

WTR YR 1974 b +19,900

a Elevation, in feet, at end of month.

b Change in contents, in acre-feet, rounded to Geological Survey standards.

11231500 MONO CREEK BELOW LAKE THOMAS A. EDISON, CALIF.

LOCATION.--Lat 37°21'40", long 118°59'26", in SW¼ sec.35, T.6 S., R.27 E. (unsurveyed), Fresno County, Sierra National Forest, on left bank 0.6 mi (1.0 km) upstream from diversion dam, 1 mi (2 km) downstream from Lake Thomas A. Edison Dam, and 1.9 mi (3.1 km) northeast of Mono Hot Springs.

DRAINAGE AREA.--92.5 mi² (239.6 km²).

PERIOD OF RECORD.--October 1921 to current year. Monthly discharge only for some periods, published in WSP 1315-A. Prior to October 1954, published as "near Vermilion Valley."

GAGE.--Water-stage recorder. Altitude of gage is 7,400 ft (2,256 m), from topographic map.

AVERAGE DISCHARGE (adjusted for storage).--53 years, 152 ft³/s (4.305 m³/s), 110,100 acre-ft/yr (136 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 709 ft³/s (20.1 m³/s) July 26 (gage height, 7.09 ft or 2.161 m); minimum daily, 16 ft³/s (0.45 m³/s) several days.

Period of record: Maximum discharge, 1,760 ft³/s (49.8 m³/s) June 2, 1938 (gage height, 8.62 ft or 2.627 m); minimum daily, 0.3 ft³/s (0.008 m³/s) Nov. 11, 12, 1954.

REMARKS.--Records good. Flow regulated by Lake Thomas A. Edison 1 mi (2 km) upstream beginning Oct. 12, 1954 (see sta 11231000). No diversion above station. See schematic diagram of San Joaquin River basin.

COOPERATION.--Gage-height record and nine discharge measurements furnished by Southern California Edison Co., in connection with a Federal Power Commission project.

REVISIONS (WATER YEARS).--WSP 1011: 1943. WSP 1515: 1956.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	74	40	357	357	384	163	16	24	19	23	263	263
2	16	143	357	357	380	163	16	25	19	62	266	263
3	22	143	357	357	380	163	16	99	19	193	158	319
4	120	143	357	357	380	163	16	182	19	276	204	357
5	81	143	357	357	388	193	16	260	19	445	163	361
6	68	143	357	357	392	222	16	225	19	465	118	370
7	44	143	354	357	388	222	17	179	19	323	207	370
8	66	153	350	354	321	219	17	171	19	234	301	370
9	178	163	350	354	155	219	18	176	19	244	301	370
10	201	163	350	354	153	219	18	138	19	270	273	370
11	204	163	350	149	153	228	18	138	19	240	250	240
12	178	20	350	19	153	231	18	138	19	193	182	18
13	102	155	350	19	153	256	18	138	19	168	118	18
14	97	286	350	19	153	256	19	95	19	250	113	18
15	136	196	354	113	153	263	20	19	19	108	108	18
16	204	250	357	280	153	263	21	19	20	160	108	19
17	305	263	365	280	153	263	21	19	20	222	108	19
18	293	72	365	280	153	266	21	93	20	266	108	19
19	305	310	365	135	153	260	20	145	20	270	74	19
20	326	339	365	276	153	256	20	145	20	219	53	19
21	317	339	365	321	153	256	20	66	21	219	53	19
22	281	339	369	361	150	201	21	20	19	204	53	19
23	143	339	365	365	150	113	21	20	19	270	106	19
24	142	339	365	384	150	113	21	20	19	280	176	19
25	16	339	361	380	155	113	21	20	19	315	198	19
26	16	339	361	380	160	113	20	20	19	606	260	19
27	16	339	361	388	160	113	21	20	19	273	346	18
28	16	335	361	384	160	99	21	19	51	247	244	18
29	16	332	361	388	-----	70	22	19	72	323	266	18
30	16	346	357	384	-----	17	23	19	78	290	263	18
31	16	-----	357	384	-----	16	-----	19	-----	263	263	-----
TOTAL	4,015	6,817	11,100	9,250	6,089	5,712	573	2,690	721	7,921	5,704	4,006
MEAN	130	227	358	298	217	184	19.1	86.8	24.0	256	184	134
MAX	326	346	369	388	392	266	23	260	78	606	346	370
MIN	16	20	350	19	150	16	16	19	19	23	53	18
AC-FT	7,960	13,520	22,020	18,350	12,080	11,330	1,140	5,340	1,430	15,710	11,310	7,950

CAL YR 1973 TOTAL 78,994 MEAN 216 MAX 485 MIN 12 AC-FT 156,700
WTR YR 1974 TOTAL 64,598 MEAN 177 MAX 606 MIN 16 AC-FT 128,100

SAN JOAQUIN RIVER BASIN

11234700 MAMMOTH POOL RESERVOIR NEAR BIG CREEK, CALIF.

LOCATION.--Lat 37°19'45", long 119°19'40", in SW¼ sec.10, T.7 S., R.24 E., Madera County, Sierra National Forest, in gatehouse of power tunnel intake near dam on San Joaquin River, 10 mi (16 km) northwest of town of Big Creek.

DRAINAGE AREA.--995 mi² (2,577 km²).

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

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Southern California Edison Co.).

EXTREMES.--Current year: Maximum contents, 123,200 acre-ft (152 hm³) May 28 (elevation, 3,332.91 ft or 1,015.871 m); minimum, 5,660 acre-ft (6.98 hm³) Feb. 21 (elevation, 3,146.10 ft or 958.931 m).

Period of record: Maximum contents, 126,500 acre-ft (156 hm³) June 2, 3, 1969; maximum elevation, 3,335.86 ft (1,016.770 m) June 3, 1969; minimum contents since appreciable storage was attained, 4,580 acre-ft (5.65 hm³) Apr. 5, 1973 (elevation, 3,139.87 ft or 957.032 m).

REMARKS.--Reservoir is formed by an earthfill dam; storage began Oct. 8, 1959. Usable capacity, 119,900 acre-ft (148 hm³) between elevations 3,100.00 ft (944.880 m), invert of power tunnel and 3,330.00 ft (1,014.984 m), crest of spillway, above mean sea level. Additional storage of 2,780 acre-ft (3.43 hm³) is not available for release. Water is diverted through tunnel for power development; water is returned to river 8.5 mi (13.7 km) downstream from dam. See schematic diagram of San Joaquin River basin. Figures given herein represent usable contents.

COOPERATION.--Records of contents furnished by Southern California Edison Co. in connection with a Federal Power Commission project.

CAPACITY TABLE (ELEVATION, IN FEET, AND CONTENTS, IN ACRE-FEET)

3,100	0	3,130	3,110	3,180	14,100	3,260	56,400
3,105	417	3,140	4,600	3,190	17,400	3,280	72,100
3,110	861	3,150	6,400	3,200	21,400	3,300	89,800
3,115	1,360	3,160	8,620	3,220	31,100	3,320	109,300
3,120	1,900	3,170	11,200	3,240	42,800	3,335	125,500

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	43,416	30,970	55,001	43,041	22,183	10,349	15,021	27,045	122,082	118,124	100,186	48,526
2	42,984	30,809	54,786	40,873	21,069	15,562	16,229	31,029	121,915	117,660	99,379	46,620
3	41,735	30,573	54,750	38,948	20,011	15,854	16,083	35,773	122,004	116,686	98,335	45,008
4	40,499	30,323	54,836	37,012	18,927	16,008	15,313	40,120	122,138	115,601	97,486	44,202
5	39,281	30,047	54,850	34,863	17,833	16,910	14,837	44,949	122,484	114,849	96,584	43,524
6	38,059	29,836	54,879	32,676	16,698	18,778	14,535	51,320	122,898	114,849	95,648	42,914
7	36,899	29,805	54,857	30,515	16,130	20,634	14,426	59,707	122,652	113,982	94,433	43,162
8	35,956	29,442	54,821	28,335	16,723	21,938	14,455	69,983	122,182	113,855	93,061	43,435
9	35,100	29,337	54,721	26,001	17,240	23,396	14,401	80,415	122,038	113,528	91,574	42,781
10	34,052	30,196	54,606	23,658	18,081	24,555	13,804	90,163	122,082	113,845	90,620	42,084
11	32,974	36,698	54,692	22,095	17,761	24,431	13,820	99,428	122,227	113,728	89,114	41,337
12	32,758	45,513	54,700	21,273	17,644	24,198	13,814	109,182	122,071	113,127	87,501	40,567
13	33,018	47,738	54,900	20,436	16,927	23,482	13,829	117,724	122,004	112,150	85,773	39,950
14	33,278	49,242	55,081	19,473	15,330	22,421	14,123	122,451	122,038	111,301	83,996	40,181
15	32,968	49,969	54,857	18,696	13,952	21,617	14,856	122,406	121,826	110,602	82,179	40,419
16	32,549	50,507	54,628	19,196	12,584	20,893	16,127	122,049	121,581	109,937	80,327	40,646
17	32,055	52,266	54,571	22,161	11,220	20,112	17,799	121,548	121,192	109,213	78,464	39,737
18	31,695	56,089	54,341	24,230	9,842	19,295	19,857	121,125	120,770	108,389	76,569	38,786
19	31,380	56,802	54,119	26,628	8,476	18,435	20,378	120,803	120,527	107,489	74,644	37,831
20	31,564	57,045	53,920	28,453	7,107	17,802	20,395	120,571	120,305	106,328	72,706	36,887
21	31,201	57,045	53,828	29,196	5,733	17,265	20,597	120,593	120,505	105,227	70,777	37,047
22	30,900	56,831	52,653	29,332	5,827	16,691	21,881	121,103	120,671	104,383	68,808	37,207
23	31,929	56,418	51,418	29,180	6,517	16,171	23,405	121,236	120,671	103,510	66,823	36,605
24	31,995	55,849	49,872	28,764	7,533	15,874	24,230	121,782	120,350	102,670	64,846	36,117
25	31,990	55,421	48,573	28,263	7,546	15,489	24,280	122,540	120,084	102,340	62,922	35,646
26	31,891	55,023	46,921	27,552	7,504	14,820	23,876	123,032	119,776	102,590	60,963	35,185
27	31,782	54,735	46,040	26,714	7,362	14,186	23,237	123,088	119,219	102,470	58,946	34,729
28	31,581	54,477	45,454	25,946	7,391	14,042	22,838	123,043	118,697	101,663	56,920	34,897
29	31,478	54,141	45,285	25,060	-----	14,060	22,887	122,507	118,351	100,631	54,499	35,060
30	31,293	53,685	45,117	24,180	-----	14,499	24,093	122,361	118,210	99,861	52,519	34,622
31	31,142	-----	44,273	23,232	-----	14,461	-----	122,339	-----	100,226	50,535	-----
MAX	43,416	57,045	55,081	43,041	22,183	24,555	24,280	123,088	122,898	118,124	100,186	48,526
MIN	30,900	29,337	44,273	18,696	5,733	10,349	13,804	27,045	118,210	99,861	50,535	34,622
(a)	3,220.06	3,256.26	3,242.33	3,204.16	3,154.65	3,181.27	3,206.06	3,332.16	3,328.41	3,310.96	3,251.77	3,226.37
(b)	-12,200	+22,500	-9,410	-21,000	-15,800	+7,070	+9,630	+98,200	-4,130	-18,000	-49,700	-15,900

CAL YR 1973 b +31,300

WTR YR 1974 b -8,770

a Elevation, in feet, at end of month.

b Change in contents, in acre-feet, rounded to Geological Survey standards.

11234760 SAN JOAQUIN RIVER ABOVE SHAKEFLAT CREEK, NEAR BIG CREEK, CALIF.

LOCATION.--Lat 37°19'00", long 119°19'37", in NW¼SW¼ sec.14, T.7 S., R.24 E., Madera County, Sierra National Forest, on right bank 1,500 ft (457 m) upstream from Shakeflat Creek, 4,900 ft (1,494 m) downstream from Mammoth Pool Dam, and 10 mi (16 km) northwest of town of Big Creek.

DRAINAGE AREA.--1,003 mi² (2,598 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 2,865.50 ft (873.404 m) above mean sea level (levels by Southern California Edison Co.).

EXTREMES.--Current year: Maximum discharge, 6,290 ft³/s (178 m³/s) May 28 (gage height, 12.55 ft or 3.825 m); minimum daily, 11 ft³/s (0.31 m³/s) Feb. 16-18, 20-26.

Period of record: Maximum discharge, 18,400 ft³/s (521 m³/s) June 3, 1969 (gage height, 18.38 ft or 5.602 m); minimum daily, 0.3 ft³/s (0.008 m³/s) Oct. 14, Dec. 5, 1959.

REMARKS.--Records good. Flow regulated by Mammoth Pool Reservoir 4,900 ft (1,494 m) upstream (see sta 11234700). Flow partly regulated by Florence Lake (see sta 11229600), Lake Thomas A. Edison (see sta 11231000) and diversions through Ward tunnel (see sta 11229500), and through Mono-Bear conduit to Ward tunnel. See schematic diagram of San Joaquin River basin.

COOPERATION.--Gage-height record and 12 discharge measurements furnished by Southern California Edison Co., in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31	29	27	14	13	30	27	41	3,350	56	26	26
2	31	23	21	13	13	33	23	43	2,940	56	26	26
3	30	17	20	13	13	21	29	44	3,060	56	26	26
4	32	17	20	13	13	16	40	44	3,240	56	26	26
5	31	17	20	13	13	15	40	45	3,340	39	25	26
6	31	17	19	14	12	15	40	46	3,280	27	25	26
7	32	17	19	14	12	16	40	46	3,280	26	25	26
8	32	17	19	13	12	16	39	47	3,230	26	25	26
9	31	17	19	13	12	16	40	48	3,110	26	26	26
10	31	17	19	13	12	16	39	49	3,060	26	27	25
11	30	20	19	13	12	16	39	49	3,210	26	27	25
12	30	26	19	14	12	16	38	50	3,200	26	27	25
13	30	18	19	13	12	15	40	50	2,920	26	27	25
14	30	19	19	12	12	15	40	1,470	3,090	26	27	25
15	30	16	19	13	12	15	36	4,280	2,910	26	25	25
16	29	17	19	15	11	15	37	3,700	2,460	26	26	25
17	31	31	19	19	11	14	38	2,670	1,790	26	26	25
18	31	28	16	16	11	14	40	1,560	942	26	26	25
19	31	21	15	16	12	14	40	924	599	26	26	25
20	31	20	15	17	11	14	40	517	305	26	26	25
21	31	20	16	16	11	14	40	419	296	26	26	25
22	31	20	17	14	11	14	40	678	504	26	26	25
23	34	20	15	13	11	14	42	1,450	632	26	26	25
24	30	20	14	14	11	14	43	1,640	408	26	25	25
25	29	20	14	13	11	14	42	3,230	174	26	25	25
26	29	20	14	13	11	14	42	4,440	71	26	25	25
27	29	20	16	13	12	15	42	5,210	56	26	27	25
28	29	20	15	13	13	21	41	5,380	56	26	27	21
29	29	19	14	13	-----	17	41	4,950	56	26	27	19
30	29	20	13	13	-----	19	41	3,950	56	26	26	19
31	29	-----	14	13	-----	17	-----	3,480	-----	26	26	-----
TOTAL	944	603	544	429	332	515	1,159	50,550	55,625	940	806	743
MEAN	30.5	20.1	17.5	13.8	11.9	16.6	38.6	1,631	1,854	30.3	26.0	24.8
MAX	34	31	27	19	13	33	43	5,380	3,350	56	27	26
MIN	29	16	13	12	11	14	23	41	56	26	25	19
AC-FT	1,870	1,200	1,080	851	659	1,020	2,300	100,300	110,300	1,860	1,600	1,470

CAL YR 1973 TOTAL 176,873 MEAN 485 MAX 7,980 MIN 11 AC-FT 350,800
WTR YR 1974 TOTAL 113,190 MEAN 310 MAX 5,380 MIN 11 AC-FT 224,500

LOCATION.--Lat 37°15'25", long 119°09'38", in SE¼SW¼ sec.5, T.8 S., R.26 E., Fresno County, Sierra National Forest, at tunnel outlet at east end of Huntington Lake, 0.9 mi (1.4 km) east of Lakeshore Post Office, and 6 mi (10 km) northeast of Big Creek.

GAGE.--Pressure-differential recorder to record discharge through penstock. November 1927 to May 23, 1956, water-stage recorder at datum 6,999.00 ft (2,133.295 m) above mean sea level (levels by Southern California Edison Co.). May 24, 1956, to Sept. 30, 1968, no recorder, see REMARKS below.

EXTREMES.--Period of record: Maximum daily discharge, 2,080 ft³/s (58.9 m³/s) June 21, 1935; no flow at times in 1961, 1964-65, 1968, 1971-72, 1974.

REMARKS.--Daily discharge for the period May 24, 1956, to Sept. 30, 1968, computed as the sum of Ward tunnel at intake, Mono-Bear conduit, Camp Creek conduit, and corrected for change in contents of Portal Forebay. Tunnel diverts from Florence Lake to Huntington Lake, receives diversions from Bear and Mono Creeks and at times from several other small tributaries of South Fork San Joaquin River. See record for sta 11229500 Ward tunnel intake at Florence Lake.

COOPERATION.--Records collected by Southern California Edison Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

REVISIONS (WATER YEARS).--WRD Calif. 1967: 1966.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	609	363	563	572	566	286	291	704	1,750	1,710	1,060	551
2	540	453	534	588	550	294	497	849	1,740	1,670	1,060	550
3	0	502	598	572	554	308	280	1,010	1,690	1,500	938	601
4	110	481	600	508	550	334	235	983	1,680	1,530	867	652
5	717	483	556	558	553	337	325	863	1,710	1,230	738	646
6	616	573	558	572	557	449	333	778	1,700	1,210	624	659
7	391	479	558	555	560	500	314	753	1,620	1,380	724	647
8	793	407	566	596	569	467	344	858	1,560	1,170	849	647
9	853	276	559	600	251	431	324	1,130	1,570	899	940	643
10	705	228	558	567	229	420	352	1,070	1,630	971	751	638
11	262	397	574	457	325	415	202	1,090	1,700	1,019	748	640
12	0	296	551	195	291	435	291	1,120	1,650	832	842	581
13	0	381	505	190	255	444	351	1,160	1,610	728	774	581
14	0	505	551	173	220	487	421	1,310	1,620	931	637	575
15	305	745	550	206	250	607	423	1,570	1,610	890	681	571
16	735	739	553	467	246	478	442	1,570	1,650	874	683	570
17	738	646	553	542	297	539	548	1,520	1,700	1,010	649	611
18	735	179	553	652	433	557	579	1,440	1,690	1,050	645	659
19	732	736	539	377	293	598	502	1,500	1,680	975	629	655
20	731	703	515	610	259	534	453	1,430	1,650	828	607	648
21	735	619	531	569	228	552	442	1,550	1,680	880	475	648
22	733	645	533	573	250	591	520	1,720	1,700	879	522	635
23	503	570	533	601	252	381	521	1,730	1,700	1,060	627	631
24	559	567	551	610	256	399	489	1,670	1,670	1,240	678	622
25	474	588	536	609	260	307	421	1,720	1,630	1,230	699	625
26	462	571	540	598	280	431	372	1,740	1,630	1,560	683	618
27	429	560	552	589	279	368	355	1,700	1,640	1,380	707	619
28	393	579	583	588	257	347	399	1,630	1,670	1,200	619	610
29	431	542	684	580	-----	385	574	1,730	1,710	1,140	562	608
30	415	528	573	579	-----	280	551	1,730	1,720	1,070	518	600
31	415	-----	586	575	-----	251	-----	1,750	-----	1,040	557	-----
TOTAL	15,121	15,341	17,296	16,028	9,870	13,212	12,151	41,378	49,960	33,237	21,993	18,541
MEAN	488	511	558	517	353	426	405	1,335	1,665	1,137	709	618
MAX	853	745	684	652	569	607	579	1,750	1,750	1,710	1,060	659
MIN	0	179	505	173	220	251	202	704	1,560	728	475	550
AC-FT	29,990	30,430	34,310	31,790	19,580	26,210	24,100	82,070	99,100	64,890	43,620	36,780
CAL YR 1973	TOTAL 253,513		MEAN 695	MAX 1,670	MIN 0	AC-FT 502,800						
WTR YR 1974	TOTAL 266,128		MEAN 729	MAX 1,750	MIN 0	AC-FT 527,900						

11236000 HUNTINGTON LAKE NEAR BIG CREEK, CALIF.

LOCATION.--Lat 37°14'03", long 119°12'41", in SW¼ sec.14, T.8 S., R.25 E., Fresno County, Sierra National Forest, in gate tower of dam 1 on Big Creek, 2 mi (3 km) northeast of town of Big Creek.

DRAINAGE AREA.--80.5 mi² (208.5 km²).

PERIOD OF RECORD.--April 1913 to current year. Prior to October 1926, monthly contents only, published in WSP 1315-A; 1926-31, published in WSP 721.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Southern California Edison Co.). Prior to June 19, 1920, nonrecording gage at same site and datum.

EXTREMES.--Current year: Maximum contents, 89,200 acre-ft (110 hm³) July 10 (elevation, 6,950.03 ft or 2,118.369 m); minimum contents, 28,800 acre-ft (35.5 hm³) Apr. 15, 16; minimum elevation, 6,897.57 ft (2,102.379 m) Apr. 16.

Period of record: Maximum contents, 90,500 acre-ft (112 hm³) May 31, 1926 (elevation, 6,950.92 ft or 2,118.640 m); minimum, 2,100 acre-ft (2.59 hm³) Nov. 6, 1937 (elevation, 6,838.53 ft or 2,084.384 m).

NOTE.--Prior to 1960, maximum and minimum daily contents were published. Maximum and minimum daily contents (1913-39) were summarized in WSP 881.

REMARKS.--Lake is formed by four dams; storage began Apr. 11, 1913. Dams were raised in 1914 and again in 1917. Usable capacity, 89,200 acre-ft (110 hm³) between elevations 6,819.9 ft (2,078.71 m), invert of outlet tunnel No. 1 and 6,950 ft (2,118.4 m), spillway crest at dam 1, above mean sea level. Additional storage of 600 acre-ft (740,000 m³) is not available for release. Huntington-Shaver conduit has diverted water from Huntington Lake to Shaver Lake since Apr. 21, 1928 (see sta 11239000). Water is used for power development in Big Creek plants. See schematic diagram of San Joaquin River basin. Figures given herein represent usable contents.

COOPERATION.--Records of contents furnished by Southern California Edison Co. in connection with a Federal Power Commission project.

REVISIONS.--WSP 1930: Drainage area.

CAPACITY TABLE (ELEVATION, IN FEET, AND CONTENTS, IN ACRE-FEET)

6,819.9	0	6,835	1,550	6,870	11,300	6,920	50,800
6,820	8	6,840	2,350	6,880	16,400	6,930	62,600
6,822	142	6,845	3,320	6,890	22,900	6,940	75,300
6,825	382	6,850	4,480	6,900	30,900	6,950	89,200
6,830	899	6,860	7,430	6,910	40,200	6,951	90,610

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	87,027	85,388	84,042	84,699	78,296	51,880	35,666	30,301	72,652	87,779	88,723	87,808
2	86,828	85,177	84,056	84,769	77,944	51,453	34,937	31,482	74,032	88,251	88,666	87,651
3	85,697	85,092	84,112	84,811	77,608	50,578	34,233	32,109	75,411	88,079	88,780	87,608
4	84,853	85,078	84,168	84,783	77,217	49,711	33,465	32,029	76,854	87,893	88,794	87,637
5	85,036	84,853	84,140	85,331	76,814	48,863	32,905	32,198	78,350	87,537	88,651	87,722
6	85,177	84,839	84,098	85,740	76,425	48,207	32,323	33,393	79,914	87,523	88,594	87,808
7	85,500	84,671	84,070	86,049	76,052	47,717	31,816	34,288	81,160	88,165	88,437	87,908
8	85,754	84,308	84,056	86,374	75,584	47,100	31,369	35,421	81,945	88,952	88,437	87,979
9	85,796	83,735	84,056	86,700	74,456	46,411	30,957	37,101	82,554	89,137	88,422	88,065
10	85,064	83,164	84,042	86,941	73,191	45,760	30,362	38,908	83,164	89,123	88,680	88,136
11	84,420	83,206	84,070	86,913	72,117	45,071	29,797	40,940	83,833	89,095	88,851	88,208
12	84,042	83,164	84,056	86,148	70,972	44,470	29,322	42,951	84,266	89,052	88,866	88,265
13	85,416	82,748	84,056	85,050	69,810	43,885	29,095	44,818	84,490	89,095	88,551	88,222
14	85,937	82,720	84,042	83,916	68,630	43,385	28,928	46,702	84,587	88,766	88,537	88,165
15	86,204	83,053	84,042	82,831	67,471	43,116	28,844	48,457	84,532	88,866	88,580	88,108
16	86,473	83,414	84,014	82,388	66,284	42,704	28,836	50,045	84,434	88,837	88,594	88,036
17	86,743	84,042	84,014	82,166	65,131	42,353	29,070	51,138	84,364	88,894	88,623	88,051
18	87,012	84,098	84,014	82,138	63,950	42,057	29,399	51,666	84,182	88,980	88,637	88,136
19	87,254	84,182	83,972	81,656	62,863	41,863	29,441	52,027	83,930	89,009	88,594	88,208
20	87,523	84,420	83,888	81,546	61,674	41,517	29,373	52,106	83,623	88,966	88,537	88,251
21	87,793	84,434	83,916	81,256	60,519	41,263	29,348	52,390	83,317	88,980	88,294	88,308
22	88,136	84,448	83,930	80,967	59,338	41,061	29,534	53,428	83,012	89,023	88,079	88,437
23	88,165	84,364	83,888	80,692	58,179	40,538	29,763	54,659	82,665	88,994	87,979	88,451
24	88,136	84,266	83,861	80,501	57,030	40,027	29,907	56,008	82,526	88,880	88,094	88,480
25	87,865	84,238	83,805	80,283	55,903	39,381	29,814	58,012	82,665	88,837	88,237	88,494
26	87,594	84,154	83,819	80,160	54,833	38,888	29,517	60,422	82,956	88,737	88,308	88,494
27	87,296	84,056	83,972	79,886	53,749	38,378	29,153	62,876	83,721	88,680	88,465	88,494
28	86,927	83,930	84,070	79,600	52,652	37,951	28,953	65,119	84,685	88,723	88,451	88,465
29	86,587	83,861	84,378	79,286	-----	37,418	29,145	67,193	85,740	88,923	88,322	88,437
30	86,247	83,763	84,434	78,974	-----	36,843	29,466	69,142	86,771	88,851	88,108	88,394
31	85,881	-----	84,573	78,649	-----	36,072	-----	71,037	-----	88,894	87,979	-----
MAX	88,165	85,388	84,573	86,941	78,296	51,880	35,666	71,037	86,771	89,137	88,866	88,494
MIN	84,042	82,720	83,805	78,649	52,652	36,072	28,836	30,301	72,652	87,523	87,979	87,608
(a)	6,947.69	6,946.18	6,946.76	6,942.46	6,921.63	6,905.74	6,898.37	6,936.72	6,948.32	6,949.81	6,949.17	6,949.46
(b)	-1,150	-2,120	+810	-5,920	-26,000	-16,600	-6,610	+41,600	+15,700	+2,120	-915	+415
CAL YR 1973	b +7,100											
WTR YR 1974	b +1,370											

a Elevation, in feet, at end of month.

b Change in contents, in acre-feet, rounded to Geological Survey standards.

11237500 PITMAN CREEK BELOW TAMARACK CREEK, CALIF.

LOCATION.--Lat 37°11'54", long 119°12'48", in NW¼NW¼ sec.35, T.8 S., R.25 E., Fresno County, Sierra National Forest, on right bank 250 ft (76 m) upstream from Huntington-Shaver conduit tunnel, 0.8 mi (1.3 km) downstream from confluence of Tamarack Creek and South Fork Tamarack Creek, 1.4 mi (2.3 km) upstream from mouth, and 1.9 mi (3.1 km) east of town of Big Creek.

DRAINAGE AREA.--22.9 mi² (59.3 km²).

PERIOD OF RECORD.--October 1927 to current year. Records for water year 1928 incomplete, yearly estimate published in WSP 1315-A.

GAGE.--Water-stage recorder, Parshall flume, and concrete control. Altitude of gage is 7,005 ft (2,135 m), from Southern California Edison Co. contour map. Prior to Sept. 29, 1940, at site 10 ft (3 m) downstream at same datum.

AVERAGE DISCHARGE.--47 years, 39.6 ft³/s (1.121 m³/s), 28,690 acre-ft/yr (35.4 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 660 ft³/s (18.7 m³/s) May 8 (gage height, 7.07 ft or 2.155 m); minimum daily, 0.39 ft³/s (0.011 m³/s) Sept. 29.

Period of record: Maximum discharge, 3,670 ft³/s (104 m³/s) Dec. 23, 1955 (gage height, 11.20 ft or 3.414 m), from rating curve extended above 1,100 ft³/s (31.2 m³/s) on basis of slope-area measurement at gage height 10.77 ft (3.283 m); no flow Oct. 15-18, 1931.

REMARKS.--Records good except those for winter periods, which are poor. No diversion above station; practically all flow diverted below station to Huntington-Shaver conduit. See schematic diagram of San Joaquin River basin.

COOPERATION.--Gage-height record and six discharge measurements furnished by Southern California Edison Co., in connection with a Federal Power Commission project.

REVISIONS (WATER YEARS).--WSP 931: 1940. WSP 1315-A: 1944. WSP 1395: 1928-29, 1938. WSP 1515: 1929.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.67	3.0	13	17	18	16	44	195	209	22	4.7	1.2
2	.67	2.8	14	16	17	31	44	242	192	21	4.4	1.1
3	.70	2.7	15	15	18	31	40	256	210	19	4.6	1.1
4	.72	2.5	15	19	18	29	40	243	189	17	10	.96
5	.75	2.5	14	18	19	29	47	270	184	17	8.8	.90
6	.75	3.8	14	17	19	28	52	310	191	16	6.8	.81
7	1.3	4.4	14	17	19	27	60	339	173	14	5.5	.81
8	5.0	3.3	14	17	18	28	64	398	139	15	4.6	.75
9	3.4	3.1	14	17	17	26	61	392	136	15	4.0	.72
10	2.8	9.7	15	17	17	24	56	374	127	17	4.1	.72
11	2.6	37	15	16	17	23	53	387	122	15	3.4	.70
12	2.4	63	14	16	17	23	65	379	113	13	3.1	.67
13	2.4	26	14	17	17	25	83	347	103	12	2.9	.67
14	2.0	19	14	16	16	27	98	335	93	12	2.9	.67
15	1.7	15	13	16	16	32	109	330	83	11	2.7	.64
16	1.6	14	13	19	17	36	117	294	71	11	2.6	.61
17	1.4	15	13	29	16	39	128	228	64	10	2.5	.54
18	1.3	21	13	43	17	43	125	177	58	9.4	2.4	.49
19	1.3	22	13	45	16	47	93	149	55	9.1	2.2	.49
20	1.3	20	13	29	22	51	84	146	50	8.8	2.2	.49
21	1.2	17	13	26	16	54	102	158	46	8.5	2.1	.46
22	1.7	17	13	25	15	52	126	202	44	7.9	1.9	.46
23	16	16	13	22	16	52	127	216	40	7.6	1.8	.44
24	8.2	16	13	21	16	56	110	245	35	7.6	1.7	.42
25	6.1	15	13	20	17	58	87	300	33	7.9	1.7	.42
26	5.2	14	13	20	18	49	75	323	31	7.1	1.5	.44
27	4.4	14	15	19	16	46	71	319	29	6.6	1.4	.42
28	4.0	14	19	19	15	46	76	302	27	6.6	1.4	.42
29	3.6	14	24	19	-----	48	99	260	26	6.4	1.4	.39
30	3.3	13	22	18	-----	51	96	245	24	5.9	1.3	.42
31	3.1	-----	20	18	-----	47	-----	231	-----	5.3	1.3	-----
TOTAL	91.56	439.8	455	643	480	1,174	2,432	8,592	2,897	361.7	101.9	19.33
MEAN	2.95	14.7	14.7	20.7	17.1	37.9	81.1	277	96.6	11.7	3.29	.64
MAX	16	63	24	45	22	58	128	398	210	22	10	1.2
MIN	.67	2.5	13	15	15	16	40	146	24	5.3	1.3	.39
AC=FT	182	872	902	1,280	952	2,330	4,820	17,040	5,750	717	202	38
CAL YR 1973	TOTAL 19,817.31		MEAN 54.3		MAX 696		MIN .67		AC=FT 39,310			
WTR YR 1974	TOTAL 17,687.29		MEAN 48.5		MAX 398		MIN .39		AC=FT 35,080			

PEAK DISCHARGE (BASE, 200 FT ³ /S)							
DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
5-8	1830	7.07	660	6-3	2100	5.63	255
5-26	1900	6.46	450				

11239000 HUNTINGTON-SHAVER CONDUIT OUTLET NEAR SHAVER LAKE, CALIF.

LOCATION.--Lat 37°09'18", long 119°13'53", in NW¼NW¼ sec.15, T.9 S., R.25 E., Fresno County, Sierra National Forest, on left bank at tunnel outlet, 2.3 mi (3.7 km) northeast of Shaver Lake, and 3.5 mi (5.6 km) south of town of Big Creek.

PERIOD OF RECORD.--October 1928 to current year. Monthly discharge only for October 1928, published in WSP 1315-A. Prior to October 1960, published as Huntington-Shaver conduit at outlet.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 6,680 ft (2,036 m), from topographic map.

AVERAGE DISCHARGE.--46 years, 224 ft³/s (6.344 m³/s), 162,300 acre-ft/yr (200 hm³/yr).

EXTREMES.--Period of record: Maximum daily discharge, 1,780 ft³/s (50.4 m³/s) June 3, 4, 1938; minimum daily, 0.90 ft³/s (0.025 m³/s) Sept. 8-11, 1955, Nov. 15, 19, 26, 27, 1966.

REMARKS.--Records good. Conduit diverts from Huntington Lake to Shaver Lake with additions from Pitman Creek and seepage en route. See schematic diagram of San Joaquin River basin.

COOPERATION.--Gage-height record and two discharge measurements furnished by Southern California Edison Co., in connection with a Federal Power Commission project.

REVISIONS (WATER YEARS).--WSP 931: 1940.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.3	1.6	8.1	15	371	294	245	382	1,570	706	580	34
2	1.3	1.5	10	13	369	301	243	404	1,560	914	528	34
3	1.3	1.5	12	12	369	294	233	980	1,560	1,120	400	34
4	1.3	1.3	11	12	368	295	229	1,400	1,560	1,120	385	25
5	1.3	1.3	10	12	366	295	231	1,420	1,560	914	255	2.5
6	1.3	1.8	9.7	15	365	291	231	1,460	1,570	725	80	2.5
7	1.5	2.7	9.7	14	365	288	235	1,510	1,560	563	15	2.5
8	2.3	1.9	10	14	363	286	236	1,560	1,550	264	577	2.5
9	2.5	1.6	10	13	362	279	231	1,560	1,550	309	577	2.5
10	1.8	7.0	11	12	359	276	217	1,560	1,540	509	577	2.5
11	1.5	35	11	12	356	272	210	1,570	1,550	520	577	2.5
12	1.5	66	11	161	353	269	218	1,580	1,550	260	578	2.5
13	1.3	26	11	330	349	268	235	1,570	1,540	171	389	2.5
14	1.3	18	11	373	348	269	248	1,570	1,540	535	34	2.5
15	1.3	14	11	373	342	273	265	1,580	1,540	313	34	2.5
16	1.5	12	11	375	339	279	272	1,560	1,530	335	34	2.5
17	1.5	14	11	384	336	280	295	1,540	1,530	430	34	2.5
18	1.5	21	11	389	332	281	293	1,510	1,520	462	34	2.5
19	1.5	20	10	395	330	283	251	1,500	1,520	402	34	2.5
20	1.5	17	9.7	389	327	287	240	1,500	1,520	352	34	2.5
21	1.5	15	9.7	385	323	288	259	1,500	1,520	314	34	2.5
22	1.5	12	10	384	317	286	294	1,530	1,510	294	34	2.5
23	1.6	11	11	381	316	284	295	1,540	1,510	520	34	2.5
24	7.7	11	10	379	313	286	276	1,550	1,350	758	34	2.5
25	5.0	10	10	378	309	286	252	1,580	1,150	725	34	2.5
26	3.5	10	10	376	305	272	238	1,590	1,050	1,060	34	2.5
27	2.7	9.2	11	376	300	265	229	1,590	793	849	34	2.5
28	2.5	9.7	15	375	297	264	231	1,590	700	385	34	2.3
29	2.1	10	19	373	-----	261	256	1,580	700	400	34	2.3
30	1.9	10	18	373	-----	261	316	1,570	702	490	34	2.3
31	1.6	-----	17	372	-----	255	-----	1,570	-----	454	34	-----
TOTAL	76.3	373.1	349.9	7,465	9,549	8,668	7,504	44,906	41,905	17,173	6,130	191.4
MEAN	2.46	12.4	11.3	241	341	280	250	1,449	1,397	554	198	6.38
MAX	16	66	19	395	371	301	316	1,590	1,570	1,120	580	34
MIN	1.3	1.3	8.1	12	297	255	210	382	700	171	15	2.3
AC-FT	151	740	694	14,810	18,940	17,190	14,880	89,070	83,120	34,060	12,160	380
CAL YR 1973	TOTAL 133,444.3		MEAN 366	MAX 1,650	MIN 1.3	AC-FT 264,700						
WTR YR 1974	TOTAL 144,290.7		MEAN 395	MAX 1,590	MIN 1.3	AC-FT 286,200						

SAN JOAQUIN RIVER BASIN

11239500 SHAVER LAKE NEAR BIG CREEK, CALIF.

LOCATION.--Lat 37°08'40", long 119°18'08", in SE¼ sec.13, T.9 S., R.24 E., Fresno County, Sierra National Forest, near center of dam on Stevenson Creek, 6 mi (10 km) southwest of town of Big Creek.

DRAINAGE AREA.--29.1 mi² (75.4 km²).

PERIOD OF RECORD.--November 1909 to current year. Prior to January 1927, monthly contents only, published in WSP 1315-A, January 1927 to September 1931, published in WSP 721.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Southern California Edison Co.).

Prior to Jan. 11, 1927, gage on rockfilled dam a short distance upstream at different datum.

EXTREMES.--Current year: Maximum contents, 134,700 acre-ft (166 hm³) July 7 (elevation, 5,369.73 ft or 1,636.694 m); minimum, 31,800 acre-ft (39.2 hm³) May 3 (elevation, 5,307.60 ft or 1,617.756 m).

Period of record: Maximum contents, 135,900 acre-ft (168 hm³) July 5, 1946 (elevation, 5,370.25 ft or 1,636.852 m); minimum, 652 acre-ft (804,000 m³) Mar. 7, 1942 (elevation, 5,249.38 ft or 1,600.011 m).

NOTE.--Prior to 1960, maximum and minimum daily contents were published. Maximum and minimum daily contents (1928-39) were summarized in WSP 881.

REMARKS.--Storage began prior to 1905. Original lake formed by rockfilled dam, usable capacity, 5,500 acre-ft (6.78 hm³). Water diverted by Fresno flume and Lumber Co.'s flumes Nos. 1 and 2 beginning prior to 1907 and discontinued July 7, 1920. Present lake formed by concrete-arch dam; dam completed Nov. 18, 1927. Usable capacity of present lake, 135,600 acre-ft (167 hm³), revised, between elevations 5,225 ft (1,592.6 m), trash-rack foundation and 5,370.13 ft (1,636.816 m), revised, crest of spillway, above mean sea level. Additional storage of 92 acre-ft (113,000 m³) is not available for release. Water is received from Pitman Creek (since Feb. 22, 1928) and Huntington Lake (since Apr. 21, 1928) through Huntington-Shaver conduit and released for power development in Big Creek plants. See schematic diagram of San Joaquin River basin. Figures given herein represent usable contents.

COOPERATION.--Records of contents furnished by Southern California Edison Co. in connection with a Federal Power Commission project.

REVISIONS.--WSP 1565: Drainage area.

CAPAITY TABLE (ELEVATION, IN FEET, AND CONTENTS, IN ACRE-FEET)

5,225	0	5,250	700	5,280	9,190	5,330	60,900
5,230	42	5,255	1,250	5,290	15,600	5,340	76,700
5,235	97	5,260	2,070	5,300	24,000	5,350	94,600
5,240	191	5,265	3,210	5,310	34,500	5,360	114,200
5,245	379	5,270	4,750	5,320	46,800	5,371	137,500

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	98,100	81,631	73,212	56,203	48,822	44,046	41,633	31,913	88,997	131,642	129,412	104,462
2	97,621	80,838	72,902	56,188	48,374	45,720	41,860	31,814	90,854	132,138	129,284	103,365
3	96,837	80,838	72,348	56,261	47,928	46,679	41,645	32,633	92,661	133,065	128,813	102,212
4	96,092	80,838	71,374	56,420	47,457	46,945	41,335	34,662	94,587	133,956	128,388	101,107
5	95,292	80,097	70,344	56,624	46,986	46,639	40,999	36,684	96,435	134,500	127,708	99,966
6	95,273	79,415	69,341	56,976	46,521	46,337	40,676	38,562	98,310	134,631	126,731	98,791
7	95,387	78,733	68,328	57,182	46,075	46,088	40,354	40,552	100,197	134,565	126,118	97,813
8	94,759	78,038	67,325	57,270	45,655	45,747	40,023	42,743	101,999	133,978	126,054	96,837
9	94,077	77,331	66,332	57,343	45,315	45,354	39,754	44,861	103,795	133,369	125,991	95,654
10	93,322	77,398	65,314	57,417	45,238	44,978	39,337	46,918	105,607	133,173	125,907	94,492
11	92,550	77,701	64,293	57,167	45,341	44,589	38,924	49,025	107,512	133,130	125,843	93,681
12	91,749	77,752	63,291	56,406	45,484	44,265	38,514	51,121	109,171	132,634	125,780	92,888
13	91,245	77,162	62,323	56,000	45,576	43,931	38,115	53,157	110,919	132,052	125,400	92,065
14	90,743	76,541	61,512	55,536	45,668	43,624	37,779	55,159	112,637	132,095	124,282	91,972
15	89,990	75,840	60,689	55,087	45,733	43,329	37,481	57,196	114,383	131,556	123,170	91,972
16	89,255	75,223	59,899	54,730	45,852	43,035	37,207	59,156	116,079	131,060	122,060	91,152
17	88,489	75,540	58,876	54,502	45,760	42,756	36,957	61,032	117,786	130,738	120,955	90,339
18	87,708	76,024	57,842	54,274	45,341	42,465	36,778	62,837	119,460	130,460	119,874	89,530
19	86,948	76,074	56,800	53,989	44,978	42,188	36,426	64,643	121,122	130,075	118,756	88,725
20	86,930	75,990	55,754	53,776	44,550	41,923	36,016	66,363	122,792	129,797	117,662	87,926
21	86,930	75,673	54,830	53,409	44,110	41,658	35,629	68,155	124,492	129,455	116,572	87,127
22	87,127	75,340	54,901	53,003	43,662	41,409	35,341	69,961	126,139	128,856	115,466	86,338
23	86,733	75,007	54,973	52,625	43,509	41,210	35,100	71,777	127,814	128,643	114,363	85,531
24	85,998	74,694	55,044	52,233	43,521	41,099	34,915	73,671	129,198	128,963	113,246	84,822
25	85,282	74,347	55,087	51,835	43,534	40,912	34,536	75,607	130,139	129,219	112,170	84,096
26	84,556	74,001	55,174	51,409	43,547	40,564	34,138	77,584	130,909	130,139	111,081	83,391
27	84,539	73,836	55,493	50,984	43,585	40,589	33,720	79,551	131,189	130,653	109,993	82,693
28	84,539	73,688	55,652	50,574	43,547	40,627	33,302	81,493	131,297	130,289	108,870	81,977
29	83,813	73,342	55,783	50,139	-----	40,577	32,856	83,374	131,405	129,883	107,790	81,269
30	83,095	73,000	55,884	49,703	-----	40,776	32,465	85,211	131,534	129,797	106,656	80,579
31	82,361	-----	56,043	49,255	-----	40,900	-----	87,091	-----	129,497	105,548	-----
MAX	98,100	81,631	73,212	57,417	48,822	46,945	41,860	87,091	131,534	134,631	129,412	104,462
MIN	82,361	73,000	54,830	49,255	43,509	40,564	32,465	31,814	88,997	128,643	105,548	80,579
(a)	5,343.29	5,337.74	5,326.68	5,321.82	5,317.50	5,315.40	5,308.23	5,345.96	5,368.27	5,367.32	5,355.68	5,342.26
(b)	-15,700	-9,360	-17,000	-6,790	-5,710	-2,650	-8,440	+54,600	+44,400	-2,040	-23,900	-25,000

CAL YR 1973 b +27,300

WTR YR 1974 b -17,500

a Elevation, in feet, at end of month.

b Change in contents, in acre-feet, rounded to Geological Survey standards.

11241950 REDINGER LAKE NEAR AUBERRY, CALIF.

LOCATION.--Lat 37°08'42", long 119°26'58", in SW¼ sec.15, T.9 S., R.23 E., Madera County, Sierra National Forest, on upstream face of dam No. 7 on San Joaquin River, 4.2 mi (6.8 km) northeast of Auberry.

DRAINAGE AREA.--1,295 mi² (3,354 km²).

PERIOD OF RECORD.--November 1950 to current year. Prior to October 1965, monthend contents only, published in WSP 1930.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Southern California Edison Co.).

EXTREMES.--Current year: Maximum contents, 26,100 acre-ft (32.2 hm³) Nov. 4 (elevation, 1,403.00 ft or 427.634 m); minimum, 9,830 acre-ft (12.1 hm³) Sept. 30 (elevation, 1,360.60 ft or 414.711 m).
Period of record: Maximum contents, 26,100 acre-ft (32.2 hm³) June 15, 1963, Oct. 29, 1964, Oct. 27, 1967, Nov. 4, 1973; maximum elevation, 1,403.00 ft (427.634 m) Nov. 4, 1973; minimum contents since appreciable storage was attained, 6,280 acre-ft (7.74 hm³) Mar. 3, 1956 (elevation, 1,347.98 ft or 410.864 m).

REMARKS.--Lake is formed by a concrete dam; storage began Nov. 19, 1950. Usable capacity, 26,120 acre-ft (32.2 hm³) between elevations 1,320.0 ft (402.34 m), invert of tunnel and 1,403.0 ft (427.63 m), top of radial gates. Additional storage of 8,914 acre-ft (11.0 hm³) is not available for release. Water is used for power development in Big Creek powerhouse No. 4. See schematic diagram of San Joaquin River basin. Figures given herein represent usable contents.

COOPERATION.--Records of contents furnished by Southern California Edison Co. in connection with a Federal Power Commission project.

CAPACITY TABLE (ELEVATION, IN FEET, AND CONTENTS, IN ACRE-FEET)

1,320	0	1,330	2,010	1,355	8,200	1,380	16,500
1,322	384	1,335	3,120	1,360	9,650	1,385	18,400
1,324	778	1,340	4,280	1,365	11,200	1,390	20,400
1,326	1,180	1,345	5,520	1,370	12,900	1,400	24,700
1,328	1,590	1,350	6,810	1,375	14,600	1,403	26,119

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FER	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12,821	25,342	25,123	24,856	24,897	24,056	25,736	25,782	25,246	25,556	24,933	25,096
2	13,584	25,241	25,383	24,016	25,119	23,940	25,773	25,745	25,200	25,529	25,015	25,128
3	14,888	25,291	25,419	24,960	25,028	23,847	25,712	25,685	25,110	25,506	25,092	25,278
4	16,338	25,119	25,055	25,019	24,988	23,114	25,675	25,643	25,019	25,470	25,128	25,465
5	17,738	25,132	24,663	24,838	24,965	21,937	25,579	25,552	24,866	25,556	25,033	25,502
6	18,388	25,150	24,524	25,006	24,893	22,650	25,856	25,782	24,829	25,745	25,019	25,575
7	18,952	25,155	24,497	25,092	25,759	23,588	25,897	25,828	24,969	25,731	24,969	24,735
8	20,465	25,046	24,439	24,897	25,579	24,560	25,699	25,602	24,676	25,351	25,019	23,900
9	21,409	24,591	24,367	24,969	25,470	24,960	25,902	25,360	25,177	24,834	24,947	24,202
10	22,581	24,667	24,358	24,974	24,721	25,470	25,561	25,556	25,342	25,006	24,938	24,390
11	23,914	24,412	24,448	24,632	24,911	25,073	25,796	25,699	25,264	24,870	25,019	24,484
12	24,587	24,466	24,528	24,771	24,960	24,118	25,916	25,639	25,410	24,911	24,965	24,466
13	24,452	24,372	24,542	24,649	24,915	23,856	25,524	25,360	25,110	24,929	24,956	24,345
14	24,376	24,434	24,399	24,600	24,938	24,042	25,694	25,474	25,465	24,893	24,960	22,546
15	24,484	24,376	24,502	24,618	24,951	24,408	25,865	25,333	25,488	24,906	24,965	20,636
16	24,511	24,443	24,645	24,640	24,965	24,816	25,625	25,497	25,616	24,920	25,010	19,109
17	24,947	24,906	24,789	24,614	24,974	25,191	25,671	25,342	25,584	24,951	25,214	18,831
18	25,110	24,434	24,748	24,038	24,992	25,529	25,888	25,575	25,703	24,974	25,001	18,580
19	25,078	24,247	24,667	23,830	25,010	25,837	25,763	25,515	25,736	25,042	24,929	18,412
20	24,780	24,207	24,703	23,945	24,960	25,860	25,763	25,552	25,369	25,042	24,893	18,175
21	24,443	24,461	24,511	23,963	24,784	25,865	25,749	25,429	25,639	24,906	24,965	16,959
22	24,260	24,694	24,649	23,998	24,658	25,768	25,782	25,712	25,584	24,915	25,037	15,628
23	24,520	24,969	24,421	24,087	24,838	25,726	25,693	25,634	25,694	24,911	25,110	15,091
24	24,924	25,195	24,358	24,390	24,965	25,759	25,777	25,488	25,342	24,911	24,974	14,765
25	24,820	25,383	24,300	24,681	25,173	25,842	25,786	25,497	25,620	24,820	25,010	14,062
26	24,834	25,611	24,466	24,739	25,401	26,017	25,726	25,515	25,694	24,721	25,078	13,686
27	24,965	25,355	24,726	24,775	25,511	25,842	25,712	25,323	25,675	24,789	25,073	13,068
28	25,155	24,979	24,771	24,789	24,587	25,837	25,694	25,374	25,648	25,087	25,015	11,775
29	25,200	24,979	24,906	24,798	-----	25,819	25,722	25,566	25,620	24,951	24,992	10,497
30	25,227	25,015	24,988	24,816	-----	25,906	25,796	25,264	25,588	25,015	25,055	10,727
31	25,255	-----	24,902	24,825	-----	25,842	-----	25,269	-----	24,983	25,069	-----
MAX	25,255	25,611	25,419	25,092	25,759	26,017	25,916	25,828	25,736	25,745	25,214	25,575
MIN	12,821	24,207	24,300	23,830	24,587	21,937	25,524	25,264	24,676	24,721	24,893	10,497
(a)	1,401.12	1,400.59	1,400.34	1,400.17	1,399.64	1,402.40	1,402.30	1,401.15	1,401.85	1,400.52	1,400.71	1,363.50
(b)	+12,500	-240	-113	-77	-238	+1,260	-46	-527	+319	-605	+86	-14,300

CAL YR 1973 b +882
WTR YR 1974 b +2,040

a Elevation, in feet, at end of month.

b Change in contents, in acre-feet, rounded to Geological Survey standards.

11242000 SAN JOAQUIN RIVER ABOVE WILLOW CREEK, NEAR AUBERRY, CALIF.

LOCATION.--Lat 37°08'40", long 119°27'13", in SW¼SW¼ sec.15, T.9 S., R.23 E., Madera County, Sierra National Forest, on right bank 1,000 ft (305 m) downstream from diversion dam, 0.4 mi (0.6 km) upstream from Willow Creek, and 4.2 mi (6.8 km) northeast of Auberry.

DRAINAGE AREA.--1,295 mi² (3,354 km²).

PERIOD OF RECORD.--March 1951 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,175.54 ft (358.305 m) above mean sea level (levels by Southern California Edison Co.).

AVERAGE DISCHARGE.--23 years, 421 ft³/s (11.92 m³/s), 305,000 acre-ft/yr (376 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 10,000 ft³/s (283 m³/s) May 2 (gage height, 19.64 ft or 5.986 m); minimum daily, 6.1 ft³/s (0.17 m³/s) Nov. 19, 20, 22.
Period of record: Maximum discharge, 73,200 ft³/s (2,070 m³/s) Dec. 23, 1955 (gage height, 54.2 ft or 16.52 m, from floodmarks), from rating curve extended above 7,000 ft³/s (198 m³/s) on basis of computed flow over dam; no flow Sept. 25, 1951.

REMARKS.--Records good. Flow regulated by nine powerplants and six reservoirs with combined capacity of about 559,900 acre-ft (690 hm³). Conduit to powerhouse No. 4 diverts 1,000 ft (305 m) above station. See schematic diagram of San Joaquin River basin.

COOPERATION.--Gage-height record and 10 discharge measurements furnished by Southern California Edison Co., in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	17	8.2	8.4	8.4	8.0	917	361	3,740	225	22	26
2	24	17	6.8	8.2	8.4	8.4	1,650	414	2,950	222	22	26
3	22	17	6.8	8.0	8.4	9.2	548	407	2,960	223	22	26
4	21	17	6.8	8.2	8.4	8.8	417	460	3,190	223	21	26
5	21	17	6.8	8.2	8.4	8.2	390	282	3,290	110	22	26
6	21	17	7.0	8.6	8.4	8.2	159	284	4,200	16	22	26
7	21	16	6.5	8.8	8.4	8.2	254	402	4,700	16	22	26
8	17	16	6.8	8.6	8.4	8.6	347	578	4,080	16	21	26
9	13	18	8.2	8.6	8.2	8.6	184	572	2,700	17	22	26
10	16	17	8.2	8.6	8.2	8.6	424	288	2,870	17	22	25
11	17	16	8.2	8.6	8.2	8.8	125	286	3,110	18	22	25
12	16	7.7	8.2	8.8	8.2	8.6	155	432	3,110	18	22	25
13	16	7.3	8.4	8.6	8.4	8.6	393	508	3,010	18	22	25
14	16	7.3	7.0	8.6	8.4	18	129	1,040	2,820	18	22	25
15	16	7.7	6.8	8.6	8.4	23	122	4,310	2,910	19	22	25
16	16	10	6.8	8.4	8.2	23	339	3,670	2,390	18	22	25
17	18	9.6	6.8	8.8	8.2	23	189	2,910	1,910	17	22	25
18	17	6.4	8.0	8.8	8.2	28	118	1,670	1,110	17	22	26
19	18	6.1	8.2	8.8	8.4	26	282	1,250	833	17	24	23
20	18	6.1	9.0	9.0	8.4	186	208	833	729	18	24	24
21	18	6.2	11	8.4	8.4	196	208	755	386	18	24	23
22	17	6.1	7.3	8.4	8.8	196	220	740	675	18	24	22
23	12	7.5	7.0	8.4	8.6	127	308	1,560	729	18	25	22
24	9.2	7.9	7.0	8.4	8.6	26	204	1,740	790	20	25	22
25	15	8.6	7.0	8.4	8.4	26	214	2,990	254	21	25	22
26	16	9.4	7.7	8.4	8.4	39	290	4,250	230	21	25	22
27	16	10	8.4	8.4	7.9	185	286	5,270	230	21	25	22
28	16	11	8.2	8.4	7.5	628	300	5,280	228	22	26	22
29	17	11	8.2	8.4	-----	278	275	4,850	227	22	26	21
30	17	11	8.2	8.4	-----	229	279	4,020	225	22	26	21
31	17	-----	8.2	8.4	-----	198	-----	3,740	-----	22	26	-----
TOTAL	536.2	341.9	237.7	263.6	233.2	2,565.8	9,934	56,152	60,586	1,488	719	726
MEAN	17.3	11.4	7.67	8.50	8.33	82.8	331	1,811	2,020	48.0	23.2	24.2
MAX	24	18	11	9.0	8.8	628	1,650	5,280	4,700	225	26	26
MIN	9.2	6.1	6.5	8.0	7.5	8.0	118	282	225	16	21	21
AC-FT	1,060	678	471	523	463	5,090	19,700	111,400	120,200	2,950	1,430	1,440
CAL YR 1973	TOTAL 180,882.5 MEAN 496 MAX 8,620 MIN 4.6 AC-FT 358,800											
WTR YR 1974	TOTAL 133,783.4 MEAN 367 MAX 5,280 MIN 6.1 AC-FT 265,400											

NOTE.--No gage-height record Oct. 1 to Nov. 12.

11242350 SOQUEL DIVERSION NEAR SUGAR PINE, CALIF.

LOCATION.--Lat 37°25'32", long 119°32'53", in SW¼NE¼ sec.10, T.6 S., R.22 E., Madera County, Sierra National Forest, on left bank 100 ft (30 m) downstream from headgate on North Fork Willow Creek, and 4.8 mi (7.7 km) east of Sugar Pine.

PERIOD OF RECORD.--October 1965 to current year. Monthly discharge only for October 1965 to September 1969, published with records for North Fork Willow Creek near Sugar Pine.

GAGE.--Water-stage recorder. Altitude of gage is 5,400 ft (1,650 m), from topographic map.

EXTREMES.--Period of record: Maximum daily discharge, 50 ft³/s (1.42 m³/s) May 14, 16, 25, 1971; no flow for several days in 1971-73.

REMARKS.--Records good. Ditch diverts water from right bank of North Fork Willow Creek 100 ft (30 m) upstream for irrigation in Madera Irrigation District.

COOPERATION.--Three discharge measurements furnished by Pacific Gas and Electric Co.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.4	3.9	14	7.3	10	14	16	25	34	19	4.5	.48
2	2.4	3.9	13	7.0	10	17	17	34	34	19	.90	.48
3	2.4	3.9	8.3	6.8	10	11	15	34	34	18	.82	.48
4	2.3	3.9	7.9	6.8	10	9.3	14	34	34	17	.80	.48
5	2.3	3.9	7.9	6.4	10	9.7	14	34	34	16	.80	.48
6	2.3	5.0	7.9	9.3	8.9	10	14	35	35	16	.82	.46
7	4.5	4.8	7.9	18	9.0	9.7	14	36	33	15	.76	.46
8	8.2	4.3	7.9	15	9.0	9.0	14	36	28	16	.78	.46
9	4.6	4.1	7.9	9.0	9.0	9.0	15	36	27	17	.74	.43
10	4.1	7.9	7.9	6.7	9.0	9.0	14	35	26	19	.70	.43
11	3.9	14	7.9	6.7	9.0	9.0	14	36	27	16	.68	.38
12	3.9	18	7.6	7.3	8.0	9.0	15	35	30	15	.68	.38
13	3.9	10	8.3	7.3	5.9	9.3	15	35	29	14	.67	.38
14	3.7	9.3	7.9	7.3	7.0	10	16	35	28	14	.67	.38
15	3.2	8.6	7.9	7.9	7.0	11	17	35	27	13	.66	.36
16	3.0	9.0	7.9	9.7	7.0	12	17	34	27	12	.63	.35
17	3.0	12	7.9	16	7.0	12	18	34	25	12	.61	.33
18	2.8	15	7.9	16	7.0	12	18	34	25	11	.60	.38
19	2.8	11	7.6	16	6.4	12	17	34	24	11	.58	.36
20	2.8	10	7.3	14	6.4	12	16	34	23	11	.57	.36
21	3.0	9.3	6.4	13	6.7	12	16	34	22	10	.56	.37
22	4.8	9.0	5.6	12	6.7	12	17	34	21	9.7	.54	.36
23	12	8.6	7.0	12	6.7	12	16	35	20	9.3	.54	.34
24	7.0	8.6	7.0	12	6.7	12	15	35	20	9.7	.55	.33
25	5.9	7.9	7.0	11	6.7	12	14	36	19	9.3	.53	.34
26	5.0	7.9	7.3	11	6.7	12	14	36	20	8.6	.55	.34
27	4.6	7.9	9.3	11	6.7	13	14	36	22	8.4	.55	.33
28	4.6	7.9	11	11	6.7	14	14	36	22	8.0	.50	.35
29	4.3	7.9	12	11	-----	14	15	36	21	7.4	.51	.38
30	4.1	7.9	12	10	-----	16	16	36	20	7.2	.51	.38
31	4.1	-----	10	10	-----	14	-----	35	-----	7.0	.48	-----
TOTAL	127.9	245.4	263.4	324.5	219.2	359.0	461	1,074	791	395.6	23.79	11.82
MEAN	4.13	8.18	8.50	10.5	7.83	11.6	15.4	34.6	26.4	12.8	.77	.39
MAX	12	18	14	18	10	17	18	36	35	19	4.5	.48
MIN	2.3	3.9	5.6	6.4	5.9	9.0	14	25	19	7.0	.48	.33
AC-FT	254	487	522	644	435	712	914	2,130	1,570	785	47	23

CAL YR 1973 TOTAL 5,043.10 MEAN 13.8 MAX 41 MIN 1.4 AC-FT 10,000

WTR YR 1974 TOTAL 4,296.61 MEAN 11.8 MAX 36 MIN .33 AC-FT 8,520

11242400 NORTH FORK WILLOW CREEK NEAR SUGAR PINE, CALIF.

LOCATION.--Lat 37°23'52", long 119°33'55", in SW¼NE¼ sec.21, T.6 S., R.22 E., Madera County, on right bank at road bridge 0.6 mi (1.0 km) downstream from Sequel Campground, 3.0 mi (4.8 km) upstream from Chilkoat Creek, and 4.7 mi (7.6 km) southeast of Sugar Pine.

DRAINAGE AREA.--16.9 mi² (43.8 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 5,200 ft (1,580 m), from topographic map.

AVERAGE DISCHARGE.--9 years, 20.9 ft³/s (0.592 m³/s), 15,140 acre-ft/yr (18.7 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 204 ft³/s (5.78 m³/s) Apr. 1 (gage height, 4.12 ft or 1.256 m); minimum daily, 1.6 ft³/s (0.045 m³/s) Oct. 4-6.
Period of record: Maximum discharge, 1,600 ft³/s (453 m³/s) Dec. 6, 1966 (gage height, 5.90 ft or 1.798 m), from rating curve extended above 250 ft³/s (7.08 m³/s) on basis of a step-backwater survey; minimum daily, 1.0 ft³/s (0.028 m³/s) Sept. 18, 19, 26-28, 1968.

REMARKS.--Records good. No storage above station. Madera Irrigation District diverts up to 50 ft³/s (1.42 m³/s) through Sequel ditch (see sta 11242350) to the Fresno River basin 2.2 mi (3.5 km) upstream.

REVISIONS (WATER YEARS).--WRD Calif. 1967: 1966(M), WRD Calif. 1972: 1970-71.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.7	1.8	19	14	13	66	93	45	74	3.7	4.9	4.1
2	1.7	1.8	12	12	13	78	80	50	67	3.7	8.0	4.1
3	1.7	1.8	9.3	11	12	45	49	54	66	3.6	7.9	3.9
4	1.6	1.8	7.7	11	12	34	44	54	62	3.6	7.9	3.9
5	1.6	1.7	6.4	11	12	33	43	60	59	3.7	7.6	3.8
6	1.6	2.4	5.8	12	12	33	43	72	58	3.7	6.7	3.6
7	2.7	2.1	5.8	18	12	30	42	85	55	3.7	6.7	3.6
8	8.9	2.0	5.5	18	12	29	42	99	52	3.6	6.5	3.6
9	2.9	2.0	5.5	14	12	27	43	103	47	3.8	6.4	3.6
10	2.4	11	5.5	9.9	12	27	39	99	43	4.6	6.3	3.6
11	2.3	37	5.6	9.6	12	26	38	103	39	4.2	6.1	3.5
12	2.3	66	5.3	12	12	29	39	107	32	3.8	6.0	3.5
13	2.3	13	10	12	14	29	42	97	29	3.5	5.8	3.5
14	2.1	9.6	9.9	10	13	32	44	92	26	3.1	6.0	3.5
15	2.1	7.1	7.1	12	13	35	47	92	22	3.2	6.0	3.5
16	2.0	7.3	6.2	18	13	36	48	85	20	3.2	5.3	3.4
17	2.0	40	6.6	47	12	35	51	72	17	3.2	5.3	3.3
18	1.8	40	6.0	44	12	37	52	58	15	3.2	5.3	3.1
19	1.8	14	5.0	43	13	38	44	60	14	3.2	5.2	3.0
20	1.8	11	5.0	34	13	38	41	43	13	3.2	5.3	3.0
21	2.0	8.8	5.0	28	13	38	40	44	12	3.1	5.2	3.0
22	4.4	6.4	8.5	24	13	38	43	51	11	3.1	5.0	2.9
23	30	5.6	6.2	22	12	35	48	53	11	3.1	4.8	2.9
24	3.9	5.3	6.0	20	13	38	49	58	9.9	3.0	4.7	2.9
25	2.6	4.6	6.0	19	13	38	42	76	9.7	3.0	4.6	3.0
26	2.3	4.8	6.0	18	13	38	41	88	7.8	2.9	4.4	3.0
27	2.1	4.5	24	16	13	48	41	88	4.6	2.9	4.3	3.0
28	2.0	4.6	30	15	13	55	41	88	4.1	2.8	4.3	3.0
29	2.0	4.8	28	15	-----	51	42	82	3.8	2.9	4.3	2.9
30	1.8	4.6	24	14	-----	63	49	77	3.7	2.9	4.2	2.9
31	1.8	-----	16	14	-----	52	-----	76	-----	2.9	4.2	-----
TOTAL	102.2	327.4	308.9	577.5	352	1,231	1,400	2,311	887.6	104.1	175.2	100.6
MEAN	3.30	10.9	9.96	18.6	12.6	39.7	46.7	74.5	29.6	3.36	5.65	3.35
MAX	30	66	30	47	14	78	93	107	74	4.6	8.0	4.1
MIN	1.6	1.7	5.0	9.6	12	26	38	43	3.7	2.8	4.2	2.9
AC-FT	203	649	613	1,150	698	2,440	2,780	4,580	1,760	206	348	200

CAL YR 1973 TOTAL 7,168.4 MEAN 19.6 MAX 184 MIN 1.4 AC-FT 14,220
WTR YR 1974 TOTAL 7,877.5 MEAN 21.6 MAX 107 MIN 1.6 AC-FT 15,630

DATE	TIME	PEAK DISCHARGE (BASE, 100 FT ³ /S)	DATE	TIME	G.H.	DISCHARGE
11-12	0800	4.07	190	4-1	2200	4.12
11-17	2230	3.97	161	5-11	2100	3.87
3-2	0300	3.89	140	5-27	2000	3.82

11243400 BASS LAKE NEAR BASS LAKE, CALIF.

LOCATION.--Lat 37°17'36", long 119°31'40", in NE¼ sec.26, T.7 S., R.22 E., Madera County, Sierra National Forest, at outlet tower at dam on North Fork Willow Creek, 2.2 mi (3.5 km) southeast of town of Bass Lake, and 5 mi (8 km) north of town of North Fork.

DRAINAGE AREA.--50.4 mi² (130.5 km²).

PERIOD OF RECORD.--January 1911 to current year. Bass Lake was formerly called Crane Valley Reservoir.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Pacific Gas and Electric Co.).

EXTREMES.--Current year: Maximum contents, 45,250 acre-ft (55.8 hm³) June 8 (elevation, 3,376.26 ft or 1,029.084 m); minimum, 20,320 acre-ft (25.1 hm³) Dec. 26 (elevation, 3,350.88 ft or 1,021.348 m).
Period of record: Maximum contents, 45,960 acre-ft (56.7 hm³) June 17, 1923 (elevation, 3,376.8 ft or 1,029.25 m); minimum, 35 acre-ft (43,200 m³) Nov. 19, 1953 (elevation, 3,270.2 ft or 996.76 m).

REMARKS.--Reservoir formed by earth- and rockfill dam; completed in 1901 and raised in 1910. Since 1910 usable contents 45,100 acre-ft (55.6 hm³) between elevations, 3,280.22 ft (999.811 m), invert of outlet conduit No. 3 and 3,376.40 ft (1,029.127 m), top of spillway gates, above mean sea level. Additional storage of 300 acre-ft (370,000 m³) not available for release. Water is released through Crane Valley powerhouse below dam for use in three small powerhouses before being discharged into Kerckhoff Reservoir at Wishon powerhouse. Water diverted from South Fork Willow Creek via Browns Creek ditch into Bass Lake near left end of dam. Madera Irrigation District has water rights to divert up to 50 ft³/s (1.42 m³/s) from North Fork Willow Creek through Soquel ditch (see sta 11242350) into Nelder Creek (Fresno River basin) during October and March to July each year. Chilkoot ditch can divert up to 7 ft³/s (0.20 m³/s) from Chilkoot Creek into North Fork Willow Creek just upstream from diversion dam from Oct. 1 to Aug. 1 each water year if available. See schematic diagram of San Joaquin River basin.

COOPERATION.--Records of contents furnished by Pacific Gas and Electric Co. in connection with a Federal Power Commission project.

MONTHEND CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

Date	Contents
Sept. 30.....	29,010
Oct. 31.....	22,520
Nov. 30.....	22,190
Dec. 31.....	21,160
Jan. 31.....	23,590
Feb. 28.....	21,570
Mar. 31.....	28,610
Apr. 30.....	39,670
May 31.....	44,890
June 30.....	43,570
July 31.....	42,330
Aug. 31.....	37,520
Sept. 30.....	29,190

11243500 PACIFIC GAS AND ELECTRIC CO. CONDUIT NO. 3 NEAR BASS LAKE, CALIF.

LOCATION.--Lat 37°17'21", long 119°31'44", in SE¼ sec.26, T.7 S., R.22 E., Madera County, Sierra National Forest, on left bank 1,000 ft (305 m) downstream from Crane Valley powerhouse and dam, and 2.5 mi (4.0 km) southeast of town of Bass Lake.

PERIOD OF RECORD.--October 1940 to current year. Prior to October 1954, published as "near Crane Valley Reservoir."

GAGE.--Water-stage recorder and concrete flume. Altitude of gage is 3,300 ft (1,006 m), from topographic map.

AVERAGE DISCHARGE.--34 years, 68.8 ft³/s (1.948 m³/s), 49,850 acre-ft/yr (61.5 hm³/yr).

EXTREMES.--Period of record: Maximum daily discharge, 167 ft³/s (4.73 m³/s) June 23, 24, 1965; no flow at times.

REMARKS.--Conduit diverts from Bass Lake in sec.26, T.7 S., R.22 E. Water passes through Crane Valley powerhouse, then to powerhouse No. 3, and is stored temporarily at Manzanita Lake on North Fork Willow Creek; flow then diverts to powerhouses No. 2 and 1A before it enters San Joaquin River at Kerckhoff Reservoir through Wishon powerhouse No. 1. See schematic diagram of San Joaquin River basin.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	109	107	64	120	87	88	0	145	144	70	119	124
2	108	47	4.2	120	115	67	0	140	144	117	119	124
3	108	0	62	119	120	75	0	140	144	84	50	125
4	108	0	120	119	120	84	0	139	144	0	.15	124
5	107	0	118	119	120	95	.04	140	144	0	73	124
6	107	0	51	118	120	93	0	141	144	0	121	124
7	107	0	60	90	122	95	0	141	137	0	120	124
8	107	0	120	89	122	84	0	142	130	0	120	125
9	107	0	117	109	122	86	0	142	129	5.0	56	137
10	108	0	118	119	122	103	0	142	123	0	.15	142
11	108	0	119	119	122	117	0	141	118	0	.15	143
12	108	24	119	111	122	119	20	142	118	0	73	143
13	108	89	119	113	122	131	47	141	118	0	120	144
14	108	119	120	120	122	148	47	140	118	0	120	145
15	108	119	120	120	121	148	47	141	120	0	120	145
16	108	119	121	101	120	148	47	141	119	4.6	52	143
17	107	119	121	60	120	148	47	142	119	.09	0	143
18	107	119	120	53	120	148	47	142	118	.09	0	142
19	108	99	119	81	120	148	64	142	118	36	72	143
20	108	73	119	70	120	148	97	142	119	0	120	142
21	107	70	119	76	120	147	98	140	119	0	118	142
22	107	119	119	100	120	145	96	140	119	74	119	141
23	106	119	119	100	120	142	91	141	119	120	67	141
24	122	118	119	109	120	142	91	141	118	118	.48	141
25	133	119	119	118	120	130	92	142	119	119	.48	142
26	120	119	118	119	120	119	97	142	120	119	73	143
27	109	119	93	120	120	121	108	141	120	50	121	142
28	108	119	77	120	120	115	114	140	55	.15	122	141
29	108	119	74	120	-----	109	109	140	.50	.15	122	141
30	108	119	102	120	-----	110	127	141	.48	67	122	140
31	107	-----	120	120	-----	49	-----	144	-----	119	123	-----
TOTAL	3,389	2,174	3,210.2	3,292	3,339	3,602	1,486.04	4,378	3,457.98	1,103.08	2,443.41	4,120
MEAN	109	72.5	104	106	119	116	49.5	141	115	35.6	78.8	137
MAX	133	119	121	120	122	148	127	145	144	120	123	145
MIN	106	0	4.2	53	87	49	0	139	.48	0	0	124
AC-FT	6,720	4,310	6,370	6,530	6,620	7,140	2,950	8,680	6,860	2,190	4,850	8,170
CAL YR 1973	TOTAL 34,004.74		MEAN 93.2		MAX 149	MIN 0	AC-FT 67,450					
WTR YR 1974	TOTAL 35,994.71		MEAN 98.6		MAX 148	MIN 0	AC-FT 71,400					

11244000 NORTH FORK WILLOW CREEK NEAR BASS LAKE, CALIF.

LOCATION.--Lat 37°17'20", long 119°31'45", in SE¼ sec.26, T.7 S., R.22 E., Madera County, Sierra National Forest, on right bank 1,500 ft (457 m) downstream from Bass Lake spillway, and 2.5 mi (4.0 km) southeast of town of Bass Lake.

DRAINAGE AREA.--50.8 mi² (131.6 km²).

PERIOD OF RECORD.--May 1940 to current year. Prior to October 1944, published as Willow Creek below Crane Valley Reservoir. October 1944 to September 1954, published as "below Crane Valley Reservoir."

Gage.--Water-stage recorder. Broad-crested weir with V-notch Dec. 21, 1961, to Jan. 16, 1969, and since Mar. 26, 1971. Altitude of gage is 3,200 ft (975 m), from topographic map.

AVERAGE DISCHARGE.--34 years, 13.4 ft³/s (0.379 m³/s), 9,710 acre-ft/yr (12.0 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 8.7 ft³/s (0.25 m³/s) Apr. 1 (gage height, 2.27 ft or 0.692 m); minimum daily, 0.29 ft³/s (0.008 m³/s) Feb. 27.
Period of record: Maximum discharge, 1,300 ft³/s (36.8 m³/s) Jan. 26, 1969 (gage height, unknown); minimum daily, 0.1 ft³/s (0.003 m³/s) Nov. 13-16, 1940.

REMARKS.--Flow regulated by Bass Lake (see sta 11243400) 1,500 ft (457 m) upstream and by diversion into Pacific Gas and Electric Co. conduit No. 3 near Bass Lake (see sta 11243500). Record for Soquel diversion (see sta 11242350) shows flow diverted from North Fork Willow Creek into Nelder Creek in Fresno River basin. Brown's Creek ditch diverted 27,950 acre-ft (34.5 hm³) from South Fork Willow Creek into Bass Lake during the current year. See schematic diagram of San Joaquin River basin.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.30	.31	2.2	.52	.37	2.9	3.2	2.0	2.6	1.4	1.2	.80
2	.30	.31	1.0	.44	.36	3.0	2.4	1.9	2.5	1.4	1.2	.78
3	.30	.30	.64	.41	.35	1.6	1.3	1.9	2.5	1.4	1.2	.76
4	.30	.30	.52	.41	.35	1.2	1.1	1.9	2.5	1.4	1.2	.73
5	.30	.31	.46	.41	.35	1.2	.98	2.1	2.5	1.3	1.2	.70
6	.30	.32	.41	.43	.35	1.2	.93	2.2	2.5	1.3	1.2	.68
7	.36	.31	.38	.70	.36	1.3	.94	2.1	2.5	1.3	1.1	.64
8	.42	.30	.37	.81	.34	1.4	1.0	2.0	2.3	1.4	1.1	.61
9	.33	.31	.35	.77	.32	.93	1.1	2.0	2.2	1.4	1.1	.59
10	.32	.34	.34	.71	.32	.77	1.2	2.0	2.1	1.4	1.1	.56
11	.31	.46	.33	.61	.31	.65	1.2	2.0	2.0	1.4	1.1	.55
12	.31	1.4	.41	1.1	.34	.58	1.3	2.1	1.9	1.4	1.1	.54
13	.31	.52	.41	1.0	.36	.53	1.4	2.3	1.9	1.4	1.1	.53
14	.30	.83	.36	.88	.34	.50	1.4	2.3	1.8	1.4	1.0	.52
15	.30	.45	.33	1.0	.32	.48	1.5	2.3	1.7	1.4	1.0	.51
16	.30	.45	.32	1.4	.32	.45	1.6	2.3	1.7	1.4	.98	.50
17	.30	1.4	.32	2.6	.32	.43	.78	2.4	1.6	1.4	.96	.48
18	.30	1.6	.32	1.4	.31	.43	1.7	2.5	1.6	1.4	.96	.47
19	.30	.64	.31	1.1	.44	.41	1.8	2.5	1.6	1.4	.95	.46
20	.30	.52	.30	1.4	.38	.41	1.9	2.4	1.6	1.4	.96	.45
21	.30	.47	.38	1.0	.35	.39	1.9	2.3	1.6	1.4	.95	.44
22	.40	.42	.67	.72	.34	.39	1.8	2.4	1.6	1.4	.93	.43
23	.77	.40	.39	.59	.33	.38	1.9	2.3	1.5	1.4	.91	.42
24	.36	.39	.36	.53	.33	.38	2.1	2.4	1.5	1.3	.88	.42
25	.34	.38	.35	.48	.32	.38	1.9	2.5	1.5	1.3	.88	.41
26	.33	.39	.35	.46	.30	.38	2.0	2.5	1.5	1.3	.87	.40
27	.33	.37	1.3	.43	.29	.53	2.2	2.5	1.5	1.3	.87	.38
28	.32	.36	.93	.42	.33	1.5	2.2	2.6	1.4	1.2	.85	.37
29	.32	.35	.58	.40	-----	.66	2.2	2.6	1.4	1.2	.84	.35
30	.31	.35	.49	.38	-----	.92	2.1	2.6	1.4	1.3	.83	.34
31	.31	-----	.46	.37	-----	.63	-----	2.6	-----	1.3	.81	-----
TOTAL	10.35	15.26	16.34	23.88	9.50	26.91	49.03	70.5	56.5	42.1	31.33	15.82
MEAN	.33	.51	.53	.77	.34	.87	1.63	2.27	1.88	1.36	1.01	.53
MAX	.77	1.6	2.2	2.6	.44	3.0	3.2	2.6	2.6	1.4	1.2	.80
MIN	.30	.30	.30	.37	.29	.38	.78	1.9	1.4	1.2	.81	.34
AC-FT	21	30	32	47	19	53	97	140	112	84	62	31

CAL YR 1973 TOTAL 782.71 MEAN 2.14 MAX 157 MIN .22 AC-FT 1,550
WTR YR 1974 TOTAL 367.52 MEAN 1.01 MAX 3.2 MIN .29 AC-FT 729

SAN JOAQUIN RIVER BASIN

11246500 WILLOW CREEK AT MOUTH, NEAR AUBERRY, CALIF.

LOCATION.--Lat 37°09'03", long 119°27'34", in SE¼NE¼ sec.16, T.9 S., R.23 E., Madera County, Sierra National Forest, on left bank 40 ft (12 m) upstream from bridge, 0.4 mi (0.6 km) upstream from mouth, 1.3 mi (2.1 km) downstream from Whiskey Creek, and 4.3 mi (6.9 km) northeast of Auberry.

DRAINAGE AREA.--130 mi² (337 km²).

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

GAGE.--Water-stage recorder. Concrete control since Oct. 22, 1964. Datum of gage is 1,174.69 ft (358.046 m) above mean sea level (levels by Southern California Edison Co.).

AVERAGE DISCHARGE.--22 years, 56.3 ft³/s (1.594 m³/s), 40,790 acre-ft/yr (50.3 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 3,140 ft³/s (88.9 m³/s) Apr. 1 (gage height, 13.11 ft or 3.996 m); minimum daily, 0.96 ft³/s (0.027 m³/s) Sept. 21-25.
Period of record: Maximum discharge, 15,700 ft³/s (445 m³/s) Dec. 23, 1955 (gage height, 28.5 ft or 8.69 m, from floodmarks), from rating curve extended above 4,700 ft³/s (133 m³/s); no flow at times in 1955, 1959-62, 1964-66, 1968, 1972.

REMARKS.--Records good. Flow regulated by Bass Lake 10 mi (16 km) upstream (see sta 11243400) and diversion into Pacific Gas and Electric Co. conduit No. 1. See schematic diagram of San Joaquin River basin.

COOPERATION.--Gage-height record and 11 discharge measurements furnished by Southern California Edison Co., in connection with a Federal Power Commission project.

REVISIONS (WATER YEARS).--WRD Calif. 1963: 1956-58(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.0	3.6	178	50	30	210	788	139	28	10	3.4	1.5
2	1.0	3.5	60	42	30	1,090	1,100	150	27	10	3.3	1.5
3	1.9	3.5	35	34	30	390	381	154	26	10	3.1	1.4
4	3.5	3.5	27	34	32	155	265	148	25	9.6	3.0	1.4
5	2.0	3.6	23	38	32	107	233	136	24	9.3	3.4	1.3
6	1.6	3.9	19	46	31	100	217	147	23	8.8	3.4	1.3
7	2.1	5.0	17	100	29	100	210	174	23	8.7	3.2	1.2
8	9.2	4.2	16	90	28	100	201	188	21	8.5	3.0	1.2
9	10	4.0	15	50	28	100	210	170	20	9.3	2.8	1.1
10	9.0	4.5	14	40	28	100	182	154	19	11	2.7	1.1
11	8.7	7.1	14	30	27	100	158	138	18	11	2.7	1.1
12	11	131	14	90	27	100	146	129	18	9.8	2.5	1.1
13	8.2	29	14	50	31	100	96	111	18	8.8	2.4	1.1
14	7.4	18	23	40	28	100	95	95	17	8.4	2.4	1.2
15	6.6	14	18	30	27	100	98	84	17	8.1	2.4	1.2
16	6.3	12	16	30	27	100	96	76	17	7.4	2.4	1.2
17	4.8	87	15	30	26	100	95	63	16	7.2	2.4	1.2
18	3.8	420	15	420	25	100	98	51	16	6.9	2.3	1.2
19	3.2	42	14	150	30	100	83	49	16	6.5	2.2	1.1
20	3.1	23	13	100	29	100	78	49	16	6.1	2.2	1.0
21	3.0	22	13	90	25	102	75	46	15	5.9	2.1	.96
22	3.2	17	25	80	25	91	79	43	14	5.5	2.1	.96
23	44	14	20	60	25	87	82	40	14	5.2	2.1	.96
24	13	13	17	50	25	80	96	39	14	4.6	2.0	.96
25	6.2	12	15	50	25	81	77	37	13	4.4	1.9	.96
26	5.0	13	15	40	25	81	72	35	13	4.2	1.8	1.0
27	4.4	11	51	40	25	72	70	34	12	4.0	1.7	1.1
28	4.2	11	79	40	25	82	72	33	12	3.8	1.6	1.2
29	4.0	11	57	40	-----	193	82	31	11	3.7	1.6	1.2
30	3.9	11	50	40	-----	157	98	30	11	3.6	1.6	1.1
31	3.6	-----	41	40	-----	220	-----	29	-----	3.5	1.5	-----
TOTAL	198.9	957.4	943	2,064	775	4,698	5,633	2,802	534	223.8	75.2	34.80
MEAN	6.42	31.9	30.4	66.6	27.7	152	188	90.4	17.8	7.22	2.43	1.16
MAX	44	420	178	420	32	1,090	1,100	188	28	11	3.4	1.5
MIN	1.0	3.5	13	30	25	72	70	29	11	3.5	1.5	.96
AC-FT	395	1,900	1,870	4,090	1,540	9,320	11,170	5,560	1,060	444	149	69

CAL YR 1973 TOTAL 19,124.65 MEAN 52.4 MAX 718 MIN .63 AC-FT 37,930
WTR YR 1974 TOTAL 18,939.10 MEAN 51.9 MAX 1,100 MIN .96 AC-FT 37,570

11247000 SAN JOAQUIN RIVER BELOW KERCKHOFF POWERHOUSE, NEAR PRATHER, CALIF.

LOCATION.--Lat 37°04'45", long 119°33'36", in NE¼NW¼ sec.10, T.10 S., R.22 E., Fresno County, on left bank 1.1 mi (1.8 km) downstream from Kerckhoff powerhouse, 1.4 mi (2.3 km) upstream from Big Sandy Creek, and 3.8 mi (6.1 km) southeast of Prather.

DRAINAGE AREA.--1,480 mi² (3,833 km²).

PERIOD OF RECORD.--April 1910 to September 1914, December 1936 to December 1937, December 1942 to current year. Published as "near North Fork" 1910-14 and as "below Kerckhoff powerhouse" 1915-60.

GAGE.--Water-stage recorder. Datum of gage is 563.4 ft (171.72 m) above mean sea level (levels by Bureau of Reclamation). Prior to Oct. 1, 1914, at site 11 mi (18 km) upstream at different datum.

AVERAGE DISCHARGE.--35 years (1910-14, 1943-74), 2,371 ft³/s (67.15 m³/s), 1,718,000 acre-ft/yr (2.12 km³/yr).

EXTREMES.--Current year: Maximum discharge, 15,700 ft³/s (445 m³/s) Apr. 2 (gage height, 25.5 ft or 7.77 m); minimum daily, 502 ft³/s (14.2 m³/s) Oct. 13.

Period of record: Maximum discharge, 92,200 ft³/s (2,610 m³/s) Dec. 23, 1955 (gage height, 51.0 ft or 15.54 m, from floodmarks), from rating curve extended above 20,000 ft³/s (566 m³/s) on basis of records for San Joaquin River above Willow Creek, near Auberry and Willow Creek at mouth, near Auberry; minimum daily, 24 ft³/s (0.68 m³/s) Sept. 26, 1966.

REMARKS.--Records excellent. Flow regulated by 12 powerplants and eight reservoirs with total usable capacity of 609,300 acre-ft (751 hm³). Earliest storage began in 1901 at Bass Lake (see sta 11243400). See records for Florence Lake, Lake Thomas A. Edison, Mammoth Pool Reservoir, Huntington, Shaver, and Redinger Lakes given elsewhere in this report. Backwater from Millerton Lake has affected record at times since November 1947, when spillway gates were installed at Friant Dam. See schematic diagram of San Joaquin River basin. Records of water temperatures for the current year are published in Part 2 of this report.

COOPERATION.--Gage-height record, telemark readings, and 17 discharge measurements furnished by Southern California Edison Co., in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	613	1,500	1,940	2,570	2,650	2,930	4,700	4,160	7,110	3,580	2,580	2,530
2	692	1,320	1,870	3,160	2,480	4,570	6,970	4,340	6,640	3,660	2,520	2,510
3	1,100	867	1,720	2,170	2,750	3,760	4,540	4,220	6,430	3,640	2,450	2,530
4	1,120	822	2,220	2,650	2,710	3,440	4,190	4,230	6,670	3,520	2,330	1,810
5	1,120	1,260	2,210	2,640	2,670	3,730	3,940	4,160	6,760	3,520	2,530	1,830
6	1,150	1,210	2,080	2,730	2,660	2,140	3,880	4,170	7,400	2,930	2,560	1,870
7	1,150	1,180	1,930	3,190	1,980	2,030	3,880	4,070	7,980	3,290	2,560	1,740
8	1,050	1,570	2,040	3,080	1,870	2,070	4,040	4,300	7,600	2,830	2,530	1,690
9	1,160	1,690	2,100	2,820	1,870	1,990	3,770	4,270	6,310	2,700	2,540	1,700
10	1,220	674	2,050	2,780	1,870	2,080	4,080	4,030	6,210	2,370	2,130	1,720
11	1,170	1,560	1,890	2,710	1,860	3,280	3,740	3,960	6,450	2,610	2,320	1,720
12	1,320	1,700	1,900	2,720	1,860	3,590	3,700	4,040	6,400	2,460	2,500	1,640
13	502	1,840	1,820	2,900	2,040	3,500	4,020	4,210	6,410	2,410	2,590	1,700
14	1,050	1,390	2,070	2,810	2,610	3,590	3,790	4,330	6,080	2,490	2,570	1,710
15	882	1,700	1,960	2,780	2,590	3,670	3,770	4,780	6,180	2,420	2,570	1,720
16	1,280	1,690	1,930	2,880	2,610	3,670	3,860	7,280	5,820	2,460	2,520	1,720
17	1,390	1,710	1,910	3,260	2,590	3,670	3,920	6,570	5,370	2,440	2,310	1,970
18	1,340	2,160	2,020	3,320	2,590	3,670	3,730	5,460	4,660	2,450	2,550	1,980
19	1,420	1,850	1,970	3,160	2,610	3,680	3,840	4,990	4,280	2,460	2,540	1,850
20	1,210	1,730	2,010	3,100	2,640	3,720	3,930	4,440	4,290	2,430	2,610	1,910
21	1,190	1,770	2,060	3,090	2,620	3,860	4,020	4,400	3,770	2,520	2,470	1,800
22	1,190	1,710	2,120	2,840	2,040	3,800	3,980	4,180	4,040	2,500	2,510	1,780
23	1,140	1,620	2,290	2,760	1,700	3,760	4,040	5,080	4,180	2,590	2,500	1,870
24	1,330	1,700	2,220	2,600	944	3,630	4,080	5,350	4,260	2,570	2,490	1,780
25	1,600	1,710	2,060	2,680	1,510	3,640	3,980	6,410	3,840	2,610	2,380	1,730
26	1,320	1,700	2,150	2,710	1,780	3,620	4,130	7,530	3,670	2,610	2,440	1,770
27	1,090	1,650	2,440	2,680	1,700	3,760	4,020	8,570	3,650	2,460	2,570	1,720
28	923	1,720	2,400	2,680	2,120	4,280	4,150	8,570	3,640	2,270	2,610	1,710
29	1,410	1,690	2,260	2,660	-----	4,020	4,020	8,390	3,540	2,650	2,590	1,770
30	1,390	1,640	2,390	2,660	-----	3,920	4,190	7,470	3,560	2,340	2,530	1,740
31	1,410	-----	2,300	2,650	-----	3,990	-----	7,330	-----	2,590	2,560	-----
TOTAL	35,932	46,333	64,330	87,440	61,924	107,060	122,900	168,290	163,180	84,380	77,460	55,520
MEAN	1,159	1,544	2,075	2,821	2,212	3,454	4,097	5,429	5,439	2,722	2,499	1,851
MAX	1,600	2,160	2,440	3,320	2,750	4,570	6,970	8,570	7,980	3,660	2,610	2,530
MIN	502	674	1,720	2,170	944	1,990	3,700	3,960	3,540	2,270	2,130	1,640
AC-FT	71,270	91,900	127,600	173,400	122,800	212,400	243,800	333,800	323,700	167,400	153,600	110,100
CAL YR 1973	TOTAL 1,016,621 MEAN 2,785 MAX 11,500 MIN 502 AC-FT 2,016,000											
WTR YR 1974	TOTAL 1,074,749 MEAN 2,945 MAX 8,570 MIN 502 AC-FT 2,132,000											

NOTE.--No gage-height record Oct. 1 to Nov. 1.

SAN JOAQUIN RIVER BASIN

11249500 MADERA CANAL AT FRIANT, CALIF.

LOCATION.--Lat 37°00'10", long 119°42'21", in NW¼SW¼ sec.5, T.11 S., R.21 E., Madera County, at Friant Dam 0.9 mi (1.4 km) northeast of Friant.

PERIOD OF RECORD.--October 1943 to current year. October 1954 to September 1966 published as Friant-Madera Canal at Friant.

GAGE.--Discharge computed on basis of valve openings in dam and head on valves. Prior to Oct. 1, 1948, water-stage recorder at several sites at various datums. Oct. 1, 1948, to Sept. 30, 1949, water-stage recorder at site 8.8 mi (14.2 km) downstream.

AVERAGE DISCHARGE.--31 years, 294 ft³/s (8.33 m³/s), 213,000 acre-ft/yr (263 hm³/yr).

EXTREMES.--Period of record: Maximum daily discharge, 1,330 ft³/s (37.7 m³/s) July 2, 1973; no flow many days in each year.

REMARKS.--Canal diverts from Millerton Lake (see sta 11250100) at right end of Friant Dam for irrigation between San Joaquin and Fresno Rivers.

COOPERATION.--Records furnished by Bureau of Reclamation and reviewed by the Geological Survey, rounded to Geological Survey standards.

REVISIONS (WATER YEARS).--WSP 1151: 1944-48.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NCV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0			0	0	498	319	1,040	1,040	1,260	1,280	442
2	0			0	0	372	222	1,040	1,040	1,250	1,280	445
3	0			0	0	230	174	1,040	1,040	1,250	1,280	448
4	0			0	0	191	174	1,040	1,060	1,250	1,280	449
5	0			0	0	191	174	1,030	1,070	1,280	1,270	448
6	0			0	0	192	310	1,030	1,070	1,300	1,270	389
7	0			0	0	192	378	921	1,070	1,290	1,270	218
8	0			0	166	193	378	861	1,130	1,300	1,270	175
9	0			0	265	193	416	859	1,180	1,310	1,260	174
10	10			0	264	193	460	857	1,180	1,300	1,230	173
11	0			0	263	194	472	903	1,130	1,310	1,200	173
12	0			0	196	165	471	927	1,180	1,310	1,200	172
13	0			0	159	149	646	925	1,270	1,300	1,210	172
14	0			0	145	150	770	971	1,300	1,290	1,220	199
15	0			0	138	196	768	1,000	1,300	1,290	1,230	214
16	0			503	138	222	704	975	1,300	1,300	1,220	214
17	0			757	153	223	662	963	1,300	1,310	1,200	239
18	0			882	162	248	735	967	1,300	1,300	1,180	252
19	0			958	162	288	825	970	1,300	1,290	1,160	251
20	0			1,020	162	432	851	971	1,300	1,280	1,170	276
21	0			1,050	162	581	850	971	1,290	1,290	1,160	289
22	0			1,050	162	624	820	971	1,290	1,300	1,140	302
23	0			1,050	162	637	802	954	1,290	1,300	1,160	307
24	0			1,050	162	644	800	947	1,280	1,310	1,150	304
25	0			1,050	259	644	932	920	1,280	1,300	1,120	301
26	0			1,050	335	644	1,000	908	1,280	1,290	1,090	266
27	0			1,050	440	644	1,000	914	1,270	1,280	1,060	246
28	0			1,050	498	548	998	980	1,270	1,270	1,050	229
29	0			1,050	-----	412	996	1,020	1,260	1,280	1,020	219
30	0			791	-----	335	1,030	1,030	1,260	1,280	745	118
31	0	-----		314	-----	318	-----	1,030	-----	1,280	497	-----
TOTAL	10	0	0	14,675	4,553	10,743	19,137	29,935	36,330	39,950	35,872	8,104
MEAN	32	0	0	473	163	347	638	966	1,211	1,289	1,157	270
MAX	10	0	0	1,050	498	644	1,030	1,040	1,300	1,310	1,280	449
MIN	0	0	0	0	0	149	174	857	1,040	1,250	497	118
AC-FT	20	0	0	29,110	9,030	21,310	37,960	59,380	72,060	79,240	71,150	16,070
CAL YR 1973	TOTAL 174,660.00			MEAN 479	MAX 1,330	MIN 0	AC-FT 346,400					
WTR YR 1974	TOTAL 199,309.00			MEAN 546	MAX 1,310	MIN 0	AC-FT 395,300					

11250000 FRIANT-KERN CANAL AT FRIANT, CALIF.

LOCATION.--Lat 36°59'53", long 119°42'11", in SE¼SW¼ sec.5, T.11 S., R.21 E., Fresno County, at Friant Dam 0.9 mi (1.4 km) northeast of Friant.

PERIOD OF RECORD.--March 1949 to current year.

GAGE.--Discharge computed on basis of valve openings in dam and head on valves. Prior to July 8, 1949, non-recording gages at various sites and datums. July 8 to Sept. 30, 1949, water-stage recorder at site 0.2 mi (0.3 km) downstream.

AVERAGE DISCHARGE.--25 years, 1,365 ft³/s (38.66 m³/s), 988,900 acre-ft/yr (1,220 hm³/yr).

EXTREMES.--Period of record: Maximum daily discharge, 4,564 ft³/s (129 m³/s) Apr. 17, 1962, Aug. 4, 1971; no flow for several months in most years.

REMARKS.--Canal diverts from Millerton Lake (see sta 11250100) at left end of Friant Dam for irrigation in upper San Joaquin Valley.

COOPERATION.--Records furnished by Bureau of Reclamation and reviewed by Geological Survey, rounded to Geological Survey standards.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,270	620		0	2,710	1,620	2,060	4,180	3,320	3,600	4,270	1,540
2	1,440	537		0	2,660	1,570	1,690	4,230	3,510	3,430	4,270	1,540
3	1,520	552		0	2,390	1,440	2,090	4,060	3,670	3,460	4,260	1,550
4	1,470	600		0	2,430	1,350	2,950	3,900	3,890	3,500	4,230	1,560
5	1,260	632		0	2,510	1,360	3,250	3,950	4,010	3,420	4,190	1,600
6	1,080	663		0	2,550	1,420	3,450	4,020	4,020	3,200	4,180	1,590
7	1,080	717		0	2,750	1,490	3,750	4,180	3,770	3,240	4,180	1,690
8	789	707		0	2,920	1,140	3,970	4,270	3,640	3,430	4,170	1,900
9	568	630		0	2,950	965	4,150	4,230	3,640	3,760	4,160	1,980
10	589	564		0	3,010	1,110	4,330	4,250	3,790	3,840	4,160	1,710
11	523	534		445	2,900	1,230	4,350	4,330	4,180	3,810	4,170	1,680
12	503	544		855	2,650	1,390	4,300	4,350	4,350	3,730	4,150	1,640
13	537	554		1,020	2,600	1,360	3,810	4,120	4,340	3,560	4,160	1,560
14	541	477		1,240	2,630	1,470	3,700	4,170	4,080	3,730	4,160	1,480
15	550	444		1,310	2,680	1,820	4,070	4,150	4,100	3,960	4,160	1,480
16	609	460		1,320	2,720	2,280	4,230	3,780	4,350	4,120	4,110	1,480
17	663	445		1,240	2,790	2,450	4,000	3,090	4,370	4,310	4,050	1,680
18	619	454		1,180	2,750	2,820	4,070	2,930	4,370	4,330	4,090	1,950
19	587	481		1,150	2,230	3,460	4,000	2,970	4,360	4,150	4,140	1,910
20	623	503		1,090	2,080	3,800	3,730	3,050	4,350	3,930	4,120	1,880
21	650	510		1,110	2,030	3,930	3,790	3,240	4,250	4,110	4,140	1,860
22	703	516		1,100	2,020	3,800	3,890	3,340	4,150	4,240	4,050	1,920
23	671	523		1,050	2,040	3,420	3,900	3,320	4,280	4,290	3,940	2,030
24	648	529		1,070	2,040	3,240	3,870	3,370	4,340	4,300	3,880	2,090
25	684	0		965	2,150	3,120	3,750	3,360	4,240	4,300	3,920	2,090
26	614	0		769	2,300	2,820	3,580	3,580	4,310	4,300	3,940	1,900
27	557	0		806	2,130	2,760	3,570	3,810	4,210	4,300	3,970	1,800
28	611	0		776	1,660	2,700	3,700	3,740	3,970	4,320	4,030	1,740
29	682	0		738	-----	2,620	3,860	3,520	3,880	4,310	3,660	1,610
30	677	0		991	-----	2,490	4,020	3,420	4,030	4,320	2,050	1,520
31	662	-----		1,490	-----	2,380	-----	3,320	-----	4,290	1,540	-----
TOTAL	23,980	13,196	0	21,715	69,280	68,825	109,880	116,230	121,770	121,590	122,500	51,960
MEAN	774	440	0	700	2,474	2,220	3,663	3,749	4,059	3,922	3,952	1,732
MAX	1,520	717	0	1,490	3,010	3,930	4,350	4,350	4,370	4,330	4,270	2,090
MIN	503	0	0	0	1,660	965	1,690	2,930	3,320	3,200	1,540	1,480
AC-FT	47,560	26,170	0	43,070	137,400	136,500	217,900	230,500	241,500	241,200	243,000	103,100
CAL YR 1973	TOTAL 716,931.00		MEAN 1,964	MAX 4,490	MIN 0	AC-FT 1,422,000						
WTR YR 1974	TOTAL 840,926.00		MEAN 2,304	MAX 4,370	MIN 0	AC-FT 1,668,000						

SAN JOAQUIN RIVER BASIN

11250100 MILLERTON LAKE AT FRIANT, CALIF.

LOCATION.--Lat 37°00'00", long 119°42'13", in SW¼SW¼ sec.5, T.11 S., R.21 E., Fresno County, near center of Friant Dam on San Joaquin River just upstream from Cottonwood Creek, 0.9 mi (1.4 km) northeast of Friant.

DRAINAGE AREA.--1,638 mi² (4,242 km²).

PERIOD OF RECORD.--October 1941 to current year. Monthend contents only for some periods, published in WSP 1315-A.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Bureau of Reclamation). Prior to May. 29, 1944, nonrecording gage on left bank at same datum.

EXTREMES.--Current year: Maximum contents, 510,800 acre-ft (630 hm³) June 16 (elevation, 576.01 ft or 175.568 m); minimum, 138,500 acre-ft (171 hm³) Oct. 6 (elevation, 470.05 ft or 143.271 m).
Period of record: Maximum contents, 528,700 acre-ft (652 hm³) June 12, 1973 (elevation, 579.66 ft or 176.680 m); minimum since lake first filled, 133,600 acre-ft (165 hm³) Apr. 11, 1969 (elevation, 467.81 ft or 142.588 m).

REMARKS.--Reservoir is formed by gravity-type concrete dam with spillway near center, completed in December 1942. Control valves installed in February 1944 and spillway gates installed in November 1947. Usable capacity, 503,200 acre-ft (620 hm³) between elevations 375.4 ft (114.42 m), invert of river outlet and 578.0 ft (176.17 m), top of drum-type spillway gates, above mean sea level. Not available for release, 17,400 acre-ft (21.5 hm³). Millerton Lake is one of the storage units in Central Valley project. Records, including extremes, represent total contents at 2400 hours.

COOPERATION.--Records furnished by Bureau of Reclamation.

CAPACITY TABLE (ELEVATION, IN FEET, AND CONTENTS, IN ACRE-FEET)

400	36,400	500	215,600
420	57,000	520	279,400
440	83,300	540	353,000
460	117,500	560	436,500
480	161,700	580	530,400

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NCV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	142,200	165,000	230,000	356,400	431,600	406,200	470,300	430,500	476,000	466,400	306,700	151,400
2	140,700	166,400	233,700	362,300	430,000	412,300	483,900	427,300	479,100	464,200	300,500	152,300
3	139,800	167,000	237,000	366,700	429,900	417,700	489,000	424,200	480,900	461,800	294,400	153,300
4	139,000	167,300	241,300	372,100	429,700	422,000	491,500	422,200	482,800	459,200	288,100	152,900
5	138,600	168,500	245,600	377,400	429,400	426,400	493,100	419,900	484,500	456,500	282,300	152,300
6	138,500	169,500	249,700	383,500	429,500	427,700	493,400	417,500	487,800	453,200	276,400	152,000
7	138,700	170,300	253,300	391,400	428,000	428,800	492,400	415,200	492,800	450,600	270,600	151,700
8	139,200	171,900	257,200	397,800	425,600	430,700	491,400	413,300	497,100	446,700	264,700	150,900
9	140,300	173,800	261,300	403,600	422,900	432,500	489,600	411,300	498,800	441,800	258,800	150,100
10	141,300	173,900	265,100	409,100	420,100	434,000	487,700	408,900	500,100	436,200	252,300	149,600
11	142,500	175,700	268,700	413,700	417,500	437,200	485,100	406,300	502,100	431,200	246,200	149,400
12	144,000	178,000	272,300	417,500	415,600	441,300	482,600	403,600	504,100	425,900	240,400	148,900
13	143,600	180,400	275,800	421,300	414,200	445,300	480,800	401,800	506,000	420,900	234,800	148,800
14	144,400	182,100	279,800	424,400	413,900	449,200	478,000	400,000	507,900	415,700	229,200	148,800
15	145,000	184,400	283,500	427,400	413,500	452,400	474,400	405,500	510,000	410,000	223,500	148,700
16	146,200	186,700	287,200	429,700	412,900	454,700	471,100	410,800	510,800	404,000	217,900	148,700
17	147,500	189,300	290,900	432,600	412,200	456,600	468,600	415,700	510,500	397,700	211,900	148,600
18	148,800	192,800	294,700	435,200	411,500	457,700	465,500	418,700	508,500	391,400	206,400	148,100
19	150,200	195,400	298,400	436,700	412,100	457,600	462,700	420,600	505,700	385,300	201,000	147,500
20	151,200	197,700	302,300	438,200	412,800	456,500	460,200	421,200	502,900	379,700	195,600	146,900
21	152,100	200,000	306,300	439,200	413,600	455,100	457,800	421,500	499,300	373,900	189,900	146,300
22	153,000	202,200	310,400	438,900	413,400	453,700	455,000	420,900	496,400	367,900	184,600	145,400
23	153,800	204,200	314,800	438,100	412,500	453,100	452,300	422,300	493,500	361,900	179,400	144,300
24	155,000	206,400	319,100	437,000	410,000	452,500	449,900	424,300	490,600	355,700	174,400	143,200
25	156,700	209,700	323,000	436,000	408,200	452,200	447,100	428,700	487,100	349,700	169,000	141,900
26	158,000	213,000	327,400	435,600	406,400	452,400	445,000	435,000	483,200	343,800	163,900	141,000
27	159,100	216,100	332,700	435,100	404,600	453,000	442,500	442,800	479,400	337,600	159,000	140,200
28	159,500	219,300	337,500	434,700	404,300	455,600	440,200	450,700	476,100	331,000	154,200	139,500
29	160,700	222,500	342,000	434,300	-----	457,500	437,200	458,500	472,800	325,000	150,200	139,100
30	162,100	225,600	346,600	433,900	-----	459,900	434,100	464,800	469,100	318,500	150,300	139,100
31	163,400	-----	351,200	433,500	-----	462,500	-----	470,800	-----	312,600	150,400	-----
MAX	163,400	225,600	351,200	439,200	431,600	462,500	493,400	470,800	510,800	466,400	306,700	153,300
MIN	138,500	165,000	230,000	356,400	404,300	406,200	434,100	400,000	469,100	312,600	150,200	139,100
(a)	480.70	503.35	539.54	559.32	552.59	565.77	559.45	567.57	567.20	529.35	475.28	470.31
(b)	+19,900	+62,200	+125,600	+82,300	-29,200	+58,200	-28,400	+36,700	-1,700	-156,500	-162,200	-11,300
(c)	660	420	260	410	550	930	1,420	2,760	3,730	3,550	2,270	1,370

CAL YR 1973 b +31,700

WTR YR 1974 b -4,400

a Elevation, in feet, at end of month.

b Change in contents, in acre-feet.

c Evaporation, in acre-feet.

11251000 SAN JOAQUIN RIVER BELOW FRIANT, CALIF.

LOCATION.--Lat 36°59'04", long 119°43'24", in SW¼SW¼ sec.7, T.11 S., R.21 E., Fresno County, on left bank 0.5 mi (0.8 km) west of Friant, 1.5 mi (2.4 km) downstream from Cottonwood Creek, 2 mi (3.2 km) downstream from Friant Dam, and at mile 268.1 (431.4 km).

DRAINAGE AREA.--1,676 mi² (4,341 km²).

PERIOD OF RECORD.--October 1907 to current year. Published as "near Pollasky" October 1907 to December 1908 and as "near Friant" January 1909 to September 1938. Monthly discharge only for October 1907 to November 1908, published in WSP 1315-A.

GAGE.--Water-stage recorder. Datum of gage is 294.00 ft (89.611 m) above mean sea level (levels by Bureau of Reclamation). Oct. 18, 1907, to Nov. 9, 1913, nonrecording gage at site 4.5 mi (7.2 km) upstream at different datum. Nov. 10, 1913, to Sept. 30, 1968, water-stage recorder at site 2.5 mi (4.0 km) upstream at different datum.

AVERAGE DISCHARGE (adjusted for change in contents and evaporation in Millerton Lake and for diversions to Madera and Friant-Kern Canals).--67 years, 2,362 ft³/s (66.89 m³/s), 1,711,000 acre-ft/yr (2,110 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,380 ft³/s (39.1 m³/s) Jan. 22 (gage height, 4.66 ft or 1.420 m); minimum daily, 32 ft³/s (0.91 m³/s) Nov. 2-5, 23.

Period of record: Maximum discharge, 77,200 ft³/s (2,190 m³/s) Dec. 11, 1937 (gage height, 23.8 ft or 7.254 m, site and datum then in use); minimum, 38 ft³/s (1.08 m³/s), regulated, July 29, 1940. Maximum discharge since construction of Friant Dam in 1941, 12,400 ft³/s (351 m³/s) June 6, 1969; minimum, 5.5 ft³/s (0.16 m³/s) Oct. 20, 1941.

REMARKS.--Records good. Flow regulated by Millerton Lake beginning in 1941 (see sta 11250100) and by other reservoirs described in REMARKS for San Joaquin River below Kerckhoff powerhouse. Diversion for irrigation through Madera and Friant-Kern Canals (see sta 11249500, 11250000) began in 1944 and 1949, respectively. See schematic diagram of San Joaquin River basin.

REVISIONS (WATER YEARS).--WSP 843: 1914(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	104	33	41	34	999	73	153	510	280	121	140	106
2	106	32	39	34	714	85	281	510	696	129	142	106
3	106	32	38	34	528	154	140	510	973	142	140	108
4	106	32	38	38	442	100	115	437	973	142	140	108
5	106	32	38	42	343	58	104	191	966	142	140	108
6	100	38	38	52	164	54	227	106	945	146	140	99
7	95	54	38	104	62	52	366	102	952	151	138	90
8	97	55	39	87	63	75	362	102	952	151	136	90
9	95	65	39	71	63	73	366	102	952	151	136	88
10	95	75	39	97	78	71	362	102	791	151	134	88
11	90	75	36	85	94	68	358	102	388	154	134	88
12	83	75	36	87	95	63	350	102	134	158	134	88
13	83	75	36	82	104	60	539	99	106	156	132	88
14	83	75	36	78	99	60	762	95	80	154	129	88
15	85	75	34	76	95	58	756	99	85	151	129	88
16	85	68	34	94	94	60	605	108	87	154	129	87
17	85	57	34	117	87	58	510	108	88	151	127	87
18	80	57	34	236	76	58	524	108	87	147	129	87
19	73	57	34	490	76	58	524	108	90	147	129	87
20	71	57	34	661	76	57	524	108	104	147	125	87
21	66	50	34	880	73	55	520	108	125	147	125	87
22	63	33	34	1,180	70	52	520	110	123	147	125	87
23	58	32	34	1,360	66	54	520	110	136	144	123	87
24	57	44	34	1,350	68	52	520	110	108	144	121	85
25	57	47	34	1,340	70	50	520	110	87	142	121	92
26	57	38	36	1,340	70	52	520	110	90	142	117	99
27	54	34	41	1,340	70	54	520	125	88	142	110	99
28	49	34	36	1,300	70	76	515	129	104	142	110	100
29	49	36	34	1,290	-----	70	510	132	121	140	108	100
30	47	39	34	1,290	-----	70	510	134	123	140	106	100
31	46	-----	34	1,140	-----	68	-----	136	-----	140	108	-----
TOTAL	2,431	1,506	1,120	16,409	4,909	2,048	13,103	5,023	10,834	4,515	3,957	2,802
MEAN	78.4	50.2	36.1	529	175	66.1	437	162	361	146	128	93.4
MAX	106	75	41	1,360	999	154	762	510	973	158	142	108
MIN	46	32	34	34	62	50	104	95	80	121	106	85
AC-FT	4,820	2,990	2,220	32,550	9,740	4,060	25,990	9,960	21,490	8,960	7,850	5,560
MEAN a	1,186	1,542	2,083	3,048	2,296	3,594	4,284	5,518	5,665	2,869	2,636	1,930
AC-FT a	72,940	91,780	128,100	187,400	127,500	221,000	254,900	339,300	337,100	176,400	162,100	114,800
CAL YR 1973	TOTAL 142,230	MEAN 390	MAX 3,820	MIN 26	AC-FT 282,100	MEAN a 2,901	AC-FT a 2,100,000					
WTR YR 1974	TOTAL 68,657	MEAN 188	MAX 1,360	MIN 32	AC-FT 136,200	MEAN a 3,057	AC-FT a 2,213,000					

a Adjusted for change in contents and evaporation in Millerton Lake and for diversions to Madera and Friant-Kern Canals.

11253310 CANTUA CREEK NEAR CANTUA CREEK, CALIF.

LOCATION.--Lat 36°24'08", long 120°25'57", in SE¼SE¼ sec.34, T.17 S., R.14 E., Fresno County, on left bank 9.2 mi (14.8 km) southwest of town of Cantua Creek, and 19 mi (31 km) north of Coalinga.

DRAINAGE AREA.--46.4 mi² (120.2 km²).

PERIOD OF RECORD.--Water years 1958-65 (annual maximum), October 1966 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 680 ft (207 m), from topographic map. Prior to October 1966, crest-stage gage at datum 2.00 ft (0.610 m) lower.

AVERAGE DISCHARGE.--8 years, 3.13 ft³/s (0.089 m³/s), 2,270 acre-ft/yr (2.80 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 41.0 ft³/s (1.16 m³/s) Jan. 7 (gage height, 2.47 ft or 0.753 m); no flow for several months.

Period of record: Maximum discharge, 1,920 ft³/s (54.3 m³/s) Feb. 24, 1969 (gage height, 6.60 ft or 2.012 m), from rating curve extended above 170 ft³/s (4.81 m³/s) on basis of slope-area measurements at gage heights 4.57 ft (1.393 m), 6.04 ft (1.841 m), and 6:60 ft (2.012 m); no flow for several months in each year.

REMARKS.--Records good. Some small dams for stock use above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1			5.8	.26	1.7	1.2	3.4	1.2	.38			
2			1.9	.29	1.7	5.4	4.2	1.2	.35			
3			.62	.26	1.7	4.5	3.8	1.2	.32			
4			.32	.90	1.5	3.6	3.4	1.2	.26			
5			.20	.86	1.4	3.0	3.2	1.3	.23			
6			.11	.89	1.4	2.6	3.0	1.2	.23			
7			.08	14	1.3	2.4	2.8	1.2	.20			
8			.06	18	1.3	11	2.8	1.1	.17			
9			.04	6.2	1.4	5.9	2.6	1.0	.20			
10			.04	3.8	1.4	7.4	3.0	.94	.17			
11			.03	3.0	1.3	5.9	2.6	1.0	.11			
12			.03	21	1.4	5.3	2.3	.94	.09			
13			.03	13	1.7	4.2	2.1	.94	.08			
14			.03	6.2	1.5	3.8	2.1	.94	.08			
15			.03	12	1.5	3.4	1.9	.94	.09			
16			.03	15	1.4	3.2	1.9	.94	.09			
17			.03	24	1.3	3.0	1.9	1.0	.13			
18			.03	9.4	1.3	2.8	1.9	1.2	.17			
19			.03	5.6	1.3	2.6	2.1	1.5	.17			
20			.03	4.2	1.3	2.6	1.9	1.4	.22			
21			.03	3.8	1.2	2.4	1.8	1.2	.20			
22			.15	3.2	1.1	2.4	1.7	1.0	.17			
23			.23	3.0	1.1	2.4	1.7	.80	.15			
24			.13	2.8	1.1	2.4	1.8	.68	.13			
25			.11	2.4	1.0	2.6	2.1	.62	.09			
26			.11	2.3	1.0	3.2	1.9	.50	.07			
27			.15	2.1	1.0	2.6	1.8	.42	.05			
28			.26	2.1	1.0	5.1	1.5	.38	.03			
29			.15	2.1	-----	4.8	1.3	.38	.01			
30			.13	1.9	-----	3.6	1.2	.42	0			
31		-----	.17	1.8	-----	4.0	-----	.38	-----			-----
TOTAL	0	0	11.09	186.36	37.3	119.3	69.7	29.12	4.64	0	0	0
MEAN	0	0	.36	6.01	1.33	3.85	2.32	.94	.15	0	0	0
MAX	0	0	5.8	24	1.7	11	4.2	1.5	.38	0	0	0
MIN	0	0	.03	.26	1.0	1.2	1.2	.38	0	0	0	0
AC-FT	0	0	22	370	74	237	138	58	9.2	0	0	0

CAL YR 1973 TOTAL 1,560.37 MEAN 4.28 MAX 140 MIN 0 AC-FT 3,090
WTR YR 1974 TOTAL 457.51 MEAN 1.25 MAX 24 MIN 0 AC-FT 907

PEAK DISCHARGE (BASE, 50 FT³/S).--No peak above base.

11253500 JAMES BYPASS NEAR SAN JOAQUIN, CALIF.

LOCATION.--Lat 36°39'09", long 120°10'49", in NE¼SW¼ sec.1, T.15 S., R.16 E., Fresno County, on right bank 3.2 mi (5.1 km) north of San Joaquin.

PERIOD OF RECORD.--October 1947 to current year. Published as "Fresno Slough bypass" in WSP 1315-A and 1735. Daily discharge for period October 1954 to September 1972 are in files of Bureau of Reclamation.

GAGE.--Water-stage recorder. Altitude of gage is 160 ft (49 m), from topographic map.

AVERAGE DISCHARGE.--27 years, 154 ft³/s (4,361 m³/s), 111,600 acre-ft/yr (138 hm³/yr).

EXTREMES.--Period of record: Maximum daily discharge, 5,570 ft³/s (158 m³/s) June 7, 1969; no flow for all or most of each year.

REMARKS.--Diversion above station for irrigation. James Bypass carries overflow from Kings River to San Joaquin River.

COOPERATION.--Records furnished by Bureau of Reclamation.

REVISIONS (WATER YEARS).--WRD Calif. 1972: Annual data.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NCV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1							0	729	0			
2							0	726	261			
3							0	705	776			
4							388	654	828			
5							172	600	735			
6							0	370	702			
7							0	265	963			
8							0	212	1,320			
9							0	58	1,630			
10							0	0	1,850			
11							0	0	2,080			
12							0	0	2,180			
13							0	0	2,000			
14							0	0	1,860			
15							0	0	1,440			
16							103	0	1,350			
17							308	0	1,370			
18							365	0	1,490			
19							511	113	1,080			
20							660	559	232			
21							801	663	52			
22							699	672	0			
23							708	598	0			
24							532	510	0			
25							492	558	0			
26							575	598	0			
27							630	612	0			
28							756	475	0			
29					-----		768	258	0			
30					-----		777	105	0			
31		-----			-----		-----	12	-----			-----
TOTAL	0	0	0	0	0	0	9,245	10,052	24,199	0	0	0
MEAN	0	0	0	0	0	0	308	324	807	0	0	0
MAX	0	0	0	0	0	0	801	729	2,180	0	0	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	0	0	0	0	18,340	19,940	48,000	0	0	0
CAL YR 1973	TOTAL	0.00	MEAN	.0	MAX	0	MIN	0	AC-FT	0		
WTR YR 1974	TOTAL	43,496.00	MEAN	119	MAX	2,180	MIN	0	AC-FT	86,270		

11257100 MIAMI CREEK NEAR OAKHURST, CALIF.

LOCATION.--Lat 37°23'37", long 119°39'12", in NE¼SE¼ sec.22, T.6 S., R.21 E., Madera County, Sierra National Forest, on left bank 200 ft (61 m) downstream from county road bridge, and 4.6 mi (7.4 km) north of Oakhurst.

DRAINAGE AREA.--10.6 mi² (27.5 km²).

PERIOD OF RECORD.--October 1960 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 3,500 ft (1,070 m), from topographic map.

AVERAGE DISCHARGE.--14 years, 8.29 ft³/s (0.235 m³/s), 6,010 acre-ft/yr (7.41 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 324 ft³/s (9.18 m³/s) Apr. 1 (gage height, 6.43 ft or 1.960 m); minimum daily, 0.70 ft³/s (0.020 m³/s) Sept. 25.
Period of record: Maximum discharge, 804 ft³/s (22.8 m³/s) Feb. 1, 1963 (gage height, 9.08 ft or 2.768 m); no flow many days in most years.

REMARKS.--No known diversions above station.

COOPERATION.--Records furnished by California Department of Water Resources and reviewed by the Geological Survey.

REVISIONS (WATER YEARS).--WRD Calif. 1967: 1963(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.80	2.0	17	9.6	9.2	75	103	15	7.4	3.7	2.3	1.0
2	.80	2.0	9.1	8.1	9.0	96	103	14	7.2	3.7	2.2	1.0
3	.80	2.0	6.8	7.3	8.6	33	40	14	7.1	3.6	2.1	.90
4	.90	2.0	6.2	7.3	8.4	24	31	13	6.9	3.6	2.1	.90
5	.80	2.1	5.5	7.3	8.3	22	27	13	6.8	3.4	2.2	.90
6	.80	2.6	5.0	6.2	8.1	23	25	13	6.8	3.3	2.1	.90
7	1.4	2.9	4.8	8.0	7.8	24	24	12	6.7	3.3	2.0	.80
8	6.3	2.4	4.8	8.4	7.4	24	22	12	6.5	3.3	1.8	.90
9	3.2	2.2	4.6	7.7	7.6	21	24	11	6.3	3.7	1.8	.90
10	2.2	3.8	4.6	7.1	7.6	19	22	11	6.1	4.3	1.8	.90
11	1.9	6.3	4.6	6.8	7.4	19	21	11	5.9	4.4	1.6	.90
12	1.8	23	4.6	9.8	7.4	21	21	10	5.8	4.1	1.6	.90
13	1.7	7.3	5.5	11	7.8	20	21	10	5.6	3.8	1.5	.90
14	1.5	8.3	7.0	10	7.5	21	19	9.8	5.5	3.6	1.5	.90
15	1.5	5.5	5.4	13	7.3	21	18	9.6	5.3	3.4	1.5	.90
16	1.4	5.3	4.9	23	7.2	20	18	9.5	5.3	3.3	1.5	.90
17	1.3	20	4.7	56	7.0	19	17	9.2	5.4	3.1	1.5	.90
18	1.3	30	4.8	36	6.9	18	17	9.2	5.3	3.1	1.4	.90
19	1.4	9.3	4.4	28	7.7	18	17	9.6	5.3	3.0	1.4	.90
20	1.4	6.8	4.3	33	7.4	17	17	9.8	5.4	2.9	1.4	.90
21	1.4	6.5	4.8	23	7.3	17	16	9.5	5.2	2.8	1.4	.90
22	1.7	5.3	7.4	17	6.8	16	15	9.2	5.0	2.7	1.3	.90
23	11	4.8	5.9	14	6.9	15	16	9.0	4.8	2.7	1.3	.80
24	4.4	4.6	5.4	13	6.9	15	19	8.9	4.6	2.6	1.2	.80
25	3.0	4.4	5.2	12	7.0	17	17	8.5	4.5	2.7	1.2	.70
26	2.6	4.5	5.2	11	7.0	16	17	8.2	4.4	2.6	1.1	.80
27	2.4	4.1	23	11	7.0	22	17	8.0	4.3	2.4	1.1	.90
28	2.1	4.0	23	10	6.9	38	17	7.7	4.2	2.4	1.2	.90
29	2.0	3.8	16	9.7	-----	30	17	7.7	3.9	2.3	1.1	.90
30	2.1	3.8	14	9.4	-----	35	16	7.7	3.8	2.4	1.1	.90
31	2.1	-----	11	9.1	-----	26	-----	7.5	-----	2.3	1.0	-----
TOTAL	68.00	191.6	239.5	442.8	211.4	802	774	317.6	167.3	98.5	48.3	26.60
MEAN	2.19	6.39	7.73	14.3	7.55	25.9	25.8	10.2	5.58	3.18	1.56	.89
MAX	11	30	23	56	9.2	96	103	15	7.4	4.4	2.3	1.0
MIN	.80	2.0	4.3	6.2	6.8	15	15	7.5	3.8	2.3	1.0	.70
AC-FT	135	380	475	878	419	1,590	1,540	630	332	195	96	53

CAL YR 1973 TOTAL 3,478.10 MEAN 9.53 MAX 91 MIN .60 AC-FT 6,900
WTR YR 1974 TOTAL 3,387.60 MEAN 9.28 MAX 103 MIN .70 AC-FT 6,720

11257500 FRESNO RIVER NEAR KNOWLES, CALIF.

LOCATION.--Lat 37°14'14", long 119°46'26", in SE¼NW¼ sec.15, T.8 S., R.20 E., Madera County, on left bank at Fresno Crossing, 0.1 mi (0.2 km) downstream from Bean Gulch, and 6 mi (9.7 km) northeast of Knowles.

DRAINAGE AREA.--133 mi² (344 km²).

PERIOD OF RECORD.--September 1911 to August 1913, November 1915 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,086.4 ft (331.13 m) above mean sea level (river-profile survey). Prior to June 13, 1930, nonrecording gage 10 ft (3 m) upstream and June 13, 1930, to Jan. 13, 1931, water-stage recorder at site 40 ft (12 m) upstream at datum 0.34 ft (0.104 m) lower.

AVERAGE DISCHARGE.--59 years (1911-12, 1916-74), 79.8 ft³/s (2.260 m³/s), 57,820 acre-ft/yr (71.3 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 3,190 ft³/s (90.3 m³/s) Apr. 2 (gage height, 6.11 ft or 1.862 m); minimum daily, 0.24 ft³/s (0.007 m³/s) Sept. 17.

Period of record: Maximum discharge, 13,300 ft³/s (377 m³/s) Dec. 23, 1955 (gage height, 11.52 ft or 3.511 m), from rating curve extended above 3,900 ft³/s (110 m³/s) on basis of slope-area measurement of maximum flow; no flow at times in some years.

REMARKS.--Records good. Diversions for irrigation of 160 acres (648,000 m²) above station. Diversions into Fresno River basin above station of up to 50 ft³/s (1.42 m³/s) at times since 1897 from the San Joaquin River basin and up to 60 ft³/s (1.70 m³/s) at times since 1888 from the Merced River basin. Diversions are for irrigation downstream from station. Records of water temperatures for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1515: 1916-19, 1920(M), 1921-23, 1925-26(M), 1932(M), 1935-36(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.1	11	209	121	89	244	790	117	108	41	6.5	1.7
2	3.5	11	131	92	89	711	1,520	152	107	38	6.0	1.8
3	4.1	12	72	76	83	580	518	158	107	36	3.8	1.4
4	4.6	11	58	84	80	345	365	156	105	33	2.3	1.7
5	4.7	11	51	99	79	264	298	157	102	28	2.3	1.3
6	4.7	12	43	133	75	244	257	155	101	24	1.3	1.2
7	5.4	13	38	228	66	240	231	151	101	20	1.2	.88
8	18	14	37	189	66	328	211	148	94	20	1.3	1.5
9	25	12	35	134	63	228	240	144	91	21	1.0	1.1
10	13	13	33	116	63	198	230	136	61	26	1.9	.74
11	9.7	36	32	101	60	181	201	132	54	30	.79	.56
12	9.2	122	33	126	61	174	185	128	54	24	.72	.30
13	8.7	79	34	143	89	171	176	125	54	21	.75	.93
14	8.3	64	50	123	77	165	169	105	54	17	.63	.75
15	7.6	45	40	113	66	160	162	97	54	16	.89	.42
16	7.3	36	35	153	64	153	155	95	54	15	.96	.30
17	6.8	48	33	373	61	145	150	124	64	15	2.5	.24
18	6.3	194	34	314	59	139	146	136	68	14	2.5	.76
19	6.4	83	32	257	77	133	150	136	68	12	2.3	.56
20	6.1	51	30	280	84	128	145	135	68	12	2.5	.56
21	6.3	49	30	291	66	121	138	132	67	12	2.6	.68
22	7.6	40	71	190	59	119	132	131	61	11	2.4	.61
23	35	33	54	165	61	116	129	129	56	10	2.7	.64
24	39	32	43	147	57	115	167	128	53	10	2.1	.53
25	19	32	38	134	57	112	150	130	51	8.8	1.7	.51
26	16	33	38	122	54	116	135	127	50	9.1	1.9	.54
27	13	30	165	112	54	126	131	121	52	8.2	2.6	.44
28	12	28	191	106	57	280	128	114	51	7.4	1.5	.42
29	12	28	123	102	-----	227	123	113	46	7.1	1.1	.80
30	11	28	119	95	-----	214	119	111	44	7.0	.98	.44
31	11	-----	95	94	-----	217	-----	111	-----	6.6	1.7	-----
TOTAL	345.4	1,211	2,027	4,813	1,916	6,694	7,651	4,034	2,100	560.2	63.42	24.31
MEAN	11.1	40.4	65.4	155	68.4	216	255	130	70.0	18.1	2.05	.81
MAX	39	194	209	373	89	711	1,520	158	108	41	6.5	1.8
MIN	3.5	11	30	76	54	112	119	95	44	6.6	.63	.24
AC-FT	685	2,400	4,020	9,550	3,800	13,280	15,180	8,000	4,170	1,110	126	48

CAL YR 1973 TOTAL 40,549.10 MEAN 111 MAX 1,980 MIN 3.0 AC-FT 80,430
WTR YR 1974 TOTAL 31,439.33 MEAN 86.1 MAX 1,520 MIN .24 AC-FT 62,360

PEAK DISCHARGE (BASE, 590 FT³/S).--Mar. 2 (0915) 1,160 ft³/s (3.93 ft); Apr. 2 (0200) 3,190 ft³/s (6.11 ft).

SAN JOAQUIN RIVER BASIN

11258000 FRESNO RIVER NEAR DAULTON, CALIF.

LOCATION.--Lat 37°05'51", long 119°53'19", in NW¼NW¼ sec.3, T.10 S., R.19 E., Madera County, on left bank 0.4 mi (0.6 km) downstream from Willow Creek, and 5.3 mi (8.5 km) southeast of Daulton.

DRAINAGE AREA.--258 mi² (668 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 377.37 ft (115.022 m) above mean sea level. October 1941 to Sept. 27, 1946, at site 300 ft (91 m) downstream and Sept. 28, 1946, to Sept. 28, 1949, at present site, at datum 8.37 ft (2.551 m) higher. Sept. 29, 1949, to Mar. 19, 1963, at datum 6.00 ft (1.829 m) higher. Mar. 20, 1963, to May 22, 1973, at datum 5.00 ft (1.524 m) higher.

AVERAGE DISCHARGE.--33 years, 106 ft³/s (3.002 m³/s), 76,800 acre-ft/yr (94.7 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 8,620 ft³/s (244 m³/s) Apr. 2 (gage height, 14.61 ft or 4.453 m); no flow Sept. 7-30.

Period of record: Maximum discharge, 17,500 ft³/s (496 m³/s) Dec. 23, 1955 (gage height, 17.64 ft or 5.377 m, present datum), from rating curve extended above 6,400 ft³/s (181 m³/s) on basis of slope-area measurement at gage height 17.69 ft (5.392 m); maximum gage height, 17.69 ft (5.392 m) Feb. 24, 1969 (present datum); no flow at times in most years.

Flood of Mar. 3, 1938, reached a discharge of 15,000 ft³/s (425 m³/s), furnished by Bureau of Reclamation.

REMARKS.--Records good except those for flows less than 50 ft³/s (1.42 m³/s), which are fair. No diversion for irrigation between this station and station near Knowles. Some regulation at low flow by mining operations and construction of Hidden Dam above station. See REMARKS for station near Knowles.

DISCHARGE, IN CURIC FEET PER SECOND. WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.07	20	59	144	116	120	633	136	104	35	2.3	.21
2	.08	17	277	137	115	621	3,240	146	102	33	2.2	.21
3	.19	8.9	107	102	108	894	663	175	102	31	2.0	.21
4	.35	9.4	87	106	102	602	510	175	99	28	1.8	.12
5	.25	11	74	131	80	421	425	176	96	28	1.7	.03
6	.56	9.6	61	178	69	361	366	175	95	26	1.6	.03
7	5.5	10	48	365	87	335	328	172	95	24	1.5	0
8	21	13	46	391	85	446	299	168	95	23	1.4	0
9	28	16	40	256	85	367	293	162	88	22	1.2	0
10	29	13	38	194	83	304	339	155	75	21	1.1	0
11	10	14	37	161	83	276	287	144	53	20	1.1	0
12	5.0	36	37	161	80	257	260	140	49	19	1.0	0
13	2.5	43	37	203	101	244	233	135	50	16	.93	0
14	1.5	55	46	171	110	230	229	126	50	16	.79	0
15	1.0	68	59	150	96	169	219	105	49	14	.72	0
16	.50	61	50	161	88	198	210	99	48	14	.65	0
17	1.6	47	42	332	85	201	211	102	48	13	.62	0
18	.93	76	40	420	82	191	187	135	62	14	.58	0
19	1.6	209	40	331	83	182	174	138	62	13	.51	0
20	1.1	87	37	287	111	174	179	138	63	14	.48	0
21	1.2	61	37	413	103	165	174	135	61	14	.40	0
22	1.1	56	48	288	88	156	164	158	57	9.3	.32	0
23	1.2	46	83	233	81	154	158	149	52	4.8	.25	0
24	28	41	71	202	81	150	174	129	48	4.5	.18	0
25	32	40	57	179	78	148	197	126	47	4.0	.15	0
26	52	39	50	161	76	149	168	126	46	3.8	.15	0
27	37	39	186	148	75	152	157	121	44	3.5	.15	0
28	17	34	277	136	75	313	152	114	43	3.3	.21	0
29	25	33	188	129	-----	359	147	109	41	3.0	.12	0
30	29	33	148	124	-----	276	140	107	37	2.5	.18	0
31	23	-----	124	121	-----	307	-----	106	-----	2.4	.21	-----
TOTAL	357.23	1,245.9	2,531	6,515	2,506	8,922	10,916	4,282	1,961	479.1	26.50	.81
MEAN	11.5	41.5	81.6	210	89.5	286	364	138	65.4	15.5	.85	.027
MAX	52	209	277	420	116	894	3,240	176	104	35	2.3	.21
MIN	.07	8.9	37	102	69	120	140	99	37	2.4	.12	0
AC-FT	709	2,470	5,020	12,920	4,970	17,700	21,650	8,490	3,890	950	53	1.6

CAL YR 1973 TOTAL 59,385.93 MEAN 163 MAX 4,500 MIN 0 AC-FT 117,800
WTR YR 1974 TOTAL 39,742.54 MEAN 109 MAX 3,240 MIN 0 AC-FT 78,830

PEAK DISCHARGE (BASE, 600 FT³/S)
DATE TIME G.H. DISCHARGE DATE TIME G.H. DISCHARGE
12-2 0515 7.90 637 4-2 0300 14.61 8,620
3-3 1700 9.16 1,130

11258900 WEST FORK CHOWCHILLA RIVER NEAR MARIPOSA, CALIF.

LOCATION.--Lat 37°25'14", long 119°52'25", in SW¼SE¼ sec.10, T.6 S., R.19 E., Mariposa County, on left bank 15 ft (5 m) downstream from bridge on Indian Peak Road, 0.5 mi (0.8 km) downstream from Humbug Creek, and 6.7 mi (10.8 km) southeast of Mariposa.

DRAINAGE AREA.--33.6 mi² (87.0 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 1,680 ft (512 m), from topographic map.

AVERAGE DISCHARGE.--17 years, 17.3 ft³/s (0.490 m³/s), 12,530 acre-ft/yr (15.4 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,150 ft³/s (60.9 m³/s) Apr. 1 (gage height, 7.59 ft or 2.313 m); no flow many days.

Period of record: Maximum discharge, 4,350 ft³/s (123 m³/s) Jan. 25, 1969 (gage height, 8.93 ft or 2.722 m in gage well, 11.1 ft or 3.38 m, from floodmarks); no flow many days in each year.

REMARKS.--No known diversions above station.

COOPERATION.--Records furnished by California Department of Water Resources and reviewed by the Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		.10	83	19	12	156	643	16	3.8	.30		
2		.10	23	12	11	311	289	15	3.6	.30		
3		.10	8.8	9.0	10	208	117	15	3.4	.30		
4		.10	6.0	10	9.9	96	86	15	2.8	.20		
5		.20	4.9	13	9.7	67	71	15	2.6	.20		
6		.20	4.1	44	9.3	57	61	14	2.4	.10		
7		.20	3.4	81	8.1	68	54	13	2.3	.10		
8		.20	3.1	48	7.9	115	50	12	2.1	.10		
9		.20	3.0	32	7.8	63	60	11	2.0	.50		
10		.30	2.6	26	7.6	52	52	10	1.8	1.4		
11		.60	2.7	21	7.7	45	44	10	1.6	1.0		
12		8.8	2.7	37	8.5	42	39	9.3	1.5	.80		
13		3.9	3.2	32	12	37	36	9.0	1.4	.60		
14		5.4	3.9	25	9.4	34	32	8.8	1.3	.40		
15		2.9	2.8	21	8.1	32	29	8.5	1.3	.30		
16		2.1	2.5	34	7.6	29	27	8.4	1.2	.20		
17		20	2.5	62	7.2	27	25	8.1	1.3	.20		
18		36	2.5	46	6.9	26	25	8.0	1.3	.10		
19		6.2	2.3	37	13	22	24	8.2	1.2	.10		
20		3.8	2.2	39	11	21	24	8.0	1.3	.10		
21		3.2	2.6	36	7.7	20	22	7.2	1.2	0		
22		2.6	11	26	6.8	19	21	6.9	1.0	0		
23		2.2	6.1	21	6.3	19	21	6.3	.90	0		
24		2.2	4.3	20	6.1	18	33	6.0	.80	0		
25		2.2	3.7	17	5.8	18	27	5.8	.70	0		
26		2.2	3.6	16	5.5	18	22	5.7	.60	0		
27		1.9	62	15	5.5	26	23	4.9	.60	0		
28		1.8	41	14	5.9	77	19	4.3	.50	0		
29		1.7	18	13	-----	44	18	4.0	.40	0		
30		1.7	15	12	-----	54	17	4.0	.30	0		
31		-----	11	12	-----	44	-----	4.1	-----	0		-----
TOTAL	0	113.10	347.5	850.0	234.3	1,865	2,011	281.5	47.20	7.30	0	0
MEAN	0	3.77	11.2	27.4	8.37	60.2	67.0	9.08	1.57	.24	0	0
MAX	0	36	83	81	13	311	643	16	3.8	1.4	0	0
MIN	0	.10	2.2	9.0	5.5	18	17	4.0	.30	0	0	0
AC-FT	0	224	689	1,690	465	3,700	3,990	558	94	14	0	0
CAL YR 1973	TOTAL	9,159.50	MEAN	25.1	MAX	1,100	MIN	0	AC-FT	18,170		
WTR YR 1974	TOTAL	5,756.90	MEAN	15.8	MAX	643	MIN	0	AC-FT	11,420		

SAN JOAQUIN RIVER BASIN

11258980 CHOWCHILLA RIVER NEAR RAYMOND, CALIF.

LOCATION.--Lat 37°15'36", long 119°56'43", in SE¼SE¼ sec.1, T.8 S., R.18 E., Madera County, on right bank 20 ft (6 m) downstream from County Road 613 bridge, 2,300 ft (701 m) downstream from Chapman Creek, and 3.8 mi (6.1 km) northwest of Raymond.

DRAINAGE AREA.--201 mi² (521 km²).

PERIOD OF RECORD.--October 1971 to current year. December 1958 to September 1970 in files of California Department of Water Resources.

GAGE.--Water-stage recorder and concrete improved control. Datum of gage is 565.67 ft (172.416 m) above mean sea level.

EXTREMES.--Current year: Maximum discharge, 7,570 ft³/s (214 m³/s) Apr. 2 (gage height, 13.47 ft or 4.106 m); minimum daily, 0.02 ft³/s (0.001 m³/s) Aug. 24-27, Sept. 20-29.
Period of record: Maximum discharge, 8,530 ft³/s (242 m³/s) Feb. 11, 1973 (gage height, 14.43 ft (4.398 m); minimum daily, 0.02 ft³/s (0.001 m³/s) for several days in each year.

REMARKS.--Records good except those for flows below 0.2 ft³/s (0.001 m³/s), which are fair. No large storage or diversions above station. Records of water temperatures for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WRD Calif. 1973: 1972(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.03	3.2	208	136	124	349	1,400	94	26	4.9	.04	.03
2	.04	3.2	237	115	125	1,090	2,810	88	25	4.3	.07	.03
3	.04	3.2	82	83	127	1,250	686	83	25	4.0	.04	.03
4	.04	3.0	53	85	132	620	498	80	23	3.8	.05	.03
5	.03	3.2	41	100	127	470	516	80	22	3.6	.05	.03
6	.03	3.4	35	179	108	452	484	79	20	3.2	.05	.03
7	.05	3.8	29	453	96	366	414	74	20	3.0	.04	.03
8	.09	4.3	26	392	86	572	342	68	18	2.8	.05	.03
9	.07	4.9	24	233	78	357	325	63	17	2.8	.05	.03
10	.07	4.9	22	181	70	282	348	61	16	3.0	.05	.03
11	.07	6.4	20	148	61	239	263	59	14	3.0	.04	.03
12	.07	35	20	183	60	226	235	57	13	3.0	.04	.03
13	.07	60	21	242	87	207	216	54	12	3.0	.04	.03
14	.98	34	26	170	75	187	199	54	12	3.0	.05	.03
15	1.4	38	27	146	67	178	185	52	11	3.0	.07	.03
16	1.5	25	22	163	63	167	174	50	11	3.2	.07	.03
17	1.5	24	20	412	61	155	163	50	11	2.8	.07	.03
18	1.5	142	20	345	59	146	155	50	12	2.3	.07	.03
19	1.4	76	20	292	66	138	160	49	12	1.8	.05	.03
20	1.4	38	18	268	91	128	153	49	12	1.6	.05	.02
21	1.4	28	18	320	71	118	145	48	12	1.3	.06	.02
22	1.4	27	41	220	62	112	134	45	11	1.1	.05	.02
23	3.4	23	59	180	57	110	128	43	10	.84	.03	.02
24	17	20	38	167	55	108	153	41	8.8	.69	.02	.02
25	10	19	30	158	53	104	158	39	8.0	.50	.02	.02
26	7.4	19	28	142	52	106	134	36	7.0	.38	.02	.02
27	5.5	18	270	133	51	112	120	33	6.7	.23	.02	.02
28	4.6	17	308	127	51	304	114	30	6.4	.15	.03	.02
29	4.0	16	151	123	-----	278	108	28	6.1	.12	.03	.02
30	3.6	15	129	122	-----	224	100	28	5.5	.09	.03	.03
31	3.4	-----	94	121	-----	228	-----	28	-----	.05	.03	-----
TOTAL	72.08	717.5	2,137	6,139	2,215	9,383	11,020	1,693	413.5	67.55	1.38	.80
MEAN	2.33	23.9	68.9	198	79.1	303	367	54.6	13.8	2.18	.045	.027
MAX	17	142	308	453	132	1,250	2,810	94	26	4.9	.07	.03
MIN	.03	3.0	18	83	51	104	100	28	5.5	.05	.02	.02
AC-FT	143	1,420	4,240	12,180	4,390	18,610	21,860	3,360	820	134	2.7	1.6

CAL YR 1973 TOTAL 44,293.64 MEAN 121 MAX 4,070 MIN .03 AC-FT 87,860
WTR YR 1974 TOTAL 33,859.81 MEAN 92.8 MAX 2,810 MIN .02 AC-FT 67,160

PEAK DISCHARGE (BASE, 660 FT³/S)
DATE TIME G.H. DISCHARGE DATE TIME G.H. DISCHARGE
3-2 1000 6.84 1,940 4-2 0100 13.47 7,570
3-8 1000 4.75 772

11259300 CHOWCHILLA RIVER BELOW RAYNOR CREEK, NEAR RAYMOND, CALIF.

LOCATION.--Lat 37°12'00", long 120°00'23", in SE¼SW¼ sec.28, T.8 S., R.18 E., Madera County, on left bank 200 ft (60 m) downstream from Raynor Creek, 1.9 mi (3.1 km) downstream from Buchanan damsite, and 5.6 mi (9.0 km) southwest of Raymond.

DRAINAGE AREA.--254 mi² (658 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 381.32 ft (116.226 m) above mean sea level.

EXTREMES.--Current year: Maximum discharge, 10,600 ft³/s (300 m³/s) Apr. 2 (gage height, 9.84 ft or 2.999 m); no flow many days.
Period of record: Maximum discharge, 11,100 ft³/s (314 m³/s) Feb. 11, 1973 (gage height, 9.97 ft or 3.039 m); no flow many days each year.

REMARKS.--Records good. No large storage or diversions above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	.19	74	134	134	221	1,190	100	27	4.7	.41	
2	0	.19	324	147	135	1,180	3,960	97	26	4.3	.23	
3	0	.19	104	100	137	1,430	844	92	17	3.9	.16	
4	0	.19	65	102	141	787	550	88	9.1	3.5	.16	
5	0	.19	52	125	130	473	464	85	13	2.8	.16	
6	0	.19	44	195	117	403	395	85	14	2.6	.16	
7	0	.19	38	495	103	355	347	83	10	2.3	.16	
8	.02	.23	35	523	92	651	314	78	12	2.0	.19	
9	.05	.27	31	282	82	443	314	70	14	1.4	.23	
10	.05	.36	29	214	73	347	383	65	15	1.3	.23	
11	.05	1.0	26	178	65	293	293	55	13	1.3	.13	
12	.05	8.3	24	188	64	300	259	60	12	1.3	.09	
13	.05	98	25	276	87	272	238	58	9.7	1.0	.07	
14	.05	45	27	202	87	253	217	55	7.9	1.3	.05	
15	.07	37	32	178	75	250	200	54	7.3	2.3	.03	
16	.07	33	29	180	70	244	185	53	8.5	2.6	.02	
17	.07	27	26	409	68	235	178	50	8.5	2.6	.02	
18	.07	68	21	464	63	217	167	52	9.1	2.8	.02	
19	.07	116	21	371	67	202	160	51	7.9	2.6	.01	
20	.07	51	20	335	92	185	162	50	9.7	2.0	.01	
21	.09	50	20	422	80	180	156	50	10	1.6	.01	
22	.11	32	24	229	68	180	147	48	11	1.3	.01	
23	.31	28	67	192	62	185	141	46	11	.47	.01	
24	.27	25	46	180	60	205	148	37	10	.31	0	
25	.31	22	37	167	56	226	176	43	9.1	.27	0	
26	.27	22	33	152	55	238	94	38	8.5	.31	0	
27	.23	21	241	141	54	250	94	36	6.7	.31	0	
28	.19	20	374	135	53	395	114	29	6.1	.41	0	
29	.19	19	173	132	-----	391	125	28	5.5	.53	0	
30	.19	18	128	132	-----	265	103	28	5.1	.53	0	
31	.19	-----	108	132	-----	310	-----	27	-----	.47	0	-----
TOTAL	3.09	743.49	2,298	7,112	2,370	11,566	12,118	1,791	333.7	55.11	2.57	0
MEAN	.10	24.8	74.1	229	84.6	373	404	57.8	11.1	1.78	.083	0
MAX	.31	116	374	523	141	1,430	3,960	100	27	4.7	.41	0
MIN	0	.19	20	100	53	180	94	27	5.1	.27	0	0
AC-FT	6.1	1,470	4,560	14,110	4,700	22,940	24,040	3,550	662	109	5.1	0

CAL YR 1973 TOTAL 50,809.16 MEAN 139 MAX 5,160 MIN 0 AC-FT 100,800
WTR YR 1974 TOTAL 38,392.96 MEAN 105 MAX 3,960 MIN 0 AC-FT 76,150

PEAK DISCHARGE (BASE, 830 FT ³ /S)							
DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
3-2	1200	6.92	2,600	4-2	0100	9.84	10,600
3-8	1200	5.43	858				

11260480 MARIPOSA CREEK NEAR CATHEYS VALLEY, CALIF.

LOCATION.--Lat 37°23'56", long 120°00'10", in SW¼NE¼ sec.21, T.6 S., R.18 E., Mariposa County, on downstream side of bridge on White Rock Road, 0.3 mi (0.5 km) downstream from China Gulch, and 5.7 mi (9.2 km) southeast of town of Catheys Valley.

DRAINAGE AREA.--65.7 mi² (170 km²).

PERIOD OF RECORD.--October 1958 to current year. Prior to October 1963, published as "near Cathay."

GAGE.--Water-stage recorder. Altitude of gage is 1,230 ft (375 m), from topographic map.

AVERAGE DISCHARGE.--16 years, 28.1 ft³/s (0.796 m³/s), 20,360 acre-ft/yr (25.1 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 3,930 ft³/s (111 m³/s) Apr. 1 (gage height, 9.97 ft or 3.039 m); no flow many days.

Period of record: Maximum discharge, 7,460 ft³/s (211 m³/s) Feb. 24, 1969 (gage height, 11.63 ft or 3.545 m); no flow many days in each year.

Flood of Apr. 3, 1958, reached a stage of 11.62 ft (3.542 m), discharge, 7,180 ft³/s (203 m³/s).

REMARKS.--Probably minor diversions above the station for irrigation.

COOPERATION.--Records furnished by California Department of Water Resources and reviewed by the Geological Survey.

REVISIONS.--WSP 1930: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		2.2	147	88	23	184	1,360	17	3.2	.20		
2		3.3	54	53	22	683	659	16	3.0	.20		
3		3.5	23	36	20	538	220	15	2.8	.10		
4		3.8	16	40	19	249	141	15	2.6	.10		
5		4.2	13	61	18	145	105	14	2.3	.10		
6		4.6	11	215	18	102	83	14	2.2	.10		
7		5.2	10	310	17	105	69	13	2.0	.10		
8		5.2	9.7	156	16	254	62	12	1.7	0		
9		5.1	9.4	89	15	131	84	11	1.5	.10		
10		5.6	9.2	60	15	98	67	9.9	1.4	.10		
11		7.0	9.3	47	15	79	53	9.7	1.2	.30		
12		26	9.4	80	16	68	48	9.2	1.1	.60		
13		13	11	66	26	57	43	8.7	.90	.50		
14		16	13	47	18	50	39	8.5	.90	.50		
15		11	11	39	16	44	36	7.9	.90	.40		
16		8.7	11	45	16	40	34	7.7	.90	.30		
17		60	11	95	15	36	31	7.5	.90	.30		
18		126	11	92	14	33	29	7.5	.90	.20		
19		25	11	83	23	30	28	7.6	.90	.20		
20		14	11	84	23	28	27	7.6	.90	.10		
21		11	11	85	18	26	24	7.1	1.0	.10		
22		9.4	31	65	16	24	23	6.6	.80	.10		
23		8.3	26	55	15	23	23	6.1	.60	0		
24		8.0	20	47	14	21	38	5.6	.50	0		
25		8.0	18	41	14	20	36	5.2	.40	0		
26		8.2	17	36	13	20	25	4.8	.30	0		
27		7.7	381	32	13	24	22	4.3	.30	0		
28		7.3	180	29	13	99	21	3.7	.30	0		
29		7.1	74	27	-----	63	19	3.5	.30	0		
30		7.2	55	25	-----	80	18	3.6	.20	0		
31		-----	39	23	-----	64	-----	3.4	-----	0		-----
TOTAL	0	431.6	1,263.0	2,251	481	3,418	3,467	272.7	36.90	4.70	0	0
MEAN	0	14.4	40.7	72.6	17.2	110	116	8.80	1.23	.15	0	0
MAX	0	126	381	310	26	683	1,360	17	3.2	.60	0	0
MIN	0	2.2	9.2	23	13	20	18	3.4	.20	0	0	0
AC-FT	0	856	2,510	4,460	954	6,780	6,880	541	73	9.3	0	0
CAL YR 1973	TOTAL	18,501.80	MEAN	50.7	MAX	2,550	MIN	0	AC-FT	36,700		
WTR YR 1974	TOTAL	11,625.90	MEAN	31.9	MAX	1,360	MIN	0	AC-FT	23,060		

11264500 MERCED RIVER AT HAPPY ISLES BRIDGE, NEAR YOSEMITE, CALIF.
(Hydrologic bench-mark station)

LOCATION.--Lat 37°43'54", long 119°33'28", unsurveyed, Mariposa County, Yosemite National Park, on right bank 10 ft (3 m) downstream from footbridge at Happy Isles, 0.4 mi (0.6 km) downstream from Illilouette Creek, and 2.0 mi (3.2 km) southeast of Yosemite National Park Headquarters.

DRAINAGE AREA.--181 mi² (469 km²).

PERIOD OF RECORD.--August 1915 to current year.

GAGE.--Water-stage recorder. Datum of gage is 4,016.58 ft (1,224.254 m) above mean sea level. Prior to Nov. 2, 1916, nonrecording gage at datum 0.55 ft (0.168 m) lower.

AVERAGE DISCHARGE.--59 years, 344 ft³/s (9.74 m³/s), 249,200 acre-ft/yr (307 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 3,260 ft³/s (92.3 m³/s) May 28, June 7 (gage height, 7.17 ft or 2.185 m); minimum daily, 6.8 ft³/s (0.19 m³/s) Oct. 5, 6.
Period of record: Maximum discharge, 9,860 ft³/s (279 m³/s) Dec. 23, 1955 (gage height, 12.73 ft or 3.880 m), from rating curve extended above 4,000 ft³/s (113 m³/s) on basis of contracted-opening measurements at gage heights 10.4 ft (3.17 m) and 11.55 ft (3.520 m); minimum, 1.5 ft³/s (0.042 m³/s) Sept. 30, 1926.

REMARKS.--Records good. Up to 5 ft³/s (0.142 m³/s) can be diverted above station for Yosemite Valley water supply. Records of chemical analyses, water temperatures, and sediment discharge for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1215: 1938(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.8	47	130	190	152	174	304	964	2,240	858	612	39
2	7.4	45	148	152	140	236	310	1,190	1,960	776	375	36
3	7.0	40	171	177	140	182	290	1,320	1,930	648	285	33
4	7.0	29	154	166	137	182	279	1,280	2,120	625	354	31
5	6.8	29	146	144	133	190	316	1,340	2,200	612	414	30
6	6.8	37	144	140	126	193	322	1,660	2,720	548	382	30
7	8.3	78	146	152	124	190	334	2,030	2,760	486	277	30
8	23	90	144	148	122	184	358	2,330	2,420	442	222	29
9	18	74	148	137	122	179	340	2,430	2,220	422	182	29
10	15	429	152	131	122	182	299	2,340	2,260	540	158	28
11	14	1,700	154	126	119	175	296	2,270	2,300	406	144	26
12	14	1,610	144	135	119	186	344	2,380	2,320	293	131	25
13	15	553	152	131	113	193	400	2,180	2,160	266	119	24
14	16	368	148	130	112	222	499	2,020	2,070	279	106	23
15	18	279	139	152	108	264	584	2,100	1,870	290	98	22
16	19	254	133	210	108	272	607	1,830	1,660	302	85	19
17	19	261	135	269	98	264	690	1,460	1,340	304	78	18
18	18	274	124	290	104	251	700	1,080	1,120	285	72	16
19	17	237	121	403	108	264	540	869	1,020	272	68	15
20	17	227	117	331	99	279	494	750	886	266	65	15
21	16	201	119	272	104	293	526	735	1,010	274	60	13
22	18	177	122	237	99	293	680	814	1,160	290	56	12
23	65	160	122	232	96	299	685	1,050	1,190	299	52	12
24	49	160	121	218	99	322	580	1,230	982	285	51	11
25	57	148	117	210	104	340	474	1,940	825	403	49	11
26	53	144	113	195	108	304	414	2,490	770	450	49	12
27	50	139	137	177	104	290	372	2,810	735	319	48	12
28	49	140	184	179	102	313	396	2,900	740	264	45	12
29	49	144	299	171	-----	304	486	2,680	776	254	45	12
30	47	140	264	162	-----	322	670	2,290	858	249	44	11
31	46	-----	215	158	-----	290	-----	2,260	-----	614	43	-----
TOTAL	773.1	8,214	4,663	5,925	3,222	7,632	13,589	55,022	48,622	12,621	4,769	636
MEAN	24.9	274	150	191	115	246	453	1,775	1,621	407	154	21.2
MAX	65	1,700	299	403	152	340	700	2,900	2,760	858	612	39
MIN	6.8	29	113	126	96	174	279	735	735	249	43	11
AC-FT	1,530	16,290	9,250	11,750	6,390	15,140	26,950	109,100	96,440	25,030	9,460	1,260
CAL YR 1973	TOTAL 164,228.7		MEAN 450		MAX 3,610		MIN 6.8		AC-FT 325,700			
WTR YR 1974	TOTAL 165,688.1		MEAN 454		MAX 2,900		MIN 6.8		AC-FT 328,600			

PEAK DISCHARGE (BASE, 1,900 FT ³ /S)							
DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-11	2230	6.90	2,920	5-28	0200	7.17	3,260
5-9	0100	6.77	2,760	6-7	0230	7.17	3,260

SAN JOAQUIN RIVER BASIN

11266500 MERCED RIVER AT POHONO BRIDGE, NEAR YOSEMITE, CALIF.

LOCATION.--Lat 37°43'01", long 119°39'55", Mariposa County, Yosemite National Park, on left bank 150 ft (46 m) upstream from Pohono bridge, 0.4 mi (0.6 km) upstream from Artist Creek, and 4.8 mi (7.7 km) southwest of Yosemite National Park headquarters.

DRAINAGE AREA.--321 mi² (831 km²).

PERIOD OF RECORD.--October 1916 to current year. Monthly discharge only for October and November 1916, published in WSP 1315-A.

GAGE.--Water-stage recorder. Datum of gage is 3,861.66 ft (1,177.034 m) above mean sea level. Prior to Sept. 5, 1918, at datum 1.8 ft (0.549 m) higher. Sept. 5, 1918, to Sept. 30, 1955, at datum 1.0 ft (0.305 m) higher.

AVERAGE DISCHARGE.--58 years, 604 ft³/s (17.11 m³/s), 437,600 acre-ft/yr (540 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 5,320 ft³/s (151 m³/s) May 28 (gage height, 9.31 ft or 2.838 m); minimum daily, 21 ft³/s (0.59 m³/s) Oct. 6.

Period of record: Maximum discharge, 23,400 ft³/s (663 m³/s) Dec. 23, 1955 (gage height, 21.52 ft or 6.559 m, from floodmarks in well), from rating curve extended above 16,300 ft³/s (462 m³/s) on basis of computation of flow over diversion dam for Yosemite powerhouse, 1 mi (1.6 km) downstream at gage heights 20.1 ft (6.13 m) and 20.98 ft (6.395 m), present datum; minimum, 3.3 ft³/s (0.093 m³/s) Sept. 29, Oct. 1, 1924.

REMARKS.--Records excellent except those for period of no gage-height record, which are good. No diversions between stations at Happy Isles bridge and Pohono bridge. One ft³/s (0.028 m³/s) sewage effluent returns between stations (see REMARKS for sta 11264500).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	69	265	370	343	360	698	1,970	3,580	1,090	631	62
2	22	67	295	310	304	564	690	2,360	3,240	990	452	60
3	22	63	335	360	313	419	625	2,620	3,050	822	357	57
4	22	56	315	320	307	389	598	2,610	3,330	767	428	55
5	22	52	295	290	293	427	649	2,780	3,330	733	502	53
6	21	59	290	280	284	443	662	3,290	3,950	663	454	52
7	24	137	286	310	285	430	697	3,830	4,060	602	361	51
8	37	165	290	290	279	407	738	4,240	3,520	559	288	51
9	39	130	292	280	279	384	722	4,400	3,160	572	239	50
10	34	615	300	270	282	388	627	4,210	3,170	917	208	49
11	32	2,540	310	255	272	374	637	4,070	3,150	652	189	48
12	31	3,180	290	270	275	392	744	4,300	3,180	490	175	47
13	31	1,140	305	265	257	406	851	3,980	2,940	428	159	46
14	31	749	295	265	268	458	1,030	3,590	2,810	419	146	45
15	31	594	285	305	257	554	1,200	3,710	2,560	417	134	44
16	32	522	270	437	261	584	1,270	3,330	2,270	418	123	42
17	33	539	270	646	233	566	1,460	2,750	1,930	415	112	41
18	33	612	250	702	248	532	1,530	2,160	1,630	392	104	38
19	32	473	245	980	266	554	1,130	1,820	1,520	370	98	37
20	32	453	238	757	234	601	1,040	1,570	1,330	358	93	35
21	31	396	240	604	247	638	1,120	1,540	1,400	357	88	34
22	33	340	245	516	242	639	1,470	1,720	1,540	370	82	33
23	100	304	245	502	226	647	1,520	2,110	1,570	375	78	32
24	85	314	245	464	235	700	1,230	2,440	1,360	417	75	31
25	86	278	235	448	244	742	1,020	3,340	1,170	482	73	30
26	85	276	230	410	253	655	909	4,150	1,080	532	71	30
27	79	270	315	373	246	639	838	4,680	1,000	412	69	29
28	77	276	380	388	239	668	877	4,760	989	344	68	29
29	75	290	640	365	-----	669	1,020	4,440	1,010	321	66	28
30	72	280	480	356	-----	719	1,380	3,720	1,090	309	64	28
31	69	-----	445	353	-----	642	-----	3,620	-----	588	63	-----
TOTAL	1,375	15,239	9,421	12,741	7,472	16,590	28,982	100,110	69,919	16,581	6,050	1,267
MEAN	44.4	508	304	411	267	535	966	3,229	2,331	535	195	42.2
MAX	100	3,180	640	980	343	742	1,530	4,760	4,060	1,090	631	62
MIN	21	52	230	255	226	360	598	1,540	989	309	63	28
AC-FT	2,730	30,220	18,690	25,270	14,820	32,910	57,490	198,600	138,700	32,890	12,000	2,510

CAL YR 1973 TOTAL 276,807 MEAN 758 MAX 6,160 MIN 21 AC-FT 549,000
WTR YR 1974 TOTAL 285,747 MEAN 783 MAX 4,760 MIN 21 AC-FT 566,800

PEAK DISCHARGE (BASE, 2,900 FT³/S)
DATE TIME G.H. DISCHARGE DATE TIME G.H. DISCHARGE
11-12 0315 8.83 4,750 5-28 0245 9.31 5,320
5-9 0145 9.05 5,010 6-7 0315 8.73 4,630

NOTE.--No gage-height record Nov. 27 to Jan. 15.

SAN JOAQUIN RIVER BASIN

169

11267350 BIG CREEK DIVERSION NEAR FISH CAMP, CALIF.

LOCATION.--Lat 37°28'10", long 119°36'51", in SE¼NE¼ sec.25, T.5 S., R.21 E., Mariposa County, Sierra National Forest, on right bank 0.5 mi (0.8 km) downstream from diversion weir, 0.5 mi (0.8 km) upstream from Rainier Creek, and 1.2 mi (1.9 km) southeast of Fish Camp.

PERIOD OF RECORD.--October 1969 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 5,400 ft (1,646 m), from topographic map.

AVERAGE DISCHARGE.--5 years, 12.7 ft³/s (0.360 m³/s), 9,200 acre-ft/yr (11.3 hm³/yr).

EXTREMES.--Period of record: Maximum daily discharge, 58 ft³/s (1.64 m³/s) May 11-19, 1973; no flow July 1, 2, 1973.

REMARKS.--Records good except those for winter period, which are fair.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.4	1.2	4.6	1.8	.76	.90	.48	18	45	14	.48	2.7
2	1.2	1.2	3.4	.72	.84	.76	.42	36	44	13	.48	2.7
3	1.1	1.2	3.0	.76	.76	.36	.36	37	44	13	.48	2.6
4	1.1	1.2	3.1	.70	.76	.32	.36	38	44	6.9	.48	2.5
5	1.0	1.2	3.0	.60	.84	.32	.36	38	44	3.2	.48	2.5
6	1.0	1.2	3.0	.62	.65	.33	.36	38	44	3.2	.48	2.5
7	1.0	1.2	3.2	.66	.63	.30	.36	37	44	3.2	.48	2.4
8	.93	1.2	3.2	.66	.67	.30	.36	35	43	3.2	.48	2.4
9	.84	2.9	2.9	.66	.71	.31	.36	33	26	3.2	.42	2.4
10	.84	8.5	2.9	.62	.76	.31	.42	28	11	3.2	.42	2.4
11	.84	10	2.9	.58	.74	.31	.42	26	11	3.2	.42	2.4
12	.84	9.4	2.9	.62	.70	.31	.48	25	11	2.3	.42	2.4
13	.84	7.2	2.7	.62	.69	.36	4.4	12	10	1.2	1.6	2.4
14	.84	6.6	2.7	.67	.69	.36	7.2	.93	10	1.2	3.6	2.4
15	.76	6.4	2.5	.78	.69	.36	7.2	.55	10	1.2	4.2	2.4
16	.76	6.4	2.5	.89	.69	.36	7.2	20	17	1.2	4.1	2.3
17	.76	7.2	2.3	.95	.58	.36	7.2	45	30	1.1	4.0	1.9
18	.76	5.9	2.3	1.0	.58	.36	7.2	45	30	1.1	3.9	1.9
19	.93	5.6	2.3	1.1	.58	.36	6.9	44	29	1.1	3.6	1.8
20	1.4	5.4	2.2	1.0	.48	.36	5.9	44	25	1.1	3.6	1.8
21	1.4	5.4	2.1	1.0	.55	.36	5.2	44	24	1.1	3.6	1.6
22	1.4	5.4	2.1	1.0	.69	.36	5.2	44	22	1.1	3.4	1.5
23	.93	5.6	2.1	.93	.76	.36	4.9	44	20	.84	3.4	1.4
24	.84	5.4	2.1	.84	.76	.36	4.6	45	20	.62	3.2	1.4
25	1.0	5.4	2.1	.84	.76	.36	4.4	45	19	.58	3.2	1.4
26	1.2	5.4	2.1	.84	.84	.36	4.2	45	17	.55	2.9	1.4
27	1.2	5.6	1.9	.83	.84	.36	4.2	45	16	.48	2.9	1.2
28	1.2	5.4	1.9	.84	.87	.42	4.2	45	15	.55	2.9	1.2
29	1.2	5.4	1.9	.84	-----	.36	4.2	45	15	.55	2.9	1.2
30	1.2	5.4	1.9	.84	-----	.42	4.2	45	14	.55	2.9	1.1
31	1.2	-----	1.9	.76	-----	.36	-----	45	-----	.48	2.9	-----
TOTAL	31.91	145.5	79.7	25.57	19.87	11.79	103.24	1,092.48	754	88.20	68.32	60.2
MEAN	1.03	4.85	2.57	.82	.71	.38	3.44	35.2	25.1	2.85	2.20	2.01
MAX	1.4	10	4.6	1.8	.87	.90	7.2	45	45	14	4.2	2.7
MIN	.76	1.2	1.9	.58	.48	.30	.36	.55	10	.48	.42	1.1
AC-FT	63	289	158	51	39	23	205	2,170	1,500	175	136	119

CAL YR 1973 TOTAL 4,763.32 MEAN 13.1 MAX 58 MIN 0 AC-FT 9,450
WTR YR 1974 TOTAL 2,480.78 MEAN 6.80 MAX 45 MIN .30 AC-FT 4,920

SAN JOAQUIN RIVER BASIN

11268000 SOUTH FORK MERCED RIVER NEAR EL PORTAL, CALIF.

LOCATION.--Lat 37°39'05", long 119°53'04", in NW¼NE¼ sec.29, T.3 S., R.19 E., Mariposa County, on right bank 1,500 ft (460 m) upstream from mouth, and 5.9 mi (9.5 km) west of El Portal.

DRAINAGE AREA.--241 mi² (624 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 1,400 ft (427 m), from topographic map.

AVERAGE DISCHARGE.--23 years, 347 ft³/s (9.827 m³/s), 251,400 acre-ft/yr (310 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,900 ft³/s (82.1 m³/s) May 26 (gage height, 9.39 ft or 2.862 m); minimum daily, 11 ft³/s (0.31 m³/s) Oct. 3.

Period of record: Maximum discharge, 46,500 ft³/s (1,320 m³/s) Dec. 23, 1955 (gage height, 18.70 ft or 5.700 m), from rating curve extended above 11,000 ft³/s (312 m³/s) on basis of slope-area measurement at gage height 17.63 ft (5.374 m); minimum, 2.2 ft³/s (0.062 m³/s) Aug. 26, 27, 1961.

REMARKS.--Records good. Big Creek ditch diverts up to 60 ft³/s (1.70 m³/s) at times into Fresno River basin. Diversion of 0.5 ft³/s (0.014 m³/s) at Wawona for domestic use and irrigation of golf course. Records of chemical analyses and sediment discharge for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1930: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	38	799	379	263	620	900	1,060	1,430	201	42	16
2	12	38	382	298	246	750	1,430	1,160	1,310	178	40	16
3	11	35	293	280	242	750	900	1,270	1,210	143	37	16
4	12	33	250	277	233	726	726	1,230	1,310	129	37	15
5	12	30	216	274	226	672	684	1,280	1,300	124	51	15
6	12	30	195	270	221	660	654	1,470	1,520	117	56	15
7	13	46	188	320	211	625	653	1,810	1,410	110	49	14
8	28	62	185	310	214	642	658	1,990	1,180	103	42	14
9	54	53	179	305	206	580	662	1,950	1,060	110	38	14
10	31	172	178	295	207	540	586	1,840	1,030	188	35	14
11	25	940	182	280	201	495	559	1,840	1,010	179	34	13
12	23	1,800	178	300	203	500	590	2,010	964	135	33	13
13	22	486	180	290	205	500	678	1,740	860	115	31	13
14	21	362	216	320	203	505	732	1,610	785	104	29	13
15	23	261	178	355	196	560	820	1,680	702	96	27	13
16	23	219	167	487	193	570	820	1,520	616	89	25	14
17	21	407	164	852	184	550	892	1,250	505	86	23	14
18	20	956	166	771	181	510	956	948	415	85	23	13
19	19	351	152	852	199	520	738	771	397	81	22	13
20	18	271	144	764	187	540	616	664	354	72	22	12
21	18	248	146	655	193	536	637	660	356	70	21	12
22	19	203	230	515	181	531	820	828	357	68	21	12
23	173	175	195	457	176	517	844	1,130	341	65	20	12
24	102	169	175	404	178	529	757	1,070	296	65	19	12
25	54	153	170	373	181	572	635	1,620	255	73	19	12
26	48	153	170	346	186	510	576	1,840	239	79	18	12
27	43	138	399	313	181	546	553	1,920	221	72	17	12
28	41	140	600	308	176	690	571	1,880	211	59	17	12
29	42	151	593	287	-----	642	614	1,650	205	51	17	13
30	40	149	626	277	-----	690	806	1,460	204	49	17	13
31	37	-----	428	267	-----	671	-----	1,440	-----	45	17	-----
TOTAL	1,029	8,269	8,324	12,481	5,673	18,249	22,067	44,591	22,053	3,141	899	402
MEAN	33.2	276	269	403	203	589	736	1,438	735	101	29.0	13.4
MAX	173	1,800	799	852	263	750	1,430	2,010	1,520	201	56	16
MIN	11	30	144	267	176	495	553	660	204	45	17	12
AC-FT	2,040	16,400	16,510	24,760	11,250	36,200	43,770	88,450	43,740	6,230	1,780	797

CAL YR 1973 TOTAL 153,002 MEAN 419 MAX 2,570 MIN 11 AC-FT 303,500
WTR YR 1974 TOTAL 147,178 MEAN 403 MAX 2,010 MIN 11 AC-FT 291,900

PEAK DISCHARGE (BASE, 2,000 FT³/S)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-12	0215	9.26	2,690	5-12	0030	9.29	2,740
4-2	0215	9.03	2,330	5-26	2330	9.39	2,900

11268200 MERCED RIVER NEAR BRICEBURG, CALIF.

LOCATION.--Lat 37°38'09", long 119°55'56", in NW¼NE¼ sec.36, T.3 S., R.18 E., Mariposa County, on left bank 150 ft (46 m) upstream from Feliciana Creek, and 2.8 mi (4.5 km) northeast of Briceburg.

DRAINAGE AREA.--691 mi² (1,790 km²).

PERIOD OF RECORD.--September 1965 to September 1974 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 1,194.98 ft (364.230 m) above mean sea level.

AVERAGE DISCHARGE.--9 years, 1,222 ft³/s (34.6 m³/s), 885,300 acre-ft/yr (1,092 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 8,650 ft³/s (245 m³/s) May 28 (gage height, 11.22 ft or 3.420 m); minimum daily, 42 ft³/s (1.19 m³/s) Oct. 3, 6.

Period of record: Maximum discharge, 21,500 ft³/s (609 m³/s) Dec. 6, 1966 (gage height, 17.79 ft or 5.422 m); minimum daily, 27 ft³/s (0.76 m³/s) Sept. 30, 1968.

REMARKS.--Records excellent. No regulation. Small diversions above station (see REMARKS for sta 11268000). Records of chemical analyses for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	43	138	1,300	1,020	727	1,740	2,490	3,280	5,510	1,370	707	96
2	43	139	790	772	655	4,050	3,410	3,920	5,100	1,230	558	95
3	42	134	724	724	655	2,060	2,140	4,350	4,650	1,060	403	90
4	43	126	653	748	642	1,560	1,770	4,250	5,100	965	437	88
5	43	114	569	719	608	1,460	1,710	4,430	4,960	931	537	84
6	42	114	537	721	596	1,450	1,660	5,210	5,770	861	516	82
7	47	159	527	780	569	1,410	1,670	6,230	5,890	779	434	80
8	77	241	516	829	582	1,400	1,700	6,900	5,100	716	352	78
9	134	220	513	791	560	1,260	1,720	7,090	4,470	715	302	78
10	102	586	516	690	566	1,200	1,510	6,780	4,450	1,210	268	77
11	86	3,140	532	654	548	1,120	1,480	6,520	4,370	990	245	76
12	80	5,860	509	772	551	1,120	1,590	6,940	4,360	708	228	75
13	77	1,970	523	846	547	1,130	1,790	6,420	4,010	587	213	73
14	74	1,310	585	771	536	1,160	2,040	5,720	3,800	541	200	69
15	76	985	510	803	526	1,330	2,350	5,970	3,470	533	188	69
16	77	818	488	1,060	518	1,390	2,430	5,380	3,070	515	175	69
17	75	975	483	1,820	496	1,360	2,680	4,480	2,640	518	166	67
18	75	1,980	477	1,790	492	1,260	2,930	3,540	2,190	492	156	67
19	72	982	441	2,300	547	1,280	2,220	2,940	2,030	462	148	64
20	71	829	430	1,920	504	1,350	1,920	2,490	1,810	443	142	61
21	70	741	434	1,600	516	1,390	1,950	2,450	1,820	432	138	59
22	72	609	555	1,290	495	1,390	2,520	2,760	1,960	436	129	59
23	247	537	504	1,190	472	1,370	2,760	3,500	2,000	441	122	57
24	253	535	477	1,080	478	1,430	2,390	3,790	1,770	470	116	56
25	176	476	473	1,000	480	1,550	1,960	5,210	1,520	526	114	54
26	173	482	460	930	497	1,390	1,760	6,480	1,390	640	111	53
27	161	441	832	827	496	1,400	1,630	7,260	1,300	528	108	52
28	154	453	1,210	854	480	1,670	1,670	7,320	1,270	425	105	51
29	152	473	1,350	787	-----	1,620	1,810	6,800	1,290	384	102	50
30	147	466	1,670	761	-----	1,730	2,330	5,730	1,340	372	98	49
31	140	-----	1,170	736	-----	1,680	-----	5,550	-----	541	97	-----
TOTAL	3,124	26,033	20,758	31,585	15,339	46,710	61,990	159,690	98,410	20,821	7,615	2,078
MEAN	101	868	670	1,019	548	1,507	2,066	5,151	3,280	672	246	69.3
MAX	253	5,860	1,670	2,300	727	4,050	3,410	7,320	5,890	1,370	707	96
MIN	42	114	430	654	472	1,120	1,480	2,450	1,270	372	97	49
AC-FT	6,200	51,640	41,170	62,650	30,420	92,650	123,000	316,700	195,200	41,300	15,100	4,120
CAL YR 1973	TOTAL	497,742	MEAN	1,364	MAX	9,530	MIN	42	AC-FT	987,300		
WTR YR 1974	TOTAL	494,153	MEAN	1,354	MAX	7,320	MIN	42	AC-FT	980,200		

PEAK DISCHARGE (BASE, 5,000 FT ³ /S)							
DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-12	0815	10.87	8,100	5-9	0330	11.11	8,480
3-2	0500	9.69	6,340	5-28	0300	11.22	8,650
4-2	0015	8.88	5,120				

SAN JOAQUIN RIVER BASIN

11269300 MAXWELL CREEK AT COULTERVILLE, CALIF.

LOCATION.--Lat 37°42'58", long 120°11'20", in NW¼SE¼ sec.34, T.2 S., R.16 E., Mariposa County, on Dogtown Road bridge, 0.4 mi (0.6 km) downstream from Cuneo Creek, and 0.5 mi (0.8 km) northeast of Coulterville.

DRAINAGE AREA.--17.0 mi² (44.0 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 1,740 ft (530 m), from topographic map.

AVERAGE DISCHARGE.--15 years, 7.86 ft³/s (0.223 m³/s), 5,690 acre-ft/yr (7.02 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 984 ft³/s (27.9 m³/s) Apr. 1 (gage height, 5.45 ft or 1.661 m); no flow many days.

Period of record: Maximum discharge, 1,770 ft³/s (50.1 m³/s) Dec. 22, 1964 (gage height, 5.71 ft or 1.740 m); no flow many days in each year.

REMARKS.--No diversion or storage above station.

COOPERATION.--Records furnished by California Department of Water Resources and reviewed by the Geological Survey.

REVISIONS (WATER YEARS).--WRD Calif. 1965: 1960(M), 1962(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	.60	48	19	5.5	52	387	5.7	1.4	.40	.20	0
2	0	.60	12	13	5.0	198	187	5.5	1.3	.40	.20	0
3	0	.70	5.5	10	4.6	102	51	5.2	1.2	.30	.10	0
4	0	.70	3.7	9.4	4.4	60	28	5.0	1.1	.30	.10	0
5	.10	.70	2.8	11	4.3	37	19	4.7	1.1	.30	.10	0
6	.10	1.1	2.3	34	4.0	25	15	4.5	1.0	.30	.10	0
7	.60	1.1	2.0	73	3.8	36	12	4.2	1.0	.30	.10	0
8	1.2	.90	1.8	42	3.6	74	11	4.0	.90	.30	.10	0
9	.50	.90	1.8	26	3.6	41	14	3.7	.90	2.4	.10	0
10	.40	1.2	1.7	18	3.5	27	12	3.6	.90	1.9	.10	0
11	.40	2.0	2.0	15	3.4	21	9.9	3.4	.90	1.2	.10	0
12	.30	8.6	1.8	37	4.1	17	8.9	3.2	.80	1.0	.10	0
13	.20	3.7	3.2	24	4.2	14	8.3	3.1	.70	.90	.10	.10
14	.30	6.4	3.2	16	3.5	12	7.5	3.0	.70	.70	.20	.10
15	.20	2.7	2.5	13	3.4	11	6.9	2.9	.70	.60	.10	.10
16	.20	2.4	2.2	13	3.4	9.9	6.5	2.9	.90	.50	.10	.10
17	.20	8.5	2.3	31	3.3	8.8	6.1	2.9	.90	.50	.10	.10
18	.20	15	2.3	27	3.3	8.4	6.2	2.8	.70	.50	.10	.10
19	.20	6.0	2.1	23	7.3	7.6	5.8	2.6	.70	.40	.10	.10
20	.30	3.4	2.0	24	7.3	6.9	5.7	2.5	.80	.40	.10	.10
21	.30	2.6	4.9	20	5.9	6.3	5.4	2.4	.80	.40	.20	0
22	.40	2.1	23	16	5.6	6.1	5.2	2.3	.70	.40	.10	0
23	2.7	1.8	8.4	13	5.1	5.9	5.9	2.1	.60	.30	.10	0
24	1.0	1.8	5.6	11	4.8	5.6	20	2.0	.60	.30	.10	0
25	.70	1.7	4.2	10	4.6	5.5	14	1.9	.60	.30	.10	0
26	.70	1.8	5.6	8.9	4.4	5.3	10	1.8	.60	.20	.10	0
27	.60	1.6	155	7.8	4.3	6.2	8.2	1.5	.50	.20	.10	0
28	.60	1.5	49	7.2	4.3	18	7.3	1.5	.50	.20	.10	0
29	.60	1.5	33	6.6	-----	13	6.4	1.5	.50	.30	.10	0
30	.60	1.5	30	6.3	-----	22	5.9	1.5	.40	.20	0	0
31	.60	-----	15	5.7	-----	19	-----	1.5	-----	.20	0	-----
TOTAL	14.20	85.10	438.9	590.9	124.5	881.5	896.1	95.4	24.40	16.60	3.30	.80
MEAN	.46	2.84	14.2	19.1	4.45	28.4	29.9	3.08	.81	.54	.11	.027
MAX	2.7	15	155	73	7.3	198	387	5.7	1.4	2.4	.20	.10
MIN	0	.60	1.7	5.7	3.3	5.3	5.2	1.5	.40	.20	0	0
AC-FT	28	169	871	1,170	247	1,750	1,780	189	48	33	6.5	1.6

CAL YR 1973 TOTAL 4,907.50 MEAN 13.4 MAX 547 MIN 0 AC-FT 9,730
 WTR YR 1974 TOTAL 3,171.70 MEAN 8.69 MAX 387 MIN 0 AC-FT 6,290

11269500 LAKE McCLURE AT EXCHEQUER, CALIF.

LOCATION.--Lat 37°35'02", long 120°16'09", in NW¼SE¼ sec.13; T.4 S., R.15 E., Mariposa County, on left end of New Exchequer Dam on Merced River, 0.9 mi (1.4 km) east of Exchequer, and 5.5 mi (8.8 km) northeast of Merced Falls.

DRAINAGE AREA.--1,037 mi² (2,686 km²).

PERIOD OF RECORD.--April 1926 to September 1930 (daily gage heights; also summary of yearly contents in WSP 881), October 1930 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Merced Irrigation District). Prior to Oct. 1, 1964, indicator in powerhouse at same datum. Oct. 1, 1964, to July 31, 1966, nonrecording gage at center of upstream face of dam at same datum.

EXTREMES.--Current year: Maximum contents, 1,025,000 acre-ft (1,260 hm³) June 13-19 (elevation, 867.0 ft or 264.26 m); minimum, 634,600 acre-ft (782 hm³) Nov. 9, 10 (elevation, 801.7 ft or 244.36 m).
Period of record: Maximum contents, 1,026,000 acre-ft (1,270 hm³) July 14, 15, 1969 (elevation, 867.2 ft or 264.32 m); practically no storage at times in 1926, 1930-31, 1964-65 when reservoir was drained for inspection or construction. Minimum since construction of New Exchequer Dam under normal operations, 273,900 acre-ft (338 hm³) Nov. 28, 1972 (elevation, 704.2 ft or 214.64 m).

REMARKS.--Reservoir is formed by a rockfill dam with a reinforced concrete face completed in March 1967. Dam is downstream from and connected to the original concrete arch and gravity-type dam which was completed in April 1926. Usable capacity, 1,024,000 acre-ft (1,260 hm³) between elevations 440.0 ft (134.11 m), invert entrance to outlet tunnel and 867.0 ft (264.26 m), top of spillway gates. Dead storage, 300 acre-ft (0.370 hm³). Water is released through a series of powerplants down the Merced River to a diversion dam for Merced Irrigation District's main canal. Records, including extremes, represent total contents at 2400 hours.

REVISIONS (WATER YEARS).--WSP 881: 1926-32 (yearly summaries only). WSP 1345: 1951(M). WSP 1930: Drainage area.

CAPACITY TABLE (ELEVATION, IN FEET, AND CONTENTS, IN ACRE-FEET)

700	263,000	820	729,600
720	317,800	840	845,800
750	415,900	860	975,700
780	534,500	870	1,046,000

CONTENTS, IN THOUSANDS OF ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	670.2	637.6	654.0	657.5	651.5	654.5	741.8	811.9	987.4	1,011	916.8	804.8
2	667.1	638.0	654.5	656.5	650.0	668.2	756.9	814.9	992.3	1,009	913.6	801.9
3	665.1	638.0	655.0	655.0	648.5	676.9	763.1	819.1	996.5	1,008	910.3	798.3
4	662.6	638.0	655.0	654.5	648.0	679.5	766.0	822.7	1,001	1,006	907.1	794.8
5	660.5	638.5	655.0	654.0	648.0	681.0	769.4	826.9	1,006	1,003	903.8	791.3
6	658.5	637.6	655.0	654.0	647.0	682.1	772.8	832.4	1,011	999.9	900.6	788.4
7	657.5	636.1	655.5	654.5	647.0	683.6	775.7	839.7	1,015	996.5	897.4	784.9
8	656.5	635.6	655.0	655.0	647.0	687.8	778.0	848.9	1,015	993.0	893.5	782.0
9	655.0	634.6	654.5	654.5	647.0	691.5	780.3	858.2	1,015	990.9	889.7	779.1
10	653.5	634.6	654.0	653.5	648.0	695.2	782.6	866.9	1,016	988.8	885.8	776.3
11	652.5	640.0	654.5	653.0	647.5	696.2	784.3	875.1	1,020	986.8	882.7	773.4
12	651.5	651.0	654.5	653.5	647.0	697.3	785.5	883.9	1,022	984.0	879.5	770.5
13	651.0	654.5	654.5	653.5	647.0	699.4	788.4	892.2	1,025	981.2	875.1	767.1
14	650.0	656.5	654.5	652.5	647.0	701.5	791.9	898.6	1,025	978.5	870.7	764.8
15	649.0	658.0	654.5	650.5	647.5	703.7	794.2	905.8	1,025	975.7	866.9	762.0
16	646.5	658.0	655.0	650.5	648.0	706.3	797.2	911.6	1,025	972.3	863.1	759.1
17	646.0	658.5	655.0	652.0	648.0	707.9	799.5	916.2	1,025	968.9	859.4	756.3
18	645.5	661.0	654.5	654.5	647.5	709.5	803.1	918.1	1,025	966.2	856.3	754.1
19	644.0	659.0	654.0	657.0	648.0	711.1	805.4	919.4	1,025	962.8	852.0	751.3
20	643.0	657.0	653.5	658.5	648.5	712.2	806.0	919.4	1,024	958.7	847.6	747.9
21	642.0	657.5	652.5	659.0	648.0	712.8	806.6	919.4	1,024	955.4	843.4	745.7
22	641.0	657.0	653.5	659.0	648.5	712.8	807.8	920.1	1,024	952.7	839.7	742.9
23	640.0	655.0	653.0	659.0	649.5	714.4	811.4	922.7	1,024	948.6	836.6	740.1
24	639.5	654.0	652.5	659.0	649.5	715.5	813.7	926.0	1,023	944.6	832.4	737.3
25	639.5	653.0	653.5	658.5	649.0	716.5	814.9	931.3	1,022	941.3	829.3	734.6
26	640.0	652.5	653.5	657.5	649.5	716.5	814.9	939.9	1,020	937.9	825.7	731.8
27	638.0	652.0	656.0	657.0	649.5	717.6	813.1	950.0	1,018	934.0	821.5	730.2
28	637.1	652.0	656.0	656.0	649.5	719.8	811.9	960.1	1,017	930.6	817.9	727.4
29	637.1	651.5	656.5	655.0	-----	722.0	810.8	969.6	1,015	927.3	814.9	725.2
30	637.6	650.5	658.0	654.0	-----	724.7	810.8	975.7	1,013	923.4	811.4	723.1
31	637.6	-----	658.0	652.5	-----	726.9	-----	981.9	-----	920.1	807.8	-----
MAX	670.2	661.0	658.0	659.0	651.5	726.9	814.9	981.9	1,025	1,011	916.8	804.8
MIN	637.1	634.6	652.5	650.5	647.0	654.5	741.8	811.9	987.4	920.1	807.8	723.1
(a)	802.3	804.9	806.4	805.3	804.7	819.5	810.8	860.9	865.4	851.7	833.7	818.8
(b)	-35,700	+12,900	+7,500	-5,500	-3,000	+77,400	+83,900	+171,100	+31,100	-92,900	-112,300	-84,700

CAL YR 1973 b -365,300

WTR YR 1974 b +49,800

a Elevation, in feet, at end of month.

b Change in contents, in acre-feet.

11270900 MERCED RIVER BELOW MERCED FALLS DAM, NEAR SNELLING, CALIF.

LOCATION.--Lat 37°31'18", long 120°19'53", in SE¼SW¼ sec.4, T.5 S., R.15 E., Merced County, on right bank 0.1 mi (0.2 km) south of Merced Falls, 0.2 mi (0.3 km) downstream from Merced Falls Dam, and 5.8 mi (9.3 km) east of Snelling.

DRAINAGE AREA.--1,061 mi² (2,748 km²).

PERIOD OF RECORD.--April 1901 to current year. Records for water years 1914-16 incomplete, yearly estimates published in WSP 1315-A. Published as "near Merced Falls" 1901-13; as "at Exchequer" 1916-64. Records at present site are about equivalent when adjusted for diversion to North Side Canal and change in contents in Lake McClure.

GAGE.--Water-stage recorder. Datum of gage is 310.55 ft (94.656 m) above mean sea level. See WSP 1930 for history of changes prior to Oct. 1, 1964.

AVERAGE DISCHARGE (adjusted for diversion to North Side Canal and change in contents in Lake McClure since 1965 and change in contents in McSwain Reservoir since 1969).--73 years, 1,336 ft³/s (37.83 m³/s), 967,900 acre-ft per year (1,193 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 5,270 ft³/s (149 m³/s) June 7 (gage height, 9.92 ft or 3.024 m); minimum daily, 180 ft³/s (5.10 m³/s) Nov. 2.

Period of record (1901-13, 1915 to current year): Maximum discharge observed, 47,700 ft³/s (1,350 m³/s) Jan. 31, 1911 (gage height, 23.3 ft or 7.10 m, site and datum then in use); no flow for part of Nov. 21, 1901. Maximum discharge since construction of Exchequer Dam in 1926, 46,200 ft³/s (1,310 m³/s) Dec. 4, 1950 (gage height, 22.6 ft or 6.89 m, from floodmarks, site and datum then in use), from rating curve extended above 16,000 ft³/s (453 m³/s) on basis of computation of peak flow over dam; minimum daily, 3.4 ft³/s (0.096 m³/s) Mar. 5, 1966.

REMARKS.--Records excellent. Merced Falls Dam diverts water to North Side Canal to irrigate 4,100 acres (16.6 km²) below station. Flow regulated by Exchequer, McSwain, and Merced Falls powerplants, Lake McClure since 1926 (see sta 11269500), and McSwain Reservoir since 1966, capacity, 9,200 acre-ft (11.3 hm³).

REVISIONS.--WSP 1930: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,120	182	705	1,700	1,490	494	777	2,520	2,710	2,150	2,140	1,740
2	1,040	180	700	1,550	1,490	495	680	2,530	2,710	2,150	2,120	1,740
3	996	182	698	1,480	1,500	498	666	2,530	2,710	2,160	2,140	1,700
4	1,010	185	698	1,500	1,130	1,090	657	2,540	2,720	2,180	2,170	1,620
5	998	185	703	1,490	876	1,480	662	2,540	2,710	2,190	2,120	1,600
6	983	306	699	1,550	882	1,490	656	2,520	2,750	2,190	2,100	1,630
7	1,070	524	696	1,560	863	1,180	667	2,520	3,740	2,210	2,090	1,610
8	930	484	693	1,500	754	865	715	2,510	5,210	2,210	2,100	1,600
9	876	488	700	1,500	538	497	727	2,500	5,150	2,180	2,110	1,560
10	882	488	650	1,500	516	491	758	2,500	3,940	2,110	2,100	1,500
11	710	476	523	1,500	739	824	847	2,500	2,870	2,080	2,090	1,490
12	605	472	480	1,490	742	689	850	2,510	2,920	2,020	2,060	1,490
13	585	476	619	1,480	672	511	847	2,480	3,250	2,000	2,050	1,470
14	550	480	696	1,490	676	511	832	2,480	3,920	2,030	2,040	1,460
15	536	484	692	1,490	624	601	840	2,470	3,480	2,020	2,060	1,470
16	540	685	696	1,500	519	651	1,100	2,480	2,930	2,120	2,040	1,450
17	550	966	698	1,490	510	662	1,300	2,530	2,840	2,170	2,050	1,440
18	545	1,450	694	1,500	610	720	1,490	2,540	2,430	2,120	2,040	1,420
19	550	2,020	692	1,500	605	813	1,580	2,530	2,100	2,130	2,050	1,400
20	550	1,750	701	1,490	520	905	1,590	2,520	2,080	2,150	2,020	1,390
21	550	1,210	702	1,490	520	997	1,600	2,510	2,080	2,180	1,960	1,390
22	550	1,010	697	1,490	514	1,040	1,590	2,340	2,070	2,200	1,940	1,390
23	545	985	702	1,490	503	1,080	1,580	2,200	2,090	2,190	1,940	1,370
24	468	1,000	695	1,490	489	1,150	1,590	2,180	2,080	2,200	1,920	1,350
25	356	1,010	697	1,500	490	1,190	1,600	2,190	2,100	2,240	1,900	1,290
26	540	1,000	701	1,490	492	1,190	2,150	2,190	2,090	2,260	1,860	1,240
27	540	815	1,400	1,490	487	1,200	2,420	2,190	2,070	2,260	1,850	1,230
28	324	695	1,720	1,500	472	1,120	2,440	2,180	2,110	2,250	1,820	1,230
29	192	695	1,700	1,490	-----	986	2,430	2,550	2,120	2,240	1,800	1,240
30	189	700	1,690	1,500	-----	872	2,480	2,720	2,150	2,240	1,750	1,210
31	189	-----	1,680	1,490	-----	830	-----	2,700	-----	2,210	1,740	-----
TOTAL	20,069	21,583	25,817	46,680	20,223	27,122	38,121	76,200	84,130	67,040	62,170	43,720
MEAN	647	719	833	1,506	722	875	1,271	2,458	2,804	2,163	2,005	1,457
MAX	1,120	2,020	1,720	1,700	1,500	1,490	2,480	2,720	5,210	2,260	2,170	1,740
MIN	189	180	480	1,480	472	491	656	2,180	2,070	2,000	1,740	1,210
AC-FT	39,810	42,810	51,210	92,590	40,110	53,800	75,610	151,100	166,900	133,000	123,300	86,720
(a)	998	2	151	123	99	561	2,060	4,520	4,410	4,710	4,140	3,050
MEAN b	102	943	955	1,428	666	2,151	2,710	5,309	3,403	726	256	78.1
AC-FT b	6,270	56,090	58,740	87,780	36,970	132,200	161,300	326,400	202,500	44,660	15,740	4,650

CAL YR 1973 TOTAL 39,810 MEAN 1,091 MAX 2,060 MIN 180 AC-FT 789,700 MEAN b 1,629 AC-FT b 1,180,000
WTR YR 1974 TOTAL 532,875 MEAN 1,460 MAX 5,210 MIN 180 AC-FT 1,057,000 MEAN b 1,565 AC-FT b 1,133,000

a Diversion, in acre-feet, to North Side Canal, furnished by Merced Irrigation District.

b Adjusted for diversion to North Side Canal and change in contents in Lake McClure and McSwain Reservoir.

11271290 MERCED RIVER AT SHAFER BRIDGE, NEAR CRESSEY, CALIF.

LOCATION.--Lat 37°27'15", long 120°36'28", in NW¼SW¼ sec.36, T.5 S., R.12 E., Merced County, near center of span on downstream side of county road bridge, 0.6 mi (1.0 km) upstream from Dry Creek, and 4.0 mi (6.4 km) north-east of Cressey.

DRAINAGE AREA.--1,117 mi² (2,893 km²).

PERIOD OF RECORD.--October 1965 to current year (low flow only).

GAGE.--Water-stage recorder. Datum of gage is 116.79 ft (35.598 m) above mean sea level.

REMARKS.--Records good. Most water released from Lake McClure (see sta 11269500, 11270900) is diverted upstream into the Main Canal of Merced Irrigation District. Flow past station consists of releases from diversion dam, irrigation return flow, and tributary inflow. No records computed above 200 ft³/s (5.66 m³/s).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		--							--	158	131	152
2		--							--	140	120	152
3		--							--	125	112	143
4		194							--	125	131	134
5		194							--	131	146	131
6		197							--	131	134	140
7		--							--	146	125	169
8		--							--	158	128	158
9		--							--	180	125	158
10		--							--	197	122	158
11		--							--	180	137	143
12		--							--	--	137	125
13		--							--	170	120	125
14		--							--	176	120	134
15		--							--	172	125	137
16		--							--	149	137	131
17		--							--	143	137	122
18		--							--	162	162	128
19		--							--	155	172	120
20		--							--	162	172	131
21		--							--	166	172	134
22		--							190	166	146	146
23		--							--	158	134	149
24		--							--	143	143	137
25		--							186	128	143	140
26		--							176	125	146	128
27		--				186			152	134	158	128
28		--							143	143	155	137
29		--			-----				158	155	152	155
30		--			-----				152	140	152	162
31		-----			-----		-----		-----	143	166	-----
TOTAL		--							--	--	4,360	4,207
MEAN		--							--	--	141	140
MAX		--							--	--	172	169
MIN		--							--	--	112	120
AC-FT		--							--	--	8,650	8,340
(a)	19,370	2,350	6,590	4,860	3,880	25,690	50,980	105,400	107,200	115,500	106,600	73,440

a Diversion, in acre-feet, to Main Canal near diversion dam, near Merced Falls, furnished by Merced Irrigation District.

SAN JOAQUIN RIVER BASIN

11271320 DRY CREEK NEAR SNELLING, CALIF.

LOCATION.--Lat 37°33'18", long 120°27'44", in NE¼SE¼ sec.30, T.4 S., R.14 E., Merced County, on left bank 650 ft (198 m) downstream from Fields Road, and 2.8 mi (4.5 km) northwest of Snelling.

DRAINAGE AREA.--67.6 mi² (175 km²).

PERIOD OF RECORD.--October 1966 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 230 ft (70 m), from topographic map.

AVERAGE DISCHARGE.--8 years, 19.9 ft³/s (0.564 m³/s), 14,420 acre-ft/yr (17.8 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,250 ft³/s (35.4 m³/s) Dec. 27 (gage height, 8.60 ft or 2.621 m); no flow for several months.

Period of record: Maximum discharge, 6,710 ft³/s (190 m³/s) Jan. 21, 1969 (gage height, 17.01 ft or 5.185 m); no flow for several months in most years.

REMARKS.--Records good. Small weir upstream from gage regulates storage for stock pond and irrigation pumping.

DISCHARGE IN CUBIC FEET PER SECOND WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NCV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1			2.3	186	3.7	1.6	112					
2			16	44	3.2	76	306					
3			4.3	20	2.9	221	41					
4			2.0	26	2.7	54	17					
5			1.4	105	2.5	20	11					
6			1.0	306	2.2	13	8.1					
7			.85	396	2.1	.11	5.9					
8			.73	111	2.0	326	4.7					
9			.65	43	1.9	51	4.5					
10			.59	27	1.8	22	5.9					
11			.53	19	1.8	15	5.6					
12			.53	57	1.8	12	3.5					
13			.67	34	2.0	9.9	.89					
14			.68	20	2.4	8.0	.81					
15			.62	16	2.3	6.5	.44					
16			.59	13	2.0	5.3	.30					
17			.57	15	1.8	4.4	.23					
18			.59	64	1.6	3.6	.19					
19			.66	63	1.9	2.9	.20					
20			.62	25	2.6	2.4	.13					
21			.74	18	3.5	2.1	.03					
22			25	14	2.5	1.8	0					
23			12	12	2.0	1.6	0					
24			5.0	11	1.8	1.5	0					
25			2.8	9.4	1.6	1.5	0					
26			2.4	8.3	1.5	1.5	0					
27			601	7.1	1.5	1.5	0					
28			250	6.1	1.3	3.0	0					
29			53	5.4	-----	6.5	0					
30			31	5.0	-----	5.6	0					
31		-----	18	4.4	-----	9.2	-----		-----			-----
TOTAL	0	0	1,036.82	1,690.7	60.9	901.4	528.42	0	0	0	0	0
MEAN	0	0	33.4	54.5	2.18	29.1	17.6	0	0	0	0	0
MAX	0	0	601	396	3.7	326	306	0	0	0	0	0
MIN	0	0	.53	4.4	1.3	1.5	0	0	0	0	0	0
AC-FT	0	0	2,060	3,350	121	1,790	1,050	0	0	0	0	0

CAL YR 1973 TOTAL 13,418.29 MEAN 36.8 MAX 2,450 MIN 0 AC-FT 26,620
WTR YR 1974 TOTAL 4,218.24 MEAN 11.6 MAX 601 MIN 0 AC-FT 8,370

PEAK DISCHARGE (BASE, 1,000 FT³/S).--Dec. 27 (0445) 1,250 ft³/s (8.60 ft).

11272500 MERCED RIVER NEAR STEVINSON, CALIF.

LOCATION.--Lat 37°22'15", long 120°55'46", in SW¼NE¼ sec.36, T.6 S., R.9 E., Merced County, on right bank 5 mi (8.0 km) upstream from mouth, and 6 mi (9.7 km) northwest of Stevinson.

DRAINAGE AREA.--1,273 mi² (3,297 km²).

PERIOD OF RECORD.--October 1940 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level. October 1940 to Aug. 15, 1955, at datum 55.74 ft (16.990 m) higher, Aug. 16, 1955, to Sept. 30, 1959, at datum 54.74 ft (16.685 m) higher.

AVERAGE DISCHARGE.--34 years, 665 ft³/s (18.83 m³/s), 481,800 acre-ft/yr (594 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 3,340 ft³/s (94.6 m³/s) June 11 (elevation, 65.20 ft or 19.873 m); minimum daily, 155 ft³/s (4.39 m³/s) July 27.
Period of record: Maximum discharge, 13,600 ft³/s (385 m³/s) Dec. 5, 1950 (elevation, 73.79 ft or 22.491 m, present datum); no flow July 19 to Aug. 21, 1961, result of temporary dam.

REMARKS.--Records good. Practically entire flow is diverted above station for irrigation of 120,000 acres (486 km²); some return flow enters above station. Flow regulated by three reservoirs, combined capacity, 1,035,000 acre-ft (1,276 hm³), the largest of which is Lake McClure (see sta 11269500).

REVISIONS.--WSP 1930: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	279	297	729	1,770	1,530	475	454	1,060	745	266	187	255
2	310	282	751	1,890	1,520	477	481	966	769	257	183	303
3	290	272	735	1,790	1,520	500	558	939	827	233	181	258
4	275	273	719	1,600	1,520	589	544	919	816	217	174	246
5	272	265	715	1,600	1,400	680	527	869	768	211	184	238
6	284	258	713	1,630	1,030	1,190	498	806	746	197	190	214
7	359	256	714	1,860	960	1,340	460	773	748	203	175	213
8	443	284	710	2,200	935	1,260	444	743	909	221	165	240
9	500	389	710	1,920	892	1,220	417	758	2,450	235	173	242
10	518	417	706	1,720	748	913	445	737	3,220	277	162	247
11	530	434	703	1,660	647	692	457	731	2,940	292	181	262
12	549	455	585	1,640	634	660	431	745	1,500	309	200	231
13	492	451	482	1,630	761	806	443	757	1,130	315	195	220
14	415	448	448	1,630	709	582	451	755	1,080	289	185	230
15	375	442	565	1,600	677	509	468	760	1,650	299	195	251
16	336	448	633	1,580	669	457	415	743	1,800	275	204	286
17	321	461	643	1,580	614	452	400	683	1,310	237	203	271
18	342	667	649	1,570	567	476	405	651	1,060	218	229	265
19	473	889	653	1,580	551	445	409	670	911	206	261	259
20	518	1,630	653	1,630	613	435	391	731	644	188	247	247
21	529	1,860	658	1,590	583	446	408	756	494	179	248	259
22	527	1,510	667	1,560	548	480	455	785	421	185	238	286
23	524	1,130	674	1,560	543	433	435	782	362	188	238	311
24	542	995	666	1,560	540	404	455	686	353	191	227	316
25	546	986	669	1,560	519	402	452	578	329	182	247	307
26	492	990	660	1,550	508	388	436	502	311	173	252	332
27	436	986	691	1,540	499	378	471	487	295	155	239	317
28	507	963	1,370	1,530	494	384	789	480	271	163	228	301
29	525	797	2,110	1,530	-----	426	1,090	450	252	185	233	265
30	419	739	1,870	1,530	-----	426	1,070	438	254	179	248	314
31	331	-----	1,790	1,530	-----	416	-----	602	-----	178	251	-----
TOTAL	13,259	20,274	25,041	51,120	22,731	18,741	15,159	22,342	29,365	6,903	6,523	7,986
MEAN	428	676	808	1,649	812	605	505	721	979	223	210	266
MAX	549	1,860	2,110	2,200	1,530	1,340	1,090	1,060	3,220	315	261	332
MIN	272	256	448	1,530	494	378	391	438	252	155	162	213
AC-FT	26,300	40,210	49,670	101,400	45,090	37,170	30,070	44,320	58,250	13,690	12,940	15,840

CAL YR 1973 TOTAL 149,854 MEAN 411 MAX 3,890 MIN 124 AC-FT 297,200
WTR YR 1974 TOTAL 239,444 MEAN 656 MAX 3,220 MIN 155 AC-FT 474,900

11274500 ORESTIMBA CREEK NEAR NEWMAN, CALIF.

LOCATION.--Lat 37°18'48", long 121°07'32", in SE¼NE¼ sec.19, T.7 S., R.8 E., Stanislaus County, on right bank 220 ft (67 m) upstream from California aqueduct siphon, 3 mi (5 km) downstream from Oso Creek, and 5 mi (8 km) west of Newman.

DRAINAGE AREA.--134 mi² (347 km²).

PERIOD OF RECORD.--January 1932 to current year.

GAGE.--Water-stage recorder. Datum of gage is 216.01 ft (65.837 m) above mean sea level. Prior to Oct. 1, 1958, at site 1,320 ft (402 m) downstream at datum 24.14 ft (7.358 m) lower. Oct. 1, 1958, to Aug. 13, 1969, at site 1,200 ft (366 m) downstream at datum 27.14 ft (8.272 m) lower.

AVERAGE DISCHARGE.--42 years, 15.2 ft³/s (0.430 m³/s), 11,010 acre-ft/yr (13.6 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 922 ft³/s (26.1 m³/s) Mar. 3 (gage height, 5.98 ft or 1.823 m); no flow for several months.

Period of record: Maximum discharge, 10,200 ft³/s (289 m³/s) Apr. 2, 1958 (gage height, 6.57 ft or 2.003 m, site and datum then in use), from rating curve extended above 5,000 ft³/s (142 m³/s); no flow for all or parts of each year.

REMARKS.--Records good. No storage or diversion above station except for minor stock ponds.

REVISIONS (WATER YEARS).--WSP 1445: 1932(M), 1938(P), 1940-41(M), 1945, 1951(M). WSP 1930: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1			21	25	8.2	48	46	4.8	.27			
2			33	19	7.2	247	144	4.8	.24			
3			6.3	14	6.3	489	85	4.8	.24			
4			3.0	68	5.5	196	62	4.8	.21			
5			.52	128	5.1	92	50	4.8	.18			
6			0	192	4.4	61	40	4.8	.15			
7			0	259	4.1	48	34	4.8	.12			
8			0	300	4.1	50	30	4.8	.09			
9			0	118	4.1	34	30	4.4	.09			
10			0	70	4.1	28	39	4.4	.09			
11			0	50	3.8	22	28	4.1	.04			
12			0	45	3.8	20	22	3.8	0			
13			0	45	4.1	17	18	3.5	0			
14			0	32	4.8	14	16	3.5	0			
15			0	26	4.1	13	14	3.5	0			
16			0	20	4.1	12	13	3.3	0			
17			0	47	3.8	11	12	3.3	0			
18			0	71	3.3	10	11	3.1	0			
19			0	60	3.3	28	12	2.9	0			
20			0	49	3.5	13	11	2.8	0			
21			0	38	3.5	9.8	9.8	2.7	0			
22			0	28	3.1	8.7	8.2	2.1	0			
23			3.5	22	2.9	8.2	7.7	1.7	0			
24			4.2	18	2.7	7.7	7.2	1.3	0			
25			3.6	16	2.7	10	8.2	1.0	0			
26			3.0	14	2.7	15	7.7	.56	0			
27			104	11	2.7	16	6.8	.35	0			
28			152	10	2.9	71	5.9	.27	0			
29			68	9.8	-----	67	5.1	.27	0			
30			40	8.7	-----	55	4.8	.27	0			
31		-----	27	8.2	-----	49	-----	.27	-----			-----
TOTAL	0	0	469.12	1,821.7	114.9	1,770.4	792.4	91.79	1.72	0	0	0
MEAN	0	0	15.1	58.8	4.10	57.1	26.4	2.96	.057	0	0	0
MAX	0	0	152	300	8.2	489	144	4.8	.27	0	0	0
MIN	0	0	0	8.2	2.7	7.7	4.8	.27	0	0	0	0
AC-FT	0	0	930	3,610	228	3,510	1,570	182	3.4	0	0	0

CAL YR 1973 TOTAL 11,267.94 MEAN 30.9 MAX 914 MIN 0 AC-FT 22,350
 WTR YR 1974 TOTAL 5,062.03 MEAN 13.9 MAX 489 MIN 0 AC-FT 10,040

PEAK DISCHARGE (BASE, 100 FT³/S, REVISED)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
12-27	1300	4.85	212	3-28	1400	4.68	160
1-7	2200	5.47	529	4-2	0700	4.78	189
3-3	0800	5.98	922				

11274630 DEL PUERTO CREEK NEAR PATTERSON, CALIF.

LOCATION.--Lat 37°29'12", long 121°12'29", in SE¼NW¼ sec.21, T.5 S., R.7 E., Stanislaus County, on left bank 1.0 mi (1.6 km) upstream from Delta-Mendota Canal crossing, and 4.4 mi (7.1 km) west of Patterson.

DRAINAGE AREA.--72.6 mi² (188.0 km²).

PERIOD OF RECORD.--October 1958 to May 1965 (maximums only), June 1965 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 200 ft (61 m), from topographic map. Prior to June 1965, crest-stage gage at site 1.0 mi (1.6 km) downstream at different datum.

AVERAGE DISCHARGE.--9 years, 5.26 ft³/s (0.149 m³/s), 3,810 acre-ft/yr (4.70 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 99 ft³/s (2.80 m³/s) Jan. 8 (gage height, 2.75 ft or 0.838 m); no flow for several months.

Period of record: Maximum discharge, 1,800 ft³/s (51.0 m³/s) Feb. 16, 1959 (gage height, 14.68 ft or 4.474 m, site and datum then in use), from rating curve extended above 690 ft³/s (19.5 m³/s); no flow for several months in each year.

REMARKS.--Records good. Some stock ponds and small diversions above station.

REVISIONS (WATER YEARS).--WSP 1930: 1959-60(M), drainage area. WRD Calif. 1970: 1967(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	14	9.2	7.2	4.5	8.4	3.8	.60	.12			
2	0	15	7.6	7.2	8.4	20	3.2	.60	.10			
3	0	7.6	6.0	6.8	13	17	3.5	.50	.08			
4	0	5.2	11	6.4	11	13	3.2	.60	.08			
5	0	4.2	17	6.4	9.2	11	3.0	.40	.04			
6	.02	3.5	27	5.6	8.0	10	3.0	.32	0			
7	.40	3.2	51	5.2	7.6	9.2	2.8	.32	0			
8	.60	3.0	72	5.2	8.0	8.0	2.5	.27	0			
9	.60	2.8	40	4.8	6.4	8.4	2.2	.23	.03			
10	.60	2.5	28	4.5	5.6	10	2.0	.23	.16			
11	.50	2.5	21	4.5	5.2	8.4	2.0	.23	.12			
12	.98	2.2	24	4.5	4.5	7.6	2.0	.27	.08			
13	1.5	2.5	24	5.2	4.5	7.2	2.2	.27	.08			
14	1.7	2.5	18	4.8	4.2	6.8	2.2	.27	.06			
15	1.7	2.2	15	4.5	4.0	6.8	2.2	.27	.04			
16	1.7	2.0	13	4.5	4.0	6.8	2.5	.32	.01			
17	2.3	2.0	15	4.5	4.0	6.4	2.8	.40	.01			
18	5.6	2.0	15	4.5	3.8	6.4	3.0	.60	0			
19	5.2	1.8	15	4.5	3.8	6.4	3.5	.85	0			
20	3.6	1.8	14	4.8	3.5	6.0	3.0	1.2	0			
21	3.1	2.0	12	4.0	3.5	5.6	3.0	1.0	0			
22	2.6	4.2	11	4.2	3.8	5.2	2.8	.85	0			
23	2.3	4.8	10	4.0	3.8	5.0	2.5	.50	0			
24	2.1	3.8	9.6	3.8	4.0	5.2	2.2	.27	0			
25	1.9	3.2	9.6	3.8	4.7	5.6	2.0	.20	0			
26	1.9	3.2	9.2	3.8	6.4	5.2	2.0	.20	0			
27	1.7	17	8.8	3.8	5.6	5.2	1.5	.18	0			
28	1.5	50	8.4	3.5	9.6	4.5	1.2	.18	0			
29	1.7	20	8.0	-----	11	4.0	1.1	.16	0			
30	1.5	13	7.6	-----	9.6	3.8	.85	.14	0			
31	-----	9.6	7.2	-----	8.8	-----	.70	-----	0			
TOTAL	0	47.30	213.3	544.2	136.5	194.0	232.1	74.45	12.43	1.01	0	0
MEAN	0	1.58	6.88	17.6	4.88	6.26	7.77	2.40	.41	.033	0	0
MAX	0	5.6	50	72	7.2	13	20	3.8	1.2	.16	0	0
MIN	0	0	1.8	6.0	3.5	3.5	3.8	.70	.14	0	0	0
AC-FT	0	94	423	1,080	271	385	462	148	25	2.0	0	0

CAL YR 1973 TOTAL 4,442.91 MEAN 12.2 MAX 267 MIN 0 AC-FT 8,810
WTR YR 1974 TOTAL 1,456.29 MEAN 3.99 MAX 72 MIN 0 AC-FT 2,890

PEAK DISCHARGE (BASE, 50 FT³/S).--Dec. 28 (0600) 69 ft³/s (2.48 ft); Jan. 8 (0130) 99 ft³/s (2.75 ft).

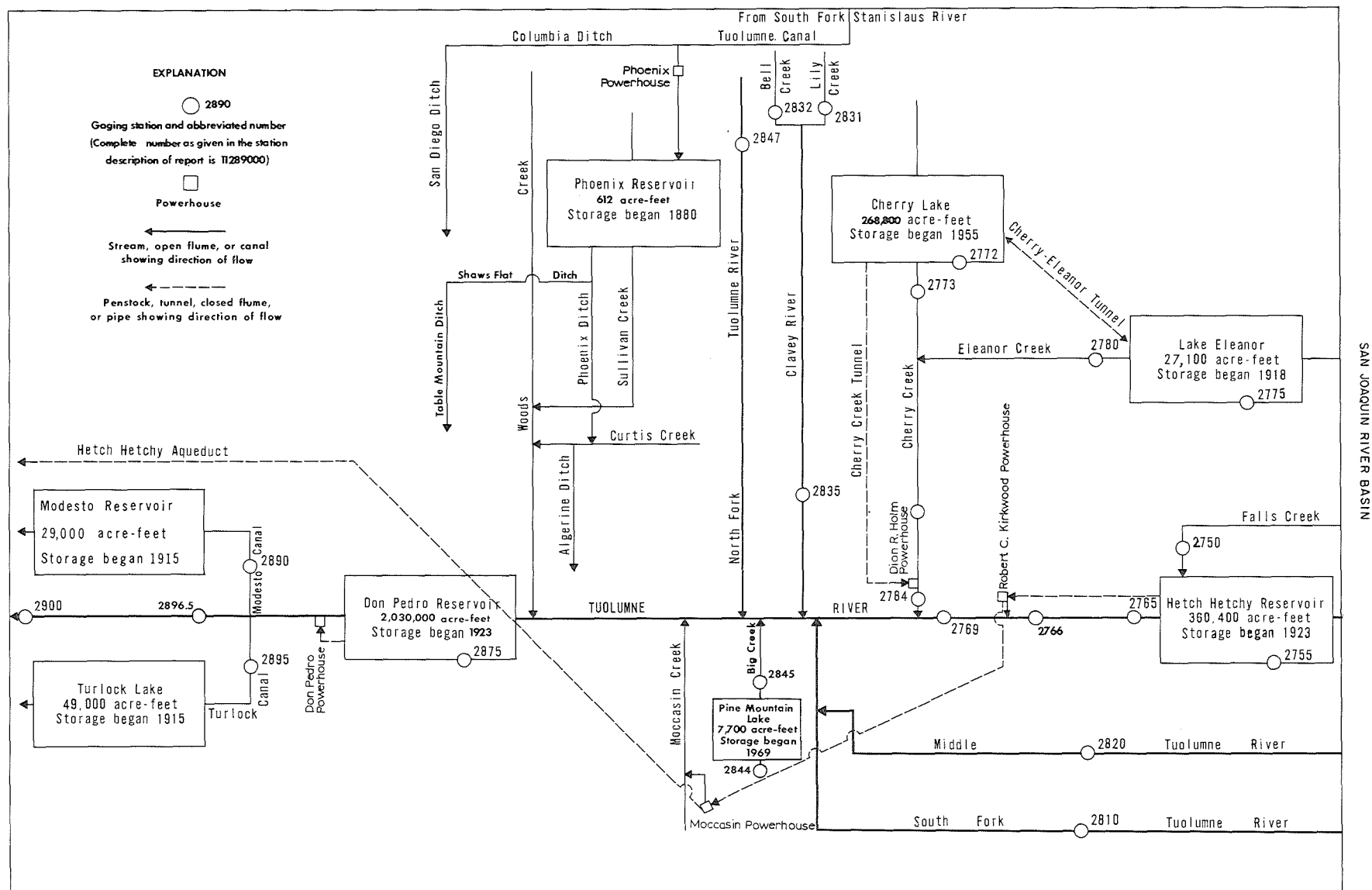


FIGURE 7.--Schematic diagram showing diversions and storage in Tuolumne River basin.

11275000 FALLS CREEK NEAR HETCH HETCHY, CALIF.

LOCATION.--Lat 37°58'15", long 119°45'48", in NW¼SE¼ sec.3, T.1 N., R.20 E., Tuolumne County, Yosemite National Park, on right bank 0.2 mi (0.3 km) upstream from Wampana Falls, 0.6 mi (1.0 km) upstream from mouth, and 2 mi (3 km) northeast of Hetch Hetchy.

DRAINAGE AREA.--46.0 mi² (119.1 km²).

PERIOD OF RECORD.--October 1915 to current year. Monthly discharge only for some periods, published in WSP 1315-A. Prior to October 1918, published as "near Sequoia."

GAGE.--Water-stage recorder. Altitude of gage is 5,350 ft (1,631 m), from topographic map.

AVERAGE DISCHARGE.--59 years, 143 ft³/s (4.05 m³/s), 103,600 acre-ft/yr (128 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,570 ft³/s (72.8 m³/s) Nov. 12 (gage height, 7.22 ft or 2.201 m); no flow Oct. 1-7.

Period of record: Maximum discharge, 6,660 ft³/s (189 m³/s) Nov. 19, 1950, Dec. 23, 1955 (gage height, 9.0 ft or 2.74 m, from floodmarks), from rating curve extended above 2,500 ft³/s (70.8 m³/s) on basis of velocity-area studies; no flow at times in many years.

REMARKS.--Records good. No regulation or diversion above station. See schematic diagram of Tuolumne River basin.

REVISIONS (WATER YEARS).--WSP 531: 1917(M). WSP 931: 1938. WSP 1930: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	16	68	95	57	129	139	364	773	376	47	4.0
2	0	16	73	79	52	138	100	481	826	344	44	3.8
3	0	15	78	70	52	82	96	533	812	278	42	3.6
4	0	12	68	61	53	75	109	515	821	242	40	3.2
5	0	9.5	61	57	53	82	112	555	783	221	39	2.9
6	0	34	61	57	52	85	119	631	959	185	37	2.8
7	0	69	64	57	48	75	130	719	1,010	157	33	2.6
8	4.2	91	63	55	47	70	135	825	814	143	32	2.5
9	1.5	73	64	53	49	69	139	851	704	151	28	2.3
10	.67	325	66	53	50	68	114	819	797	691	24	2.0
11	.70	1,490	65	48	50	69	112	737	816	473	21	2.1
12	.88	1,620	58	59	48	89	137	791	919	278	18	2.0
13	.96	471	65	58	49	89	165	743	882	181	16	1.8
14	.96	260	63	52	44	102	205	593	869	148	15	1.7
15	.96	190	57	86	40	121	255	639	818	131	13	1.6
16	1.0	163	54	195	42	128	275	590	745	124	12	1.4
17	1.2	205	61	367	41	121	302	467	625	116	10	1.2
18	1.2	182	57	315	39	104	325	346	525	101	9.5	1.2
19	1.1	121	49	385	46	106	240	247	455	92	8.5	1.1
20	1.1	107	44	262	51	116	178	174	388	86	7.9	.89
21	1.0	92	44	165	46	124	200	163	427	84	7.1	.73
22	1.0	78	48	122	44	126	280	254	501	67	6.4	.60
23	28	69	53	100	42	128	315	384	540	62	5.8	.48
24	25	69	50	85	46	143	252	504	495	60	5.3	.39
25	22	61	48	82	49	152	190	726	430	67	5.1	.33
26	18	61	46	77	49	135	156	899	398	63	4.9	.30
27	16	58	84	68	45	126	134	1,070	346	59	4.8	.21
28	16	64	121	65	41	154	141	1,090	321	55	4.6	.17
29	16	68	334	61	-----	154	170	1,040	336	53	4.5	.16
30	16	64	248	60	-----	158	250	801	386	51	4.3	.15
31	14	-----	135	59	-----	116	-----	757	-----	48	4.1	-----
TOTAL	189.43	6,153.5	2,450	3,408	1,325	3,434	5,475	19,308	19,521	5,187	553.8	48.21
MEAN	6.11	205	79.0	110	47.3	111	183	623	651	167	17.9	1.61
MAX	28	1,620	334	385	57	158	325	1,090	1,010	691	47	4.0
MIN	0	9.5	44	48	39	68	96	163	321	48	4.1	.15
AC-FT	376	12,210	4,860	6,760	2,630	6,810	10,860	38,300	38,720	10,290	1,100	96

CAL YR 1973 TOTAL 59,435.75 MEAN 163 MAX 1,620 MIN 0 AC-FT 117,900
WTR YR 1974 TOTAL 67,052.94 MEAN 184 MAX 1,620 MIN 0 AC-FT 133,000

PEAK DISCHARGE (BASE, 900 FT³/S)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-12	0630	7.22	2,570	5-28	0815	6.09	1,240
5-9	0600	5.68	938	7-10	1515	5.67	932

11275500 HETCH HETCHY RESERVOIR AT HETCH HETCHY. CALIF.

LOCATION.--Lat 37°56'52", long 119°47'13", in NW¼NW¼ sec.16, T.1 N., R.20 E., Tuolumne County, Yosemite National Park, near center of O'Shaughnessy Dam on Tuolumne River at Hetch Hetchy, 1.5 mi (2.4 km) downstream from Falls Creek.

DRAINAGE AREA.--455 mi² (1,178 km²).

PERIOD OF RECORD.--May 1923 to current year. Prior to October 1930 monthend contents, published in WSP 1315-A.

GAGE.--Nonrecording gage. Datum of gage is at mean sea level (levels by city and county of San Francisco).

Prior to Oct. 1, 1927, nonrecording gage at same site and datum. Oct. 1, 1927, to July 9, 1972, water-stage recorder at same site and datum.

EXTREMES.--Current year: Maximum contents, 362,100 acre-ft (446 hm³) June 24 (elevation, 3,806.9 ft or 1,160.34 m); minimum, 161,500 acre-ft (199 hm³) Mar. 25 (elevation, 3,690.9 ft or 1,124.99 m).

Period of record: Maximum contents, 369,100 acre-ft (455 hm³) Dec. 3, 1950 (elevation, 3,810.4 ft or 1,161.41 m); no contents at times in 1929-31.

REMARKS.--Reservoir is formed by concrete gravity-type dam, completed to crest elevation 3,726.5 ft (1,135.84 m) in 1923 and raised to 3,812.0 ft (1,161.90 m) in 1937; storage began Apr. 6, 1923. Ten-foot (3-m) drum gates were installed on spillway in 1949. Capacity, 360,400 acre-ft (444 hm³) between elevations 3,512.0 ft (1,070.46 m), somewhat above bottom outlet and 3,806.0 ft (1,160.07 m), top of drum-type spillway gates. Water is diverted from reservoir through tunnel to Robert C. Kirkwood powerplant 15 mi (24 km) downstream where flow is diverted from powerplant tailrace in a closed conduit through Hetch Hetchy aqueduct to Moccasin Creek powerplant with flow in excess of aqueduct capacity being spilled to river. At Moccasin Creek diversion dam, water re-enters Hetch Hetchy aqueduct and flows into Crystal Springs Reservoir, which supplies city of San Francisco. Surplus water is spilled into Don Pedro Reservoir at Red Mountain Bar. Flow down river is for State Department of Fish and Game and Raker Act requirements. Hetch Hetchy Reservoir is main storage unit of Hetch Hetchy water-supply system for San Francisco. See schematic diagram of Tuolumne River basin. Records, including extremes, represent contents at 0800 hours.

COOPERATION.--Record of elevation furnished by city and county of San Francisco.

REVISIONS.--WSP 1930: Drainage area.

CAPACITY TABLE (ELEVATION, IN FEET, AND CONTENTS, IN ACRE-FEET)

3,512	0	3,540	8,700	3,640	97,000	3,740	238,900
3,513	51	3,560	22,900	3,660	119,900	3,760	273,700
3,515	154	3,580	39,500	3,680	146,200	3,780	310,400
3,520	410	3,600	57,400	3,700	175,000	3,800	348,600
3,530	3,300	3,620	76,500	3,720	206,000	3,810.4	369,100

CONTENTS, IN ACRE-FEET, AT 0800, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	255,900	212,100	223,500	206,200	199,000	170,100	164,500	172,300	322,400	360,400	356,400	319,200
2	254,400	210,800	222,700	205,800	198,300	170,900	165,400	174,900	326,100	360,000	356,400	317,900
3	252,600	209,500	222,100	205,200	197,500	170,600	165,400	178,500	329,100	360,400	356,000	315,800
4	251,200	208,100	221,500	204,400	196,700	170,100	165,200	183,200	332,600	360,400	355,600	313,900
5	249,900	206,800	220,900	203,500	195,900	169,700	165,100	187,200	336,600	360,400	354,500	312,200
6	248,500	205,600	220,100	202,800	194,600	169,100	164,900	192,600	342,200	360,000	354,100	310,800
7	246,800	204,400	219,200	202,200	193,400	168,500	164,800	199,000	349,800	359,400	353,500	309,300
8	245,400	203,500	218,300	201,600	192,700	168,000	165,200	206,800	354,100	359,000	352,700	307,800
9	244,000	202,700	217,500	200,000	191,800	167,300	165,500	216,000	356,000	359,600	351,900	306,500
10	242,600	202,700	217,000	200,300	190,800	166,600	165,400	225,500	357,800	361,700	350,700	304,800
11	241,300	207,600	216,100	199,700	189,600	166,100	165,100	233,700	361,000	361,400	349,800	303,300
12	239,800	222,200	215,500	199,000	188,700	165,400	164,600	242,300	361,900	359,800	348,600	301,600
13	238,200	226,500	214,800	198,600	187,800	164,600	164,500	251,600	356,600	359,600	347,400	300,100
14	236,700	228,000	214,000	198,300	186,900	164,200	164,600	258,500	354,500	359,800	346,100	298,500
15	237,000	228,700	213,200	197,800	185,800	163,900	166,100	265,500	354,100	359,800	344,900	296,800
16	233,800	229,200	212,400	197,600	184,700	163,800	167,000	271,200	355,400	359,800	343,500	295,500
17	232,800	229,300	211,600	199,200	183,500	163,800	168,300	274,400	356,400	360,000	342,200	293,900
18	232,000	230,700	210,800	200,500	182,400	163,800	170,300	275,000	355,200	359,800	340,600	292,000
19	229,800	231,200	210,000	202,800	181,400	163,500	171,300	273,700	353,700	359,600	339,300	290,200
20	228,200	231,500	209,000	204,100	180,500	163,200	171,200	271,900	353,900	359,400	337,700	288,700
21	226,700	230,800	207,900	205,200	179,600	162,700	170,700	269,600	354,100	358,800	336,200	287,300
22	225,400	230,200	207,200	205,100	178,200	162,600	171,200	267,700	355,000	358,400	334,700	285,800
23	224,000	229,500	206,600	204,700	177,000	162,600	172,000	266,600	358,800	358,200	333,100	284,200
24	222,900	228,800	205,700	204,400	175,800	162,600	172,900	267,100	362,100	358,000	331,400	282,500
25	221,400	228,000	204,800	204,100	174,300	161,500	173,100	270,500	360,000	357,800	330,100	280,900
26	220,200	227,200	203,800	203,600	173,200	161,700	172,600	276,600	357,600	357,600	328,700	279,500
27	218,900	226,300	203,000	203,000	172,200	163,000	172,000	286,000	357,200	357,600	327,200	277,800
28	217,500	225,500	202,800	202,000	170,900	163,200	171,300	297,400	358,800	357,600	325,500	276,200
29	216,600	224,800	203,600	201,600	-----	163,500	170,900	307,000	359,800	357,000	324,000	274,600
30	215,000	223,800	205,700	200,800	-----	163,600	170,900	313,900	360,200	356,600	322,400	272,800
31	213,600	-----	206,500	199,700	-----	163,800	-----	318,300	-----	356,400	320,900	-----
MAX	255,900	231,500	223,500	206,200	199,000	170,900	173,100	318,300	362,100	361,700	356,400	319,200
MIN	213,600	202,700	202,800	197,600	170,900	161,500	164,500	172,300	322,400	356,400	320,900	272,800
(a)	3,724.7	3,731.0	3,720.3	3,716.0	3,697.2	3,692.4	3,697.2	3,784.2	3,805.9	3,804.0	3,785.6	3,759.5
(b)	-43,500	+10,200	-17,300	-6,800	-28,800	-7,100	+7,100	+147,400	+41,900	-3,800	-35,500	-48,100

CAL YR 1973 b +88,700

WTR YR 1974 b +15,700

a Elevation, in feet, at end of month.

b Change in contents, in acre-feet.

SAN JOAQUIN RIVER BASIN

11276500 TUOLUMNE RIVER NEAR HETCH HETCHY, CALIF.

LOCATION.--Lat 37°56'15", long 119°47'50", in SW¼SE¼ sec.17, T.1 N., R.20 E., Tuolumne County, Yosemite National Park, on left bank 1 mi (2 km) downstream from O'Shaughnessy Dam at Hetch Hetchy, and 2.5 mi (4.0 km) downstream from Falls Creek.

DRAINAGE AREA,--457 mi² (1,184 km²).

PERIOD OF RECORD.--October 1910 to current year. Monthly discharge only for some periods, published in WSP 1315-A. Published as "at Hetch Hetchy damsite, near Sequoia" 1910-14 and as "below Hetch Hetchy damsite, near Sequoia" 1915-18.

GAGE.--Water-stage recorder with concrete control since May 5, 1970. Altitude of gage is 3,480 ft (1,061 m), from topographic map. Prior to Jan. 1, 1915, water-stage recorder at site 1 mi (1.6 km) upstream, at damsite, at different datum. Jan. 1, 1915, to Sept. 30, 1968, water-stage recorder, at same site and datum. Oct. 1, 1968, to May 4, 1970, nonrecording gage at site 0.5 mi (0.8 km) upstream at different datum.

AVERAGE DISCHARGE (prior to diversion to Robert C. Kirkwood powerplant and Hetch Hetchy aqueduct).--57 years (1910-67), 999 ft³/s (28.29 m³/s), 723,800 acre-ft/yr (892 hm³/yr); 7 years (1967-74), 357 ft³/s (10.11 m³/s), 258,600 acre-ft/yr (319 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 9,810 ft³/s (278 m³/s) June 12 (gage height, 12.67 ft or 3.862 m); minimum daily, 25 ft³/s (0.71 m³/s) Mar. 25, 26.

Period of record: Maximum discharge, 12,900 ft³/s (365 m³/s) June 1, 1943 (gage height, 13.90 ft or 4.237 m); no flow Oct. 3, 4, 1968, Dec. 16, 1969, Feb. 20-26, 1970.

REMARKS.--Records good. Flow regulated by Hetch Hetchy Reservoir 1 mi (1.6 km) upstream beginning in April 1923 (see sta 11275500). Flow diverted above station through tunnel to Robert C. Kirkwood powerplant and Hetch Hetchy aqueduct beginning Apr. 26, 1967. See schematic diagram of Tolumne River basin.

REVISIONS.--WSP 1930: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38	34	47	41	391	35	53	527	3,250	1,950	70	68
2	38	33	39	40	389	43	43	530	3,240	1,520	69	231
3	38	34	38	39	389	39	35	538	3,260	1,010	68	496
4	38	35	38	211	387	36	33	636	3,280	1,010	68	353
5	38	35	38	389	387	34	32	720	3,290	1,010	68	73
6	38	35	37	345	384	34	31	748	3,330	930	67	72
7	38	34	35	345	384	35	31	728	3,620	618	67	71
8	38	34	36	286	390	36	30	728	4,300	266	66	71
9	38	34	37	246	390	31	86	732	4,270	78	66	71
10	38	35	37	244	395	29	121	736	3,950	1,310	66	70
11	38	38	38	260	389	28	121	748	4,730	1,950	65	69
12	37	42	37	291	393	29	121	720	7,920	872	65	69
13	37	38	37	291	397	28	120	708	7,680	79	65	68
14	37	39	37	290	394	28	122	784	5,620	78	65	68
15	37	38	37	290	396	28	123	1,090	4,450	77	75	68
16	37	38	37	343	393	28	123	1,430	3,510	76	65	55
17	36	43	37	395	390	28	123	1,870	3,510	73	65	38
18	36	46	37	397	392	27	228	2,080	3,510	68	65	38
19	36	40	37	399	405	27	415	2,080	2,490	68	64	38
20	36	39	37	402	395	27	511	2,080	2,060	68	64	38
21	36	38	38	402	390	27	538	2,060	2,090	68	56	38
22	36	38	41	399	140	27	502	2,050	1,500	70	64	38
23	37	38	38	397	29	27	508	2,040	1,020	73	69	38
24	35	38	38	397	29	26	520	2,050	2,550	73	69	38
25	34	38	38	397	29	25	534	2,060	3,210	72	68	43
26	34	38	39	397	29	25	534	2,090	2,370	71	68	38
27	34	38	53	395	29	26	534	2,140	1,010	71	68	38
28	34	38	47	395	29	29	534	2,190	712	71	68	38
29	34	38	54	395	-----	28	520	2,410	1,430	70	68	36
30	34	36	46	393	-----	29	524	2,980	1,740	70	68	34
31	34	-----	42	391	-----	29	-----	3,210	-----	70	68	-----
TOTAL	1,129	1,122	1,227	9,902	8,534	928	7,750	45,493	98,902	13,890	2,067	2,504
MEAN	36.4	37.4	39.6	319	305	29.9	258	1,468	3,297	448	66.7	83.5
MAX	38	46	54	402	405	43	538	3,210	7,920	1,950	75	496
MIN	34	33	35	39	29	25	30	527	712	68	56	34
AC-FT	2,240	2,230	2,430	19,640	16,930	1,840	15,370	90,240	196,200	27,550	4,100	4,970
CAL YR 1973	TOTAL	114,044	MEAN	312	MAX	6,180	MIN	28	AC-FT	226,200		
WTR YR 1974	TOTAL	193,448	MEAN	530	MAX	7,920	MIN	25	AC-FT	383,700		

185

LOCATION.--Lat 37°52'46", long 119°56'46", in SE¼SW¼ sec.1, T.1 S., R.18 E., Tuolumne County, Stanislaus National Forest, on left bank 0.5 mi (0.8 km) upstream from Early Intake, 2.4 mi (3.9 km) upstream from Cherry Creek, and 5.0 mi (8.0 km) west of Mather.

PERIOD OF RECORD.--October 1970 to current year. Records for the period October 1939 to September 1970 in the files of the California district office of the Geological Survey.

EXTREMES.--Current year: Maximum discharge, 9,520 ft³/s (270 m³/s) June 12 (gage height, 20.94 ft or 6.383 m); minimum daily, 37 ft³/s (1.05 m³/s) many days during October and November.

Period of record: Maximum discharge, 9,520 ft³/s (270 m³/s) June 12, 1974 (gage height, 20.94 ft or 6.383 m); minimum daily, 36 ft³/s (1.02 m³/s) Sept. 19, 1973.

Flood of June 1, 1943, reached a stage of 22.1 ft (6.74 m), discharge, 12,900 ft³/s (365 m³/s).

REMARKS.--Records good. Flow regulated by Hetch Hetchy Reservoir 12 mi (19 km) upstream (see sta 11275500).

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37	37	154	113	428	112	300	575	3,250	1,910	80	76
2	37	37	106	97	424	210	200	577	3,240	1,630	79	108
3	37	37	81	90	418	156	150	604	3,250	965	79	461
4	37	37	71	119	410	133	133	696	3,270	961	79	462
5	37	38	65	435	407	128	114	735	3,280	960	80	111
6	37	42	62	394	407	132	106	727	3,320	935	79	83
7	38	40	58	373	407	123	99	709	3,540	665	78	82
8	43	39	57	373	418	132	94	719	4,230	408	78	80
9	38	38	54	295	418	122	108	720	4,350	105	78	80
10	37	45	54	286	421	112	175	720	4,000	879	78	80
11	37	57	54	280	421	105	172	738	4,600	1,980	77	79
12	37	119	56	358	424	110	167	700	7,710	1,150	76	79
13	37	64	58	364	421	108	163	678	8,230	139	76	79
14	37	71	69	349	421	101	160	723	5,890	94	75	79
15	37	59	60	355	421	97	160	1,010	4,770	90	75	79
16	37	53	56	400	421	93	159	1,370	3,550	88	82	79
17	37	62	56	505	418	89	157	1,810	3,540	87	74	57
18	37	134	57	494	418	85	187	2,070	3,530	79	73	47
19	37	82	53	491	432	81	419	2,060	2,770	78	72	47
20	37	68	52	512	424	78	545	2,060	2,030	77	71	46
21	37	70	56	498	421	76	584	2,040	2,070	76	71	46
22	38	61	95	474	319	72	548	2,030	1,640	76	64	46
23	54	57	78	463	82	70	555	2,030	973	80	74	46
24	41	56	69	460	68	70	596	2,030	2,120	80	76	45
25	38	55	65	449	64	69	614	2,040	3,330	81	76	45
26	37	55	65	446	62	69	608	2,070	2,560	82	76	50
27	37	53	171	442	74	90	600	2,110	1,190	81	76	46
28	37	51	215	438	77	109	586	2,170	542	80	76	46
29	37	51	230	435	-----	104	579	2,330	1,350	80	76	46
30	37	51	165	432	-----	102	576	2,930	1,590	80	76	42
31	37	-----	119	428	-----	101	-----	3,220	-----	80	76	-----
TOTAL	1,178	1,719	2,661	11,648	9,546	3,239	9,614	45,001	99,715	14,156	2,356	2,752
MEAN	38.0	57.3	85.8	376	341	104	320	1,452	3,324	457	76.0	91.7
MAX	54	134	230	512	432	210	614	3,220	8,230	1,980	82	462
MIN	37	37	52	90	62	69	94	575	542	76	64	42
AC-FT	2,340	3,410	5,280	23,100	18,930	6,420	19,070	89,260	197,800	28,080	4,670	5,460
CAL YR 1973	TOTAL 125,864		MEAN 345	MAX 6,320	MIN 36	AC-FT 249,700						
WTR YR 1974	TOTAL 203,585		MEAN 558	MAX 8,230	MIN 37	AC-FT 403,800						

LOCATION.--Lat 37°52'54", long 119°58'09", in NW¼SW¼ sec.2, T.1 S., R.18 E., Tuolumne County, Stanislaus National Forest, on left bank 0.6 mi (1.0 km) upstream from Cherry Creek, 0.7 mi (1.1 km) downstream from Robert C. Kirkwood powerplant and Hetch Hetchy aqueduct, and 6.3 mi (10.1 km) west of Mather.

REMARKS.--Records good. Flow regulated by Hetch Hetchy Reservoir 13 mi (21 km) upstream (see sta 11275500) and Robert C. Kirkwood powerplant beginning Apr. 26, 1967. Water is diverted to Hetch Hetchy aqueduct from the tailrace of the powerplant through a closed conduit. Flow in excess of aqueduct capacity is diverted to river. See schematic diagram of Tuolumne River basin.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	60	65	267	232	170	248	410	681	3,190	2,010	154	135
2	65	61	165	235	154	365	495	700	3,190	1,770	131	193
3	67	35	217	213	159	236	299	785	3,220	1,110	133	312
4	69	36	213	162	163	274	267	826	3,230	1,070	154	318
5	70	60	205	168	157	270	251	824	3,260	1,100	176	170
6	101	73	196	144	157	279	235	800	3,250	1,080	166	124
7	50	73	188	153	155	271	165	800	3,400	780	158	106
8	62	63	169	131	163	275	209	802	4,020	549	140	128
9	81	62	106	43	150	251	226	818	4,090	213	139	172
10	80	44	184	36	164	179	289	825	3,810	952	137	158
11	68	56	187	69	175	224	295	785	4,300	2,130	128	146
12	68	185	172	127	172	236	289	790	6,970	1,320	188	135
13	50	83	199	102	169	234	292	785	7,720	234	170	124
14	42	87	210	106	167	229	231	790	5,670	169	158	128
15	69	77	182	103	164	224	287	1,150	4,580	218	102	151
16	72	62	112	143	149	218	286	1,480	3,480	199	155	161
17	76	58	188	257	157	145	287	1,800	3,480	189	134	126
18	76	139	190	237	165	213	311	2,010	3,470	171	161	110
19	67	90	189	224	184	208	543	2,020	2,780	153	185	108
20	48	115	188	228	179	208	644	2,020	2,080	139	170	97
21	48	189	193	253	321	201	624	2,020	2,110	162	163	76
22	52	168	219	219	522	196	650	2,030	1,710	183	146	113
23	90	184	139	206	212	197	662	2,030	1,050	175	154	163
24	76	169	208	198	152	134	691	2,050	2,150	163	156	140
25	72	105	189	191	204	198	705	2,030	3,340	150	170	122
26	75	188	209	171	191	203	698	2,060	2,650	138	196	123
27	59	181	311	176	206	208	690	2,120	1,300	139	184	110
28	45	181	388	183	215	252	629	2,190	614	170	174	92
29	74	182	366	176	-----	248	668	2,350	1,440	184	162	116
30	82	183	250	172	-----	246	670	2,920	1,680	173	159	143
31	79	-----	258	170	-----	196	-----	3,150	-----	163	157	-----
TOTAL	2,093	3,254	6,457	5,228	5,296	7,066	12,998	46,441	97,234	17,356	4,860	4,300
MEAN	67.5	108	208	169	189	228	433	1,498	3,241	560	157	143
MAX	101	189	388	257	522	365	705	3,150	7,720	2,130	196	318
MIN	42	35	106	36	149	134	165	681	614	138	102	76
AC-FT	4,150	6,450	12,810	10,370	10,500	14,020	25,780	92,120	192,900	34,430	9,640	8,530
CAL YR 1973	TOTAL	148,888	MEAN	408	MAX	5,550	MIN	35	AC-FT	295,300		
WTR YR 1974	TOTAL	212,583	MEAN	582	MAX	7,720	MIN	35	AC-FT	421,700		

11277200 CHERRY LAKE NEAR HETCH HETCHY, CALIF.

LOCATION.--Lat 37°58'33", long 119°54'47", in SE¼NW¼ sec.5, T.1 N., R.19 E., Tuolumne County, Stanislaus National Forest, on upstream face of Cherry Valley Dam on Cherry Creek, 4.2 mi (6.8 km) upstream from Eleanor Creek, 7 mi (11 km) north of Early Intake, and 7.3 mi (11.7 km) northwest of Hetch Hetchy.

DRAINAGE AREA.--117 mi² (303 km²).

PERIOD OF RECORD.--August 1956 to current year. Prior to October 1959, published as Lake Lloyd near Hetch Hetchy.

GAGE.--Nonrecording gage read once daily. Datum of gage is at mean sea level (levels by city and county of San Francisco).

EXTREMES (at 0800).--Current year: Maximum contents, 269,400 acre-ft (332 hm³) July 10 (elevation, 4,700.3 ft or 1,432.65 m); minimum, 118,300 acre-ft (146 hm³) Nov. 9 (elevation, 4,604.7 ft or 1,403.51 m).
Period of record: Maximum contents, 269,400 acre-ft (332 hm³) July 10, 1974 (elevation, 4,700.3 ft or 1,432.65 m); maximum elevation, 4,700.6 ft (1,432.74 m) July 1-3, 1957; normal minimum since reservoir first filled, 7,660 acre-ft (9.44 hm³) Jan. 24, 1960 (elevation, 4,502.1 or 1,372.24 m). Reservoir drained for inspection in 1961 and 1964.

REMARKS.--Reservoir is formed by a rockfill dam completed in 1956; storage began in December 1955. Usable capacity, 268,800 acre-ft (331 hm³) between elevations 4,430 ft (1,350.3 m), bottom of sluice gates and 4,700 ft (1,432.6 m), top of spillway gates, above mean sea level. Additional storage of 20 acre-ft (24,700 m³) is not available for release. Water is released down Cherry Creek for power development and domestic supply as part of Hetch Hetchy system of city and county of San Francisco. Unmeasured diversion from Lake Eleanor into Cherry Lake began Mar. 6, 1960. Diversion from Cherry Lake through tunnel to Cherry powerhouse near mouth of Cherry Creek began Aug. 1, 1960. See schematic diagram of Tuolumne River basin. Records, including extremes, represent total contents at 0800 hours.

COOPERATION.--Gage-height record furnished by city and county of San Francisco.

CAPACITY TABLE (ELEVATION, IN FEET, AND CONTENTS, IN ACRE-FEET)

4,440	0	4,490	3,020	4,560	60,800	4,660	201,100
4,450	75	4,500	6,030	4,580	85,100	4,680	234,100
4,460	250	4,510	11,700	4,600	111,800	4,700	268,800
4,470	675	4,520	19,700	4,620	139,900	4,705	277,900
4,480	1,530	4,540	38,900	4,640	169,700		

CONTENTS, IN ACRE-FEET, AT 0800, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	150,900	123,600	159,600	154,000	150,800	130,200	143,000	164,900	238,700	268,500	252,800	225,200
2	149,900	122,600	159,600	154,100	150,200	132,100	143,900	166,800	241,500	268,500	251,400	225,100
3	148,900	121,500	160,200	154,000	149,900	133,100	144,200	169,100	244,400	268,100	250,900	225,100
4	147,800	120,500	160,000	153,900	149,700	134,800	144,500	171,200	247,500	267,800	250,200	223,700
5	146,800	120,100	159,600	153,100	149,200	135,200	144,600	173,700	250,500	268,100	251,100	222,600
6	145,800	119,400	159,100	152,700	148,400	--	144,900	177,100	253,700	267,600	250,400	221,400
7	145,200	118,700	158,800	152,500	147,800	--	145,600	180,200	257,600	267,400	249,500	220,400
8	144,900	118,700	158,500	151,900	147,100	--	146,800	183,800	260,500	267,800	249,000	219,200
9	144,600	118,300	158,400	151,400	146,500	--	147,100	187,400	263,000	266,900	248,000	219,000
10	142,300	119,900	158,800	150,600	145,900	--	147,300	190,600	265,600	269,400	246,800	217,900
11	142,300	127,200	158,500	149,900	145,500	--	147,400	193,000	268,300	268,100	246,100	216,600
12	141,200	143,900	157,900	149,200	144,900	--	147,700	195,500	268,800	267,600	245,700	215,400
13	140,100	148,300	157,500	148,600	143,700	--	148,100	198,400	268,500	267,100	244,500	214,400
14	138,200	150,000	157,000	148,400	142,900	--	149,200	200,100	268,800	266,700	243,700	213,100
15	138,500	151,200	156,600	147,700	141,800	--	150,900	201,900	268,600	266,900	242,500	212,200
16	137,500	151,900	156,100	147,500	141,700	--	151,900	203,900	267,900	266,200	241,500	212,000
17	136,400	153,000	155,900	149,200	140,700	--	153,100	204,800	268,300	265,300	240,300	210,900
18	135,600	155,000	155,500	150,800	139,600	--	154,400	205,200	267,800	264,400	239,200	209,700
19	134,100	156,700	154,900	152,500	138,800	--	155,600	205,700	268,600	263,500	239,100	208,400
20	132,800	157,200	154,300	153,600	137,500	--	156,100	205,800	268,100	262,500	237,800	207,300
21	131,900	157,500	153,400	154,300	136,900	--	157,000	206,000	268,100	262,000	236,600	206,100
22	131,800	159,200	153,300	154,300	136,100	--	159,500	206,600	268,800	262,000	235,400	205,200
23	131,700	159,800	152,800	154,100	135,200	--	159,900	208,100	267,900	260,900	234,100	205,000
24	131,000	159,000	152,700	153,900	134,200	--	160,900	210,000	267,800	259,800	233,200	203,700
25	130,100	159,100	152,300	153,600	133,700	138,500	161,400	213,000	267,400	259,000	232,200	202,400
26	128,200	159,700	151,900	153,300	133,100	138,800	161,500	216,400	267,800	258,100	232,100	201,100
27	128,400	159,600	151,500	153,000	131,900	138,900	161,800	220,900	268,100	257,000	230,900	198,600
28	127,500	159,600	151,400	152,800	131,100	139,200	162,300	225,200	268,100	256,300	229,600	199,000
29	127,100	159,400	151,500	152,400	-----	139,800	163,200	229,400	268,100	256,300	228,400	198,100
30	126,000	159,300	153,100	151,900	-----	140,800	163,600	232,600	268,200	255,300	227,400	197,900
31	124,700	-----	153,500	151,400	-----	142,000	-----	235,600	-----	254,000	226,200	-----
MAX	160,900	159,700	160,200	154,300	150,800	--	163,600	235,600	268,800	269,400	252,800	225,200
MIN	124,700	118,300	151,400	147,500	131,100	--	143,000	164,900	238,700	254,000	226,200	197,900
(a)	4,609.3	4,633.1	4,629.5	4,627.8	4,613.8	4,621.4	4,636.0	4,680.9	4,699.7	4,691.6	4,675.3	4,658.0
(b)	-26,700	+34,600	-5,400	-2,500	-20,300	+10,900	+21,600	+72,000	+32,700	-14,300	-27,800	-28,300

CAL YR 1973 b +123,100

WTR YR 1974 b +46,500

a Elevation, in feet, at end of month.
b Change in contents, in acre-feet.

11277300 CHERRY CREEK BELOW CHERRY VALLEY DAM, NEAR HETCH HETCHY, CALIF.

LOCATION.--Lat 37°58'04", long 119°54'59", in SE¼SW¼ sec.5, T.1 N., R.19 E., Tuolumne County, Stanislaus National Forest, on right bank 0.7 mi (1.1 km) downstream from Cherry Valley Dam, 3.5 mi (5.6 km) upstream from Eleanor Creek, 6.7 mi (10.8 km) north of Early Intake, and 7.2 mi (11.6 km) west of Hetch Hetchy.

DRAINAGE AREA.--118 mi² (306 km²).

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 4,337.08 ft (1,321.942 m) above mean sea level (levels by city and county of San Francisco).

AVERAGE DISCHARGE (since diversion to Cherry Creek powerplant).--14 years (1960-74), 21.4 ft³/s (0.606 m³/s), 15,500 acre-ft/yr (19.1 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 4,210 ft³/s (119 m³/s) July 10 (gage height, 10.53 ft or 3.210 m); minimum daily, 2.0 ft³/s (0.057 m³/s) Oct. 15-18.
Period of record: Maximum discharge, 4,210 ft³/s (119 m³/s) July 10, 1974 (gage height, 10.53 ft or 3.210 m); minimum daily, 1.6 ft³/s (0.045 m³/s) Apr. 10, 1957.

REMARKS.--Records good. Flow regulated by Cherry Lake 0.7 mi (1.1 km) upstream (see sta 11277200). Diversion between Lake Eleanor and Cherry Lake began Mar. 6, 1960. Diversion from Cherry Lake to Cherry powerplant began Aug. 1, 1960. See schematic diagram of Tuolumne River basin.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	4.6	6.4	6.4	5.7	6.7	11	4.4	5.7	149	17	15
2	13	4.6	5.3	6.2	5.5	6.7	8.2	4.2	5.7	15	17	15
3	13	4.8	5.3	6.0	5.5	5.5	6.4	4.6	5.7	15	17	15
4	13	4.8	5.0	6.0	5.5	5.3	6.2	4.8	6.0	14	17	15
5	10	4.8	5.0	6.0	5.5	5.0	5.7	4.8	6.0	16	17	15
6	4.4	5.0	5.0	6.0	5.3	5.0	5.3	4.8	6.0	16	16	15
7	3.9	5.0	4.6	5.7	5.3	5.0	4.8	4.6	6.0	16	16	15
8	3.2	5.0	4.4	5.5	5.0	5.3	4.4	4.6	6.0	16	16	15
9	3.0	5.0	4.4	5.5	4.6	5.0	5.3	4.6	6.0	16	16	15
10	2.9	5.5	4.4	5.5	4.6	5.0	4.8	4.6	6.0	1,450	16	15
11	2.9	6.2	4.6	5.5	4.6	5.0	4.8	4.6	773	365	16	15
12	2.6	8.5	4.6	5.7	4.6	5.5	4.6	4.4	1,600	12	16	15
13	2.2	6.2	5.0	5.5	4.4	5.3	4.6	4.4	1,170	9.4	16	15
14	2.2	6.2	4.6	5.5	4.4	5.0	4.4	4.4	1,410	9.4	16	15
15	2.0	6.0	4.6	5.5	4.2	4.8	4.4	4.4	1,330	9.4	16	15
16	2.0	5.7	4.6	6.7	4.2	4.4	4.2	4.4	866	9.4	16	15
17	2.0	7.1	4.8	9.8	4.2	3.9	4.2	5.0	1,180	30	16	15
18	2.0	6.4	4.6	9.5	4.2	3.7	4.2	5.3	327	17	16	15
19	3.0	5.5	4.6	9.2	4.8	3.7	4.4	5.3	434	22	15	15
20	4.8	5.3	4.6	9.2	4.4	3.5	4.6	5.3	601	17	15	15
21	5.3	5.3	4.8	8.0	4.4	3.4	4.4	5.5	47	17	15	15
22	6.0	5.0	4.8	7.4	4.2	3.4	4.4	5.5	915	17	15	15
23	6.7	5.0	4.8	7.0	4.2	3.5	4.6	5.3	681	17	15	15
24	6.0	5.0	4.6	6.7	4.2	3.5	5.0	5.3	660	17	16	15
25	6.0	5.0	4.6	6.4	4.2	3.5	5.0	5.3	210	17	16	15
26	5.7	4.8	4.8	6.4	4.2	3.5	5.0	5.5	40	17	15	15
27	5.5	4.8	6.4	6.2	3.7	3.7	4.8	5.5	237	17	15	15
28	5.5	4.6	6.7	6.2	3.9	5.7	4.6	5.5	135	17	15	15
29	5.3	4.6	8.5	6.0	-----	4.6	4.6	5.5	135	17	15	15
30	5.0	4.6	7.2	6.0	-----	5.3	4.4	5.7	120	30	15	15
31	4.8	-----	6.7	5.7	-----	4.6	-----	5.7	-----	21	15	-----
TOTAL	166.9	160.9	160.3	202.9	129.5	144.0	153.3	153.8	12,930.1	2,427.6	490	450
MEAN	5.38	5.36	5.17	6.55	4.63	4.65	5.11	4.96	431	78.3	15.8	15.0
MAX	13	8.5	8.5	9.8	5.7	6.7	11	5.7	1,600	1,450	17	15
MIN	2.0	4.6	4.4	5.5	3.7	3.4	4.2	4.2	5.7	9.4	15	15
AC-FT	331	319	318	402	257	286	304	305	25,650	4,820	972	893

CAL YR 1973 TOTAL 2,894.0 MEAN 7.93 MAX 16 MIN 2.0 AC-FT 5,740
WTR YR 1974 TOTAL 17,569.3 MEAN 48.1 MAX 1,600 MIN 2.0 AC-FT 34,850

11277500 LAKE ELEANOR NEAR HETCH HETCHY, CALIF.

LOCATION.--Lat 37°58'27", long 119°52'48", in SE¼NW¼ sec.3, T.1 N., R.19 E., Tuolumne County, Yosemite National Park, 720 ft (219 m) from left bank on downstream side of dam on Eleanor Creek, 1.7 mi (2.7 km) upstream from Miguel Creek, and 5.5 mi (8.8 km) northwest of Hetch Hetchy.

DRAINAGE AREA.--78.1 mi² (202.3 km²).

PERIOD OF RECORD.--June 1918 to current year. Prior to October 1930, published in WSP 1315-A. Published as "near Sequoia" 1919-20.

GAGE.--Water-stage recorder. Datum of gage is 2.39 ft (0.728 m) above mean sea level (corrected). Prior to Oct. 1, 1927, nonrecording gage on upstream side of dam at same site and datum.

EXTREMES.--Current year: Maximum contents, 27,300 acre-ft (33.7 hm³) July 10 (gage height, 4,661.2 ft or 1,420.73 m); no usable contents Oct. 19-22; minimum gage height, 4,626.0 ft (1,410.00 m) Oct. 21, 22.

Period of record: Maximum contents, 31,000 acre-ft (38.2 hm³) Dec. 11, 1937, from capacity table then in use (gage height, 4,663.4 ft or 1,421.40 m); no usable contents at times in 1921, 1929-30, 1956-60, 1972-74.

REMARKS.--Reservoir is formed by multiple-arch dam completed in 1918; storage began June 23, 1918. Usable capacity, 26,100 acre-ft (32.2 hm³) between gage heights 4,620.9 ft (1,408.45 m), natural outlet of old lake and 4,660.0 ft (1,420.37 m), top of 5-foot (1.5-m) flashboards. Records, including extremes, represent total contents at 2400 hours. See schematic diagram of Tuolumne River basin.

COOPERATION.--Periodic observations of gage height furnished by city and county of San Francisco.

REVISIONS (WATER YEARS).--WSP 1445: 1938(M). WSP 1930: Drainage area.

CAPACITY TABLE (GAGE HEIGHT, IN FEET, AND CONTENTS, IN ACRE-FEET)

4,626.2	639	4,634	4,700	4,644	11,900	4,654	20,600
4,627	996	4,636	5,960	4,646	13,500	4,656	22,400
4,628	1,480	4,638	7,330	4,648	15,300	4,658	24,300
4,630	2,450	4,640	8,710	4,650	17,000	4,660	26,100
4,632	3,580	4,642	10,300	4,652	18,800	4,663	29,100

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,010	861	8,020	5,750	5,410	3,130	3,920	10,900	24,800	27,000	26,300	25,200
2	1,770	817	7,810	5,480	5,100	3,920	3,860	12,100	24,800	27,100	26,300	25,100
3	1,580	817	7,610	5,210	4,760	3,630	3,630	13,400	24,700	27,100	26,300	25,100
4	1,430	772	7,330	4,930	4,420	3,240	3,350	14,500	24,700	27,100	26,200	25,000
5	1,290	772	7,060	4,700	4,080	3,010	3,180	15,900	24,600	27,000	26,200	25,000
6	1,190	906	6,780	4,480	3,750	2,840	3,130	17,400	24,700	26,900	26,200	25,000
7	1,090	1,140	6,510	4,200	3,410	2,730	3,180	19,200	24,700	26,800	26,200	24,900
8	1,040	1,380	6,300	3,920	3,070	2,620	3,180	21,100	24,600	26,600	26,100	24,800
9	996	1,530	6,090	3,690	2,730	2,510	3,350	23,300	24,500	26,700	26,100	24,800
10	906	3,240	5,890	3,350	2,450	2,400	3,240	24,700	24,600	27,300	26,100	24,800
11	861	8,710	5,750	3,070	2,260	2,400	3,180	25,000	24,800	27,100	26,100	24,800
12	817	13,700	5,540	2,840	2,160	2,510	3,350	25,100	25,500	27,000	26,100	24,700
13	817	14,000	5,410	2,620	2,060	2,560	3,630	24,900	26,300	26,800	26,000	24,600
14	772	13,800	5,210	2,400	2,010	2,680	4,080	24,800	26,800	26,600	26,000	24,600
15	728	13,400	5,040	2,510	1,920	2,790	4,650	24,800	26,900	26,400	25,900	24,500
16	683	12,900	4,870	3,350	1,870	2,960	5,210	24,800	26,900	26,300	25,900	24,500
17	683	13,200	4,700	5,610	1,870	2,960	5,890	24,600	26,800	26,100	25,800	24,500
18	639	13,300	4,590	6,920	1,820	2,900	6,580	24,400	26,700	26,100	25,800	24,500
19	--	12,900	4,370	8,160	1,870	2,900	6,780	24,200	26,600	26,100	25,700	24,400
20	--	12,500	4,080	8,570	1,870	2,900	6,850	24,100	26,500	26,100	25,700	24,400
21	--	12,100	3,920	8,570	1,870	2,960	7,060	24,100	26,600	26,100	25,700	24,300
22	--	11,600	3,750	8,430	1,870	2,960	7,610	24,300	26,800	26,100	25,600	24,300
23	772	11,100	3,520	8,230	1,820	3,010	8,230	24,500	26,900	26,100	25,600	24,300
24	861	10,600	3,350	7,950	1,820	3,070	8,570	24,700	26,900	26,200	25,600	24,200
25	906	10,100	3,130	7,680	1,820	3,130	8,710	24,800	26,900	26,200	25,500	24,100
26	950	9,660	2,960	7,400	1,820	3,070	8,870	25,000	26,800	26,300	25,500	24,100
27	950	9,180	3,240	7,130	1,820	3,180	9,020	25,100	26,800	26,300	25,400	24,100
28	950	8,790	3,520	6,780	1,820	3,350	9,020	25,000	26,700	26,300	25,300	24,000
29	906	8,430	4,930	6,440	-----	3,520	9,260	24,900	26,800	26,300	25,300	23,900
30	906	8,090	5,680	6,090	-----	3,800	9,820	24,800	26,900	26,300	25,200	23,900
31	861	-----	5,820	5,750	-----	3,690	-----	24,700	-----	26,300	25,200	-----
MAX	--	14,000	8,020	8,570	5,410	3,920	9,820	25,100	26,900	27,300	26,300	25,200
MIN	--	772	2,960	2,400	1,820	2,400	3,130	10,900	24,500	26,100	25,200	23,900
(a)	4,626.7	4,639.1	4,635.8	4,635.7	4,628.7	4,632.2	4,641.4	4,658.4	4,660.8	4,660.2	4,659.0	4,657.6
(b)	-1,439	+7,229	-2,270	-70	-3,930	+1,870	+6,130	+14,880	+2,200	-600	-1,100	-1,300

CAL YR 1973 b --
WTR YR 1974 b +21,600

a Gage height, in feet, at end of month.
b Change in contents, in acre-feet.

11278000 ELEANOR CREEK NEAR HETCH HETCHY, CALIF..

LOCATION.--Lat 37°58'09", long 119°52'52", in NW¼SW¼ sec.3, T.1 N., R.19 E., Tuolumne County, Yosemite National Park, on right bank 0.5 mi (0.8 km) downstream from Lake Eleanor Dam, 1.1 mi (1.8 km) upstream from Miguel Creek, and 5.5 mi (8.8 km) northwest of Hetch Hetchy.

DRAINAGE AREA.--78.4 mi² (203.1 km²).

PERIOD OF RECORD.--October 1909 to current year. Monthly discharge only for some periods, published in WSP 1315-A. Published as "near Sequoia" 1910-18.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 4,500 ft (1,370 m), from topographic map. November 1909 to November 1915, nonrecording gage and water-stage recorder at site 1 mi (1.6 km) upstream at different datum.

AVERAGE DISCHARGE (prior to diversion to Cherry Lake).--50 years (1909-59), 223 ft³/s (6.32 m³/s), 161,400 acre-ft/yr (199 hm³/yr); 15 years (1959-74), 65.1 ft³/s (1.84 m³/s), 47,160 acre-ft/yr (58.1 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,230 ft³/s (34.8 m³/s) May 13 (gage height, 5.49 ft or 1.673 m); minimum daily, 2.6 ft³/s (0.074 m³/s) Nov. 15.

Period of record: Maximum discharge, 11,700 ft³/s (331 m³/s) Nov. 19, 1950 (gage height, 14.95 ft or 4.557 m), from rating curve extended above 1,500 ft³/s (42.5 m³/s) on basis of velocity-area studies; no flow at times in 1910, 1930-31, 1933, 1956.

REMARKS.--Records good. Flow regulated by Lake Eleanor 0.5 mi (0.8 km) upstream beginning in 1918 (see sta 11277500). Diversion from Lake Eleanor to Cherry Lake began in March 1960. See schematic diagram of Tuolumne River basin.

REVISIONS (WATER YEARS).--WSP 1315-A: 1923(M). WSP 1930: Drainage area.

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	5.2	6.1	4.4	4.0	8.6	15	6.0	733	151	21	13
2	15	5.2	4.0	4.4	4.0	6.3	6.1	6.0	736	156	20	13
3	15	5.2	3.7	4.0	4.0	3.7	4.8	5.4	723	157	20	13
4	14	5.2	3.7	4.0	4.0	4.0	4.6	4.8	697	156	19	14
5	15	5.2	3.1	4.0	4.0	4.8	4.9	5.1	658	153	18	14
6	8.4	5.2	3.1	4.0	4.0	4.4	5.0	5.2	691	149	18	13
7	5.2	5.2	4.0	4.0	4.0	4.4	4.8	5.2	730	143	18	13
8	7.0	5.2	4.8	4.0	4.0	4.4	4.8	5.1	655	138	18	13
9	6.6	5.6	4.8	4.0	3.7	4.4	5.2	13	569	136	18	13
10	6.6	6.1	4.8	4.4	3.1	4.0	5.2	406	551	394	17	13
11	6.6	7.5	4.8	4.4	3.4	4.0	5.2	978	413	431	17	13
12	5.6	8.0	4.8	5.2	3.4	4.4	5.2	1,160	204	279	17	13
13	5.2	2.8	5.2	4.8	3.7	4.0	5.2	1,130	123	239	17	13
14	4.8	3.1	5.2	4.4	3.4	4.0	5.2	949	274	199	17	14
15	4.8	2.6	5.2	6.1	3.4	4.0	5.0	938	395	170	16	13
16	4.8	2.8	4.8	7.0	3.7	4.0	4.8	906	434	149	16	13
17	4.8	7.1	4.8	8.4	3.7	4.0	4.8	754	419	133	15	13
18	4.8	6.1	4.8	6.1	3.7	4.0	5.2	572	366	120	14	13
19	5.2	4.8	4.8	5.2	4.0	4.4	5.5	449	316	72	14	13
20	5.2	4.8	4.4	5.6	3.7	4.4	5.4	357	273	42	13	14
21	5.2	4.8	4.8	5.2	4.0	4.4	4.8	317	219	38	13	14
22	5.2	4.0	6.1	4.8	4.0	4.0	4.6	376	209	33	13	13
23	6.1	3.7	5.6	4.4	4.0	3.7	5.1	527	241	25	13	13
24	5.2	3.7	5.2	4.4	3.7	3.7	5.8	620	257	24	13	13
25	5.2	3.7	5.2	4.0	3.7	3.7	6.5	789	254	23	13	13
26	5.2	3.7	5.6	4.0	3.7	3.7	6.4	930	242	22	14	14
27	5.2	3.7	11	4.0	3.7	4.4	5.6	1,080	226	22	14	14
28	5.2	4.0	7.0	4.0	3.7	7.0	5.2	1,090	210	22	14	14
29	5.2	4.0	8.4	4.0	-----	4.0	5.1	1,020	173	22	14	14
30	5.2	4.0	5.2	4.0	-----	4.8	5.6	861	151	22	13	14
31	5.2	-----	4.8	4.0	-----	4.0	-----	771	-----	21	13	-----
TOTAL	217.7	142.2	159.8	145.2	105.4	137.6	166.6	17,035.8	12,142	3,841	490	400
MEAN	7.02	4.74	5.15	4.68	3.76	4.44	5.55	550	405	124	15.8	13.3
MAX	15	8.0	11	8.4	4.0	8.6	15	1,160	736	431	21	14
MIN	4.8	2.6	3.1	4.0	3.1	3.7	4.6	4.8	123	21	13	13
AC-FT	432	282	317	288	209	273	330	33,790	24,080	7,620	972	793
CAL YR 1973	TOTAL	17,732.7	MEAN	48.6	MAX	1,210	MIN	2.6	AC-FT	35,170		
WTR YR 1974	TOTAL	34,983.3	MEAN	95.8	MAX	1,160	MIN	2.6	AC-FT	69,390		

11278300 CHERRY CREEK NEAR EARLY INTAKE, CALIF.

LOCATION.--Lat 37°53'40", long 119°57'42", in NW¼SE¼ sec.35, T.1 N., R.18 E., Tuolumne County, Stanislaus National Forest, on right bank 1.2 mi (1.9 km) upstream from mouth, 1.3 mi (2.1 km) north of Early Intake, and 10.3 mi (16.6 km) southwest of Hetch Hetchy.

DRAINAGE AREA.--226 mi² (585 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 2,272.00 ft (692.506 m) above mean sea level (levels by city and county of San Francisco).

AVERAGE DISCHARGE (since diversion to Dion R. Holm powerplant).--14 years (1960-74), 104 ft³/s (2.95 m³/s), 75,350 acre-ft/yr (92.9 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 4,380 ft³/s (124 m³/s) July 10 (gage height, 10.11 ft or 3.082 m); minimum daily, 8.6 ft³/s (0.24 m³/s) Oct. 17-19.

Period of record: Maximum discharge, 16,500 ft³/s (467 m³/s) Feb. 1, 1963 (gage height, 14.50 ft or 4.420 m), from rating curve extended above 4,600 ft³/s (130 m³/s); minimum daily, 0.30 ft³/s (0.008 m³/s) Apr. 5, 6, 1964.

REMARKS.--Records good. Flow regulated by Cherry Lake 10 mi (16 km) upstream (see sta 11277200) and Lake Eleanor 9.8 mi (15.8 km) upstream (see sta 11277500). Diversion from Cherry Lake to Dion R. Holm powerplant began Aug. 1, 1960. Water is returned to creek 1.2 mi (1.9 km) below station. See schematic diagram of Tuolumne River basin.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	12	58	71	50	112	300	58	749	345	38	29
2	28	12	37	55	48	188	350	53	750	178	38	29
3	28	12	30	50	46	111	160	50	740	180	37	29
4	28	12	28	47	45	84	138	47	711	178	37	29
5	28	12	25	46	44	83	120	45	670	175	36	29
6	23	15	23	46	42	87	107	44	698	172	36	29
7	13	14	23	45	41	86	96	42	742	166	35	29
8	17	13	23	45	41	85	87	40	674	162	35	29
9	12	12	23	43	39	82	92	39	579	166	35	29
10	11	17	21	41	37	80	91	321	554	1,670	35	28
11	11	27	23	40	36	77	90	1,020	1,060	996	35	28
12	11	69	23	51	36	99	81	1,200	1,820	315	35	28
13	10	24	26	62	36	99	75	1,180	1,290	261	34	28
14	9.2	25	35	56	36	90	69	1,010	1,690	223	34	29
15	9.0	21	29	60	35	86	64	988	1,740	192	34	29
16	8.8	18	25	100	34	80	60	938	1,380	168	34	29
17	8.6	35	26	215	34	74	57	787	1,600	167	34	29
18	8.6	66	28	164	34	68	58	604	763	143	33	29
19	8.6	26	25	157	41	67	58	475	709	109	30	29
20	9.9	21	23	134	41	62	55	385	931	59	29	29
21	12	23	27	129	39	57	52	340	270	53	29	30
22	12	19	41	94	38	55	49	382	1,100	52	29	29
23	25	18	34	83	36	52	49	525	940	41	28	29
24	15	18	30	77	36	54	68	625	932	41	30	29
25	13	17	28	71	34	56	67	796	515	41	30	28
26	13	18	30	66	34	54	72	952	262	40	30	28
27	13	17	94	60	34	66	74	1,100	482	39	30	29
28	12	16	160	57	34	84	78	1,130	342	39	30	29
29	12	16	204	55	-----	77	73	1,060	311	39	30	29
30	12	16	137	52	-----	84	65	886	250	56	29	29
31	12	-----	86	50	-----	78	-----	785	-----	42	29	-----
TOTAL	462.7	641	1,425	2,322	1,081	2,517	2,855	17,907	25,254	6,508	1,018	865
MEAN	14.9	21.4	46.0	74.9	38.6	81.2	95.2	578	842	210	32.8	28.8
MAX	29	69	204	215	50	188	350	1,200	1,820	1,670	38	30
MIN	8.6	12	21	40	34	52	49	39	250	39	28	28
AC-FT	918	1,270	2,830	4,610	2,140	4,990	5,660	35,520	50,090	12,910	2,020	1,720

CAL YR 1973 TOTAL 31,735.7 MEAN 86.9 MAX 1,270 MIN 8.6 AC-FT 62,950
WTR YR 1974 TOTAL 62,855.7 MEAN 172 MAX 1,820 MIN 8.6 AC-FT 124,700

11281000 SOUTH FORK TUOLUMNE RIVER NEAR OAKLAND RECREATION CAMP, CALIF.

LOCATION.--Lat 37°49'18", long 120°00'43", in SE¼SE¼ sec.29, T.1 S., R.18 E., Tuolumne County, Stanislaus National Forest, on right bank 75 ft (23 m) downstream from highway bridge on Big Oak Flat Road, 0.5 mi (0.8 km) southwest of Oakland Recreation Camp, and 0.6 mi (1.0 km) upstream from Middle Tuolumne River.

DRAINAGE AREA.--87.0 mi² (225.3 km²).

PERIOD OF RECORD.--March 1923 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 2,800 ft (853 m), from topographic map. Prior to Nov. 22, 1931, at site 50 ft (15 m) upstream at same datum.

AVERAGE DISCHARGE.--51 years, 93.1 ft³/s (2.637 m³/s), 67,450 acre-ft/yr (83.2 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,220 ft³/s (34.6 m³/s) Mar. 2 (gage height, 5.67 ft or 1.728 m); minimum daily, 5.4 ft³/s (0.15 m³/s) Oct. 25.
Period of record: Maximum discharge, 11,900 ft³/s (337 m³/s) Dec. 23, 1955 (gage height, 10.9 ft or 3.32 m, from floodmarks), from rating curve extended above 1,300 ft³/s (36.8 m³/s) on basis of slope-area measurements at gage heights 7.48 ft (2.280 m) and 10.9 ft (3.32 m); minimum, 0.3 ft³/s (0.008 m³/s) Aug. 23, 1934.

REMARKS.--Records good. No diversion above station. One small recreation reservoir (capacity unknown) is located approximately 3.5 mi (5.6 km) upstream. See schematic diagram of Tuolumne River basin.

REVISIONS (WATER YEARS).--WSP 1445: 1923, 1925(M), 1926-28, 1929-30(M), 1932(M), 1935-36(M), 1937-38, 1943(M), 1945(M). WSP 1930: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.4	11	188	118	91	536	436	252	225	34	17	8.9
2	7.2	11	79	86	88	681	485	277	221	34	17	8.7
3	7.1	11	69	85	86	273	288	290	199	32	16	8.4
4	7.1	10	71	84	82	209	242	283	197	34	16	8.4
5	6.9	11	59	78	80	196	226	298	188	29	17	8.3
6	6.9	13	48	78	76	191	216	338	192	29	18	8.3
7	7.8	15	45	75	74	191	209	369	178	29	18	8.3
8	8.6	14	44	75	74	191	206	378	159	29	19	8.2
9	8.1	14	43	74	72	180	214	372	141	33	18	8.0
10	8.4	19	43	71	71	173	197	358	135	99	18	8.1
11	14	122	46	68	70	162	192	352	127	58	18	8.1
12	14	452	47	73	69	183	196	366	120	44	11	8.1
13	19	104	52	81	68	180	206	335	107	38	13	8.0
14	6.9	81	63	84	70	176	216	302	97	33	15	8.0
15	6.0	56	56	100	68	186	226	310	88	31	15	8.0
16	6.4	48	48	172	68	188	228	283	80	30	15	7.9
17	6.4	150	48	279	64	183	235	254	75	27	15	7.9
18	6.6	230	48	250	65	173	252	218	69	26	14	7.8
19	6.8	86	44	257	71	172	214	194	67	26	14	7.8
20	6.9	65	43	233	73	172	192	178	61	25	13	7.7
21	6.9	58	48	197	70	167	191	173	58	26	13	7.7
22	7.6	48	75	164	66	162	218	191	55	23	11	7.6
23	43	50	70	144	65	157	235	223	53	21	10	7.4
24	40	66	60	128	63	159	233	232	47	20	9.9	7.3
25	5.4	43	51	118	63	167	208	271	46	27	9.6	7.2
26	6.4	39	51	111	63	159	201	298	43	25	9.3	7.3
27	6.8	35	128	101	63	181	196	300	40	22	9.1	7.3
28	6.4	35	196	101	64	254	199	288	39	20	8.5	7.2
29	6.7	37	208	97	-----	220	202	269	38	19	8.7	7.1
30	22	37	208	95	-----	252	220	233	36	19	9.0	7.0
31	35	-----	149	93	-----	233	-----	230	-----	18	8.9	-----
TOTAL	354.7	1,971	2,428	3,770	1,997	6,707	6,979	8,715	3,181	960	424.0	236.0
MEAN	11.4	65.7	78.3	122	71.3	216	233	281	106	31.0	13.7	7.87
MAX	43	452	208	279	91	681	485	378	225	99	19	8.9
MIN	5.4	10	43	68	63	157	191	173	36	18	8.5	7.0
AC-FT	704	3,910	4,820	7,480	3,960	13,300	13,840	17,290	6,310	1,900	841	468

CAL YR 1973 TOTAL 38,875.9 MEAN 107 MAX 614 MIN 3.9 AC-FT 77,110
WTR YR 1974 TOTAL 37,722.7 MEAN 103 MAX 681 MIN 5.4 AC-FT 74,820

PEAK DISCHARGE (BASE, 900 FT³/S).--Mar. 2 (0330) 1,220 ft³/s (5.67 ft).

SAN JOAQUIN RIVER BASIN

11282000 MIDDLE TUOLUMNE RIVER AT OAKLAND RECREATION CAMP, CALIF.

LOCATION.--Lat 37°49'42", long 120°00'38", in SW¼NW¼ sec.28, T.1 S., R.18 E., Tuolumne County, Stanislaus National Forest, on left bank 1,000 ft (305 m) downstream from Oakland Recreation Camp, 0.8 mi (1.3 km) upstream from South Fork Tuolumne River, and 2.7 mi (4.3 km) east of Buck Meadows Post Office.

DRAINAGE AREA.--73.5 mi² (190.4 km²).

PERIOD OF RECORD.--October 1916 to current year. Monthly discharge only for October 1916, published in WSP 1315-A. Published as Middle Fork of Tuolumne River near Buck Meadows 1917-32 and as "near Buck Meadows" 1933-40.

GAGE.--Water-stage recorder. Altitude of gage is 2,800 ft' (853 m), from topographic map.

AVERAGE DISCHARGE.--58 years, 74.8 ft³/s (2.12 m³/s), 54,190 acre-ft/yr (66.8 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 801 ft³/s (22.7 m³/s) Mar. 2 (gage height, 5.57 ft or 1.698 m); minimum daily, 1.5 ft³/s (0.042 m³/s) Sept. 25, 26.

Period of record: Maximum discharge, 4,920 ft³/s (139 m³/s) Dec. 23, 1955 (gage height, 11.75 ft or 3.581 m from flood profile, 11.05 ft or 3.368 m, from floodmarks inside gage well), from rating curve extended above 2,300 ft³/s (65.1 m³/s) on basis of slope-area measurement of maximum flow; no flow Sept. 4-14, 1924, Aug. 12 to Oct. 5, 1931, Sept. 11-17, 1934, Sept. 7-14, 1961.

REMARKS.--Records good. No regulation but small diversion above station for irrigation. See schematic diagram of Tuolumne River basin.

REVISIONS (WATER YEARS).--WSP 1395: 1919(M), 1938(M), 1951(P). WSP 1930: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.7	5.2	143	77	56	214	247	233	370	36	10	4.2
2	1.7	5.5	40	51	50	307	215	273	355	34	9.6	4.0
3	1.7	5.5	37	51	52	128	148	301	310	32	9.3	3.2
4	1.8	5.3	37	58	51	107	129	295	328	31	8.2	2.8
5	1.7	5.2	32	51	48	106	128	318	310	29	11	2.3
6	1.7	5.6	31	48	46	104	123	360	330	28	13	2.0
7	2.3	8.4	30	48	49	106	124	408	310	27	11	2.4
8	4.7	8.6	29	51	51	106	128	450	273	26	8.6	2.3
9	6.2	9.6	29	47	47	98	136	468	245	30	8.1	2.3
10	5.1	21	28	41	47	95	123	460	237	139	7.5	2.5
11	4.3	121	30	41	45	90	120	452	223	80	7.2	2.3
12	3.8	290	30	55	47	100	128	486	207	50	6.7	2.2
13	3.6	85	31	58	41	98	136	460	184	38	6.4	2.2
14	3.4	56	34	52	49	95	147	415	168	33	5.9	2.2
15	3.2	41	30	62	45	98	162	430	147	30	5.8	2.2
16	3.2	37	29	92	46	100	170	398	132	28	5.5	2.1
17	3.1	88	30	134	38	100	178	345	118	26	5.5	2.1
18	3.0	98	31	132	46	95	201	291	106	25	5.3	2.0
19	2.9	46	28	153	51	95	167	257	100	23	5.2	1.9
20	2.8	40	28	140	41	95	150	229	92	22	5.0	1.8
21	3.0	36	38	113	48	96	150	227	84	21	4.8	1.8
22	3.3	31	47	87	44	95	177	243	78	20	4.6	1.8
23	13	28	34	86	41	95	203	277	72	18	4.3	1.7
24	15	30	32	76	41	96	201	303	64	17	4.1	1.6
25	8.3	27	31	72	42	105	170	375	58	17	4.0	1.5
26	6.5	29	32	68	43	100	158	435	52	18	3.7	1.5
27	6.2	26	100	57	41	110	150	475	48	16	3.6	1.6
28	5.5	26	101	65	41	132	155	468	44	15	3.5	1.6
29	5.2	27	115	60	-----	124	158	430	41	13	3.3	1.6
30	5.2	27	128	59	-----	148	180	380	38	13	4.1	1.6
31	5.3	-----	95	56	-----	134	-----	372	-----	12	4.1	-----
TOTAL	138.4	1,268.9	1,490	2,241	1,287	3,572	4,762	11,314	5,124	947	198.9	65.3
MEAN	4.46	42.3	48.1	72.3	46.0	115	159	365	171	30.5	6.42	2.18
MAX	15	290	143	153	56	307	247	486	370	139	13	4.2
MIN	1.7	5.2	28	41	38	90	120	227	38	12	3.3	1.5
AC-FT	275	2,520	2,960	4,450	2,550	7,090	9,450	22,440	10,160	1,880	395	130

CAL YR 1973 TOTAL 33,396.5 MEAN 91.5 MAX 743 MIN 1.7 AC-FT 66,240
WTR YR 1974 TOTAL 32,408.5 MEAN 88.8 MAX 486 MIN 1.5 AC-FT 64,280

PEAK DISCHARGE (BASE, 760 FT³/S).--Mar. 2 (0130) 801 ft³/s (5.57 ft).

11283100 LILY CREEK NEAR PINECREST, CALIF.

LOCATION.--Lat 38°08'41", long 119°53'59" (unsurveyed), in T.3 N., R.19 E., Tuolumne County, Stanislaus National Forest, on left bank 1,500 ft (460 m) downstream from Mud Lake, and 5.7 mi (9.2 km) southeast of Pinecrest.

DRAINAGE AREA.--11.9 mi² (30.8 km²).

PERIOD OF RECORD.--July 1964 to September 1974 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 6,990 ft (2,131 m), from topographic map.

AVERAGE DISCHARGE.--10 years, 45.2 ft³/s (1.280 m³/s), 32,750 acre-ft/yr (40.4 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,010 ft³/s (28.6 m³/s) Nov. 11 (gage height, 8.63 ft or 2.630 m); minimum daily, 0.11 ft³/s (0.003 m³/s) Oct. 1-4, 6.

Period of record: Maximum discharge, 1,700 ft³/s (48.1 m³/s) Dec. 23, 1964 (gage height, 10.77 ft or 3.283 m), from rating curve extended above 420 ft³/s (11.9 m³/s); no flow many days in 1970.

Flood of Feb. 1, 1963, reached a stage of 11.7 ft (3.57 m), from floodmarks (discharge, 2,030 ft³/s or 57.5 m³/s).

REMARKS.--Records good except those for the winter months, which are fair. Small regulation by Y-Meadow Reservoir, capacity, 180 acre-ft (222,000 m³). No diversions above station. See schematic diagram of Tuolumne River basin. Records of water temperatures for the water year 1974 are published in Part 2 of this report.

REVISIONS.--Revised figures of discharge, in cubic feet per second, for the water year 1973, superseding those published in WRD Calif. 1973, are given herewith:

Date	Discharge	Date	Discharge
1973		1973-Con.	
Sept. 12	0.16	Sept. 22	0.14
13	.16	23	.14
14	.16	24	.14
15	.16	25	.13
16	.16	26	.13
17	.16	27	.12
18	.16	28	.12
19	.16	29	.11
20	.15	30	.11
21	.14		

Month	Cfs-days	Maximum	Minimum	Mean	Acre-feet
September 1973	4.63	0.20	0.11	0.15	9.2
WTR YR 1973	15,221.11	410	.06	41.7	30,190

SAN JOAQUIN RIVER BASIN

11283100 LILY CREEK NEAR PINECREST, CALIF.--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.11	.74	17	32	18	15	25	170	200	17	.74	.20
2	.11	.68	16	22	16	23	28	221	177	14	.62	.20
3	.11	.62	16	17	17	25	23	210	186	10	.50	.20
4	.11	.50	17	18	18	19	24	216	189	8.2	1.0	.18
5	.13	.56	16	19	17	20	32	259	197	6.6	1.4	.18
6	.11	.12	17	19	16	23	36	297	215	5.3	5.8	.18
7	.29	.47	20	18	16	20	43	323	173	4.3	3.2	.18
8	.88	.44	21	17	16	18	48	314	137	3.6	2.0	.18
9	.33	.32	23	15	17	18	43	306	138	130	1.4	.18
10	.22	.354	24	14	17	19	35	282	135	162	1.1	.18
11	.18	.751	25	14	17	17	40	282	139	31	.80	.18
12	.16	.453	22	14	15	17	55	282	129	17	.56	.18
13	.15	.84	19	15	14	20	69	227	117	10	.46	.18
14	.14	.56	17	14	14	28	90	259	107	7.3	.42	.18
15	.14	.42	16	30	13	40	97	235	93	5.6	.39	.18
16	.13	.35	17	60	14	49	106	187	92	4.5	.36	.16
17	.13	.31	17	126	13	44	122	123	69	3.5	.36	.16
18	.13	.36	17	129	13	33	110	75	58	2.8	.33	.15
19	.13	.31	16	124	14	34	64	56	49	2.5	.33	.15
20	.15	.28	15	58	13	44	63	46	46	1.9	.33	.14
21	.15	.25	14	36	12	50	96	69	56	1.6	.30	.14
22	.38	.22	18	29	12	48	148	146	56	1.4	.28	.14
23	4.8	.20	16	26	12	50	124	189	49	1.2	.28	.14
24	2.7	.20	15	25	13	61	64	222	40	1.1	.26	.14
25	1.9	.18	15	27	16	59	52	264	34	1.5	.26	.14
26	1.3	.18	14	21	16	40	39	300	29	4.3	.24	.14
27	1.2	.17	16	18	14	37	35	302	24	2.8	.24	.14
28	1.1	.22	23	18	12	34	49	277	23	1.9	.24	.15
29	1.1	.23	161	19	-----	41	72	229	22	1.4	.24	.14
30	.80	.20	93	20	-----	46	118	238	21	1.1	.22	.14
31	.80	-----	47	20	-----	35	-----	237	-----	.88	.22	-----
TOTAL	20.07	2,244.10	800	1,034	415	1,027	1,950	6,843	3,000	466.28	37.48	4.93
MEAN	.65	74.8	25.8	33.4	14.8	33.1	65.0	221	100	15.0	1.21	.16
MAX	4.8	751	161	129	18	61	148	323	215	162	14	.20
MIN	.11	.50	14	14	12	15	23	46	21	.88	.22	.14
AC-FT	40	4,450	1,590	2,050	823	2,040	3,870	13,570	5,950	925	74	9.8
CAL YR 1973	TOTAL	17,541.43	MEAN	48.1	MAX	751	MIN	.11	AC-FT	34,790		
WTR YR 1974	TOTAL	17,841.86	MEAN	48.9	MAX	751	MIN	.11	AC-FT	35,390		

PEAK DISCHARGE (BASE, 160 FT ³ /S)							
DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-11	1400	8.63	1,010	5-7	2030	6.43	486
12-29	1700	5.16	253	5-26	2100	6.39	478
1-18	2200	5.09	241	7-9	2300	6.52	504
4-22	2200	4.96	221				

SAN JOAQUIN RIVER BASIN

197

11283200 BELL CREEK NEAR PINECREST, CALIF.

LOCATION.--Lat 38°09'46", long 119°56'32", in NE¼NE¼ sec.36, T.4 N., R.18 E., Tuolumne County, on right bank 1,400 ft (426 m) downstream from Bell Meadows, and 3 mi (5 km) southeast of Pinecrest.

DRAINAGE AREA.--9.11 m² (23.59 km²)..

PERIOD OF RECORD.--September 1963 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,450 ft (1,966 m), from topographic map.

AVERAGE DISCHARGE.--11 years, 27.6 ft³/s (0.782 m³/s), 20,000 acre-ft/yr (24.7 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 373 ft³/s (10.6 m³/s) Nov. 12 (gage height, 5.56 ft or 1.695 m); minimum daily, 0.09 ft³/s (0.003 m³/s) Oct. 1, Sept. 19-23.
Period of record: Maximum discharge, 934 ft³/s (26.5 m³/s) Dec. 23, 1964 (gage height, 7.54 ft or 2.298 m), from rating curve extended above 160 ft³/s (4.53 m³/s) on basis of slope-area measurement at gage height 8.79 ft (2.679 m); no flow at times in most years.
Flood of Feb. 1, 1963, reached a stage of 8.79 ft (2.679 m), from floodmarks (discharge, 1,410 ft³/s or 39.9 m³/s), from slope-area measurement of maximum flow.

REMARKS.--Records good except those for winter months, which are fair. No storage or diversion above station. See schematic diagram of Tuolumne River basin.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NCV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.09	1.7	11	30	19	19	28	120	108	11	1.8	.19
2	.10	1.4	10	21	17	28	32	135	95	9.7	1.8	.18
3	.10	1.1	10	16	18	29	27	128	98	8.4	1.6	.17
4	.11	.91	11	16	18	23	28	134	97	7.5	8.7	.16
5	.11	.96	10	17	17	23	33	153	102	6.7	7.4	.15
6	.12	5.4	10	17	17	23	36	171	108	6.0	3.0	.15
7	.36	22	11	17	17	21	40	189	93	5.4	2.0	.14
8	.55	11	12	18	16	20	41	185	80	5.0	1.6	.13
9	.34	8.4	13	15	17	20	38	181	79	96	1.4	.13
10	.30	69	14	13	17	20	33	171	75	118	1.2	.12
11	.32	194	14	12	16	19	39	171	80	22	1.1	.14
12	.28	157	12	12	16	19	54	167	77	11	.93	.14
13	.26	36	12	13	15	21	61	144	71	8.0	.84	.14
14	.23	25	11	12	14	29	71	143	65	6.8	.76	.15
15	.21	20	11	24	14	37	80	140	59	6.0	.70	.14
16	.20	18	11	38	13	39	80	119	56	5.3	.57	.12
17	.19	22	13	66	13	36	89	94	46	4.8	.52	.11
18	.21	24	13	78	13	31	83	72	40	4.3	.48	.10
19	.22	18	12	79	12	32	55	58	34	3.9	.41	.09
20	.29	16	11	49	10	37	54	51	33	3.7	.39	.09
21	.28	15	9.7	37	10	41	72	57	35	3.4	.36	.09
22	.60	13	11	33	11	41	94	74	35	3.0	.30	.09
23	3.3	13	11	28	10	42	87	92	30	2.8	.27	.09
24	2.8	11	10	27	10	47	60	115	25	2.9	.25	.10
25	3.1	12	10	27	10	45	52	138	21	4.1	.24	.11
26	2.7	11	9.9	22	11	38	44	159	18	3.8	.22	.11
27	2.7	11	10	19	11	36	42	164	15	2.7	.21	.12
28	2.7	13	19	19	11	35	48	152	14	2.4	.20	.13
29	2.0	13	103	20	-----	45	60	130	14	2.2	.22	.12
30	1.5	12	61	21	-----	45	87	117	13	2.1	.21	.13
31	2.0	-----	40	20	-----	34	-----	116	-----	2.0	.20	-----
TOTAL	28.27	776.37	526.6	836	393	975	1,648	4,040	1,720	380.9	39.88	3.83
MEAN	.91	25.9	17.0	27.0	14.0	31.5	54.9	130	57.3	12.3	1.29	.13
MAX	3.3	194	103	79	19	47	94	189	108	118	8.7	.19
MIN	.09	.91	9.7	12	10	19	27	51	13	2.0	.20	.09
AC-FT	56	1,540	1,040	1,660	780	1,930	3,270	8,010	3,410	756	79	7.6
CAL YR 1973	TOTAL	10,769.93	MEAN	29.5	MAX	223	MIN	.04	AC-FT	21,360		
WTR YR 1974	TOTAL	11,367.85	MEAN	31.1	MAX	194	MIN	.09	AC-FT	22,550		

PEAK DISCHARGE (BASE, 125 FT³/S)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-12	0330	5.56	373	5-7	1915	5.11	280
12-29	1600	4.55	182	5-26	1900	4.85	232
4-23	0015	4.20	130	7-10	unknown	5.12	282

11283500 CLAVEY RIVER NEAR BUCK MEADOWS, CALIF.

LOCATION.--Lat 37°54'02", long 120°04'15", in SE¼NE¼ sec.35, T.1 N., R.17 E., Tuolumne County, Stanislaus National Forest, on right bank 300 ft (91 m) upstream from Forest Service road bridge, 1.7 mi (2.7 km) downstream from Quilty Creek, and 6 mi (10 km) north of Buck Meadows Post Office.

DRAINAGE AREA.--144 mi² (373 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 2,374.08 ft (723.620 m) above mean sea level.

AVERAGE DISCHARGE.--15 years, 253 ft³/s (7.165 m³/s), 183,300 acre-ft/yr (226 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 3,870 ft³/s (110 m³/s) Nov. 12 (gage height, 12.85 ft or 3.917 m); minimum daily, 11 ft³/s (0.312 m³/s) Sept. 20-30.

Period of record: Maximum discharge, 19,200 ft³/s (544 m³/s) Feb. 1, 1963 (gage height, 21.40 ft or 6.523 m), from rating curve extended above 2,000 ft³/s (56.6 m³/s) on basis of slope-area measurement of maximum flow; minimum, 3.4 ft³/s (0.096 m³/s) Sept. 7, 8, 1961.

REMARKS.--Records good except those for period of no gage-height record, which are fair. No storage or diversion above station. See schematic diagram of Tuolumne River basin.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	22	358	441	293	500	1,670	956	603	91	33	17
2	12	23	219	329	266	1,270	1,410	1,090	547	85	32	16
3	12	22	198	313	263	820	1,120	1,090	514	78	31	16
4	12	22	178	295	255	750	925	1,020	537	73	30	16
5	12	22	158	269	247	710	790	1,130	500	68	41	15
6	12	35	147	238	228	670	700	1,250	542	63	49	15
7	16	52	145	253	229	630	675	1,340	509	60	40	14
8	35	111	145	242	221	600	682	1,330	428	58	35	14
9	26	70	147	219	216	550	665	1,260	385	93	32	14
10	21	322	150	197	217	510	600	1,180	384	473	30	14
11	19	1,510	160	197	210	485	582	1,130	369	160	29	14
12	20	1,820	148	237	211	510	585	1,110	364	107	27	13
13	18	423	167	257	196	515	598	998	334	86	26	13
14	17	292	158	241	201	522	618	865	311	74	25	13
15	16	206	144	278	186	555	658	904	283	66	25	13
16	16	182	141	520	193	620	712	801	261	60	24	13
17	15	536	163	1,330	174	565	790	679	244	56	24	12
18	15	670	174	1,080	188	532	990	550	200	52	24	12
19	15	313	155	1,170	180	523	720	484	185	49	22	12
20	15	241	147	835	168	520	631	431	166	46	22	11
21	16	199	161	651	170	505	681	430	170	44	22	11
22	18	166	183	559	177	485	815	522	172	42	21	11
23	101	142	173	502	170	460	872	604	164	40	20	11
24	59	145	153	453	170	455	707	662	146	39	20	11
25	36	127	153	426	172	523	615	758	129	39	19	11
26	33	127	153	396	179	495	572	828	121	39	19	11
27	28	118	368	360	172	584	551	870	109	39	18	11
28	26	119	507	345	190	780	591	822	104	38	18	11
29	25	130	943	327	-----	810	648	722	100	36	18	11
30	24	130	867	314	-----	1,030	763	633	96	37	17	11
31	23	-----	553	303	-----	950	-----	614	-----	35	17	-----
TOTAL	726	8,297	7,616	13,577	5,742	19,434	22,936	27,063	8,977	2,326	810	387
MEAN	23.4	277	246	438	205	627	765	873	299	75.0	26.1	12.9
MAX	101	1,820	943	1,330	293	1,270	1,670	1,340	603	473	49	17
MIN	12	22	141	197	168	455	551	430	96	35	17	11
AC-FT	1,440	16,460	15,110	26,930	11,390	38,550	45,490	53,680	17,810	4,610	1,610	768

CAL YR 1973 TOTAL 115,897 MEAN 318 MAX 1,820 MIN 12 AC-FT 229,900
WTR YR 1974 TOTAL 117,891 MEAN 323 MAX 1,820 MIN 11 AC-FT 233,800

DATE	TIME	G.H.	DISCHARGE (BASE, 1,400 FT ³ /S)	DATE	TIME	G.H.	DISCHARGE
11-12	0715	12.85	3,870	3-2	unknown	--	unknown
11-17	2230	9.27	1,510	4-1	unknown	11.42	2,630
12-29	1845	9.12	1,450	5-8	0030	9.95	1,820
1-17	1045	9.55	1,640				

NOTE.--No gage-height record Feb. 19 to Apr. 19.

11284400 BIG CREEK ABOVE WHITES GULCH, NEAR GROVELAND, CALIF.

LOCATION.--Lat 37°50'31", long 120°11'02", in SW¼NE¼ sec.23, T.1 S., R.16 E., Tuolumne County, on right bank 500 ft (152 m) upstream from Whites Gulch, and 2.5 mi (4.0 km) east of Groveland.

DRAINAGE AREA.--16.4 mi² (42.5 km²).

PERIOD OF RECORD.--May 1969 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,561.79 ft (780.834 m) above mean sea level (levels by Boise-Cascade Corp.).

AVERAGE DISCHARGE.--5 years, 6.65 ft³/s (0.188 m³/s), 4,820 acre-ft/yr (5.94 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 595 ft³/s (16.9 m³/s) Apr. 1 (gage height, 4.83 ft or 1.472 m); no flow for many days.

Period of record: Maximum discharge, 1,230 ft³/s (34.8 m³/s) Jan. 16, 1970 (gage height, 5.80 ft or 1.768 m); no flow many days in each year.

Flood of December 1964 reached a stage of 6.4 ft (1.95 m), from floodmarks (discharge not determined).

REMARKS.--Records fair. No storage or diversion above station. See schematic diagram of Tuolumne River basin.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	.03	68	16	5.5	66	216	6.6	2.0	.36	.08	
2	0	.03	20	11	5.0	163	165	6.0	2.0	.34	.07	
3	0	.03	7.8	8.2	4.4	74	55	5.6	1.9	.31	.07	
4	0	.03	4.9	8.4	4.1	49	33	5.5	1.8	.26	.07	
5	0	.05	3.7	9.1	4.0	36	24	5.3	1.6	.23	.06	
6	0	.12	2.9	11	3.7	27	19	5.1	1.5	.20	.06	
7	0	.11	2.4	17	3.6	30	16	4.8	1.4	.19	.06	
8	0	.08	2.0	18	3.6	46	15	4.6	1.3	.20	.05	
9	0	.07	1.8	15	3.5	35	19	4.4	1.3	1.1	.04	
10	0	.12	1.8	14	3.8	26	17	4.1	1.2	1.6	.04	
11	0	.81	2.8	12	3.6	21	13	3.8	1.1	.92	.04	
12	0	7.7	2.7	30	3.8	18	12	3.7	1.0	.73	.02	
13	0	.98	4.1	30	4.6	15	11	3.6	.99	.62	.02	
14	0	3.5	4.0	21	4.4	13	9.6	3.6	.95	.48	.01	
15	0	1.3	2.7	20	3.9	12	8.4	3.5	.94	.39	.01	
16	0	1.4	2.3	26	4.0	11	7.7	3.5	.95	.33	0	
17	0	15	2.8	52	3.7	9.2	7.5	3.4	.96	.29	0	
18	0	21	2.8	37	3.5	8.4	7.7	3.4	.96	.23	0	
19	0	5.2	2.3	28	8.4	7.6	7.6	3.3	.97	.20	0	
20	0	2.7	2.0	25	7.2	6.9	6.9	3.2	.95	.18	0	
21	0	1.9	6.7	20	4.9	6.1	6.2	3.0	.89	.16	0	
22	0	1.3	35	15	4.9	5.9	6.1	2.9	.81	.14	0	
23	.05	.98	12	13	4.1	5.6	6.7	2.8	.72	.13	0	
24	.03	1.1	7.3	11	3.8	5.4	29	2.7	.64	.12	0	
25	0	1.1	5.4	9.5	3.6	5.3	19	2.6	.60	.12	0	
26	0	1.5	5.1	8.0	3.4	5.3	13	2.5	.58	.11	0	
27	0	.98	76	7.0	3.6	7.6	11	2.4	.54	.11	0	
28	0	.86	57	6.3	3.5	23	8.9	2.3	.50	.10	0	
29	0	.81	30	5.8	-----	15	7.8	2.1	.47	.10	0	
30	.02	.86	21	5.5	-----	24	7.0	2.1	.41	.09	0	
31	.03	-----	14	5.1	-----	20	-----	2.1	-----	.08	0	-----
TOTAL	.13	71.65	413.3	514.9	120.1	797.3	785.1	114.5	31.93	10.42	.70	0
MEAN	.004	2.39	13.3	16.6	4.29	25.7	26.2	3.69	1.06	.34	.023	0
MAX	.05	21	76	52	8.4	163	216	6.6	2.0	1.6	.08	0
MIN	0	.03	1.8	5.1	3.4	5.3	6.1	2.1	.41	.08	0	0
AC-FT	.3	142	820	1,020	238	1,580	1,560	227	63	21	1.4	0

CAL YR 1973 TOTAL 4,264.91 MEAN 11.7 MAX 468 MIN 0 AC-FT 8,460
WTR YR 1974 TOTAL 2,860.03 MEAN 7.84 MAX 216 MIN 0 AC-FT 5,670

PEAK DISCHARGE (BASE, 150 FT³/S).--Mar. 2 (0445) 295 ft³/s (4.10 ft); Apr. 1 (2100) 595 ft³/s (4.83 ft).

SAN JOAQUIN RIVER BASIN

11284500 BIG CREEK NEAR GROVELAND, CALIF.

LOCATION.--Lat 37°51'30", long 120°12'19", in NE¼NW¼ sec.15, T.1 S., R.16 E., Tuolumne County, on right bank 0.4 mi (0.6 km) downstream from Pine Mountain Dam, and 1.9 mi (3.1 km) northeast of Groveland.

DRAINAGE AREA.--25.0 mi² (64.8 km²).

PERIOD OF RECORD.--October 1931 to September 1933, July 1959 to September 1974 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 2,425 ft (739 m), from topographic map. Prior to Oct. 1, 1969, at site 1,700 ft (520 m) upstream at different datum.

AVERAGE DISCHARGE (adjusted for change in contents in Pine Mountain Lake).--17 years, 11.8 ft³/s (0.334 m³/s), 8,550 acre-ft/yr (10.5 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 840 ft³/s (23.8 m³/s) Apr. 1 (gage height, 4.06 ft or 1.237 m), from rating curve extended as explained below; minimum daily, 0.70 ft³/s (0.020 m³/s) many days in October, November, and September.

Period of record: Maximum discharge, 4,530 ft³/s (128 m³/s) Feb. 1, 1963 (gage height, 7.71 ft or 2.350 m, site and datum then in use), from rating curve extended above 1,500 ft³/s (42.5 m³/s) on basis of slope-area measurement of maximum flow; no flow for several months in most years. Maximum discharge since construction of Pine Mountain Dam in 1969, 1,100 ft³/s (31.2 m³/s) Feb. 11, 1973 (gage height, 4.56 ft or 1.390 m), from rating curve extended above 340 ft³/s (9.63 m³/s) on basis of slope-area measurement of maximum flow; minimum daily, 0.01 ft³/s (0.0003 m³/s) many days in 1970-71.

Flood of December 1955 reached a stage of 7.6 ft (2.32 m), from floodmarks, at site 1,700 ft (518 m) upstream at different datum (discharge, 4,300 ft³/s or 122 m³/s).

REMARKS.--Records fair. Flow regulated by Pine Mountain Lake beginning Oct. 15, 1969, capacity, 7,700 acre-ft (9.49 hm³). Some diversion for irrigation of golf course. See schematic diagram of Tuolumne River basin.

REVISIONS.--WSP 1930: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.72	.70	3.7	26	12	156	282	12	1.1	.75	.77	.76
2	.71	.70	.97	20	11	390	301	10	1.0	.75	.77	.76
3	.76	.70	.97	17	9.4	143	87	9.7	.93	.75	.77	.76
4	.76	.70	.88	13	8.5	84	52	9.4	.91	.75	.79	.76
5	.76	.72	.88	20	8.4	60	38	9.4	.88	.75	.77	.76
6	.76	.74	.88	28	7.3	45	29	9.6	.87	.75	.77	.76
7	.93	.70	.88	35	6.7	48	25	9.2	.87	.75	.77	.76
8	.87	.70	.88	34	7.4	76	22	8.1	.88	.77	.77	.76
9	.79	.71	.88	26	6.2	56	32	6.8	.87	1.3	.77	40
10	.79	.75	.88	22	6.6	42	27	6.6	.87	.81	.77	72
11	.79	.93	.97	20	7.0	35	20	6.5	.86	.79	.77	.74
12	.79	1.8	.88	39	7.3	30	18	6.4	.85	.79	.77	.70
13	.79	.91	1.1	44	9.4	24	16	5.4	.85	.77	.77	.70
14	.78	.79	.88	32	8.3	21	15	4.5	.85	.76	.77	.70
15	94	126	.88	28	7.7	19	14	4.0	.86	.76	.76	.70
16	.70	.81	.88	35	8.4	18	13	3.7	.86	.76	.77	.70
17	.70	3.0	.97	66	8.2	16	13	3.5	.85	.76	.76	.70
18	.70	1.4	.88	55	6.9	16	13	3.7	.86	.76	.76	.70
19	.70	.97	.88	43	17	14	13	3.6	.87	.76	.75	.70
20	.70	.88	.88	35	16	13	13	3.6	.85	.76	.76	.70
21	.70	.88	1.5	30	12	12	11	3.3	.85	.76	.76	.70
22	.77	.88	1.2	23	12	12	11	3.4	.84	.76	.76	.70
23	1.3	.88	.97	20	9.7	11	14	3.4	.84	.76	.76	.70
24	.70	.88	.97	18	8.5	11	56	3.3	.84	.77	.75	.71
25	.70	.88	.97	16	8.0	12	34	3.9	.84	.76	.76	.70
26	.70	.88	1.4	14	7.6	12	20	4.0	.84	.76	.76	.73
27	.70	.88	2.2	13	8.2	16	16	3.0	.75	.76	.75	.74
28	.70	.88	2.8	12	17	40	15	1.9	.75	.76	.74	.75
29	.70	.88	38	11	-----	26	14	1.4	.75	.77	.75	.74
30	.70	1.1	35	11	-----	33	13	1.3	.75	.77	.76	.74
31	.70	-----	25	10	-----	30	-----	1.1	-----	.78	.76	-----
TOTAL	116.87	233.82	131.01	816	262.7	1,521	1,247	165.7	25.79	24.21	23.67	132.33
MEAN	3.77	7.79	4.23	26.3	9.38	49.1	41.6	5.35	.86	.78	.76	4.41
MAX	94	126	38	66	17	390	301	12	1.1	1.3	.79	72
MIN	.70	.70	.88	10	6.2	11	11	1.1	.75	.75	.74	.70
AC-FT	232	464	260	1,620	521	3,020	2,470	329	51	48	47	262
(a)	6,550	6,500	7,840	7,840	7,820	7,840	7,840	7,800	7,630	7,450	7,160	6,710

CAL YR 1973 TOTAL 6,314.95 MEAN 17.3 MAX 786 MIN .70 AC-FT 12,530 MEAN b 18.7 AC-FT b 13,570
WTR YR 1974 TOTAL 4,700.10 MEAN 12.9 MAX 390 MIN .70 AC-FT 9,320 MEAN b 12.7 AC-FT b 9,190

a Contents, in acre-feet, at end of month in Pine Mountain Lake.

b Adjusted for change in contents in Pine Mountain Lake.

11284700 NORTH FORK TUOLUMNE RIVER NEAR LONG BARN, CALIF.

LOCATION.--Lat 38°05'56", long 120°05'55", in NW¼SW¼ sec.22, T.3 N., R.17 E., Tuolumne County, Stanislaus National Forest, on right bank 0.6 mi (1.0 km) upstream from small tributary, 1.5 mi (2.4 km) east of Long Barn, and 3.8 mi (6.1 km) upstream from Wrights Creek.

DRAINAGE AREA.--23.1 mi² (59.8 km²).

PERIOD OF RECORD.--August 1962 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 4,650 ft (1,417 m), from topographic map.

AVERAGE DISCHARGE.--12 years, 28.5 ft³/s (0.807 m³/s), 20,650 acre-ft/yr (25.5 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 346 ft³/s (9.80 m³/s) July 9 (gage height, 4.67 ft or 1.423 m); minimum daily, 0.71 ft³/s (0.020 m³/s) Oct. 1.
Period of record: Maximum discharge, 1,670 ft³/s (47.3 m³/s) Jan. 21, 1969 (gage height, 7.61 ft or 2.320 m), from rating curve extended above 650 ft³/s (18.4 m³/s) on basis of slope-area measurement at gage height 9.8 ft (2.99 m); minimum daily, 0.2 ft³/s (0.006 m³/s) Sept. 18-25, 1962.
Flood of Dec. 23, 1955, reached a stage of 9.8 ft (2.99 m), from floodmarks (discharge, 2,560 ft³/s or 72.5 m³/s, by slope-area measurement).

REMARKS.--Records good except those for the period of no gage-height record, which are fair. No storage or diversion above station. See schematic diagram of Tuolumne River basin.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NCV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.71	2.0	48	54	33	80	208	80	25	5.3	2.7	1.2
2	.75	2.0	30	46	31	179	212	87	23	5.1	2.6	1.1
3	.75	1.9	22	41	29	103	150	91	22	5.0	2.2	1.1
4	.81	1.8	20	37	27	80	126	90	21	4.8	2.3	1.1
5	.85	2.5	18	33	26	75	111	93	19	4.6	3.3	1.1
6	.81	5.8	16	30	26	71	98	97	18	4.5	2.7	1.1
7	2.0	4.6	16	33	25	69	89	103	17	4.3	2.3	1.1
8	4.6	3.6	16	27	23	66	84	105	16	4.2	2.0	1.0
9	2.8	3.6	16	25	22	64	85	100	15	60	2.0	1.0
10	2.0	7.4	15	22	21	61	78	91	14	50	2.0	1.0
11	1.6	32	16	21	20	60	74	85	13	8.9	1.6	1.0
12	1.5	78	15	25	20	72	73	80	12	7.1	1.5	1.0
13	1.4	22	20	27	20	72	72	74	11	6.4	1.5	1.0
14	1.4	16	18	26	19	72	73	67	10	5.9	1.5	1.6
15	1.2	12	16	32	19	76	75	62	9.6	5.5	1.5	1.5
16	1.2	14	15	55	19	78	76	56	9.0	5.2	1.6	1.2
17	1.2	70	18	100	17	77	77	49	8.5	4.8	1.5	1.1
18	1.2	64	17	147	18	74	82	44	8.0	4.8	1.4	1.0
19	1.2	29	16	139	21	71	75	40	7.6	4.6	1.4	.98
20	1.2	22	14	117	20	69	69	36	7.1	4.3	1.4	.97
21	1.2	18	22	85	19	67	66	35	7.2	4.1	1.4	.90
22	2.2	15	23	70	19	65	68	34	7.3	3.8	1.3	.94
23	13	13	18	62	19	63	72	33	7.0	3.7	1.3	.94
24	5.1	13	17	56	18	62	76	34	6.7	3.7	1.3	.93
25	3.6	11	17	51	18	63	67	34	6.5	3.9	1.2	.93
26	3.1	11	19	47	19	66	65	35	6.3	3.7	1.2	.86
27	2.7	10	71	43	18	80	66	35	6.1	3.4	1.2	.93
28	2.4	10	91	40	19	114	68	34	5.8	3.3	1.2	.97
29	2.2	10	142	38	-----	116	69	32	5.7	3.2	1.2	.97
30	2.0	11	99	36	-----	151	73	29	5.5	3.2	1.2	.93
31	1.9	-----	67	34	-----	129	-----	27	-----	3.0	1.2	-----
TOTAL	68.58	516.2	968	1,599	605	2,545	2,677	1,892	349.9	244.3	52.7	31.45
MEAN	2.21	17.2	31.2	51.6	21.6	82.1	89.2	61.0	11.7	7.88	1.70	1.05
MAX	13	78	142	147	33	179	212	105	25	60	3.3	1.6
MIN	.71	1.8	14	21	17	60	65	27	5.5	3.0	1.2	.86
AC-FT	136	1,020	1,920	3,170	1,200	5,050	5,310	3,750	694	485	105	62
CAL YR 1973	TOTAL 11,318.02	MEAN 31.0	MAX 153	MIN .60	AC-FT 22,450							
WTR YR 1974	TOTAL 11,549.13	MEAN 31.6	MAX 212	MIN .71	AC-FT 22,910							

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-12	0700	3.94	151	3-1	2400	4.48	290
11-17	1945	4.05	176	4-1	2100	4.65	340
12-29	1315	4.14	197	7-9	unknown	4.67	346
1-18	1815	3.99	162				

NOTE.--No gage-height record June 14 to July 10.

SAN JOAQUIN RIVER BASIN

11287500 DON PEDRO RESERVOIR NEAR LA GRANGE, CALIF.

LOCATION.--Lat 37°42'06", long 120°25'16", in NE¼SW¼ sec.3, T.3 S., R.14 E., Tuolumne County, at New Don Pedro Dam on Tuolumne River, 500 ft (152 m) downstream from Mexican Gulch, and 3.4 mi (5.5 km) northeast of La Grange.

DRAINAGE AREA.--1,533 mi² (3,970 km²).

PERIOD OF RECORD.--September 1923 to current year. 1923-24 (year-end contents only) and October 1924 to September 1930 monthend contents, published in WSP 1315-A.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Turlock Irrigation District). Prior to Feb. 1, 1941, nonrecording gage at site 1.5 mi (2.4 km) upstream at same datum. Feb. 2, 1941, to Nov. 3, 1970, water-stage recorder at site 1.5 mi (2.4 km) upstream at same datum. Nov. 4, 1970, to Apr. 26, 1972, nonrecording gage at same site and datum.

EXTREMES.--Current year: Maximum contents, 1,795,000 acre-ft (2.21 km³) June 26, 27 (elevation, 811.0 ft or 247.19 m); minimum, 897,600 acre-ft (1.11 km³) Oct. 18, 19 (elevation, 714.0 ft or 217.63 m).
Period of record: Maximum contents, 1,795,000 acre-ft (2.21 km³) June 26, 27, 1974 (elevation, 811.0 ft or 247.19 m); minimum, 29,200 acre-ft (36.0 hm³) Sept. 1-3, 5, 1934; minimum elevation, 475.0 ft (144.78 m) Sept. 1, 2, 1934. Minimum since construction of New Don Pedro Dam in 1970 under normal operations, 340,400 acre-ft (420 hm³) Oct. 28, 29, 1971 (elevation, 608.7 ft or 185.53 m).

REMARKS.--Reservoir is formed by earthfill dam completed June 23, 1971; storage began Nov. 3, 1970. Total capacity, 2,030,000 acre-ft (2.50 km³) at elevation 830.0 ft (252.98 m), top of uncontrolled spillway, of which 309,000 acre-ft (381 hm³) below elevation 600.0 ft (182.88 m), mutually agreed-upon minimum, is not available for release. Water passes through powerplant at dam and down Tuolumne River to La Grange Dam, 2.5 mi (4.0 km) downstream, where it is diverted into Turlock and Modesto Canals for irrigation. This reservoir is operated jointly by Turlock and Modesto Irrigation Districts. Prior to June 1971 reservoir was formed by a concrete gravity-type dam completed Jan. 1, 1923, capacity, 290,400 acre-ft (358 hm³). Records, including extremes, represent total contents at 2400 hours. See schematic diagram of Tuolumne River basin.

REVISIONS.--WSP 1930: Drainage area.

CAPACITY TABLE (ELEVATION, IN FEET, AND CONTENTS, IN ACRE-FEET)

550	158,700	650	517,400	770	1,359,000
570	212,900	680	679,000	800	1,669,000
590	274,800	710	869,700	830	2,030,000
620	384,100	740	1,095,000		

CONTENTS, IN THOUSANDS OF ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	911.8	906.1	983.7	1,084	1,173	1,235	1,369	1,474	1,624	1,793	1,707	1,584
2	910.3	906.8	987.5	1,085	1,175	1,241	1,383	1,477	1,632	1,793	1,703	1,578
3	907.5	908.2	989.8	1,086	1,178	1,260	1,388	1,480	1,639	1,792	1,698	1,573
4	904.6	909.6	992.0	1,087	1,180	1,264	1,392	1,483	1,646	1,790	1,694	1,569
5	902.5	909.6	994.3	1,088	1,181	1,267	1,396	1,486	1,651	1,789	1,689	1,565
6	901.1	911.0	995.8	1,095	1,182	1,271	1,400	1,490	1,658	1,788	1,685	1,560
7	902.5	911.8	997.4	1,097	1,184	1,275	1,405	1,493	1,666	1,786	1,680	1,556
8	903.2	913.2	999.6	1,099	1,185	1,279	1,407	1,495	1,673	1,783	1,676	1,553
9	902.5	914.6	1,001	1,101	1,189	1,284	1,411	1,499	1,684	1,782	1,671	1,549
10	901.8	917.5	1,002	1,101	1,192	1,288	1,413	1,502	1,690	1,783	1,668	1,546
11	901.1	921.1	1,003	1,103	1,194	1,290	1,416	1,506	1,699	1,787	1,662	1,541
12	900.4	929.7	1,005	1,106	1,196	1,294	1,419	1,511	1,715	1,788	1,659	1,538
13	900.4	933.4	1,007	1,110	1,197	1,296	1,422	1,516	1,731	1,786	1,655	1,535
14	901.1	936.3	1,010	1,112	1,198	1,300	1,427	1,519	1,744	1,782	1,651	1,531
15	900.4	938.4	1,012	1,114	1,201	1,303	1,429	1,525	1,754	1,779	1,648	1,527
16	899.0	940.7	1,014	1,117	1,203	1,307	1,431	1,529	1,762	1,775	1,643	1,523
17	898.3	945.1	1,016	1,124	1,207	1,310	1,433	1,534	1,769	1,773	1,638	1,518
18	897.6	951.7	1,018	1,130	1,210	1,312	1,435	1,538	1,774	1,768	1,634	1,514
19	897.6	953.9	1,020	1,138	1,212	1,315	1,438	1,543	1,779	1,765	1,629	1,509
20	898.3	955.4	1,021	1,144	1,214	1,317	1,441	1,548	1,781	1,760	1,626	1,505
21	899.7	958.3	1,025	1,149	1,216	1,319	1,446	1,551	1,783	1,755	1,622	1,500
22	901.1	960.6	1,030	1,152	1,217	1,321	1,448	1,554	1,786	1,751	1,618	1,496
23	901.8	962.8	1,033	1,155	1,219	1,323	1,451	1,558	1,787	1,746	1,614	1,491
24	901.8	965.8	1,035	1,156	1,223	1,327	1,454	1,562	1,788	1,742	1,611	1,486
25	902.5	967.2	1,038	1,159	1,224	1,328	1,457	1,568	1,793	1,737	1,606	1,482
26	902.5	968.7	1,041	1,162	1,225	1,330	1,460	1,577	1,795	1,732	1,603	1,478
27	903.2	971.0	1,051	1,166	1,227	1,332	1,463	1,587	1,795	1,728	1,600	1,474
28	904.6	973.2	1,059	1,167	1,229	1,336	1,467	1,594	1,793	1,724	1,592	1,470
29	904.6	974.7	1,067	1,170	-----	1,340	1,469	1,601	1,793	1,720	1,594	1,465
30	904.6	977.0	1,074	1,171	-----	1,347	1,471	1,609	1,793	1,715	1,591	1,460
31	904.6	-----	1,080	1,172	-----	1,353	-----	1,616	-----	1,712	1,588	-----
MAX	911.8	977.0	1,080	1,172	1,229	1,353	1,471	1,616	1,795	1,793	1,707	1,584
MIN	897.6	906.1	983.7	1,084	1,173	1,235	1,369	1,474	1,624	1,712	1,588	1,460
(a)	715.0	724.9	738.1	749.2	755.8	769.4	781.4	795.2	810.8	803.8	792.6	780.3
(b)	-8,600	+72,400	+103,000	+92,000	+57,000	+124,000	+118,000	+145,000	+177,000	-81,000	-124,000	-128,000

CAL YR 1973 b +668,500

WTR YR 1974 b +546,800

a Elevation, in feet, at end of month.
b Change in contents, in acre-feet.

11289000 MODESTO CANAL NEAR LA GRANGE, CALIF.

LOCATION.--Lat 37°40'04", long 120°27'26", in SE&SW¼ sec.17, T.3 S., R.14 E., Stanislaus County, on right bank 0.5 mi (0.8 km) northeast of La Grange, and 1.4 mi (2.2 km) downstream from intake at La Grange Dam.

PERIOD OF RECORD.--April 1903 to current year. Monthly discharge only for some periods, published in WSP 1315-A.

GAGE.--Water-stage recorder. V-notch sharp-crested weir since Mar. 19, 1963. Datum of gage is 272.4 ft (83.03 m) above mean sea level (levels by Modesto Irrigation District). Prior to July 1904, nonrecording gage at approximate present site at different datum. July 1904 to March 1920, nonrecording gage in concrete well 0.9 mi (1.4 km) upstream and 460 ft (140 m) below intake, set by water-surface elevation to read same as previous gage. March 1920 to February 1924, nonrecording gage and February 1924 to March 1932, water-stage recorder, 0.9 mi (1.4 km) upstream and 500 ft (152 m) below intake at different datum.

AVERAGE DISCHARGE.--71 years, 403 ft³/s (11.41 m³/s), 292,000 acre-ft/yr (360 hm³/yr).

EXTREMES.--Period of record: Maximum daily discharge, 1,820 ft³/s (51.5 m³/s) July 1, 1935; no flow at times most years.

REMARKS.--Records excellent. Canal diverts from right bank of Tuolumne River at La Grange Dam for irrigation in Modesto and Waterford Irrigation Districts. See schematic diagram of Tuolumne River basin.

REVISIONS (WATER YEARS).--WSP 1315-A: 1904-9 (monthly figures only).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	637	0	165		0	5.5	915	576	668	1,070	1,050	652
2	488	0	21		0	4.8	822	625	458	1,010	1,130	803
3	257	16	59		0	13	869	808	947	1,090	955	1,210
4	599	24	22		0	152	723	820	922	832	831	973
5	582	565	21		0	102	706	811	989	1,040	1,110	888
6	428	415	21		0	314	174	1,000	1,070	833	1,160	933
7	254	414	20		0	502	149	1,140	864	833	1,080	776
8	256	288	20		0	615	573	1,090	867	833	1,010	296
9	413	227	19		0	581	535	953	740	831	1,000	831
10	366	61	19		0	154	482	1,300	1,120	832	835	1,050
11	409	23	18		0	901	469	1,430	967	833	781	1,140
12	441	195	16		0	749	286	1,420	913	835	830	1,080
13	12	32	16		0	367	156	1,420	861	833	819	1,110
14	3.5	195	15		0	391	140	1,400	935	834	814	1,240
15	1.7	310	15		13	377	724	1,080	989	927	896	1,090
16	0	336	16		22	414	750	1,050	990	932	1,110	731
17	0	176	15		15	153	746	1,050	997	1,020	1,210	481
18	0	24	15		21	364	690	1,040	986	1,130	1,200	481
19	0	318	15		941	345	701	1,010	986	1,170	1,220	481
20	0	372	6.4		763	241	215	1,090	986	1,080	1,240	480
21	0	318	0		735	272	193	1,060	1,150	878	1,060	479
22	0	25	0		827	231	759	1,090	895	1,140	1,010	479
23	0	25	0		427	168	764	865	900	1,120	906	483
24	0	40	0		24	146	629	936	965	1,190	726	488
25	0	23	0		781	549	678	896	878	1,290	463	489
26	0	134	0		88	459	556	803	899	1,130	770	488
27	0	131	0		5.1	484	289	826	960	816	654	489
28	0	136	0		4.8	479	284	754	1,160	630	522	488
29	0	155	0		-----	417	886	687	1,110	863	567	488
30	0	132	0		-----	163	941	806	835	959	533	489
31	0	-----	0		-----	147	-----	836	-----	775	465	-----
TOTAL	5,147.2	5,110	534.4	0	4,666.9	10,260.3	16,804	30,672	28,007	29,589	27,957	21,586
MEAN	166	170	17.2	0	167	331	560	989	934	954	902	720
MAX	637	565	165	0	941	901	941	1,430	1,160	1,290	1,240	1,240
MIN	0	0	0	0	0	4.8	140	576	458	630	463	296
AC-FT	10,210	10,140	1,060	0	9,260	20,350	33,330	60,840	55,550	58,690	55,450	42,820
CAL YR 1973	TOTAL	163,445.91	MEAN	448	MAX	1,280	MIN	0	AC-FT	324,200		
WTR YR 1974	TOTAL	180,333.80	MEAN	494	MAX	1,430	MIN	0	AC-FT	357,700		

SAN JOAQUIN RIVER BASIN

11289500 TURLOCK CANAL NEAR LA GRANGE, CALIF.

LOCATION.--Lat 37°39'57", long 120°26'24", in NW¼NW¼ sec.21, T.3 S., R.14 E., Stanislaus County, on right bank 2,400 ft (730 m) downstream from intake at La Grange Dam, and 1.2 mi (1.9 km) east of La Grange.

PERIOD OF RECORD.--October 1898 to current year. Monthly discharge only for some periods, published in WSP 1315-A.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 277.70 ft (84.643 m), levels by Turlock Irrigation District. July 1, 1899 to Sept. 14, 1915, nonrecording gage at different sites and datums near canal intake. Sept. 15, 1915, to Apr. 15, 1924, nonrecording gage and Apr. 16, 1924, to winter of 1936-37, water-stage recorder, both at present site at datum 0.25 ft (0.076 m) higher.

AVERAGE DISCHARGE.--76 years, 610 ft³/s (17.28 m³/s), 441,900 acre-ft/yr (545 hm³/yr).

EXTREMES.--Period of record: Maximum daily discharge, 2,280 ft³/s (64.6 m³/s) June 12, 1949, July 26, 1973; no diversion for irrigation during some periods in some years. Prior to 1939, unmeasured small discharge during winter called zero.

REMARKS.--Records excellent. Canal diverts from left bank of Tuolumne River at La Grange Dam for irrigation in Turlock Irrigation District and to supply town of La Grange. During fall and winter some unmeasured flow is diverted from canal at tunnel 0.3 mi (0.5 km) upstream from gage, passed through La Grange powerplant and returned to river. See schematic diagram of Tuolumne River basin.

REVISIONS (WATER YEARS).--WSP 1315-A: 1899-1908 (monthly figures only). WSP 1445: 1917-20, 1922.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	650	28	288	35	43	882	1,170	1,810	1,620	1,840	2,050	1,770
2	790	26	56	36	42	675	1,150	1,810	819	2,020	2,030	1,690
3	40	25	500	36	34	38	1,140	1,710	1,540	1,910	2,100	1,770
4	664	24	552	35	39	894	1,120	1,510	1,600	1,870	1,830	1,730
5	787	98	365	35	42	439	1,130	1,300	1,630	1,890	1,920	1,600
6	610	36	490	34	42	205	1,150	1,720	1,510	1,760	1,990	1,580
7	40	35	445	35	42	45	37	1,730	1,530	1,540	2,010	1,590
8	71	107	148	35	43	43	1,200	1,750	1,470	1,730	2,080	1,280
9	585	83	47	35	42	41	1,260	1,810	531	1,810	2,080	1,240
10	582	51	655	35	36	35	1,220	1,700	1,560	1,750	2,020	1,030
11	577	33	447	34	41	39	1,180	1,570	1,460	1,880	1,860	973
12	593	123	443	33	42	38	1,130	1,340	1,410	1,920	2,040	980
13	398	432	334	32	42	200	996	1,750	1,540	1,890	1,690	967
14	39	193	216	34	41	477	36	1,790	1,700	1,800	1,510	964
15	872	109	103	34	41	503	1,220	1,790	1,700	1,920	1,460	966
16	112	184	58	37	40	77	1,210	1,840	1,440	1,940	1,510	962
17	41	44	397	37	34	35	1,210	1,880	1,780	1,990	1,310	998
18	41	33	366	37	38	760	1,310	1,700	1,820	1,920	852	997
19	40	206	451	35	41	768	1,230	1,160	1,740	1,890	1,440	995
20	38	372	43	35	42	1,030	1,240	1,740	1,810	1,960	1,510	995
21	37	210	38	36	43	1,090	89	1,790	1,890	1,840	1,360	986
22	36	38	37	36	42	1,070	1,410	1,750	1,850	1,830	1,390	974
23	37	70	36	36	42	723	1,390	1,770	1,650	2,000	1,400	983
24	38	90	37	36	37	36	1,370	1,880	1,810	1,990	1,340	965
25	38	37	36	37	41	1,130	1,400	1,690	1,900	1,980	1,120	983
26	38	304	36	36	704	981	1,330	405	1,920	2,090	1,300	983
27	36	287	37	35	836	994	1,230	323	1,920	2,110	1,320	982
28	35	256	36	52	903	941	132	1,470	1,890	1,870	1,270	980
29	37	292	35	37	-----	823	1,360	1,540	1,930	2,050	1,300	969
30	37	215	36	40	-----	617	1,470	1,540	1,740	2,150	1,330	975
31	34	-----	35	45	-----	34	-----	1,690	-----	2,140	1,130	-----
TOTAL	7,973	4,041	6,803	1,125	3,455	15,663	32,520	49,258	48,710	59,280	49,552	34,857
MEAN	257	135	219	36.3	123	505	1,084	1,589	1,624	1,912	1,598	1,162
MAX	872	432	655	52	903	1,130	1,470	1,880	1,930	2,150	2,100	1,770
MIN	34	24	35	32	34	34	36	323	531	1,540	852	962
AC-FT	15,810	8,020	13,490	2,230	6,850	31,070	64,500	97,700	96,620	117,600	98,290	69,140
CAL YR 1973	TOTAL 287,119.17			MEAN 787	MAX 2,280			MIN 0			AC-FT 569,500	
WTR YR 1974	TOTAL 313,237.00			MEAN 858	MAX 2,150			MIN 24			AC-FT 621,300	

11289650 TUOLUMNE RIVER BELOW LA GRANGE DAM, NEAR LA GRANGE, CALIF.

LOCATION.--Lat 37°39'59", long 120°26'28", in NW¼NW¼ sec.21, T.3 S., R.14 E., Stanislaus County, on left bank 0.5 mi (0.8 km) downstream from La Grange Dam, and 1.1 mi (1.8 km) east of La Grange.

DRAINAGE AREA.--1,538 mi² (3,983 km²)..

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

GAGE.--Water-stage recorder. Datum of gage is 170.19 ft (51.874 m) above mean sea level (levels by Turlock Irrigation District).

EXTREMES (River only).--Current year: Maximum discharge, 3,260 ft³/s (92.3 m³/s) Jan. 3 (gage height, 9.55 ft or 2.911 m); minimum daily, 14 ft³/s (0.40 m³/s) May 20-22.
 Period of record: Maximum discharge, 3,260 ft³/s (92.3 m³/s) Jan. 3, 1974 (gage height, 9.55 ft or 2.911 m); minimum daily, 0.10 ft³/s (0.003 m³/s) Oct. 29 to Nov. 3, 1970.
 (Combined flow).--Current year: Maximum discharge, 3,710 ft³/s (105 m³/s) July 25; minimum daily, 263 ft³/s (7.45 m³/s) Oct. 14.
 Period of record: Maximum discharge, 3,880 ft³/s (110 m³/s) June 26, 1973; minimum daily, 0.45 ft³/s (0.01 m³/s) Nov. 2, 1970.

REMARKS.--Records good. Flow diverted into Modesto Canal (see sta 11289000) and Turlock Canal (see sta 11289500) at La Grange Dam. Flow regulated by Don Pedro powerplant, Don Pedro Reservoir 4.5 mi (7.2 km) upstream (see sta 11287500), Hetch Hetchy Reservoir (see sta 11275500), Cherry Lake (see sta 11277200), and Lake Eleanor (see sta 11277500). Tuolumne Canal (see sta 11297500) diverts water from the Stanislaus River basin into the Tuolumne River basin for power, irrigation, and domestic supply in the vicinity of Sonora upstream from station. Diversion through Hetch Hetchy aqueduct to San Francisco began Oct. 19, 1934; an average of 277 ft³/s (7.84 m³/s) was diverted during the current year. See schematic diagram of Tuolumne River basin. For records of combined discharge of river and Modesto and Turlock canals, see following page. Records of water temperatures for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	484	749	372	276	1,470	829	117	22	20	161	225	528
2	468	660	368	1,690	904	514	106	20	18	24	314	528
3	1,880	473	405	1,800	269	331	116	20	254	185	24	676
4	1,360	369	408	1,910	1,430	679	116	20	272	24	21	650
5	454	460	406	1,500	1,510	1,010	118	20	205	64	207	648
6	455	405	406	328	1,440	1,060	119	19	233	24	305	659
7	203	409	405	1,940	1,330	1,290	118	201	24	22	182	574
8	203	404	372	1,750	1,230	1,140	118	201	22	30	33	542
9	454	403	372	1,810	808	531	117	24	22	22	25	738
10	460	373	406	1,770	271	329	118	21	324	21	21	1,030
11	460	376	407	1,700	1,280	634	120	21	180	21	21	753
12	460	433	404	950	1,350	595	119	20	102	21	21	681
13	466	400	408	287	1,430	821	118	19	21	21	344	571
14	220	403	407	1,580	1,350	545	118	19	21	21	567	534
15	731	400	375	1,580	1,230	501	118	18	21	22	566	534
16	1,450	401	273	1,600	753	503	118	18	21	22	566	1,150
17	1,560	373	321	1,480	267	326	115	18	20	34	567	1,620
18	1,470	375	322	1,420	267	504	114	18	20	232	514	1,870
19	1,320	405	321	861	539	504	115	16	20	305	448	1,890
20	742	400	654	287	569	382	116	14	19	91	464	1,850
21	318	402	661	1,610	758	326	117	14	43	25	538	1,690
22	264	371	378	1,560	595	327	115	14	20	311	585	1,340
23	1,180	404	296	1,600	480	322	115	105	19	337	599	1,720
24	1,260	372	318	1,610	269	320	114	41	20	398	533	1,860
25	1,280	375	276	1,590	515	327	114	20	20	437	536	1,710
26	1,220	408	581	1,060	625	326	114	20	19	185	565	1,690
27	675	406	667	283	487	326	114	17	19	22	535	1,620
28	264	405	428	1,640	492	324	115	17	123	20	536	1,510
29	1,280	406	333	1,590	-----	328	112	17	121	19	536	1,360
30	1,280	403	274	1,750	-----	324	117	16	22	41	536	1,720
31	1,240	-----	446	1,670	-----	327	-----	55	-----	19	540	-----
TOTAL	25,561	12,623	12,470	42,482	23,918	16,605	3,481	1,085	2,265	3,181	11,474	34,246
MEAN	825	421	402	1,370	854	536	116	35.0	75.5	103	370	1,142
MAX	1,880	749	667	1,940	1,510	1,290	120	201	324	437	599	1,890
MIN	203	369	273	276	267	320	106	14	18	19	21	528
AC-FT	50,700	25,040	24,730	84,260	47,440	32,940	6,900	2,150	4,490	6,310	22,760	67,930
CAL YR 1973	TOTAL	99,641.4	MEAN	273	MAX	1,880	MIN	2.8	AC-FT	197,600		
WTR YR 1974	TOTAL	189,391.0	MEAN	519	MAX	1,940	MIN	14	AC-FT	375,700		

11289650 TUOLUMNE RIVER BELOW LA GRANGE DAM, NEAR LA GRANGE, CALIF.--Continued

COMBINED DISCHARGE, IN CUBIC FEET PER SECOND, OF TUOLUMNE RIVER, MODESTO CANAL
NEAR LA GRANGE AND TURLOCK CANAL NEAR LA GRANGE, CALIF., WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,770	774	825	311	1,510	1,720	2,200	2,410	2,310	3,070	3,330	2,950
2	1,750	686	445	1,730	946	1,190	2,080	2,460	1,300	3,050	3,470	3,020
3	2,180	514	964	1,840	303	382	2,130	2,540	2,740	3,190	3,080	3,660
4	2,620	417	982	1,950	1,470	1,730	1,960	2,350	2,790	2,730	2,680	3,350
5	1,820	1,120	792	1,540	1,550	1,550	1,950	2,130	2,820	2,990	3,240	3,140
6	1,490	856	917	362	1,480	1,580	1,440	2,740	2,810	2,620	3,460	3,170
7	497	858	870	1,980	1,370	1,840	304	3,070	2,420	2,400	3,270	2,940
8	530	799	540	1,790	1,270	1,800	1,890	3,040	2,360	2,590	3,120	2,120
9	1,450	713	438	1,850	850	1,150	1,910	2,790	1,290	2,660	3,110	2,810
10	1,410	485	1,080	1,810	307	518	1,820	3,020	3,000	2,600	2,880	3,110
11	1,450	432	872	1,730	1,320	1,570	1,770	3,020	2,610	2,730	2,660	2,870
12	1,490	751	863	983	1,390	1,380	1,540	2,780	2,430	2,780	2,890	2,740
13	876	864	758	319	1,470	1,390	1,270	3,190	2,420	2,740	2,850	2,650
14	263	791	638	1,610	1,390	1,410	294	3,210	2,660	2,660	2,890	2,740
15	1,600	819	493	1,610	1,280	1,380	2,060	2,890	2,710	2,870	2,920	2,590
16	1,560	921	347	1,640	815	994	2,080	2,910	2,450	2,890	3,190	2,840
17	1,600	593	733	1,520	316	514	2,070	2,950	2,800	3,040	3,090	3,100
18	1,510	432	703	1,460	326	1,630	2,110	2,760	2,830	3,280	2,570	3,350
19	1,360	929	787	896	1,520	1,620	2,050	2,190	2,750	3,370	3,110	3,370
20	780	1,140	703	322	1,370	1,650	1,570	2,840	2,820	3,130	3,210	3,330
21	355	930	699	1,650	1,540	1,690	399	2,860	3,080	2,740	2,960	3,160
22	300	434	415	1,600	1,460	1,630	2,280	2,850	2,770	3,280	2,990	2,790
23	1,220	499	332	1,640	949	1,210	2,270	2,740	2,570	3,460	2,910	3,190
24	1,300	502	355	1,650	330	502	2,110	2,860	2,800	3,580	2,600	3,310
25	1,320	435	312	1,630	1,340	2,010	2,190	2,610	2,800	3,710	2,120	3,180
26	1,260	846	617	1,100	1,420	1,770	2,000	1,230	2,840	3,410	2,640	3,160
27	711	824	704	318	1,330	1,800	1,630	1,170	2,900	2,950	2,510	3,090
28	299	797	464	1,690	1,400	1,740	531	2,240	3,170	2,520	2,330	2,980
29	1,320	853	368	1,630	-----	1,570	2,360	2,240	3,160	2,930	2,400	2,820
30	1,320	750	310	1,790	-----	1,100	2,530	2,360	2,600	3,150	2,400	3,180
31	1,270	-----	481	1,720	-----	508	-----	2,580	-----	2,930	2,140	-----
TOTAL	38,681	21,764	19,807	43,671	32,022	42,528	52,798	81,030	79,010	92,050	89,020	90,710
MEAN	1,248	725	639	1,409	1,144	1,372	1,760	2,614	2,634	2,969	2,872	3,024
MAX	2,620	1,140	1,080	1,980	1,550	2,010	2,530	3,210	3,170	3,710	3,470	3,660
MIN	263	417	310	311	303	382	294	1,170	1,290	2,400	2,120	2,120
AC-FT	76,720	43,170	39,290	86,620	63,520	84,350	104,700	160,700	156,700	182,600	176,600	179,900
CAL YR 1973	TOTAL 550,203			MEAN 1,507	MAX 3,880	MIN 136	AC-FT 1,091,000					
WTR YR 1974	TOTAL 683,091			MEAN 1,871	MAX 3,710	MIN 263	AC-FT 1,355,000					

LOCATION.--Lat 37°37'38", long 120°59'11", in SE¼SW¼ sec.33, T.3 S., R.9 E., Stanislaus County, on left bank at bridge on Ninth Street in Modesto, and 0.2 mi (0.3 km) downstream from Dry Creek.

PERIOD OF RECORD.--1878-84, 1891-94, 1897 (gage heights only), January 1895 to December 1896, April 1940 to current year. Monthly discharge only for some periods, published in WSP 1315-A.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level, unadjusted (levels by Modesto Irrigation District). Prior to July 11, 1947, at site 1,700 ft (518 m) downstream at same datum, July 11, 1947, to Nov. 16, 1953, at site 1,000 ft (305 m) downstream at same datum.

EXTREMES.--Current year: Maximum discharge, 3,520 ft³/s (99.7 m³/s) Jan. 8 (elevation, 44.99 ft or 13.713 m); minimum daily, 201 ft³/s (5.69 m³/s) July 31, Aug. 13.
Period of record (1895-96, 1940 to current year): Maximum discharge observed, 57,000 ft³/s (1,610 m³/s) Dec. 9, 1950 (elevation, 69.19 ft or 21.089 m); minimum, 85 ft³/s (2.41 m³/s) Oct. 25, 1961.

REMARKS.--Records excellent. Flow regulated by reservoirs and powerplants above station. In addition to diversions into Modesto and Turlock Canals (see sta 11289000, 11289500), there are diversions for irrigation of about 1,300 acres (5.26 hm²) between station above La Grange Dam and at Modesto. See REMARKS for sta 11289650 for Tuolumne River below La Grange Dam. See schematic diagram of Tuolumne River basin. Records of water temperatures 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	261	1,840	630	668	1,900	700	893	360	262	372	226	722
2	412	1,390	606	809	1,640	970	1,470	333	304	273	251	707
3	588	1,260	588	1,610	1,150	2,030	1,790	293	283	318	401	718
4	1,570	1,090	597	1,670	594	1,880	837	288	317	272	380	817
5	1,670	998	625	2,420	1,350	1,740	683	304	464	377	264	836
6	763	1,040	655	2,260	1,660	1,650	592	308	453	269	273	850
7	829	803	715	1,860	1,620	1,680	532	306	452	289	434	991
8	900	655	726	2,940	1,510	1,940	453	313	406	266	438	961
9	695	615	675	2,750	1,420	2,090	414	427	308	379	337	882
10	695	615	665	2,580	1,050	1,280	412	381	303	463	253	996
11	685	588	685	2,520	592	1,060	395	299	347	336	267	1,240
12	645	597	748	2,220	1,270	1,310	405	279	434	286	230	1,180
13	665	615	850	1,430	1,560	1,300	401	315	380	303	201	1,090
14	685	606	792	776	1,650	1,430	384	278	345	270	311	1,030
15	579	606	748	1,620	1,600	1,140	375	252	300	276	656	964
16	705	615	695	1,830	1,510	952	363	256	299	277	711	935
17	1,280	615	625	1,800	1,060	903	376	257	255	267	733	1,310
18	1,600	606	645	1,740	606	715	387	240	268	234	757	2,010
19	1,580	588	655	1,670	504	745	408	282	317	272	724	2,390
20	1,460	597	645	1,230	675	760	392	297	306	419	636	2,460
21	1,020	606	862	688	729	672	371	284	314	366	622	2,470
22	705	597	875	1,610	901	606	353	264	264	293	686	2,350
23	534	579	759	1,780	792	580	366	257	295	299	716	1,940
24	1,020	590	655	1,810	695	590	404	270	288	464	749	2,180
25	1,320	582	588	1,810	630	582	424	307	265	504	743	2,370
26	1,570	572	570	1,750	555	736	417	308	255	581	728	2,260
27	1,750	591	838	1,230	720	631	431	281	257	465	757	2,200
28	1,320	597	2,630	606	710	956	400	255	235	341	746	2,140
29	992	597	1,960	1,580	-----	843	378	287	293	265	745	2,090
30	1,530	597	828	1,780	-----	816	356	268	382	221	727	1,910
31	1,840	-----	660	1,940	-----	815	-----	239	-----	201	705	-----
TOTAL	31,868	22,247	24,795	52,987	30,653	34,102	15,862	9,088	9,651	10,218	16,407	44,999
MEAN	1,028	742	800	1,709	1,095	1,100	529	293	322	330	529	1,500
MAX	1,840	1,840	2,630	2,940	1,900	2,090	1,790	427	464	581	757	2,470
MIN	261	572	570	606	504	580	353	239	235	201	201	707
AC-FT	63,210	44,130	49,180</									

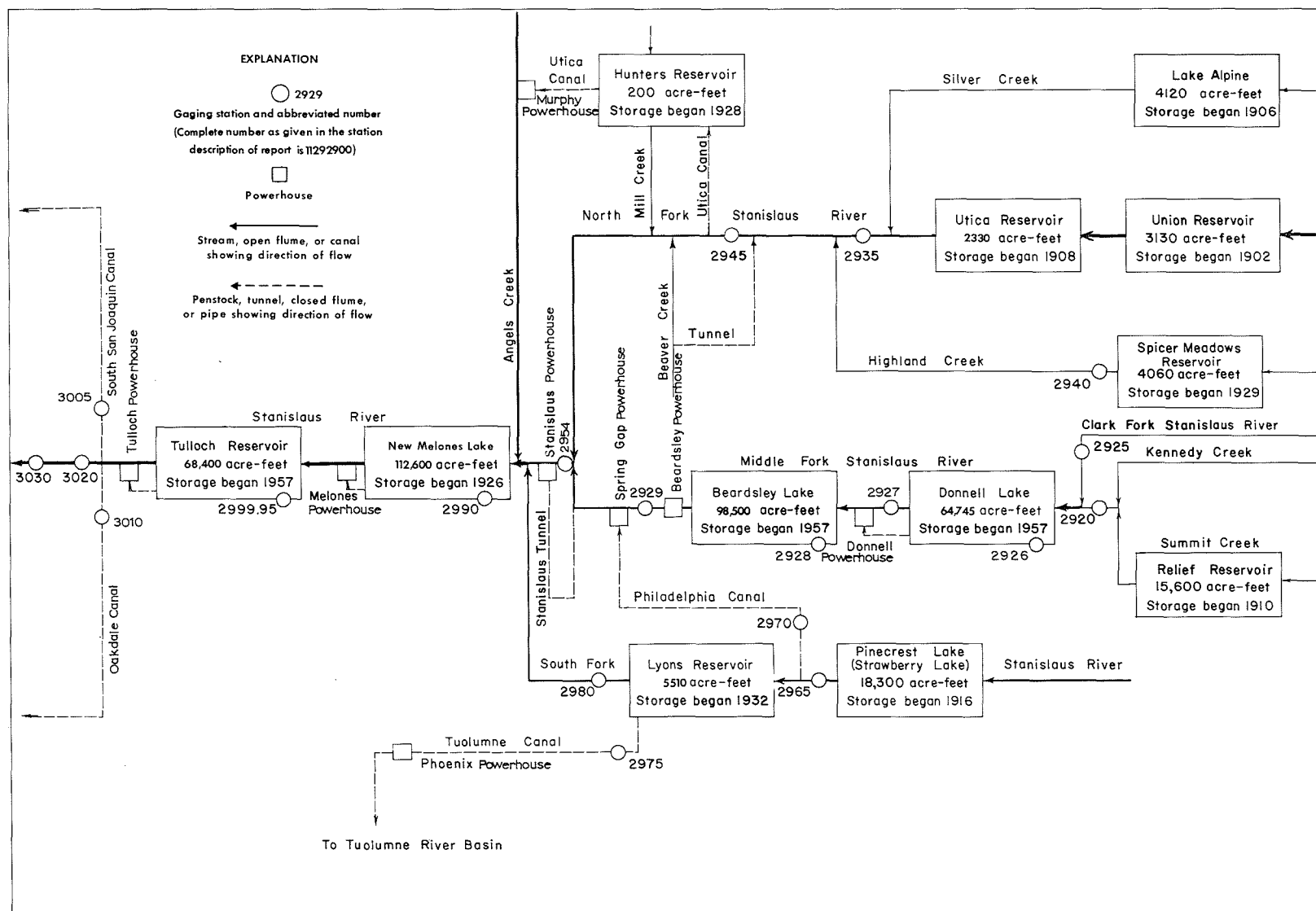


FIGURE 8.—Schematic diagram showing diversions and storage in Stanislaus River basin.

LOCATION.--Lat 38°17'51", long 119°44'25", in SW¼NE¼ sec.11, T.5 N., R.20 E., Tuolumne County, Stanislaus National Forest, on right bank at upper end of Kennedy Meadows, 1.3 mi (2.1 km) upstream from Deadman Creek, 1.6 mi (2.6 km) downstream from Relief Reservoir, and 5.8 mi (9.3 km) southwest of Dardanelle.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27	32	234	48	44	40	59	134	653	483	263	231
2	27	32	236	46	43	35	54	168	663	390	262	231
3	27	31	231	40	42	34	51	196	680	335	329	199
4	100	29	223	45	42	43	52	194	707	353	367	150
5	169	30	218	45	41	42	55	207	739	348	289	136
6	166	38	212	45	40	40	57	237	867	302	273	77
7	166	36	207	45	40	38	59	274	858	278	262	55
8	202	37	203	42	39	38	60	298	676	255	251	54
9	250	42	198	41	39	37	61	300	663	476	242	54
10	264	134	127	42	39	36	56	296	694	721	235	53
11	267	470	50	39	38	36	58	288	744	343	232	52
12	114	374	51	40	38	37	64	287	624	230	227	52
13	28	149	51	39	39	37	71	260	547	206	229	51
14	28	109	49	39	37	41	82	256	720	226	231	50
15	28	91	48	62	37	45	95	507	698	240	225	50
16	28	80	48	67	37	48	105	506	667	244	221	42
17	28	74	48	78	37	48	116	397	570	211	218	29
18	28	70	46	88	36	47	123	306	498	194	216	28
19	27	65	45	91	37	47	109	250	375	196	230	28
20	31	63	45	75	37	50	103	210	320	196	270	28
21	29	59	45	65	35	54	105	194	448	205	279	27
22	31	55	46	60	35	56	120	245	541	207	209	27
23	40	53	43	57	35	59	124	352	551	248	271	27
24	35	51	43	56	34	64	113	429	490	272	268	27
25	34	49	42	55	35	66	99	607	366	312	264	27
26	34	148	42	52	35	64	90	743	340	315	259	27
27	34	251	44	50	35	63	83	874	348	291	255	27
28	34	248	44	49	34	63	84	912	374	280	251	27
29	33	244	73	47	-----	65	89	832	442	278	246	26
30	32	240	62	46	-----	66	104	682	498	273	242	26
31	32	-----	54	45	-----	59	-----	642	-----	280	237	-----
TOTAL	2,373	3,384	3,108	1,639	1,060	1,498	2,501	12,083	17,361	9,188	7,853	1,918
MEAN	76.5	113	100	52.9	37.9	48.3	83.4	390	579	296	253	63.9
MAX	267	470	236	91	44	66	124	912	867	721	367	231
MIN	27	29	42	39	34	34	51	134	320	194	209	26
AC=FT	4,710	6,710	6,160	3,250	2,100	2,970	4,960	23,970	34,440	18,220	15,580	3,800
CAL YR 1973	TOTAL 56,058		MEAN 154	MAX 1,220	MIN 27	AC=FT 111,200						
WTR YR 1974	TOTAL 63,966		MEAN 175	MAX 912	MIN 26	AC=FT 126,900						

SAN JOAQUIN RIVER BASIN

11292500 CLARK FORK STANISLAUS RIVER NEAR DARDANELLE, CALIF.

LOCATION.--Lat 38°21'50", long 119°52'13", in NE¼NE¼ sec.22, T.6 N., R.19 E., Tuolumne County, Stanislaus National Forest, on right bank 0.5 mi (0.8 km) upstream from mouth, and 2.6 mi (4.2 km) northwest of Dardanelle.

DRAINAGE AREA.--67.5 mi² (175 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 5,507.3 ft (1,678.62 m) above mean sea level (river-profile survey).

AVERAGE DISCHARGE.--24 years, 153 ft³/s (4.333 m³/s), 110,800 acre-ft/yr (137 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,310 ft³/s (37.1 m³/s) May 27 (gage height, 7.12 ft or 2.170 m); minimum daily, 32 ft³/s (0.91 m³/s) Oct. 1-6, Nov. 4.

Period of record: Maximum discharge, 4,350 ft³/s (123 m³/s) Nov. 20, 1950 (gage height, 11.88 ft or 3.621 m), from rating curve extended above 1,300 ft³/s (36.8 m³/s) on basis of slope-area measurement of maximum flow; minimum, 11 ft³/s (0.31 m³/s) Apr. 3, 1958.

REMARKS.--Records good except those for the winter period, which are fair. No storage or diversion above station. See schematic diagram of Stanislaus River basin.

REVISIONS.--WSP 1930: Drainage area.

DISCHARGE* IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32	41	70	80	102	92	145	372	845	381	107	47
2	32	40	67	60	98	94	135	445	808	343	94	47
3	32	36	66	60	98	90	129	485	813	307	90	46
4	32	32	70	62	98	89	130	501	847	291	108	45
5	32	39	68	68	95	88	139	547	889	271	133	44
6	32	57	74	70	93	89	136	621	970	248	190	44
7	42	93	75	73	92	88	148	741	932	229	108	44
8	47	81	75	72	91	86	158	836	814	217	95	44
9	40	65	76	77	91	85	156	877	818	333	88	43
10	39	290	77	78	91	86	143	827	841	348	83	42
11	41	551	77	72	91	86	148	820	899	245	80	42
12	43	463	75	75	90	87	167	817	903	209	76	42
13	45	206	77	74	88	89	182	748	871	195	74	41
14	44	151	73	73	87	98	207	731	846	188	72	41
15	40	130	72	118	85	111	243	727	797	182	70	40
16	37	120	73	121	86	115	260	656	735	174	68	38
17	36	119	75	160	84	114	291	558	646	162	66	37
18	35	111	72	196	83	111	304	475	585	152	64	37
19	35	102	65	244	85	113	251	420	529	147	62	36
20	39	98	70	173	81	120	243	381	492	141	61	35
21	37	94	72	147	80	129	267	376	514	138	59	35
22	39	90	74	136	79	133	325	414	541	134	58	35
23	55	86	73	129	78	140	325	471	523	128	56	35
24	46	86	71	123	79	157	275	555	475	125	55	35
25	48	84	71	120	80	166	245	693	440	136	54	35
26	45	82	71	116	80	150	227	861	404	134	53	35
27	46	80	77	111	78	148	217	1,000	383	117	52	35
28	45	81	83	109	78	148	221	1,080	382	109	51	35
29	42	80	174	107	-----	156	237	960	394	106	50	35
30	40	79	127	105	-----	161	291	864	397	101	49	35
31	42	-----	104	104	-----	144	-----	854	-----	101	49	-----
TOTAL	1,240	3,577	2,444	3,313	2,441	3,563	6,345	20,713	20,334	6,092	2,375	1,185
MEAN	40.0	119	78.8	107	87.2	115	212	668	678	197	76.6	39.5
MAX	55	551	174	244	102	166	325	1,080	970	381	190	47
MIN	32	32	65	60	78	85	129	372	382	101	49	35
AC-FT	2,460	7,090	4,850	6,570	4,840	7,070	12,590	41,080	40,330	12,080	4,710	2,350

CAL YR 1973 TOTAL 61,381 MEAN 168 MAX 1,190 MIN 32 AC-FT 121,700
WTR YR 1974 TOTAL 73,622 MEAN 202 MAX 1,080 MIN 32 AC-FT 146,000

PEAK DISCHARGE (BASE, 600 FT ³ /S)							
DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-11	1245	5.72	747	6-6	2130	6.83	1,180
5-8	2045	6.56	1,070	8-5	2330	5.45	655
5-27	2145	7.12	1,310				

11292600 DONNELL LAKE NEAR DARDANELLE, CALIF.

LOCATION.--Lat 38°19'46", long 119°57'37", unsurveyed, T.6 N., R.18 E., Tuolumne County, Stanislaus National Forest, on left bank in hoist house of Donnell Dam on Middle Fork Stanislaus River, 1.2 mi (1.9 km) downstream from Niagara Creek, and 6.9 mi (11.1 km) west of Dardanelle.

DRAINAGE AREA.--230 mi² (596 km²).

PERIOD OF RECORD.--October 1957 to current year. Prior to October 1960, published as Donnell's Reservoir near Dardanelle.

GAGE.--Water-stage recorder. Datum of gage is 4.84 ft (1.475 m) above mean sea level (levels by Oakdale and South San Joaquin Irrigation Districts).

EXTREMES.--Current year: Maximum contents, 64,500 acre-ft (79.5 hm³) July 9 (gage height, 4,916.3 ft or 1,498.49 m); minimum, 6,040 acre-ft (7.45 hm³) Apr. 13 (gage height, 4,740.9 ft or 1,445.03 m).
Period of record: Maximum contents, 64,900 acre-ft (80.0 hm³) May 8, 1963 (gage height, 4,917.3 ft or 1,498.79 m); minimum since reservoir first filled, 4,800 acre-ft (5.92 hm³) Apr. 19, 1965 (gage height, 4,735.3 ft or 1,443.32 m).

REMARKS.--Lake is formed by concrete arch-type dam completed in 1957. Usable capacity, 62,590 acre-ft (77.2 hm³) between gage heights 4,720.0 ft (1,438.66 m), minimum operating head and 4,917.0 ft (1,498.70 m), top of spillway gates. Lake is for power and conservation storage. Water passes through a 7.2-mi (11.6-km) tunnel to a powerplant and down the Middle Fork Stanislaus River to Beardsley Lake (see sta 11292800). Records, including extremes, represent total contents at 2400 hours of which 2,150 acre-ft (2.65 hm³) is below minimum operating head. See schematic diagram of Stanislaus River basin.

REVISIONS.--WSP 1930: Drainage area.

CAPACITY TABLE (GAGE HEIGHT, IN FEET, AND CONTENTS, IN ACRE-FEET)

4,735	4,730	4,790	19,100
4,740	5,830	4,800	22,100
4,750	8,220	4,820	28,400
4,760	10,800	4,850	38,700
4,770	13,400	4,880	49,800
4,780	16,200	4,917.3	64,900

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22,900	27,300	43,200	37,100	23,000	12,400	10,300	14,000	63,900	64,300	63,100	56,200
2	22,600	27,500	43,200	36,600	23,100	12,900	9,950	15,800	63,900	64,200	63,000	55,800
3	22,600	27,600	43,100	36,000	23,200	13,200	9,430	17,900	63,900	64,200	63,000	55,400
4	22,800	27,700	43,200	35,300	22,800	12,800	8,920	20,000	63,900	64,300	63,200	54,800
5	23,100	27,600	42,900	34,500	22,300	12,400	8,440	22,400	64,200	64,200	63,400	54,100
6	23,500	27,800	42,700	33,800	21,800	12,000	8,000	25,400	64,100	64,200	63,400	53,500
7	23,700	28,200	42,500	32,900	21,200	11,600	7,650	29,000	63,800	64,200	63,300	52,700
8	24,100	28,600	42,400	32,100	20,700	11,600	7,380	33,000	63,600	64,100	63,100	51,900
9	24,700	28,900	42,200	31,200	20,700	12,000	7,100	37,300	64,200	64,500	63,100	51,100
10	25,200	29,500	41,900	30,300	20,800	12,000	6,710	41,300	64,100	64,300	62,800	50,300
11	25,800	34,100	41,400	29,400	20,300	11,600	6,340	45,200	64,200	64,200	62,600	49,500
12	26,300	38,800	41,100	29,200	19,800	11,200	6,150	49,000	63,900	64,100	62,400	48,700
13	26,400	40,300	40,600	29,500	19,200	10,800	6,040	52,300	64,200	63,900	62,000	48,000
14	26,500	41,400	40,100	28,900	18,600	10,800	6,170	55,500	64,200	63,700	61,800	47,100
15	26,500	42,200	39,500	28,700	18,100	10,600	6,620	58,900	64,200	63,600	61,500	46,500
16	26,500	42,500	39,000	28,600	18,100	11,000	7,170	59,900	64,100	63,500	61,100	45,900
17	26,600	43,600	38,500	29,600	18,200	11,400	7,920	59,600	64,100	63,400	60,900	45,500
18	26,600	44,400	37,900	30,300	17,700	11,300	8,750	59,000	64,200	63,200	60,600	44,800
19	26,700	44,500	37,400	31,200	17,100	11,000	9,130	58,300	64,000	63,000	60,300	44,300
20	26,800	44,400	36,900	31,300	16,500	10,700	9,410	58,300	64,000	62,800	60,100	43,700
21	26,900	44,700	36,400	31,000	16,200	10,500	9,840	58,800	64,200	62,600	59,800	43,100
22	26,900	44,400	36,300	30,500	15,300	10,400	10,700	59,700	64,200	62,600	59,500	43,200
23	26,100	44,100	35,900	29,900	15,200	10,700	11,700	61,200	64,200	62,600	59,200	42,600
24	26,200	43,800	36,200	29,300	15,100	11,300	12,100	62,900	64,200	62,800	59,000	42,200
25	26,400	43,600	36,500	28,600	14,500	11,400	12,200	64,200	64,100	63,000	58,700	41,800
26	26,500	43,300	36,000	27,900	13,900	11,300	12,200	64,300	64,200	63,200	58,400	41,400
27	26,600	43,300	35,600	27,100	13,300	11,100	12,100	63,900	64,300	63,300	58,100	41,000
28	26,800	43,300	35,200	26,400	12,700	11,000	12,000	63,900	64,300	63,400	57,700	40,600
29	26,900	43,200	36,400	25,500	-----	11,000	12,200	63,400	64,300	63,300	57,500	40,700
30	27,000	43,100	37,400	24,700	-----	10,900	12,700	63,800	64,300	63,300	57,100	40,300
31	27,200	-----	37,300	23,800	-----	10,600	-----	64,000	-----	63,500	56,600	-----
MAX	27,200	44,700	43,200	37,100	23,200	13,200	12,700	64,300	64,300	64,500	63,400	56,200
MIN	22,600	27,300	35,200	23,800	12,700	10,400	6,040	14,000	63,600	62,600	56,600	40,300
(a)	4,816.1	4,862.2	4,846.1	4,805.5	4,767.1	4,759.4	4,767.3	4,915.3	4,915.9	4,914.0	4,897.3	4,854.6
(b)	+3,900	+15,900	-5,800	-13,500	-11,100	-2,100	+2,100	+51,300	+300	-800	-6,900	-16,300

CAL YR 1973 b +11,900

WTR YR 1974 b +17,000

a Gage height, in feet, at end of month.
b Change in contents, in acre-feet.

11292700 MIDDLE FORK STANISLAUS RIVER AT HELLS HALF ACRE BRIDGE, NEAR PINECREST, CALIF.

LOCATION.--Lat 38°14'49", long 120°01'51", in SW¼NE¼ sec.31, T.5 N., R.18 E., Tuolumne County, on left bank 200 ft (61 m) upstream from Donnell powerhouse, 800 ft (244 m) downstream from Hells Half Acre bridge, 1.1 mi (1.8 km) upstream from Cow Creek, and 4.7 mi (7.6 km) northwest of Pinecrest.

DRAINAGE AREA.--287 mi² (743 km²).

PERIOD OF RECORD.--February 1956 to current year. Prior to October 1965, published as Middle Fork Stanislaus River at Hells Half Acre bridge.

GAGE.--Water-stage recorder. Datum of gage is 3,418.31 ft (1,041.901 m) above mean sea level (river-profile survey). Prior to Aug. 9, 1961, at site 1,600 ft (488 m) upstream at different datum.

AVERAGE DISCHARGE.--18 years, 254 ft³/s (7.19 m³/s), 184,000 acre-ft/yr (227 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 3,820 ft³/s (108 m³/s) May 27 (gage height, 9.55 ft or 2.911 m); minimum daily, 26 ft³/s (0.74 m³/s) Nov. 2-4.

Period of record: Maximum discharge, 10,200 ft³/s (289 m³/s) Dec. 24, 1964 (gage height, 13.64 ft or 4.158 m in gage well, 14.2 ft or 4.33 m, outside, from floodmarks), from rating curve extended above 5,200 ft³/s (147 m³/s) on basis of slope-area measurement at gage height 12.20 ft (3.719 m); minimum daily, 3.3 ft³/s (0.094 m³/s) Nov. 9, 10, 1957.

Maximum stage known since at least 1905, 23 ft (7.0 m) Dec. 23, 1955, from floodmarks, at present site (discharge, 26,600 ft³/s or 753 m³/s by slope-area measurement).

REMARKS.--Records good. Flow regulated by Relief Reservoir since 1909, capacity, 15,600 acre-ft (19.2 hm³), by Donnell Lake (see sta 11292600), and by diversion around station through Donnell powerhouse. See schematic diagram of Stanislaus River basin. Records of water temperatures for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35	29	112	235	175	438	455	475	2,280	574	38	46
2	35	26	92	193	165	546	449	527	2,040	480	37	46
3	35	26	89	183	161	290	358	527	2,010	211	37	46
4	35	26	89	175	157	242	336	521	2,130	215	39	46
5	35	27	84	164	154	240	336	561	2,000	209	42	45
6	35	36	81	155	149	232	327	624	2,570	112	46	45
7	39	39	82	153	146	227	327	689	2,570	74	44	43
8	42	41	83	146	143	214	327	709	2,010	74	43	43
9	37	32	83	139	135	206	337	671	1,570	170	43	43
10	37	81	86	131	132	205	303	617	1,810	1,170	44	43
11	37	450	89	126	131	198	306	600	1,890	300	42	43
12	37	604	84	141	132	218	327	574	2,120	87	42	42
13	37	175	93	150	129	230	334	509	1,490	77	42	42
14	37	128	90	140	124	245	362	477	1,680	69	40	42
15	37	100	86	183	119	272	394	470	1,650	64	42	42
16	37	94	84	269	123	286	400	1,420	1,490	58	41	41
17	37	174	99	901	117	281	408	1,770	1,220	64	40	41
18	37	240	109	641	119	265	443	1,530	976	45	41	41
19	37	136	93	687	130	265	352	1,270	898	44	41	41
20	38	115	88	465	115	270	331	838	625	43	40	41
21	37	101	95	356	113	281	349	534	645	41	37	41
22	39	90	99	306	112	281	398	451	898	40	37	41
23	53	83	90	278	108	277	419	542	928	39	37	41
24	42	81	87	255	109	288	363	740	760	39	37	41
25	40	76	88	243	111	296	321	1,580	630	40	36	41
26	39	76	89	229	111	288	298	2,670	415	40	37	41
27	39	71	134	216	108	314	291	3,420	306	39	37	40
28	38	77	214	209	108	368	305	3,310	388	37	38	40
29	38	80	619	199	-----	485	329	3,210	475	38	45	40
30	38	78	458	191	-----	537	382	2,180	596	41	45	40
31	38	-----	290	181	-----	403	-----	2,050	-----	38	45	-----
TOTAL	1,177	3,392	4,059	8,040	3,636	9,188	10,667	36,066	41,070	4,572	1,255	1,268
MEAN	38.0	113	131	259	130	296	356	1,163	1,369	147	40.5	42.3
MAX	53	604	619	901	175	546	455	3,420	2,570	1,170	46	46
MIN	35	26	81	126	108	198	291	451	306	37	36	40
AC-FT	2,330	6,730	8,050	15,950	7,210	18,220	21,160	71,540	81,460	9,070	2,490	2,520

CAL YR 1973 TOTAL 112,009 MEAN 307 MAX 5,250 MIN 26 AC-FT 222,200
WTR YR 1974 TOTAL 124,390 MEAN 341 MAX 3,420 MIN 26 AC-FT 246,700

11292800 BEARDSLEY LAKE NEAR STRAWBERRY, CALIF.

LOCATION.--Lat 38°12'17", long 120°04'31", in SE¼NW¼ sec.14, T.4 N., R.17 E., Tuolumne County, Stanislaus National Forest, in hoist house of Beardsley Dam on Middle Fork Stanislaus River, 2.4 mi (3.9 km) upstream from Spring Gap powerhouse, 3.9 mi (6.3 km) west of Strawberry, and 4.7 mi (7.6 km) west of Pinecrest.

DRAINAGE AREA.--309 mi² (800 km²).

PERIOD OF RECORD.--June 1957 to current year. Prior to October 1960, published as Lake Hartley near Strawberry.

GAGE.--Water-stage recorder. Datum of gage is 7.84 ft (2.390 m) above mean sea level (levels by Oakdale and South San Joaquin Irrigation Districts).

EXTREMES.-- Current year: Maximum contents, 97,900 acre-ft (121 hm³) June 29, 30 (gage height, 3,397.2 ft or 1,035.47 m); minimum, 64,000 acre-ft (78.9 hm³) Dec. 26 (gage height, 3,346.2 ft or 1,019.92 m).
Period of record: Maximum contents, 98,700 acre-ft (122 hm³) June 27, 1957 (gage height, 3,398.2 ft or 1,035.77 m); minimum since reservoir first filled, 20,000 acre-ft (24.7 hm³) Jan. 27, 28, 1962 (gage height, 3,261.3 ft or 994.04 m).

REMARKS.--Reservoir is formed by rockfill, earth-core dam completed in 1957. Capacity, 98,500 acre-ft (121 hm³) between gage heights 3,145.0 ft (958.60 m), tunnel invert and 3,398.0 ft (1,035.71 m), top of spillway gates. No dead storage. Reservoir is used for power and conservation storage. Water passes through Beardsley power-plant and down Middle Fork Stanislaus River to Melones Reservoir (see sta 11299000). Records, including extremes, represent contents at 2400 hours. See schematic diagram of Stanislaus River basin.

REVISIONS.--WSP 1930: Drainage area.

CAPACITY TABLE (GAGE HEIGHT, IN FEET, AND CONTENTS, IN ACRE-FEET)

3,261	19,900	3,350	66,400
3,290	33,100	3,370	79,200
3,320	48,800	3,398	98,500

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	89,000	73,100	68,900	65,800	78,200	75,800	79,400	94,500	97,400	97,600	97,400	91,300
2	88,600	73,100	68,800	66,100	77,700	76,300	79,800	94,700	97,400	97,700	97,400	91,100
3	87,700	73,100	69,000	66,400	77,200	76,100	81,700	94,800	97,400	97,600	97,400	91,100
4	86,800	73,100	68,700	66,800	77,300	76,500	82,600	94,900	97,600	97,700	97,500	91,100
5	85,900	73,500	68,500	67,300	77,400	76,700	83,600	95,100	97,500	97,800	97,500	91,100
6	85,100	73,600	68,400	67,800	77,400	77,000	84,600	95,400	96,900	97,700	97,400	91,000
7	84,500	73,200	68,300	68,200	77,400	77,400	85,500	95,700	96,700	97,700	97,200	90,900
8	83,700	72,300	68,200	68,600	77,600	77,100	86,500	96,000	96,500	97,700	96,900	91,000
9	82,900	71,400	68,000	69,000	77,100	76,600	87,500	95,700	96,400	97,800	96,700	91,100
10	82,100	71,600	67,900	69,400	76,500	76,300	88,500	94,700	97,500	97,700	96,400	91,200
11	81,100	72,200	67,800	69,700	76,600	76,500	89,400	93,600	97,700	97,700	96,200	91,300
12	80,700	72,500	67,400	69,500	76,700	76,800	90,400	92,500	97,200	97,700	95,900	91,300
13	79,900	71,800	67,400	68,800	76,700	77,200	91,500	91,300	96,700	97,800	95,700	91,300
14	79,000	71,200	67,300	68,800	76,700	77,200	92,600	90,100	97,500	97,700	95,400	91,600
15	78,400	70,400	67,200	69,000	76,700	77,600	93,800	88,600	97,500	97,700	95,100	91,500
16	77,400	70,100	67,100	69,700	76,200	77,400	94,400	88,000	97,300	97,700	94,800	91,300
17	76,500	69,600	67,000	71,800	75,600	77,300	93,900	87,500	97,200	97,700	94,400	90,900
18	75,600	69,100	66,900	73,400	75,600	77,600	93,000	86,600	97,700	97,600	94,100	90,800
19	74,700	68,900	66,900	75,000	75,700	78,100	92,100	85,500	97,500	97,500	93,800	90,400
20	73,900	68,900	66,700	76,100	75,700	78,300	92,300	84,600	97,700	97,400	93,500	90,200
21	73,100	68,600	66,700	77,100	75,700	78,400	92,500	84,600	97,700	97,300	93,200	90,000
22	72,300	68,600	66,400	78,000	75,800	78,300	92,800	84,700	97,700	97,200	93,000	89,200
23	73,300	68,500	66,000	78,400	75,300	78,100	93,200	85,000	97,700	97,400	92,700	88,900
24	73,300	68,400	65,200	78,500	74,800	78,000	93,600	85,500	97,400	97,400	92,300	88,600
25	73,200	68,300	64,200	78,600	74,800	78,300	93,700	87,200	97,500	97,500	92,000	88,200
26	73,200	68,200	64,000	78,400	74,800	78,400	93,800	91,100	97,700	97,400	91,900	87,800
27	73,200	68,300	64,100	78,400	74,800	78,600	93,900	95,800	97,700	97,400	91,700	87,500
28	73,100	68,200	64,400	78,400	74,800	78,600	94,000	96,200	97,700	97,400	91,600	87,000
29	73,100	68,400	65,400	78,300	-----	78,700	94,200	96,300	97,900	97,400	91,500	86,200
30	73,100	68,500	65,400	78,300	-----	78,800	94,300	96,200	97,900	97,400	91,400	85,800
31	73,100	-----	65,600	78,300	-----	78,700	-----	96,900	-----	97,100	91,300	-----
MAX	89,000	73,600	69,000	78,600	78,200	78,800	94,400	96,900	97,900	97,800	97,500	91,600
MIN	72,300	68,200	64,000	65,800	74,800	75,800	79,400	84,600	96,400	97,100	91,300	85,800
(a)	3,360.7	3,353.5	3,348.8	3,368.7	3,363.4	3,369.3	3,392.1	3,395.8	3,397.1	3,396.0	3,387.9	3,379.9
(b)	-16,400	-4,600	-2,900	+12,700	-3,500	+3,900	+15,600	+2,600	+1,000	-800	-5,800	-5,500
CAL YR 1973	b +33,200											
WTR YR 1974	b -3,700											

a Gage height, in feet, at end of month.
b Change in contents, in acre-feet.

11292900 MIDDLE FORK STANISLAUS RIVER BELOW BEARDSLEY DAM, CALIF.

LOCATION.--Lat 38°11'36", long 120°05'53", in NW¼NW¼ sec.22, T.4 N., R.17 E., Tuolumne County, Stanislaus National Forest, on right bank 0.5 mi (0.8 km) downstream from Beardsley afterbay dam, 1.5 mi (2.4 km) downstream from Beardsley Dam, and 5.7 mi (9.2 km) west of Pinecrest.

DRAINAGE AREA.--316 mi² (818 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 3,044.7 ft (928.02 m) above mean sea level (river-profile survey).

AVERAGE DISCHARGE.--17 years, 632 ft³/s (17.90 m³/s), 457,900 acre-ft/yr (565 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 3,660 ft³/s (104 m³/s) May 29 (gage height, 9.21 ft or 2.807 m); minimum daily, 18 ft³/s (0.51 m³/s) Nov. 3, 4.

Period of record: Maximum discharge, 6,630 ft³/s (188 m³/s) May 24, 1969 (gage height, 11.07 ft or 3.374 m); minimum daily, 3.0 ft³/s (0.085 m³/s) Oct. 10, 11, 1958.

REMARKS.--Records excellent. No diversion above station. Flow regulated by Relief Reservoir, capacity, 15,600 acre-ft (19.2 hm³), Donnell Lake since April 1957 (see sta 11292600), and by Beardsley Lake since January 1957 (see sta 11292800). See schematic diagram of Stanislaus River basin.

REVISIONS.--WSP 1930: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	472	30	475	624	954	669	1,050	1,190	2,510	1,300	461	556
2	472	19	464	624	723	692	697	1,250	2,520	1,070	472	554
3	472	18	493	620	644	689	688	1,280	2,520	900	464	554
4	468	18	616	620	643	684	681	1,290	2,520	811	468	550
5	472	19	618	621	650	684	679	1,290	2,530	838	467	552
6	468	20	617	620	684	684	678	1,300	3,360	829	464	565
7	468	173	616	620	662	692	671	1,310	3,120	712	487	546
8	468	448	616	620	665	693	665	1,310	2,620	710	569	499
9	465	465	616	620	665	690	660	1,580	2,070	817	578	487
10	468	472	616	620	665	688	652	1,900	1,750	1,810	600	483
11	465	474	616	620	664	688	642	1,860	2,290	943	579	479
12	265	478	616	620	662	690	632	1,830	2,740	738	600	478
13	213	477	618	620	665	690	626	1,790	2,290	635	600	481
14	472	470	617	621	665	693	620	1,760	1,890	724	608	480
15	483	465	612	628	666	694	613	1,900	2,280	665	608	478
16	495	484	612	637	666	695	785	2,380	2,210	640	612	477
17	496	497	612	659	662	693	1,500	2,630	1,910	613	613	479
18	494	506	612	662	661	637	1,680	2,600	1,300	613	613	479
19	495	501	608	663	662	702	1,580	2,390	1,610	613	613	478
20	491	502	608	661	661	864	1,010	1,840	1,190	613	617	477
21	483	412	615	658	661	915	1,040	1,180	1,200	613	626	479
22	484	506	616	656	661	916	1,040	1,010	1,560	543	626	478
23	188	515	616	829	661	822	1,050	1,010	1,530	470	630	476
24	58	504	613	977	661	706	1,060	1,060	1,470	465	634	477
25	63	494	611	1,010	661	770	1,050	1,100	1,200	477	634	481
26	57	492	609	1,050	661	906	1,050	1,230	946	478	579	480
27	44	475	618	1,020	661	1,050	1,060	1,470	1,010	477	538	474
28	44	471	625	993	661	1,100	1,050	3,560	1,010	472	540	479
29	44	474	644	988	-----	1,200	1,050	3,610	1,030	465	539	479
30	44	472	639	976	-----	1,360	1,140	2,770	1,210	469	543	478
31	44	-----	628	965	-----	1,290	-----	2,150	-----	472	544	-----
TOTAL	10,615	11,351	18,712	22,722	18,877	24,946	27,399	54,830	57,396	21,995	17,526	14,913
MEAN	342	378	604	733	674	805	913	1,769	1,913	710	565	497
MAX	496	515	644	1,050	954	1,360	1,680	3,610	3,360	1,810	634	565
MIN	44	18	464	620	643	637	613	1,010	946	465	461	474
AC-FT	21,050	22,510	37,120	45,070	37,440	49,480	54,350	108,800	113,800	43,630	34,760	29,580

CAL YR 1973 TOTAL 242,958 MEAN 666 MAX 4,000 MIN 18 AC-FT 481,900
WTR YR 1974 TOTAL 301,282 MEAN 825 MAX 3,610 MIN 18 AC-FT 597,600

11293500 NORTH FORK STANISLAUS RIVER BELOW SILVER CREEK, CALIF.

LOCATION.--Lat 38°26'22", long 120°00'53", in SE¼ sec.20, T.7 N., R.18 E., Alpine County, Stanislaus National Forest, on right bank 100 ft (30 m) downstream from Silver Creek, and 5.6 mi (9.0 km) northeast of Big Meadows.

DRAINAGE AREA.--27.8 mi² (72.0 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 6,677.3 ft (2,035.24 m) above mean sea level (river-profile survey).

AVERAGE DISCHARGE.--22 years, 78.9 ft³/s (2.234 m³/s), 57,160 acre-ft/yr (70.5 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,220 ft³/s (34.6 m³/s) May 7 (gage height, 7.62 ft or 2.323 m); minimum daily, 4.2 ft³/s (0.12 m³/s) Oct. 1.

Period of record: Maximum discharge, 2,780 ft³/s (78.7 m³/s) Dec. 24, 1964 (gage height, 11.16 ft or 3.402 m, from floodmarks), from rating curve extended above 500 ft³/s (14.2 m³/s); minimum daily, 0.3 ft³/s (0.008 m³/s) Oct. 10, 1958.

Flood of Nov. 20, 1950, reached a stage of 11.17 ft (3.405 m), from Pacific Gas and Electric Co. recorder chart, (discharge, 2,790 ft³/s or 79.0 m³/s).

REMARKS.--Flow regulated by Lake Alpine, Union, and Utica Reservoirs, combined capacity, 9,580 acre-ft (11.8 hm³), revised. No diversion above station. See schematic diagram of Stanislaus River basin.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

REVISIONS.--WSP 1930: 1954(M), drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.2	56	80	97	51	107	122	478	405	32	36	17
2	4.3	58	50	60	45	204	83	563	356	29	35	17
3	4.3	60	40	50	43	126	64	507	350	25	36	17
4	4.3	60	37	45	47	63	59	468	371	22	38	17
5	6.3	60	35	40	49	53	77	531	346	19	38	17
6	10	75	34	35	41	53	89	610	385	16	38	17
7	12	124	36	35	38	55	105	740	342	14	33	16
8	11	64	38	35	37	53	126	776	261	13	25	16
9	13	37	40	35	38	43	139	733	251	136	27	15
10	21	94	41	35	40	43	95	631	265	244	29	13
11	21	362	43	34	42	40	109	594	266	80	26	13
12	28	235	41	35	39	45	169	571	260	44	23	13
13	41	37	43	35	48	47	200	479	233	32	24	13
14	40	26	41	39	36	65	237	481	216	26	24	13
15	40	22	37	80	34	100	289	490	193	22	24	13
16	40	19	37	195	36	122	285	396	169	18	23	13
17	40	21	41	418	43	115	310	298	144	15	23	13
18	39	22	42	305	34	91	306	228	118	13	22	13
19	42	26	36	409	49	102	197	177	99	11	23	12
20	46	36	33	220	40	122	217	154	81	10	22	14
21	45	44	40	142	34	145	276	193	81	9.1	22	20
22	47	42	58	98	35	151	361	281	87	8.5	22	21
23	52	37	42	82	37	156	331	394	82	7.9	22	21
24	49	38	36	72	35	179	229	491	67	13	22	20
25	40	36	32	69	37	179	158	556	52	23	23	21
26	32	37	32	62	34	133	123	661	44	25	20	20
27	34	34	53	55	33	139	109	699	38	28	17	21
28	34	38	60	55	32	136	150	637	35	28	17	22
29	42	43	232	53	-----	139	199	492	36	28	17	22
30	56	41	252	51	-----	180	298	398	33	30	17	22
31	56	-----	139	49	-----	112	-----	407	-----	36	17	-----
TOTAL	954.4	1,884	1,801	3,025	1,107	3,298	5,512	15,114	5,666	1,057.5	785	502
MEAN	30.8	62.8	58.1	97.6	39.5	106	184	488	189	34.1	25.3	16.7
MAX	56	362	252	418	51	204	361	776	405	244	38	22
MIN	4.2	19	32	34	32	40	59	154	33	7.9	17	12
AC-FT	1,890	3,740	3,570	6,000	2,200	6,540	10,930	29,980	11,240	2,100	1,560	996
CAL YR 1973	TOTAL 35,234.3											
WTR YR 1974	TOTAL 40,705.9											
	MEAN 96.5											
	MAX 916											
	MIN 3.3											
	AC-FT 69,890											
	MEAN 112											
	MAX 776											
	MIN 4.2											
	AC-FT 80,740											

		PEAK DISCHARGE (BASE, 300 FT ³ /S)					
DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-12	0345	6.87	674	4-22	2200	6.40	451
12-29	1830	6.14	356	5-7	2145	7.62	1,220
1-19	0400	6.60	537	5-26	2330	7.50	1,110
4-17	2300	6.29	408	7-9	2245	6.53	505

LOCATION.--Lat 38°23'34", long 119°59'50", in SW¼ sec.3, T.6 N., R.18 E., Tuolumne County, Stanislaus National Forest, on right bank 500 ft (152 m) downstream from Spicer Meadows Reservoir dam, 5.8 mi (9.3 km) upstream from mouth, and 7 mi (11 km) east of Big Meadow.

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

GAGE.--Water-stage recorder. Datum of gage is 6,374.8 ft (1,943.04 m) above mean sea level (river-profile survey).

EXTREMES.--Current year: Maximum discharge, 4,830 ft³/s (137 m³/s) Nov. 12 (gage height, 9.68 ft or 2.950 m), from rating curve extended above 1,200 ft³/s (34.0 m³/s); minimum daily, 0.20 ft³/s (0.006 m³/s) Oct. 16.

Period of record: Maximum discharge, 9,860 ft³/s (279 m³/s) Jan. 31, 1963 (gage height, 11.88 ft or 3.621 m), from rating curve extended above 1,200 ft³/s (34.0 m³/s); no flow Sept. 28 to Dec. 1, Dec. 4-6, 1964, Sept. 17, Oct. 4, 21-24, 1972.

Flood of Nov. 20, 1950, reached a stage of 11.50 ft (3.505 m) from Pacific Gas and Electric Co. recorder chart (discharge, 8,800 ft³/s or 249 m³/s).

REMARKS.--Flow regulated by Spicer Meadows Reservoir 500 ft (152 m) upstream, capacity, 4,060 acre-ft (5.01 hm³).
See schematic diagram of Stanislaus River basin.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	7.6	73	102	72	269	140	549	638	135	34	27
2	26	4.9	70	70	64	301	123	660	590	122	35	27
3	25	3.0	73	65	64	134	106	646	596	99	36	27
4	25	2.9	66	60	65	106	107	637	607	92	36	27
5	24	4.3	61	60	65	104	131	703	605	83	64	27
6	23	5.5	59	60	62	100	141	797	660	72	71	27
7	23	5.8	64	60	63	93	158	936	578	64	39	26
8	22	6.3	64	67	60	77	178	1,000	485	61	36	26
9	22	6.5	66	59	62	72	184	983	478	218	44	25
10	21	6.8	68	50	63	77	141	889	495	284	50	25
11	20	1,520	71	52	62	72	159	861	525	142	50	25
12	9.7	2,040	60	50	61	77	219	834	513	97	49	24
13	.96	367	64	50	56	90	254	705	479	80	49	21
14	.21	245	53	51	54	125	304	696	450	69	49	18
15	.71	185	52	177	52	158	373	694	409	62	49	18
16	.20	165	56	263	55	167	381	587	374	55	48	18
17	2.2	203	65	635	51	152	419	460	327	49	48	18
18	1.8	191	60	428	51	133	414	357	288	45	48	17
19	1.9	131	53	508	56	142	268	292	250	42	49	17
20	3.0	117	50	248	50	161	275	255	226	40	51	11
21	3.1	102	56	169	49	181	345	285	243	39	51	.35
22	3.2	91	54	135	48	183	456	387	258	38	50	.66
23	3.3	80	49	118	45	193	438	466	247	35	50	2.0
24	3.5	80	46	107	49	220	290	591	214	34	50	4.2
25	16	72	47	104	52	223	244	714	187	34	36	4.2
26	25	69	47	95	52	187	198	889	167	37	22	4.2
27	25	66	55	85	48	192	185	965	143	32	25	3.6
28	24	79	63	84	49	171	213	952	139	30	25	3.6
29	15	80	353	80	-----	247	262	768	144	28	25	3.6
30	8.0	73	252	77	-----	235	362	654	145	31	26	3.4
31	7.6	-----	138	74	-----	156	-----	647	-----	34	27	-----
TOTAL	411.38	6,009.6	2,408	4,243	1,580	4,798	7,468	20,859	11,460	2,283	1,322	480.81
MEAN	13.3	200	77.7	137	56.4	155	249	673	382	73.6	42.6	16.0
MAX	26	2,040	353	635	72	301	456	1,000	660	284	71	27
MIN	.20	2.9	46	50	45	72	106	255	139	28	22	.35
AC-FT	816	11,920	4,780	8,420	3,130	9,520	14,810	41,370	22,730	4,530	2,620	954
CAL YR 1973	TOTAL	55,253.78	MEAN	151	MAX	2,040	MIN	.20	AC-FT	109,600		
WTR YR 1974	TOTAL	63,322.79	MEAN	173	MAX	2,040	MIN	.20	AC-FT	125,600		

DATE	TIME	G.H.	PEAK DISCHARGE (BASE, 500 FT ³ /S)	DATE	TIME	G.H.	DISCHARGE
11-12	0400	9.68	4,830	5-2	2200	6.15	999
12-29	1700	5.20	558	5-8	2130	6.97	1,540
1-18	2300	5.99	912	5-26	2115	6.85	1,450
3-1	2300	5.38	628	6-6	2130	5.95	891
4-17	2300	5.25	576	6-12	0015	5.47	665
4-22	2315	5.34	611	7-9	2045	5.15	539

11294500 NORTH FORK STANISLAUS RIVER NEAR AVERY, CALIF.

LOCATION.--Lat 38°14'45", long 120°17'20", in SW¼NE¼ sec.35, T.5 N., R.15 E., Calaveras County, Stanislaus National Forest, on right bank 700 ft (213 m) upstream from intake of Utica Canal, 3.3 mi (5.3 km) upstream from Beaver Creek, and 5.1 mi (8.2 km) northeast of Avery.

DRAINAGE AREA.--163 mi² (422 km²).

PERIOD OF RECORD.--July 1914 to September 1925, November 1928 to current year. Yearly discharge only for some years, published in WSP 1315-A.

GAGE.--Water-stage recorder. Datum of gage is 3,388.3 ft (1,032.75 m) above mean sea level (river-profile survey). Prior to September 1922, nonrecording gage at same site at datum 0.05 ft (0.015 m) lower.

AVERAGE DISCHARGE.--57 years, 421 ft³/s (11.92 m³/s), 305,000 acre-ft/yr (376 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 10,600 ft³/s (300 m³/s) Nov. 12 (gage height, 10.28 ft or 3.133 m); minimum daily, 21 ft³/s (0.59 m³/s) Sept. 24, 25.

Period of record: Maximum discharge, 36,000 ft³/s (1,020 m³/s) Jan. 31, 1963 (gage height, 15.00 ft or 4.572 m, from floodmarks), from rating curve extended above 14,000 ft³/s (396 m³/s) on basis of slope-area measurement at gage height 13.8 ft (4.21 m); minimum daily, 5.5 ft³/s (0.16 m³/s) Dec. 6, 7, 1929.

REMARKS.--Flow regulated at low and medium stages by Lake Alpine, Spicer Meadows, Union and Utica Reservoirs, combined capacity, 13,600 acre-ft (16.8 hm³). Diversion of a maximum of 10 ft³/s (0.28 m³/s) during summer from Beaver Creek into river above station. See schematic diagram of Stanislaus River basin.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

REVISIONS (WATER YEARS).--WSP 1215: 1938(M). WSP 1515: 1915(M), 1932(M), 1936(M), 1938, 1940(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35	71	452	663	430	1,370	1,090	1,860	1,720	215	84	43
2	35	70	336	485	392	1,900	1,000	2,220	1,610	198	83	43
3	35	72	317	458	380	943	801	2,200	1,500	174	83	42
4	34	70	299	434	380	672	740	2,060	1,560	152	85	42
5	33	72	270	407	368	665	800	2,260	1,430	139	99	41
6	33	118	262	390	329	621	810	2,500	1,540	125	136	41
7	51	189	270	391	329	591	845	2,870	1,450	112	107	41
8	70	194	275	351	317	535	892	3,080	1,160	113	80	41
9	50	93	278	325	312	487	952	2,980	1,060	403	70	40
10	42	270	285	284	318	489	776	2,730	1,100	1,000	85	39
11	48	2,900	297	289	312	464	783	2,570	1,080	438	93	36
12	48	4,960	279	316	312	551	963	2,520	1,100	254	87	36
13	49	1,010	283	347	285	560	1,040	2,220	1,000	196	83	35
14	49	658	267	334	295	638	1,170	2,050	939	161	83	34
15	47	497	249	549	269	796	1,410	2,130	861	140	83	30
16	46	442	259	1,040	282	853	1,470	1,880	756	125	82	29
17	45	841	305	3,470	257	817	1,510	1,520	667	113	81	29
18	44	922	334	2,020	271	703	1,650	1,200	562	101	80	28
19	45	487	270	2,610	303	716	1,100	1,000	500	91	79	28
20	49	407	255	1,440	279	759	1,090	881	433	83	80	27
21	54	377	265	1,030	273	831	1,250	933	416	77	82	26
22	59	330	299	823	268	849	1,620	1,210	435	72	81	25
23	150	286	274	729	245	850	1,690	1,550	429	68	79	22
24	92	290	243	643	253	919	1,200	1,800	380	63	83	21
25	72	263	242	609	263	988	989	2,070	327	73	79	21
26	60	260	242	559	271	858	854	2,330	287	79	64	22
27	65	239	384	499	259	967	780	2,550	252	82	42	23
28	65	261	508	501	254	1,010	886	2,450	229	76	42	23
29	63	293	1,800	473	-----	1,180	1,010	2,110	224	72	41	23
30	67	286	1,500	455	-----	1,450	1,300	1,740	223	70	41	23
31	71	-----	882	439	-----	1,020	-----	1,710	-----	77	42	-----
TOTAL	1,706	17,228	12,481	23,363	8,506	26,052	32,471	63,184	25,230	5,142	2,419	954
MEAN	55.0	574	403	754	304	840	1,082	2,038	841	166	78.0	31.8
MAX	150	4,960	1,800	3,470	430	1,900	1,690	3,080	1,720	1,000	136	43
MIN	33	70	242	284	245	464	740	881	223	63	41	21
AC-FT	3,380	34,170	24,760	46,340	16,870	51,670	64,410	125,300	50,040	10,200	4,800	1,890
CAL YR 1973	TOTAL 188,418 MEAN 516 MAX 4,960 MIN 33 AC-FT 373,700											
WTR YR 1974	TOTAL 218,736 MEAN 599 MAX 4,960 MIN 21 AC-FT 433,900											

PEAK DISCHARGE (BASE, 2,000 FT ³ /S)							
DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-12	0645	10.28	10,600	4-23	0245	6.02	2,010
12-29	1715	6.86	2,980	5-8	0015	7.73	4,310
1-17	0715	8.08	4,940	5-27	0030	7.09	3,300
3-2	0015	7.29	3,590				

11295400 STANISLAUS RIVER NEAR HATHAWAY PINES, CALIF.

LOCATION.--Lat 38°08'29", long 120°22'19", in NW¼SW¼ sec.6, T.3 N., R.15 E., Calaveras County, on right bank 1,000 ft (300 m) upstream from Stanislaus powerplant, and 3.6 mi (5.8 km) south of Hathaway Pines.

DRAINAGE AREA.--629 mi² (1,629 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 1,030.00 ft (313.944 m) above mean sea level (levels by Pacific Gas and Electric Co.).

AVERAGE DISCHARGE (River only).--7 years, 895 ft³/s (25.3 m³/s), 648,400 acre-ft/yr (799 hm³/yr).
(Combined river and powerplant).--7 years, 1,404 ft³/s (39.76 m³/s), 1,017,000 acre-ft/yr (1.25 km³/yr).

EXTREMES (River only).--Current year: Maximum discharge, 10,600 ft³/s (300 m³/s) Nov. 12 (gage height, 15.60 ft or 4.755 m); minimum daily, 31 ft³/s (0.88 m³/s) Oct. 14.
Period of record: Maximum discharge, 17,300 ft³/s (490 m³/s) Jan. 21, 1970 (gage height, 17.98 ft or 5.480 m, recorded, 18.6 ft or 5.67 m, from floodmarks); minimum daily, 19 ft³/s (0.54 m³/s) Aug. 17, 1968.
(Combined flow).--Current year: Maximum discharge, 11,200 ft³/s (317 m³/s) Nov. 12; minimum daily 62 ft³/s (1.76 m³/s) Nov. 4.
Period of record: Maximum discharge, 17,900 ft³/s (507 m³/s) Jan. 21, 1970; minimum daily, 45 ft³/s, (1.27 m³/s) Nov. 3, 1972.

REMARKS.--Records excellent. Many diversions above station for hydro-electric powerplants. Small diversions for domestic water supply. Stanislaus tunnel diverts from left bank of Middle Fork Stanislaus River 13.7 mi (22.0 km) upstream from station in SE¼ sec.24, T.4 N., R.16 E., to Stanislaus powerplant 1,000 ft (300 m) downstream from station. See schematic diagram of Stanislaus River basin. For records of combined discharge of river and tunnel, see following page. Records of water temperatures for the current year are published in Part 2 of this report.

COOPERATION.--Records of diversion to Stanislaus powerplant furnished by Pacific Gas and Electric Co.

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34	86	869	1,190	1,400	2,230	3,540	3,180	4,060	1,110	63	53
2	34	79	539	908	854	3,980	3,130	3,690	4,000	833	59	63
3	35	69	467	851	698	2,010	2,200	3,730	3,840	663	60	62
4	36	62	551	805	711	1,500	1,890	3,490	3,930	503	58	60
5	36	68	509	765	688	1,430	1,820	3,710	3,770	520	62	58
6	36	108	507	757	673	1,340	1,740	3,980	4,570	506	89	56
7	45	236	512	739	621	1,320	1,720	4,330	4,460	394	97	53
8	83	251	488	694	626	1,250	1,710	4,580	3,650	315	120	51
9	63	89	487	666	590	1,140	1,810	4,640	3,000	579	162	48
10	45	210	519	589	597	1,100	1,550	4,810	2,520	2,540	180	46
11	39	2,900	521	601	624	1,030	1,520	4,560	3,130	1,060	168	44
12	39	5,580	522	636	662	1,170	1,680	4,460	3,570	607	194	42
13	32	1,230	528	686	630	1,200	1,750	4,100	3,150	390	204	39
14	31	790	532	682	641	1,250	1,880	3,770	2,320	427	198	39
15	35	656	468	842	610	1,440	2,140	3,970	2,770	343	197	39
16	38	517	465	1,500	625	1,500	2,290	4,150	2,580	307	200	41
17	44	1,120	529	5,290	596	1,450	3,080	4,060	2,230	242	200	41
18	46	1,620	630	3,430	603	1,280	3,600	3,690	1,460	220	199	40
19	50	774	508	4,210	691	1,240	2,850	3,230	1,700	198	185	41
20	51	591	497	2,500	640	1,420	2,090	2,630	1,320	189	150	39
21	50	541	520	2,070	638	1,610	2,200	1,890	1,080	180	152	40
22	51	412	644	1,920	632	1,650	2,690	1,910	1,550	170	156	40
23	299	388	557	1,870	596	1,570	2,870	2,300	1,520	78	161	39
24	151	383	496	1,860	602	1,520	2,330	2,640	1,490	65	160	38
25	115	337	480	1,840	604	1,620	1,960	3,040	1,100	59	163	40
26	122	346	500	1,820	618	1,630	1,800	3,440	855	73	145	40
27	96	290	985	1,800	604	1,970	1,690	3,850	759	77	68	39
28	86	296	1,230	1,760	574	2,390	1,810	5,860	805	74	59	38
29	79	331	3,160	1,730	-----	2,640	2,000	5,710	887	71	58	40
30	83	336	2,570	1,670	-----	3,570	2,440	4,700	840	62	54	39
31	84	-----	1,540	1,630	-----	2,880	-----	3,730	-----	65	56	-----
TOTAL	2,068	20,696	23,330	48,311	18,648	53,330	65,780	117,830	72,916	12,920	4,077	1,348
MEAN	66.7	690	753	1,558	666	1,720	2,193	3,801	2,431	417	132	44.9
MAX	299	5,580	3,160	5,290	1,400	3,980	3,600	5,860	4,570	2,540	204	63
MIN	31	62	465	589	574	1,030	1,520	1,890	759	59	54	38
AC-FT	4,100	41,050	46,280	95,820	36,990	105,800	130,500	233,700	144,600	25,630	8,090	2,670
CAL YR 1973	TOTAL	337,394	MEAN	924	MAX	7,310	MIN	29	AC-FT	669,200		
WTR YR 1974	TOTAL	441,254	MEAN	1,209	MAX	5,860	MIN	31	AC-FT	875,200		

11295400 STANISLAUS RIVER NEAR HATHAWAY PINES, CALIF.--Continued

COMBINED DISCHARGE, IN CUBIC FEET PER SECOND, OF STANISLAUS RIVER AND STANISLAUS
POWERPLANT AT STANISLAUS, NEAR HATHAWAY PINES, CALIF., WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	568	86	1,430	1,750	1,980	2,790	4,100	3,740	4,630	1,690	623	598
2	569	79	1,100	1,460	1,420	4,540	3,690	4,250	4,570	1,410	617	608
3	570	69	1,020	1,410	1,260	2,570	2,760	4,290	4,410	1,240	618	605
4	570	62	1,110	1,360	1,270	2,060	2,450	4,050	4,500	1,070	615	603
5	570	68	1,070	1,320	1,250	1,990	2,380	4,270	4,340	1,090	619	601
6	570	108	1,060	1,310	1,230	1,900	2,300	4,540	5,140	1,080	644	599
7	580	262	1,070	1,300	1,180	1,880	2,280	4,890	5,030	964	652	595
8	618	813	1,050	1,250	1,190	1,810	2,270	5,140	4,220	884	676	593
9	597	651	1,040	1,220	1,150	1,700	2,370	5,200	3,570	1,150	716	590
10	578	772	1,080	1,150	1,160	1,660	2,140	5,370	3,090	3,110	734	588
11	573	3,460	1,080	1,160	1,180	1,590	2,080	5,120	3,700	1,630	722	585
12	470	6,140	1,080	1,190	1,220	1,730	2,240	5,020	4,140	1,170	748	582
13	438	1,790	1,090	1,240	1,190	1,760	2,310	4,660	3,720	955	756	579
14	564	1,350	1,090	1,240	1,200	1,810	2,440	4,330	2,890	993	750	578
15	575	1,220	1,030	1,400	1,170	2,000	2,700	4,530	3,340	908	749	578
16	579	1,080	1,020	2,060	1,180	2,060	2,850	4,710	3,150	872	751	580
17	584	1,690	1,090	5,850	1,150	2,010	3,640	4,620	2,800	806	751	580
18	584	2,190	1,190	3,990	1,160	1,840	4,160	4,250	2,030	785	750	578
19	589	1,340	1,060	4,770	1,250	1,800	3,410	3,790	2,270	762	736	578
20	589	1,150	1,050	3,060	1,200	1,980	2,650	3,190	1,890	753	700	576
21	586	1,050	1,080	2,630	1,200	2,170	2,760	2,450	1,650	745	702	576
22	585	976	1,200	2,480	1,190	2,210	3,250	2,470	2,120	733	706	576
23	686	955	1,110	2,430	1,150	2,130	3,430	2,860	2,090	641	711	575
24	231	947	1,050	2,420	1,160	2,080	2,890	3,200	2,060	628	708	574
25	115	900	1,040	2,400	1,160	2,180	2,520	3,600	1,670	625	711	574
26	122	908	1,060	2,380	1,180	2,190	2,360	4,010	1,420	637	693	574
27	96	851	1,540	2,160	1,160	2,530	2,250	4,420	1,330	640	614	573
28	86	856	1,790	1,840	1,130	2,950	2,370	6,430	1,370	637	605	572
29	79	891	3,720	1,810	-----	3,200	2,560	6,280	1,460	632	604	573
30	83	895	3,130	1,750	-----	4,130	3,000	5,270	1,400	622	600	572
31	84	-----	2,100	1,890	-----	3,440	-----	4,300	-----	625	601	-----
TOTAL	14,088	33,609	40,630	63,680	34,320	70,690	82,580	135,250	90,000	30,487	21,182	17,513
MEAN	454	1,120	1,311	2,054	1,226	2,280	2,753	4,363	3,000	983	683	584
MAX	686	6,140	3,720	5,850	1,980	4,540	4,160	6,430	5,140	3,110	756	608
MIN	79	62	1,020	1,150	1,130	1,590	2,080	2,450	1,330	622	600	572
AC-FT	27,940	66,660	80,590	126,300	68,070	140,200	163,800	268,300	178,500	60,470	42,010	34,740
CAL YR 1973	TOTAL	523,304	MEAN	1,434	MAX	7,840	MIN	62	AC-FT	1,038,000		
WTR YR 1974	TOTAL	634,029	MEAN	1,737	MAX	6,430	MIN	62	AC-FT	1,258,000		

LOCATION.--Lat 38°11'51", long 120°00'27", in SW¼ sec.16, T.4 N., R.18 E., Tuolumne County, Stanislaus National Forest, on right bank 0.3 mi (0.5 km) downstream from bridge on State Highway 108 at Strawberry, 0.6 mi (1.0 km) downstream from Herring Creek, and 1.2 mi (1.9 km) downstream from Pinecrest Lake.

PERIOD OF RECORD.--October 1911 to January 1917, August 1938 to current year. Monthly discharge only for October 1913 and yearly estimates for 1912-13, published in WSP 1315-A. Published as "near Confidence" 1911-13.

AVERAGE DISCHARGE.--41 years, (1911-16, 1938-74), 128 ft³/s (3.625 m³/s), 92,740 acre-ft/yr (114 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,210 ft³/s (34.3 m³/s) May 28 (gage height, 5.51 ft or 1.679 m); minimum daily, 17 ft³/s (0.48 m³/s) Nov. 5.
Period of record: Maximum discharge, 3,900 ft³/s (110 m³/s) Nov. 21, 1950 (gage height, 9.25 ft or 2.819 m), from rating curve extended above 1,100 ft³/s (31.2 m³/s) on basis of contracted-opening measurement of maximum flow at bridge 0.3 mi (0.5 km) below station; minimum, 1.3 ft³/s (0.037 m³/s) Nov. 22, 23, 1946.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

CAL YR 1973	TOTAL 49,047	MEAN 134	MAX 1,110	MIN 17	AC=FT 97,280
WTR YR 1974	TOTAL 56,391	MEAN 154	MAX 976	MIN 17	AC=FT 111,900

LOCATION.--Lat 38°10'39", long 120°02'46", in NW¼NW¼ sec.30, T.4 N., R.18 E., Tuolumne County, Stanislaus National Forest, on right bank 250 ft (76 m) downstream from diversion dam on South Fork Stanislaus River, and 2.8 mi (4.5 km) southwest of Strawberry.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 4,960 ft (1,511.8 m) above mean sea level (river-profile survey).

EXTREMES.--Period of record: Maximum daily discharge, 64 ft³/s (1.81 m³/s) in 1941, 1961-63, 1965, 1971-72, 1974; no flow at times in some years.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	60	19	59	58	58	61	61	58	58	60	47	.54
2	60	20	58	57	58	60	61	64	62	59	47	.16
3	60	20	59	57	59	59	61	57	61	59	47	.12
4	60	20	58	57	59	59	61	56	61	60	47	1.3
5	60	11	58	57	58	59	61	58	53	60	46	2.6
6	59	19	58	57	58	60	61	59	62	58	45	26
7	60	22	58	57	58	61	61	59	59	53	47	55
8	60	30	58	56	58	61	60	59	59	48	47	60
9	60	39	58	56	58	61	60	56	64	52	47	60
10	60	53	58	56	59	61	60	62	62	53	48	60
11	60	59	58	56	59	61	60	60	61	51	48	60
12	39	51	58	56	60	61	61	60	61	60	48	60
13	40	36	58	57	59	61	60	60	61	59	48	60
14	60	48	58	58	60	61	60	58	60	56	48	60
15	58	54	58	59	60	61	60	60	58	47	49	60
16	56	54	58	58	60	61	61	54	59	42	50	60
17	56	56	58	57	60	61	61	58	59	37	50	60
18	56	57	59	58	60	61	59	58	58	26	50	60
19	56	58	58	59	60	59	59	59	56	22	17	60
20	48	57	58	58	60	59	59	60	55	21	.11	60
21	31	45	58	57	60	60	60	61	59	19	.11	60
22	31	57	58	49	60	60	61	61	61	32	.11	60
23	20	55	58	57	60	60	60	62	60	47	.11	60
24	27	55	58	58	60	61	59	63	60	48	3.1	60
25	44	56	58	58	60	61	60	62	60	48	3.4	61
26	22	58	58	58	60	61	60	62	60	51	.67	61
27	18	58	60	58	60	61	60	62	60	53	.11	61
28	18	58	60	58	60	61	60	61	60	52	.11	61
29	18	58	61	57	-----	61	61	59	60	51	.11	61
30	18	58	61	57	-----	61	58	57	61	50	.52	61
31	17	-----	59	58	-----	61	-----	58	-----	49	.99	-----
TOTAL	1,392	1,341	1,812	1,769	1,661	1,876	1,806	1,843	1,790	1,483	885.45	1,471.72
MEAN	44.9	44.7	58.5	57.1	59.3	60.5	60.2	59.5	59.7	47.8	28.6	49.1
MAX	60	59	61	59	60	61	61	64	64	60	50	61
MIN	17	11	58	49	58	59	58	54	53	19	.11	.12
AC=FT	2,760	2,660	3,590	3,510	3,290	3,720	3,580	3,660	3,550	2,940	1,760	2,920
CAL YR 1973	TOTAL 17,135.82		MEAN 46.9	MAX 63	MIN .03	AC=FT 33,990						
WTR YR 1974	TOTAL 19,130.17		MEAN 52.4	MAX 64	MIN .11	AC=FT 37,940						

SAN JOAQUIN RIVER BASIN

11297500 TUOLUMNE CANAL NEAR LONG BARN, CALIF.

LOCATION.--Lat 38°05'35", long 120°10'03", in SW¼ sec.24, T.3 N., R.16 E., Tuolumne County, Stanislaus National Forest, on left bank 300 ft (91 m) downstream from intake, 350 ft (107 m) downstream from Lyons Reservoir on South Fork Stanislaus River, 2 mi (3 km) west of Long Barn, and 15 mi (24 km) northeast of Sonora.

PERIOD OF RECORD.--October 1937 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 4,110.0 ft (1,252.73 m) above mean sea level (river-profile survey). Prior to June 1938, at site 200 ft (61 m) downstream at different datum.

AVERAGE DISCHARGE.--37 years, 27.0 ft³/s (0.765 m³/s), 19,560 acre-ft/yr (24.1 hm³/yr).

EXTREMES.--Period of record: Maximum daily discharge, 57 ft³/s (1.61 m³/s) May 9-13, 1973, Jan. 20, 1974; no flow at times in some years.

REMARKS.--Canal diverts from left bank of South Fork Stanislaus River into Tuolumne River basin for power and domestic supply in vicinity of Sonora. See schematic diagram of Stanislaus River basin.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	39	24	43	46	43	45	47	45	49	45	45	48
2	39	24	43	46	42	46	48	55	48	45	45	48
3	39	24	43	46	42	47	43	51	50	45	44	48
4	39	24	43	46	44	46	45	49	51	44	44	48
5	39	24	43	46	46	54	45	49	51	44	45	48
6	39	25	44	46	46	53	45	49	51	45	46	48
7	39	25	45	46	46	45	45	50	52	45	46	48
8	34	25	45	46	46	45	45	52	51	45	46	48
9	30	26	44	46	46	44	45	52	50	44	46	48
10	29	28	44	46	46	44	45	53	50	49	46	48
11	28	29	44	45	46	44	45	53	51	46	46	48
12	28	30	44	44	45	44	45	53	51	44	45	47
13	29	26	44	44	45	44	45	53	50	42	45	47
14	29	24	44	44	45	45	45	49	52	41	45	47
15	18	25	44	44	45	46	45	45	52	42	45	47
16	17	25	44	45	45	46	45	47	53	42	47	48
17	17	25	45	46	45	46	48	48	53	44	48	48
18	17	26	45	46	45	46	47	47	53	46	48	48
19	18	26	45	51	45	45	48	46	52	46	47	48
20	26	32	45	57	45	45	48	47	53	46	48	48
21	26	38	45	50	45	45	48	48	52	45	48	47
22	26	38	45	43	45	45	48	48	52	45	48	47
23	22	38	45	45	45	45	50	50	54	45	48	46
24	19	38	45	45	45	45	50	50	52	45	48	45
25	15	38	45	45	45	45	47	48	49	45	48	45
26	18	38	45	45	45	45	49	47	50	45	48	45
27	26	39	45	45	45	45	49	47	50	45	48	43
28	26	39	46	45	45	46	49	47	47	45	37	42
29	25	41	46	44	-----	45	49	41	45	45	41	42
30	25	42	47	44	-----	46	44	39	46	45	45	41
31	25	-----	46	44	-----	46	-----	48	-----	45	48	-----
TOTAL	846	906	1,381	1,421	1,258	1,418	1,397	1,506	1,520	1,385	1,424	1,399
MEAN	27.3	30.2	44.5	45.8	44.9	45.7	46.6	48.6	50.7	44.7	45.9	46.6
MAX	39	42	47	57	46	54	50	55	54	49	48	48
MIN	15	24	43	43	42	44	43	39	45	41	37	41
AC-FT	1,680	1,800	2,740	2,820	2,500	2,810	2,770	2,990	3,010	2,750	2,820	2,770
CAL YR 1973	TOTAL	15,419	MEAN	42.2	MAX	57	MIN	15	AC-FT	30,580		
WTR YR 1974	TOTAL	15,861	MEAN	43.5	MAX	57	MIN	15	AC-FT	31,460		

11298000 SOUTH FORK STANISLAUS RIVER NEAR LONG BARN, CALIF.

LOCATION.--Lat 38°05'33", long 120°10'02", in SW¼ sec.24, T.3 N., R.16 E., Tuolumne County, Stanislaus National Forest, on left bank 600 ft (183 m) downstream from Lyons Dam, 2 mi (3 km) west of Long Barn, and 15 mi (24 km) northeast of Sonora.

DRAINAGE AREA.--66.9 mi² (173.3 km²).

PERIOD OF RECORD.--October 1937 to current year. Monthly discharge only for some periods, published in WSP 1315-A.

GAGE.--Water-stage recorder and masonry control. Datum of gage is 4,073.4 ft (1,241.57 m) above mean sea level (river-profile survey).

AVERAGE DISCHARGE.--37 years, 85.9 ft³/s (2.433 m³/s), 62,230 acre-ft/yr (76.7 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,170 ft³/s (33.1 m³/s) May 28 (gage height, 5.54 ft or 1.689 m); minimum daily, 0.77 ft³/s (0.022 m³/s) Oct. 27, 28.
Period of record: Maximum discharge, 4,900 ft³/s (139 m³/s) Nov. 21, 1950 (gage height, 9.3 ft or 2.83 m), from rating curve extended above 1,100 ft³/s (31.2 m³/s) on basis of computation of maximum flow over Lyons Dam; no flow at times in 1937-39, 1952.

REMARKS.--Flow regulated by Lyons Reservoir 600 ft (183 m) upstream, capacity, 5,510 acre-ft (6.79 hm³), revised, and Pinecrest Lake, capacity, 18,300 acre-ft (22.6 hm³). Tuolumne Canal (see sta 11297500) diverts at Lyons Dam; other diversions, see schematic diagram of Stanislaus River basin.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

REVISIONS (WATER YEARS).--WSP 1215: 1938(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.1	2.4	2.3	2.0	6.2	2.6	224	124	710	54	1.4	2.0
2	2.0	2.4	2.0	1.7	5.8	2.3	287	347	611	29	1.5	2.0
3	2.0	2.4	2.0	1.8	6.1	2.0	188	490	596	10	1.7	1.8
4	1.9	2.4	2.0	1.8	4.6	2.0	135	455	660	2.4	2.5	1.6
5	1.4	2.3	2.0	1.8	2.8	9.6	106	503	596	2.4	2.1	1.7
6	1.4	2.2	1.9	1.8	2.1	52	86	616	803	2.4	1.6	1.6
7	1.6	2.2	1.8	1.8	2.0	67	73	741	831	2.4	1.6	1.6
8	2.1	2.2	1.8	1.8	2.0	64	66	830	635	2.4	1.6	1.6
9	2.4	2.2	1.8	1.8	2.0	58	67	847	515	3.6	1.6	1.6
10	2.3	2.2	1.9	1.8	2.0	54	56	809	539	571	1.6	1.6
11	2.0	2.4	2.0	2.4	2.0	47	49	705	591	81	1.6	1.6
12	2.0	2.4	2.0	2.7	2.0	54	49	628	513	12	1.6	2.2
13	1.9	2.0	2.0	2.6	2.0	57	52	658	459	3.5	1.6	2.6
14	1.8	2.0	2.0	2.6	2.0	55	59	551	513	4.1	1.6	2.6
15	2.1	1.9	1.9	2.6	2.0	58	69	619	493	3.7	1.5	2.6
16	2.4	2.2	1.8	2.7	2.0	60	78	590	426	3.2	1.5	2.6
17	2.3	2.4	1.9	2.8	2.0	58	81	431	311	2.3	1.6	2.5
18	2.0	2.3	2.0	2.7	2.0	52	99	289	262	1.6	1.6	2.4
19	2.2	2.1	2.0	41	2.0	45	70	204	256	1.6	1.4	2.3
20	2.0	2.0	2.0	130	2.0	39	49	143	225	1.4	1.5	2.2
21	2.0	2.0	2.2	102	2.0	37	48	121	83	1.4	1.5	2.2
22	2.0	2.0	2.1	86	2.0	35	72	159	26	1.4	1.4	2.2
23	2.2	2.0	2.0	63	2.0	32	93	237	200	1.4	1.4	2.2
24	1.9	2.0	2.0	47	2.0	32	87	474	159	1.4	1.4	2.4
25	1.9	2.0	2.0	37	2.0	35	61	669	111	1.4	1.4	2.2
26	1.9	2.0	2.1	29	2.0	34	54	823	86	1.5	1.4	2.0
27	.77	2.0	2.3	21	2.0	38	53	965	55	1.6	1.4	2.0
28	.77	1.9	2.2	17	2.0	81	58	972	56	1.6	2.3	1.6
29	1.7	1.9	2.2	12	-----	67	60	786	58	1.5	2.2	1.6
30	2.4	1.8	2.1	9.0	-----	109	77	743	59	1.4	2.2	2.1
31	2.4	-----	2.0	6.9	-----	104	-----	690	-----	1.4	2.1	-----
TOTAL	59.84	64.2	62.3	640.1	71.6	1,442.5	2,606	17,219	11,438	810.0	51.4	61.2
MEAN	1.93	2.14	2.01	20.6	2.56	48.5	86.9	555	381	26.1	1.66	2.04
MAX	2.4	2.4	2.3	130	6.2	109	287	972	831	571	2.5	2.6
MIN	.77	1.8	1.8	1.7	2.0	2.0	48	121	26	1.4	1.4	1.6
AC=FT	119	127	124	1,270	142	2,860	5,170	34,150	22,690	1,610	102	121

CAL YR 1973 TOTAL 30,382.44 MEAN 83.2 MAX 1,170 MIN .77 AC=FT 60,260
WTR YR 1974 TOTAL 34,526.14 MEAN 94.6 MAX 972 MIN .77 AC=FT 68,480

SAN JOAQUIN RIVER BASIN

11299000 MELONES LAKE NEAR SONORA, CALIF.

LOCATION.--Lat 37°57'12", long 120°30'49", in NW¼SE¼ sec.11, T.1 N., R.13 E., Tuolumne County, at gate tower near left bank at Melones Dam on Stanislaus River, 0.1 mi (0.2 km) downstream from Bear Creek, and 7.5 mi (12.1 km) southwest of Sonora.

DRAINAGE AREA.--904 mi² (2,341 km²).

PERIOD OF RECORD.--1926 (year-end content only, published in WSP 1315-A), June 1927 to current year. Prior to October 1970, published as Melones Reservoir at Melones Dam.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Pacific Gas and Electric Co.). Prior to Feb. 28, 1961, nonrecording gage at same site and datum.

EXTREMES.--Current year: Maximum contents, 113,720 acre-ft (140 hm³) June 24 (elevation, 735.6 ft or 224.21 m); minimum, 3,187 acre-ft (3.93 hm³) Nov. 4 (elevation, 613.3 ft or 186.93 m).

Period of record: Maximum contents observed, 115,800 acre-ft (143 hm³) May 27, 1951 (elevation, 736.7 ft or 224.55 m); minimum, 3,187 acre-ft (3.93 hm³) Nov. 4, 1973 (elevation, 613.3 ft or 186.93 m).

REMARKS.--Reservoir is formed by concrete overflow dam; storage began Aug. 21, 1926. Dam completed in December 1926. Capacity for power development 1 mi (2 km) below dam is 106,140 acre-ft (131 hm³) between elevations 628.0 ft (191.41 m), minimum operating level and 735.0 ft (224.03 m), top of drum-type spillway gates, above mean sea level; usable capacity for irrigation, 109,980 acre-ft (136 hm³) between elevations 610.0 ft (185.93 m), floor of outlet tunnel, and 735.0 ft (224.03 m) above mean sea level. Dead storage, 2,630 acre-ft (3.24 hm³). Released water flows down Stanislaus River to Tulloch Reservoir (see sta 11299995). Records, including extremes, represent total contents at 2400 hours. See schematic diagram of Stanislaus River basin.

COOPERATION.--Records furnished by Pacific Gas and Electric Co. in connection with a Federal Power Commission project.

REVISIONS.--WSP 1930: Drainage area.

CAPACITY TABLE (ELEVATION, IN FEET, AND CONTENTS, IN ACRE-FEET)

610	2,630	635	8,750	660	21,500	700	59,140
615	3,495	640	10,680	665	25,025	710	72,200
620	4,480	645	12,905	670	28,900	720	86,930
625	5,650	650	15,450	680	37,580	730	103,460
630	7,070	655	18,340	690	47,620	736.7	115,800

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11,445	4,590	43,816	63,486	61,336	41,500	98,870	67,780	105,098	110,577	72,631	32,337
2	11,402	4,090	45,480	63,714	59,994	55,703	96,660	69,130	104,916	110,577	70,660	31,067
3	11,445	3,550	46,443	64,090	58,188	61,957	94,985	71,220	104,552	109,662	68,860	29,564
4	11,360	3,187	47,299	64,351	56,406	65,124	94,483	72,631	104,552	108,381	66,835	27,860
5	11,402	3,855	48,283	64,612	55,350	67,375	94,148	74,496	104,188	107,283	65,134	26,222
6	11,360	3,895	49,057	66,439	54,998	69,265	93,813	76,968	105,280	106,190	63,337	24,805
7	11,575	4,070	49,717	67,240	54,064	71,360	93,813	80,203	105,826	104,916	61,580	23,864
8	11,665	4,656	50,511	67,510	52,331	74,066	92,498	83,771	104,734	103,290	59,872	22,941
9	11,710	9,148	51,192	67,645	50,738	75,654	91,360	86,629	103,290	102,780	58,307	21,911
10	11,665	11,020	51,192	67,510	49,057	76,968	88,965	91,198	103,290	107,283	56,643	20,976
11	11,620	16,628	50,511	67,240	47,513	77,990	85,576	95,655	106,372	107,649	55,115	19,940
12	11,575	28,260	49,944	67,105	46,015	79,170	82,132	98,020	109,662	107,100	54,410	18,940
13	11,105	29,813	49,388	67,105	44,440	80,350	78,728	98,190	112,055	105,644	54,295	17,920
14	10,850	30,062	48,836	67,240	42,900	81,536	75,508	97,510	112,980	104,370	54,179	16,754
15	11,020	29,813	48,172	67,375	41,900	82,877	72,774	97,510	113,535	102,950	53,602	15,789
16	11,105	29,481	47,406	68,725	41,400	84,372	70,240	97,850	113,350	101,420	51,987	15,022
17	11,190	29,979	46,657	78,285	40,818	85,726	68,995	97,680	112,980	100,250	50,511	13,860
18	11,402	32,854	46,336	83,026	40,236	86,780	69,265	97,340	112,055	98,530	48,946	12,525
19	11,530	33,894	45,694	88,652	40,042	87,713	68,320	96,660	112,610	96,830	47,730	11,890
20	11,665	35,048	44,960	91,035	39,751	88,652	66,309	96,325	113,105	95,153	46,657	11,620
21	11,755	36,033	44,544	92,823	39,366	90,223	64,612	96,158	112,980	93,310	45,587	11,360
22	11,800	36,579	45,168	93,310	38,990	91,848	64,612	96,493	113,350	91,685	44,856	11,755
23	11,800	37,216	44,960	92,173	38,520	92,985	65,787	97,510	113,535	89,904	43,400	11,487
24	10,680	37,768	44,440	89,591	38,050	93,478	68,185	98,700	113,720	88,026	42,300	11,147
25	8,414	38,238	43,920	85,877	37,580	93,645	71,220	100,230	113,165	86,178	41,206	10,892
26	8,858	38,708	43,504	81,685	37,125	93,645	73,344	102,270	112,425	84,221	40,139	10,459
27	8,186	39,084	46,122	77,114	36,670	94,148	70,940	103,290	111,870	82,281	38,896	10,234
28	7,582	39,460	48,946	72,487	36,852	94,650	69,680	106,554	111,315	80,350	37,674	9,911
29	6,710	39,751	54,295	68,455	-----	94,818	68,725	108,015	110,945	78,433	36,306	10,356
30	5,780	40,236	59,262	65,395	-----	95,990	67,915	107,100	110,394	76,530	34,959	10,113
31	5,227	-----	61,580	62,961	-----	95,220	-----	105,280	-----	74,496	33,721	-----
MAX	11,800	40,236	61,580	93,310	61,336	95,990	98,870	108,015	113,720	110,577	72,631	32,337
MIN	5,227	3,187	43,504	62,961	36,670	41,500	64,612	67,780	103,290	74,496	33,721	9,911
(a)	623.3	682.8	702.0	703.1	679.2	725.2	706.9	731.0	733.8	711.6	675.7	638.6
(b)	-6,218	+35,009	+21,344	+1,381	-26,109	+58,368	-27,305	+37,365	+5,114	-35,898	-40,775	-23,608

CAL YR 1973 h +36,187
WTR YR 1974 b -1,332

a Elevation, in feet, at end of month.
b Change in contents, in acre-feet.

11299995 TULLOCH RESERVOIR NEAR KNIGHTS FERRY, CALIF.

LOCATION.--Lat 37°52'34", long 120°36'12", in Rancheria Del Rio Estanislao Grant, T.1 S., R.12 E., Tuolumne County, in center of dam on Stanislaus River, 1.9 mi (3.1 km) upstream from Goodwin Dam, and 5.3 mi (8.5 km) northeast of Knights Ferry.

DRAINAGE AREA.--980 mi² (2,538 km²).

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

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Oakdale and South San Joaquin Irrigation Districts).

EXTREMES.--Current year: Maximum contents, 67,200 acre-ft (82.9 hm³) June 24 (elevation, 510.2 ft or 155.51 m); minimum, 12,000 acre-ft (14.8 hm³) Oct. 2-6 (elevation, 432.8 ft or 131.92 m).
Period of record: Maximum contents, 69,500 acre-ft (85.7 hm³) Jan. 7, 1965 (elevation, 512.0 ft or 156.06 m); minimum, 4,580 acre-ft (5.65 hm³) Oct. 3, 1960 (elevation, 404.0 ft or 123.14 m).

REMARKS.--Reservoir is formed by gravity-type concrete dam completed in October 1957. Usable capacity, 56,840 acre-ft (70.1 hm³) between elevations 431.0 ft (131.37 m), normal minimum water surface and 511.0 ft (155.75 m), top of radial gates. Dead storage, 11,560 acre-ft (14.3 hm³). Reservoir is used for irrigation and power. Water passes down Stanislaus River, some first passing through Tulloch powerplant at dam. Part of flow is diverted at Goodwin Dam to Oakdale Canal (see sta 11301000) and South San Joaquin Canal (see sta 11300500). Records, including extremes, represent total contents at 2400 hours. See schematic diagram of Stanislaus River basin.

REVISIONS.--WSP 1930: Drainage area.

CAPACITY TABLE (ELEVATION, IN FEET, AND CONTENTS, IN ACRE-FEET)

404	4,580	460	23,600
411	6,020	475	33,100
420	8,200	490	45,300
430	11,100	512	69,500
445	16,400		

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NCV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12,200	29,800	56,100	58,200	46,300	56,700	50,700	52,400	63,800	66,800	65,500	64,900
2	12,000	30,200	56,000	58,000	46,500	58,700	57,400	52,300	63,300	66,800	65,500	64,700
3	12,000	30,400	55,800	57,800	46,800	60,600	57,500	52,300	63,300	67,000	65,500	64,700
4	12,000	30,500	55,600	57,600	47,800	60,800	55,300	52,300	63,800	67,000	65,500	65,100
5	12,000	30,400	55,500	57,600	48,400	60,700	52,700	52,300	64,000	67,000	65,400	65,700
6	12,000	30,400	55,300	58,600	48,100	60,600	50,000	54,100	64,900	67,100	65,400	66,100
7	12,400	30,200	55,100	58,800	48,300	60,600	47,700	54,300	66,000	67,100	65,400	66,000
8	13,000	30,000	55,000	58,800	49,100	60,800	46,300	54,100	66,300	67,100	65,400	66,000
9	13,600	29,800	54,800	58,600	49,900	60,800	45,000	52,900	65,800	67,000	65,600	65,800
10	14,300	29,400	55,400	58,500	50,800	60,600	44,500	49,600	65,500	66,000	66,100	65,700
11	14,900	29,900	56,700	58,300	51,500	60,400	44,400	47,000	65,500	66,100	66,500	65,600
12	15,500	32,700	58,000	58,200	52,300	60,200	44,400	46,500	66,000	66,100	66,600	65,500
13	16,200	35,400	59,500	57,900	53,000	60,000	44,300	47,200	66,200	66,200	66,200	65,200
14	16,700	38,000	60,000	57,700	53,700	59,900	44,200	46,500	66,700	66,200	65,700	65,000
15	17,200	40,600	59,400	57,600	54,400	59,600	44,000	45,200	67,000	66,200	65,400	64,700
16	17,700	43,200	59,000	57,500	55,000	59,400	43,700	44,300	66,500	66,300	65,500	64,400
17	17,800	45,800	58,500	55,100	55,600	59,200	43,200	43,900	66,500	66,000	66,000	64,100
18	17,700	48,600	58,000	51,400	56,200	59,000	43,400	43,400	66,300	66,000	66,500	63,900
19	17,700	50,600	57,500	48,900	56,800	58,700	43,900	43,100	66,700	66,100	66,600	63,300
20	18,300	51,700	57,000	47,000	57,200	58,500	45,900	42,900	66,800	66,100	66,600	62,300
21	18,900	53,200	56,800	44,100	57,300	58,300	47,000	43,300	66,800	66,100	66,500	61,500
22	19,800	54,600	56,700	41,900	57,300	57,900	48,600	44,100	67,000	66,100	66,300	60,000
23	21,100	55,400	56,400	40,700	57,400	57,900	51,100	45,300	67,100	66,100	66,200	59,200
24	22,700	55,800	56,000	39,800	57,400	58,600	52,100	47,400	67,200	66,000	66,100	58,300
25	24,300	56,200	55,500	39,900	57,400	56,900	51,300	50,500	66,800	66,000	66,000	57,900
26	25,300	56,200	55,300	40,600	57,500	53,000	51,100	55,000	66,700	65,800	65,800	57,800
27	26,300	56,000	57,600	41,200	57,500	49,500	51,500	58,200	66,700	65,800	65,600	57,700
28	27,300	55,700	58,000	41,500	56,700	48,200	51,900	60,300	66,600	65,700	65,500	57,600
29	28,100	55,500	58,200	42,800	-----	46,500	52,400	62,700	66,700	65,600	65,400	56,900
30	28,600	55,300	58,200	44,200	-----	46,400	52,600	64,000	66,700	65,600	65,200	56,800
31	29,200	-----	57,900	45,400	-----	46,600	-----	64,200	-----	65,500	65,100	-----
MAX	29,200	56,200	60,000	58,800	57,500	60,800	57,500	64,200	67,200	67,100	66,600	66,100
MIN	12,000	29,400	54,800	39,800	46,300	46,400	43,200	42,900	63,300	65,500	65,100	56,800
(a)	469.3	500.0	502.4	490.1	501.3	491.4	497.4	507.8	509.8	508.8	508.5	501.4
(b)	+16,900	+26,100	+2,600	-12,500	+11,300	-10,100	+6,000	+11,600	+2,500	-1,200	-400	-8,300

CAL YR 1973 b +6,500
WTR YR 1974 b +44,500

a Elevation, in feet, at end of month.
b Change in contents, in acre-feet.

SAN JOAQUIN RIVER BASIN

11300500 SOUTH SAN JOAQUIN CANAL NEAR KNIGHTS FERRY, CALIF.

LOCATION.--Lat 37°51'16", long 120°38'14", in Rancheria Del Rio Estanislao Grant, Tuolumne County, on left bank 0.8 mi (1.3 km) downstream from headgate at Goodwin Dam, and 3.0 mi (4.8 km) northeast of Knights Ferry.

PERIOD OF RECORD.--May 1914 to current year. Monthly and yearly discharge only for some periods, published in WSP 1315-A.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 334.18 ft (101.858 m) above mean sea level (levels by Oakdale Irrigation District). Prior to Mar. 12, 1915, nonrecording gage 100 ft (30 m) downstream. Mar. 12, 1915, to July 1, 1921, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--60 years, 426 ft³/s (12.06 m³/s), 308,600 acre-ft/yr (380.5 hm³/yr).

EXTREMES.--Period of record: Maximum daily discharge, 1,310 ft³/s (37.1 m³/s) July 16, 1967; no flow at times in each year except 1951, 1969, 1973-74.

REMARKS.--Records excellent except those for period of no gage-height record, which are good. Canal diverts from right bank of Stanislaus River at Goodwin Dam for irrigation in Oakdale and South San Joaquin Irrigation Districts. See schematic diagram of Stanislaus River basin.

DISCHARGE IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	296	2.2	13	.30	.10	204	612	1,050	1,280	1,110	1,110	875
2	296	2.2	12	.30	.10	202	609	1,180	1,270	1,110	1,110	872
3	275	2.8	4.7	.40	.10	202	609	1,180	1,270	1,110	1,110	872
4	270	3.6	.10	.40	.10	311	494	1,200	1,270	1,110	1,110	766
5	270	10	.10	.40	.10	528	275	1,200	1,210	1,110	1,110	673
6	270	16	.20	.50	1.4	606	201	1,190	1,180	1,110	1,100	672
7	232	14	6.6	.30	.20	609	202	1,200	1,190	1,110	1,090	672
8	231	14	14	.20	.20	556	389	1,200	1,200	1,110	1,080	671
9	329	13	14	.20	.20	525	431	1,200	1,200	1,120	963	671
10	190	14	6.1	.20	.20	526	426	1,200	1,200	1,130	885	668
11	344	11	.70	.20	.20	529	475	1,230	1,190	1,120	885	666
12	328	3.4	.60	.20	.30	533	409	1,240	1,190	1,120	661	665
13	316	2.8	.60	.10	1.9	536	409	1,240	1,220	1,120	559	685
14	311	.40	2.9	.10	3.2	539	410	1,250	1,200	1,120	570	703
15	308	.40	7.1	.10	3.4	486	636	1,270	1,260	1,120	864	694
16	307	.40	7.1	.10	3.4	455	757	1,270	1,260	1,120	963	725
17	274	.50	3.2	.10	3.4	458	826	1,260	1,260	1,120	850	710
18	289	.70	.60	.20	3.6	219	764	1,270	1,150	1,120	848	686
19	181	1.3	.50	.20	3.6	3.4	546	1,270	1,160	1,130	847	685
20	9.6	2.0	.50	.20	3.6	3.4	587	1,260	1,160	1,130	851	658
21	4.6	1.4	.60	.20	3.4	3.2	620	1,270	1,160	1,130	869	633
22	8.8	2.0	.60	.20	3.4	3.2	690	1,270	1,150	1,130	878	634
23	12	2.0	4.1	.10	3.4	21	777	1,280	1,160	1,130	876	633
24	11	2.0	6.2	.10	3.4	144	794	1,280	1,170	1,130	876	634
25	11	2.0	6.2	.10	3.6	599	790	1,280	1,160	1,140	876	421
26	10	1.2	2.8	.10	115	795	798	1,270	1,210	1,140	878	250
27	9.6	.30	.70	.10	201	791	806	1,270	1,210	1,140	878	291
28	9.2	.30	.40	.10	202	784	806	1,280	1,230	1,140	878	280
29	8.0	.20	.40	.10	-----	783	805	1,270	1,160	1,140	878	283
30	6.6	6.2	.30	.10	-----	785	806	1,280	1,160	1,140	878	284
31	3.6	-----	.30	.10	-----	689	-----	1,280	-----	1,140	878	-----
TOTAL	5,421.0	132.30	117.20	6.00	564.50	13,428.2	17,759	38,390	36,090	34,850	28,209	18,632
MEAN	175	4.41	3.78	.19	20.2	433	592	1,238	1,203	1,124	910	621
MAX	344	16	14	.50	202	795	826	1,280	1,280	1,140	1,110	875
MIN	3.6	.20	.10	.10	.10	3.2	201	1,050	1,150	1,110	559	250
AC-FT	10,750	262	232	12	1,120	26,630	35,220	76,150	71,580	69,120	55,950	36,960

CAL YR 1973 TOTAL 195,203.70 MEAN 535 MAX 1,290 MIN .10 AC-FT 387,200
 WTR YR 1974 TOTAL 193,599.20 MEAN 530 MAX 1,280 MIN .10 AC-FT 384,000

NOTE.--No gage-height record June 4-30.

227

REMARKS.--Records excellent. Canal diverts water from left bank of Stanislaus River at Goodwin Dam 0.3 mi (0.5 km) upstream for irrigation in Oakdale Irrigation District. See schematic diagram of Stanislaus River basin.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	360	4.2	3.4	.15	6.0	36	20	490	528	521	481	460
2	357	5.0	3.0	.12	6.0	18	.22	490	526	522	482	460
3	320	5.0	1.7	.08	6.0	6.0	.08	490	524	521	482	460
4	320	4.2	.65	.10	6.0	11	8.5	491	525	520	482	461
5	320	4.2	0	.12	5.5	20	14	491	525	521	483	460
6	320	4.2	0	.26	5.5	20	14	493	525	521	483	460
7	111	3.8	0	.22	5.5	20	21	493	525	521	483	460
8	3.4	3.4	0	.15	6.0	20	107	498	524	522	480	460
9	1.5	3.4	0	.12	6.0	20	48	501	524	499	451	460
10	1.3	3.0	0	.08	6.0	20	24	504	523	484	450	460
11	1.3	3.4	0	.08	7.5	20	56	509	524	516	450	460
12	2.7	3.0	0	.08	8.5	20	0	509	525	516	449	460
13	6.5	3.4	.04	.08	9.0	20	0	510	523	517	449	460
14	6.0	3.4	.03	.06	9.0	20	0	517	525	518	449	460
15	6.0	3.4	.03	.03	9.0	20	124	520	526	519	449	460
16	6.0	3.4	.01	.06	9.0	20	324	519	525	520	451	460
17	6.5	3.0	.03	.06	9.0	20	390	518	525	519	451	459
18	6.5	3.0	.03	.10	9.0	9.8	268	521	525	519	450	459
19	6.5	2.6	.02	.12	3.6	.38	33	525	522	519	450	459
20	6.5	2.1	0	.08	0	.32	122	525	519	520	452	459
21	6.5	2.1	.13	.08	0	.32	199	526	521	521	460	455
22	6.5	2.1	.12	.08	0	.32	388	526	525	521	460	453
23	6.5	2.1	.08	.08	0	10	423	527	527	521	460	453
24	6.0	3.0	.03	.06	0	27	391	526	524	521	460	452
25	6.0	3.0	.03	.03	1.1	114	377	523	522	522	460	450
26	6.0	3.0	.14	.03	0	76	377	525	519	522	460	447
27	5.5	3.0	1.1	.03	0	131	379	523	519	522	461	443
28	5.5	3.0	.45	.03	13	96	418	526	520	522	460	433
29	5.0	3.0	.15	2.3	-----	112	459	526	519	522	461	433
30	4.2	3.0	.12	6.0	-----	71	479	525	520	522	460	427
31	5.0	-----	.12	6.0	-----	45	-----	528	-----	519	460	-----
TOTAL	2,231.4	98.4	11.41	16.87	146.2	1,024.14	5,463.80	15,895	15,704	16,070	14,319	13,643
MEAN	72.0	3.28	.37	.54	5.22	33.0	182	513	523	518	462	455
MAX	360	5.0	3.4	6.0	13	131	479	528	528	522	483	461
MIN	1.3	2.1	0	.03	0	.32	0	490	519	484	449	427
AC=FT	4,430	195	23	33	290	2,030	10,840	31,930	31,150	31,870	28,400	27,060
CAL YR 1973	TOTAL 84,778.27											
WTR YR 1974	TOTAL 84,623.22											

11302000 STANISLAUS RIVER BELOW GOODWIN DAM, NEAR KNIGHTS FERRY, CALIF.

LOCATION.--Lat 37°51'06", long 120°38'13", in Rancheria Del Rio Estanislao Grant, Calaveras County, on right bank 250 ft (76 m) upstream from Owl Creek, 0.9 mi (1.4 km) downstream from Goodwin Dam, and 2.9 mi (4.7 km) north-east of Knights Ferry.

DRAINAGE AREA.--986 mi² (2,554 km²).

PERIOD OF RECORD.--February 1957 to current year. Records equivalent to those published as Stanislaus River at Knights Ferry, 1903-14, and as Stanislaus River near Knights Ferry, 1915-32, if adjusted for diversions in Stanislaus and San Joaquin Water Company's canal and Oakdale and South San Joaquin canals.

GAGE.--Water-stage recorder. Datum of gage is 252.83 ft (77.063 m) above mean sea level.

AVERAGE DISCHARGE.--17 years, 771 ft³/s (21.83 m³/s), 558,600 acre-ft/yr (689 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 5,300 ft³/s (150 m³/s) Apr. 2 (gage height, 13.77 ft or 4.197 m); minimum daily, 0.27 ft³/s (0.008 m³/s) Oct. 26-28.

Period of record: Maximum discharge, 40,200 ft³/s (1,140 m³/s) Dec. 24, 1964 (gage height, 28.85 ft or 8.793 m, in gage well, 31.2 ft or 9.51 m outside, from floodmarks), from rating curve extended above 27,000 ft³/s (765 m³/s); minimum daily, 0.27 ft³/s (0.008 m³/s) Oct. 26-28, 1973.

Flood of Dec. 23, 1955, reached a stage of 37.7 ft (11.49 m), from floodmarks (discharge, 62,900 ft³/s or 1,780 m³/s, by computation of flow over Goodwin Dam).

REMARKS.--Records good. Flow regulated by reservoirs and powerplants at Donnell, Beardsley Lake, Melones, Tulloch, and several smaller reservoirs above station. South San Joaquin Canal (see sta 11300500) and Oakdale Canal (see sta 11301000) divert at Goodwin Dam 1.0 mi (1.6 km) upstream. See schematic diagram of Stanislaus River basin. Records of water temperatures for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1930: Drainage area.

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR-OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.7	96	957	1,860	2,410	1,310	4,290	2,410	3,910	4.0	3.6	4.4
2	1.7	94	938	1,850	2,280	1,330	4,700	2,250	3,860	3.6	3.6	4.4
3	1.2	96	957	1,850	2,300	1,340	4,320	2,240	3,280	3.8	3.6	4.4
4	1.0	96	964	1,860	1,970	1,390	4,330	2,220	3,130	3.6	3.6	4.4
5	1.0	89	964	1,850	1,750	1,260	4,330	2,210	3,180	3.6	3.6	4.2
6	1.0	86	977	1,860	1,750	1,170	4,160	1,300	3,100	4.0	4.0	4.2
7	16	79	957	1,860	1,750	1,170	3,870	2,190	3,290	4.4	4.0	4.0
8	144	79	944	1,850	1,750	1,220	3,620	2,600	3,620	4.4	3.8	4.0
9	3.3	78	944	1,840	1,760	1,260	3,600	3,430	3,420	6.3	3.4	4.2
10	29	78	950	1,840	1,760	1,260	3,570	3,860	1,930	22	3.0	4.0
11	.58	88	957	1,840	1,760	1,260	3,760	3,270	860	4.7	3.0	4.0
12	.37	113	964	1,840	1,760	1,260	4,030	2,970	1,080	4.2	2.8	3.8
13	.33	160	970	1,840	1,770	1,260	4,030	3,270	1,160	4.2	2.8	3.8
14	.41	174	1,410	1,790	1,780	1,260	3,990	3,970	892	4.4	3.0	3.6
15	.45	180	1,860	1,780	1,450	1,320	3,800	3,910	1,670	4.2	3.0	3.6
16	.53	183	1,860	1,760	1,260	1,360	3,440	3,820	2,070	4.2	3.2	3.6
17	68	183	1,850	2,900	1,260	1,360	3,370	3,700	1,740	4.4	3.2	3.6
18	362	183	1,860	3,980	1,260	1,570	3,150	3,330	1,310	4.2	3.4	3.4
19	308	180	1,860	3,850	1,250	1,820	3,610	2,840	365	4.2	3.4	3.4
20	276	138	1,850	3,610	1,390	1,820	2,370	2,060	202	4.4	3.4	3.6
21	284	92	1,860	3,640	1,520	1,820	2,410	898	205	4.7	3.6	3.6
22	128	174	1,860	3,320	1,520	1,820	1,580	283	205	4.7	4.0	3.4
23	.88	242	1,840	3,570	1,520	1,790	626	189	294	4.9	4.0	3.4
24	.41	650	1,840	4,050	1,520	1,680	562	119	526	4.7	4.2	3.4
25	.30	650	1,840	4,080	1,520	2,540	579	8.8	520	4.7	4.4	3.2
26	.27	808	1,850	4,040	1,420	3,600	957	7.6	149	4.7	4.0	3.0
27	.27	950	1,880	4,030	1,330	3,480	1,840	939	16	4.4	4.0	3.0
28	.27	950	1,870	4,050	1,310	3,270	1,840	2,580	4.0	4.4	4.0	2.8
29	22	950	1,870	3,380	-----	3,500	1,800	3,540	3.6	4.4	4.0	2.6
30	80	944	1,860	2,700	-----	3,850	2,180	4,090	4.0	4.2	4.2	2.3
31	113	-----	1,860	2,620	-----	4,050	-----	3,910	-----	4.2	4.4	-----
TOTAL	1,845.97	8,863	45,423	83,190	46,080	58,400	90,714	74,414.4	45,995.6	152.8	112.2	109.3
MEAN	59.5	295	1,465	2,684	1,646	1,884	3,024	2,400	1,533	4.93	3.62	3.64
MAX	362	950	1,880	4,080	2,410	4,050	4,700	4,090	3,910	22	4.4	4.4
MIN	.27	78	938	1,760	1,250	1,170	562	7.6	3.6	3.6	2.8	2.3
AC-FT	3,660	17,580	90,100	165,000	91,400	115,800	179,900	147,600	91,230	303	223	217

CAL YR 1973 TOTAL 367,751.17 MEAN 1,008 MAX 3,870 MIN .27 AC-FT 729,400

WTR YR 1974 TOTAL 455,300.27 MEAN 1,247 MAX 4,700 MIN .27 AC-FT 903,100

11303000 STANISLAUS RIVER AT RIPON, CALIF.

LOCATION.--Lat 37°43'47", long 121°06'34", in NW¼SE¼ sec.29, T.2 S., R.8 E., Stanislaus County, on left bank 15 ft (5 m) downstream from railroad bridge, 1.1 mi (1.8 km) southeast of Ripon, and 15 mi (24 km) upstream from mouth.

DRAINAGE AREA.--1,075 mi² (2,784 km²).

PERIOD OF RECORD.--October 1940 to current year. April to September 1940 in reports of California Department of Water Resources.

GAGE.--Water-stage recorder. Datum of gage is 0.72 ft (0.219 m) above mean sea level. October 1940 to Nov. 17, 1953, at site 100 ft (30 m) upstream at same datum.

AVERAGE DISCHARGE.--34 years, 1,047 ft³/s (29.7 m³/s), 758,600 acre-ft/yr (935 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 5,210 ft³/s (148 m³/s) Apr. 3 (gage height, 52.73 ft or 16.072 m); minimum daily, 130 ft³/s (3.68 m³/s) Oct. 31.

Period of record: Maximum discharge, 62,500 ft³/s (1,770 m³/s) Dec. 24, 1955 (gage height, 63.25 ft or 19.279 m); minimum, 40 ft³/s (1.13 m³/s) July 21, 1961.

Flood of Feb. 12, 1938, reached a stage of 64.4 ft (19.63 m), from floodmarks.

REMARKS.--Records good. Flow regulated by reservoirs and powerplants above station (see REMARKS for sta 11302000). South San Joaquin and Oakdale Canals (see sta 11300500, 11301000) divert at Goodwin Dam 34 mi (55 km) upstream. Diversions for irrigation of 57,250 acres (232 km²) in vicinity of Oakdale area. See schematic diagram of Stanislaus River basin.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	240	172	993	1,920	2,800	1,550	4,130	2,240	3,850	367	224	273
2	207	196	1,070	1,960	2,630	1,710	4,520	2,470	3,910	288	207	310
3	239	198	1,050	1,910	2,460	2,010	5,160	2,370	3,890	277	242	306
4	258	195	1,050	1,900	2,430	1,890	4,790	2,380	3,630	264	236	258
5	262	197	1,050	1,910	2,210	1,700	4,610	2,370	3,240	270	235	319
6	283	205	1,010	1,950	2,010	1,630	4,540	2,390	3,290	339	246	336
7	277	202	1,020	2,130	1,960	1,520	4,370	1,820	3,260	346	201	305
8	426	196	1,000	2,040	1,940	1,510	4,070	2,210	3,370	290	176	300
9	372	191	988	1,960	1,930	1,590	3,860	2,530	3,650	299	167	356
10	309	191	985	1,920	1,920	1,610	3,820	3,180	3,640	483	213	423
11	231	187	997	1,900	1,920	1,660	3,680	3,650	2,550	480	239	366
12	205	189	1,010	1,930	1,920	1,600	3,830	3,400	1,590	383	224	349
13	204	199	1,020	1,960	1,920	1,540	4,080	3,110	1,550	382	202	327
14	199	217	1,040	1,920	1,910	1,520	4,110	3,220	1,620	321	221	326
15	179	245	1,270	1,880	1,910	1,480	4,080	3,750	1,440	327	208	300
16	175	260	1,690	1,870	1,710	1,570	3,930	3,960	1,950	252	236	304
17	155	272	1,760	1,850	1,530	1,610	3,700	3,950	2,200	279	228	320
18	143	278	1,770	2,470	1,490	1,640	3,520	3,920	2,080	293	227	345
19	214	279	1,800	3,530	1,490	1,730	3,370	3,650	1,720	226	221	394
20	360	275	1,810	3,820	1,470	1,900	3,480	3,220	1,030	237	221	415
21	357	269	1,820	3,680	1,560	1,890	2,860	2,540	756	251	209	367
22	368	231	1,870	3,630	1,660	1,890	2,680	1,680	708	268	186	378
23	364	223	1,900	3,480	1,710	1,870	2,140	1,100	743	244	166	374
24	252	255	1,840	3,470	1,740	1,860	1,550	939	806	215	175	331
25	192	476	1,830	3,970	1,740	1,800	1,430	855	909	200	211	322
26	165	622	1,830	4,110	1,720	2,260	1,400	714	994	188	228	349
27	148	725	1,960	4,180	1,660	3,210	1,670	677	689	200	187	385
28	140	889	2,440	4,170	1,580	3,420	2,200	1,130	549	225	174	469
29	135	929	2,310	4,190	-----	3,400	2,180	2,310	425	219	233	517
30	131	949	2,020	3,890	-----	3,450	2,080	3,040	380	201	230	485
31	130	-----	1,940	3,040	-----	3,850	-----	3,780	-----	231	255	-----
TOTAL	7,320	9,912	46,143	84,540	52,930	61,870	101,840	78,555	60,419	8,845	6,628	10,609
MEAN	236	330	1,488	2,727	1,890	1,996	3,395	2,534	2,014	285	214	354
MAX	426	949	2,440	4,190	2,800	3,850	5,160	3,960	3,910	483	255	517
MIN	130	172	985	1,850	1,470	1,480	1,400	677	380	188	166	258
AC-FT	14,520	19,660	91,520	167,700	105,000	122,700	202,000	155,800	119,800	17,540	13,150	21,040

CAL YR 1973 TOTAL 435,340 MEAN 1,193 MAX 4,100 MIN 130 AC-FT 863,500
WTR YR 1974 TOTAL 529,611 MEAN 1,451 MAX 5,160 MIN 130 AC-FT 1,050,000

SAN JOAQUIN RIVER BASIN

11303500 SAN JOAQUIN RIVER NEAR VERNALIS, CALIF.
(International Hydrological Decade River Station)

LOCATION.--Lat 37°40'34", long 121°15'55", in El Pescadero Grant, San Joaquin County, on left bank 12 ft (4 m) downstream from Durham Ferry highway bridge, 2.6 mi (4.2 km) downstream from Stanislaus River, and 3.2 mi (5.1 km) northeast of Vernalis.

DRAINAGE AREA.--13,536 mi² (35,058 km²).

PERIOD OF RECORD.--July 1922 to current year (1922-23 and 1925-29, low-water records only).

GAGE.--Water-stage recorder. Datum of gage is at mean sea level. July 1922 to September 1946, at various sites on or within 100 ft (30 m) of Durham Ferry bridge. Prior to Apr. 1, 1931, at different datum. Apr. 1, 1931, to Sept. 30, 1959, at datum 5.06 ft (1.542 m) above mean sea level. Oct. 1, 1959, to Nov. 30, 1967, at site 120 ft (37 m) upstream at present datum.

AVERAGE DISCHARGE.--46 years (1924, 1929-74), 4,425 ft³/s (125.3 m³/s), 3,206,000 acre-ft/yr (3,950 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 9,810 ft³/s (278 m³/s) Jan. 27 (elevation, 19.16 ft or 5.840 m); minimum daily, 1,260 ft³/s (35.7 m³/s) Aug. 3, 7.
Period of record: Maximum discharge recorded, 79,000 ft³/s (2,240 m³/s) Dec. 9, 1950 (elevation, 32.81 ft or 10.000 m, present datum), including flow through breaks in levee; maximum elevation, 34.55 ft (10.531 m) Jan. 27, 1969; minimum discharge, 19 ft³/s (0.54 m³/s) Aug. 10, 1961.

REMARKS.--Records good. Natural flow of stream affected by storage reservoirs, power developments, ground-water withdrawals, and diversions for irrigation; low flows consist mainly of return flow from irrigated areas. Records of chemical analyses, water temperatures, and sediment discharge for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 831: 1936. WSP 931: 1940. WSP 1930: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,760	2,960	2,900	5,830	8,600	3,420	6,470	4,210	4,920	1,840	1,300	2,170
2	1,660	2,910	2,930	5,760	8,360	3,460	6,880	3,910	5,130	1,700	1,300	2,300
3	1,800	2,500	2,960	5,770	7,880	4,510	7,820	3,890	5,370	1,600	1,260	2,260
4	2,060	2,400	2,960	6,360	7,320	5,070	8,100	3,970	5,340	1,570	1,340	2,220
5	2,910	2,240	2,960	6,800	6,750	4,900	7,960	4,080	5,100	1,630	1,380	2,220
6	2,900	2,110	2,990	6,890	6,670	4,920	8,350	4,180	4,930	1,620	1,310	2,210
7	2,450	2,060	2,990	6,940	6,350	5,520	8,530	3,950	4,930	1,600	1,260	2,220
8	2,900	1,810	3,000	7,070	5,910	6,020	8,300	3,620	4,910	1,700	1,340	2,360
9	2,000	1,700	2,990	7,830	5,550	6,240	7,600	4,080	5,230	1,760	1,370	2,400
10	2,820	1,770	2,910	8,110	5,380	6,190	7,120	4,510	5,670	2,040	1,380	2,280
11	2,830	1,860	2,870	8,200	4,930	5,800	6,650	4,960	5,730	2,160	1,370	2,390
12	2,770	1,870	2,860	8,290	4,490	5,490	6,400	5,170	4,880	2,070	1,430	2,560
13	2,650	1,870	2,910	7,980	4,670	5,360	6,380	5,070	3,970	2,000	1,320	2,500
14	2,520	1,850	2,920	7,180	4,970	5,180	6,430	4,900	3,750	2,070	1,290	2,450
15	2,430	1,910	2,860	6,450	5,070	4,860	6,250	5,040	3,310	1,970	1,380	2,420
16	2,230	1,920	3,200	6,740	4,950	4,380	5,880	5,390	3,840	1,740	1,590	2,400
17	2,190	1,920	3,460	6,770	4,530	4,200	5,530	5,440	4,400	1,610	1,700	2,420
18	2,520	1,960	3,460	6,840	4,140	4,090	5,300	5,350	4,370	1,520	1,820	2,680
19	2,740	1,980	3,500	7,710	3,670	3,990	5,290	5,240	3,890	1,410	1,880	3,150
20	2,900	2,110	3,520	8,290	3,500	4,060	5,290	5,080	3,360	1,400	1,840	3,500
21	2,950	2,350	3,550	8,180	3,540	4,000	5,110	4,620	2,800	1,520	1,810	3,630
22	2,620	2,710	3,780	8,050	3,670	3,900	4,580	3,760	2,500	1,550	1,740	3,620
23	2,340	2,770	3,910	8,820	3,760	3,850	4,230	3,020	2,360	1,410	1,810	3,650
24	2,180	2,590	3,910	8,990	3,730	3,780	3,570	2,700	2,400	1,340	1,820	3,480
25	2,450	2,440	3,840	9,380	3,650	3,850	3,340	2,560	2,330	1,400	1,970	3,520
26	2,700	2,500	3,770	9,650	3,500	3,920	3,180	2,460	2,350	1,430	2,050	3,630
27	2,910	2,610	3,870	9,700	3,550	4,870	3,100	2,390	2,220	1,470	2,000	3,640
28	2,950	2,780	4,730	9,330	3,530	5,490	3,650	2,260	2,070	1,440	1,910	3,670
29	2,610	2,900	6,420	8,830	-----	5,940	4,040	3,120	1,900	1,430	1,990	3,660
30	2,370	2,900	6,320	9,340	-----	5,910	4,170	3,830	1,840	1,410	2,020	3,760
31	2,820	-----	5,930	9,140	-----	6,160	-----	4,540	-----	1,320	2,080	-----
TOTAL	78,940	68,430	111,180	241,220	142,620	149,330	175,500	127,300	115,800	50,730	50,060	85,370
MEAN	2,546	2,221	3,586	7,781	5,094	4,817	5,850	4,106	3,860	1,636	1,615	2,846
MAX	3,000	2,960	6,420	9,700	8,600	6,240	8,530	5,440	5,730	2,160	2,080	3,760
MIN	1,660	1,700	2,860	5,760	3,500	3,420	3,100	2,260	1,840	1,320	1,260	2,170
AC-FT	156,600	135,700	220,500	478,500	282,900	296,200	348,100	252,500	229,700	100,600	99,290	169,300
CAL YR 1973	TOTAL 1,249,159			MEAN 3,422		MAX 12,900		MIN 950		AC-FT 2,478,000		
WTR YR 1974	TOTAL 1,396,480			MEAN 3,826		MAX 9,700		MIN 1,260		AC-FT 2,770,000		

11306000 SOUTH FORK CALAVERAS RIVER NEAR SAN ANDREAS, CALIF.

LOCATION.--Lat 38°08'40", long 120°39'46", in SW¼NW¼ sec.4, T.3 N., R.12 E., Calaveras County, on right bank 0.1 mi (0.2 km) downstream from San Antonio Creek, and 3.7 mi (6.0 km) south of San Andreas.

DRAINAGE AREA.--118 mi² (306 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 860 ft (262 m), from topographic map. Prior to Feb. 13, 1952, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--24 years, 83.1 ft³/s (2,353 m³/s), 60,210 acre-ft/yr (74.2 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 14,000 ft³/s (396 m³/s) Mar. 1 (gage height, 11.41 ft or 3.478 m), from rating curve extended above 2,600 ft³/s (73.6 m³/s) on basis of slope-area measurement of peak flow; minimum daily, 0.67 ft³/s (0.019 m³/s) Oct. 3.

Period of record: Maximum discharge, 17,600 ft³/s (498 m³/s) Dec. 23, 1955 (gage height, 10.29 ft or 3.136 m), from rating curve extended above 5,700 ft³/s (161 m³/s) on basis of slope-area measurement of peak flow; maximum gage height, 11.41 ft (3.478 m) Mar. 1, 1974; no flow at times in most years.

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

REVISIONS (WATER YEARS).--WSP 1395: 1951(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.0	3.6	746	373	86	2,630	1,940	75	22	8.3	3.5	1.3
2	2.0	3.7	207	215	79	3,920	1,450	70	22	8.0	3.4	1.3
3	.67	3.7	58	164	73	1,320	633	68	21	7.8	2.8	1.3
4	.77	3.8	80	172	68	624	440	64	20	7.5	2.7	1.2
5	.78	4.7	66	217	65	421	347	60	19	6.8	2.7	1.1
6	.77	12	55	1,130	73	336	293	58	18	6.6	2.7	1.1
7	2.8	16	48	448	60	362	245	56	18	5.9	2.7	.90
8	8.2	11	42	268	57	648	218	54	18	6.8	2.5	.82
9	8.9	8.3	39	189	54	378	239	51	17	29	2.5	.82
10	8.2	8.3	36	150	53	305	210	48	16	54	2.5	.74
11	3.7	26	40	129	51	257	182	46	15	25	2.5	.74
12	2.5	174	42	170	53	251	164	45	14	17	2.3	.74
13	2.2	92	75	154	63	220	148	43	14	14	2.5	.74
14	2.1	62	86	136	53	198	136	42	14	13	2.0	.82
15	2.1	42	58	156	50	182	129	40	13	11	1.8	.82
16	2.2	35	48	148	51	170	119	40	12	9.3	1.8	.82
17	2.1	94	70	600	52	160	111	39	12	8.6	1.8	.82
18	2.1	255	78	519	46	148	117	40	13	8.0	1.6	.82
19	2.1	98	59	425	73	136	116	39	16	7.5	1.5	.82
20	2.1	63	50	314	81	124	105	38	17	6.8	1.5	.74
21	2.5	54	98	254	64	116	96	37	15	6.1	1.5	.74
22	3.5	42	350	200	88	108	90	34	14	5.5	1.3	.74
23	19	32	140	170	76	102	88	33	12	5.2	1.3	.74
24	18	33	103	152	67	96	117	31	11	5.2	1.3	.74
25	7.8	35	87	123	62	93	119	29	10	5.0	1.2	.74
26	5.3	38	96	119	58	96	100	23	10	4.6	1.2	.82
27	4.5	30	1,230	106	58	121	91	25	9.3	4.4	1.2	.90
28	4.1	25	934	100	60	359	87	25	9.3	4.3	1.3	.98
29	3.8	23	673	93	-----	274	81	24	8.8	4.1	1.3	.98
30	3.8	24	448	88	-----	1,010	78	24	8.6	3.7	1.3	.98
31	3.6	-----	283	85	-----	695	-----	23	-----	3.7	1.3	-----
TOTAL	137.19	1,352.1	6,425	7,567	1,774	15,860	8,289	1,324	439.0	312.7	61.5	26.82
MEAN	4.43	45.1	207	244	63.4	512	276	42.7	14.6	10.1	1.98	.89
MAX	19	255	1,230	1,130	88	3,920	1,940	75	22	54	3.5	1.3
MIN	.67	3.6	36	85	46	93	78	23	8.6	3.7	1.2	.74
AC-FT	272	2,680	12,740	15,010	3,520	31,460	16,440	2,630	871	620	122	53

CAL YR 1973 TOTAL 52,633.29 MEAN 144 MAX 3,740 MIN .01 AC-FT 104,400
WTR YR 1974 TOTAL 43,568.31 MEAN 119 MAX 3,920 MIN .67 AC-FT 86,420

PEAK DISCHARGE (BASE, 1,000 FT ³ /S)							
DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
12-1	0500	5.34	1,660	3-8	0200	4.62	1,040
12-27	2300	5.90	2,200	3-30	1400	6.24	2,560
1-6	0800	5.47	1,770	4-1	2100	7.59	4,880
3-1	2330	11.41	14,000				

11308000 NORTH FORK CALAVERAS RIVER NEAR SAN ANDREAS, CALIF.

LOCATION.--Lat 38°13'17", long 120°41'54", in NE¼NW¼ sec.7, T.4 N., R.12 E., Calaveras County, on right bank 0.5 mi (0.8 km) upstream from Chile Gulch, and 1.8 mi (2.9 km) northwest of San Andreas.

DRAINAGE AREA.--85.2 mi² (220.7 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 750 ft (229 m), from topographic map. Prior to Feb. 14, 1952, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--24 years, 48.9 ft³/s (1.385 m³/s), 35,430 acre-ft/yr (43.7 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,920 ft³/s (82.7 m³/s) Mar. 2 (gage height, 9.77 ft or 2.978 m); minimum daily, 0.23 ft³/s (0.007 m³/s) Sept. 24.
Period of record: Maximum discharge, 6,200 ft³/s (176 m³/s) Dec. 23, 1955 (gage height, 12.52 ft or 3.816 m), from rating curve extended above 3,900 ft³/s (110 m³/s); no flow at times in most years.

REMARKS.--Records good. Small diversions above station for irrigation. Records of sediment discharge for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1930: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.1	6.8	464	126	37	323	752	42	16	6.1	3.5	.87
2	1.3	6.8	191	100	37	1,490	759	40	16	5.9	3.3	.71
3	1.3	6.8	85	76	33	536	325	39	15	5.4	2.7	.54
4	2.3	6.8	58	68	31	302	210	37	15	5.2	2.5	.44
5	2.6	7.6	44	73	30	204	159	36	14	4.6	2.2	.35
6	2.6	19	36	113	29	156	129	35	13	4.6	2.3	.35
7	9.5	17	31	118	27	143	110	33	13	4.3	1.8	.32
8	12	13	28	126	26	339	98	32	12	5.4	1.5	.27
9	7.4	10	25	119	25	211	102	30	12	37	1.6	.49
10	5.0	12	24	103	24	153	106	28	11	37	1.4	.46
11	4.3	22	21	88	24	124	86	28	11	16	1.4	.43
12	4.0	192	22	152	24	117	77	27	10	11	1.4	.43
13	4.0	59	24	169	29	102	70	26	10	9.7	1.4	.51
14	3.8	52	48	119	26	88	65	25	9.7	8.8	1.3	.55
15	3.7	29	30	146	24	78	61	24	9.8	8.0	1.2	.59
16	3.7	22	25	110	24	71	57	24	9.7	7.4	1.1	.66
17	3.8	59	29	319	28	64	55	24	10	7.1	1.1	.54
18	3.9	239	50	234	25	60	57	24	10	6.8	1.1	.45
19	3.8	72	34	228	90	56	59	24	13	6.2	.98	.37
20	3.9	42	27	150	105	51	53	23	14	5.8	.99	.37
21	4.2	36	35	120	61	47	49	22	12	5.2	.92	.35
22	6.6	29	246	93	81	44	47	21	11	5.0	1.2	.28
23	21	24	106	78	66	43	48	21	9.8	4.6	1.6	.29
24	16	23	66	68	52	41	70	19	9.3	4.8	1.2	.23
25	9.7	22	49	60	44	39	91	18	9.0	4.6	.93	.37
26	7.6	23	43	54	39	40	66	17	8.6	4.8	.74	1.2
27	7.3	23	362	48	38	50	57	16	8.0	5.3	.68	1.1
28	6.9	20	409	43	36	239	52	16	7.3	4.6	.75	.94
29	6.6	19	426	40	-----	164	48	16	7.1	4.1	.66	.89
30	6.5	19	266	38	-----	502	44	16	6.5	3.9	.84	.93
31	6.8	-----	134	36	-----	403	-----	16	-----	4.1	.84	-----
TOTAL	183.2	1,131.8	3,438	3,415	1,115	6,280	3,962	799	332.8	253.3	45.13	16.28
MEAN	5.91	37.7	111	110	39.8	203	132	25.8	11.1	8.17	1.46	.54
MAX	21	239	464	319	105	1,490	759	42	16	37	3.5	1.2
MIN	1.1	6.8	21	36	24	39	44	16	6.5	3.9	.66	.23
AC-FT	363	2,240	6,820	6,770	2,210	12,460	7,860	1,580	660	502	90	32

CAL YR 1973 TOTAL 26,982.54 MEAN 73.9 MAX 1,270 MIN 0 AC-FT 53,520
WTR YR 1974 TOTAL 20,971.51 MEAN 57.5 MAX 1,490 MIN .23 AC-FT 41,600

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
12-1	0900	5.93	1,320	3-30	1830	5.05	968
12-29	1630	4.89	896	4-1	1930	6.32	1,580
3-2	0230	9.77	2,920				

11308700 NEW HOGAN LAKE NEAR VALLEY SPRINGS, CALIF.

LOCATION.--Lat 38°09'01", long 120°48'45", in SW¼SW¼ sec.31, T.4 N., R.11 E., Calaveras County, in control house at New Hogan Dam on the Calaveras River, 3.0 mi (4.8 km) south of Valley Springs.

DRAINAGE AREA.--362 mi² (938 km²).

PERIOD OF RECORD.--December 1963 to current year. Prior to October 1971, published as "New Hogan Reservoir."

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Corps of Engineers).

EXTREMES.--Current year: Maximum contents, 273,130 acre-ft (337 hm³) May 7 (elevation, 700.88 ft or 213.628 m); minimum, 142,680 acre-ft (176 hm³) Oct. 21 (elevation, 661.46 ft (201.613 m).
Period of record: Maximum contents, 273,130 acre-ft (337 hm³) May 7, 1974 (elevation, 700.88 ft or 213.628 m); minimum since initial season of normal operation, 9,360 acre-ft (11.5 hm³) Oct. 27, 1964 (elevation, 516.81 ft or 157.524 m).

REMARKS.--Reservoir is formed by an earthfill dam and four earthfill dikes. Storage began Dec. 20, 1963. Total capacity, 323,859 acre-ft (399 hm³) between elevations 534.5 ft (162.92 m), invert of outlet valve and 713.0 ft (217.32 m), top of spillway gates. Elevation of spillway crest is 679.5 ft (207.11 m). No dead storage. The reservoir is operated for flood control according to existing downstream channel conditions. Reservoir releases limited, insofar as possible, to amounts that will not cause flows greater than 6,000 ft³/s (170 m³/s) at Bellota. Records, including extremes, show contents at 2400 hours.

COOPERATION.--Records furnished by Corps of Engineers, not rounded to Geological Survey standards.

CAPACITY TABLE (ELEVATION, IN FEET AND CONTENTS, IN ACRE-FEET)

545	723	600	27,320
550	1,240	610	39,169
555	1,956	630	70,540
560	2,951	650	113,200
570	6,134	670	166,978
580	11,147	700	269,652
590	18,020		

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	143,608	143,116	154,544	172,478	185,145	198,208	244,052	272,456	267,611	255,379	243,571	228,360
2	143,417	143,062	155,942	170,855	185,520	216,242	251,519	272,536	267,258	254,962	243,090	227,898
3	143,225	143,034	156,544	169,060	186,770	221,807	254,886	272,694	266,945	254,620	242,574	227,507
4	143,034	142,925	156,888	167,304	185,957	224,609	257,017	272,853	266,593	254,278	242,094	227,117
5	142,843	143,089	157,175	165,824	186,176	225,737	258,585	272,972	266,203	253,824	241,616	226,692
6	142,734	143,253	157,347	167,008	186,395	224,469	259,852	273,091	265,813	253,294	241,137	226,302
7	143,062	143,335	157,577	166,326	186,583	223,485	260,967	273,130	265,345	252,802	240,623	225,949
8	143,007	143,362	157,750	165,086	186,771	223,906	261,932	272,972	264,878	252,500	240,109	225,561
9	143,007	143,444	157,922	164,527	187,022	223,065	262,976	272,655	264,411	252,953	239,706	225,102
10	142,953	143,581	158,095	165,263	187,241	221,772	263,906	272,377	263,945	252,953	239,193	224,609
11	142,953	143,827	158,297	166,060	187,367	221,284	264,683	272,140	263,441	252,764	238,681	224,187
12	142,925	144,841	158,441	167,008	187,681	222,016	265,345	271,942	262,976	252,613	238,243	223,731
13	142,871	145,419	158,787	168,077	187,964	220,311	266,047	271,823	262,434	252,311	237,805	223,240
14	142,843	145,749	159,105	168,881	188,153	218,960	266,593	271,625	261,932	251,972	237,331	222,855
15	142,843	145,915	159,365	169,687	188,373	218,304	267,062	271,388	261,430	251,595	236,785	222,540
16	142,843	146,108	159,597	170,555	188,593	218,546	267,532	271,190	260,967	251,256	236,275	222,261
17	142,816	146,633	159,915	172,961	188,751	219,167	267,963	270,954	260,467	250,842	235,694	222,051
18	142,789	147,963	160,234	175,384	188,940	219,791	268,591	270,638	259,967	250,391	235,114	221,772
19	142,762	148,547	160,495	177,212	189,350	220,207	268,905	270,401	259,813	249,940	234,571	221,423
20	142,734	148,826	160,727	178,650	189,887	220,658	269,298	270,204	259,506	249,453	234,137	221,110
21	142,680	149,077	161,367	179,786	190,299	221,075	269,692	270,007	259,199	248,928	233,703	220,832
22	143,007	149,244	163,118	180,556	190,774	221,598	269,968	269,810	258,854	248,479	233,234	220,554
23	143,062	149,384	163,881	181,266	191,155	222,016	270,362	269,653	258,432	247,956	232,729	220,276
24	143,144	149,496	164,468	181,946	191,472	222,365	270,954	269,653	258,049	247,545	232,045	219,964
25	143,116	149,663	164,910	182,472	191,758	222,680	271,507	269,534	257,629	247,060	231,578	219,687
26	143,089	149,719	165,735	182,999	191,981	223,345	271,783	269,416	257,247	246,464	231,075	219,444
27	143,144	149,859	171,215	183,402	192,235	223,836	272,021	269,102	256,903	245,981	230,609	219,237
28	143,089	149,971	174,110	183,778	192,554	225,455	272,258	268,748	256,560	245,572	230,180	218,995
29	143,089	149,999	174,776	184,086	-----	226,869	272,377	268,473	256,217	245,127	229,679	218,856
30	143,116	150,279	174,473	184,397	-----	231,147	272,456	268,199	255,798	244,533	229,251	218,615
31	143,116	-----	173,384	184,676	-----	234,969	-----	267,963	-----	244,015	228,823	-----
MAX	143,608	150,279	174,776	184,676	192,554	234,969	272,456	273,130	267,611	255,379	243,571	228,360
MIN	142,680	142,925	154,544	164,527	185,145	198,208	244,052	267,963	255,798	244,015	228,823	218,615
(a)	661.62	664.21	672.14	675.82	678.32	690.81	700.71	699.57	696.42	693.28	689.10	686.19
(b)	-656	+7,163	+23,105	+11,294	+7,876	+42,415	+37,487	-4,493	-12,165	-11,783	-15,192	-10,208
(c)	1,045	385	208	281	386	559	1,180	2,075	2,548	2,722	2,806	2,364

CAL YR 1973 b +53,489

WTR YR 1974 b +74,843

a Elevation, in feet, at end of month.

b Change in contents, in acre-feet.

c Evaporation, in acre-feet.

11308900 CALAVERAS RIVER BELOW NEW HOGAN DAM, NEAR VALLEY SPRINGS, CALIF.

LOCATION.--Lat 38°08'53", long 120°49'26", in NW¼NE¼ sec.1, T.3 N., R.10 E., Calaveras County, on right bank at county road bridge, 0.5 mi (0.8 km) upstream from Cosgrove Creek, 0.8 mi (1.3 km) downstream from New Hogan Dam, and 3.0 mi (4.8 km) south of Valley Springs.

DRAINAGE AREA.--363 mi² (940 km²).

PERIOD OF RECORD.--January 1961 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 519.8 ft (158.44 m) above mean sea level (levels by Corps of Engineers). Auxiliary nonrecording gage 300 ft (91 m) downstream at different datum used May 1, 1962, to Jan. 26, 1963.

AVERAGE DISCHARGE (adjusted for change in contents and evaporation in New Hogan Lake).--13 years, 243 ft³/s (6.882 m³/s), 176,100 acre-ft/yr (217 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,720 ft³/s (48.7 m³/s) Dec. 28 (gage height, 3.43 ft or 1.045 m); minimum daily, 8.4 ft³/s (0.24 m³/s) Nov. 1, 2.
Period of record: Maximum discharge, 7,830 ft³/s (222 m³/s) Jan. 25, 26, 1969 (gage height, 7.46 ft or 2.274 m); no flow many days in 1961-65, 1971.

REMARKS.--Records good. Flow regulated by New Hogan Lake (see sta 11308700). Some seepage of North Fork Stanislaus River water enters basin from diversion canals and reservoirs, normally not over 1.5 ft³/s (0.042 m³/s). Small diversions above station for irrigation. Records of water temperatures for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NCV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	69	8.4	36	1,490	22	23	28	150	176	190	240	202
2	73	8.4	25	1,480	21	29	26	114	181	193	225	202
3	74	8.9	24	1,480	20	26	23	77	199	174	225	206
4	74	9.4	23	1,480	19	22	23	75	208	156	225	197
5	62	9.5	23	1,480	19	446	23	74	221	191	215	179
6	44	12	23	1,500	19	1,490	22	81	225	226	215	181
7	47	11	23	1,480	19	1,490	22	118	238	212	215	181
8	40	12	24	1,480	20	1,490	22	171	256	185	202	181
9	18	12	22	922	19	1,490	22	219	275	161	195	188
10	16	12	20	22	19	1,490	22	229	267	132	202	220
11	10	12	20	20	19	952	22	188	245	119	202	220
12	9.4	13	23	21	20	303	22	160	245	139	187	194
13	9.9	12	33	21	20	1,480	22	157	245	168	176	163
14	9.9	12	28	21	20	1,200	22	176	245	185	203	154
15	9.9	12	12	21	20	787	22	176	248	173	232	154
16	9.9	12	11	21	20	285	22	176	250	185	250	132
17	9.9	12	10	23	20	20	22	176	250	199	250	102
18	9.9	12	10	23	20	20	22	176	243	230	250	103
19	9.9	12	10	22	21	21	33	176	213	250	236	134
20	9.9	12	11	22	21	21	51	176	197	250	211	144
21	9.9	12	11	22	21	21	49	161	185	250	197	126
22	10	12	12	22	21	20	49	142	185	235	229	127
23	10	12	10	22	21	20	49	125	185	225	250	127
24	10	12	9.9	22	21	20	50	125	185	240	250	115
25	9.9	12	9.9	22	21	21	49	125	185	258	240	99
26	9.9	15	11	22	21	21	77	125	185	267	225	94
27	9.9	23	21	22	21	21	100	137	185	225	214	94
28	9.9	23	849	22	21	22	101	171	185	225	205	94
29	9.9	23	1,540	22	-----	22	121	176	185	225	202	93
30	10	23	1,500	22	-----	24	150	176	185	255	202	92
31	10	-----	1,490	22	-----	23	-----	176	-----	268	202	-----
TOTAL	725.0	391.6	5,874.8	13,271	566	13,320	1,288	4,684	6,477	6,371	6,772	4,498
MEAN	23.4	13.1	190	428	20.2	430	42.9	151	216	206	218	150
MAX	74	23	1,540	1,500	22	1,490	150	229	275	268	250	220
MIN	9.4	8.4	9.9	20	19	20	22	74	176	119	176	92
AC-FT	14,440	777	11,650	26,320	1,120	26,420	2,550	9,290	12,850	12,640	13,430	8,920
MEAN a	29.8	140	569	616	169	1,129	693	112	54.3	58.2	16.9	18.2
AC-FT a	1,830	8,320	34,960	37,900	9,380	69,390	41,220	6,870	3,230	3,580	1,040	1,080
CAL YR 1973	TOTAL 110,338.2	MEAN 302	MAX 5,470	MIN 1.2	AC-FT 218,900	MEAN a 396	AC-FT a 286,700					
WTR YR 1974	TOTAL 64,238.4	MEAN 176	MAX 1,540	MIN 8.4	AC-FT 127,400	MEAN a 302	AC-FT a 218,800					

a Adjusted for change in contents and evaporation in New Hogan Lake.

11312000 BEAR CREEK NEAR LOCKEFORD, CALIF.

LOCATION.--Lat 38°09'10", long 121°08'17", in NW¼SE¼ sec.31, T.4 N., R.8 E., San Joaquin County, on right bank 15 ft (5 m) downstream from county road bridge, and 0.8 mi (1.3 km) southeast of Lockeford.

DRAINAGE AREA.--47.6 mi² (123.3 km²).

PERIOD OF RECORD.--October 1930 to current year. Monthly discharge only for some periods, published in WSP 1315-A. October 1926 to November 1930 at site 3 mi (5 km) downstream; records not equivalent.

GAGE.--Water-stage recorder and low-water concrete control. Datum of gage is 80.68 ft (24.591 m) above mean sea level (levels by Corps of Engineers).

AVERAGE DISCHARGE.--44 years, 11.9 ft³/s (0.337 m³/s), 8,620 acre-ft/yr (10.6 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 560 ft³/s (15.9 m³/s) Dec. 28 (gage height, 12.40 ft or 3.780 m); no flow many days.

Period of record: Maximum discharge, 2,930 ft³/s (83.0 m³/s) Apr. 3, 1958 (gage height, 15.13 ft or 4.612 m); no flow for several months in most years.

REMARKS.--Records fair except those for period of no gage-height record, which are poor. No storage or diversion above station. Occasionally water is released from East Bay Municipal Utility District aqueduct into Bear Creek above station. Summer discharge influenced by return flows from irrigated areas.

REVISIONS.--WSP 1635: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	.17	73	82	5.5	4.0	49	.01	.71		0	.02
2	0	.65	48	46	5.9	48	162	0	.74		0	.09
3	0	.39	15	24	5.1	68	44	0	.52		0	.28
4	0	.17	7.5	22	4.4	29	20	0	.02		0	1.2
5	0	.13	4.0	56	4.1	14	12	.57	0		0	.38
6	0	4.5	2.5	188	3.9	9.1	8.1	.64	0		0	.04
7	.33	2.8	1.7	390	3.2	7.5	6.3	2.2	.05		0	.01
8	4.4	1.9	1.2	110	3.2	29	4.9	1.4	.38		0	0
9	1.9	1.5	.81	52	2.7	21	5.3	.85	.09		0	0
10	1.3	1.2	.58	34	2.6	11	18	1.8	.01		0	0
11	.61	.79	.50	26	2.6	8.2	12	2.9	.01		0	0
12	.24	23	.78	102	2.7	11	6.9	2.1	.01		0	0
13	.13	7.9	37	47	3.3	12	5.0	1.1	0		0	0
14	.15	9.5	44	30	4.7	8.4	4.0	.67	0		0	0
15	.08	3.7	13	40	3.9	6.6	3.2	.71	0		0	0
16	.04	10	6.1	30	3.3	5.5	2.6	.45	0		0	.76
17	.03	9.4	4.2	59	3.3	5.2	2.2	.15	0		0	.83
18	.03	51	3.4	83	3.7	4.3	2.1	.03	0		0	.31
19	.03	11	2.6	121	3.5	3.8	2.7	.06	0		.11	.42
20	.03	5.5	2.1	60	8.2	3.5	3.2	.04	0		.62	.97
21	.03	3.3	22	35	5.8	2.9	2.3	.70	0		.05	.12
22	.06	2.0	229	21	5.6	2.4	1.7	.01	0		.01	1.4
23	.63	1.3	41	16	5.3	2.1	1.8	.20	0		.31	1.6
24	1.1	1.3	20	13	4.1	2.2	2.7	2.2	0		.06	2.0
25	.70	1.1	12	11	3.3	1.9	4.4	2.6	0		.52	1.8
26	.50	.68	12	9.6	3.0	2.2	8.1	.65	0		.26	1.0
27	.26	.63	365	8.1	2.8	2.7	6.4	.41	0		.33	1.5
28	.12	.52	425	6.9	3.1	11	3.0	.01	0		.34	.46
29	.07	.37	113	6.1	-----	12	1.2	0	0		.04	.34
30	.05	.27	66	5.6	-----	15	.02	0	0		.01	.95
31	.06	-----	36	5.3	-----	27	-----	.01	-----		.01	-----
TOTAL	12.88	156.67	1,608.97	1,739.6	112.8	390.5	405.12	22.47	2.54	0	2.67	16.48
MEAN	.42	5.22	51.9	56.1	4.03	12.6	13.5	.72	.085	0	.086	.55
MAX	4.4	51	425	390	8.2	68	162	2.9	.74	0	.62	2.0
MIN	0	.13	.50	5.3	2.6	1.9	.02	0	0	0	0	0
AC-FT	26	311	3,190	3,450	224	775	804	45	5.0	0	5.3	33
CAL YR 1973	TOTAL	10,212.88	MEAN	28.0	MAX	542	MIN	0	AC-FT	20,260		
WTR YR 1974	TOTAL	4,470.70	MEAN	12.2	MAX	425	MIN	0	AC-FT	8,870		

PEAK DISCHARGE (BASE, 500 FT³/S).--Dec. 28 (0430) 560 ft³/s (12.40 ft); Jan. 7 (0430) 553 ft³/s (12.35 ft).

NOTE.--No gage-height record June 15 to Aug. 15.

SAN JOAQUIN RIVER BASIN

11313000 DELTA-MENDOTA CANAL AT TRACY PUMPING PLANT, NEAR TRACY, CALIF.

LOCATION.--Lat 37°47'49", long 121°35'03", in SW¼SW¼ sec.31, T.1 S., R.4 E., Alameda County, at Tracy pumping plant at intake to canal, 6 mi (10 km) southeast of Byron, and 10 mi (16 km) northwest of Tracy.

PERIOD OF RECORD.--June 1951 to current year. Prior to October 1959, published as "near Tracy."

GAGE.--Water-stage recorder on forebay, pressure gages on pump discharge lines, and operating time of pumps. Datum of gage is at mean sea level (levels by Bureau of Reclamation).

AVERAGE DISCHARGE.--23 years, 1,957 ft³/s (55.42 m³/s), 1,418,000 acre-ft/yr (1.748 hm³/yr).

EXTREMES.--Period of record: Maximum daily discharge, 4,935 ft³/s (140 m³/s) Aug. 11, 1969; no flow many days in most years.

REMARKS.--Discharge computed from records of operation of pumps. Water is diverted from Sacramento-San Joaquin Delta by way of Old River and a dredged channel to the Tracy pumping plant where it is lifted 200 ft (61 m) into canal. Water, less intermediate diversions, flows into Mendota Pool on San Joaquin River to replace water diverted at Friant Dam. The canal is a part of the Central Valley Project.

COOPERATION.--Records furnished by Bureau of Reclamation, rounded to Geological Survey standards.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3,740	3,300	2,330	854	2,470	4,170	2,780	3,290	4,510	4,500	4,530	3,930
2	3,740	3,300	2,320	854	2,490	4,250	2,800	3,520	4,490	4,510	4,520	3,950
3	3,730	3,290	2,330	857	2,490	4,640	2,670	3,950	4,530	4,460	4,540	3,660
4	3,720	3,280	2,320	856	2,470	4,240	2,340	4,190	4,510	4,550	4,540	3,230
5	3,730	3,290	2,330	861	2,480	4,620	2,340	4,190	4,510	4,540	4,520	3,020
6	3,740	3,300	2,380	862	2,680	4,600	2,020	4,120	4,530	4,450	4,530	2,990
7	3,750	3,200	2,410	861	2,820	4,610	1,930	4,230	4,540	4,460	4,520	2,870
8	3,730	3,200	2,340	863	3,220	4,320	1,940	4,570	4,390	4,480	4,520	2,870
9	3,740	3,200	2,340	862	3,240	4,220	1,980	4,570	4,200	4,490	4,280	2,870
10	3,730	3,140	1,100	861	3,250	4,290	1,970	4,370	3,740	4,470	4,600	2,870
11	3,730	2,990	1,070	857	3,250	4,240	1,980	4,540	3,720	4,470	4,590	2,860
12	3,800	3,000	1,110	857	3,260	4,040	2,100	4,540	3,870	4,490	4,610	2,850
13	3,660	2,990	855	856	3,270	4,160	2,370	4,540	3,960	4,470	4,610	2,880
14	3,740	3,000	856	855	3,330	4,040	2,370	4,540	4,200	4,480	4,560	2,870
15	3,300	2,870	853	1,340	3,520	4,030	2,380	4,520	4,530	4,500	4,640	2,770
16	3,040	2,990	852	1,680	3,680	4,150	2,500	4,530	4,490	4,520	4,450	2,770
17	3,030	2,980	853	1,680	3,680	4,310	2,430	4,540	4,520	4,530	4,560	3,260
18	3,010	3,000	1,370	1,680	3,720	4,610	2,340	4,530	4,440	4,250	4,540	3,270
19	2,940	2,980	1,690	1,680	3,990	4,600	2,480	4,500	4,450	4,550	4,540	3,330
20	2,920	2,360	1,660	1,690	3,990	4,600	2,540	4,530	4,570	4,530	4,550	3,290
21	2,940	2,540	1,670	1,170	4,220	4,580	2,540	4,520	4,600	4,520	4,540	3,300
22	3,040	3,030	1,680	858	4,230	4,570	2,600	4,530	4,530	4,530	4,540	3,290
23	3,170	2,990	1,670	858	4,360	4,590	2,610	4,520	4,540	4,510	4,560	3,280
24	3,070	2,980	1,670	1,380	4,360	4,580	2,790	4,510	4,520	4,500	4,550	3,260
25	2,980	2,960	1,670	1,690	4,220	4,570	3,250	4,490	4,510	4,490	4,570	3,300
26	2,990	2,950	1,670	1,680	4,160	4,370	3,380	4,480	4,500	4,520	4,550	3,940
27	3,090	2,980	1,260	1,680	4,220	4,350	3,370	4,480	4,490	4,500	4,590	3,920
28	2,980	3,060	852	1,680	4,200	3,850	3,370	4,480	4,490	4,540	4,560	3,980
29	2,920	2,320	854	1,680	-----	3,450	3,370	4,480	4,500	4,540	4,560	4,560
30	2,980	2,330	852	1,680	-----	2,870	3,370	4,490	4,500	4,550	4,400	4,370
31	2,920	-----	853	2,160	-----	2,840	-----	4,480	-----	4,530	3,940	-----
TOTAL	103,600	89,800	48,070	38,282	97,270	131,360	76,910	135,770	131,880	139,430	140,110	99,610
MEAN	3,342	2,993	1,551	1,235	3,474	4,237	2,564	4,380	4,396	4,498	4,520	3,320
MAX	3,800	3,300	2,410	2,160	4,360	4,640	3,380	4,570	4,600	4,550	4,640	4,560
MIN	2,920	2,320	852	854	2,470	2,840	1,930	3,290	3,720	4,250	3,940	2,770
AC-FT	205,500	178,100	95,350	75,930	192,900	260,600	152,600	269,300	261,600	276,600	277,900	197,600
CAL YR 1973	TOTAL 1,072,510.00			MEAN 2,938	MAX 4,740	MIN .0	AC-FT 2,127,000					
WTR YR 1974	TOTAL 1,232,092.00			MEAN 3,376	MAX 4,640	MIN 852	AC-FT 2,444,000					

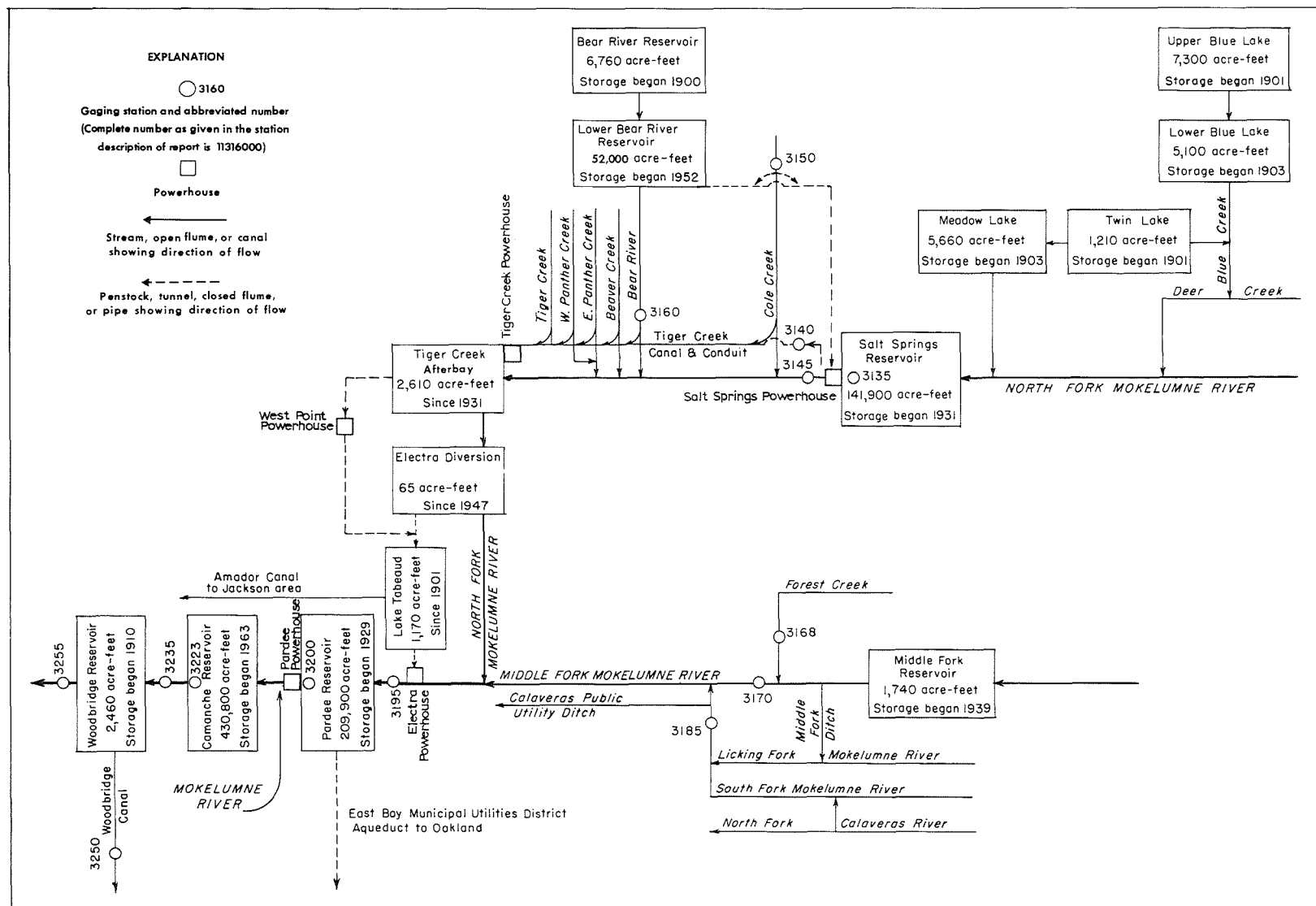


FIGURE 9.--Schematic diagram showing diversions and storage in Mokelumne River basin.

11313500 SALT SPRINGS RESERVOIR NEAR WEST POINT, CALIF.

LOCATION.--Lat 38°30'00", long 120°12'55", in SE¼ sec.33, T.8 N., R.16 E., Calaveras County, Eldorado National Forest, at right end of Salt Springs Dam on North Fork Mokelumne River, 2 mi (3 km) upstream from Cole Creek, and 18 mi (29 km) northeast of West Point.

DRAINAGE AREA.--169 mi² (438 km²).

PERIOD OF RECORD.--March 1931 to current year. Prior to October 1964, records published as usable contents.

GAGE.--Nonrecording gage read once daily. Datum of gage is at mean sea level (levels by Pacific Gas and Electric Co.).

EXTREMES (at 1700).--Current year: Maximum contents observed, 141,900 acre-ft (175 hm³) June 19-25 (elevation, 3,958.0 ft or 1,206.40 m); minimum, 49,400 acre-ft (60.9 hm³) Nov. 6 (elevation, 3,841.0 ft or 1,170.74 m).

Period of record: Maximum contents observed, 141,900 acre-ft (175 hm³) for several days in June or July each year 1948-54, 1956-58, 1960, 1962-63, 1965, 1967, 1969-74 (elevation, 3,958.0 ft or 1,206.40 m); no contents at times in 1932-33, 1945, 1962.

REMARKS.--Reservoir is formed by concrete-faced, rockfill dam, completed in 1931; storage began in March 1931. Capacity, 141,900 acre-ft (175 hm³) between elevations 3,667.75 ft (1,117.930 m), outlet drain and 3,958.0 ft (1,206.40 m), top of radial gates, above mean sea level. Storage of 1,860 acre-ft (2.29 hm³) available for release to river only. Water is released through powerhouse just below dam and discharged into Tiger Creek powerhouse conduit (see sta 11314000). Figures given herein represent total contents. See schematic diagram of Mokelumne River basin.

COOPERATION.--Records of contents furnished by Pacific Gas and Electric Co. in connection with a Federal Power Commission project.

REVISIONS.--WSP 1930: Drainage area.

CAPACITY TABLE (ELEVATION, IN FEET, AND CONTENTS, IN ACRE-Feet)

3,667.75	45	3,740.0	7,320
3,700.0	1,250	3,750.0	9,800
3,705.0	1,680	3,760.0	12,700
3,710.0	2,200	3,780.0	19,600
3,715.0	2,810	3,800.0	28,000
3,720.0	3,520	3,850.0	54,900
3,725.0	4,320	3,900.0	90,800
3,730.0	5,230	3,958.0	141,900
3,735.0	6,230		

CONTENTS, IN ACRE-Feet, AT 2400, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	76,423	53,543	76,127	71,023	76,720	60,013	57,074	70,091	137,935	141,184	126,640	98,399
2	75,758	52,925	75,979	71,095	76,201	60,013	57,590	72,829	137,270	140,992	125,634	97,412
3	75,094	51,946	75,758	71,238	75,463	59,682	57,590	75,463	137,650	140,608	124,723	96,430
4	74,434	50,855	75,389	71,238	75,094	59,154	57,396	78,060	141,568	140,129	123,723	95,614
5	73,921	49,895	75,021	71,095	74,507	58,499	57,332	80,845	140,800	139,555	123,451	94,802
6	72,901	49,360	74,507	70,735	73,775	58,109	57,203	83,900	140,704	139,078	122,636	93,993
7	72,032	49,538	73,995	70,377	72,756	57,719	57,203	87,628	140,992	138,506	121,824	93,026
8	71,166	50,134	73,556	70,520	72,539	57,267	57,139	92,383	140,512	137,935	121,103	92,143
9	70,592	49,895	73,047	70,234	71,960	57,010	57,203	97,248	140,608	138,315	120,205	91,185
10	70,019	51,096	72,539	69,804	71,238	56,689	57,203	101,805	140,992	141,665	119,399	90,310
11	69,449	61,012	72,176	69,591	70,449	56,434	57,074	105,858	140,992	141,088	118,416	89,359
12	68,809	73,848	71,599	69,164	69,877	56,115	57,074	109,720	140,992	140,704	117,526	88,413
13	67,819	76,349	71,310	68,951	69,093	55,797	57,139	113,114	141,088	140,321	116,372	87,393
14	66,836	77,240	70,807	68,596	68,384	56,561	57,461	116,283	140,992	140,033	115,488	86,300
15	65,859	77,687	70,377	68,667	67,889	56,434	58,044	119,757	141,088	139,651	114,518	85,290
16	65,304	77,761	69,948	69,805	67,186	56,370	59,023	122,456	141,184	139,078	113,552	84,285
17	64,751	78,209	69,378	71,960	66,486	56,370	60,013	124,268	140,992	138,410	112,502	83,900
18	64,064	79,410	68,809	73,120	65,789	56,242	61,348	125,269	141,376	137,840	111,542	83,362
19	63,379	79,937	68,384	75,831	65,097	55,924	62,021	125,908	141,857	137,080	110,586	82,825
20	62,360	79,786	67,889	76,794	64,476	55,734	62,360	126,183	141,857	136,417	109,634	82,366
21	61,280	79,711	67,467	77,314	63,721	55,671	63,039	126,640	141,857	135,661	108,599	81,832
22	60,278	79,334	67,326	77,836	63,175	55,481	64,407	127,650	141,857	135,001	107,825	81,300
23	59,748	79,034	67,046	78,135	62,563	55,418	65,720	128,940	141,857	134,248	107,139	80,845
24	59,352	78,584	66,486	78,659	61,954	55,418	66,696	131,443	141,857	133,498	106,284	80,239
25	58,761	78,284	65,859	78,809	61,348	55,544	67,046	133,217	141,857	132,749	105,432	79,636
26	58,239	77,761	65,304	79,109	60,811	55,671	67,256	135,284	141,665	132,002	104,584	79,259
27	57,267	77,314	65,235	79,184	60,278	55,671	67,467	136,512	141,376	131,257	103,569	78,659
28	56,306	76,720	65,651	78,734	59,682	55,797	67,537	137,555	141,184	130,420	102,643	78,060
29	55,607	76,275	67,749	78,209	-----	55,988	67,889	137,745	141,184	129,401	101,638	77,687
30	54,789	75,684	69,948	77,911	-----	56,497	68,596	137,365	141,184	128,478	100,553	77,165
31	54,164	-----	70,592	77,463	-----	56,882	-----	137,840	-----	127,558	99,474	-----
MAX	76,423	79,937	76,127	79,184	76,720	60,013	68,596	137,840	141,857	141,665	126,640	98,399
MIN	54,164	49,360	65,235	68,596	59,682	55,418	57,074	70,091	137,270	127,558	99,474	77,165
(a)	3,848.9	3,880.3	3,873.3	3,882.7	3,857.5	3,853.2	3,870.5	3,953.8	3,957.3	3,942.8	3,910.7	3,882.3
(b)	-23,100	+21,500	-5,090	+6,870	-17,800	-2,800	+11,700	+69,200	+3,340	-13,600	-28,100	-22,300

CAL YR 1973 b +34,300
WTR YR 1974 b -75

a Elevation, in feet, at end of month.

b Change in contents, in acre-feet, rounded to Geological Survey standards.

LOCATION:--Lat 38°29'47", long 120°13'04", in SW¼ sec.33, T.8 N., R.16 E., Amador County, Eldorado National Forest, on left bank 1,000 ft (305 m) downstream from Salt Springs Dam and powerhouse.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 3,620 ft (1,103 m), from topographic map. Auxiliary nonrecording gages in stilling wells upstream and downstream from control.

EXTREMES.--Period of record: Maximum daily discharge, 577 ft³/s (16.3 m³/s) June 22, 1945; no flow at times in some years.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	541	539	489	530	508	489	420	519	541	540	541	541
2	540	538	502	530	510	426	402	512	541	539	540	539
3	539	537	523	530	510	462	436	512	541	540	539	538
4	540	539	521	530	510	484	469	513	541	540	540	539
5	539	537	525	531	510	496	478	512	541	540	541	539
6	537	537	526	529	511	500	485	516	541	539	542	538
7	534	529	525	527	515	493	490	518	541	539	542	541
8	520	525	526	526	513	491	490	499	540	539	542	541
9	524	538	527	524	514	491	491	515	540	529	541	537
10	540	522	526	523	516	490	503	452	539	530	541	537
11	538	382	525	526	515	490	502	.09	539	541	541	536
12	538	230	524	527	516	489	499	0	528	541	542	536
13	538	485	524	522	514	491	500	0	521	541	542	536
14	538	520	524	519	516	490	501	0	520	540	529	535
15	541	520	524	516	517	486	502	12	520	539	541	535
16	542	519	524	512	518	480	500	17	520	539	541	534
17	540	502	517	513	517	480	501	11	524	539	541	537
18	539	491	526	513	518	480	500	.73	530	539	541	539
19	538	508	538	515	518	480	498	1.4	530	539	541	541
20	539	520	532	517	520	480	497	.26	529	539	539	537
21	541	520	524	516	519	480	498	.06	534	539	539	546
22	539	520	526	518	520	480	500	0	542	539	540	546
23	529	519	528	519	520	480	515	105	542	540	541	542
24	540	519	537	521	520	480	521	451	541	541	542	540
25	539	529	542	520	521	492	521	529	545	540	541	540
26	538	536	537	492	519	498	521	531	551	539	541	539
27	543	536	513	520	518	498	521	530	551	538	541	541
28	540	535	530	514	520	494	520	534	550	539	541	542
29	540	535	505	514	-----	489	519	536	550	539	540	541
30	539	533	489	516	-----	416	519	540	544	498	540	543
31	538	-----	517	512	-----	443	-----	540	-----	512	540	-----
TOTAL	16,671	15,300	16,196	16,122	14,443	14,918	14,819	9,406.54	16,117	16,636	16,753	16,176
MEAN	538	510	522	520	516	481	494	303	537	537	540	539
MAX	543	539	542	531	521	500	521	540	551	541	542	546
MIN	520	230	489	492	508	416	402	0	520	498	529	534
AC=FT	33,070	30,350	32,120	31,980	28,650	29,590	29,390	18,660	31,970	33,000	33,230	32,090
WTR YR 1973	TOTAL	176,510.50	MEAN	484	MAX	559	MIN					

SAN JOAQUIN RIVER BASIN

11314500 NORTH FORK MOKELUMNE RIVER BELOW SALT SPRINGS DAM, CALIF.

LOCATION.--Lat 38°29'37", long 120°13'12", in NE¼NW¼ sec.4, T.7 N., R.16 E., Calaveras County, Stanislaus National Forest, on left bank 0.3 mi (0.5 km) downstream from Salt Springs Dam, and 1.3 mi (2.1 km) upstream from Cole Creek.

DRAINAGE AREA.--170 mi² (440 km²).

PERIOD OF RECORD.--September 1926 to current year. Monthly discharge only for some periods, published in WSP 1315-A. Published as "above Moore Creek" 1926-30.

GAGE.--Water-stage recorder. Altitude of gage is 3,590 ft (1,094 m), from topographic map. Prior to Sept. 12, 1928, at site 100 ft (30 m) upstream and Sept. 12, 1928, to Sept. 23, 1940, at present site at datum 2.0 ft (0.61 m) higher.

AVERAGE DISCHARGE (combined flow of North Fork Mokelumne River and Tiger Creek powerhouse conduit minus Bear River-Cole Creek diversion).--48 years, 474 ft³/s (13.42 m³/s), 343,400 acre-ft/yr (423 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 3,280 ft³/s (92.9 m³/s) June 5 (gage height, 8.94 ft or 2.725 m); minimum daily, 6.0 ft³/s (0.17 m³/s) Jan. 4.

Period of record: Maximum discharge, 16,000 ft³/s (453 m³/s), Nov. 21, 1950 (gage height, 17.20 ft or 5.243 m), from rating curve extended above 3,900 ft³/s (110 m³/s) on basis of computations of flow over dam and discharge through powerhouse; minimum daily, 0.3 ft³/s (0.008 m³/s) Mar. 31, Apr. 1, 1931.

REMARKS.--Flow regulated by Salt Springs Reservoir 0.3 mi (0.5 km) upstream since 1931 (see sta 11313500). Diversion from Bear River and Cole Creek to Salt Springs powerhouse averaged 208 ft³/s (5.89 m³/s) during current year. Diversion above station through Tiger Creek powerhouse conduit (see sta 11314000). See schematic diagram of Mokelumne River basin.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

REVISIONS.--WSP 1930: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	8.2	65	6.8	73	289	351	279	2,610	301	329	321
2	11	6.7	104	6.3	90	359	369	251	2,390	301	336	294
3	11	6.6	195	6.1	115	320	334	302	1,200	300	296	282
4	11	6.6	176	6.0	214	295	298	308	1,910	299	269	282
5	10	6.7	198	56	301	282	288	316	2,320	298	267	282
6	11	6.6	256	108	301	276	280	318	2,620	298	271	282
7	11	6.6	226	108	297	284	274	326	2,530	298	272	282
8	11	6.6	224	108	296	286	273	334	1,770	298	278	282
9	11	6.6	222	108	292	284	274	343	1,640	141	284	296
10	11	7.0	223	108	289	282	259	422	1,940	966	283	308
11	11	8.8	227	112	288	281	260	874	2,060	535	282	307
12	11	11	207	116	285	267	263	876	2,170	387	314	304
13	11	98	171	127	269	279	263	887	2,000	290	313	303
14	11	192	171	210	280	278	263	845	1,850	215	263	301
15	11	236	195	284	276	282	265	859	1,500	256	295	299
16	11	157	231	291	272	288	268	887	1,420	291	295	142
17	11	144	229	298	272	288	270	896	1,190	290	295	13
18	11	9.6	212	300	271	287	277	907	655	289	296	12
19	11	79	199	301	269	286	281	802	942	289	294	12
20	11	212	210	304	267	285	284	911	462	287	295	12
21	11	211	117	126	267	283	284	870	855	286	240	12
22	11	210	106	7.4	264	282	285	912	682	286	171	12
23	11	210	159	7.1	261	281	272	773	872	284	194	12
24	10	209	201	6.9	259	280	267	1,090	426	283	218	12
25	10	221	211	6.6	256	268	269	1,370	390	285	247	12
26	10	229	174	7.0	256	260	270	2,020	293	285	278	12
27	10	230	32	32	254	261	270	2,730	260	283	276	12
28	10	232	7.6	56	250	266	271	2,970	179	328	276	11
29	10	231	10	55	-----	273	273	2,910	170	356	312	11
30	11	225	8.2	56	-----	348	275	2,280	267	329	325	11
31	10	-----	7.2	68	-----	328	-----	2,070	-----	320	323	-----
TOTAL	332	3,423.6	4,974.0	3,392.2	7,084	8,908	8,430	31,938	39,573	9,954	8,687	4,733
MEAN	10.7	114	160	109	253	287	281	1,030	1,319	321	280	158
MAX	11	236	256	304	301	359	369	2,970	2,620	966	336	321
MIN	10	6.6	7.2	6.0	73	260	259	251	170	141	171	11
AC-FT	659	6,790	9,870	6,730	14,050	17,670	16,720	63,350	78,490	19,740	17,230	9,390
CAL YR 1973	TOTAL	76,116.3	MEAN	209	MAX	3,550	MIN	4.8	AC-FT	151,000		
WTR YR 1974	TOTAL	131,428.8	MEAN	360	MAX	2,970	MIN	6.0	AC-FT	260,700		

11315000 COLE CREEK NEAR SALT SPRINGS DAM, CALIF.

LOCATION.--Lat 38°31'26", long 120°12'28", in SE¼ sec.21, T.8 N., R.16 E., Amador County, Eldorado National Forest, on right bank 1.8 mi (2.9 km) north of Salt Springs Dam, 3.4 mi (5.5 km) upstream from mouth, and 6.5 mi (10.1 km) southwest of Mokelumne Peak.

DRAINAGE AREA.--20.4 mi² (52.8 km²).

PERIOD OF RECORD.--July 1927 to November 1942, October 1943 to current year. Prior to October 1958, published as Cold Creek near Mokelumne Peak. October 1958 to September 1960, published as "near Mokelumne Peak."

GAGE.--Water-stage recorder. Altitude of gage is 5,970 ft (1,820 m), from topographic map.

AVERAGE DISCHARGE.--46 years, 64.5 ft³/s (1.827 m³/s), 46,730 acre-ft/yr (57.6 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,350 ft³/s (38.2 m³/s) Dec. 29 (gage height, 5.74 ft or 1.750 m); minimum daily, 0.10 ft³/s (0.003 m³/s) Sept. 25-30.

Period of record: Maximum discharge, 6,140 ft³/s (174 m³/s) Dec. 23, 1964 (gage height, 10.21 ft or 3.112 m), from rating curve extended above 900 ft³/s (25.5 m³/s) on basis of slope-area measurement at gage height 9.69 ft (2.954 m); no flow many days in some years.

REMARKS.--Occasional pumping for domestic use in summer-home tract began in September 1961. See schematic diagram of Mokelumne River basin.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

REVISIONS (WATER YEARS).--WSP 1515: 1928, 1930-31, 1938(M), 1944, 1947. WSP 1930: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.14	2.6	60	75	48	125	66	314	380	30	7.0	.36
2	.14	2.3	121	65	45	112	65	353	333	26	6.5	.34
3	.14	1.8	96	55	43	64	57	327	335	21	5.8	.32
4	.14	1.3	67	47	47	57	59	328	320	18	6.6	.30
5	.14	1.2	44	43	47	59	76	372	342	15	24	.28
6	.14	81	35	45	49	60	71	434	371	13	11	.26
7	1.4	277	37	40	41	51	84	496	296	12	8.0	.26
8	2.0	78	36	35	39	45	96	495	242	13	5.0	.25
9	.81	56	38	33	42	43	89	473	258	372	3.0	.23
10	.60	380	40	38	43	46	72	424	263	157	1.5	.21
11	.51	772	40	31	44	41	90	418	273	66	1.0	.21
12	.48	479	32	31	41	41	125	389	250	40	.95	.19
13	.48	117	31	34	42	43	137	336	228	29	.90	.18
14	.45	75	37	37	36	66	170	348	204	22	.90	.17
15	.42	60	29	228	36	88	204	326	173	18	.85	.17
16	.40	52	31	191	37	94	206	261	161	15	.80	.15
17	.40	73	50	379	43	90	228	194	131	13	.75	.15
18	.38	69	49	318	35	74	212	147	110	12	.70	.14
19	.37	54	39	324	34	83	131	118	94	11	.65	.14
20	.49	45	31	149	40	94	145	112	87	12	.60	.12
21	.49	41	30	97	32	105	194	175	96	12	.60	.11
22	.95	39	29	79	30	97	242	272	91	12	.59	.11
23	6.2	41	27	73	36	104	216	345	81	11	.57	.11
24	11	34	28	69	34	124	130	382	67	10	.55	.11
25	14	41	28	69	39	126	106	408	56	14	.53	.10
26	11	43	27	62	35	95	88	495	47	12	.51	.10
27	9.5	32	36	58	31	91	85	493	41	12	.48	.10
28	7.7	42	59	56	29	79	108	457	38	11	.45	.10
29	4.9	44	622	55	-----	109	138	348	37	9.3	.43	.10
30	3.1	36	198	53	-----	105	201	331	36	7.9	.41	.10
31	2.1	-----	112	51	-----	77	-----	351	-----	7.3	.38	-----
TOTAL	80.97	3,070.2	2,139	2,920	1,098	2,488	3,891	10,722	5,441	1,033.5	92.00	5.47
MEAN	2.61	102	69.0	94.2	39.2	80.3	130	346	181	33.3	2.97	.18
MAX	14	772	622	379	49	126	242	496	380	372	24	.36
MIN	.14	1.2	27	31	29	41	57	112	36	7.3	.38	.10
AC-FT	161	6,090	4,240	5,790	2,180	4,930	7,720	21,270	10,790	2,050	182	11

CAL YR 1973 TOTAL 28,867.04 MEAN 79.1 MAX 772 MIN .08 AC-FT 57,260
WTR YR 1974 TOTAL 32,981.14 MEAN 90.4 MAX 772 MIN .10 AC-FT 65,420

DATE	TIME	PEAK DISCHARGE (BASE, 500 FT ³ /S)	DATE	TIME	DISCHARGE
11-11	1330	5.56 1,230	5-7	1945	4.88 839
12-29	1245	5.74 1,350	5-26	1930	4.95 874
1-18	1945	4.49 659	7-9	1900	5.30 1,070

NOTE.--No gage-height record Aug. 7 to Sept. 6.

SAN JOAQUIN RIVER BASIN

11316000 BEAR RIVER NEAR SALT SPRINGS DAM, CALIF.

LOCATION.--Lat 38°29'37", long 120°17'18", in NE¼NW¼ sec.2, T.7 N., R.15 E., Amador County, Eldorado National Forest, on right bank 200 ft (61 m) upstream from diversion to Tiger Creek powerhouse conduit and highway bridge, 1.5 mi (2.4 km) upstream from mouth, and 4 mi (6 km) west of Salt Springs Dam.

DRAINAGE AREA.--48.0 mi² (124.3 km²).

PERIOD OF RECORD.--October 1951 to current year.

GAGE.--Water-stage recorder and broad-crested weir. Altitude of gage is 3,710 ft (1,131 m), from topographic map.

AVERAGE DISCHARGE.--23 years, 55.2 ft³/s (1.563 m³/s), 39,990 acre-ft/yr (49.3 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,000 ft³/s (28.3 m³/s) May 26 (gage height, 3.66 ft or 1.116 m); minimum daily, 1.5 ft³/s (0.042 m³/s) Nov. 2-4.

Period of record: Maximum discharge, 11,000 ft³/s (312 m³/s) Dec. 24, 1964 (gage height, 10.11 ft or 3.082 m in gage well, 11.8 ft or 3.60 m, from flood profile), from rating curve extended above 560 ft³/s (15.9 m³/s) on basis of slope-area measurements of maximum flow; minimum daily, 1.0 ft³/s (0.028 m³/s) Aug. 23-28, 1961.

Flood in November 1950 reached a stage of 11.2 ft (3.41 m), from floodmarks (discharge, 10,000 ft³/s or 283 m³/s).

REMARKS.--Flow regulated by Bear River Reservoir since 1900, capacity, 6,760 acre-ft (8.34 hm³) and Lower Bear River Reservoir 4 mi (6 km) upstream since December 1952, capacity, 49,100 acre-ft (60.5 hm³). Water diverted for power from Lower Bear River Reservoir through tunnel to Salt Springs powerhouse on North Fork Mokelumne River since December 1952. Water diverted occasionally from Cole Creek into Lower Bear River Reservoir. See schematic diagram of Mokelumne River basin.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.2	1.7	28	61	29	94	131	72	552	6.1	5.0	5.0
2	4.2	1.5	15	52	25	100	124	74	534	6.0	4.9	5.0
3	4.2	1.5	14	42	24	64	101	73	477	5.9	4.8	5.0
4	4.2	1.5	14	36	23	54	92	72	494	5.8	4.8	4.9
5	4.1	2.3	13	33	22	53	87	72	468	5.7	5.2	4.9
6	4.2	12	13	30	21	50	82	72	508	5.7	5.5	4.9
7	10	17	13	27	20	48	78	72	467	5.7	6.2	4.9
8	9.6	6.4	13	24	19	46	78	69	355	7.9	4.6	4.8
9	5.1	5.1	13	23	19	44	79	63	331	32	4.6	4.8
10	4.7	17	14	21	18	42	71	56	345	11	7.0	4.7
11	4.6	60	14	20	18	40	71	51	363	8.8	7.1	4.7
12	4.6	91	14	24	18	52	73	121	377	7.4	4.8	4.7
13	4.5	25	15	24	18	49	72	528	323	7.0	4.7	4.7
14	4.4	20	14	34	17	52	74	544	280	7.2	4.7	5.6
15	4.4	15	14	61	16	57	80	556	215	6.5	4.6	6.5
16	4.3	16	14	75	17	61	83	487	176	6.1	4.6	6.5
17	4.3	62	29	150	16	59	70	354	138	5.9	4.5	6.4
18	4.3	56	20	136	17	56	64	216	83	5.9	4.5	6.4
19	4.3	29	17	143	21	55	63	181	28	5.8	4.4	6.3
20	4.6	21	16	110	17	55	68	122	13	5.7	4.4	6.3
21	4.4	17	18	85	16	55	72	135	9.3	5.7	4.6	6.8
22	6.0	15	17	70	16	54	68	341	9.0	5.6	5.2	8.9
23	17	13	15	59	16	53	58	552	8.6	5.6	5.2	9.0
24	5.7	13	15	53	16	54	60	636	7.6	5.5	5.2	9.0
25	5.2	12	16	48	16	55	58	666	7.1	5.6	5.3	9.0
26	4.9	12	17	43	17	61	52	747	6.8	5.5	5.1	9.0
27	4.8	11	43	39	17	74	51	761	6.6	5.4	5.1	9.0
28	4.6	12	64	36	17	85	52	711	6.5	5.3	5.0	7.1
29	4.6	12	183	33	-----	109	54	592	6.3	5.2	5.0	4.3
30	4.5	13	114	31	-----	136	61	506	6.2	5.1	5.0	4.2
31	4.4	-----	80	29	-----	105	-----	519	-----	5.1	5.1	-----
TOTAL	164.9	591.0	899	1,652	526	1,972	2,227	10,021	6,601.0	217.7	156.7	183.3
MEAN	5.32	19.7	29.0	53.3	18.8	63.6	74.2	323	220	7.02	5.05	6.11
MAX	17	91	183	150	29	136	131	761	552	32	7.1	9.0
MIN	4.1	1.5	13	20	16	40	51	51	6.2	5.1	4.4	4.2
AC-FT	327	1,170	1,780	3,280	1,040	3,910	4,420	19,880	13,090	432	311	364

CAL YR 1973 TOTAL 18,727.0 MEAN 51.3 MAX 648 MIN 1.5 AC-FT 37,150
WTR YR 1974 TOTAL 25,211.6 MEAN 69.1 MAX 761 MIN 1.5 AC-FT 50,010

11316800 FOREST CREEK NEAR WILSEYVILLE, CALIF.

LOCATION.--Lat 38°24'12", long 120°26'45", in SW¼NW¼ sec.4, T.6 N., R.14 E., Calaveras County, on left bank 1.0 mi (1.6 km) downstream from Lion Creek, 1.8 mi (2.9 km) upstream from mouth, and 4 mi (6 km) northeast of Wilseyville.

DRAINAGE AREA.--20.8 mi² (53.9 km²).

PERIOD OF RECORD.--July 1960 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 2,950 ft (899 m), from topographic map.

AVERAGE DISCHARGE.--14 years, 24.2 ft³/s (0.685 m³/s), 17,530 acre-ft/yr (21.6 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 900 ft³/s (25.5 m³/s) Mar. 2 (gage height, 6.30 ft or 1.920 m); minimum daily, 2.3 ft³/s (0.065 m³/s) Oct. 1.

Period of record: Maximum discharge, 1,770 ft³/s (50.1 m³/s) Dec. 24, 1964 (gage height, 7.68 ft or 2.341 m), from rating curve extended above 500 ft³/s (14.2 m³/s) on basis of slope-area measurement at gage height 7.41 ft (2.259 m); minimum, 0.6 ft³/s (0.17 m³/s) Aug. 24, 25, 1961.

REMARKS.--Records good except those for periods of no gage-height record, which are fair. No regulation. Minor diversions above station for irrigation and domestic use. See schematic diagram of Mokelumne River basin.

DISCHARGE IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.3	3.9	84	58	40	100	327	46	17	7.5	5.5	4.1
2	2.6	3.9	39	50	36	400	270	46	16	7.6	5.5	3.9
3	3.1	4.0	29	45	35	200	138	44	16	7.8	5.4	3.8
4	3.1	4.2	25	41	33	90	115	43	15	8.1	5.5	3.8
5	3.1	5.5	22	38	32	77	104	42	14	7.6	5.5	3.8
6	3.0	14	21	37	30	74	94	41	14	7.5	5.1	3.2
7	8.1	12	19	35	31	76	87	40	13	7.3	4.9	3.3
8	9.3	8.5	18	33	30	76	84	39	13	8.9	4.8	3.0
9	5.4	7.3	17	32	29	69	87	37	13	29	4.8	2.7
10	4.5	13	17	31	28	64	80	36	13	17	4.3	3.1
11	4.2	33	18	29	28	61	77	34	12	12	3.8	3.5
12	4.1	72	17	35	27	69	72	32	12	11	4.0	3.1
13	3.9	29	21	35	26	66	67	31	12	9.7	4.3	3.3
14	3.8	29	20	41	26	63	63	29	12	8.9	4.9	3.4
15	3.6	18	18	54	25	63	62	28	12	8.4	4.8	3.6
16	3.6	18	17	61	26	63	60	27	12	8.1	4.3	3.5
17	3.6	42	23	135	25	61	58	26	11	7.5	4.3	3.4
18	3.6	60	23	110	25	59	59	25	11	6.0	4.6	3.3
19	3.6	32	20	113	33	57	57	24	12	6.4	4.1	3.3
20	4.6	26	19	96	30	55	53	24	11	6.4	4.1	3.3
21	4.2	23	27	80	28	53	50	22	11	5.8	3.9	3.4
22	5.1	19	35	69	31	52	48	21	9.8	5.6	4.2	3.0
23	21	17	27	63	29	51	49	20	8.7	5.7	4.1	2.9
24	7.8	17	24	57	27	50	53	19	8.6	5.7	3.9	2.6
25	5.7	16	22	53	26	49	50	20	8.7	5.9	3.7	2.8
26	4.9	16	25	51	26	51	50	20	8.8	5.9	3.7	3.1
27	4.5	15	71	47	25	61	47	20	8.7	5.4	3.7	2.8
28	4.2	14	74	44	26	81	47	20	8.5	5.4	3.7	3.1
29	4.1	13	208	42	-----	81	46	20	8.3	5.2	4.2	3.3
30	3.9	14	96	41	-----	158	45	19	7.8	5.3	4.2	3.7
31	3.9	-----	69	39	-----	126	-----	18	-----	5.1	4.3	-----
TOTAL	152.4	599.3	1,165	1,695	813	2,656	2,499	913	349.9	253.7	138.1	99.1
MEAN	4.92	20.0	37.6	54.7	29.0	85.7	83.3	29.5	11.7	8.18	4.45	3.30
MAX	21	72	208	135	40	400	327	46	17	29	5.5	4.1
MIN	2.3	3.9	17	29	25	49	45	18	7.8	5.1	3.7	2.6
AC-FT	302	1,190	2,310	3,360	1,610	5,270	4,960	1,810	694	503	274	197

CAL YR 1973 TOTAL 9,827.3 MEAN 26.9 MAX 208 MIN 2.3 AC-FT 19,490
WTR YR 1974 TOTAL 11,333.5 MEAN 31.1 MAX 400 MIN 2.3 AC-FT 22,480

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-12	0600	4.39	132	1-17	0700	4.58	189
12-1	0530	4.61	198	3-2	unknown	6.30	900
12-29	1130	5.43	497	4-1	2030	5.84	673

NOTE.--No gage-height record for Feb. 20 to Mar. 4, May 1 to June 5.

11317000 MIDDLE FORK MOKELUMNE RIVER AT WEST POINT, CALIF.

LOCATION.--Lat 38°23'23", long 120°31'32", in SE¼NE¼ sec.10, T.6 N., R.13 E., Calaveras County, on right bank 200 ft (61 m) downstream from highway bridge, 0.6 mi (1.0 km) south of West Point, and 4.5 mi (7.2 km) upstream from South Fork Mokelumne River.

DRAINAGE AREA.--68.4 mi² (177.2 km²).

PERIOD OF RECORD.--October 1911 to current year. Monthly discharge only for October 1911, published in WSP 1315-A.

GAGE.--Water-stage recorder. Altitude of gage is 2,450 ft (747 m), from topographic map. Prior to Oct. 6, 1926, nonrecording gage at site 1,200 ft (366 m) upstream at different datum. Oct. 6, 1926, to Aug. 18, 1928, non-recording gage at present site and datum.

AVERAGE DISCHARGE.--63 years, 61.4 ft³/s (1.739 m³/s), 44,480 acre-ft/yr (54.8 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,570 ft³/s (44.5 m³/s) Mar. 2 (gage height, 5.90 ft or 1.798 m); minimum daily, 7.7 ft³/s (0.22 m³/s) Nov. 2.

Period of record: Maximum discharge, 4,320 ft³/s (122 m³/s) Dec. 23, 1955 (gage height, 8.98 ft or 2.737 m); no flow Aug. 23 to Sept. 14, 1931, Sept. 9, 1934.

REMARKS.--Records good except those for the summer months, which are fair. Flow slightly regulated by Middle Fork Reservoir, capacity, 1,740 acre-ft (2.15 hm³), 6 mi (10 km) above station, since January 1940. Several small diversions above station. At times water diverted 4 mi (6 km) above station to South Fork Mokelumne River via Middle Fork ditch, capacity, 15 ft³/s (0.42 m³/s) and Licking Fork Mokelumne River. See schematic diagram of Mokelumne River basin.

REVISIONS (WATER YEARS).--WSP 1515: 1919-20, 1927-28(M), 1936(M). WSP 1930: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	8.0	309	190	106	369	685	144	61	24	33	11
2	25	7.7	123	155	100	844	690	147	60	25	32	12
3	18	7.8	87	125	95	399	465	145	60	25	32	11
4	18	8.2	73	115	92	283	379	143	57	23	31	12
5	20	10	65	106	89	254	326	139	54	21	31	11
6	22	21	60	108	86	233	289	138	52	21	31	10
7	33	18	57	99	83	249	263	141	51	21	31	10
8	36	14	54	95	82	258	244	143	49	30	30	10
9	27	12	52	91	80	230	259	138	46	87	32	9.6
10	22	20	51	86	79	205	232	130	46	58	29	10
11	20	44	54	83	76	189	216	122	43	42	28	11
12	19	108	53	103	77	216	203	117	41	35	27	11
13	19	42	62	107	77	207	192	111	39	31	26	11
14	20	48	62	121	74	197	185	104	37	30	25	12
15	25	27	55	179	73	195	180	99	36	29	25	12
16	22	29	52	189	76	193	175	95	36	28	23	12
17	27	58	63	454	73	187	173	91	36	28	22	11
18	27	132	68	399	72	177	177	89	36	28	21	11
19	27	93	60	418	104	168	165	85	37	28	21	12
20	27	74	56	334	91	161	154	81	36	39	20	12
21	31	68	79	268	83	152	149	77	32	39	20	11
22	30	58	121	216	89	146	147	72	30	39	20	9.8
23	44	54	86	187	82	141	154	71	29	38	20	11
24	16	52	74	166	79	136	177	71	29	38	20	9.3
25	12	47	68	152	76	135	163	72	28	37	20	10
26	11	57	72	139	76	138	156	71	27	36	20	11
27	12	48	221	129	77	179	149	73	26	36	20	11
28	10	42	242	121	77	289	148	72	24	35	20	10
29	8.0	42	465	115	-----	262	146	70	23	34	20	9.3
30	8.0	42	330	108	-----	511	144	66	23	34	20	10
31	7.9	-----	240	104	-----	462	-----	63	-----	33	14	-----
TOTAL	668.9	1,291.7	3,514	5,262	2,324	7,765	7,185	3,180	1,184	1,052	764	324.0
MEAN	21.6	43.1	113	170	83.0	250	240	103	39.5	33.9	24.6	10.8
MAX	44	132	465	454	106	844	690	147	61	87	33	12
MIN	7.9	7.7	51	83	72	135	144	63	23	21	14	9.3
AC-FT	1,330	2,560	6,970	10,440	4,610	15,400	14,250	6,310	2,350	2,090	1,520	643
CAL YR 1973	TOTAL 30,515.6 MEAN 83.6 MAX 500 MIN 4.1 AC-FT 60,530											
WTR YR 1974	TOTAL 34,514.6 MEAN 94.6 MAX 844 MIN 7.7 AC-FT 68,460											

PEAK DISCHARGE (BASE, 400 FT ³ /S)							
DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
12-1	0630	3.71	543	3-2	0100	5.90	1,570
12-29	1300	4.16	691	3-30	2300	4.04	649
1-17	1330	3.80	570	4-1	1930	5.00	1,040

11318500 SOUTH FORK MOKELUMNE RIVER NEAR WEST POINT, CALIF.

LOCATION.--Lat 38°22'06", long 120°32'40", in SE¼SE¼ sec.16, T.6 N., R.13 E., Calaveras County, on right bank 500 ft (152 m) upstream from highway bridge, 2.4 mi (3.9 km) southwest of West Point, and 2.5 mi (4.0 km) upstream from mouth.

DRAINAGE AREA.--75.1 mi² (194.5 km²).

PERIOD OF RECORD.--October 1933 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,950 ft (594 m), from topographic map. October 1933 to Sept. 19, 1957, at site 1,100 ft (335 m) downstream at different datum.

AVERAGE DISCHARGE.--41 years, 84.1 ft³/s (2.38 m³/s), 60,930 acre-ft/yr (75.1 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,710 ft³/s (76.7 m³/s) Mar. 2 (gage height, 8.32 ft or 2.536 m); minimum daily, 3.0 ft³/s (0.085 m³/s) Sept. 25.

Period of record: Maximum discharge, 6,920 ft³/s (196 m³/s) Dec. 23, 1955 (gage height, 14.8 ft or 4.51 m, from floodmarks, site and datum then in use), from rating curve extended above 2,700 ft³/s (76.5 m³/s) on basis of slope-area measurement of maximum flow; no flow Aug. 6, 7, Aug. 12 to Sept. 26, 1934.

REMARKS.--Records good. Several small diversions above station for domestic use and for irrigation of about 100 acres (405,000 m²). Diversions into South Fork Mokelumne River basin above station at times from North Fork Calaveras River and from Middle Fork Mokelumne River for use below station. See schematic diagram of Mokelumne River basin.

REVISIONS (WATER YEARS).--WSP 1315-A: 1934(M). WSP 1930: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	15	353	211	110	597	897	145	53	27	15	8.4
2	10	15	138	164	100	1,300	924	144	53	28	15	8.9
3	11	15	94	135	96	576	617	138	52	28	14	9.4
4	11	15	78	123	92	393	481	134	49	27	14	8.2
5	11	16	68	115	89	325	407	131	47	25	15	6.3
6	11	41	62	124	84	289	358	129	46	22	15	5.9
7	20	32	57	109	82	306	319	126	45	22	15	6.9
8	33	28	55	107	80	310	291	121	43	25	13	6.3
9	21	22	53	98	78	273	295	114	41	98	12	5.8
10	18	32	51	89	75	246	261	108	40	64	12	5.4
11	17	86	54	86	72	229	243	101	38	41	12	4.3
12	16	259	52	123	74	253	231	95	37	33	11	4.6
13	15	97	64	131	73	239	217	97	37	29	12	4.3
14	14	97	60	140	71	228	208	89	36	26	13	4.8
15	14	57	55	188	68	222	202	82	36	24	13	5.3
16	13	60	52	207	71	219	195	81	35	23	13	5.0
17	13	143	65	616	67	210	188	78	34	23	16	4.7
18	12	251	67	517	66	199	190	76	35	23	19	4.5
19	12	110	60	507	113	189	175	73	36	22	18	3.6
20	13	81	56	396	94	180	163	70	34	21	15	3.6
21	12	71	87	313	87	172	159	68	33	21	14	3.8
22	14	58	154	246	98	166	156	62	32	20	14	3.9
23	60	53	96	213	88	159	147	60	31	19	12	5.1
24	27	51	78	190	84	154	146	60	30	19	11	3.2
25	19	44	70	170	81	152	143	62	30	18	8.7	3.0
26	18	46	75	153	80	157	143	61	29	18	8.4	3.2
27	17	41	257	139	79	212	143	62	28	17	8.8	3.7
28	16	37	307	130	80	349	143	62	27	16	8.8	4.0
29	16	36	531	121	-----	336	143	59	26	16	8.8	3.6
30	15	38	400	114	-----	671	143	56	26	17	9.2	3.6
31	15	-----	252	107	-----	618	-----	54	-----	18	9.5	-----
TOTAL	524	1,947	3,901	6,082	2,332	9,929	8,328	2,798	1,119	830	395.2	153.3
MEAN	16.9	64.9	126	196	83.3	320	278	90.3	37.3	26.8	12.7	5.11
MAX	60	259	531	616	113	1,300	924	145	53	98	19	9.4
MIN	10	15	51	86	66	152	143	54	26	16	8.4	3.0
AC-FT	1,040	3,860	7,740	12,060	4,630	19,690	16,520	5,550	2,220	1,650	784	304
CAL YR 1973	TOTAL	36,531.7	MEAN	100	MAX	730	MIN	3.4	AC-FT	72,460		
WTR YR 1974	TOTAL	38,338.5	MEAN	105	MAX	1,300	MIN	3.0	AC-FT	76,040		

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-17	2400	4.96	509	1-18	2230	5.20	610
12-1	0630	5.37	686	3-2	0100	8.32	2,710
12-29	1430	5.65	825	3-30	1500	5.68	840
1-17	0930	5.56	780	4-1	1900	6.51	1,340

NOTE.--No gage-height record May 25 to July 3.

SAN JOAQUIN RIVER BASIN

11319500 MOKELUMNE RIVER NEAR MOKELUMNE HILL, CALIF.

LOCATION.--Lat 38°18'46", long 120°43'09", in SW¼SW¼ sec.1, T.5 N., R.11 E., Calaveras County, on downstream side of bridge 1.2 mi (1.9 km) northwest of Mokelumne Hill, and 8 mi (13 km) downstream from confluence of North and South Forks of Mokelumne River.

DRAINAGE AREA.--544 mi² (1,409 km²).

PERIOD OF RECORD.--January to June 1901, May 1903 to December 1904, October 1927 to current year. Yearly estimate only for water year 1928 (incomplete), published in WSP 1315-A. Published as "at Electra" 1901, 1903-4.

GAGE.--Water-stage recorder. Datum of gage is 589.88 ft (179.796 m) above mean sea level (levels by California Division of Highways). Jan. 1 to June 30, 1901, and May 11, 1903, to Dec. 31, 1904, nonrecording gage at site 3 mi (5 km) upstream at different datum. Nov. 10, 1927, to Aug. 26, 1952, water-stage recorder at site 40 ft (12 m) upstream at present datum.

AVERAGE DISCHARGE.--48 years (1903-4, 1927-74), 982 ft³/s (27.81 m³/s), 711,500 acre-ft/yr (877 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 7,440 ft³/s (211 m³/s) Mar. 2 (gage height, 8.75 ft or 2.667 m); minimum daily, 470 ft³/s (13.3 m³/s) Oct. 10.
Period of record: Maximum discharge, 33,700 ft³/s (954 m³/s) Dec. 3, 1950 (gage height, 18.5 ft or 5.64 m); minimum observed, 5 ft³/s (0.14 m³/s) Aug. 13-15, 17, 18, 1904.

REMARKS.--Records excellent. Flow regulated by Salt Springs Reservoir beginning in 1931 (see sta 11313500), several smaller reservoirs, and four powerplants. Diversion above station for irrigation and domestic use. See schematic diagram of Mokelumne River basin. Records of water temperatures for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1445: 1903-4, 1928(M), 1936(M), 1938(M), 1940(M), 1943(M), 1945(M).
WSP 1930: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	581	616	1,900	1,540	1,020	1,810	3,650	1,490	4,060	928	968	856
2	688	602	1,190	1,300	1,040	4,780	4,210	1,580	4,280	958	945	879
3	533	540	1,090	1,130	1,060	2,670	3,030	1,530	3,290	962	957	928
4	672	554	1,000	1,110	1,060	2,090	2,560	1,530	2,450	940	885	840
5	479	656	937	1,100	1,110	1,980	2,230	1,560	3,940	964	936	804
6	603	614	996	1,270	1,190	1,830	2,110	1,620	4,230	909	767	858
7	610	681	985	1,110	1,160	1,820	1,980	1,710	3,950	930	1,050	928
8	726	685	951	1,110	1,180	1,940	1,940	1,900	3,280	959	921	843
9	712	681	931	1,100	1,100	1,720	1,890	1,700	2,670	1,150	884	902
10	470	741	1,040	1,080	1,140	1,700	1,870	1,670	2,970	1,510	935	858
11	599	1,140	996	1,120	1,140	1,630	1,750	1,640	3,190	1,570	889	895
12	576	1,600	970	1,070	1,080	1,650	1,790	1,720	3,300	1,100	880	894
13	571	936	980	1,160	1,130	1,670	1,690	2,030	3,050	1,060	923	892
14	563	961	1,050	1,140	1,090	1,670	1,520	2,200	2,880	989	947	855
15	609	988	980	1,520	1,170	1,700	1,700	2,160	2,570	852	882	834
16	648	1,000	949	1,720	1,150	1,700	1,640	2,030	2,230	943	889	797
17	595	1,060	1,000	2,960	1,070	1,590	1,570	1,780	2,130	949	899	619
18	646	1,450	1,020	2,800	1,130	1,610	1,730	1,600	1,650	969	927	491
19	601	1,020	1,000	2,890	1,250	1,610	1,610	1,460	1,450	879	923	632
20	532	864	1,040	2,410	1,220	1,510	1,540	1,410	1,290	938	863	604
21	579	1,110	1,050	2,120	1,100	1,510	1,500	1,340	1,360	938	860	592
22	662	989	1,230	1,610	1,240	1,480	1,410	1,500	1,390	913	808	582
23	758	988	1,090	1,430	1,110	1,430	1,560	1,760	1,650	927	856	564
24	661	999	1,000	1,370	1,140	1,440	1,660	2,150	1,280	900	805	597
25	584	938	1,080	1,280	1,080	1,470	1,590	3,140	1,060	945	802	608
26	641	974	1,050	1,230	1,070	1,480	1,510	3,490	1,050	977	928	537
27	601	884	1,490	1,170	1,110	1,560	1,480	4,960	988	958	877	589
28	623	942	1,800	1,120	1,100	2,000	1,470	5,000	1,020	929	860	526
29	624	915	2,390	1,110	-----	2,050	1,510	4,930	863	941	889	576
30	551	925	2,560	1,100	-----	2,800	1,490	4,080	896	996	925	573
31	546	-----	1,770	1,060	-----	2,950	-----	3,510	-----	940	924	-----
TOTAL	18,844	27,053	37,515	45,240	31,440	58,850	57,190	70,180	70,417	30,823	27,804	21,953
MEAN	608	902	1,210	1,459	1,123	1,898	1,906	2,264	2,347	994	897	732
MAX	758	1,600	2,560	2,960	1,250	4,780	4,210	5,000	4,280	1,570	1,050	928
MIN	470	540	931	1,060	1,020	1,430	1,410	1,340	863	852	767	491
AC-FT	37,380	53,660	74,410	89,730	62,360	116,700	113,400	139,200	139,700	61,140	55,150	43,540
CAL YR 1973	TOTAL 414,498		MEAN 1,136	MAX 5,420		MIN 310	AC-FT 822,200					
WTR YR 1974	TOTAL 497,309		MEAN 1,362	MAX 5,000		MIN 470	AC-FT 986,400					

11320000 PARDEE RESERVOIR NEAR VALLEY SPRINGS, CALIF.

LOCATION.--Lat 38°15'25", long 120°50'59", in NW¼SW¼ sec.26, T.5 N., R.10 E., Amador County, at Pardee Dam on the Mokelumne River, 4.5 mi (7.2 km) north of Valley Springs.

DRAINAGE AREA.--578 mi² (1,497 km²).

PERIOD OF RECORD.--March 1929 to September 1930 (lake elevation only), October 1930 to September 1933, published in reports of the Geological Survey. October 1933 to September 1961 in files of East Bay Municipal Utility District. October 1961 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by East Bay Municipal Utility District). EXTREMES.--Current year: Maximum contents, 211,600 acre-ft (261 hm³) June 16 (elevation, 568.36 ft or 173.236 m); minimum, 189,000 acre-ft (233 hm³) Mar. 5, 18 (elevation, 558.03 ft or 170.088 m).

Period of record: Maximum contents, 219,300 acre-ft (270 hm³) Dec. 23, 1955 (elevation, 571.72 ft or 174.260 m); minimum, 49,000 acre-ft (60.4 hm³) Aug. 31, 1931 (elevation, 457.6 ft or 139.48 m).

REMARKS.--Reservoir is formed by a curved concrete gravity dam, completed in 1929; storage began Mar. 9, 1929. Usable capacity, 194,100 acre-ft (239 hm³) between elevations 393.50 ft (119.939 m), diversion tunnel invert and 567.65 ft (173.020 m), spillway crest, above mean sea level. Dead storage, 15,800 acre-ft (19.5 hm³).

Water is released from reservoir for municipal use in the area on the east side of San Francisco Bay. Small intermittent diversions are made to Jackson Valley Irrigation District. Records represent total contents at 2400 hours. See schematic diagram of Mokelumne River basin.

COOPERATION.--Records furnished by East Bay Municipal Utility District.

REVISIONS.--WSP 1930: Drainage area.

CAPACITY TABLE (ELEVATION, IN FEET, AND CONTENTS, IN ACRE-FEET)

523	125,100
530	136,500
540	153,800
550	172,700
560	193,200
570	215,300
580	239,100

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	194,100	192,200	197,800	198,800	190,800	190,300	192,200	194,600	204,100	207,500	208,300	198,900
2	194,100	191,800	198,300	198,000	190,900	191,900	191,800	194,900	204,000	207,000	207,800	198,700
3	193,700	191,800	198,600	198,000	191,000	189,100	192,400	195,100	204,400	206,500	207,500	198,600
4	193,700	192,300	198,600	198,500	191,100	189,400	192,200	195,300	204,900	206,000	208,400	198,300
5	193,200	192,200	198,500	199,000	190,700	189,000	191,900	195,500	204,900	205,500	208,200	198,000
6	193,400	191,900	198,400	197,900	190,300	189,500	192,500	195,900	205,300	205,000	207,400	197,700
7	194,400	191,700	198,500	197,700	189,700	189,500	192,400	196,300	206,100	204,400	207,100	197,600
8	194,500	191,500	198,500	196,600	189,900	189,300	191,800	197,000	206,400	204,100	206,600	197,300
9	194,500	191,400	198,500	195,300	189,900	189,500	191,900	197,100	207,000	204,300	205,900	197,200
10	194,000	192,000	198,700	194,600	189,900	189,100	191,900	197,400	207,700	204,900	205,600	196,900
11	193,800	194,000	198,900	194,100	190,000	189,500	191,600	197,300	207,500	205,700	206,500	196,800
12	193,600	195,700	198,900	194,100	190,000	189,600	191,800	196,900	208,000	205,500	206,300	196,600
13	193,700	195,500	199,200	194,600	190,000	189,500	191,900	198,000	209,100	205,300	205,800	196,400
14	194,200	195,200	199,400	194,300	190,200	189,400	192,300	198,600	211,100	204,800	205,200	196,200
15	194,000	195,000	199,500	194,200	190,600	189,200	192,100	198,300	211,400	204,200	204,600	195,900
16	193,800	195,000	199,500	193,500	191,000	189,200	191,800	198,300	211,600	203,700	204,000	195,600
17	193,300	195,000	199,700	193,500	191,200	189,300	192,200	198,800	211,400	203,400	203,400	194,800
18	193,400	195,900	199,900	193,800	191,500	189,000	192,600	199,000	211,100	203,200	204,400	194,300
19	192,500	195,800	200,000	193,000	191,700	189,400	192,200	199,000	211,100	202,600	204,300	194,100
20	192,600	195,600	200,200	192,800	191,400	189,600	192,100	199,400	210,600	202,100	204,100	193,800
21	193,100	195,800	200,600	192,500	190,900	189,800	192,300	200,000	210,700	201,500	203,400	194,300
22	193,900	195,800	200,500	192,300	190,600	190,200	192,300	200,400	210,700	201,500	202,600	194,800
23	193,900	195,800	200,100	192,500	190,100	190,200	192,600	200,500	211,000	202,200	201,900	194,500
24	193,700	195,800	200,000	192,600	189,700	190,300	193,600	200,900	210,600	202,900	201,200	194,200
25	193,200	195,700	200,300	192,600	189,400	190,400	193,700	200,200	210,200	203,600	201,900	194,000
26	192,900	195,700	200,700	192,300	189,200	190,400	194,300	201,000	209,900	204,300	201,400	193,600
27	193,100	195,500	200,200	191,900	189,400	190,500	194,500	200,500	209,500	205,400	200,700	193,400
28	193,800	195,400	198,900	191,500	189,400	190,000	194,600	201,000	209,200	206,400	200,000	193,700
29	193,400	195,200	198,100	191,600	-----	190,000	194,800	200,500	208,600	207,000	199,400	194,200
30	192,900	195,200	197,600	191,500	-----	190,800	194,700	201,000	208,000	207,900	198,900	193,900
31	192,500	-----	199,000	190,800	-----	190,000	-----	202,500	-----	208,700	199,200	-----
MAX	194,500	195,900	200,700	199,000	191,700	191,900	194,800	202,500	211,600	208,700	208,400	198,900
MIN	192,500	191,400	197,600	190,800	189,200	189,000	191,600	194,600	204,000	201,500	198,900	193,400
(a)	559.70	560.93	562.70	558.89	558.20	558.50	560.71	564.31	566.80	567.11	562.79	560.34
(b)	-1,900	+2,600	+3,800	-8,200	-1,400	+600	+4,700	+7,800	+5,500	+700	-9,600	-5,300
(c)	404	224	95	163	171	259	551	1,060	1,422	1,444	1,368	878
(d)	18,765	15,881	9,851	9,138	10,743	11,525	12,332	17,991	21,400	23,040	23,023	20,790

CAL YR 1973 b +5,900
WTR YR 1974 b -500

a Elevation, in feet, at end of month.

b Change in contents, in acre-feet.

c Evaporation, in acre-feet.

d Diversion, in acre-feet, from Pardee Reservoir to East Bay Utility District and to Jackson Valley Irrigation District.

SAN JOAQUIN RIVER BASIN

11322300 CAMANCHE RESERVOIR NEAR CLEMENTS, CALIF.

LOCATION.--Lat 38°13'31", long 121°01'17", in NE¼SE¼ sec.6, T.4 N., R.9 E., San Joaquin County, at Camanche Dam on the Mokelumne River, 4.3 mi (6.9 km) northeast of Clements.

DRAINAGE AREA.--621 mi² (1,608 km²).

PERIOD OF RECORD.--December 1963 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by East Bay Municipal Utility District).

EXTREMES.--Current year: Maximum contents, 404,900 acre-ft (499 hm³) June 24 (elevation, 232.04 ft or 70.726 m); minimum, 254,500 acre-ft (314 hm³) Nov. 25 (elevation, 209.27 ft or 63.786 m).
Period of record: Maximum contents, 425,700 acre-ft (525 hm³) July 14, 1967 (elevation, 234.82 ft or 71.573 m); minimum since initial season of operation, 68,700 acre-ft (84.7 hm³) Sept. 5, 11, 18, 1966 (elevation, 164.97 ft or 50.283 m).

REMARKS.--Reservoir is formed by earthfill dam. Storage began Dec. 18, 1963. Usable capacity, 430,300 acre-ft (531 hm³). between elevations 104.00 ft (31.699 m), invert of emergency valve release and 235.50 ft (71.780 m), spillway crest above mean sea level. Dead storage, 534 acre-ft (658,000 m³). Camanche Reservoir provides holdover storage to meet downstream water requirements and flood control on the Mokelumne River. Records, including extremes, represent total contents at 2400 hours. See schematic diagram of Mokelumne River basin.

COOPERATION.--Records furnished by East Bay Municipal Utility District.

CAPACITY TABLE (ELEVATION, IN FEET, AND CONTENTS, IN ACRE-FEET)

120	4,970	170	82,600
130	13,600	190	156,200
140	25,000	220	320,900
150	38,900	235.5	430,900
160	57,100		

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	316,600	304,500	258,400	267,700	256,100	287,700	323,500	336,800	373,800	403,100	384,200	364,400
2	316,600	304,300	259,000	266,200	255,700	292,600	328,100	336,900	376,400	402,800	383,900	363,600
3	315,600	303,500	259,000	263,700	255,400	296,600	328,300	337,700	376,400	402,600	383,300	362,900
4	315,100	302,400	258,600	260,600	255,300	295,800	328,800	338,400	374,900	402,300	381,500	362,200
5	314,700	302,700	258,300	257,700	256,200	295,000	328,900	339,200	378,100	402,100	380,600	361,500
6	313,800	302,900	257,900	257,700	257,500	293,100	328,500	339,900	382,500	401,700	380,400	360,700
7	313,700	302,900	257,500	257,100	258,900	291,900	328,600	340,700	386,200	401,200	379,900	359,900
8	313,200	302,700	257,100	257,400	259,600	291,600	328,900	341,200	389,200	401,400	379,600	359,100
9	312,800	302,700	256,700	258,100	260,200	290,900	328,800	341,600	390,700	401,700	379,200	358,400
10	312,400	302,300	256,300	258,800	260,900	290,400	328,700	341,700	392,600	402,200	378,600	357,900
11	312,000	301,500	256,300	258,900	261,500	288,700	328,700	342,200	395,800	401,200	376,800	357,200
12	311,600	297,800	256,300	258,900	262,200	288,800	329,000	343,200	398,500	401,000	376,000	356,300
13	310,800	293,000	256,400	258,100	263,100	289,200	329,500	343,300	399,800	400,800	375,600	355,400
14	309,700	288,200	256,400	258,400	264,300	289,900	329,400	344,000	399,800	400,600	375,200	354,700
15	309,100	283,300	256,300	259,100	265,600	291,300	330,000	345,600	400,800	400,300	374,900	353,900
16	308,800	278,700	256,100	260,800	266,800	292,000	330,900	346,700	401,300	400,000	374,500	353,000
17	308,700	274,100	256,200	263,900	267,900	292,200	330,800	346,700	402,400	399,500	374,200	352,300
18	308,800	269,300	256,000	266,000	269,100	293,000	331,300	346,500	403,200	399,100	372,300	351,200
19	309,000	264,500	255,800	267,500	270,900	293,500	332,200	346,400	403,700	398,700	371,500	350,000
20	308,600	260,900	255,900	267,600	272,900	294,400	332,500	345,900	404,000	398,600	370,700	348,900
21	307,800	258,800	256,400	267,000	274,800	295,500	332,500	345,400	403,800	398,300	370,500	347,300
22	306,800	256,600	257,200	265,800	276,800	296,900	332,500	345,200	404,100	397,700	370,100	345,400
23	307,300	255,400	257,900	263,900	278,800	298,500	333,100	346,000	404,600	396,300	369,900	344,600
24	307,500	255,000	258,200	262,600	280,900	300,100	333,400	347,300	404,900	395,100	369,600	343,600
25	307,700	254,500	258,000	261,100	282,600	301,900	334,400	351,800	404,800	393,700	367,900	342,500
26	307,600	254,600	258,700	259,900	284,100	303,700	334,300	355,300	404,600	392,300	367,500	341,600
27	306,800	255,200	262,100	258,200	285,200	305,600	334,700	362,400	404,200	390,500	367,100	340,500
28	305,700	255,800	265,400	257,000	286,300	309,500	335,100	367,200	404,000	388,800	366,700	338,800
29	305,500	256,400	268,200	255,800	-----	312,600	335,600	371,900	403,900	387,600	366,400	337,000
30	305,300	257,300	270,700	255,900	-----	315,600	336,100	374,000	403,500	386,200	366,100	336,000
31	304,900	-----	269,200	256,500	-----	320,800	-----	373,500	-----	384,600	365,100	-----
MAX	316,600	304,500	270,700	267,700	286,300	320,800	336,100	374,000	404,900	403,100	384,200	364,400
MIN	304,900	254,500	255,800	255,800	255,300	287,700	323,500	336,800	373,800	384,600	365,100	336,000
(a)	217.53	209.75	211.76	209.61	214.58	219.98	222.29	227.70	231.84	229.25	226.51	222.27
(b)	-12,300	-47,600	+11,900	-12,700	+29,800	+34,400	+15,400	+37,400	+29,900	-18,900	-19,500	-29,100
(c)	2,171	1,104	676	733	758	1,430	2,212	4,360	5,852	5,869	5,456	4,138

CAL YR 1973 b -10,800
WTR YR 1974 b +18,800

a Elevation, in feet, at end of month.
b Change in contents, in acre-feet.
c Evaporation, in acre-feet.

11323500 MOKELUMNE RIVER BELOW CAMANCHE DAM, CALIF.

LOCATION.--Lat 38°13'14", long 121°02'19", in NW¼NW¼ sec.7, T.4 N., R.9 E., San Joaquin County, on left bank 0.7 mi (1.1 km) downstream from Murphy Creek, 1.0 mi (1.6 km) downstream from Camanche Dam, and 3.4 mi (5.5 km) northeast of Clements.

DRAINAGE AREA.--627 mi² (1,624 km²).

PERIOD OF RECORD.--October 1904 to current year. Monthly discharge only for some periods, published in WSP 1315-A, and 1735. Prior to October 1961, published as "near Clements."

GAGE.--Water-stage recorder. Datum of gage is 82.71 ft (25.210 m) above mean sea level. Oct. 28, 1904, to Apr. 18, 1926, nonrecording gage at bridge 3.3 mi (5.3 km) downstream at datum 13.62 ft (4.151 m) lower. Apr. 19, 1926, to Apr. 8, 1931, water-stage recorder, 75 ft (23 m) downstream from bridge at datum 15.62 ft (4.761 m) lower. Apr. 9, 1931, to Sept. 30, 1961, 700 ft (213 m) upstream from bridge at datum 15.55 ft (4.740 m) lower.

AVERAGE DISCHARGE.--24 years (1904-28), 1,111 ft³/s (31.47 m³/s), 804,300 acre-ft/yr (992 hm³/yr); 45 years (1929-74), 833 ft³/s (23.59 m³/s), 603,500 acre-ft/yr (744 hm³/yr), adjusted for change in contents in and evaporation from Camanche Reservoir since 1963. Storage and diversion by East Bay Municipal Utility District began in March 1929.

EXTREMES.--Current year: Maximum discharge, 3,400 ft³/s (96.3 m³/s) Nov. 16 (gage height, 8.23 ft or 2.509 m); minimum daily, 204 ft³/s (5.78 m³/s) Feb. 15.

Period of record: Maximum discharge, 28,800 ft³/s (816 m³/s) Nov. 21, 1950 (gage height, 24.40 ft or 7.437 m, site and datum then in use); no flow July 9, Aug. 15, 20-23, 1924.

REMARKS.--Records good. Flow regulated by Camanche Reservoir 1 mi (1.6 km) upstream beginning December 1963 (see sta 11322300), Salt Springs Reservoir beginning March 1931 (see sta 11313500), Pardee Reservoir beginning March 1929 (see sta 11320000), several small reservoirs, and four powerplants. East Bay Municipal Utility District aqueducts are the largest of several diversions above the station. Maximum capacity is 511 ft³/s (14.5 m³/s) with Pardee Reservoir full. See schematic diagram of Mokelumne River basin. Records of water temperatures for the current year are published in Part 2 of this report.

COOPERATION.--Six discharge measurements and temperature record furnished by the East Bay Municipal Utility District.

REVISIONS (WATER YEARS).--WSP 751: Drainage area. WSP 881: 1905-9 (yearly summaries only). WSP 1445: 1911, 1917(M), 1925(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	539	562	532	2,480	958	715	1,330	974	2,940	842	887	884
2	538	562	510	2,460	955	1,680	2,300	973	2,950	845	885	882
3	540	562	719	2,460	957	2,510	2,520	873	2,950	846	884	879
4	553	568	967	2,450	858	2,510	2,530	766	2,670	847	884	886
5	529	550	967	2,460	579	2,510	2,270	766	2,110	845	883	886
6	532	515	967	2,510	476	2,510	2,000	766	1,510	843	880	887
7	535	515	967	2,090	494	2,510	2,000	766	1,230	837	871	886
8	532	514	967	1,470	502	2,280	2,000	977	1,240	841	871	886
9	532	515	967	1,310	487	1,990	2,000	1,150	1,250	844	870	885
10	538	517	967	1,160	489	1,990	2,000	1,150	1,240	843	870	889
11	538	604	894	1,170	490	1,840	1,730	1,150	1,250	844	869	885
12	547	2,520	831	1,170	492	1,460	1,410	1,150	1,250	844	867	911
13	551	3,330	846	1,170	357	1,260	1,210	1,160	1,390	844	865	932
14	550	3,330	842	1,160	212	1,260	1,210	1,180	1,500	844	869	932
15	550	3,320	841	1,160	204	1,260	1,220	1,210	1,500	844	874	931
16	550	3,360	836	1,170	205	1,260	1,220	1,200	1,500	844	871	930
17	550	3,340	835	1,170	205	1,260	1,220	1,200	1,230	840	871	927
18	453	3,320	834	1,810	206	1,260	1,230	1,210	987	844	869	925
19	391	3,290	834	2,520	207	1,020	1,230	1,210	993	844	869	925
20	394	2,650	834	2,520	207	777	1,230	1,210	993	844	874	862
21	394	1,960	849	2,500	208	586	1,230	1,110	906	845	876	811
22	400	1,960	861	2,470	208	395	1,120	1,020	844	850	875	811
23	400	1,470	842	2,230	207	397	975	1,020	844	821	872	818
24	400	967	841	1,990	208	399	975	1,030	843	798	871	824
25	400	967	841	1,980	207	400	973	1,030	844	798	877	824
26	485	714	848	1,980	205	400	974	1,030	844	796	877	826
27	562	498	961	1,980	303	401	974	1,300	844	797	879	826
28	562	498	1,280	1,980	488	406	973	2,020	844	786	882	819
29	562	498	1,490	1,550	-----	533	973	2,620	843	785	878	818
30	562	499	1,490	958	-----	681	974	2,630	844	785	885	818
31	562	-----	1,900	958	-----	681	-----	2,790	-----	841	884	-----
TOTAL	15,731	44,475	29,160	56,446	11,574	39,141	44,001	38,641	41,183	25,771	27,139	26,205
MEAN	507	1,483	941	1,821	413	1,263	1,467	1,246	1,373	831	875	874
MAX	562	3,360	1,900	2,520	958	2,510	2,530	2,790	2,950	850	887	932
MIN	391	498	510	958	204	395	973	766	843	785	865	811
AC-FT	31,200	88,220	57,840	112,000	22,960	77,640	87,280	76,640	81,690	51,120	53,830	51,980
MEAN a	343	701	1,145	1,627	964	1,845	1,763	1,926	1,974	619	647	454
AC-FT a	21,070	41,720	70,420	100,000	53,570	113,500	104,900	118,400	117,400	38,090	39,790	27,020
CAL YR 1973	TOTAL 334,265	MEAN 916	MAX 3,360	MIN 391	AC-FT 663,000	MEAN a 952	AC-FT a 689,000					
WTR YR 1974	TOTAL 399,467	MEAN 1,094	MAX 3,360	MIN 204	AC-FT 792,300	MEAN a 1,168	AC-FT a 845,800					

a Adjusted for change in contents in and evaporation from Camanche reservoir.

SAN JOAQUIN RIVER BASIN

11325000 WOODBRIDGE CANAL AT WOODBRIDGE, CALIF.

LOCATION.--Lat 38°09'07", long 121°18'00", in NE¼SE¼ sec.34, T.4 N., R.6 E., San Joaquin County, on right bank at Woodbridge, at point of diversion from Woodbridge Reservoir.

PERIOD OF RECORD.--April 1926 to current year.

GAGE.--Water-stage recorder and gate-opening recorder. Datum of gage is 32.18 ft (9.808 m) above mean sea level (levels by East Bay Municipal Utility District). Prior to Mar. 15, 1931, water-stage recorder at site 0.2 mi (0.3 km) downstream at different datum.

AVERAGE DISCHARGE.--48 years, 138 ft³/s (3.908 m³/s), 99,980 acre-ft/yr (123 hm³/yr).

EXTREMES.--Period of record: Maximum daily discharge, 482 ft³/s (13.6 m³/s) July 8, 1953; no flow at times in each year.

REMARKS.--Records good. Discharge computed from records of gate openings and effective head as shown by recorder. Canal diverts from Woodbridge Reservoir on Mokelumne River for irrigation south and west of Woodbridge. See schematic diagram of Mokelumne River basin.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	157					0	40	157	349	359	359	291
2	159					0	45	172	347	362	372	291
3	160					0	49	166	347	359	371	301
4	157					0	49	158	349	345	364	304
5	160					0	45	158	340	345	369	297
6	157					0	43	162	332	361	372	296
7	142					0	42	221	325	367	366	287
8	124					0	45	249	316	360	359	267
9	127					0	40	265	315	318	350	251
10	124					0	51	262	321	290	339	241
11	124					0	53	272	329	289	340	236
12	124					44	49	272	340	278	340	236
13	124					52	49	272	354	288	343	226
14	123					42	44	276	356	295	345	215
15	122					40	60	296	353	324	335	203
16	118					45	71	305	347	349	333	206
17	117					41	60	293	339	362	329	212
18	118					51	61	288	332	367	324	206
19	115					51	69	277	327	365	325	206
20	114					46	69	282	326	367	339	185
21	114					60	66	284	322	365	327	168
22	110					63	73	287	319	372	324	145
23	102					60	80	294	313	370	323	137
24	94					60	61	313	311	370	321	145
25	94					59	53	316	326	375	310	145
26	90					58	60	315	343	373	317	140
27	91					49	61	313	355	359	324	134
28	88					48	60	318	360	357	322	144
29	81				-----	48	76	332	362	357	316	148
30	30				-----	48	103	335	353	358	312	172
31	0	-----			-----	49	-----	349	-----	355	301	-----
TOTAL	3,560	0	0	0	0	1,014	1,727	8,259	10,108	10,761	10,471	6,435
MEAN	115	0	0	0	0	32.7	57.6	266	337	347	338	215
MAX	160	0	0	0	0	63	103	349	362	375	372	304
MIN	0	0	0	0	0	0	40	157	311	278	301	134
AC-FT	7,060	0	0	0	0	2,010	3,430	16,380	20,050	21,340	20,770	12,760
CAL YR 1973	TOTAL	56,756.00	MEAN	155	MAX	385	MIN	0	AC-FT	112,600		
WTR YR 1974	TOTAL	52,335.00	MEAN	143	MAX	375	MIN	0	AC-FT	103,800		

SAN JOAQUIN RIVER BASIN

251

11325500 MOKELUMNE RIVER AT WOODBRIDGE, CALIF.

LOCATION.--Lat 38°09'31", long 121°18'09", in NW¼NE¼ sec.34, T.4 N., R.6 E., San Joaquin County, on right bank at Woodbridge, 0.4 mi (0.6 km) downstream from county highway bridge, and 0.5 mi (0.8 km) downstream from dam and canal intake of Woodbridge Irrigation District.

DRAINAGE AREA.--661 mi² (1,712 km²).

PERIOD OF RECORD.--May 1924 to current year (low-water records only 1924-25).

GAGE.--Water-stage recorder. Datum of gage is 14.9 ft (4.54 m) above mean sea level (levels by East Bay Municipal Utility District). May 1924 to July 1928, 0.4 mi (0.6 km) upstream and 100 ft (30 m) downstream from bridge at datum 4 ft (1.2 m) higher; July 1928 to March 1931, 0.4 mi (0.6 km) upstream and 400 ft (120 m) downstream from bridge at same datum; March 1931 to July 25, 1968, 125 ft (38 m) downstream at same datum.

AVERAGE DISCHARGE (since start of diversion through East Bay Municipal Utility District aqueduct).--45 years (1929-74), 612 ft³/s (17.33 m³/s), 443,400 acre-ft/yr (547 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 3,270 ft³/s (92.6 m³/s) Nov. 20 (gage height, 19.21 ft or 5.855 m); minimum daily, 164 ft³/s (4.64 m³/s) Feb. 27.

Period of record: Maximum discharge, 27,000 ft³/s (765 m³/s) Nov. 22, 1950 (gage height, 29.58 ft or 9.016 m), from rating curve extended above 6,200 ft³/s (176 m³/s) on basis of contracted-opening measurement of maximum flow; minimum daily, 1.4 ft³/s (0.04 m³/s) Sept. 19, 20, 22, 1927.

REMARKS.--Records fair. Concerning regulation and diversions see REMARKS for Mokelumne River below Camanche Dam; between Woodbridge and Camanche Dam there are many additional diversions for irrigation, including Woodbridge Canal (see sta 11325000). Nearest diversion is 0.5 mi (0.8 km) upstream. See schematic diagram of Mokelumne River basin. Records of chemical analyses and water temperatures for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1930: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	332	616	514	1,970	1,000	430	699	729	2,040	334	396	479
2	336	577	479	2,250	977	814	1,530	731	2,150	334	385	485
3	332	559	455	2,280	967	1,810	2,060	739	2,190	320	385	473
4	335	553	794	2,280	959	2,160	2,200	578	2,210	339	390	475
5	347	557	902	2,310	767	2,220	2,260	541	1,910	360	386	481
6	334	572	913	2,310	541	2,250	1,970	487	1,450	336	381	482
7	396	514	902	2,400	490	2,310	1,850	458	971	337	379	508
8	419	497	908	1,660	488	2,320	1,790	454	911	354	384	511
9	392	494	904	1,380	473	1,930	1,860	739	883	509	390	561
10	386	501	902	1,200	458	1,900	1,870	781	865	482	398	526
11	386	506	902	1,160	455	1,650	1,850	777	821	459	397	527
12	386	741	791	1,150	451	1,600	1,490	769	807	460	397	532
13	393	1,820	775	1,140	446	1,270	1,300	774	803	398	389	590
14	394	2,560	784	1,130	275	1,170	1,190	774	951	412	388	608
15	395	2,870	770	1,120	206	1,150	1,170	755	979	380	394	614
16	397	3,040	766	1,120	191	1,160	1,140	735	997	363	407	628
17	392	3,160	764	1,120	175	1,160	1,150	741	980	344	455	599
18	387	3,240	762	1,150	175	1,160	1,150	740	602	329	438	604
19	288	3,260	755	1,960	175	1,140	1,140	755	563	335	438	605
20	248	3,270	754	2,250	175	738	1,090	759	559	333	418	644
21	244	2,620	773	2,300	177	680	1,090	740	552	336	421	554
22	254	1,960	796	2,290	180	333	1,060	560	426	335	440	546
23	268	1,860	776	2,260	175	305	916	536	416	316	448	551
24	264	1,330	763	1,970	172	302	918	523	426	300	437	540
25	262	996	760	1,840	169	304	897	515	383	296	447	544
26	261	924	766	1,840	165	300	882	517	329	296	455	554
27	369	626	840	1,830	164	310	876	561	327	307	445	562
28	417	508	962	1,820	300	318	873	949	350	300	443	576
29	547	478	1,300	1,830	-----	310	832	1,560	340	300	445	579
30	804	478	1,380	1,220	-----	539	814	1,780	365	299	467	568
31	726	-----	1,390	1,030	-----	552	-----	1,850	-----	340	465	-----
TOTAL	11,691	41,687	26,002	53,570	11,346	34,595	39,917	23,907	27,556	10,943	12,908	16,506
MEAN	377	1,390	839	1,728	405	1,116	1,331	771	919	353	416	550
MAX	804	3,270	1,390	2,400	1,000	2,320	2,260	1,850	2,210	509	467	644
MIN	244	478	455	1,030	164	300	699	454	327	296	379	473
AC-FT	23,190	82,690	51,570	106,300	22,500	68,620	79,180	47,420	54,660	21,710	25,600	32,740
CAL YR 1973	TOTAL	239,378	MEAN	656	MAX	3,270	MIN	99	AC-FT	474,800		
WTR YR 1974	TOTAL	310,628	MEAN	851	MAX	3,270	MIN	164	AC-FT	616,100		

SAN JOAQUIN RIVER BASIN

11327000 SUTTER CREEK NEAR SUTTER CREEK, CALIF.

LOCATION.--Lat 38°23'45", long 120°46'49", in SE¼SE¼ sec.5, T.6 N., R.11 E., Amador County, on left bank 1.3 mi (2.1 km) east of town of Sutter Creek.

DRAINAGE AREA.--48.1 mi² (124.6 km²).

PERIOD OF RECORD.--October 1935 to December 1941, March 1960 to current year. Monthly discharge only for some periods, published in WSP 1315-A.

GAGE.--Water-stage recorder. Altitude of gage is 1,220 ft (372 m), from topographic map. Prior to Oct. 29, 1937, nonrecording gage 15 ft (5 m) downstream at datum 4.00 ft (1.219 m) lower. Oct. 29, 1937, to Dec. 7, 1938, nonrecording gage at present site at datum 4.00 ft (1.219 m) lower.

AVERAGE DISCHARGE.--20 years (1935-41, 1960-74), 32.4 ft³/s (0.92 m³/s), 23,470 acre-ft/yr (28.9 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 934 ft³/s (26.5 m³/s) Mar. 2 (gage height, 3.48 ft or 1.061 m); no flow Oct. 1-5.

Period of record: Maximum discharge, 5,770 ft³/s (163 m³/s) Jan. 31, 1963 (gage height, 6.27 ft or 1.911 m), from rating curve extended above 1,200 ft³/s (34.0 m³/s) on basis of slope-area measurement at gage height 4.77 ft (1.454 m); no flow at times in each year except 1938, 1941.

REMARKS.--Small diversion above station for irrigation.

COOPERATION.--Records furnished by California Department of Water Resources and reviewed by the Geological Survey.

REVISIONS.--WSP 1930: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	2.9	252	89	40	219	501	46	16	6.1	3.2	1.2
2	0	2.9	81	71	34	562	408	43	16	6.0	3.0	1.1
3	0	2.9	48	62	32	312	233	40	15	5.7	2.9	1.0
4	0	3.0	35	56	30	212	172	39	14	5.5	2.8	.90
5	0	3.9	28	61	29	161	142	38	14	4.9	2.7	1.0
6	.10	14	23	102	27	138	122	37	13	4.5	2.5	.90
7	2.7	13	19	97	26	149	108	35	13	4.9	2.4	.90
8	5.0	13	17	86	25	174	99	33	12	7.2	2.3	1.0
9	3.5	7.5	15	75	24	131	109	31	12	6.8	2.2	.80
10	2.4	17	14	66	23	112	94	30	12	37	2.2	.70
11	2.1	40	16	63	23	101	84	29	11	17	2.1	.70
12	2.0	143	17	90	24	110	78	28	11	12	2.1	.60
13	1.9	37	27	91	27	94	72	27	11	9.9	2.0	.70
14	1.8	62	26	101	25	84	68	27	10	8.3	2.1	.80
15	1.8	25	20	131	23	78	65	26	10	7.5	1.9	.80
16	1.8	38	18	116	28	73	62	26	10	6.3	1.9	.80
17	1.8	58	26	199	27	68	59	26	11	6.2	1.9	.70
18	1.7	105	26	161	24	65	62	25	10	5.9	1.8	.60
19	1.6	46	21	139	72	62	60	25	14	5.9	1.7	.50
20	1.5	29	18	116	57	57	54	24	12	5.4	1.7	.50
21	1.6	25	44	98	44	52	50	24	11	5.1	2.2	.60
22	2.5	20	125	83	62	50	47	23	9.5	5.0	1.5	.70
23	12	16	68	74	48	48	52	22	8.7	4.8	1.4	.60
24	6.9	16	49	67	41	45	78	21	8.2	4.3	1.3	.60
25	4.4	15	37	62	37	45	87	20	7.9	4.0	1.2	.60
26	3.7	18	36	56	36	47	82	19	7.0	4.1	1.2	.70
27	3.4	15	170	48	39	68	69	18	7.2	3.9	1.1	.70
28	3.2	13	178	45	34	141	61	18	6.7	3.7	1.1	.80
29	3.0	12	231	42	-----	112	54	17	6.0	3.6	1.2	.80
30	3.0	12	146	39	-----	273	49	17	6.0	3.4	1.3	.90
31	2.9	-----	98	36	-----	229	-----	17	-----	3.4	1.3	-----
TOTAL	78.30	825.1	1,929	2,622	961	4,072	3,281	851	325.2	279.9	60.2	23.20
MEAN	2.53	27.5	62.2	84.6	34.3	131	109	27.5	10.8	9.03	1.94	.77
MAX	12	143	252	199	72	562	501	46	16	68	3.2	1.2
MIN	0	2.9	14	36	23	45	47	17	6.0	3.4	1.1	.50
AC-FT	155	1,640	3,830	5,200	1,910	8,080	6,510	1,690	645	555	119	46

CAL YR 1973 TOTAL 16,533.80 MEAN 45.3 MAX 671 MIN 0 AC-FT 32,790
WTR YR 1974 TOTAL 15,307.90 MEAN 41.9 MAX 562 MIN 0 AC-FT 30,360

11329500 DRY CREEK NEAR GALT, CALIF.

LOCATION.--Lat 38°14'53", long 121°13'33", in NE¼NE¼ sec.32, T.5 N., R.7 E., San Joaquin County, on left bank of main channel 35 ft (11 m) downstream from county road bridge, 2 mi (3 km) downstream from Coyote Creek, and 4 mi (6 km) east of Galt.

DRAINAGE AREA.--329 mi² (852 km²).

PERIOD OF RECORD.--October 1926 to September 1933, October 1944 to current year. Monthly figures only for some periods, published in WSP 1315-A.

GAGE.--Water-stage recorder. Datum of gage is 52.83 ft (16.103 m) above mean sea level (levels by East Bay Municipal Utility District). Dec. 4, 1926, to Sept. 30, 1933, at site 4 mi (6 km) downstream at different datum. Oct. 1, 1944, to Sept. 30, 1945, on right bank at datum 3.00 ft (0.914 m) higher. Oct. 1, 1945, to June 15, 1966, on right bank at same datum.

AVERAGE DISCHARGE.--37 years, 116 ft³/s (3.29 m³/s), 84,040 acre-ft/yr (104 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 4,400 ft³/s (125 m³/s) Jan. 7 (gage height, 13.96 ft or 4.255 m); no flow for many days.

Period of record: Maximum discharge, 24,000 ft³/s (680 m³/s) Apr. 3, 1958 (gage height, 15.28 ft or 4.657 m); no flow for many days in each year.

REMARKS.--Records good. Many small diversions above station for irrigation. Total storage of many small reservoirs, 1,000 acre-ft (1.23 hm³) and approximately a total of 500 acres (2.0 km²) irrigated.

REVISIONS.--WSP 1930: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	1,130	987	206	196	869	119	38	4.3	0	3.0
2		0	786	648	201	1,650	2,200	111	36	6.9	0	2.0
3		0	346	479	173	1,990	986	110	30	6.0	0	.28
4		0	214	427	157	1,080	650	105	20	7.6	0	.39
5		0	155	563	141	704	514	101	15	7.6	0	4.1
6		0	118	1,200	127	557	427	98	13	6.7	0	2.6
7		0	99	2,970	118	473	368	79	16	4.3	0	1.2
8		0	83	1,220	115	812	325	74	11	2.5	0	.15
9		0	68	740	109	617	336	70	7.6	21	0	0
10		0	61	564	104	495	401	64	18	79	0	0
11		4.1	60	464	99	431	307	59	19	49	0	0
12		261	104	594	97	480	259	58	21	28	0	0
13		205	202	549	136	442	229	56	13	24	0	0
14		183	397	452	123	361	209	55	15	17	0	0
15		176	206	629	102	310	192	50	5.4	14	0	0
16		194	136	528	97	283	180	48	6.8	11	0	0
17		291	110	769	116	258	166	38	12	11	0	0
18		407	159	906	102	236	155	41	20	11	0	0
19		283	136	990	114	213	190	38	21	7.6	0	0
20		120	113	804	235	193	163	35	23	7.1	0	0
21		78	137	625	162	175	143	34	19	5.9	0	0
22		60	878	490	191	162	133	26	18	5.2	0	0
23		46	568	417	197	153	131	26	13	2.6	0	0
24		39	374	370	163	146	211	22	4.5	0	0	0
25		34	270	331	144	138	277	25	1.2	0	0	0
26		31	230	299	133	152	232	39	.01	0	0	0
27		31	1,530	267	132	164	191	26	.09	0	.26	0
28		29	2,670	240	131	329	167	28	.46	0	4.3	0
29		30	1,420	220	-----	345	142	23	0	0	4.4	0
30		30	1,180	207	-----	485	126	24	0	0	4.0	0
31		-----	676	198	-----	687	-----	38	-----	0	2.6	-----
TOTAL	0	2,532.1	14,616	20,147	3,925	14,717	10,879	1,720	417.06	339.3	15.56	13.72
MEAN	0	84.4	471	650	140	475	363	55.5	13.9	10.9	.50	.46
MAX	0	407	2,670	2,970	235	1,990	2,200	119	38	79	4.4	4.1
MIN	0	0	60	198	97	138	126	22	0	0	0	0
AC-FT	0	5,020	28,990	39,960	7,790	29,190	21,580	3,410	827	673	31	27
CAL YR 1973	TOTAL	98,198.80	MEAN	269	MAX	4,760	MIN	0	AC-FT	194,800		
WTR YR 1974	TOTAL	69,321.74	MEAN	190	MAX	2,970	MIN	0	AC-FT	137,500		

PEAK DISCHARGE (BASE, 2,000 FT ³ /S)							
DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
12-1	1730	12.20	2,380	3-2	1400	12.33	2,410
12-28	1000	13.82	3,590	4-2	0600	13.03	2,660
1-7	0500	13.96	4,400				

11333000 CAMP CREEK NEAR SOMERSET, CALIF.

LOCATION.--Lat 38°39'26", long 120°39'46", in SW¼SW¼ sec.4, T.9 N., R.12 E., El Dorado County, on right bank 0.2 mi (0.3 km) upstream from mouth, 1.3 mi (2.1 km) northeast of Somerset, and 5.6 mi (9.0 km) south of Camino.

DRAINAGE AREA.--62.6 mi² (162.1 km²).

PERIOD OF RECORD.--February to May 1924 (published as "near Pleasant Valley"), October 1954 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,820 ft (555 m), from topographic map. Feb. 1 to May 31, 1924, nonrecording gage at site 0.2 mi (0.3 km) upstream at different datum.

AVERAGE DISCHARGE (adjusted for change in contents, evaporation, and diversion from Jenkinson Lake).--20 years (1954-74), 81.6 ft³/s (2.311 m³/s), 59,120 acre-ft/yr (72.9 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,030 ft³/s (29.2 m³/s) Jan. 19 (gage height, 6.79 ft or 2.070 m); minimum daily, 2.5 ft³/s (0.071 m³/s) Nov. 4.
Period of record: Maximum discharge, 6,040 ft³/s (171 m³/s) Dec. 23, 1964 (gage height, 12.50 ft or 3.810 m); minimum, 0.5 ft³/s (0.014 m³/s) Aug. 1-3, 1961.

REMARKS.--Records good except those for period of no gage-height record, which are poor. Flow partly regulated since January 1955 by Jenkinson Lake, usable capacity, 40,570 acre-ft (50.0 hm³). Water is released from Jenkinson Lake through Camino conduit for irrigation and domestic supply in North Fork Cosumnes and South Fork American River basins. Some water is released from Jenkinson Lake down Camp Creek for irrigation downstream from station.

REVISIONS.--WSP 1930: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.4	7.0	79	42	110	224	736	189	34	7.0	15	29
2	4.4	6.7	35	31	87	641	964	209	31	17	14	28
3	4.4	4.9	21	27	101	518	753	215	29	21	14	25
4	4.3	2.5	15	25	101	390	557	209	26	20	13	20 ^a
5	4.2	2.7	13	25	95	341	447	209	21	20	13	6.2
6	4.2	7.2	12	26	87	315	383	212	18	19	13	5.8
7	7.5	15	10	25	83	325	334	220	16	19	13	5.3
8	18	9.4	9.1	24	80	325	302	230	13	24	12	5.1
9	13	4.1	8.6	24	77	291	312	194	10	103	12	5.2
10	9.0	9.7	8.0	23	73	270	273	105	9.7	79	12	5.3
11	7.4	21	9.6	22	70	261	252	147	9.4	43	12	5.4
12	6.7	37	9.9	28	71	299	239	149	9.2	34	11	5.5
13	6.4	16	18	34	78	302	224	140	9.1	30	11	5.6
14	6.2	18	21	66	70	290	216	127	8.9	28	11	5.7
15	6.0	9.6	15	118	66	288	214	118	8.7	26	11	5.8
16	5.9	8.8	13	97	74	290	212	109	9.0	25	11	6.0
17	5.8	14	18	242	73	292	209	99	9.1	24	10	6.2
18	5.7	26	17	149	68	281	215	91	9.2	23	10	6.4
19	5.5	16	14	733	130	265	195	83	11	22	12	6.2
20	5.7	11	12	718	122	253	179	75	10	21	26	6.0
21	6.1	13	18	548	103	239	171	70	9.3	20	34	5.8
22	6.9	9.7	34	425	108	227	172	63	8.9	20	34	5.4
23	29	7.8	25	350	92	216	192	60	8.6	19	35	4.9
24	20	9.1	20	298	85	205	215	59	8.2	18	36	4.7
25	12	8.4	17	260	81	204	190	56	8.0	18	36	4.8
26	9.8	15	18	238	89	205	176	58	7.9	18	35	5.0
27	9.0	11	79	212	102	264	160	64	7.8	18	35	5.4
28	8.1	8.7	82	180	101	340	157	64	7.7	17	33	5.8
29	7.8	7.5	252	159	-----	342	161	57	7.6	16	31	6.1
30	7.3	7.4	152	143	-----	474	172	47	7.1	16	30	6.4
31	7.1	-----	60	128	-----	558	-----	39	-----	15	30	-----
TOTAL	257.8	344.2	1,115.2	5,420	2,477	9,735	8,982	3,767	382.4	800.0	625	248.0
MEAN	8.32	11.5	36.0	175	88.5	314	299	122	12.7	25.8	20.2	8.27
MAX	29	37	252	733	130	641	964	230	34	103	36	29
MIN	4.2	2.5	8.0	22	66	204	157	39	7.1	7.0	10	4.7
AC-FT	511	683	2,210	10,750	4,910	19,310	17,820	7,470	758	1,590	1,240	492
(a)	-1,300	+3,948	+7,930	+7,926	+175	+136	-247	+72	-1,651	-3,515	-4,696	-3,787
(b)	87	14	18	36	49	71	115	258	297	309	291	234
(c)	1,232	780	580	451	611	641	655	2,042	3,800	3,831	4,027	3,378
MEAN d	8.62	91.2	175	312	103	328	308	160	53.8	36.0	14.0	5.33
AC-FT d	530	5,420	10,740	19,160	5,740	20,160	18,340	9,840	3,200	2,220	862	317

CAL YR 1973 TOTAL 17,159.8 MEAN 47.0 MAX 554 MIN 2.5 AC-FT 34,040 MEAN d 107 AC-FT d 77,120
WTR YR 1974 TOTAL 34,153.6 MEAN 93.6 MAX 964 MIN 2.5 AC-FT 67,740 MEAN d 133 AC-FT d 96,530

a Change in contents, in acre-feet, in Jenkinson Lake, furnished by Bureau of Reclamation.

b Evaporation, in acre-feet, from Jenkinson Lake, furnished by Bureau of Reclamation.

c Diversion, in acre-feet, from Jenkinson Lake, furnished by Bureau of Reclamation.

d Adjusted for change in contents, evaporation, and diversion from Jenkinson Lake.

NOTE.--No gage-height record Aug. 23 to Sept. 30.

11333500 NORTH FORK COSUMNES RIVER NEAR EL DORADO, CALIF.

LOCATION.--Lat 38°35'20", long 120°50'38", in NE¼SW¼ sec.35, T.9 N., R.10 E., El Dorado County, on downstream side of left abutment of county road bridge, 0.8 mi (1.3 km) north of Nashville, 2.6 mi (4.2 km) upstream from mouth, and 6 mi (10 km) south of El Dorado.

DRAINAGE AREA.--205 mi² (531 km²).

PERIOD OF RECORD.--August 1911 to December 1941, October 1948 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 840 ft (256 m), from topographic map. Prior to October 1933, nonrecording gage at site 1.5 mi (2.4 km) upstream at different datum. October 1933 to December 1941, water-stage recorder at site 1,000 ft (305 m) upstream at different datum.

AVERAGE DISCHARGE.--56 years, 203 ft³/s (5.749 m³/s), 147,100 acre-ft/yr (181 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 3,500 ft³/s (99.1 m³/s) Mar. 2 (gage height, 8.13 ft or 2.478 m); minimum daily, 7.0 ft³/s (0.20 m³/s) Sept. 23, 24.
Period of record: Maximum discharge, 15,800 ft³/s (447 m³/s) Dec. 23, 1955 (gage height, 14.8 ft or 4.51 m), from rating curve extended above 7,500 ft³/s (212 m³/s) on basis of slope-area measurement of maximum flow; no flow for part of 1924, 1926, 1931, 1933-34.

REMARKS.--Records good except those for summer months, which are fair. Flow partly regulated since January 1955 by Jenkinson Lake, usable capacity, 40,570 acre-ft (50.0 hm³). Camino conduit above the station diverts water out of the basin (see REMARKS for sta 11333000 Camp Creek near Somerset). Numerous small diversions above station for irrigation and domestic use.

REVISIONS (WATER YEARS).--WSP 1315-A: 1914(M), 1925(M), 1928(M). WSP 1930: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	44	29	836	568	359	763	2,370	468	192	46	24	45
2	44	30	355	424	288	2,550	2,670	517	192	45	24	42
3	45	32	229	354	290	1,840	1,980	532	181	57	24	39
4	45	30	186	318	282	1,320	1,540	515	170	54	23	29
5	42	34	159	322	270	1,070	1,260	512	157	49	23	9.8
6	29	62	142	455	253	923	1,060	513	152	46	24	8.5
7	39	88	127	458	244	963	900	520	146	41	24	8.1
8	66	121	119	357	235	1,170	797	544	135	52	26	7.5
9	69	64	113	291	226	885	851	523	123	276	26	8.1
10	52	76	105	252	220	759	734	380	116	288	26	7.9
11	43	215	115	232	212	694	663	414	109	136	24	8.0
12	40	581	124	273	210	907	616	407	105	107	18	8.4
13	38	282	217	309	232	873	579	387	99	92	17	8.5
14	31	254	209	444	214	800	554	355	93	80	16	8.3
15	20	165	154	844	203	773	545	336	90	70	19	8.6
16	19	156	136	668	218	768	543	315	85	67	22	9.3
17	18	243	165	1,880	221	765	533	292	82	59	21	9.4
18	18	448	205	1,390	201	729	540	273	79	55	26	9.4
19	18	267	172	1,870	367	681	505	256	86	52	18	9.4
20	22	205	152	1,750	342	626	465	239	88	47	24	9.3
21	24	194	190	1,320	286	580	444	225	78	44	48	9.1
22	32	156	350	1,020	349	542	441	218	71	42	51	8.3
23	70	132	238	841	284	513	477	215	66	40	54	7.0
24	82	126	200	714	257	489	607	216	60	37	55	7.0
25	43	120	175	619	245	486	542	218	57	35	54	7.1
26	33	127	178	547	248	498	493	225	54	36	54	7.3
27	30	110	840	501	291	622	441	241	50	34	53	7.6
28	29	98	1,030	452	270	982	424	243	48	30	49	8.1
29	29	94	1,760	412	-----	979	418	235	48	28	45	9.0
30	30	93	1,230	381	-----	1,700	432	215	47	25	45	9.7
31	29	-----	700	354	-----	1,830	-----	200	-----	24	46	-----
TOTAL	1,173	4,632	10,911	20,620	7,317	29,080	24,424	10,749	3,059	2,094	1,003	373.7
MEAN	37.8	154	352	665	261	938	814	347	102	67.5	32.4	12.5
MAX	82	581	1,760	1,880	367	2,550	2,670	544	192	288	55	45
MIN	18	29	105	232	201	486	418	200	47	24	16	7.0
AC-FT	2,330	9,190	21,640	40,900	14,510	57,680	48,450	21,320	6,070	4,150	1,990	741

CAL YR 1973 TOTAL 95,106.0 MEAN 261 MAX 3,760 MIN 13 AC-FT 188,600
WTR YR 1974 TOTAL 115,435.7 MEAN 316 MAX 2,670 MIN 7.0 AC-FT 229,000

PEAK DISCHARGE (BASE, 1,800 FT³/S)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
12-29	1800	7.70	2,780	3-2	0500	8.13	3,500
1-17	1100	7.52	2,580	4-1	1930	7.91	3,230
1-19	1730	7.22	2,280				

SAN JOAQUIN RIVER BASIN

11334300 SOUTH FORK COSUMNES RIVER NEAR RIVER PINES, CALIF.

LOCATION.--Lat 38°33'25", long 120°47'32", in SE¼SW¼ sec.8, T.8 N., R.11 E., Amador County, on left bank 2.4 mi (3.9 km) upstream from mouth, and 2.7 mi (4.3 km) west of River Pines.

DRAINAGE AREA.--64.3 mi² (166.5 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 1,220 ft (372 m), from topographic map.

AVERAGE DISCHARGE.--17 years, 46.6 ft³/s (1.320 m³/s), 33,760 acre-ft/yr (41.6 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,790 ft³/s (50.7 m³/s) Mar. 2 (gage height, 5.37 ft or 1.637 m); minimum daily, 0.50 ft³/s (0.014 m³/s) Oct. 1, 3.
Period of record: Maximum discharge, 5,540 ft³/s (157 m³/s) Feb. 1, 1963 (gage height, 10.90 ft or 3.322 m), from rating curve extended above 1,900 ft³/s (53.8 m³/s) on basis of slope-area measurement at gage height 9.90 ft (3.018 m); no flow at times in most years.

REMARKS.--No storage or known diversion above station.

COOPERATION.--Records furnished by Bureau of Reclamation and reviewed by Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.50	4.5	521	161	68	345	700	75	24	9.8	6.3	1.6
2	.60	4.5	156	120	60	1,070	687	72	23	9.8	5.6	1.5
3	.50	4.5	89	99	55	581	429	68	23	9.7	5.3	1.4
4	.60	4.3	67	90	52	381	314	65	22	9.3	5.0	1.4
5	.60	6.0	55	95	49	288	249	62	21	8.8	4.5	1.4
6	.60	23	47	133	47	251	208	58	20	8.2	4.4	1.2
7	2.6	25	42	112	44	265	181	56	20	7.9	4.2	1.1
8	6.5	23	37	120	42	364	161	52	18	9.9	4.0	1.1
9	4.1	15	34	98	41	272	171	50	18	54	3.8	1.0
10	2.6	24	31	85	40	230	159	47	17	52	3.8	1.0
11	2.1	54	32	80	39	204	141	45	17	25	3.8	1.1
12	2.1	167	32	158	40	228	128	44	17	19	3.8	1.1
13	2.0	67	55	158	45	207	117	42	16	16	3.4	1.1
14	2.0	84	54	203	40	183	109	41	15	14	3.3	1.1
15	1.8	43	43	323	39	165	102	40	15	13	3.2	1.2
16	1.7	44	38	275	44	149	95	40	15	12	3.0	1.2
17	1.7	82	47	525	44	136	88	39	15	11	2.9	1.3
18	1.7	158	48	367	40	126	85	38	15	11	2.8	1.0
19	1.7	80	41	312	82	117	84	37	18	11	2.6	1.0
20	1.7	55	37	244	78	106	80	36	17	9.9	2.5	.90
21	1.7	48	81	187	63	96	75	35	15	9.5	2.5	.90
22	2.3	38	215	156	85	89	71	34	14	8.9	2.5	.90
23	17	32	113	132	69	84	75	31	13	8.7	2.3	.90
24	17	30	85	115	62	79	108	30	12	8.2	2.1	.90
25	8.9	28	69	103	57	76	110	30	12	8.0	1.9	.80
26	6.4	28	74	91	56	77	111	28	11	9.2	1.8	.80
27	5.3	25	342	81	63	96	100	26	11	8.2	1.8	.90
28	5.2	23	286	74	57	181	94	26	11	7.7	1.7	1.0
29	4.6	22	445	70	-----	159	86	25	10	7.2	1.7	1.0
30	4.5	21	292	65	-----	370	80	24	9.9	7.0	1.7	1.0
31	4.4	-----	187	62	-----	396	-----	24	-----	6.5	1.7	-----
TOTAL	115.00	1,262.8	3,695	4,894	1,501	7,371	5,198	1,320	484.9	410.4	99.9	32.80
MEAN	3.71	42.1	119	158	53.6	238	173	42.6	16.2	13.2	3.22	1.09
MAX	17	167	521	525	85	1,070	700	75	24	54	6.3	1.6
MIN	.50	4.3	31	62	39	76	71	24	9.9	6.5	1.7	.80
AC-FT	228	2,500	7,330	9,710	2,980	14,620	10,310	2,620	962	814	198	65

CAL YR 1973 TOTAL 26,983.30 MEAN 73.9 MAX 1,300 MIN 0 AC-FT 53,520
WTR YR 1974 TOTAL 26,384.80 MEAN 72.3 MAX 1,070 MIN .50 AC-FT 52,330

11335000 COSUMNES RIVER AT MICHIGAN BAR, CALIF.

LOCATION.--Lat. 38°30'01", long 121°02'39", in NW¼SE¼ sec. 36, T.8 N., R.8 E., Sacramento County, on downstream side of midstream pier of highway bridge at Michigan Bar, 5.5 mi (8.8 km) southwest of Latrobe, and 12 mi (19 km) downstream from confluence of North and Middle Forks of Cosumnes River.

DRAINAGE AREA.--536 mi² (1,388 km²).

PERIOD OF RECORD.--October 1907 to current year. Monthly discharge only for some periods, published in WSP 1315-A.

GAGE.--Water-stage recorder. Datum of gage is 168.09 ft (51.234 m) above mean sea level. Prior to July 10, 1930, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--67 years, 487 ft³/s (13.79 m³/s), 352,800 acre-ft/yr (435 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 8,980 ft³/s (254 m³/s) Mar. 2 (gage height, 8.07 ft or 2.460 m); minimum daily, 21 ft³/s (0.59 m³/s) Sept. 18, 25-29.

Period of record: Maximum discharge, 42,000 ft³/s (1,190 m³/s) Dec. 23, 1955 (gage height, 14.59 ft or 4.447 m); no flow at times in many years.

Flood in March 1907 reached a stage of 16.3 ft (4.97 m), discharge unknown.

REMARKS.--Records good. Flow partly regulated since January 1955 by Jenkinson Lake, usable capacity, 40,570 acre-ft (50.0 hm³/yr). Camino conduit above the station diverts water out of the basin (see REMARKS for sta 11333000). Numerous small diversions above station for irrigation and domestic use. Records of chemical analyses, water temperatures, and sediment discharge for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 331: 1911-12. WSP 1315-A: 1908-9, 1911(M). WSP 1930: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	46	2,920	2,000	866	1,920	4,730	1,060	443	94	61	50
2	27	46	1,300	1,440	758	6,530	5,340	1,140	437	89	64	51
3	26	45	740	1,180	700	4,220	3,600	1,160	416	91	60	50
4	27	44	578	1,110	676	2,860	2,820	1,130	391	94	58	49
5	26	46	488	1,250	646	2,250	2,360	1,120	362	89	55	40
6	26	82	422	2,040	604	2,000	2,060	1,130	343	86	56	28
7	29	148	375	2,030	572	1,950	1,870	1,140	329	83	54	25
8	44	210	346	1,450	554	2,640	1,700	1,180	301	92	51	25
9	95	148	324	1,110	530	2,010	1,770	1,160	275	321	50	24
10	77	124	307	940	512	1,780	1,660	997	256	738	48	24
11	54	427	333	839	494	1,730	1,520	973	239	297	47	24
12	42	1,800	375	940	488	2,140	1,440	951	227	207	47	24
13	37	980	838	1,060	566	1,950	1,360	900	216	171	47	22
14	36	848	803	1,050	506	1,810	1,310	833	202	152	45	22
15	36	482	536	2,160	476	1,740	1,280	792	192	136	44	23
16	35	464	440	1,780	494	1,700	1,270	747	181	125	43	23
17	33	723	452	4,770	542	1,700	1,250	695	176	119	41	23
18	32	1,450	604	3,530	470	1,650	1,270	640	169	111	41	21
19	31	857	500	3,840	731	1,560	1,230	594	187	104	43	22
20	30	604	446	3,490	830	1,460	1,130	544	193	98	41	22
21	31	536	629	2,730	653	1,380	1,070	507	174	91	45	23
22	35	434	1,380	2,160	857	1,310	1,050	491	158	88	59	22
23	62	360	875	1,840	700	1,260	1,100	483	144	86	59	22
24	178	333	700	1,590	625	1,210	1,420	492	137	83	57	22
25	114	324	578	1,420	584	1,190	1,340	506	126	81	56	21
26	75	307	662	1,270	572	1,240	1,180	522	120	82	55	21
27	61	283	2,610	1,140	660	1,400	1,070	565	114	84	54	21
28	55	247	3,490	1,050	625	2,030	1,030	578	109	78	52	21
29	54	235	3,800	960	-----	2,040	990	559	102	75	52	21
30	50	257	3,320	893	-----	3,300	1,000	505	97	71	54	22
31	46	-----	2,110	839	-----	3,660	-----	463	-----	67	54	-----
TOTAL	1,533	12,890	33,281	53,901	17,291	65,620	52,220	24,557	6,816	4,183	1,593	808
MEAN	49.5	430	1,074	1,739	618	2,117	1,741	792	227	135	51.4	26.9
MAX	178	1,800	3,800	4,770	866	6,530	5,340	1,180	443	738	64	51
MIN	26	44	307	839	470	1,190	990	463	97	67	41	21
AC-FT	3,040	25,570	66,010	106,900	34,300	130,200	103,600	48,710	13,520	8,300	3,160	1,600
CAL YR 1973	TOTAL 258,254	MEAN 708	MAX 9,390	MIN 24	AC-FT 512,200							
WTR YR 1974	TOTAL 274,693	MEAN 753	MAX 6,530	MIN 21	AC-FT 544,900							

PEAK DISCHARGE (BASE, 4,000 FT³/S)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
12-1	1000	6.88	5,060	3-2	0700	8.07	8,980
12-29	2100	7.03	5,480	4-1	2300	7.55	7,090
1-17	1200	7.26	6,160				

SAN JOAQUIN RIVER BASIN

11335700 DEER CREEK NEAR SLOUGHHOUSE, CALIF.

LOCATION.--Lat 38°33'06", long 121°06'30", in NW¼NW¼ sec.16, T.8 N., R.8 E., Sacramento County, on right bank 0.2 mi (0.3 km) upstream from Scott Road, 0.4 mi (0.6 km) upstream from Little Deer Creek, and 5.9 mi (9.5 km) northeast of Sloughhouse.

DRAINAGE AREA.--46.0 mi² (119.1 km²).

PERIOD OF RECORD.--November 1959 to September 1966, October 1967 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 160 ft (49 m), from topographic map.

AVERAGE DISCHARGE.--13 years, 29.1 ft³/s (0.82 m³/s), 21,080 acre-ft/yr (26.0 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,820 ft³/s (79.9 m³/s) Mar. 1 (gage height, 10.52 ft or 3.206 m); no flow for several months.

Period of record: Maximum discharge, 6,560 ft³/s (186 m³/s) Oct. 13, 1962 (gage height, 12.86 ft or 3.920 m, from floodmarks), from rating curve extended above 2,200 ft³/s (62.3 m³/s); no flow for several months in each year.

REMARKS.--No known regulation or diversion above station.

COOPERATION.--Records furnished by California Department of Water Resources and reviewed by the Geological Survey.

REVISIONS.--WSP 1930: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	941	246	35	861	517	12	1.2	0		
2		0	128	96	32	758	314	11	1.2	0		
3		0	50	64	29	223	150	10	1.2	0		
4		0	39	117	29	111	81	9.7	1.2	0		
5		0	33	136	27	62	58	9.3	.90	0		
6		8.9	29	459	24	50	50	8.9	.70	0		
7		15	26	401	22	78	43	8.5	.50	0		
8		15	23	175	22	163	41	8.2	.50	0		
9		5.0	20	102	21	57	47	7.2	.40	15		
10		4.8	18	66	21	46	45	6.2	.30	27		
11		50	23	54	19	45	39	5.3	.20	7.5		
12		621	33	87	19	207	40	4.8	.20	3.6		
13		450	269	50	26	83	33	4.6	.20	2.2		
14		339	104	61	20	54	30	4.4	.20	1.5		
15		230	48	127	18	46	29	4.3	.30	1.0		
16		193	40	100	19	42	26	4.1	.50	.70		
17		508	41	784	22	39	24	3.8	.60	.30		
18		231	42	305	17	38	23	3.8	.70	.20		
19		48	35	238	50	35	27	3.8	1.3	.10		
20		34	33	173	36	32	23	3.8	4.3	.10		
21		33	127	107	29	30	19	3.6	3.6	0		
22		22	239	63	69	29	18	3.4	1.8	0		
23		17	78	53	38	28	18	3.2	1.1	0		
24		19	57	47	32	27	46	2.7	.60	0		
25		25	47	42	29	25	37	2.2	.40	0		
26		17	103	40	28	29	26	1.8	.20	0		
27		14	536	37	30	39	20	1.6	.10	0		
28		11	489	35	28	64	17	1.2	0	0		
29		10	354	34	-----	85	14	1.1	0	0		
30		34	179	32	-----	355	13	1.1	0	0		
31		-----	116	32	-----	134	-----	1.2	-----	0		-----
TOTAL	0	2,954.7	4,300	4,363	791	3,875	1,868	156.8	24.40	59.20	0	0
MEAN	0	98.5	139	141	28.3	125	62.3	5.06	.81	1.91	0	0
MAX	0	621	941	784	69	861	517	12	4.3	27	0	0
MIN	0	0	18	32	17	25	13	1.1	0	0	0	0
AC-FT	0	5,860	8,530	8,650	1,570	7,690	3,710	311	48	117	0	0

CAL YR 1973 TOTAL 24,673.00 MEAN 67.6 MAX 1,790 MIN 0 AC-FT 48,940
WTR YR 1974 TOTAL 18,392.10 MEAN 50.4 MAX 941 MIN 0 AC-FT 36,480

11336000 COSUMNES RIVER AT McCONNELL, CALIF.

LOCATION.--Lat 38°21'29", long 121°20'34", in NE¼NE¼ sec.20, T.6 N., R.6 E., Sacramento County, on downstream side of bridge on U.S. Highway 99, 0.2 mi (0.3 km) south of McConnell, 1 mi (2 km) downstream from Deer Creek, and 7 mi (11 km) north of Galt.

DRAINAGE AREA.--724 mi² (1,875 km²).

PERIOD OF RECORD.--October 1941 to current year. Monthly figures only for some periods, published in WSP 1315-A. Gage heights only during high-water periods 1931-40, in reports of California Department of Water Resources.

GAGE.--Water-stage recorder. Datum of gage is 3.34 ft (1.018 m) below mean sea level.

AVERAGE DISCHARGE.--33 years, 555 ft³/s (15.7 m³/s), 402,100 acre-ft/yr (496 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 9,650 ft³/s (273 m³/s) Mar. 3 (gage height, 43.52 ft or 13.265 m); no flow at times.

Period of record (1943 to current year): Maximum discharge, 54,000 ft³/s (1,530 m³/s) Dec. 23, 1955 (gage height, 46.26 ft or 14.100 m), from rating curve extended above 36,000 ft³/s (1,020 m³/s); no flow for parts of each year.

Flood of Feb. 23, 24, 1936, reached a stage of 45.94 ft (14.003 m), discharge unknown.

REMARKS.--Records good except those for the summer months, which are poor. Diversions for irrigation of 2,100 acres (8.50 km²) between stations at Michigan Bar and at McConnell.

REVISIONS (WATER YEARS).--WSP 1315-A: 1947(M). WSP 1930: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	36	2,290	2,440	839	781	3,670	972	409	65	7.0	2.2
2	0	34	3,310	1,950	822	6,290	6,850	1,040	401	48	5.8	1.8
3	0	33	1,270	1,420	723	7,120	4,930	1,090	398	64	5.0	1.2
4	0	34	828	1,260	691	3,660	3,270	1,080	365	77	4.1	1.2
5	0	37	647	1,550	661	2,580	2,640	1,070	347	77	3.6	2.0
6	0	56	539	2,050	627	2,130	2,260	1,070	321	51	3.0	1.2
7	0	77	471	3,820	590	1,910	1,970	1,070	301	58	2.6	0
8	0	127	420	2,680	567	2,760	1,760	1,090	281	80	2.2	0
9	0	164	383	1,530	543	2,250	1,720	1,100	258	136	1.8	0
10	129	111	353	1,220	522	1,830	1,750	990	237	602	1.4	0
11	60	160	340	1,050	505	1,660	1,540	902	220	408	.90	0
12	44	1,200	403	1,140	488	2,010	1,420	895	202	235	.50	0
13	35	1,670	555	1,310	534	2,420	1,340	858	188	177	0	0
14	43	1,190	1,410	1,140	520	1,880	1,270	798	172	143	0	0
15	21	987	813	2,180	485	1,740	1,240	747	153	121	0	0
16	14	553	573	2,030	465	1,680	1,210	719	145	93	0	0
17	6.5	869	496	4,230	534	1,630	1,190	672	143	75	0	0
18	.40	1,930	631	5,720	486	1,580	1,180	627	136	59	0	0
19	0	1,630	602	4,630	508	1,490	1,200	583	143	51	0	0
20	0	827	517	4,360	890	1,390	1,090	539	135	42	0	0
21	0	652	501	3,270	689	1,290	1,030	501	138	44	0	0
22	0	557	1,660	2,540	750	1,230	999	473	123	46	0	0
23	6.0	447	1,500	2,060	762	1,180	1,010	456	116	33	0	0
24	100	378	973	1,770	658	1,140	1,240	458	104	37	0	0
25	124	362	775	1,530	604	1,120	1,380	469	87	24	0	0
26	79	334	670	1,350	571	1,160	1,150	479	81	18	0	0
27	59	320	2,560	1,190	603	1,210	1,080	506	56	16	0	0
28	50	271	5,250	1,080	624	1,770	988	524	68	13	2.0	0
29	45	245	4,060	992	-----	1,920	944	517	53	12	2.9	0
30	42	234	5,220	916	-----	2,780	940	484	53	9.6	2.7	0
31	39	-----	2,720	854	-----	4,180	-----	434	-----	8.0	2.5	-----
TOTAL	896.90	15,525	42,740	65,262	17,261	67,771	54,261	23,213	5,834	2,922.6	48.00	9.6
MEAN	28.9	518	1,379	2,105	616	2,186	1,809	749	194	94.3	1.55	.32
MAX	129	1,930	5,250	5,720	890	7,120	6,850	1,100	409	602	7.0	2.2
MIN	0	33	340	854	465	781	940	434	53	8.0	0	0
AC-FT	1,780	30,790	84,770	129,400	34,240	134,400	107,600	46,040	11,570	5,800	95	19

CAL YR 1973 TOTAL 305,565.59 MEAN 837 MAX 11,400 MIN 0 AC-FT 606,100
WTR YR 1974 TOTAL 295,744.10 MEAN 810 MAX 7,120 MIN 0 AC-FT 586,600

PEAK DISCHARGE (BASE, 3,600 FT ³ /S)							
DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
12-1	2230	40.28	5,080	1-18	0230	42.12	6,840
12-28	1300	41.34	6,250	3-3	0030	43.52	9,650
12-30	0530	41.34	6,250	4-2	1530	42.42	7,440
1-7	0900	39.49	4,290				

SAN JOAQUIN RIVER BASIN

11336580 MORRISON CREEK NEAR SACRAMENTO, CALIF.

LOCATION.--Lat 38°29'55", long 121°27'06", in SW¼SE¼ sec.32, T.8 N., R.5 E., Sacramento County, on right bank 750 ft (229 m) upstream from Florin Road, 1.6 mi (2.6 km) upstream from Elder Creek, and 2 mi (3.2 km) south of Sacramento city limits.

DRAINAGE AREA.--53.4 mi² (138.3 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 7.60 ft (2.316 m) above mean sea level. Prior to June 29, 1960, at site 650 ft (198 m) downstream at datum 1.55 ft (0.472 m) higher. June 29, 1960, to Sept. 12, 1965, at site 475 ft (144.8 m) upstream at datum 2.71 ft (0.826 m) higher.

AVERAGE DISCHARGE.--15 years, 18.8 ft³/s (0.532 m³/s), 13,620 acre-ft/yr (16.8 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 682 ft³/s (19.3 m³/s) Nov. 17 (gage height, 5.02 ft or 1.530 m); minimum daily, 0.79 ft³/s (0.022 m³/s) Sept. 2.
Period of record: Maximum discharge, 1,610 ft³/s (45.6 m³/s) Jan. 26, 1969 (gage height, 8.53 ft or 2.600 m); no flow at times in 1960, 1962, 1965.

REMARKS.--Records fair except those for the period May 29 to Sept. 13, which are poor. No regulation or diversion above station. Summer flow is sustained by waste water from domestic and industrial use.

REVISIONS.--WRD Calif. 1972: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.1	6.3	283	28	13	123	94	4.8	3.7	4.4	11	1.0
2	4.4	5.9	83	24	8.3	129	99	4.3	4.3	5.1	11	.79
3	7.0	3.9	33	21	6.8	49	40	4.1	6.0	4.7	9.0	3.1
4	5.2	2.5	19	120	8.2	26	20	3.8	6.2	3.7	8.5	3.2
5	3.9	59	13	107	6.8	18	16	2.9	6.6	4.5	10	4.0
6	7.0	41	11	182	6.8	14	14	4.3	6.3	3.9	11	4.9
7	70	23	9.1	234	6.7	50	14	4.8	6.3	3.9	10	2.7
8	7.2	9.0	5.6	101	6.6	36	16	5.7	4.6	118	12	1.6
9	8.7	13	5.0	54	4.3	18	27	5.5	4.2	50	10	2.4
10	6.1	56	6.8	37	4.0	11	18	5.0	5.9	29	3.6	2.5
11	4.9	105	16	57	5.8	25	13	4.2	5.6	17	3.7	3.3
12	4.6	172	9.5	62	15	27	12	3.1	5.3	17	4.1	1.8
13	3.0	112	36	41	7.4	33	11	4.4	5.0	12	2.5	2.0
14	2.5	71	16	99	7.6	16	11	5.4	5.0	13	2.3	4.3
15	4.5	23	8.9	147	7.0	11	11	5.6	3.8	16	3.4	4.0
16	5.1	59	6.7	109	9.0	7.3	10	5.4	3.2	18	2.9	6.6
17	5.1	162	7.7	197	4.5	8.0	10	5.5	5.1	18	1.2	4.9
18	5.3	94	7.4	150	4.7	6.9	12	4.6	6.1	20	.96	8.1
19	5.2	33	6.6	114	27	6.9	10	4.2	65	19	1.3	7.2
20	4.0	20	6.5	56	15	7.9	10	5.7	12	14	2.8	6.5
21	2.5	12	84	38	15	7.2	10	5.9	7.4	11	3.4	5.0
22	89	7.5	74	28	13	6.1	10	5.7	3.8	17	2.8	4.0
23	69	6.3	33	23	8.3	3.7	15	5.9	2.2	18	2.2	6.0
24	20	5.3	17	20	6.1	3.1	13	5.9	4.3	18	1.6	6.8
25	8.5	5.4	12	16	8.1	17	11	3.8	4.1	17	1.0	6.1
26	7.5	7.4	58	11	8.1	20	9.7	3.6	3.8	15	1.9	6.5
27	4.6	6.9	226	9.5	7.2	36	8.7	3.1	4.2	10	3.7	6.4
28	3.5	6.7	228	11	32	15	7.0	5.0	4.8	9.4	3.1	4.4
29	5.6	14	107	12	-----	26	6.0	5.5	4.0	12	2.9	3.3
30	6.5	60	67	11	-----	92	5.1	5.6	3.2	14	3.0	6.3
31	6.6	-----	38	22	-----	33	-----	5.8	-----	12	2.2	-----
TOTAL	393.1	1,202.1	1,533.8	2,141.5	272.3	880.1	563.5	149.1	212.0	544.6	149.06	129.69
MEAN	12.7	40.1	49.5	69.1	9.73	28.4	18.8	4.81	7.07	17.6	4.81	4.32
MAX	89	172	283	234	32	129	99	5.9	65	118	12	8.1
MIN	2.5	2.5	5.0	9.5	4.0	3.1	5.1	2.9	2.2	3.7	.96	.79
AC-FT	780	2,380	3,040	4,250	540	1,750	1,120	296	421	1,080	296	257
CAL YR 1973	TOTAL 13,531.90		MEAN 37.1		MAX 724		MIN 2.5		AC-FT 26,840			
WTR YR 1974	TOTAL 8,170.85		MEAN 22.4		MAX 283		MIN .79		AC-FT 16,210			

		PEAK DISCHARGE (BASE, 300 FT ³ /S)					
DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
10-7	1030	4.13	390	12-1	0230	4.26	494
10-22	2300	3.45	322	12-27	2230	3.63	356
11-12	0300	3.59	348	6-19	0530	3.37	301
11-13	1900	3.72	374	7-8	1430	3.52	334
11-17	1530	5.02	682				

LOCATION.--Lat 37°59'44", long 121°42'03", in NW¼NE¼ sec.25, T.2 N., R.2 E., Contra Costa County, at pumping plant No. 1, 0.7 mi (1.1 km) east of Oakley, and 2.6 mi (4.2 km) northwest of Knightsen.

GAGE.--Recording flowmeters on pumps. Prior to Jan. 1, 1953, water-stage recorder at site 3.2 mi (5.1 km) downstream at datum 121.72 ft (37.100 m) above mean sea level (levels by Bureau of Reclamation).

EXTREMES.--Period of record: Maximum daily discharge, 255 ft³/s (7.22 m³/s) June 23, 1972; minimum daily, 4.0 ft³/s (0.11 m³/s) Jan. 20, 1970.

COOPERATION.--Records of daily discharge furnished by Bureau of Reclamation and reviewed by Geological Survey.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	115	126	52	54	57	60	79	83	178	199	219	162
2	154	131	52	55	62	59	90	79	177	185	211	158
3	158	111	57	56	54	57	88	79	155	195	212	163
4	159	112	58	56	58	59	89	79	156	191	207	153
5	159	115	57	53	58	64	90	78	156	185	207	150
6	125	108	57	55	62	70	83	80	153	181	206	147
7	114	107	59	57	39	67	81	82	146	183	213	126
8	95	102	56	57	38	72	71	94	135	173	214	113
9	84	98	53	57	60	72	60	109	169	170	207	111
10	74	93	54	56	58	68	60	112	189	168	202	112
11	76	91	58	55	59	63	67	118	205	200	198	116
12	66	94	61	55	57	66	67	117	200	193	193	127
13	36	91	60	55	58	68	68	119	206	195	191	126
14	83	94	58	58	63	66	60	126	205	199	185	123
15	83	108	58	56	60	69	84	129	206	193	183	121
16	93	102	62	56	55	64	93	124	205	201	185	122
17	107	76	56	58	58	63	91	121	197	197	187	112
18	108	60	58	58	61	69	95	118	200	203	191	107
19	108	63	50	58	64	74	73	117	197	202	190	98
20	108	64	59	59	42	72	48	125	195	199	192	96
21	110	58	58	60	62	74	82	126	151	207	194	95
22	107	60	53	62	61	72	93	125	203	207	196	94
23	104	57	53	62	60	65	90	127	200	217	188	94
24	108	55	54	65	65	65	83	130	205	203	187	93
25	100	56	52	64	63	60	76	127	200	199	184	91
26	99	59	54	63	40	65	76	129	206	212	182	91
27	98	62	53	62	63	62	76	132	207	205	178	91
28	92	59	53	61	80	67	70	127	207	216	175	74
29	105	58	54	50	-----	59	75	126	215	219	172	86
30	115	57	53	61	-----	62	81	131	214	220	163	106
31	113	-----	55	56	-----	60	-----	180	-----	223	155	-----
TOTAL	3,256	2,527	1,727	1,990	1,617	2,033	2,339	3,549	5,638	6,140	5,967	3,458
MEAN	105	84.2	55.7	57.7	57.8	65.6	78.0	114	188	198	192	115
MAX	159	131	62	65	80	74	95	180	215	223	219	163
MIN	36	55	50	50	38	57	48	78	135	168	155	74
AC-FT	6,460	5,010	3,430	3,550	3,210	4,030	4,640	7,040	11,180	12,180	11,840	6,860
CAL YR 1973	TOTAL 46,502		MEAN 127	MAX 253	MIN 36	AC-FT 92,240						
WTR YR 1974	TOTAL 40,041		MEAN 110	MAX 223	MIN 36	AC-FT 79,420						

11337500 MARSH CREEK NEAR BYRON, CALIF.

LOCATION.--Lat 37°52'24", long 121°43'34", in Los Meganos Grant, Contra Costa County, on right bank 40 ft (12 m) downstream from highway bridge on Marsh Creek Road, 1.2 mi (1.9 km) upstream from Marsh Creek Dam, and 5.0 mi (8.0 km) west of Byron.

DRAINAGE AREA.--42.6 mi² (110.3 km²).

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

GAGE.--Water-stage recorder and concrete control (control ineffective since 1972 due to gravel fill). Datum of gage is 177.87 ft (54.215 m) above mean sea level.

AVERAGE DISCHARGE.--21 years, 8.71 ft³/s (0.247 m³/s), 6,310 acre-ft/yr (7.78 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 438 ft³/s (12.4 m³/s) Apr. 1 (gage height, 5.78 ft or 1.762 m); no flow for long periods.
Period of record: Maximum discharge, 3,880 ft³/s (110 m³/s) Jan. 31, 1963 (gage height, 11.62 ft or 3.542 m), from rating curve extended above 880 ft³/s (24.9 m³/s) on basis of slope-area measurement at gage height 10.90 ft (3.322 m); maximum gage height, 12.98 ft (3.956 m) Dec. 23, 1955; no flow for long periods in each year.

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

REVISIONS (WATER YEARS).--WSP 1635: 1955.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	131	25	13	26	173	8.5				
2		0	30	17	11	118	142	8.9				
3		0	17	15	9.6	88	74	7.9				
4		0	12	19	9.2	49	53	8.2				
5		15	9.6	16	8.5	36	41	8.2				
6		5.8	7.9	18	7.9	30	35	8.2				
7		2.2	6.6	23	7.5	28	30	7.9				
8		1.0	5.7	21	7.2	26	27	7.2				
9		4.0	5.2	19	7.2	21	35	5.5				
10		16	4.7	17	7.2	20	30	4.9				
11		49	6.3	16	6.9	20	23	4.7				
12		10	6.3	16	7.5	22	21	4.2				
13		2.5	6.0	14	9.6	18	19	4.2				
14		2.7	6.6	14	7.2	16	18	4.0				
15		1.7	5.2	15	6.6	15	18	3.6				
16		4.7	4.9	20	6.9	14	18	3.0				
17		16	4.7	41	6.6	13	17	2.2				
18		38	4.7	37	6.3	12	16	2.5				
19		14	4.5	46	12	12	16	2.6				
20		7.9	4.2	37	7.9	11	15	2.5				
21		5.7	6.9	29	5.7	10	14	2.7				
22		4.3	19	24	5.5	10	13	3.0				
23		3.4	9.2	22	4.9	10	14	2.5				
24		2.7	7.9	19	4.7	10	16	1.7				
25		2.2	7.2	18	4.7	12	14	1.8				
26		2.0	14	16	4.7	15	13	1.1				
27		1.7	97	14	4.7	12	12	.09				
28		1.5	45	13	5.5	57	9.6	.04				
29		1.6	44	12	-----	39	8.9	.01				
30		3.2	34	12	-----	68	9.6	0				
31		-----	26	12	-----	45	-----	0	-----			-----
TOTAL	0	218.8	593.3	637	206.2	883	945.1	121.84	0	0	0	0
MEAN	0	7.29	19.1	20.5	7.36	28.5	31.5	3.93	0	0	0	0
MAX	0	49	131	46	13	118	173	8.9	0	0	0	0
MIN	0	0	4.2	12	4.7	10	8.9	0	0	0	0	0
AC-FT	0	434	1,180	1,260	409	1,750	1,870	242	0	0	0	0

CAL YR 1973 TOTAL 7,478.10 MEAN 20.5 MAX 397 MIN 0 AC-FT 14,830

WTR YR 1974 TOTAL 3,605.24 MEAN 9.88 MAX 173 MIN 0 AC-FT 7,150

PEAK DISCHARGE (BASE, 140 FT³/S)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
12-1	0415	5.68	409	3-2	0330	4.80	194
12-27	0415	4.79	192	4-1	1545	5.78	438

NOTE.--No gage-height record Oct. 4 to Nov. 13.

11341400 SACRAMENTO RIVER NEAR MOUNT SHASTA, CALIF.

LOCATION.--Lat 41°15'56", long 122°18'32", in SE¼SE¼ sec.33, T.40 N., R.4 W., Siskiyou County, on left bank 200 ft (61 m) upstream from Stink Creek, 0.3 mi (0.5 km) upstream from Southern Pacific Railroad bridge, and 3.3 mi (5.3 km) south of town of Mount Shasta.

DRAINAGE AREA.--135 mi² (350 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 2,800 ft (853 m), from topographic map. Prior to July 1, 1966, water-stage recorder at site 500 ft (152 m) upstream at datum 4.26 ft (1.298 m) higher.

AVERAGE DISCHARGE (adjusted for change in contents in Lake Siskiyou).--15 years, 261 ft³/s (7.392 m³/s), 189,100 acre-ft/yr (233 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 11,500 ft³/s (326 m³/s) Jan. 16 (gage height, 10.25 ft or 3.124 m, from floodmarks); minimum daily, 45 ft³/s (1.27 m³/s) Aug. 18.

Period of record: Maximum discharge, 12,200 ft³/s (346 m³/s) Dec. 22, 1964 (gage height, 12.6 ft or 3.84 m, from floodmarks, present site and datum), from slope-area measurement of maximum flow; minimum, 37 ft³/s (1.05 m³/s) Sept. 6, 1962. Maximum discharge since construction of Box Canyon Dam in 1968, 11,500 ft³/s (326 m³/s) Jan. 16, 1974 (gage height, 10.25 ft or 3.124 m, from floodmarks), from rating curve extended above 2,900 ft³/s (82.1 m³/s) on basis of flow-over-dam computation of maximum flow; minimum daily, 14 ft³/s (0.40 m³/s) Dec. 8-16, 1972.

REMARKS.--Records good except those for no or doubtful gage-height record, which are fair. Flow regulated by Box Canyon Dam 2 mi (3 km) upstream beginning December 1968, capacity, 26,100 acre-ft (32.2 hm³). See schematic diagram of Pit and McCloud River basins. Records of water temperatures for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	64	141	1,370	386	380	718	1,140	895	631	152	92	78
2	61	139	1,200	379	375	660	918	1,100	736	81	91	78
3	60	139	1,020	375	375	363	973	1,110	900	198	91	78
4	60	140	515	352	348	135	634	1,040	866	273	90	73
5	62	149	354	295	303	180	628	1,020	823	189	92	52
6	73	179	388	292	300	305	634	1,080	812	140	91	48
7	85	176	391	289	254	335	605	1,150	771	138	93	48
8	79	739	389	176	242	335	546	1,180	660	140	91	48
9	75	1,600	385	101	242	311	510	1,160	713	219	90	47
10	72	2,950	382	103	242	335	548	1,160	735	230	90	47
11	70	4,220	419	126	256	364	635	1,060	580	163	88	47
12	70	3,120	457	149	304	481	580	1,130	403	150	87	47
13	70	1,640	458	251	306	497	498	1,020	430	159	87	47
14	70	1,170	412	856	280	417	486	984	603	155	88	47
15	64	1,190	335	3,900	238	370	517	907	576	149	88	47
16	61	1,270	300	9,600	244	371	633	386	560	143	53	65
17	60	1,170	378	3,000	245	464	702	258	484	140	48	79
18	60	1,090	407	2,380	245	526	769	398	366	138	45	79
19	60	632	398	2,160	286	588	768	396	376	135	53	79
20	86	172	490	1,370	312	623	616	296	457	135	50	79
21	225	316	577	1,170	312	546	567	438	419	135	54	79
22	610	434	463	1,140	268	478	672	556	389	92	76	65
23	955	431	430	828	242	479	860	674	362	61	84	47
24	500	392	357	498	242	480	864	792	342	67	81	47
25	294	296	303	613	197	489	592	886	293	86	80	47
26	255	220	303	461	198	538	503	1,060	261	92	78	47
27	210	219	304	380	245	930	449	1,130	265	93	75	47
28	182	227	307	383	530	1,130	584	1,190	262	93	79	65
29	142	460	357	380	-----	1,330	641	998	261	107	79	79
30	142	1,490	399	380	-----	1,880	698	831	258	104	78	79
31	142	-----	391	380	-----	1,230	-----	719	-----	95	78	-----
TOTAL	5,019	26,511	14,639	33,153	8,011	17,888	19,770	27,004	15,594	4,252	2,440	1,815
MEAN	162	884	472	1,069	286	577	659	871	520	137	78.7	60.5
MAX	955	4,220	1,370	9,600	530	1,880	1,140	1,190	900	273	93	79
MIN	60	139	300	101	197	135	449	258	258	61	45	47
AC-FT	9,960	52,580	29,040	65,760	15,890	35,480	39,210	53,560	30,930	8,430	4,840	3,600
MEAN a	152	892	446	1,062	291	616	623	890	524	141	75.8	62.0
AC-FT a	9,350	53,100	27,430	65,270	16,140	37,900	37,070	54,700	31,190	8,690	4,660	3,690
(b)	25,500	26,020	24,410	23,920	24,170	26,590	24,450	25,590	26,110	25,930	26,020	
CAL YR 1973	TOTAL 125,200	MEAN 343	MAX 4,220	MIN 41	AC-FT 248,300	MEAN a 342	AC-FT a 247,800					
WTR YR 1974	TOTAL 176,096	MEAN 482	MAX 9,600	MIN 45	AC-FT 349,300	MEAN a 482	AC-FT a 349,200					

a Adjusted for change in contents in Lake Siskiyou.

b Contents, in acre-feet, at end of month in Lake Siskiyou.

NOTE.--No gage-height record Jan. 15-17. Doubtful gage-height record Aug. 13 to Sept. 30.

SACRAMENTO RIVER BASIN

11342000 SACRAMENTO RIVER AT DELTA, CALIF.

LOCATION.--Lat 40°56'23", long 122°24'58", in SW¼NW¼ sec.35, T.36 N., R.5 W, Shasta County, Bureau of Reclamation property, on left bank 0.2 mi (0.3 km) downstream from Dog Creek, 0.6 mi (1.0 km) southeast of Delta, and 2.8 mi (4.5 km) south of Lamoine.

DRAINAGE AREA.--425 mi² (1,101 km²).

PERIOD OF RECORD.--October 1944 to current year. Monthly discharge only for some periods, published in WSP 1315-A.

GAGE.--Water-stage recorder. Datum of gage is 1,075.00 ft (326.660 m) above mean sea level (levels by Bureau of Reclamation).

AVERAGE DISCHARGE.--30 years, 1,200 ft³/s (34.0 m³/s), 869,400 acre-ft/yr (1,070 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 69,800 ft³/s (1,980 m³/s) Jan. 16 (gage height, 27.20 ft or 8.291 m in gage well, 28.7 ft or 8.75 m, from floodmarks); from rating curve extended above 19,000 ft³/s (538 m³/s) as explained below; minimum daily, 219 ft³/s (6.20 m³/s) Oct. 18, 19.

Period of record: Maximum discharge, 69,800 ft³/s (1,980 m³/s) Jan. 16, 1974 (gage height, 27.20 ft or 8.291 m), from rating curve extended above 19,000 ft³/s (538 m³/s) on basis of slope-area measurements at gage heights, 19.50 ft (5.944 m) in gage well, 20.0 ft (6.10 m), from floodmarks, and 27.20 ft (8.291 m) in gage well, 28.7 ft (8.75 m), from floodmarks; minimum, 141 ft³/s (3.99 m³/s) Sept. 3-5, 1950.

REMARKS.--Records good. Some regulation from Box Canyon Dam near the town of Mount Shasta. Some minor diversions for irrigation above station. See schematic diagram of Pit and McCloud River basins. Records of chemical analyses and water temperatures for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1395: 1951(M). WSP 1931: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	226	467	11,300	2,620	2,310	7,260	8,750	2,490	1,740	634	372	299
2	225	450	6,340	2,310	2,100	5,030	6,820	2,860	1,830	480	367	298
3	222	440	4,760	2,150	1,980	3,360	5,210	2,860	2,050	514	364	296
4	221	458	3,510	1,990	1,900	2,400	4,130	2,730	1,990	649	361	275
5	221	1,160	2,730	1,810	1,750	2,100	3,580	2,800	1,870	675	384	270
6	259	3,650	2,470	1,690	1,680	2,100	3,270	3,000	1,810	504	407	269
7	311	3,390	2,370	1,570	1,600	2,090	2,980	3,220	1,730	504	377	268
8	277	6,130	2,220	1,440	1,510	1,910	2,810	3,310	1,610	714	366	266
9	271	11,100	2,090	1,230	1,480	1,810	2,730	3,120	1,580	859	358	266
10	264	15,600	1,980	1,170	1,440	1,790	2,490	2,860	1,580	727	354	264
11	258	25,200	2,060	1,150	1,410	3,730	2,490	2,760	1,480	664	350	261
12	255	18,800	2,280	1,330	1,490	5,560	2,420	2,710	1,220	567	346	260
13	254	8,690	2,910	3,130	1,440	4,160	2,250	2,560	1,100	555	343	260
14	253	6,430	2,600	7,230	1,390	3,210	2,160	2,480	1,310	535	343	259
15	225	7,670	2,300	23,200	1,300	2,760	2,140	2,360	1,270	518	340	259
16	220	11,900	2,100	53,900	1,510	2,650	2,260	1,840	1,230	505	336	259
17	220	7,950	2,760	16,200	1,390	2,640	2,400	1,320	1,180	494	303	276
18	219	7,770	2,600	12,200	1,440	2,630	2,480	1,380	992	481	299	280
19	219	5,180	2,340	10,100	1,700	2,520	2,370	1,300	1,050	476	300	279
20	240	3,400	2,410	7,310	1,610	2,490	2,140	1,240	1,080	468	297	278
21	994	2,800	4,890	5,720	1,600	2,380	2,060	1,250	992	459	294	285
22	4,590	2,650	4,550	4,800	1,510	2,180	2,220	1,490	936	446	298	286
23	4,920	2,360	3,410	4,090	1,390	2,130	2,580	1,700	893	378	321	246
24	1,940	2,160	2,800	3,110	1,360	2,090	2,530	1,940	848	373	314	239
25	1,140	1,950	2,480	3,090	1,330	2,350	2,140	2,200	795	383	311	238
26	900	1,690	2,370	2,740	1,310	2,680	1,930	2,580	724	392	308	248
27	787	1,570	2,630	2,430	1,360	5,010	1,690	2,740	709	396	306	248
28	659	1,870	3,100	2,280	5,060	6,870	1,850	2,660	692	390	306	247
29	544	4,360	4,150	2,150	-----	12,500	1,950	2,480	675	388	305	249
30	509	15,000	3,650	2,040	-----	21,100	2,140	2,130	667	399	304	249
31	488	-----	3,030	2,250	-----	9,150	-----	1,890	-----	383	302	-----
TOTAL	22,331	182,245	101,190	188,430	47,350	130,640	86,970	72,260	37,633	15,910	10,336	7,977
MEAN	720	6,075	3,264	6,078	1,691	4,214	2,899	2,331	1,254	513	333	266
MAX	4,920	25,200	11,300	53,900	5,060	21,100	8,750	3,310	2,050	859	407	299
MIN	219	440	1,980	1,150	1,300	1,790	1,690	1,240	667	373	294	238
AC-FT	44,290	361,500	200,700	373,800	93,920	259,100	172,500	143,300	74,650	31,560	20,500	15,820

CAL YR 1973 TOTAL 702,219 MEAN 1,924 MAX 25,200 MIN 190 AC-FT 1,393,000
WTR YR 1974 TOTAL 903,272 MEAN 2,475 MAX 53,900 MIN 219 AC-FT 1,792,000

PEAK DISCHARGE (BASE, 5,000 FT ³ /S)							
DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
10-23	0100	9.38	6,560	1-18	1530	12.94	14,100
11-12	0400	16.71	28,300	2-28	1930	10.87	8,490
11-16	0545	12.35	14,200	3-11	2400	9.80	6,060
11-30	1615	14.11	19,800	3-30	0230	18.48	33,000
12-21	1730	9.02	5,840	4-1	1045	11.31	9,570
1-16	1000	27.20	69,800				

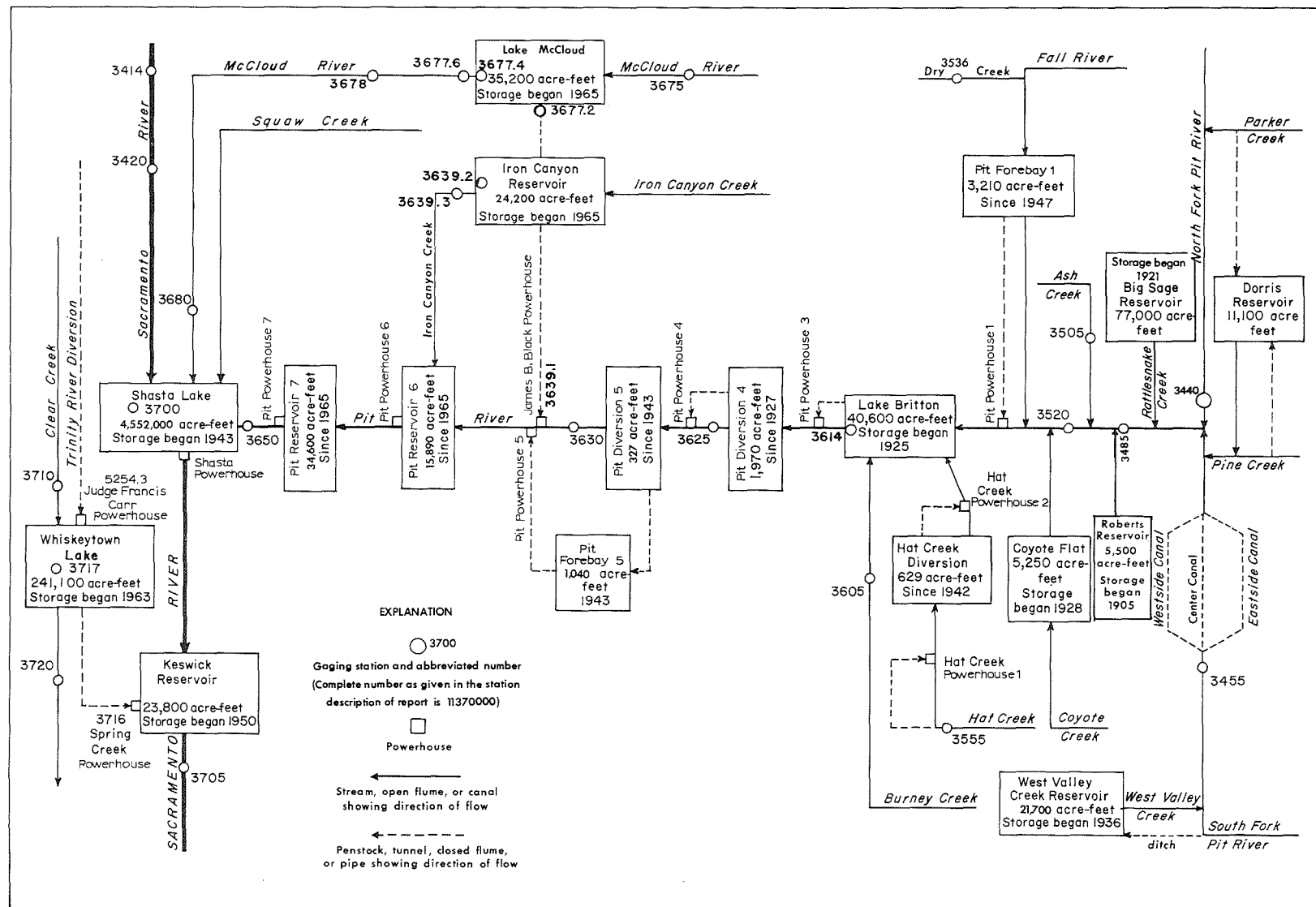


FIGURE 10.--Schematic diagram showing diversions and storage in Pit and McCloud river basins.

11345500 SOUTH FORK PIT RIVER NEAR LIKELY, CALIF.

LOCATION.--Lat 41°13'51", long 120°26'10", in NE¼SE¼ sec.11, T.39 N., R.13 E., Modoc County, on left bank 400 ft (122 m) downstream from highway bridge, 1.4 mi (2.3 km) downstream from West Valley Creek, and 3.5 mi (5.6 km) east of Likely.

DRAINAGE AREA.--247 mi² (640 km²).

PERIOD OF RECORD.--October 1928 to current year. Monthly discharge only for some periods, published in WSP 1315-A.

GAGE.--Water-stage recorder. Datum of gage is 4,508 ft (1,374 m) above mean sea level. Prior to Oct. 1, 1931, at site 1,000 ft (305 m) downstream at different datum.

AVERAGE DISCHARGE.--46 years, 78.9 ft³/s (2.234 m³/s), 57,160 acre-ft/yr (70.5 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 664 ft³/s (18.8 m³/s) Jan. 19 (gage height, 4.59 ft or 1.399 m); minimum daily, 8.0 ft³/s (0.23 m³/s) Jan. 8.

Period of record: Maximum discharge, 1,620 ft³/s (45.9 m³/s) June 2, 1971 (gage height, 6.05 ft or 1.844 m); minimum, 0.2 ft³/s (0.006 m³/s) Feb. 3, 1941.

REMARKS.--Records good except those for period of no gage-height record, which are fair. Flow regulated by West Valley Creek Reservoir beginning in May 1937, usable capacity, 21,700 acre-ft (26.8 hm³). Diversions for irrigation of about 3,800 acres (1,538 hm²) above station. See schematic diagram of Pit and McCloud River basins. Records of chemical analyses for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1931: Drainage area. WRD Calif. 1965: 1932, 1938(M), 1952(M). WRD Calif. 1971: 1960.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	34	53	27	38	27	43	247	295	127	90	197
2	19	33	43	20	36	25	49	277	286	122	95	196
3	21	34	38	17	34	25	43	295	277	119	94	196
4	19	32	33	14	33	25	27	311	272	115	94	194
5	20	32	37	12	32	32	25	328	279	114	110	192
6	25	34	41	10	31	62	28	365	282	114	105	190
7	40	41	43	8.8	30	46	22	409	256	114	98	188
8	37	50	39	8.0	29	33	21	470	243	122	98	188
9	33	42	33	8.2	28	35	21	560	228	146	97	186
10	32	44	32	10	28	44	20	605	205	144	94	186
11	32	44	35	12	29	61	16	600	194	148	90	138
12	31	58	34	15	30	95	18	590	184	138	110	102
13	31	52	34	30	33	112	19	533	176	127	144	102
14	30	43	37	95	34	115	20	474	182	122	156	97
15	29	42	38	330	35	117	22	450	182	117	158	92
16	26	41	39	270	37	66	28	402	176	117	156	92
17	26	46	46	295	34	60	36	371	169	114	152	92
18	26	46	41	195	35	51	65	355	159	104	150	94
19	26	42	34	520	36	36	73	334	154	95	152	88
20	30	41	37	230	27	28	77	314	154	92	152	86
21	32	40	38	125	24	23	57	295	144	94	150	88
22	34	38	39	95	20	22	61	272	129	94	146	89
23	39	38	38	80	29	20	67	265	126	94	144	79
24	37	38	35	71	34	22	77	275	120	92	144	67
25	34	38	42	64	43	25	92	291	119	95	144	69
26	32	37	37	56	60	22	110	309	115	100	144	70
27	31	38	47	52	49	24	133	330	126	102	142	69
28	31	42	63	48	30	23	144	342	126	102	142	69
29	32	52	82	46	-----	25	173	337	124	100	140	70
30	31	67	39	43	-----	37	220	325	120	97	163	70
31	29	-----	30	40	-----	38	-----	311	-----	92	199	-----
TOTAL	915	1,259	1,257	2,847.0	938	1,376	1,807	11,642	5,602	3,473	4,053	3,636
MEAN	29.5	42.0	40.5	91.8	33.5	44.4	60.2	376	187	112	131	121
MAX	40	67	82	520	60	117	220	605	295	148	199	197
MIN	19	32	30	8.0	20	20	16	247	115	92	90	67
AC-FT	1,810	2,500	2,490	5,650	1,860	2,730	3,580	23,090	11,110	6,890	8,040	7,210

CAL YR 1973 TOTAL 35,110.0 MEAN 96.2 MAX 533 MIN 19 AC-FT 69,640
WTR YR 1974 TOTAL 38,805.0 MEAN 106 MAX 605 MIN 8.0 AC-FT 76,970

NOTE.--No gage-height record Jan. 2 to Feb. 11.

SACRAMENTO RIVER BASIN

11348500 PIT RIVER NEAR CANBY, CALIF.

LOCATION.--Lat 41°24'22", long 120°55'36", in NW¼SW¼ sec.10, T.41 N., R.9 E., Modoc County, on right bank at lower end of Warm Spring Valley, 4 mi (6 km) southwest of Canby.

DRAINAGE AREA.--1,431 mi² (3,706 km²), excluding Goose Lake basin.

PERIOD OF RECORD.--January 1904 to December 1905, May 1929 to current year (1929-31 incomplete).

GAGE.--Water-stage recorder. Datum of gage is 4,266 ft (1,300 m) above mean sea level. January 1904 to December 1905, nonrecording gage and May 6, 1929, to Sept. 30, 1931, water-stage recorder, at site 100 ft (30 m) upstream at different datum.

AVERAGE DISCHARGE.--44 years (1905, 1931-74), 251 ft³/s (7.11 m³/s), 181,800 acre-ft/yr (224 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,880 ft³/s (81.6 m³/s) Jan. 20 (gage height, 7.20 ft or 2.195 m); minimum daily, 9.0 ft³/s (0.25 m³/s) July 29.
Period of record: Maximum discharge observed, 13,000 ft³/s (368 m³/s) Mar. 8, 1904 (gage height, 15.0 ft or 4.57 m, site and datum then in use); minimum, 0.1 ft³/s (0.003 m³/s) Apr. 29, Aug. 5, Sept. 18, 1934, Aug. 18-21, 1935.

REMARKS.--Records good. Flow regulated by many small reservoirs, total capacity now, about 144,000 acre-ft (178 hm³). Diversions for irrigation of about 39,000 acres (158 km²) above station. See schematic diagram of Pit and McCloud River basins. Records of chemical analyses and water temperatures for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1445: 1904, 1935(M), 1936, 1937(M). WSP 1931: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	71	62	424	215	268	667	1,580	412	98	33	84	83
2	60	64	316	117	244	803	1,430	464	170	17	54	90
3	47	64	264	108	220	785	1,430	494	247	119	64	91
4	36	71	211	99	206	665	1,220	495	209	112	61	91
5	31	105	178	94	198	577	967	495	165	67	55	103
6	29	92	171	90	188	857	793	520	206	40	45	112
7	43	91	254	96	180	1,280	673	530	323	34	47	101
8	40	104	254	106	182	1,300	599	515	255	117	42	97
9	32	104	203	100	177	939	553	505	227	175	39	100
10	31	124	167	95	172	805	515	555	246	156	42	86
11	32	127	170	86	167	957	487	620	255	132	50	89
12	32	181	168	89	170	1,310	478	680	207	150	54	89
13	38	201	163	180	165	1,850	459	732	170	152	51	77
14	161	195	164	419	163	1,770	428	728	130	159	45	75
15	127	177	190	1,230	169	1,800	434	723	111	160	39	74
16	69	172	204	2,140	179	1,930	447	691	133	139	34	75
17	55	214	340	2,150	185	1,890	438	646	117	128	33	90
18	62	253	353	1,780	182	1,760	474	565	113	103	33	93
19	58	260	283	2,300	196	1,520	543	546	116	85	32	85
20	55	214	214	2,610	199	1,200	590	564	78	82	33	77
21	66	178	214	1,790	188	953	633	549	73	73	28	75
22	53	152	222	1,500	172	803	580	408	101	35	25	77
23	51	153	214	1,040	150	719	534	397	130	33	28	78
24	62	133	201	605	150	653	502	359	107	35	26	79
25	85	128	204	476	172	618	477	320	79	30	31	76
26	73	129	220	407	206	621	456	257	78	28	59	73
27	71	158	217	354	299	637	451	240	72	28	73	73
28	66	182	330	319	349	668	456	285	66	18	61	73
29	80	254	616	294	-----	765	442	296	62	9.0	46	72
30	73	333	786	269	-----	1,660	410	313	59	21	47	71
31	66	-----	545	266	-----	1,770	-----	187	-----	81	67	-----
TOTAL	1,855	4,675	8,460	21,424	5,496	34,532	19,479	15,091	4,403	2,551.0	1,428	2,525
MEAN	59.8	156	273	691	196	1,114	649	487	147	82.3	46.1	84.2
MAX	161	333	786	2,610	349	1,930	1,580	732	323	175	84	112
MIN	29	62	163	86	150	577	410	187	59	9.0	25	71
AC-FT	3,680	9,270	16,780	42,490	10,900	68,490	38,640	29,930	8,730	5,060	2,830	5,010
CAL YR 1973	TOTAL	71,028.0	MEAN	195	MAX	1,040	MIN	11	AC-FT	140,900		
WTR YR 1974	TOTAL	121,919.0	MEAN	334	MAX	2,610	MIN	9.0	AC-FT	241,800		

11350500 ASH CREEK AT ADIN, CALIF.

LOCATION.--Lat 41°11'54", long 120°56'32", in SE¼SW¼ sec.21, T.39 N., R.9 E., Modoc County, on left bank 300 ft (91 m) upstream from highway bridge at Adin, and 0.4 mi (0.6 km) upstream from Butte Creek.

DRAINAGE AREA.--258 mi² (668 km²).

PERIOD OF RECORD.--March 1904 to December 1905, October 1928 to November 1932, October 1957 to current year. Records of daily discharge for Oct. 19-31, 1928, are in error and should not be used.

GAGE.--Water-stage recorder. Altitude of gage is 4,190 ft (1,277 m), estimated, on basis of bench mark 300 ft (91 m) downstream. Prior to Sept. 12, 1957, water-stage recorder or nonrecording gage at sites within 1 mi (1.6 km) of present site, at different datums.

AVERAGE DISCHARGE.--22 years (1904-5, 1928-32, 1957-74), 77.8 ft³/s (2.203 m³/s), 56,370 acre-ft/yr (69.5 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,790 ft³/s (79.0 m³/s) Jan. 19 (gage height, 14.37 ft or 4.380 m); minimum daily, 9.3 ft³/s (0.26 m³/s) Aug. 29.
Period of record: Maximum discharge, 2,950 ft³/s (83.5 m³/s) Jan. 24, 1970 (gage height, 14.69 ft or 4.478 m in gage well, 15.24 ft or 4.645 m, from floodmarks); no flow for part of Aug. 26, 1962.

REMARKS.--Small diversions above station for irrigation. Flow regulated by many small reservoirs, total capacity, 4,732 acre-ft (5.83 hm³). See schematic diagram of Pit and McCloud River basins.

COOPERATION.--Records furnished by California Department of Water Resources and reviewed by Geological Survey.

REVISIONS (WATER YEARS).--WSP 1931: Drainage area. WRD Calif. 1966: 1958(M), 1960(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	28	121	78	107	289	1,110	153	36	19	27	14
2	20	29	94	54	73	253	784	165	35	19	28	16
3	20	31	78	65	68	201	727	168	28	21	29	17
4	17	31	64	44	74	179	524	165	25	21	27	17
5	18	32	58	59	62	188	445	164	28	22	32	18
6	28	32	73	55	53	422	414	164	34	20	29	17
7	39	33	86	46	55	382	344	163	32	17	27	17
8	31	32	77	43	55	232	317	167	32	26	26	17
9	27	30	62	47	56	212	307	168	28	32	25	19
10	31	32	56	46	58	366	288	159	24	40	24	19
11	28	39	60	49	57	573	264	143	25	36	22	19
12	26	81	59	57	61	573	237	134	22	33	23	20
13	26	66	60	115	56	430	214	128	21	30	23	21
14	25	60	70	266	57	380	202	120	19	27	22	22
15	25	61	75	891	54	473	198	109	20	25	22	23
16	26	93	87	670	60	511	193	100	22	24	27	23
17	25	101	276	512	59	665	194	101	22	23	30	22
18	25	92	128	776	63	543	226	99	22	22	27	21
19	25	60	86	1,810	73	458	227	90	22	21	25	20
20	31	52	79	866	66	389	200	76	25	21	26	19
21	27	48	135	453	64	338	187	64	26	19	25	18
22	27	47	135	281	64	309	186	60	21	19	24	20
23	34	46	113	211	58	283	193	52	21	16	24	20
24	30	47	97	164	70	268	187	43	21	29	26	20
25	37	47	131	146	114	265	176	44	21	22	26	20
26	29	46	109	127	134	274	166	44	23	31	26	20
27	36	49	187	103	114	279	159	38	23	30	25	21
28	30	66	246	96	105	310	150	33	22	28	17	21
29	29	72	365	87	-----	897	143	34	20	24	9.3	22
30	29	167	149	83	-----	760	144	37	19	23	10	23
31	27	-----	108	90	-----	575	-----	34	-----	25	12	-----
TOTAL	847	1,650	3,524	8,390	1,990	12,277	9,106	3,219	739	765	745.3	586
MEAN	27.3	55.0	114	271	71.1	396	304	104	24.6	24.7	24.0	19.5
MAX	39	167	365	1,810	134	897	1,110	168	36	40	32	23
MIN	17	28	56	43	53	179	143	33	19	16	9.3	14
AC-FT	1,680	3,270	6,990	16,640	3,950	24,350	18,060	6,380	1,470	1,520	1,480	1,160
CAL YR 1973	TOTAL	22,947.8	MEAN	62.9	MAX	579	MIN	9.8	AC-FT	45,520		
WTR YR 1974	TOTAL	43,838.3	MEAN	120	MAX	1,810	MIN	9.3	AC-FT	86,950		

SACRAMENTO RIVER BASIN

11352000 PIT RIVER NEAR BIEBER, CALIF.

LOCATION.--Lat 41°00'55", long 121°09'13", in NE¼SW¼ sec.27, T.37 N., R.7 E., Modoc County, on right bank 2.2 mi (3.5 km) upstream from Spring Gulch, and 7.4 mi (11.9 km) south of Bieber.

DRAINAGE AREA.--2,475 mi² (6,410 km²), excluding Goose Lake basin.

PERIOD OF RECORD.--January 1904 to September 1908, December 1913 to August 1914, September 1921 to September 1926, November 1928 to September 1931, October 1951 to current year. Yearly figures only for some periods, published in WSP 1315-A.

GAGE.--Water-stage recorder. Datum of gage is 4,080.4 ft (1,243.71 m) above mean sea level. Prior to November 1928, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--36 years (1903-8, 1921-26, 1928-31, 1951-74), 530 ft³/s (15.0 m³/s), 384,000 acre-ft/yr (473 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 9,980 ft³/s (283 m³/s) Jan. 20 (gage height, 10.24 ft or 3.121 m); minimum daily, 1.5 ft³/s (0.042 m³/s) Aug. 13, 19.
Period of record: Maximum discharge, 33,800 ft³/s (957 m³/s) Mar. 19, 1907 (gage height, 16.7 ft or 5.09 m), from rating curve extended above 11,000 ft³/s (312 m³/s); no flow at times in some years.

REMARKS.--Records good except those for the period of no gage-height record, which are fair. Flow regulated by many small reservoirs, total capacity now, 204,000 acre-ft (252 hm³). Diversions for irrigation of 33,000 acres (134 km²) between stations near Canby and near Bieber. See schematic diagram of Pit and McCloud River basins.

REVISIONS (WATER YEARS).--WSP 1285: 1907, 1930. WSP 1315-A: 1914(M). WSP 1931: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	104	90	844	1,260	886	1,200	5,360	712	161	4.8	3.4	5.6
2	49	94	1,070	712	928	1,680	5,420	670	111	3.3	3.6	5.2
3	32	82	956	418	816	2,160	5,330	670	99	3.0	3.8	6.0
4	61	80	718	280	730	2,360	4,230	706	66	4.9	3.7	6.4
5	128	82	560	210	646	2,100	3,540	706	53	8.0	3.5	6.0
6	58	123	495	200	550	2,060	3,030	712	52	9.4	3.1	4.8
7	50	161	545	195	505	2,770	2,580	688	45	10	2.6	5.2
8	38	140	748	185	510	2,840	2,120	652	44	100	2.3	5.2
9	26	202	795	180	500	2,970	1,820	635	82	250	1.9	4.8
10	30	202	605	185	482	2,720	1,750	664	50	210	1.6	5.2
11	46	295	505	220	466	2,620	1,570	706	73	180	1.6	4.8
12	59	664	535	240	458	2,990	1,400	712	201	160	1.6	4.0
13	66	921	490	350	446	3,320	1,300	670	215	170	1.5	4.0
14	78	879	478	850	434	3,420	1,200	640	145	170	1.6	3.3
15	54	706	555	1,910	426	3,370	1,110	640	132	175	1.8	3.3
16	80	590	555	3,800	430	3,480	1,050	635	143	175	1.8	4.0
17	86	610	787	5,620	446	3,760	986	696	117	160	1.9	3.6
18	119	830	1,280	6,610	454	4,100	994	724	91	145	1.8	5.2
19	119	879	1,160	7,900	478	4,120	1,070	754	78	120	1.5	20
20	109	635	830	9,360	505	3,640	1,150	688	70	100	1.9	14
21	91	525	730	6,850	505	3,110	1,140	640	66	60	1.8	8.9
22	84	410	1,030	5,030	478	2,630	1,130	512	58	30	1.9	13
23	132	362	1,090	3,670	462	2,200	1,070	390	54	20	2.8	12
24	104	338	879	2,930	446	1,900	1,000	414	46	10	2.8	8.9
25	85	320	748	2,170	490	1,690	970	426	38	8.6	2.8	6.8
26	132	295	795	1,570	575	1,600	928	205	32	7.0	3.3	8.3
27	104	288	809	1,300	694	1,590	886	115	25	5.0	3.0	30
28	82	309	986	1,110	774	1,690	851	79	15	2.8	2.8	11
29	79	406	1,430	994	-----	2,160	816	104	11	2.2	3.3	5.2
30	85	555	1,730	879	-----	3,120	760	267	7.0	2.0	3.6	11
31	106	-----	1,630	823	-----	5,040	-----	346	-----	2.6	4.0	-----
TOTAL	2,476	12,073	26,368	68,011	15,520	84,410	56,561	17,178	2,380.0	2,308.6	78.6	235.7
MEAN	79.9	402	851	2,194	554	2,723	1,885	554	79.3	74.5	2.54	7.86
MAX	132	921	1,730	9,360	928	5,040	5,420	754	215	250	4.0	30
MIN	26	80	478	180	426	1,200	760	79	7.0	2.0	1.5	3.3
AC-FT	4,910	23,950	52,300	134,900	30,780	167,400	112,200	34,070	4,720	4,580	156	468

CAL YR 1973 TOTAL 131,070.49 MEAN 359 MAX 2,900 MIN 0 AC-FT 260,000
WTR YR 1974 TOTAL 287,599.90 MEAN 788 MAX 9,360 MIN 1.5 AC-FT 570,500

NOTE.--No gage-height record June 18 to Aug. 7.

11355500 HAT CREEK NEAR HAT CREEK, CALIF.

LOCATION.--Lat 40°41'12", long 121°25'25", in NE¼SE¼ sec.28, T.33 N., R.5 E., Shasta County, on right bank 0.8 mi (1.3 km) northeast of Old Station Post Office, and 8 mi (13 km) southeast of Hat Creek Post Office.

DRAINAGE AREA.--162 mi² (420 km²), hydrologic drainage boundary uncertain owing to ground-water exchange.

PERIOD OF RECORD.--July 1926 to September 1929, April 1930 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 4,300 ft (1,311 m), from topographic map. July 1926 to April 1928 at site 0.5 mi (0.8 km) upstream at different datum. May 1928 to July 1965 at site 80 ft (24 km) upstream at datum 2.76 ft (0.841 m) higher.

AVERAGE DISCHARGE.--47 years, 139 ft³/s (3.936 m³/s), 100,700 acre-ft/yr (124 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,220 ft³/s (34.6 m³/s) Nov. 11 (gage height, 6.26 ft or 1.908 m in gage well, 7.1 ft or 2.16 m, from high-water marks); minimum daily, 133 ft³/s (3.77 m³/s) Jan. 10.
Period of record: Maximum discharge, 3,320 ft³/s (94.0 m³/s) Dec. 11, 1937 (gage height, 7.75 ft or 2.362 m in gage well, affected by drawdown, site and datum then in use), from rating curve extended above 610 ft³/s (17.3 m³/s) on basis of slope-area measurement of maximum flow; minimum, 67 ft³/s (1.90 m³/s) Sept. 7, 1934.

REMARKS.--Records excellent. Diversions for irrigation of 260 acres (1.05 km²) above station. See schematic diagram of Pit and McCloud River basins.

REVISIONS (WATER YEARS).--WSP 1395: 1938. WSP 1931: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	144	147	144	149	173	144	189	181	287	282	199	177
2	143	147	149	140	169	147	183	188	292	274	200	177
3	144	146	152	144	167	151	182	191	310	261	202	183
4	144	146	152	136	167	153	183	195	307	259	203	176
5	144	144	157	143	164	156	180	204	304	265	206	175
6	145	149	157	140	161	160	178	215	300	266	205	175
7	153	176	157	137	164	157	176	217	297	258	201	173
8	149	190	155	136	162	153	174	236	278	320	200	177
9	147	321	152	134	161	153	175	257	283	348	198	182
10	146	521	152	133	159	155	176	251	298	291	194	182
11	146	950	153	134	159	155	177	248	308	268	195	182
12	145	638	152	138	159	154	178	246	318	258	190	182
13	145	272	152	145	157	152	180	237	319	247	187	182
14	145	222	152	154	156	155	182	233	322	232	186	182
15	144	202	150	363	156	158	182	234	321	228	186	182
16	144	194	150	427	157	158	183	225	305	227	185	182
17	144	189	160	301	155	164	185	218	286	225	184	181
18	144	179	155	288	156	165	183	207	292	223	183	174
19	144	172	152	313	157	163	180	205	292	221	183	167
20	146	171	151	250	153	162	178	200	272	217	183	165
21	147	167	151	219	154	161	179	190	279	214	182	168
22	162	160	150	205	153	161	184	197	285	214	181	168
23	165	158	150	197	151	162	189	209	287	211	180	165
24	152	157	149	192	153	164	184	220	282	209	184	167
25	150	156	149	189	153	165	180	247	272	207	187	166
26	149	155	149	184	153	168	178	282	260	213	187	166
27	148	153	151	180	152	165	176	310	256	209	187	166
28	148	152	151	178	149	192	175	315	262	206	186	171
29	147	155	172	176	-----	241	170	296	270	203	184	176
30	147	160	162	174	-----	201	171	282	277	200	178	176
31	147	-----	157	173	-----	199	-----	283	-----	199	177	-----
TOTAL	4,568	6,849	4,745	5,972	4,430	5,094	5,390	7,219	8,721	7,455	5,883	5,245
MEAN	147	228	153	193	158	164	180	233	291	240	190	175
MAX	165	950	172	427	173	241	189	315	322	348	206	183
MIN	143	144	144	133	149	144	170	181	256	199	177	165
AC-FT	9,060	13,580	9,410	11,850	8,790	10,100	10,690	14,320	17,300	14,790	11,670	10,400
CAL YR 1973	TOTAL 60,728 MEAN 166 MAX 950 MIN 135 AC-FT 120,500											
WTR YR 1974	TOTAL 71,571 MEAN 196 MAX 950 MIN 133 AC-FT 142,000											

PEAK DISCHARGE (BASE, 220 FT ³ /S)							
DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-7	2300	3.49	235	5-8	2400	3.70	272
11-11	1000	6.26	1,220	5-28	0030	4.09	352
1-16	0230	4.57	471	6-15	0015	4.09	352
3-29	0130	3.70	272	7-9	0030	4.43	432

SACRAMENTO RIVER BASIN

11360500 BURNEY CREEK NEAR BURNEY, CALIF.

LOCATION.--Lat 40°52'16", long 121°40'57", in SE¼SW¼ sec.19, T.35 N., R.3 E., Shasta County, on right bank 300 ft (91 m) upstream from road bridge, 0.8 mi (1.3 km) southwest of Burney, and 4.5 mi (7.2 km) upstream from Goose Creek.

DRAINAGE AREA.--88.8 mi² (230.0 km²).

PERIOD OF RECORD.--August 1911 to August 1913 (published as "at Burney"), March 1921 to September 1922, April 1958 to September 1964, October 1965 to current year. Monthly discharge only for some periods, published in WSP 1315-A.

GAGE.--Water-stage recorder. Altitude of gage is 3,180 ft (969 m), from topographic map. August 1911 to August 1913 and March 1921 to September 1922, nonrecording gage or water-stage recorder at different site and datum.

AVERAGE DISCHARGE.--18 years (1911-13, 1921-22, 1958-64, 1965-74), 72.2 ft³/s (2.045 m³/s), 52,310 acre-ft/yr (64.5 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,890 ft³/s (81.8 m³/s) Jan. 15 (gage height, 13.81 ft or 4.209 m); minimum daily, 13 ft³/s (0.37 m³/s) Oct. 4, Sept. 10.

Period of record: Maximum discharge, 4,910 ft³/s (139 m³/s) Jan. 23, 1970 (gage height, 15.89 ft or 4.843 m), from rating curve extended above 2,500 ft³/s (70.8 m³/s) on basis of contracted-opening measurement of maximum flow; minimum, 3.4 ft³/s (0.096 m³/s) Aug. 4, 1961.

REMARKS.--Small diversions upstream for irrigation. Slight regulation probably caused by logging operations.

COOPERATION.--Records furnished by California Department of Water Resources and reviewed by Geological Survey.

REVISION (WATER YEARS).--WSP 1931: Drainage area. WRD Calif. 1971: 1970.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	23	409	230	284	235	564	195	118	47	32	25
2	18	23	274	190	258	238	453	195	119	45	33	25
3	16	21	203	171	231	239	342	193	118	43	33	24
4	13	21	169	150	224	219	304	188	116	42	32	24
5	15	48	151	141	207	216	329	188	113	42	32	24
6	21	85	145	130	197	233	343	192	110	42	31	23
7	46	171	161	120	197	233	320	197	107	41	31	23
8	31	170	159	100	193	216	327	204	99	60	30	24
9	25	264	138	106	186	203	348	203	96	65	30	22
10	22	414	127	110	182	202	314	192	94	60	29	13
11	19	1,120	150	113	178	264	296	184	92	54	29	18
12	19	1,100	134	105	177	263	287	179	89	50	28	18
13	19	653	161	291	170	249	271	172	87	47	28	18
14	18	387	141	469	166	248	263	164	84	45	27	18
15	18	345	132	2,140	156	254	258	159	78	45	27	19
16	15	496	127	2,190	174	259	255	153	77	44	26	19
17	17	498	184	1,090	160	318	253	150	75	43	26	20
18	19	405	173	1,020	161	300	253	147	71	41	24	20
19	18	274	142	1,300	186	271	237	140	73	40	24	21
20	19	216	137	731	168	255	227	130	72	39	24	21
21	20	186	164	601	165	245	224	124	68	39	22	21
22	42	169	165	557	152	243	227	122	64	38	22	22
23	77	147	153	493	154	234	231	120	61	38	25	22
24	44	131	138	423	152	230	224	120	58	37	25	22
25	32	125	141	372	152	234	217	122	55	36	25	22
26	27	114	138	325	160	268	206	128	55	34	23	20
27	25	106	200	298	154	390	197	131	54	34	24	19
28	24	116	334	279	208	399	190	131	52	34	24	19
29	23	144	578	262	-----	802	188	129	50	33	25	19
30	23	339	396	249	-----	1,000	190	125	48	34	25	19
31	23	-----	287	267	-----	480	-----	120	-----	34	25	-----
TOTAL	766	8,311	6,111	15,023	5,152	9,440	8,338	4,897	2,453	1,326	841	624
MEAN	24.7	277	197	485	184	305	278	158	81.8	42.8	27.1	20.8
MAX	77	1,120	578	2,190	284	1,000	564	204	119	65	33	25
MIN	13	21	127	100	152	202	188	120	48	33	22	13
AC-FT	1,520	16,480	12,120	29,800	10,220	18,720	16,540	9,710	4,870	2,630	1,670	1,240
CAL YR 1973	TOTAL 35,386.3		MEAN 96.9	MAX 1,120	MIN 8.3	AC-FT 70,190						
WTR YR 1974	TOTAL 63,282.0		MEAN 173	MAX 2,190	MIN 13	AC-FT 125,500						

RESERVOIRS IN PIT AND McCLOUD RIVER BASINS, CALIF.

11361400 LAKE BRITTON NEAR BURNEY.--Lat 41°01'20", long 121°40'32", in SW¼SW¼ sec.30, T.37 N., R.3 E., Shasta County, Shasta National Forest, at control house on right bank 200 ft (61 m) upstream from dam on Pit River, 1.1 mi (1.8 km) downstream from Clark Creek, 1.3 mi (2.1 km) northwest of Burney Falls, and 9 mi (14 km) north of Burney. Drainage area, 4,607 mi² (11,930 km²). Period of record, October 1965 to current year. Gage is a remote telemark read once daily. Datum of gage is at mean sea level (levels by Pacific Gas and Electric Co.). Extremes for current year: Maximum contents, 17,028 acre-ft (21.0 hm³) Jan. 19 (elevation, 2,758.40 ft or 840.760 m); minimum, 3,886 acre-ft (4.79 hm³) Oct. 19 (elevation, 2,747.90 ft or 837.560 m). Extremes for period of record: Maximum contents, 20,445 acre-ft (25.2 hm³) Jan. 25, 1970 (elevation, 2,761.55 ft or 841.720 m); minimum, 719 acre-ft (887,000 m³) Feb. 1, 1968 (elevation, 2,744.75 ft or 836.600 m).

Reservoir is formed by gravity-type concrete dam. Storage began July 15, 1925. Maximum storage, 40,600 acre-ft (50.1 hm³). Record of contents collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project. See schematic diagram of Pit and McCloud River basins.

11363920 IRON CANYON RESERVOIR NEAR BIG BEND.--Lat 41°02'41", long 121°58'52", in SW¼SE¼ sec.21, T.37 N., R.1 W., Shasta County, Shasta National Forest, in control house on left bank 500 ft (150 m) upstream from Iron Canyon Dam on Iron Canyon Creek, 3.7 mi (6.0 km) northwest of Big Bend. Drainage area, 11.1 mi² (28.7 km²). Period of record, December 1965 to current year. Gage is a water-stage recorder. Datum of gage is at mean sea level (levels by Pacific Gas and Electric Co.). Extremes for current year: Maximum contents, 12,424 acre-ft (15.3 hm³) Sept. 1 (elevation, 2,636.08 ft or 803.477 m); minimum, 3,269 acre-ft (4.03 hm³) Jan. 25 (elevation, 2,593.60 ft or 790.529 m). Extremes for period of record: Maximum contents, 22,800 acre-ft (28.1 hm³) July 24, 1968 (elevation, 2,662.07 ft or 811.399 m); normal minimum since initial operation of reservoir, 2,860 acre-ft (3.53 hm³) May 23, 24, 29, June 2, 7, 9, 14, 23, 24, 1966 (elevation, 2,590.00 ft or 789.432 m). Reservoir drained for inspection Feb. 10, 1971. Contents reduced to 195 acre-ft (240,000 m³), elevation, 2,540.00 ft or 774.192 m.

Reservoir is formed by a rockfill dam completed in 1965. Capacity is 24,200 acre-ft (29.8 hm³) between elevations 2,525.00 ft (769.620 m), invert of sluice pipe and 2,665.00 ft (812.292 m), crest of spillway. No dead storage. Water is diverted from Lake McCloud through a tunnel to Iron Canyon Reservoir and thence into the Pit River via a powerplant. Record of contents collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project. See schematic diagram of Pit and McCloud River basins.

11367740 LAKE McCLOUD NEAR McCLOUD.--Lat 41°08'06", long 122°04'26", in SE¼SW¼ sec.22, T.38 N., R.2 W., Shasta County, Shasta National Forest, on McCloud Dam near spillway on McCloud River, 200 ft (61 m) downstream from Panther Creek, and 8.8 mi (14.1 km) southeast of McCloud. Drainage area, 403 mi² (1,044 km²). Period of record, October 1965 to current year. Gage is a water-stage recorder. Datum of gage is at mean sea level (levels by Pacific Gas and Electric Co.). Extremes for current year: Maximum contents, 35,967 acre-ft (44.3 hm³) Jan. 15 (elevation, 2,681.40 ft or 817.291 m); minimum, 18,293 acre-ft (22.6 hm³) Oct. 20 (elevation, 2,640.60 ft or 804.855 m). Extremes for period of record: Maximum contents, 35,967 acre-ft (44.3 hm³) Jan. 15, 1974 (elevation, 2,681.40 ft or 817.291 m); minimum since storage pool first filled, 15,700 acre-ft (19.4 hm³) Jan. 22, 1967 (elevation, 2,632.60 ft or 802.416 m).

Reservoir is formed by a rockfill dam completed in 1965. Capacity, 35,234 acre-ft (43.4 hm³) between elevations 2,471.30 ft (753.252 m), invert of sluice pipe and 2,680.00 ft (816.864 m), maximum operational water surface. No dead storage. Water is diverted from Lake McCloud through a diversion tunnel to Iron Canyon Reservoir and thence into the Pit River. Record of contents collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project. See schematic diagram of Pit and McCloud River basins.

MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

Date	Elevation (feet)	Contents (acre- feet)	Change in contents (acre- feet)	Elevation (feet)	Contents (acre- feet)	Change in contents (acre- feet)	Elevation (feet)	Contents (acre- feet)	Change in contents (acre- feet)
Lake Britton			Iron Canyon Reservoir			Lake McCloud			
Sept. 30.....	2,756.40	13,689	--	2,625.00	9,211	--	2,645.00	19,853	--
Oct. 31.....	2,750.55	6,754	-6,935	2,622.90	8,666	-545	2,645.40	19,999	+146
Nov. 30.....	2,748.20	4,201	-2,553	2,595.10	3,454	-5,212	2,678.50	34,460	+14,461
Dec. 31.....	2,754.05	10,804	+6,603	2,595.00	3,441	-13	2,673.00	31,716	-2,744
CAL YR 1973	--	--	+7,231	--	--	-5,250	--	--	+7,192
Jan. 31.....	2,753.40	10,030	-774	2,595.80	3,543	+102	2,677.90	34,153	+2,437
Feb. 28.....	2,753.25	9,853	-177	2,594.90	3,429	-114	2,671.00	30,755	-3,398
Mar. 31.....	2,757.00	14,443	+4,590	2,602.60	4,505	+1,076	2,677.80	34,102	+3,347
Apr. 30.....	2,753.20	9,794	-4,649	2,594.80	3,416	-1,089	2,677.80	34,102	0
May 31.....	2,750.50	6,698	-3,096	2,594.30	3,354	-62	2,678.50	34,460	+358
June 30.....	2,756.10	13,312	+6,614	2,604.10	4,743	+1,389	2,674.00	32,203	-2,257
July 31.....	2,753.50	10,148	-3,164	2,630.00	11,469	+6,726	2,676.70	33,545	+1,342
Aug. 31.....	2,752.55	9,033	-1,115	2,631.40	10,992	-477	2,676.10	33,244	-301
Sept. 30.....	2,753.85	10,565	+1,532	2,605.40	4,958	-6,034	2,653.80	23,218	-10,026
WTR YR 1974	--	--	-3,124	--	--	-4,253	--	--	+3,365

SACRAMENTO RIVER BASIN

11362500 PIT RIVER BELOW PIT NO. 4 DAM, CALIF.

LOCATION.--Lat 40°58'25", long 121°46'42", unsurveyed, T.36 N., R.2 E., Shasta County, Shasta National Forest, on right bank 0.6 mi (1.0 km) downstream from Ruling Creek, 1.3 mi (2.1 km) downstream from Pit No. 4 dam, and 2.7 mi (4.3 km) downstream from Pit No. 3 powerhouse.

DRAINAGE AREA.--4,648 mi² (12,036 km²), excluding Goose Lake basin.

PERIOD OF RECORD.--May 1922 to current year. Monthly discharge only for some periods, published in WSP 1315-A. Published as "near Pecks Bridge" April to October 1922, and as "at Lindsay Flat" November 1922 to June 1927.

GAGE.--Water-stage recorder. Altitude of gage is 2,358 ft (718.7 m), from river-profile map. Prior to November 1922, water-stage recorder at site at Pecks Bridge 7.4 mi (11.9 km) upstream at different datum. November 1922 to June 20, 1927, at site at Lindsay Flat 1.8 mi (2.9 km) upstream at different datum.

AVERAGE DISCHARGE.--64 years (1910-74), 2,789 ft³/s (78.98 m³/s), 2,020,000 acre-ft/yr (2,490 hm³/yr), including diversion to Pit No. 4 powerplant. Period 1910-22 extrapolated on basis of records for Pit River at Big Bend.

EXTREMES.--Current year: Maximum discharge, 18,300 ft³/s (518 m³/s) Jan. 19 (gage height, 14.71 ft or 4.484 m); minimum daily, 61 ft³/s (1.73 m³/s) Dec. 8-10, 12, Feb. 22, 25-27.
Period of record: Maximum discharge, 31,000 ft³/s (878 m³/s) Jan. 25, 1970 (gage height, 18.04 ft or 5.499 m), from rating curve extended above 17,000 ft³/s (481 m³/s); minimum daily, 234 ft³/s (6.63 m³/s) Sept. 13, 1953. Minimum daily discharge since diversion to Pit No. 4 powerplant in 1955, 22 ft³/s (0.62 m³/s) Dec. 2-4, 1969.

REMARKS.--Flow regulated by many small reservoirs and powerplants, total usable reservoir capacity, 253,000 acre-ft (312 hm³). Many diversions above station; diversion to Pit No. 4 powerplant began June 9, 1955. See schematic diagram of Pit and McCloud River basins.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

REVISIONS (WATER YEARS).--WSP 843: 1935(M). WSP 1315-A: 1928(M). WSP 1931: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	457	90	74	1,250	864	1,760	8,870	379	162	157	161	172
2	360	85	66	468	593	2,970	8,560	407	161	158	162	156
3	501	88	67	124	711	2,920	7,970	430	159	157	163	159
4	337	88	177	66	615	2,780	6,630	381	159	157	160	157
5	112	87	122	69	432	2,510	4,830	323	159	158	162	159
6	108	87	67	66	224	2,420	4,290	285	159	153	162	169
7	119	86	65	67	112	3,280	3,890	316	157	161	161	168
8	106	85	61	66	133	3,420	3,040	300	160	161	161	157
9	113	87	61	66	82	3,070	2,650	308	162	156	158	167
10	107	87	61	64	75	3,000	2,480	228	159	159	159	174
11	109	94	62	66	69	3,100	2,160	226	159	165	156	177
12	107	86	61	66	66	3,320	1,900	257	160	159	161	174
13	108	461	63	70	63	3,440	1,670	254	166	157	158	176
14	106	1,220	69	74	64	3,690	1,490	267	159	157	158	159
15	104	1,010	231	3,060	101	3,800	1,330	297	163	163	160	150
16	105	1,040	127	10,100	67	3,670	1,240	408	159	158	160	159
17	109	924	67	11,500	64	3,860	1,130	389	160	162	159	164
18	107	950	136	12,700	65	4,500	1,080	383	160	163	157	162
19	110	1,010	504	15,700	65	4,420	1,050	297	162	157	160	168
20	110	744	451	14,700	63	3,920	973	252	159	160	151	153
21	111	256	327	12,600	63	3,570	1,010	246	159	160	157	165
22	163	92	594	8,900	61	3,010	957	228	161	159	165	174
23	108	86	729	6,210	62	2,600	814	171	160	166	172	172
24	107	86	537	4,280	62	2,060	962	163	160	167	174	180
25	104	87	278	3,480	61	1,810	845	162	157	167	173	179
26	104	87	120	2,510	61	1,700	841	161	157	163	169	176
27	107	86	90	1,900	61	1,690	748	161	158	160	160	175
28	104	86	464	1,630	143	2,000	643	160	164	161	170	171
29	103	87	1,790	1,350	-----	2,570	509	161	160	161	169	163
30	103	89	2,140	902	-----	5,650	461	160	159	160	173	177
31	101	-----	1,910	812	-----	7,920	-----	160	-----	161	177	-----
TOTAL	4,610	9,451	11,571	114,916	5,102	100,430	75,023	8,320	4,799	4,963	5,048	5,012
MEAN	149	315	373	3,707	182	3,240	2,501	268	160	160	163	167
MAX	501	1,220	2,140	15,700	864	7,920	8,870	430	166	167	177	180
MIN	101	85	61	64	61	1,690	461	160	157	153	151	150
AC-FT	9,140	18,750	22,950	227,900	10,120	199,200	148,800	16,500	9,520	9,840	10,010	9,940
MEAN a	3,094	3,342	3,813	6,956	3,382	6,552	5,811	3,375	1,909	2,177	2,110	2,485
AC-FT a190,200	198,800	234,400	427,700	187,800	402,900	345,800	207,500	113,600	133,800	129,700	147,800	
CAL YR 1973 TOTAL	76,504		MEAN 210	MAX 3,640	MIN 59	AC-FT 151,700	MEAN a 2,961	AC-FT a 2,144,000				
WTR YR 1974 TOTAL	349,245		MEAN 957	MAX 15,700	MIN 61	AC-FT 692,700	MEAN a 3,758	AC-FT a 2,721,000				

a Adjusted for diversion to Pit No. 4 powerplant.

11363000 PIT RIVER AT BIG BEND, CALIF.

LOCATION.--Lat 41°01'10", long 121°54'36", in NW¼SW¼ sec.31, T.37 N., R.1 E., Shasta County, on left bank at Big Bend, 0.4 mi (0.6 km) downstream from Nelson Creek, and 1.5 mi (2.4 km) upstream from Kosk Creek.

DRAINAGE AREA.--4,711 mi² (12,199 km²), excluding Goose Lake basin.

PERIOD OF RECORD.--October 1910 to current year. Monthly discharge only for some periods, published in WSP 1315-A. Published as "at Henderson" 1910-23.

GAGE.--Water-stage recorder. Datum of gage is 1,674.47 ft (510.378 m) above mean sea level. Prior to Dec. 28, 1912, nonrecording gage and Dec. 28, 1912, to June 21, 1924, water-stage recorder at same site at datum 7.69 ft (2.344 m) higher.

AVERAGE DISCHARGE (prior to diversion to Pit No. 5 powerplant).--33 years (1910-43), 2,931 ft³/s (83.0 m³/s), 2,122,000 acre-ft/yr (2,616 hm³); 31 years (1943-74), 602 ft³/s (17.05 m³/s), 436,100 acre-ft/yr (53.8 hm³/yr), unadjusted.

EXTREMES.--Current year: Maximum discharge, 26,200 ft³/s (742 m³/s) Jan. 19 (gage height, 15.32 ft or 4.670 m); minimum daily, 91 ft³/s (2.58 m³/s) Nov. 3.

Period of record: Maximum discharge, 49,000 ft³/s (1,390 m³/s) Jan. 25, 1970 (gage height, 18.17 ft or 5.538 m in gage well, 19.0 ft or 5.79 m, from floodmarks), from rating curve extended above 17,000 ft³/s (481 m³/s), partly affected by gate operation at Pit No. 4 dam; minimum daily, 34 ft³/s (0.96 m³/s) Mar. 29, 1955.

REMARKS.--Flow regulated by many reservoirs and powerplants, total usable reservoir capacity, about 253,000 acre-ft (312 hm³). Many diversions above station; diversion to Pit No. 5 powerhouse began May 1, 1944. See schematic diagram of Pit and McCloud River basins.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

REVISIONS (WATER YEARS).--WSP 1345: 1911, 1914(M), 1916(M), 1917, 1928, 1935-36(M). WSP 1931: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NCV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	120	104	1,040	2,330	1,720	2,270	10,600	967	197	157	141	120
2	119	93	581	1,500	1,360	3,640	10,200	996	195	157	143	135
3	114	91	860	989	1,410	3,570	9,260	1,020	202	156	136	132
4	115	95	913	751	1,300	3,360	7,880	957	200	153	136	134
5	126	124	804	364	1,140	3,110	5,930	902	197	150	146	134
6	136	358	642	306	916	2,970	5,330	847	195	149	144	135
7	176	384	277	284	689	3,700	4,680	891	190	151	140	131
8	136	383	262	268	640	4,000	3,890	878	187	173	138	133
9	130	363	251	256	518	3,630	3,370	882	176	163	142	125
10	131	390	240	243	503	3,550	3,100	808	181	164	129	129
11	130	1,630	254	235	515	3,630	2,730	740	181	158	134	126
12	127	1,590	252	245	549	4,150	2,530	800	180	159	136	128
13	127	1,320	278	432	312	4,270	2,320	786	176	150	140	128
14	124	2,340	516	743	293	4,470	2,140	664	173	147	139	129
15	122	1,910	716	4,540	302	4,380	2,010	621	172	148	139	123
16	121	2,040	594	13,400	296	4,260	1,920	724	173	147	133	122
17	124	2,160	578	15,700	228	4,460	1,840	731	171	149	127	124
18	117	1,970	583	18,200	234	5,070	1,790	697	172	148	127	125
19	127	1,840	1,000	21,500	306	5,310	1,700	634	176	149	127	121
20	121	1,490	912	16,900	343	4,520	1,680	541	175	138	133	129
21	122	933	887	14,200	349	4,140	1,670	494	168	141	132	123
22	146	706	1,120	10,100	331	3,550	1,590	459	165	144	131	124
23	169	443	1,370	7,370	205	3,010	1,480	388	162	142	133	129
24	143	280	1,260	5,490	322	2,410	1,600	267	161	143	129	134
25	133	265	935	4,390	207	2,410	1,480	230	158	147	128	136
26	128	249	766	3,330	207	2,540	1,470	227	161	147	131	135
27	117	243	879	2,690	202	2,660	1,370	250	158	136	136	132
28	119	256	1,260	2,380	546	2,950	1,230	221	158	131	134	131
29	123	254	2,970	2,080	-----	4,710	1,080	218	158	143	133	127
30	120	522	3,040	1,630	-----	8,650	1,030	214	158	145	134	130
31	118	-----	2,930	1,680	-----	9,770	-----	209	-----	142	125	-----
TOTAL	3,981	24,826	28,970	154,526	15,943	125,120	98,900	19,263	5,276	4,627	4,176	3,864
MEAN	128	828	935	4,985	569	4,036	3,297	621	176	149	135	129
MAX	176	2,340	3,040	21,500	1,720	9,770	10,600	1,020	202	173	146	136
MIN	114	91	240	235	202	2,270	1,030	209	158	131	125	120
AC-FT	7,900	49,240	57,460	306,500	31,620	248,200	196,200	38,210	10,460	9,180	8,280	7,660

CAL YR 1973 TOTAL 129,615 MEAN 355 MAX 4,630 MIN 74 AC-FT 257,100
WTR YR 1974 TOTAL 489,472 MEAN 1,341 MAX 21,500 MIN 91 AC-FT 970,900

SACRAMENTO RIVER BASIN

11363910 JAMES B. BLACK POWERPLANT NEAR BIG BEND, CALIF.

LOCATION.--Lat 40°59'12", long 121°58'35", in SW¼SE¼ sec.9, T.36 N., R.1 W., Shasta County, at powerplant on right bank of Pit River, 5.8 mi (9.3 km) downstream from Big Bend.

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

GAGE.--Recorded output from powerplant turbines.

AVERAGE DISCHARGE.--8 years, 1,065 ft³/s (30.16 m³/s), 771,600 acre-ft/yr (95.14 hm³/yr).

EXTREMES.--Period of record: Maximum daily discharge, 2,420 ft³/s (68.5 m³/s) July 15, 1966; no flow for several days in each year.

REMARKS.--Water is diverted from Lake McCloud (see sta 11367740) at SE¼SW¼ sec.22, T.38 N., R.2 W., to Iron Canyon Reservoir (see sta 11363920), and then into the penstock for James B. Black powerplant. Records are combined flow of diversion from McCloud River at McCloud Dam plus Iron Canyon Creek.

COOPERATION.--Records furnished by Pacific Gas and Electric Co. in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	907	725	1,550	1,560	1,550	1,510	1,570	1,430	1,760	928	968	1,150
2	1,050	778	1,540	1,520	1,349	1,360	1,830	1,280	1,350	926	882	1,630
3	775	555	1,360	1,310	1,580	1,550	1,710	1,600	1,500	1,020	878	1,100
4	679	675	1,590	1,650	1,570	1,660	1,530	1,340	1,370	1,150	1,170	1,520
5	662	1,110	1,280	1,300	1,480	1,440	1,590	1,420	1,460	1,110	986	1,510
6	547	220	1,370	1,370	1,390	1,570	1,430	1,470	1,390	1,000	1,080	1,550
7	729	1,280	1,520	1,540	1,550	1,470	1,570	1,400	1,440	1,110	1,030	1,340
8	711	739	1,330	1,350	1,470	1,550	1,360	1,460	1,430	842	826	935
9	693	1,200	1,370	1,400	1,450	1,200	1,560	1,420	1,440	999	1,310	1,440
10	673	1,320	1,300	1,350	1,500	1,680	1,480	1,470	1,340	1,020	1,050	1,350
11	513	2,010	1,500	1,470	1,450	1,590	1,550	1,340	1,490	1,330	786	1,390
12	776	2,010	1,350	1,310	1,390	1,510	1,470	1,410	1,430	1,220	1,050	1,330
13	825	2,000	1,240	1,230	1,430	1,680	1,460	1,380	1,430	999	1,240	1,220
14	393	2,000	1,620	1,670	1,470	1,500	1,340	1,390	1,290	1,200	996	1,190
15	771	1,990	1,640	1,730	1,390	1,560	1,550	1,490	1,430	1,090	995	1,150
16	767	1,890	1,800	1,910	1,480	1,460	1,520	1,460	1,420	1,180	940	1,390
17	699	1,730	1,850	1,930	1,410	1,520	1,430	1,420	1,450	1,070	994	1,160
18	551	1,700	1,840	1,950	1,450	1,480	1,360	1,350	1,380	1,090	1,080	1,150
19	986	1,600	1,810	1,870	1,440	1,520	1,490	1,240	1,390	1,180	930	1,350
20	412	1,550	1,840	1,890	1,430	1,470	1,500	1,630	1,350	1,160	1,140	466
21	439	1,550	1,830	1,930	1,240	1,480	1,470	1,290	1,360	813	866	0
22	878	1,520	1,710	1,720	1,540	1,490	1,410	1,340	1,400	1,040	1,120	290
23	898	1,480	1,450	1,440	1,320	1,420	1,450	1,520	1,410	740	1,280	1,970
24	832	1,510	1,580	1,660	1,380	1,370	1,390	1,470	1,380	1,070	866	1,860
25	798	1,480	1,520	1,550	1,460	1,580	1,350	1,370	1,340	1,060	933	1,530
26	946	1,440	1,490	1,520	1,140	1,390	1,560	1,430	1,440	1,140	962	1,080
27	293	1,440	1,480	1,510	1,490	1,610	1,390	1,450	750	1,020	1,100	1,120
28	611	1,380	1,510	1,480	1,510	1,640	1,410	1,330	947	1,010	1,030	1,090
29	1,030	1,450	1,390	1,370	-----	1,570	1,400	1,100	1,300	842	714	1,080
30	977	1,690	1,410	1,490	-----	1,980	1,520	1,650	1,530	913	1,260	1,070
31	821	-----	1,610	1,690	-----	1,980	-----	1,430	-----	733	1,040	-----
TOTAL	22,642	42,022	47,680	48,670	40,300	47,790	45,050	43,780	41,397	32,005	31,502	36,411
MEAN	730	1,401	1,538	1,570	1,439	1,542	1,502	1,412	1,380	1,032	1,016	1,214
MAX	1,050	2,010	1,850	1,950	1,580	1,980	1,970	1,650	1,760	1,330	1,310	1,970
MIN	293	220	1,240	1,230	1,140	1,200	1,340	1,100	750	733	714	0
AC-FT	44,910	83,350	94,570	96,540	79,940	94,790	89,360	86,840	82,110	63,480	62,480	72,220
CAL YR 1973	TOTAL 401,031.00		MEAN 1,099		MAX 2,020		MIN 0		AC-FT 795,400			
WTR YR 1974	TOTAL 479,249.00		MEAN 1,313		MAX 2,010		MIN 0		AC-FT 950,600			

11363930 IRON CANYON CREEK BELOW IRON CANYON DAM, NEAR BIG BEND, CALIF.

LOCATION.--Lat 41°02'27", long 121°59'02", in NW¼NW¼ sec.28, T.37 N., R.1 W., Shasta County, on left bank 0.2 mi (0.3 km) downstream from Iron Canyon Dam, and 4.2 mi (6.8 km) west of Big Bend.

DRAINAGE AREA.--11.6 mi² (30.0 km²).

PERIOD OF RECORD.--August 1966 to current year.

GAGE.--Water-stage recorder, 60° sharp-crested V-notch weir, and concrete control. Datum of gage is 2,461.52 ft (750.271 m) above mean sea level (levels by Pacific Gas and Electric Co.).

AVERAGE DISCHARGE.--8 years, 4.73 ft³/s (0.134 m³/s), 3,430 acre-ft/yr (4.23 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 29 ft³/s (0.82 m³/s) Jan. 16 (gage height, 1.77 ft or 0.539 m); minimum daily, 2.5 ft³/s (0.071 m³/s) May 5.

Period of record: Maximum discharge recorded, 391 ft³/s (11.1 m³/s) Feb. 1, 1971 (gage height, 3.10 ft or 0.945 m), from rating curve extended above 65 ft³/s (1.84 m³/s) on basis of computation of flow over weir (flow was a result of sluicing at dam); no flow July 15-18, 1967.

REMARKS.--Flow is regulated by Iron Canyon Dam (see sta 11363920). There is inter-basin diversion from Lake McCloud (see sta 11367790) to Iron Canyon Reservoir (see sta 11363920) and then into a tunnel to James B. Black powerplant on the Pit River (see sta 11363910). See schematic diagram of Pit and McCloud River basins.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.1	3.1	3.7	3.1	3.1	3.2	4.4	3.1	3.1	3.1	3.1	3.1
2	3.1	3.1	3.1	3.1	3.1	3.1	3.7	3.1	3.1	3.1	3.1	3.1
3	3.1	3.1	3.1	3.2	3.1	3.1	3.2	3.1	3.1	3.1	3.1	3.1
4	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
5	3.1	3.2	3.1	3.1	3.1	3.1	3.1	2.5	3.1	3.1	3.1	3.1
6	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
7	3.1	3.2	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
8	3.1	3.1	3.1	3.1	2.7	3.2	3.1	3.1	3.1	3.1	3.1	3.1
9	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.2	3.1	3.1
10	3.1	3.2	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
11	3.1	4.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
12	3.1	3.6	3.1	3.1	3.1	3.2	2.9	3.1	2.7	3.1	3.1	3.1
13	3.1	3.1	3.1	3.2	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
14	3.1	3.1	3.1	3.2	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
15	3.1	3.1	3.1	5.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
16	3.1	3.1	3.1	11	3.1	3.1	3.1	3.1	3.1	3.1	2.8	3.1
17	2.8	3.1	3.1	9.7	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
18	3.1	3.2	3.1	7.3	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
19	3.1	3.1	3.1	5.7	3.1	3.0	3.1	3.1	3.1	3.1	3.1	3.1
20	3.1	3.1	2.9	4.5	3.1	3.1	3.1	3.1	3.2	3.1	3.1	3.1
21	3.1	3.1	3.2	3.8	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
22	3.2	3.1	3.1	3.2	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
23	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.2
24	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.2
25	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
26	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
27	3.1	3.1	3.2	3.1	3.1	3.4	3.1	3.1	3.1	3.1	3.1	3.1
28	3.1	3.1	3.1	3.1	3.5	3.3	3.1	3.1	3.1	3.1	3.1	3.1
29	3.1	3.1	3.2	3.1	-----	4.9	3.1	3.1	3.1	3.1	3.1	3.1
30	3.1	3.5	3.1	3.1	-----	6.3	3.1	3.1	3.1	3.1	3.1	3.1
31	3.1	-----	3.1	3.1	-----	4.2	-----	3.1	-----	3.1	3.1	-----
TOTAL	95.9	95.3	96.8	121.9	86.8	102.9	94.8	95.5	92.7	96.2	95.8	93.2
MEAN	3.09	3.18	3.12	3.93	3.10	3.32	3.16	3.08	3.09	3.10	3.09	3.11
MAX	3.2	4.1	3.7	11	3.5	6.3	4.4	3.1	3.2	3.2	3.1	3.2
MIN	2.8	3.1	2.9	3.1	2.7	3.0	2.9	2.5	2.7	3.1	2.8	3.1
AC-FT	190	189	192	242	172	204	188	189	184	191	190	185

CAL YR 1973 TOTAL 1,203.5 MEAN 3.30 MAX 5.0 MIN 2.7 AC-FT 2,390
WTR YR 1974 TOTAL 1,167.8 MEAN 3.20 MAX 11 MIN 2.5 AC-FT 2,320

LOCATION.--Lat 40°50'36", long 122°00'58", in NW¼Sec. 31, T.35 N., R.1 W., Shasta County, Shasta National Forest, on right bank 0.5 mi¹ (0.8 km) upstream from Potem Creek, 1.9 mi (3.1 km) downstream from Pit No. 7 dam and powerhouse, and 5.0 mi (8.0 km) west of town of Montgomery Creek.

PERIOD OF RECORD.--October 1944 to current year (monthly discharge only December 1964 to May 1965). Monthly discharge only for some periods, published in WSP 1315-A.

AVERAGE DISCHARGE (prior to diversion from McCloud River).--21 years (1944-65), 3,759 ft³/s (106.5 m³/s), 2,721,000 acre-ft/yr (3.35 km³/yr); 9 years (1965-74), 5,610 ft³/s (158.9 m³/s), 4,064,000 acre-ft/yr (5.01 km³/yr).

EXTREMES.--Current year: Maximum discharge, 58,000 ft³/s (1,640 m³/s) Jan. 19 (gage height, 31.38 ft or 9.565 m); maximum gage height, 31.99 ft or 9.751 m Mar. 30 (backwater from Shasta Lake); minimum daily discharge, 62 ft³/s (1.76 m³/s) Aug. 10, result of maintenance on Pit No. 7 powerplant.
Period of record: Maximum discharge, 73,000 ft³/s (2,070 m³/s) Jan. 24, 1970 (gage height, 32.36 ft or 9.863 m); minimum daily, 42 ft³/s (1.19 m³/s) July 22, 1967.

REMARKS.--Flow regulated by many reservoirs and powerplants, total usable reservoir capacity, 337,000 acre-ft (416 hm³). Many diversions above station for irrigation. Diversion from McCloud River to Pit River began December 1965 (see sta 11367720). See schematic diagram of Pit and McCloud River basins. Records of chemical analyses for the current year are published in Part 2 of this report.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

REVISIONS (WATER YEARS).--WSP 1931: Drainage area. WRD Calif. 1967: 1966.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3,450	3,520	12,100	9,530	9,820	11,200	30,800	7,850	8,110	5,460	4,940	1,790
2	3,350	4,870	8,780	8,580	8,550	11,400	32,400	6,980	4,650	4,260	4,560	5,000
3	3,370	4,700	8,510	8,190	8,580	10,100	21,100	8,210	6,210	5,190	4,890	4,080
4	3,720	7,330	8,090	7,910	8,360	10,600	20,700	8,080	5,530	4,750	3,730	4,150
5	4,420	4,840	8,030	7,710	8,220	10,100	18,000	7,060	6,730	4,760	6,140	3,820
6	4,070	3,810	7,920	7,170	8,190	10,400	16,800	7,660	5,860	3,400	6,940	4,710
7	4,610	4,000	7,840	7,020	8,100	11,200	14,600	7,380	6,830	2,030	6,020	5,230
8	3,100	4,710	7,260	5,390	6,730	10,900	13,300	7,770	7,310	4,560	4,490	4,570
9	2,770	7,010	6,790	6,450	7,040	10,200	12,800	7,290	1,320	5,400	4,210	4,140
10	2,750	8,770	5,890	6,240	7,110	10,600	11,600	7,940	4,230	4,980	62	3,630
11	2,470	15,600	6,940	6,110	7,240	11,700	10,900	6,650	6,330	5,030	248	4,250
12	3,740	15,400	7,250	6,230	7,160	13,200	10,400	6,900	5,390	5,090	4,080	4,070
13	4,240	10,700	7,890	8,370	6,960	12,700	9,850	7,750	5,310	3,890	5,050	4,390
14	4,310	10,900	6,630	11,000	6,470	12,400	9,500	7,220	6,310	3,030	4,940	4,340
15	3,460	10,800	7,840	27,600	6,730	12,100	9,390	7,070	5,070	3,930	4,940	2,210
16	3,730	13,600	7,060	43,500	6,600	11,600	9,080	6,870	4,820	4,960	3,710	3,730
17	3,660	13,000	7,590	35,800	6,590	11,900	9,000	7,170	4,850	5,040	3,060	3,530
18	3,760	11,800	7,920	38,600	6,700	12,500	8,900	7,490	7,790	4,800	1,880	4,660
19	4,600	9,840	6,710	40,600	7,620	12,400	8,670	6,410	3,740	5,310	4,120	4,580
20	1,580	9,080	7,760	31,000	6,540	11,500	8,570	6,810	4,220	2,740	4,970	5,790
21	1,910	8,120	8,560	26,400	5,830	11,100	8,500	6,890	4,560	2,800	4,170	337
22	4,290	7,960	8,600	20,500	7,910	10,400	8,500	6,840	7,900	4,120	4,980	2,030
23	4,960	7,960	8,560	16,100	5,970	9,790	8,800	6,940	5,600	4,440	4,750	4,830
24	4,160	7,660	8,150	13,800	6,580	9,270	8,300	6,590	4,270	4,650	2,440	4,360
25	4,280	6,440	8,030	11,800	6,630	9,680	8,500	5,980	3,870	5,120	1,330	4,700
26	3,800	6,430	7,970	10,700	7,860	10,300	8,500	6,320	3,520	5,200	4,890	3,680
27	1,720	4,340	8,390	9,140	7,510	11,000	8,400	6,100	2,690	3,110	5,230	4,560
28	2,400	5,910	10,200	9,410	6,730	13,500	8,300	6,540	3,570	1,730	4,210	4,800
29	4,030	6,550	13,700	9,020	-----	22,200	7,800	6,030	2,330	4,500	4,120	3,770
30	3,670	9,560	11,500	8,570	-----	32,800	8,040	5,230	6,090	4,740	4,730	3,240
31	4,290	-----	10,700	9,								

11367500 McCLOUD RIVER NEAR McCLOUD, CALIF.

LOCATION.--Lat 41°11'18", long 122°03'52", in NW¼NE¼ sec.34, T.39 N., R.2 W., Siskiyou County, on right bank 0.4 mi (0.6 km) downstream from Angel Creek, and 6 mi (10 km) southeast of McCloud.

DRAINAGE AREA.--358 mi² (927 km²).

PERIOD OF RECORD.--April 1931 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,711.2 ft (826.37 m) above mean sea level (river-profile survey).

AVERAGE DISCHARGE.--43 years, 933 ft³/s (26.42 m³/s), 676,000 acre-ft/yr (83.4 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 11,200 ft³/s (317 m³/s) Jan. 16 (gage height, 9.12 ft or 2.780 m); minimum daily, 782 ft³/s (22.1 m³/s) Oct. 19.

Period of record: Maximum discharge, 11,800 ft³/s (334 m³/s) Dec. 21, 1955 (gage heights, 9.42 ft or 2.871 m in gage well, 10.7 ft or 3.26 m, from floodmarks), from rating curve extended above 8,800 ft³/s (249 m³/s) on basis of slope-area measurement of maximum flow; minimum, 524 ft³/s (14.8 m³/s) Nov. 23, 24, 1932.

REMARKS.--Two small diversions above station for irrigation, and one 22-inch (0.56-m) pipeline for town of McCloud and millpond. See schematic diagram of Pit and McCloud River basins.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

REVISIONS (WATER YEARS).--WSP 843: 1936(M). WSP 1445: 1940(M). WSP 1931: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SER
1	794	799	2,080	1,210	1,450	1,740	3,050	1,610	1,500	1,210	1,090	1,020
2	794	794	1,600	1,140	1,390	1,680	2,770	1,660	1,510	1,200	1,080	1,020
3	793	791	1,400	1,120	1,350	1,490	2,410	1,670	1,530	1,180	1,080	1,010
4	793	793	1,290	1,090	1,330	1,390	2,280	1,650	1,520	1,180	1,080	1,010
5	794	813	1,210	1,100	1,300	1,350	2,230	1,660	1,490	1,180	1,090	1,010
6	799	902	1,150	1,060	1,280	1,360	2,140	1,690	1,460	1,180	1,090	1,010
7	810	1,080	1,140	1,030	1,260	1,380	2,040	1,740	1,460	1,170	1,080	1,010
8	799	1,380	1,130	1,020	1,250	1,320	2,000	1,800	1,420	1,170	1,080	1,010
9	794	1,420	1,080	1,010	1,240	1,290	2,000	1,830	1,400	1,340	1,070	1,010
10	794	2,430	1,040	1,010	1,220	1,280	1,910	1,760	1,410	1,290	1,070	1,010
11	791	4,170	1,060	1,000	1,210	1,330	1,850	1,730	1,420	1,200	1,060	1,000
12	788	4,160	1,050	1,010	1,210	1,550	1,830	1,710	1,430	1,180	1,060	998
13	788	2,440	1,050	1,140	1,190	1,580	1,790	1,670	1,420	1,170	1,060	996
14	788	1,830	1,030	1,510	1,180	1,490	1,760	1,620	1,400	1,160	1,060	996
15	788	1,860	1,020	3,850	1,170	1,480	1,770	1,600	1,390	1,160	1,050	998
16	788	2,840	1,000	10,100	1,190	1,490	1,770	1,550	1,370	1,160	1,040	994
17	788	2,480	1,070	5,840	1,180	1,540	1,760	1,520	1,370	1,150	1,030	987
18	786	1,940	1,050	4,400	1,160	1,560	1,780	1,470	1,360	1,150	1,030	991
19	782	1,550	1,020	3,910	1,160	1,530	1,730	1,440	1,360	1,150	1,030	991
20	787	1,380	1,010	2,900	1,140	1,500	1,690	1,410	1,340	1,140	1,030	986
21	832	1,250	1,030	2,420	1,140	1,470	1,670	1,390	1,310	1,140	1,030	987
22	947	1,150	1,010	2,130	1,120	1,470	1,690	1,400	1,300	1,140	1,030	990
23	996	1,070	998	2,000	1,120	1,460	1,730	1,420	1,290	1,140	1,030	990
24	913	1,020	989	1,900	1,120	1,450	1,710	1,430	1,270	1,140	1,030	989
25	861	993	988	1,820	1,120	1,510	1,670	1,460	1,260	1,140	1,030	983
26	834	967	988	1,780	1,180	1,700	1,620	1,540	1,230	1,130	1,030	980
27	821	938	1,000	1,630	1,210	2,270	1,580	1,590	1,230	1,090	1,030	981
28	814	947	1,100	1,570	1,370	2,730	1,550	1,600	1,220	1,090	1,020	982
29	807	1,020	1,370	1,520	-----	3,410	1,540	1,580	1,210	1,090	1,020	981
30	803	1,860	1,380	1,480	-----	8,330	1,560	1,540	1,210	1,090	1,020	981
31	801	-----	1,270	1,460	-----	4,120	-----	1,510	-----	1,090	1,020	-----
TOTAL	25,267	47,067	35,603	66,160	34,240	59,250	56,880	49,250	41,090	36,000	32,550	29,901
MEAN	815	1,569	1,148	2,134	1,223	1,911	1,896	1,589	1,370	1,161	1,050	997
MAX	996	4,170	2,080	10,100	1,450	8,330	3,050	1,830	1,530	1,340	1,090	1,020
MIN	782	791	988	1,000	1,120	1,280	1,540	1,390	1,210	1,090	1,020	980
AC-FT	50,120	93,360	70,620	131,200	67,920	117,500	112,800	97,690	81,500	71,410	64,560	59,310

CAL YR 1973 TOTAL 377,257 MEAN 1,034 MAX 4,170 MIN 782 AC-FT 748,300
WTR YR 1974 TOTAL 513,258 MEAN 1,406 MAX 10,100 MIN 782 AC-FT 1,018,000

SACRAMENTO RIVER BASIN

11367720 McCLOUD-IRON CANYON DIVERSION TUNNEL NEAR McCLOUD, CALIF.

LOCATION.--Lat 41°08'06", long 122°04'26", in SE&SW¼ sec.22, T.38 N., R.2 W., Shasta County, Shasta National Forest, on left bank of Lake McCloud, 8.8 mi (14.2 km) southeast of McCloud.

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

GAGE.--None. Water-stage recorders on Lake McCloud and Iron Canyon Reservoir used to compute record.

AVERAGE DISCHARGE.--8 years, 1,099 ft³/s (31.1 m³/s), 796,200 acre-ft/yr (98.2 hm³/yr).

EXTREMES.--Period of record: Maximum daily discharge, 1,890 ft³/s (53.5 m³/s) May 20-22, June 1-3, 10, 1967; no flow for several days in 1965-68, 1971.

REMARKS.--Water is diverted from Lake McCloud (see sta 11367740) to Iron Canyon Reservoir (see sta 11363920) and thence into James B. Black powerplant (see sta 11363910) on the Pit River. Diversion began Dec. 1, 1965. See schematic diagram of Pit and McCloud River basins.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	699	716	1,400	1,360	1,400	1,380	1,370	1,410	1,410	1,240	1,020	973
2	743	722	1,400	1,360	1,380	1,370	1,390	1,380	1,400	1,200	1,010	1,020
3	740	696	1,400	1,330	1,390	1,380	1,400	1,410	1,420	1,180	1,000	1,030
4	726	689	1,400	1,360	1,410	1,410	1,400	1,390	1,410	1,180	1,010	1,060
5	711	751	1,400	1,330	1,410	1,400	1,410	1,400	1,420	1,170	1,020	1,100
6	682	692	1,400	1,330	1,400	1,410	1,390	1,400	1,410	1,160	1,030	1,130
7	690	800	1,400	1,340	1,400	1,400	1,410	1,400	1,410	1,150	1,030	1,140
8	692	843	1,400	1,330	1,400	1,410	1,380	1,400	1,410	1,130	1,010	1,110
9	692	933	1,390	1,320	1,400	1,370	1,390	1,400	1,410	1,130	1,030	1,140
10	690	1,070	1,370	1,310	1,400	1,400	1,390	1,410	1,400	1,130	1,040	1,150
11	662	1,180	1,380	1,320	1,400	1,410	1,400	1,390	1,410	1,150	1,030	1,170
12	680	1,230	1,380	1,300	1,390	1,380	1,400	1,390	1,420	1,160	1,030	1,170
13	699	1,280	1,370	1,270	1,380	1,400	1,400	1,390	1,420	1,140	1,050	1,160
14	653	1,340	1,370	1,330	1,380	1,390	1,380	1,390	1,400	1,140	1,040	1,150
15	671	1,390	1,370	1,380	1,370	1,400	1,400	1,400	1,400	1,140	1,040	1,140
16	687	1,400	1,350	1,270	1,380	1,390	1,400	1,410	1,410	1,160	1,030	1,160
17	685	1,410	1,340	1,260	1,370	1,400	1,410	1,410	1,410	1,150	1,030	1,150
18	662	1,400	1,360	1,280	1,370	1,400	1,390	1,400	1,410	1,160	1,030	1,140
19	707	1,400	1,350	1,290	1,370	1,410	1,400	1,380	1,410	1,150	1,020	1,160
20	662	1,400	1,350	1,340	1,320	1,400	1,400	1,410	1,400	1,150	1,030	1,060
21	642	1,400	1,350	1,380	1,330	1,410	1,410	1,390	1,390	1,120	1,020	933
22	712	1,400	1,340	1,410	1,350	1,410	1,400	1,380	1,390	1,110	1,030	860
23	761	1,400	1,340	1,390	1,330	1,410	1,400	1,400	1,400	1,070	1,030	980
24	788	1,390	1,320	1,410	1,330	1,390	1,390	1,400	1,390	1,080	1,020	1,070
25	787	1,390	1,300	1,410	1,340	1,410	1,380	1,400	1,380	1,080	998	1,130
26	803	1,380	1,310	1,410	1,300	1,390	1,400	1,400	1,380	1,070	1,020	1,110
27	729	1,360	1,310	1,410	1,320	1,400	1,400	1,400	1,290	1,070	1,030	1,100
28	709	1,350	1,330	1,400	1,340	1,400	1,400	1,410	1,250	1,070	1,030	1,090
29	745	1,360	1,320	1,330	-----	1,340	1,390	1,390	1,260	1,050	1,010	1,080
30	727	1,410	1,360	1,370	-----	1,300	1,400	1,390	1,290	1,050	1,040	1,070
31	730	-----	1,360	1,400	-----	1,340	-----	1,410	-----	1,050	1,030	-----
TOTAL	21,966	35,182	42,220	41,730	38,360	43,110	41,880	43,340	41,610	34,990	31,788	32,736
MEAN	709	1,173	1,362	1,346	1,370	1,391	1,396	1,398	1,387	1,129	1,025	1,091
MAX	803	1,410	1,400	1,410	1,410	1,410	1,410	1,410	1,420	1,240	1,050	1,170
MIN	642	689	1,300	1,260	1,300	1,300	1,370	1,380	1,250	1,050	998	860
AC-FT	43,570	69,780	83,740	82,770	76,090	85,510	83,070	85,960	82,530	69,400	63,050	64,930
CAL YR 1973	TOTAL	408,214	MEAN	1,118	MAX	1,590	MIN	642	AC-FT	809,700		
WTR YR 1974	TOTAL	448,912	MEAN	1,230	MAX	1,420	MIN	642	AC-FT	890,400		

11367760 McCLOUD RIVER BELOW McCLOUD DAM, NEAR McCLOUD, CALIF.

LOCATION.--Lat 41°07'44", long 122°04'08", in SW¼NE¼ sec.27, T.38 N., R.2 W., Shasta County, Shasta National Forest, on left bank 0.1 mi (0.2 km) downstream from Lizard Creek, 0.6 mi (1.0 km) downstream from McCloud Dam, and 9 mi (14.5 km) southeast of McCloud.

DRAINAGE AREA.--404 mi² (1,046 km²).

PERIOD OF RECORD.--April 1966 to current year (low flow only).

GAGE.--Water-stage recorder. Datum of gage is 2,401.76 ft (732.056 m) above mean sea level (levels by Pacific Gas and Electric Co.).

REMARKS.--Flow regulated by Lake McCloud (see sta 11367740) since November 1965. Most of McCloud River runoff is diverted from reservoir through tunnel to Iron Canyon Reservoir (see sta 11363920) in Pit River basin. This station records fishwater release. Prior to water year 1974, flow was computed up to 400 ft³/s (11.33 m³/s). Because of channel changes, flow is computed only up to 200 ft³/s (5.66 m³/s). See schematic diagram of Pit and McCloud River basins.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	195	187	--	55	--	67			--	162	176	184
2	195	188	--	57	--	64			--	162	175	189
3	195	188	--	57	166	--			--	164	176	189
4	194	186	162	56	157	200			--	170	176	189
5	194	166	103	56	132	172			--	170	170	191
6	192	50	85	55	90	--			--	170	173	193
7	180	50	70	54	96	--			--	170	175	194
8	190	62	79	54	90	69			--	170	175	195
9	192	56	81	78	94	90			--	171	175	194
10	193	79	78	99	97	117			--	160	175	195
11	196	--	80	99	100	195			--	160	175	194
12	193	--	79	92	102	--			--	163	176	195
13	194	--	79	47	104	--			--	166	177	198
14	195	--	80	53	107	--			--	168	177	194
15	194	--	79	--	110	--			--	168	177	194
16	194	--	68	--	98	--			--	168	176	193
17	193	--	59	--	105	--			--	169	176	194
18	195	--	59	--	105	--			--	170	179	193
19	195	--	58	--	107	--			190	171	175	193
20	192	--	59	--	115	--			173	172	175	192
21	173	92	60	--	114	--			163	171	176	193
22	114	131	60	--	117	--			158	172	173	194
23	45	65	58	--	120	--		181	158	173	175	193
24	116	64	58	--	121	--			159	173	176	193
25	157	73	58	--	122	--			158	172	175	200
26	172	87	56	--	111	--			161	174	176	194
27	178	97	56	--	107	--			168	174	167	198
28	183	89	59	--	70	--			160	175	145	198
29	185	71	61	--	-----	--			163	175	175	197
30	186	93	60	--	-----	--			162	174	178	197
31	186	-----	56	--	-----	--	-----		-----	174	178	-----
TOTAL	5,556	--	--	--	--	--	--	--	--	5,251	5,403	5,810
MEAN	179	--	--	--	--	--	--	--	--	169	174	194
MAX	196	--	--	--	--	--	--	--	--	175	179	200
MIN	45	--	--	--	--	--	--	--	--	160	145	184
AC-FT	11,020	--	--	--	--	--	--	--	--	10,420	10,720	11,520

SACRAMENTO RIVER BASIN

11367800 McCloud River at Ah-Di-Na, near McCloud, Calif.

LOCATION.--Lat 41°06'39", long 122°05'42", in NE¼SW¼ sec.33, T.38 N., R.2 W., Shasta County, Shasta National Forest, on right bank at Ah-Di-Na, 1.8 mi (2.9 km) downstream from Squirrel Creek, 3.9 mi (6.3 km) downstream from McCloud Dam, and 9.6 mi (15.4 km) south of McCloud.

DRAINAGE AREA.--427 mi² (1,106 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 2,160 ft (658 m), from topographic map.

AVERAGE DISCHARGE (adjusted for diversion to Iron Canyon Reservoir and change in contents in Lake McCloud).--10 years, 1,376 ft³/s (38.97 m³/s), 996,900 acre-ft/yr (1.23 km³/yr).

EXTREMES.--Current year: Maximum discharge, 26,400 ft³/s (748 m³/s) Jan. 16 (gage height, 13.68 ft or 4.170 m in gage well, 15.38 ft or 4.688 m, from floodmarks), from rating curve extended as explained below; minimum daily, 174 ft³/s (4.93 m³/s) Aug. 28.

Period of record: Maximum discharge prior to construction of McCloud Dam, 9,660 ft³/s (274 m³/s) Dec. 22, 1964 (gage height, 9.43 ft or 2.874 m), from rating curve extended above 2,500 ft³/s (70.8 m³/s); minimum daily, 86 ft³/s (2.44 m³/s) Oct. 1-26, 1964. Maximum discharge since construction of McCloud Dam in 1965, 26,400 ft³/s (748 m³/s) Jan. 16, 1974 (gage height, 13.68 ft or 4.170 m in gage well, 15.38 ft or 4.688 m, from floodmarks), from rating curve extended above 8,000 ft³/s (227 m³/s) on basis of slope-area measurement of peak flow; minimum daily, 41 ft³/s (1.16 m³/s) Dec. 18-20, 1971 (caused by valve malfunction at dam).

Flood of Dec. 21, 1955, reached a stage of 12.5 ft or 3.81 m (discharge, 17,800 ft³/s or 504 m³/s, revised, from rating curve extended above 2,500 ft³/s or 85.0 m³/s).

REVISIONS.--The maximum discharge for the flood of Dec. 21, 1955, has been revised to 17,800 ft³/s (504 m³/s), gage height, 12.5 ft or 3.81 m, from floodmarks and for the water year 1970 has been revised to 22,900 ft³/s (649 m³/s) Jan. 23, 1970 (gage height, 12.94 ft or 3.944 m), superseding figures published in WRD Calif. 1970.

REMARKS.--Flow regulated by Lake McCloud 3.9 mi (6.3 km) upstream (see sta 11367740) since November 1965. Diversion to Iron Canyon Reservoir (see sta 11363920) through McCloud River diversion tunnel (see sta 11367720) started Dec. 1, 1965. See schematic diagram of Pit and McCloud River basins.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	214	210	2,500	275	445	612	3,440	588	410	209	213	217
2	213	210	938	244	390	473	2,780	598	407	209	213	224
3	213	210	730	223	308	691	2,050	719	405	210	213	223
4	211	211	438	210	291	395	1,590	657	405	216	213	223
5	211	219	329	202	244	325	1,350	567	351	216	213	225
6	213	316	268	192	211	367	1,140	785	301	215	211	228
7	212	323	246	182	212	401	1,120	780	331	215	213	229
8	210	536	250	180	199	202	1,130	792	336	236	212	230
9	212	508	244	190	200	207	1,130	838	327	242	212	229
10	211	1,170	233	202	199	246	918	761	303	214	212	230
11	214	5,050	242	200	200	392	801	794	277	211	212	228
12	211	5,690	257	198	200	1,060	768	787	275	211	212	230
13	212	2,880	272	235	199	913	741	637	274	212	213	232
14	212	1,640	278	442	199	599	756	508	273	212	213	229
15	211	1,800	269	2,470	201	554	740	639	272	213	213	228
16	211	3,790	242	17,300	200	630	735	458	273	213	211	228
17	211	2,770	260	7,510	200	629	715	450	271	212	211	227
18	211	1,520	262	5,340	202	721	744	372	269	212	214	226
19	211	1,220	241	5,020	199	543	684	366	257	213	209	226
20	210	663	232	2,640	200	591	599	357	236	213	211	226
21	216	384	269	2,290	201	431	531	351	222	212	211	227
22	220	376	266	1,430	200	480	712	315	214	213	208	227
23	229	266	245	1,110	200	405	764	280	213	215	209	226
24	205	239	226	981	199	465	704	310	212	213	210	226
25	209	232	216	1,010	200	546	600	359	211	213	209	234
26	211	231	209	728	201	828	575	431	212	214	210	226
27	210	231	226	570	201	1,830	504	545	218	214	200	232
28	211	235	301	562	364	2,970	452	549	209	214	174	231
29	211	241	463	482	-----	4,490	495	496	211	214	208	231
30	211	841	402	390	-----	11,800	531	426	210	213	212	231
31	210	-----	326	475	-----	4,990	-----	417	-----	212	212	-----
TOTAL	6,577	34,212	11,880	53,483	6,465	39,786	29,799	16,926	8,385	6,651	6,507	6,829
MEAN	212	1,140	383	1,725	231	1,283	993	546	280	215	210	228
MAX	229	5,690	2,500	17,300	445	11,800	3,440	838	410	242	214	234
MIN	205	210	209	180	199	202	452	280	209	209	174	217
AC-FT	13,050	67,860	23,560	106,100	12,820	78,920	59,110	33,570	16,630	13,190	12,910	13,550
MEAN a	923	2,556	1,700	3,111	1,540	2,729	2,389	1,950	1,628	1,365	1,230	1,150
AC-FT a	56,770	152,100	104,600	191,300	85,810	167,800	142,200	119,900	96,900	83,930	75,660	68,450

CAL YR 1973 TOTAL 118,321 MEAN 324 MAX 5,690 MIN 171 AC-FT 234,700 MEAN a 1,466 AC-FT a 1,062,000
WTR YR 1974 TOTAL 227,500 MEAN 623 MAX 17,300 MIN 174 AC-FT 451,200 MEAN a 1,858 AC-FT a 1,345,000

a Adjusted for diversion to Iron Canyon Reservoir and change in contents in Lake McCloud.

LOCATION.--Lat 40°57'30", long 122°13'07", unsurveyed, T.36 N., R.3 W., Shasta County, on right bank just upstream from Shasta Lake, 0.2 mi (0.3 km) downstream from Big Bollobokka Creek, and 11.3 mi (18.2 km) east of Lamoine.

GAGE.--Water-stage recorder. Datum of gage is 1,100.00 ft (335.280 m) above mean sea level (levels by Bureau of Reclamation).

AVERAGE DISCHARGE (prior to regulation by Lake McCloud and diversion to Pit River basin).--20 years (1945-65), 1,699 ft^3/s (48.12 m^3/s), 1,230,000 acre-ft/yr (1,517 hm^3/yr); 9 years (1965-74), 903 ft^3/s (25.57 m^3/s), 654,200 acre-ft/yr (806 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 45,500 ft³/s (1,290 m³/s) Jan. 16 (gage height, 28.26 ft or 8.614 m), from rating curve extended above 15,000 ft³/s (425 m³/s) on basis of slope-area measurement of maximum flow; minimum daily, 297 ft³/s (8.41 m³/s) Oct. 4, 5, 16, 17, 19.

Period of record: Maximum discharge, 45,500 ft³/s (1,290 m³/s) Jan. 16, 1974 (gage height, 28.26 ft or 8.614 m), from rating curve extended above 15,000 ft³/s (425 m³/s) on basis of slope-area measurement of maximum flow; minimum daily, 109 ft³/s (3.09 m³/s) Dec. 16-20, 1971.

REMARKS.--Flow partially regulated by Lake McCloud (see sta 11367740) since Nov. 3, 1965. Diversions to Iron Canyon Reservoir (see sta 11363920) began Dec. 1, 1965. See schematic diagram of Pit and McCloud River basins. Records of chemical analyses for the current year are published in Part 2 of this report.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

REVISIONS (WATER YEARS).--WSP 1445: 1953(M). WSP 1931: Drainage area.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	301	351	9,210	1,680	1,690	4,870	8,890	1,170	691	421	374	329
2	300	345	4,430	1,450	1,510	3,520	7,150	1,200	687	417	372	340
3	298	342	3,150	1,290	1,350	2,640	5,100	1,160	682	410	371	338
4	297	352	2,220	1,160	1,210	1,900	4,050	1,250	674	414	368	338
5	297	624	1,780	1,090	1,100	1,550	3,440	1,120	636	416	394	336
6	314	1,800	1,500	998	997	1,490	3,020	1,170	556	413	395	340
7	380	1,960	1,360	919	955	1,560	2,830	1,370	576	412	376	339
8	320	3,240	1,260	868	904	1,240	2,550	1,370	581	549	368	340
9	311	3,110	1,180	834	872	1,170	2,440	1,370	567	945	362	338
10	304	7,060	1,110	823	845	1,190	2,050	1,230	550	529	359	338
11	307	15,900	1,190	799	823	2,220	1,850	1,160	511	482	356	335
12	300	15,200	1,370	836	823	4,300	1,780	1,260	511	452	356	336
13	301	7,940	1,760	1,730	791	3,770	1,690	1,130	508	440	353	334
14	300	5,980	1,660	3,270	766	2,750	1,650	987	505	431	350	336
15	298	6,550	1,500	11,200	749	2,210	1,630	925	503	426	349	333
16	297	10,700	1,350	36,300	815	2,140	1,570	956	511	421	345	331
17	297	7,720	1,510	17,300	753	1,980	1,530	820	518	418	343	330
18	298	6,300	1,450	12,100	779	2,000	1,520	746	506	415	345	328
19	297	4,380	1,340	10,900	905	1,790	1,430	726	522	413	344	327
20	308	2,910	1,310	6,660	859	1,590	1,340	703	491	410	338	327
21	454	2,190	2,330	5,230	851	1,540	1,230	687	460	403	336	325
22	1,090	1,840	2,560	3,680	806	1,370	1,250	657	446	399	335	325
23	1,460	1,510	2,020	3,050	783	1,380	1,470	598	444	398	334	322
24	775	1,340	1,680	2,770	761	1,330	1,360	606	437	395	333	320
25	551	1,230	1,480	2,390	744	1,360	1,240	669	430	391	333	324
26	467	1,140	1,400	1,980	764	1,850	1,230	749	428	392	330	325
27	422	1,050	1,550	1,720	753	3,410	1,180	870	425	390	329	326
28	396	1,110	2,040	1,660	2,300	6,970	1,010	869	414	389	303	326
29	379	1,320	2,890	1,510	-----	10,800	1,080	799	417	384	308	327
30	368	6,540	2,490	1,380	-----	26,000	995	714	423	379	329	327
31	360	-----	2,040	1,550	-----	11,300	-----	704	-----	375	328	-----
TOTAL	12,847	122,034	64,120	139,127	27,258	113,190	69,555	29,745	15,610	13,529	10,816	9,940
MEAN	414	4,068	2,068	4,488	974	3,651	2,319	960	520	436	349	331
MAX	1,460	15,900	9,210	36,300	2,300	26,000	8,890	1,370	691	945	395	340

SACRAMENTO RIVER BASIN

11370000 SHASTA LAKE NEAR REDDING, CALIF.

LOCATION.--Lat 40°43'08", long 122°25'12", in SE¼NW¼ sec.15, T.33 N., R.5 W., Shasta County, in Shasta Dam on Sacramento River near right bank, 2 mi (3 km) downstream from Squaw Creek, and 9.5 mi (15.3 km) north of Redding.

DRAINAGE AREA.--6,421 mi² (16,630 km²), excluding Goose Lake basin.

PERIOD OF RECORD.--November 1942 to current year. Prior to 1950, published as Shasta Reservoir near Redding.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Bureau of Reclamation). Prior to

July 10, 1944, nonrecording gage at various sites near dam at same datum.

EXTREMES.--Current year: Maximum contents, 4,547,000 acre-ft (5,606 hm³) May 28 (elevation, 1,066.83 ft or 325.170 m); minimum, 3,213,000 acre-ft (3,962 hm³) Oct. 21 (elevation, 1,016.90 ft or 309.951 m).

Period of record: Maximum contents, 4,550,300 acre-ft (5,611 hm³) May 19, 1967 (elevation, 1,066.94 ft or 325.203 m); minimum since reservoir first filled, 2,144,900 acre-ft (2,645 hm³) Nov. 22, 1961 (elevation, 965.54 ft or 294.297 m).

REMARKS.--Reservoir is formed by concrete gravity-type dam completed in 1949; regulation began Dec. 30, 1943. Usable capacity, 4,436,000 acre-ft (5,470 hm³) between elevations 737.75 ft (224.866 m), bottom of lowest set of river outlets and 1,067.0 ft (325.22 m), top of flashboard gates on drum-type spillway gates, above mean sea level. Dead storage, 115,700 acre-ft (143 hm³). Installation of flashboard gates on top of drum gates completed Nov. 12, 1964. Gates increased elevation to 1,067.0 ft (325.22 m), total capacity, 4,552,000 acre-ft (5,613 hm³). All water passes down the Sacramento River, most of which is through powerplant at dam. Records, including extremes, represent total contents at 2400 hours. See schematic diagram of Pit and McCloud River basins.

COOPERATION.--Records furnished by Bureau of Reclamation, rounded to Geological Survey standards.

REVISIONS.--WSP 1931: Drainage area.

CAPACITY TABLE (ELEVATION, IN FEET, AND CONTENTS, IN ACRE-FEET)

960	2,047,000	1,010	3,052,000
970	2,226,000	1,020	3,287,000
980	2,416,000	1,030	3,534,000
990	2,617,000	1,050	4,063,000
1,000	2,828,000	1,067	4,552,000

CONTENTS, IN THOUSANDS OF ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3,309	3,239	3,680	3,364	3,594	3,693	4,503	4,414	4,537	4,392	4,183	3,840
2	3,301	3,239	3,687	3,345	3,575	3,749	4,455	4,433	4,533	4,383	4,176	3,831
3	3,293	3,239	3,673	3,334	3,556	3,791	4,409	4,455	4,532	4,377	4,168	3,820
4	3,285	3,244	3,638	3,327	3,535	3,826	4,401	4,477	4,531	4,369	4,160	3,810
5	3,280	3,254	3,602	3,314	3,522	3,857	4,398	4,492	4,532	4,363	4,156	3,797
6	3,278	3,273	3,562	3,298	3,514	3,882	4,390	4,497	4,532	4,354	4,153	3,787
7	3,278	3,295	3,521	3,281	3,511	3,906	4,382	4,500	4,530	4,342	4,147	3,779
8	3,272	3,323	3,489	3,266	3,504	3,926	4,370	4,506	4,530	4,346	4,136	3,770
9	3,265	3,377	3,466	3,257	3,508	3,942	4,359	4,509	4,521	4,349	4,124	3,760
10	3,257	3,451	3,441	3,249	3,519	3,966	4,343	4,513	4,515	4,344	4,104	3,748
11	3,249	3,598	3,422	3,240	3,531	4,021	4,325	4,514	4,513	4,341	4,086	3,739
12	3,243	3,702	3,403	3,233	3,529	4,088	4,305	4,515	4,511	4,337	4,074	3,730
13	3,239	3,738	3,399	3,240	3,523	4,141	4,283	4,519	4,506	4,330	4,064	3,722
14	3,234	3,756	3,393	3,283	3,518	4,183	4,269	4,524	4,504	4,321	4,054	3,714
15	3,231	3,778	3,389	3,445	3,511	4,181	4,256	4,528	4,500	4,314	4,044	3,701
16	3,228	3,836	3,381	3,822	3,508	4,172	4,244	4,529	4,495	4,307	4,031	3,692
17	3,226	3,868	3,377	3,950	3,507	4,163	4,232	4,531	4,490	4,302	4,018	3,686
18	3,222	3,893	3,372	4,052	3,511	4,153	4,221	4,533	4,490	4,296	4,002	3,683
19	3,221	3,903	3,363	4,127	3,520	4,141	4,225	4,533	4,485	4,292	3,989	3,682
20	3,214	3,929	3,357	4,138	3,525	4,127	4,239	4,533	4,479	4,282	3,979	3,684
21	3,213	3,897	3,379	4,116	3,528	4,112	4,260	4,535	4,473	4,271	3,968	3,676
22	3,226	3,855	3,396	4,077	3,534	4,105	4,282	4,536	4,474	4,264	3,957	3,669
23	3,241	3,811	3,398	4,024	3,536	4,113	4,306	4,538	4,471	4,258	3,947	3,669
24	3,248	3,765	3,394	3,964	3,538	4,130	4,326	4,541	4,463	4,252	3,934	3,667
25	3,251	3,714	3,386	3,900	3,544	4,157	4,347	4,541	4,456	4,246	3,918	3,667
26	3,252	3,674	3,379	3,847	3,556	4,188	4,366	4,543	4,447	4,240	3,908	3,666
27	3,249	3,631	3,374	3,791	3,571	4,239	4,373	4,546	4,436	4,229	3,898	3,664
28	3,246	3,593	3,371	3,734	3,620	4,309	4,376	4,547	4,425	4,216	3,888	3,664
29	3,244	3,568	3,385	3,677	-----	4,421	4,378	4,546	4,413	4,207	3,876	3,664
30	3,242	3,626	3,386	3,633	-----	4,528	4,395	4,544	4,400	4,199	3,867	3,658
31	3,241	-----	3,380	3,613	-----	4,503	-----	4,543	-----	4,191	3,855	-----
MAX	3,309	3,929	3,687	4,138	3,620	4,528	4,503	4,547	4,537	4,392	4,183	3,840
MIN	3,213	3,239	3,357	3,233	3,504	3,693	4,221	4,414	4,400	4,191	3,855	3,658
(a)	1,018.08	1,033.61	1,023.84	1,033.12	1,033.39	1,065.34	1,061.67	1,066.68	1,061.83	1,054.56	1,042.34	1,034.86
(b)	-76.0	+385.0	-246.0	+233.0	+7.0	+883.0	-108.0	+148.0	-143.0	-209.0	-336.0	-197.0
(c)	5,070	1,370	1,560	1,750	2,920	3,050	6,760	11,750	14,750	14,570	15,260	13,320

CAL YR 1973 b +80.0

WTR YR 1974 b +341.0

a Elevation, in feet, at end of month.

b Change in contents, in thousands of acre-feet.

c Evaporation, in acre-feet.

11370500 SACRAMENTO RIVER AT KESWICK, CALIF.

LOCATION.--Lat 40°36'04", long 122°26'36", in SW¼NW¼ sec.28, T.32 N., R.5 W., Shasta County, on right bank 0.4 mi (0.6 km) upstream from Middle Creek, 0.8 mi (1.3 km) downstream from Keswick Dam, 1.6 mi (2.6 km) downstream from Keswick, and 10 mi (16 km) downstream from Shasta Dam.

DRAINAGE AREA.--6,468 mi² (16,752 km²), excluding Goose Lake basin.

PERIOD OF RECORD.--October 1938 to current year. Monthly discharge only for some periods, published in WSP 1315-A.

GAGE.--Water-stage recorder. Datum of gage is 479.81 ft (146.246 m) above mean sea level. Prior to Oct. 1, 1939, at site 1.5 mi (2.4 km) upstream at datum 20.2 ft (6.16 m) higher and Oct. 1, 1939, to Apr. 30, 1942, at site 1.5 mi (2.4 km) upstream at datum 15.2 ft (4.63 m) higher. Aug. 20, 1960, to July 3, 1973, auxiliary water-stage recorder at city of Redding pumping plant 2.1 mi (3.4 km) downstream.

AVERAGE DISCHARGE (adjusted for change in contents and evaporation in Shasta Lake and transbasin diversion into Keswick Reservoir).--36 years, 8,733 ft³/s (247.3 m³/s), 6,327,000 acre-ft/yr (7,800 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 81,400 ft³/s (2,310 m³/s) Apr. 1 (gage height, 31.92 ft or 9.729 m); minimum daily, 5,740 ft³/s (163 m³/s) Nov. 8.

Period of record: Maximum discharge, 186,000 ft³/s (5,270 m³/s) Feb. 23, 1940 (gage height, 47.2 ft or 14.39 m, site and datum then in use), from rating curve extended above 75,000 ft³/s (2,120 m³/s) on basis of peak discharge at Kennet plus 4,000 ft³/s (113 m³/s) estimated inflow; minimum observed, 2,730 ft³/s (77.3 m³/s) Aug. 22, 1939. Maximum discharge since construction of Shasta Dam in 1944, 81,400 ft³/s (2,310 m³/s) Apr. 1, 1974 (gage height, 31.92 ft or 9.729 m); maximum gage height, 32.22 ft (9.821 m) Jan. 24, 1970; minimum discharge, 154 ft³/s (4.36 m³/s) May 15, 1948.

REMARKS.--Records good. Flow regulated by Shasta Dam beginning Dec. 30, 1943 (see sta 11370000). Diurnal fluctuations from Shasta powerplant re-regulated by Keswick Reservoir, capacity, 4,170 acre-ft (5.14 hm³) between normal operation elevations 579.0 ft (176.48 m) and 586.0 ft (178.61 m) and powerplant. No diversion for irrigation between Shasta Dam and station at Keswick. Since December 1963, water is released from Whiskeytown Lake (see sta 11371700) at lat 40°37'03", long 122°31'31", through a tunnel to Spring Creek powerplant (see sta 11371600) and then into Keswick Reservoir. See schematic diagram of Pit and McCloud River basins. Records of chemical analyses for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1931: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9,150	6,290	30,100	30,400	35,100	6,820	75,500	7,790	12,900	12,800	12,000	13,100
2	9,150	6,290	30,100	30,100	29,900	6,710	78,900	7,150	12,900	12,600	12,000	13,100
3	9,160	6,290	35,400	24,900	29,700	6,620	66,200	6,600	12,900	12,200	12,100	13,100
4	9,130	6,290	41,300	22,600	29,300	6,700	41,400	6,000	12,500	12,200	12,000	13,100
5	7,840	6,060	39,300	25,000	25,000	8,080	35,700	7,600	12,500	12,200	12,100	13,100
6	7,790	6,300	39,700	25,100	21,800	12,100	33,100	15,000	12,500	12,100	12,100	13,100
7	7,800	6,340	38,800	24,900	18,700	14,600	30,300	15,600	12,500	12,200	12,500	13,100
8	7,790	5,740	32,000	22,100	18,200	14,500	31,000	15,000	12,600	12,200	13,000	13,000
9	7,790	6,080	25,700	19,200	13,200	14,600	31,500	15,700	12,600	12,200	13,400	13,200
10	7,800	12,600	25,100	19,100	10,300	11,500	31,400	15,700	12,500	12,100	13,400	12,600
11	7,810	15,300	25,100	19,200	9,670	8,040	31,400	15,300	12,600	12,100	13,400	11,800
12	7,810	21,500	25,100	19,200	18,100	7,870	31,400	15,300	12,700	12,100	13,400	11,900
13	7,800	25,500	22,000	19,200	17,800	7,790	31,300	14,300	12,700	12,100	13,300	12,100
14	7,770	28,400	20,900	18,700	17,800	9,030	27,700	11,800	12,700	12,000	13,300	12,100
15	6,400	31,400	20,800	15,900	17,400	29,500	25,300	12,000	12,700	12,100	13,300	12,100
16	6,270	33,500	20,900	10,800	16,200	31,200	25,500	12,200	12,700	12,100	13,300	11,900
17	6,270	37,400	20,900	43,200	15,100	30,900	25,500	12,500	12,600	12,100	13,300	10,800
18	6,270	37,500	20,900	41,400	14,500	30,700	24,800	12,700	12,700	12,100	13,300	9,780
19	6,270	30,600	20,900	48,300	14,100	30,600	16,100	12,600	12,800	12,100	13,300	8,560
20	6,270	8,520	21,000	56,200	14,000	30,500	10,400	12,200	12,900	12,200	13,300	8,520
21	6,280	40,200	21,400	61,300	14,100	30,200	7,720	11,700	12,700	12,100	13,300	8,480
22	6,300	42,900	22,800	61,000	14,100	26,100	7,590	11,700	12,800	12,200	13,300	8,490
23	6,320	41,700	24,400	60,500	14,000	15,300	7,860	11,700	12,800	12,100	13,200	8,370
24	6,290	41,300	24,300	60,000	12,900	9,450	8,360	12,200	12,800	12,100	13,200	8,420
25	6,260	40,900	24,400	59,400	11,600	7,560	8,630	12,600	12,800	12,100	13,100	8,430
26	6,270	35,000	24,500	50,800	10,300	7,700	7,900	12,600	12,800	12,100	13,100	8,410
27	6,260	31,100	26,500	50,200	8,430	7,750	14,500	12,500	12,700	12,100	13,100	8,390
28	6,260	30,900	30,700	50,000	7,670	10,300	16,000	12,800	12,700	12,100	13,100	8,360
29	6,260	30,500	31,200	49,700	-----	36,600	14,300	13,200	12,800	12,100	13,100	8,370
30	6,270	30,500	30,800	41,400	-----	68,900	8,030	13,200	12,700	12,100	13,100	8,390
31	6,280	-----	30,500	35,400	-----	79,700	-----	13,200	-----	12,100	13,100	-----
TOTAL	221,390	702,900	847,500	1,115,27M	478,970	618,020	805,290	380,440	381,100	377,000	402,500	324,170
MEAN	7,142	23,430	27,340	35,970	17,110	19,940	26,840	12,270	12,700	12,160	12,980	10,810
MAX	9,160	42,900	41,300	61,300	35,100	79,700	78,900	15,700	12,900	12,800	13,400	13,200
MIN	6,260	5,740	20,800	10,800	7,670	6,620	7,590	6,000	12,500	12,000	12,000	8,360
AC-FT	439,100	1,394M	1,681M	2,212M	950,000	1,226M	1,597M	754,600	755,900	747,800	798,400	643,000
MEAN a	5,390	27,360	19,340	35,280	12,790	30,070	21,140	10,780	7,042	5,760	5,043	5,022
AC-FT a	331,400	1,628M	1,189M	2,169M	710,100	1,849M	1,258M	662,800	419,000	354,200	310,100	298,800

CAL YR 1973 TOTAL 4,950,370 MEAN 13,560 MAX 42,900 MIN 5,150 AC-FT 9,819,000 MEAN a 11,280 AC-FT a 8,168,000
WTR YR 1974 TOTAL 6,654,480 MEAN 18,230 MAX 79,700 MIN 5,740 AC-FT 13,200,000 MEAN a 15,440 AC-FT a 11,180,000

a Adjusted for change in contents and evaporation in Shasta Lake and transbasin diversion into Keswick Reservoir.

11371000 CLEAR CREEK AT FRENCH GULCH, CALIF.

LOCATION.--Lat 40°41'42", long 122°38'08", unsurveyed, Shasta County, on right bank 1,200 ft (366 m) downstream from French Gulch, 0.3 mi (0.5 km) south of town of French Gulch, and 15 mi (24 km) northwest of Redding.

DRAINAGE AREA.--115 mi² (298 km²).

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,320.60 ft (402.519 m) above mean sea level. Prior to Dec. 28, 1959, water-stage recorder at datum 3.00 ft (0.914 m) higher.

AVERAGE DISCHARGE.--24 years, 226 ft³/s (6.400 m³/s), 163,700 acre-ft/yr (202 hm³/yr).

EXTREMES.--Current year; Maximum discharge, 14,600 ft³/s (413 m³/s) Jan. 16 (gage height, 14.99 ft or 4.569 m); minimum daily, 14 ft³/s (0.40 m³/s) Sept. 21, 22, 24-27.
Period of record: Maximum discharge, 14,600 ft³/s (413 m³/s) Jan. 16, 1974 (gage height, 14.99 ft or 4.569 m), from rating curve extended above 5,200 ft³/s (147 m³/s) on basis of slope-area measurement of peak flow; minimum, 3.9 ft³/s (0.11 m³/s) Sept. 6-8, 1955.

REMARKS.--Records good. No large diversion above station. See schematic diagram of Pit and McCloud River basins.

REVISIONS.--WSP 1285: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	53	3,300	782	546	1,680	3,090	368	123	60	28	19
2	17	51	2,100	651	503	1,350	2,580	352	118	58	27	18
3	16	49	1,310	578	473	969	1,840	334	115	57	26	18
4	16	48	910	513	448	761	1,410	313	113	54	26	18
5	16	135	690	474	422	647	1,220	297	113	54	28	17
6	21	298	593	430	397	597	1,050	287	109	52	35	17
7	35	454	529	394	374	571	930	277	105	51	30	17
8	28	750	486	365	352	514	850	267	102	50	27	16
9	25	820	444	341	335	470	822	254	98	49	26	16
10	23	1,660	413	317	319	445	745	244	95	48	24	17
11	22	3,070	410	303	305	691	686	235	92	46	23	16
12	21	3,180	392	311	306	1,400	638	226	89	45	23	16
13	20	1,590	466	478	288	1,100	602	217	88	44	23	16
14	20	1,090	452	983	272	895	560	209	86	44	23	16
15	19	938	424	3,460	259	774	533	204	84	42	23	16
16	19	1,690	402	12,000	277	714	509	200	88	43	23	16
17	18	1,610	452	5,040	261	662	490	201	93	43	22	16
18	18	1,940	458	3,270	291	609	475	197	85	42	22	15
19	18	1,420	434	2,860	380	561	448	190	101	41	21	15
20	20	969	444	2,110	353	513	422	181	99	39	22	15
21	86	734	1,030	1,600	342	473	401	175	86	37	21	14
22	564	600	1,140	1,340	318	444	390	169	80	35	20	14
23	650	510	858	1,090	296	420	423	163	77	34	20	15
24	260	455	693	944	284	396	425	158	74	33	20	14
25	151	408	605	847	279	398	408	152	72	31	19	14
26	108	379	571	757	291	417	409	146	71	30	19	14
27	87	347	618	680	296	687	401	142	68	30	19	14
28	74	318	743	619	1,150	1,210	397	138	66	30	19	15
29	65	361	1,350	577	-----	3,520	391	135	63	30	19	15
30	59	944	1,270	536	-----	6,330	378	131	61	29	19	16
31	56	-----	973	564	-----	2,970	-----	127	-----	28	19	-----
TOTAL	2,569	26,871	24,960	45,214	10,417	33,188	23,923	6,689	2,714	1,309	716	475
MEAN	82.9	896	805	1,459	372	1,071	797	216	90.5	42.2	23.1	15.8
MAX	650	3,180	3,300	12,000	1,150	6,330	3,090	368	123	60	35	19
MIN	16	48	392	303	259	396	378	127	61	28	19	14
AC-FT	5,100	53,300	49,510	89,680	20,660	65,830	47,450	13,270	5,380	2,600	1,420	942

CAL YR 1973 TOTAL 140,201.2 MEAN 384 MAX 3,300 MIN 9.5 AC-FT 278,100
WTR YR 1974 TOTAL 179,045 MEAN 491 MAX 12,000 MIN 14 AC-FT 355,100

PEAK DISCHARGE (BASE, 1,500 FT ³ /S)							
DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-12	0730	10.24	3,800	1-16	1100	14.99	14,600
11-18	1030	8.20	2,140	2-28	2030	7.86	2,030
12-1	0800	10.34	3,890	3-30	0330	12.70	9,080
12-29	1430	7.35	1,540				

LOCATION.--Lat 40°38'49", long 122°37'34", unsurveyed, Shasta County, at powerplant 1.6 mi (2.6 km) downstream from Mill Creek, and 3.8 mi (6.1 km) south of French Gulch.

REMARKS.--Water is diverted from Trinity River at NW¼SE¼ sec.8, T.33 N., R.8 W., through a tunnel to powerplant and then into Whiskeytown Lake (see sta 11371700). See schematic diagram of Pit and McCloud River basins.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FER	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,390	288	1,790	3,100	3,140	3,280	13	3,560	3,590	3,390	2,630	2,590
2	1,390	286	1,780	3,100	3,140	3,180	0	3,550	3,580	3,110	2,610	2,580
3	1,390	376	1,750	2,960	3,140	3,090	0	3,570	3,580	3,110	2,620	2,580
4	1,330	379	1,790	3,380	3,140	2,840	0	3,590	3,580	3,110	2,620	2,580
5	323	278	1,670	3,110	3,140	3,320	706	3,580	3,570	3,110	2,590	2,590
6	321	314	1,620	3,110	3,200	3,320	1,210	3,590	3,580	3,110	2,620	1,980
7	322	316	1,690	2,960	3,220	3,320	1,210	3,590	3,590	3,110	2,620	1,870
8	329	377	1,780	3,000	3,130	3,360	2,670	3,420	3,580	3,080	2,630	1,830
9	325	386	1,770	2,820	3,130	3,410	3,500	3,550	3,580	2,910	2,740	1,790
10	322	331	1,650	2,820	3,130	3,480	3,500	3,520	3,560	3,170	2,620	1,860
11	326	283	1,620	3,300	3,270	3,480	3,530	3,560	3,580	3,180	2,620	1,880
12	328	5,0	1,940	3,200	3,260	3,480	3,550	3,560	3,570	3,180	2,630	1,950
13	325	0	3,030	3,280	3,230	3,390	3,510	3,500	3,550	3,180	2,620	1,830
14	324	0	3,100	3,280	3,230	3,390	2,410	2,880	3,480	3,180	2,620	1,760
15	276	178	3,100	3,300	3,240	3,410	2,660	3,050	3,430	3,180	2,620	1,820
16	273	4,0	3,090	830	3,260	3,390	3,490	3,170	3,300	3,030	2,620	1,770
17	303	0	3,090	25	3,260	3,390	3,330	3,320	3,450	3,180	2,620	1,890
18	388	0	3,090	0	3,330	3,490	3,330	3,630	3,390	3,190	2,620	1,840
19	286	276	3,090	0	3,330	3,390	3,430	3,610	3,550	3,200	2,740	2,700
20	291	525	3,090	0	3,330	3,390	3,560	3,600	3,590	3,190	2,660	2,740
21	265	1,340	3,100	3,0	3,330	3,390	3,560	3,620	3,580	3,180	2,670	2,730
22	271	1,770	3,090	1,580	3,330	3,390	3,560	3,620	3,540	3,180	2,670	2,610
23	338	1,770	3,100	1,660	3,110	3,390	3,540	3,600	3,510	3,180	2,670	2,450
24	421	1,770	3,100	2,300	3,240	3,390	3,540	3,610	3,300	3,170	2,350	2,620
25	326	1,770	3,100	2,610	3,240	3,390	3,430	3,610	3,250	3,170	2,530	2,710
26	294	1,740	3,010	2,600	3,240	3,390	3,520	3,590	3,180	2,720	2,770	2,670
27	274	1,510	3,100	2,600	3,270	3,390	3,550	3,580	3,190	2,630	2,660	2,610
28	266	1,770	3,110	2,900	3,280	3,400	3,560	3,580	3,320	2,620	2,660	2,710
29	269	1,740	3,110	3,220	-----	2,640	3,560	3,580	138	2,620	2,670	2,710
30	264	1,780	3,100	3,290	-----	5,0	3,540	3,580	33	2,610	2,680	1,700
31	280	-----	3,100	3,320	-----	0	-----	3,590	-----	2,620	2,640	-----
TOTAL	13,830	21,562.0	79,550	73,658.0	90,290	96,575.0	80,969	108,960	97,721	94,600	81,640	67,950
MEAN	446	719	2,566	2,376	3,225	3,115	2,699	3,515	3,257	3,052	2,634	2,265
MAX	1,390	1,780	3,110	3,380	3,330	3,490	3,560	3,630	3,590	3,390	2,770	2,740
MIN	264	0	1,620	0	3,110	0	0	2,880	33	2,610	2,350	1,700
AC-FT	27,430	42,770	157,800	146,100	179,100	191,600	160,600	216,100	193,800	187,600	161,900	134,800
CAL YR 1973	TOTAL 646,798.0		MEAN 1,772		MAX 3,310		MIN 0		AC-FT 1,283,000			
WTR YR 1974	TOTAL 907,305.0		MEAN 2,486		MAX 3,630		MIN 0		AC-FT 1,800,000			

SACRAMENTO RIVER BASIN

11371600 SPRING CREEK POWERPLANT AT KESWICK, CALIF.

LOCATION.--Lat 40°37'41", long 122°27'59", in NE¼SE¼ sec.18, T.32 N., R.5 W., Shasta County, at powerplant on Spring Creek, 0.4 mi (0.6 km) northwest of Keswick, and 4.9 mi (7.9 km) northwest of Redding.

PERIOD OF RECORD.--December 1963 to current year.

GAGE.--Discharge computed from powerplant output.

AVERAGE DISCHARGE.--10 years, 2,218 ft³/s (62.8 m³/s), 1,607,000 acre-ft/yr (1,981 hm³/yr).

EXTREMES.--Period of record: Maximum daily discharge, 4,700 ft³/s (133 m³/s) Jan. 21, 1971; no flow Mar. 30, Apr. 2, 1974.

REMARKS.--Water is released from Whiskeytown Lake (see sta 11371700) at lat 40°37'03", long 122°31'31", through a tunnel to powerplant and then into Keswick Reservoir. See schematic diagram of Pit and McCloud River basins.

COOPERATION.--Records furnished by Bureau of Reclamation, rounded to Geological Survey standards.

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,320	433	4,670	4,640	4,550	4,630	4	4,510	4,070	3,650	2,690	2,770
2	1,370	420	4,600	4,630	4,570	4,610	0	3,500	4,070	3,030	2,680	2,690
3	1,400	419	4,620	4,620	4,570	4,600	2,150	3,610	4,060	3,010	2,690	2,680
4	1,420	431	4,630	4,570	4,600	4,590	4,460	4,530	4,060	3,180	2,680	2,730
5	426	352	4,650	4,580	4,590	4,600	4,510	4,530	4,070	3,180	2,690	2,720
6	405	628	4,640	4,590	4,600	4,620	3,840	4,500	3,940	3,190	2,670	2,730
7	410	955	3,050	4,610	4,600	4,620	3,190	4,520	3,790	3,190	2,670	2,720
8	415	963	3,040	4,590	4,570	4,650	3,980	3,570	3,780	3,500	2,700	2,720
9	415	1,360	2,640	4,580	4,560	4,640	4,460	4,510	3,770	3,910	2,850	2,740
10	407	1,980	2,490	4,600	4,580	4,630	4,480	4,510	3,780	3,310	2,700	2,730
11	414	2,310	2,380	4,640	4,630	4,640	4,500	4,540	3,790	3,400	2,690	2,750
12	403	4,530	2,610	4,650	4,620	4,620	4,490	4,550	3,780	3,400	2,690	2,740
13	415	4,580	3,830	4,600	4,610	4,560	4,480	4,380	3,780	3,380	2,690	2,730
14	414	4,620	4,020	4,050	4,610	4,550	4,240	3,390	3,790	3,390	2,690	2,730
15	391	4,580	4,020	4,620	4,620	4,540	3,430	3,410	3,410	3,390	2,680	2,840
16	306	4,610	4,020	4,530	4,660	4,560	4,470	3,400	3,410	2,960	2,690	2,810
17	379	4,560	4,020	4,400	4,630	4,560	4,500	3,800	3,400	3,390	2,690	2,710
18	413	4,560	4,020	4,410	4,620	4,550	4,520	4,040	3,650	3,390	2,690	2,710
19	322	4,540	4,020	4,410	4,660	4,580	4,440	4,030	3,640	3,440	2,690	2,740
20	321	3,350	4,020	4,450	4,620	4,560	4,510	4,040	3,890	3,390	2,710	2,730
21	322	4,660	4,110	4,430	4,610	4,570	4,540	4,050	4,050	3,380	2,700	2,730
22	309	3,840	4,350	4,510	4,620	4,540	4,520	4,030	4,040	3,390	2,700	2,730
23	643	2,920	4,350	4,490	4,630	4,450	4,520	4,040	3,900	3,380	2,700	2,880
24	1,670	2,800	4,350	4,480	3,980	4,490	4,500	4,030	3,900	3,430	3,210	2,770
25	1,060	2,730	4,070	4,510	4,010	4,530	4,510	4,050	3,640	3,390	2,860	2,670
26	637	2,090	4,660	4,560	3,990	4,570	4,500	4,050	3,010	2,730	2,770	2,680
27	436	1,170	4,610	4,580	3,990	4,560	4,520	4,050	2,700	2,860	2,770	2,790
28	417	685	4,620	4,540	4,070	4,570	4,520	4,030	2,740	2,840	2,740	2,790
29	446	2,490	4,620	4,520	-----	4,330	4,530	4,070	772	2,760	2,720	2,760
30	454	3,410	4,640	4,550	-----	0	4,470	4,080	801	2,760	2,700	1,650
31	446	-----	4,660	4,550	-----	4	-----	4,090	-----	2,690	2,660	-----
TOTAL	18,606	76,976	125,030	140,530	125,970	132,524	119,784	126,440	105,483	100,290	84,460	81,170
MEAN	600	2,566	4,033	4,533	4,499	4,275	3,993	4,079	3,516	3,235	2,725	2,706
MAX	1,670	4,660	4,670	4,650	4,660	4,650	4,540	4,550	4,070	3,910	3,210	2,880
MIN	306	352	2,380	4,090	3,980	0	0	3,390	772	2,690	2,660	1,650
AC-FT	36,910	152,700	248,000	278,700	249,900	262,900	237,600	250,800	209,200	198,900	167,500	161,000

CAL YR 1973 TOTAL 918,680 MEAN 2,517 MAX 4,670 MIN 306 AC-FT 1,822,000
 WTR YR 1974 TOTAL 1,237,263 MEAN 3,390 MAX 4,670 MIN 0 AC-FT 2,454,000

11371700 WHISKEYTOWN LAKE NEAR IGO, CALIF.

LOCATION.--Lat 40°37'03", long 122°31'31", unsurveyed, Shasta County, at outlet works to Spring Creek powerplant on Clear Creek, 1.8 mi (2.9 km) downstream from Whiskey Creek, and 7.8 mi (12.6 km) northeast of Igo.

DRAINAGE AREA.--200 mi² (518 km²).

PERIOD OF RECORD.--May 1963 to current year. Prior to October 1964 published as Whiskeytown Reservoir near Igo.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Bureau of Reclamation).

EXTREMES.--Current year: Maximum contents, 253,100 acre-ft (312 hm³) Mar. 30 (elevation, 1,213.69 ft or 369.933 m); minimum, 197,000 acre-ft (243 hm³) Nov. 25 (elevation, 1,195.52 ft or 364.394 m).
Period of record: Maximum contents, 253,100 acre-ft (312 hm³) Mar. 30, 1974 (elevation, 1,213.69 ft or 369.933 m); minimum since reservoir was first filled, 159,000 acre-ft (196 hm³) Oct. 25, 1970 (elevation, 1,181.48 ft or 360.115 m).

REMARKS.--Reservoir is formed by earth- and rockfill dam. Storage began in May 1963. Capacity, 241,100 acre-ft (297 hm³) between elevations 1,100.00 ft (335.280 m), minimum operating level and 1,210.00 ft (368.808 m), crest of spillway. No dead storage. Transbasin water enters the reservoir through Judge Francis Carr powerplant (see sta 11525430) and is released through Spring Creek tunnel to Spring Creek powerplant (see sta 11371600) and Keswick Reservoir. Records, including extremes, represent contents at 2400 hours. See schematic diagram of Pit and McCloud River basins.

COOPERATION.--Records furnished by Bureau of Reclamation.

CAPACITY TABLE (ELEVATION, IN FEET, AND CONTENTS, IN ACRE-FEET)

1,015	714	1,080	15,100
1,020	994	1,100	27,500
1,030	1,800	1,120	46,700
1,040	3,060	1,140	74,000
1,050	4,900	1,180	155,300
1,060	7,420	1,220	274,400

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	217,700	215,800	214,900	213,100	222,000	210,800	250,700	235,600	234,400	237,400	237,200	238,300
2	217,800	215,500	214,400	212,800	221,300	213,300	249,300	237,100	234,200	237,700	237,200	238,300
3	217,900	215,400	212,400	212,100	220,600	214,800	244,800	238,500	234,000	238,200	237,200	238,400
4	217,800	215,200	209,700	212,200	219,800	214,600	239,800	238,100	233,700	238,400	237,300	238,300
5	217,500	216,200	206,400	211,500	218,800	214,600	236,400	237,600	233,400	238,400	237,300	238,200
6	217,500	216,400	202,600	210,700	217,900	214,500	234,800	237,300	233,300	238,600	237,400	236,900
7	217,500	216,600	201,900	209,300	217,100	214,500	233,900	236,800	233,500	238,700	237,500	235,500
8	217,400	217,200	201,100	207,900	216,000	214,100	234,400	237,800	233,700	239,500	237,500	233,800
9	217,300	218,700	200,700	206,000	214,900	213,600	235,600	237,100	233,500	238,100	237,400	232,100
10	217,100	221,700	200,400	203,900	213,600	213,400	236,600	236,500	234,000	238,300	237,500	230,500
11	216,900	229,600	200,400	203,200	212,700	216,200	237,400	235,700	234,200	238,200	237,500	228,800
12	216,700	230,600	200,700	202,300	211,800	219,600	238,100	234,800	234,400	238,200	237,600	227,400
13	216,600	226,500	201,100	202,300	210,700	221,500	238,500	234,200	234,600	238,200	237,600	225,700
14	216,400	221,000	201,100	204,900	209,600	222,600	237,000	234,100	234,700	238,100	237,600	223,900
15	216,200	217,100	201,100	215,800	208,500	223,300	237,500	234,300	235,700	238,100	237,600	222,000
16	216,100	215,500	201,000	245,100	207,500	224,000	237,700	234,700	236,100	238,500	237,700	220,000
17	216,000	212,900	201,200	246,900	206,300	224,400	237,500	234,800	237,200	238,400	237,700	218,500
18	216,000	211,400	201,200	244,500	205,700	224,800	237,100	235,000	237,600	238,400	237,700	216,900
19	215,900	207,100	201,200	241,300	205,100	224,800	236,900	235,100	238,400	238,300	238,000	217,000
20	215,800	204,600	201,400	236,800	204,400	224,700	236,900	235,200	238,500	238,200	238,100	217,300
21	216,400	200,300	204,700	231,200	203,800	224,400	236,700	235,300	238,300	238,100	238,200	217,600
22	218,800	198,400	206,700	229,300	203,000	224,100	236,500	235,400	237,800	238,000	238,400	217,600
23	220,500	198,000	207,600	227,300	201,600	223,900	236,700	235,400	237,600	237,800	238,600	217,000
24	218,700	197,600	208,200	226,300	201,600	223,500	236,500	235,400	236,900	237,700	237,200	216,800
25	217,700	197,000	209,100	225,500	201,600	223,200	236,600	235,500	236,700	237,600	237,000	217,200
26	217,200	197,500	208,400	224,400	201,600	222,900	236,500	235,500	237,300	237,800	237,500	217,400
27	217,000	199,200	208,200	223,100	201,600	224,600	236,400	235,400	238,700	237,500	237,600	217,400
28	216,900	202,500	208,600	222,100	206,700	227,500	236,200	235,300	240,300	237,300	237,800	217,400
29	216,700	203,000	210,800	222,000	-----	242,400	236,100	235,100	240,000	237,200	238,100	217,500
30	216,400	211,100	212,300	221,800	-----	253,100	235,800	234,900	237,600	237,100	238,400	217,700
31	216,100	-----	212,900	222,300	-----	250,700	-----	234,700	-----	237,100	238,500	-----
MAX	220,500	230,600	214,900	246,900	222,000	253,100	250,700	238,500	240,300	239,500	238,600	238,400
MIN	215,800	197,000	200,400	202,300	201,600	210,800	233,900	234,100	233,300	237,100	237,000	216,800
(a)	1,201.99	1,200.33	1,200.93	1,204.02	1,198.85	1,212.96	1,208.34	1,207.99	1,208.91	1,208.75	1,209.19	1,202.51
(b)	-1,400	-5,000	+1,800	+9,400	-15,600	+44,000	-14,900	-1,100	+2,900	-500	+1,400	-20,800
(c)	530	100	160	120	260	350	740	1,470	1,680	1,730	1,760	1,540

CAL YR 1973 b +10,900
WTR YR 1974 b +200

a Elevation, in feet, at end of month.
b Change in contents, in acre-feet.
c Evaporation, in acre-feet.

11372000 CLEAR CREEK NEAR IGO, CALIF.

LOCATION.--Lat 40°30'48", long 122°31'23", unsurveyed, Shasta County, on left bank at highway bridge on Redding-Igo Road 1.0 mi (1.6 km) northeast of Igo, 8.3 mi (13.4 km) southwest of Redding, and 10.4 mi (16.7 km) upstream from mouth.

DRAINAGE AREA.--228 mi² (590 km²).

PERIOD OF RECORD.--October 1940 to current year.

GAGE.--Water-stage recorder. Datum of gage is 672.99 ft (205.127 m) above mean sea level.

AVERAGE DISCHARGE (adjusted for change in contents and diversions).--34 years, 464 ft³/s (13.14 m³/s), 336,200 acre-ft/yr (415 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 8,430 ft³/s (239 m³/s) Apr. 1 (gage height, 9.28 ft or 2.829 m); minimum daily, 46 ft³/s (1.31 m³/s) Oct. 2.

Period of record: Maximum discharge, 24,500 ft³/s (694 m³/s) Dec. 21, 1955 (gage height, 13.75 ft or 4.191 m); minimum, 8.6 ft³/s (0.24 m³/s) Sept. 4, 6, 7, 1950. Maximum discharge since construction of Whiskeytown Dam in 1963, 9,940 ft³/s (282 m³/s) Dec. 22, 1964 (gage height, 9.23 ft or 2.813 m); minimum daily, 37 ft³/s (1.05 m³/s) many days in August and September 1966.

REMARKS.--Records good. Flow regulated by Whiskeytown Lake since May 1963 (see sta 11371700). Transbasin diversion from Trinity River through Judge Francis Carr powerplant to Whiskeytown Lake began in April 1963 (see sta 11525430). Diversions from Whiskeytown Lake to Spring Creek powerplant (see sta 11371600) began in December 1963. See schematic diagram of Pit and McCloud River basins. Records of water temperatures for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1345: Drainage area. WSP 1395: 1941(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	47	65	473	245	305	383	6,940	95	60	52	50	49
2	46	88	288	204	233	282	5,080	91	60	52	51	49
3	47	88	231	162	200	235	3,420	89	59	51	51	49
4	47	88	202	147	180	199	739	86	59	51	51	49
5	47	141	184	138	163	179	290	85	59	52	53	49
6	49	126	170	128	150	177	250	84	58	52	52	49
7	56	177	160	121	141	225	222	82	57	52	51	49
8	50	183	153	115	134	195	205	81	57	180	50	49
9	49	495	146	110	128	175	209	79	57	103	50	49
10	48	488	141	106	122	170	184	79	56	72	50	48
11	48	634	148	106	118	451	168	79	56	66	50	48
12	48	503	141	117	121	380	157	78	55	62	50	47
13	48	266	156	168	113	277	148	77	56	59	50	47
14	48	240	150	470	108	232	140	73	56	57	49	47
15	48	286	144	1,510	104	203	136	71	55	56	49	47
16	48	797	141	3,510	106	184	129	65	56	56	49	47
17	48	572	148	3,490	100	168	125	74	57	55	49	47
18	48	1,100	140	3,290	139	154	123	74	55	55	49	47
19	48	320	138	2,360	242	144	119	72	67	54	50	47
20	48	243	146	1,590	164	136	114	71	61	53	49	47
21	50	202	749	1,270	147	129	110	70	57	53	49	47
22	67	188	469	490	134	125	107	69	56	52	49	47
23	84	172	301	243	125	120	116	67	55	52	49	47
24	58	164	244	216	118	117	141	66	55	51	49	47
25	53	155	217	198	114	122	122	65	54	51	49	47
26	51	147	226	181	109	125	118	64	54	51	49	47
27	50	142	320	167	107	181	111	63	54	51	49	47
28	50	140	400	157	356	334	106	62	55	51	49	47
29	49	148	763	148	-----	1,940	101	62	55	51	49	47
30	49	606	396	140	-----	6,200	97	61	53	51	49	47
31	49	-----	294	288	-----	6,370	-----	61	-----	51	49	-----
TOTAL	1,576	8,964	7,979	21,585	4,281	20,312	20,027	2,295	1,704	1,855	1,542	1,430
MEAN	50.8	299	257	696	153	655	668	74.0	56.8	59.8	49.7	47.7
MAX	84	1,100	763	3,510	356	6,370	6,940	95	67	180	53	49
MIN	46	65	138	106	100	117	97	61	53	51	49	47
AC-FT	3,130	17,780	15,830	42,810	8,490	40,290	39,720	4,550	3,380	3,680	3,060	2,840
MEAN a	191	2,063	1,756	3,005	1,151	2,537	1,724	644	391	263	193	165
AC-FT a	11,720	122,750	107,960	184,770	63,940	156,020	102,560	39,590	23,290	16,150	11,850	9,840
CAL YR 1973	TOTAL 51,683	MEAN 142	MAX 1,790	MIN 46	AC-FT 102,500	MEAN a 917	AC-FT a 664,000					
WTR YR 1974	TOTAL 93,550	MEAN 256	MAX 6,940	MIN 46	AC-FT 185,600	MEAN a 1,174	AC-FT a 850,400					

a Adjusted for change in contents and evaporation in Whiskeytown Lake, diversion from Trinity River through Judge Francis Carr powerplant, and diversion to Spring Creek powerplant.

11374000 COW CREEK NEAR MILLVILLE, CALIF.

LOCATION.--Lat 40°30'19", long 122°13'56", in NE¼NW¼ sec.32, T.31 N., R.3 W., Shasta County, on right bank 2.9 mi (4.7 km) upstream from mouth, 4.2 mi (6.8 km) southwest of Millville, and 4.3 mi (6.9 km) downstream from Little Cow Creek.

DRAINAGE AREA.--425 mi² (1,100 km²).

PERIOD OF RECORD.--October 1949 to current year.

GAGE.--Water-stage recorder. Datum of gage is 408.3 ft (124.4 m) above mean sea level.

AVERAGE DISCHARGE.--25 years, 710 ft³/s (20.11 m³/s), 514,400 acre-ft/yr (634 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 35,300 ft³/s (1,000 m³/s) Jan. 15 (gage height, 17.81 ft or 5.428 m); minimum daily, 51 ft³/s (1.44 m³/s) Sept. 15.

Period of record: Maximum discharge, 45,200 ft³/s (1,280 m³/s) Dec. 27, 1951 (gage height, 21.55 ft or 6.568 m); minimum daily, 0.80 ft³/s (0.023 m³/s) Aug. 13, 1966.

Flood of 1937 or 1940 reached a stage of 23.8 ft (7.25 m), from floodmarks. Probable backwater effect from high flows on the Sacramento River.

REMARKS.--Records good. Numerous small diversions above station for irrigation. Records of water temperatures for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1931: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	83	123	10,100	1,880	3,200	5,150	10,100	750	443	136	86	78
2	84	122	2,950	1,520	1,800	3,970	4,820	774	427	137	90	77
3	73	121	1,820	1,360	1,440	3,370	3,160	768	429	137	86	66
4	69	124	1,410	1,200	1,280	1,890	2,300	744	420	128	85	63
5	68	160	1,170	1,150	1,150	1,560	1,910	747	408	129	95	61
6	73	878	1,000	1,130	1,050	2,170	1,780	754	389	126	115	63
7	309	3,220	917	1,050	999	11,600	1,440	763	367	126	98	63
8	344	1,720	854	1,000	941	3,630	1,240	786	343	272	91	64
9	226	2,300	740	938	899	2,430	1,530	804	320	311	84	63
10	172	3,250	680	887	859	1,970	1,240	758	313	310	81	65
11	141	9,590	1,970	853	821	3,240	1,080	723	300	250	86	63
12	130	8,770	1,370	2,350	864	2,570	988	708	301	214	82	61
13	127	3,810	2,480	5,020	970	2,070	917	668	297	185	86	58
14	127	2,430	2,360	8,530	830	1,680	868	624	296	173	86	57
15	122	1,640	1,440	22,900	777	1,480	847	597	279	156	84	51
16	118	4,350	1,160	22,300	875	1,330	828	572	280	143	81	59
17	114	4,380	1,810	9,400	800	1,390	828	558	295	131	85	56
18	112	5,170	1,400	11,800	1,050	1,300	847	552	269	130	81	63
19	115	2,100	1,130	11,700	5,400	1,180	810	513	267	121	82	63
20	123	1,510	1,060	4,970	1,750	1,100	768	478	286	117	78	59
21	134	1,430	4,570	3,350	1,410	1,030	756	454	246	107	82	55
22	188	1,710	3,160	2,610	1,390	992	762	438	219	111	71	58
23	421	1,370	1,960	2,180	1,110	954	804	430	204	109	75	63
24	270	1,440	1,570	1,890	995	923	980	433	204	99	73	68
25	196	1,080	1,300	1,650	920	1,140	1,010	437	192	97	71	63
26	162	935	1,420	1,540	904	1,540	828	447	185	96	68	65
27	148	774	4,490	1,410	920	1,800	756	482	172	94	65	68
28	140	713	7,160	1,320	2,960	2,450	714	510	173	95	71	71
29	130	698	11,100	1,240	-----	11,600	702	508	167	97	75	67
30	125	7,310	3,700	1,160	-----	10,700	714	484	155	89	77	77
31	125	-----	2,460	2,620	-----	4,730	-----	462	-----	86	75	-----
TOTAL	4,769	73,228	80,711	132,948	38,364	92,939	46,327	18,726	8,646	4,512	2,545	1,908
MEAN	154	2,441	2,604	4,289	1,370	2,998	1,544	604	288	146	82.1	63.6
MAX	421	9,590	11,100	22,900	5,400	11,600	10,100	804	443	311	115	78
MIN	68	121	680	853	777	923	702	430	155	86	65	51
AC-FT	9,460	145,200	160,100	263,700	76,090	184,300	91,890	37,140	17,150	8,950	5,050	3,780

CAL YR 1973 TOTAL 403,167 MEAN 1,105 MAX 13,600 MIN 22 AC-FT 799,700
WTR YR 1974 TOTAL 505,623 MEAN 1,385 MAX 22,900 MIN 51 AC-FT 1,003,000

PEAK DISCHARGE (BASE, 10,000 FT³/S)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-11	1045	13.43	20,800	1-15	1115	17.81	35,300
11-12	2145	11.06	12,800	1-16	1245	14.86	24,400
11-16	2030	11.25	13,300	1-18	1100	13.38	19,500
11-30	1045	11.83	14,900	2-19	0530	11.18	13,100
12-1	0300	12.99	18,400	3-7	0315	14.11	21,800
12-29	0715	13.09	18,700	3-29	0830	12.86	18,000
1-14	1500	12.17	15,900	4-1	1215	11.21	13,200

11374400 MIDDLE FORK COTTONWOOD CREEK NEAR ONO, CALIF.

LOCATION.--Lat 40°22'03", long 122°34'19", in SW¼NW¼ sec.17, T.29 N., R.6 W., Shasta County, on right bank 700 ft (210 m) downstream from Poverty Gulch, 4.6 mi (7.4 km) upstream from North Fork Cottonwood Creek, and 7.8 mi (12.6 km) southeast of Ono.

DRAINAGE AREA.--244 mi² (632 km²).

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

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 610 ft (186 m), from topographic map. Prior to Nov. 1, 1969, at site 4.2 mi (6.8 km) downstream at different datum.

AVERAGE DISCHARGE.--18 years, 266 ft³/s (7.53 m³/s), 192,700 acre-ft/yr (238 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 22,700 ft³/s (643 m³/s) Jan. 16 (gage height, 12.70 ft or 3.871 m), from rating curve extended as explained below; minimum daily, 11 ft³/s (0.31 m³/s) Oct. 1-5.
Period of record: Maximum discharge, 22,700 ft³/s (643 m³/s) Jan. 16, 1974 (gage height, 12.70 ft or 3.871 m), from rating curve extended above 6,600 ft³/s (185 m³/s) on basis of slope-area measurement of peak flow; minimum daily, 1.2 ft³/s (0.034 m³/s) Aug. 28, 1964.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	28	1,630	1,020	588	1,590	3,060	355	154	63	26	19
2	11	27	990	794	523	1,480	2,280	350	144	59	25	18
3	11	26	682	706	482	1,200	1,730	338	140	56	25	18
4	11	26	545	636	462	881	1,440	328	137	56	24	18
5	11	93	480	573	436	752	1,270	322	137	54	41	18
6	12	154	426	531	412	704	1,110	316	140	49	43	17
7	26	172	408	492	400	845	962	316	134	49	30	17
8	30	230	420	450	376	632	872	316	127	84	26	16
9	24	257	380	420	359	558	818	300	121	130	25	16
10	23	730	350	385	342	523	710	285	118	89	24	15
11	20	1,010	385	375	332	672	646	265	112	81	23	15
12	18	1,360	380	402	332	910	598	260	112	73	22	15
13	17	770	711	749	320	836	550	246	109	66	22	15
14	16	674	580	1,940	305	768	522	236	109	61	22	15
15	15	559	510	6,250	300	752	494	228	103	56	22	15
16	15	947	468	16,100	305	720	474	223	103	51	22	15
17	15	936	545	6,580	290	688	448	236	109	49	22	15
18	15	1,070	545	4,330	365	672	522	232	103	47	21	15
19	15	636	486	3,810	672	565	454	218	121	47	20	15
20	15	524	687	2,570	469	509	415	210	140	45	21	15
21	17	426	2,440	1,990	436	462	391	201	109	43	22	14
22	66	380	1,580	1,620	406	436	373	193	92	36	20	14
23	147	350	1,150	1,310	376	418	379	189	86	34	20	13
24	120	340	990	1,100	364	388	454	184	84	34	20	13
25	66	308	963	960	359	412	422	179	78	32	18	13
26	49	295	972	845	370	406	494	174	78	30	19	13
27	41	277	1,190	752	388	406	428	169	76	30	18	13
28	36	277	1,380	688	834	537	397	162	76	30	18	13
29	32	318	2,860	632	-----	3,360	373	158	71	27	18	13
30	30	1,240	1,750	580	-----	5,050	361	162	68	27	18	13
31	29	-----	1,290	618	-----	2,460	-----	162	-----	27	19	-----
TOTAL	964	14,480	28,173	60,208	11,603	30,592	23,447	7,513	3,291	1,615	716	454
MEAN	31.1	483	909	1,942	414	987	782	242	110	52.1	23.1	15.1
MAX	147	1,360	2,860	16,100	834	5,050	3,060	355	154	130	43	19
MIN	11	26	350	375	290	388	361	158	68	27	18	13
AC-FT	1,910	28,720	55,880	119,400	23,010	60,680	46,510	14,900	6,530	3,200	1,420	901

CAL YR 1973 TOTAL 145,514.9 MEAN 399 MAX 4,470 MIN 8.2 AC-FT 288,600
WTR YR 1974 TOTAL 183,056.0 MEAN 502 MAX 16,100 MIN 11 AC-FT 363,100

PEAK DISCHARGE (BASE, 1,800 FT³/S)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-30	2300	4.15	2,010	1-16	1400	12.70	22,700
12-21	0800	4.85	3,170	3-29	2400	7.57	8,340
12-29	0200	5.12	3,660				

11375700 NORTH FORK COTTONWOOD CREEK NEAR IGO, CALIF.

LOCATION.--Lat 40°26'32", long 122°32'57", in SE¼NW¼ sec.21, T.30 N., R.6 W., Shasta County, near right bank on downstream side of bridge on Gas Point Road, 1.2 mi (1.9 km) downstream from Huling Creek, 4.4 mi (7.1 km) south of Igo, and 4.5 mi (7.2 km) upstream from Middle Fork.

DRAINAGE AREA.--88.7 mi² (229.7 km²):

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

GAGE.--Water-stage recorder. Altitude of gage is 630 ft (192 m), from topographic map.

AVERAGE DISCHARGE.--18 years, 177 ft³/s (5.013 m³/s), 128,200 acre-ft/yr (158 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 10,400 ft³/s (295 m³/s) Jan. 16 (gage height, 36.36 ft or 11.083 m in gage well, 39.1 ft or 11.92 m, from floodmarks); minimum daily, 8.8 ft³/s (0.25 m³/s) Oct. 4, 5.

Period of record: Maximum discharge, 11,000 ft³/s (312 m³/s) Dec. 22, 1964 (gage height, 39.45 ft or 12.024 m in gage well, 41.7 ft or 12.71 m, from floodmarks), from rating curve extended above 4,400 ft³/s (125 m³/s) on basis of slope-area measurement of maximum flow; minimum daily, 0.80 ft³/s (0.023 m³/s) July 23-25, 1968, Aug. 27-29, Sept. 1, 1972.

Flood of Dec. 21, 1955, reached a peak discharge of 14,300 ft³/s (405 m³/s) by slope-area measurement at site 1.2 mi (1.9 km) upstream (above Huling Creek) adjusted for intervening drainage area.

REMARKS.--Some storage for irrigation above station in Rainbow Lake, capacity, 4,800 acre-ft (5.92 hm³). Some flow diverted upstream to Clear Creek basin by Happy Valley Irrigation Canal.

COOPERATION.--Records furnished by California Department of Water Resources and reviewed by Geological Survey.

REVISIONS (WATER YEARS).--WRD Calif. 1966: 1960(M), 1961(M), 1963(M), 1964(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.9	33	960	491	565	567	3,220	238	118	74	36	15
2	9.9	30	640	453	480	503	1,670	229	115	73	36	14
3	9.9	21	510	440	456	477	1,220	217	114	73	35	14
4	8.8	20	491	402	432	419	1,040	203	114	70	35	13
5	8.8	66	478	376	400	386	985	199	110	70	47	12
6	12	76	434	344	363	410	911	194	110	68	42	11
7	32	106	389	325	313	590	829	189	108	66	37	11
8	20	170	363	293	277	402	788	184	106	68	34	11
9	22	600	338	274	243	346	772	180	106	67	32	11
10	16	824	312	259	224	327	639	174	102	66	31	9.9
11	15	1,090	325	255	218	764	568	172	98	66	31	10
12	13	1,020	280	281	222	900	533	165	97	63	31	11
13	15	624	299	382	207	736	512	165	94	63	31	11
14	15	523	260	1,170	198	685	495	159	94	61	29	11
15	15	523	250	2,410	201	644	475	159	92	58	29	10
16	15	1,400	235	7,560	211	598	443	156	90	56	28	9.9
17	15	1,130	245	3,140	192	543	402	155	90	54	28	10
18	15	1,390	225	2,760	375	481	363	151	87	55	27	10
19	15	728	225	1,850	477	444	303	153	88	55	27	9.9
20	16	600	255	1,280	266	416	277	150	89	54	27	9.9
21	21	504	1,100	972	246	393	265	142	87	52	24	9.9
22	98	491	581	841	225	370	258	135	87	51	21	9.9
23	126	466	504	774	213	350	288	130	85	50	20	9.7
24	73	453	408	720	208	332	328	130	83	49	19	9.6
25	50	434	414	664	203	336	287	127	83	47	17	9.5
26	45	382	517	595	199	305	289	126	80	45	18	9.6
27	41	350	624	540	194	367	271	126	80	44	17	9.6
28	39	318	744	497	594	508	268	122	79	42	18	9.3
29	37	338	1,400	470	-----	2,560	261	122	76	39	18	9.7
30	36	1,130	696	444	-----	2,570	248	119	76	38	16	10
31	34	-----	555	708	-----	1,920	-----	117	-----	36	15	-----
TOTAL	897.7	15,840	15,057	31,970	8,402	20,649	19,208	4,988	2,838	1,773	856	321.4
MEAN	29.0	528	486	1,031	300	666	640	161	94.6	57.2	27.6	10.7
MAX	126	1,400	1,400	7,560	594	2,570	3,220	238	118	74	47	15
MIN	8.8	20	225	255	192	305	248	117	76	36	15	9.3
AC-FT	1,780	31,420	29,870	63,410	16,670	40,960	38,100	9,890	5,630	3,520	1,700	637

CAL YR 1973 TOTAL 100,741.0 MEAN 276 MAX 2,360 MIN 2.8 AC-FT 199,800
WTR YR 1974 TOTAL 122,800.1 MEAN 336 MAX 7,560 MIN 8.8 AC-FT 243,600

11375810 COTTONWOOD CREEK NEAR OLINDA, CALIF.

LOCATION.--Lat 40°23'06", long 122°28'31", in SE¼NW¼ sec.7, T.29 N., R.5 W., Shasta County, on left bank 1.0 mi (1.6 km) downstream from Dutch Gulch, and 5.5 mi (8.8 km) southwest of Olinda.

DRAINAGE AREA.--395 mi² (1,023 km²).

PERIOD OF RECORD.--August 1971 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 515 ft (157 m), from topographic map.

EXTREMES.--Current year: Maximum discharge, 36,900 ft³/s (1,050 m³/s) Jan. 16 (gage height, 21.44 ft or 6.535 m); minimum daily, 16 ft³/s (0.45 m³/s) Sept. 11.

Period of record: Maximum discharge, 36,900 ft³/s (1,050 m³/s) Jan. 16, 1974 (gage height, 21.44 ft or 6.535 m); no flow Aug. 30, Sept. 7, 8, 1972.

REMARKS.--Records good. Numerous pumping diversions above station. Records of water temperatures for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	64	2,510	1,720	1,300	2,350	7,770	746	237	84	62	28
2	18	64	1,810	1,400	1,100	2,000	4,260	704	231	78	62	27
3	17	50	1,380	1,280	1,020	1,990	3,060	662	208	80	60	25
4	19	48	1,160	1,150	964	1,440	2,430	615	189	78	58	24
5	19	118	1,000	1,050	904	1,300	2,170	585	188	73	74	24
6	20	270	892	955	850	1,260	1,970	565	196	72	90	24
7	59	260	826	892	790	2,330	1,760	540	187	72	71	23
8	68	400	820	814	735	1,340	1,680	535	175	134	60	22
9	61	628	742	754	685	1,140	1,660	510	165	231	56	22
10	50	1,700	675	697	650	1,050	1,510	480	160	169	54	21
11	44	2,090	719	670	620	1,420	1,410	450	153	142	57	16
12	35	2,780	675	796	620	1,980	1,340	430	147	127	54	17
13	34	1,610	1,120	1,260	598	1,640	1,270	414	144	117	52	17
14	34	1,480	913	3,270	566	1,480	1,220	402	142	110	50	18
15	34	1,190	772	9,100	550	1,410	1,180	382	138	104	50	19
16	34	2,470	692	23,400	546	1,340	1,130	370	140	98	48	20
17	34	2,420	790	9,850	526	1,280	1,070	374	156	97	48	19
18	32	3,040	808	7,530	680	1,220	1,050	394	144	97	48	20
19	34	1,570	708	6,470	1,680	1,110	979	378	157	94	47	18
20	37	1,230	885	4,460	838	1,040	881	350	214	92	47	19
21	41	1,030	4,160	3,270	740	976	842	340	151	88	44	19
22	118	969	2,580	2,720	685	928	812	332	133	80	40	18
23	277	857	2,000	2,350	635	880	806	300	124	77	36	18
24	234	838	1,740	2,070	610	832	1,010	289	119	78	34	19
25	146	748	1,590	1,830	598	826	958	280	112	76	29	20
26	107	686	1,710	1,580	594	826	1,000	270	107	73	29	20
27	94	635	2,250	1,450	594	814	930	268	101	74	30	21
28	81	605	2,500	1,340	1,580	1,070	848	266	98	72	31	21
29	73	640	5,410	1,220	-----	6,880	812	261	91	70	30	22
30	71	2,580	2,720	1,120	-----	9,190	770	252	89	66	30	26
31	66	-----	3,180	1,340	-----	5,020	-----	245	-----	61	28	-----
TOTAL	2,010	33,070	49,737	97,808	22,258	58,362	48,588	12,989	4,596	2,964	1,509	627
MEAN	64.8	1,102	1,604	3,155	795	1,883	1,620	419	153	95.6	48.7	20.9
MAX	277	3,040	5,410	23,400	1,680	9,190	7,770	746	237	231	90	28
MIN	17	48	675	670	526	814	770	245	89	61	28	16
AC-FT	3,990	65,590	98,650	194,000	44,150	115,800	96,370	25,760	9,120	5,880	2,990	1,240

CAL YR 1973 TOTAL 273,740.0 MEAN 750 MAX 7,570 MIN 4.3 AC-FT 543,000
WTR YR 1974 TOTAL 334,518.0 MEAN 916 MAX 23,400 MIN 16 AC-FT 663,500

PEAK DISCHARGE (BASE, 3,000 FT ³ /S)						
DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.
11-12	0800	9.38	3,200	2-19	0400	9.56
11-18	0400	10.93	5,070	2-28	2000	10.11
11-30	2130	10.12	4,080	3-3	0230	9.56
12-21	0930	11.73	6,110	3-7	0800	9.65
12-29	0330	13.84	9,010	3-29	2300	16.65
1-16	1530	21.44	36,900	4-1	1000	14.09

11375820 SOUTH FORK COTTONWOOD CREEK NEAR COTTONWOOD, CALIF.

LOCATION.--Lat 40°18'59", long 122°26'52", in SW¼SE¼ sec.32, T.29 N., R.5 W., Tehama County, on right bank 15 ft (5 m) downstream from highway bridge, 0.7 mi (1.1 km) upstream from Dry Fork, and 10.3 mi (16.6 km) southwest of Cottonwood.

DRAINAGE AREA.--217 mi² (562 km²).

PERIOD OF RECORD.--October 1962 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 525 ft (160 m), from topographic map. October 1962 to Dec. 22, 1964, at site 85 ft (26 m) upstream at different datum.

AVERAGE DISCHARGE.--12 years, 240 ft³/s (6.797 m³/s), 173,900 acre-ft/yr (214 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 18,700 ft³/s (530 m³/s) Jan. 16 (gage height, 14.05 ft or 4.282 m); no flow Oct. 1-6.

Period of record: Maximum discharge, 18,700 ft³/s (530 m³/s) Jan. 16, 1974 (gage height, 14.05 ft or 4.282 m); no flow many days in each year.

REMARKS.--Small diversion above station.

COOPERATION.--Records furnished by California Department of Water Resources and reviewed by Geological Survey.

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	51	1,580	715	418	1,700	3,120	311	192	54	13	3.4
2	0	49	630	543	359	1,130	2,610	315	188	50	12	3.4
3	0	49	433	475	325	1,000	1,810	318	190	49	11	3.3
4	0	50	364	424	305	617	1,350	315	185	45	11	3.4
5	0	75	331	387	287	527	1,090	315	187	43	11	3.2
6	0	190	315	360	267	493	912	327	208	42	21	2.8
7	.50	242	329	344	254	1,120	766	359	191	42	18	2.8
8	3.7	337	364	322	241	559	685	407	168	54	14	2.6
9	5.9	315	350	298	230	430	650	420	149	82	11	2.5
10	7.4	820	320	284	220	383	582	362	136	67	9.6	2.3
11	7.4	1,570	329	279	213	735	521	324	133	56	9.0	2.1
12	6.8	1,800	322	297	212	725	487	300	133	51	8.1	2.0
13	6.1	841	459	636	208	480	456	282	129	46	7.5	1.9
14	5.5	545	431	1,380	194	425	433	264	121	40	7.3	1.9
15	5.5	454	378	6,280	184	448	425	255	114	36	7.0	1.9
16	5.4	674	359	15,000	184	476	418	240	114	34	6.5	1.9
17	5.5	711	422	7,560	175	504	427	237	113	32	6.5	2.0
18	5.4	620	482	4,390	186	516	425	233	100	31	6.1	2.0
19	4.6	428	417	4,230	398	467	382	216	103	29	5.9	2.0
20	6.5	342	405	2,830	345	416	350	195	116	28	5.6	2.0
21	8.0	297	2,220	1,840	294	377	347	178	94	27	5.4	2.0
22	21	255	1,310	1,310	267	356	340	177	84	26	5.3	2.0
23	166	229	759	1,030	238	338	366	170	79	25	4.9	2.0
24	200	224	618	868	225	324	398	170	77	22	4.8	1.9
25	127	222	592	751	218	332	362	178	73	21	4.3	1.9
26	105	216	557	658	216	355	344	201	70	18	4.0	1.8
27	86	205	733	582	214	362	309	231	65	20	3.6	1.8
28	71	202	822	526	912	467	294	243	61	22	3.7	1.8
29	62	223	2,150	477	-----	3,820	288	242	57	18	3.7	1.7
30	58	1,280	1,560	434	-----	7,110	291	224	55	16	3.5	1.6
31	53	-----	991	423	-----	3,290	-----	205	-----	14	3.5	-----
TOTAL	1,033.20	13,516	21,332	55,933	7,789	30,282	21,238	8,214	3,685	1,140	247.8	67.9
MEAN	33.3	451	688	1,804	278	977	708	265	123	36.8	7.99	2.26
MAX	200	1,800	2,220	15,000	912	7,110	3,120	420	208	82	21	3.4
MIN	0	49	315	279	175	324	288	170	55	14	3.5	1.6
AC-FT	2,050	26,810	42,310	110,900	15,450	60,060	42,130	16,290	7,310	2,260	492	135

CAL YR 1973 TOTAL 112,627.30 MEAN 309 MAX 3,950 MIN 0 AC-FT 223,400
WTR YR 1974 TOTAL 164,477.90 MEAN 451 MAX 15,000 MIN 0 AC-FT 326,200

11376000 COTTONWOOD CREEK NEAR COTTONWOOD, CALIF.

LOCATION.--Lat 40°23'14", long 122°14'15", in NE¼NE¼ sec.7, T.29 N., R.3 W., Shasta County, on left bank 2.2 mi (3.5 km) east of Cottonwood, and 2.5 mi (4.0 km) upstream from mouth.

DRAINAGE AREA.--927 mi² (2,401 km²).

PERIOD OF RECORD.--October 1940 to current year.

GAGE.--Water-stage recorder. Datum of gage is 364.0 ft (110.95 m) above mean sea level (levels by Corps of Engineers). Prior to July 26, 1963, at site 100 ft (30 m) downstream on right bank at datum 3.59 ft (1.094 m) higher. July 26, 1963, to Sept. 13, 1972, at site 350 ft (107 m) downstream on right bank. Sept. 21, 1967, to Jan. 14, 1968, supplementary gage at a site 1,550 ft (472 m) downstream on right bank at datum 2.35 ft (0.716 m) higher.

AVERAGE DISCHARGE.--34 years, 868 ft³/s (24.6 m³/s), 628,900 acre-ft/yr (775 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 70,000 ft³/s (1,980 m³/s) Jan. 16 (gage height, 20.15 ft or 6.142 m); minimum daily, 62 ft³/s (1.76 m³/s) Sept. 25.
Period of record: Maximum discharge, 70,000 ft³/s (1,980 m³/s) Jan. 16, 1974 (gage height, 20.15 ft or 6.142 m); minimum, 15 ft³/s (0.42 m³/s) for several days in September 1945.

REMARKS.--Records good except those for Jan. 16 to Feb. 5, which are fair. Small diversions for irrigation above station. At times during irrigation season, Cottonwood Creek receives water above station from Sacramento River by way of Anderson-Cottonwood Canal. Records of chemical analyses for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1345: 1943, 1944(M), 1946-47, 1949(M), 1951-52. WSP 1931: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NCV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	95	124	6,910	3,310	2,120	6,260	16,200	1,100	506	206	112	87
2	93	119	3,220	2,670	1,760	4,870	9,280	1,040	491	194	116	95
3	89	113	2,270	2,390	1,610	4,580	5,970	1,010	475	188	120	85
4	89	103	1,880	2,080	1,490	3,080	4,310	971	458	189	116	83
5	89	122	1,620	1,920	1,450	2,510	3,420	936	451	184	126	79
6	114	344	1,440	1,730	1,380	2,190	2,980	924	466	171	142	73
7	140	380	1,340	1,560	1,310	8,250	2,530	932	448	166	143	73
8	154	549	1,360	1,460	1,230	3,440	2,280	961	426	199	126	75
9	154	580	1,280	1,330	1,160	2,320	2,250	963	402	374	120	79
10	142	2,440	1,150	1,220	1,100	2,040	2,120	909	378	358	110	83
11	148	3,350	1,150	1,110	1,060	2,390	2,000	856	361	299	107	76
12	157	5,090	1,240	1,270	1,040	4,160	1,870	819	348	278	106	70
13	154	2,980	1,790	2,070	1,030	2,930	1,770	779	339	247	102	72
14	148	2,400	1,770	4,880	962	2,550	1,670	757	324	230	102	81
15	151	1,830	1,450	22,100	923	2,390	1,600	715	311	205	95	78
16	160	3,090	1,290	54,300	915	2,280	1,530	688	307	199	95	74
17	150	3,390	1,330	24,100	900	2,180	1,470	678	347	186	102	76
18	138	5,200	1,550	13,200	1,300	2,060	1,450	712	328	179	101	74
19	145	2,530	1,330	12,400	7,000	1,910	1,390	676	315	171	101	76
20	150	1,760	1,240	8,470	2,000	1,770	1,260	638	411	167	99	72
21	155	1,460	7,100	6,040	1,250	1,640	1,200	608	353	165	93	66
22	190	1,240	5,370	4,670	1,200	1,550	1,170	589	304	158	87	74
23	300	1,120	3,190	3,700	1,080	1,450	1,170	568	276	151	87	66
24	375	1,030	2,770	3,260	1,030	1,390	1,440	542	261	154	87	66
25	271	918	2,390	2,960	979	1,350	1,490	532	250	143	89	62
26	210	836	2,240	2,570	966	1,430	1,460	541	237	139	93	72
27	181	771	3,330	2,280	970	1,390	1,410	555	230	138	85	72
28	160	722	4,180	2,130	2,820	1,850	1,300	572	238	146	89	72
29	135	736	12,600	1,910	-----	12,800	1,230	581	221	139	95	70
30	132	4,600	6,420	1,840	-----	27,500	1,170	556	217	129	88	68
31	125	-----	4,230	2,010	-----	11,100	-----	530	-----	119	83	-----
TOTAL	4,894	49,927	90,430	196,940	42,035	127,610	80,390	23,238	10,479	5,971	3,217	2,249
MEAN	158	1,664	2,917	6,353	1,501	4,116	2,680	750	349	193	104	75.0
MAX	375	5,200	12,600	54,300	7,000	27,500	16,200	1,100	506	374	143	95
MIN	89	103	1,150	1,110	900	1,350	1,170	530	217	119	83	62
AC-FT	9,710	99,030	179,400	390,600	83,380	253,100	159,500	46,090	20,790	11,840	6,380	4,460

CAL YR 1973 TOTAL 511,203 MEAN 1,401 MAX 16,100 MIN 67 AC-FT 1,014,000
WTR YR 1974 TOTAL 637,380 MEAN 1,746 MAX 54,300 MIN 62 AC-FT 1,264,000

PEAK DISCHARGE (BASE, 7,100 FT ³ /S)							
DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
12-1	0045	12.10	11,000	2-28	2145	12.04	12,700
12-21	1500	12.32	11,700	3-7	2115	13.25	18,000
12-29	0730	13.45	19,000	3-30	0430	17.04	41,800
1-16	2015	20.15	70,000	4-1	0700	14.70	25,800

11376550 BATTLE CREEK BELOW COLEMAN FISH HATCHERY, NEAR COTTONWOOD, CALIF.

LOCATION.--Lat 40°23'54", long 122°08'43", in SW¼NE¼ sec.1, T.29 N., R.3 W., Shasta County, U.S. Fish and Wildlife service land, on right bank 3.7 mi (6.0 km) downstream from Spring Branch, 5.7 mi (9.2 km) upstream from mouth, and 7.0 mi (11.3 km) east of Cottonwood.

DRAINAGE AREA.--357 mi² (925 km²).

PERIOD OF RECORD.--October 1961 to current year. October 1940 to September 1961 at site 0.6 mi (1.0 km) upstream published as "near Cottonwood"; low-flow records not equivalent owing to Coleman Fish Hatchery diversion.

GAGE.--Water-stage recorder. Altitude of gage is 415 ft (126 m), from topographic map.

AVERAGE DISCHARGE.--13 years, 538 ft³/s (15.2 m³/s), 389,800 acre-ft/yr (481 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 15,000 ft³/s (425 m³/s) Jan. 16 (gage height, 11.62 ft or 3.542 m); minimum daily, 254 ft³/s (7.19 m³/s) Oct. 1, 3, 4.

Period of record: Maximum discharge, 24,300 ft³/s (688 m³/s) Jan. 24, 1970 (gage height, 14.75 ft or 4.496 m), from rating curve extended above 4,200 ft³/s (119 m³/s) on basis of slope-area measurement of peak flow; minimum since 1961, 52 ft³/s (1.47 m³/s) Aug. 8, 1962.

Maximum stage known, 15.8 ft (4.82 m) Dec. 11, 1937, from floodmarks at former site and datum (discharge, 35,000 ft³/s or 991 m³/s, by slope-area measurement).

REMARKS.--Records good. Flow regulated by four small powerplants, several small reservoirs, and Coleman Fish Hatchery. Coleman Fish Hatchery diverts, 50 ft³/s (1.42 m³/s) to 90 ft³/s (2.55 m³/s) which is returned above the station. Ten ft³/s (0.28 m³/s) diverted at times above station for irrigation. Maximum flows considered equivalent to former station Battle Creek near Cottonwood. Records of water temperatures for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WRD Calif. 1965: 1963.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	254	336	2,720	923	976	1,960	2,170	822	775	594	461	360
2	257	331	1,100	792	873	1,570	2,000	882	760	557	450	358
3	254	333	835	782	817	1,820	1,600	894	760	509	445	358
4	254	337	734	727	788	1,050	1,380	870	744	496	440	355
5	256	337	573	729	749	922	1,310	870	738	497	440	354
6	266	364	636	747	715	894	1,460	910	775	511	450	354
7	352	635	646	761	715	1,450	1,230	946	752	514	435	351
8	388	777	641	725	687	1,300	1,160	1,030	723	633	430	353
9	334	774	593	693	668	1,070	1,290	1,090	706	764	415	353
10	315	1,780	567	658	651	926	1,160	1,030	714	755	410	353
11	310	4,400	842	659	636	1,090	1,090	973	738	589	407	351
12	307	3,650	685	1,060	636	1,010	1,050	948	762	532	400	345
13	309	1,470	1,100	1,220	628	910	1,000	896	733	510	400	347
14	308	1,150	749	1,370	610	854	972	848	728	483	392	348
15	306	860	662	6,490	596	838	965	838	719	472	390	358
16	303	1,080	617	10,900	645	822	958	808	714	593	386	366
17	299	1,280	854	4,730	617	1,290	965	783	711	615	384	360
18	294	1,850	802	3,340	632	969	991	791	670	593	378	365
19	300	961	692	3,410	975	894	939	745	679	576	377	361
20	299	807	675	2,410	723	855	894	712	655	549	375	360
21	311	741	1,420	1,820	675	823	888	674	618	544	374	362
22	353	739	1,050	1,540	636	817	913	662	637	532	370	364
23	622	660	845	1,370	596	805	958	666	626	522	367	365
24	420	645	787	1,250	588	802	958	681	601	510	369	365
25	365	584	726	1,160	579	876	906	637	586	510	363	361
26	358	551	744	1,090	565	955	852	640	562	510	362	362
27	351	521	998	1,010	557	1,220	810	660	541	505	360	362
28	351	513	1,450	971	1,080	1,210	780	670	540	500	362	361
29	347	532	2,150	923	-----	3,250	786	680	537	494	362	360
30	340	2,110	1,300	886	-----	5,300	798	710	563	478	361	361
31	342	-----	1,040	903	-----	2,410	-----	775	-----	456	362	-----
TOTAL	10,125	31,188	29,333	56,048	19,613	40,962	33,233	25,141	20,368	16,903	12,277	10,733
MEAN	327	1,040	946	1,808	700	1,321	1,108	811	679	545	396	358
MAX	622	4,400	2,720	10,900	1,080	5,300	2,170	1,090	775	764	461	366
MIN	254	331	567	658	557	802	780	637	537	456	360	345
AC-FT	20,080	61,860	58,180	111,200	38,900	81,250	65,920	49,870	40,400	33,530	24,350	21,290
CAL YR 1973	TOTAL 233,237	MEAN 639	MAX 4,400	MIN 215	AC-FT 462,600							
WTR YR 1974	TOTAL 305,925	MEAN 838	MAX 10,900	MIN 254	AC-FT 606,800							

PEAK DISCHARGE (BASE, 2,500 FT³/S)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-11	1030	7.79	6,000	1-18	1500	6.17	4,090
11-12	0330	7.66	5,800	3-1	1745	5.06	2,880
11-18	1015	5.57	2,980	3-3	0300	5.70	3,550
12-1	0130	7.49	5,520	3-17	0545	4.79	2,610
12-29	0345	5.39	2,780	3-30	0315	8.56	7,570
1-16	1300	11.62	15,000				

11377100 SACRAMENTO RIVER ABOVE BEND BRIDGE, NEAR RED BLUFF, CALIF.

LOCATION.--Lat 40°17'19", long 122°11'08", in NW¼NE¼ sec.15, T.28 N., R.3 W., Tehama County, on left bank 2.7 mi (4.3 km) upstream from Bend Bridge, and 8.1 mi (13.0 km) northeast of Red Bluff.

DRAINAGE AREA.--8,900 mi² (23,050 km²), excluding Goose Lake basin.

PERIOD OF RECORD.--1879-88 annual observed maximums only, published in WSP 1315-A. January 1892 to current year. Monthly discharges only for some periods and yearly estimates for some incomplete years, published in WSP 1315-A. Published as "at Red Bluff" 1894-96, as "at Jellys Ferry" 1895-1902, and as "near Red Bluff" 1903-68.

GAGE.--Water-stage recorder. Datum of gage is 285.77 ft (87.103 m) above mean sea level. Prior to January 1902, nonrecording gage at site 6.1 mi (9.8 km) upstream at different datum. January 1902 to December 1919, nonrecording gage at several sites about 10 mi (16 km) downstream at different datum. December 1919 to September 1968, water-stage recorder at site 10.1 mi (16.3 km) downstream at different datum.

AVERAGE DISCHARGE.--83 years, 11,830 ft³/s (335 m³/s), 8,571,000 acre-ft/yr (10.6 km³/yr).

EXTREMES.--Current year: Maximum discharge, 133,000 ft³/s (3,770 m³/s) Jan. 16 (gage height, 32.47 ft or 9.897 m); minimum daily, 6,710 ft³/s (190 m³/s) Oct. 19.
Period of record: Maximum discharge, 291,000 ft³/s (8,240 m³/s) Feb. 28, 1940 (gage height, 38.9 ft or 11.86 m, site and datum then in use), from rating curve extended above 170,000 ft³/s (4,810 m³/s) on basis of velocity-area studies; minimum (1892 to current year), 2,000 ft³/s (56.6 m³/s) Mar. 29, 1944.

REMARKS.--Records excellent. Flow regulated by Shasta Lake since Dec. 30, 1943 (see sta 11370000). Diversions, in addition to those on tributaries, for irrigation of 22,000 acres (8,900 hm²) between stations at Keswick and above Bend Bridge. Transbasin diversions from Trinity River to Whiskeytown Lake via Judge Francis Carr powerplant (see sta 11525430) started in April 1963. Records of chemical analyses and water temperatures at or near this gaging station for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 861: 1904, 1907, 1909, 1914-15, 1927-28. WSP 1315-A: 1914(M), 1916(M), 1918(M). WSP 1931: Drainage area. WRD Calif. 1969: 1965.

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9,480	6,870	62,000	40,100	46,000	25,800	119,000	10,600	15,600	13,800	12,400	13,200
2	9,330	6,870	41,200	38,300	38,400	20,400	108,000	10,500	15,500	13,600	12,300	13,200
3	9,300	6,870	38,400	34,100	35,500	20,600	93,700	9,680	15,500	13,300	12,400	13,200
4	9,350	6,850	46,500	29,200	34,600	14,900	63,600	9,390	15,100	13,100	12,400	13,200
5	8,520	6,810	43,100	30,400	31,000	14,100	44,800	9,220	14,900	13,100	12,400	13,200
6	8,070	7,790	42,900	30,900	27,000	15,900	43,200	15,600	14,900	13,000	12,400	13,200
7	8,600	10,500	42,500	30,500	23,900	43,200	37,700	17,800	14,900	13,000	12,700	13,200
8	8,780	10,600	38,200	28,000	22,900	27,300	37,000	17,500	14,800	13,500	13,000	13,200
9	8,490	8,720	32,000	25,000	19,100	22,600	37,800	17,700	14,700	14,000	13,400	13,200
10	8,360	20,700	28,900	23,800	15,100	19,700	37,100	17,800	14,700	13,900	13,500	13,100
11	8,340	34,700	30,900	23,600	13,300	17,900	36,200	17,900	14,700	13,500	13,600	12,400
12	8,290	38,900	30,300	25,900	19,200	18,000	35,700	17,800	14,400	13,200	13,500	11,900
13	8,290	36,800	30,600	31,100	21,400	16,000	35,300	17,700	14,200	13,100	13,500	12,200
14	8,270	33,800	27,900	35,700	21,000	14,400	33,500	15,000	14,200	13,000	13,500	12,400
15	7,520	36,200	25,900	76,600	20,700	27,200	29,100	14,700	14,200	12,900	13,500	12,300
16	6,810	39,300	25,200	107,000	19,900	35,200	28,900	15,000	14,100	12,900	13,500	12,300
17	6,740	49,900	26,000	94,300	18,800	35,800	28,800	15,100	14,200	12,900	13,400	11,800
18	6,740	60,400	25,900	88,300	18,100	34,700	28,500	15,600	14,100	12,800	13,400	10,600
19	6,710	43,700	25,000	84,300	26,200	34,300	23,400	15,400	14,200	12,800	13,400	9,520
20	6,740	18,700	24,700	76,900	20,100	34,100	15,900	15,200	14,400	12,700	13,400	8,850
21	6,810	33,600	36,800	78,000	18,800	33,800	12,300	14,300	14,200	12,700	13,400	8,820
22	6,990	47,200	36,900	74,400	18,700	31,900	11,300	14,200	14,100	12,700	13,400	8,690
23	7,730	45,300	33,100	71,800	17,900	22,300	11,200	14,100	14,000	12,700	13,400	8,640
24	7,590	44,300	31,900	69,800	17,000	15,100	12,200	14,500	14,000	12,600	13,200	8,480
25	7,250	43,500	30,400	68,300	15,500	12,400	12,700	15,000	13,900	12,500	13,300	8,570
26	7,070	40,800	30,000	61,600	14,200	12,800	12,200	15,100	13,900	12,500	13,200	8,490
27	6,990	34,500	35,300	56,800	12,700	13,200	14,800	15,200	13,800	12,500	13,200	8,480
28	6,940	33,900	47,200	56,100	14,000	14,900	18,500	15,400	13,800	12,500	13,200	8,440
29	6,920	33,600	69,200	55,400	-----	55,200	18,300	16,000	13,800	12,500	13,200	8,390
30	6,890	48,900	48,700	49,500	-----	112,000	12,500	15,900	13,800	12,400	13,200	8,460
31	6,890	-----	42,600	43,100	-----	109,000	-----	15,900	-----	12,400	13,200	-----
TOTAL	240,800	890,580	1,130,2M	1,638.8M	621,000	924,700	1,053.2M	460,790	432,600	402,100	407,500	331,630
MEAN	7,768	29,690	36,460	52,860	22,180	29,830	35,110	14,860	14,420	12,970	13,150	11,050
MAX	9,480	60,400	69,200	107,000	46,000	112,000	119,000	17,900	15,600	14,000	13,600	13,200
MIN	6,710	6,810	24,700	23,600	12,700	12,400	11,200	9,220	13,800	12,400	12,300	8,390
AC-FT	477,600	1,766M	2,242M	3,251M	1,232M	1,834M	2,089M	914,000	858,100	797,600	808,300	657,800

CAL YR 1973 TOTAL 6,520,620 MEAN 17,860 MAX 69,200 MIN 6,710 AC-FT 12,930,000
WTR YR 1974 TOTAL 8,533,900 MEAN 23,380 MAX 119,000 MIN 6,710 AC-FT 16,930,000

11378800 RED BANK CREEK NEAR RED BLUFF, CALIF.

LOCATION.--Lat 40°05'25", long 122°24'45", in NE¼SE¼ sec.22, T.26 N., R.5 W., Tehama County, on road bridge near bank 0.1 mi (0.2 km) downstream from unnamed tributary, 1.8 mi (2.9 km) southeast of town of Red Bank, and 11 mi (18 km) southwest of Red Bluff.

DRAINAGE AREA.--93.5 mi² (242.2 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 470 ft (143 m), from topographic map.

AVERAGE DISCHARGE.--15 years, 48.6 ft³/s (1,376 m³/s), 35,210 acre-ft/yr (43.4 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 6,680 ft³/s (189 m³/s) Jan. 16 (gage height, 9.52 ft or 2.902 m); no flow for several months.

Period of record: Maximum discharge, 9,730 ft³/s (276 m³/s) Jan. 5, 1965 (gage height, 10.06 ft or 3.066 m); no flow for several months in each year.

REMARKS.--Some small storage ponds and possibly some diversions for irrigation upstream.

COOPERATION.--Records furnished by California Department of Water Resources and reviewed by Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	299	66	85	259	760	37	6.9	.30		
2		0	88	59	72	162	381	33	6.6	.30		
3		0	61	61	63	327	263	31	5.7	.20		
4		0	49	58	57	160	193	27	4.7	.20		
5		0	43	58	50	133	177	25	4.1	.20		
6		0	37	57	46	125	152	23	3.9	.20		
7		0	33	57	41	485	129	22	3.5	.10		
8		0	30	53	40	213	116	22	3.3	.30		
9		0	27	48	39	147	120	20	3.2	1.1		
10		12	26	44	36	142	97	19	3.0	2.1		
11		85	28	42	34	644	83	18	2.7	1.9		
12		84	28	63	35	608	75	18	2.6	1.5		
13		34	39	84	33	209	70	17	2.3	1.1		
14		29	36	236	31	166	64	17	2.1	.70		
15		25	31	900	28	142	59	15	2.0	.50		
16		146	28	3,510	28	124	57	15	2.3	.40		
17		228	26	1,400	27	110	51	17	3.1	.30		
18		172	24	770	27	97	60	20	2.8	.30		
19		76	25	495	36	84	55	17	3.0	.20		
20		60	31	370	26	76	47	15	4.3	.20		
21		50	801	276	23	70	43	15	3.2	.10		
22		43	154	225	22	65	40	15	2.4	.10		
23		38	83	193	21	59	64	14	1.8	0		
24		34	67	174	20	55	134	13	1.6	0		
25		31	55	155	20	54	103	12	1.5	0		
26		28	54	136	20	54	78	11	1.4	0		
27		25	76	121	21	65	65	10	1.3	0		
28		24	79	110	294	90	54	9.3	1.0	0		
29		23	172	99	-----	1,870	46	8.7	.60	0		
30		905	89	88	-----	1,760	41	8.3	.40	0		
31		-----	73	87	-----	587	-----	7.6	-----	0		
TOTAL	0	2,152	2,692	10,095	1,275	9,142	3,677	551.9	87.30	12.30	0	0
MEAN	0	71.7	86.8	326	45.5	295	123	17.8	2.91	.40	0	0
MAX	0	905	801	3,510	294	1,870	760	37	6.9	2.1	0	0
MIN	0	0	24	42	20	54	40	7.6	.40	0	0	0
AC-FT	0	4,270	5,340	20,020	2,530	18,130	7,290	1,090	173	24	0	0
CAL YR 1973	TOTAL	34,343.80	MEAN	94.1	MAX	2,260	MIN	0	AC-FT	68,120		
WTR YR 1974	TOTAL	29,684.50	MEAN	81.3	MAX	3,510	MIN	0	AC-FT	58,880		

11379000 ANTELOPE CREEK NEAR RED BLUFF, CALIF.

LOCATION.--Lat 40°12'14", long 122°07'02", in Rio De Los Berrendos Grant, Tehama County, on right bank 1.8 mi (2.9 km) upstream from diversion dam of Los Molinos Mutual Water Co., 6.5 mi (10.5 km) east of Red Bluff, and 9.7 mi (15.6 km) upstream from mouth.

DRAINAGE AREA.--123 mi² (319 km²).

PERIOD OF RECORD.--October 1940 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 360 ft (110 m), from topographic map. Prior to Sept. 18, 1954, at site 0.6 mi (1.0 km) downstream at different datum. Sept. 18, 1954, to July 9, 1969, at datum 2.00 ft (0.610 m) higher.

AVERAGE DISCHARGE.--34 years, 153 ft³/s (4.33 m³/s), 110,800 acre-ft/yr (137 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 8,400 ft³/s (238 m³/s) Jan. 16 (gage height, 14.78 ft or 4.505 m); minimum daily, 41 ft³/s (1.16 m³/s) Oct. 4.

Period of record: Maximum discharge, 17,200 ft³/s (487 m³/s) Jan. 23, 1970 (gage height, 17.95 ft or 5.471 m), from rating curve extended above 6,000 ft³/s (170 m³/s) on basis of slope-area measurement at gage height 15.96 ft (4.865 m), present datum; minimum, 8.2 ft³/s (0.23 m³/s) Oct. 27, 1961.

Flood of December 1937 reached a stage of about 22 ft (6.7 m), from floodmarks, at former site and datum.

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

REVISIONS (WATER YEARS).--WSP 1315-A: 1949(M). WSP 1931: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	42	47	1,990	386	263	1,750	1,430	204	170	71	58	54
2	43	48	682	305	234	1,090	1,240	217	168	70	58	53
3	42	49	431	269	217	766	883	221	168	70	57	52
4	41	49	324	239	205	527	684	224	162	68	57	52
5	42	53	262	222	194	410	575	230	156	68	57	52
6	44	61	224	220	183	350	627	245	148	66	61	52
7	68	124	204	212	177	506	493	261	141	66	59	51
8	56	122	185	201	170	555	435	284	132	79	57	50
9	50	266	169	186	164	508	444	302	125	88	56	52
10	47	814	157	174	160	404	392	287	121	101	56	52
11	46	2,510	255	167	155	815	352	273	119	80	55	52
12	46	2,140	235	357	155	681	325	263	116	75	55	51
13	46	798	473	518	161	511	301	249	111	72	55	50
14	46	526	310	770	153	412	282	233	108	71	55	50
15	45	316	244	4,180	148	353	269	227	104	70	55	50
16	45	922	211	4,940	168	314	260	214	103	68	54	50
17	45	1,020	294	2,270	163	305	255	204	106	68	54	50
18	45	1,370	278	1,730	157	281	257	203	99	68	54	50
19	45	594	236	1,550	328	261	249	186	96	67	54	50
20	46	412	214	1,130	255	243	236	170	98	66	55	50
21	48	331	740	849	219	228	228	158	91	65	54	50
22	70	280	634	664	204	217	228	153	88	65	54	50
23	150	240	413	544	184	208	243	153	84	65	53	50
24	64	214	348	462	173	202	253	154	81	65	52	50
25	54	186	285	401	165	215	247	162	79	64	52	50
26	51	165	259	353	160	249	224	176	78	63	52	50
27	49	144	356	311	158	408	209	198	76	63	52	50
28	49	135	538	284	790	612	198	203	75	63	52	50
29	48	134	795	263	-----	2,210	190	199	73	62	52	50
30	47	1,240	584	245	-----	3,420	196	188	71	61	54	50
31	47	-----	456	255	-----	1,500	-----	176	-----	59	54	-----
TOTAL	1,607	15,320	12,786	24,657	5,863	20,511	12,205	6,617	3,347	2,147	1,703	1,523
MEAN	51.8	511	412	795	209	662	407	213	112	69.3	54.9	50.8
MAX	150	2,510	1,990	4,940	790	3,420	1,430	302	170	101	61	54
MIN	41	47	157	167	148	202	190	153	71	59	52	50
AC-FT	3,190	30,390	25,360	48,910	11,630	40,680	24,210	13,120	6,640	4,260	3,380	3,020
CAL YR 1973	TOTAL	86,139	MEAN	236	MAX	2,870	MIN	39	AC-FT	170,900		
WTR YR 1974	TOTAL	102,286	MEAN	297	MAX	4,940	MIN	41	AC-FT	214,800		

PEAK DISCHARGE (BASE, 2,200 FT³/S)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-12	0130	12.72	4,960	3-1	1715	10.98	3,120
12-1	0115	12.10	4,220	3-30	0300	13.33	5,800
1-16	1315	14.78	8,400				

11379500 ELDER CREEK NEAR PASKENTA, CALIF.

LOCATION.--Lat 40°01'29", long 122°30'31", in SE¼NW¼ sec.14, T.25 N., R.6 W., Tehama County, on left bank 2.5 mi (4.0 km) downstream from South Fork Elder Creek, 8.2 mi (13.2 km) northwest of Flournoy, and 10 mi (19 km) north of Paskenta.

DRAINAGE AREA.--92.9 mi² (241 km²).

PERIOD OF RECORD.--October 1948 to current year. Monthly discharge only for some periods, published in WSP 1315-A.

GAGE.--Water-stage recorder. Datum of gage is 718.1 ft (218.88 m) above mean sea level. Prior to Aug. 13, 1965, water-stage recorder at site 300 ft (91 m) downstream at datum 5.13 ft (1.564 m) lower.

AVERAGE DISCHARGE.--26 years, 104 ft³/s (2.945 m³/s), 75,350 acre-ft/yr (92.9 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 8,850 ft³/s (251 m³/s) Jan. 16 (gage height, 11.14 ft or 3.395 m); minimum daily, 3.3 ft³/s (0.093 m³/s) Oct. 3.

Period of record: Maximum discharge, 11,700 ft³/s (331 m³/s) Feb. 24, 1958 (gage height, 13.90 ft or 4.237 m, site and datum then in use), from rating curve extended above 3,500 ft³/s (99.1 m³/s) on basis of slope-area measurements at gage heights 10.97 ft (3.344 m) and 13.90 ft (4.237 m); no flow at times in some years.

REMARKS.--Records good except those for periods of no gage-height record, which are fair. No regulation or large diversion above station.

REVISIONS (WATER YEARS).--WSP 1515: 1956. WSP 1931: Drainage area. WRD Calif. 1970: 1967(P).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.6	7.9	793	291	206	524	1,610	176	52	21	9.2	5.0
2	3.6	8.2	334	240	169	351	968	176	50	20	8.8	4.9
3	3.3	66	232	231	158	338	664	172	48	19	8.4	4.9
4	3.4	36	190	209	150	227	514	164	45	18	8.0	4.8
5	3.4	67	165	196	139	199	444	160	44	17	8.0	4.6
6	3.8	85	147	182	130	188	389	163	41	18	7.7	4.4
7	7.6	156	152	178	125	313	344	168	39	20	7.4	4.3
8	9.3	460	157	163	118	217	318	172	37	25	7.0	4.1
9	9.5	550	138	146	114	182	300	159	36	35	6.9	4.3
10	6.8	680	126	135	110	175	278	138	34	26	6.8	5.4
11	6.0	1,200	145	140	106	446	255	128	32	24	6.7	4.5
12	5.7	770	129	209	108	431	240	119	31	23	6.7	4.0
13	5.5	266	222	372	102	273	227	110	30	21	6.8	3.8
14	5.4	192	169	1,060	97	237	217	104	29	20	6.8	4.0
15	5.3	162	146	2,770	93	227	210	99	28	19	6.9	4.2
16	5.1	831	136	5,860	94	233	203	94	27	18	6.6	4.2
17	5.0	540	176	1,910	87	238	199	95	26	17	6.5	4.1
18	5.0	440	172	1,440	96	229	217	90	26	16	6.4	3.9
19	5.1	280	148	1,320	172	211	193	82	27	15	6.2	3.9
20	5.4	190	206	851	115	195	180	78	29	15	6.1	3.8
21	6.1	140	1,270	619	108	181	172	75	27	14	5.8	3.7
22	19	110	516	472	100	173	173	72	26	14	5.8	3.7
23	51	95	337	400	93	168	202	69	25	13	5.3	3.9
24	21	83	284	350	89	163	256	67	24	12	5.3	3.8
25	13	74	279	315	87	168	223	67	23	12	5.2	3.7
26	11	66	298	282	87	165	207	66	22	12	5.1	3.9
27	9.7	60	362	256	84	182	191	66	21	11	5.2	3.9
28	8.3	58	333	237	651	215	179	64	21	11	5.4	3.7
29	7.7	76	673	222	-----	3,100	170	62	21	11	5.5	3.9
30	7.9	1,560	469	210	-----	2,790	169	58	21	10	5.4	4.1
31	7.9	-----	359	221	-----	1,160	-----	55	-----	9.6	5.2	-----
TOTAL	270.4	9,309.1	9,263	21,487	3,788	13,899	9,912	3,368	942	536.6	203.1	125.4
MEAN	8.72	310	299	693	135	448	330	109	31.4	17.3	6.55	4.18
MAX	51	1,560	1,270	5,860	651	3,100	1,610	176	52	35	9.2	5.4
MIN	3.3	7.9	126	135	84	163	169	55	21	9.6	5.1	3.7
AC-FT	536	18,460	18,370	42,620	7,510	27,570	19,660	6,680	1,870	1,060	403	249

CAL YR 1973 TOTAL 65,692.9 MEAN 180 MAX 2,020 MIN 2.3 AC-FT 130,300
WTR YR 1974 TOTAL 73,103.6 MEAN 200 MAX 5,860 MIN 3.3 AC-FT 145,000

DATE	TIME	PEAK DISCHARGE (BASE, 1,200 FT ³ /S)	DATE	TIME	PEAK DISCHARGE (BASE, 1,200 FT ³ /S)
11-11	unknown	5.62 1,580	1-18	2300	5.69 1,710
11-16	0345	5.80 1,690	2-28	1845	6.45 2,340
11-30	1615	7.62 3,110	3-11	2100	5.46 1,550
12-21	0700	6.39 2,100	3-29	2145	9.81 6,540
1-16	0930	11.14 8,850	4-1	1015	6.30 2,210

NOTE.--No gage-height record June 10 to July 12 and July 13 to Aug. 15.

11381500 MILL CREEK NEAR LOS MOLINOS, CALIF.

LOCATION.--Lat 40°03'17", long 122°01'23", in NE¼NW¼ sec.6, T.25 N., R.1 W., Tehama County, on right bank 4.5 mi (7.2 km) northeast of Los Molinos, and 5.5 mi (8.8 km) upstream from mouth.

DRAINAGE AREA.--131 mi² (339 km²).

PERIOD OF RECORD.--September 1909 to August 1913 (fragmentary), October 1928 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 385 ft (117 m), from topographic map. Prior to September 1913, nonrecording gage at site 0.3 mi (0.5 km) downstream at different datum.

AVERAGE DISCHARGE.--46 years (1928-74), 306 ft³/s (8.67 m³/s), 221,700 acre-ft/yr (273 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 10,300 ft³/s (292 m³/s) Nov. 11 (gage height, 12.06 ft or 3.676 m); minimum daily, 106 ft³/s (3.00 m³/s) Oct. 4, 5.

Period of record (1928 to current year): Maximum discharge, 36,400 ft³/s (1,030 m³/s) Dec. 11, 1937 (gage height, 23.4 ft or 7.13 m, from floodmarks), from rating curve extended above 14,000 ft³/s (396 m³/s) on basis of step-backwater computation and slope-area measurement of maximum flow; minimum, 49 ft³/s (1.39 m³/s) Dec. 13, 1932.

REMARKS.--Records good. No storage or large diversion above station. Records of chemical analyses obtained near this station for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1315-A: 1929(M). WSP 1931: Drainage area. WRD Calif. 1969: 1938(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	109	128	2,340	678	424	2,170	1,930	533	639	482	211	154
2	109	126	896	533	380	1,380	1,650	584	683	449	219	154
3	108	123	603	471	353	882	1,140	583	728	401	207	154
4	106	123	485	418	337	633	887	585	715	385	201	152
5	106	131	435	383	324	529	770	611	689	380	197	151
6	110	183	391	370	308	485	846	675	666	374	209	149
7	171	501	376	343	299	699	682	737	659	359	201	148
8	152	700	369	321	296	669	622	826	578	451	197	147
9	128	935	348	299	287	568	642	903	568	630	192	146
10	120	2,510	331	282	281	488	560	789	598	472	188	146
11	118	6,620	414	275	275	904	520	719	652	383	185	143
12	117	4,250	364	548	275	855	516	693	653	345	182	143
13	117	1,560	706	789	278	668	493	635	627	331	180	143
14	117	1,010	440	1,430	275	565	483	580	626	318	178	139
15	113	700	366	7,640	269	537	481	578	615	307	177	138
16	111	1,470	335	6,700	275	539	487	538	595	299	176	138
17	111	1,770	577	3,290	284	553	504	511	535	292	174	135
18	111	1,850	532	2,560	272	575	535	491	538	288	171	135
19	109	945	432	2,600	478	534	490	474	554	283	171	135
20	113	686	383	1,650	370	501	479	463	487	276	171	135
21	125	551	874	1,170	330	480	479	446	493	270	169	133
22	196	481	892	899	318	474	508	422	523	262	165	131
23	412	417	559	739	290	471	557	416	518	255	163	130
24	186	376	484	636	278	468	517	469	495	251	162	130
25	156	332	426	556	272	492	487	532	473	248	160	130
26	142	304	402	496	269	538	468	656	432	244	159	130
27	135	274	563	456	272	959	452	759	411	242	157	130
28	134	262	987	432	1,230	1,180	434	761	414	235	157	130
29	129	268	1,650	407	-----	4,070	426	717	435	225	157	130
30	126	1,590	1,270	383	-----	5,380	472	658	463	218	157	128
31	130	-----	859	397	-----	2,120	-----	622	-----	214	157	-----
TOTAL	4,227	31,176	20,089	38,151	9,599	31,366	19,517	18,966	17,062	10,169	5,550	4,187
MEAN	136	1,039	648	1,231	343	1,012	651	612	569	328	179	140
MAX	412	6,620	2,340	7,640	1,230	5,380	1,930	903	728	630	219	154
MIN	106	123	331	275	269	468	426	416	411	214	157	128
AC-FT	8,380	61,840	39,850	75,670	19,040	62,210	38,710	37,620	33,840	20,170	11,010	8,300
CAL YR 1973	TOTAL	156,142	MEAN	428	MAX	6,620	MIN	104	AC-FT	309,700		
WTR YR 1974	TOTAL	210,059	MEAN	576	MAX	7,640	MIN	106	AC-FT	416,700		

PEAK DISCHARGE (BASE, 2,400 FT³/S)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-11	0800	12.06	10,300	3-1	1600	7.85	3,820
12-1	0130	8.68	4,870	3-29	2300	11.58	9,440
1-15	1000	11.96	10,100	4-1	2230	6.72	2,630
1-18	1200	7.39	3,290				

11382000 THOMES CREEK AT PASKENTA, CALIF.

LOCATION.--Lat 39°52'57", long 122°33'03", in SW¼NW¼ sec.4, T.23 N., R.6 W., Tehama County, on left bank 0.2 mi (0.3 km) upstream from Digger Creek, and 0.3 mi (0.5 km) upstream from highway bridge at Paskenta.

DRAINAGE AREA.--194 mi² (502 km²).

PERIOD OF RECORD.--October 1920 to current year. Monthly discharge only for some periods, published in WSP 1315-A. Prior to 1943, published as Thomas Creek at Paskenta.

GAGE.--Water-stage recorder. Datum of gage is 731.1 ft (222.84 m) above mean sea level. Prior to Oct. 1, 1930, nonrecording gage at site 0.3 mi (0.5 km) downstream at different datum. Oct. 1, 1930, to Dec. 28, 1938, water-stage recorder at site 1,300 ft (396 m) upstream and Dec. 29, 1938, to June 20, 1942, at site 1,000 ft (305 m) upstream at different datum. June 21, 1942, to Sept. 30, 1959, at present site at datum 1.75 ft (0.533 m) higher.

AVERAGE DISCHARGE.--54 years, 291 ft³/s (8.241 m³/s), 210,800 acre-ft/yr (260 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 29,400 ft³/s (833 m³/s) Jan. 16 (gage height, 12.30 ft or 3.749 m); minimum daily, 5.1 ft³/s (0.14 m³/s) Sept. 21-25.
Period of record: Maximum discharge, 37,800 ft³/s (1,070 m³/s) Dec. 22, 1964 (gage height, 15.32 ft or 4.670 m in gage well, 16.4 ft or 5.00 m, from floodmarks), from rating curve extended above 14,000 ft³/s (396 m³/s) on basis of slope-area measurement of peak flow; no flow at times in many years.

REMARKS.--Records fair. No storage or large diversions above station. Records of water temperatures for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1345: 1923, 1924-28(M), 1938, 1940(M). WSP 1931: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.3	29	1,700	1,170	502	1,700	4,240	523	268	64	19	8.5
2	7.7	25	800	972	418	1,060	2,730	502	265	57	18	7.7
3	6.6	24	578	894	390	750	1,870	509	276	52	18	7.7
4	6.3	23	502	800	365	620	1,390	495	256	50	17	7.3
5	6.3	55	467	670	334	594	1,260	502	265	47	18	7.3
6	6.9	199	546	562	314	586	1,140	570	265	48	18	6.9
7	11	632	810	488	303	660	1,000	650	234	51	17	6.6
8	25	962	958	424	296	516	906	710	204	66	16	6.3
9	31	1,090	750	380	283	436	846	630	178	125	16	6.3
10	19	2,000	610	342	276	418	710	570	167	86	16	6.3
11	16	3,440	640	334	270	562	650	546	160	72	15	6.6
12	13	2,860	562	418	270	660	650	516	146	62	15	6.3
13	12	1,130	972	1,150	265	554	594	454	139	56	15	6.0
14	11	790	760	3,390	262	516	570	406	129	51	14	6.0
15	10	930	670	9,620	256	630	594	390	120	48	13	6.0
16	9.4	2,340	650	19,600	262	740	578	375	116	45	13	6.0
17	8.5	1,380	1,290	6,120	254	822	594	310	108	44	12	6.0
18	8.5	1,070	1,070	5,470	290	858	620	276	101	40	11	6.0
19	9.0	660	870	5,890	866	790	495	262	110	39	11	6.0
20	9.8	518	1,080	2,790	412	760	460	246	111	37	12	6.0
21	11	406	2,240	1,790	350	760	460	248	96	35	11	5.1
22	42	375	1,010	1,380	322	750	523	234	90	34	10	5.1
23	153	330	780	1,080	314	700	509	239	87	31	10	5.1
24	111	322	870	930	326	680	488	239	83	29	9.8	5.1
25	90	279	1,070	822	338	740	400	262	80	27	9.4	5.1
26	71	268	1,080	710	342	750	390	314	72	26	9.4	5.7
27	57	256	1,490	640	334	700	360	375	66	27	8.5	5.7
28	57	293	1,630	586	1,290	906	360	360	64	24	9.0	5.4
29	47	759	4,540	546	-----	7,100	375	338	63	23	9.0	5.4
30	36	2,810	2,060	523	-----	8,320	436	296	64	21	9.0	5.7
31	30	-----	1,340	538	-----	2,900	-----	273	-----	20	9.0	-----
TOTAL	939.3	26,255	34,395	71,029	10,504	38,538	26,198	12,620	4,383	1,437	408.1	185.2
MEAN	30.3	875	1,110	2,291	375	1,243	873	407	146	46.4	13.2	6.17
MAX	153	3,440	4,540	19,600	1,290	8,320	4,240	710	276	125	19	8.5
MIN	6.3	23	467	334	254	418	360	234	63	20	8.5	5.1
AC-FT	1,860	52,080	68,220	140,900	20,830	76,440	51,960	25,030	8,690	2,850	809	367

CAL YR 1973 TOTAL 167,142.9 MEAN 458 MAX 4,990 MIN 3.0 AC-FT 331,500
WTR YR 1974 TOTAL 226,891.6 MEAN 622 MAX 19,600 MIN 5.1 AC-FT 450,000

PEAK DISCHARGE (BASE, 1,800 FT ³ /S)							
DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-11	1030	7.65	4,460	12-29	0900	8.88	7,370
11-16	0730	7.03	3,300	1-16	1030	12.30	29,400
11-30	1300	7.44	4,040	1-19	0030	8.64	8,920
12-17	1200	6.40	2,130	2-28	1930	6.43	2,920
12-21	0700	7.18	3,520	3-30	0130	10.35	16,400
12-26	2330	6.37	1,980	4-1	1330	7.88	5,720

11383500 DEER CREEK NEAR VINA, CALIF.

LOCATION.--Lat 40°00'51", long 121°56'50", in NW¼NE¼ sec.23, T.25 N., R.1 W., Tehama County, on left bank 0.5 mi (0.8 km) upstream from diversion dam, and 7.9 mi (12.7 km) northeast of Vina.

DRAINAGE AREA.--208 mi² (539 km²).

PERIOD OF RECORD.--October 1911 to December 1915, March 1920 to December 1937, January 1939 to current year.
Monthly discharge only for some periods, published in WSP 1315-A.

GAGE.--Water-stage recorder. Datum of gage is 479.5 ft (146.15 m) above mean sea level (river-profile survey).
Prior to Oct. 9, 1928, nonrecording gage at site 0.8 mi (1.3 km) downstream at different datum. Oct. 9, 1928, to Jan. 19, 1939, water-stage recorder at present site at datum 2.64 ft (0.805 m) higher.

AVERAGE DISCHARGE.--56 years, 320 ft³/s (9.06 m³/s), 231,800 acre-ft/yr (286 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 11,900 ft³/s (337 m³/s) Mar. 29 (gage height, 12.01 ft or 3.661 m); minimum daily, 97 ft³/s (2.7 m³/s) Oct. 3, 4.
Period of record: Maximum discharge, 23,800 ft³/s (674 m³/s) Dec. 10, 1937 (gage height, 19.2 ft or 5.85 m, present datum, from floodmarks), from rating curve extended above 9,200 ft³/s (261 m³/s) on basis of velocity-area studies; minimum, 43 ft³/s (1.2 m³/s) Dec. 13, 1932.

REMARKS.--Records excellent. No storage or large diversions above station.

REVISIONS (WATER YEARS).--WSP 1315-A: 1940-42(M). WSP 1931: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NCV	DEC	JAN	FFB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	98	105	2,980	949	594	3,680	3,590	600	419	221	169	142
2	98	105	1,190	771	545	2,610	2,900	626	412	216	167	141
3	97	105	847	704	508	1,520	2,170	631	408	213	171	141
4	97	106	686	611	487	1,030	1,670	631	402	210	167	141
5	98	119	578	572	465	849	1,410	640	396	208	166	139
6	101	165	506	534	435	769	1,330	670	387	207	174	139
7	136	428	477	485	429	872	1,120	715	375	207	166	137
8	133	422	463	444	415	795	1,020	765	358	251	162	137
9	110	614	429	412	400	719	1,010	800	347	322	160	136
10	104	1,770	405	385	391	666	890	755	337	239	159	136
11	102	5,340	462	374	381	1,160	820	710	329	218	158	135
12	102	3,840	424	552	379	1,220	795	675	322	204	157	133
13	101	1,570	582	764	370	967	745	631	315	196	157	133
14	101	1,050	489	1,250	361	850	710	591	308	194	156	133
15	100	770	436	6,430	353	817	695	571	301	191	155	133
16	100	1,560	404	8,280	395	792	690	539	299	187	154	131
17	100	1,840	548	6,030	374	789	705	535	310	187	154	131
18	99	1,990	580	4,060	366	828	725	527	291	187	153	130
19	99	1,100	499	3,940	571	787	660	499	291	183	153	129
20	103	835	462	2,680	480	744	626	464	302	179	152	128
21	108	672	1,180	1,890	443	702	622	436	278	176	151	128
22	168	584	1,020	1,420	417	681	650	422	267	173	151	129
23	442	501	725	1,150	392	669	710	416	258	200	149	129
24	185	452	628	978	380	653	675	412	250	187	149	128
25	133	404	562	870	373	681	618	419	244	175	147	127
26	120	372	538	784	372	711	571	430	240	175	147	127
27	113	336	737	709	373	1,190	535	458	236	174	146	127
28	109	315	1,090	663	2,020	1,720	519	475	233	172	145	126
29	107	327	2,020	615	-----	5,240	527	464	227	171	145	127
30	105	1,710	1,590	576	-----	8,520	559	450	223	170	145	127
31	105	-----	1,160	586	-----	4,210	-----	433	-----	169	145	-----
TOTAL	3,774	29,507	24,697	50,468	13,469	47,441	30,267	17,390	9,365	6,162	4,830	3,980
MEAN	122	984	797	1,628	481	1,530	1,009	561	312	199	156	133
MAX	442	5,340	2,980	8,280	2,020	8,520	3,590	800	419	322	174	142
MIN	97	105	404	374	353	653	519	412	223	169	145	126
AC-FT	7,490	58,530	48,990	100,100	26,720	94,100	60,030	34,490	18,580	12,220	9,580	7,890

CAL YR 1973 TOTAL 167,440 MEAN 459 MAX 5,340 MIN 94 AC-FT 332,100
WTR YR 1974 TOTAL 241,350 MEAN 661 MAX 8,520 MIN 97 AC-FT 478,700

PEAK DISCHARGE (BASE, 2,500 FT³/S)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-11	0730	10.30	8,100	1-16	2000	11.35	10,300
12-1	0030	9.19	6,100	2-28	2315	8.83	5,470
12-21	1945	6.55	2,610	3-29	2215	12.01	11,900
12-29	1215	6.49	2,550				

11384000 BIG CHICO CREEK NEAR CHICO, CALIF.

LOCATION.--Lat 39°46'35", long 121°45'10", in Arroyo Chico Grant, Butte County, on right bank 1.8 mi (2.9 km) upstream from golf clubhouse in Bidwell Park, 2.6 mi (4.2 km) upstream from Lindo Channel, and 7 mi (11 km) northeast of Chico.

DRAINAGE AREA.--72.4 mi² (187.5 km²).

PERIOD OF RECORD.--May 1930 to current year. Prior to October 1952, published as Chico Creek near Chico.

GAGE.--Water-stage recorder. Altitude of gage is 300 ft (91 m), from topographic map. Prior to Oct. 1, 1955, at site 0.6 mi (1.0 km) downstream at different datum.

AVERAGE DISCHARGE.--44 years, 148 ft³/s (4.191 m³/s), 107,200 acre-ft/yr (132 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 7,120 ft³/s (202 m³/s) Mar. 29 (gage height, 13.02 ft or 3.968 m); minimum daily, 25 ft³/s (0.71 m³/s) Oct. 18.

Period of record: Maximum discharge, 9,580 ft³/s (271 m³/s) Jan. 5, 1965 (gage height, 15.36 ft or 4.682 m); minimum, 10 ft³/s (0.28 m³/s) Dec. 11, 1932, Aug. 15, 1939, Sept. 18, 1947.

REMARKS.--Records good. No storage or large diversion above station. Records of chemical analyses for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1931: Drainage area. WRD Calif. 1965: 1964(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27	28	2,280	505	315	2,700	2,370	125	59	40	33	29
2	27	28	1,010	399	264	1,960	1,840	122	58	40	32	29
3	27	28	601	339	230	1,230	1,290	119	56	39	32	29
4	26	28	453	294	210	786	902	115	55	37	30	28
5	26	34	362	264	196	578	675	112	54	34	28	28
6	27	75	293	239	182	491	560	109	53	38	31	28
7	46	256	242	211	170	537	469	106	52	39	32	28
8	38	161	208	190	160	496	420	105	51	55	30	28
9	31	368	182	172	150	442	406	102	50	78	31	30
10	29	1,060	162	156	145	402	360	98	49	56	29	31
11	28	3,270	175	148	140	773	318	96	49	46	29	29
12	28	2,800	168	273	143	1,280	285	93	48	46	30	29
13	27	1,070	245	498	143	930	257	91	47	43	31	30
14	27	717	236	847	136	664	233	89	47	42	30	30
15	27	480	213	3,640	129	527	215	87	46	41	31	30
16	27	1,500	194	3,800	167	459	201	86	47	41	28	30
17	26	1,700	279	2,940	162	409	191	88	52	44	30	30
18	25	1,700	274	2,110	156	372	184	94	49	37	30	30
19	26	946	245	1,730	428	336	178	89	50	35	30	30
20	27	571	219	1,260	368	302	168	84	53	35	30	29
21	28	412	516	888	296	271	160	80	48	34	30	29
22	50	345	797	637	250	248	153	77	46	34	29	29
23	133	284	532	508	214	234	160	74	45	35	29	28
24	50	244	417	444	195	220	167	71	43	35	29	28
25	37	211	347	392	183	231	145	70	43	35	30	28
26	33	190	319	345	177	273	155	67	43	34	30	28
27	31	164	536	300	172	550	148	65	42	33	30	28
28	30	142	924	267	903	1,270	140	64	41	35	30	28
29	29	137	1,070	237	-----	3,650	133	63	41	33	30	28
30	29	652	899	215	-----	5,300	128	61	40	39	29	29
31	29	-----	649	238	-----	2,480	-----	59	-----	33	29	-----
TOTAL	1,051	19,601	15,047	24,486	6,384	30,401	13,011	2,761	1,457	1,246	932	868
MEAN	33.9	653	485	790	228	981	434	89.1	48.6	40.2	30.1	28.9
MAX	133	3,270	2,280	3,800	903	5,300	2,370	125	59	78	33	31
MIN	25	28	162	148	129	220	128	59	40	33	28	28
AC-FT	2,080	38,880	29,850	48,570	12,660	60,300	25,810	5,480	2,890	2,470	1,850	1,720

CAL YR 1973 TOTAL 93,669 MEAN 257 MAX 3,540 MIN 21 AC-FT 185,800
WTR YR 1974 TOTAL 117,245 MEAN 321 MAX 5,300 MIN 25 AC-FT 232,600

PEAK DISCHARGE (BASE, 1,600 FT ³ /S)							
DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-12	0100	10.53	4,920	1-16	2030	10.27	4,720
11-16	1230	6.72	1,960	3-1	0130	8.34	3,260
12-1	0230	8.48	3,280	3-29	2300	13.02	7,120

SACRAMENTO RIVER BASIN

11384350 MUD CREEK NEAR CHICO, CALIF.

LOCATION.--Lat 39°47'02", long 121°53'06", in SW¼SE¼ sec.5, T.22 N., R.1 E., Butte County, on left bank 0.1 mi (0.2 km) upstream from bridge on State Highway 99E, and 5 mi (8 km) northwest of Chico.

DRAINAGE AREA.--48.9 mi² (126.7 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 170 ft (52 m), from topographic map.

AVERAGE DISCHARGE.--9 years, 63.1 ft³/s (1,787 m³/s), 45,720 acre-ft/yr (56.4 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 11,500 ft³/s (326 m³/s) Mar. 30 (gage height, 11.00 ft or 3.353 m); no flow for several months.

Period of record: Maximum discharge, 11,500 ft³/s (326 m³/s) Mar. 30, 1974 (gage height, 11.00 ft or 3.353 m); maximum gage height, 12.94 ft (3.944 m) Jan. 13, 1969; no flow for several months in each year. Flood of Dec. 22, 1964, reached a stage of 13.23 ft (4.033 m), discharge, 9,880 ft³/s (280 m³/s); maximum stage recorded since reconstruction of the channel, 13.55 ft (4.130 m) Jan. 15, 1965 (backwater from debris).

REMARKS.--No storage or diversion above station. During periods of flood flows on Big Chico Creek, flood waters are diverted at Mud Creek diversion dam in sec.18, T.22 N., R.2 E., to Lindo channel and Mud Creek, however, most of the water is diverted to Mud Creek.

COOPERATION.--Records furnished by the California Department of Water Resources and reviewed by the Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	752	148	51	774	674	15	4.5	.10		
2	0	0	239	99	36	347	395	14	4.1	.30		
3	0	0	167	74	29	256	265	14	3.9	.40		
4	0	0	113	60	26	179	195	13	3.5	.70		
5	0	3.7	76	51	23	140	159	12	3.1	0		
6	0	12	55	51	21	108	118	12	2.9	0		
7	3.1	63	40	56	20	381	85	11	2.3	0		
8	.90	28	31	38	19	224	71	11	2.1	1.4		
9	.20	316	25	29	19	142	77	10	2.0	2.4		
10	0	499	22	24	18	102	57	9.7	1.8	1.5		
11	0	2,980	33	29	18	439	45	9.5	1.5	.30		
12	0	2,040	26	278	19	312	38	9.4	1.1	0		
13	0	373	87	187	20	200	32	8.9	1.1	0		
14	0	215	49	572	18	161	29	8.6	1.1	0		
15	0	135	33	1,090	17	123	26	8.5	1.3	0		
16	0	742	26	1,510	40	87	25	8.4	1.3	0		
17	0	530	153	646	24	63	22	8.7	2.2	0		
18	0	412	70	741	20	51	21	8.7	2.5	0		
19	0	222	46	386	94	41	21	8.4	2.5	0		
20	0	211	35	275	59	33	20	7.8	2.6	0		
21	0	166	603	206	46	27	19	7.5	1.7	0		
22	28	159	372	160	37	24	19	7.6	.80	0		
23	32	124	218	121	31	22	23	6.9	.30	0		
24	5.1	91	170	88	27	21	25	6.8	0	0		
25	1.6	63	110	69	23	25	22	6.6	0	0		
26	.40	47	123	58	22	38	20	5.9	0	0		
27	0	33	375	46	21	93	18	5.6	0	0		
28	0	26	387	38	982	180	17	5.2	.20	0		
29	0	24	312	33	-----	2,450	16	5.2	.10	0		
30	0	799	246	30	-----	5,070	15	5.1	0	0		
31	0	-----	183	40	-----	729	-----	4.7	-----	0		-----
TOTAL	71.30	10,313.7	5,177	7,233	1,780	12,842	2,569	275.7	50.50	7.10	0	0
MEAN	2.30	344	167	233	63.6	414	85.6	8.89	1.68	.23	0	0
MAX	32	2,980	752	1,510	982	5,070	674	15	4.5	2.4	0	0
MIN	0	0	22	24	17	21	15	4.7	0	0	0	0
AC-FT	141	20,460	10,270	14,350	3,530	25,470	5,100	547	100	14	0	0
CAL YR 1973	TOTAL	41,011.10	MEAN	112	MAX	2,980	MIN	0	AC-FT	81,350		
WTR YR 1974	TOTAL	40,319.30	MEAN	110	MAX	5,070	MIN	0	AC-FT	79,970		

11384600 LITTLE STONY CREEK ABOVE EAST PARK RESERVOIR, NEAR LODOGA, CALIF.

LOCATION.--Lat 39°17'48", long 122°32'22", in NE¼SW¼ (revised), sec.28, T.17 N., R.6 W., Colusa County, on left bank 1.1 mi (1.8 km) upstream from county bridge on Lodoga-Stonyford Road, 1.4 mi (2.3 km) downstream from Frenzel Creek, and 2.8 mi (4.5 km) southwest of Lodoga.

DRAINAGE AREA.--45.6 mi² (118.1 km²).

PERIOD OF RECORD.--September 1966 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,300 ft (396 m), from topographic map.

AVERAGE DISCHARGE.--8 years, 70.3 ft³/s (1.991 m³/s), 50,930 acre-ft/yr (62.8 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 3,190 ft³/s (90.3 m³/s) Jan. 16 (gage height, 10.42 ft or 3.176 m), from rating curve extended above 1,500 ft³/s (42.5 m³/s); minimum daily, 0.70 ft³/s (0.020 m³/s) Sept. 21-25. Period of record: Maximum discharge, 4,000 ft³/s (113 m³/s) Jan. 23, 1970 (gage height, 11.39 ft or 3.472 m), from rating curve extended above 1,500 ft³/s (42.5 m³/s); no flow for several days during August and September 1972.

REMARKS.--Records good. No known storage or diversions above station. Records of water temperatures for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WRD Calif. 1968: 1967.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.94	2.9	831	127	101	842	720	47	19	6.6	2.3	1.2
2	.94	2.9	355	108	88	686	528	46	18	6.0	2.3	1.1
3	1.0	3.0	216	113	82	438	402	44	18	5.8	2.3	1.1
4	1.0	3.2	156	98	77	276	318	43	17	5.6	2.2	1.1
5	1.0	24	124	87	73	211	259	41	17	5.5	2.6	.84
6	1.1	18	105	79	70	180	220	40	16	5.6	3.0	.87
7	1.9	43	93	77	68	178	189	38	15	6.1	2.6	.86
8	2.6	38	82	75	65	150	165	37	14	13	2.7	.83
9	2.9	65	73	72	63	131	152	35	14	13	2.8	.81
10	2.2	204	65	70	60	122	133	35	14	9.2	2.0	.83
11	1.9	432	77	72	59	199	121	34	13	8.8	1.6	.86
12	1.8	422	67	160	60	242	110	33	12	8.3	1.5	.82
13	1.6	236	175	561	57	216	101	32	12	7.5	1.4	.78
14	1.6	193	117	858	54	206	96	31	11	6.8	1.3	.78
15	1.6	173	97	1,280	53	187	90	30	11	6.2	1.4	.78
16	1.6	443	87	2,130	55	166	85	30	11	5.9	1.4	.78
17	1.6	438	104	1,150	51	151	80	31	12	6.3	1.4	.75
18	1.6	347	89	776	56	141	77	32	11	6.0	1.4	.75
19	1.6	208	81	718	252	129	73	30	15	5.7	1.3	.75
20	1.7	164	76	559	120	119	69	29	15	5.3	1.5	.75
21	2.0	123	310	398	102	112	66	28	12	4.9	1.4	.70
22	5.6	101	278	297	89	105	64	27	10	4.6	1.3	.70
23	21	84	182	237	81	101	63	26	9.6	4.3	1.2	.70
24	7.3	73	142	195	75	96	64	25	9.2	4.0	1.2	.70
25	4.6	65	120	166	71	99	60	24	8.5	3.6	1.2	.70
26	3.8	59	145	144	69	94	59	22	8.3	3.4	1.2	.72
27	3.3	52	216	127	66	148	56	22	8.4	3.4	1.1	.72
28	3.2	49	177	115	573	205	54	21	7.9	3.2	1.2	.75
29	2.9	52	193	106	-----	981	51	21	7.2	3.0	1.2	.75
30	2.8	718	165	98	-----	1,480	49	21	6.8	2.8	1.2	.75
31	2.9	-----	145	109	-----	724	-----	20	-----	2.3	1.2	-----
TOTAL	91,58	4,836.0	5,143	11,162	2,690	9,115	4,574	975	372.9	182.7	52.4	24.53
MEAN	2.95	161	166	360	96.1	294	152	31.5	12.4	5.89	1.69	.82
MAX	21	718	831	2,130	573	1,480	720	47	19	13	3.0	1.2
MIN	.94	2.9	65	70	51	94	49	20	6.8	2.3	1.1	.70
AC-FT	182	9,590	10,200	22,140	5,340	18,080	9,070	1,930	740	362	104	49
CAL YR 1973	TOTAL 36,920.62	MEAN 101	MAX 1,180	MIN .60	AC-FT 73,230							
WTR YR 1974	TOTAL 39,219.11	MEAN 107	MAX 2,130	MIN .70	AC-FT 77,790							

PEAK DISCHARGE (BASE, 1,000 FT³/S)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-30	2200	7.88	1,580	2-28	1530	7.53	1,410
1-16	1030	10.42	3,190	3-30	0030	9.44	2,480

RESERVOIRS IN STONY CREEK BASIN, CALIF.

11385100 EAST PARK RESERVOIR NEAR STONYFORD.--Lat 39°21'24", long 122°30'53", in SW¼NE¼ sec.3, T.17 N., R.6 W., Colusa County, near south side of spillway section on East Park Dam on Little Stony Creek, 1.9 mi (3.1 km) southeast of Stonyford. Drainage area, 98.2 mi² (254.3 km²). Period of record, October 1969 to current year. Nonrecording gage read once daily. Datum of gage is at mean sea level (levels by Bureau of Reclamation). Extremes for current year: Maximum contents, 53,500 acre-ft (66.0 hm³) Mar. 30 (elevation, 1,201.10 ft or 366.095 m); minimum, 978 acre-ft (1.21 hm³) Oct. 31 (elevation, 1,140.00 ft or 347.472 m). Extremes for period of record: Maximum contents, 53,500 acre-ft (66.0 hm³) Mar. 30, 1974 (elevation, 1,201.10 ft or 366.095 m); minimum, 280 acre-ft (345,000 m³) Aug. 8 to Oct. 31, 1972 (elevation, 1,131.68 ft or 344.936 m).

Reservoir is formed by a concrete arch-type dam. Storage began in 1910. Capacity, 48,211 acre-ft (59.4 hm³) between elevations 1,131.68 ft (344.936 m), invert of sluice pipe and 1,198.18 ft (365.205 m), crest of spillway. Capacity increased to 50,889 acre-ft (62.7 hm³) with the addition of flashboards to an elevation of 1,199.68 ft (365.662 m). Dead storage, 279 acre-ft (344,000 m³). Records of contents furnished by Bureau of Reclamation.

11386100 STONY GORGE RESERVOIR NEAR ELK CREEK.--Lat 39°35'09", long 122°31'54", in NE¼SE¼ sec.16, T.20 N., R.6 W., Glenn County, on south end of Stony Gorge Dam on Stony Creek, 1.3 mi (2.1 km) southeast of Elk Creek. Drainage area, 301 mi² (780 km²). Period of record, October 1969 to current year. Nonrecording gage read once daily. Datum of gage is at mean sea level (levels by Bureau of Reclamation). Extremes for current year: Maximum contents, 53,550 acre-ft (66.0 hm³) Mar. 30 (elevation, 843.40 ft or 257.068 m); minimum, 5,250 acre-ft (6.47 hm³) Oct. 2 (elevation, 783.95 ft or 238.948 m). Extremes for period of record: Maximum contents, 54,630 acre-ft (67.4 hm³) Mar. 26, 1971 (elevation, 844.20 ft or 257.312 m); minimum, 3,810 acre-ft (4.70 hm³) Nov. 6, 1971 (elevation, 779.20 ft or 237.500 m).

Reservoir is formed by slab and buttress-type dam. Storage began in 1928. Capacity, 50,383 acre-ft (62.1 hm³) between elevations, 728.0 ft (221.89 m), top of low intake and 841.0 ft (256.34 m), crest of spillway. No dead storage. Records of contents furnished by Bureau of Reclamation.

MONTHEND ELEVATION AND CONTENTS, AT 0800, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
EAST PARK RESERVOIR				STONY GORGE RESERVOIR		
Sept. 30.....	1,173.76	16,240	--	785.19	5,670	--
Oct. 31.....	1,168.30	11,910	-4,330	791.40	8,060	+2,390
Nov. 30.....	1,180.20	22,590	+10,680	831.14	38,470	+30,410
Dec. 31.....	1,192.66	39,070	+16,480	832.02	39,460	+990
CAL YR 1973.....	--	--	+20,100	--	--	-6,200
Jan. 31.....	1,198.42	48,630	+9,560	832.64	40,170	+710
Feb. 28.....	1,199.20	50,020	+1,390	839.06	47,900	+7,730
Mar. 31.....	1,200.56	52,500	+2,480	840.38	49,580	+1,680
Apr. 30.....	1,199.97	51,420	-1,080	841.82	51,450	+1,870
May 31.....	1,195.96	44,400	-7,020	831.46	38,830	-12,620
June 30.....	1,195.74	44,030	-370	835.94	44,050	+5,220
July 31.....	1,190.30	35,510	-8,520	829.52	36,680	-7,370
Aug. 31.....	1,181.39	23,920	-11,590	816.98	24,450	-12,230
Sept. 30.....	1,175.64	17,940	-5,980	795.55	9,980	-14,470
WTR YR 1974.....	--	--	+1,700	--	--	+4,310

11387000 STONY CREEK NEAR FRUTO, CALIF.

LOCATION.--Lat 39°40'18", long 122°31'01", in SW¼SE¼ sec.15, T.21 N., R.6 W., Glenn County, on right bank 0.3 mi (0.5 km) downstream from Grindstone Creek, and 6.5 mi (10.5 km) northwest of Fruto.

DRAINAGE AREA.--597 mi² (1,546 km²).

PERIOD OF RECORD.--January 1901 to October 1912, October 1960 to current year.

GAGE.--Water-stage recorder and two crest-stage gages. Altitude of gage is 600 ft (183 m), from topographic map. Prior to Oct. 6, 1912, nonrecording gage at site 1.0 mi (1.6 km) downstream at different datum.

AVERAGE DISCHARGE (unadjusted).--25 years, 683 ft³/s (19.34 m³/s), 494,800 acre-ft/yr (610 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 36,500 ft³/s (1,030 m³/s) Jan. 16 (gage height, 14.54 ft or 4.432 m); minimum daily, 3.6 ft³/s (0.10 m³/s) Oct. 19, 20.

Period of record: Maximum discharge, 40,200 ft³/s (1,140 m³/s) Dec. 23, 1964 (gage height, 15.94 ft or 4.858 m in gage well, 16.1 ft or 4.91 m, from floodmarks); no flow July 5-13, Oct. 25, 26, 1901.

REMARKS.--Records fair. Many diversions above station for irrigation. Flow regulated by Stony Gorge Reservoir (see sta 11386100) 6.9 mi (11.1 km) upstream since 1928 and by East Park Reservoir (see sta 11385100) since 1910, combined usable capacity, 100,700 acre-ft (124 hm³). Records of water temperatures for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1931: Drainage area.

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	65	10	4,690	1,750	531	4,940	7,100	704	137	37	251	414
2	65	9.9	2,380	1,460	468	5,230	4,470	679	136	34	251	414
3	65	9.8	1,700	1,310	535	3,300	2,870	771	134	33	253	397
4	64	9.8	1,260	1,240	680	2,520	2,950	775	125	32	255	362
5	65	46	1,020	1,110	695	2,090	2,950	682	118	31	259	348
6	176	97	933	995	705	1,800	2,670	1,010	111	31	256	330
7	170	132	930	984	693	1,710	2,270	1,060	104	31	255	330
8	69	218	952	915	674	1,630	2,000	881	94	211	255	336
9	70	172	869	850	658	1,440	1,850	1,100	88	406	259	331
10	139	444	785	781	642	1,320	1,660	1,450	83	396	259	319
11	217	813	797	798	629	1,430	1,690	1,430	78	392	259	312
12	216	1,160	746	1,190	627	1,740	1,700	1,400	73	387	293	312
13	216	665	1,230	2,440	611	1,730	1,620	1,370	69	386	375	305
14	215	540	1,090	4,340	586	1,680	1,550	1,140	67	387	385	331
15	126	473	968	9,060	563	1,660	1,090	977	62	389	394	331
16	9.3	1,900	874	25,800	563	1,200	788	842	61	393	404	327
17	5.4	1,440	1,030	15,100	547	894	731	711	60	390	404	320
18	4.0	1,190	1,030	7,100	586	1,010	710	700	59	384	406	319
19	3.6	1,020	944	6,910	1,140	1,190	668	682	72	382	404	319
20	3.6	594	932	4,610	646	1,610	638	667	74	384	409	315
21	3.9	1,600	3,630	3,290	717	1,610	614	657	65	387	409	310
22	6.3	1,290	2,450	3,080	780	1,440	596	647	60	388	409	310
23	49	1,030	1,700	2,570	766	1,340	578	641	55	369	409	306
24	58	949	1,350	2,090	725	1,260	590	635	50	310	409	295
25	32	839	1,280	1,730	688	1,280	620	634	48	272	405	224
26	25	796	1,340	1,480	670	1,400	650	639	46	282	411	171
27	18	719	2,150	1,330	661	1,220	644	390	46	278	414	177
28	15	746	2,050	1,220	1,750	1,440	626	163	43	275	414	182
29	14	833	3,680	1,130	-----	8,440	738	162	39	291	414	183
30	13	3,370	2,710	772	-----	17,300	780	154	37	274	414	155
31	11	-----	2,130	534	-----	7,960	-----	143	-----	267	411	-----
TOTAL	2,209.1	23,115.5	49,430	107,969	19,536	84,814	48,411	23,896	2,294	8,509	10,805	9,085
MEAN	71.3	771	1,595	3,483	698	2,736	1,614	771	76.5	274	349	303
MAX	217	3,370	4,690	25,800	1,750	17,300	7,100	1,450	137	406	414	414
MIN	3.6	9.8	746	534	468	894	578	143	37	31	251	155
AC-FT	4,380	45,850	98,040	214,200	38,750	168,200	96,020	47,400	4,550	16,880	21,430	18,020

CAL YR 1973 TOTAL 383,009.6 MEAN 1.049 MAX 11,500 MIN 3.6 AC-FT 759,700

WTR YR 1974 TOTAL 390,073.6 MEAN 1.069 MAX 25,800 MIN 3.6 AC-FT 773,700

LOCATION.--Lat 39°48'36", long 122°19'45", in SE¼NE¼ sec.32, T.23 N., R.4 W., Tehama County, on left bank 0.4 mi (0.6 km) downstream from Black Butte Dam, and 8.2 mi (13.2 km) northwest of Orland.

GAGE.--Water-stage recorder and Parshall flume. Datum of gage is 372.64 ft (113.581 m) above mean sea level. Prior to Oct. 23, 1956, at site 0.5 mi (0.8 km) upstream at different datum. Oct. 23, 1956, to Sept. 30, 1960, at present site and datum. Oct. 1, 1960, to Sept. 30, 1961, at datum 1.00 ft (0.305 m) lower.

EXTREMES.--Period of record: Maximum daily discharge, 320 ft³/s (9.06 m³/s) May 8, 1969; no flow at times in most years.

REMARKS.--Records good. Canal diverts from Black Butte Lake at right end of Black Butte Dam; water is used for irrigation. A pump with a capacity of 6 ft³/s (0.17 m³/s) diverted water at times above station and was included in the canal record prior to Mar. 1, 1970. Total diverted during the current year was 628 acre-ft (774,000 m³).

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	207	30	2.6	3.2	1.1	.60	.70	115	288	216	283	218
2	224	31	1.8	3.2	1.1	.70	.50	145	290	237	282	233
3	230	32	1.8	3.1	1.1	.70	.30	202	294	251	282	233
4	232	30	3.7	3.0	1.1	.70	.30	271	292	248	260	228
5	213	13	4.3	3.0	2.8	.60	.30	294	283	260	245	267
6	155	1.8	4.2	3.8	3.6	.30	.30	310	291	266	250	304
7	87	4.3	3.6	2.8	3.6	.40	.30	308	240	250	274	313
8	52	4.1	3.4	2.8	3.5	.40	.30	285	246	124	272	313
9	46	3.9	3.8	2.7	3.5	.40	.40	290	253	138	260	300
10	36	3.7	4.3	2.6	3.5	.40	.40	297	268	168	272	286
11	31	4.0	4.3	3.1	3.5	.40	.40	267	275	90	286	256
12	30	4.3	4.3	3.2	3.7	.30	.40	244	266	84	288	219
13	30	4.8	4.6	3.0	3.8	.30	.40	205	262	91	270	213
14	30	3.8	4.6	2.8	2.5	.30	.40	190	286	147	266	248
15	30	3.8	4.3	1.8	.60	.40	1.0	231	289	179	263	240
16	31	4.1	4.0	2.4	.60	.40	45	260	268	215	243	232
17	31	4.5	4.0	1.3	.60	.30	130	247	255	246	236	234
18	30	3.9	4.3	1.4	.60	.20	187	270	244	284	211	234
19	30	3.8	4.3	1.0	.60	.20	220	290	233	300	219	272
20	30	3.6	4.3	1.0	.60	.20	240	292	224	300	239	295
21	30	3.5	5.1	.60	.60	.20	247	269	239	292	241	290
22	30	3.3	3.9	.60	.60	.20	220	239	281	282	268	287
23	11	3.2	3.8	.60	.60	.70	221	231	260	250	259	284
24	4.2	3.2	3.8	.60	.60	.40	217	242	247	232	278	280
25	4.2	3.2	3.2	.60	.60	.70	140	238	247	226	258	261
26	4.3	40	3.1	.60	.60	1.3	104	218	259	240	243	210
27	4.0	50	3.2	.60	.60	1.5	83	219	284	257	273	181
28	4.0	48	3.2	.80	.60	1.5	76	248	298	261	283	174
29	5.3	48	3.2	1.1	-----	2.3	90	272	300	272	261	168
30	10	24	3.2	1.1	-----	1.9	95	277	261	262	231	182
31	30	-----	3.2	1.1	-----	1.0	-----	282	-----	280	236	-----
TOTAL	1,922.0	420.8	115.4	59.50	46.80	19.90	2,321.40	7,748	8,023	6,948	8,032	7,455
MEAN	62.0	14.0	3.72	1.92	1.67	.64	77.4	250	267	224	259	249
MAX	232	50	5.1	3.8	3.8	2.3	247	310	300	300	288	313
MIN	4.0	1.8	1.8	.60	.60	.20	.30	115	224	84	211	168
AC-FT	3,810	835	229	118	93	39	4,600	15,370	15,910	13,780	15,930	14,790
CAL YR 1973	TOTAL	42,914.30	MEAN	118	MAX	304	MIN	.20	AC-FT	85,120		
WTR YR 1974	TOTAL	43,111.80	MEAN	118	MAX	313	MIN	.20				

11387995 BLACK BUTTE LAKE NEAR ORLAND, CALIF.

LOCATION.--Lat 39°48'50", long 122°20'12", in SE¼SW¼ sec.29, T.23 N., R.4 W., Tehama County, in control tower in right abutment of main dam on Stony Creek, 8 mi (13 km) northwest of Orland.

DRAINAGE AREA.--736 mi² (1,906 km²).

PERIOD OF RECORD.--October 1963 to current year. Prior to October 1971, published as Black Butte Reservoir near Orland.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Corps of Engineers).

EXTREMES.--Current year: Maximum contents, 148,423 acre-ft (183 hm³) Apr. 1 (elevation, 470.89 ft or 143.527 m); minimum, 27,418 acre-ft (33.8 hm³) Nov. 4-6 (elevation, 429.17 ft or 130.811 m).
Period of record: Maximum contents, 149,700 acre-ft (185 hm³) June 8, 9, 1967 (elevation, 471.19 ft or 143.619 m); minimum since initial season of operation, 9,420 acre-ft (11.6 hm³) Oct. 27, 1964 (elevation, 413.83 ft or 126.135 m).

REMARKS.--Reservoir is formed by seven earthfill dams; storage began Oct. 28, 1963. Usable capacity, 150,000 acre-ft (185 hm³) between elevations 414.6 ft (126.37 m), minimum operating level and 473.5 ft (144.32 m), spillway crest, above mean sea level. Additional storage of 10,000 acre-ft (12.3 hm³) is not available for release. South Diversion Canal (see sta 11397990) diverts at right end of dam. Water is released down Stony Creek for irrigation. Records, including extremes, represent total contents at 2400 hours.

COOPERATION.--Records of contents furnished by Corps of Engineers, not rounded to Geological Survey standards.

CAPACITY TABLE (ELEVATION, IN FEET, AND CONTENTS, IN ACRE-FEET)

413	8,811	450	73,660
415	10,300	460	105,925
420	14,950	470	144,621
430	28,788	480	191,348
440	48,072		

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30,865	27,843	74,367	71,649	46,911	88,234	148,423	117,583	112,808	76,597	55,138	42,266
2	30,005	27,745	75,285	68,551	44,871	94,425	147,348	116,837	111,712	75,315	54,107	42,287
3	29,190	27,630	72,839	66,969	43,777	96,867	145,469	116,055	110,622	73,954	53,135	42,287
4	28,504	27,418	69,677	66,611	44,914	96,094	142,851	115,313	109,429	72,635	52,198	42,246
5	27,925	27,418	67,410	65,982	46,391	93,829	142,180	114,315	108,350	71,246	51,295	42,041
6	27,598	27,418	65,493	65,195	47,940	91,562	140,886	113,653	106,991	69,790	50,380	41,675
7	27,745	27,532	65,304	64,308	49,520	89,551	139,021	113,506	105,677	68,495	49,430	41,250
8	27,728	27,892	66,310	64,335	50,997	87,118	136,885	112,955	104,618	67,826	48,493	40,887
9	27,696	28,172	67,024	65,955	52,362	84,406	134,527	113,028	103,529	67,743	47,457	40,567
10	27,679	28,955	67,937	67,051	53,726	81,271	131,714	113,836	102,413	67,604	46,521	40,188
11	27,991	30,692	69,169	67,771	55,041	78,554	128,821	114,574	101,269	67,549	45,553	39,870
12	28,321	33,123	69,819	69,253	56,401	77,317	126,044	115,313	100,029	67,632	44,575	39,752
13	28,704	34,648	70,816	72,839	57,658	76,268	123,226	116,204	98,900	67,687	43,881	39,476
14	29,022	35,888	71,852	76,807	58,833	75,970	120,292	117,172	97,677	67,438	43,443	39,259
15	29,342	36,810	72,577	88,651	59,998	76,777	120,217	117,733	96,362	67,079	43,318	39,083
16	29,258	40,108	73,161	120,254	61,128	77,769	121,697	117,995	95,091	66,721	43,277	38,888
17	29,123	43,028	73,836	129,136	62,219	78,948	123,111	118,108	93,895	66,201	43,235	38,693
18	29,005	45,126	74,692	128,310	63,509	80,504	124,225	118,145	92,774	65,629	43,256	38,479
19	28,804	46,694	75,077	122,613	66,173	82,351	124,225	118,145	91,726	64,926	43,173	38,208
20	28,704	47,523	75,463	114,647	67,521	84,938	124,148	118,070	90,651	64,281	43,111	37,841
21	28,504	49,475	78,676	106,991	68,888	87,627	123,533	118,070	89,519	63,589	43,090	37,592
22	28,487	51,295	76,987	98,186	70,359	89,648	122,689	118,108	88,234	63,033	42,925	37,324
23	28,338	52,642	73,659	90,716	71,736	91,660	121,811	118,145	86,959	62,481	42,883	37,076
24	28,321	53,750	69,621	83,313	73,073	93,399	121,240	118,070	85,693	61,776	42,698	36,848
25	28,255	54,729	65,412	75,166	74,426	95,257	120,444	118,070	84,531	60,999	42,636	36,527
26	28,189	55,549	64,068	66,474	75,672	97,238	120,027	118,108	83,189	60,228	42,554	36,151
27	28,106	56,279	67,632	57,262	76,927	99,310	119,461	117,883	81,919	59,414	42,389	35,777
28	27,975	56,941	70,017	52,152	81,087	101,580	118,896	116,811	80,504	58,607	42,246	35,479
29	27,925	57,956	74,544	51,757	-----	112,808	118,520	116,018	79,100	57,832	42,185	35,201
30	27,925	65,385	75,821	50,768	-----	142,306	118,070	114,980	77,829	56,916	42,225	34,850
31	27,909	-----	74,219	48,848	-----	147,777	-----	113,873	-----	56,010	42,225	-----
MAX	30,865	65,385	78,676	129,136	81,087	147,777	148,423	118,145	112,808	76,597	55,138	42,287
MIN	27,598	27,418	64,068	48,848	43,777	75,970	118,070	112,955	77,829	56,010	42,185	34,850
(a)	429.47	447.07	450.19	440.35	452.47	470.74	463.33	462.20	451.40	443.42	437.25	433.45
(b)	-3,688	+37,476	+8,834	-25,371	+32,239	+66,690	-29,707	-4,197	-36,044	-21,819	-13,785	-7,375
(c)	772	212	208	405	452	569	1,411	2,151	2,640	2,303	1,912	1,571

CAL YR 1973 b +13,478
WTR YR 1974 b +3,253

a Elevation, in feet, at end of month.
b Change in contents, in acre-feet.
c Evaporation, in acre-feet.

11388000 STONY CREEK BELOW BLACK BUTTE DAM, NEAR ORLAND, CALIF.

LOCATION.--Lat 39°49'07", long 122°19'26", in NW¼SW¼ sec.28, T.23 N., R.4 W., Tehama County, on left bank 200 ft (61 m) downstream from road bridge, 0.6 mi (1.0 km) downstream from Black Butte Dam, 8.1 mi (13.0 km) northwest of Orland.

DRAINAGE AREA.--737 mi² (1,909 km²).

PERIOD OF RECORD.--July 1955 to current year. Prior to October 1962, published as Stony Creek at Black Butte damsite, near Orland.

GAGE.--Water-stage recorder and grouted rock control. Datum of gage is 366.02 ft (111.563 m) above mean sea level (levels by Corps of Engineers). Prior to Dec. 12, 1960, water-stage recorder at site 0.6 mi (1.0 km) upstream at different datum. Dec. 12, 1960, to Nov. 30, 1963, nonrecording gage at bridge 200 ft (61 m) upstream at datum 4.04 ft (1.231 m) higher.

AVERAGE DISCHARGE (adjusted for diversion to South Diversion Canal since 1956 and for change in contents and evaporation in Black Butte Lake since 1964).--19 years, 664 ft³/s (18.8 m³/s), 481,100 acre-ft/yr (593 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 15,200 ft³/s (430 m³/s) Jan. 19 (gage height, 9.80 ft or 2.987 m); no flow Oct. 30 to Nov. 1.

Period of record: Maximum discharge, 36,300 ft³/s (1,030 m³/s) Feb. 24, 1958 (gage height, 11.82 ft or 3.603 m, site and datum then in use), from rating curve extended above 7,500 ft³/s (212 m³/s) on basis of slope-area measurement of maximum flow; no flow Dec. 8-10, 31, 1956, Jan. 1-10, 1957, Oct. 19 to Nov. 7, Nov. 13-15, 1962. Maximum discharge since construction of Black Butte Dam in 1964, 19,400 ft³/s (549 m³/s) Dec. 25, 1964 (gage height, 10.41 ft or 3.174 m); no flow at times in each year.

REMARKS.--Records good. Many diversions above station for irrigation. Flow regulated by Black Butte Lake (see sta 11387995), East Park Reservoir (see sta 11385100), usable capacity, 50,900 acre-ft (62.8 hm³), and Stony Gorge Reservoir (see sta 11386100), usable capacity, 50,400 acre-ft (62.1 hm³). Prior to October 1956, figures of daily discharge included water diverted to South Diversion Canal, which diverts 0.6 mi (1.0 km) above station. Records of chemical analyses and water temperatures for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	211	0	1,200	2,990	1,540	827	7,210	902	380	336	396	148		
2	200	1.6	2,340	2,940	1,540	2,600	5,190	899	381	337	418	144		
3	181	39	2,990	2,100	1,160	2,520	3,600	912	381	349	407	142		
4	107	49	2,970	1,540	216	3,050	4,140	915	390	354	397	140		
5	103	51	2,250	1,510	58	3,270	3,000	901	392	353	400	150		
6	98	52	1,890	1,500	48	2,980	3,000	941	391	355	398	163		
7	86	52	1,090	1,500	46	2,980	2,990	921	388	355	396	173		
8	64	52	488	1,160	46	2,970	3,000	850	360	326	404	176		
9	54	52	498	174	46	2,980	3,000	614	344	293	410	157		
10	50	52	356	289	46	2,960	3,000	622	346	305	411	145		
11	51	52	215	486	46	2,840	3,000	592	353	288	410	149		
12	52	52	402	490	46	2,580	3,000	609	357	263	410	148		
13	51	54	599	494	46	2,370	3,000	592	354	279	407	152		
14	50	54	602	1,610	47	1,890	2,990	413	356	335	349	154		
15	51	54	605	5,250	48	1,290	1,380	388	352	338	180	154		
16	52	56	606	9,920	49	759	25	374	353	332	174	158		
17	52	57	606	12,600	49	290	2.7	373	357	348	167	159		
18	52	57	606	10,200	49	68	85	377	345	355	175	159		
19	51	58	716	11,700	49	24	427	381	341	361	186	162		
20	51	58	820	10,200	49	6.8	479	381	342	366	173	162		
21	52	59	2,230	8,140	49	12	564	381	338	365	166	148		
22	52	59	3,460	7,570	49	30	870	381	349	363	177	125		
23	52	59	3,490	6,570	49	50	885	387	361	362	171	115		
24	50	60	3,470	5,960	50	52	895	388	352	357	178	117		
25	50	61	3,470	5,950	50	52	897	390	350	353	177	111		
26	50	50	2,110	5,960	51	52	886	391	359	352	178	122		
27	50	47	494	5,950	51	52	874	390	354	343	190	136		
28	45	50	972	3,980	52	52	880	377	344	338	188	127		
29	11	50	1,520	1,580	-----	191	884	370	337	340	167	133		
30	0	160	2,220	1,560	-----	1,610	894	371	336	349	150	152		
31	0	-----	2,940	1,550	-----	5,670	-----	374	-----	366	150	-----		
TOTAL	2,079	1,607.6	48,225	133,423	5,625	47,077.8	61,047.7	17,157	10,743	10,516	8,560	4,381		
MEAN	67.1	53.6	1,556	4,304	201	1,519	2,035	553	358	339	276	146		
MAX	211	160	3,490	12,600	1,540	5,670	7,210	941	392	366	418	176		
MIN	0	0	215	174	46	6.8	2.7	370	336	263	150	111		
AC-FT	4,120	3,190	95,650	264,600	11,160	93,380	121,100	34,030	21,310	20,860	16,980	8,690		
MEAN a	81.5	701	1,706	3,900	791	2,614	1,637	770	64.2	246	342	297		
AC-FT a	5,010	41,710	104,900	239,800	43,940	160,700	97,400	47,350	3,820	15,120	21,040	17,680		
CAL YR 1973	TOTAL	360,384.30	MEAN	987	MAX	9,180	MIN	0	AC-FT	714,800	MEAN a	1,143	AC-FT a	827,700
WTR YR 1974	TOTAL	350,442.10	MEAN	960	MAX	12,600	MIN	0	AC-FT	695,100	MEAN a	1,102	AC-FT a	798,500

a Adjusted for diversion to South Diversion Canal near Orland and for change in contents and evaporation in Black Butte Lake.

LOCATION.--Lat 39°27'28", long 121°59'35", in SE¼NE¼ sec.32, T.19 N., R.1 W., Glenn County, on left bank 100 ft (30 m) upstream from highway bridge, 0.5 mi (0.8 km) south of Butte City, and at mile 115.8 (186.3 km) upstream from Sacramento.

EXTREMES.--Current year: Maximum discharge, 136,000 ft³/s (3,850 m³/s) Jan. 18 (gage height, 94.54 ft or 28.816 m); minimum daily, 6,880 ft³/s (195 m³/s) Oct. 21.
Period of record: Maximum discharge (1940 to current year), 170,000 ft³/s (4,810 m³/s) Feb. 7, 1942 (gage height, 96.87 ft or 29.526 m); minimum recorded, 1,050 ft³/s (29.7 m³/s) July 15, 25, 26, 1931 (gage height, 67.49 ft or 20.571 m).

REMARKS.--Records good. Natural flow affected by storage reservoirs, power developments, diversions for irrigation and return flow from irrigated areas. During floods, overbank flow into Butte basin occurs upstream from the left (east) bank levee. The combined overbank flow and tributary runoff then flows south on the east bank floodplain into the Butte Sink and Sutter Bypass. Maximum overbank flood flows at the latitude of Butte City are as follows: Current year (Butte Creek at State Highway 162): Maximum discharge, 11,700 ft³/s (331 m³/s) Jan. 17 (gage height, 81.6 ft or 24.87 m). Period of record: Maximum discharge, 17,200 ft³/s (487 m³/s) Jan. 24, 1970 (gage height, 82.0 ft or 24.99 m). Combined overbank flow.--Current year: Maximum discharge, 52,900 ft³/s (1,500 m³/s) Jan. 18. Period of record: Maximum discharge, 74,300 ft³/s (2,100 m³/s) Jan. 25, 1970. Records of water temperatures 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	9,120	7,530	62,900	53,200	50,600	34,200	124,000	14,900	14,500	11,200	9,800	11,200
2	9,130	7,540	84,800	48,200	51,100	43,900	121,000	13,500	14,200	11,300	9,760	11,300
3	9,200	7,550	60,100	45,100	44,700	36,700	122,000	12,900	14,200	11,100	9,740	11,300
4	9,130	7,580	49,100	40,100	41,500	32,800	111,000	12,100	14,200	10,600	9,780	11,400
5	9,110	7,610	52,000	35,600	39,800	26,600	87,700	11,500	13,600	10,500	9,830	11,400
6	8,580	7,840	49,900	35,700	36,500	25,000	62,000	11,400	13,400	10,500	9,840	11,500
7	8,290	8,480	48,600	35,900	33,300	28,600	55,900	16,500	13,300	10,700	9,910	11,700
8	9,050	12,600	47,200	35,400	30,500	50,800	49,200	18,200	13,200	11,100	10,200	11,800
9	9,190	12,900	43,000	32,700	29,300	38,900	47,400	18,100	13,000	11,600	10,500	11,900
10	8,880	16,100	37,100	29,600	25,500	33,100	47,500	18,400	12,800	12,300	10,800	12,000
11	8,730	34,000	34,300	28,500	22,100	30,500	45,900	18,100	12,700	12,000	10,900	11,900
12	8,680	57,300	35,800	29,200	20,400	33,800	44,500	18,000	12,600	11,500	11,100	11,400
13	8,640	59,400	35,100	34,100	25,700	31,200	43,500	17,900	12,300	10,800	11,100	11,000
14	8,620	47,800	36,400	37,400	26,500	27,300	42,600	17,300	12,100	10,500	11,100	10,900
15	8,620	40,500	33,700	51,900	26,200	25,200	40,200	14,900	12,100	10,700	11,100	11,000
16	8,120	41,500	31,700	90,900	26,000	35,700	35,900	14,500	12,100	10,600	11,000	11,200
17	7,300	50,900	31,100	124,000	25,200	40,000	34,500	14,500	12,200	10,400	11,100	11,700
18	7,060	59,800	32,900	130,000	23,900	40,900	33,700	14,700	12,100	10,300	11,100	10,900
19	6,930	66,600	32,000	114,000	24,400	40,300	33,100	14,900	12,100	10,300	11,200	9,980
20	6,910	54,200	30,900	109,000	31,000	39,600	27,300	14,700	12,200	10,200	11,000	9,000
21	6,880	29,500	32,300	99,000	25,000	38,800	21,300	14,400	12,300	10,200	10,900	8,520
22	6,990	37,800	55,800	93,000	24,600	38,200	18,000	13,400	12,000	10,200	10,900	8,440
23	7,660	47,500	52,700	89,000	24,100	36,200	16,500	13,200	11,900	10,200	10,800	8,400
24	8,780	47,900	44,200	84,200	23,200	28,500	15,900	13,000	11,900	10,100	10,800	8,360
25	8,320	46,800	41,400	81,100	22,100	22,500	16,900	13,300	11,700	9,950	10,800	8,180
26	7,780	46,200	39,500	79,300	20,800	20,400	16,600	13,800	11,500	9,870	10,900	8,310
27	7,630	43,500	38,800	74,000	19,700	20,600	15,600	14,100	11,400	9,920	10,900	8,250
28	7,720	38,000	45,600	67,800	18,500	23,200	18,400	14,200	11,400	9,940	10,900	8,200
29	7,650	36,900	56,000	63,700	-----	27,						

11389500 SACRAMENTO RIVER AT COLUSA, CALIF.

LOCATION.--Lat 39°12'51", long 121°59'57", at north end of Jimeno Grant, Colusa County, on right bank just downstream from highway bridge at Colusa, and at mile 89.4 (143.8 km) upstream from Sacramento.

DRAINAGE AREA.--12,096 mi² (31,329 km²).

PERIOD OF RECORD.--April 1921 to October 1939 (low-water periods only), June 1940 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2.95 ft (0.899 m) below mean sea level. Prior to December 1930, water-stage recorder in center fender pier 50 ft (15 m) upstream from bridge at same datum.

AVERAGE DISCHARGE.--34 years (1940-74), 11,600 ft³/s (328.5 m³/s), 8,404,000 acre-ft/yr (10.4 km³/yr).

EXTREMES.--Current year: Maximum discharge, 48,600 ft³/s (1,380 m³/s) Jan. 18 (gage height, 67.68 ft or 20.629 m); minimum daily, 6,640 ft³/s (188 m³/s) Oct. 21.
Period of record: Maximum discharge (1940 to current year), 49,000 ft³/s (1,390 m³/s) Feb. 8, 1942 (gage height, 69.20 ft or 21.092 m); minimum discharge recorded, 820 ft³/s (23.2 m³/s) July 25, 26, 1931 (gage height, 34.79 ft or 10.604 m).

REMARKS.--Records excellent. Natural flow of stream affected by storage reservoirs, power development, bypassing for flood control, diversions for irrigation, and return flow from irrigated areas.

REVISIONS (WATER YEARS).--WSP 1345: 1952.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8,760	7,200	37,800	38,100	36,100	22,000	45,700	16,500	14,800	11,100	9,660	11,300
2	8,790	7,190	44,700	36,300	36,200	33,600	45,500	13,500	14,600	11,100	9,600	11,300
3	8,830	7,170	43,000	35,300	35,100	32,800	45,700	12,900	14,500	10,900	9,600	11,500
4	8,760	7,160	38,400	34,200	33,800	31,200	44,800	12,200	14,500	10,600	9,620	11,600
5	8,720	7,160	38,100	32,500	33,200	27,100	43,300	11,600	14,100	10,400	9,680	11,500
6	8,490	7,340	38,100	32,000	32,400	24,100	39,800	11,100	13,700	10,300	9,690	11,500
7	7,950	7,760	37,500	32,200	31,100	23,900	38,400	12,300	13,600	10,400	9,700	11,700
8	8,450	10,200	37,100	32,100	29,100	23,700	36,800	15,400	13,400	10,800	9,830	11,900
9	8,800	12,400	36,300	31,400	27,300	33,900	36,300	16,800	13,200	11,200	10,100	12,000
10	8,490	12,600	34,500	29,300	25,000	31,400	36,100	17,300	12,900	11,900	10,400	12,100
11	8,380	23,200	32,900	27,300	21,500	29,400	35,700	17,700	12,700	12,100	10,700	12,200
12	8,300	36,300	32,600	27,000	19,000	29,700	35,200	17,700	12,500	11,700	10,800	11,700
13	8,240	40,800	33,100	29,800	20,400	30,300	34,800	17,600	12,400	11,200	10,800	11,200
14	8,190	38,700	33,100	32,400	23,800	27,100	34,400	17,500	12,100	10,500	10,900	11,300
15	8,190	35,900	32,200	34,600	24,100	24,100	33,800	16,200	12,100	10,700	10,900	11,600
16	7,880	35,200	30,800	40,800	24,000	27,500	32,400	14,800	12,100	10,600	10,800	11,700
17	7,070	37,300	29,600	46,300	23,600	32,900	31,500	14,600	12,100	10,500	10,800	11,800
18	6,860	40,000	30,200	48,400	22,700	33,400	31,200	14,600	12,100	10,400	10,800	11,300
19	6,720	41,900	30,800	47,200	21,800	33,300	30,900	14,900	12,000	10,300	10,900	10,400
20	6,690	41,300	29,900	46,400	26,600	33,100	28,500	14,900	12,100	10,200	10,900	9,500
21	6,640	34,100	29,500	45,200	25,900	32,800	22,300	14,500	12,300	10,200	11,000	8,890
22	6,760	31,100	35,100	43,700	23,500	32,700	17,900	13,900	12,100	10,100	10,900	8,770
23	7,200	36,700	38,100	43,000	22,700	32,300	15,600	13,500	11,900	10,100	11,000	8,690
24	8,150	37,700	35,600	42,300	21,800	29,400	14,800	13,300	11,900	9,980	11,000	8,620
25	8,030	37,300	34,400	41,700	21,000	23,400	15,200	13,400	11,800	9,880	11,000	8,450
26	7,510	37,100	33,700	41,400	19,700	19,700	15,500	13,800	11,500	9,780	11,000	8,540
27	7,280	36,600	33,200	40,900	18,500	18,700	15,100	14,200	11,300	9,750	11,000	8,500
28	7,390	34,800	34,400	39,800	17,200	19,800	14,600	14,400	11,300	9,820	11,000	8,440
29	7,320	33,900	36,800	39,000	-----	22,300	16,000	14,500	11,200	9,790	11,000	8,450
30	7,240	34,000	39,700	38,300	-----	34,400	17,300	14,900	11,100	9,720	11,100	8,480
31	7,150	-----	40,900	37,600	-----	43,000	-----	15,000	-----	9,690	11,200	-----
TOTAL	243,230	810,080	1,092,1M	1,166,5M	717,100	903,000	905,100	455,500	377,900	325,710	327,380	314,930
MEAN	7,846	27,000	35,230	37,630	25,610	29,130	30,170	14,690	12,600	10,510	10,560	10,500
MAX	8,830	41,900	44,700	48,400	36,200	43,000	45,700	17,700	14,800	12,100	11,200	12,200
MIN	6,640	7,160	29,500	27,000	17,200	18,700	14,600	11,100	11,100	9,690	9,600	8,440
AC-FT	482,400	1,607M	2,166M	2,314M	1,422M	1,791M	1,795M	903,500	749,600	646,000	649,400	624,700
CAL YR 1973	TOTAL 6,400,730		MEAN 17,540		MAX 44,700		MIN 6,640		AC-FT 12,700,000			
WTR YR 1974	TOTAL 7,638,530		MEAN 20,930		MAX 48,400		MIN 6,640		AC-FT 15,150,000			

SACRAMENTO RIVER BASIN

315

11389700 BUTTE CREEK AT BUTTE MEADOWS, CALIF.

LOCATION.--Lat 40°04'06", long 121°34'25", in SW¼NW¼ sec.31, T.26 N., R.4 E., Tehama County, on right bank 1.0 mi (1.6 km) downstream from small tributary, 1.5 mi (2.4 km) southwest of Butte Meadows, and 15 mi (24 km) north-east of Forest Ranch.

DRAINAGE AREA.--44.4 mi² (115.0 km²).

PERIOD OF RECORD.--August 1960 to September 1974 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 4,260 ft (1,298 m), from topographic map.

AVERAGE DISCHARGE.--14 years, 139 ft³/s (3.936 m³/s), 100,700 acre-ft/yr (124 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,370 ft³/s (67.1 m³/s) Jan. 16 (gage height, 6.01 ft or 1.832 m); minimum daily, 59 ft³/s (1.67 m³/s) Oct. 1-5, 15, 17-19.
Period of record: Maximum discharge, 4,290 ft³/s (121 m³/s) Dec. 22, 1964 (gage height, 7.64 ft or 2.329 m); minimum, 46 ft³/s (1.30 m³/s) Sept. 4, 1961.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	59	63	309	267	245	347	410	304	291	119	85	72
2	59	63	229	234	224	274	639	316	294	116	83	71
3	59	63	208	225	214	273	515	324	292	113	83	71
4	59	63	195	212	207	203	447	334	281	111	82	71
5	59	72	183	205	198	196	409	353	272	110	85	71
6	63	107	178	198	177	190	383	377	269	110	84	71
7	77	168	180	188	187	188	348	412	249	109	81	71
8	65	119	175	180	181	176	335	457	231	152	81	71
9	62	310	167	176	176	171	325	471	223	158	80	71
10	61	591	164	169	172	170	300	450	219	122	79	71
11	60	1,550	164	164	168	185	293	431	216	113	77	70
12	60	1,240	160	176	166	208	291	410	210	110	77	69
13	61	476	159	265	162	191	282	374	200	107	77	68
14	60	326	154	300	159	190	278	361	196	104	77	69
15	59	288	149	1,180	155	192	280	352	189	101	76	68
16	60	429	151	1,630	160	198	292	328	188	99	76	69
17	59	450	202	1,390	153	209	294	311	177	98	75	69
18	59	410	183	1,220	153	223	299	283	170	97	75	69
19	59	297	170	1,280	159	228	278	262	176	96	75	69
20	64	259	167	875	148	229	275	247	163	95	75	69
21	68	229	174	659	146	230	282	240	156	93	74	69
22	127	207	170	532	143	234	303	247	152	93	74	69
23	136	189	162	459	140	237	315	254	147	92	74	69
24	80	178	158	404	140	242	290	263	141	90	74	69
25	73	169	162	364	139	263	269	281	137	89	73	69
26	69	163	164	329	144	296	259	314	133	88	73	68
27	67	155	198	300	139	460	246	343	130	87	72	68
28	66	154	227	279	155	441	245	343	126	87	72	68
29	64	165	408	262	-----	1,050	258	326	123	86	72	68
30	63	293	333	250	-----	1,620	279	309	121	86	73	68
31	63	-----	289	247	-----	908	-----	296	-----	85	72	-----
TOTAL	2,100	9,246	6,092	14,619	4,710	10,172	10,109	10,373	5,864	3,216	2,386	2,085
MEAN	67.7	308	197	472	168	328	337	335	195	104	77.0	69.5
MAX	136	1,550	408	1,630	245	1,620	810	471	294	158	85	72
MIN	59	63	149	164	139	170	245	240	121	85	72	68
AC-FT	4,170	18,340	12,080	29,000	9,340	20,180	20,050	20,570	11,630	6,380	4,730	4,140

CAL YR 1973 TOTAL 55,713 MEAN 153 MAX 1,550 MIN 59 AC-FT 110,500
WTR YR 1974 TOTAL 80,972 MEAN 222 MAX 1,630 MIN 59 AC-FT 160,600

PEAK DISCHARGE (BASE, 350 FT ³ /S)							
DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-11	1000	5.91	2,270	3-1	1600	3.71	525
11-18	0100	3.70	520	3-30	0300	5.83	2,190
11-30	2400	3.63	470	5-8	2100	3.74	540
12-29	0930	3.62	484	5-27	2200	3.43	402
1-16	1930	6.01	2,370				

11389950 LITTLE BUTTE CREEK AT MAGALIA, CALIF.

LOCATION.--Lat 39°48'38", long 121°35'00", in NW¼NE¼ sec.36, T.23 N., R.3 E., Butte County, on left bank 1,000 ft (305 m) downstream from Magalia Dam, and 0.4 mi (0.6 km) northwest of Magalia.

DRAINAGE AREA.--11.4 mi² (29.5 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 2,160 ft (658 m), from topographic map.

AVERAGE DISCHARGE (unadjusted).--6 years, 21.1 ft³/s (0.598 m³/s), 15,290 acre-ft/yr (18.9 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 984 ft³/s (27.9 m³/s) Mar. 29 (gage height, 6.36 ft or 1.939 m); minimum daily, 0.04 ft³/s (0.001 m³/s) Sept. 25.

Period of record: Maximum discharge, 1,180 ft³/s (33.4 m³/s) Jan. 24, 1970 (gage height, 6.47 ft or 1.972 m); minimum daily, 0.22 ft³/s (0.006 m³/s) Nov. 14, 1971, Apr. 17, 18, 23, 1972.

REMARKS.--Records fair. Flow regulated by Paradise Reservoir, capacity, 6,430 acre-ft (7.93 hm³) and Magalia Reservoir, capacity, 3,540 acre-ft (4.36 hm³). Diversion occurs above Magalia Reservoir through a 30-inch (76-cm) pipeline into Pacific Gas and Electric Co.'s Toadtown Canal when Magalia Reservoir is spilling. Diversion is made from Magalia Reservoir for the municipal supply of Paradise.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.25	.29	293	77	56	455	410	10	.71	.50	.48	.43
2	.24	.32	104	64	43	248	294	9.9	.76	.49	.53	.43
3	.24	.33	64	57	38	145	185	8.4	.82	.48	.48	.42
4	.25	.36	51	53	35	110	145	5.9	.80	.48	.48	.43
5	.26	.52	45	51	32	93	120	3.5	.79	.47	.48	.38
6	.27	.94	40	52	30	82	102	2.9	.78	.47	.48	.34
7	.41	2.6	36	46	28	99	87	1.9	.77	.52	.48	.34
8	.40	.51	33	41	26	94	76	1.4	.76	.70	.48	.38
9	.43	4.2	30	36	24	75	77	1.2	.74	.58	.43	.26
10	.45	5.2	27	33	23	62	64	1.0	.73	.53	.48	.30
11	.30	27	34	33	22	107	55	.93	.72	.53	.38	.23
12	.37	99	33	67	23	166	47	.92	.70	.48	.43	.26
13	.41	39	55	101	24	108	42	.93	.69	.48	.48	.17
14	.43	25	46	123	22	78	37	.93	.68	.48	.53	.26
15	.44	16	34	436	20	66	34	.94	.67	.43	.58	.30
16	.46	69	29	410	31	60	31	.93	.66	.43	.58	.30
17	.48	62	42	433	29	54	29	.98	.65	.38	.77	.26
18	.48	46	41	336	26	50	28	2.8	.64	.38	1.1	.20
19	.47	27	31	269	97	45	27	7.6	.63	.38	1.1	.13
20	.44	21	26	182	67	42	23	4.8	.62	.38	1.0	.20
21	.46	16	69	137	46	39	19	1.5	.60	.38	.84	.23
22	1.0	16	138	108	41	37	18	.82	.59	.43	.43	.13
23	.47	13	68	92	35	35	24	.80	.58	.48	.43	.08
24	.46	11	49	77	27	33	31	.79	.57	.53	.48	.14
25	.46	8.5	42	69	24	37	26	.77	.56	.53	.48	.04
26	.46	7.0	42	62	24	48	23	.78	.55	.53	.43	.09
27	.43	5.2	114	55	23	127	20	.73	.54	.48	.43	.11
28	.27	4.4	182	50	163	192	18	.71	.53	.48	.53	.17
29	.27	4.4	176	47	-----	524	14	.70	.52	.53	.43	.13
30	.28	30	128	44	-----	674	11	.72	.51	.48	.43	.07
31	.28	-----	92	50	-----	320	-----	.71	-----	.48	.38	-----
TOTAL	12.32	561.77	2,194	3,691	1,079	4,305	2,117	76.89	19.87	14.90	17.04	7.21
MEAN	.40	18.7	70.8	119	38.5	139	70.6	2.48	.66	.48	.55	.24
MAX	1.0	99	293	436	163	674	410	10	.82	.70	1.1	.43
MIN	.24	.29	26	33	20	33	11	.70	.51	.38	.38	.04
AC-FT	24	1,110	4,350	7,320	2,140	8,540	4,200	153	39	30	34	14
(a)	360	238	227	229	209	228	360	918	1,140	1,390	1,340	1,180
CAL YR 1973 TOTAL	8,598.24			MEAN 23.6	MAX 293	MIN .24	AC-FT 17,050					
WTR YR 1974 TOTAL	14,096.00			MEAN 38.6	MAX 674	MIN .04	AC-FT 27,960					

a Diversion, in acre-feet, from Magalia Reservoir, furnished by Paradise Irrigation District.

11390000 BUTTE CREEK NEAR CHICO, CALIF.

LOCATION.--Lat 39°43'34", long 121°42'28", in NW¼NW¼ sec.36, T.22 N., R.2 E., Butte County, on right bank 0.7 mi (1.1 km) downstream from Little Butte Creek, and 7.5 mi (12.1 km) east of Chico.

DRAINAGE AREA.--147 mi² (381 km²).

PERIOD OF RECORD.--October 1930 to current year. Monthly discharge only for some periods, published in WSP 1315-A.

GAGE.--Water-stage recorder. Altitude of gage is 320 ft (98 m), from topographic map. Prior to Aug. 13, 1944, water-stage recorder at site 0.4 mi (0.6 km) upstream at different datum.

AVERAGE DISCHARGE (unadjusted).--44 years, 413 ft³/s (11.70 m³/s), 299,200 acre-ft/yr (369 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 12,600 ft³/s (357 m³/s) Mar. 30 (gage height, 11.76 ft or 3.584 m); minimum daily, 79 ft³/s (2.24 m³/s) Oct. 15, 16.
Period of record: Maximum discharge, 21,200 ft³/s (600 m³/s) Dec. 22, 1964 (gage height, 14.12 ft or 3.304 m), from rating curve extended above 8,900 ft³/s (252 m³/s) on basis of slope-area measurement at gage height 13.35 ft (4.069 m); minimum, 10 ft³/s (0.28 m³/s) Nov. 29, 1952.

REMARKS.--Records good. Flow slightly regulated by storage in Magalia Reservoir, capacity, 3,540 acre-ft (4.36 hm³) and since 1957 by Paradise Reservoir, capacity, 6,430 acre-ft (7.93 hm³). Diversions above station for irrigation and domestic use of about 7,000 acre-ft (8.63 hm³) annually. Butte Creek receives water above station from West Branch Feather River by way of Toadtown Canal. Records of chemical analyses and water temperatures for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1445: 1953(M). WSP 1931: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	118	137	3,260	1,270	864	3,980	4,860	617	472	278	188	170
2	117	137	1,590	1,050	754	2,740	3,570	631	468	274	186	169
3	116	137	1,180	954	692	1,830	2,490	623	469	268	194	168
4	117	137	984	885	654	1,450	1,940	622	462	265	194	168
5	109	155	863	831	615	1,250	1,630	629	449	264	194	167
6	121	318	785	798	603	1,130	1,430	642	438	259	195	165
7	202	684	745	735	652	1,100	1,260	659	424	254	185	164
8	189	462	703	693	642	1,170	1,150	691	414	320	193	164
9	128	758	656	654	621	1,010	1,140	714	403	398	203	162
10	85	2,050	621	621	602	870	1,010	695	395	317	199	163
11	84	6,090	654	608	584	1,380	944	663	391	287	197	161
12	82	5,250	623	875	585	1,810	906	646	379	277	187	159
13	81	1,970	739	1,360	572	1,480	853	609	377	272	171	162
14	81	1,350	685	1,840	557	1,260	815	588	371	267	180	162
15	79	1,010	623	6,200	543	1,160	793	584	363	249	192	165
16	79	2,550	593	6,410	628	1,100	776	558	360	235	198	166
17	84	2,630	804	5,740	591	1,070	766	544	362	243	187	162
18	118	2,370	776	4,500	564	1,030	771	522	347	247	178	166
19	120	1,440	686	4,020	1,060	991	727	499	344	245	183	160
20	128	1,140	632	2,860	843	932	696	483	353	240	184	159
21	137	930	1,070	2,200	730	887	682	462	333	242	180	161
22	219	848	1,370	1,800	676	861	692	461	323	240	186	162
23	427	749	974	1,590	626	846	747	463	315	239	190	151
24	256	686	809	1,400	598	828	726	462	308	223	190	152
25	196	623	764	1,280	587	882	676	470	301	209	188	154
26	172	581	759	1,160	592	1,060	641	485	295	205	179	156
27	155	525	1,360	1,050	593	1,850	608	513	290	201	189	157
28	149	497	1,950	980	1,570	2,340	590	528	287	198	177	155
29	144	497	2,370	917	-----	6,620	583	512	281	194	173	156
30	140	1,370	1,860	813	-----	9,600	593	494	276	192	175	146
31	137	-----	1,480	805	-----	4,780	-----	479	-----	189	171	-----
TOTAL	4,370	38,081	32,968	56,899	19,198	59,297	35,065	17,548	11,050	7,791	5,786	4,832
MEAN	141	1,269	1,063	1,835	686	1,913	1,169	566	368	251	187	161
MAX	427	6,090	3,260	6,410	1,570	9,600	4,860	714	472	398	203	170
MIN	79	137	593	608	543	828	583	461	276	189	171	146
AC-FT	8,670	75,530	65,390	112,900	38,080	117,600	69,550	34,810	21,920	15,450	11,480	9,580
(a)	2,180	4,150	6,850	6,660	5,070	6,960	7,030	6,930	6,450	6,050	5,310	4,510
CAL YR 1973	TOTAL 227,829	MEAN 624	MAX 6,090	MIN 79	AC-FT 451,900							
WTR YR 1974	TOTAL 292,885	MEAN 802	MAX 9,600	MIN 79	AC-FT 580,900							

DATE	TIME	PEAK DISCHARGE (BASE, 2,700 FT ³ /S)	DISCHARGE	DATE	TIME	DISCHARGE
11-12	0230	8.87	8,250	1-16	2100	9.16
11-16	1030	5.31	3,320	3-1	2000	5.95
12-1	0330	6.31	4,730	3-30	0500	11.76

a Toadtown Canal diversion, in acre-feet, from West Branch Feather River, furnished by Pacific Gas and Electric Co.

11390210 CHEROKEE CANAL NEAR NELSON, CALIF.

LOCATION.--Lat 39°34'54", long 121°41'54", in SE¼SW¼ sec.13, T.20 N., R.2 E., Butte County, on right bank 25 ft (8 m) upstream from county bridge, 4.1 mi (6.6 km) northeast of Nelson, and 10.5 mi (16.9 km) northwest of Oroville.

PERIOD OF RECORD.--August 1970 to September 1974 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 145.65 ft (44.394 m) above mean sea level. Supplementary crest-stage gage on Gold Run Creek bypass channel 170 ft (52 m) to left at same datum.

EXTREMES.--Current year: Maximum discharge, 3,870 ft³/s (110 m³/s) Nov. 11 (gage height, 12.02 ft or 3.664 m); no flow many days.

Period of record: Maximum discharge, 6,030 ft³/s (171 m³/s) Feb. 27, 1973 (gage height, 13.67 ft or 4.167 m); no flow many days in each year.

REMARKS.--Records good. Low flow regulated by irrigation ponds on Gold Run Creek. Gold Run Creek receives water from West Branch Feather River via Upper Miocene Canal. Records of water temperatures and sediment discharge for the water year 1974 are published in Part 2 of this report.

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.6	31	757	164	187	1,070	1,080	53	17	2.0	1.8	
2	7.3	31	210	144	127	348	423	53	21	2.0	2.2	
3	7.9	31	144	130	110	199	252	51	21	1.6	2.4	
4	8.6	31	133	120	102	158	192	50	21	1.4	7.7	
5	8.6	36	117	112	100	133	173	48	18	1.1	5.8	
6	10	71	110	110	98	117	155	46	17	.73	3.7	
7	13	262	100	112	98	378	138	45	16	.96	6.5	
8	19	116	98	104	98	262	135	45	13	27	6.1	
9	22	312	89	93	95	138	155	40	11	30	4.0	
10	22	494	84	91	93	141	135	39	9.3	23	2.0	
11	31	1,800	105	91	91	490	120	39	8.3	21	.73	
12	18	1,140	100	389	91	382	110	38	6.9	19	.84	
13	19	550	151	233	111	176	101	32	6.5	18	4.2	
14	21	315	112	900	91	147	96	34	6.1	17	9.8	
15	22	170	93	1,410	89	141	96	34	5.8	16	5.4	
16	23	790	87	1,290	186	133	94	36	6.5	13	2.0	
17	23	710	287	782	107	127	92	39	7.4	13	.73	
18	14	436	130	875	91	122	90	33	7.9	13	.20	
19	9.3	220	100	392	406	110	87	31	9.8	13	.09	
20	5.1	219	93	259	122	98	85	45	10	5.8	.06	
21	11	188	480	206	93	91	81	69	8.3	3.2	.04	
22	25	161	386	176	80	89	77	61	6.9	2.6	.01	
23	70	141	167	164	70	89	88	39	5.0	2.4	0	
24	38	141	149	149	65	89	94	33	3.7	2.0	0	
25	38	114	127	135	58	91	83	26	3.2	2.0	0	
26	38	98	271	124	58	104	74	22	3.2	2.0	0	
27	44	84	759	114	56	193	62	26	3.2	2.0	0	
28	38	74	589	107	823	229	59	25	2.9	2.0	0	
29	31	74	326	104	-----	1,510	54	25	2.6	2.0	0	
30	29	859	227	110	-----	1,290	53	24	2.4	2.2	0	
31	30	-----	179	128	-----	405	-----	27	-----	4.5	0	-----
TOTAL	704.4	9,699	6,760	9,318	3,796	9,050	4,534	1,208	280.9	265.49	66.30	0
MEAN	22.7	323	218	301	136	292	151	39.0	9.36	8.56	2.14	0
MAX	70	1,800	759	1,410	823	1,510	1,080	69	21	30	9.8	0
MIN	5.1	31	84	91	56	89	53	22	2.4	.73	0	0
AC-FT	1,400	19,240	13,410	18,480	7,530	17,950	8,990	2,400	557	527	132	0
CAL YR 1973	TOTAL	50,165.60	MEAN	137	MAX	2,080	MIN	0	AC-FT	99,500		
WTR YR 1974	TOTAL	45,682.09	MEAN	125	MAX	1,800	MIN	0	AC-FT	90,610		

11390500 SACRAMENTO RIVER BELOW WILKINS SLOUGH, NEAR GRIMES, CALIF.

LOCATION.--Lat 39°00'36", long 121°49'25", in NW¼NE¼ sec.2, T.13 N., R.1 E., Colusa County, on right bank 1,200 ft (366 m) downstream from Wilkins Slough, 5.8 mi (9.3 km) southeast of Grimes, and at mile 62.9 (101.2 km) upstream from Sacramento.

DRAINAGE AREA.--12,926 mi² (33,478 km²).

PERIOD OF RECORD.--August 1931 to September 1938 (low-water periods only), October 1938 to current year. Monthly discharge only for some periods, published in WSP 1315-A. Prior to October 1965, published as "below Wilkins Slough."

GAGE.--Water-stage recorder. Datum of gage is 3.00 ft (0.914 m) below mean sea level.

AVERAGE DISCHARGE.--36 years (1938-74), 10,190 ft³/s (288.6 m³/s), 7,383,000 acre-ft/yr (9.10 km³/yr).

EXTREMES.--Current year: Maximum discharge, 29,400 ft³/s (833 m³/s) Jan. 19 (gage height, 50.08 ft or 15.264 m); minimum daily, 7,060 ft³/s (200 m³/s) Oct. 21.

Period of record: Maximum discharge (1938 to current year), 29,400 ft³/s (833 m³/s) Jan. 19, 1974 (gage height, 50.08 ft or 15.264 m); maximum gage height, 52.75 ft (16.078 m) Mar. 1, 1940; minimum discharge, 100 ft³/s (2.83 m³/s) Aug. 1, 1931 (gage height, 14.20 ft or 4.328 m).

REMARKS.--Records excellent. Natural flow of stream affected by storage reservoirs, power developments, bypassing for flood control, diversions for irrigation, and return flow from irrigated areas. Records of water temperatures for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9,020	7,650	26,600	26,600	26,600	17,000	28,200	15,500	12,700	9,250	8,320	10,200
2	9,020	7,670	27,900	26,200	26,500	22,000	28,500	12,100	12,600	9,230	8,310	10,400
3	8,990	7,640	28,100	26,800	26,400	24,000	28,600	10,900	12,400	9,170	8,330	10,500
4	9,000	7,620	27,100	27,000	26,100	23,900	28,600	10,100	12,300	8,990	8,360	10,800
5	8,940	7,590	26,700	27,200	26,000	23,900	28,300	9,390	12,100	8,710	8,420	10,900
6	8,870	7,700	26,800	27,000	25,900	24,000	27,500	8,800	11,700	8,620	8,470	10,900
7	8,430	7,900	26,700	27,800	25,600	23,500	26,900	9,780	11,600	8,580	8,470	11,100
8	8,400	9,100	26,600	27,600	25,300	25,500	26,600	13,700	11,400	8,960	8,460	11,300
9	8,880	11,600	26,500	27,000	24,700	26,200	26,500	15,000	11,100	9,580	8,700	11,400
10	8,830	11,900	26,200	26,800	24,100	25,800	26,400	15,200	10,800	10,200	9,030	11,600
11	8,670	19,000	25,800	25,800	22,100	25,500	26,400	15,500	10,500	10,800	9,340	11,800
12	8,610	28,000	25,800	24,700	19,400	25,300	26,300	15,500	10,300	10,700	9,470	11,700
13	8,550	28,600	25,900	25,600	19,000	25,600	26,100	15,500	10,200	10,300	9,580	11,200
14	8,500	27,700	25,900	26,100	22,200	25,100	26,000	15,400	9,910	9,730	9,620	11,000
15	8,440	26,600	25,800	26,400	23,000	24,100	26,000	14,500	9,860	9,640	9,650	11,200
16	8,390	26,400	25,600	27,200	23,100	24,200	25,700	12,800	9,860	9,580	9,680	11,300
17	7,810	26,600	25,400	28,200	22,800	25,800	25,600	12,400	9,900	9,380	9,610	11,400
18	7,380	27,200	25,500	29,000	22,200	26,000	25,500	12,400	9,980	9,230	9,630	11,300
19	7,180	27,600	25,900	29,300	21,200	26,100	25,400	12,800	9,890	9,140	9,740	10,500
20	7,100	27,700	25,800	29,200	23,200	26,100	25,100	13,000	9,830	9,020	9,810	9,790
21	7,060	26,500	25,700	28,700	24,100	26,100	23,000	12,800	10,000	8,950	9,820	9,090
22	7,080	25,000	26,800	28,600	22,900	26,000	19,000	12,100	10,200	8,870	9,830	8,830
23	7,340	26,400	27,500	28,200	22,100	26,000	15,800	11,600	10,100	8,820	9,940	8,750
24	8,050	26,800	26,600	27,900	21,300	25,600	14,400	11,300	10,100	8,630	9,970	8,640
25	8,510	26,800	26,300	27,700	20,500	24,000	14,300	11,300	9,920	8,460	10,000	8,500
26	8,210	26,800	26,100	27,600	19,500	21,200	14,500	11,500	9,730	8,380	10,100	8,380
27	7,840	26,700	26,400	27,500	18,600	19,400	14,000	11,900	9,550	8,310	10,100	8,390
28	7,810	26,400	26,900	27,300	17,500	19,400	13,400	12,100	9,440	8,380	10,100	8,360
29	7,810	26,100	27,400	27,100	-----	21,400	15,900	12,200	9,350	8,400	10,100	8,310
30	7,760	26,100	27,500	26,900	-----	25,300	16,900	12,500	9,260	8,330	10,100	8,280
31	7,690	-----	26,900	26,800	-----	27,400	-----	12,800	-----	8,290	10,200	-----
TOTAL	254,170	615,370	820,700	845,800	641,900	751,400	695,400	392,370	316,580	282,630	291,260	305,820
MEAN	8,199	20,510	26,470	27,280	22,930	24,240	23,180	12,660	10,550	9,117	9,395	10,190
MAX	9,020	28,600	28,100	29,300	26,600	27,400	28,600	15,500	12,700	10,800	10,200	11,800
MIN	7,060	7,590	25,400	24,700	17,500	17,000	13,400	8,800	9,260	8,290	8,310	8,280
AC-FT	504,100	1,221M	1,628M	1,678M	1,273M	1,490M	1,379M	778,300	627,900	560,600	577,700	606,600

CAL YR 1973 TOTAL 5,372,220 MEAN 14,720 MAX 28,600 MIN 6,880 AC-FT 10,660,000

WTR YR 1974 TOTAL 6,213,400 MEAN 17,020 MAX 29,300 MIN 7,060 AC-FT 12,320,000

SACRAMENTO RIVER BASIN

11390655 SOUTH FORK WILLOW CREEK NEAR FRUTO, CALIF.

LOCATION.--Lat 39°32'28", long 122°23'19", in SW¼SE¼ sec.35, T.20 N., R.5 W., Glenn County, on right bank 150 ft (46 m) downstream from county road bridge, and 4.5 mi (7.2 km) southeast of Fruto.

DRAINAGE AREA.--38.9 mi² (100.8 km²).

PERIOD OF RECORD.--July 1963 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 375 ft (114 m), from topographic map.

AVERAGE DISCHARGE.--11 years, 5.95 ft³/s (0.169 m³/s), 4,310 acre-ft/yr (5.31 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 537 ft³/s (15.2 m³/s) Jan. 16 (gage height, 6.44 ft or 1.963 m); no flow for several months.

Period of record: Maximum discharge, 3,620 ft³/s (103 m³/s) Feb. 7, 1973 (gage height, 12.58 ft or 3.834 m), from rating curve extended above 1,000 ft³/s (28.3 m³/s) on basis of slope-area measurement of peak flow; no flow for several months each year.

REMARKS.--Records good. No known regulation or diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	34	.56	5.8	23	8.7	1.5	.04			
2		0	1.8	.41	5.0	10	6.3	1.6	.05			
3		0	.23	1.2	4.8	4.8	5.8	1.4	.03			
4		0	0	2.4	4.8	3.7	5.2	1.4	.01			
5		0	0	2.7	4.4	3.3	5.2	1.3	.01			
6		0	0	3.0	4.0	3.2	5.0	1.3	0			
7		0	0	4.8	3.9	21	4.4	1.3	0			
8		0	0	9.6	3.9	16	4.2	1.1	0			
9		0	0	6.6	3.9	6.1	4.4	1.1	0			
10		0	0	4.6	3.7	5.0	3.9	1.1	0			
11		0	0	16	3.7	5.2	3.3	1.1	0			
12		0	0	70	3.9	4.8	3.0	1.3	0			
13		0	0	70	3.9	4.0	2.8	1.1	0			
14		0	0	37	3.5	3.9	2.7	1.1	0			
15		0	0	48	3.3	3.7	2.5	1.1	0			
16		0	0	181	3.5	3.5	2.4	1.0	0			
17		0	0	51	3.2	3.2	2.4	1.0	0			
18		0	0	40	3.2	3.3	2.4	1.0	0			
19		0	0	27	4.0	2.8	2.4	1.0	0			
20		0	0	20	3.2	2.7	2.1	.82	0			
21		0	22	15	2.8	2.4	1.8	.73	0			
22		0	8.5	12	2.5	2.4	1.7	.56	0			
23		0	2.5	11	2.4	2.4	1.7	.56	0			
24		0	1.5	9.8	2.2	2.4	2.2	.34	0			
25		0	1.0	9.3	2.2	2.8	3.0	.23	0			
26		0	.91	8.4	2.2	3.0	2.7	.18	0			
27		0	1.6	7.2	2.2	2.8	2.2	.18	0			
28		0	1.4	6.9	8.9	3.0	1.8	.18	0			
29		0	1.1	6.6	-----	35	1.6	.18	0			
30		55	.82	6.3	-----	49	1.5	.10	0			
31		-----	.73	6.1	-----	10	-----	.07	-----			
TOTAL	0	55	78.09	694.47	105.0	248.4	99.3	26.93	.14	0	0	0
MEAN	0	1.83	2.52	22.4	3.75	8.01	3.31	.87	.005	0	0	0
MAX	0	55	34	181	8.9	49	8.7	1.6	.05	0	0	0
MIN	0	0	0	.41	2.2	2.4	1.5	.07	0	0	0	0
AC-FT	0	109	155	1,380	208	493	197	53	.3	0	0	0

CAL YR 1973 TOTAL 9,018.71 MEAN 24.7 MAX 750 MIN 0 AC-FT 17,890
 WTR YR 1974 TOTAL 1,307.33 MEAN 3.58 MAX 181 MIN 0 AC-FT 2,590

PEAK DISCHARGE (BASE, 250 FT³/S).--Jan. 16 (1100) 537 ft³/s (6.44 ft).

11390660 WALKER CREEK AT ARTOIS, CALIF.

LOCATION.--Lat 39°37'32", long 122°11'45", in SW¼SW¼ sec.34, T.21 N., R.3 W., Glenn County, on left bank 500 ft (152 m) upstream from county road bridge, and 0.3 mi (0.5 km) north of Artois.

DRAINAGE AREA.--60.4 mi² (156.4 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 156.4 ft (47.67 m) above mean sea level (levels by Corps of Engineers).

AVERAGE DISCHARGE.--9 years, 22.7 ft³/s (0.643 m³/s), 16,450 acre-ft/yr (20.3 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,090 ft³/s (59.2 m³/s) Nov. 30 (gage height, 8.87 ft or 2.704 m); minimum daily, 0.71 ft³/s (0.020 m³/s) Nov. 1.
Period of record: Maximum discharge, 5,660 ft³/s (160 m³/s) Feb. 7, 1973 (gage height, 11.69 ft or 3.563 m), from rating curve extended above 1,800 ft³/s (51.0 m³/s) on basis of contracted-opening measurement at gage height 11.69 ft (3.563 m); no flow at times most years.

REMARKS.--Records good. Several small storage ponds above station for irrigation.

REVISIONS (WATER YEARS).--WRD Calif. 1969: 1966-68(P).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	.71	671	19	5.3	2.9	7.2	3.4	2.6	1.8	9.0	16
2	9.9	4.1	111	13	5.0	3.0	5.4	3.8	3.5	8.1	6.5	20
3	8.1	7.4	54	9.6	4.6	2.9	4.7	4.3	2.0	10	5.3	17
4	9.1	11	34	11	4.4	2.4	4.0	5.1	1.4	9.1	5.6	11
5	14	17	24	13	3.7	2.2	3.3	6.4	1.1	6.8	7.6	11
6	18	20	19	11	3.2	2.1	2.9	5.6	1.8	6.1	11	9.2
7	32	9.4	15	10	2.9	2.6	2.6	6.0	3.0	4.2	8.2	7.5
8	36	5.3	12	11	2.7	3.2	2.4	4.0	2.2	5.7	10	9.3
9	13	5.2	10	9.1	2.5	3.3	2.2	3.5	1.8	16	9.1	12
10	6.9	5.7	8.8	7.7	2.5	2.8	2.1	5.1	1.4	9.9	5.8	9.7
11	4.8	8.9	8.1	7.4	2.5	2.7	1.9	6.2	1.4	57	9.1	9.5
12	7.6	19	8.8	55	2.7	2.4	1.7	4.7	2.5	28	12	10
13	11	22	9.1	66	2.8	2.2	1.6	4.2	2.2	19	12	11
14	12	20	9.6	41	2.7	2.3	1.4	6.3	2.0	13	8.8	13
15	13	14	8.5	149	2.4	2.1	1.3	3.9	1.9	13	5.5	10
16	12	9.1	7.4	831	2.4	1.9	1.2	3.8	1.8	9.7	3.2	7.0
17	8.7	25	6.8	229	2.2	1.8	1.1	5.4	2.9	11	3.5	12
18	7.3	195	6.4	238	2.3	1.7	1.1	7.4	5.9	10	3.8	14
19	7.4	59	6.1	138	2.4	3.0	1.3	7.9	6.5	6.7	8.0	14
20	6.9	26	5.6	64	2.2	2.3	1.7	5.1	8.1	4.7	9.6	9.9
21	5.6	16	116	42	2.4	1.9	2.1	8.4	9.0	6.5	10	6.3
22	7.1	13	198	26	2.2	1.7	2.0	7.3	5.5	4.8	11	9.2
23	6.5	9.0	61	20	2.0	1.6	3.3	5.6	5.4	7.2	9.3	12
24	5.9	6.9	43	16	1.9	1.6	4.7	5.1	5.9	11	13	11
25	4.6	5.6	32	14	1.9	1.7	9.1	5.2	6.9	7.9	16	12
26	3.3	4.9	22	11	1.9	1.8	15	3.8	6.1	5.5	12	15
27	2.6	6.6	43	9.8	1.8	2.0	14	2.3	5.5	3.9	12	19
31	.85	-----	27	6.0	-----	16	-----	1.8	-----	8.8	16	-----
TOTAL	294.95	1,230.61	1,735.2	2,100.2	77.7	88.7	118.6	146.8	112.7	413.7	283.7	363.6
MEAN	9.51	41.0	56.0	67.7	2.78	2.86	3.95	4.74	3.76	13.3	9.15	12.1
MAX	36	662	671	831	5.3	16	15	8.4	9.0	99	16	20
MIN	.85	.71	5.6	6.0	1.8	1.6	1.1	1.4	1.1	1.8	3.2	6.3
AC-FT	585	2,440	3,440	4,170	154	176	235	291	224	821	563	721
CAL YR 1973	TOTAL	20,031.76	MEAN	54.9	MAX	2,410	MIN	.71	AC-FT	39,730		
WTR YR 1974	TOTAL	6,966.46	MEAN	19.1	MAX	831	MIN	.71	AC-FT	13,820		

PEAK DISCHARGE (BASE, 600 FT ³ /S)							
DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-30	2000	8.87	2,090	1-18	1800	6.72	705
1-16	1200	8.70	1,930				

SACRAMENTO RIVER BASIN

11390672 STONE CORRAL CREEK NEAR SITES, CALIF.

LOCATION.--Lat 39°17'18", long 122°18'00", in NW¼NW¼ sec.34, T.17 N., R.4 W., Colusa County, on left bank at road bridge, 2.4 mi (3.9 km) southeast of Sites.

DRAINAGE AREA.--38.2 mi² (98.9 km²).

PERIOD OF RECORD.--March 1958 to September 1964, October 1965 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 180 ft (55 m), from topographic map.

AVERAGE DISCHARGE.--15 years (1958-64, 1965-74), 6.65 ft³/s (0.188 m³/s), 4,820 acre-ft/yr (5.94 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 638 ft³/s (18.1 m³/s) Jan. 16 (gage height, 9.86 ft or 3.005 m); no flow for several months.

Period of record: Maximum discharge, 5,430 ft³/s (154 m³/s) Feb. 6, 1973 (gage height, 16.45 ft or 5.014 m), from rating curve extended above 1,200 ft³/s (34.0 m³/s) on basis of slope-conveyance study at gage height 13.0 ft (3.96 m) and a slope-area measurement at 16.45 ft (5.014 m); no flow for several months in each year.

Flood of Apr. 2, 1958, reached a stage of 14.93 ft (4.551 m), discharge, 2,500 ft³/s (70.8 m³/s).

Flood of Dec. 22, 1964, reached a stage of 13.0 ft (3.96 m), from floodmarks (discharge, 1,940 ft³/s or 54.9 m³/s from slope-conveyance study).

REMARKS.--No known diversion or regulation above station.

COOPERATION.--Records furnished by Bureau of Reclamation and reviewed by Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	42	.60	4.9	27	10	1.2				
2		0	4.9	.30	3.8	15	8.8	.80				
3		0	1.2	1.5	2.8	5.4	6.7	.50				
4		0	.50	8.7	2.2	2.8	5.3	.30				
5		0	.20	13	1.7	1.6	5.1	.20				
6		0	0	18	.80	1.4	5.0	.10				
7		0	0	39	.60	35	4.5	.10				
8		0	0	28	.60	18	4.6	.10				
9		0	0	15	.50	7.1	4.7	0				
10		0	0	10	.50	5.0	4.7	0				
11		0	0	17	.50	4.8	4.6	0				
12		0	0	72	.50	4.9	4.6	0				
13		0	0	35	.70	4.3	4.4	0				
14		0	0	27	.50	3.6	4.6	0				
15		0	0	80	.30	3.4	5.0	0				
16		0	0	159	.30	3.2	5.1	0				
17		0	0	50	.20	2.9	5.2	0				
18		1.8	0	42	.20	2.5	5.1	0				
19		2.2	0	28	.70	1.5	5.2	0				
20		.30	0	19	.60	1.1	5.1	0				
21		0	43	14	.10	.90	4.6	0				
22		0	28	11	.10	.90	4.3	0				
23		0	7.0	10	.10	1.0	4.1	0				
24		0	4.1	8.7	.10	.90	4.0	0				
25		0	2.5	8.4	.10	1.2	4.2	0				
26		0	2.4	8.2	.10	3.3	4.6	0				
27		0	7.3	7.6	.10	2.5	4.2	0				
28		0	4.4	7.2	6.6	3.7	3.8	0				
29		0	3.3	6.5	-----	19	2.9	0				
30		39	2.0	5.6	-----	68	1.8	0				
31		-----	1.2	4.8	-----	12	-----	0	-----			-----
TOTAL	0	43.30	154.00	755.10	30.20	263.90	146.8	3.30	0	0	0	0
MEAN	0	1.44	4.97	24.4	1.08	8.51	4.89	.11	0	0	0	0
MAX	0	39	43	159	6.6	68	10	1.2	0	0	0	0
MIN	0	0	0	.30	.10	.90	1.8	0	0	0	0	0
AC-FT	0	86	305	1,500	60	523	291	6.5	0	0	0	0
CAL YR 1973	TOTAL	10,015.00	MEAN	27.4	MAX	1,140	MIN	0	AC-FT	19,860		
WTR YR 1974	TOTAL	1,396.60	MEAN	3.83	MAX	159	MIN	0	AC-FT	2,770		

LOCATION.--Lat 38°48'11", long 121°42'55", in NW¼NE¼ sec.14, T.11 N., R.2 E., Sutter County, on left bank just upstream from Southern Pacific Railroad bridge at Knights Landing, 13.1 mi (21.1 km) upstream from Feather River, and at mile 34.0 (54.7 km) upstream from Sacramento.

PERIOD OF RECORD.--April 1921 to October 1939 (low-water periods only), June 1940 to current year. Monthly discharge only for some periods, published in WSP 1315-A.

AVERAGE DISCHARGE.--34 years (1940-74), 10,930 ft³/s (309.5 m³/s), 7,919,000 acre-ft/yr (9.76 km³/yr).

Period of record: Maximum discharge (1940 to current year), 30,800 ft³/s (872 m³/s) Jan. 26, 1970 (gage height, 40.86 ft or 12.454 m); maximum gage height, 41.83 ft (12.750 m) Feb. 8, 1942 (backwater from Feather River and Sutter Bypass); minimum discharge recorded, 250 ft³/s (7.08 m³/s) July 23, 1931 (gage height, 7.80 ft or 2.377 m).

REMARKS.--Records good. Natural flow of stream affected by storage reservoirs, power developments, bypassing for flood control, diversions for irrigation, and considerable return flow from irrigated areas. Records of chemical analyses near this station 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	9,750	8,070	27,300	25,600	25,700	17,300	26,900	16,700	13,800	9,850	8,610	12,400
2	9,800	8,140	29,500	25,900	25,500	24,100	27,500	13,500	13,800	9,710	8,790	12,600
3	9,790	7,910	29,700	26,000	25,500	24,100	28,400	11,200	13,600	9,510	8,850	12,600
4	9,850	7,910	27,700	26,600	25,600	24,000	28,600	10,200	13,400	9,230	8,840	13,100
5	9,680	8,000	26,700	27,100	25,500	23,300	28,300	9,570	13,200	8,970	8,900	13,300
6	9,650	8,160	26,500	26,700	25,700	24,000	27,500	8,780	12,600	8,830	8,950	13,300
7	9,290	8,360	26,700	27,400	26,000	24,600	27,100	8,850	12,200	8,800	9,110	13,500
8	9,100	9,180	25,700	27,200	26,200	23,700	26,700	12,700	11,900	9,040	9,160	13,800
9	9,610	11,700	25,500	26,700	26,000	25,200	26,400	15,200	11,500	10,100	9,090	13,900
10	9,780	12,600	25,400	27,100	26,100	24,300	26,200	15,900	11,100	11,200	9,250	14,100
11	9,510	17,200	25,300	27,300	24,100	24,700	26,500	16,100	10,700	12,000	9,550	14,300
12	9,560	29,600	25,300	25,300	21,300	25,600	26,600	15,500	10,500	12,400	9,930	14,200
13	9,380	29,800	25,900	25,800	19,000	25,400	26,600	16,000	10,400	12,100	10,100	13,600
14	9,380	29,100	25,700	26,700	22,400	25,000	26,300	16,000	10,000	11,500	10,200	13,100
15	9,150	27,700	26,100	25,900	24,700	24,000	26,200	16,300	9,670	10,600	10,300	13,200
16	9,110	27,200	24,700	26,500	25,100	23,900	26,100	14,600	9,600	10,300	10,500	13,300
17	8,610	27,200	26,500	27,000	24,900	26,600	26,100	14,000	9,820	9,960	10,500	13,200
18	8,040	28,400	27,000	27,300	24,200	26,500	25,900	13,800	10,100	9,710	10,600	13,200
19	7,760	28,400	27,300	28,900	22,900	26,400	26,000	14,200	9,940	9,510	10,800	12,300
20	7,760	28,500	27,200	29,300	23,300	26,200	25,800	14,400	9,930	9,240	10,900	11,300
21	7,700	27,100	27,000	28,500	25,900	25,900	23,900	14,400	10,300	9,150	10,900	10,400
22	7,650	24,400	27,100	27,800	25,900	25,000	20,000	13,700	10,700	9,130	10,900	9,990
23	7,900	26,500	27,700	27,500	24,700	25,000	16,800	13,400	10,600	9,050	11,000	9,740
24	8,520	27,400	26,600	27,200	23,900	25,100	15,400	13,200	10,600	8,920	11,200	9,710
25	9,160	27,100	25,800	26,800	22,800	24,400	15,200	13,000	10,500	8,740	11,300	9,500
26	9,200	27,000	25,300	26,500	21,400	21,000	15,500	13,000	10,500	8,630	11,300	9,240
27	8,650	26,300	24,800	26,500	19,400	19,800	15,000	13,400	10,200	8,620	11,200	9,150
28	8,430	25,700	24,800	26,500	18,100	19,400	14,400	13,500	10,000	8,630	11,300	9,210
29	8,450	25,800	25,300	26,500	-----	21,000	16,500	13,800	9,710			

CAL YR 1973	TOTAL	5,584,580	MEAN	15,300	MAX	29,800	MIN	6,600	AC-FT	11,080,000
WTR YR 1974	TOTAL	6,405,300	MEAN	17,550	MAX	29,800	MIN	7,650	AC-FT	12,700,000

RESERVOIRS IN FEATHER RIVER BASIN, CALIF.

11391370 FRENCHMAN LAKE.--Lat 39°53'36", long 120°11'17", in NW¼NE¼ sec.33, T.24 N., R.16 E., Plumas County, in valve chamber at center of toe of Frenchman Dam on Little Last Chance Creek, 5.4 mi (8.7 km) upstream from the confluence with Middle Fork Feather River, and 7.1 mi (11.4 km) north of Chilcote. Drainage area, 81.1 mi² (210.0 km²). Period of record, October 1966 to current year in reports of Geological Survey. November 1961 to September 1966 published in reports of California Department of Water Resources. Gage is a water-stage recorder in valve house at center of toe of Frenchman Dam. Datum of gage is at mean sea level. Extremes for current year: Maximum contents, 56,878 acre-ft (70.1 hm³) May 10 (elevation, 5,588.88 ft or 1,703.491 m); minimum, 38,049 acre-ft (46.9 hm³) Sept. 30 (elevation, 5,575.67 ft or 1,699.464 m). Extremes for period 1966 to current year: Maximum contents, 59,093 acre-ft (72.9 hm³) May 22, 1967 (elevation, 5,590.28 ft or 1,703.917 m); minimum, 36,715 acre-ft (45.3 hm³) Nov. 12, 1966 (elevation, 5,574.64 ft or 1,699.150 m).

Reservoir is formed by rockfill dam completed in 1961. Capacity, 53,582 acre-ft (66.1 hm³) between elevations 5,517 ft (1,681.6 m), invert of intake and 5,588 ft (1,703.2 m), crest of spillway. Dead storage, 1,840 acre-ft (2.27 hm³). Records, including extremes, represent total contents at 2400 hours. Records of contents furnished by California Department of Water Resources.

11391490 LAKE DAVIS.--Lat 39°53'03", long 120°28'31", in NW¼SW¼ sec.1, T.23 N., R.13 E., Plumas County, in control house on left abutment of Grizzly Valley Dam on Big Grizzly Creek, 5.3 mi (8.5 km) north of Portola. Drainage area, 44.0 mi² (114.0 km²). Period of record, November 1966 to current year. Gage is a water-stage recorder in control house on Grizzly Valley Dam. Datum of gage is at mean sea level. Extremes for current year: Maximum contents, 86,111 acre-ft (106 hm³) Apr. 1, 2 (elevation, 5,775.43 ft or 1,760.351 m); minimum, 70,214 acre-ft (86.6 hm³) Oct. 19 (elevation, 5,771.31 ft or 1,759.095 m). Extremes for period of record: Maximum contents, 92,818 acre-ft (114 hm³) May 13, 14, 1969 (elevation, 5,777.05 ft or 1,760.845 m); minimum since reservoir first filled, 69,052 acre-ft (85.1 hm³) Dec. 2, 1972 (elevation, 5,770.99 ft or 1,758.998 m).

Reservoir is formed by earth- and rockfill dam completed in 1967. Capacity, 84,040 acre-ft (104 hm³) between elevations 5,700 ft (1,737.4 m), top of low-level intake and 5,775 ft (1,760.2 m), crest of spillway. Dead storage, 108 acre-ft (133,000 m³). Records, including extremes, represent total contents at 2400 hours. Records of contents furnished by California Department of Water Resources.

11401120 ANTELOPE LAKE.--Lat 40°10'48", long 120°36'25", in SE¼SE¼ sec.22, T.27 N., R.12 E., Plumas County, in control house at toe of Antelope Dam on Indian Creek, 1.3 mi (2.1 km) south of Boulder Creek Guard Station, 12 mi (19.3 km) northeast of Genesee, and 13.9 mi (22.4 km) northeast of Taylorsville. Drainage area, 68.6 mi² (177.7 km²). Period of record, October 1966 to current year in reports of Geological Survey. November 1963 to September 1966 published in reports of California Department of Water Resources. Gage is a water-stage recorder in control house at toe of Antelope Dam. Datum of gage is at mean sea level. Extremes for current year: Maximum contents, 24,422 acre-ft (30.1 hm³) May 9 (elevation, 5,003.95 ft or 1,525.204 m); minimum, 18,904 acre-ft (23.3 hm³) Nov. 4 (elevation, 4,997.87 ft or 1,523.351 m). Extremes for period 1966 to current year: Maximum contents, 25,010 acre-ft (30.8 hm³) Jan. 23, 1970 (elevation, 5,004.55 ft or 1,525.387 m); minimum since reservoir first filled, 400 acre-ft (493,000 m³) Oct. 13, 1971 (elevation, 4,951.50 ft or 1,509.217 m), caused by draining lake for removal of nongame fish. Normal minimum since reservoir first filled, 2,125 acre-ft (2.62 hm³) Sept. 30, 1971 (elevation, 4,964.40 ft or 1,513.149 m).

Reservoir is formed by a rockfill dam. Storage began November 1963. Capacity, 22,566 acre-ft (27.8 hm³) between elevations 4,950 ft (1,508.8 m), lip of intake tower and 5,002 ft (1,524.6 m), crest of spillway. Records, including extremes, represent contents at 2400 hours. Records of contents furnished by California Department of Water Resources.

MONTHEND ELEVATION AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

Date	Elevation (feet)	Contents (acre- feet)	Change in contents (acre- feet)	Elevation (feet)	Contents (acre- feet)	Change in contents (acre- feet)	Elevation (feet)	Contents (acre- feet)	Change in contents (acre- feet)
FRENCHMAN LAKE				LAKE DAVIS			ANTELOPE LAKE		
Sept. 30.....	5,575.98	38,438	--	a5,771.63	a71,386	--	4,998.41	19,361	--
Oct. 31.....	5,575.82	38,237	-201	a5,771.35	a70,360	-1,026	4,997.93	18,954	-407
Nov. 30.....	a5,576.41	a38,970	+733	5,772.54	74,778	+4,418	a5,000.71	a21,382	+2,428
Dec. 31.....	5,577.75	40,711	+1,741	a5,773.30	a77,675	+2,897	5,002.69	23,214	+1,832
CAL YR 1973....	--	--	-288	--	--	+7,352	--	--	+1,578
Jan. 31.....	a5,581.19	a45,345	+4,634	5,774.41	82,014	+4,339	5,002.65	23,176	-38
Feb. 28.....	5,582.11	46,653	+1,308	5,774.65	82,968	+954	5,002.57	23,100	-76
Mar. 31.....	5,586.93	53,802	+7,149	5,775.32	85,664	+2,696	5,003.58	24,064	+964
Apr. 30.....	5,588.69	56,574	+2,772	5,775.14	84,936	-728	5,003.21	23,708	-356
May 31.....	5,588.17	55,746	-828	5,774.77	83,448	-1,488	5,003.14	23,641	-67
June 30.....	5,584.71	50,432	-5,314	5,774.11	80,829	-2,619	5,001.42	22,029	-1,612
July 31.....	5,581.02	45,122	-5,310	5,773.43	78,177	-2,652	5,001.58	22,124	+95
Aug. 31.....	5,577.58	40,489	-4,633	5,772.49	74,589	-3,588	5,000.87	21,475	-649
Sept. 30.....	5,575.67	38,049	-2,440	5,771.53	71,019	-3,570	4,999.92	20,622	-853
WTR YR 1974....	--	--	-389	--	--	-367	--	--	+1,261

a Estimated.

11391400 LITTLE LAST CHANCE CREEK BELOW FRENCHMAN DAM, NEAR CHILCOOT, CALIF.

LOCATION.--Lat 39°53'36", long 120°11'17", in SW¼NE¼ sec.33, T.24 N., R.16 E., Plumas County, Plumas National Forest, in valve house at toe of Frenchman Dam, 7.1 mi (11.4 km) northwest of Chilcoot.

DRAINAGE AREA.--81.1 mi² (210.0 km²).

PERIOD OF RECORD.--October 1958 to current year. Prior to October 1969, published as Little Last Chance Creek near Chilcoot.

GAGE.--Water-stage recorder and steel-lipped Cipolletti weir. Datum of release gage is 5,480.00 ft (1,670.304 m). October 1958 to September 1967, at site 1.9 mi (3.1 km) downstream at different datum.

AVERAGE DISCHARGE (unadjusted).--16 years, 28.2 ft³/s (0.799 m³/s), 20,430 acre-ft/yr (25.2 hm³/yr).

EXTREMES.--Current year: Maximum daily discharge, 208 ft³/s (5.89 m³/s) Apr. 18 (includes flow over spillway); minimum daily, 1.5 ft³/s (0.042 m³/s) Oct. 17.

Period of record: Maximum discharge, 784 ft³/s (22.2 m³/s) Feb. 8, 1960 (gage height, 5.56 ft or 1.695 m, previous site and datum), from rating curve extended above 310 ft³/s (8.78 m³/s); no flow Oct. 23, 1959, July 24-27, 29, Aug. 4, 1961. Maximum discharge since construction of Frenchman Dam in 1961, 544 ft³/s (15.4 m³/s) May 23, 1967; no flow Apr. 10, 1973.

REMARKS.--Flow regulated by Frenchman Reservoir beginning Nov. 7, 1961, usable capacity, 53,580 acre-ft (66.1 hm³). Records since October 1967 are combined flow of release from Frenchman Dam and flow over spillway.

COOPERATION.--Records furnished by California Department of Water Resources and reviewed by Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.8	3.9	2.0	2.0	2.3	2.3	2.3	89	144	62	159	66
2	2.0	3.9	2.0	2.0	2.3	2.3	30	91	139	62	110	66
3	2.0	3.9	2.0	2.0	2.3	2.3	45	95	139	62	74	66
4	2.0	3.9	2.0	2.0	2.3	2.3	30	97	139	62	69	55
5	2.0	3.9	1.9	2.0	2.3	2.3	20	101	139	62	69	49
6	2.0	3.9	1.9	2.0	2.3	2.3	21	105	139	62	68	49
7	2.0	3.2	1.9	2.0	2.3	2.3	28	111	139	62	68	49
8	2.0	2.0	1.9	1.9	2.3	2.3	39	119	139	62	39	49
9	2.0	2.0	1.9	1.9	2.3	2.3	53	122	139	52	21	49
10	2.0	2.0	1.9	2.0	2.3	2.3	66	126	155	26	21	39
11	2.0	2.0	2.0	2.0	2.3	2.3	76	124	166	12	21	19
12	2.0	2.0	2.0	2.0	2.3	2.3	82	122	166	12	21	16
13	2.0	2.0	2.0	2.0	2.3	2.3	85	113	146	12	21	16
14	2.0	2.0	2.0	1.9	2.3	2.3	86	105	101	12	63	16
15	1.8	2.0	2.0	1.9	2.3	2.3	94	99	101	24	79	16
16	1.6	2.0	2.0	1.9	2.3	2.3	98	89	101	31	79	16
17	1.5	2.0	2.0	1.8	2.3	2.3	133	82	58	45	66	16
18	2.1	2.0	2.0	1.8	2.3	2.3	208	78	23	67	48	16
19	3.5	2.0	1.9	1.8	2.3	2.3	170	74	19	80	48	16
20	3.9	2.0	1.9	1.8	2.3	2.3	63	69	19	85	48	16
21	3.9	2.0	1.9	1.8	2.3	2.3	71	66	19	85	48	16
22	3.9	2.0	1.9	1.9	2.3	2.3	79	64	19	85	48	16
23	3.9	2.0	1.9	1.9	2.3	2.3	86	61	19	94	48	16
24	3.9	2.0	1.9	1.9	2.3	2.3	91	57	19	99	48	16
25	3.9	2.0	1.9	1.9	2.3	2.3	95	56	19	99	48	16
26	3.9	2.0	1.9	1.8	2.3	2.3	97	54	19	115	59	16
27	3.9	2.0	2.0	1.8	2.3	2.3	96	53	47	138	66	16
28	3.9	2.0	2.0	1.8	2.3	2.3	94	49	62	145	66	16
29	3.9	2.0	2.0	1.8	-----	2.3	90	48	62	155	66	16
30	3.9	2.0	2.0	1.8	-----	2.3	87	129	62	161	66	9.5
31	3.9	-----	2.0	2.0	-----	2.3	-----	157	-----	160	66	-----
TOTAL	86.1	72.6	60.6	59.1	64.4	71.3	2,315.3	2,805	2,658	2,290	1,821	853.5
MEAN	2.78	2.42	1.95	1.91	2.30	2.30	77.2	90.5	88.6	73.9	58.7	28.5
MAX	3.9	3.9	2.0	2.0	2.3	2.3	208	157	166	161	159	66
MIN	1.5	2.0	1.9	1.8	2.3	2.3	2.3	48	19	12	21	9.5
AC-FT	171	144	120	117	128	141	4,590	5,560	5,270	4,540	3,610	1,690

CAL YR 1973 TOTAL 7,139.20 MEAN 19.6 MAX 163 MIN 0 AC-FT 14,160
WTR YR 1974 TOTAL 13,156.90 MEAN 36.0 MAX 208 MIN 1.5 AC-FT 26,100

SACRAMENTO RIVER BASIN

11391460 BERRY CREEK NEAR SATTLEY, CALIF.

LOCATION.--Lat 39°36'04", long 120°25'23", in SW¼NE¼ sec.9, T.20 N., R.14 E., Sierra County, on right bank 1.0 mi (1.6 km) south of Sattley, and 3.2 mi (5.1 km) northwest of Sierraville.

DRAINAGE AREA.--7.54 mi² (19.53 km²).

PERIOD OF RECORD.--October 1973 to September 1974.

GAGE.--Water-stage recorder. Altitude of gage is 5,000 ft (1,520 m), from topographic map.

EXTREMES.--Current year: Maximum discharge, 125 ft³/s (3.54 m³/s) Nov. 12 (gage height, 3.80 ft or 1.158 m), from rating curve extended above 50 ft³/s (1.42 m³/s); minimum daily, 5.9 ft³/s (0.17 m³/s) Nov. 4.

REMARKS.--Records fair. Some minor diversions at times upstream. Data for period 1954-67 at same site published by California Department of Water Resources as Miller Creek near Sattley.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.5	6.7	11	13	13	17	26	33	76	25	16	10
2	6.5	6.3	8.5	12	12	15	23	34	80	24	16	9.9
3	6.5	6.1	7.9	11	12	12	20	32	82	23	16	9.8
4	6.5	5.9	7.7	10	12	11	18	33	78	22	18	9.7
5	6.5	6.0	7.7	9.5	12	10	18	36	78	21	18	9.6
6	6.5	11	7.5	9.1	11	9.7	16	42	77	20	16	9.2
7	8.5	24	7.4	8.7	11	9.3	17	50	74	19	15	9.2
8	8.2	10	7.4	8.6	11	8.8	17	56	69	44	14	9.1
9	7.2	13	7.2	8.4	11	8.6	17	61	68	68	14	9.0
10	7.0	26	7.2	8.2	10	8.5	15	60	68	37	14	9.0
11	6.8	54	7.3	8.0	11	8.5	15	60	69	31	13	8.9
12	6.7	52	7.3	8.4	11	8.6	16	59	68	28	13	8.9
13	6.7	20	7.3	8.7	11	8.5	16	56	68	26	13	8.9
14	6.7	15	7.2	16	10	9.6	16	56	66	25	13	8.8
15	6.5	13	7.0	42	10	11	20	57	64	24	13	8.6
16	6.5	12	7.2	40	8.9	12	23	51	63	24	13	8.6
17	6.5	12	9.4	45	8.7	13	25	46	59	23	12	8.6
18	6.5	11	8.2	43	8.6	13	25	41	56	23	12	8.5
19	6.5	10	7.7	56	9.1	12	19	37	55	21	12	8.4
20	7.0	9.7	7.4	37	8.7	12	18	35	51	21	12	8.3
21	6.7	9.3	7.9	28	8.4	12	21	39	48	20	12	8.3
22	11	8.9	7.7	24	8.4	13	26	43	46	19	12	8.1
23	9.4	8.5	7.4	22	8.1	13	26	46	44	19	11	8.1
24	7.1	8.4	7.4	20	7.9	14	21	50	42	18	11	8.1
25	7.0	8.3	7.6	17	7.9	14	17	57	40	18	11	8.0
26	6.7	8.1	7.6	16	7.9	15	15	65	37	18	11	7.9
27	6.7	7.9	8.1	15	7.9	15	14	70	30	17	11	7.9
28	6.8	8.0	8.6	15	7.9	13	15	73	28	17	11	7.9
29	6.5	8.3	39	14	-----	31	19	71	27	16	11	7.9
30	6.4	8.3	20	14	-----	49	24	71	26	16	10	7.9
31	6.5	-----	14	13	-----	30	-----	73	-----	16	10	-----
TOTAL	217.1	407.7	290.8	600.6	276.4	437.1	578	1,593	1,737	743	404	261.1
MEAN	7.00	13.6	9.38	19.4	9.87	14.1	19.3	51.4	57.9	24.0	13.0	8.70
MAX	11	54	39	56	13	49	26	73	82	68	18	10
MIN	6.4	5.9	7.0	8.0	7.9	8.5	14	32	26	16	10	7.9
AC-FT	431	809	577	1,190	548	867	1,150	3,160	3,450	1,470	801	518

WTR YR 1974 TOTAL 7,545.8 MEAN 20.7 MAX 82 MIN 5.9 AC-FT 14,970

PEAK DISCHARGE (BASE, 80 FT ³ /S)							
DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-12	0445	3.80	125	6-2	1745	3.65	98
5-28	1830	3.50	86	7-9	0330	3.54	102

11391500 BIG GRIZZLY CREEK AT GRIZZLY VALLEY DAM, NEAR PORTOLA, CALIF.

LOCATION.--Lat 39°53'00", long 120°28'29", in NW¼SW¼ sec.1, T.23 N., R.13 E., Plumas County, at Grizzly Valley Dam on Big Grizzly Creek, 5.3 mi (8.5 km) north of Portola.

DRAINAGE AREA.--44.0 mi² (114.0 km²).

PERIOD OF RECORD.--October 1925 to September 1932, October 1950 to September 1953, June 1954 to September 1967, October 1968 to current year. Prior to October 1952, published as Grizzly Creek near Portola, October 1952 to September 1953, June 1954 to September 1967, published as Big Grizzly Creek near Portola.

GAGE.--Water-stage recorder and Cipolletti weir. Altitude of gage is 5,700 ft (1,740 m), from topographic map. Supplementary water-stage recorder in control house on Grizzly Valley Dam and concrete spillway. Prior to October 1968 at different site and datum.

AVERAGE DISCHARGE (prior to regulation by Lake Davis).--22 years (1925-32, 1950-53, 1954-66), 38.2 ft³/s (1.082 m³/s), 27,680 acre-ft/yr (34.1 hm³/yr); 7 years (1967, 1968-74), 34.1 ft³/s (0.966 m³/s), 24,710 acre-ft/yr (30.5 hm³/yr).

EXTREMES.--Current year: Maximum daily discharge, 177 ft³/s (5.01 m³/s) Apr. 2, 3; minimum daily, 15 ft³/s (0.42 m³/s) many days.

Period of record: Maximum discharge, 4,080 ft³/s (116 m³/s) Feb. 1, 1963 (gage height, 8.03 ft or 2.448 m, 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; maximum gage height, 9.54 ft (2.908 m), former site and datum, Mar. 26, 1928; no flow Jan. 22 or 23, 1962. Maximum discharge since construction of Grizzly Valley Dam in 1966, 253 ft³/s (7.16 m³/s) May 13, 1969 (includes flow through spillway); no flow many days in September and October 1969.

REMARKS.--Flow regulated by Lake Davis completed in December 1966, usable capacity, 84,050 acre-ft (104 hm³). Diversions for irrigation of about 400 acres (1.62 km²) above station and domestic water supply via Grizzly Valley pipeline.

COOPERATION.--Records furnished by California Department of Water Resources and reviewed by Geological Survey.

REVISIONS (WATER YEARS).--WSP 1315-A: 1930(M). WSP 1931: Drainage area at former site.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NCV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	15	15	15	24	60	171	155	24	24	24	24
2	15	15	15	15	24	75	177	155	24	24	24	24
3	15	15	15	15	24	75	177	154	24	24	24	24
4	15	15	15	15	24	75	175	153	24	24	24	24
5	15	15	15	15	24	110	174	152	24	24	24	24
6	15	15	15	15	24	150	174	152	24	24	24	41
7	15	15	15	15	24	150	172	151	24	24	24	75
8	15	15	15	15	24	150	171	151	24	24	24	75
9	15	15	15	15	24	150	175	151	24	24	24	75
10	15	15	15	15	24	150	174	151	24	24	24	41
11	15	15	15	15	24	150	171	151	24	24	24	24
12	15	15	15	15	24	150	170	151	24	24	24	24
13	15	15	15	15	24	150	168	150	24	24	24	24
14	15	15	15	15	24	150	166	150	24	24	24	24
15	15	15	15	15	24	150	166	150	24	24	24	24
16	15	15	15	36	24	150	166	150	24	24	24	24
17	15	15	15	65	24	150	142	99	24	24	24	24
18	15	15	15	65	24	150	170	75	24	24	24	24
19	15	15	15	127	24	150	170	75	24	24	24	24
20	15	15	15	150	24	150	168	75	24	24	24	24
21	15	15	15	150	24	150	166	75	24	24	24	24
22	15	15	15	150	24	150	141	75	24	24	24	24
23	15	15	15	150	24	150	126	75	24	24	24	24
24	15	15	15	150	24	150	149	42	24	24	24	24
25	15	15	15	150	24	150	168	24	24	24	24	24
26	15	15	15	150	24	150	166	24	24	24	24	24
27	15	15	15	150	24	150	163	24	24	24	24	24
28	15	15	15	150	24	150	159	24	24	24	24	24
29	15	15	15	150	-----	150	157	24	24	24	24	24
30	15	15	15	150	-----	154	156	24	24	24	24	24
31	15	-----	15	87	-----	166	-----	24	-----	24	24	-----
TOTAL	465	450	465	2,255	672	4,315	4,948	3,186	720	744	744	907
MEAN	15.0	15.0	15.0	72.7	24.0	139	165	103	24.0	24.0	24.0	30.2
MAX	15	15	15	150	24	166	177	155	24	24	24	75
MIN	15	15	15	15	24	60	126	24	24	24	24	24
AC-FT	922	893	922	4,470	1,330	8,560	9,810	6,320	1,430	1,480	1,480	1,800

CAL YR 1973 TOTAL 7,594 MEAN 20.8 MAX 75 MIN 15 AC-FT 15,060
WTR YR 1974 TOTAL 19,871 MEAN 54.4 MAX 177 MIN 15 AC-FT 39,410

11392100 MIDDLE FORK FEATHER RIVER NEAR PORTOLA, CALIF.

LOCATION.--Lat 39°49'07", long 120°26'37", in SW¼NW¼ sec.29, T.23 N., R.14 E., Plumas County, on right bank 0.8 mi (1.3 km) downstream from Big Grizzly Creek and 1.5 mi (2.4 km) northeast of Portola.

DRAINAGE AREA.--586 mi² (1,517 km²).

PERIOD OF RECORD.--October 1968 to current year. November 1955 to September 1968 in bulletins of California Department of Water Resources.

GAGE.--Water-stage recorder. Altitude of gage is 4,860 ft (1,481 m), from topographic map.

AVERAGE DISCHARGE.--6 years, 290 ft³/s (8.213 m³/s), 210,100 acre-ft/yr (259 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 3,650 ft³/s (103 m³/s) Mar. 31 (gage height, 7.79 ft or 2.374 m); minimum daily, 20 ft³/s (0.57 m³/s) Oct. 1.
Period of record: Maximum discharge, 7,640 ft³/s (216 m³/s) Jan. 21, 1969, (gage height, 10.18 ft or 3.103 m); minimum daily, 3.1 ft³/s (0.088 m³/s) Sept. 11, 12, 1969.

REMARKS.--Flow partly regulated by Frenchman Lake (see sta 11391370) and Lake Davis (see sta 11391490).

COOPERATION.--Records furnished by California Department of Water Resources and reviewed by Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	41	139	427	261	469	2,450	415	111	58	42	28
2	21	40	124	310	240	1,040	2,010	396	117	57	41	28
3	21	41	173	244	225	2,040	1,750	380	121	57	41	27
4	22	40	340	221	211	1,630	1,360	375	128	57	43	25
5	22	42	349	195	193	1,120	1,070	361	134	56	49	24
6	23	47	270	172	130	977	900	316	130	54	46	30
7	24	57	232	151	148	1,070	792	241	127	52	46	89
8	25	69	211	140	153	1,160	716	268	247	59	43	87
9	26	90	205	151	168	953	675	275	133	62	41	87
10	28	107	182	136	165	753	670	283	135	59	39	64
11	28	110	163	120	161	653	659	293	140	57	40	26
12	28	144	141	118	158	610	623	314	141	55	41	26
13	27	213	165	165	152	590	586	337	143	54	42	28
14	29	527	166	319	146	580	548	352	130	55	42	27
15	30	521	226	1,330	156	550	521	363	127	67	41	26
16	30	373	286	2,250	162	548	512	362	128	88	40	26
17	30	344	285	1,750	160	558	475	319	126	93	40	26
18	31	418	300	1,970	159	571	502	278	133	90	41	25
19	30	515	541	2,030	172	572	541	262	145	84	44	26
20	30	566	623	2,280	191	552	591	259	132	77	51	30
21	30	385	421	1,590	212	509	580	259	120	71	53	30
22	35	271	353	1,050	202	486	493	254	110	66	49	30
23	42	210	396	933	186	468	454	237	108	64	45	31
24	45	164	352	791	178	450	473	193	101	63	43	31
25	52	140	288	674	181	441	510	146	87	60	42	31
26	57	116	236	580	187	440	518	132	78	56	41	32
27	57	118	252	498	204	449	498	116	72	52	39	32
28	52	119	494	469	229	530	462	103	68	49	36	33
29	47	117	759	451	-----	653	448	97	63	47	33	34
30	44	119	783	430	-----	1,210	439	93	60	46	32	33
31	42	-----	870	367	-----	3,170	-----	98	-----	44	30	-----
TOTAL	1,028	6,064	10,325	22,312	5,090	25,802	22,826	8,177	3,595	1,909	1,296	1,072
MEAN	33.2	202	333	720	182	832	761	264	120	61.6	41.8	35.7
MAX	57	566	870	2,280	261	3,170	2,450	415	247	93	53	89
MIN	20	40	124	118	130	440	439	93	60	44	30	24
AC-FT	2,040	12,030	20,480	44,260	10,100	51,180	45,280	16,220	7,130	3,790	2,570	2,130
CAL YR 1973	TOTAL	73,051.1	MEAN	200	MAX	1,940	MIN	4.3	AC-FT	144,900		
WTR YR 1974	TOTAL	109,496.0	MEAN	300	MAX	3,170	MIN	20	AC-FT	217,200		

LOCATION.--Lat 39°45'14", long 120°35'42", in NW¼SE¼ sec.23, T.22 N., R.12 E., Plumas County, on left bank 0.6 mi (1.0 km) upstream from Frazier Creek, 1.0 mi (1.6 km) northwest of Clio, and 2.2 mi (3.5 km) southeast of Blairden.

PERIOD OF RECORD.--October 1925 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 4,380 ft (1,335 m), from topographic map. Prior to July 29, 1953, at site 0.5 mi (0.8 km) downstream at different datum.

EXTREMES.--Current year: Maximum discharge, 4,010 ft³/s (114 m³/s) Mar. 31 (gage height, 11.27 ft or 3.435 m); minimum daily, 38 ft³/s (1.08 m³/s) Oct. 1.
Period of record: Maximum discharge, 14,500 ft³/s (411 m³/s) Feb. 1, 1963 (gage height, 16.19 ft or 4.935 m); minimum, 4.3 ft³/s (0.12 m³/s) Sept. 5, 1934.

REMARKS.--Records good. Diversions for irrigation of about 40,000 acres (162 km²) above station, of which 14,500 acres (58.7 km²) receive supplemental water of about 7,000 acre-ft (8.63 hm³) annually from Little Truckee River. Flow partly regulated by Lake Davis, total usable capacity, 84,000 acre-ft (104 hm³) beginning in November 1966 (see sta 11391490) and by Frenchman Lake, total usable capacity, 53,600 acre-ft (66.1 hm³) beginning in November 1961 (see sta 11391370). Records of water temperatures for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1445: 1928, 1930, 1932. WSP 1931: Drainage area.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38	70	412	650	411	1,280	3,320	581	269	111	75	58
2	39	70	305	439	362	1,460	2,580	570	285	107	74	57
3	39	71	259	375	335	2,160	2,190	552	292	104	76	56
4	39	70	351	272	314	1,870	1,780	546	293	101	82	55
5	40	106	430	270	289	1,400	1,440	543	286	98	84	55
6	40	137	374	266	241	1,210	1,200	536	281	96	81	55
7	48	165	336	255	240	1,220	1,030	468	261	95	77	70
8	47	120	304	238	237	1,310	940	517	314	171	76	91
9	45	194	286	229	239	1,140	922	548	282	201	73	88
10	45	354	268	231	237	945	868	540	248	127	72	89
11	46	917	295	211	236	856	855	530	249	116	70	62
12	46	970	251	227	235	887	837	532	247	110	70	53
13	47	443	337	383	235	848	797	535	250	107	71	53
14	46	606	274	548	235	847	756	533	239	105	72	54
15	48	677	287	2,270	235	844	727	539	227	102	72	54
16	48	689	357	3,130	236	848	717	532	224	108	72	53
17	48	710	502	2,800	236	859	681	506	215	117	71	54
18	48	724	449	2,750	237	879	705	449	200	116	68	54
19	48	625	525	2,980	273	866	732	408	220	110	67	52
20	51	684	770	2,760	249	842	756	380	204	106	70	53
21	49	511	631	2,080	259	798	766	377	188	102	73	54
22	108	364	483	1,400	261	759	703	380	176	98	73	53
23	150	301	484	1,230	245	728	649	377	168	94	70	53
24	76	233	458	1,020	238	703	659	356	163	91	68	53
25	80	202	389	877	237	689	682	302	150	91	66	54
26	83	178	353	797	269	693	678	315	139	89	65	54
27	84	161	437	704	270	803	654	326	131	87	65	56
28	82	166	595	633	332	1,030	610	312	125	84	63	55
29	77	176	1,310	597	-----	1,720	586	285	121	81	61	57
30	74	250	1,050	558	-----	2,990	585	265	116	78	60	56
31	72	-----	1,060	534	-----	3,450	-----	261	-----	77	59	-----
TOTAL	1,831	10,944	14,622	31,714	7,423	36,934	30,405	13,901	6,563	3,280	2,196	1,761
MEAN	59.1	365	472	1,023	265	1,191	1,014	448	219	106	70.8	58.7
MAX	150	970	1,310	3,130	411	3,450	3,320	581	314	201	84	91
MIN	38	70	251	211	235	689	585	261	116	77	59	52
AC-FT	3,630	21,710	29,000	62,900	14,720	73,260	60,310	27,570	13,020	6,510	4,360	3,490
CAL YR 1973	TOTAL	110,041	MEAN	301	MAX	2,510	MIN	30	AC-FT	218,300		
WTR YR 1974	TOTAL	161,574	MEAN	44								

SACRAMENTO RIVER BASIN

11394500 MIDDLE FORK FEATHER RIVER NEAR MERRIMAC, CALIF.

LOCATION.--Lat 39°42'30", long 121°16'10", in NW¼NE¼ sec.2, T.21 N., R.6 E., Butte County, Plumas National Forest, on left bank 400 ft (122 m) downstream from bridge on Milsap Bar Road, 500 ft (152 m) downstream from Little North Fork, 4.5 mi (7.2 km) southeast of Merrimac, and 20 mi (32 km) northeast of Oroville.

DRAINAGE AREA.--1,062 mi² (2,751 km²).

PERIOD OF RECORD.--October 1951 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,560 ft (475 m), from topographic map. Prior to Jan. 21, 1965, on right bank at same site and datum.

AVERAGE DISCHARGE.--23 years, 1,478 ft³/s (41.86 m³/s), 1,071,000 acre-ft/yr (1.32 km³/yr).

EXTREMES.--Current year: Maximum discharge, 27,400 ft³/s (776 m³/s) Mar. 30 (gage height, 17.19 ft or 5.240 m, from crest-stage gage); minimum daily, 191 ft³/s (5.41 m³/s) Sept. 29.

Period of record: Maximum discharge, 86,200 ft³/s (2,440 m³/s) Dec. 22, 1964 (gage height, 26.5 ft or 8.08 m, from floodmarks, present site), from rating curve extended above 19,000 ft³/s (538 m³/s) on basis of slope-area measurement of maximum flow; minimum, 92 ft³/s (2.61 m³/s) Jan. 2, 1960.

Flood of Dec. 10, 1937, reached a stage of 19.4 ft (5.91 m), from floodmarks (discharge, 46,100 ft³/s or 1,310 m³/s).

REMARKS.--Records good. Diversions above station for irrigation of about 1,000 acres (4.05 km²) between stations near Clio and near Merrimac. Flow partly regulated by Antelope Lake (see sta 11401120) beginning in 1963, Lake Davis (see sta 11391490) beginning in 1966, and Frenchman Lake (see sta 11391370) beginning in 1961. Records of water temperatures for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1931, WRD Calif. 1965: 1960, drainage area. WRD Calif. 1968: 1956(M), 1963(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	201	319	3,980	3,630	2,310	6,130	10,200	3,180	2,860	826	400	263
2	201	313	2,560	2,730	2,040	6,760	9,000	3,500	2,940	794	394	259
3	199	311	2,100	2,460	1,900	5,170	8,000	3,420	2,990	757	389	255
4	198	310	1,900	2,130	1,800	4,710	6,200	3,500	2,840	717	384	250
5	199	387	1,860	2,010	1,710	3,700	5,470	3,670	2,650	690	427	246
6	203	1,220	1,800	1,900	1,600	3,330	4,900	3,980	2,580	666	423	243
7	370	3,620	1,700	1,750	1,500	3,220	4,440	4,410	2,410	639	394	241
8	393	2,180	1,650	1,620	1,460	3,130	4,140	4,950	2,170	1,060	376	247
9	316	2,960	1,570	1,520	1,420	2,950	4,030	5,190	2,120	2,050	367	291
10	262	6,880	1,510	1,450	1,400	2,720	3,700	4,890	2,010	1,280	351	292
11	240	14,400	1,580	1,390	1,360	2,770	3,510	4,530	2,000	954	344	291
12	239	12,700	1,570	1,650	1,340	3,340	3,440	4,300	1,970	828	336	253
13	235	6,330	1,690	2,590	1,300	3,160	3,290	3,960	1,890	753	331	224
14	230	4,500	1,670	3,940	1,260	3,010	3,180	3,660	1,840	701	326	220
15	224	3,730	1,520	13,100	1,210	3,160	3,170	3,630	1,750	661	328	218
16	223	5,290	1,500	13,100	1,300	3,370	3,320	3,400	1,660	633	326	219
17	223	6,400	2,060	14,300	1,230	3,630	3,420	3,070	1,540	633	321	216
18	219	5,900	2,150	12,100	1,230	3,700	3,600	2,690	1,440	628	317	213
19	219	4,060	1,910	14,500	1,500	3,660	3,330	2,420	1,460	607	312	209
20	235	3,260	2,020	10,500	1,380	3,400	3,190	2,230	1,370	583	311	205
21	250	2,730	2,170	7,830	1,340	3,170	3,270	2,160	1,260	565	314	202
22	430	2,260	2,120	6,070	1,300	3,100	3,390	2,290	1,220	545	317	201
23	1,220	1,950	1,880	5,250	1,230	3,020	3,540	2,470	1,170	528	311	202
24	649	1,750	1,790	4,530	1,200	2,960	3,220	2,650	1,100	510	300	201
25	467	1,590	1,690	3,920	1,190	3,210	2,970	2,910	1,030	492	295	195
26	422	1,460	1,650	3,450	1,230	4,200	2,790	3,330	969	479	288	194
27	396	1,350	2,410	3,040	1,320	6,400	2,610	3,740	912	463	281	194
28	380	1,290	3,550	2,810	1,490	9,500	2,520	3,720	874	451	275	194
29	360	1,340	7,200	2,620	-----	13,000	2,550	3,310	855	437	271	191
30	340	2,740	5,760	2,460	-----	18,000	2,780	2,980	841	423	267	195
31	328	-----	4,520	2,410	-----	14,000	-----	2,830	-----	409	267	-----
TOTAL	10,071	103,530	73,040	152,760	40,550	155,580	123,170	106,970	52,721	21,762	10,343	6,824
MEAN	325	3,451	2,356	4,928	1,448	5,019	4,106	3,451	1,757	702	334	227
MAX	1,220	14,400	7,200	14,500	2,310	18,000	10,200	5,190	2,990	2,050	427	292
MIN	198	310	1,500	1,390	1,190	2,720	2,520	2,160	841	409	267	191
AC-FT	19,980	205,400	144,900	303,000	80,430	308,600	244,300	212,200	104,600	43,160	20,520	13,540
CAL YR 1973	TOTAL 628,140 MEAN 1,721 MAX 14,400 MIN 163 AC-FT 1,246,000											
WTR YR 1974	TOTAL 857,321 MEAN 2,349 MAX 18,000 MIN 191 AC-FT 1,700,000											

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-11	1000	14.59	16,900	1-19	0130	14.47	16,500
12-29	0930	11.63	8,690	3-1	2300	12.05	9,710
1-17	0200	15.02	18,300	3-30	unknown	17.19	27,400

NOTE.--No gage-height record Mar. 16 to Apr. 4.

11394620 FALL RIVER NEAR FEATHER FALLS, CALIF.

LOCATION.--Lat 39°40'00", long 121°08'01", in SW¼NW¼ sec.19, T.21 N., R.8 E., Plumas County, on right bank 0.5 mi (0.8 km) downstream from Coyote Creek, and 8 mi (13 km) northeast of Feather Falls.

DRAINAGE AREA.--9.89 mi² (25.62 km²).

PERIOD OF RECORD.--July 1963 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 4,000 ft (1,219 m), from topographic map.

AVERAGE DISCHARGE.--11 years, 46.8 ft³/s (1.325 m³/s), 33,910 acre-ft/yr (41.8 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,020 ft³/s (28.9 m³/s) Mar. 30 (gage height, 5.85 ft or 1.783 m); minimum daily, 1.8 ft³/s (0.051 m³/s) Sept. 24, 25, 27-30.

Period of record: Maximum discharge, 3,770 ft³/s (107 m³/s) Dec. 22, 1964 (gage height, 10.00 ft or 3.048 m), from rating curve extended above 200 ft³/s (5.66 m³/s) on basis of slope-area measurement of maximum flow; minimum daily, 1.4 ft³/s (0.040 m³/s) Aug. 23-25, 1970.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NCV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.3	5.9	102	148	66	178	312	105	57	9.4	4.5	2.3
2	3.3	5.7	78	127	60	168	250	114	55	9.0	4.3	2.3
3	3.4	5.7	71	103	57	119	194	117	52	8.5	4.2	2.2
4	3.3	5.5	65	91	54	97	153	121	47	8.2	4.1	2.2
5	3.3	8.0	61	83	51	87	130	127	44	7.9	4.3	2.1
6	3.4	38	57	76	48	79	117	140	40	7.7	4.2	2.1
7	12	135	55	68	46	76	106	153	36	7.4	4.0	2.1
8	9.6	74	52	62	44	69	100	163	33	25	3.8	2.0
9	6.2	136	49	57	42	64	96	163	30	27	3.7	2.0
10	5.2	320	48	53	41	62	88	152	28	16	3.6	2.0
11	4.7	677	48	50	39	64	86	142	26	12	3.5	2.1
12	4.5	639	45	66	39	82	86	131	24	11	3.4	2.1
13	4.3	303	48	88	37	76	84	119	23	9.8	3.4	2.0
14	4.0	193	44	150	36	77	85	110	21	9.2	3.1	2.0
15	4.0	147	43	458	35	81	90	105	20	8.6	3.1	2.0
16	3.8	216	41	446	36	91	95	96	20	8.1	3.0	2.0
17	3.7	323	62	545	33	104	101	88	19	7.8	3.0	2.0
18	3.7	280	56	499	34	112	108	79	18	7.7	2.9	1.9
19	3.7	190	53	521	35	114	98	72	20	7.3	2.9	1.9
20	4.2	145	50	343	32	111	95	66	18	7.0	2.9	1.9
21	4.3	116	52	245	31	108	98	63	16	6.7	2.8	1.9
22	17	98	48	189	30	107	105	63	15	6.5	2.7	1.9
23	32	83	45	153	29	105	109	65	14	6.3	2.7	1.9
24	14	74	43	131	28	105	99	67	13	6.0	2.6	1.8
25	10	66	43	114	28	130	88	71	12	5.7	2.6	1.8
26	9.0	61	46	101	30	177	81	78	12	5.5	2.5	1.9
27	8.0	54	92	91	30	283	76	83	11	5.3	2.5	1.8
28	7.2	51	170	83	31	299	75	76	11	5.1	2.4	1.8
29	6.5	52	363	76	-----	601	77	72	10	4.9	2.4	1.8
30	6.2	93	262	71	-----	758	88	65	9.7	4.8	2.4	1.8
31	5.9	-----	189	69	-----	390	-----	61	-----	4.6	2.4	-----
TOTAL	213.7	4,594.8	2,481	5,357	1,102	4,974	3,370	3,127	754.7	276.0	99.9	59.6
MEAN	6.89	153	80.0	173	39.4	160	112	101	25.2	8.90	3.22	1.99
MAX	32	677	363	545	66	758	312	163	57	27	4.5	2.3
MIN	3.3	5.5	41	50	28	62	75	61	9.7	4.6	2.4	1.8
AC-FT	424	9,110	4,920	10,630	2,190	9,870	6,680	6,200	1,500	547	198	118

CAL YR 1973 TOTAL 23,080.4 MEAN 63.2 MAX 677 MTN 2.4 AC-FT 45,780
WTR YR 1974 TOTAL 26,409.7 MEAN 72.4 MAX 758 MIN 1.8 AC-FT 52,380

PEAK DISCHARGE (BASE, 180 FT ³ /S)							
DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-7	1600	3.49	242	1-16	2230	5.11	724
11-12	0430	5.69	956	3-1	1730	3.80	310
11-17	1600	4.04	372	3-30	0300	5.85	1,020
12-29	0830	4.37	471	5-8	1930	3.22	184

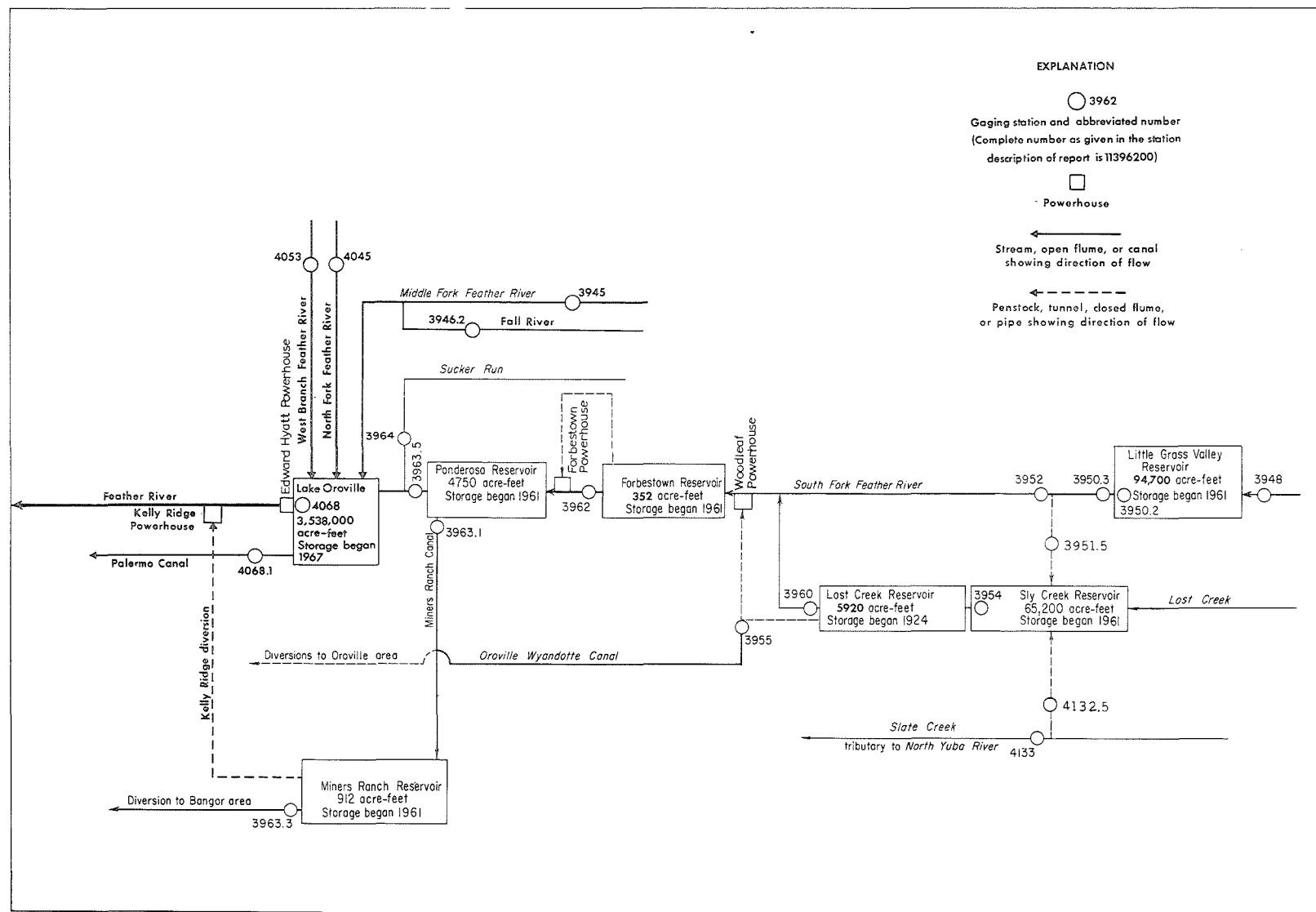


FIGURE 11.--Schematic diagram showing diversions and storage in South Fork Feather River basin.

11394800 SOUTH FORK FEATHER RIVER ABOVE LITTLE GRASS VALLEY RESERVOIR, CALIF.

LOCATION.--Lat 39°45'07", long 120°57'26", in NW¼SE¼ sec.22, T.22 N., R.9 E., Plumas County, Plumas National Forest, on right bank 0.5 mi (0.8 km) downstream from unnamed tributary, 4.5 mi (7.2 km) upstream from Little Grass Valley Dam, and 5 mi (8 km) north of La Porte.

DRAINAGE AREA.--8.09 mi² (20.95 km²).

PERIOD OF RECORD.--October 1960 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5,080 ft (1,548 m), from topographic map.

AVERAGE DISCHARGE.--14 years, 31.6 ft³/s (0.895 m³/s), 22,890 acre-ft/yr (28.2 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 828 ft³/s (23.4 m³/s) Nov. 12 (gage height, 4.35 ft or 1.326 m); minimum daily, 0.02 ft³/s (0.0006 m³/s) Sept. 18.
Period of record: Maximum discharge, 4,160 ft³/s (118 m³/s) Jan. 31, 1963 (gage height, 7.12 ft or 2.170 m), from rating curve extended above 140 ft³/s (3.96 m³/s) on basis of slope-area measurement at gage height 5.47 ft (1.667 m); minimum daily, 0.02 ft³/s (0.0006 m³/s) Sept. 18, 1974.

REMARKS.--Records good. No storage or diversion above station. See schematic diagram of South Fork Feather River basin.

REVISIONS (WATER YEARS).--WRD Calif. 1969: 1966(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NCV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.41	4.1	37	53	29	87	148	83	142	15	1.8	.15
2	.35	4.1	27	46	27	62	120	95	154	14	1.6	.15
3	.35	4.1	26	40	26	46	95	97	151	11	1.6	.20
4	.30	3.7	23	36	24	42	77	104	139	9.9	1.6	.20
5	.25	4.9	22	29	23	40	70	117	128	8.6	1.6	.15
6	.25	20	22	27	24	37	62	139	122	7.4	1.6	.15
7	4.5	97	21	24	22	34	57	169	107	6.9	1.4	.11
8	4.5	46	20	22	21	32	55	202	92	32	1.1	.11
9	2.0	117	20	20	20	30	53	216	92	42	.95	.08
10	1.2	281	19	19	19	30	48	195	95	28	.83	.08
11	.95	605	21	18	18	29	46	179	95	18	.73	.08
12	.95	498	19	21	18	29	48	166	90	16	.63	.08
13	.83	205	20	43	18	28	46	145	85	14	.63	.08
14	.73	122	18	66	17	29	48	139	81	12	.55	.06
15	.73	87	18	396	16	31	55	133	72	11	.55	.06
16	.63	90	18	374	16	36	60	117	64	11	.55	.06
17	.63	136	27	418	15	44	66	102	55	9.2	.47	.06
18	.55	95	24	395	14	51	72	83	50	8.6	.55	.02
19	.55	68	22	387	14	53	64	70	48	8.0	.55	.08
20	.73	57	21	233	14	51	62	66	40	7.4	.55	.08
21	1.1	50	22	154	14	51	66	66	38	6.9	.47	.08
22	9.4	43	20	114	14	53	72	77	36	5.9	.47	.11
23	12	38	18	85	12	53	74	90	32	5.4	.41	.11
24	6.9	34	18	70	13	55	64	104	27	4.9	.35	.15
25	6.4	30	18	59	13	64	57	128	26	4.1	.35	.15
26	5.9	27	18	51	14	87	51	172	21	3.7	.30	.11
27	4.9	26	22	46	13	120	46	195	19	3.4	.30	.08
28	4.9	26	38	42	18	99	46	185	18	2.5	.25	.08
29	4.5	34	117	37	-----	304	50	157	18	2.2	.20	.08
30	4.1	44	87	34	-----	387	62	139	16	2.0	.20	.11
31	4.1	-----	68	32	-----	195	-----	139	-----	2.0	.15	-----
TOTAL	85.59	2,896.9	891	3,391	506	2,289	1,940	4,069	2,153	333.0	23.29	3.10
MEAN	2.76	96.6	28.7	109	18.1	73.8	64.7	131	71.8	10.7	.75	.10
MAX	12	605	117	418	29	387	148	216	154	42	1.8	.20
MIN	.25	3.7	18	18	12	28	46	66	16	2.0	.15	.02
AC-FT	170	5,750	1,770	6,730	1,000	4,540	3,850	8,070	4,270	661	46	6.1
CAL YR 1973	TOTAL 13,296.20	MEAN 36.4	MAX 605	MIN .06	AC-FT 26,370							
WTR YR 1974	TOTAL 18,580.88	MEAN 50.9	MAX 605	MIN .02	AC-FT 36,860							

PEAK DISCHARGE (BASE, 140 FT ³ /S)							
DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-7	1600	3.00	163	1-17	0300	3.95	582
11-9	2230	3.45	334	3-1	1600	2.92	142
11-12	0500	4.35	828	3-30	0200	3.94	577
11-17	0230	3.02	172	5-8	1900	3.27	256
12-29	0900	2.97	154	5-27	1830	3.22	237
1-15	0600	3.76	480				

SACRAMENTO RIVER BASIN

11395020 LITTLE GRASS VALLEY RESERVOIR NEAR LA PORTE, CALIF.

LOCATION.--Lat 39°43'25", long 121°01'10", in SE¼NW¼ sec.31, T.22 N., R.9 E., Plumas County, Plumas National Forest, on right bank 300 ft (91 m) upstream from dam on South Fork Feather River, 3.3 mi (5.3 km) northwest of La Porte.

DRAINAGE AREA.--25.8 mi² (66.8 km²).

PERIOD OF RECORD.--October 1961 to current year. Monthend elevation and contents only October 1961 to October 1962.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Oroville-Wyandotte Irrigation District). Prior to Nov. 1, 1962, in valve chamber in dam at same datum.

EXTREMES.--Current year: Maximum contents, 93,200 acre-ft (115 hm³) June 29 to July 1 (elevation, 5,046.1 ft or 1,538.05 m); minimum, 57,200 acre-ft (70.5 hm³) Nov. 4, 6 (elevation, 5,021.0 ft or 1,530.40 m).
Period of record: Maximum contents, 96,100 acre-ft (118 hm³) Apr. 29, 1965 (elevation, 5,047.9 ft or 1,538.60 m); minimum since reservoir first filled, 44,400 acre-ft (54.7 hm³) Dec. 5, 1972 (elevation, 5,010.0 ft or 1,527.05 m).

REMARKS.--Reservoir is formed by rockfill dam. Storage began in October 1961. Total capacity, 93,000 acre-ft (115 hm³) between elevations 4,876 ft (1,486.2 m), invert of release valve and 5,047 ft (1,538.3 m), top of spillway gates, all of which is usable. Water is released down South Fork Feather River for power development and irrigation downstream. Records, including extremes, represent contents at 2400 hours. See schematic diagram of South Fork Feather River basin.

CAPACITY TABLE (ELEVATION, IN FEET, AND CONTENTS, IN ACRE-FEET)

5,000	34,600
5,010	44,400
5,020	55,900
5,030	68,900
5,040	83,500
5,048	96,300

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	68,000	58,400	72,800	66,500	75,700	74,100	77,800	79,800	87,000	93,200	83,300	71,700
2	67,600	58,000	72,500	66,400	75,700	74,400	77,200	80,300	87,600	93,000	82,900	71,200
3	67,300	57,700	72,100	66,300	75,600	74,600	76,800	80,600	88,100	92,700	82,600	70,900
4	67,100	57,200	71,800	66,200	75,600	74,400	76,300	81,000	88,500	92,400	82,200	70,500
5	66,500	57,300	71,500	66,000	75,500	74,400	75,900	81,400	89,000	91,900	81,900	70,100
6	66,300	57,200	71,200	65,900	75,500	74,400	75,700	82,000	--	91,500	81,400	69,800
7	66,000	58,000	70,800	65,600	75,500	74,300	75,600	82,800	--	91,100	81,100	69,300
8	65,800	58,000	70,500	65,400	75,500	74,300	75,500	84,100	--	91,200	80,900	68,900
9	65,500	58,700	70,100	65,000	75,500	74,100	75,300	84,900	--	91,200	80,400	68,600
10	65,100	60,800	69,600	64,700	75,500	74,000	75,300	85,500	--	90,900	80,100	68,200
11	64,700	65,600	69,500	64,500	75,300	73,900	75,200	85,800	--	90,700	79,700	67,800
12	64,500	69,500	69,000	64,300	75,300	73,900	75,000	86,200	--	90,400	79,200	67,500
13	64,100	71,200	68,800	64,200	75,300	73,700	75,000	86,300	--	90,100	78,800	67,100
14	63,800	72,000	68,500	64,900	75,300	73,600	74,900	86,500	--	89,800	78,500	66,800
15	63,400	72,400	68,100	67,300	75,300	73,400	74,900	86,500	--	89,500	78,100	66,400
16	63,200	73,100	67,700	70,300	75,300	73,300	75,200	86,300	--	89,000	77,800	66,000
17	62,800	74,100	67,600	73,300	75,300	73,100	75,600	86,200	--	88,700	77,400	65,800
18	62,400	74,400	67,300	76,300	75,500	73,100	76,000	86,200	--	88,400	77,100	65,400
19	62,000	74,600	67,100	77,800	75,600	73,100	76,500	85,800	--	88,200	76,600	65,000
20	61,700	74,600	66,700	77,800	75,200	73,000	77,100	85,500	--	87,700	76,300	64,600
21	61,300	74,400	66,700	77,400	74,900	73,000	77,500	85,400	--	87,400	75,900	64,300
22	61,500	74,300	66,300	77,100	74,700	73,000	77,900	85,100	--	87,100	75,500	63,900
23	61,300	74,100	66,000	76,800	74,400	73,000	78,500	84,900	--	86,600	75,200	63,600
24	61,100	73,900	65,600	76,600	74,000	73,000	79,000	84,700	92,800	86,300	74,700	63,200
25	60,800	73,600	65,400	76,300	73,700	73,000	79,100	84,700	92,800	86,000	74,400	62,800
26	60,400	73,300	65,100	76,200	73,400	73,300	79,200	84,700	92,800	85,500	74,000	62,500
27	60,200	73,000	65,100	76,000	73,100	74,100	79,400	84,900	93,000	85,200	73,600	62,100
28	59,800	72,700	65,200	76,000	73,100	75,000	79,400	85,100	93,000	84,900	73,100	61,700
29	59,400	72,500	66,000	75,900	-----	76,200	79,500	85,400	93,200	84,400	73,000	61,300
30	59,000	72,800	66,400	75,700	-----	78,700	79,700	86,000	93,200	84,100	72,400	61,000
31	58,700	-----	66,500	75,700	-----	78,400	-----	86,500	-----	83,600	72,100	-----
MAX	68,000	74,600	72,800	77,800	75,700	78,700	79,700	86,500	--	93,200	83,300	71,700
MIN	58,700	57,200	65,100	64,200	73,100	73,000	74,900	79,800	--	83,600	72,100	61,000
(a)	5,022.2	5,032.7	5,028.2	5,034.7	5,032.9	5,036.5	5,037.4	5,041.9	5,046.1	5,040.1	5,032.2	5,023.9
(b)	-9,800	+14,100	-6,300	+9,200	-2,600	+5,300	+1,300	+6,800	+6,700	-9,600	-11,500	-11,000

CAL YR 1973 b +5,500
WTR YR 1974 b -7,500

a Elevation, in feet, at end of month.
b Change in contents, in acre-feet.

11395030 SOUTH FORK FEATHER RIVER BELOW LITTLE GRASS VALLEY DAM, CALIF.

LOCATION.--Lat 39°43'26", long 121°01'16", in SW¼NW¼ sec.31, T.22 N., R.9 E., Plumas County, Plumas National Forest, on left bank 0.1 mi (0.2 km) downstream from Little Grass Valley Dam, 0.7 mi (1.1 km) downstream from Ice Creek, and 3.5 mi (5.6 km) northwest of La Porte.

DRAINAGE AREA.--25.9 mi² (67.1 km²).

PERIOD OF RECORD.--October 1927 to September 1933 (published as "near La Porte"), October 1960 to current year.

GAGE.--Water-stage recorder. Datum of gage is 4,809.0 ft (1,465.78 m) above mean sea level. Prior to Oct. 1, 1960, at site 0.4 mi (0.6 km) upstream at different datum. Oct. 1, 1960, to Oct. 30, 1962, at present site and datum. Nov. 1, 1962, to May 31, 1966, at site on outlet works at base of Little Grass Valley Dam 0.1 mi (0.2 km) upstream at datum 4,850.00 ft (1,478.280 m) above mean sea level.

AVERAGE DISCHARGE (adjusted for change in contents in Little Grass Valley Reservoir).--20 years, 99.1 ft³/s (2.81 m³/s), 71,800 acre-ft/yr (88.5 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,540 ft³/s (43.6 m³/s) Mar. 30 (gage height, 11.65 ft or 3.551 m); minimum daily, 11 ft³/s (0.31 m³/s) Apr. 17, 19-22.

Period of record: Maximum discharge, 4,250 ft³/s (120 m³/s) Feb. 1, 1963; minimum, 0.2 ft³/s (0.006 m³/s) Oct. 28-31, Nov. 2, 1961.

REMARKS.--Records good. Flow regulated by Little Grass Valley Reservoir (see sta 11395020) beginning in October 1961. No diversion above station. See schematic diagram of South Fork Feather River basin.

REVISIONS.--WSP 1931: Drainage area.

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	254	175	263	260	149	193	1,040	147	16	13	184	181
2	206	175	263	257	130	193	858	147	16	64	186	181
3	168	175	263	260	113	193	650	147	16	184	186	181
4	168	175	263	260	101	193	498	149	16	184	186	181
5	168	175	263	260	93	193	392	149	15	184	186	181
6	168	177	263	260	81	193	339	151	15	184	186	181
7	168	184	260	260	74	193	304	151	15	184	186	181
8	166	179	260	257	68	193	275	153	14	184	186	181
9	166	186	263	257	65	193	263	153	14	181	186	179
10	166	193	263	257	63	193	248	256	14	181	186	179
11	166	167	263	254	60	193	236	353	14	181	186	179
12	166	21	263	257	58	193	222	353	14	181	186	179
13	164	42	263	260	59	193	214	353	14	181	184	179
14	164	90	263	266	58	193	208	353	14	181	184	181
15	164	172	263	132	56	193	206	353	14	181	184	181
16	164	266	263	20	66	193	89	353	14	181	184	181
17	164	272	263	17	64	193	11	353	14	181	184	179
18	164	269	260	72	64	196	12	353	14	181	184	179
19	164	266	260	628	87	196	11	353	14	181	184	179
20	164	266	260	822	140	196	11	353	14	181	184	179
21	166	266	260	705	160	196	11	353	14	181	184	179
22	168	266	260	615	160	196	11	353	13	181	184	179
23	168	266	260	440	160	196	12	353	13	181	181	177
24	168	266	260	350	160	196	73	356	13	181	181	177
25	168	263	260	290	160	196	147	356	13	181	181	177
26	168	260	260	254	160	201	147	356	13	181	181	177
27	168	260	260	214	160	203	147	356	13	181	181	175
28	166	263	266	184	180	225	147	356	13	181	181	175
29	157	263	275	162	-----	542	147	210	13	181	181	175
30	175	263	263	164	-----	1,370	147	16	13	181	181	175
31	175	-----	263	164	-----	1,190	-----	16	-----	181	181	-----
TOTAL	5,289	6,261	8,132	8,858	2,949	8,580	7,076	8,214	422	5,344	5,699	5,368
MEAN	171	209	262	286	105	277	236	265	14.1	172	184	179
MAX	254	272	275	822	180	1,370	1,040	356	16	184	186	181
MIN	157	21	260	17	56	193	11	16	13	13	181	175
AC-FT	10,490	12,420	16,130	17,570	5,850	17,020	14,040	16,290	837	10,600	11,300	10,650

CAL YR 1973 TOTAL 45,675.2 MEAN 125 MAX 275 MIN 4.4 AC-FT 90,600 MEAN a 146 AC-FT a 105,600
WTR YR 1974 TOTAL 72,192.0 MEAN 198 MAX 1,370 MIN 11 AC-FT 143,200 MEAN a 188 AC-FT a 135,800

a Adjusted for change in contents in Little Grass Valley Reservoir.

11395200 SOUTH FORK FEATHER RIVER BELOW DIVERSION DAM, NEAR STRAWBERRY VALLEY, CALIF.

LOCATION.--Lat 39°38'51", long 121°07'04", in NE¼SE¼ sec.30, T.21 N., R.8 E., Plumas County, Plumas National Forest, on right bank 0.1 mi (0.2 km) downstream from diversion dam, 3.1 mi (5.0 km) upstream from Rock Creek, and 5.8 mi (9.3 km) north of Strawberry Valley.

DRAINAGE AREA.--37.7 mi² (97.6 km²).

PERIOD OF RECORD.--October 1960 to current year.

GAGE.--Water-stage recorder and since Nov. 7, 1962, concrete control. Datum of gage is 3,535.02 ft (1,077.474 m) above mean sea level (levels by Oroville-Wyandotte Irrigation District).

AVERAGE DISCHARGE (adjusted for diversion to South Fork tunnel).--14 years, 160 ft³/s (4.531 m³/s), 115,900 acre-ft/yr (143 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,200 ft³/s (62.3 m³/s) Mar. 30 (gage height, 8.76 ft or 2.670 m); minimum daily, 2.7 ft³/s (0.076 m³/s) Apr. 23-29.

Period of record: Maximum discharge, 6,330 ft³/s (179 m³/s) Jan. 31, 1963 (gage height, 13.21 ft or 4.026 m), from rating curve extended above 500 ft³/s (14.2 m³/s) on basis of computation of peak flow over diversion dam; minimum daily, 0.3 ft³/s (0.008 m³/s) Dec. 25, 1962, to Jan. 2, 1963, Mar. 1-3, 1963.

REMARKS.--Records good. Flow regulated by Little Grass Valley Reservoir (see sta 11395020). South Fork diversion tunnel, maximum capacity, about 600 ft³/s (17.0 m³/s) 500 ft (152 m) upstream, diverts to Sly Creek Reservoir (see sta 11395400); diversion began in November 1961. See schematic diagram of South Fork Feather River basin.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NCV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.8	7.2	5.7	5.1	3.6	48	852	9.8	10	9.0	10	10
2	7.6	5.7	5.3	5.1	3.6	9.4	576	9.8	10	9.2	10	10
3	7.6	5.7	5.3	5.1	3.4	5.1	313	9.8	10	9.5	10	10
4	7.6	5.7	5.1	5.1	3.4	5.1	160	9.8	10	9.5	10	10
5	7.6	5.9	5.1	5.1	3.4	5.1	91	9.8	10	9.5	10	10
6	7.6	6.1	5.1	5.1	3.4	5.1	38	9.8	10	9.5	10	10
7	7.8	6.5	5.1	5.1	3.4	5.3	24	9.8	10	9.5	10	11
8	7.8	6.1	5.1	5.1	3.4	5.3	12	10	10	9.8	10	11
9	59	14	5.1	5.1	3.4	5.3	14	10	10	10	10	11
10	45	100	5.1	5.1	3.4	5.3	5.1	10	10	10	10	11
11	8.5	508	5.3	5.1	3.4	5.5	27	10	10	10	10	11
12	8.5	307	5.1	5.3	3.4	23	50	10	10	9.8	10	11
13	8.5	26	5.1	5.3	3.4	13	25	10	16	9.8	10	11
14	8.5	5.1	8.2	23	3.4	5.3	4.1	10	8.8	10	10	11
15	8.8	5.1	4.9	221	3.4	5.3	4.1	10	8.8	10	10	11
16	8.8	6.6	4.9	126	3.6	5.3	4.0	10	8.8	9.8	10	11
17	8.8	91	5.1	115	3.6	5.3	3.8	11	8.8	9.8	11	11
18	8.8	51	4.9	89	3.6	5.3	3.8	11	8.8	9.8	11	12
19	8.8	5.3	4.9	527	3.6	5.1	3.8	11	8.8	9.8	11	12
20	9.0	5.1	4.7	584	3.6	26	3.8	11	8.8	10	11	12
21	9.0	5.1	4.3	453	3.6	4.9	3.8	11	8.8	10	11	12
22	9.2	5.1	4.3	170	3.6	4.9	38	11	8.8	10	11	12
23	9.5	5.1	4.3	50	3.6	4.9	2.7	11	8.5	10	11	12
24	9.5	5.1	4.3	27	3.6	4.9	2.7	11	8.5	10	11	13
25	9.2	5.1	4.3	3.8	3.6	5.1	2.7	11	8.5	10	11	12
26	9.2	4.9	4.3	3.6	3.6	29	2.7	11	8.8	10	10	12
27	9.2	4.9	4.5	3.6	3.6	29	2.7	11	8.8	10	10	12
28	9.2	4.9	4.7	3.6	3.8	33	2.7	11	8.8	10	10	12
29	9.2	4.9	140	3.6	-----	677	2.7	11	8.8	10	10	12
30	9.2	5.3	15	3.6	-----	1,760	6.6	10	8.8	10	10	12
31	9.5	-----	5.3	3.6	-----	1,140	-----	10	-----	10	10	-----
TOTAL	354.3	1,223.5	346.3	2,477.1	98.4	3,890.8	2,281.8	321.6	284.7	304.3	319	338
MEAN	11.4	40.8	11.2	79.9	3.51	126	76.1	10.4	9.49	9.82	10.3	11.3
MAX	59	508	140	584	3.8	1,760	852	11	16	10	11	13
MIN	7.6	4.9	4.3	3.6	3.4	4.9	2.7	9.8	8.5	9.0	10	10
AC-FT	703	2,430	687	4,910	195	7,720	4,530	638	565	604	633	670
MEAN a	185	386	353	461	149	474	353	332	28.9	179	182	177
AC-FT a	11,360	22,950	21,720	28,350	8,280	29,170	21,000	20,390	1,720	11,010	11,170	10,560
(b)	10,660	20,520	21,030	23,440	8,090	21,450	16,470	19,750	1,150	10,410	10,540	9,890

CAL YR 1973 TOTAL 4,943.6 MEAN 13.5 MAX 508 MIN 4.3 AC-FT 9,810 MEAN a 196 AC-FT a 141,900
WTR YR 1974 TOTAL 12,239.8 MEAN 33.5 MAX 1,760 MIN 2.7 AC-FT 24,280 MEAN a 273 AC-FT a 197,700

a Adjusted for diversion to South Fork tunnel.

b Diversion, in acre-feet, from South Fork Feather River to South Fork diversion tunnel.

11395400 SLY CREEK RESERVOIR NEAR STRAWBERRY VALLEY, CALIF.

LOCATION.--Lat 39°35'01", long 121°06'45", in NW¼NW¼ sec.20, T.20 N., R.8 E., Butte County, Plumas National Forest, on right bank 100 ft (30 m) upstream from dam on Lost Creek, 1.4 mi (2.3 km) northwest of Strawberry Valley.

DRAINAGE AREA.--24.0 mi² (62.2 km²).

PERIOD OF RECORD.--November 1961 to current year (fragmentary prior to Mar. 14, 1962).

GAGE.--Nonrecording gage read once daily. Datum of gage is at mean sea level (levels by Oroville-Wyandotte Irrigation District). Prior to Sept. 30, 1966, water-stage recorder in valve chamber inside dam at same datum.

EXTREMES.--Current year: Maximum contents, 63,400 acre-ft (78.2 hm³) June 6 (elevation, 3,527.3 ft or 1,075.12 m); minimum, 13,600 acre-ft (16.8 hm³) Nov. 6 (elevation, 3,408.7 ft or 1,038.97 m).
Period of record: Maximum contents, 65,500 acre-ft (80.8 hm³) June 2-5, 11, 12, 1962, Apr. 7, 1963 (elevation, 3,531.5 ft or 1,076.40 m); minimum, 1,610 acre-ft (1.99 hm³) Dec. 17, 1972 (elevation, 3,332.8 ft or 1,015.84 m).

REMARKS.--Reservoir is formed by earthfill dam. Storage began in November 1961. Total capacity, 65,000 acre-ft (80.1 hm³) between elevations 3,285 ft (1,001.3 m), invert of outlet and 3,531 ft (1,076.2 m), top of spillway gate, all of which is available for release. Water is diverted into reservoir from South Fork Feather River through South Fork diversion tunnel and from North Yuba River basin through Slate Creek tunnel. Records, including extremes, show contents at time nonrecording gage was read. See schematic diagram of South Fork Feather River basin.

COOPERATION.--Reservoir nonrecording-gage readings furnished by Oroville-Wyandotte Irrigation District.

CAPACITY TABLE (ELEVATION, IN FEET, AND CONTENTS, IN ACRE-FEET)

3,320	860	3,420	16,600
3,340	2,150	3,450	26,300
3,360	4,300	3,480	38,500
3,380	7,360	3,510	53,400
3,400	11,500	3,532	66,200

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24,100	15,000	41,300	44,000	57,200	46,200	58,100	53,100	61,400	60,300	47,000	29,800
2	23,900	14,800	41,800	44,200	57,200	47,500	58,000	52,900	61,200	60,000	46,500	29,200
3	23,500	14,500	41,800	44,300	57,100	48,200	57,800	52,700	61,200	59,400	46,000	28,700
4	23,000	14,200	41,800	44,500	57,100	48,500	57,700	52,400	62,200	59,100	45,400	28,200
5	22,700	13,800	41,700	44,600	57,000	48,700	57,500	52,200	62,800	58,600	44,900	27,600
6	22,400	13,600	41,600	44,600	57,100	48,900	57,500	52,100	63,400	58,200	44,400	27,000
7	22,200	14,400	41,400	44,700	55,800	48,200	57,400	53,900	63,200	57,600	43,800	26,300
8	22,100	15,000	41,200	44,700	54,900	48,300	57,200	56,200	62,800	57,200	43,300	25,800
9	21,500	15,700	41,000	44,800	54,200	48,400	57,200	58,500	62,300	57,600	42,800	25,300
10	21,200	17,300	40,800	44,100	54,600	48,500	57,100	59,700	61,800	57,600	42,200	25,000
11	20,700	20,900	40,600	43,900	53,600	48,300	57,100	60,000	61,800	57,400	41,600	24,600
12	20,300	22,900	40,400	44,100	52,500	48,700	57,000	60,400	61,600	57,000	41,100	24,200
13	20,000	26,300	40,200	43,800	52,400	49,000	56,900	60,700	61,900	56,800	40,400	23,400
14	19,600	27,000	40,300	44,000	52,200	49,200	56,900	61,000	62,000	56,200	39,900	22,800
15	19,300	29,200	39,900	44,200	50,900	49,300	56,900	61,300	61,800	55,800	39,300	22,300
16	18,800	31,100	39,600	47,300	50,300	49,400	56,900	61,500	61,800	55,400	38,800	21,700
17	18,500	33,800	39,400	50,000	49,800	49,700	56,700	61,700	61,800	54,800	38,300	21,000
18	18,200	37,200	39,400	51,700	48,900	50,100	56,700	61,900	62,200	54,400	37,600	20,400
19	17,700	39,200	39,200	54,200	49,100	51,100	56,900	62,200	61,500	53,900	37,100	19,900
20	17,400	40,000	39,100	56,500	47,500	52,200	56,100	62,400	61,500	53,300	36,600	19,400
21	17,000	40,300	39,000	57,800	47,400	53,400	55,600	62,400	61,500	52,900	36,000	18,900
22	16,600	40,600	39,000	57,300	47,400	52,900	55,200	61,800	61,400	52,300	35,500	18,300
23	16,600	40,800	38,800	57,700	47,200	52,800	54,900	61,500	61,300	51,900	34,900	17,500
24	16,200	40,700	38,600	57,800	46,700	52,300	54,600	61,200	61,300	51,400	34,300	17,300
25	15,900	40,800	38,400	57,700	46,200	51,900	54,600	61,200	60,900	51,000	33,800	17,000
26	15,700	40,600	38,100	57,500	45,800	51,700	54,400	61,000	61,000	50,500	33,300	16,700
27	15,400	40,500	38,200	57,400	45,500	52,000	54,200	60,900	60,500	49,700	32,700	16,500
28	16,400	40,500	39,000	57,400	45,100	53,600	53,900	60,800	60,300	49,200	32,100	16,200
29	16,100	40,400	40,800	57,300	-----	55,800	53,600	61,500	60,200	48,700	31,400	15,800
30	15,900	40,200	43,000	57,200	-----	58,600	53,300	61,500	60,000	48,000	30,900	15,700
31	15,400	-----	43,100	57,200	-----	58,400	-----	61,500	-----	47,500	30,400	-----
MAX	24,100	40,800	43,100	57,800	57,200	58,600	58,100	62,400	63,400	60,300	47,000	29,800
MIN	15,400	13,600	38,100	43,800	45,100	46,200	53,300	52,100	60,000	47,500	30,400	15,700
(a)	3,415.4	3,483.7	3,489.9	3,516.8	3,493.9	3,518.8	3,509.7	3,524.1	3,521.6	3,498.6	3,460.7	3,416.7
(b)	-8,700	+24,800	+2,900	+14,100	-12,100	+13,300	-5,100	+8,200	-1,500	-12,500	-17,100	-14,700

CAL YR 1973 b +24,300
WTR YR 1974 b -8,400

a Elevation, in feet, at end of month.
b Change in contents, in acre-feet.

11395500 OROVILLE-WYANDOTTE CANAL NEAR CLIPPER MILLS, CALIF.

LOCATION.--Lat 39°33'15", long 121°11'31", in NW¼NE¼ sec.33, T.20 N., R.7 E., Butte County, in concrete valve house at head of canal, 2.5 mi (4.0 km) north of Clipper Mills.

PERIOD OF RECORD.--October 1927 to September 1941 (published as Forbestown ditch), October 1953 to current year. Monthly discharge only for October 1953 to September 1961, published with records for Lost Creek near Clipper Mills.

GAGE.--Water-stage recorder and Parshall flume. Datum of gage is 3,166.0 ft (965.00 m) above mean sea level (levels by Oroville-Wyandotte Irrigation District). Prior to Sept. 30, 1941, nonrecording gages and Oct. 1, 1941, to Nov. 16, 1962, water-stage recorder at sites at different datums 4 mi (6 km) upstream in abandoned portion of canal, 0.3 mi (0.5 km) downstream from Lost Creek Dam.

AVERAGE DISCHARGE (prior to closure of lumber mill).--23 years (1927-41, 1953-62), 21.0 ft³/s (0.595 m³/s), 15,200 acre-ft/yr (18.7 hm³/yr); 12 years (1962-74), 8.15 ft³/s (0.231 m³/s), 5,900 acre-ft/yr (7.27 hm³/yr).

EXTREMES.--Period of record: Maximum daily discharge, 43 ft³/s (1.22 m³/s) Aug. 9 to Sept. 9, 1937; no flow at times in many years.

REMARKS.--Records good. Water is discharged to canal through valve in Woodleaf penstock. Prior to Nov. 16, 1962, canal diverted from Lost Creek Dam. Water is used for irrigation and domestic supply. Demand for water reduced when a large lumber mill closed at Woodleaf in 1962. See schematic diagram of South Fork Feather River basin.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	8.6	.42	.36	.10	.15	.05	0	.55	10	16	17
2	16	8.6	.42	.36	.10	.20	.05	0	2.0	12	18	17
3	16	8.6	.42	.36	.10	.25	.05	0	2.7	14	18	17
4	16	8.6	.42	.36	.10	.25	0	0	5.4	14	18	17
5	16	8.3	.42	.36	.10	.25	0	0	10	14	18	17
6	16	6.6	.42	.36	.10	.25	0	0	7.8	14	17	17
7	15	3.6	.42	.36	.10	.25	0	0	4.4	14	17	17
8	14	1.1	.42	.30	.10	.25	0	0	7.3	8.2	17	17
9	14	1.0	.42	.32	.10	.25	0	0	8.6	8.0	17	17
10	14	1.1	.42	.25	.10	.25	0	0	8.8	8.0	17	17
11	15	1.1	.42	.30	.10	.25	0	0	9.0	8.0	16	17
12	14	1.1	.42	.36	.10	.25	0	0	10	7.7	16	17
13	12	1.1	.42	.36	.10	.25	0	0	9.2	7.7	15	18
14	12	1.0	.42	.36	.10	.30	0	0	8.8	7.8	15	17
15	12	1.0	.42	.36	.15	.30	0	0	9.0	9.4	16	18
16	10	1.0	.42	.18	.21	.30	0	0	8.9	11	17	17
17	10	.95	.42	.20	.25	.30	0	0	8.8	11	17	18
18	9.7	.95	.42	.11	.25	.30	0	0	8.9	11	17	18
19	9.4	.95	.36	.37	.25	.30	0	0	9.0	10	17	18
20	9.2	.86	.36	.31	.25	.30	0	0	9.0	10	17	18
21	9.0	.70	.36	.25	.25	.25	0	0	9.0	10	17	18
22	8.9	.70	.36	.55	.25	.25	0	0	9.0	10	17	18
23	9.0	.70	.36	.31	.25	.25	0	0	9.0	10	17	18
24	8.0	.70	.36	.10	.25	.25	0	0	8.9	10	17	18
25	8.4	.55	.36	.05	.19	.25	0	0	9.0	12	17	18
26	8.4	.42	.36	.05	.15	.25	0	0	9.0	12	17	17
27	9.0	.42	.36	.10	.15	.15	0	0	8.9	12	17	16
28	9.0	.42	.36	.10	.15	.15	0	0	9.2	12	17	16
29	8.8	.42	.36	.10	-----	.15	0	.66	10	12	17	16
30	8.6	.42	.36	.22	-----	.15	0	.62	10	14	17	16
31	8.6	-----	.36	.21	-----	.09	-----	.55	-----	14	17	-----
TOTAL	363.0	71.56	12.24	8.34	4.40	7.39	.15	1.83	240.15	337.8	523	517
MEAN	11.7	2.39	.39	.27	.16	.24	.005	.059	8.01	10.9	16.9	17.2
MAX	17	8.6	.42	.55	.25	.30	.05	.66	10	14	18	18
MIN	8.0	.42	.36	.05	.10	.09	0	0	.55	7.7	15	16
AC-FT	720	142	24	17	8.7	15	.3	3.6	476	670	1,040	1,030

CAL YR 1973 TOTAL 2,587.54 MEAN 7.09 MAX 25 MIN .20 AC-FT 5,130
WTR YR 1974 TOTAL 2,086.86 MEAN 5.72 MAX 18 MIN 0 AC-FT 4,140

11396000 LOST CREEK NEAR CLIPPER MILLS, CALIF.

LOCATION.--Lat 39°34'25", long 121°08'26", in SE¼SW¼ sec.24, T.20 N., R.7 E., Butte County, Plumas National Forest, on left bank 0.3 mi (0.5 km) downstream from Lost Creek Reservoir, and 2.8 mi (4.5 km) north of Clipper Mills.

DRAINAGE AREA.--30.0 mi² (77.7 km²).

PERIOD OF RECORD.--October 1927 to September 1941, October 1948 to current year. Records for Woodleaf powerplant from February 1963 to September 1966 in files of Geological Survey.

GAGE.--Water-stage recorder. Altitude of gage is 3,170 ft (966 m), from topographic map.

AVERAGE DISCHARGE.--27 years (1927-41, 1948-61, prior to regulation of Sly Creek Reservoir), 73.0 ft³/s (2.07 m³/s), 52,850 acre-ft/yr (65.2 hm³/yr); 13 years (1961-74), 26.4 ft³/s (0.75 m³/s), 19,130 acre-ft/yr (23.6 hm³/yr), unadjusted.

EXTREMES.--Current year: Maximum discharge, 2,720 ft³/s (77.0 m³/s) Mar. 30 (gage height, 5.61 ft or 1.710 m); minimum daily, 0.02 ft³/s (0.0006 m³/s) Oct. 27 to Nov. 4.

Period of record: Maximum discharge, 5,000 ft³/s (142 m³/s) Dec. 22, 1955 (gage height, 6.90 ft or 2.103 m); no flow at times in some years.

REMARKS.--Records fair. Flow regulated by Sly Creek Reservoir 1.5 mi (2.4 km) upstream (see sta 11395400) and Lost Creek Reservoir 0.3 mi (0.5 km) upstream, usable capacity, 5,920 acre-ft (7.30 hm³) with flashboards. Water is diverted into Sly Creek Reservoir through South Fork diversion tunnel from South Fork Feather River and through Slate Creek tunnel from North Yuba River basin. Woodleaf tunnel diverts from Lost Creek Reservoir to Woodleaf powerhouse. Oroville-Wyandotte Canal (see sta 11395500) diverts from Woodleaf penstock for irrigation and domestic use. Records represent seepage, release, or spill from Lost Creek Dam to Lost Creek. See schematic diagram of South Fork Feather River basin.

REVISIONS (WATER YEARS).--WSP 1395: 1954. WSP 1931: Drainage area. WRD Calif. 1968: 1967.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.14	.02	3.1	.78	525	4.2	1,400	.22	5.1	1.9	.94	.90
2	.14	.02	1.2	.66	391	3.7	1,170	.22	5.1	1.8	.94	.90
3	.16	.02	.94	.58	.46	2.4	916	.20	5.1	1.6	.94	.90
4	.14	.02	.70	.52	.43	1.7	740	.20	5.3	1.6	.94	.90
5	.14	.22	.62	.49	.43	1.4	530	.20	5.3	1.6	.94	.90
6	.14	.45	.52	.46	.40	1.2	408	.20	4.3	1.5	.93	.90
7	.40	.96	.46	.43	.40	1.3	344	.18	3.5	1.5	.90	.90
8	.24	.24	.43	.40	.37	1.2	300	1.3	2.9	1.6	.86	.90
9	.18	.79	.37	.40	.34	1.2	254	100	2.8	1.3	.86	.86
10	.16	1.6	.34	.37	.31	1.1	195	.22	2.6	1.1	.86	.90
11	.16	3.3	.37	.34	.31	1.6	138	.20	2.8	1.1	.82	.90
12	.16	3.1	.31	.58	.31	2.6	84	.20	2.6	.98	.82	.86
13	.16	1.4	.46	.74	.31	2.0	51	.20	2.6	.98	.82	.90
14	.16	.98	.37	1.7	.31	1.6	46	.20	2.5	.98	.82	.90
15	.16	.74	.34	3.1	.28	1.4	44	.20	2.4	.98	.86	.90
16	.16	2.7	.31	3.5	.34	1.2	41	.20	2.4	.94	.86	.90
17	.16	2.8	.37	3.3	.31	44	3.7	.20	2.1	.94	.86	.86
18	.18	2.2	.34	2.6	.34	13	.52	.20	1.6	.94	.86	.86
19	.16	1.2	.31	2.2	.95	.94	.49	.18	2.9	.90	.90	.82
20	.20	.90	.28	1.6	.58	.86	.46	.18	2.8	.90	.90	.78
21	.20	.74	.66	349	.55	.82	.43	.16	2.6	.94	.90	.82
22	.43	.62	.70	563	.49	.78	.40	16	2.6	.94	.90	.82
23	.40	.52	.52	609	.46	.74	.40	19	2.5	.94	.90	.78
24	.16	.46	.49	412	.46	.74	.40	14	2.4	.98	.94	.78
25	.14	.43	.46	328	.43	.78	.34	12	2.2	.98	.94	.74
26	.06	.40	.52	209	.43	.78	.28	10	2.0	.94	.90	.70
27	.02	.37	.86	100	.40	1.7	.28	9.2	2.0	.94	.94	.78
28	.02	.31	1.1	23	.77	2.8	.26	7.8	1.9	.94	.94	.74
29	.02	.34	1.7	.52	-----	90	.24	6.0	1.9	.94	.94	.74
30	.02	1.5	1.2	.34	-----	2,180	.22	5.8	1.9	.94	.94	.70
31	.02	-----	.98	189	-----	1,840	-----	5.3	-----	.94	.90	-----
TOTAL	4.99	29.35	21.33	2,807.61	927.17	4,207.74	6,669.42	210.16	88.7	35.56	27.77	25.24
MEAN	.16	.98	.69	90.6	33.1	136	222	6.78	2.96	1.15	.90	.84
MAX	.43	3.3	3.1	609	525	2,180	1,400	100	5.3	1.9	.94	.90
MIN	.02	.02	.28	.34	.28	.74	.22	.16	1.6	.90	.82	.70
AC-FT	9.9	58	42	5,570	1,840	8,350	13,230	417	176	71	55	50
(a)	24,900	27,220	33,960	31,890	28,900	32,620	30,600	28,350	16,900	30,460	30,960	27,300

CAL YR 1973 TOTAL 223.74 MEAN .61 MAX 12 MIN .02 AC-FT 444
WTR YR 1974 TOTAL 15,055.04 MEAN 41.2 MAX 2,180 MIN .02 AC-FT 29,860

a Diversion, in acre-feet, to Woodleaf powerplant.

SACRAMENTO RIVER BASIN

11396200 SOUTH FORK FEATHER RIVER BELOW FORBESTOWN DAM, CALIF.

LOCATION.--Lat 39°33'05", long 121°12'30", in SE¼NE¼ sec.32, T.20 N., R.7 E., Butte County, Plumas National Forest, on right bank 500 ft (152 m) downstream from Forbestown Dam, 0.4 mi (0.6 km) upstream from Oroleve Creek, and 4.0 mi (6.4 km) northeast of Forbestown.

DRAINAGE AREA.--87.5 mi² (226.6 km²).

PERIOD OF RECORD.--July 1962 to current year. Records for Forbestown powerplant from February 1963 to September 1966 in files of Geological Survey.

GAGE.--Water-stage recorder. Altitude of gage is 1,690 ft (515 m), from topographic map.

AVERAGE DISCHARGE.--12 years, 68.5 ft³/s (1.940 m³/s), 49,630 acre-ft/yr (61.2 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 5,000 ft³/s (142 m³/s) Mar. 30 (gage height, 12.27 ft or 3.740 m); minimum daily, 4.2 ft³/s (0.12 m³/s) Nov. 2, 3.

Period of record: Maximum discharge, 7,510 ft³/s (213 m³/s) Jan. 31, 1963 (gage height, 13.85 ft or 4.221 m in gage well, 15.3 ft or 4.66 m, from floodmarks); minimum daily, 0.6 ft³/s (0.017 m³/s) Apr. 4, 1963.

REMARKS.--Records fair. Flow regulated by Little Grass Valley Reservoir (see sta 11395020), Sly Creek Reservoir (see sta 11395400), and smaller reservoirs. Water from North Yuba River basin is imported through Slate Creek tunnel (see sta 11413250) to Sly Creek Reservoir. Oroville-Wyandotte Canal (see sta 11395500) diverts above station. Tunnel 600 ft (183 m) above station diverts most flow through Forbestown powerplant except fish-water releases and uncontrolled spill over Forbestown Dam. See schematic diagram of South Fork Feather River basin.

REVISIONS.--WRD Calif. 1968: 1967 diversions.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.9	7.9	164	36	4.7	771	2,440	24	11	12	11	12
2	9.9	4.2	48	18	4.7	370	1,900	24	11	12	11	12
3	9.7	4.2	36	6.5	16	309	1,290	22	10	12	11	12
4	9.7	4.4	31	23	28	77	948	20	9.9	12	11	11
5	9.9	4.6	36	36	25	82	763	19	9.9	12	11	11
6	9.9	4.6	31	40	19	83	585	152	11	12	10	11
7	9.9	4.7	19	36	16	85	424	74	12	12	10	11
8	9.9	4.4	13	26	14	80	340	72	12	12	10	11
9	17	6.3	10	21	11	78	315	61	12	12	11	11
10	10	35	4.5	17	7.6	73	251	462	11	12	11	11
11	9.9	550	8.3	15	6.3	89	201	452	11	12	11	11
12	10	479	34	41	8.0	180	167	452	11	11	11	11
13	10	4.3	18	61	5.9	133	116	450	11	11	11	11
14	10	10	18	138	5.1	102	75	448	11	11	11	11
15	10	4.9	4.5	634	5.1	90	67	445	11	11	11	11
16	10	79	4.5	423	8.4	80	60	283	11	11	11	11
17	10	298	16	636	6.1	92	27	19	11	11	11	11
18	10	272	18	405	6.9	96	19	17	11	11	11	11
19	11	64	4.5	728	71	59	11	12	11	11	11	11
20	11	34	4.5	738	44	85	25	12	11	11	11	11
21	11	5.6	29	720	36	54	36	12	11	11	11	11
22	11	7.0	58	737	30	58	46	11	11	11	11	11
23	12	4.4	36	457	25	54	11	22	11	11	11	11
24	11	4.4	34	437	21	51	15	11	11	11	11	11
25	11	4.4	28	304	17	56	32	11	11	11	11	11
26	11	4.4	32	205	20	83	30	11	11	11	11	11
27	10	4.4	86	124	18	181	27	11	11	10	11	11
28	10	4.4	80	59	44	497	23	11	11	10	11	11
29	10	4.4	342	135	-----	1,190	20	11	11	10	11	11
30	10	16	110	30	-----	4,250	19	11	11	11	11	11
31	10	-----	66	23	-----	3,040	-----	11	-----	11	11	-----
TOTAL	324.7	1,934.9	1,423.8	7,309.5	523.8	12,528	10,283	3,653	329.8	349	338	333
MEAN	10.5	64.5	45.9	236	18.7	404	343	118	11.0	11.3	10.9	11.1
MAX	17	550	342	738	71	4,250	2,440	462	12	12	11	12
MIN	9.7	4.2	4.5	6.5	4.7	51	11	11	9.9	10	10	11
AC-FT	644	3,840	2,820	14,500	1,040	24,850	20,400	7,250	654	692	670	661
(a)	24,240	33,630	38,650	38,270	34,430	37,340	37,210	23,770	16,800	31,610	31,580	27,500
CAL YR 1973	TOTAL	11,851.2	MEAN	32.5	MAX	550	MIN	4.2	AC-FT	23,510		
WTR YR 1974	TOTAL	39,330.5	MEAN	108	MAX	4,250	MIN	4.2	AC-FT	78,010		

a Diversion, in acre-feet, to Forbestown powerplant, furnished by Oroville-Wyandotte Irrigation District.

11396310 MINERS RANCH CANAL BELOW PONDEROSA DAM, NEAR FORBESTOWN, CALIF.

LOCATION.--Lat 39°33'00", long 121°18'20", in SE¼NW¼ sec.33, T.20 N., R.6 E., Butte County, on right bank 800 ft (244 m) downstream from Ponderosa Dam, and 3 mi (5 km) northwest of Forbestown.

PERIOD OF RECORD.--October 1962 to current year.

GAGE.--Water-stage recorder and Parshall flume. Altitude of gage is 975 ft (297 m), from topographic map.

AVERAGE DISCHARGE.--12 years, 222 ft³/s (6.287 m³/s), 160,800 acre-ft/yr (198 hm³/yr).

EXTREMES.--Period of record: Maximum daily discharge, 279 ft³/s (7.90 m³/s) Oct. 12, 1971; no flow at times in most years.

REMARKS.--Records good. Canal diverts from South Fork Feather River at Ponderosa Dam. Water is used for power development and irrigation. See schematic diagram of South Fork Feather River basin.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	252	240	207	232	247	157	185	216	275	245	252	250
2	259	241	204	232	247	156	184	218	275	245	253	250
3	261	242	204	233	247	156	183	218	270	244	253	252
4	261	240	214	233	247	156	182	218	222	244	253	252
5	262	241	232	232	247	156	180	214	169	242	252	251
6	262	241	234	232	248	156	178	208	155	241	252	251
7	252	242	239	232	248	156	178	208	261	241	252	251
8	251	240	242	232	248	156	181	208	274	241	252	252
9	251	244	246	232	248	156	190	204	275	241	252	251
10	250	244	247	232	248	156	190	200	275	252	251	251
11	242	228	233	232	248	157	190	199	274	262	251	251
12	246	211	224	232	233	157	198	199	274	264	251	251
13	250	211	234	232	222	157	208	198	274	264	251	251
14	253	210	242	233	220	157	212	196	274	264	251	251
15	257	204	242	234	221	157	218	201	272	264	251	251
16	258	203	240	234	221	158	216	211	271	264	251	251
17	258	212	240	234	221	158	216	210	270	264	252	251
18	258	210	240	227	221	158	215	210	270	264	252	252
19	258	210	240	227	222	158	215	211	270	264	252	253
20	261	208	240	232	221	158	215	204	270	263	253	253
21	262	208	240	236	219	169	215	114	270	263	253	253
22	250	209	240	239	213	187	215	93	270	261	252	253
23	228	209	240	238	213	187	214	126	268	261	252	253
24	226	208	242	242	213	187	215	255	268	261	252	253
25	226	208	242	245	213	186	215	268	268	258	252	252
26	223	208	241	244	214	185	215	268	267	252	252	252
27	221	208	236	244	214	185	215	268	268	252	251	251
28	222	207	232	244	183	185	215	270	219	252	251	252
29	234	207	234	247	-----	186	215	271	208	252	251	252
30	241	208	232	247	-----	186	215	275	238	253	250	251
31	240	-----	232	247	-----	185	-----	269	-----	253	250	-----
TOTAL	7,675	6,602	7,255	7,312	6,407	5,164	6,083	6,628	7,714	7,891	7,803	7,548
MEAN	248	220	234	236	229	167	203	214	257	255	252	252
MAX	262	244	247	247	248	187	218	275	275	264	253	253
MIN	221	203	204	227	183	156	178	93	155	241	250	250
AC-FT	15,220	13,100	14,390	14,500	12,710	10,240	12,070	13,150	15,300	15,650	15,480	14,970
(a)	13,330	12,330	14,000	14,320	12,480	9,840	11,700	11,370	12,800	13,380	13,030	12,650
CAL YR 1973	TOTAL 82,336	MEAN 226	MAX 262	MIN 121	AC-FT 163,300							
WTR YR 1974	TOTAL 84,082	MEAN 230	MAX 275	MIN 93	AC-FT 166,800							

a Diversion, in acre-feet, to Kelly Ridge powerplant, furnished by Oroville-Wyandotte Irrigation District.

SACRAMENTO RIVER BASIN

11396330 BANGOR CANAL BELOW MINERS RANCH RESERVOIR, NEAR OROVILLE, CALIF.

LOCATION.--Lat 39°30'15", long 121°27'16", in NE¼SW¼ sec.18, T.19 N., R.5 E., Butte County, on left bank 400 ft (122 m) downstream from outlet at Miners Ranch Dam, and 5 mi (8 km) east of Oroville.

PERIOD OF RECORD.--January 1963 to current year.

GAGE.--Water-stage recorder and Parshall flume. Altitude of gage is 815 ft (248 m), from topographic map.

AVERAGE DISCHARGE.--11 years, 15.4 ft³/s (0.436 m³/s), 11,160 acre-ft/yr (13.8 hm³/yr).

EXTREMES.--Period of record: Maximum daily discharge, 65 ft³/s (1.84 m³/s) Aug. 17-20, 1963; no flow for several days in 1965, 1969.

REMARKS.--Records excellent. Flow regulated by Miners Ranch Reservoir, capacity, 912 acre-ft (1.12 hm³). Canal completed in November 1962. Water is used for irrigation. See schematic diagram of South Fork Feather River basin.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27	11	9.6	4.9	5.9	5.4	4.9	11	25	24	27	27
2	27	11	9.6	4.9	5.6	5.4	4.9	11	27	24	28	27
3	27	11	9.3	4.9	5.6	5.4	4.6	11	26	24	28	27
4	27	11	9.3	4.6	5.6	5.4	4.6	11	25	24	28	27
5	27	11	9.3	4.6	5.4	5.2	4.6	11	25	25	28	27
6	27	11	9.0	4.6	5.2	5.2	4.6	11	23	25	28	27
7	27	11	6.9	4.6	5.2	5.2	4.6	11	26	25	28	27
8	19	11	5.4	4.6	5.2	5.2	4.6	11	26	25	28	27
9	13	11	5.4	4.6	5.4	5.2	4.9	12	26	25	28	26
10	13	11	5.4	4.6	5.4	5.2	4.9	14	25	25	28	26
11	13	10	5.4	5.4	5.4	5.2	4.9	14	25	25	28	26
12	13	10	5.4	6.2	5.4	5.2	4.9	14	25	25	28	27
13	13	10	5.4	6.2	5.6	5.2	4.9	14	25	25	28	28
14	14	9.9	5.4	6.2	5.6	4.9	4.9	17	25	25	29	28
15	14	9.9	5.4	6.9	5.4	4.9	4.9	19	25	24	29	28
16	12	9.9	5.6	5.9	5.6	4.9	4.9	19	25	24	29	28
17	11	9.9	5.4	5.9	5.6	4.9	8.4	20	25	24	29	28
18	10	9.9	5.4	5.9	5.6	4.9	11	21	25	25	29	28
19	10	9.9	5.4	5.9	5.6	4.9	11	21	25	25	27	28
20	10	10	5.4	5.9	5.6	4.9	11	21	25	25	27	29
21	11	10	5.4	5.9	5.6	4.9	11	21	25	26	27	29
22	11	9.9	5.4	5.9	5.6	4.9	11	22	25	26	27	29
23	11	9.9	5.4	5.9	5.6	4.9	11	23	25	26	27	28
24	11	9.9	5.4	5.9	5.4	4.9	11	24	25	26	27	28
25	10	9.9	5.4	5.9	5.4	4.9	11	24	25	26	27	28
26	10	9.9	5.6	5.9	5.4	4.9	11	23	25	27	27	27
27	10	9.9	5.4	5.9	5.4	4.9	11	23	25	27	28	27
28	10	9.9	5.6	6.2	5.4	4.9	11	23	25	27	28	27
29	10	9.9	5.4	6.2	-----	4.9	11	23	24	26	27	27
30	10	9.6	5.2	6.2	-----	4.9	11	23	24	26	27	27
31	11	-----	4.9	6.2	-----	4.9	-----	23	-----	26	27	-----
TOTAL	469	308.2	192.5	173.4	153.7	156.6	228.0	546	752	782	861	823
MEAN	15.1	10.3	6.21	5.59	5.49	5.05	7.60	17.6	25.1	25.2	27.8	27.4
MAX	27	11	9.6	6.9	5.9	5.4	11	24	27	27	29	29
MIN	10	9.6	4.9	4.6	5.2	4.9	4.6	11	23	24	27	26
AC-FT	930	611	382	344	305	311	452	1,080	1,490	1,550	1,710	1,630

CAL YR 1973 TOTAL 5,629.8 MEAN 15.4 MAX 30 MIN 3.5 AC-FT 11,170

WTR YR 1974 TOTAL 5,445.4 MEAN 14.9 MAX 29 MIN 4.6 AC-FT 10,800

11396350 SOUTH FORK FEATHER RIVER AT PONDEROSA DAM, CALIF.

LOCATION.--Lat 39°32'52", long 121°18'11", in NW¼SE¼ sec.33, T.20 N., R.6 E., Butte County, at entrance to Miners Ranch Canal on the left end of Ponderosa Dam, 2,800 ft (853 m) upstream from Sucker Run, and 2.6 mi (4.2 km) northwest of Forbestown.

DRAINAGE AREA.--108 mi² (280 km²).

PERIOD OF RECORD.--July 1962 to current year.

GAGE.--Water-stage recorder, high level sluice gate, and concrete spillway of Ponderosa Dam. Datum of gage is at mean sea level (levels by Oroville-Wyandotte Irrigation District). Prior to Oct. 1, 1967, at site 1,800 ft (550 m) downstream at different datum.

AVERAGE DISCHARGE (adjusted for diversion to Miners Ranch Canal).--12 years, 497 ft³/s (14.1 m³/s), 360,100 acre-ft/yr (444 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 6,810 ft³/s (193 m³/s) Mar. 30; no flow many days.

Period of record: Maximum discharge, 11,000 ft³/s (312 m³/s) Dec. 22, 1964 (gage height, 11.52 ft or 3.511 m in gage well, 12.7 ft or 3.87 m, outside from floodmarks, site and datum then in use); no flow for several months in 1968-73.

REMARKS.--Records good. Records are combined flow through sluice gate and flow over spillway. Flow regulated by several reservoirs and diversions. Water is imported from North Yuba River basin through Slate Creek tunnel. Miners Ranch Canal (see sta 11396310) diverts at Ponderosa Dam for power development and irrigation; diversion began in October 1962. See schematic diagram of South Fork Feather River basin.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36	134	992	568	383	1,880	4,070	472	355	0	270	275
2	110	134	645	508	356	1,510	3,310	460	222	238	300	275
3	117	134	520	496	383	962	2,400	454	0	295	270	270
4	100	134	460	490	472	815	1,890	454	0	236	265	250
5	114	192	460	508	460	731	1,570	834	0	265	265	265
6	110	290	427	508	454	717	1,330	2,640	0	295	265	275
7	147	394	432	496	460	745	1,130	60	197	305	265	270
8	147	330	383	484	454	745	1,010	55	632	356	270	270
9	156	275	388	484	444	717	1,000	30	652	183	270	84
10	151	275	366	478	444	697	880	196	321	275	270	6.6
11	71	888	366	472	438	745	801	300	0	275	270	210
12	88	836	366	508	449	940	738	300	0	270	270	270
13	192	520	427	562	466	836	671	300	0	255	265	260
14	121	472	405	711	460	773	593	300	0	236	265	265
15	130	366	372	1,680	460	731	562	300	0	241	265	265
16	126	460	372	1,250	460	703	556	336	0	265	270	275
17	121	490	372	1,840	472	678	532	310	0	265	270	265
18	121	490	372	1,280	460	684	496	290	0	265	275	275
19	121	520	366	1,610	612	645	490	287	0	265	275	275
20	114	520	350	1,560	556	638	484	310	0	260	275	270
21	121	228	372	1,370	526	606	496	530	0	255	275	270
22	147	310	520	1,620	526	580	514	555	0	260	275	270
23	23	405	432	970	514	568	295	565	0	265	275	265
24	246	378	432	1,010	490	562	444	411	0	265	280	101
25	228	361	460	895	484	568	490	386	0	265	280	63
26	134	366	460	752	478	619	490	386	0	270	280	86
27	134	366	520	652	484	808	490	376	0	275	275	53
28	143	361	704	556	526	1,180	484	366	0	275	270	103
29	160	350	1,360	484	-----	2,340	478	366	0	280	265	82
30	147	325	822	484	-----	6,180	472	303	0	285	265	62
31	134	-----	645	383	-----	4,640	-----	355	-----	285	265	-----
TOTAL	4,010	11,304	15,568	25,669	13,171	35,543	29,166	13,287	2,379	8,025	8,415	6,225.6
MEAN	129	377	502	828	470	1,147	972	429	79.3	259	271	208
MAX	246	888	1,360	1,840	612	6,180	4,070	2,640	652	356	300	275
MIN	23	134	350	383	356	562	295	30	0	0	265	6.6
AC-FT	7,950	22,420	30,880	50,910	26,120	70,500	57,850	26,350	4,720	15,920	16,690	12,350
MEAN a	377	597	736	1,064	699	1,313	1,175	642	336	513	523	459
AC-FT a	23,170	35,520	45,270	65,410	38,830	80,740	69,920	39,500	20,020	31,570	32,170	27,320
CAL YR 1973	TOTAL 117,994.00	MEAN 323	MAX 1,370	MIN 0	AC-FT 234,000	MEAN a 549	AC-FT a 397,400					
WTR YR 1974	TOTAL 172,762.60	MEAN 473	MAX 6,180	MIN 0	AC-FT 342,700	MEAN a 704	AC-FT a 509,400					

a Adjusted for diversion to Miners Ranch Canal.

SACRAMENTO RIVER BASIN

11396400 SUCKER RUN NEAR FORBESTOWN, CALIF.

LOCATION.--Lat 39°33'12", long 121°18'04", in NW¼NE¼ sec.33, T.20 N., R.6 E., Butte County, on left bank at upstream side of road bridge, 0.7 mi (1.1 km) upstream from confluence with South Fork Feather River, and 2.8 mi (4.5 km) northwest of Forbestown.

DRAINAGE AREA.--18.7 mi² (48.4 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 960 ft (292 m), from topographic map.

AVERAGE DISCHARGE.--9 years, 28.3 ft³/s (0.801 m³/s), 20,500 acre-ft/yr (25.3 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 955 ft³/s (27.0 m³/s) Mar. 30 (gage height, 5.33 ft or 1.625 m); minimum daily, 4.5 ft³/s (0.13 m³/s) Oct. 1.
 Period of record: Maximum discharge, 1,320 ft³/s (37.4 m³/s) Jan. 21, 1967 (gage height, 6.03 ft or 1.838 m), from rating curve extended as explained below; minimum daily, 0.40 ft³/s (0.011 m³/s) Oct. 7, 1966.
 Flood of Dec. 22, 1964, reached a stage of 7.4 ft (2.26 m), from floodmarks, discharge, 2,190 ft³/s (62 m³/s) from rating curve extended above 600 ft³/s (17.0 m³/s) on basis of computation of maximum flow over rock control.

REMARKS.--Records good except those for the period of no gage-height record, which are poor. See schematic diagram of South Fork Feather River basin.

REVISIONS (WATER YEARS).--WRD Calif. 1969: 1966-68(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.5	7.8	245	67	60	581	392	49	26	14	7.2	7.7
2	4.6	8.0	86	57	52	341	260	47	25	14	7.1	8.0
3	4.6	8.4	60	52	48	176	195	46	25	14	7.0	8.2
4	4.6	8.3	49	48	46	134	164	44	24	13	6.9	8.2
5	4.6	13	42	46	44	114	146	44	24	13	6.8	8.1
6	4.8	25	38	45	43	103	133	43	24	13	6.7	8.0
7	15	101	34	43	42	121	121	41	24	13	6.6	7.9
8	12	30	32	41	40	116	114	40	23	26	6.5	7.8
9	8.8	63	30	39	39	102	117	39	22	24	6.4	7.8
10	7.1	126	28	37	39	95	105	38	22	19	6.4	7.8
11	6.8	255	32	37	37	132	97	38	22	18	6.3	7.7
12	6.6	234	29	66	38	174	90	37	21	18	6.2	7.5
13	6.4	100	40	71	38	125	85	36	17	18	6.2	7.6
14	6.3	68	32	154	37	109	81	35	16	17	6.2	7.6
15	6.1	42	28	289	36	99	77	35	16	14	6.1	7.6
16	6.1	124	27	280	45	91	74	34	16	14	6.0	7.6
17	6.1	151	37	293	40	85	71	35	16	13	6.0	7.3
18	6.1	134	31	226	42	79	70	36	16	13	5.9	7.2
19	6.1	74	28	177	105	74	68	35	18	12	5.8	7.2
20	6.4	55	26	134	62	69	64	34	18	11	5.8	7.0
21	6.8	46	55	110	60	66	62	33	16	10	5.8	7.1
22	18	40	74	93	57	63	60	32	16	9.5	5.8	7.2
23	29	35	51	84	51	61	65	31	16	9.0	5.9	7.0
24	12	35	44	76	48	59	66	31	15	8.5	6.0	6.4
25	10	32	40	70	46	62	61	29	15	8.0	6.2	6.4
26	9.4	30	45	65	46	65	59	29	15	7.8	6.4	6.6
27	8.7	28	96	60	45	152	56	28	14	7.7	6.6	6.7
28	7.7	27	115	57	80	241	54	27	14	7.6	6.8	6.6
29	7.7	27	169	55	-----	495	51	27	14	7.6	7.1	6.7
30	7.6	92	103	53	-----	567	50	27	14	7.4	7.3	6.7
31	7.5	-----	79	59	-----	265	-----	26	-----	7.3	7.4	-----
TOTAL	258.0	2,019.5	1,825	2,984	1,366	5,016	3,108	1,106	564	401.4	199.4	221.2
MEAN	8.32	67.3	58.9	96.3	48.8	162	104	35.7	18.8	12.9	6.43	7.37
MAX	29	255	245	293	105	581	392	49	26	26	7.4	8.2
MIN	4.5	7.8	26	37	36	59	50	26	14	7.3	5.8	6.4
AC-FT	512	4,010	3,620	5,920	2,710	9,950	6,160	2,190	1,120	796	396	439
CAL YR 1973	TOTAL 14,591.9 MEAN 40.0 MAX 501 MIN 3.8 AC-FT 28,940											
WTR YR 1974	TOTAL 19,068.5 MEAN 52.2 MAX 581 MIN 4.5 AC-FT 37,820											

DATE	TIME	PEAK DISCHARGE (BASE, 300 FT ³ /S)	DATE	TIME	G.H.	DISCHARGE
11-11	1030	4.57 628	3-1	1800	5.23	905
12-1	0230	4.18 483	3-30	0400	5.33	955
1-16	2200	4.59 636	4-1	1200	4.38	553

NOTE.--No gage-height record July 19 to Sept. 9.

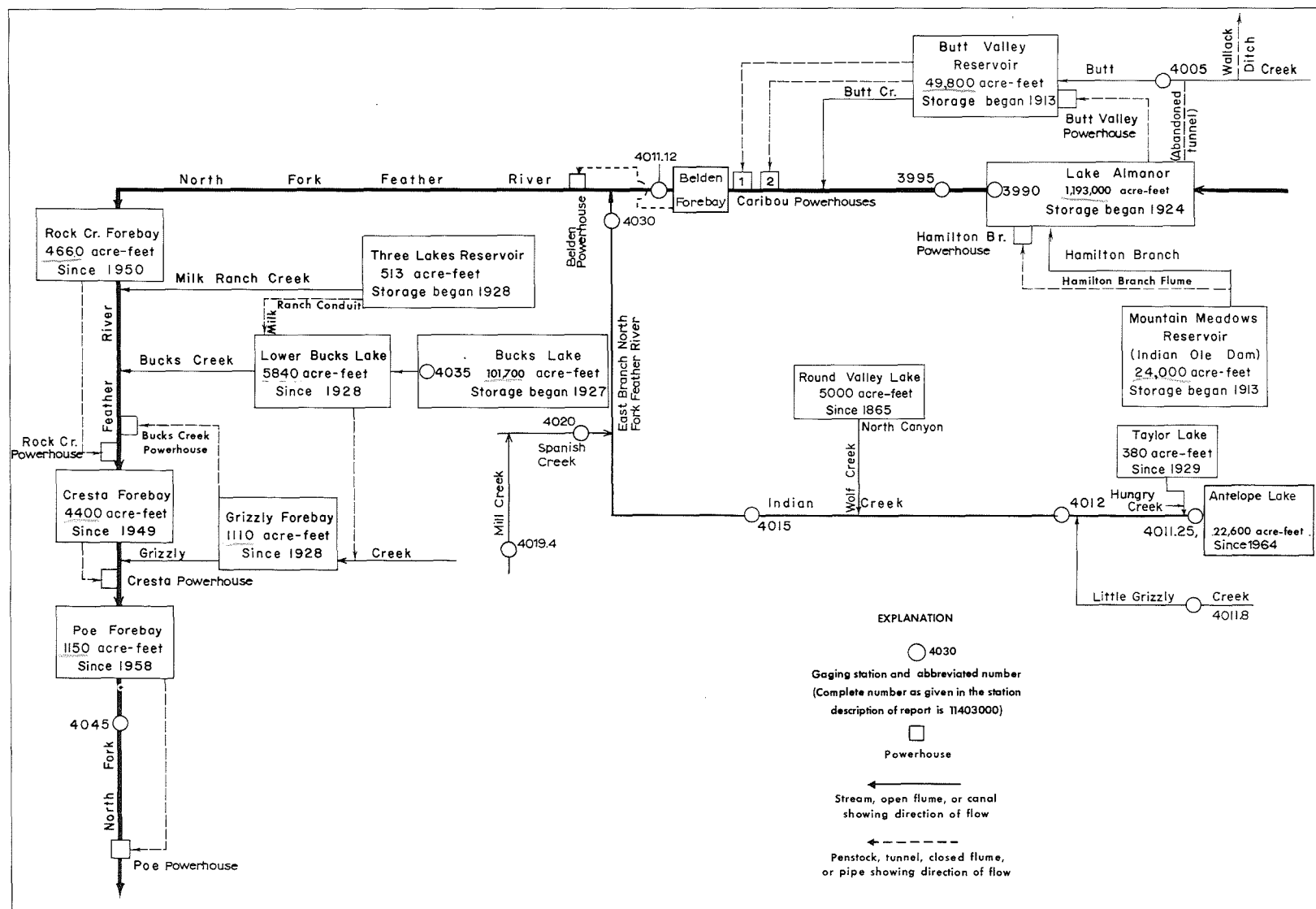


FIGURE 12.--Schematic diagram showing diversions and storage in North Fork Feather River basin.

SACRAMENTO RIVER BASIN

11399000 LAKE ALMANOR AT PRATTVILLE, CALIF.

LOCATION.--Lat 40°12'50", long 121°09'40", in SW¼NE¼ sec.11, T.27 N., R.7 E., Plumas County, Plumas National Forest, at outlet tower to No. 2 tunnel on North Fork Feather River at Prattville, 4.7 mi (7.6 km) northwest of Lake Almanor Dam, and 5.6 mi (9.0 km) northwest of Canyon Dam.

DRAINAGE AREA.--491 mi² (1,272 km²).

PERIOD OF RECORD.--July 1913 to current year. Monthly contents only for some periods, published in WSP 1315-A. Published as "near Prattville" 1937-60. Prior to October 1964, records published as usable contents.

GAGE.--Nonrecording gage monitored once daily. Datum of gage is 10.23 ft (3.118 m) below mean sea level (levels by Pacific Gas and Electric Co.). Prior to June 1, 1965, nonrecording gage at site 4.7 mi (7.6 km) southeast at same datum.

EXTREMES (at 2400).--Current year: Maximum contents observed, 1,142,000 acre-ft (1.41 km³) June 4, 5, 10, 11 (gage height, 4,493.96 ft or 1,369.759 m); minimum observed, 864,100 acre-ft (1.07 km³) Nov. 4, 5 (gage height, 4,483.20 ft or 1,366.479 m).

Period of record: Maximum contents, 1,142,000 acre-ft (1.41 km³) June 4, 5, 10, 11, 1974 (gage height, 4,493.96 ft or 1,369.759 m); minimum, 5,230 acre-ft (6.45 hm³) Feb. 5, 1918 (gage height, 4,416.1 ft or 1,346.03 m).

REMARKS.--Lake is formed by earthfill dam; storage began in July 1913; dam raised to gage height 4,455 ft (1,357.9 m) in 1917 and 4,515 ft (1,376.2 m) in 1927. Capacity, 1,184,000 acre-ft (1.46 km³), revised, between gage heights 4,495.5 ft (1,370.23 m), revised, upper storage limit and 4,422 ft (1,347.8 m), bottom of lowest outlet, of which 8,950 acre-ft (11.0 hm³) is not available for release. Water is diverted by tunnel and penstock to Butt Valley Reservoir and powerhouse for use in Caribou powerplants; some water also released down North Fork Feather River (see sta 11399500). Figures given herein represent total contents at 2400 hours. See schematic diagram of North Fork Feather River basin.

COOPERATION.--Records of contents collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

REVISIONS.--WSP 1931: Drainage area.

CAPACITY TABLE (GAGE HEIGHT, IN FEET, AND CONTENTS, IN ACRE-FEET)

4,422	8,950	4,432	34,200	4,450	220,800	4,475	672,700
4,424	10,100	4,434	49,500	4,455	294,500	4,480	787,300
4,426	11,300	4,437	74,200	4,460	376,700	4,485	908,500
4,428	13,500	4,440	101,900	4,465	467,000	4,490	1,036,000
4,430	21,200	4,445	156,400	4,470	565,500	4,495.5	1,184,000

CONTENTS, IN THOUSANDS OF ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	892.6	868.7	946.8	971.0	1,038	1,028	1,096	1,072	1,133	1,132	1,083	1,007
2	892.1	867.5	950.9	972.8	1,036	1,031	1,099	1,071	1,137	1,130	1,081	1,005
3	890.6	866.1	952.4	974.8	1,033	1,036	1,101	1,070	1,141	1,129	1,079	1,002
4	890.1	864.1	953.7	975.8	1,032	1,039	1,102	1,069	1,142	1,127	1,077	1,000
5	888.6	864.8	954.4	977.9	1,031	1,038	1,103	1,069	1,142	1,126	1,076	998.0
6	887.4	864.8	952.9	977.6	1,029	1,040	1,103	1,070	1,141	1,124	1,073	995.4
7	888.4	865.8	952.2	977.6	1,028	1,043	1,103	1,070	1,141	1,122	1,071	993.1
8	887.2	867.8	950.9	977.4	1,027	1,045	1,102	1,072	1,141	1,123	1,069	990.2
9	885.4	873.6	950.4	976.4	1,026	1,047	1,102	1,074	1,141	1,122	1,066	988.2
10	884.0	872.5	950.1	974.8	1,025	1,049	1,101	1,075	1,142	1,121	1,064	985.6
11	882.7	878.3	950.6	973.8	1,024	1,051	1,101	1,077	1,142	1,119	1,061	982.8
12	881.7	910.5	948.1	975.3	1,022	1,050	1,100	1,079	1,141	1,118	1,058	980.2
13	880.5	911.2	950.4	976.1	1,021	1,050	1,098	1,081	1,141	1,117	1,056	977.4
14	879.0	920.9	950.1	979.7	1,020	1,049	1,097	1,082	1,141	1,115	1,053	975.1
15	877.8	924.2	949.4	991.0	1,019	1,049	1,097	1,082	1,141	1,113	1,051	972.8
16	876.6	929.2	948.9	1,004	1,020	1,049	1,096	1,083	1,140	1,111	1,048	971.0
17	875.1	934.5	948.9	1,013	1,019	1,049	1,094	1,084	1,140	1,110	1,045	969.4
18	873.9	937.0	949.1	1,023	1,018	1,050	1,093	1,084	1,139	1,108	1,043	967.9
19	873.1	939.3	949.6	1,033	1,019	1,050	1,092	1,084	1,140	1,106	1,040	966.1
20	871.4	941.8	951.1	1,041	1,018	1,049	1,090	1,084	1,140	1,104	1,037	964.6
21	870.7	943.3	954.2	1,045	1,019	1,049	1,089	1,087	1,139	1,103	1,035	964.9
22	873.9	945.3	954.9	1,047	1,019	1,049	1,087	1,090	1,139	1,101	1,033	966.1
23	873.6	947.4	953.9	1,047	1,017	1,050	1,087	1,092	1,139	1,100	1,030	967.9
24	873.6	947.4	955.5	1,047	1,017	1,050	1,085	1,094	1,138	1,097	1,027	969.2
25	875.1	946.1	953.9	1,046	1,015	1,050	1,083	1,098	1,137	1,096	1,024	970.5
26	875.1	944.1	953.4	1,045	1,015	1,052	1,081	1,102	1,136	1,094	1,022	972.0
27	873.9	942.0	954.9	1,044	1,014	1,055	1,079	1,108	1,135	1,092	1,020	972.8
28	873.4	939.5	957.5	1,043	1,014	1,060	1,077	1,113	1,135	1,090	1,017	972.5
29	871.9	938.5	961.5	1,041	-----	1,068	1,075	1,118	1,133	1,088	1,015	970.7
30	870.7	941.3	964.9	1,040	-----	1,083	1,073	1,123	1,133	1,087	1,013	968.4
31	870.0	-----	968.7	1,039	-----	1,090	-----	1,128	-----	1,085	1,010	-----
MAX	892.6	947.4	968.7	1,047	1,038	1,090	1,103	1,128	1,142	1,132	1,083	1,007
MIN	870.0	864.1	946.8	971.0	1,014	1,028	1,073	1,069	1,133	1,085	1,010	964.6
(a)	4,483.44	4,486.31	4,487.39	4,490.11	4,489.14	4,492.03	4,491.40	4,493.45	4,493.63	4,491.83	4,489.00	4,487.38
(b)	-23,300	+71,300	+27,400	+70,300	-25,000	+76,000	-17,000	+55,000	+5,000	-48,000	-75,000	-41,600

CAL YR 1973 b +288,700

WTR YR 1974 b +75,100

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

b Change in contents, in acre-feet, rounded to Geological Survey standards.

11399500 NORTH FORK FEATHER RIVER NEAR PRATTVILLE, CALIF.

LOCATION.--Lat 40°10'10", long 121°05'29", in NE&SW¼ sec.28, T.27 N., R.8 E., Plumas County, Plumas National Forest, on left bank 0.5 mi (0.8 km) downstream from Almanor Dam, 4.5 mi (7.2 km) southeast of Prattville, and 9 mi (14 km) upstream from Butt Creek.

DRAINAGE AREA.--493 mi² (1,277 km²).

PERIOD OF RECORD.--June 1905 to current year (daily discharges for July 1921 to September 1936 include water diverted through Almanor-Butt Creek tunnel). Records for water year 1911 incomplete, yearly estimate published in WSP 1315-A. Published as "below Prattville" prior to 1911. Supplemental records for Almanor-Butt Creek tunnel diversion computed November 1924 to Dec. 30, 1958, as difference of flow between Butt Creek above Almanor-Butt Creek tunnel (unpublished prior to 1936 and since 1964), and Butt Creek below Almanor-Butt Creek tunnel (unpublished prior to 1936 and 1960-64).

GAGE.--Water-stage recorder and broad-crested weir. Altitude of gage is 4,380 ft (1,335 m), from topographic map. Prior to Oct. 1, 1936, nonrecording gages or water-stage recorders at several sites within 0.5 mi (0.8 km) of present site at various datums.

AVERAGE DISCHARGE (adjusted for diversion and leakage).--69 years, 913 ft³/s (25.86 m³/s), 661,500 acre-ft/yr (816 hm³/yr).

EXTREMES.--Current year: Maximum daily discharge, 339 ft³/s (9.60 m³/s) Apr. 23; minimum daily, 27 ft³/s (0.76 m³/s) Jan. 26, 27.

Period of record: Maximum discharge, 10,000 ft³/s (283 m³/s) Mar. 19, 1907, before construction of dam (gage height, 16.2 ft or 4.94 m, at former site), from rating curve extended above 3,700 ft³/s (105 m³/s); no flow Apr. 15, 16, 1914, at times January to April 1919, Apr. 21, 1923.

REMARKS.--Flow regulated by Lake Almanor 0.5 mi (0.8 km) upstream (see sta 11399000) and Mountain Meadows Reservoir since 1924, capacity, 24,000 acre-ft (29.6 hm³). Water diverted for power from Lake Almanor through old Almanor-Butt Creek tunnel to Butt Creek until Dec. 30, 1958. Diversion through new tunnel and Butt Valley powerhouse began Dec. 31, 1958. See schematic diagram of North Fork Feather River basin.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

REVISIONS (WATER YEARS).--WSP 1245: 1951 (yearly summaries). WSP 1285: 1952 (yearly summaries).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38	36	40	34	82	42	38	282	39	35	37	36
2	38	36	40	34	82	42	37	282	39	35	37	36
3	38	36	40	34	82	42	37	282	39	35	37	36
4	38	36	39	34	82	42	37	282	40	35	37	36
5	38	36	40	34	65	34	37	282	39	35	37	36
6	37	36	39	34	41	28	36	282	39	35	37	36
7	38	36	39	34	41	32	36	282	39	35	37	35
8	38	37	40	34	41	35	36	282	39	35	37	35
9	37	38	39	36	41	36	36	282	39	35	37	35
10	37	38	37	38	41	36	36	282	40	35	37	35
11	37	38	33	38	41	36	35	228	38	35	37	35
12	37	39	33	38	41	36	35	110	38	35	37	35
13	37	39	33	39	41	36	35	42	38	35	36	35
14	36	39	33	39	41	36	36	41	38	35	36	35
15	36	39	33	43	41	36	36	41	38	35	36	35
16	36	40	33	45	42	36	36	41	38	35	36	35
17	36	40	33	41	42	36	36	41	38	35	36	35
18	36	40	34	42	42	36	36	41	36	35	36	35
19	36	40	34	42	42	36	36	41	34	37	36	35
20	36	39	34	41	41	36	36	40	33	41	36	35
21	36	40	34	40	41	36	35	38	33	41	36	35
22	37	40	34	40	41	36	208	38	33	41	36	35
23	36	39	34	40	41	36	339	38	33	41	36	35
24	36	39	34	40	41	36	330	38	33	41	36	35
25	36	39	34	205	41	36	290	38	33	39	36	35
26	36	39	34	27	41	36	271	38	33	37	36	35
27	36	39	34	27	41	38	282	38	34	37	36	35
28	36	39	34	57	41	38	282	39	35	37	36	35
29	36	39	36	97	-----	42	282	39	35	37	36	35
30	36	40	35	82	-----	43	282	39	35	37	36	35
31	36	-----	34	82	-----	38	-----	39	-----	37	36	-----
TOTAL	1,137	1,151	1,103	1,491	1,340	1,144	3,324	3,908	1,098	1,133	1,128	1,056
MEAN	36.7	38.4	35.6	48.1	47.9	36.9	111	126	36.6	36.5	36.4	35.2
MAX	38	40	40	205	82	43	339	282	40	41	37	36
MIN	36	36	33	27	41	28	35	38	33	35	36	35
AC-FT	2,260	2,280	2,190	2,960	2,660	2,270	6,590	7,750	2,180	2,250	2,240	2,090
MEAN a	1,056	635	753	1,119	1,541	967	2,300	1,637	1,811	1,864	1,921	1,423
AC-FT a	64,930	37,790	46,270	68,810	85,600	59,470	136,900	100,600	107,800	114,600	118,100	84,650
CAL YR 1973	TOTAL 13,946	MEAN 38.2	MAX 136	MIN 24	AC-FT 27,660	MEAN a 661	AC-FT a 478,700					
WTR YR 1974	TOTAL 19,013	MEAN 52.1	MAX 339	MIN 27	AC-FT 37,710	MEAN a 1,417	AC-FT a 1,026,000					

a Adjusted for diversion through Butt Valley powerhouse and leakage from Almanor-Butt Creek tunnel No. 1.

11400500 BUTT CREEK BELOW ALMANOR-BUTT CREEK TUNNEL, NEAR PRATTVILLE, CALIF.

LOCATION.--Lat 40°11'12", long 121°11'11", in NW¼NW¼ sec.22, T.27 N., R.7 E., Plumas County, on right bank 400 ft (122 m) downstream from outlet of old tunnel from Lake Almanor to Butt Creek, and 2.2 mi (3.5 km) southwest of Prattville.

DRAINAGE AREA.--69.3 mi² (179.5 km²).

PERIOD OF RECORD.--October 1936 to September 1964 to current year. Published as "below tunnel No. 1" 1938-40. Records for water years 1937-38, published in WSP 1515.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 4,400 ft (1,341 m), from topographic map. Prior to Oct. 5, 1937, at site 200 ft (61 m) downstream at datum 4 ft (1.2 m) lower.

AVERAGE DISCHARGE (natural flow of Butt Creek, adjusted for leakage from Almanor-Butt Creek tunnel No. 1).--38 years (including records for sta 11400000 Butt Creek above Almanor-Butt Creek tunnel, near Prattville for water years 1960-64), 84.0 ft³/s (2.379 m³/s), 60,860 acre-ft/yr (75.0 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,020 ft³/s (57.2 m³/s) Mar. 30 (gage height, 4.23 ft or 1,289 m), from rating curve extended above 840 ft³/s (23.8 m³/s); minimum daily, 47 ft³/s (1.33 m³/s) Oct. 1.
Period of record: Maximum discharge, 3,830 ft³/s (108 m³/s) Dec. 23, 1964 (gage height, 5.87 ft or 1,789 m), from rating curve extended above 1,400 ft³/s (39.6 m³/s); minimum daily, 30 ft³/s (0.85 m³/s) Dec. 1, 2, 1936.

REMARKS.--No regulation above station. Hal-Bunger valve in conduit from Lake Almanor to Butt Valley powerhouse is opened for short periods several times a year causing sharp peaks. Wallack ditch, above station, diverts several cubic feet per second during each irrigation season into Yellow Creek basin. Leakage from Almanor-Butt Creek tunnel No. 1 was 6,550 acre-ft (8.08 hm³) during the current year. See schematic diagram of North Fork Feather River basin.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	47	55	108	162	152	178	607	465	216	85	67	61
2	48	56	114	139	141	222	489	475	215	84	68	61
3	48	56	108	148	136	184	378	479	214	83	68	61
4	50	55	102	135	134	158	334	484	250	82	67	61
5	49	59	98	129	127	144	320	498	384	81	69	61
6	50	90	99	124	120	143	303	527	371	79	70	61
7	66	157	106	118	122	140	289	564	353	77	67	60
8	57	109	106	113	119	130	287	608	341	115	120	60
9	55	170	101	109	117	126	280	624	234	111	205	60
10	53	285	98	94	116	126	250	541	150	92	205	60
11	53	613	100	93	114	130	368	358	218	86	205	60
12	53	530	97	113	112	138	454	338	323	83	203	60
13	53	241	97	166	110	139	445	311	321	78	202	59
14	53	178	94	199	110	144	444	291	346	77	202	59
15	53	160	91	748	109	157	451	279	348	77	202	59
16	53	215	90	1,060	113	172	460	260	225	76	202	59
17	52	213	127	1,020	107	196	473	257	126	75	201	56
18	51	191	117	793	107	223	482	237	120	75	201	56
19	52	140	106	913	111	223	444	216	118	74	201	57
20	55	126	102	570	104	220	441	201	113	73	201	56
21	56	117	107	405	103	217	450	191	109	72	201	56
22	113	110	101	321	102	226	473	190	105	73	200	54
23	127	103	96	277	100	232	488	195	101	72	198	54
24	70	100	94	246	100	238	460	202	99	72	196	54
25	64	96	99	222	100	249	436	215	97	70	195	54
26	60	93	103	200	102	279	415	241	93	69	142	54
27	58	90	129	184	100	396	396	269	92	67	61	54
28	57	93	150	176	86	369	401	270	90	66	61	54
29	57	98	356	165	-----	905	419	254	88	66	61	54
30	56	132	247	157	-----	1,450	439	237	86	66	61	55
31	56	-----	195	154	-----	687	-----	223	-----	67	61	-----
TOTAL	1,825	4,731	3,738	9,453	3,174	8,541	12,376	10,500	5,946	2,423	4,463	1,730
MEAN	58.9	158	121	305	113	276	413	339	198	78.2	144	57.7
MAX	127	613	356	1,060	152	1,450	607	624	384	115	205	61
MIN	47	55	90	93	86	126	250	190	86	66	61	54
AC-FT	3,620	9,380	7,410	18,750	6,300	16,940	24,550	20,830	11,790	4,810	8,850	3,430

CAL YR 1973 TOTAL 40,849 MEAN 112 MAX 613 MIN 47 AC-FT 81,020
WTR YR 1974 TOTAL 68,900 MEAN 189 MAX 1,450 MIN 47 AC-FT 136,700

11401112 NORTH FORK FEATHER RIVER BELOW BELDEN DAM, CALIF.

LOCATION.--Lat 40°04'18", long 121°09'46", in SE¼SW¼ sec.26, T.26 N., R.7 E., Plumas County, Plumas National Forest, on left bank 0.2 mi (0.3 km) downstream from Belden Dam, 0.4 mi (0.6 km) upstream from Deadwood Canyon, and 6.2 mi (10.0 km) northeast of Belden.

DRAINAGE AREA.--612 mi² (1,585 km²).

PERIOD OF RECORD.--October 1969 to current year. July 1959 to September 1969 in files of Pacific Gas and Electric Co.

GAGE.--Water-stage recorder. Datum of gage is 2,811.00 ft (856.793 m) above mean sea level (levels by Pacific Gas and Electric Co.).

AVERAGE DISCHARGE (including diversion to Belden powerhouse).--5 years, 1,305 ft³/s (36.96 m³/s), 945,500 acre-ft/yr (1.17 km³/yr).

EXTREMES.--Current year; Maximum discharge, 2,960 ft³/s (83.8 m³/s) Apr. 30 (gage height, 8.81 ft or 2.685 m); minimum daily, 56 ft³/s (1.59 m³/s) Sept. 18.
Period of record: Maximum discharge, 2,960 ft³/s (83.8 m³/s) Apr. 30, 1974 (gage height, 8.81 ft or 2.685 m); minimum daily, 12 ft³/s (0.34 m³/s) June 15, 1971.

REMARKS.--Flow regulated by Belden Reservoir 0.2 mi (0.3 km) upstream, Lake Almanor (see sta 11399000), Butt Valley Reservoir, and Mountain Meadows Reservoir, combined capacity, 1,267,000 acre-ft (1.56 km³), revised. Diversion through tunnel to Belden powerhouse began on Aug. 27, 1969. See schematic diagram of North Fork Feather River basin.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	61	61	66	64	65	73	719	705	133	138	133	132
2	65	61	65	66	65	74	680	707	136	137	129	137
3	65	59	64	65	65	71	645	695	136	135	135	107
4	66	61	66	65	66	70	516	694	193	135	135	59
5	65	62	65	65	65	68	543	698	361	135	133	59
6	66	61	63	64	66	69	515	680	220	136	133	61
7	65	61	64	63	65	68	509	661	140	132	133	60
8	65	61	63	64	65	67	493	615	140	136	135	60
9	62	61	62	64	65	69	500	686	140	138	133	60
10	62	62	60	64	64	69	475	682	139	135	133	60
11	61	65	63	65	64	68	507	655	140	135	135	60
12	62	66	66	64	65	68	472	521	140	137	135	60
13	62	65	66	63	66	68	466	295	140	136	135	59
14	61	65	65	63	128	69	465	134	139	137	135	59
15	59	64	66	67	69	70	467	136	132	135	138	59
16	58	64	65	69	67	69	469	137	136	135	134	59
17	60	64	64	70	68	70	485	137	137	136	135	59
18	60	63	64	67	70	68	521	275	134	134	135	56
19	60	63	66	368	70	68	489	751	132	135	133	60
20	60	64	63	1,600	68	69	478	136	135	136	135	71
21	59	64	64	1,620	67	68	464	132	135	135	135	69
22	61	63	62	503	67	70	587	231	135	134	138	71
23	66	63	62	402	67	67	775	133	134	135	136	72
24	63	63	61	413	68	68	745	134	134	135	136	74
25	60	63	63	534	69	69	705	132	135	136	135	75
26	61	63	63	434	68	67	665	134	134	137	136	77
27	63	65	64	435	68	68	672	133	132	135	132	77
28	61	65	64	383	69	69	671	130	136	135	136	451
29	62	64	66	78	-----	658	1,110	133	137	135	135	1,570
30	62	63	66	64	-----	1,380	2,300	133	137	135	136	1,390
31	62	-----	65	65	-----	854	-----	133	-----	136	138	-----
TOTAL	1,925	1,889	1,986	8,071	1,929	4,823	19,108	11,558	4,452	4,201	4,175	5,323
MEAN	62.1	63.0	64.1	260	68.9	156	637	373	148	136	135	177
MAX	66	66	66	1,620	128	1,380	2,300	751	361	138	138	1,570
MIN	58	59	60	63	64	67	464	130	132	132	129	56
AC-FT	3,820	3,750	3,940	16,010	3,830	9,570	37,900	22,930	8,830	8,330	8,280	10,560
MEAN a	1,097	920	914	1,720	1,756	1,594	2,920	2,236	2,099	1,771	2,154	1,344
AC-FT a	67,450	54,770	56,190	105,800	97,500	98,020	173,700	137,500	124,900	108,900	132,400	79,990
CAL YR 1973	TOTAL 35,885	MEAN 98.3	MAX 829	MIN 48	AC-FT 71,180	MEAN a 748	AC-FT a 541,500					
WTR YR 1974	TOTAL 69,440	MEAN 190	MAX 2,300	MIN 56	AC-FT 137,700	MEAN a 1,709	AC-FT a 1,237,000					

a Adjusted for diversion through Belden powerhouse.

11401125 INDIAN CREEK NEAR BOULDER CREEK GUARD STATION, NEAR TAYLORSVILLE, CALIF.

LOCATION (revised).--Lat 40°10'47", long 120°36'27", in SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.22, T.27 N., R.12 E., Plumas County, on left bank 150 ft (46 m) downstream from Antelope Dam, 1.0 mi (1.6 km) upstream from Cold Stream, 2.2 mi (3.5 km) south of Boulder Creek Guard Station, 12.1 mi (19.5 km) northeast of Genesee, and 17.1 mi (27.5 km) northeast of Taylorsville.

DRAINAGE AREA.--68.6 mi² (177.7 km²).

PERIOD OF RECORD.--October 1965 to current year. June 1961 to September 1965 in reports of California Department of Water Resources.

GAGE.--Water-stage recorder and steel-lipped weir. Supplementary water-stage recorder on dam and concrete spillway. Altitude of gage is 4,930 ft (1,502 m), from topographic map. October 1965 to September 1968, at site 0.9 mi (1.4 km) downstream at different datum.

AVERAGE DISCHARGE.--9 years, 70.3 ft³/s (1.991 m³/s), 50,930 acre-ft/yr (62.8 hm³/yr).

EXTREMES.--Current year: Maximum daily discharge, 491 ft³/s (13.91 m³/s) May 10 (includes flow over spillway); minimum daily, 10 ft³/s (0.28 m³/s) many days.

Period of record: Maximum discharge, 828 ft³/s (23.4 m³/s) May 24, 1967 (gage height, 6.31 ft or 1.923 m, previous site and datum) and Jan. 24, 1970 (includes flow over spillway); no flow for several months in 1971-72 (caused by draining of Antelope Lake).

REMARKS.--Flow regulated since Nov. 25, 1963 by Antelope Lake, capacity, 22,500 acre-ft (27.7 hm³) and storage in Taylor Lake since 1929, capacity, 380 acre-ft (469,000 m³). Some diversions for irrigation upstream. See schematic diagram of North Fork Feather River basin. Records since October 1968 are combined flow of release from Antelope Dam and flow over spillway.

COOPERATION.--Records furnished by California Department of Water Resources and reviewed by Geological Survey.

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	10	10	84	90	86	336	246	196	14	10	10
2	10	10	10	67	86	117	315	285	182	10	10	10
3	10	10	10	60	82	113	271	301	174	10	10	10
4	10	10	10	52	80	108	240	312	163	10	10	10
5	10	10	10	51	74	104	225	322	153	10	10	10
6	10	10	10	51	67	100	216	340	143	10	10	10
7	10	10	10	48	65	96	207	372	133	10	10	10
8	10	10	10	45	65	94	201	422	124	10	10	10
9	10	10	10	41	64	92	207	474	115	10	10	10
10	10	10	10	38	64	90	201	491	106	10	10	10
11	10	10	10	36	62	88	193	458	98	10	10	10
12	10	10	10	36	60	86	193	422	90	10	10	10
13	10	10	10	38	60	84	193	380	82	10	10	10
14	10	10	10	46	60	84	190	343	151	10	10	10
15	10	10	10	122	59	94	193	322	172	10	10	10
16	10	10	10	237	62	106	201	301	153	10	10	10
17	10	10	10	350	60	119	222	275	151	10	10	10
18	10	10	10	329	59	148	243	252	151	10	10	10
19	10	10	10	434	65	168	243	234	151	10	10	10
20	10	10	10	406	64	174	234	216	91	10	10	10
21	10	10	10	305	62	174	231	201	22	10	10	10
22	10	10	10	231	64	174	240	198	22	10	10	10
23	10	10	10	190	59	174	259	198	22	10	10	10
24	10	10	12	163	57	174	249	207	22	10	10	10
25	10	10	13	143	57	179	234	219	22	10	10	10
26	10	10	16	124	60	179	219	240	22	10	10	10
27	10	10	26	115	62	190	201	259	22	10	10	10
28	10	10	32	104	65	210	193	268	21	10	10	10
29	10	10	61	98	-----	231	193	255	21	10	10	10
30	10	10	94	90	-----	384	210	240	21	10	10	10
31	10	-----	92	84	-----	387	-----	219	-----	10	10	-----
TOTAL	310	300	576	4,218	1,834	4,607	6,753	9,272	2,996	314	310	300
MEAN	10.0	10.0	18.6	136	65.5	149	225	299	99.9	10.1	10.0	10.0
MAX	10	10	94	434	90	387	336	491	196	14	10	10
MIN	10	10	10	36	57	84	190	198	21	10	10	10
AC-FT	615	595	1,140	8,370	3,640	9,140	13,390	18,390	5,940	623	615	595

CAL YR 1973 TOTAL 13,557 MEAN 37.1 MAX 235 MIN 10 AC-FT 26,890
WTR YR 1974 TOTAL 31,790 MEAN 87.1 MAX 491 MIN 10 AC-FT 63,060

11401180 LITTLE GRIZZLY CREEK NEAR GENESEE, CALIF.

LOCATION.--Lat 40°00'50", long 120°45'11", in NE¼SW¼ sec.21, T.25 N., R.11 E., Plumas County, Plumas National Forest, on right bank 2 mi (3 km) south of Genesee, and 2.5 mi (4.0 km) upstream from Indian Creek.

DRAINAGE AREA.--29.6 mi² (76.7 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 4,180 ft (1,274 m), from topographic map.

AVERAGE DISCHARGE.--10 years, 57.4 ft³/s (1.626 m³/s), 41,590 acre-ft/yr (51.3 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,200 ft³/s (34.0 m³/s) Mar. 30 (gage height, 5.33 ft or 1.625 m); minimum daily, 6.5 ft³/s (0.184 m³/s) Oct. 18, 19.
Period of record: Maximum discharge, 1,800 ft³/s (51.0 m³/s) Jan. 24, 1970 (gage height, 6.15 ft or 1.875 m), from rating curve extended above 500 ft³/s (14.2 m³/s) on basis of slope-area measurement at gage height, 5.90 ft (1.798 m); minimum daily, 3.5 ft³/s (0.099 m³/s) Sept. 10, 11, 30, 1966.

REMARKS.--Records poor. No known diversion or regulation above station. See schematic diagram of North Fork Feather River basin. Records of water temperatures for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.4	8.0	93	72	49	203	316	170	180	26	16	9.4
2	7.2	7.7	56	54	44	180	289	180	170	24	15	9.4
3	7.3	8.1	39	51	42	100	225	180	165	23	15	9.0
4	7.2	7.4	31	44	40	72	181	180	160	22	15	9.1
5	7.2	10	27	40	37	61	157	195	150	22	17	9.1
6	7.3	30	24	36	35	59	134	225	145	21	16	8.9
7	10	68	25	34	34	56	124	250	140	23	15	8.7
8	9.6	36	26	30	32	51	121	330	130	55	14	8.6
9	8.3	38	27	29	32	48	123	380	120	67	14	8.4
10	7.7	115	27	27	31	49	109	370	110	57	13	8.4
11	7.5	300	28	26	31	50	108	340	98	50	13	8.1
12	7.3	228	28	28	30	58	111	310	90	43	12	8.1
13	7.2	106	29	49	29	62	109	295	82	38	12	8.4
14	7.1	64	29	71	29	67	112	275	75	34	12	8.3
15	6.9	43	25	224	28	81	124	250	82	32	12	8.2
16	6.9	51	24	272	29	94	139	230	82	30	11	7.8
17	6.8	72	34	399	27	106	158	210	80	28	11	7.6
18	6.5	81	43	290	28	117	176	190	76	27	11	7.5
19	6.5	53	40	481	31	114	155	175	69	25	11	7.4
20	7.1	38	34	346	29	107	149	160	62	24	11	7.1
21	7.0	29	33	225	28	100	156	150	55	23	11	7.1
22	23	24	31	161	27	98	177	145	52	22	10	7.3
23	31	20	28	126	26	99	181	145	48	21	10	7.3
24	13	18	26	107	26	99	180	145	45	20	10	7.1
25	11	17	25	92	26	103	170	160	42	19	9.7	7.1
26	9.9	15	27	80	28	104	155	180	40	18	9.6	7.0
27	9.4	14	46	71	28	133	140	205	37	18	9.8	7.0
28	8.8	14	72	64	32	156	135	230	34	17	9.8	7.0
29	8.4	17	205	58	-----	334	140	225	30	17	9.8	7.1
30	8.0	40	147	54	-----	855	155	200	27	16	9.5	7.2
31	7.9	-----	98	51	-----	430	-----	190	-----	16	9.4	-----
TOTAL	286.4	1,572.2	1,427	3,692	888	4,246	4,709	6,870	2,676	878	374.6	238.7
MEAN	9.24	52.4	46.0	119	31.7	137	157	222	89.2	28.3	12.1	7.96
MAX	31	300	205	481	49	855	316	380	180	67	17	9.4
MIN	6.5	7.4	24	26	26	48	108	145	27	16	9.4	7.0
AC-FT	568	3,120	2,830	7,320	1,760	8,420	9,340	13,630	5,310	1,740	743	473
CAL YR 1973	TOTAL	19,495.8	MEAN	53.4	MAX	344	MIN	6.5	AC-FT	38,670		
WTR YR 1974	TOTAL	27,857.9	MEAN	76.3	MAX	855	MIN	6.5	AC-FT	55,260		

PEAK DISCHARGE (BASE, 300 FT³/S)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-11	1130	4.00	485	3-1	1830	3.58	356
1-17	0230	4.41	520	3-30	0530	5.33	1,200
1-19	1030	4.16	524				

NOTE.--No gage-height record Apr. 24 to June 19, June 26 to Aug. 14.

11401500 INDIAN CREEK NEAR CRESCENT MILLS, CALIF.

LOCATION.--Lat 40°04'42", long 120°55'36", in SW¼SW¼ sec.25, T.26 N., R.9 E., Plumas County, on left bank 0.8 mi (1.3 km) upstream from Dixie Creek, and 1.5 mi (2.4 km) south of Crescent Mills.

DRAINAGE AREA.--739 mi² (1,914 km²).

PERIOD OF RECORD.--January 1906 to December 1909, September 1911 to March 1918, October 1930 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 3,500 ft (1,070 m), from topographic map. Prior to March 1918, nonrecording gage at site 800 ft (240 m) upstream at different datum.

AVERAGE DISCHARGE.--53 years (1906-9, 1911-17, 1930-74), 559 ft³/s (15.8 m³/s), 405,000 acre-ft/yr (499 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 11,800 ft³/s (3,342 m³/s) Mar. 30 (gage height, 13.46 ft or 4.103 m); minimum daily, 24 ft³/s (0.680 m³/s) Sept. 3.
Period of record: Maximum discharge observed, 25,000 ft³/s (708 m³/s) Mar. 19, 1907 (gage height, 20.2 ft or 6.16 m, site and datum then in use); minimum, 1.7 ft³/s (0.048 m³/s) Aug. 25, 1931.

REMARKS.--Records good. Natural flow affected by storage in Round Valley Reservoir since 1865, capacity, 5,000 acre-ft (6.2 hm³), Taylor Lake since 1929, capacity, 380 acre-ft (469,000 m³), and Antelope Lake since November 1963 (see sta 11401120). Diversions above station for irrigation of about 11,800 acres (47.8 km²) of which 9,700 acres (39.2 km²) are in Indian and Genesee Valleys. See schematic diagram of North Fork Feather River basin. Records of water temperatures for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1445: 1906-9. WSP 1931: 1956, 1958(M). WRD Calif. 1968: 1967.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37	82	2,360	1,380	893	3,310	7,070	1,510	975	134	42	30
2	36	80	1,420	1,010	803	4,890	6,000	1,670	950	122	47	33
3	36	79	1,020	925	742	3,060	4,790	1,680	934	108	49	24
4	36	80	834	786	725	1,890	3,610	1,680	903	108	71	29
5	36	91	712	750	682	1,590	2,950	1,700	851	111	68	27
6	40	170	656	709	598	1,550	2,570	1,790	807	104	70	25
7	46	232	665	660	585	1,530	2,290	1,950	751	97	66	28
8	52	271	720	598	577	1,400	2,180	2,220	662	152	59	35
9	65	246	696	549	554	1,220	2,230	2,440	598	321	60	36
10	60	825	647	501	536	1,190	2,060	2,370	559	244	52	35
11	56	2,790	761	472	519	1,210	1,880	2,140	545	207	49	35
12	54	3,510	706	556	511	1,450	1,830	1,970	523	171	44	32
13	54	2,200	836	1,010	499	1,550	1,720	1,790	480	140	45	29
14	53	1,440	732	1,260	488	1,670	1,660	1,630	446	118	35	29
15	52	970	656	3,720	474	2,140	1,670	1,530	527	107	41	33
16	51	1,120	612	5,690	517	2,390	1,720	1,440	488	101	42	33
17	51	1,490	786	7,630	488	2,700	1,790	1,340	479	77	37	35
18	47	1,750	1,020	6,980	482	2,990	1,920	1,280	446	66	40	36
19	43	1,130	839	7,100	660	3,050	1,870	1,170	447	63	36	35
20	52	849	744	6,880	564	2,640	1,780	1,050	446	64	35	34
21	58	723	877	5,000	550	2,300	1,670	976	317	62	36	32
22	88	608	893	3,110	540	2,150	1,730	935	242	66	37	29
23	276	515	747	2,210	479	2,060	1,820	919	223	67	37	31
24	174	456	678	1,800	483	1,960	1,720	927	210	58	32	28
25	121	409	642	1,570	495	1,960	1,610	990	188	55	32	32
26	101	375	634	1,370	540	1,890	1,470	1,110	182	61	33	42
27	90	347	853	1,170	570	2,440	1,350	1,240	168	60	33	33
28	85	327	1,180	1,100	936	3,020	1,280	1,270	170	58	28	25
29	83	368	2,530	1,010	-----	4,340	1,270	1,200	148	63	27	30
30	80	933	2,910	931	-----	9,540	1,340	1,110	135	59	26	28
31	77	-----	1,820	910	-----	10,100	-----	1,030	-----	58	27	-----
TOTAL	2,190	24,466	31,186	69,347	16,490	85,180	68,850	46,057	14,800	3,282	1,336	943
MEAN	70.6	816	1,006	2,237	589	2,748	2,295	1,486	493	106	43.1	31.4
MAX	276	3,510	2,910	7,630	936	10,100	7,070	2,440	975	321	71	42
MIN	36	79	612	472	474	1,190	1,270	919	135	55	26	24
AC-FT	4,340	48,530	61,860	137,500	32,710	169,000	136,600	91,350	29,360	6,510	2,650	1,870
CAL YR 1973	TOTAL	201,787	MEAN	553	MAX	3,510	MIN	17	AC-FT	400,200		
WTR YR 1974	TOTAL	364,127	MEAN	998	MAX	10,100	MIN	24	AC-FT	722,200		

PEAK DISCHARGE (BASE, 1,500 FT³/S)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-12	1200	8.31	3,830	3-2	0500	9.48	5,320
11-18	0300	6.48	1,950	3-19	0530	7.87	3,300
12-1	0830	7.30	2,720	3-30	2200	13.46	11,800
12-29	2230	8.25	3,760	5-10	0100	7.10	2,520
1-17	1530	11.43	8,140				

11402000 SPANISH CREEK ABOVE BLACKHAWK CREEK, AT KEDDIE, CALIF.

LOCATION---Lat 40°00'11", long 120°57'12", in SE&NE¼ sec.27, T.25 N., R.9 E., Plumas County, on right bank 200 ft (61 m) upstream from Blackhawk Creek, and 0.9 mi (1.4 km) southeast of Keddle.

DRAINAGE AREA--184 mi² (477 km²).

PERIOD OF RECORD--October 1933 to current year. Prior to October 1953, published as "at Keddle." Records for October 1911 to September 1933 at site 1.2 mi (1.9 km) downstream not equivalent owing to inflow.

GAGE--Water-stage recorder. Datum of gage is 3,129.86 ft (953.981 m) above mean sea level.

AVERAGE DISCHARGE--41 years, 274 ft³/s (7.76 m³/s), 198,500 acre-ft/yr (245 hm³/yr).

EXTREMES--Current year: Maximum discharge, 10,800 ft³/s (306 m³/s) Mar. 30 (gage height, 11.31 ft or 3.447 m); minimum daily, 33 ft³/s (0.93 m³/s) Sept. 25.

Period of record: Maximum discharge, 15,400 ft³/s (436 m³/s) Dec. 22, 1964 (gage height, 13.53 ft or 4.124 m), from rating curve extended above 5,200 ft³/s (147 m³/s) on basis of slope-area measurement at gage height 12.47 ft (3.801 m); minimum, 3.8 ft³/s (0.11 m³/s) Aug. 12, 1934.

REMARKS--Records excellent. Flow regulated by five small reservoirs having a combined capacity of 800 acre-ft (986,000 m³). Approximately 4,600 acres (18.6 km²) irrigated above station (from information furnished by U.S. Forest Service). City of Quincy diverts about 450 acre-ft (555,000 m³) annually for municipal supply. See schematic diagram of North Fork Feather River basin.

REVISIONS (WATER YEARS)--WSP 1041: 1938(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	45	69	2,250	620	457	4,100	2,790	611	413	129	61	46
2	41	67	839	495	396	2,950	2,290	660	416	122	62	47
3	40	70	560	446	362	1,350	1,610	622	420	117	63	48
4	42	69	455	387	342	896	1,250	631	409	111	63	45
5	43	92	388	363	321	732	1,070	658	359	105	69	50
6	45	240	350	340	298	689	927	720	347	104	68	49
7	51	367	352	309	285	735	831	815	341	100	63	50
8	61	281	352	285	273	697	792	930	306	166	59	50
9	57	629	324	267	263	598	823	976	286	196	59	49
10	55	1,410	302	251	256	572	714	883	280	157	56	53
11	52	4,030	414	240	249	652	647	787	269	136	56	53
12	52	3,550	380	287	248	1,010	644	732	258	126	56	53
13	51	1,460	540	777	243	878	612	654	251	115	52	52
14	51	975	466	1,280	236	818	593	589	245	108	50	51
15	50	677	377	5,990	229	906	611	571	236	107	48	49
16	49	1,580	330	5,490	265	1,000	643	534	238	101	50	46
17	55	2,020	559	5,610	242	1,090	670	500	221	96	44	40
18	58	1,820	551	3,780	233	1,110	733	479	204	87	51	41
19	61	847	437	5,060	383	1,020	619	425	223	85	50	44
20	70	600	374	2,770	309	873	575	380	213	84	48	42
21	71	473	547	1,760	299	782	578	355	196	87	49	39
22	132	384	587	1,260	287	741	634	356	187	81	50	37
23	325	319	459	995	254	716	668	367	176	82	52	39
24	148	283	394	822	245	693	596	386	163	74	49	36
25	106	257	356	714	242	730	525	433	156	73	47	33
26	91	239	345	624	279	815	479	497	146	71	46	42
27	82	221	534	550	298	1,610	437	556	136	69	44	42
28	77	210	712	505	572	2,210	421	561	135	67	48	39
29	73	213	1,680	465	-----	4,660	443	494	133	66	48	40
30	70	907	1,200	433	-----	8,170	510	457	138	68	48	43
31	69	-----	789	437	-----	3,620	-----	425	-----	67	47	-----
TOTAL	2,273	24,359	18,203	43,612	8,366	47,423	24,735	18,044	7,501	3,157	1,656	1,348
MEAN	73.3	812	587	1,407	299	1,530	825	582	250	102	53.4	44.9
MAX	325	4,030	2,250	5,990	572	8,170	2,790	976	420	196	69	53
MIN	40	67	302	240	229	572	421	355	133	66	44	33
AC-FT	4,510	48,320	36,110	86,500	16,590	94,060	49,060	35,790	14,880	6,260	3,280	2,670

CAL YR 1973 TOTAL 133,973 MEAN 367 MAX 4,220 MIN 25 AC-FT 265,700
WTR YR 1974 TOTAL 200,677 MEAN 550 MAX 8,170 MIN 33 AC-FT 398,000

PEAK DISCHARGE (BASE, 1,700 FT ³ /S)							
DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-11	1300	8.22	5,510	1-16	2330	9.89	8,260
11-17	1830	6.06	2,670	1-19	0500	8.57	6,050
12-1	0430	6.81	3,580	3-1	2030	9.21	7,100
12-29	1100	5.74	2,310	3-30	0600	11.31	10,800

SACRAMENTO RIVER BASIN

11403000 EAST BRANCH OF NORTH FORK FEATHER RIVER NEAR RICH BAR, CALIF.

LOCATION.--Lat 40°00'38", long 121°13'03", in SW¼NE¼ sec.20, T.25 N., R.7 E., Plumas County, Plumas National Forest, on left bank 0.5 mi (0.8 km) upstream from mouth, and 1.3 mi (2.1 km) west of Rich Bar.

DRAINAGE AREA.--1,025 mi² (2,655 km²).

PERIOD OF RECORD.--October 1950 to September 1961, 1965-67 (annual maximum), December 1967 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 2,300 ft (701 m), from topographic map. Prior to Nov. 29, 1950, at site 30 ft (9 m) downstream at same datum.

AVERAGE DISCHARGE.--17 years (1950-61, 1968-74), 1,140 ft³/s (32.28 m³/s), 825,900 acre-ft/yr (1,020 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 19,200 ft³/s (544 m³/s) Mar. 30 (gage height, 12.84 ft or 3.914 m); minimum daily, 99 ft³/s (2.80 m³/s) Sept. 3, 4.

Period of record: Maximum discharge, 48,300 ft³/s (1,370 m³/s) Dec. 22, 1964 (gage height, 16.56 ft or 5.048 m), from rating curve extended above 15,000 ft³/s (425 m³/s) on basis of study of upstream and downstream peak discharges; minimum, 39 ft³/s (1.10 m³/s) Sept. 6, 7, 1955, July 28, Aug. 23, 1961.

CORRECTIONS.--The maximum discharge for the period of record is 48,300 ft³/s (1,370 m³/s) Dec. 22, 1964 (gage height, 16.56 ft or 5.048 m); the previously published figure was not the maximum.

REMARKS.--No storage or diversion between stations on Indian and Spanish Creeks and station near Rich Bar.

COOPERATION.--Records furnished by Pacific Gas and Electric Co. and reviewed by Geological Survey.

REVISIONS (WATER YEARS).--WSP 1245: 1951(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	106	168	5,070	2,450	1,600	9,680	11,400	2,460	1,620	334	137	101
2	104	171	2,850	1,910	1,420	9,470	9,560	2,700	1,600	312	143	106
3	105	165	2,040	1,730	1,310	5,160	7,290	2,650	1,590	290	147	99
4	102	168	1,700	1,510	1,260	3,280	5,550	2,660	1,540	280	169	99
5	101	203	1,440	1,400	1,180	2,730	4,610	2,720	1,410	274	175	105
6	101	431	1,230	1,300	1,060	2,620	4,010	2,910	1,350	266	176	101
7	110	832	1,160	1,180	1,030	2,670	3,580	3,220	1,280	252	164	106
8	129	795	1,210	1,060	1,000	2,480	3,410	3,670	1,140	410	151	113
9	135	923	1,180	964	963	2,150	3,510	3,960	1,040	624	152	112
10	140	2,640	1,100	896	934	2,080	3,170	3,740	994	488	139	117
11	133	7,650	1,300	853	906	2,220	2,890	3,360	963	418	136	117
12	126	7,960	1,330	1,000	896	3,020	2,830	3,110	924	367	131	114
13	124	4,640	1,600	2,220	877	2,910	2,670	2,810	870	319	126	111
14	121	3,230	1,600	3,250	855	2,940	2,580	2,550	827	286	113	111
15	120	2,320	1,390	13,100	830	3,550	2,620	2,420	894	273	116	115
16	116	3,080	1,210	14,200	929	3,940	2,720	2,270	858	258	120	115
17	114	3,880	1,480	16,400	864	4,390	2,830	2,120	822	226	105	115
18	118	4,420	1,900	12,900	844	4,720	3,060	2,020	763	201	119	115
19	114	2,750	1,600	11,900	1,260	4,640	2,830	1,830	794	195	114	115
20	119	2,020	1,330	9,510	1,040	4,000	2,670	1,640	777	195	110	115
21	135	1,710	1,630	6,840	1,020	3,520	2,570	1,530	622	197	112	115
22	150	1,410	1,950	4,750	986	3,300	2,720	1,490	533	192	115	115
23	599	1,150	1,630	3,610	874	3,170	2,860	1,490	497	194	118	115
24	438	954	1,440	2,950	864	3,040	2,650	1,530	463	173	108	115
25	291	837	1,270	2,550	871	3,090	2,430	1,660	430	168	105	115
26	232	781	1,190	2,280	971	3,160	2,210	1,880	409	171	104	115
27	207	718	1,540	2,010	1,030	4,940	2,030	2,100	379	167	101	115
28	192	681	2,160	1,860	1,830	6,450	1,930	2,140	380	162	105	115
29	182	690	4,060	1,690	-----	11,600	1,960	1,970	355	165	102	115
30	174	1,850	4,700	1,530	-----	22,200	2,130	1,820	349	165	101	115
31	170	-----	3,180	1,450	-----	15,700	-----	1,690	-----	162	100	-----
TOTAL	5,108	59,227	58,470	131,253	29,504	158,820	107,280	74,120	26,473	8,184	3,914	3,352
MEAN	165	1,974	1,886	4,234	1,054	5,123	3,576	2,391	882	264	126	112
MAX	599	7,960	5,070	16,400	1,830	22,200	11,400	3,960	1,620	624	176	117
MIN	101	165	1,100	853	830	2,080	1,930	1,490	349	162	100	99
AC-FT	10,130	117,500	116,000	260,300	58,520	315,000	212,800	147,000	52,510	16,230	7,760	6,650

CAL YR 1973 TOTAL 398,420 MEAN 1,092 MAX 7,960 MIN 83 AC-FT 790,300
WTR YR 1974 TOTAL 665,705 MEAN 1,824 MAX 22,200 MIN 99 AC-FT 1,320,000

NOTE.--No gage-height record Feb. 1 to Sept. 30.

11403500 BUCKS LAKE NEAR BUCKS LODGE, CALIF.

LOCATION.--Lat 39°53'45", long 121°12'10", in NW¼ sec.33, T.24 N., R.7 E., Plumas County, Plumas National Forest, in intake tower No. 2 upstream from dam on Bucks Creek, 2 mi (3 km) northwest of Bucks Lodge, and 15 mi (24 km) west of Quincy.

DRAINAGE AREA.--28.6 mi² (74.1 km²).

PERIOD OF RECORD.--1927-28 (year-end contents only, published in WSP 1315-A), October 1928 to current year.

Prior to October 1954, published as Bucks Creek Reservoir near Bucks Ranch.

GAGE.--Nonrecording gage monitored once daily. Datum of gage is at mean sea level (levels by Feather River Power Co.). Prior to June 6, 1974, water-stage recorder at same site and datum.

EXTREMES (at 2400).--Current year: Maximum contents, 105,600 acre-ft (130 hm³) July 1, 2, 9, 10 (elevation, 5,157.0 ft or 1,571.85 m); minimum, 59,300 acre-ft (73.1 hm³) Oct. 1, 2 (elevation, 5,129.5 ft or 1,563.47 m). Period of record: Maximum contents, 105,800 acre-ft (130 hm³) June 23, 1938 (elevation, 5,157.1 ft or 1,571.88 m); minimum, 12,330 acre-ft (15.2 hm³) Feb. 27, 1929 (elevation, 5,090.7 ft or 1,551.65 m).

NOTE.--Prior to 1974, maximum and minimum instantaneous contents were published.

REMARKS.--Reservoir is formed by concrete-faced, rockfill dam completed in 1927; storage began in May 1927. Capacity, 101,400 acre-ft (125 hm³) between elevations 5,064.75 ft (1,543.736 m), sill of outlet gate and 5,154.85 ft (1,571.198 m), spillway crest, above mean sea level. Released water flows down Bucks Creek to Lower Bucks Lake, where it enters tunnel that discharges into Grizzly Creek, then to Bucks Creek powerhouse. Figures given herein represent total contents, of which 274 acre-ft (338,000 m³) is not available for release. See schematic diagram of North Fork Feather River basin.

COOPERATION.--Records of contents collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

CAPACITY TABLE (ELEVATION, IN FEET, AND CONTENTS, IN ACRE-FEET)

5,064.75	274	5,075	2,400	5,100	21,200	5,125	52,500
5,066	388	5,080	4,740	5,105	26,600	5,130	60,000
5,068	635	5,085	7,920	5,110	32,500	5,140	75,900
5,070	977	5,090	11,700	5,115	38,800	5,150	93,000
5,072	1,440	5,095	16,200	5,120	45,500	5,160	111,200

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	59,311	60,073	84,008	90,816	103,209	101,744	103,026	101,744	105,236	105,605	100,651	84,448
2	59,311	60,134	84,281	91,008	103,209	102,109	103,209	101,744	105,236	105,605	100,651	83,937
3	59,342	60,164	84,521	91,201	103,026	102,293	103,209	101,926	105,420	105,420	100,651	83,427
4	59,357	60,210	84,743	91,078	103,026	102,293	103,209	101,926	105,420	105,420	100,651	82,912
5	59,357	60,623	84,794	90,851	102,843	102,109	103,209	102,293	105,236	105,236	100,651	82,408
6	59,433	61,145	85,205	90,501	102,843	102,109	103,209	102,659	105,236	105,051	100,651	81,902
7	59,615	60,546	85,428	90,221	103,026	102,109	103,209	103,209	105,236	104,867	100,651	81,395
8	59,661	62,347	85,651	89,890	102,843	101,926	103,209	103,759	105,051	105,420	100,651	80,889
9	59,691	64,042	85,840	89,593	102,843	101,380	103,392	104,497	104,867	105,605	96,324	80,386
10	59,691	66,322	86,046	89,280	102,843	101,198	103,026	104,682	104,682	105,605	96,146	79,883
11	59,707	70,277	86,424	89,280	102,843	101,380	103,026	104,867	104,682	105,420	95,789	79,381
12	59,737	71,598	86,631	89,506	103,026	101,380	103,209	104,867	104,682	105,236	95,255	79,047
13	59,768	74,184	86,976	89,872	103,026	101,198	103,209	105,051	104,682	105,236	94,720	78,547
14	59,783	75,892	86,907	91,026	103,026	100,651	103,209	105,051	104,497	105,051	94,189	78,048
15	59,798	76,437	86,769	94,143	103,026	100,651	103,209	105,051	104,497	105,051	93,658	77,548
16	59,829	77,463	86,889	96,794	103,026	100,469	103,209	104,867	104,497	104,867	93,127	77,052
17	59,844	78,545	87,114	98,678	103,026	100,287	103,209	104,867	104,313	104,682	92,598	76,556
18	59,859	79,079	87,200	101,562	102,659	100,287	103,392	104,682	104,313	104,497	92,071	76,059
19	59,905	79,447	87,373	103,697	102,843	100,287	103,209	104,497	104,682	104,313	91,544	75,401
20	59,691	79,799	87,321	103,972	102,293	100,105	102,843	104,313	105,051	104,128	91,017	74,909
21	59,342	80,168	87,718	103,862	102,109	100,105	102,659	104,128	105,236	103,944	90,319	74,580
22	59,768	80,537	87,926	103,807	101,926	99,924	102,476	104,128	105,236	103,759	90,319	74,089
23	59,920	80,874	87,926	103,752	101,562	99,924	102,476	104,497	105,051	103,392	88,232	73,600
24	59,783	81,126	87,857	103,679	101,198	99,924	102,293	104,313	105,051	103,026	87,885	73,110
25	59,752	81,396	87,805	103,587	100,833	100,105	102,293	104,497	105,236	102,659	87,540	72,621
26	59,798	81,616	87,840	103,496	100,469	100,287	102,109	104,867	105,236	102,293	87,195	72,135
27	59,859	81,818	88,255	103,422	100,105	100,287	101,926	105,051	105,236	101,926	86,851	71,487
28	59,920	82,055	88,758	103,349	100,469	100,651	101,744	105,236	105,236	101,562	86,506	71,163
29	59,996	82,428	89,733	103,294	-----	102,109	101,744	105,236	105,236	101,016	85,818	70,679
30	59,996	83,463	90,186	103,203	-----	102,109	101,562	105,236	105,236	100,833	85,818	70,197
31	59,996	-----	90,553	103,203	-----	101,926	-----	105,236	-----	100,833	84,791	-----
MAX	59,996	83,463	90,553	103,972	103,209	102,293	103,392	105,236	105,420	105,605	100,651	84,448
MIN	59,311	60,073	84,008	89,280	100,105	99,924	101,562	101,744	104,313	100,833	84,791	70,197
(a)	5,130.00	5,144.52	5,148.64	5,155.70	5,154.20	5,155.00	5,154.80	5,156.80	5,156.80	5,154.40	5,145.30	5,136.50
(b)	+685	+23,500	+7,090	+12,600	-2,730	+1,460	-364	+3,670	+2	-4,410	-16,000	-14,600

CAL YR 1973 b +35,000

WTR YR 1974 b +10,900

a Elevation, in feet, at end of month.

b Change in contents, in acre-feet, rounded to Geological Survey standards.

11404500 NORTH FORK FEATHER RIVER AT PULGA, CALIF.

LOCATION.--Lat 39°47'39", long 121°27'03", in SW¼NE¼ sec.6, T.22 N., R.5 E., Butte County, Plumas National Forest, on left bank between railroad and highway bridges, 0.5 mi (0.8 km) downstream from Flea Valley Creek and Pulga, and 1.5 mi (2.4 km) downstream from Poe Dam.

DRAINAGE AREA.--1,953 mi² (5,058 km²).

PERIOD OF RECORD.--October 1910 to current year. Monthly discharge only for some periods and yearly estimates for water years 1911 and 1938, published in WSP 1315-A. Prior to October 1960, published as "at Big Bar."

GAGE.--Water-stage recorder. Datum of gage is 1,304.88 ft (397.727 m) above mean sea level (levels by Pacific Gas and Electric Co.). Prior to Oct. 1, 1937, at site 1.1 mi (1.8 km) upstream at different datum. Oct. 1, 1937, to Sept. 30, 1958, at present site at datum 5.00 ft (1.524 m) higher.

AVERAGE DISCHARGE (including diversion through Poe powerhouse).--64 years, 3,005 ft³/s (85.10 m³/s), 2,177,000 acre-ft/yr (2.68 km³/yr).

EXTREMES.--Current year: Maximum discharge, 42,600 ft³/s (1,210 m³/s) Mar. 30 (gage height, 27.81 ft or 8.476 m); minimum daily, 45 ft³/s (1.27 m³/s) several days.

Period of record (prior to diversion to Poe powerhouse): Maximum discharge, 72,400 ft³/s (2,050 m³/s) Dec. 23, 1955 (gage height, 35.60 ft or 10.851 m, present datum), from rating curve extended above 34,000 ft³/s (963 m³/s); minimum daily, 235 ft³/s (6.66 m³/s) Oct. 31, 1932.

1958 to current year: Maximum discharge, 73,000 ft³/s (2,070 m³/s) Dec. 22, 1964 (gage height, 35.80 ft or 10.912 m), from rating curve extended above 34,000 ft³/s (963 m³/s); minimum daily, 33 ft³/s (0.93 m³/s) June 25, 1961.

REMARKS.--Records good. Flow regulated by Lake Almanor (see sta 11399000), Bucks Lake (see sta 11403500), Mountain Meadows Reservoir, Butt Valley Reservoir, and five forebays, combined capacity, 1,386,000 acre-ft (1.71 km³), revised. Diversion through Poe powerhouse began on May 29, 1958. See schematic diagram of North Fork Feather River basin. Records of water temperatures for the current year are published in Part 2 of this report.

COOPERATION.--Gage-height record and 10 discharge measurements furnished by Pacific Gas and Electric Co. in connection with a Federal Power Commission project.

REVISIONS (WATER YEARS).--WSP 931: 1938(M), 1940. WSP 1515: 1935.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	47	57	4,380	647	1,890	8,500	16,700	3,650	503	56	51	45
2	50	56	1,450	167	1,540	10,400	13,900	3,920	573	55	49	46
3	51	60	319	141	1,260	4,870	10,900	3,860	578	56	45	48
4	50	59	143	132	1,120	2,600	8,550	3,910	1,700	54	47	48
5	50	71	125	128	609	1,340	7,180	4,080	2,490	53	47	49
6	51	91	564	123	111	1,580	6,400	4,480	2,230	53	47	48
7	136	532	155	119	233	1,350	5,780	5,020	1,870	53	46	48
8	60	115	200	112	291	924	5,860	5,670	1,520	70	45	50
9	56	1,390	323	109	173	359	5,260	6,080	1,370	67	48	50
10	56	6,100	428	105	99	229	6,430	5,730	1,320	59	47	51
11	56	18,500	565	104	99	540	6,590	5,230	1,310	56	45	48
12	57	16,100	211	142	97	3,050	6,020	4,760	1,180	54	46	49
13	55	6,070	301	831	97	3,430	5,800	4,080	1,060	55	45	51
14	55	2,770	212	2,250	95	2,800	6,010	3,490	971	54	48	52
15	55	1,070	118	17,900	90	3,230	4,140	3,450	805	54	47	50
16	57	4,210	101	18,800	100	3,780	4,380	3,070	412	53	47	48
17	55	5,720	414	20,500	95	4,610	3,130	2,610	128	53	45	50
18	55	5,670	359	17,700	93	4,880	4,720	2,500	56	54	45	51
19	55	1,920	134	21,000	172	5,060	3,410	1,850	58	53	48	50
20	58	755	96	13,900	125	4,200	3,810	1,600	56	52	45	51
21	58	393	144	10,300	122	3,680	3,660	158	57	53	46	52
22	74	166	167	8,010	115	3,440	3,880	77	58	53	47	53
23	493	121	133	6,320	110	3,210	4,390	175	57	53	46	52
24	66	114	124	4,990	105	2,970	4,010	298	57	52	46	52
25	59	106	117	4,370	103	3,400	3,610	496	56	51	47	50
26	57	102	118	3,780	101	4,230	3,200	783	56	51	47	51
27	58	98	184	3,210	100	7,360	2,930	1,400	57	52	46	51
28	57	96	887	2,790	207	8,880	2,710	1,560	56	52	48	51
29	55	96	4,960	2,220	-----	19,100	2,320	642	57	52	47	49
30	54	1,030	4,500	1,840	-----	34,900	2,810	509	56	51	47	49
31	55	-----	1,840	1,800	-----	21,600	-----	453	-----	52	46	-----
TOTAL	2,251	73,638	23,772	164,540	9,352	180,502	168,490	85,591	20,757	1,686	1,446	1,493
MEAN	72.6	2,455	767	5,308	334	5,823	5,616	2,761	692	54.4	46.6	49.8
MAX	493	18,500	4,960	21,000	1,890	34,900	16,700	6,080	2,490	70	51	53
MIN	47	56	96	104	90	229	2,320	77	56	51	45	45
AC-FT	4,460	146,100	47,150	326,400	18,550	358,000	334,200	169,800	41,170	3,340	2,870	2,960
(a)	1,769	6,248	4,803	9,576	4,420	10,140	9,584	7,085	4,774	2,958	2,800	2,000
(b)	108,800	371,800	295,300	588,800	245,700	623,200	570,300	435,700	284,100	181,900	171,900	119,000

CAL YR 1973 TOTAL 184,995 MEAN 507 MAX 18,500 MIN 47 AC-FT 366,900 MEAN a 3,258 AC-FT a 2,359,000
WTR YR 1974 TOTAL 733,518 MEAN 2,010 MAX 34,900 MIN 45 AC-FT 1,455,000 MEAN a 5,520 AC-FT a 3,996,000

a Adjusted for diversion through Poe powerhouse.

11405300 WEST BRANCH FEATHER RIVER NEAR PARADISE, CALIF.

LOCATION.--Lat 39°47'12", long 121°33'42", in SE¼SE¼ sec.6, T.22 N., R.4 E., Butte County, on right bank 0.6 mi (1.0 km) upstream from Griffin Gulch, and 4.0 mi (6.4 km) northeast of Paradise.

DRAINAGE AREA.--110 mi² (285 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 1,370 ft (418 m), from topographic map. Prior to June 1, 1970, on left bank at same datum.

AVERAGE DISCHARGE.--17 years, 330 ft³/s (9.346 m³/s), 239,100 acre-ft/yr (295 km³/yr).

EXTREMES.--Current year: Maximum discharge, 13,000 ft³/s (368 m³/s) Mar. 30 (gage height, 18.17 ft or 5.538 m); minimum daily, 1.0 ft³/s (0.028 m³/s) Oct. 2, Sept. 21.
Period of record: Maximum discharge, 26,300 ft³/s (745 m³/s) Dec. 22, 1964 (gage height, 26.2 ft or 7.99 m, from floodmarks), from rating curve extended above 14,000 ft³/s (396 m³/s); minimum, 0.3 ft³/s (0.008 m³/s) Aug. 31, Sept. 1, 2, 1960, Sept. 8, 1962.

REMARKS.--Records good. Dewey, Miners, and Hendricks Canals divert from headwaters of West Branch Feather River into Butte Creek basin for power development at DeSabra and Centerville plants of Pacific Gas and Electric Co. Upper Miocene Canal diverts about 50 ft³/s (1.42 m³/s) to Lime Saddle powerplant. Flow regulated by Round Valley Reservoir, usable capacity, 5,000 acre-ft (6.16 hm³) and Philbrook Reservoir, capacity, 5,010 acre-ft (6.18 hm³). Records of water temperatures for the current year are published in Part 2 of this report.

REVISIONS.--WRD Calif. 1968: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.1	1.4	2,190	887	726	3,230	3,850	767	659	89	2.1	1.4
2	1.0	1.4	1,050	723	627	2,080	2,870	789	698	72	1.9	1.4
3	1.1	1.3	760	650	576	1,290	2,060	760	713	57	1.6	1.3
4	1.3	1.3	640	570	545	956	1,700	796	678	46	1.7	1.3
5	1.6	15	548	523	510	809	1,480	843	657	40	4.1	1.2
6	1.8	370	496	491	433	704	1,310	952	620	35	1.8	1.3
7	41	1,670	475	445	353	727	1,170	1,060	547	31	1.7	1.3
8	24	657	442	414	334	654	1,080	1,180	503	213	2.0	1.3
9	6.8	1,700	401	373	318	589	1,060	1,180	510	435	4.4	1.2
10	27	3,780	373	343	307	601	936	1,040	494	192	4.4	2.4
11	24	8,950	401	328	294	871	885	946	460	111	2.7	1.8
12	21	6,890	367	577	292	1,170	879	897	379	78	7.9	1.5
13	20	2,530	456	1,440	280	897	815	802	361	55	16	1.3
14	23	1,630	388	1,840	270	767	786	753	404	43	11	1.3
15	22	1,330	346	6,630	258	721	783	754	416	33	5.1	1.3
16	19	3,220	324	6,520	302	660	755	684	392	23	2.3	1.3
17	18	3,030	605	5,080	274	620	773	624	343	21	1.9	1.2
18	3.2	2,460	526	4,710	264	580	802	533	325	22	1.6	1.2
19	1.6	1,430	410	4,920	644	520	688	468	330	24	1.7	1.2
20	1.5	1,010	364	2,720	439	490	660	432	293	20	1.8	1.1
21	2.1	785	627	1,900	390	470	679	411	258	16	1.9	1.0
22	232	664	699	1,490	358	450	739	483	248	13	1.8	1.1
23	461	564	508	1,230	324	420	783	537	227	11	1.9	1.5
24	87	506	433	1,070	310	400	670	586	202	9.5	5.2	1.7
25	36	450	417	926	301	450	599	664	180	7.4	2.1	1.8
26	22	397	412	818	321	560	565	779	155	6.1	1.9	1.8
27	19	353	928	728	327	2,310	527	878	136	5.3	1.9	1.8
28	9.6	340	1,520	661	972	2,240	529	846	110	4.6	1.7	1.8
29	5.4	350	2,590	607	-----	7,340	584	735	101	3.4	1.6	1.7
30	2.7	1,470	1,610	624	-----	8,710	678	674	95	2.7	1.6	1.7
31	1.6	-----	1,120	696	-----	3,670	-----	643	-----	2.5	1.5	-----
TOTAL	1,138.4	46,556.4	22,426	50,934	11,349	45,956	31,695	23,496	11,494	1,721.5	100.8	43.2
MEAN	36.7	1,552	723	1,643	405	1,482	1,057	758	383	55.5	3.25	1.44
MAX	461	8,950	2,590	6,630	972	8,710	3,850	1,180	713	435	16	2.4
MIN	1.0	1.3	324	328	258	400	527	411	95	2.5	1.5	1.0
AC-FT	2,260	92,340	44,480	101,000	22,510	91,150	62,870	46,600	22,800	3,410	200	86
CAL YR 1973	TOTAL 179,118.5	MEAN 491	MAX 8,950	MIN 1.0	AC-FT 355,300							
WTR YR 1974	TOTAL 246,910.3	MEAN 676	MAX 8,950	MIN 1.0	AC-FT 489,700							

PEAK DISCHARGE (BASE, 2,000 FT ³ /S)							
DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-7	1630	9.08	2,450	12-1	0200	10.37	3,690
11-9	2100	11.99	5,210	12-29	1100	10.19	3,530
11-11	1000	17.20	11,600	1-16	2030	17.50	12,000
11-12	0230	17.30	11,800	3-1	1845	10.77	4,070
11-16	0930	10.50	3,810	3-30	0430	18.17	13,000

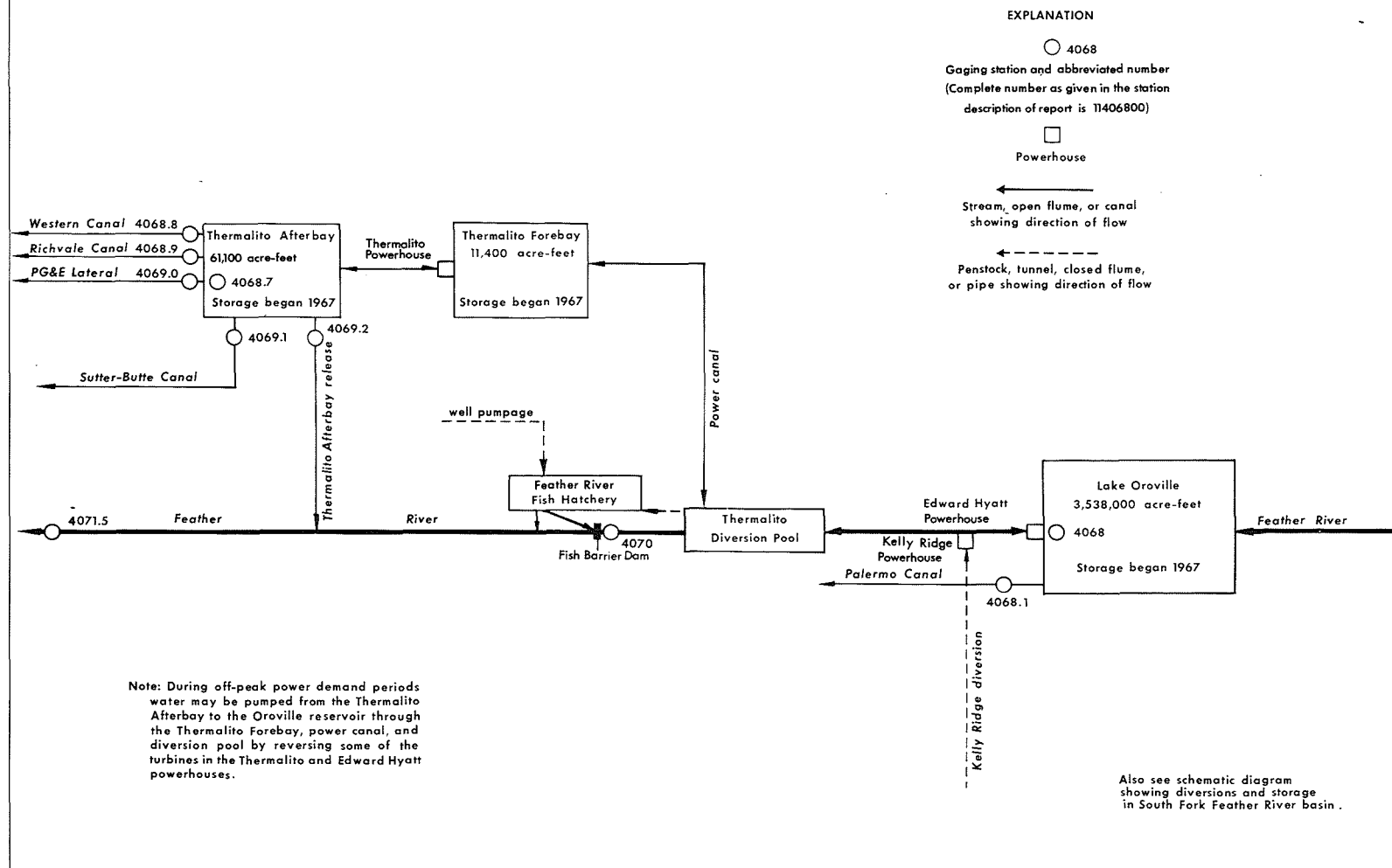


FIGURE 13.--Schematic diagram showing diversions and storage from Feather River at Lake Oroville.

11406800 LAKE OROVILLE NEAR OROVILLE, CALIF.

LOCATION.--Lat 39°32'06", long 121°28'25" (revised), in NE¼SW¼ sec.1, T.19.N., R.4 E., Butte County, near intake structure at left end of Oroville Dam on Feather River, 1.0 mi (1.6 km) downstream from North Fork Feather River, and 4.2 mi (6.8 km) east of Oroville.

DRAINAGE AREA.--3,607 mi² (9,342 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 0.47 ft (0.143 m) above mean sea level (levels by California Department of Water Resources).

EXTREMES.--Current year: Maximum contents, 3,535,000 acre-ft (4.36 km³) June 16 (gage height, 899.85 ft or 274.274 m); minimum, 2,397,000 acre-ft (2.96 km³) Sept. 30 (gage height, 817.63 ft or 249.214 m).

Period of record: Maximum contents, 3,536,000 acre-ft (4.36 km³) June 4, 1973 (gage height, 899.88 ft or 274.283 m); minimum since initial storage began, 1,643,000 acre-ft (2.03 km³) Sept. 3, 1968 (gage height, 746.27 ft or 227.463 m).

REMARKS.--Reservoir is formed by an earthfill dam with concrete chute-type sidehill spillway completed May 13, 1968; storage began Nov. 14, 1967. Usable capacity, 2,686,000 acre-ft (3.31 km³) between elevations 640.0 ft (195.07 m), minimum power pool and 900.0 ft (274.32 m), normal maximum pool. Dead storage, 852,200 acre-ft (1.05 km³). Total capacity at normal maximum pool, 3,538,000 acre-ft (4.36 km³); temporary detention storage occurred at times during dam construction; maximum was 155,200 acre-ft (191 hm³) Dec. 23, 1964. Water is released to Edward Hyatt powerhouse through penstock in left abutment of dam and to Palermo Canal through concrete tunnel also in left abutment of dam. Three of the total of six turbines in the Edward Hyatt power-plant are reversible and during periods of low power demand water is pumped at times from the river back into Lake Oroville. Records, including extremes, represent total contents at 2400 hours. See schematic diagram showing diversions and storage from Feather River at Lake Oroville.

COOPERATION.--Records collected by California Department of Water Resources, under general supervision of the Geological Survey, in connection with a Federal Power Commission project. Contents rounded to Geological Survey standards.

CAPACITY TABLE (GAGE HEIGHT, IN FEET, AND CONTENTS, IN ACRE-FEET)

730	1,498,000	790	2,081,000	850	2,808,000
740	1,586,000	800	2,192,000	860	2,945,000
750	1,678,000	810	2,307,000	870	3,086,000
760	1,773,000	820	2,426,000	880	3,232,000
770	1,872,000	830	2,549,000	890	3,382,000
780	1,974,000	840	2,676,000	900	3,538,000

CONTENTS, IN THOUSANDS OF ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,728	2,683	2,803	2,812	2,825	2,903	3,342	3,228	3,449	3,506	3,165	2,749
2	2,726	2,680	2,800	2,811	2,822	2,950	3,321	3,234	3,467	3,496	3,150	2,742
3	2,728	2,684	2,791	2,805	2,816	2,976	3,278	3,244	3,473	3,484	3,143	2,729
4	2,721	2,688	2,782	2,798	2,809	2,991	3,231	3,258	3,481	3,485	3,143	2,715
5	2,713	2,683	2,773	2,797	2,799	2,994	3,209	3,278	3,486	3,476	3,127	2,701
6	2,715	2,692	2,762	2,801	2,787	2,997	3,192	3,291	3,490	3,476	3,112	2,682
7	2,718	2,712	2,751	2,803	2,779	3,002	3,176	3,306	3,492	3,476	3,093	2,676
8	2,716	2,725	2,739	2,799	2,776	3,002	3,163	3,323	3,505	3,472	3,073	2,673
9	2,714	2,750	2,728	2,790	2,775	2,997	3,153	3,340	3,523	3,470	3,061	2,661
10	2,712	2,801	2,718	2,779	2,789	2,987	3,148	3,355	3,524	3,464	3,051	2,641
11	2,711	2,913	2,708	2,770	2,788	2,987	3,150	3,367	3,526	3,452	3,043	2,628
12	2,710	2,995	2,699	2,775	2,789	2,998	3,154	3,382	3,530	3,436	3,033	2,616
13	2,712	3,015	2,693	2,788	2,788	3,009	3,154	3,384	3,530	3,419	3,013	2,602
14	2,711	3,014	2,685	2,803	2,789	3,014	3,155	3,379	3,531	3,410	2,994	2,597
15	2,700	3,006	2,693	2,893	2,786	3,019	3,157	3,380	3,530	3,399	2,980	2,593
16	2,695	3,015	2,703	2,964	2,798	3,024	3,160	3,383	3,535	3,384	2,961	2,581
17	2,695	3,015	2,704	3,008	2,807	3,029	3,160	3,384	3,532	3,369	2,950	2,565
18	2,689	3,012	2,701	3,019	2,819	3,033	3,163	3,387	3,528	3,351	2,949	2,546
19	2,683	2,998	2,696	3,048	2,827	3,038	3,162	3,388	3,524	3,338	2,935	2,532
20	2,686	2,978	2,696	3,036	2,826	3,029	3,161	3,386	3,519	3,331	2,915	2,517
21	2,690	2,954	2,706	3,005	2,828	3,041	3,162	3,380	3,514	3,323	2,897	2,508
22	2,689	2,929	2,717	2,975	2,831	3,039	3,168	3,376	3,512	3,314	2,878	2,506
23	2,686	2,902	2,721	2,948	2,840	3,032	3,175	3,376	3,514	3,296	2,865	2,493
24	2,687	2,876	2,728	2,922	2,854	3,025	3,182	3,376	3,513	3,278	2,851	2,471
25	2,690	2,847	2,734	2,893	2,854	3,025	3,187	3,385	3,512	3,262	2,851	2,449
26	2,690	2,828	2,733	2,872	2,849	3,035	3,191	3,404	3,508	3,245	2,839	2,432
27	2,695	2,814	2,740	2,859	2,844	3,063	3,198	3,422	3,504	3,238	2,821	2,415
28	2,700	2,799	2,750	2,851	2,848	3,094	3,209	3,433	3,498	3,235	2,801	2,411
29	2,696	2,787	2,780	2,842	-----	3,182	3,218	3,440	3,505	3,222	2,781	2,411
30	2,693	2,789	2,798	2,831	-----	3,300	3,223	3,441	3,513	3,202	2,762	2,397
31	2,687	-----	2,803	2,826	-----	3,326	-----	3,442	-----	3,184	2,758	-----
MAX	2,728	3,015	2,803	3,048	2,854	3,326	3,342	3,442	3,535	3,506	3,165	2,749
MIN	2,683	2,680	2,685	2,770	2,775	2,903	3,148	3,228	3,449	3,184	2,758	2,397
(a)	840.83	848.57	849.59	851.29	852.91	886.33	879.41	893.90	898.45	876.78	846.20	817.63
(b)	-41,320	+102,000	+13,640	+23,840	+21,880	+478,600	-103,500	+219,400	+71,040	-329,100	-426,300	-360,700
(c)	4,973	1,510	805	1,207	1,753	2,148	4,296	7,437	9,894	10,735	10,169	8,124

CAL YR 1973 b -332,000

WTR YR 1974 b -58,000

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

b Change in contents, in acre-feet.

c Evaporation, in acre-feet.

SACRAMENTO RIVER BASIN

11406810 PALERMO CANAL NEAR OROVILLE, CALIF.

LOCATION.--Lat 39°31'59", long 121°28'54" (revised), in SW¼SW¼ sec.1, T.19 N., R.4 E., Butte County, on right bank 50 ft (15 m) downstream from Oroville Dam, and 4.4 mi (7.1 km) east of Oroville.

PERIOD OF RECORD.--April 1965 to current year. Daily discharge of diversion from Kelly Ridge penstock for period April 1965 to October 1968 when Kelly Ridge penstock supplied the entire flow of Palermo Canal are in files of California district office of Geological Survey.

GAGE.--Water-stage recorder and Parshall flume. Datum of gage is 547.67 ft (166.930 m), levels by California Department of Water Resources. April 1965 to October 1968, water-stage recorder and Parshall flume at site of diversion from Kelly Ridge penstock, 0.4 mi (0.6 km) downstream at different datum.

AVERAGE DISCHARGE.--9 years, 12.2 ft³/s (0.346 m³/s) 8,840 acre-ft/yr (10.9 hm³/yr).

EXTREMES.--Period of record: Maximum daily discharge, 28 ft³/s (0.79 m³/s) several days in July to September 1967; no flow at times in 1967, 1970, 1974.

REMARKS.--Canal diverts from left end of Oroville Dam. Water is used for irrigation near Oroville. During period of construction of Oroville Dam, water was released from Kelly Ridge penstock to meet irrigation requirements.

COOPERATION.--Records collected by California Department of Water Resources, under general supervision of Geological Survey, in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	4.2	3.9	3.8	3.8	6.1	6.4	6.3	18	20	23	21
2	17	4.0	3.8	3.8	3.7	6.2	6.4	6.2	19	20	23	21
3	17	4.1	3.8	3.8	3.7	6.2	6.4	9.4	19	20	23	21
4	17	4.1	1.2	3.8	3.7	6.2	6.3	11	19	20	23	21
5	17	4.1	0	3.8	3.7	6.2	6.3	11	19	20	23	21
6	16	4.1	1.4	3.8	3.7	6.2	6.2	11	20	20	23	21
7	16	4.1	3.7	3.8	3.7	6.2	6.2	11	22	20	23	21
8	13	4.1	3.7	3.8	4.4	6.2	6.2	12	22	14	23	21
9	8.5	4.2	3.7	3.8	5.4	6.2	6.2	14	22	11	23	21
10	7.0	4.3	3.7	3.7	5.6	6.2	6.2	15	22	11	23	21
11	7.0	4.3	3.7	3.7	6.0	6.2	6.2	15	22	11	23	21
12	7.7	3.9	3.7	3.7	6.0	6.2	6.2	15	22	11	22	21
13	7.8	4.8	3.8	3.7	5.9	6.2	6.2	15	21	11	20	21
14	6.6	4.4	3.7	3.8	6.0	6.2	6.2	15	20	11	20	21
15	6.7	4.1	3.7	3.8	6.0	6.2	6.2	15	20	11	20	21
16	6.7	4.1	3.7	3.8	6.0	6.2	6.2	15	20	11	21	21
17	8.0	4.1	3.7	3.9	6.0	6.2	6.2	15	20	13	24	21
18	10	4.1	3.7	3.8	6.0	6.2	6.2	15	20	14	22	21
19	10	3.4	3.7	3.8	6.0	6.2	6.2	15	20	16	20	21
20	8.8	3.7	3.7	3.8	6.0	6.2	6.2	15	20	20	20	21
21	6.5	3.7	3.7	3.8	6.0	6.2	6.2	15	20	20	20	21
22	5.1	3.7	3.8	3.8	6.0	6.2	6.2	15	20	20	20	21
23	4.1	3.8	3.8	3.8	6.0	6.2	6.2	15	20	19	20	21
24	4.2	3.7	3.8	3.8	6.0	6.2	6.3	15	20	21	20	21
25	4.3	3.6	3.7	3.8	6.0	6.2	6.2	17	20	22	20	21
26	4.2	3.4	3.8	3.8	6.0	6.2	6.3	18	20	23	20	20
27	4.1	3.5	3.7	3.8	6.0	6.2	6.3	18	20	23	20	19
28	4.1	3.7	3.8	3.8	6.0	6.3	6.3	18	20	23	20	19
29	4.2	3.8	3.8	3.7	-----	6.4	6.3	18	20	23	20	18
30	4.2	3.8	3.8	3.8	-----	6.4	6.3	18	20	23	20	17
31	4.3	-----	3.8	3.8	-----	6.4	-----	18	-----	23	20	-----
TOTAL	274.1	118.9	107.5	117.4	149.3	192.8	187.4	441.9	607	545	662	618
MEAN	8.84	3.96	3.47	3.79	5.33	6.22	6.25	14.3	20.2	17.6	21.4	20.6
MAX	17	4.8	3.9	3.9	6.0	6.4	6.4	18	22	23	24	21
MIN	4.1	3.4	0	3.7	3.7	6.1	6.2	6.2	18	11	20	17
AC-FT	544	236	213	233	296	382	372	877	1,200	1,080	1,310	1,230

CAL YR 1973 TOTAL 4,003.6 MEAN 11.0 MAX 23 MIN 0 AC-FT 7,940
WTR YR 1974 TOTAL 4,021.3 MEAN 11.0 MAX 24 MIN 0 AC-FT 7,980

11406870 THERMALITO AFTERBAY NEAR OROVILLE, CALIF.

LOCATION.--Lat 39°27'30", long 121°38'17", in NE¼SE¼ sec.33, T.19 N., R.3 E., Butte County, at dam 195 ft (59 m) northeast of centerline of outlet structure, and 5.7 mi (9.2 km) southwest of Oroville.

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

GAGE.--Water-stage recorder. Datum of gage is 100.47 ft (30.623 m) above mean sea level (levels by California Department of Water Resources). Auxiliary water-stage recorder 90 ft (27 m) southwest of centerline of Western Canal outlet, and 7.2 mi (11.6 km) west of Oroville.

EXTREMES.--Current year: Maximum contents, 56,525 acre-ft (69.7 hm³) Dec. 31 (gage height, 136.38 ft or 41.569 m); minimum, 16,741 acre-ft (20.6 hm³) June 16 (gage height, 124.66 ft or 37.996 m).
Period of record: Maximum contents, 57,300 acre-ft (70.7 hm³) May 24, 1969 (gage height, 136.56 ft or 41.623 m); minimum since initial operation began, 5,590 acre-ft (6.89 hm³) Mar. 1, 1968 (gage height, 119.09 ft or 36.299 m).

REMARKS.--Reservoir is formed by an earthfill dam completed in 1967; diversion from the reservoir began Oct. 12, 1967. Usable capacity, 61,144 acre-ft (75.4 hm³) between gage heights 120.0 ft (36.58 m) and 139.0 ft (42.37 m), extreme operating levels. Normal operating range is 123 ft (37.5 m) to 136.5 ft (41.61 m). Water is released to four canals and to the Feather River from the reservoir (see sta 11406880, 11406890, 11406900, 11406910, 11406920). Total maximum release to the four canals is approximately, 4,000 ft³/s (113 m³/s). Water is pumped, at times, from Thermalito Afterbay back into Thermalito Forebay during off-peak periods to be re-released through Thermalito powerplant for power generation during peak demand periods. Records, including extremes, represent total contents at 2400 hours. See schematic diagram showing diversions and storage from Feather River at Lake Oroville.

COOPERATION.--Records collected by California Department of Water Resources, under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

CAPACITY TABLE (GAGE HEIGHT, IN FEET, AND CONTENTS, IN ACRE-FEET)

120	7,054	128	25,832
122	10,792	130	32,150
124	15,157	134	46,719
126	20,171	139	68,198

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34,723	33,935	27,689	49,074	37,747	43,684	41,824	29,928	30,606	22,666	42,997	38,503
2	31,653	35,520	29,193	45,854	35,695	42,731	41,486	35,869	20,627	28,751	44,492	32,919
3	27,226	30,250	31,852	43,684	33,629	37,104	40,814	37,675	22,162	34,827	36,502	33,935
4	30,089	25,296	31,062	42,352	32,450	32,684	39,779	32,919	21,884	30,153	24,065	35,939
5	34,208	32,051	30,541	42,088	33,222	34,345	40,369	25,772	26,253	33,155	27,534	37,675
6	28,751	28,530	30,606	28,030	38,431	34,174	41,937	27,813	30,997	29,067	29,289	44,492
7	25,832	31,522	30,606	23,204	41,299	34,586	43,340	28,751	35,451	24,414	33,324	37,568
8	25,742	27,968	29,289	19,456	40,554	34,517	44,415	29,992	30,024	26,313	38,178	29,928
9	25,712	25,623	28,405	23,062	38,938	38,070	45,658	32,484	20,011	25,922	38,757	31,160
10	26,616	22,610	28,061	28,688	25,922	45,035	46,758	34,827	25,414	23,119	33,527	39,926
11	24,970	27,596	29,130	34,003	30,509	45,385	44,492	33,324	28,625	25,088	28,972	40,629
12	24,530	27,380	30,769	29,703	31,819	44,030	43,684	26,283	28,908	30,379	25,503	41,824
13	21,142	27,534	32,986	21,333	35,939	39,669	42,088	30,834	30,932	35,765	31,292	45,035
14	21,361	26,313	41,749	23,921	37,496	35,939	40,443	39,157	27,473	32,684	34,654	38,503
15	29,003	24,794	33,765	25,207	42,465	33,155	38,829	40,629	24,123	32,150	35,939	29,289
16	32,084	25,503	24,065	26,525	34,414	31,522	37,246	39,339	16,741	34,106	40,111	29,193
17	30,412	27,319	26,981	29,067	30,541	30,769	35,765	39,266	22,807	37,425	37,496	35,207
18	34,551	27,968	33,324	32,919	24,007	29,416	33,324	36,608	24,472	41,486	25,503	41,749
19	38,070	28,908	39,266	34,003	27,906	29,067	33,324	34,106	25,623	43,340	25,088	43,991
20	33,087	28,908	42,352	35,277	34,106	28,311	32,051	33,391	26,616	35,451	30,704	47,910
21	28,405	29,289	40,443	36,185	38,431	27,349	30,541	35,381	27,596	31,062	35,625	42,731
22	30,704	29,352	35,451	36,608	40,591	28,436	26,464	37,747	25,982	28,311	41,075	29,703
23	35,451	29,416	34,586	37,175	36,115	32,718	24,794	36,749	20,011	34,517	41,824	32,150
24	35,000	29,512	31,292	37,246	24,765	37,318	24,414	39,449	19,878	36,749	39,853	38,829
25	32,751	29,799	26,737	36,749	25,503	36,679	25,148	35,555	20,627	40,369	26,951	45,463
26	32,051	25,982	31,062	36,361	30,153	33,595	28,093	25,712	23,921	41,749	26,525	47,870
27	27,012	24,210	36,749	35,695	36,502	33,155	25,712	18,496	28,030	37,318	32,283	49,438
28	21,580	25,355	44,145	36,185	42,617	34,311	22,162	17,384	33,629	27,165	39,266	40,037
29	23,005	26,829	50,496	37,998	-----	36,502	21,388	18,780	27,596	27,689	44,299	28,405
30	26,343	24,735	54,231	42,088	-----	38,142	25,623	24,472	18,548	32,517	50,210	30,541
31	30,347	-----	56,525	40,963	-----	40,852	-----	30,704	-----	37,818	42,201	-----
MAX	38,070	35,520	56,525	49,074	42,617	45,385	46,758	40,629	35,451	43,340	50,210	49,438
MIN	21,142	22,610	24,065	19,456	24,007	27,349	21,388	17,384	16,741	22,666	24,065	28,405
(a)	129.45	127.63	136.38	132.50	132.94	132.47	127.93	129.56	125.38	131.64	132.83	129.51
(b)	-8,446	-5,612	+31,790	-15,562	+1,654	-1,765	-15,229	+5,081	-12,156	+19,270	+4,383	-11,660
(c)	1,265	657	396	403	560	666	1,171	1,734	2,093	2,391	2,535	2,016

CAL YR 1973 b +25,102
WTR YR 1974 b -8,252

a Gage height, in feet, at end of month.
b Change in contents, in acre-feet.
c Evaporation, in acre-feet.

SACRAMENTO RIVER BASIN

11406880 WESTERN CANAL AT INTAKE, NEAR OROVILLE, CALIF.

LOCATION.--Lat 39°30'19", long 121°41'06", in SW¼NW¼ sec.18, T.19 N., R.3 E., Butte County, on left bank 500 ft (152 m) downstream from Thermalito Afterbay Dam, and 7.3 mi (11.7 km) west of Oroville.

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

GAGE.--Water-stage recorder. Datum of gage is 100.47 ft (30.623 m) above mean sea level (levels by California Department of Water Resources).

AVERAGE DISCHARGE.--6 years, 267 ft³/s (7.56 m³/s), 193,400 acre-ft/yr (238 hm³/yr).

EXTREMES.--Period of record: Maximum daily discharge, 1,000 ft³/s (28.3 m³/s) May 18, 1974; no flow for several months in each year.

REMARKS.--Water is diverted from Thermalito Afterbay and is used for irrigation. See schematic diagram showing diversions and storage from Feather River at Lake Oroville.

COOPERATION.--Records collected by California Department of Water Resources, under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	244	201					0	156	642	743	722	427
2	251	202					0	157	636	745	723	400
3	251	201					0	245	634	748	722	347
4	252	202					0	363	647	746	722	345
5	253	142					0	438	622	746	723	316
6	252	94					0	535	604	746	722	266
7	252	91					0	651	588	746	723	242
8	251	34					0	698	571	746	722	241
9	251	0					0	747	601	742	722	243
10	251	0					0	806	650	744	723	212
11	251	0					0	852	708	745	722	189
12	251	0					0	863	759	744	722	189
13	251	0					0	885	782	744	723	189
14	252	0					0	921	804	744	723	188
15	252	0					0	953	816	742	722	189
16	252	0					0	984	815	737	721	122
17	252	0					0	995	807	726	721	83
18	252	0					0	1,000	799	726	721	83
19	252	0					0	977	805	715	721	82
20	252	0					23	927	806	707	708	22
21	251	0					50	911	796	707	662	0
22	252	0					47	911	775	713	642	0
23	197	0					57	885	775	705	630	0
24	145	0					57	833	776	701	622	0
25	144	0					57	818	755	706	620	0
26	177	0					57	818	745	715	606	79
27	195	0					79	816	744	725	564	207
28	197	0					105	777	744	724	549	249
29	196	0					123	699	744	724	539	250
30	198	0					157	664	745	722	498	249
31	197	-----					-----	648	-----	726	435	-----
TOTAL	7,174	1,167	0	0	0	0	812	22,933	21,695	22,650	20,795	5,409
MEAN	231	38.9	0	0	0	0	27.1	740	723	731	671	180
MAX	253	202	0	0	0	0	157	1,000	816	748	723	427
MIN	144	0	0	0	0	0	0	156	571	701	435	0
AC-FT	14,230	2,310	0	0	0	0	1,610	45,490	43,030	44,930	41,250	10,730
CAL YR 1973	TOTAL	93,011.00	MEAN	255	MAX	706	MIN	0	AC-FT	184,500		
WTR YR 1974	TOTAL	102,635.00	MEAN	281	MAX	1,000	MIN	0	AC-FT	203,600		

11406890 RICHVALE CANAL AT INTAKE, NEAR OROVILLE, CALIF.

LOCATION.--Lat 39°30'19", long 121°41'06", in SW¼NW¼ sec.18, T.19 N., R.3 E., Butte County, on right bank 500 ft (152 m) downstream from axis of Thermalito Afterbay Dam, and 7.3 mi (11.7 km) west of Oroville.

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

GAGE.--Water-stage recorder. Datum of gage is 100.47 ft (30.623 m) above mean sea level (levels by California Department of Water Resources).

AVERAGE DISCHARGE.--6 years, 114 ft³/s (3.23 m³/s) 82,590 acre-ft/yr (102 hm³/yr).

EXTREMES.--Period of record: Maximum daily discharge, 511 ft³/s (14.5 m³/s) May 16, 1974; no flow for several months in each year.

REMARKS.--Canal diverts from Thermalito Afterbay; water is used for irrigation. The canal is part of the Oroville project. See schematic diagram showing diversions and storage from Feather River at Lake Oroville.

COOPERATION.--Records collected by California Department of Water Resources, under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14						0	226	375	404	380	321
2	14						0	251	390	399	379	321
3	14						0	388	394	399	382	279
4	14						0	456	398	399	381	266
5	14						0	456	399	399	381	266
6	14						0	456	399	399	378	216
7	14						0	468	400	400	380	189
8	5.0						0	472	400	398	379	159
9	0						0	472	402	389	377	139
10	0						0	472	402	383	377	133
11	0						0	494	399	387	379	133
12	0						0	505	399	384	380	134
13	0						0	507	400	383	376	93
14	0						0	508	398	382	375	74
15	0						0	505	399	375	375	73
16	0						0	511	400	370	376	73
17	0						0	508	400	368	375	77
18	0						0	446	401	369	374	76
19	0						0	428	401	371	376	76
20	0						0	429	401	371	380	76
21	0						0	436	402	372	380	75
22	0						22	435	402	372	381	73
23	0						48	435	402	371	380	38
24	0						50	435	401	384	380	17
25	0						50	433	403	389	379	17
26	0						50	434	402	386	380	17
27	0						92	435	403	385	381	17
28	0						157	387	404	380	380	18
29	0						180	372	403	377	336	17
30	0						180	373	404	379	320	16
31	0	-----					-----	374	-----	378	320	-----
TOTAL	103.0	0	0	0	0	0	829	13,507	11,983	11,902	11,577	3,479
MEAN	3.32	0	0	0	0	0	27.6	436	399	384	373	116
MAX	14	0	0	0	0	0	180	511	404	404	382	321
MIN	0	0	0	0	0	0	0	226	375	368	320	16
AC-FT	204	0	0	0	0	0	1,640	26,790	23,770	23,610	22,960	6,900
CAL YR 1973	TOTAL 52,912.00	MEAN 145	MAX 485	MIN 0	AC-FT 105,000							
WTR YR 1974	TOTAL 53,380.00	MEAN 146	MAX 511	MIN 0	AC-FT 105,900							

SACRAMENTO RIVER BASIN

11406900 PACIFIC GAS AND ELECTRIC CO. LATERAL AT INTAKE, NEAR OROVILLE, CALIF.

LOCATION.--Lat 39°29'22", long 121°41'12", in SE&NW¼ sec.19, T.19 N., R.3 E., Butte County, on right bank 82 ft (25 m) downstream from axis of Thermalito Afterbay Dam, and 7.2 mi (11.6 km) west of Oroville.

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

GAGE.--Water-stage recorder. Datum of gage is 113.47 ft (34.586 m) above mean sea level (levels by California Department of Water Resources).

AVERAGE DISCHARGE.--6 years, 4.40 ft³/s (0.12 m³/s), 3,190 acre-ft/yr (3.93 hm³/yr).

EXTREMES.--Period of record: Maximum daily discharge, 43 ft³/s (1.22 m³/s) Apr. 30, 1973; no flow for several months in each year.

REMARKS.--Flow regulated at outlet works from Thermalito Afterbay; water is used for irrigation. Records for some years include diversions from Thermalito Afterbay into Pacific Gas and Electric Co. lateral via Duncan lateral siphon. No diversion was made during the current year to Duncan lateral siphon.

COOPERATION.--Records collected by California Department of Water Resources, under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1								0	13	11	11	8.2
2								0	12	11	11	6.7
3								0	10	11	11	5.7
4								6.6	9.7	11	11	4.8
5								12	10	11	11	4.8
6								32	11	11	11	4.8
7								38	11	11	11	4.8
8								39	10	11	11	4.8
9								40	11	11	11	4.8
10								41	12	11	11	4.6
11								41	13	11	11	3.4
12								25	13	11	11	2.0
13								13	12	11	11	2.0
14								14	12	11	11	2.1
15								14	12	11	11	2.0
16								13	12	11	11	2.0
17								14	12	11	11	2.3
18								17	13	11	11	1.0
19								18	13	11	11	0
20								19	13	11	11	0
21								20	12	11	11	0
22								20	11	11	11	0
23								20	11	11	11	0
24								16	11	11	11	0
25								14	11	11	11	0
26								14	11	11	11	0
27								13	11	11	11	0
28								13	11	11	11	0
29								14	11	11	11	0
30								15	11	11	11	0
31								14		11	11	
TOTAL	0	0	0	0	0	0	0	569.6	345.7	341	341	70.8
MEAN	0	0	0	0	0	0	0	18.4	11.5	11.0	11.0	2.36
MAX	0	0	0	0	0	0	0	41	13	11	11	8.2
MIN	0	0	0	0	0	0	0	0	9.7	11	11	0
AC-FT	0	0	0	0	0	0	0	1,130	686	676	676	140
CAL YR 1973	TOTAL 1,535.60	MEAN 4.21	MAX 43	MIN 0	AC-FT 3,050							
WTR YR 1974	TOTAL 1,668.10	MEAN 4.57	MAX 41	MIN 0	AC-FT 3,310							

11406910 SUTTER BUTTE CANAL AT INTAKE, NEAR OROVILLE, CALIF.

LOCATION.--Lat 39°27'01", long 121°39'27", in NW corner of Boga Fernandez Grant, T.18 N., R.3 E., Butte County, on left bank 675 ft (206 m) downstream from Thermalito Afterbay Dam, and 6.8 mi (10.9 km) southwest of Oroville.

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

GAGE.--Water-stage recorder. Datum of gage is 109.97 ft (33.519 m) above mean sea level (levels by California Department of Water Resources). Prior to May 1, 1970, at datum 109.50 ft (33.376 m) lower.

AVERAGE DISCHARGE.--6 years, 665 ft³/s (18.8 m³/s), 481,800 acre-ft/yr (5.94 km³/yr).

EXTREMES.--Period of record: Maximum daily discharge, 2,110 ft³/s (59.8 m³/s) Apr. 22-24, 1968; no flow for several months in each year.

REMARKS.--Water is diverted from Thermalito Afterbay and is used for irrigation. See schematic diagram showing diversions and storage from Feather River at Lake Oroville.

COOPERATION.--Records collected by California Department of Water Resources, under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	457	86	84			0	35	1,180	1,470	1,540	1,630	1,310
2	457	86	85			0	0	1,270	1,460	1,530	1,630	1,270
3	474	86	85			0	0	1,390	1,490	1,580	1,610	1,270
4	481	87	51			0	0	1,500	1,470	1,600	1,590	1,280
5	465	86	0			0	0	1,620	1,460	1,610	1,560	1,270
6	458	85	0			0	0	1,800	1,450	1,600	1,520	1,230
7	458	84	0			0	0	1,900	1,470	1,610	1,520	1,200
8	412	85	0			0	0	1,940	1,460	1,540	1,530	1,180
9	366	83	0			0	0	1,980	1,450	1,450	1,530	1,160
10	355	82	0			0	0	1,960	1,450	1,450	1,550	1,090
11	355	84	0			0	0	1,950	1,490	1,480	1,540	1,020
12	356	83	0			0	0	1,960	1,530	1,510	1,550	994
13	355	84	0			0	69	1,940	1,570	1,510	1,540	961
14	356	84	0			0	103	1,940	1,570	1,510	1,530	920
15	344	84	0			0	103	1,940	1,570	1,530	1,540	901
16	331	84	0			0	103	1,920	1,570	1,570	1,550	815
17	319	84	0			0	185	1,890	1,560	1,580	1,550	720
18	314	84	0			0	241	1,830	1,540	1,580	1,550	673
19	314	84	0			0	275	1,810	1,520	1,560	1,530	618
20	313	85	0			0	284	1,810	1,510	1,580	1,520	572
21	312	85	0			73	307	1,810	1,520	1,590	1,530	556
22	314	85	0			175	407	1,740	1,540	1,610	1,510	556
23	294	85	0			208	605	1,700	1,530	1,630	1,500	524
24	237	84	0			214	634	1,680	1,530	1,640	1,490	509
25	181	85	0			186	581	1,650	1,500	1,630	1,500	493
26	182	85	0			148	589	1,580	1,470	1,630	1,450	474
27	182	83	0			148	622	1,560	1,500	1,640	1,410	466
28	182	84	0			124	664	1,570	1,530	1,620	1,400	466
29	182	84	0		-----	104	742	1,530	1,520	1,620	1,370	466
30	117	84	0		-----	105	991	1,480	1,530	1,620	1,350	466
31	86	-----	0		-----	105	-----	1,470	-----	1,630	1,330	-----
TOTAL	10,009	2,534	305	0	0	1,590	7,540	53,300	45,230	48,780	46,910	25,430
MEAN	323	84.5	9.84	0	0	51.3	251	1,719	1,508	1,574	1,513	848
MAX	481	87	85	0	0	214	991	1,980	1,570	1,640	1,630	1,310
MIN	86	82	0	0	0	0	0	1,180	1,450	1,450	1,330	466
AC-FT	19,850	5,030	605	0	0	3,150	14,960	105,700	89,710	96,760	93,050	50,440
CAL YR 1973	TOTAL 232,205.00		MEAN 636	MAX 1,970	MIN 0	AC-FT 460,600						
WTR YR 1974	TOTAL 241,628.00		MEAN 662	MAX 1,980	MIN 0	AC-FT 479,300						

LOCATION.--Lat. 39°27'23", long 121°38'10", in NW¼Sec.33, T.19 N., R.3 E., Butte County, on left bank of outlet channel 955 ft (291 m) downstream from centerline of Thermalito Afterbay Dam, and 5.7 mi (9.2 km) southwest of Oroville.

COOPERATION.--Records collected by California Department of Water Resources, under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

CAL YR 1973	TOTAL	1,966,077	MEAN	5,387	MAX	18,100	MIN	619	AC-FT	3,900,000
WTP YR 1974	TOTAL	3,058,340	MEAN	8,379	MAX	18,100	MIN	2,000	AC-FT	6,066,000

LOCATION.--Lat 39°31'18", long 121°32'48", in Boga Fernandez Grant, T.19 N., R.4 E., Butte County, on right bank 300 ft (91 m) upstream from Fish barrier dam on Feather River, and 0.8 mi (1.3 km) northeast of Oroville Post Office.

PERIOD OF RECORD.--October 1901 to current year. Monthly discharge only for some periods, published in WSP 1315-A. October 1934 to September 1961 published as "near Oroville." Records since October 1967 equivalent to earlier records if diversions out of Thermalito Afterbay are added to flow past station.

AVERAGE DISCHARGE (adjusted for diversions into and out of, change in contents of, and evaporation from Lake Oroville, Thermalito diversion pool, Thermalito Forebay, and Thermalito Afterbay).--73 years, 5,970 ft³/s (169.1 m³/s), 4,325,000 acre-ft/yr (5.33 km³/yr).

REMARKS.--Flow regulated by Lake Oroville (see sta 11406800) and other powerplants and reservoirs above station. Several diversions above station for power and irrigation. Feather River Fish Hatchery diverts up to 120 ft³/s (3.40 m³/s) at Thermalito diversion dam 0.4 mi (0.6 km) upstream from gage. Diverted flow returns to Feather River approximately 0.3 mi (0.5 km) downstream from gage. Daily figures shown are combined figures of river flow and diversion-to fish hatchery. See REMARKS for upstream stations and schematic diagrams showing diversions from Feather River at Lake Oroville and for South Fork Feather River basin. Records of chemical analyses, water temperatures, and sediment discharge for the current year are published in Part 2 of this report.

REVISONS (WATER YEARS).--WSP 843: 1907(M), 1909(M), 1914-15(M), 1919(M), 1927-28(M). WSP 881: 1913-28 (yearly summaries only). WSP 1515: 1906-8. WSP 1931: Drainage area. WRD Calif. 1967: 1966. Figures of revised adjusted monthly and yearly discharge for the water years 1968-70 superseding figures published in WRD Calif. 1968, 1969, 1970, are given herewith:

	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
	Water year 1968											
Mean	3,012	2,879	3,267	4,497	12,450	7,840	6,564	5,365	3,200	2,696	2,794	2,474
Ac-ft	185,200	171,300	200,900	276,500	716,300	482,100	390,600	329,900	190,400	165,800	171,800	147,200
Cal yr 1967	Mean	--	Ac-ft	--								
Wtr yr 1968	Mean	4,722	Ac-ft	3,428,000								
	Water year 1969											
Mean	2,096	2,761	5,308	24,490	12,420	10,350	16,720	16,880	6,816	3,151	3,057	3,282
Ac-ft	128,900	164,300	326,400	1,506M	689,900	636,300	994,900	1,038M	405,600	193,700	188,000	195,300
Cal yr 1968	Mean	4,808	Ac-ft	3,490,000								
Wtr yr 1969	Mean	8,933	Ac-ft	6,467,000								
	Water year 1970											
Mean	3,715	3,914	10,950	35,680	11,170	10,760	5,324	4,988	2,675	2,426	3,054	2,998
Ac-ft	228,400	232,900	673,500	2,194M	620,100	661,500	316,800	306,700	159,200	149,200	187,800	178,400
Cal yr 1969	Mean	9,644	Ac-ft	6,982,000								
Wtr yr 1970	Mean	8,160	Ac-ft	5,908,000								

SACRAMENTO RIVER BASIN

11407000 FEATHER RIVER AT OROVILLE, CALIF.--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NCV	DEC	JAN	FER	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	405	411	424	400	406	420	31,400	423	403	404	413	413
2	410	412	413	402	403	408	37,300	423	400	408	411	409
3	404	410	409	406	405	405	37,300	421	401	413	415	411
4	410	408	409	409	405	402	33,700	421	398	409	418	413
5	409	411	411	400	405	400	17,200	430	397	412	418	409
6	407	410	412	405	407	400	12,500	422	401	411	411	412
7	409	410	410	432	405	407	9,900	419	405	414	416	411
8	409	410	411	423	406	405	7,460	423	404	415	415	414
9	408	415	413	414	406	402	5,800	422	404	412	410	412
10	406	413	410	415	402	403	1,840	422	407	413	406	411
11	407	425	404	416	405	406	403	423	406	412	407	405
12	408	425	402	415	406	405	403	423	407	410	408	410
13	407	433	410	409	410	400	400	432	415	411	408	412
14	405	427	410	429	409	403	399	431	410	411	409	408
15	407	423	408	2,460	409	402	405	422	408	411	408	411
16	406	2,200	411	12,400	410	396	410	422	409	413	408	411
17	407	8,890	412	28,900	409	394	410	413	401	414	404	409
18	406	8,810	411	32,700	408	392	412	413	406	415	409	410
19	407	5,430	411	29,800	413	390	411	413	415	408	412	409
20	407	5,450	411	29,800	416	390	409	413	409	406	408	411
21	406	5,400	408	29,500	413	388	411	414	403	413	407	409
22	407	5,430	405	23,200	417	390	410	413	402	412	406	406
23	408	5,400	407	16,900	413	407	414	404	405	411	400	410
24	411	5,430	406	14,500	412	414	413	404	404	409	408	411
25	416	5,380	409	14,500	412	406	417	405	408	413	405	413
26	414	2,310	419	8,180	415	406	420	405	408	418	410	411
27	406	412	426	3,280	417	408	417	404	408	418	410	409
28	405	415	417	428	425	406	415	405	407	414	413	407
29	403	414	410	400	-----	5,240	412	405	403	418	410	408
30	401	430	413	402	-----	22,700	415	406	400	425	411	412
31	408	-----	412	404	-----	26,300	-----	406	-----	417	406	-----
TOTAL	12,629	68,044	12,744	253,529	11,469	65,495	202,606	12,902	12,154	12,790	12,700	12,307
MEAN	407	2,268	411	8,178	410	2,113	6,754	416	405	413	410	410
MAX	416	8,890	426	32,700	425	26,300	37,300	432	415	425	418	414
MIN	401	408	402	400	402	388	399	404	397	404	400	405
AC-FT	25,050	135,000	25,280	502,900	22,750	129,900	401,900	25,590	24,110	25,370	25,190	24,410
MEAN a	2,770	15,080	10,680	22,150	8,511	23,220	18,990	12,700	7,702	4,325	3,445	2,607
AC-FT a	170,300	897,300	656,700	1,362M	472,700	1,428M	1,130M	780,600	458,300	265,900	211,800	155,100
CAL YR 1973	TOTAL 303,399	MEAN 831	MAX 29,000	MIN 380	AC-FT 601,800	MEAN a 7,355	AC-FT a 5,325,000					
WTR YR 1974	TOTAL 689,369	MEAN 1,889	MAX 37,300	MIN 388	AC-FT 1,367,000	MEAN a 11,030	AC-FT a 7,989,000					

a Adjusted for diversions in and out of, change in contents of, and evaporation from Lake Oroville, Thermalito diversion pool, Thermalito Forebay and Thermalito Afterbay.

LOCATION.--Lat 39°22'00", long 121°38'46", in Boga Fernandez Grant, T.18 N., R.3 E., Butte County, on right bank 300 ft (91 m) upstream from highway bridge, and 2.7 mi (4.3 km) east of Gridley.

GAGE.--Water-stage recorder. Datum of gage is 2.91 ft (0.887 m) below mean sea level. Prior to Mar. 13, 1966, water-stage recorder on left bank. Mar. 14, 1966, to Sept. 30, 1973, on right bank, at datum 47.09 ft (14.353 m) above mean sea level.

Period of record: Maximum discharge, 151,000 ft³/s (4,280 m³/s) Dec. 23, 1964 (gage height, 50.43 ft or 15.371 m, present datum); minimum daily, 117 ft³/s (3.31 m³/s) June 27, 1966. Maximum discharge since construction of Oroville Dam in 1967, 72,900 ft³/s (2,060 m³/s) Jan. 27, 1970 (gage height, 42.81 ft or 13.048 m); minimum daily, 366 ft³/s (10.4 m³/s) July 26, 1968.

COOPERATION.--Records furnished by California Department of Water Resources and reviewed by Geological Survey.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,820	2,810	13,500	12,100	14,900	8,160	47,000	6,750	3,580	3,030	7,440	7,740
2	2,840	2,810	13,300	12,600	14,000	10,700	53,000	6,750	3,540	3,490	7,420	7,800
3	2,800	2,800	13,200	13,900	13,800	11,500	54,000	6,690	3,560	4,090	7,300	7,820
4	2,820	2,800	13,100	13,900	13,600	11,700	52,900	6,670	3,570	4,090	7,270	7,890
5	2,830	2,880	13,000	14,000	13,400	11,700	40,800	5,780	3,580	4,090	7,430	7,910
6	2,820	2,900	13,000	10,200	11,700	11,800	33,000	5,300	3,570	4,070	7,430	8,000
7	2,830	2,880	13,100	10,800	10,300	12,200	30,400	5,240	3,560	4,080	7,500	7,870
8	2,840	2,880	13,500	12,100	9,730	12,700	26,500	5,260	3,560	5,030	7,530	7,840
9	2,820	2,890	13,400	11,400	9,290	12,700	25,100	5,240	3,580	6,020	7,520	7,900
10	2,820	2,900	13,400	10,200	7,650	12,800	20,600	5,230	3,590	7,430	7,530	8,000
11	2,800	6,690	13,100	10,200	6,300	12,800	16,900	7,700	3,600	7,490	7,520	7,980
12	2,800	14,300	10,900	10,200	6,230	12,800	15,300	7,920	3,590	7,560	7,420	7,950
13	2,780	15,000	10,200	10,100	6,230	13,200	15,200	8,620	4,140	7,580	7,610	7,970
14	2,760	16,700	7,530	10,700	6,190	13,600	15,100	8,150	6,160	7,560	7,580	7,870
15	2,790	16,800	7,160	14,500	6,180	13,700	15,000	8,030	7,500	7,570	7,530	7,800
16	2,800	17,300	7,080	21,900	6,130	14,000	14,900	7,980	6,080	7,570	7,550	7,910
17	2,800	23,500	7,190	40,200	5,220	14,600	14,900	8,040	3,110	7,560	7,470	7,960
18	2,800	25,300	7,140	45,700	5,210	14,500	14,900	7,990	4,030	7,610	7,400	7,970
19	2,770	21,700	7,160	47,000	5,250	14,600	14,900	7,970	5,500	7,560	7,410	7,960
20	2,770	21,300	7,190	47,100	5,210	14,600	14,900	7,880	5,530	7,470	7,520	8,010
21	2,740	21,300	7,180	46,800	5,240	14,500	14,000	7,080	5,490	7,470	7,620	7,970
22	2,790	21,300	7,150	43,500	5,180	14,600	13,500	6,620	5,440	7,490	7,740	7,900
23	2,820	21,300	7,160	37,400	5,140	14,700	12,200	5,850	4,640	7,540	7,750	7,970
24	2,800	21,300	7,130	33,900	6,330	14,700	10,700	5,020	3,660	7,510	7,720	8,020
25	2,750	21,300	7,180	33,500	7,060	14,800	9,270	3,950	3,140	7,510	7,660	7,870
26	2,750	19,300	7,360	28,400	7,080	13,600	9,190	3,550	2,720	7,520	7,690	7,740
27	2,750	15,400	8,310	22,800	7,120	13,000	9,120	3,490	2,650	7,440	7,800	7,680
28	2,710	13,400	8,360	18,400	7,210	13,300	7,980	3,560	2,640	7,330	7,820	7,620
29	2,720	13,300	8,450	16,700	-----	17,800	6,860	3,600	2,620	7,420	7,800	7,580
30	2,810	13,200	10,600	15,300	-----	37,800	6,770	3,590	2,580	7,49		

SACRAMENTO RIVER BASIN

11407300 NORTH HONCUT CREEK NEAR BANGOR, CALIF.

LOCATION.--Lat 39°20'32", long 121°29'25", in NW¼SE¼ sec.11, T.17 N., R.4 E., Butte County, on left bank 0.2 mi (0.3 km) upstream from unnamed tributary, and 5.7 mi (9.2 km) southwest of Bangor.

DRAINAGE AREA.--47.1 mi² (122.0 km²).

PERIOD OF RECORD.--October 1960 to September 1962, July 1963 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 125 ft (38 m), from topographic map. Prior to September 1962, at site 50 ft (15 m) upstream at same datum.

AVERAGE DISCHARGE.--13 years, 52.7 ft³/s (1.49 m³/s), 38,180 acre-ft/yr (47.1 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 4,710 ft³/s (133.4 m³/s) Jan. 16 (gage height, 10.18 ft or 3.103 m); no flow many days.

Period of record: Maximum discharge, 10,700 ft³/s (303 m³/s) Dec. 26, 1964 (gage height, 11.57 ft or 3.527 m), from rating curve extended above 4,600 ft³/s (130 m³/s); maximum gage height, 12.03 ft (3.667 m) Feb. 27, 1973; no flow many days in 1961-62, 1966, 1968, 1971-74.

REMARKS.--Small diversions above station for irrigation. Slight regulation occurs from Lake Wyandotte, capacity, 1,460 acre-ft (1.80 hm³).

COOPERATION.--Records furnished by California Department of Water Resources and reviewed by Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.2	1.8	1,060	129	78	1,930	840	13	5.7	.40	.10	0
2	1.5	1.9	198	79	44	576	291	13	6.4	.30	0	0
3	1.6	2.2	121	64	37	244	162	12	7.6	.30	0	0
4	1.4	2.1	91	56	33	143	107	12	7.3	.50	0	0
5	1.3	2.6	74	53	31	99	78	11	5.4	.90	0	0
6	1.5	6.6	64	96	28	76	62	11	4.1	.70	.20	0
7	7.5	199	57	157	27	248	50	9.6	2.7	.80	.70	0
8	8.1	89	53	104	25	310	43	8.3	2.3	9.3	1.2	0
9	5.0	177	50	70	24	135	111	6.7	2.1	14	1.4	0
10	2.7	533	46	57	22	93	82	5.7	2.0	6.6	1.2	0
11	1.7	1,120	44	52	21	184	52	5.1	1.9	4.9	1.2	0
12	1.5	771	47	260	21	413	40	6.0	1.7	3.9	1.7	0
13	1.4	433	106	159	26	170	32	6.0	1.8	3.1	1.7	0
14	1.5	311	72	434	22	114	28	6.0	2.0	2.5	1.3	0
15	1.3	128	53	834	21	84	25	6.1	2.0	2.1	1.0	0
16	1.3	481	45	1,160	42	67	24	6.6	2.0	1.8	.70	0
17	1.8	640	156	714	36	55	22	6.7	2.1	1.5	1.1	0
18	1.8	413	103	587	28	47	22	6.8	2.0	1.4	1.3	0
19	1.6	194	69	331	338	40	22	7.0	2.4	1.3	1.1	0
20	1.5	145	57	206	112	34	21	6.5	2.7	1.1	.90	0
21	1.3	143	286	156	75	30	20	6.0	2.4	.80	.80	0
22	2.5	98	463	124	90	28	19	5.6	2.0	.60	.50	0
23	9.0	83	182	105	54	26	19	5.4	1.4	.80	.30	0
24	6.3	86	140	90	43	25	27	5.8	1.0	1.0	.10	0
25	4.0	78	101	80	36	25	30	6.0	1.2	.70	0	0
26	3.1	68	147	73	32	31	30	6.4	1.1	.70	0	0
27	2.6	57	979	66	31	305	21	6.2	1.0	.50	0	0
28	2.4	51	666	62	183	489	17	6.4	.80	.40	0	0
29	2.1	47	384	38	-----	1,130	15	5.9	.70	.30	0	0
30	2.2	209	193	32	-----	1,100	14	5.7	.50	.20	0	.10
31	1.8	-----	127	40	-----	330	-----	5.8	-----	.10	0	-----
TOTAL	84.5	6,571.2	6,234	6,468	1,560	8,581	2,326	230.3	78.30	63.50	18.50	.10
MEAN	2.73	219	201	209	55.7	277	77.5	7.43	2.61	2.05	.60	.003
MAX	9.0	1,120	1,060	1,160	338	1,930	840	13	7.6	14	1.7	.10
MIN	1.2	1.8	44	32	21	25	14	5.1	.50	.10	0	0
AC-FT	168	13,030	12,370	12,830	3,090	17,020	4,610	457	155	126	37	.2

CAL YR 1973 TOTAL 41,275.60 MEAN 113 MAX 2,380 MIN 0 AC-FT 81,870
WTR YR 1974 TOTAL 32,215.40 MEAN 88.3 MAX 1,930 MIN 0 AC-FT 63,900

11407500 SOUTH HONCUT CREEK NEAR BANGOR, CALIF.

LOCATION.--Lat 39°22'04", long 121°22'16", in SE¼SE¼ sec.35, T.18 N., R.5 E., Butte County, on right bank 2.3 mi (3.7 km) southeast of Bangor, 3.3 mi (5.3 km) upstream from Tennessee Creek, and 16.3 mi (26.2 km) southeast of Oroville.

DRAINAGE AREA.--30.6 mi² (79.3 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 620 ft (189 m), from topographic map.

AVERAGE DISCHARGE.--24 years, 37.5 ft³/s (1.06 m³/s), 27,170 acre-ft/yr (33.5 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 3,500 ft³/s (99.1 m³/s) Jan. 16 (gage height, 9.07 ft or 2.765 m); minimum daily, 0.42 ft³/s (0.012 m³/s) Sept. 9.

Period of record: Maximum discharge, 17,600 ft³/s (498 m³/s) Dec. 26, 1964 (gage height, 19.25 ft or 5.867 m), from rating curve extended above 2,200 ft³/s (62.3 m³/s) on basis of slope-area measurements at gage heights 11.15 ft (3.399 m) and 19.25 ft (5.867 m); no flow at times in most years.

REMARKS.--Records good. Some small diversions upstream for irrigation.

REVISIONS.--WSP 1931: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.4	2.5	627	105	52	1,670	773	20	4.1	2.2	1.2	1.2
2	1.7	2.6	123	78	35	612	278	18	4.1	2.1	1.1	.89
3	1.6	2.6	76	65	31	220	173	18	4.0	1.9	.98	.71
4	1.5	2.4	54	58	29	139	134	17	3.8	1.9	1.0	.52
5	1.5	2.7	40	53	27	108	112	16	3.5	1.7	.90	.53
6	1.5	13	32	68	25	93	96	15	3.3	1.8	.90	.67
7	12	288	27	80	24	254	83	14	3.1	1.9	1.3	.62
8	9.8	34	23	75	23	193	76	12	2.8	21	1.2	.48
9	6.0	280	21	61	22	119	103	11	2.7	19	1.2	.42
10	3.5	317	19	51	21	96	79	9.8	2.7	8.2	.96	.46
11	3.1	830	23	50	21	144	66	9.2	2.5	4.3	1.5	.51
12	2.7	448	21	162	24	219	59	8.8	2.4	3.7	2.4	.49
13	2.5	218	74	97	25	120	53	8.5	2.5	3.1	2.0	.50
14	2.6	117	36	317	21	97	48	8.2	2.5	2.8	1.5	.56
15	2.5	50	27	598	20	84	45	8.2	2.5	2.6	.93	.58
16	2.5	330	24	821	41	75	42	8.0	2.6	2.3	.81	.49
17	2.5	517	93	470	32	65	36	8.3	2.8	2.4	.91	.53
18	2.4	244	50	456	28	58	34	9.6	2.7	2.4	.86	.60
19	2.4	104	35	251	318	51	34	8.7	3.6	2.3	.94	.75
20	2.5	78	30	159	89	46	30	7.9	3.6	2.2	1.0	.83
21	2.5	59	234	118	80	42	28	7.4	3.0	2.1	.97	.80
22	9.8	44	300	94	76	40	27	6.8	2.9	1.9	.87	.77
23	20	34	113	80	53	38	33	6.4	3.0	1.9	.81	.71
24	5.7	42	81	69	45	36	38	6.1	2.8	1.7	.70	.65
25	2.9	34	61	60	40	39	30	5.6	2.5	1.5	.65	.69
26	2.5	31	99	52	37	64	28	5.2	2.5	1.5	.63	.74
27	2.5	25	600	44	34	390	26	4.8	2.5	1.7	.71	.80
28	2.4	22	359	40	131	336	24	4.6	2.4	1.7	.69	.80
29	2.4	20	378	37	-----	909	21	4.6	2.3	1.7	.74	.68
30	2.5	215	159	34	-----	914	20	4.5	2.1	1.6	.83	.60
31	2.4	-----	119	47	-----	290	-----	4.3	-----	1.3	1.1	-----
TOTAL	121.8	4,406.8	3,958	4,750	1,404	7,561	2,629	296.5	87.8	108.4	32.29	19.58
MEAN	3.93	147	128	153	50.1	244	87.6	9.56	2.93	3.50	1.04	.65
MAX	20	830	627	821	318	1,670	773	20	4.1	21	2.4	1.2
MIN	1.4	2.4	19	34	20	36	20	4.3	2.1	1.3	.63	.42
AC-FT	242	8,740	7,850	9,420	2,780	15,000	5,210	588	174	215	64	39
CAL YR 1973	TOTAL 26,839.34		MEAN 73.5		MAX 1,760		MIN 0		AC-FT 53,240			
WTR YR 1974	TOTAL 25,375.17		MEAN 69.5		MAX 1,670		MIN .42		AC-FT 50,330			

PEAK DISCHARGE (BASE, 1,400 FT³/S)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-9	2000	7.53	1,760	1-16	2000	9.07	3,500
11-11	0900	8.79	3,170	3-1	0930	8.60	2,940
11-17	1600	7.45	1,680	3-30	0430	7.77	2,010
12-1	0130	7.62	1,850	4-1	1200	7.38	1,610

SACRAMENTO RIVER BASIN

11407700 FEATHER RIVER AT YUBA CITY, CALIF.

LOCATION.--Lat 39°08'20", long 121°36'17", in New Helvetia Grant, T.15 N., R.3 E., Yuba County, on left bank at 5th Street railroad bridge in Yuba City, 0.7 mi (1.1 km) upstream from confluence with Yuba River, and at mile 28.0 (45.1 km) upstream from mouth.

DRAINAGE AREA.--3,974 mi² (10,293 km²).

PERIOD OF RECORD.--October 1964 to current year. November 1943 to September 1963 (prior to July 1, 1944, stage only) published in reports of California Department of Water Resources.

GAGE.--Water-stage recorder. Datum of gage is 3.00 ft (0.914 m) below mean sea level.

AVERAGE DISCHARGE.--10 years, 6,128 ft³/s (173.5 m³/s), 4,440,000 acre-ft/yr (5.47 km³/yr).

EXTREMES.--Current year: Maximum daily discharge, 55,300 ft³/s (1,570 m³/s) Apr. 3; minimum daily, 2,590 ft³/s (73.3 m³/s) June 30.

Period of record: Maximum discharge, 172,000 ft³/s (4,870 m³/s) Dec. 23, 1964 (gage height, 76.42 ft or 23.293 m); minimum daily, 166 ft³/s (4.70 m³/s) June 30, 1966.

REMARKS.--Flow regulated by powerplants and reservoirs. There are many diversions above the station for irrigation. Discharge figures computed as summation of Feather River near Gridley, North and South Honcut Creeks (see sta 11407150, 11407300, 11407500), and a correction for ungaged drainage area. Records of water temperatures and sediment discharge for the current year are published in Part 2 of this report.

COOPERATION.--Gage-height record furnished by California Department of Water Resources.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,830	2,830	20,000	13,000	15,400	22,000	53,200	6,880	3,620	3,040	7,440	7,740
2	2,850	2,830	14,500	13,200	14,300	15,300	55,200	6,870	3,580	3,500	7,420	7,800
3	2,810	2,820	14,000	14,400	14,100	13,300	55,300	6,810	3,600	4,100	7,300	7,820
4	2,830	2,820	13,700	14,300	13,800	12,800	53,800	6,780	3,610	4,100	7,270	7,890
5	2,840	2,900	13,400	14,400	13,600	12,500	41,500	5,880	3,610	4,100	7,430	7,910
6	2,830	2,980	13,400	10,800	11,900	12,400	33,600	5,400	3,600	4,080	7,430	8,000
7	2,900	4,750	13,400	11,700	10,500	14,100	30,900	5,330	3,580	4,090	7,510	7,870
8	2,910	3,350	13,800	12,800	9,910	14,600	27,000	5,340	3,580	5,150	7,540	7,840
9	2,860	4,640	13,700	11,900	9,470	13,700	25,900	5,310	3,600	6,150	7,530	7,900
10	2,840	6,160	13,600	10,600	7,820	13,500	21,200	5,290	3,610	7,490	7,540	8,000
11	2,820	14,200	13,400	10,600	6,460	14,100	17,400	7,750	3,620	7,530	7,530	7,980
12	2,820	19,000	11,200	11,800	6,400	15,200	15,700	7,980	3,610	7,590	7,440	7,950
13	2,790	17,500	10,900	11,100	6,430	14,300	15,500	8,680	4,160	7,600	7,620	7,970
14	2,780	18,300	7,940	13,600	6,360	14,400	15,400	8,200	6,180	7,580	7,590	7,870
15	2,800	17,500	7,470	20,000	6,340	14,300	15,300	8,080	7,520	7,590	7,540	7,800
16	2,810	20,400	7,340	29,500	6,450	14,500	15,200	8,040	6,100	7,590	7,560	7,910
17	2,820	27,900	8,150	44,700	5,480	15,100	15,100	8,100	3,130	7,570	7,480	7,960
18	2,820	27,800	7,730	49,700	5,430	14,900	15,100	8,050	4,050	7,620	7,410	7,970
19	2,790	22,800	7,560	49,200	7,770	14,900	15,100	8,030	5,520	7,570	7,420	7,960
20	2,790	22,200	7,520	48,500	5,980	14,900	15,100	7,940	5,550	7,480	7,530	8,010
21	2,750	22,100	9,180	47,900	5,840	14,800	14,200	7,130	5,510	7,480	7,630	7,970
22	2,840	21,800	10,100	44,300	5,820	14,900	13,700	6,670	5,460	7,500	7,750	7,900
23	2,930	21,700	8,290	38,100	5,550	14,900	12,400	5,900	4,660	7,550	7,750	7,970
24	2,850	21,800	7,980	34,500	6,670	14,900	10,900	5,070	3,670	7,520	7,720	8,020
25	2,780	21,700	7,800	34,000	7,350	15,000	9,500	3,990	3,150	7,520	7,660	7,870
26	2,770	19,700	8,300	28,900	7,340	14,000	9,410	3,590	2,730	7,530	7,690	7,740
27	2,770	15,700	14,400	23,200	7,370	15,700	9,300	3,530	2,660	7,450	7,800	7,680
28	2,730	13,700	12,300	18,800	8,420	16,500	8,140	3,600	2,650	7,340	7,820	7,620
29	2,740	13,600	11,400	17,000	-----	25,600	7,000	3,640	2,630	7,430	7,800	7,580
30	2,830	14,800	12,000	15,600	-----	45,500	6,900	3,630	2,590	7,500	7,820	7,650
31	2,830	-----	13,100	15,500	-----	46,600	-----	3,620	-----	7,470	7,720	-----
TOTAL	87,360	430,280	347,560	733,600	238,260	529,200	653,950	191,110	121,140	203,810	234,690	236,150
MEAN	2,818	14,340	11,210	23,660	8,509	17,070	21,800	6,165	4,038	6,575	7,571	7,872
MAX	2,930	27,900	20,000	49,700	15,400	46,600	55,300	8,680	7,520	7,620	7,820	8,020
MIN	2,730	2,820	7,340	10,600	5,430	12,400	6,900	3,530	2,590	3,040	7,270	7,580
AC-FT	173,300	853,500	689,400	1,455M	472,600	1,050M	1,297M	379,100	240,300	404,300	465,500	468,400
CAL YR 1973	TOTAL	2,521,260	MEAN	6,908	MAX	54,600	MIN	1,040	AC-FT	5,001,000		
WTR YR 1974	TOTAL	4,007,110	MEAN	10,980	MAX	55,300	MIN	2,590	AC-FT	7,948,000		

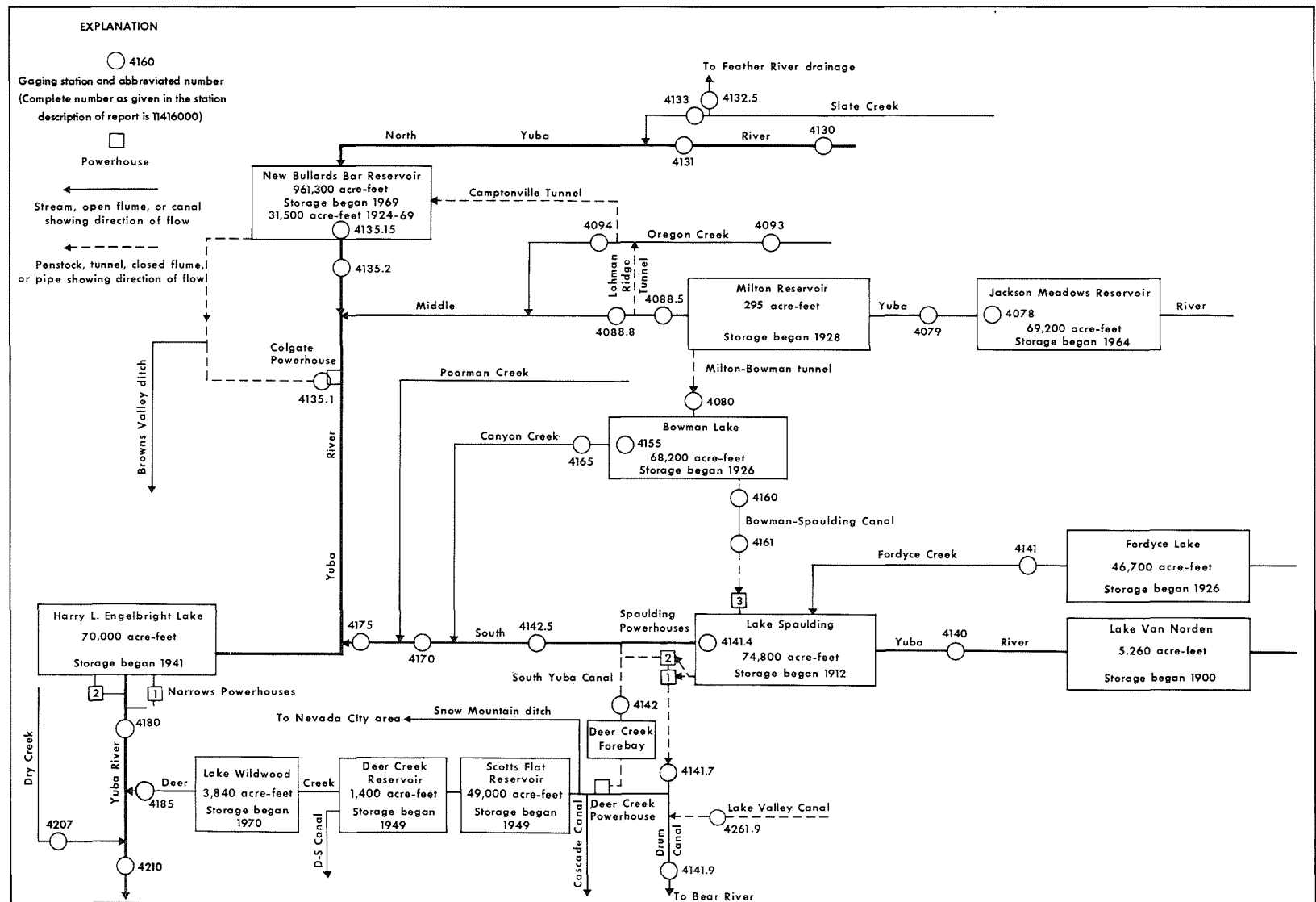


FIGURE 14.--Schematic diagram showing diversions and storage in Yuba River basin.

SACRAMENTO RIVER BASIN

11407800 JACKSON MEADOWS RESERVOIR NEAR SIERRA CITY, CALIF.

LOCATION.--Lat 39°30'40", long 120°33'15", in NW¼SE¼ sec.18, T.19 N., R.13 E., Sierra County, Tahoe National Forest, on right bank at Jackson Meadows Dam on Middle Yuba River, 0.7 mi (1.1 km) downstream from Pass Creek, and 5.7 mi (9.2 km) southeast of Sierra City.

DRAINAGE AREA.--37.6 mi² (97.4 km²).

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

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Nevada Irrigation District).

EXTREMES.--Current year: Maximum contents, 70,700 acre-ft (87.1 hm³) July 9 (elevation, 6,037.4 ft or 1,840.20 m); minimum, 25,200 acre-ft (31.1 hm³) Nov. 10 (elevation, 5,986.6 ft or 1,824.72 m).

Period of record: Maximum contents, 71,000 acre-ft (87.5 hm³) on several days in 1969-71 (elevation, 6,037.7 ft or 1,840.29 m); minimum since reservoir first filled, 20,300 acre-ft (25.0 hm³) Oct. 21 to Nov. 1, 1968 (elevation, 5,978.7 ft or 1,822.31 m).

REMARKS.--Reservoir is formed by an earthfill dam. Storage began Nov. 9, 1964. Usable capacity, 66,700 acre-ft (82.2 hm³) between elevations 5,933.0 ft (1,808.38 m), bottom of intake tower and 6,036.0 ft (1,839.77 m), top of spillway Tainter gates. Dead storage, 2,500 acre-ft (3.08 hm³). Records, including extremes, represent total contents at 2400 hours. See schematic diagram of Yuba River basin.

REVISIONS (WATER YEARS).--WRD Calif. 1970: 1969.

CAPACITY TABLE (ELEVATION, IN FEET, AND CONTENTS, IN ACRE-FEET)

5,960	10,600	6,010	43,900
5,970	15,400	6,020	53,200
5,980	21,000	6,030	63,000
5,990	27,600	6,040	73,500
6,000	35,300		

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	44,900	27,200	35,200	41,100	54,700	54,800	55,100	55,300	--	69,800	69,500	58,800
2	44,300	26,600	35,300	41,400	54,700	54,800	54,900	55,900	--	69,800	69,400	58,300
3	43,800	26,100	35,500	41,600	54,700	54,700	54,900	56,700	70,400	69,800	69,500	57,700
4	43,100	--	35,600	41,800	54,600	54,700	54,800	57,700	70,200	69,800	69,400	57,100
5	42,500	--	35,700	42,000	54,500	54,600	54,700	58,700	70,000	69,700	69,500	56,500
6	41,900	--	35,800	42,300	54,500	54,600	54,800	60,000	69,800	69,700	69,500	56,000
7	41,400	--	35,900	42,400	54,600	54,600	54,800	--	69,600	69,600	69,400	55,400
8	40,800	--	36,100	42,600	54,600	54,600	54,800	--	69,400	70,200	69,400	54,900
9	40,200	--	36,200	42,800	54,500	54,500	54,800	--	69,200	70,700	69,400	54,300
10	39,700	25,200	36,300	42,900	54,500	54,500	54,800	--	69,000	70,400	69,400	53,800
11	39,100	24,300	36,400	43,100	54,500	54,500	54,800	--	69,500	70,200	69,400	53,100
12	38,500	30,400	36,600	43,200	54,500	54,500	54,800	--	70,200	70,000	69,400	52,500
13	38,000	30,900	36,800	43,400	54,500	54,600	54,800	--	70,400	69,900	69,100	51,800
14	37,400	31,300	36,800	43,900	54,500	54,500	54,900	--	70,200	69,800	68,700	51,200
15	36,800	31,700	37,000	45,700	54,500	54,500	54,900	--	69,900	69,800	68,200	50,600
16	36,300	32,000	37,100	47,000	54,500	54,500	55,000	--	69,700	69,700	67,600	50,100
17	35,700	32,500	37,300	48,600	54,500	54,600	55,100	--	69,600	69,700	67,100	49,400
18	35,000	32,800	37,500	50,300	54,500	54,600	55,100	--	69,400	69,700	66,600	48,900
19	34,400	33,000	37,600	52,200	54,500	54,700	55,000	--	69,200	69,700	66,100	48,200
20	33,900	33,200	37,700	53,200	54,500	54,700	55,000	--	69,100	69,700	65,600	47,700
21	33,200	33,400	37,900	53,800	54,400	54,700	55,100	--	69,100	69,600	64,900	47,000
22	32,800	33,600	38,000	54,300	54,400	54,700	55,100	--	69,500	69,600	64,400	46,500
23	32,400	33,700	38,100	54,600	54,400	54,700	55,200	--	69,700	69,600	63,800	45,800
24	31,800	33,900	38,300	54,800	54,400	54,800	55,100	--	69,800	69,600	63,300	45,200
25	31,200	34,000	38,400	54,800	54,400	54,700	55,000	--	69,800	69,600	62,700	44,600
26	30,700	34,200	38,500	54,800	54,400	54,800	54,900	--	69,800	69,600	62,200	44,000
27	30,100	34,400	38,800	54,800	54,400	54,800	54,900	--	69,800	69,500	61,600	43,400
28	29,500	34,500	39,000	54,700	54,400	54,800	54,900	--	69,800	69,500	61,000	42,800
29	28,900	34,700	40,000	54,700	-----	55,200	54,900	--	69,800	69,500	60,500	42,200
30	28,300	34,900	40,500	54,700	-----	55,300	55,100	--	69,800	69,500	59,900	41,600
31	27,800	-----	40,900	54,700	-----	55,100	-----	--	-----	69,500	59,400	-----
MAX	44,900	--	40,900	54,800	54,700	55,300	55,200	--	70,700	69,500	58,800	
MIN	27,800	--	35,200	41,100	54,400	54,500	54,700	--	69,500	59,400	41,600	
(a)	5,990.2	5,999.5	6,006.6	6,021.6	6,021.3	6,022.0	6,022.0	--	6,036.6	6,036.3	6,026.4	6,007.4
(b)	--	+7,100	+6,000	+13,800	-300	+700	0	--	--	-300	-10,100	-17,800
CAL YR 1973	b +9,600											
WTR YR 1974	b -3,900											

a Elevation, in feet, at end of month.

b Change in contents, in acre-feet.

11407900 MIDDLE YUBA RIVER BELOW JACKSON MEADOWS DAM, NEAR SIERRA CITY, CALIF.

LOCATION.--Lat 39°30'58", long 120°33'40", in SE¼NW¼ sec.18, T.19 N., R.13 E., Sierra County, Tahoe National Forest, on right bank 0.6 mi (1.0 km) downstream from Jackson Meadows Dam, and 5.2 mi (8.4 km) southeast of Sierra City.

DRAINAGE AREA.--38.3 mi² (99.2 km²).

PERIOD OF RECORD.--October 1964 to current year. If record for Milton-Bowman tunnel near Graniteville is added to record published as Middle Yuba River at Milton, a record equivalent to this site can be obtained for the period 1928-64.

GAGE.--Water-stage recorder. Datum of gage is 5,717.20 ft (1,742.603 m) above mean sea level (levels by Nevada Irrigation District).

AVERAGE DISCHARGE (adjusted for change in contents in Jackson Meadows Reservoir).--10 years, 125 ft³/s (3,540 m³/s), 90,560 acre-ft/yr (112 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,250 ft³/s (35.4 m³/s) May 30 (gage height, 5.50 ft or 1.676 m); minimum daily, 6.5 ft³/s (0.18 m³/s) Dec. 15, 16.

Period of record: Maximum discharge, 2,300 ft³/s (65.1 m³/s) Sept. 1, 1965 (gage height, 6.60 ft or 2.012 m), from rating curve extended above 1,100 ft³/s (31.2 m³/s) on basis of computation of flow over Milton Dam at gage height, 10.57 ft (3.222 m); minimum daily, 0.1 ft³/s (0.003 m³/s) Oct. 1, 2, 1964.

Maximum stage known since at least 1925, 10.57 ft (3.222 m) Jan. 31, 1963, from floodmarks (discharge, 10,000 ft³/s or 283 m³/s, by computation of flow over Milton Dam, adjusted for diversion and inflow).

REMARKS.--Records good. Flow regulated by Jackson Meadows Reservoir since November 1964 (see sta 11407800). See schematic diagram of Yuba River basin.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	284	281	7.9	11	119	131	288	281	727	98	18	274
2	292	281	7.6	10	107	192	245	216	726	95	16	274
3	298	274	7.3	9.4	100	163	199	17	716	89	15	281
4	298	274	7.3	9.1	94	130	174	18	716	85	14	284
5	298	274	7.3	9.1	85	112	160	18	640	79	18	284
6	295	274	7.0	8.5	80	98	148	19	610	73	18	281
7	292	281	7.0	7.9	79	98	146	20	564	65	18	284
8	284	274	7.0	7.9	79	94	142	20	524	95	14	284
9	284	189	7.0	7.6	77	82	150	19	508	346	13	281
10	284	136	7.0	7.3	75	79	146	18	500	370	12	284
11	284	154	6.8	7.3	72	76	138	17	203	232	11	288
12	284	156	6.8	7.6	72	82	144	17	89	168	9.8	284
13	281	75	6.8	8.5	73	79	148	76	280	138	111	288
14	281	13	6.8	13	71	72	158	365	437	118	230	288
15	281	10	6.5	37	68	72	181	565	388	100	230	288
16	284	11	6.5	30	73	77	183	610	340	91	230	284
17	284	17	8.8	33	71	85	233	548	305	87	230	288
18	284	12	8.2	36	71	94	260	476	270	79	230	292
19	288	10	7.9	44	85	96	251	390	260	77	248	292
20	298	9.8	7.3	26	76	102	233	284	252	73	278	292
21	298	9.1	7.3	20	72	111	230	270	146	67	274	292
22	295	8.5	7.3	19	72	116	254	344	28	63	274	292
23	295	7.9	7.3	71	66	121	309	460	59	61	274	288
24	298	7.9	7.0	119	62	131	298	565	95	55	274	288
25	306	7.6	7.0	138	60	142	257	635	110	54	274	288
26	302	7.3	7.0	144	61	150	222	695	112	52	274	284
27	298	7.3	8.5	136	63	174	195	764	110	49	274	278
28	295	7.3	9.8	133	63	186	183	812	105	46	274	270
29	292	8.2	27	124	-----	263	183	912	105	44	274	270
30	288	8.2	18	118	-----	500	209	880	100	29	278	270
31	288	-----	14	116	-----	393	-----	750	-----	21	274	-----
TOTAL	9,013	3,085.1	265.0	1,468.2	2,146	4,301	6,067	11,081	10,025	3,099	4,981.8	8,515
MEAN	291	103	8.55	47.4	76.6	139	202	357	334	100	161	284
MAX	306	281	27	144	119	500	309	912	727	370	278	292
MIN	281	7.3	6.5	7.3	60	72	138	17	28	21	9.8	270
AC-FT	17,880	6,120	526	2,910	4,260	8,530	12,030	21,980	19,880	6,150	9,880	16,890
CAL YR 1973	TOTAL 40,320.4	MEAN 110	MAX 665	MIN 5.5	AC-FT 79,980	MEAN a 124	AC-FT a 90,080					
WTR YR 1974	TOTAL 64,047.1	MEAN 175	MAX 912	MIN 6.5	AC-FT 127,000	MEAN a 170	AC-FT a 123,100					

a Adjusted for change in contents in Jackson Meadows Reservoir.

11408850 MIDDLE YUBA RIVER NEAR CAMPTONVILLE, CALIF.

LOCATION.--Lat 39°25'01", long 120°57'06", in SW¼SE¼ sec.15, T.18 N., R.9 E., Sierra County, Tahoe National Forest, on right bank 0.6 mi (1.0 km) downstream from Kanaka Creek, and 5.8 mi (9.3 km) southeast of Camptonville.

DRAINAGE AREA.--136 mi² (352 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 2,170 ft (661 m), from topographic map.

AVERAGE DISCHARGE.--7 years, 370 ft³/s (10.5 m³/s), 268,100 acre-ft/yr (331 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 5,910 ft³/s (167 m³/s) Nov. 12 (gage height, 11.85 ft or 3.612 m); minimum daily, 34 ft³/s (0.96 m³/s) Sept. 27-29.
Period of record: Maximum discharge, 12,300 ft³/s (348 m³/s) Jan. 21, 1970 (gage height, 14.80 ft or 4.511 m); minimum daily, 21 ft³/s (0.59 m³/s) Oct. 17, 1971.

REMARKS.--Records good. Natural flow of stream affected by Jackson Meadows Reservoir since November 1964 (see sta 11407800), Milton-Bowman tunnel (see sta 11408000) which diverts above station to Bowman Lake (see sta 11415500), and other small diversions above station. See schematic diagram of Yuba River basin.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35	47	1,090	870	602	3,000	2,910	840	1,260	202	65	43
2	35	47	610	700	546	2,000	2,440	939	1,270	193	64	43
3	35	47	482	602	499	1,500	1,760	668	1,270	181	63	43
4	35	46	416	530	478	1,000	1,420	678	1,220	166	63	42
5	35	67	368	482	447	850	1,240	709	1,130	153	61	41
6	35	235	347	447	416	792	1,090	771	1,090	138	61	39
7	65	957	338	404	404	808	987	882	1,030	128	60	39
8	86	527	323	368	386	767	931	965	935	270	59	39
9	63	427	312	344	374	706	930	958	885	615	59	39
10	48	1,350	312	318	359	662	843	896	875	685	59	38
11	43	3,280	356	302	350	652	783	830	751	482	56	38
12	41	3,390	341	395	341	899	778	790	342	359	56	38
13	41	1,640	534	602	335	821	754	736	500	285	55	38
14	40	1,070	440	1,030	320	759	756	892	778	235	54	37
15	39	740	386	3,330	308	785	798	1,110	708	199	54	37
16	38	989	356	2,420	353	830	868	1,110	646	175	53	36
17	38	1,780	558	3,300	329	859	904	993	586	157	53	36
18	38	1,580	542	2,640	346	849	967	860	538	144	52	36
19	37	948	454	3,140	587	821	888	741	520	132	51	36
20	39	725	407	2,160	478	789	823	658	490	123	51	36
21	40	590	458	1,500	425	771	805	614	464	118	50	35
22	77	492	496	1,170	410	756	864	665	203	109	49	35
23	234	419	437	995	368	745	958	783	166	97	48	35
24	97	389	395	930	344	739	915	916	179	95	48	35
25	71	353	374	882	335	783	801	1,060	222	89	46	35
26	62	326	392	816	350	842	717	1,300	229	85	45	35
27	57	292	931	750	370	1,190	641	1,540	225	81	45	34
28	54	275	1,340	690	450	1,570	617	1,560	216	76	45	34
29	51	308	2,710	645	-----	2,570	626	1,480	209	72	44	34
30	49	518	1,760	602	-----	4,400	697	1,490	206	68	44	35
31	47	-----	1,150	586	-----	2,860	-----	1,310	-----	66	44	-----
TOTAL	1,705	23,854	19,415	33,950	11,310	37,375	30,511	29,744	19,143	6,038	1,656	1,121
MEAN	55.0	795	626	1,095	404	1,206	1,017	959	638	195	53.4	37.4
MAX	234	3,390	2,710	3,330	602	4,400	2,910	1,560	1,270	685	65	43
MIN	35	46	312	302	308	652	617	614	166	66	44	34
AC-FT	3,380	47,310	38,510	67,340	22,430	74,130	60,520	59,000	37,970	11,980	3,280	2,220
CAL YR 1973	TOTAL	145,176	MEAN	398	MAX	3,390	MIN	33	AC-FT	288,000		
WTR YR 1974	TOTAL	215,822	MEAN	591	MAX	4,400	MIN	34	AC-FT	428,100		

11408880 MIDDLE YUBA RIVER BELOW OUR HOUSE DAM, CALIF.

LOCATION.--Lat 39°24'42", long 120°59'49", in SW¼NW¼ sec.20, T.18 N., R.9 E., Sierra County, Tahoe National Forest, on right bank 400 ft (122 m) downstream from Our House Dam, and 4.0 mi (6.4 km) southeast of Camptonville.

DRAINAGE AREA.--145 mi² (376 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 1,957.51 ft (596.649 m) above mean sea level. Prior to Nov. 4, 1970, at datum 10.0 ft (3.05 m) higher.

AVERAGE DISCHARGE.--6 years, 181 ft³/s (5.13 m³/s), 131,100 acre-ft/yr (162 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 4,510 ft³/s (128 m³/s) Nov. 12 (gage height, 17.30 ft or 5.273 m); minimum daily, 21 ft³/s (0.59 m³/s) June 17-21.

Period of record: Maximum discharge, 12,500 ft³/s (354 m³/s) Jan. 21, 1970 (gage height, 20.70 ft or 6.309 m, present datum); minimum daily, 3.2 ft³/s (0.09 m³/s) Oct. 21 to Nov. 4, 1970.

REMARKS.--Records good. Natural flow of stream affected by Jackson Meadows Reservoir since November 1964 (see sta 11407800), Milton-Bowman tunnel (see sta 11408000) which diverts above station to Bowman Lake (see sta 11415500), Lohman Ridge tunnel since October 1968 which diverts 400 ft (122 m) upstream to Oregon Creek and then to Bullards Bar Reservoir via Camptonville tunnel. Other small diversions above station. See schematic diagram of Yuba River basin.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32	32	353	128	33	1,550	1,900	56	397	27	27	28
2	32	32	39	36	33	1,410	1,420	145	395	27	27	28
3	32	32	37	35	33	553	817	53	397	27	27	28
4	32	32	36	34	32	243	556	52	342	26	28	28
5	32	32	35	33	32	96	383	53	270	26	28	28
6	32	35	35	33	32	39	242	53	231	26	28	28
7	32	322	35	32	32	35	144	62	176	26	28	28
8	33	52	35	32	32	31	87	138	87	28	28	28
9	33	39	35	31	32	30	85	136	51	31	28	28
10	32	783	35	30	32	29	37	97	48	32	28	28
11	32	3,160	35	30	32	29	36	58	47	30	28	28
12	32	2,830	35	31	32	125	35	54	41	29	27	28
13	32	730	37	33	31	50	35	53	42	28	27	28
14	32	282	37	310	31	31	41	77	40	28	27	28
15	32	42	36	2,770	31	31	46	281	27	28	27	29
16	32	188	35	1,600	31	31	48	289	24	27	27	29
17	32	926	37	2,630	31	36	50	170	21	27	27	29
18	32	780	37	1,870	31	33	108	67	21	27	27	29
19	32	157	36	2,470	35	31	57	53	21	27	28	30
20	32	40	33	1,320	34	31	48	52	21	27	28	30
21	32	38	31	665	32	30	48	51	21	27	28	30
22	33	37	32	350	32	30	57	52	22	27	29	30
23	35	36	31	169	32	30	109	53	26	27	29	30
24	34	36	31	104	32	29	83	77	26	27	29	30
25	33	35	31	58	32	30	63	235	26	27	29	30
26	33	35	31	37	32	32	61	457	27	27	29	31
27	33	35	146	35	32	348	59	671	27	27	29	31
28	33	35	550	35	32	684	59	672	27	26	29	31
29	33	35	2,020	34	-----	1,760	53	602	27	26	28	31
30	33	37	940	34	-----	3,400	54	611	27	26	28	32
31	32	-----	403	33	-----	1,790	-----	446	-----	27	28	-----
TOTAL	1,006	10,885	5,279	15,042	398	12,607	6,821	5,926	2,955	848	865	874
MEAN	32.5	363	170	485	32.1	407	227	191	98.5	27.4	27.9	29.1
MAX	35	3,160	2,020	2,770	35	3,400	1,900	672	397	32	29	32
MIN	32	32	31	30	31	29	35	51	21	26	27	28
AC-FT	2,000	21,590	10,470	29,840	1,780	25,010	13,530	11,750	5,860	1,680	1,720	1,730
(a)	1,630	29,170	30,850	42,420	22,290	54,530	51,410	51,560	34,880	11,170	1,800	650

CAL YR 1973 TOTAL 40,135 MEAN 110 MAX 3,240 MIN 21 AC-FT 79,610
WTR YR 1974 TOTAL 64,006 MEAN 175 MAX 3,400 MIN 21 AC-FT 127,000

a Diversion, in acre-feet, to Lohman Ridge tunnel.

SACRAMENTO RIVER BASIN

379

11409300 OREGON CREEK AT CAMPTONVILLE, CALIF.

LOCATION.--Lat 39°26'46", long 121°02'43", in SE¼NE¼ sec.11, T.18 N., R.8 E., Yuba County, Tahoe National Forest, on right bank 25 ft (8 m) downstream from county bridge, 0.5 mi (0.8 km) southeast of Camptonville, and 5.5 mi (8.8 km) upstream from mouth.

DRAINAGE AREA.--23.0 mi² (59.6 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 2,230 ft (680 m), from topographic map.

AVERAGE DISCHARGE.--7 years, 80.2 ft³/s (2.27 m³/s), 58,100 acre-ft/yr (71.6 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,770 ft³/s (50.1 m³/s) Jan. 15 (gage height, 8.26 ft or 2.518 m); minimum daily, 2.6 ft³/s (0.074 m³/s) Sept. 28-30.
Period of record: Maximum discharge, 3,130 ft³/s (88.6 m³/s) Jan. 21, 1970 (gage height, 10.07 ft or 3.069 m); minimum daily, 1.6 ft³/s (0.05 m³/s) Sept. 3, 1972, Sept. 10, 1973.

REMARKS.--Records good. No regulation or diversion above station. See schematic diagram of Yuba River basin.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.7	4.7	410	271	102	577	916	69	22	9.2	5.1	3.2
2	2.7	4.7	213	209	90	598	755	76	21	8.9	4.7	3.2
3	3.0	4.7	164	172	82	356	487	77	20	8.6	4.6	3.2
4	3.1	4.6	136	149	76	263	356	75	20	8.3	4.4	3.1
5	3.1	17	116	134	71	223	291	73	21	8.0	4.4	3.1
6	3.3	73	104	121	66	204	244	73	20	7.8	4.4	3.1
7	14	273	97	105	62	205	210	74	19	7.6	4.2	3.0
8	21	112	92	95	58	192	187	74	18	46	4.0	3.0
9	12	204	87	87	55	181	180	72	17	55	3.8	3.0
10	6.4	455	84	80	53	170	159	68	17	24	3.6	3.0
11	5.3	732	90	76	50	183	144	62	16	18	3.6	2.9
12	4.7	644	87	122	50	322	132	57	15	15	3.4	2.8
13	4.5	385	200	203	49	266	122	53	15	14	3.4	2.9
14	4.2	284	152	397	47	234	113	49	14	13	3.4	2.8
15	4.0	191	121	1,140	45	225	108	46	14	12	3.3	2.8
16	4.0	336	106	708	56	222	106	44	14	11	3.3	2.8
17	3.8	556	189	780	50	218	106	43	14	10	3.3	2.8
18	3.8	508	181	667	54	209	108	40	14	9.8	3.4	2.7
19	3.8	299	151	790	178	196	102	37	16	9.4	3.4	2.7
20	4.4	218	129	569	118	181	93	34	15	8.8	3.4	2.7
21	4.7	170	150	392	97	166	87	32	14	8.2	3.4	2.7
22	15	138	174	290	86	155	85	31	13	7.9	3.4	2.7
23	47	112	145	236	79	144	93	30	12	7.6	3.4	2.7
24	20	101	124	202	76	134	92	29	11	7.3	3.4	2.7
25	12	91	112	176	74	139	84	29	11	6.8	3.4	2.7
26	9.6	81	123	154	101	153	81	28	11	6.7	3.4	2.7
27	7.6	72	383	135	112	252	76	28	11	6.3	3.3	2.7
28	6.2	67	599	119	115	475	71	27	10	6.1	3.3	2.6
29	5.3	82	959	107	-----	727	68	27	9.8	5.7	3.3	2.6
30	4.9	201	598	99	-----	1,050	66	26	9.5	5.4	3.3	2.6
31	4.9	-----	373	97	-----	670	-----	23	-----	5.3	3.2	-----
TOTAL	251.0	6,420.7	6,649	8,882	2,152	9,290	5,722	1,506	454.3	377.7	113.9	85.5
MEAN	8.10	214	214	287	76.9	300	191	48.6	15.1	12.2	3.67	2.85
MAX	47	732	959	1,140	178	1,050	916	77	22	55	5.1	3.2
MIN	2.7	4.6	84	76	45	134	66	23	9.5	5.3	3.2	2.6
AC-FT	498	12,740	13,190	17,620	4,270	18,430	11,350	2,990	501	749	226	170

CAL YR 1973 TOTAL 37,647.2 MEAN 103 MAX 1,230 MIN 1.6 AC-FT 74,670
WTR YR 1974 TOTAL 41,904.1 MEAN 115 MAX 1,140 MIN 2.6 AC-FT 83,120

PEAK DISCHARGE (BASE, '500 FT ³ /S)							
DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-9	2230	5.85	570	1-17	0200	6.77	955
11-11	1000	7.21	1,180	1-19	0900	6.78	960
11-12	0400	6.84	990	3-1	2100	7.07	1,100
11-17	1630	6.48	822	3-28	0530	6.02	638
12-1	0230	6.19	706	3-30	0430	7.27	1,200
12-29	0830	7.46	1,300	4-1	1600	7.27	1,200
1-15	0430	8.26	1,770				

SACRAMENTO RIVER BASIN

11409400 OREGON CREEK BELOW LOG CABIN DAM, NEAR CAMPTONVILLE, CALIF.

LOCATION.--Lat 39°26'22", long 121°03'29", in SW¼SW¼ sec.11, T.18 N., R.8 E., Yuba County, Tahoe National Forest, on right bank 500 ft (152 m) downstream from Log Cabin Dam, 670 ft (204 m) upstream from High Point Ravine, and 1.1 mi (1.8 km) southwest of Camptonville.

DRAINAGE AREA.--29.1 mi² (75.4 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 1,919.96 ft (585.204 m) above mean sea level (levels by Yuba County Water Agency). Prior to July 24, 1973, at site 470 ft (143 m) downstream at datum 8.40 ft (2.560 m) lower.

AVERAGE DISCHARGE.--6 years, 53.5 ft³/s (1.52 m³/s), 38,760 acre-ft/yr (47.8 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,060 ft³/s (58.3 m³/s) Jan. 15 (gage height, 7.79 ft or 2.374 m), from rating curve extended above 600 ft³/s (17.0 m³/s); minimum daily, 6.4 ft³/s (0.18 m³/s) July 2.
Period of record: Maximum discharge, 4,180 ft³/s (118 m³/s) Jan. 21, 1970 (gage height, 7.02 ft or 2.140 m, previous site and datum); maximum gage height, 7.51 ft (2.289 m) Jan. 16, 1970; minimum daily discharge, 0.34 ft³/s (0.01 m³/s) Sept. 18, 1972.

REMARKS.--Records good. Camptonville tunnel, maximum capacity, about 830 ft³/s (23.5 m³/s), 520 ft (158 m) upstream, diverts to New Bullards Bar Reservoir (see sta 11413515); diversion began October 1968. See schematic diagram showing diversions and storage in Yuba River basin. Records of water temperatures for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.8	8.3	117	12	11	305	660	14	14	6.6	8.7	8.0
2	9.7	8.3	13	11	11	325	456	15	14	6.4	8.7	8.0
3	9.7	8.3	12	11	11	36	140	14	14	7.0	8.7	8.0
4	9.6	8.3	12	10	10	12	24	14	14	8.3	8.7	8.0
5	9.6	8.7	12	10	10	12	13	14	14	8.2	8.7	8.0
6	9.5	11	11	10	10	12	13	14	14	8.2	8.7	7.8
7	11	18	11	9.8	10	12	13	15	14	8.2	8.6	7.8
8	10	13	11	9.5	10	12	13	15	14	9.7	8.5	8.3
9	9.4	13	11	9.4	10	11	12	15	14	11	8.5	9.1
10	8.9	131	11	9.3	10	11	13	15	14	12	8.6	9.1
11	8.7	494	11	9.1	9.9	11	12	14	14	11	8.6	9.0
12	8.7	364	11	25	9.9	14	12	14	12	10	8.4	8.9
13	8.6	31	13	50	9.9	12	12	14	13	10	8.2	8.9
14	8.5	15	12	130	9.9	12	13	14	12	9.7	8.2	8.9
15	8.5	13	12	850	9.3	12	14	14	8.3	9.1	8.2	8.9
16	8.5	15	11	450	9.3	12	14	14	8.2	8.7	8.2	8.9
17	8.4	195	12	500	9.3	12	14	14	8.0	8.7	8.2	8.9
18	8.4	145	13	427	9.3	12	14	14	8.0	8.6	8.3	8.9
19	8.3	14	12	579	11	12	14	14	8.0	8.5	8.4	8.9
20	8.4	14	11	352	10	12	14	14	8.0	8.4	8.4	8.4
21	8.4	13	10	164	10	11	14	14	7.6	8.4	8.4	8.2
22	9.4	12	10	79	9.9	11	14	14	7.4	8.2	8.4	8.7
23	14	12	9.8	33	9.9	11	14	14	7.4	8.4	8.3	8.6
24	12	12	9.6	15	9.6	11	14	14	7.4	8.4	8.1	8.5
25	11	12	9.4	13	9.6	11	14	14	7.6	8.3	8.0	8.2
26	8.5	11	9.6	12	9.9	11	14	14	7.6	8.3	8.0	8.3
27	8.5	11	59	12	9.8	12	14	14	7.2	8.3	8.0	8.4
28	8.3	11	251	12	9.9	138	14	14	6.7	8.3	8.0	8.3
29	8.3	11	757	11	-----	436	14	14	6.6	8.4	8.0	8.2
30	8.3	12	260	11	-----	782	14	14	6.6	8.5	8.0	7.8
31	8.3	-----	33	11	-----	379	-----	14	-----	8.6	8.0	-----
TOTAL	287.2	1,644.9	1,757.4	3,847.1	279.4	2,682	1,630	439	311.6	270.4	258.7	253.9
MEAN	9.26	54.8	56.7	124	9.98	86.5	54.3	14.2	10.4	8.72	8.35	8.46
MAX	14	494	757	850	11	782	660	15	14	12	8.7	9.1
MIN	8.3	8.3	9.4	9.1	9.3	11	12	14	6.6	6.4	8.0	7.8
AC-FT	570	3,260	3,490	7,630	554	5,320	3,230	871	618	536	513	504
(a)	1,690	42,030	44,050	57,080	27,140	72,520	62,540	54,470	35,400	11,580	1,570	361

CAL YR 1973 TOTAL 10,421.5 MEAN 28.6 MAX 1,210 MIN 6.3 AC-FT 20,670
WTR YR 1974 TOTAL 13,661.6 MEAN 37.4 MAX 850 MIN 6.4 AC-FT 27,100

a Camptonville tunnel diversion, in acre-feet, to New Bullards Bar Reservoir.

11413000 NORTH YUBA RIVER BELOW GOODYEARS BAR, CALIF.

LOCATION.--Lat 39°31'30", long 120°56'13", in NE¼SW¼ sec.11, T.19 N., R.9 E., Sierra County, Tahoe National Forest, on right bank 200 ft (61 m) downstream from St. Catherine Creek, 3.1 mi (5.0 km) southwest of Goodyears Bar, and 6.4 mi (10.3 km) southwest of Downieville.

DRAINAGE AREA.--250 mi² (648 km²).

PERIOD OF RECORD.--October 1930 to current year. Prior to October 1949, published as North Fork Yuba River below Goodyears Bar. Monthly and yearly discharge only for some periods, published in WSP 1315-A.

GAGE.--Water-stage recorder. Datum of gage is 2,453 ft (747.7 m) above mean sea level (river-profile survey).

AVERAGE DISCHARGE.--44 years, 764 ft³/s (21.6 m³/s), 553,500 acre-ft/yr (682 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 12,200 ft³/s (346 m³/s) Nov. 12 (gage height, 13.60 ft or 4.145 m); minimum daily, 136 ft³/s (3.85 m³/s) Oct. 4.

Period of record: Maximum discharge, 40,000 ft³/s (1,130 m³/s) Feb. 1, 1963 (gage height, 23.8 ft or 7.25 m, from floodmarks); from rating curve extended above 8,500 ft³/s (241 m³/s) on basis of one float measurement at 17,900 ft³/s (507 m³/s) and slope-area measurements at gage heights 19.15 ft (5.837 m) and 23.8 ft (7.25 m); minimum, 69 ft³/s (1.95 m³/s) Aug. 26, 1931.

REMARKS.--Records good. Several small diversions above station for irrigation and mining. See schematic diagram of Yuba River basin.

REVISIONS (WATER YEARS).--WSP 1041: 1944. WSP 1931: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	142	188	1,730	1,700	1,140	3,800	5,600	1,910	2,700	715	315	202
2	138	186	1,140	1,350	1,040	3,650	4,600	2,140	2,840	680	306	201
3	137	181	929	1,200	982	3,000	3,300	2,120	2,850	637	312	199
4	136	175	825	1,090	946	1,900	2,800	2,190	2,650	605	302	195
5	137	228	761	1,030	918	1,600	2,400	2,330	2,510	576	334	193
6	137	588	729	967	850	1,480	2,220	2,580	2,460	551	311	191
7	216	2,450	714	878	815	1,450	2,050	2,990	2,280	525	293	190
8	270	1,300	695	814	790	1,380	1,920	3,360	2,030	1,130	286	190
9	191	1,550	682	767	760	1,280	1,900	3,500	1,950	1,910	279	187
10	169	4,090	681	729	745	1,230	1,650	3,300	1,960	1,060	269	185
11	162	8,430	750	706	730	1,280	1,500	3,100	1,990	795	264	183
12	158	7,110	723	846	720	1,800	1,560	2,980	1,970	690	260	181
13	156	3,110	1,000	1,230	700	1,600	1,510	2,750	1,920	624	255	180
14	153	2,150	940	1,740	695	1,530	1,510	2,620	1,860	577	252	179
15	152	1,590	850	7,000	690	1,580	1,630	2,640	1,740	542	250	179
16	150	2,120	840	5,350	720	1,650	1,750	2,370	1,650	514	246	176
17	149	3,010	1,020	6,300	690	1,710	1,830	2,080	1,470	506	242	174
18	149	2,610	1,200	5,670	700	1,780	1,970	1,780	1,380	475	238	171
19	147	1,730	980	7,590	960	1,700	1,710	1,600	1,330	457	235	170
20	163	1,380	970	4,800	860	1,640	1,620	1,480	1,190	439	235	168
21	161	1,170	1,050	3,330	810	1,580	1,660	1,490	1,130	423	231	167
22	272	1,010	1,140	2,650	770	1,500	1,830	1,730	1,100	408	226	166
23	540	898	1,150	2,260	740	1,480	1,970	1,960	1,050	394	222	165
24	265	834	950	1,980	710	1,480	1,720	2,170	977	381	219	164
25	244	773	900	1,770	715	1,620	1,520	2,470	906	371	216	163
26	223	730	930	1,610	770	1,830	1,410	3,030	836	364	215	164
27	219	685	1,370	1,470	830	2,500	1,310	3,370	783	351	212	163
28	212	666	2,500	1,360	890	3,600	1,300	3,310	757	342	208	160
29	203	740	4,600	1,270	-----	6,500	1,360	2,940	747	332	207	161
30	190	1,060	3,400	1,200	-----	9,100	1,550	2,660	737	323	205	160
31	186	-----	2,180	1,170	-----	6,600	-----	2,620	-----	317	205	-----
TOTAL	5,927	52,742	38,329	71,827	22,686	74,830	60,660	77,570	49,753	18,014	7,850	5,327
MEAN	191	1,758	1,236	2,317	810	2,414	2,022	2,502	1,658	581	253	178
MAX	540	8,430	4,600	7,590	1,140	9,100	5,600	3,500	2,850	1,910	334	202
MIN	136	175	681	706	690	1,230	1,300	1,480	737	317	205	160
AC-FT	11,760	104,600	76,030	142,500	45,000	148,400	120,300	153,900	98,690	35,730	15,570	10,570

CAL YR 1973 TOTAL 336,781 MEAN 923 MAX 8,430 MIN 136 AC-FT 668,000
WTR YR 1974 TOTAL 485,515 MEAN 1,330 MAX 9,100 MIN 136 AC-FT 963,000

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE	NOTE
11-11	1200	13.31	11,500	1-19	0630	11.81	8,510	NOTE.--No gage-height record Feb. 5 Apr. 11.
11-12	0530	13.60	12,200	3-1	unknown	--	unknown	
11-17	1700	8.06	3,490	3-30	unknown	12.58	10,100	
12-29	unknown	9.88	5,730	5-8	2300	8.58	4,080	
1-15	2400	12.71	10,100	5-27	2230	8.65	4,160	
1-17	0300	11.61	8,190					

11413100 NORTH YUBA RIVER ABOVE SLATE CREEK, NEAR STRAWBERRY VALLEY, CALIF.

LOCATION.--Lat 39°31'29", long 121°05'26", in NE¼SW¼ sec.9, T.19 N., R.8 E., Yuba County, Tahoe National Forest, on left bank 500 ft (152 m) upstream from Slate Creek, and 2.8 mi (4.5 km) southeast of Strawberry Valley.

DRAINAGE AREA.--351 mi² (909 km²).

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

GAGE.--Water-stage recorder and crest-stage gages. Datum of gage is 1,953.44 ft (595.409 m) above mean sea level.

AVERAGE DISCHARGE.--6 years, 1,427 ft³/s (40.41 m³/s), 1,034,000 acre-ft/yr (1.27 km³/yr).

EXTREMES.--Current year: Maximum discharge, 21,300 ft³/s (603 m³/s) Mar. 30 (gage height, 15.89 ft or 4.843 m); minimum daily, 172 ft³/s (4.87 m³/s) Oct. 5.

Period of record: Maximum discharge, 35,800 ft³/s (1,010 m³/s) Jan. 22, 1970 (gage height, 19.91 ft or 6.069 m, recorded; 20.7 ft or 6.31 m, from floodmarks); minimum daily, 138 ft³/s (3.91 m³/s) Sept. 29, 1968. Flood of Dec. 22, 1964, reached a stage of 29.8 ft (9.08 m), from floodmarks (discharge, 63,400 ft³/s or 1,800 m³/s from slope-area measurement).

REMARKS.--Records good. Several small diversions above station for irrigation and mining. See schematic diagram of Yuba River basin.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	177	235	3,660	2,910	1,680	6,230	7,510	2,470	3,190	785	356	238
2	175	230	2,120	2,330	1,530	5,970	6,680	2,800	3,340	750	348	237
3	175	225	1,640	2,040	1,440	3,490	5,000	2,750	3,380	715	353	234
4	173	218	1,430	1,830	1,380	2,570	4,050	2,840	3,140	680	345	231
5	172	294	1,290	1,700	1,310	2,250	3,550	3,040	2,950	653	370	227
6	173	920	1,210	1,600	1,240	2,060	3,110	3,440	2,880	615	356	221
7	302	3,900	1,160	1,440	1,200	2,050	2,830	4,070	2,670	609	337	220
8	426	2,100	1,120	1,330	1,160	1,920	2,680	4,600	2,310	920	325	220
9	285	2,270	1,090	1,250	1,120	1,790	2,620	4,770	2,160	1,660	317	217
10	229	6,890	1,080	1,180	1,100	1,720	2,310	4,460	2,020	1,070	311	214
11	209	14,600	1,180	1,130	1,070	1,790	2,170	4,130	1,960	880	305	211
12	200	12,800	1,130	1,460	1,060	2,670	2,190	3,920	1,910	800	300	208
13	195	5,670	1,480	2,300	1,030	2,370	2,100	3,560	1,830	720	293	203
14	190	3,790	1,360	3,120	998	2,180	2,090	3,280	1,760	670	288	202
15	187	2,620	1,200	12,100	962	2,260	2,200	3,300	1,660	630	283	202
16	185	4,000	1,140	8,800	1,040	2,440	2,390	2,970	1,570	601	286	202
17	182	6,040	1,630	11,700	965	2,590	2,490	2,570	1,470	557	275	200
18	181	5,290	1,660	9,390	976	2,600	2,710	2,200	1,380	537	276	197
19	178	3,230	1,410	13,400	1,390	2,510	2,340	1,940	1,400	513	276	195
20	193	2,410	1,280	8,490	1,210	2,360	2,150	1,790	1,280	502	276	193
21	200	1,950	1,480	5,830	1,130	2,280	2,170	1,750	1,200	481	276	193
22	349	1,670	1,660	4,470	1,080	2,210	2,390	2,010	1,150	464	273	193
23	969	1,460	1,450	3,640	1,000	2,150	2,600	2,300	1,110	453	266	192
24	432	1,350	1,300	3,070	983	2,130	2,270	2,570	1,040	438	262	190
25	353	1,230	1,250	2,690	970	2,340	2,000	2,940	962	425	259	190
26	326	1,150	1,260	2,400	1,110	2,650	1,840	3,610	900	415	255	188
27	300	1,060	2,410	2,160	1,170	4,180	1,710	4,080	850	406	252	185
28	285	1,010	4,090	1,990	1,220	5,770	1,700	4,000	825	395	248	185
29	268	1,120	8,410	1,840	-----	9,570	1,750	3,550	815	382	244	185
30	247	2,070	5,660	1,720	-----	15,500	1,990	3,170	807	370	243	185
31	239	-----	3,790	1,680	-----	8,220	-----	3,090	-----	365	244	-----
TOTAL	8,155	91,802	62,030	120,990	32,524	110,820	83,590	97,970	53,919	19,461	9,098	6,158
MEAN	263	3,060	2,001	3,903	1,162	3,575	2,786	3,160	1,797	628	293	205
MAX	969	14,600	8,410	13,400	1,680	15,500	7,510	4,770	3,380	1,660	370	238
MIN	172	218	1,080	1,130	962	1,720	1,700	1,750	807	365	243	185
AC-FT	16,180	182,100	123,000	240,000	64,510	219,800	165,800	194,300	106,900	38,600	18,050	12,210
CAL YR 1973	TOTAL 538,364	MEAN 1,475	MAX 14,600	MIN 157	AC-FT 1,068,000							
WTR YR 1974	TOTAL 696,517	MEAN 1,908	MAX 15,500	MIN 172	AC-FT 1,382,000							

PEAK DISCHARGE (BASE, 4,500 FT³/S)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-7	1800	11.12	6,260	1-15	0800	14.45	15,600
11-12	0630	15.62	20,200	1-17	0300	14.27	14,900
11-17	1800	11.57	7,250	3-1	2030	12.82	10,300
12-1	0400	10.50	5,050	3-30	0500	15.89	21,300
12-29	1230	13.08	11,100	5-8	2400	10.75	5,530

383

LOCATION.--Lat 39°36'57", long 121°03'03", in SE¼SW¼ sec.2, T.20 N., R.8 E., Plumas County, Plumas National Forest, on right bank 30 ft (9 m) upstream from diversion dam on Slate Creek, 0.3 mi (0.5 km) upstream from Fenev Ravine, and 4.5 mi (7.2 km) northeast of town of Strawberry Valley.

PERIOD OF RECORD.--October 1966 to current year. Records of daily discharge for December 1961 to September 1966 are in files of Geological Survey. Monthly diversion used to adjust Slate Creek below diversion dam near Strawberry Valley since February 1962.

AVERAGE DISCHARGE.--8 years, 114 ft³/s (3.228 m³/s), 82,590 acre-ft/yr (102 hm³/yr).

EXTREMES.--Period of record: Maximum daily discharge, 863 ft³/s (24.4 m³/s) Apr. 6, 1963; no flow many days in each year.

REMARKS.--Records good. Tunnel diverts water from Slate Creek to Sly Creek Reservoir (see sta 11395400) for power development. See schematic diagrams of South Fork Feather and Yuba River basins.

[illegible]

11413300 SLATE CREEK BELOW DIVERSION DAM, NEAR STRAWBERRY VALLEY, CALIF.

LOCATION.--Lat 39°36'52", long 121°03'04", in SE¼SW¼ sec.2, T.20 N., R.8 E., Plumas County, Plumas National Forest, on right bank 300 ft (91 m) downstream from diversion dam, 0.2 mi (0.3 km) upstream from Feney Ravine, and 4.5 mi (7.2 km) northeast of town of Strawberry Valley.

DRAINAGE AREA.--49.4 mi² (127.9 km²).

PERIOD OF RECORD.--October 1960 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 3,570 ft (1,088 m), from topographic map.

AVERAGE DISCHARGE (adjusted for diversion to Slate Creek tunnel).--14 years, 223 ft³/s (6.315 m³/s), 161,600 acre-ft/yr (199 hm³/yr).

EXTREMES (Creek only).--Current year: Maximum discharge, 7,280 ft³/s (206 m³/s) Mar. 30 (gage height, 12.88 ft or 3.926 m); minimum daily, 7.0 ft³/s (0.20 m³/s) Nov. 15.

Period of record: Maximum discharge, 13,100 ft³/s (371 m³/s) Dec. 22, 1964 (gage height, 16.42 ft or 5.005 m), from rating curve extended above 5,500 ft³/s (156 m³/s) on basis of computed flow over dam at gage heights 12.75 ft (3.886 m) and 15.90 ft (4.846 m); minimum, 0.3 ft³/s (0.008 m³/s) Mar. 4, 5, 1962.

(Combined flow).--Current year: Maximum discharge, 7,280 ft³/s (206 m³/s) Mar. 30; minimum daily, 8.4 ft³/s (0.24 m³/s) Sept. 30.

Period of record: Maximum discharge, 13,900 ft³/s (394 m³/s) Dec. 22, 1964; minimum daily, 2.3 ft³/s (0.065 m³/s) Nov. 23, 1961.

REMARKS.--Records good. Slate Creek tunnel (see sta 11413250) diverts at diversion dam, 300 ft (91 m) upstream, up to 900 ft³/s (25.5 m³/s) from Slate Creek Reservoir, capacity, 223 acre-ft (275,000 m³) to Sly Creek Reservoir (see sta 11395400). Diversion began in February 1962. See schematic diagrams of South Fork Feather and Yuba River basins.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	10	8.7	618	541	242	1,720	1,330	502	24	8.6	8.6	8.6		
2	10	8.7	387	436	215	1,030	1,140	541	24	8.6	8.6	8.6		
3	10	8.7	315	370	200	572	856	527	24	8.6	8.6	8.6		
4	10	8.7	276	327	192	436	717	544	24	8.6	8.6	8.6		
5	10	8.7	245	297	178	384	645	569	24	8.6	8.6	8.6		
6	10	9.4	226	273	178	342	572	307	24	8.6	8.6	8.6		
7	10	415	216	240	162	324	537	24	24	8.6	8.6	8.6		
8	10	65	206	215	154	288	516	24	24	9.1	8.6	8.6		
9	10	425	199	195	150	264	506	24	24	9.0	8.6	8.6		
10	10	1,370	197	176	146	261	460	372	24	8.9	8.6	8.3		
11	10	3,800	209	170	140	276	437	694	24	8.6	8.6	8.3		
12	10	3,300	197	258	140	422	422	654	24	8.6	8.6	8.3		
13	10	1,050	229	499	131	390	408	574	27	8.6	8.6	8.3		
14	10	356	211	763	127	380	412	529	17	8.6	8.6	8.3		
15	10	7.0	197	2,970	126	408	440	514	16	8.6	8.6	8.3		
16	10	281	190	2,430	135	460	464	443	16	8.6	8.6	8.3		
17	10	877	339	2,840	124	502	477	384	16	8.6	8.6	8.3		
18	10	543	327	2,390	126	524	516	318	16	8.6	8.6	8.3		
19	10	354	279	2,900	133	506	450	293	16	8.6	8.6	8.3		
20	10	539	245	1,570	124	478	436	251	16	8.6	8.6	8.3		
21	10	411	256	965	120	460	450	251	16	8.6	8.6	8.3		
22	10	351	234	722	117	450	474	293	16	8.6	8.6	8.3		
23	9.4	297	202	541	111	440	492	312	16	8.6	8.6	8.2		
24	8.7	264	190	468	112	440	429	364	16	8.6	8.6	8.2		
25	8.7	239	190	404	114	502	380	422	16	8.6	8.6	8.2		
26	8.7	209	206	356	148	682	348	414	16	8.6	8.6	8.2		
27	8.7	190	500	321	156	1,280	327	559	12	8.6	8.6	8.1		
28	8.7	185	888	291	183	1,450	330	198	8.6	8.6	8.6	8.1		
29	8.7	228	2,010	264	-----	3,360	362	24	8.6	8.6	8.6	8.1		
30	8.7	551	1,120	248	-----	4,650	422	24	8.6	8.6	8.6	8.1		
31	8.7	-----	714	242	-----	1,750	-----	24	-----	8.6	8.6	-----		
TOTAL	299.0	16,359.9	11,818	24,682	4,184	25,431	15,755	10,973	561.8	267.8	266.6	250.5		
MEAN	9.65	545	381	796	149	820	525	354	18.7	8.64	8.60	8.35		
MAX	10	3,800	2,010	2,970	242	4,650	1,330	694	27	9.1	8.6	8.6		
MIN	8.7	7.0	190	170	111	261	327	24	8.6	8.6	8.6	8.1		
AC-FT	593	32,450	23,440	48,960	8,300	50,440	31,250	21,760	1,110	531	529	497		
MEAN a	30.1	747	381	796	149	820	526	514	188	56.6	17.9	10.3		
AC-FT a	1,850	44,460	23,440	48,960	8,300	50,440	31,280	31,620	11,190	3,480	1,100	615		
CAL YR 1973	TOTAL	61,523.6	MEAN	169	MAX	3,800	MIN	5.6	AC-FT	122,000	MEAN a	299	AC-FT a	216,600
WTR YR 1974	TOTAL	110,848.6	MEAN	304	MAX	4,650	MIN	7.0	AC-FT	219,900	MEAN a	355	AC-FT a	256,700

a Adjusted for diversion to Slate Creek tunnel.

11413510 NEW COLGATE POWERPLANT NEAR FRENCH CORRAL, CALIF.

LOCATION.--Lat 39°19'51", long 121°11'23", in NE¼SE¼ sec.16, T.17 N., R.7 E., Yuba County, at powerplant on right bank of Yuba River, 0.3 mi (0.5 km) upstream from Dobbins Creek, and 2.3 mi (3.7 km) northwest of French Corral.

PERIOD OF RECORD.--October 1966 to current year. Records of daily discharge for October 1960 to September 1966 are available in files of Geological Survey. Prior to October 1969, published as "Colgate powerplant."

GAGE.--Recorded output from powerplant turbines.

AVERAGE DISCHARGE.--8 years, 1,224 ft³/s (34.7 m³/s), 886,800 acre-ft/yr (1.09 km³/yr).

EXTREMES.--Period of record: Maximum daily discharge, 4,200 ft³/s (119 m³/s) June 2, 1971; no flow for several days in each year.

REMARKS.--Water is diverted from North Yuba River at New Bullards Bar Dam (see sta 11413515). Colgate powerplant was rebuilt during the 1970 water year with an increased capacity. Browns Valley ditch diverts up to 10 ft³/s (0.28 m³/s) at times from the head of the penstock for use in irrigation. During the current year, 207 acre-ft (25,500 m³) of water was diverted. This diversion discontinued Oct. 31, 1973. See schematic diagram of Yuba River basin.

COOPERATION.--Records collected by Yuba County Water Agency, under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NCV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,540	2,050	3,280	3,280	3,380	2,770	1,690	3,400	3,490	2,440	2,490	
2	2,380	2,530	3,300	3,320	3,360	3,230	2,360	2,950	3,500	3,450	2,820	
3	1,790	1,570	3,300	3,310	3,390	2,480	3,220	3,400	2,430	3,490	2,470	
4	2,020	1,960	3,280	3,300	3,340	2,000	3,300	3,410	3,490	3,470	2,680	
5	1,540	2,140	3,280	3,290	3,330	2,770	3,400	3,420	3,490	3,450	2,790	
6	1,150	1,580	3,300	3,170	3,340	3,340	3,380	3,400	3,480	3,450	2,500	
7	1,630	1,270	3,270	3,290	3,290	3,180	3,390	3,090	3,480	2,260	2,630	
8	1,780	324	3,270	3,320	3,270	3,320	3,370	3,370	3,470	1,790	2,740	
9	1,610	435	3,260	3,310	1,300	3,330	3,380	3,130	3,460	498	2,570	
10	1,660	158	3,270	3,290	3,310	2,460	3,380	2,600	3,320	719	2,730	
11	1,420	7.0	2,680	3,300	3,310	2,500	3,370	2,680	3,470	2,410	2,610	
12	1,870	1.0	2,930	3,300	3,330	3,370	3,370	1,610	2,860	1,790	2,500	
13	3,070	0	3,120	3,300	3,310	3,390	3,370	3,050	2,810	1,830	2,700	
14	1,980	720	3,270	3,320	3,290	3,220	3,380	2,360	3,030	1,780	2,760	
15	1,250	2,930	3,250	3,310	3,300	3,360	3,370	2,580	3,040	2,200	2,250	
16	1,960	3,290	3,260	3,370	3,300	3,360	3,360	2,430	2,800	2,480	3,030	
17	1,870	3,240	3,250	3,360	3,300	3,350	3,370	2,480	3,170	2,520	2,610	
18	2,080	3,290	3,260	3,360	3,290	3,370	3,410	3,120	3,480	2,370	2,650	
19	2,330	3,300	3,250	3,300	3,290	2,940	3,370	2,200	3,490	2,630	2,670	
20	1,660	3,300	3,260	2,960	2,880	3,060	3,410	2,690	3,470	2,360	2,590	
21	1,460	3,300	3,280	3,000	3,160	3,350	3,360	2,530	2,780	2,790	2,600	
22	1,990	3,290	3,250	3,360	3,290	3,380	3,400	2,460	2,990	2,570	2,690	
23	1,680	3,290	3,190	3,420	3,280	3,350	3,420	2,470	2,560	2,500	2,460	
24	1,610	3,290	2,670	3,400	3,260	3,390	2,880	2,560	2,830	2,620	2,820	
25	1,590	3,310	2,130	3,400	3,280	3,390	3,380	1,420	2,780	2,520	2,410	
26	1,800	3,260	2,820	3,380	3,270	3,270	3,420	2,670	2,280	2,410	2,700	
27	2,220	3,290	3,210	3,410	3,260	3,370	3,360	1,620	1,710	2,980	2,640	
28	2,030	3,290	3,240	3,400	3,260	3,430	3,390	2,350	113	1,590	2,600	
29	2,380	3,280	3,110	3,400	-----	3,380	3,380	3,490	401	3,140	2,700	
30	2,190	3,270	3,080	3,460	-----	3,300	3,380	3,380	2,250	2,500	840	
31	2,090	-----	3,300	3,320	-----	2,700	-----	3,420	-----	2,610	0	-----
TOTAL	57,630	66,965.0	97,620	102,710	89,970	97,110	98,020	85,740	85,924	75,617	77,250	0
MFAN	1,859	2,232	3,149	3,313	3,213	3,133	3,267	2,766	2,864	2,439	2,492	0
MAX	3,070	3,310	3,300	3,460	3,390	3,430	3,420	3,490	3,500	3,490	3,030	0
MIN	1,150	0	2,130	2,960	1,300	2,000	1,690	1,420	113	498	0	0
AC-FT	114,300	132,800	193,600	203,700	178,500	192,600	194,400	170,100	170,400	150,000	153,200	0
CAL YR 1973	TOTAL	664,553.00	MEAN	1,821	MAX	3,310	MIN	0	AC-FT	1,318,000		
WTR YR 1974	TOTAL	934,556.00	MEAN	2,560	MAX	3,500	MIN	0	AC-FT	1,854,000		

11413515 NEW BULLARDS BAR RESERVOIR NEAR NORTH SAN JUAN, CALIF.

LOCATION.--Lat 39°23'34", long 121°08'25", in SE¼NW¼ sec.25, T.18 N., R.7 E., Yuba County, Plumas National Forest, in center of dam on North Yuba River, 2.2 mi (3.5 km) upstream from Middle Yuba River, and 2.4 mi (3.9 km) northwest of North San Juan.

DRAINAGE AREA.--489 mi² (1,267 km²).

PERIOD OF RECORD.--January 1969 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Yuba County Water Agency).

EXTREMES.--Current year: Maximum contents, 964,084 acre-ft (1.19 km³) June 7 (elevation, 1,955.58 ft or 596.061 m); minimum, 505,458 acre-ft (623 hm³) Nov. 6 (elevation, 1,839.40 or 560.649 m).
Period of record: Maximum contents, 963,364 acre-ft (1.19 km³) June 27, 1971 (elevation, 1,955.43 ft or 596.015 m); minimum since reservoir first filled, 327,322 acre-ft (404 hm³) Jan. 21, 1972 (elevation, 1,775.40 ft or 541.142 m).

REMARKS.--Reservoir is formed by concrete-arch dam with a concrete-sidehill spillway. Spill controlled by three 30-foot (9.1-m) by 53-foot (16.2-m) radial gates. Storage began in January 1969. Usable capacity, 727,380 acre-ft (897 hm³) between elevations 1,732.0 ft (527.91 m), minimum power pool and 1,955.0 ft (595.88 m), normal gross pool. Dead storage, 233,920 acre-ft (288 hm³). Total capacity at normal gross pool, 1,955.0 ft (595.88 m), 961,300 acre-ft (1.19 km³). Water is released to Colgate powerplant through a tunnel at the dam. Water is diverted into the reservoir from Middle Yuba River via Lohman Ridge tunnel to Oregon Creek then via Camptonville tunnel. Records, including extremes, represent total contents at 2400 hours. See schematic diagram of Yuba River basin.

COOPERATION.--Records collected by Yuba County Water Agency, under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

CAPACITY TABLE (ELEVATION, IN FEET, AND CONTENTS, IN ACRE-FEET)

1,600	64,900	1,750	270,110
1,630	90,570	1,800	389,980
1,660	122,990	1,850	539,750
1,690	162,980	1,900	721,130
1,720	211,770	1,960	985,471

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	612,059	519,679	681,023	697,200	794,371	753,297	880,819	848,701	954,846	936,599	847,688	722,916
2	608,066	515,178	682,170	698,987	793,317	767,658	867,341	851,789	956,995	931,711	843,336	723,432
3	605,082	512,617	681,405	699,763	791,842	775,112	858,876	853,601	960,586	926,748	839,480	723,988
4	601,258	509,268	680,057	699,841	790,159	780,942	851,347	855,328	962,021	921,431	835,113	724,186
5	598,788	506,187	677,969	699,491	788,184	784,285	846,939	857,766	962,884	916,876	830,327	725,021
6	597,028	505,458	675,571	698,986	785,961	785,752	841,232	860,209	963,316	911,382	826,424	725,539
7	595,271	514,857	672,646	697,588	783,533	788,478	834,242	864,350	964,084	908,876	821,671	726,016
8	592,816	520,840	670,222	695,764	780,942	789,738	828,591	869,131	963,844	910,490	817,365	726,693
9	590,543	526,770	667,351	693,559	781,903	790,159	826,424	874,513	963,220	916,042	813,506	727,052
10	587,927	547,178	664,374	690,856	779,690	792,263	827,074	880,929	963,028	918,733	808,886	727,610
11	585,665	590,473	662,909	688,541	776,359	795,216	828,591	886,702	962,453	917,247	804,540	727,889
12	582,612	628,451	660,770	687,541	773,647	799,191	829,892	894,614	962,261	916,274	800,293	728,687
13	576,708	646,182	660,332	689,081	770,717	801,353	830,761	898,634	962,261	914,976	795,638	729,006
14	573,274	656,319	658,411	694,331	767,584	804,115	832,065	903,400	961,781	913,587	790,580	729,445
15	571,355	658,112	656,095	724,703	764,031	805,816	833,371	907,447	962,069	910,952	787,219	729,885
16	567,803	664,337	653,115	747,196	761,482	808,544	834,939	911,414	961,302	907,954	781,777	730,324
17	564,536	676,407	652,557	776,442	758,529	811,150	836,989	915,115	959,865	904,502	777,607	730,884
18	561,078	685,620	651,739	798,768	755,583	813,846	839,524	915,716	957,472	901,519	773,037	731,284
19	556,791	689,466	650,069	825,472	755,666	817,021	841,232	917,665	955,085	897,811	768,484	731,764
20	553,832	691,394	647,920	821,800	754,807	819,516	842,108	918,269	952,034	894,751	763,949	732,004
21	551,519	691,587	647,180	811,150	753,216	821,024	842,985	918,826	950,321	890,607	759,841	732,925
22	549,112	690,699	646,811	808,629	750,527	822,102	844,565	920,035	947,803	886,475	754,930	733,086
23	548,045	689,582	645,333	805,391	747,805	823,397	847,160	922,082	945,811	883,079	749,633	733,486
24	546,712	687,233	644,669	801,141	744,765	824,347	848,701	924,787	943,017	879,465	745,980	733,887
25	544,517	684,852	644,595	796,991	741,935	825,991	849,142	929,555	940,417	875,412	741,935	734,368
26	541,732	682,055	643,857	797,033	739,515	828,808	849,318	934,858	938,483	871,639	736,697	734,689
27	538,099	678,808	646,885	795,638	737,099	837,295	848,701	942,970	937,541	867,028	732,205	735,171
28	534,711	675,685	654,082	795,849	735,894	850,906	847,908	948,848	939,427	864,974	727,331	735,492
29	530,551	672,798	674,620	795,807	-----	875,818	847,468	951,044	940,843	859,942	722,677	736,014
30	526,925	674,164	686,772	795,300	-----	905,192	847,380	952,224	939,277	855,815	721,764	736,536
31	523,266	-----	693,094	795,216	-----	898,633	-----	953,235	-----	851,347	722,359	-----
MAX	612,059	691,587	693,094	825,472	794,371	905,192	880,819	953,235	964,084	936,599	847,688	736,536
MIN	523,266	505,458	643,857	687,541	735,894	753,297	826,424	848,701	937,541	851,347	721,764	722,916
(a)	1,844.96	1,887.90	1,892.84	1,918.10	1,903.70	1,941.62	1,930.20	1,953.31	1,950.37	1,931.10	1,900.31	1,903.86
(b)	-91,871	+150,898	+18,930	+102,123	-59,322	+162,739	-51,253	+105,855	-13,958	-87,930	-128,988	+14,177

CAL YR 1973 b +121,399

WTR YR 1974 b +319,334

a Elevation, in feet, at end of month.
b Change in contents, in acre-feet.

11413520 NORTH YUBA RIVER BELOW NEW BULLARDS BAR DAM, NEAR NORTH SAN JUAN, CALIF.

LOCATION.--Lat 39°22'48", long 121°08'19", in SW¼NE¼ sec.36, T.18 N., R.7 E., Yuba County, Plumas National Forest, on right bank 1.1 mi (1.8 km) downstream from New Bullards Bar Dam, and 2 mi (3 km) northwest of North San Juan.

DRAINAGE AREA.--490 mi² (1,269 km²).

PERIOD OF RECORD.--August 1966 to current year.

GAGE.--Water-stage recorder and crest-stage gages. Altitude of gage is 1,280 ft (390 m), from topographic map.

AVERAGE DISCHARGE.--6 years (1969-74, since construction of Bullards Bar Dam), 454 ft³/s (12.86 m³/s), 328,900 acre-ft/yr (406 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 27,600 ft³/s (782 m³/s) Apr. 1 (gage height, 24.45 ft or 7.452 m); minimum daily, 1.3 ft³/s (0.037 m³/s) Sept. 10, 11.

Period of record: Maximum discharge, 56,200 ft³/s (1,590 m³/s) Jan. 22, 1970 (gage height, 35.29 ft or 10.756 m), from rating curve extended above 40,000 ft³/s (1,130 m³/s) on basis of computation of flow over old Colgate Dam; minimum daily, 0.42 ft³/s (0.012 m³/s) Nov. 5, 1966.

Flood of Dec. 22, 1964, reached a stage of 49.8 ft (15.18 m), from floodmarks (discharge, 91,000 ft³/s or 2,580 m³/s, from computation of flow over old Colgate Dam).

REMARKS.--Records fair. Flow regulated by New Bullards Bar Reservoir since 1969 (see sta 11413515). Colgate powerplant (see sta 11413510) diverts from New Bullards Bar Dam 1.1 mi (1.8 km) upstream. Water is diverted out of basin through Slate Creek tunnel (see sta 11413250). See schematic diagram of Yuba River basin. Records of water temperatures for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.0	7.1	8.8	11	9.2	16	25,600	6.8	6.8	8.6	7.0	5.0
2	7.8	7.1	8.8	9.2	8.5	19	18,900	6.7	7.6	8.6	7.0	5.0
3	8.2	7.1	8.8	9.2	8.5	13	12,500	6.8	8.0	8.5	6.8	5.0
4	8.1	7.1	8.8	9.2	7.8	10	8,620	6.6	8.7	8.3	6.7	5.1
5	7.8	11	8.8	9.2	7.8	10	5,730	6.4	8.3	8.3	6.5	5.1
6	7.8	9.2	8.8	9.2	7.8	9.4	5,660	6.1	8.0	8.3	6.5	5.1
7	10	18	8.5	9.2	7.8	11	5,540	5.9	8.0	8.2	6.3	3.6
8	14	7.8	8.2	9.2	7.8	11	4,760	5.5	8.1	13	6.2	1.9
9	14	7.8	8.2	9.2	7.8	9.7	3,050	5.5	8.2	11	6.0	1.5
10	14	21	8.2	8.9	7.8	9.1	931	5.2	8.2	8.3	5.9	1.3
11	14	29	8.2	8.9	7.4	10	16	5.2	8.3	7.9	5.7	1.3
12	14	12	8.2	10	7.4	13	8.8	4.9	8.3	7.8	5.6	5.0
13	14	8.1	11	9.5	7.4	11	7.8	4.9	8.4	7.9	5.5	6.7
14	14	8.1	9.2	13	7.4	10	7.4	4.8	8.7	7.9	5.4	7.2
15	14	8.1	8.5	21	7.4	9.5	7.1	4.7	8.8	7.8	5.2	7.4
16	14	14	8.8	19	6.5	9.5	7.1	4.5	8.8	7.8	5.2	7.5
17	14	10	14	20	5.7	8.9	6.9	4.3	8.8	7.8	5.1	7.6
18	9.1	8.1	8.8	18	6.0	8.9	6.8	4.3	8.8	7.8	5.0	7.6
19	7.4	8.1	8.8	4,610	12	8.9	6.8	4.7	9.0	7.7	4.9	7.7
20	7.3	8.1	9.6	15,300	7.1	8.9	6.8	4.6	8.8	7.6	4.9	7.8
21	7.3	8.1	13	14,600	6.8	8.9	6.8	4.6	8.8	7.6	4.8	7.8
22	9.4	8.1	11	5,560	6.4	8.9	6.5	4.4	8.8	7.6	4.8	7.8
23	8.8	8.1	9.2	4,770	5.5	8.9	6.9	4.6	8.8	7.8	4.8	7.8
24	7.4	8.1	8.8	4,630	6.1	8.9	7.3	4.7	8.7	7.8	4.8	7.8
25	7.1	8.1	8.8	3,740	5.9	9.2	7.3	5.1	8.6	7.5	4.9	7.8
26	6.8	8.1	11	1,060	6.0	9.7	6.9	5.2	8.6	7.4	4.9	7.8
27	7.1	8.1	12	1,060	6.2	13	6.7	5.7	8.6	7.4	4.9	7.8
28	7.1	8.1	18	487	6.4	15	6.4	5.8	8.6	7.3	4.9	7.8
29	7.1	8.1	22	13	-----	1,510	6.4	6.3	8.6	7.2	4.9	7.8
30	7.1	13	15	10	-----	8,400	6.6	6.2	8.6	7.2	5.0	7.8
31	7.1	-----	13	9.6	-----	17,500	-----	6.4	-----	7.0	5.0	-----
TOTAL	303.8	302.7	322.8	56,062.5	204.4	27,709.3	91,440.3	167.4	253.3	250.9	171.1	182.4
MEAN	9.80	10.1	10.4	1,808	7.30	894	3,048	5.40	8.44	8.09	5.52	6.08
MAX	14	29	22	15,300	12	17,500	25,600	6.8	9.0	13	7.0	7.8
MIN	6.8	7.1	8.2	8.9	5.5	8.9	6.4	4.3	6.8	7.0	4.8	1.3
AC-FT	603	600	640	111,200	405	54,960	181,400	332	502	498	339	362

CAL YR 1973 TOTAL 3,655.0 MEAN 10.0 MAX 42 MIN 6.6 AC-FT 7,250
WTR YR 1974 TOTAL 177,370.9 MEAN 486 MAX 25,600 MIN 1.3 AC-FT 351,800

NOTE.--No gage-height record Nov. 5 to Jan. 9.

11414000 SOUTH YUBA RIVER NEAR CISCO, CALIF.

LOCATION.--Lat 39°19'12", long 120°33'38", in SE¼SW¼ sec.19, T.17 N., R.13 E., Nevada County, Tahoe National Forest, on right bank 0.7 mi (1.1 km) downstream from Rattlesnake Creek, 1.3 mi (2.1 km) west of Cisco Grove, and 1.5 mi (2.4 km) northwest of Cisco.

DRAINAGE AREA.--51.8 mi² (134.2 km²).

PERIOD OF RECORD.--April 1942 to current year. Prior to October 1949, published as South Fork Yuba River near Cisco.

GAGE.--Water-stage recorder. Altitude of gage is 5,520 ft (1,682 m), from river-profile map. Prior to October 1945, water-stage recorder at site 200 ft (61 m) upstream at same datum.

AVERAGE DISCHARGE.--32 years, 203 ft³/s (5.75 m³/s), 147,100 acre-ft/yr (181 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 5,280 ft³/s (150 m³/s) Nov. 12 (gage height, 11.07 ft or 3.374 m); minimum daily, 15 ft³/s (0.425 m³/s) Sept. 8-10.
Period of record: Maximum discharge, 18,400 ft³/s (521 m³/s) Jan. 31, 1963 (gage height, 19.6 ft or 5.97 m, from floodmarks in gage house, 20.6 ft or 6.28 m, from outside floodmarks), from rating curve extended above 4,600 ft³/s (130 m³/s) on basis of slope-area measurement at gage height 15.8 ft (4.81 m); minimum daily, 0.1 ft³/s (0.003 m³/s) Nov. 5-7, 1954.

REMARKS.--Records good. Low flow regulated by Lake Van Norden, capacity, 4,320 acre-ft (5.33 hm³), 5,260 acre-ft (6.49 hm³) with flashboards. See schematic diagram of Yuba River basin.

REVISIONS.--WSP 1931: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34	29	170	234	141	597	280	819	1,180	129	20	16
2	31	24	178	183	130	424	252	853	1,250	109	23	16
3	28	27	163	168	128	218	196	881	1,210	89	23	16
4	28	26	153	153	128	165	186	960	1,040	77	26	16
5	31	23	142	141	120	160	198	1,020	1,040	69	34	16
6	31	118	125	131	118	149	188	1,150	1,030	60	28	16
7	38	898	128	126	116	139	203	1,360	909	53	24	16
8	43	302	130	118	114	124	232	1,420	777	326	23	15
9	37	260	135	113	116	118	249	1,350	807	1,800	22	15
10	34	1,470	131	108	118	123	197	1,230	833	676	21	15
11	33	3,460	131	105	118	119	216	1,180	851	305	21	17
12	38	2,190	122	128	118	122	300	1,090	823	178	21	54
13	37	446	123	197	111	116	317	978	791	126	20	56
14	37	287	113	304	106	138	373	1,000	742	98	20	56
15	36	240	111	1,840	104	196	490	995	652	81	20	56
16	36	256	115	1,200	111	255	533	793	540	70	19	55
17	35	425	230	1,410	102	263	579	580	456	60	18	77
18	33	299	198	1,310	102	236	590	436	435	47	18	77
19	24	198	147	1,410	101	237	385	342	371	42	18	76
20	25	168	133	601	99	258	396	317	330	38	18	74
21	24	159	136	372	94	275	496	472	351	36	18	73
22	35	158	129	284	94	284	648	768	340	33	17	71
23	64	149	119	251	93	301	651	963	303	31	17	69
24	42	185	115	230	92	344	391	1,090	257	29	17	68
25	46	181	122	218	99	364	287	1,220	218	28	17	66
26	42	176	126	191	100	353	239	1,450	178	26	17	63
27	41	169	169	172	94	367	219	1,450	152	23	17	57
28	40	179	266	162	91	259	269	1,390	149	22	16	54
29	34	206	1,070	157	-----	607	386	1,170	154	21	16	51
30	30	192	620	150	-----	667	572	1,070	141	19	16	47
31	31	-----	343	148	-----	310	-----	1,110	-----	19	16	-----
TOTAL	1,098	12,900	6,093	12,315	3,058	8,288	10,518	30,907	18,310	4,720	621	1,374
MEAN	35.4	430	197	397	109	267	351	997	610	152	20.0	45.8
MAX	64	3,460	1,070	1,840	141	667	651	1,450	1,250	1,800	34	77
MIN	24	23	111	105	91	116	186	317	141	19	16	15
AC-FT	2,180	25,590	12,090	24,430	6,070	16,440	20,860	61,300	36,320	9,360	1,230	2,730

CAL YR 1973 TOTAL 87,595 MEAN 240 MAX 3,460 MIN 15 AC-FT 173,700
WTR YR 1974 TOTAL 110,202 MEAN 302 MAX 3,460 MIN 15 AC-FT 218,600

PEAK DISCHARGE (BASE, 1,500 FT ³ /S)							
DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-12	0430	11.07	5,280	5-7	2130	7.18	1,930
12-29	1130	6.64	1,590	5-26	2030	7.53	2,170
1-15	0730	7.43	2,300	7-9	1630	7.96	2,470
1-18	2030	7.73	2,460				

389

LOCATION.--Lat 39°22'45", long 120°29'52", in NW¼SE¼ sec.34, T.18 N., R.13 E., Nevada County, Tahoe National Forest, on right bank 850 ft (259 m) downstream from Fordyce Dam, and 5.3 mi (8.5 km) northeast of Cisco.

PERIOD OF RECORD.--June 1966 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,250 ft (1,905 m), from topographic map.

AVERAGE DISCHARGE.--8 years, 202 ft³/s (5.721 m³/s), 102,200 acre-ft/yr (126 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 4,660 ft³/s (132 m³/s) July 9 (gage height, 7.90 ft or 2.408 m in gage well, 6.82 ft or 2.079 m, from high-water marks), from rating curve extended above 800 ft³/s (22.7 m³/s) as explained below; minimum daily, 6.3 ft³/s (0.18 m³/s) Oct. 30 to Nov. 3.

Period of record: Maximum discharge, 4,660 ft³/s (132 m³/s) July 9, 1974 (gage height, 7.90 ft or 2.408 m in gage well, 6.82 ft or 2.079 m, from high-water marks), from rating curve extended above 800 ft³/s (22.7 m³/s) on basis of slope-area measurement of peak flow; minimum daily, 5.3 ft³/s (0.15 m³/s) Jan. 8, 9, 1968.

REMARKS.--Flow regulated by Fordyce Lake, usable capacity, 46,662 acre-ft (57.5 hm³). See schematic diagram of Yuba River basin.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.9	6.3	33	36	46	194	27	50	383	264	434	517
2	8.9	6.3	33	36	46	196	27	51	602	251	225	474
3	8.9	6.3	33	39	46	201	27	52	770	211	59	492
4	8.9	6.5	34	39	46	249	27	52	750	113	59	492
5	8.9	6.7	34	39	46	355	29	53	537	109	209	491
6	8.9	6.9	34	39	46	370	30	53	445	95	395	485
7	8.9	7.3	34	40	46	365	31	53	716	95	391	480
8	8.9	7.6	34	38	46	363	31	53	967	98	270	475
9	8.9	8.0	34	38	49	357	31	53	1,420	1,360	57	469
10	8.9	8.7	34	38	49	351	32	53	1,550	145	55	463
11	8.8	9.6	34	37	300	350	33	53	1,630	110	55	458
12	8.8	11	34	38	402	362	34	53	1,790	104	81	452
13	8.7	13	34	41	329	377	35	53	1,790	98	434	439
14	8.7	14	34	42	320	371	35	53	1,690	92	486	430
15	8.7	17	34	44	321	368	35	53	1,520	86	480	425
16	8.7	20	34	44	319	365	35	54	1,170	82	474	421
17	7.8	22	35	45	318	359	35	54	599	76	462	416
18	6.6	25	35	46	316	357	35	54	794	70	462	411
19	6.5	27	35	46	318	353	36	54	805	67	468	407
20	6.6	28	35	46	318	349	38	55	768	67	468	401
21	6.4	29	35	46	316	346	39	56	525	67	462	232
22	7.4	30	35	46	311	343	40	56	356	67	50	16
23	7.3	30	35	46	307	222	40	57	421	67	46	16
24	7.2	30	35	46	200	27	41	194	383	67	44	135
25	7.1	31	35	46	195	27	42	310	308	82	44	394
26	7.0	31	35	46	156	27	44	321	181	456	181	390
27	7.0	31	35	46	196	27	45	325	82	498	530	381
28	6.8	32	35	46	194	27	47	326	128	396	523	386
29	6.4	32	35	46	-----	27	49	334	198	480	523	381
30	6.3	33	35	46	-----	27	50	337	245	445	323	375
31	6.3	-----	36	46	-----	27	-----	338	-----	437	486	-----
TOTAL	244.1	566.2	1,067	1,317	5,602	7,739	1,080	3,713	23,523	6,655	9,236	11,804
MEAN	7.87	18.9	34.4	42.5	200	250	36.0	120	784	215	298	393
MAX	8.9	33	36	46	402	377	50	338	1,790	1,360	530	517
MIN	6.3	6.3	33	36	46	27	27	50	82	67	44	16
AC-FT	484	1,120	2,120	2,610	11,110	15,350	2,140	7,360	46,660	13,200	18,320	23,410
CAL YR 1973	TOTAL	44,859.0	MEAN	123	MAX	736	MIN	6.3	AC-FT	88,980		
WTR YR 1974	TOTAL	72,546.3	MEAN	199	MAX	1,790	MIN	6.3	AC-FT	143,900		

SACRAMENTO RIVER BASIN

11414140 LAKE SPAULDING NEAR EMIGRANT GAP, CALIF.

LOCATION.--Lat 39°19'35", long 120°38'32", in SE¼NE¼ sec.20, T.17 N., R.12 E., Nevada County, on left abutment of Spaulding Dam on South Yuba River, 2.5 mi (4.0 km) northeast of Emigrant Gap.

DRAINAGE AREA.--118 mi² (306 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 4,809.6 ft (1,465.97 m) above mean sea level (levels by Pacific Gas and Electric Co.). Prior to July 1968, nonrecording gage at same site and datum.

EXTREMES.--Current year: Maximum contents, 74,773 acre-ft (94.19 hm³) June 8-20 (gage height, 205.0 ft or 62.48 m); minimum, 12,288 acre-ft (15.15 hm³) Nov. 2 (gage height, 78.7 ft or 23.99 m).
Period of record: Maximum contents, 75,100 acre-ft (92.59 hm³) July 13, 1967 (gage height, 205.5 ft or 62.64 m); minimum, 4,180 acre-ft (5.15 hm³) Mar. 23, 1973 (gage height, 48.0 ft or 14.63 m).

REMARKS.--Lake is formed by three concrete-arch dams with spillway on the middle arch. Storage began in 1913. Capacity, 74,773 acre-ft (92.20 hm³) between gage heights 0.6 ft (0.18 m), bottom of outlet and 205.0 ft (62.48 m), top of radial gates. Released water flows through Spaulding powerhouses Nos. 1 and 2. Flow through powerhouse No. 1 is transported out of Yuba River basin by Drum Canal to Bear River basin. See schematic diagrams of Yuba River and Bear River basins.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project. Contents not rounded to Geological Survey standards.

CAPACITY TABLE (GAGE HEIGHT, IN FEET, AND CONTENTS, IN ACRE-FEET)

11	329	50	4,578
15	427	70	9,632
20	566	100	19,541
25	874	150	41,545
30	1,352	200	71,329
40	2,742	206	75,473

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25,952	12,383	42,272	36,815	47,093	35,940	49,313	47,920	73,660	72,283	51,182	33,517
2	25,214	12,288	41,960	36,327	46,818	37,502	49,876	49,201	73,730	71,804	50,612	33,238
3	24,406	12,637	41,338	35,699	45,351	37,897	49,369	50,498	73,591	71,396	49,651	32,959
4	23,690	12,956	40,720	35,028	44,171	37,947	48,698	52,042	73,591	70,652	48,865	32,452
5	22,906	12,988	40,107	34,505	43,269	37,848	48,197	53,666	74,076	69,912	48,030	32,039
6	22,132	13,699	39,600	33,939	42,220	37,848	47,588	55,554	74,286	69,176	47,533	32,452
7	21,369	18,023	38,995	33,191	41,390	37,848	46,983	58,448	74,564	68,445	47,093	33,517
8	20,803	18,813	38,195	32,498	40,362	37,848	46,490	61,354	74,773	68,180	46,545	34,647
9	20,317	19,176	37,601	31,720	39,448	37,010	46,218	63,949	74,773	74,425	46,436	35,651
10	19,762	24,366	37,010	30,862	38,494	35,315	45,675	66,014	74,773	74,634	44,598	36,864
11	19,176	36,668	36,522	30,060	37,453	34,932	45,081	67,519	74,773	74,355	43,534	37,996
12	18,740	44,866	35,940	29,355	36,571	34,694	44,974	68,644	74,773	73,383	42,748	39,246
13	18,596	45,675	35,362	29,137	35,506	34,127	44,705	69,110	74,773	72,215	42,325	40,260
14	18,380	45,675	34,694	29,443	34,837	33,098	44,598	69,711	74,773	71,125	41,908	41,545
15	17,916	45,621	34,174	36,522	34,790	33,611	44,974	70,652	74,773	69,644	41,545	42,691
16	17,280	45,675	34,174	40,209	34,742	33,986	45,512	71,261	74,773	68,378	41,183	43,852
17	16,722	47,864	33,564	45,135	34,694	34,600	46,000	71,329	74,773	66,928	40,772	44,974
18	16,136	48,252	33,471	47,975	34,600	34,932	46,599	71,125	74,773	65,495	40,362	46,163
19	15,625	47,920	33,098	54,135	34,600	35,219	46,599	70,584	74,773	63,949	40,006	47,257
20	15,422	47,643	32,498	54,724	34,457	35,458	46,545	70,181	74,773	62,613	39,650	48,531
21	15,052	46,928	32,085	54,842	34,363	36,037	46,654	69,845	74,348	61,104	39,246	49,089
22	14,985	46,654	31,584	54,724	34,410	36,376	47,478	70,450	74,773	59,676	38,844	48,921
23	14,752	46,054	31,042	54,135	34,080	36,815	48,197	71,804	74,773	58,265	38,295	49,201
24	14,091	45,027	30,326	53,666	33,657	37,256	48,308	73,039	74,634	56,630	37,158	49,369
25	13,796	44,812	29,795	52,967	33,331	37,897	47,698	72,764	74,425	55,316	36,085	49,313
26	13,536	44,064	29,355	52,214	33,005	37,996	47,147	73,039	74,147	54,249	35,362	49,313
27	13,406	43,534	29,310	51,468	32,590	39,752	46,599	72,764	73,660	53,549	34,982	49,313
28	13,213	43,217	30,326	50,442	32,314	40,669	46,163	72,901	73,039	52,735	34,694	49,089
29	13,020	42,743	35,315	49,707	-----	43,746	46,109	73,176	72,832	52,214	34,410	48,698
30	12,828	42,371	36,864	48,754	-----	48,030	46,490	73,591	72,488	51,812	34,221	48,141
31	12,573	-----	37,108	47,809	-----	48,141	-----	73,591	-----	51,468	33,892	-----
MAX	25,952	48,252	42,272	54,842	47,093	48,141	49,876	73,591	74,773	74,634	51,182	49,369
MIN	12,573	12,288	29,310	29,137	32,314	33,098	44,598	47,920	72,488	51,468	33,892	32,039
(a)	79.6	151.6	141.2	161.7	131.1	162.3	159.3	203.3	201.7	168.2	134.5	162.3
(b)	-14,002	+29,798	-5,263	+10,701	-15,495	+15,827	-1,651	+27,101	-1,103	-21,020	-17,576	+14,249

CAL YR 1973 b +21,075

WTR YR 1974 b +21,566

a Gage height, in feet, at end of month.
b Change in contents, in acre-feet.

11414170 DRUM CANAL AT TUNNEL OUTLET, NEAR EMIGRANT GAP, CALIF.

LOCATION.--Lat 39°19'03", long 120°39'08", in SE¼SW¼ sec.20, T.17 N., R.12 E., Nevada County, in Tahoe National Forest, 100 ft (30 m) downstream from tunnel outlet, 1.0 mi (1.6 km) downstream from Spaulding No. 1 powerhouse, and 1.7 mi (2.7 km) northeast of Emigrant Gap.

PERIOD OF RECORD.--October 1964 to current year. Prior to October 1972, published as "Drum Canal at intake."

GAGE.--Water-stage recorder. Altitude of gage is 4,880 ft (1,487 m), from topographic map. Prior to Oct. 1, 1968, in powerhouse 0.7 mi (1.1 km) upstream at different datum.

AVERAGE DISCHARGE.--10 years, 555 ft³/s (15.72 m³/s), 402,100 acre-ft/yr (496 hm³/yr).

EXTREMES.--Period of record: Maximum daily discharge, 838 ft³/s (23.7 m³/s) Apr. 11, 16, May 14, 1969; no flow for several days in most years.

REMARKS.--Canal diverts from Spaulding No. 1 powerhouse at Lake Spaulding Dam. Water is used for irrigation and power in the Bear River basin. See schematic diagrams of Yuba River and Bear River basins.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	529	310	684	694	802	629	681	780	790	681	727	711
2	594	290	697	686	800	543	683	779	787	680	697	707
3	597	87	701	683	803	683	743	770	792	680	659	706
4	602	88	708	682	801	739	777	777	785	676	665	704
5	598	204	709	681	797	791	777	773	781	671	677	708
6	591	209	709	679	792	780	776	773	780	669	685	365
7	596	324	700	692	791	778	773	775	780	671	681	7.3
8	561	401	704	704	791	774	776	763	774	665	682	7.4
9	502	493	707	701	788	781	776	776	776	685	683	.55
10	494	575	709	701	786	784	769	777	779	712	688	0
11	497	682	704	700	789	781	777	775	776	674	693	0
12	463	654	691	688	792	727	776	776	778	673	701	0
13	293	660	696	688	789	736	778	768	775	672	711	0
14	293	657	701	670	788	745	781	770	777	675	721	0
15	414	661	705	581	787	768	785	780	773	675	722	0
16	508	667	699	635	781	771	786	784	769	671	713	0
17	489	500	694	639	780	776	788	783	772	669	713	0
18	485	654	693	684	780	774	785	783	768	670	713	0
19	469	685	693	700	782	778	786	784	759	668	713	16
20	294	697	699	758	785	773	784	785	758	672	716	25
21	327	690	707	787	736	777	783	785	765	673	718	62
22	330	697	700	787	688	775	787	786	763	670	718	236
23	447	696	713	794	691	767	789	787	761	674	715	246
24	669	706	713	799	742	767	789	787	760	673	711	492
25	360	704	703	793	781	764	786	788	758	674	711	556
26	472	701	706	780	778	762	783	789	704	669	711	555
27	286	701	609	768	775	743	778	789	678	674	707	555
28	306	696	476	760	748	652	783	789	687	671	710	688
29	309	703	542	762	-----	636	785	785	687	708	709	780
30	310	691	660	806	-----	611	779	785	681	729	711	765
31	311	-----	683	790	-----	671	-----	790	-----	729	712	-----
TOTAL	13,996	16,483	21,215	22,272	21,743	22,836	23,199	24,191	22,773	21,053	21,793	8,892.25
MEAN	451	549	684	718	777	737	773	780	759	679	703	296
MAX	669	706	713	806	803	791	789	790	792	729	727	780
MIN	286	87	476	581	688	543	681	763	678	665	659	0
AC-FT	27,760	32,690	42,080	44,180	43,130	45,300	46,020	47,980	45,170	41,760	43,230	17,640
CAL YR 1973	TOTAL	224,127.70	MEAN	614	MAX	793	MIN	.70	AC-FT	444,600		
WTR YR 1974	TOTAL	240,446.25	MEAN	659	MAX	806	MIN	0	AC-FT	476,900		

SACRAMENTO RIVER BASIN

11414190 DRUM CANAL ABOVE DRUM FOREBAY, NEAR BLUE CANYON, CALIF.

LOCATION.--Lat 39°15'50", long 120°43'47", in NE¼SW¼ sec.10, T.16 N., R.11 E., Placer County, on right bank 1.2 mi (1.9 km) west of Blue Canyon, and 1.5 mi (2.4 km) upstream from Drum Forebay.

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

GAGE.--Water-stage recorder. Altitude of gage is 4,800 ft (1,463 m), from topographic map.

AVERAGE DISCHARGE.--10 years, 562 ft³/s (15.9 m³/s), 407,200 acre-ft/yr (502 hm³/yr).

EXTREMES.--Period of record: Maximum daily discharge, 801 ft³/s (22.7 m³/s) Sept. 29, 1974; no flow at times in most years.

REMARKS.--Flow represents water diverted from South Yuba River through Spaulding No. 1 powerplant plus diversion from North Fork American River basin by way of Lake Valley Canal (see sta 11426190). This water enters the Bear River at Drum Forebay. See schematic diagrams of Yuba River and Bear River basins.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	534	311	715	730	738	704	719	714	744	747	725	762
2	610	291	730	725	739	521	719	712	744	746	718	759
3	608	88	732	731	741	719	721	705	747	746	717	758
4	604	89	735	731	741	733	722	709	747	744	722	752
5	603	212	735	731	738	735	725	706	745	739	726	760
6	601	313	735	729	740	733	722	702	745	738	734	450
7	605	326	726	725	740	733	719	703	754	741	730	29
8	563	401	726	731	741	732	722	693	742	743	728	29
9	504	494	731	730	741	732	720	704	747	738	725	14
10	500	578	731	730	741	732	713	702	753	733	728	.52
11	503	689	731	730	738	731	719	701	751	744	730	.22
12	459	675	722	721	736	729	718	699	753	742	735	.05
13	332	683	722	728	735	731	718	695	754	740	738	.05
14	330	679	726	719	736	720	719	695	754	742	735	.05
15	457	688	728	645	734	725	724	716	753	743	737	.05
16	505	701	729	695	737	731	723	731	751	739	734	.30
17	491	538	726	705	739	732	727	731	750	738	747	.44
18	495	685	723	723	739	730	726	732	750	738	746	.44
19	451	715	727	719	736	732	726	733	753	735	744	.44
20	340	727	730	722	733	730	723	735	747	737	750	.44
21	366	718	731	723	737	732	723	734	748	738	755	9.9
22	366	724	729	718	738	732	723	734	748	735	753	21
23	562	723	732	726	736	731	722	733	751	740	751	112
24	607	733	732	737	735	729	722	734	751	738	749	457
25	423	731	732	738	735	729	716	735	749	738	752	585
26	446	728	733	738	735	730	714	736	741	734	753	584
27	324	729	676	739	736	732	708	737	744	737	750	584
28	318	723	546	740	736	732	713	739	749	734	754	697
29	309	731	616	733	-----	727	716	741	750	732	756	801
30	310	718	704	736	-----	666	711	740	747	729	761	787
31	311	-----	721	727	-----	708	-----	744	-----	728	762	-----
TOTAL	14,437	17,141	22,212	22,455	20,651	22,313	21,593	22,325	22,462	22,896	22,945	8,953.90
MEAN	466	571	717	724	738	720	720	720	749	739	740	298
MAX	610	733	735	740	741	735	727	744	754	747	762	801
MIN	309	.88	546	645	733	521	708	693	741	728	717	.05
AC-FT	28,640	34,000	44,060	44,540	40,960	44,260	42,830	44,280	44,550	45,410	45,510	17,760
CAL YR 1973	TOTAL	227,051.90	MEAN	622	MAX	746	MIN	.30	AC-FT	450,400		
WTR YR 1974	TOTAL	240,383.90	MEAN	659	MAX	801	MIN	.05	AC-FT	476,800		

LOCATION.--Lat 39°18'45", long 120°39'45", in SE¼NE¼ sec.30, T.17 N., R.12 E., Nevada County, on left bank of concrete flume 400 ft (122 m) downstream from Bowman Lake Road, and 2.5 mi (4.0 km) northeast of Emigrant Gap.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	90	94	95	145	146	115	140	140	137	108	84	120
2	91	74	93	144	144	130	140	141	137	111	84	119
3	91	72	93	143	146	137	140	141	140	111	112	120
4	91	71	92	143	146	140	140	142	142	111	120	120
5	90	87	92	143	146	141	142	142	140	111	121	119
6	90	109	92	145	145	140	142	143	138	114	119	119
7	90	88	92	144	119	139	143	143	139	116	122	118
8	90	70	91	144	144	141	39	143	139	116	121	118
9	89	71	90	144	144	141	1.0	144	139	99	121	119
10	88	72	90	144	143	140	1.0	144	140	135	119	119
11	88	72	96	143	142	140	44	145	140	135	119	119
12	108	73	101	145	142	108	127	143	140	115	119	120
13	119	75	101	144	135	119	132	142	139	114	118	120
14	117	83	100	146	141	120	133	142	139	112	117	119
15	116	71	99	131	141	125	136	142	138	114	117	119
16	114	95	99	136	142	127	139	144	138	113	116	119
17	113	83	101	143	142	132	137	148	138	115	116	119
18	114	94	99	144	142	120	143	147	138	114	117	120
19	114	112	95	144	143	131	146	145	138	113	117	120
20	110	67	91	145	143	133	146	144	137	114	117	120
21	92	123	92	147	144	137	145	143	137	115	109	121
22	92	149	91	147	145	139	145	143	136	114	115	121
23	93	134	91	146	145	138	145	144	137	114	116	119
24	96	95	90	148	144	138	146	143	137	115	116	119
25	98	94	90	149	143	138	146	143	107	115	116	118
26	114	94	91	148	143	138	146	143	74	116	117	118
27	123	94	93	148	142	137	146	144	104	115	119	119
28	121	94	90	148	127	106	145	145	105	114	120	120
29	119	92	64	147	-----	139	142	144	107	106	120	120
30	119	98	65	144	-----	140	140	141	107	84	120	120
31	120	-----	108	143	-----	141	-----	139	-----	84	120	-----
TOTAL	3,200	2,700	2,867	4,475	3,969	4,110	3,757.0	4,437	3,927	3,483	3,584	3,581
MEAN	103	90.0	92.5	144	142	133	125	143	131	112	116	119
MAX	123	149	108	149	146	141	146	148	142	135	122	121
MIN	88	67	64	131	119	106	1.0	139	74	84	84	118
AC-FT	6,350	5,360	5,690	8,880	7,870	8,150	7,450	8,800	7,790	6,910	7,110	7,100
CAL YR 1973	TOTAL	35,532.26	MEAN	97.3	MAX	149	MIN	1.18	AC-FT	70,480		
WTR YR 1974	TOTAL	44,090.00	MEAN	121	MAX	149	MIN	1.0	AC-FT	87,450		

SACRAMENTO RIVER BASIN

11414250 SOUTH YUBA RIVER AT LANGS CROSSING, NEAR EMIGRANT GAP, CALIF.

LOCATION.--Lat 39°19'07", long 120°39'27", in SW¼SW¼ sec.20, T.17 N., R.12 E., Nevada County, on right bank 150 ft (46 m) downstream from road bridge, 0.8 mi (1.3 km) downstream from Spaulding Nos. 1 and 2 powerplants, and 1.6 mi (2.6 km) northeast of Emigrant Gap.

DRAINAGE AREA.--120 mi² (311 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 4,432.44 ft (1,351.008 m) above mean sea level (levels by Pacific Gas and Electric Co.).

AVERAGE DISCHARGE.--8 years, 88.4 ft³/s (2.50 m³/s), 64,050 acre-ft/yr (79.0 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 3,920 ft³/s (111 m³/s) July 10 (gage height, 10.25 ft or 3.124 m); minimum daily, 2.8 ft³/s (0.079 m³/s) Aug. 1.

Period of record: Maximum discharge, 9,700 ft³/s (275 m³/s) Jan. 22, 1970 (gage height, 14.45 ft or 4.404 m); minimum daily, 2.8 ft³/s (0.079 m³/s) Aug. 1, 1974.

REMARKS.--Flow regulated by Lake Spaulding (see sta 11414140). See schematic diagrams of Yuba River and Bear River basins.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.5	4.5	20	19	14	130	80	20	1,310	14	2.8	6.1
2	5.0	4.0	15	14	11	65	55	20	1,710	14	3.8	5.8
3	5.0	3.8	12	12	11	31	39	20	1,910	13	4.0	5.7
4	5.0	3.6	11	10	9.5	21	33	19	1,640	13	4.7	5.8
5	5.0	4.6	9.8	9.7	8.8	24	28	18	1,070	13	4.5	6.6
6	4.9	23	9.9	9.3	8.5	19	26	17	930	12	4.5	6.6
7	6.0	31	11	9.0	8.4	18	25	16	576	12	4.5	6.5
8	6.9	14	10	8.3	8.3	18	115	19	655	11	4.3	6.4
9	6.1	16	9.6	8.1	8.3	16	150	21	885	32	4.3	6.5
10	5.3	64	9.6	7.7	8.0	16	149	37	1,010	1,210	4.2	6.6
11	4.9	103	9.4	7.6	8.0	16	106	218	1,060	87	4.2	7.6
12	5.0	93	11	8.9	8.5	29	30	324	1,100	29	4.2	7.0
13	5.0	44	12	19	8.0	20	26	348	1,080	25	4.2	6.9
14	5.0	28	12	24	7.9	26	26	325	1,030	21	4.2	7.0
15	4.9	26	10	77	7.8	33	26	183	839	18	4.0	6.9
16	4.9	40	9.9	75	7.5	33	27	144	684	15	4.0	7.0
17	4.7	77	17	83	7.1	29	26	95	299	13	4.0	7.1
18	4.7	61	20	72	7.3	27	24	37	199	10	4.0	7.1
19	4.7	25	13	83	9.0	26	20	38	189	7.2	4.0	7.0
20	4.7	18	11	52	9.7	25	20	39	91	6.0	4.0	6.6
21	4.2	19	10	37	8.9	20	19	38	58	5.2	8.7	6.2
22	6.1	14	14	22	7.7	19	19	38	56	4.5	18	6.2
23	14	11	12	16	7.6	19	21	38	55	4.3	7.1	6.0
24	7.6	9.4	10	16	8.5	19	21	236	53	4.0	9.7	7.2
25	5.9	8.8	9.9	16	9.3	20	22	1,520	47	3.8	9.5	7.2
26	5.2	8.5	11	17	11	22	22	1,630	24	3.8	9.2	7.1
27	5.2	7.9	24	17	11	38	22	2,000	21	3.7	9.2	6.5
28	5.0	7.7	35	17	12	50	22	1,680	19	3.7	6.4	5.4
29	4.7	8.3	76	17	-----	92	21	1,040	16	3.8	6.2	5.1
30	4.7	10	50	16	-----	166	21	888	15	5.4	6.1	4.5
31	4.7	-----	22	16	-----	50	-----	1,140	-----	3.8	6.1	-----
TOTAL	169.5	788.1	517.1	815.6	252.6	1,137	1,241	12,206	18,631	1,621.2	178.6	194.2
MEAN	5.47	26.3	16.7	26.3	9.02	36.7	41.4	394	621	52.3	5.76	6.47
MAX	14	103	76	83	14	166	150	2,000	1,910	1,210	18	7.6
MIN	4.2	3.6	9.4	7.6	7.1	16	19	16	15	3.7	2.8	4.5
AC-FT	336	1,560	1,030	1,620	501	2,260	2,460	24,210	36,950	3,220	354	385

CAL YR 1973 TOTAL 11,787.0 MEAN 32.3 MAX 1,380 MIN 3.6 AC-FT 23,380
WTR YR 1974 TOTAL 37,751.9 MEAN 103 MAX 2,000 MIN 2.8 AC-FT 74,880

11415500 BOWMAN LAKE NEAR GRANITEVILLE, CALIF.

LOCATION.--Lat 39°27'01", long 120°39'10", in SE¼SW¼ sec.5, T.18 N., R.12 E., Nevada County, on rockfill portion of Bowman Dam on Canyon Creek, 4.5 mi (7.2 km) east of Graniteville, and 8 mi (13 km) south of Sierra City.

DRAINAGE AREA.--27.1 mi² (70.2 km²).

PERIOD OF RECORD.--December 1926 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Nevada Irrigation District). Prior to Oct. 8, 1964, nonrecording gage at same site and datum.

EXTREMES.--Current year: Maximum contents, 69,300 acre-ft (85.4 hm³) May 27 (elevation, 5,564.4 ft or 1,696.03 m); minimum, 46,900 acre-ft (57.8 hm³) Oct. 1-6 (elevation, 5,535.8 ft or 1,687.31 m).

Period of record: Maximum contents, 71,000 acre-ft (87.5 hm³) May 30, 1965 (elevation, 5,566.5 ft or 1,696.67 m); minimum observed under normal operating conditions since reservoir first filled, 1,000 acre-ft (1.23 hm³) Mar. 4, 1931 (elevation 5,430.1 ft or 1,655.09 m).

REMARKS.--Lake is formed by one rockfill and one concrete-arch dam; storage began in November 1926. Total capacity, 68,200 acre-ft (84.1 hm³) between elevations, 5,400 ft (1,645.9 m), bottom of outlet tunnel and 5,563 ft (1,695.6 m), crest of concrete-arch dam. Flashboards are occasionally added, increasing elevation to 5,565.8 ft (1,696.46 m) and capacity to 70,400 acre-ft (86.8 hm³), all of which is available for release. Lake receives water from Middle Yuba River through Milton-Bowman tunnel (see sta 11408000), and releases it through Bowman-Spaulding Canal (see sta 11416000) which conveys it to reservoirs of Pacific Gas and Electric Co. Water is eventually used for irrigation by Nevada Irrigation District. See schematic diagram of Yuba River basin. Lake completely drained for inspection and repair Nov. 25 to Dec. 9, 1949, Oct. 1-20, 1966, Oct. 4-29, 1972.

COOPERATION.--Thirty-six nonrecording gage readings furnished by Nevada Irrigation District.

REVISIONS.--WSP 1931: Drainage area.

CAPACITY TABLE (ELEVATION, IN FEET, AND CONTENTS, IN ACRE-FEET)

5,419.6	0	5,460	6,900
5,425	500	5,470	10,200
5,430	900	5,480	14,200
5,435	1,400	5,510	30,000
5,440	2,100	5,540	49,800
5,450	4,100	5,570	73,800

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG.	SEP
1	46,900	49,100	61,500	56,400	62,900	55,200	58,800	60,900	69,200	66,100	66,800	60,500
2	46,900	49,200	61,200	56,400	62,800	55,900	59,000	61,600	69,200	65,800	66,300	60,500
3	46,900	49,200	61,000	56,300	62,400	55,900	59,100	62,400	69,200	65,600	65,800	60,500
4	46,900	49,200	60,600	56,000	62,200	55,700	59,000	63,000	69,200	65,200	65,300	60,500
5	46,900	49,400	60,300	56,000	61,900	55,600	58,800	63,800	69,200	64,800	64,800	60,500
6	46,900	49,800	60,000	55,800	61,600	55,400	58,700	64,800	69,200	64,400	64,300	60,400
7	47,000	52,900	59,600	55,600	61,200	55,200	58,500	65,900	69,200	64,200	63,600	60,400
8	47,100	53,700	59,200	55,400	60,800	55,100	58,400	67,200	69,100	65,200	63,200	60,400
9	47,100	54,400	58,800	55,100	60,500	54,800	58,400	68,500	69,100	67,600	62,600	60,400
10	47,100	57,200	58,400	54,700	60,200	54,500	58,200	69,100	69,100	68,400	62,000	60,300
11	47,100	62,200	58,100	54,300	59,800	54,400	58,000	69,200	69,100	68,800	61,400	60,300
12	47,200	65,200	57,700	54,100	59,500	54,500	58,000	69,200	69,100	68,800	60,800	60,300
13	47,200	65,200	57,500	54,100	59,200	54,500	57,900	69,200	69,100	68,800	60,400	60,300
14	47,200	64,700	57,200	54,500	58,800	54,400	57,900	69,200	69,000	68,800	60,300	60,200
15	47,200	64,400	56,800	57,400	58,400	54,400	58,000	69,200	69,000	68,800	60,200	60,200
16	47,200	64,500	56,400	59,300	58,100	54,200	58,300	69,200	68,900	68,800	60,200	60,200
17	47,200	64,800	56,300	61,400	57,800	54,100	58,600	69,100	68,800	68,800	60,200	60,200
18	47,200	64,700	56,100	63,600	57,500	54,100	58,900	68,900	68,700	68,800	60,100	60,200
19	47,200	64,400	55,900	65,500	57,300	54,000	59,100	68,800	68,600	68,800	60,100	60,200
20	47,200	64,100	55,600	65,200	57,000	54,000	59,200	68,700	68,500	68,800	60,200	60,200
21	47,300	64,000	55,300	64,800	56,700	54,000	59,300	68,800	68,400	68,800	60,300	60,200
22	47,600	63,700	55,000	64,600	56,400	53,900	59,600	68,800	68,400	68,800	60,300	60,200
23	48,000	63,400	54,700	64,400	56,000	53,900	60,100	69,000	68,300	68,800	60,400	60,200
24	48,200	63,100	54,300	64,300	55,600	53,900	60,400	69,100	68,100	68,800	60,400	60,200
25	48,400	62,800	54,000	64,100	55,200	54,000	60,400	69,200	67,900	68,800	60,400	60,200
26	48,500	62,400	53,600	64,000	54,900	54,200	60,400	69,200	67,600	68,800	60,500	60,100
27	48,700	62,100	53,500	63,900	54,500	54,600	60,300	69,300	67,300	68,800	60,500	60,100
28	48,800	61,800	53,600	63,700	54,200	54,900	60,200	69,200	67,000	68,600	60,600	60,100
29	48,900	61,600	55,600	63,600	-----	56,200	60,100	69,200	66,800	68,300	60,600	60,000
30	49,000	61,500	56,400	63,300	-----	57,800	60,900	69,200	66,400	67,900	60,600	60,000
31	49,100	-----	56,500	63,200	-----	58,200	-----	69,200	-----	67,400	60,500	-----
MAX	49,100	65,200	61,500	65,500	62,900	58,200	60,900	69,300	69,200	68,800	66,800	60,500
MIN	46,900	49,100	53,500	54,100	54,200	53,900	57,900	60,900	66,400	64,200	60,100	60,000
(a)	5,538.9	5,554.6	5,548.4	5,556.7	5,545.5	5,550.5	--	--	5,560.8	5,562.0	5,553.4	5,552.8
(b)	+2,200	+12,400	-5,000	+6,700	-9,000	+4,000	+2,200	+8,800	-2,800	+1,000	-6,900	-500

CAL YR 1973 b +12,100
WTR YR 1974 b +13,100

a Elevation, in feet, at end of month.

b Change in contents, in acre-feet.

NOTE.--Contents based on daily nonrecording readings Apr. 29 to June 2.

11416000 BOWMAN-SPAULDING CANAL INTAKE NEAR GRANITEVILLE, CALIF.

LOCATION.--Lat 39°26'26", long 120°39'30", in NW¼SW¼ sec.8, T.18 N., R.12 E., Nevada County, Tahoe National Forest, on left bank 0.6 mi (1.0 km) downstream from Bowman Dam, 4.5 mi (7.2 km) east of Graniteville, and 8.5 mi (13.7 km) south of Sierra City.

PERIOD OF RECORD.--October 1927 to current year. Prior to October 1970, published as Bowman-Spauldung Canal at intake or Bowman-Spauldung Canal intake, near Sierra City.

GAGE.--Water-stage recorder. Datum of gage is 5,390.39 ft (1,642.991 m) above mean sea level. Prior to July 1965 at site 0.3 mi (0.5 km) upstream at different datum.

AVERAGE DISCHARGE.--47 years, 156 ft³/s (4.42 m³/s), 113,000 acre-ft/yr (139 hm³/yr).

EXTREMES.--Period of record: Maximum daily discharge, 339 ft³/s (9.60 m³/s) July 24, 1973; no flow at times in most years.

REMARKS.--Records good. Canal diverts from left bank of Canyon Creek at diversion dam 500 ft (152 m) downstream from Bowman Dam. Water is diverted to Lake Spaulding and after passing through several powerhouses is used for irrigation by Nevada Irrigation District. See schematic diagram of Yuba River basin.

REVISIONS (WATER YEARS).--WSP 1395: 1935-36, 1940.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	288	305	240	196	231	110	90	167	182	291	302	298
2	290	305	236	204	236	78	145	139	182	299	306	298
3	291	305	240	213	237	177	166	127	182	302	305	299
4	292	306	250	213	217	212	194	136	182	302	306	299
5	294	308	255	216	252	203	208	135	182	299	306	294
6	291	290	255	219	263	196	213	119	182	298	304	294
7	287	181	255	219	246	196	221	98	182	102	304	297
8	283	223	263	212	263	202	224	75	189	6.7	304	302
9	281	254	266	238	257	213	225	66	201	9.6	304	302
10	281	213	263	246	254	215	225	71	201	9.0	305	298
11	287	30	263	244	252	160	224	88	209	6.7	305	298
12	291	32	262	225	251	111	224	121	216	6.2	304	298
13	294	163	257	191	251	110	224	127	226	5.9	302	299
14	294	238	255	178	252	111	219	135	228	5.6	302	301
15	295	238	259	54	256	164	204	148	231	6.7	302	301
16	298	195	264	54	257	202	183	170	236	6.7	302	302
17	298	106	256	6.9	257	185	173	198	240	4.9	302	304
18	301	153	236	6.9	256	176	171	214	246	5.2	301	304
19	304	221	239	11	252	185	182	213	251	5.2	301	305
20	305	242	254	79	249	192	197	212	251	5.2	301	305
21	306	227	260	138	254	192	197	209	255	4.9	301	305
22	305	227	262	159	260	194	178	210	264	10	299	305
23	273	249	262	185	262	190	167	208	269	4.6	301	306
24	301	260	267	198	262	180	174	208	271	3.7	308	306
25	306	256	273	206	262	148	191	185	276	3.4	306	306
26	301	254	273	202	264	134	208	174	280	3.4	308	306
27	298	254	241	207	267	118	213	174	280	3.4	305	306
28	301	254	179	212	267	116	214	173	285	76	298	306
29	302	251	61	212	-----	47	204	176	291	200	298	306
30	302	237	166	220	-----	31	188	183	291	274	298	308
31	302	-----	195	228	-----	131	-----	183	-----	302	298	-----
TOTAL	9,142	6,777	7,507	5,392.8	7,087	4,879	5,846	4,842	6,961	2,862.0	9,388	9,058
MEAN	295	226	242	174	253	157	195	156	232	92.3	303	302
MAX	306	308	273	246	267	215	225	214	291	302	308	308
MIN	273	30	61	6.9	217	31	90	66	182	3.4	298	294
AC-FT	18,130	13,440	14,890	10,700	14,060	9,680	11,600	9,600	13,810	5,680	18,620	17,970
CAL YR 1973	TOTAL 80,137.14			MEAN 220	MAX 339	MIN .54	AC-FT 159,000					
WTR YR 1974	TOTAL 79,741.80			MEAN 218	MAX 308	MIN 3.4	AC-FT 158,200					

LOCATION.--Lat 39°20'32", long 120°38'26", in SW¼NW¼ sec.16, T.17 N., R.12 E., Nevada County, at outlet of Jordan Creek siphon 0.6 mi (1.0 km) downstream from Fuller Lake, and 3.5 mi (5.6 km) northeast of Emigrant Gap.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	287	290	300	302	289	308	305	299	317	312	294	298
2	287	289	294	290	287	288	298	305	319	311	299	299
3	287	289	285	291	285	283	289	286	302	313	302	300
4	286	288	284	290	281	299	281	282	305	313	302	295
5	292	289	287	287	277	302	287	290	318	311	305	296
6	289	300	288	289	287	294	286	297	318	308	306	296
7	291	306	287	288	284	287	287	307	317	257	306	297
8	289	270	285	279	290	284	290	309	315	36	306	298
9	284	276	288	279	295	285	302	301	314	0	305	299
10	265	311	290	293	292	287	302	291	314	0	304	299
11	285	311	293	296	290	241	294	276	313	0	304	298
12	283	310	294	297	288	185	295	286	313	0	304	297
13	284	293	294	296	288	182	299	298	317	0	303	299
14	285	311	292	297	286	171	302	274	320	0	303	300
15	284	314	285	309	285	228	304	303	318	0	303	300
16	284	313	287	305	291	296	304	300	316	0	303	300
17	286	316	298	315	293	297	295	304	316	0	303	301
18	288	309	305	300	291	286	299	308	315	0	302	303
19	290	303	284	287	295	282	287	305	316	0	302	302
20	290	313	281	260	289	289	288	298	317	0	302	302
21	292	312	288	309	283	292	293	297	315	0	302	303
22	292	304	294	301	288	293	302	312	314	0	301	303
23	294	289	292	296	288	294	301	311	314	0	301	303
24	290	301	287	295	289	296	290	311	314	0	304	302
25	294	306	290	294	288	292	281	312	313	0	303	302
26	298	305	294	290	289	279	278	307	313	0	302	303
27	293	301	308	277	292	303	283	312	314	199	302	304
28	291	298	312	278	293	298	286	312	312	262	302	303
29	290	299	320	281	-----	309	291	290	313	247	300	302
30	291	294	312	261	-----	291	293	300	313	277	301	302
31	291	-----	305	286	-----	268	-----	311	-----	292	300	-----
TOTAL	8,932	9,010	9,103	9,018	8,073	8,589	8,792	9,294	9,435	3,438	9,376	9,006
MEAN	288	300	294	291	288	277	293	300	315	111	302	300
MAX	298	316	320	315	295	309	305	312	320	313	306	304
MIN	265	270	281	260	277	171	278	274	302	0	294	295
AC-FT	17,720	17,870	18,060	17,890	16,010	17,040	17,440	18,430	18,710	6,820	18,600	17,860
CAL YR 1973	TOTAL	98,279.00	MEAN	269	MAX	320	MIN	0	AC-FT	194,900		
WTR YR 1974	TOTAL	102,066.00	MEAN	280	MAX							

SACRAMENTO RIVER BASIN

11416500 CANYON CREEK BELOW BOWMAN LAKE, CALIF.

LOCATION.--Lat 39°26'23", long 120°39'39", in NE¼SE¼ sec.7, T.18 N., R.12 E., Nevada County, on left bank 1 mi (1.6 km) downstream from Bowman Dam, 3 mi (5 km) upstream from Texas Creek, and 9 mi (14 km) south of Sierra City.

DRAINAGE AREA.--28.3 mi² (73.3 km²).

PERIOD OF RECORD.--January 1927 to current year.

GAGE.--Water-stage recorder and concrete control. Concrete control covered with rocks Jan. 22, 1970. Altitude of gage is 5,100 ft (1,554 m), from topographic map.

AVERAGE DISCHARGE.--47 years, 39.0 ft³/s (1.104 m³/s), 28,260 acre-ft/yr (34.84 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 610 ft³/s (17.3 m³/s) May 27 (gage height, 5.92 ft or 1.804 m); minimum daily, 1.0 ft³/s (0.03 m³/s) July 6.

Period of record: Maximum discharge, 3,740 ft³/s (106 m³/s) Jan. 22, 1970 (gage height, 9.42 ft or 2.871 m in gage well, 10.32 ft or 3.416 m, from floodmarks), from rating curve extended above 1,500 ft³/s (42.5 m³/s) on basis of slope-area measurement of maximum flow; no flow at times.

REMARKS.--Records good. Flow regulated by French Lake, usable capacity, 13,840 acre-ft (17.1 hm³), Bowman Lake (see sta 11415500), several smaller reservoirs, and diversion into Bowman-Spaulding Canal (see sta 11416000). See schematic diagram of Yuba River basin.

REVISIONS (WATER YEARS).--WSP 1315-A: 1930(M). WSP 1931: Drainage area.

DISCHARGE IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.1	3.2	3.6	4.6	3.0	22	7.5	4.4	342	2.4	4.6	2.4
2	5.5	2.7	3.2	4.6	2.8	6.7	5.6	4.0	377	1.7	5.0	2.2
3	4.5	3.0	3.0	4.4	2.7	3.3	4.2	3.6	385	1.3	4.8	2.1
4	3.8	2.8	2.8	4.0	2.7	2.8	4.2	3.4	345	1.2	4.6	1.8
5	3.6	3.2	2.7	3.6	2.8	2.8	4.0	3.4	296	1.1	4.4	3.3
6	3.6	10	2.7	3.4	3.0	2.7	4.0	3.4	314	1.0	4.0	4.8
7	4.7	25	2.7	3.3	2.7	2.6	4.2	3.3	300	2.9	3.6	4.8
8	3.8	5.4	2.7	3.0	2.6	2.6	4.4	3.2	212	8.7	3.2	4.6
9	3.6	8.3	2.7	3.0	2.4	2.6	4.2	2.8	180	13	2.8	3.4
10	4.7	21	2.6	3.0	2.4	2.6	3.8	242	192	8.7	2.7	2.4
11	7.1	27	2.7	2.8	2.4	2.6	4.0	470	200	19	2.6	2.2
12	6.8	212	2.6	4.2	2.2	3.3	4.2	421	210	99	2.4	2.4
13	5.7	457	2.4	7.8	2.1	3.2	4.0	338	205	107	2.2	2.6
14	5.7	292	2.1	12	2.2	3.4	4.4	328	195	90	1.8	2.7
15	5.3	142	2.0	23	2.4	4.4	5.0	338	172	75	2.0	2.7
16	5.1	102	2.1	18	2.4	4.6	4.8	282	141	63	2.2	2.7
17	5.1	205	7.7	26	2.4	4.6	5.0	185	93	55	2.1	2.8
18	4.0	230	3.3	29	2.4	4.4	4.6	96	41	50	1.8	2.8
19	2.4	116	2.6	287	2.7	4.2	3.6	28	13	48	1.5	2.7
20	1.6	24	2.2	519	2.1	4.0	3.8	5.4	7.2	44	1.6	2.4
21	1.3	4.2	2.2	349	2.1	4.0	4.2	3.0	5.4	40	1.7	2.4
22	2.9	2.6	2.0	205	2.1	3.8	4.4	27	4.8	35	2.6	2.4
23	5.3	2.1	1.8	115	2.0	4.0	4.2	175	4.6	35	3.3	2.2
24	3.1	1.8	1.8	48	2.0	4.2	3.6	257	3.8	31	2.8	2.4
25	2.3	1.7	2.0	15	2.1	5.4	3.3	331	3.6	31	2.7	2.4
26	4.3	1.5	2.7	4.2	2.0	7.5	3.2	445	3.0	30	2.8	2.4
27	6.5	1.4	8.1	3.2	1.8	9.9	3.3	542	2.8	28	2.4	2.4
28	4.7	1.6	17	3.2	2.0	6.1	3.8	524	2.8	21	2.0	2.2
29	4.3	2.8	17	3.0	-----	26	4.0	437	2.7	6.9	2.1	2.4
30	4.2	3.8	5.4	3.0	-----	23	4.2	334	2.4	4.4	2.6	2.4
31	4.0	-----	4.8	3.0	-----	5.4	-----	314	-----	3.4	2.6	-----
TOTAL	136.6	1,915.1	123.2	1,717.3	66.5	188.7	127.7	6,153.9	4,256.1	957.7	87.5	81.4
MEAN	4.41	63.8	3.97	55.4	2.38	6.09	4.26	199	142	30.9	2.82	2.71
MAX	7.1	457	17	519	3.0	26	7.5	542	385	107	5.0	4.8
MIN	1.3	1.4	1.8	2.8	1.8	2.6	3.2	2.8	2.4	1.0	1.5	1.8
AC-FT	271	3,800	244	3,410	132	374	253	12,210	8,440	1,900	174	161

CAL YR 1973 TOTAL 4,318.18 MEAN 11.8 MAX 457 MIN .80 AC-FT 8,570
WTR YR 1974 TOTAL 15,811.70 MEAN 43.3 MAX 542 MIN 1.0 AC-FT 31,360

LOCATION.--Lat 39°17'32", long 121°06'13", in NW¼SE¼ sec.32, T.17 N., R.8 E., Nevada County, on left bank at Jones Bar, 100 ft (30 m) upstream from Rush Creek, 0.9 mi (1.4 km) downstream from bridge on State Highway 49, and 5 mi (8 km) northwest of Grass Valley.

PERIOD OF RECORD.--October 1940 to September 1948, April 1959 to current year. Published as South Fork Yuba River at Jones Bar 1940-48 and as South Yuba River at Jones Bar 1959-63.

AVERAGE DISCHARGE.--23 years, 481 ft³/s (13.62 m³/s), 348,500 acre-ft/yr (430 hm³/yr).

Period of record: Maximum discharge, 53,600 ft³/s (1,520 m³/s) Dec. 22, 1964 (gage height, 25.0 ft or 7.62 m, from floodmarks), from rating curve extended above 23,000 ft³/s (651 m³/s) on basis of slope-area measurement of maximum flow; minimum, 1.0 ft³/s (0.028 m³/s) Sept. 10-13, 1944.

Flood of Dec. 23, 1955, reached a stage of 30.7 ft (9.36 m), from floodmarks, present datum, at site 100 ft (30 m) upstream.

REVISIONS (WATER YEARS).--WSP 1315-A: 1942-43(M), drainage area at former site. WSP 1931: Drainage area.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	64	59	2,740	970	561	4,520	3,370	561	1,770	103	67	46
2	60	57	975	779	502	3,750	2,740	578	2,090	100	67	48
3	45	56	686	690	466	1,800	2,000	568	2,540	96	65	47
4	44	54	582	618	442	1,300	1,610	568	2,200	94	65	47
5	43	64	512	582	418	1,100	1,380	572	1,800	91	66	47
6	42	304	466	575	400	1,000	1,210	600	1,420	89	70	46
7	56	990	433	547	391	1,140	1,080	642	1,290	85	67	46
8	88	587	403	522	368	1,120	1,040	670	942	223	62	46
9	86	334	378	496	355	975	1,140	662	1,190	670	60	47
10	65	1,220	370	475	348	887	1,040	686	1,290	1,540	58	48
11	56	3,620	421	463	335	878	960	1,180	1,340	360	56	48
12	54	3,940	403	650	335	1,320	829	1,360	1,430	267	56	44
13	55	2,060	603	941	335	1,120	754	1,210	1,400	298	54	45
14	53	1,520	540	1,530	318	960	726	1,260	1,370	269	53	44
15	51	887	469	4,020	308	946	718	1,030	1,190	241	52	45
16	50	1,220	424	2,450	385	941	722	918	997	217	51	46
17	48	2,720	540	4,180	360	914	706	788	622	198	51	46
18	49	3,530	596	2,910	358	860	714	561	436	181	50	45
19	48	1,280	472	4,450	852	802	654	454	368	174	50	46
20	48	869	433	2,960	564	750	610	391	290	163	48	44
21	48	690	616	2,210	505	710	589	360	221	152	48	43
22	82	558	765	1,550	505	674	603	332	188	142	59	42
23	300	469	568	1,230	445	642	638	451	175	142	50	42
24	154	448	499	1,020	415	626	654	610	169	132	52	43
25	95	403	466	878	400	634	600	1,930	163	121	51	42
26	80	385	521	766	433	694	568	2,170	141	121	51	43
27	71	338	1,160	694	460	1,080	536	2,770	123	113	51	44
28	71	320	1,570	638	557	2,020	522	2,530	119	111	49	44
29	65	330	3,410	586	-----	3,010	536	2,350	113	98	46	56
30	61	785	1,810	544	-----	6,480	547	1,410	107	75	46	72
31	60	-----	1,220	530	-----	3,320	-----	1,600	-----	72	46	-----
TOTAL	2,192	30,097	25,051	41,454	12,121	46,973	29,796	31,772	27,494	6,738	1,717	1,392
MEAN	70.7	1,003	808	1,337	433	1,515	993	1,025	916	217	55.4	46.4
MAX	300	3,940	3,410	4,450	852	6,480	3,370	2,770	2,540	1,540	70	72
MIN	42	54	370	463	308	626	522	332	107	72	46	42
AC-FT	4,350	59,700	49,690	82,220	24,040	93,170	59,100	63,020	54,530	13,360	3,410	2,76

11418000 YUBA RIVER BELOW ENGLEBRIGHT DAM, NEAR SMARTVILLE, CALIF.

LOCATION.--Lat 39°14'07", long 121°16'23", in NW¼NW¼ sec.23, T.16 N., R.6 E., Yuba County, on right bank 2,000 ft (610 m) downstream from Englebright Dam, 0.5 mi (0.8 km) upstream from Deer Creek, and 2.3 mi (3.7 km) north-east of Smartville.

DRAINAGE AREA.--1,108 mi² (2,870 km²).

PERIOD OF RECORD.--October 1941 to current year. Prior to October 1953, published as "at Narrows Dam." October 1953 to Sept. 30, 1969, published as "at Englebright Dam." If records for Deer Creek near Smartville (sta 11418500) since 1941 are added to records at this station, records equivalent to those published from 1903 to 1941 as Yuba River at Smartville (sta 11419000) can be obtained.

GAGE.--Water-stage recorder and crest-stage gages. Datum of gage is 278.68 ft (84.942 m) above mean sea level (levels by International Engineering Co.). Prior to Sept. 19, 1958, at site 2,000 ft (610 m) upstream at datum 248.31 ft (75.685 m) higher and Sept. 19, 1958, to Sept. 30, 1969, at datum 278.68 ft (84.942 m) lower. Supplementary gage 2,000 ft (610 m) upstream since Oct. 1, 1969, at Englebright Dam at datum 248.31 ft (75.685 m) higher.

AVERAGE DISCHARGE.--33 years, 2,578 ft³/s (73.0 m³/s), 1,868,000 acre-ft/yr (2.30 km³/yr).

EXTREMES.--Current year: Maximum discharge, 35,100 ft³/s (994 m³/s) Apr. 1 (gage height, 21.68 ft or 6.608 m), from rating curve extended above 8,200 ft³/s (232 m³/s) on basis of spillway rating at Englebright Dam; minimum daily, 324 ft³/s (9.18 m³/s) Sept. 27.
Period of record: Maximum discharge, 171,000 ft³/s (4,840 m³/s) Dec. 22, 1964 (gage height, 546.14 ft or 166.463 m, site and datum then in use); no flow through powerplant, from rating curve extended above 25,000 ft³/s (708 m³/s) on basis of computation of peak flow over spillway of dam at gage heights 544.72 ft (166.031 m) and 546.14 ft (166.463 m); no flow at times in 1942, 1949, 1956, 1958-61, 1968-69.

REMARKS.--Records good. Diversions out of basin for power and irrigation above station up to 1,800 ft³/s (51.0 m³/s), see sta 11413250, 11414190, 11414200. Flow regulated by Lake Spaulding beginning in 1912 (see sta 11414140), Jackson Meadows Reservoir (see sta 11407800) since November 1964, New Bullards Bar Reservoir (see sta 11413515) since January 1969, Englebright Reservoir beginning in 1941, capacity, 70,000 acre-ft (86.3 hm³), Bowman Lake (see sta 11415500), Fordyce Lake beginning in 1926, capacity, 46,700 acre-ft (57.6 hm³), and many smaller reservoirs. See schematic diagram of Yuba River basin.

REVISIONS.--WSP 1931: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,840	2,370	7,850	5,370	4,170	7,570	32,100	4,170	5,580	2,230	2,740	563
2	1,820	2,380	5,460	4,650	4,160	13,300	26,000	4,160	5,860	2,270	2,740	542
3	1,820	2,370	4,710	4,770	4,160	6,710	17,600	4,160	5,190	2,250	2,740	565
4	1,810	2,370	4,460	4,500	4,160	4,530	14,500	4,160	6,060	2,210	2,740	480
5	1,810	2,360	4,420	4,430	4,150	4,220	11,400	4,160	5,540	2,220	2,750	473
6	1,800	2,360	4,420	4,480	4,150	4,770	10,900	4,170	5,010	2,190	2,770	481
7	1,800	2,440	4,410	4,530	4,140	4,960	10,500	4,160	4,890	2,140	2,770	495
8	1,810	2,440	4,400	4,510	4,130	5,580	9,790	4,160	4,450	2,130	2,770	498
9	1,820	2,380	4,390	4,420	2,510	4,950	8,100	4,160	4,530	2,130	2,770	496
10	1,820	2,420	3,920	4,400	3,790	4,470	6,090	4,140	4,510	2,580	2,770	493
11	1,820	3,920	3,550	4,400	3,870	4,150	4,630	4,130	4,660	2,200	2,770	497
12	1,860	8,360	4,250	4,400	3,690	4,430	4,480	4,120	4,370	2,140	2,770	497
13	2,000	4,600	4,380	4,780	3,690	5,180	4,360	4,100	4,170	2,140	2,770	461
14	1,960	4,390	4,370	6,040	3,690	4,730	4,310	4,100	4,170	2,120	2,770	368
15	1,590	4,390	4,370	13,600	3,700	4,580	4,290	4,080	4,180	2,360	2,760	368
16	2,330	4,410	4,360	9,560	3,700	4,740	4,290	2,880	4,170	2,720	2,770	368
17	2,270	6,870	3,900	12,600	3,700	4,620	4,270	3,930	4,160	2,720	2,770	367
18	2,300	8,820	4,080	10,000	3,650	4,540	4,280	4,030	3,990	2,730	2,770	363
19	2,310	5,860	4,370	14,700	3,940	4,380	4,270	4,090	3,740	2,730	2,770	363
20	2,310	4,870	4,360	20,900	4,170	4,170	4,200	4,060	3,210	2,740	2,770	365
21	2,300	4,630	4,360	18,300	4,160	4,170	4,160	4,020	2,960	2,730	2,770	368
22	2,330	4,430	4,390	11,900	4,170	4,180	4,160	2,670	2,950	2,730	2,770	368
23	2,330	4,410	4,390	9,850	4,170	4,170	4,170	1,720	2,940	2,740	2,770	355
24	2,320	4,410	4,380	9,300	4,160	4,180	4,250	2,190	2,930	2,730	2,770	333
25	2,340	4,410	4,000	8,790	4,160	4,170	4,220	4,080	2,670	2,740	2,770	327
26	2,340	4,400	3,600	5,540	4,160	4,180	4,180	4,090	2,520	2,730	2,770	325
27	2,330	4,390	4,150	5,340	4,150	4,610	4,160	4,110	2,550	2,730	2,770	324
28	2,350	4,380	5,910	5,000	4,150	7,420	4,160	3,400	4,030	2,500	2,770	327
29	2,340	4,370	11,100	4,280	-----	10,500	4,170	5,610	3,870	2,580	2,770	327
30	2,350	4,150	8,160	4,180	-----	23,500	4,170	5,470	2,220	2,730	1,160	328
31	2,350	-----	6,100	4,160	-----	24,000	-----	5,480	-----	2,730	692	-----
TOTAL	64,580	124,360	150,970	233,680	110,600	201,660	232,160	123,960	122,080	76,620	82,032	12,485
MEAN	2,083	4,145	4,870	7,538	3,950	6,505	7,739	3,999	4,069	2,472	2,646	416
MAX	2,350	8,820	11,100	20,900	4,170	24,000	32,100	5,610	6,060	2,740	2,770	565
MIN	1,590	2,360	3,550	4,160	2,510	4,150	4,160	1,720	2,220	2,120	692	324
AC-FT	128,100	246,700	299,400	463,500	219,400	400,000	460,500	245,900	242,100	152,000	162,700	24,760

CAL YR 1973 TOTAL 1,011,582 MEAN 2,771 MAX 11,100 MIN 839 AC-FT 2,006,000
WTR YR 1974 TOTAL 1,535,187 MEAN 4,206 MAX 32,100 MIN 324 AC-FT 3,045,000

11418500 DEER CREEK NEAR SMARTVILLE, CALIF.

LOCATION.--Lat 39°13'28", long 121°16'03", in SW¼SE¼ sec.23, T.16 N., R.6 E., Nevada County, on left bank 400 ft (122 m) upstream from county road bridge, 0.9 mi (1.4 km) upstream from mouth, and 2 mi (3 km) northeast of Smartville.

DRAINAGE AREA.--84.6 mi² (219.1 km²).

PERIOD OF RECORD.--June 1935 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 630 ft (192 m), from river-profile map. June 21, 1935, to Nov. 30, 1938, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--39 years, 134 ft³/s (3,795 m³/s), 97,080 acre-ft/yr (120 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 5,820 ft³/s (165 m³/s) Mar. 2 (gage height, 10.11 ft or 3.082 m); minimum daily, 1.9 ft³/s (0.054 m³/s) Oct. 3.

Period of record: Maximum discharge, 11,600 ft³/s (329 m³/s) Oct. 13, 1962 (gage height, 13.77 ft or 4.197 m), from rating curve extended above 5,200 ft³/s (147 m³/s); minimum daily, 0.1 ft³/s (0.003 m³/s) Aug. 4-6, 15, 1940.

Flood of March 1928 reached a stage of 14.5 ft (4.42 m), from floodmarks (discharge, 14,000 ft³/s or 396 m³/s).

REMARKS.--Records good. Natural flow of stream is affected by Scotts Flat Reservoir beginning in 1949, usable capacity, 26,300 acre-ft (32.4 hm³), increased to 49,000 acre-ft (60.4 hm³) in July 1964, Deer Creek Reservoir, capacity, 1,400 acre-ft (1.73 hm³), Lake Wildwood, capacity, 3,840 acre-ft (4.73 hm³) beginning in 1970, power developments, and diversion for irrigation. At times water from South Yuba River is diverted to Deer Creek and water from Deer Creek is diverted to Bear River. See schematic diagram of Yuba River basin. Records of sediment discharge for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1395: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.2	31	2,060	552	309	2,360	2,310	121	8.8	2.8	8.1	5.1
2	2.0	16	317	427	267	2,470	1,620	114	9.5	2.8	8.6	4.7
3	1.9	11	175	374	235	965	1,050	108	8.4	4.0	7.6	11
4	2.3	9.7	122	345	220	634	815	98	8.6	4.4	6.7	10
5	2.5	19	97	343	211	512	679	94	7.7	4.8	6.2	11
6	2.6	85	82	448	193	456	594	90	7.1	4.9	5.0	10
7	39	628	75	513	183	656	521	83	7.1	5.0	4.9	4.5
8	48	188	70	405	165	749	479	73	6.4	141	5.1	4.7
9	25	303	64	322	159	479	381	61	4.5	174	4.7	4.8
10	12	999	60	284	158	417	382	54	3.8	57	5.5	10
11	7.2	1,570	78	270	152	438	326	50	3.5	36	6.2	9.5
12	5.5	1,140	82	550	160	860	287	46	4.1	27	5.7	10
13	5.2	551	198	510	175	522	250	41	4.2	24	5.2	9.2
14	5.3	264	148	853	160	450	221	40	5.0	24	5.5	4.5
15	5.5	116	92	1,560	157	403	207	37	6.2	19	5.9	4.2
16	5.4	532	79	1,140	211	379	188	36	6.7	15	5.8	4.2
17	5.2	1,170	109	1,600	202	364	173	36	6.9	15	5.7	4.1
18	5.3	602	91	1,410	168	346	157	38	7.7	15	5.7	4.0
19	5.5	236	72	1,290	864	315	174	37	12	14	5.5	3.9
20	5.7	176	64	1,010	460	293	190	35	16	13	5.7	4.1
21	5.7	175	266	778	316	278	185	31	14	10	5.9	4.8
22	46	119	474	614	299	266	172	28	10	10	5.5	4.6
23	115	96	228	465	261	255	180	24	7.2	15	5.4	4.4
24	43	130	244	446	226	243	235	22	4.9	11	5.2	4.8
25	23	99	222	400	206	251	219	21	3.7	11	5.0	4.4
26	14	102	278	361	215	268	196	16	3.3	12	4.4	4.9
27	11	75	1,070	320	222	523	178	14	4.1	11	7.2	4.7
28	8.7	63	1,010	298	239	1,170	161	10	3.6	11	8.5	4.5
29	6.4	66	1,680	277	-----	1,550	148	9.0	3.2	9.1	8.4	4.9
30	5.8	511	883	255	-----	2,440	133	9.7	3.3	8.4	4.8	4.7
31	12	-----	616	264	-----	1,510	-----	9.2	-----	8.6	5.2	-----
TOTAL	483.9	10,082.7	11,106	18,684	6,793	22,822	12,811	1,485.9	201.5	719.8	184.8	180.2
MEAN	15.6	336	358	603	243	736	427	47.9	6.72	23.2	5.96	6.01
MAX	115	1,570	2,060	1,600	864	2,470	2,310	121	16	174	8.6	11
MIN	1.9	9.7	60	255	152	243	133	9.0	3.2	2.8	4.4	3.9
AC-FT	960	20,000	22,030	37,060	13,470	45,270	25,410	2,950	400	1,430	367	357
(a)	32,696	42,332	48,619	48,728	48,699	49,271	48,619	48,330	45,722	42,930	38,808	35,243
CAL YR 1973	TOTAL 75,066.5	MEAN 206	MAX 2,850	MIN 1.6	AC-FT 148,900							
WTR YR 1974	TOTAL 85,554.8	MEAN 234	MAX 2,470	MIN 1.9	AC-FT 169,700							

a Contents, in acre-feet, at end of month for Scotts Flat Reservoir, furnished by Nevada Irrigation District.

SACRAMENTO RIVER BASIN

11420700 DRY CREEK NEAR BROWNS VALLEY, CALIF.

LOCATION.--Lat 39°15'23", long 121°20'34", in NE¼SW¼ sec.7, T.16 N., R.6 E., Yuba County, on left bank 500 ft (150 m) upstream from diversion dam, and 3.6 mi (5.8 km) east of Browns Valley.

DRAINAGE AREA.--87.1 mi² (225.6 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 265 ft (80.8 m), from topographic map.

AVERAGE DISCHARGE (unadjusted).--10 years, 91.6 ft³/s (2.59 m³/s), 66,360 acre-ft/yr (81.8 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 4,500 ft³/s (127 m³/s) Mar. 1 (gage height, 9.44 ft or 2.877 m); minimum daily, 3.4 ft³/s (0.10 m³/s) Nov. 1.

Period of record: Maximum discharge, 5,950 ft³/s (169 m³/s) Jan. 21, 1969 (gage height, 10.38 ft or 3.164 m); minimum daily, 1.2 ft³/s (0.03 m³/s) Dec. 12-15, 1964.

REMARKS.--Records good except those for the summer months, which are fair. Flow regulated by Lake Mildred, capacity, 1,500 acre-ft (1.85 hm³) and Merle Collins Reservoir since 1963, capacity, 57,000 acre-ft (70.3 hm³), 6.5 mi (10.5 km) upstream. Some diversion above station for irrigation. See schematic diagram of Yuba River basin.

DISCHARGE IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.1	3.4	320	434	254	2,650	2,310	30	6.2	9.0	4.7	8.4
2	8.0	3.5	193	306	211	2,820	1,520	14	6.7	8.6	5.0	7.7
3	8.0	3.5	260	251	173	1,040	813	14	7.1	8.5	5.3	7.5
4	7.8	3.6	211	223	156	566	599	16	7.1	16	5.7	8.0
5	7.6	5.1	173	211	148	400	494	13	6.6	30	6.0	7.7
6	8.0	12	145	273	127	326	430	13	5.9	26	6.4	7.2
7	26	57	124	300	123	568	373	12	5.7	13	6.8	7.4
8	18	16	109	296	83	968	337	11	5.4	46	7.3	8.0
9	15	60	98	249	65	509	376	11	5.2	33	7.6	7.9
10	7.3	104	90	207	61	363	378	12	5.2	26	8.1	8.6
11	5.9	314	94	188	62	393	307	11	5.7	24	10	7.4
12	5.5	130	102	409	62	837	271	11	6.2	22	10	6.6
13	5.2	123	223	482	60	555	232	10	6.0	20	9.6	7.9
14	5.0	76	228	630	60	398	205	9.3	5.4	16	9.1	8.1
15	4.8	34	154	2,140	56	329	192	9.3	5.6	16	8.3	8.0
16	4.5	72	120	1,270	79	290	177	9.5	6.7	15	8.0	8.9
17	4.5	263	183	2,020	74	263	163	10	6.5	15	8.0	8.1
18	4.3	116	221	1,230	75	243	153	9.8	7.8	15	8.1	7.9
19	4.3	53	161	1,180	584	231	157	9.5	10	14	8.2	7.9
20	4.3	39	126	667	475	207	143	10	8.9	10	8.2	7.5
21	4.3	33	335	470	263	164	129	9.6	7.7	13	8.2	7.5
22	13	27	1,100	361	268	148	123	8.8	8.1	13	7.9	7.6
23	18	22	488	309	195	139	123	7.4	8.1	14	7.7	7.4
24	7.5	27	296	275	149	131	155	7.0	7.6	13	7.5	7.3
25	5.9	23	217	251	125	132	151	6.5	8.4	12	7.4	7.6
26	4.4	23	238	230	114	167	135	6.7	8.2	12	7.3	7.9
27	3.5	18	1,280	205	112	496	127	6.8	9.5	8.4	7.3	8.2
28	3.5	15	1,550	191	110	1,370	118	6.7	8.3	4.7	7.3	7.9
29	3.5	14	1,510	180	-----	2,060	102	6.5	8.2	4.5	7.4	8.5
30	3.5	109	843	171	-----	3,210	69	6.2	9.0	4.4	7.7	8.9
31	3.5	-----	491	179	-----	1,450	-----	6.4	-----	4.5	7.9	-----
TOTAL	232.7	1,799.1	11,683	15,788	4,324	23,423	10,862	324.0	213.0	486.6	234.0	235.5
MEAN	7.51	60.0	377	509	154	756	362	10.5	7.10	15.7	7.55	7.85
MAX	26	314	1,550	2,140	584	3,210	2,310	30	10	46	10	8.9
MIN	3.5	3.4	90	171	56	131	69	6.2	5.2	4.4	4.7	6.6
AC-FT	462	3,570	23,170	31,320	8,580	46,460	21,540	643	422	965	464	467

CAL YR 1973 TOTAL 58,915.8 MEAN 161 MAX 2,910 MIN 2.9 AC-FT 116,900
 WTR YR 1974 TOTAL 69,604.9 MEAN 191 MAX 3,210 MIN 3.4 AC-FT 138,100

NOTE.--No gage-height record Aug. 1 to Sept. 3.

11421000 YUBA RIVER NEAR MARYSVILLE, CALIF.

LOCATION.--Lat 39°10'33", long 121°31'26", in New Helvetia Grant, Yuba County, on left bank 4.2 mi (6.8 km) northeast of Marysville, and 5 mi (8 km) downstream from Dry Creek.

DRAINAGE AREA.--1,339 mi² (3,468 km²).

PERIOD OF RECORD.--Water years 1940-43, 1945 (low-water periods only), October 1940 to current year. Published as "at Marysville" October 1940 to September 1957. Records published for two sites August 1954 to September 1955. Yearly discharge for the 1945 water year published in WSP 1315-A.

GAGE.--Water-stage recorder. Datum of gage is 2.95 ft (0.899 m) below mean sea level. Prior to August 1954 and Oct. 1, 1956, to Sept. 30, 1957, at Simpson Lane Bridge in Marysville 4.2 mi (6.8 km) downstream at same datum. Sept. 3, 1963, to Sept. 23, 1968, auxiliary water-stage recorder at Simpson Lane Bridge in Marysville 4.2 mi (6.8 km) downstream at same datum.

AVERAGE DISCHARGE.--31 years (1943-74), 2,609 ft³/s (73.9 m³/s), 1,890,000 acre-ft/yr (2.33 km³/yr).

EXTREMES.--Current year: Maximum discharge, 49,300 ft³/s (1,400 m³/s) Apr. 1 (gage height, 77.0 ft or 23.47 m, from floodmarks); minimum daily, 197 ft³/s (5.58 m³/s) Sept. 26, 27.
Period of record: Maximum discharge (1943 to current year), 180,000 ft³/s (5,100 m³/s) Dec. 22, 1964 (gage height, 90.15 ft or 27.478 m, from floodmarks), from rating curve extended above 91,000 ft³/s (2,580 m³/s) on basis of Corps of Engineers flood routing study; minimum recorded, 10 ft³/s (0.28 m³/s) July 2, 1959.

REMARKS.--Records good. Flow regulated by several reservoirs above station. Many diversions above station for power. Diversions for irrigation of about 13,000 acres (52.6 km²) between stations at Englebright Dam and near Marysville. Records of water temperatures for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1715: 1956(M). WSP 1931: Drainage area. WRD Calif. 1965: 1960.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,680	2,130	10,000	6,340	4,690	9,100	38,300	4,130	5,180	1,840	2,410	502
2	1,680	2,110	6,230	5,330	4,620	19,300	30,200	4,060	5,400	1,830	2,410	350
3	1,660	2,090	5,160	5,310	4,510	9,470	20,000	4,010	4,840	1,820	2,390	415
4	1,670	2,090	4,670	4,960	4,470	6,230	16,300	3,960	5,650	1,800	2,410	340
5	1,640	2,120	4,540	4,880	4,440	5,550	13,400	3,940	5,330	1,790	2,410	270
6	1,630	2,190	4,500	5,120	4,390	5,810	12,400	3,920	4,830	1,770	2,410	280
7	1,720	2,690	4,450	5,280	4,350	6,130	11,500	3,860	4,670	1,710	2,410	309
8	1,750	2,520	4,410	5,170	4,310	7,780	10,800	3,830	4,250	1,930	2,400	294
9	1,750	2,380	4,370	4,920	3,100	6,270	9,220	3,810	4,250	1,930	2,400	322
10	1,750	3,330	4,020	4,800	3,650	5,680	7,670	3,780	4,260	2,190	2,400	336
11	1,740	5,770	3,440	4,750	4,080	5,350	6,020	3,780	4,340	1,860	2,400	370
12	1,720	9,760	4,050	5,380	3,850	6,260	5,650	3,770	4,160	1,770	2,400	388
13	1,850	6,070	4,430	5,820	3,870	6,510	5,380	3,740	3,840	1,790	2,400	411
14	1,830	5,250	4,540	7,580	3,850	5,940	5,200	3,720	3,780	1,750	2,400	294
15	1,490	4,460	4,380	18,000	4,110	5,600	5,080	3,700	3,780	1,960	2,390	257
16	2,030	4,840	4,210	11,900	4,000	5,710	5,000	2,680	3,830	2,350	2,390	251
17	2,050	7,020	4,040	16,200	4,010	5,530	4,830	3,470	3,750	2,360	2,400	257
18	2,060	10,000	4,020	12,600	3,900	5,440	4,770	3,670	3,660	2,380	2,410	252
19	2,060	6,350	4,360	15,600	5,150	5,260	4,820	3,770	3,340	2,390	2,400	247
20	2,060	5,090	4,260	22,800	5,120	4,970	4,730	3,770	3,000	2,370	2,400	247
21	2,060	4,820	4,610	20,600	4,750	4,910	4,660	3,730	2,590	2,390	2,400	255
22	2,150	4,400	5,870	14,200	4,670	4,880	4,580	2,920	2,550	2,390	2,400	259
23	2,260	4,400	5,020	10,900	4,570	4,830	4,500	1,520	2,520	2,400	2,390	252
24	2,180	4,450	4,820	10,100	4,380	4,800	4,740	1,510	2,490	2,400	2,400	232
25	2,170	4,390	4,370	9,620	4,440	4,750	4,690	3,580	2,330	2,400	2,400	212
26	2,160	4,340	3,910	6,720	4,410	4,800	4,570	3,760	2,140	2,400	2,410	197
27	2,160	4,270	7,050	6,230	4,410	5,980	4,460	3,780	1,990	2,400	2,420	197
28	2,140	4,160	9,110	5,820	4,430	10,900	4,380	3,410	3,370	2,060	2,420	204
29	2,110	3,990	14,000	5,010	-----	15,600	4,300	4,440	3,510	2,320	2,430	200
30	2,110	4,060	10,000	4,770	-----	31,400	4,230	5,120	2,110	2,350	1,520	210
31	2,120	-----	7,200	4,660	-----	28,000	-----	5,120	-----	2,400	599	-----
TOTAL	59,440	131,540	170,040	271,370	120,530	258,740	266,380	114,260	111,740	65,500	71,829	8,610
MEAN	1,917	4,385	5,485	8,754	4,305	8,346	8,879	3,686	3,725	2,113	2,317	287
MAX	2,260	10,000	14,000	22,800	5,150	31,400	38,300	5,120	5,650	2,400	2,430	502
MIN	1,490	2,090	3,440	4,660	3,100	4,750	4,230	1,510	1,990	1,710	599	197
AC-FT	117,900	260,900	337,300	538,300	239,100	513,200	528,400	226,600	221,600	129,900	142,500	17,080

CAL YR 1973 TOTAL 1,074,938 MEAN 2,945 MAX 14,000 MIN 449 AC-FT 2,132,000
WTR YR 1974 TOTAL 1,649,979 MEAN 4,520 MAX 38,300 MIN 197 AC-FT 3,273,000

NOTE.--No gage-height record Mar. 25 to Apr. 4.

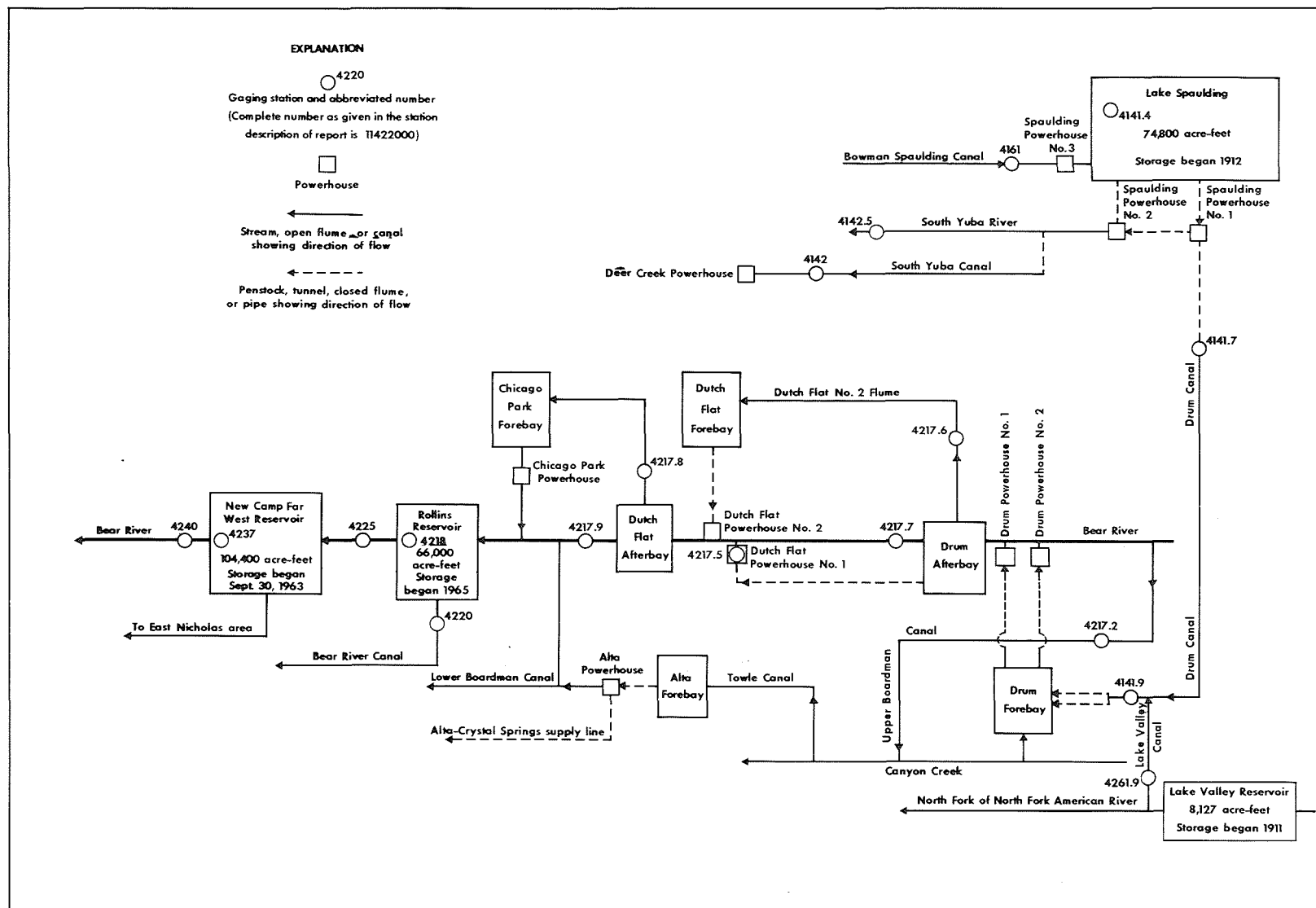


FIGURE 15.--Schematic diagram showing diversion and storage in Bear River basin.

COOPERATION.--Records furnished by California Department of Water Resources and reviewed by Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4,900	5,320	25,000	19,500	20,200	17,600	80,000	11,700	9,240	5,350	10,400	8,890
2	4,880	5,290	24,600	18,400	19,600	32,500	88,000	11,500	9,330	5,770	10,300	8,800
3	4,870	5,290	21,000	19,000	18,800	25,800	77,400	11,400	8,830	6,240	10,200	8,820
4	4,820	5,280	19,700	19,100	18,600	19,900	73,500	11,300	9,560	6,520	10,200	8,820
5	4,820	5,370	19,000	19,400	18,300	18,200	61,800	10,800	9,280	6,490	10,300	8,790
6	4,800	5,600	18,700	16,700	17,700	18,000	45,300	10,000	8,770	6,450	10,400	8,870
7	4,950	5,960	18,500	16,100	15,900	18,100	39,300	9,810	8,590	6,380	10,400	8,850
8	4,940	6,350	18,700	17,300	14,700	21,600	36,600	9,690	8,300	7,200	10,400	8,820
9	4,900	5,830	18,700	17,100	13,600	20,200	34,100	9,650	8,200	8,400	10,400	8,810
10	4,850	7,210	18,500	15,400	12,300	19,200	30,600	9,590	8,180	9,520	10,500	8,940
11	4,790	10,600	17,900	15,100	11,500	18,700	25,700	10,700	8,170	10,100	10,400	8,920
12	4,730	22,900	16,600	15,700	10,700	20,100	22,000	12,000	8,100	9,910	10,500	8,900
13	4,830	22,700	16,000	16,600	10,600	20,700	21,200	12,100	7,800	9,920	10,500	8,890
14	4,790	23,400	14,000	16,700	10,500	20,300	21,000	12,600	9,100	9,870	10,600	8,830
15	4,520	23,000	12,400	28,000	10,500	20,000	20,800	12,100	11,000	9,940	10,600	8,510
16	4,890	23,100	12,100	31,600	10,500	20,100	20,700	11,300	11,300	10,400	10,600	8,590
17	5,000	26,900	11,900	40,300	10,200	20,600	20,400	11,600	8,140	10,400	10,600	8,610
18	4,970	34,100	11,900	54,600	9,690	20,100	20,300	12,000	7,770	10,500	10,500	8,610
19	4,970	31,900	12,100	62,700	10,900	20,000	20,300	12,100	8,860	10,400	10,500	8,610
20	4,960	28,400	11,900	70,400	11,600	19,800	20,200	12,100	9,130	10,300	10,600	8,590
21	4,910	27,500	12,100	67,700	10,800	19,700	19,600	11,600	8,650	10,200	10,600	8,610
22	5,000	26,900	14,700	61,000	10,600	19,700	19,000	10,600	8,570	10,200	10,600	8,610
23	5,300	26,600	13,800	48,400	10,500	19,800	17,900	8,280	8,240	10,300	10,500	8,560
24	5,210	26,400	13,000	40,900	10,700	19,900	17,100	7,550	7,340	10,300	10,600	8,590
25	5,180	26,400	12,500	38,700	11,800	19,900	15,400	8,390	6,540	10,300	10,600	8,610
26	5,100	26,100	11,800	36,000	11,900	19,600	14,700	8,080	5,860	10,300	10,500	8,460
27	5,140	22,700	15,000	31,800	12,000	19,200	14,500	7,980	5,480	10,300	10,700	8,430
28	5,120	19,400	19,700	26,900	12,100	23,000	13,800	7,820	6,490	10,000	10,700	8,360
29	5,130	18,500	22,300	23,400	-----	26,300	12,400	8,230	6,870	10,100	10,700	8,340

11421750 DUTCH FLAT NO. 1 POWERPLANT NEAR DUTCH FLAT, CALIF.

LOCATION.--Lat 39°13'02", long 120°50'04", in SW¼SE¼ sec.27, T.16 N., R.10 E., Placer County, at powerplant 0.8 mi (1.3 km) north of Dutch Flat.

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

GAGE.--Recorded powerplant output.

AVERAGE DISCHARGE.--10 years, 252 ft³/s (7.137 m³/s), 182,600 acre-ft/yr (22.5 hm³/yr).

EXTREMES.--Period of record: Maximum daily discharge, 548 ft³/s (15.5 m³/s) for several days in January, February, April 1965; no flow at times in each year.

REMARKS.--Water is diverted from Drum Afterbay through a tunnel to Dutch Flat No. 1 powerplant and returned to Dutch Flat Afterbay. See schematic diagram showing diversion and storage in Bear River basin.

COOPERATION.--Records collected by Pacific Gas and Electric Co. in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	126	40	330	359	378	368	528	359	388	303	228	303
2	189	55	320	359	398	349	528	359	388	303	295	295
3	212	0	339	388	388	312	528	448	378	295	312	312
4	236	0	330	330	408	312	474	378	388	270	236	270
5	205	103	312	378	388	320	448	349	388	236	236	295
6	173	71	438	378	408	461	501	408	388	278	270	87
7	212	111	205	378	378	474	408	378	438	286	286	0
8	220	103	295	295	359	487	388	388	286	303	286	0
9	111	119	286	359	408	461	330	388	359	303	278	0
10	87	270	312	220	408	408	368	368	378	378	270	0
11	142	461	378	368	418	408	398	378	388	303	312	0
12	87	408	303	380	368	378	398	349	303	286	270	0
13	111	295	349	339	388	378	408	388	359	220	295	0
14	79	349	312	388	398	398	408	378	388	270	295	0
15	71	295	312	515	408	438	408	368	368	253	270	0
16	95	295	303	408	398	408	418	368	368	236	270	0
17	126	528	320	515	359	501	378	378	388	270	270	0
18	173	388	378	438	378	438	418	388	368	245	312	0
19	63	368	278	461	295	312	378	368	378	228	295	0
20	71	428	312	408	368	378	388	378	339	261	270	55
21	87	236	320	474	349	408	349	408	398	261	286	0
22	87	368	330	398	359	398	368	378	388	245	303	0
23	228	368	339	515	349	378	408	388	378	270	278	40
24	166	303	320	515	368	398	368	388	349	270	295	30
25	126	270	320	220	398	368	378	349	295	261	286	161
26	87	312	330	438	408	388	418	378	378	270	303	173
27	87	339	339	408	408	359	398	378	320	270	261	150
28	79	286	330	368	368	508	368	398	295	278	286	181
29	55	278	339	368	-----	454	448	359	303	286	339	270
30	40	303	359	388	-----	528	474	368	295	303	245	278
31	79	-----	428	330	-----	448	-----	378	-----	253	286	-----
TOTAL	3,910	7,750	10,166	12,036	10,706	12,624	12,478	11,734	10,825	8,494	8,724	2,900
MEAN	126	258	328	388	382	407	416	379	361	274	281	96.7
MAX	236	528	438	515	418	528	528	448	438	378	339	312
MIN	40	0	205	220	295	312	330	349	286	220	228	0
AC-FT	7,760	15,370	20,160	23,870	21,240	25,040	24,750	23,270	21,470	16,850	17,300	5,750
CAL YR 1973	TOTAL 105,341.00			MEAN 289	MAX 528	MIN 0	AC-FT 208,900					
WTR YR 1974	TOTAL 112,347.00			MEAN 308	MAX 528	MIN 0	AC-FT 222,800					

SACRAMENTO RIVER BASIN

11421760 DUTCH FLAT NO. 2 FLUME NEAR BLUE CANYON, CALIF.

LOCATION.--Lat 39°15'16", long 120°46'28"; in SE¼NE¼ sec.18, T.16 N., R.11 E., Placer County, on left bank 600 ft (183 m) downstream from Drum Afterbay, and 3.6 mi (5.8 km) west of Blue Canyon.

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

GAGE.--Water-stage recorder. Datum of gage is 3,348.09 ft (1,020.498 m) above mean sea level (levels by Nevada Irrigation District).

AVERAGE DISCHARGE.--8 years, 413 ft³/s (11.7 m³/s), 299,200 acre-ft/yr (369 hm³/yr).

EXTREMES.--Period of record: Maximum daily discharge, 610 ft³/s (17.3 m³/s) Mar. 1, 1968; no flow at times in each year.

REMARKS.--Records good except flows below 40 ft³/s (1.13 m³/s), which are estimated. Water is diverted from Drum Afterbay through the flume to Dutch Flat No. 2 powerplant and then to Dutch Flat Afterbay. See schematic diagram of Bear River basin.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	351	298	511	512	529	568	583	525	521	418	434	440
2	381	226	449	529	545	570	581	461	516	441	460	436
3	386	74	467	480	544	538	582	538	532	439	417	441
4	414	95	443	451	546	517	579	527	523	467	462	455
5	406	267	445	490	542	540	577	532	530	468	462	451
6	409	258	456	490	531	553	576	533	519	423	463	229
7	403	388	447	511	501	539	577	512	529	447	428	0
8	347	351	450	486	524	538	532	522	536	440	420	0
9	387	451	460	499	538	548	516	510	517	459	414	.66
10	384	466	444	505	521	534	510	544	498	523	418	0
11	420	573	430	471	525	577	500	547	562	520	429	0
12	307	578	438	472	528	576	566	544	525	554	434	0
13	244	579	451	495	548	551	569	516	536	456	428	0
14	299	562	450	554	456	576	566	512	577	487	424	0
15	397	480	444	574	498	548	567	513	498	491	428	0
16	469	532	447	543	510	575	566	516	506	496	440	0
17	397	570	446	575	540	581	566	531	526	466	442	0
18	347	569	466	558	538	549	569	531	538	477	438	0
19	345	569	445	578	571	562	547	509	548	478	434	0
20	332	571	448	577	571	559	584	545	504	474	435	0
21	309	519	448	582	570	560	583	527	509	479	437	0
22	304	552	447	566	571	573	505	515	522	480	442	131
23	407	491	449	573	521	555	532	506	523	478	456	233
24	399	463	441	541	481	546	559	533	514	463	434	413
25	336	479	448	562	515	559	550	516	527	469	445	421
26	343	449	448	576	404	584	517	517	517	475	443	436
27	236	417	517	573	569	583	517	553	439	464	454	430
28	290	445	525	573	568	582	522	530	457	455	456	428
29	290	456	539	576	-----	580	544	542	443	444	452	582
30	247	476	537	573	-----	582	531	537	438	430	432	478
31	278	-----	514	574	-----	578	-----	520	-----	425	440	-----
TOTAL	10,864	13,204	14,350	16,619	14,805	17,381	16,573	16,264	15,430	14,486	13,601	6,004.66
MEAN	350	440	463	536	529	561	552	525	514	467	439	200
MAX	469	579	539	582	571	584	584	553	577	554	463	582
MIN	236	74	430	451	404	517	500	461	438	418	414	0
AC-FT	21,550	26,190	28,460	32,960	29,370	34,480	32,870	32,260	30,610	28,730	26,980	11,910
CAL YR 1973	TOTAL 149,028.00	MEAN 408	MAX 590	MIN 0	AC-FT 295,600							
WTR YR 1974	TOTAL 169,581.66	MEAN 465	MAX 584	MIN 0	AC-FT 336,400							

LOCATION.--Lat 39°15'16", long 120°46'26", in SW¼NW¼ sec.17, T.16 N., R.11 E., Placer County, on left bank 60 ft (18 m) below Drum Afterbay Dam, and 3.5 mi (5.6 km) west of Blue Canyon.

PERIOD OF RECORD.--April 1966 to current year, low flows only April to September 1966.

GAGE.--Water-stage recorder and 4-foot (1.2-m) steel Cipolletti weir set in a concrete broad-crested weir. Altitude of gage is 3,300 ft (1,006 m), from topographic map. April 1966 to May 25, 1967, water-stage recorder at present site at different datum, May 26, 1967, to Feb. 11, 1968, water-stage recorder at site 1,000 ft (305 m) downstream at different datum.

EXTREMES.--Current year: Maximum discharge, 1,880 ft³/s (53.2 m³/s) Mar. 1 (gage height, 3.32 ft or 1.012 m); minimum daily, 4.7 ft³/s (0.13 m³/s) Oct. 7.

Period of record: Maximum discharge, 2,880 ft³/s (81.6 m³/s) Jan. 21, 1970 (gage height, 3.68 ft or 1.122 m), from rating curve extended above 900 ft³/s (25.5 m³/s); minimum daily, 1.0 ft³/s (0.028 m³/s) Dec. 9, 1967.

REMARKS.--Water for Dutch Flat No. 1 powerplant (see sta 11421750) and Dutch Flat No. 2 flume (see sta 11421760) is diverted from Drum Afterbay just upstream from station. See schematic diagram of Bear River basin.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.0	5.2	5.1	5.1	5.1	451	162	9.7	10	10	10	10
2	4.8	5.2	5.2	5.1	5.1	9.6	9.9	9.8	10	10	10	10
3	4.9	5.1	5.1	5.1	5.2	15	10	9.8	10	10	10	10
4	5.0	5.1	5.2	5.2	5.1	12	10	9.8	10	10	10	10
5	4.9	5.1	5.2	5.1	5.1	12	10	9.8	10	10	10	10
6	4.9	5.2	5.1	5.2	5.1	12	10	9.7	10	10	10	10
7	4.7	5.1	5.1	5.1	5.1	12	10	9.7	10	10	10	10
8	4.9	5.2	5.1	5.1	5.2	12	9.8	9.8	10	10	10	10
9	5.0	5.1	5.1	5.2	5.1	12	9.8	9.9	10	10	10	10
10	5.1	5.2	5.1	5.1	5.1	12	9.6	9.8	10	10	10	10
11	5.1	5.2	5.1	5.2	5.1	12	9.7	9.7	10	10	10	10
12	5.2	5.1	5.1	5.2	5.2	11	9.7	9.7	10	10	10	10
13	5.4	5.1	5.1	5.1	5.1	9.2	9.8	9.7	10	10	10	10
14	5.3	5.2	5.1	27	5.1	9.4	9.8	9.7	10	10	10	10
15	5.4	5.2	5.1	61	5.1	9.3	9.7	9.8	10	10	10	10
16	5.3	12	5.1	159	5.1	9.4	9.7	9.7	10	10	10	10
17	5.1	48	5.2	205	5.1	9.0	10	9.8	10	10	10	10
18	5.1	13	5.1	111	5.1	9.6	9.6	9.8	10	10	10	10
19	5.2	5.1	5.2	115	5.1	9.3	9.7	11	10	10	10	10
20	5.2	5.1	5.1	68	5.1	9.2	9.3	10	10	10	10	10
21	5.2	5.1	5.1	5.1	5.1	9.3	9.8	10	10	10	10	10
22	5.1	5.1	5.1	44	5.1	9.2	10	10	10	10	10	10
23	5.1	5.2	5.1	5.1	5.1	9.5	9.7	10	10	10	10	10
24	5.1	5.1	5.1	31	5.1	9.6	9.8	10	10	10	10	10
25	5.2	5.1	5.1	14	5.1	9.8	9.7	10	10	10	10	10
26	5.2	5.2	5.1	5.1	5.1	9.6	9.7	10	10	10	10	10
27	5.2	5.3	5.2	5.1	5.1	11	9.9	10	10	10	10	10
28	5.2	5.1	5.1	5.1	5.1	9.9	9.9	10	10	10	10	10
29	5.2	5.2	39	5.1	-----	132	9.7	10	10	10	10	10
30	5.2	5.2	11	5.2	-----	215	9.7	10	10	10	10	10
31	5.1	-----	5.2	5.1	-----	9.9	-----	10	-----	10	10	-----
TOTAL	161.3	212.1	198.6	942.7	143.1	1,091.8	446.0	306.7	300	310	310	300
MEAN	5.20	7.07	6.41	30.4	5.11	35.2	14.9	9.89	10.0	10.0	10.0	10.0
MAX	8.0	48	39	205	5.2	451	162	11	10	10	10	10
MIN	4.7	5.1	5.1	5.1	5.1	9.0	9.3	9.7	10	10	10	10
AC-FT	320	421	394	1,870	284	2,170	885	608	595	615	615	595
CAL YR 1973	TOTAL	3,202.8	MEAN	8.77	MAX	48	MIN	4.7	AC-FT	6,350		
WTR YR 1974	TOTAL	4,722.3	MEAN	12.9	MAX	451	MIN	4.7	AC-FT	9,370		

SACRAMENTO RIVER BASIN

11421780 CHICAGO PARK FLUME NEAR DUTCH FLAT, CALIF.

LOCATION.--Lat 39°12'55", long 120°50'23", in NW¼NE¼ sec.34, T.16 N., R.10 E., Nevada County, on left bank 670 ft (204 m) downstream from Dutch Flat Afterbay, and 0.6 mi (1.0 km) north of Dutch Flat.

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

GAGE.--Water-stage recorder. Altitude of gage is 2,600 ft (792 m), from topographic map. Prior to Sept. 8, 1968, at site 420 ft (128 m) upstream at same datum.

AVERAGE DISCHARGE.--8 years, 668 ft³/s (18.9 m³/s), 484,000 acre-ft/yr (597 hm³/yr).

EXTREMES.--Period of record: Maximum daily discharge, 1,080 ft³/s (30.6 m³/s) Nov. 12, 13, 1973; no flow for several days in each year.

REMARKS.--Records good except flows below 70 ft³/s (1.98 m³/s), which are estimated. Flow regulated by Dutch Flat Afterbay. See schematic diagram of Bear River basin.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	526	337	1,050	1,050	1,030	1,040	1,020	968	954	824	660	813
2	544	240	890	934	1,030	991	1,020	966	953	788	774	814
3	650	94	963	1,050	986	1,030	1,020	969	952	789	869	814
4	783	145	911	821	1,030	1,030	1,020	965	952	803	796	816
5	586	365	769	974	1,030	1,040	1,020	965	949	805	735	859
6	631	349	991	919	1,030	1,030	1,020	964	947	801	720	551
7	615	576	777	919	869	1,030	1,010	962	950	802	746	0
8	600	517	804	862	898	1,030	1,010	964	955	804	772	.97
9	522	588	832	822	1,030	1,030	1,010	963	952	910	773	0
10	563	846	911	914	1,030	1,030	1,000	964	950	938	774	0
11	536	1,060	853	917	1,030	1,030	1,000	964	952	813	775	0
12	392	1,080	928	916	1,040	1,030	1,000	960	951	889	774	0
13	280	1,080	828	1,010	1,010	1,030	1,000	963	950	775	731	0
14	398	1,070	848	963	982	1,030	1,000	960	953	775	728	0
15	462	827	882	1,050	913	1,030	998	958	948	773	775	0
16	562	1,050	905	1,050	927	1,030	997	961	947	772	796	0
17	555	1,070	870	1,050	1,010	1,040	994	959	948	773	779	0
18	540	1,060	987	1,050	1,030	1,030	989	960	949	773	781	0
19	298	1,060	830	1,050	1,040	1,030	989	956	948	772	784	0
20	413	1,070	933	1,040	1,030	1,030	986	957	947	771	786	0
21	381	1,060	831	1,050	1,030	1,030	988	958	946	778	786	0
22	378	894	884	1,040	1,040	1,030	982	958	949	774	787	60
23	728	971	949	1,050	1,030	1,030	985	956	947	778	788	70
24	632	934	854	1,040	1,030	1,030	975	956	945	779	789	602
25	420	886	881	1,040	1,030	1,030	977	958	944	778	803	610
26	316	810	882	1,050	1,030	1,020	973	956	945	779	806	606
27	426	841	889	1,050	1,030	1,030	973	956	948	780	806	606
28	370	822	1,060	1,040	1,030	1,020	975	955	942	779	806	608
29	310	874	1,060	1,040	-----	1,020	972	954	942	781	806	889
30	289	907	1,060	1,020	-----	1,020	970	954	945	781	809	823
31	336	-----	1,060	1,030	-----	1,020	-----	955	-----	725	810	-----
TOTAL	15,042	23,483	28,172	30,811	28,225	31,871	29,873	29,764	27,930	24,662	24,124	9,541.97
MEAN	485	783	909	994	1,008	1,028	996	960	931	796	778	318
MAX	783	1,080	1,060	1,050	1,040	1,040	1,020	969	955	938	869	889
MIN	280	94	769	821	869	991	970	954	768	725	660	0
AC-FT	29,840	46,580	55,880	61,110	55,980	63,220	59,250	59,040	55,400	48,920	47,850	18,930
CAL YR 1973	TOTAL 277,497.40		MEAN 760		MAX 1,080		MIN 0		AC-FT 550,400			
WTR YR 1974	TOTAL 303,498.97		MEAN 832		MAX 1,080		MIN 0		AC-FT 602,000			

11421790 BEAR RIVER BELOW DUTCH FLAT AFTERBAY, NEAR DUTCH FLAT, CALIF.

LOCATION.--Lat 39°12'55", long 120°50'23", in NE¼NW¼ sec.34, T.16 N., R.10 E., Placer County, at the left bank downstream end of spillway on Dutch Flat Afterbay Dam, 0.6 mi (1.0 km) north of Dutch Flat.

DRAINAGE AREA.--21.5 mi² (55.7 km²).

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

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 2,600 ft (790 m), from topographic map.

AVERAGE DISCHARGE.--8 years, 34.7 ft³/s (0.983 m³/s), 25,140 acre-ft/yr (31.00 hm³/yr).

EXTREMES.--Current year: Maximum daily discharge, 1,010 ft³/s (28.6 m³/s) Mar. 30; minimum daily, 3.7 ft³/s (0.10 m³/s) Nov. 2-4.

Period of record: Maximum daily discharge, 1,500 ft³/s (42.5 m³/s) Jan. 20, 1969; minimum daily, 0.08 ft³/s (0.002 m³/s) Mar. 8-19, 1968.

REMARKS.--Records good. Water is imported from South Yuba River basin via South Yuba Canal (see sta 11414200) and Drum Canal above forebay (see sta 11414190). Chicago Park flume (see sta 11421780) diverts above station to Chicago Park powerplant. Records include spill over Dutch Flat Afterbay Dam. This station measures flow from Dutch Flat Afterbay in connection with a Federal Power Commission project. See schematic diagram of Bear River basin.

COOPERATION.--Records of elevations for Dutch Flat Afterbay furnished by Nevada Irrigation District.

REVISIONS (WATER YEARS).--WRD Calif. 1967: 1966.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.9	5.8	4.0	4.0	4.0	777	737	67	29	8.8	8.6	9.4
2	6.9	3.7	4.0	4.0	4.0	325	444	96	26	8.6	8.6	9.6
3	6.9	3.7	4.0	4.0	4.0	41	328	38	19	8.6	8.6	9.6
4	6.9	3.7	4.0	4.0	4.0	65	268	41	40	8.6	8.6	9.4
5	6.9	3.8	4.0	4.0	4.0	148	252	40	60	8.6	8.6	9.4
6	6.9	3.8	4.0	4.0	4.0	177	199	71	46	8.6	8.6	9.1
7	6.9	3.8	4.0	4.0	4.0	140	128	42	17	8.6	8.6	14
8	6.9	4.0	4.0	4.0	4.0	117	58	49	20	8.6	8.6	28
9	6.9	4.0	4.0	4.0	4.0	156	44	40	18	8.6	8.6	20
10	7.1	4.0	4.0	4.0	4.0	83	40	44	14	8.8	8.6	9.6
11	7.1	85	4.0	4.0	4.0	128	42	53	30	8.8	8.6	9.6
12	7.1	240	4.0	4.0	4.0	198	99	42	22	8.8	8.6	9.6
13	7.1	4.0	4.0	4.0	4.0	91	144	38	10	8.8	8.6	9.6
14	7.4	4.0	4.0	27	4.0	153	109	29	80	8.8	8.6	9.6
15	7.1	4.0	4.0	443	4.0	121	126	20	13	8.8	8.8	9.6
16	7.1	4.0	4.0	213	4.0	135	131	36	16	8.8	8.8	9.6
17	7.1	217	4.0	551	4.2	201	116	45	25	8.8	9.1	9.6
18	7.4	179	4.0	312	4.2	91	148	63	68	8.6	9.1	9.6
19	7.4	4.4	4.0	326	4.2	85	68	22	20	8.6	9.1	9.6
20	7.6	4.0	4.0	185	4.2	87	136	28	33	8.6	9.1	9.6
21	7.6	4.0	4.0	137	4.2	77	68	28	29	8.8	9.1	9.9
22	7.6	4.0	4.0	73	4.4	98	9.6	33	59	8.8	9.1	9.9
23	7.6	4.0	4.0	127	4.2	52	82	26	47	8.8	9.1	10
24	7.4	4.0	4.0	11	4.2	49	81	21	15	8.8	9.1	10
25	7.4	4.0	4.0	4.0	4.2	60	77	35	23	8.6	9.4	10
26	7.8	4.0	4.0	4.0	4.2	97	82	32	8.1	8.6	9.6	10
27	7.8	4.0	26	4.0	4.2	112	48	26	8.3	8.6	9.6	10
28	7.6	4.0	16	4.0	4.4	318	69	33	8.8	8.6	9.6	10
29	7.6	4.0	135	4.0	-----	519	68	35	8.8	8.6	9.6	10
30	7.6	4.0	116	4.0	-----	1,010	67	35	8.8	8.6	9.4	10
31	7.6	-----	26	4.0	-----	361	-----	26	-----	8.6	9.4	-----
TOTAL	225.2	825.7	423.0	2,485.0	114.8	6,072	4,269.6	1,234	821.8	269.2	277.4	323.9
MEAN	7.26	27.5	13.6	80.2	4.10	196	142	39.8	27.4	8.68	8.95	10.8
MAX	7.8	240	135	551	4.4	1,010	737	96	80	8.8	9.6	28
MIN	6.9	3.7	4.0	4.0	4.0	41	9.6	20	8.1	8.6	8.6	9.1
AC-FT	447	1,640	839	4,930	228	12,040	8,470	2,450	1,630	534	550	642
CAL YR 1973	TOTAL	3,612.0	MEAN	9.90	MAX	240	MIN	3.7	AC-FT	7,160		
WTR YR 1974	TOTAL	17,341.6	MEAN	47.5	MAX	1,010	MIN	3.7	AC-FT	34,400		

SACRAMENTO RIVER BASIN

11421800 ROLLINS RESERVOIR NEAR COLFAX, CALIF.

LOCATION.--Lat 39°08'05", long 120°56'54", in NE¼SE¼ sec.22, T.15 N., R.9 E., Placer County, on left bank just upstream from Rollins Dam on Bear River, 2.3 mi (3.7 km) north of Colfax.

DRAINAGE AREA.--104 mi² (269 km²).

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

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Nevada Irrigation District).

EXTREMES.--Current year: Maximum contents, 68,800 acre-ft (84.8 hm³) Mar. 1 (elevation, 2,174.3 ft or 662.73 m); minimum, 39,200 acre-ft (48.3 hm³) Sept. 28 (elevation, 2,132.2 ft or 549.89 m).
Period of record: Maximum contents, 70,100 acre-ft (86.4 hm³) Jan. 21, 1970 (elevation, 2,175.8 ft or 663.18 m); minimum since reservoir first filled, 28,100 acre-ft (34.6 hm³) Mar. 7, 1965 (elevation, 2,110.0 ft or 643.13 m).

REMARKS.--Reservoir is formed by earthfill dam. Storage began Dec. 15, 1964. Usable capacity, 66,000 acre-ft (81.4 hm³) between elevations 1,970.0 ft (600.46 m), invert of outlet tunnel and 2,171.0 ft (661.72 m), spillway crest, above mean sea level. Dead storage, 270 acre-ft (333,000 m³). Several diversions into and out of basin upstream for power development and irrigation. Stored water is released into Bear River, part of which is diverted to Pacific Gas and Electric's Bear River Canal for power development. Water is later used for irrigation. Records, including extremes, represent total contents at 2400 hours. See schematic diagram of Bear River basin.

CAPACITY TABLE (ELEVATION, IN FEET, AND CONTENTS, IN ACRE-FEET)

2,050	8,940	2,140	43,800
2,060	11,200	2,160	57,300
2,080	16,800	2,176	70,200
2,120	32,700		

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	49,200	49,800	67,200	67,000	66,800	68,800	68,700	66,800	66,700	66,500	66,300	66,500
2	49,200	50,100	66,900	66,900	66,800	67,600	67,700	66,700	66,700	66,500	66,400	66,500
3	49,400	50,100	66,800	66,900	66,800	67,200	67,500	66,800	66,700	66,500	66,500	66,500
4	50,000	50,200	66,700	66,800	66,800	67,100	67,300	66,700	66,700	66,500	66,500	66,500
5	50,000	50,700	66,700	66,800	66,700	67,100	67,200	66,700	66,700	66,500	66,400	66,500
6	50,300	51,000	66,700	66,800	66,700	67,100	67,200	66,800	66,700	66,500	66,400	66,000
7	50,500	52,500	66,700	66,800	66,700	67,200	67,100	66,700	66,600	66,500	66,400	64,600
8	50,900	53,300	66,700	66,700	66,700	67,100	67,000	66,700	66,600	66,700	66,400	63,100
9	50,800	54,200	66,700	66,700	66,700	67,100	67,000	66,700	66,600	66,700	66,400	61,700
10	50,800	56,600	66,700	66,700	66,700	67,000	67,000	66,700	66,600	66,600	66,400	60,200
11	50,700	60,100	66,700	66,700	66,700	67,100	67,000	66,700	66,700	66,500	66,400	58,700
12	50,200	64,800	66,700	66,800	66,700	67,200	67,000	66,700	66,600	66,600	66,400	57,200
13	49,600	67,000	66,900	67,000	66,700	67,100	67,000	66,700	66,600	66,500	66,300	55,600
14	49,200	67,000	66,700	67,600	66,700	67,100	67,000	66,700	66,700	66,500	66,300	54,100
15	48,900	66,800	66,700	67,700	66,700	67,100	67,000	66,700	66,600	66,500	66,400	52,500
16	48,800	67,100	66,700	67,700	66,700	67,100	67,000	66,700	66,600	66,500	66,400	51,000
17	48,600	67,700	66,800	67,700	66,700	67,100	66,900	66,600	66,600	66,500	66,400	49,500
18	48,600	67,200	66,800	67,800	66,700	66,900	66,900	66,700	66,700	66,500	66,400	47,900
19	48,200	66,900	66,700	67,700	67,100	67,000	66,900	66,700	66,600	66,500	66,400	46,400
20	47,900	66,900	66,700	67,400	66,900	67,000	66,900	66,700	66,700	66,500	66,400	44,900
21	47,600	66,800	66,900	67,200	66,900	67,000	66,900	66,700	66,700	66,500	66,400	43,300
22	47,600	66,700	66,900	67,100	66,900	67,000	66,800	66,700	66,700	66,500	66,400	41,700
23	48,400	66,700	66,900	67,100	66,800	66,900	66,800	66,700	66,700	66,500	66,400	40,300
24	48,700	66,700	66,800	67,000	66,800	66,900	66,900	66,700	66,600	66,500	66,500	40,000
25	48,400	66,700	66,800	66,900	66,800	66,900	66,800	66,700	66,600	66,500	66,400	39,800
26	48,000	66,700	67,000	66,900	66,800	67,000	66,800	66,700	66,600	66,500	66,400	39,600
27	47,800	66,700	67,300	66,900	66,800	67,200	66,800	66,700	66,500	66,500	66,400	39,400
28	47,500	66,700	67,400	66,800	66,900	67,300	66,800	66,700	66,500	66,500	66,400	39,200
29	48,100	66,700	67,700	66,800	-----	67,900	66,800	66,700	66,600	66,500	66,400	39,500
30	48,600	67,000	67,200	66,800	-----	68,200	66,800	66,700	66,500	66,500	66,400	39,800
31	49,200	-----	67,200	66,800	-----	67,600	-----	66,700	-----	66,400	66,400	-----
MAX	50,900	67,700	67,700	67,800	67,100	68,800	68,700	66,800	66,700	66,700	66,500	66,500
MIN	47,500	49,800	66,700	66,700	66,700	66,900	66,800	66,600	66,500	66,400	66,300	39,200
(a)	2,148.5	2,172.2	2,172.4	2,172.0	2,172.1	2,172.9	2,172.0	2,171.8	2,171.6	2,171.5	2,171.5	2,133.2
(b)	-100	+17,800	+200	-400	+100	+700	-800	-100	-200	-100	0	-26,600

CAL YR 1973 b +500
WTR YR 1974 b -9,500

a Elevation, in feet, at end of month.
b Change in contents, in acre-feet.

11422000 BEAR RIVER CANAL INTAKE NEAR COLFAX, CALIF.

LOCATION.--Lat 39°07'58", long 120°57'12", in SW¼SE¼ sec.22, T.15 N., R.9 E., Placer County, on right bank 600 ft (183 m) downstream from canal inlet, 0.2 mi (0.3 km) below Rollins Dam, and 2.2 mi (3.5 km) north of Colfax.

PERIOD OF RECORD.--January 1912 to September 1953, October 1964 to current year. Monthly discharge only for some periods published in WSP 1315-A. Prior to October 1912, published as Pacific Gas and Electric Co.'s Canal near Colfax, October 1912 to September 1953, published as Bear River Canal near Colfax.

GAGE.--Water-stage recorder. Altitude of gage is 1,980 ft (604 m), from topographic map. Prior to Mar. 25, 1946, water-stage recorder at site 1.5 mi (2.4 km) downstream at different datum.

AVERAGE DISCHARGE.--51 years (1912-53, 1964-74), 287 ft³/s (8.13 m³/s), 207,900 acre-ft/yr (256 hm³).

EXTREMES.--Period of record: Maximum daily discharge, 499 ft³/s (14.1 m³/s) Apr. 20-22, 1966, Aug. 1-3, 1967; no flow at times in most years.

REMARKS.--Canal diverts from left bank of Bear River. Water is first used to develop power at Halsey and Wise powerhouse, part of it is then distributed for irrigation and part is eventually spilled into North Fork American River. See schematic diagram showing diversion and storage in Bear River basin.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	445	5.4	396	428	433	397	420	453	472	479	467	464
2	443	7.2	404	429	433	426	427	455	471	479	467	463
3	445	5.2	402	429	434	441	446	454	472	479	467	463
4	445	3.0	402	429	434	441	445	455	472	479	467	463
5	446	146	418	430	434	441	440	455	472	478	467	463
6	446	271	399	431	434	441	445	455	472	478	467	463
7	447	298	419	432	435	441	444	454	472	478	467	464
8	446	289	428	432	435	441	444	457	472	460	465	464
9	446	291	428	432	435	441	443	459	472	451	464	463
10	447	293	426	432	436	441	442	459	472	472	465	463
11	447	297	425	433	436	441	442	459	472	475	465	463
12	448	301	427	434	436	442	441	459	473	475	465	462
13	449	302	428	435	437	442	440	458	472	475	464	461
14	449	303	427	414	437	442	440	458	472	475	465	461
15	449	302	427	380	437	442	440	458	472	474	466	461
16	449	303	426	410	437	442	439	458	473	474	466	461
17	449	305	427	432	437	442	439	458	471	473	466	460
18	449	304	427	430	437	442	438	458	472	473	467	461
19	449	378	427	430	439	442	438	458	472	473	467	460
20	449	437	427	430	438	442	438	459	472	472	467	460
21	449	437	428	431	437	442	437	459	471	472	467	460
22	368	438	429	432	439	442	437	459	472	472	466	459
23	349	438	428	432	440	442	437	460	472	471	466	459
24	448	438	428	432	440	442	437	461	472	470	360	459
25	448	439	428	432	440	442	437	461	476	470	465	459
26	448	438	429	432	440	442	437	461	478	469	465	458
27	448	437	431	432	440	442	436	462	478	469	465	458
28	448	436	433	432	441	442	436	462	479	469	465	458
29	19	436	436	432	-----	441	436	462	479	467	465	457
30	0	440	432	433	-----	430	444	462	479	467	464	457
31	0	-----	428	433	-----	440	-----	467	-----	467	464	-----
TOTAL	12,368	9,217.8	13,120	13,285	12,231	13,617	13,165	14,215	14,196	14,635	14,333	13,827
MEAN	399	307	423	429	437	439	439	459	473	472	462	461
MAX	449	440	436	435	441	442	446	467	479	479	467	464
MIN	0	3.0	396	380	433	397	420	453	471	451	360	457
AC-FT	24,530	18,280	26,020	26,350	24,260	27,010	26,110	28,200	28,160	29,030	28,430	27,430

CAL YR 1973 TOTAL 153,029.8 MEAN 419 MAX 455 MIN 0 AC-FT 303,500
WTR YR 1974 TOTAL 158,209.8 MEAN 433 MAX 479 MIN 0 AC-FT 313,800

SACRAMENTO RIVER BASIN

11422500 BEAR RIVER BELOW ROLLINS DAM, NEAR COLFAX, CALIF.

LOCATION.--Lat 39°07'53", long 120°57'29", in SE¼SW¼ sec.22, T.15 N., R.9 E., Nevada County, on right bank 65 ft (20 m) downstream from highway bridge, 0.5 mi (0.8 km) downstream from Rollins Dam, and 2.2 mi (3.5 km) north of Colfax.

DRAINAGE AREA.--105 mi² (272 km²).

PERIOD OF RECORD.--January 1912 to September 1913, October 1913 to July 1915 (gage heights and discharge measurements only), August 1915 to June 1917, November 1949 to September 1953, August 1964 to current year. Monthly discharge only for some periods, published in WSP 1315-A. Prior to August 1964, published as Bear River near Colfax. Records for November and December 1911 include diversion to Bear River Canal and are not equivalent.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,927.41 ft (587.475 m) above mean sea level. Prior to Aug. 8, 1915, nonrecording gages at several sites above diversion dam 0.3 mi (0.5 km) upstream at different datums. Aug. 8, 1915, to June 30, 1917, nonrecording gage 0.7 mi (1.1 km) downstream at different datum. Nov. 1, 1949, to Sept. 30, 1953, at site 0.2 mi (0.3 km) downstream at different datum.

AVERAGE DISCHARGE (unadjusted), --15 years (1912-13, 1915-16, 1950-53, 1964-74), 404 ft³/s (11.4 m³/s),
292,700 acre-ft/yr (36.1 km³/yr).

EXTREMES.--Current year: Maximum discharge, 6,160 ft³/s (174 m³/s) Apr. 1 (gage height, 8.34 ft or 2.542 m); minimum daily, 27 ft³/s (0.76 m³/s) Nov. 8.
Period of record: Maximum discharge (prior to construction of Rollins Dam in 1964), 9,620 ft³/s (272 m³/s) Nov. 20, 1950 (gage height, 21.40 ft or 6.523 m, site and datum then in use), from rating curve extended above 3,600 ft³/s (102 m³/s) on basis of slope-area measurement of maximum flow; no flow at times in 1912, 1952. Maximum discharge since construction of Rollins Dam, 12,700 ft³/s (360 m³/s) Jan. 21, 1970 (gage height, 11.72 ft or 3.572 m), from rating curve extended above 6,000 ft³/s (170 m³/s); minimum daily, 0.5 ft³/s (0.014 m³/s) Nov. 17, 1964.

REMARKS.--Records good. Flow regulated by Rollins Reservoir (see sta 11421800) beginning Dec. 15, 1964. Bear River Canal (see sta 11422000) diverts above station. See schematic diagram of Bear River basin.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	94	72	2,070	1,290	930	3,260	4,070	747	548	344	219	322
2	34	74	1,150	1,030	882	3,870	3,980	744	536	346	247	322
3	59	76	934	1,040	816	2,000	2,480	691	528	313	360	325
4	59	80	801	817	817	1,540	1,970	730	532	329	358	329
5	59	85	609	924	814	1,390	1,720	697	543	330	288	349
6	60	72	773	894	795	1,350	1,540	648	561	330	253	384
7	60	48	576	810	663	1,410	1,310	697	551	326	257	244
8	54	27	558	756	634	1,440	1,200	651	524	492	292	241
9	56	29	512	674	717	1,330	1,170	640	531	674	300	235
10	83	34	645	704	754	1,210	1,080	636	519	596	300	230
11	116	37	550	732	745	1,200	1,000	633	508	449	301	239
12	147	39	644	842	746	1,430	1,010	630	541	441	301	245
13	145	325	781	1,080	733	1,310	1,040	618	506	379	275	241
14	144	1,280	761	1,420	692	1,220	1,000	602	516	338	255	244
15	143	837	663	3,510	610	1,170	979	597	554	327	273	246
16	142	1,120	671	2,330	707	1,160	969	595	503	322	321	240
17	141	1,820	703	3,580	697	1,200	926	602	495	320	311	236
18	110	2,310	841	2,660	755	1,060	948	631	524	321	297	238
19	74	1,320	640	2,900	1,220	998	876	624	565	319	304	247
20	73	1,050	697	2,260	1,060	1,000	902	574	524	315	313	259
21	73	997	719	1,860	933	980	800	610	524	318	318	254
22	79	756	925	1,480	957	970	768	583	529	313	312	247
23	91	759	889	1,390	882	933	779	588	534	317	309	243
24	73	766	732	1,200	844	905	880	574	505	317	394	242
25	74	637	709	1,090	819	904	871	582	499	319	343	244
26	74	584	719	1,040	837	956	858	568	475	320	319	245
27	74	572	1,250	1,000	842	1,100	805	549	362	321	317	244
28	73	536	1,920	963	848	1,950	776	558	367	320	317	243
29	55	572	2,920	928	-----	2,410	779	561	376	319	314	242
30	74	684	2,250	892	-----	4,770	775	562	353	320	318	242
31	74	-----	1,530	892	-----	3,110	-----	559	-----	300	321	-----
TOTAL	2,667	17,598	30,142	42,988	22,749	49,536	38,261	19,281	15,133	11,095	9,407	7,862
MEAN	86.0	587	972	1,387	812	1,598	1,275	622	504	358	303	262
MAX	147	2,310	2,920	3,580	1,220	4,770	4,070	747	565	674	394	384
MIN	34	27	512	674	610	904	768	549	353	300	219	230
AC-FT	5,290	34,910	59,790	85,270	45,120	98,250	75,890	38,240	30,020	22,010	18,660	15,590
CAL YR 1973	TOTAL 203,331		MEAN 557	MAX 4,410		MIN 27	AC-FT 403,300					
WTR YR 1974	TOTAL 266,719		MEAN 731	MAX 4,770		MIN 27	AC-FT 529,000					

11423700 NEW CAMP FAR WEST RESERVOIR NEAR WHEATLAND, CALIF.

LOCATION.--Lat 39°03'01", long 121°18'53", in NE¼SW¼ sec.21, T.14 N., R.6 E., on Yuba-Placer County line, in center of New Camp Far West Dam on the Bear River, 6.4 mi (10.3 km) east of Wheatland, and 11.8 mi (19.0 km) northeast of Sheridan.

DRAINAGE AREA.--283 mi² (733 km²).

PERIOD OF RECORD.--October 1966 to current year. October 1963 to September 1966 in reports of California Department of Water Resources.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by South Sutter Water District).

EXTREMES.--Current year: Maximum contents, 114,600 acre-ft (141 hm³) Mar. 1 (elevation, 304.70 ft or 92.872 m); minimum, 62,400 acre-ft (76.9 hm³) Oct. 1 (elevation, 274.87 ft or 83.780 m).
Period of record: Maximum contents, 120,200 acre-ft (148 hm³) Jan. 21, 1970 (elevation, 307.3 ft or 93.66 m); minimum, 2,200 acre-ft (2.71 hm³) Oct. 11, 1968 (elevation, 175.0 ft or 53.34 m), may have been lower during period of no record Oct. 12-16, 1968.

REMARKS.--Reservoir is formed by an earthfill dam. Storage began Sept. 30, 1963. Usable capacity, 102,200 acre-ft (126 hm³) between elevations 175.0 ft (53.34 m), bottom of lowest river outlet and 300.0 ft (91.44 m), crest of spillway. Dead storage, 2,200 acre-ft (2.71 hm³). Records, including extremes, represent total contents at 2400 hours. See schematic diagram of Bear River basin.

COOPERATION.--Records furnished by California Department of Water Resources and reviewed by Geological Survey.

CAPACITY TABLE (ELEVATION, IN FEET, AND CONTENTS, IN ACRE-FEET)

170	1,400	250	34,200
180	3,000	260	44,000
190	4,800	270	55,500
200	7,000	280	69,500
210	9,800	290	85,600
220	14,000	300	104,400
230	19,400	320	151,000
240	25,800		

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	62,400	65,000	110,500	107,900	107,000	114,600	113,500	106,100	105,900	103,500	95,000	81,100
2	62,500	65,200	108,500	107,400	107,000	112,000	111,100	106,400	105,900	103,100	94,200	80,800
3	62,500	65,300	107,400	107,200	106,800	109,400	109,600	106,400	105,900	102,700	93,700	80,600
4	62,500	65,400	107,000	106,800	106,800	108,300	108,700	106,600	105,900	102,100	93,300	80,300
5	62,500	65,900	105,900	107,000	106,600	108,100	108,300	106,400	105,900	101,600	92,900	80,100
6	62,500	66,300	105,900	107,700	106,600	107,900	108,100	106,400	105,900	100,800	92,400	80,100
7	62,800	67,800	105,900	107,700	106,600	108,500	107,700	106,400	105,700	100,500	92,000	80,000
8	63,100	68,900	105,900	107,400	106,600	108,300	107,400	106,400	105,700	100,800	91,400	79,800
9	63,200	69,500	105,900	107,000	106,600	107,900	107,400	106,400	105,700	102,100	91,100	79,500
10	63,100	72,400	106,100	106,800	106,600	107,700	107,400	106,400	105,700	102,500	90,500	79,200
11	63,100	77,100	106,100	106,800	106,600	107,700	107,200	106,400	105,700	102,900	89,500	79,000
12	63,100	82,500	106,100	107,400	106,600	108,500	107,000	106,100	105,500	102,700	89,000	78,800
13	62,900	85,300	107,000	107,700	106,800	108,100	107,000	106,100	105,300	102,700	88,400	78,800
14	62,900	89,900	106,600	109,000	106,600	107,700	107,000	106,100	105,300	102,500	88,000	78,800
15	62,900	92,900	106,400	110,700	106,600	107,700	107,000	106,100	105,300	102,300	87,300	78,700
16	62,800	97,600	106,400	109,800	106,600	107,400	107,000	106,100	105,100	102,000	86,700	78,800
17	62,800	105,300	106,400	111,100	106,600	107,400	107,000	106,100	105,100	101,600	86,400	78,800
18	62,600	109,000	106,600	110,900	106,600	107,200	106,800	106,100	104,800	101,400	85,800	79,000
19	62,500	108,100	106,400	110,000	108,300	107,000	106,800	106,100	105,100	101,000	85,400	79,200
20	62,500	107,400	106,400	109,200	107,700	106,800	106,800	106,100	105,300	100,500	85,100	79,500
21	62,500	107,000	107,000	108,500	107,200	106,600	106,800	106,100	105,500	100,300	84,600	79,600
22	62,600	106,800	107,700	108,100	107,200	106,600	106,600	106,100	105,500	99,500	84,300	79,800
23	63,100	106,600	107,200	107,900	107,000	106,600	106,600	106,100	105,500	99,300	83,800	80,100
24	63,200	106,600	106,800	107,400	107,000	106,600	106,800	106,100	105,500	98,800	83,700	80,300
25	63,300	106,600	106,600	107,200	106,800	106,600	106,800	106,100	105,700	98,400	83,300	80,400
26	63,500	106,600	107,000	107,200	106,800	106,800	106,600	106,100	105,500	97,800	83,000	80,600
27	63,800	106,100	109,400	107,000	106,800	108,100	106,600	105,900	105,300	97,300	82,500	80,800
28	64,000	106,100	109,600	107,000	107,000	109,400	106,600	105,900	104,800	96,900	82,500	80,900
29	64,300	106,400	111,500	107,000	-----	110,700	106,600	105,900	104,600	96,300	82,100	81,100
30	64,500	108,700	109,400	106,800	-----	112,600	105,900	105,900	103,800	96,100	81,700	81,400
31	64,900	-----	108,500	106,800	-----	110,500	-----	105,900	-----	95,600	81,400	-----
MAX	64,900	109,000	111,500	111,100	108,300	114,600	113,500	106,600	105,900	103,500	95,000	81,400
MIN	62,400	65,000	105,900	106,800	106,600	106,600	105,900	105,900	103,800	95,600	81,400	78,700
(a)	276.67	302.02	301.86	301.13	301.20	302.78	300.70	300.71	299.72	295.34	287.42	287.36
(b)	+2,500	+43,800	-200	-1,700	+200	+3,500	-4,600	0	-2,100	-8,200	-14,200	0

CAL YR 1973 b +5,000
WTR YR 1974 b +19,000

a Elevation, in feet, at end of month.
b Change in contents, in acre-feet.

11424000 BEAR RIVER NEAR WHEATLAND, CALIF.

LOCATION.--Lat 39°00'01", long 121°24'21", in SE¼SW¼ sec.3, T.13 N., R.5 E., Yuba County, on right bank 100 ft (30 m) downstream from bridge on U.S. Highway 99E, 1 mi (2 km) southeast of Wheatland, and 6.5 mi (10.5 km) downstream from Rock Creek.

DRAINAGE AREA.--292 mi² (756 km²).

PERIOD OF RECORD.--October 1928 to current year.

GAGE.--Water-stage recorder. Datum of gage is 71.92 ft (21.921 m) above mean sea level. Prior to July 17, 1929, nonrecording gage at about same site at datum 9.58 ft (2.920 m) higher. July 17, 1929, to Oct. 22, 1943, water-stage recorder at several sites within 300 ft (90 m) of present site at datum 9.58 ft (2.920 m) higher. Oct. 23, 1943, to June 23, 1964, at site 100 ft (30 m) upstream at datum 7.00 ft (2.134 m) higher. June 23, 1964, to May 28, 1970, at present site at datum 5.00 ft (1.524 m) higher.

AVERAGE DISCHARGE (adjusted for diversions and change in contents in New Camp Far West Reservoir since 1966).--45 years, 464 ft³/s (13.14 m³/s), 336,200 acre-ft/yr (415 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 13,200 ft³/s (374 m³/s) Mar. 2 (gage height, 15.18 ft or 4.627 m); minimum daily, 10 ft³/s (0.28 m³/s) Sept. 22.

Period of record: Maximum discharge, 33,000 ft³/s (935 m³/s) Dec. 22, 1955 (gage height, 19.30 ft or 5.883 m, site and datum then in use); maximum gage height, 20.83 ft (6.349 m) Nov. 21, 1950, site and datum then in use; no flow at times.

REMARKS.--Records good. Natural flow of stream affected by inflow from Yuba River and American River basins. Flow regulated by Lake Combie, usable capacity, 7,840 acre-ft (9.67 hm³), Rollins Reservoir since December 1964 (see sta 11421800), and New Camp Far West Reservoir since October 1963 (see sta 11423700). Many diversions for irrigation and power. See schematic diagram of Bear River basin. Records of chemical analyses for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1931: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	21	26	5,670	2,500	1,190	3,120	5,450	412	62	24	20	30		
2	64	25	3,770	1,960	1,170	10,000	7,540	398	56	18	16	28		
3	35	25	1,960	1,600	1,090	5,230	4,400	386	72	18	17	27		
4	16	25	1,380	1,490	995	2,900	3,020	356	77	16	16	31		
5	14	28	1,110	1,370	975	2,210	2,410	341	58	18	16	25		
6	13	30	910	1,760	928	1,930	2,120	312	72	19	16	30		
7	16	33	887	2,090	892	1,940	1,850	266	95	21	16	34		
8	13	27	766	1,900	818	2,440	1,640	246	89	40	16	33		
9	12	30	698	1,570	775	2,030	1,550	218	85	41	18	31		
10	13	39	682	1,360	810	1,790	1,490	197	75	35	21	33		
11	15	66	746	1,280	841	1,650	1,330	186	60	32	21	30		
12	15	59	787	1,430	863	2,140	1,230	183	50	31	22	26		
13	14	44	1,000	1,770	959	2,120	1,190	172	62	28	21	23		
14	14	51	1,340	1,980	908	1,770	1,170	166	23	23	19	22		
15	14	34	1,110	4,590	826	1,590	1,130	154	21	23	20	19		
16	13	50	951	4,130	796	1,480	1,110	144	24	20	20	19		
17	13	122	925	5,290	872	1,480	1,070	143	22	22	21	21		
18	13	2,680	992	5,120	841	1,410	1,000	141	19	20	20	39		
19	11	2,800	1,060	5,350	1,510	1,260	960	156	28	17	20	21		
20	11	1,720	868	4,330	1,970	1,180	890	147	25	18	20	18		
21	11	1,340	1,010	3,080	1,500	1,150	843	127	24	18	21	15		
22	17	1,000	1,820	2,580	1,490	1,090	780	126	24	20	21	10		
23	40	798	1,640	2,220	1,350	1,060	710	119	25	18	22	11		
24	63	756	1,300	1,950	1,200	1,000	783	111	25	18	26	13		
25	14	732	1,060	1,740	1,100	981	856	105	19	18	23	14		
26	12	640	959	1,540	1,050	1,040	783	98	19	23	23	14		
27	14	565	2,090	1,370	1,100	1,250	715	96	18	24	24	13		
28	15	495	3,830	1,230	1,090	2,220	657	75	14	20	26	12		
29	15	455	5,360	1,160	-----	3,480	615	62	13	17	26	14		
30	25	702	5,180	1,150	-----	7,050	754	71	19	15	25	11		
31	26	-----	3,170	1,140	-----	6,400	-----	64	-----	18	32	-----		
TOTAL	602	15,397	55,031	72,030	29,909	76,391	50,046	5,778	1,275	693	645	667		
MEAN	19.4	513	1,775	2,324	1,068	2,464	1,668	186	42.5	22.4	20.8	22.2		
MAX	64	2,800	5,670	5,350	1,970	10,000	7,540	412	95	41	32	39		
MIN	11	25	682	1,140	775	981	615	62	13	15	16	10		
AC-FT	1,190	30,540	109,200	142,900	59,320	151,500	99,270	11,460	2,530	1,370	1,280	1,320		
(a)	4,699	0	0	0	0	0	3,073	27,821	28,160	29,068	27,942	12,723		
MEAN b	136	1,249	1,773	2,296	1,072	2,521	1,643	639	480	362	244	236		
AC-FT b	8,389	74,340	109,000	141,200	59,520	155,000	97,743	39,281	28,590	22,238	15,022	14,043		
CAL YR 1973	TOTAL	277,639	MEAN	761	MAX	13,800	MIN	10	AC-FT	550,700	MEAN b	955	AC-FT b	691,400
WTR YR 1974	TOTAL	308,464	MEAN	845	MAX	10,000	MIN	10	AC-FT	611,800	MEAN b	1,056	AC-FT b	764,400

a Diversion, in acre-feet, to Camp Far West North and South Canals and South Sutter conveyance canal, furnished by South Sutter Water District.

b Adjusted for diversions and change in contents in New Camp Far West Reservoir.

11425000 FEATHER RIVER AT NICOLAUS, CALIF.

LOCATION.--Lat 38°54'01", long 121°35'00", in New Helvetia Grant, T.12 N., R.3 E., Sutter County, on left bank at highway bridge at Nicolaus, 2.9 mi (4.7 km) downstream from Bear River, and at mile 9.4 (15.1 km).

DRAINAGE AREA.--5,920 mi² (15,330 km²).

PERIOD OF RECORD.--June 1921 to December 1942 (low-water periods only), April 1943 to current year.

GAGE.--Water-stage recorder. Datum of gage is 3.30 ft (1.006 m) below mean sea level. Prior to November 1931, on middle fender pier of bridge 0.3 mi (0.5 km) upstream at same datum. Since June 1960 auxiliary water-stage recorder at various sites near highway bridge for low-water periods.

AVERAGE DISCHARGE.--31 years (1943-74), 8,405 ft³/s (238.0 m³/s), 6,089,000 acre-ft/yr (7.51 km³/yr).

EXTREMES.--Current year: Maximum discharge, 108,000 ft³/s (3,060 m³/s) Apr. 2 (gage height, 45.26 ft or 13.795 m); minimum daily, 4,290 ft³/s (121 m³/s) July 1.

Period of record: Maximum discharge (1943 to current year), 357,000 ft³/s (10,100 m³/s) Dec. 23, 1955; maximum gage height, 51.60 ft (15.728 m) Dec. 23, 1955; no flow Aug. 2-18, 1924, July 11-22, 24, 26, Aug. 1, 1931.

REMARKS.--Records good. Flow partly regulated by many reservoirs, total capacity, 6,868,000 acre-ft (8.47 km³), the largest of which are Lake Oroville (see sta 11406800) completed in 1968, Lake Almanor (see sta 11399000) completed in 1913, and New Bullards Bar Reservoir (see sta 11413515) completed in 1969. Diversions for irrigation of about 87,000 acres (352 km²) between stations at Oroville and Nicolaus. Records of water temperatures near this station for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1931: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4,940	5,580	29,400	22,500	22,000	17,700	91,500	11,900	8,850	4,290	9,990	8,940
2	4,920	5,580	39,900	21,200	21,500	45,100	105,000	11,400	8,950	4,700	10,000	8,820
3	4,930	5,550	25,700	20,800	21,000	48,900	96,000	11,200	8,690	5,190	10,000	8,770
4	4,920	5,500	22,000	21,100	20,500	34,500	87,000	11,000	9,100	5,700	9,950	8,800
5	4,920	5,450	20,900	21,000	19,500	26,000	75,000	10,800	9,130	5,830	9,970	8,780
6	4,900	5,570	20,200	19,700	18,500	22,000	65,000	9,860	8,620	5,800	10,100	8,780
7	4,970	5,730	19,900	18,900	17,500	21,000	60,300	9,480	8,390	5,730	10,100	8,850
8	5,080	6,470	19,900	19,500	16,500	25,000	55,000	9,340	8,090	5,970	10,100	8,810
9	5,120	6,260	19,900	20,000	15,500	23,000	48,900	9,290	7,820	7,220	10,200	8,800
10	5,080	6,380	19,800	18,000	15,000	22,500	42,700	9,240	7,840	8,210	10,200	8,850
11	5,080	8,420	19,200	17,200	14,500	22,000	30,900	9,340	7,760	9,460	10,300	8,960
12	5,070	21,900	18,300	17,900	14,000	21,700	23,100	11,000	7,810	9,620	10,300	8,920
13	5,100	27,300	17,500	19,500	13,600	23,600	21,100	11,600	7,470	9,590	10,300	8,880
14	5,170	25,500	16,400	19,500	13,300	22,600	20,700	12,100	7,760	9,570	10,400	8,870
15	5,130	23,700	14,500	30,700	13,300	21,900	20,600	12,000	9,250	9,480	10,500	8,730
16	4,950	23,300	14,000	49,100	13,200	21,800	20,500	11,600	10,600	9,770	10,400	8,660
17	5,350	26,700	13,800	54,000	13,100	22,000	20,600	10,200	8,760	9,980	10,500	8,700
18	5,390	46,300	13,500	61,000	12,200	21,700	20,600	11,200	7,040	10,000	10,400	8,730
19	5,420	50,300	13,900	70,000	12,900	21,100	20,800	11,600	7,680	10,000	10,400	8,710
20	5,450	39,100	13,700	80,000	15,700	20,700	20,700	11,700	8,720	9,950	10,400	8,680
21	5,450	34,100	13,900	78,000	14,700	20,500	20,800	11,800	8,480	9,840	10,500	8,700
22	5,470	32,200	17,100	74,000	14,300	20,400	20,900	10,900	8,260	9,840	10,500	8,700
23	5,730	30,700	16,700	60,000	13,900	20,600	20,800	8,420	8,140	9,820	10,500	8,650
24	5,880	29,800	15,100	54,000	13,300	20,800	19,300	7,410	7,320	9,870	10,400	8,680
25	5,840	29,600	14,200	47,000	14,000	21,100	17,300	7,650	6,210	9,820	10,500	8,710
26	5,710	29,000	13,800	40,000	14,000	21,800	15,800	7,770	5,310	9,850	10,500	8,550
27	5,670	25,200	16,800	32,000	13,900	21,900	15,400	7,610	4,820	9,870	10,500	8,420
28	5,640	20,500	23,500	28,000	13,700	26,000	14,800	7,530	4,750	9,840	10,700	8,350
29	5,620	19,100	29,000	25,000	-----	30,700	13,200	7,130	5,990	9,550	10,700	8,290
30	5,570	18,800	35,600	24,000	-----	50,800	12,300	9,180	5,420	9,790	10,600	8,280
31	5,620	-----	25,400	22,900	-----	83,600	-----	8,870	-----	9,880	9,290	-----
TOTAL	164,090	619,590	613,500	1,106,5M	435,100	843,000	1,116,6M	310,120	233,030	264,030	319,200	261,370
MEAN	5,293	20,650	19,790	35,690	15,540	27,190	37,220	10,000	7,768	8,517	10,300	8,712
MAX	5,880	50,300	39,900	80,000	22,000	83,600	105,000	12,100	10,600	10,000	10,700	8,960
MIN	4,900	5,450	13,500	17,200	12,200	17,700	12,300	7,130	4,750	4,290	9,290	8,280
AC-FT	325,500	1,229M	1,217M	2,195M	863,000	1,672M	2,215M	615,100	462,200	523,700	633,100	518,400
CAL YR 1973	TOTAL 4,101,750		MEAN 11,240		MAX 72,000		MIN 2,630		AC-FT 8,136,000			
WTR YR 1974	TOTAL 6,286,130		MEAN 17,220		MAX 105,000		MIN 4,290		AC-FT 12,470,000			

SACRAMENTO RIVER BASIN

11425500 SACRAMENTO RIVER AT VERONA, CALIF.

LOCATION.--Lat 38°46'51", long 121°36'12", in SW¼Sec. 23, T.11 N., R.3 E., Sutter County, on left bank 0.8 mi (1.3 km) southeast of Verona, 1 mi (2 km) downstream from Feather River, 6.2 mi (10.0 km) east of Knights Landing, and at mile 19.6 (31.5 km) upstream from Sacramento.

DRAINAGE AREA.--21,257 mi² (55,056 km²).

PERIOD OF RECORD.--May 1926 to September 1929 (low-water periods only), October 1929 to current year.

GAGE.--Water-stage recorder. Datum of gage is 3.00 ft (0.914 m) below mean sea level.

AVERAGE DISCHARGE.--45 years (1929-74), 19,050 ft³/s (539.5 m³/s), 13,800,000 acre-ft/yr (17.0 km³/yr).

EXTREMES.--Current year: Maximum discharge, 74,900 ft³/s (2,120 m³/s) Jan. 20 (gage height, 37.90 ft or 11.552 m); minimum daily, 12,700 ft³/s (360 m³/s) Oct. 21.
Period of record: Maximum discharge, 79,200 ft³/s (2,240 m³/s) Mar. 1, 1940 (gage height, 41.20 ft or 12.558 m); minimum daily, 304 ft³/s (8.61 m³/s) July 23, 24, 1931; maximum reverse flow, 16,800 ft³/s (476 m³/s) Dec. 4, 1950, backwater from American River.
Maximum combined discharge of Sacramento River at Verona and Fremont weir, about 322,000 ft³/s (9,120 m³/s) Dec. 25, 1964.

REMARKS.--Records excellent. Natural flow of stream affected by storage reservoirs, power developments, diversions for irrigation, return flow from irrigated areas, and bypassing for flood control. When discharge exceeds about 55,000 ft³/s (1,560 m³/s) flow begins over Fremont weir (just upstream) into Yolo Bypass (see sta 11453000). Gage height of crest of Fremont weir is 33.5 ft (10.21 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14,900	13,400	60,200	64,100	62,900	33,400	69,300	29,100	23,800	15,000	19,300	22,000
2	14,800	13,400	63,600	63,600	62,300	47,800	73,400	26,300	23,900	14,600	19,300	22,100
3	14,800	13,300	63,500	62,800	61,700	59,300	74,300	23,500	24,000	14,800	19,300	22,300
4	14,800	13,100	63,700	62,100	61,100	60,000	74,000	21,900	23,600	15,100	19,300	22,500
5	14,600	13,100	62,900	61,300	60,300	58,600	73,300	20,600	23,800	15,100	19,400	22,700
6	14,500	13,400	62,100	60,500	59,300	56,800	71,200	19,100	23,100	15,000	19,700	23,000
7	14,400	13,800	61,600	59,800	58,100	54,800	68,800	18,100	22,100	14,900	19,800	23,400
8	14,300	15,200	61,100	59,500	56,600	54,800	67,000	20,600	21,500	15,100	19,700	23,700
9	14,700	17,100	60,700	58,900	54,400	57,500	65,600	23,200	20,500	18,700	19,800	23,900
10	14,900	19,300	60,200	57,500	50,800	58,800	64,500	23,800	19,800	21,300	20,200	24,000
11	14,600	23,100	59,300	55,500	46,600	58,800	63,200	24,100	19,100	23,600	20,600	24,200
12	14,600	36,800	58,200	53,500	40,900	58,300	61,800	26,100	18,800	23,700	20,900	24,300
13	14,300	46,800	56,800	52,600	36,800	58,600	60,900	26,800	18,200	23,300	21,200	24,200
14	14,300	53,100	56,000	52,600	36,600	58,100	60,300	27,400	17,800	22,600	21,500	23,800
15	14,100	59,300	54,400	56,100	37,100	56,600	59,900	27,500	18,900	21,800	21,600	23,400
16	13,800	61,300	52,500	62,300	37,100	54,500	59,500	26,300	20,600	21,600	21,800	23,300
17	14,000	62,400	50,600	65,700	36,900	54,000	58,700	24,500	20,500	21,400	21,700	23,200
18	13,500	64,600	48,900	70,400	36,000	55,600	58,000	25,100	18,000	21,000	21,800	23,300
19	13,100	65,400	47,800	74,200	35,200	56,900	57,300	25,800	18,200	20,600	22,000	22,800
20	12,900	65,000	47,100	74,900	37,000	57,700	56,400	26,300	19,500	20,300	22,100	21,900
21	12,700	64,700	46,400	74,400	38,800	58,000	54,500	26,300	20,000	19,900	22,100	20,800
22	12,800	63,500	47,800	73,000	38,800	58,200	49,800	25,600	20,100	19,800	22,100	20,000
23	13,400	62,300	51,100	71,100	37,800	58,100	43,600	23,500	20,000	19,700	22,100	19,500
24	14,200	62,000	54,100	69,600	36,400	57,800	38,500	21,600	19,300	19,500	22,200	19,300
25	14,600	62,000	57,100	68,600	35,700	56,700	35,400	20,900	18,000	19,200	22,400	19,100
26	14,600	62,000	57,900	67,800	35,000	53,700	33,400	21,500	16,700	19,100	22,500	18,700
27	14,000	61,500	58,700	67,000	34,000	49,000	31,800	21,800	15,600	19,100	22,600	18,300
28	13,700	60,400	61,200	66,000	32,700	46,700	30,200	22,100	15,200	19,100	22,800	18,200
29	13,700	59,300	61,900	64,900	-----	48,400	29,200	21,800	16,100	19,100	22,900	18,000
30	13,500	58,400	63,500	64,000	-----	54,400	29,400	23,200	16,100	19,100	23,000	17,800
31	13,400	-----	63,700	63,300	-----	64,700	-----	23,600	-----	19,200	22,400	-----
TOTAL	436,500	1,299.0M	1,774.6M	1,977.6M	1,256.9M	1,716.6M	1,673.2M	738,000	592,800	592,300	658,100	653,700
MEAN	14,080	43,300	57,250	63,790	44,890	55,370	55,770	23,810	19,760	19,110	21,230	21,790
MAX	14,900	65,400	63,700	74,900	62,900	64,700	74,300	29,100	24,000	23,700	23,000	24,300
MIN	12,700	13,100	46,400	52,600	32,700	33,400	29,200	18,100	15,200	14,600	19,300	17,800
AC-FT	865,800	2,577M	3,520M	3,923M	2,493M	3,405M	3,319M	1,466M	1,176M	1,175M	1,305M	1,297M
CAL YR 1973	TOTAL 10,670,300			MEAN 29,230		MAX 65,800		MIN 10,300		AC-FT 21,160,000		
WTR YR 1974	TOTAL 13,369,300			MEAN 36,630		MAX 74,900		MIN 12,700		AC-FT 26,520,000		

11426000 SACRAMENTO WEIR SPILL TO YOLO BYPASS, NEAR SACRAMENTO, CALIF.

LOCATION.--Lat 38°36'25", long 121°33'15" (unsurveyed), Sacramento County, 2 gages on right bank, one 100 ft (30 m) upstream from weir and one 100 ft (30 m) downstream from weir, 3.2 mi (5.1 km) upstream from American River, 4 mi (6 km) northwest of Sacramento, and at mile 4.2 (6.8 km) upstream from Sacramento.

PERIOD OF RECORD.--October 1939 to current year. Monthly discharge only for water years 1940-51, published in WSP 1735. Published as Sacramento weir near Sacramento 1939-61. Gage-height records collected at same site February 1926 to September 1934 and major flood flows only October 1934 to September 1939 are contained in reports of California Department of Water Resources.

GAGE.--Water-stage recorders and concrete weir crest. Datum of gage is 3.00 ft (0.914 m) below mean sea level. October 1939 to September 1942, October 1959 to September 1963, water-stage recorder or nonrecording gage at downstream end of weir. October 1942 to September 1959, water-stage recorder on left bank at Sacramento River opposite center of weir. Since February 1963, water-stage recorders on right bank 100 ft (30 m) upstream and 100 ft (30 m) downstream from ends of weir.

AVERAGE DISCHARGE.--35 years, 219 ft³/s (6.202 m³/s), 158,700 acre-ft/yr (1.96 km³/yr).

EXTREMES.--Current year: Maximum daily discharge, 3,590 ft³/s (102 m³/s) Jan. 20; no flow most of year. Period of record: Maximum discharge, 118,000 ft³/s (3,340 m³/s) Mar. 26, 1928; maximum gage height, 33.01 ft (10.061 m) Dec. 23, 1955; no flow all or most of each year.

REMARKS.--Crest of weir is at gage height 22.0 ft (6.71 m) and top of moveable gates at 28.0 ft (8.53 m). Weir consists of 48 gates each 38.1 ft (11.61 m) long. Flow over weir enters Yolo Bypass by way of Sacramento Bypass. Flow regulated by weir gates. Flow for the current year consisted of leakage through weir gates only. Since February 1963, stage is obtained by averaging the stage obtained at sites above and below the weir.

COOPERATION.--Records furnished by California Department of Water Resources and reviewed by Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NCV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	65	242	148	0	326					
2		0	169	238	133	0	403					
3		0	164	207	115	29	1,810					
4		0	146	159	102	70	1,650					
5		0	110	128	72	25	1,190					
6		0	89	114	8.0	0	368					
7		0	72	111	0	0	317					
8		0	58	132	0	2.4	282					
9		0	27	118	0	66	250					
10		0	3.0	29	0	108	221					
11		0	0	0	0	111	183					
12		0	0	0	0	104	142					
13		0	0	0	0	103	115					
14		0	0	0	0	89	95					
15		0	0	18	0	45	53					
16		142	0	202	0	0	27					
17		208	0	281	0	0	4.9					
18		250	0	386	0	0	0					
19		260	0	2,080	0	0	0					
20		251	0	3,590	0	0	0					
21		247	0	3,350	0	9.1	0					
22		216	0	1,020	0	14	0					
23		140	0	316	0	12	0					
24		120	0	280	0	4.6	0					
25		118	0	260	0	0	0					
26		100	0	248	0	0	0					
27		62	42	231	0	0	0					
28		14	94	214	0	0	0					
29		0	126	193	-----	0	0					
30		0	203	169	-----	28	0					
31		-----	236	154	-----	230	-----		-----			-----
TOTAL	0	2,128	1,604.0	14,470	578.0	1,050.1	7,436.9	0	0	0	0	0
MEAN	0	70.9	51.7	467	20.6	33.9	248	0	0	0	0	0
MAX	0	260	236	3,590	148	230	1,810	0	0	0	0	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	4,220	3,180	28,700	1,150	2,080	14,750	0	0	0	0	0
CAL YR 1973	TOTAL	11,669.00	MEAN	32.0	MAX	1,070	MIN	0	AC-FT	23,150		
WTR YR 1974	TOTAL	27,267.00	MEAN	74.7	MAX	3,590	MIN	0	AC-FT	54,080		

11426150 ONION CREEK NEAR SODA SPRINGS, CALIF.

LOCATION.--Lat 39°16'02", long 120°21'50", in SE¼NE¼ sec.11, T.16 N., R.14 E., Placer County, Tahoe National Forest, on right bank 0.3 mi (0.5 km) upstream from unnamed tributary, 1 mi (2 km) upstream from mouth, and 4.0 mi (6.5 km) south of Soda Springs.

DRAINAGE AREA.--3.58 mi² (9.27 km²).

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

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 5,900 ft (1,798 m), from topographic map.

AVERAGE DISCHARGE.--15 years, 9.99 ft³/s (0.283 m³/s), 7,240 acre-ft/yr (8.93 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 252 ft³/s (7.14 m³/s) Nov. 12 (gage height, 2.76 ft or 0.841 m); minimum daily, 0.13 ft³/s (0.004 m³/s) Oct. 1-3, Sept. 20-28.
Period of record: Maximum discharge, 1,750 ft³/s (49.6 m³/s) Dec. 23, 1964 (gage height, 4.98 ft or 1.518 m in gage well, 6.82 ft or 2.079 m, from floodmarks), from rating curve extended above 40 ft³/s (1.13 m³/s) on basis of slope-area measurement of maximum flow; minimum daily, 0.1 ft³/s (0.003 m³/s) for several days in 1959, 1961, 1973.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.13	.59	14	10	11	21	21	53	42	3.1	1.2	.27
2	.13	.59	9.0	9.0	11	18	19	58	42	3.1	1.2	.25
3	.13	.59	7.0	8.4	10	13	18	58	38	2.7	1.1	.25
4	.19	.51	6.2	7.8	9.5	12	18	60	32	2.5	1.2	.24
5	.19	.59	5.9	7.5	9.5	12	18	67	31	2.5	1.4	.23
6	.19	4.2	5.9	7.3	8.9	11	18	78	28	2.3	.98	.22
7	.29	29	5.9	7.2	8.9	11	20	102	24	2.3	.86	.22
8	.67	4.5	5.9	7.1	8.9	10	21	107	21	12	.84	.22
9	.67	9.8	6.0	7.1	8.9	9.5	21	105	20	41	.78	.22
10	.33	30	6.0	7.1	9.5	10	19	92	18	12	.74	.22
11	.33	94	6.0	7.1	9.5	9.5	21	85	18	6.8	.70	.21
12	.33	66	5.9	7.3	8.9	8.9	24	76	18	5.5	.66	.20
13	.37	15	5.8	8.3	8.5	9.5	25	65	15	4.8	.64	.19
14	.38	13	5.5	18	8.3	12	28	62	13	4.5	.59	.18
15	.30	11	5.4	74	7.8	15	34	56	11	3.9	.56	.17
16	.25	10	9.2	46	7.7	18	35	48	11	3.4	.54	.16
17	.22	12	9.7	80	7.4	18	38	38	11	3.1	.51	.15
18	.22	9.5	7.0	87	6.8	18	39	31	10	2.5	.51	.14
19	.22	7.3	6.6	89	6.7	19	33	26	8.9	2.5	.50	.14
20	.33	7.3	6.5	48	6.5	21	33	24	7.8	2.3	.48	.13
21	.25	7.3	6.4	33	6.3	22	39	28	7.3	2.2	.44	.13
22	.67	6.8	6.2	26	6.4	22	46	33	6.3	2.1	.44	.13
23	.98	6.3	5.9	22	6.5	23	43	38	5.9	1.8	.38	.13
24	1.1	5.5	5.9	21	6.6	26	33	42	5.1	1.7	.38	.13
25	1.2	5.5	6.4	20	6.8	24	27	48	4.5	1.7	.38	.13
26	.98	6.8	7.0	18	6.8	23	24	67	4.2	1.5	.38	.13
27	.86	6.8	7.8	15	6.3	22	23	65	3.6	1.4	.38	.13
28	.76	9.5	14	15	6.3	20	24	63	3.3	1.4	.33	.13
29	.51	12	49	14	-----	26	28	49	3.1	1.4	.32	.16
30	.51	11	23	13	-----	27	39	42	3.1	1.3	.29	.16
31	.59	-----	15	12	-----	22	-----	42	-----	1.2	.28	-----
TOTAL	14.28	402.97	286.0	752.2	226.2	533.4	829	1,808	466.1	140.5	19.99	5.37
MEAN	.46	13.4	9.23	24.3	8.08	17.2	27.6	58.3	15.5	4.53	.64	.18
MAX	1.2	94	49	89	11	27	46	107	42	41	1.4	.27
MIN	.13	.51	5.4	7.1	6.3	8.9	18	24	3.1	1.2	.28	.13
AC-FT	28	799	567	1,490	449	1,060	1,640	3,590	925	279	40	11
CAL YR 1973	TOTAL	4,057.37	MEAN	11.1	MAX	107	MIN	.10	AC-FT	8,050		
WTR YR 1974	TOTAL	5,484.01	MEAN	15.0	MAX	107	MIN	.13	AC-FT	10,880		

PEAK DISCHARGE (BASE, 50 FT ³ /S)							
DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-7	1000	2.11	53	1-18	1730	2.52	162
11-12	0200	2.76	252	4-22	1900	2.11	60
12-29	1030	2.31	99	5-7	1800	2.53	167
1-15	0100	2.25	85	7-9	1330	2.23	74
1-17	0300	2.39	121				

421

LOCATION.--Lat 39°17'58", long 120°39'11", in NE¼NW¼ sec.32, T.17 N., R.12 E., Placer County, Tahoe National Forest, on right bank 0.2 mi (0.3 km) upstream from inlet to Carpenter Flat siphon, and 1 mi (2 km) east of Emigrant Gap.

REMARKS.--Canal diverts from right bank of the North Fork of North Fork American River, 2.7 mi (4.3 km) downstream from Lake Valley Reservoir to Drum Canal in Bear River basin. See schematic diagram of Bear River and Yuba River basins.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31	.73	31	27	0	38	30	35	34	35	31	35
2	31	.78	33	27	0	33	28	35	34	35	31	35
3	32	.85	31	24	0	32	25	35	33	35	31	35
4	32	.90	31	24	0	32	25	36	32	35	29	35
5	31	8.0	27	24	0	32	24	36	30	35	24	35
6	31	3.9	26	24	0	32	24	34	25	35	23	25
7	33	2.2	26	24	0	31	25	32	31	35	23	.98
8	32	.21	26	9.2	0	31	25	32	30	35	23	.01
9	31	.70	26	0	0	31	26	30	25	35	23	0
10	31	3.3	26	0	0	30	25	28	30	35	23	0
11	30	6.6	26	0	0	29	26	29	30	35	23	0
12	30	21	26	0	0	30	27	29	29	35	22	0
13	30	23	26	0	0	30	26	29	29	35	15	0
14	29	22	26	0	0	29	26	29	28	35	.07	0
15	30	27	26	0	8.9	30	28	29	27	35	0	0
16	30	34	25	0	18	30	28	29	24	35	6.5	0
17	30	38	27	0	29	31	28	28	32	35	34	0
18	31	31	27	0	29	30	28	27	32	35	34	0
19	32	30	28	0	30	30	27	26	32	35	35	0
20	31	30	29	0	29	30	27	26	32	35	35	0
21	31	28	29	0	29	30	28	26	33	35	34	0
22	32	27	29	0	29	30	29	26	33	35	34	0
23	32	27	29	0	29	30	29	26	34	35	34	0
24	32	27	29	0	29	30	28	29	34	35	34	2.6
25	31	27	29	0	29	31	27	29	34	35	34	32
26	31	27	29	0	29	32	26	30	34	35	34	33
27	30	28	34	0	29	34	26	30	35	35	34	34
28	12	28	34	0	29	33	27	33	35	35	33	36
29	.70	28	38	0	-----	40	28	36	35	31	33	36
30	.70	27	28	0	-----	36	32	35	35	31	34	36
31	.70	-----	27	0	-----	26	-----	34	-----	31	35	-----
TOTAL	851.10	558.17	884	183.2	375.9	973	808	948	941	1,073	838.57	410.59
MEAN	27.5	18.6	28.5	5.91	13.4	31.4	26.9	30.6	31.4	34.6	27.1	13.7
MAX	33	38	38	27	30	40	32	36	35	35	35	36
MIN	.70	.21	25	0	0	26	24	26	24	31	0	0
AC-FT	1,690	1,110	1,750	363	746	1,930	1,600	1,880	1,870	2,130	1,660	814
CAL YR 1973	TOTAL 7,252.31		MEAN 19.9		MAX 38		MIN 0		AC-FT 14,380			
WTR YR 1974	TOTAL 8,844.53		MEAN 24.2		MAX 40		MIN 0		AC-FT 17,540			

11426200 NORTH FORK FORBES CREEK NEAR DUTCH FLAT, CALIF.

LOCATION.--Lat 39°08'37", long 120°45'30", in NW¼SE¼ sec.17, T.15 N., R.11 E., Placer County, Tahoe National Forest, on right bank 0.2 mi (0.3 km) downstream from Big Reservoir, and 6.0 mi (9.7 km) southeast of Dutch Flat.

DRAINAGE AREA.--1.68 mi² (4.35 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 3,980 ft (1,213 m), from topographic map.

AVERAGE DISCHARGE.--18 years, 4.83 ft³/s (0.137 m³/s), 3,500 acre-ft/yr (4.32 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 119 ft³/s (3.37 m³/s) Jan. 18 (gage height, 3.58 ft or 1.091 m); minimum daily, 0.40 ft³/s (0.011 m³/s) June 15-26.
Period of record: Maximum discharge, 377 ft³/s (10.7 m³/s) Jan. 22, 1970 (gage height, 4.76 ft or 1.451 m); no flow many days in 1964-66.
Maximum stage known, 6.40 ft (1.951 m) probably Dec. 23, 1955, from floodmarks (discharge unknown).

REMARKS.--Flow regulated by Big Reservoir, capacity, 2,200 acre-ft (2.71 hm³). Some diversion above station for mining.

COOPERATION.--Records furnished by Bureau of Reclamation and reviewed by Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.0	3.8	4.6	38	9.8	42	83	3.8	.90	.50	3.1	2.4
2	4.0	3.8	4.1	31	8.6	78	76	3.6	.80	.50	3.1	2.4
3	4.0	3.8	4.0	24	7.5	60	56	3.5	.80	.50	3.0	2.4
4	4.0	3.8	4.0	20	6.8	42	41	3.4	.80	.50	2.9	2.4
5	4.0	3.9	4.0	18	6.1	35	30	3.2	.70	.50	2.9	2.5
6	4.0	4.0	3.9	18	5.2	29	24	2.6	.70	.50	2.8	2.5
7	4.0	4.2	3.9	15	5.0	29	22	2.4	.60	.50	2.8	2.5
8	4.0	3.8	3.9	13	4.9	26	19	2.4	.60	.80	2.7	2.5
9	4.0	3.8	3.9	11	4.6	22	17	2.3	.60	.90	2.6	2.5
10	4.0	4.1	3.9	9.5	4.6	19	14	2.2	.60	.70	2.6	2.5
11	3.8	4.5	3.9	8.7	4.5	20	11	2.0	.60	.70	2.6	2.5
12	3.9	5.1	3.9	9.1	4.5	24	9.5	1.9	.50	.80	2.5	2.5
13	3.9	4.3	4.3	9.6	4.5	24	8.6	1.8	.50	1.1	2.5	2.6
14	3.9	4.2	4.2	14	4.4	21	7.4	1.7	.50	1.1	2.5	2.6
15	3.8	3.9	4.1	29	4.3	22	6.7	1.6	.40	1.5	2.4	2.6
16	3.8	4.0	4.1	40	4.4	20	6.5	1.5	.40	2.0	2.4	2.4
17	3.8	4.7	4.4	73	4.5	25	6.1	1.5	.40	2.0	2.4	2.4
18	3.8	4.4	4.3	89	4.6	20	5.8	1.5	.40	2.0	2.5	2.4
19	3.8	4.0	4.2	80	6.1	15	5.5	1.5	.40	2.3	2.6	2.4
20	3.8	3.9	4.2	61	5.5	13	5.0	1.4	.40	2.5	2.6	2.4
21	3.8	3.9	4.5	46	5.7	11	4.5	1.4	.40	2.6	2.6	2.4
22	4.1	3.8	4.6	35	5.8	9.9	4.5	1.4	.40	2.7	2.6	2.3
23	4.0	3.8	4.5	28	5.9	8.9	4.9	1.4	.40	2.7	2.5	2.3
24	3.9	3.8	4.5	23	5.5	7.9	6.4	1.3	.40	2.9	2.6	2.3
25	3.9	3.7	4.5	19	5.2	7.6	5.5	1.3	.40	3.3	2.6	2.3
26	3.8	3.7	4.6	16	6.0	7.6	5.1	1.3	.40	3.2	2.5	2.3
27	3.8	3.7	5.4	14	6.2	10	4.7	1.3	.50	3.2	2.5	2.3
28	3.8	3.7	5.4	12	8.1	20	4.4	1.2	.50	3.2	2.4	2.3
29	3.8	3.7	20	11	-----	28	3.9	1.1	.50	3.2	2.5	2.4
30	3.8	4.2	44	9.9	-----	75	4.0	1.0	.50	3.2	2.5	2.4
31	3.8	-----	41	9.5	-----	77	-----	.90	-----	3.1	2.5	-----
TOTAL	120.8	120.0	224.8	834.3	158.8	848.9	502.0	59.40	16.00	55.20	81.3	72.7
MEAN	3.90	4.00	7.25	26.9	5.67	27.4	16.7	1.92	.53	1.78	2.62	2.42
MAX	4.1	5.1	44	89	9.8	78	83	3.8	.90	3.3	3.1	2.6
MIN	3.8	3.7	3.9	8.7	4.3	7.6	3.9	.90	.40	.50	2.4	2.3
AC-FT	240	238	446	1,650	315	1,680	996	118	.32	109	161	144

CAL YR 1973 TOTAL 2,401.90 MEAN 6.58 MAX 74 MIN .40 AC-FT 4,760
WTR YR 1974 TOTAL 3,094.20 MEAN 8.48 MAX 89 MIN .40 AC-FT 6,140

11426400 NORTH SHIRTTAIL CREEK NEAR DUTCH FLAT, CALIF.

LOCATION.--Lat 39°07'49", long 120°47'44", in NW¼SE¼ sec.24, T.15 N., R.10 E., Placer County, Tahoe National Forest, on right bank 200 ft (61 m) downstream from Forbes Creek, and 7.0 mi (11.3 km) southeast of Dutch Flat.

DRAINAGE AREA.--9.10 mi² (23.57 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 3,500 ft (1,067 m), from topographic map.

AVERAGE DISCHARGE.--18 years, 21.8 ft³/s (0.617 m³/s), 15,790 acre-ft/yr (19.5 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 429 ft³/s (12.1 m³/s) Mar. 30 (gage height, 4.06 ft or 1.237 m); minimum daily, 0.30 ft³/s (0.008 m³/s) Sept. 8-30.
Period of record: Maximum discharge, 1,780 ft³/s (50.4 m³/s) Dec. 22, 1964 (gage height, 7.56 ft or 2.304 m), from rating curve extended above 590 ft³/s (16.7 m³/s) on basis of slope-area measurement at gage height 6.36 ft (1.939 m); minimum daily, 0.10 ft³/s (0.003 m³/s) many days in 1970.
Flood of Dec. 23, 1955, reached a stage of 7.30 ft (2.225 m), from floodmarks (discharge, 1,650 ft³/s or 46.7 m³/s).

REMARKS.--Flow slightly regulated by Big Reservoir, capacity, 2,200 acre-ft (2.71 hm³).

COOPERATION.--Records furnished by Bureau of Reclamation and reviewed by Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.70	4.1	100	106	52	238	311	22	5.9	1.5	1.0	.40
2	.70	4.1	62	89	45	222	261	21	5.8	1.5	1.0	.40
3	.70	4.1	50	77	40	148	195	20	5.6	1.4	1.0	.40
4	.70	4.1	42	69	36	118	153	19	5.5	1.2	.90	.40
5	.70	6.3	38	65	33	105	123	18	5.2	1.1	1.0	.40
6	.70	11	36	62	30	96	100	17	4.9	1.0	.90	.40
7	1.6	39	35	57	28	100	87	16	4.7	1.0	.80	.40
8	1.8	16	33	51	27	94	79	15	4.3	6.4	.70	.30
9	1.4	12	31	46	26	87	75	14	4.2	16	.80	.30
10	1.1	41	30	41	25	83	68	14	3.9	6.4	.70	.30
11	1.0	71	32	39	23	84	63	13	3.2	3.9	.80	.30
12	.90	118	31	46	23	114	57	12	2.9	3.1	.70	.30
13	2.4	73	61	58	23	102	50	11	2.7	2.7	.60	.30
14	4.2	62	49	96	22	91	45	11	2.5	2.3	.70	.30
15	4.1	35	41	174	22	82	41	11	2.8	2.0	.60	.30
16	3.9	57	36	178	24	78	36	10	3.0	1.8	.70	.30
17	3.9	115	53	291	23	74	33	10	3.0	1.8	.70	.30
18	3.9	114	49	234	24	68	31	10	2.9	1.7	.70	.30
19	3.9	65	44	214	61	65	30	9.8	3.5	1.5	.60	.30
20	3.9	51	40	165	46	61	28	9.4	3.1	1.6	.60	.30
21	3.9	41	54	134	39	57	26	9.2	2.8	1.6	.70	.30
22	5.7	34	60	110	38	52	25	8.9	2.7	1.4	.60	.30
23	11	29	53	93	35	48	26	8.3	2.7	1.4	.60	.30
24	5.7	27	48	82	32	44	27	8.2	2.6	1.3	.70	.30
25	5.1	26	44	74	30	44	27	7.5	2.5	1.5	.60	.30
26	4.8	25	51	68	36	42	28	7.2	2.5	1.5	.50	.30
27	4.5	23	101	63	36	63	28	6.9	2.6	1.4	.60	.30
28	4.4	22	126	59	41	134	27	6.5	2.5	1.4	.60	.30
29	4.4	22	234	55	-----	178	25	6.4	1.9	1.2	.50	.30
30	4.3	43	166	50	-----	363	23	6.2	1.6	1.1	.60	.30
31	4.2	-----	125	48	-----	245	-----	6.1	-----	1.1	.50	-----
TOTAL	100.20	1,194.7	1,955	2,994	920	3,380	2,128	364.6	104.0	74.8	22.00	9.70
MEAN	3.23	39.8	63.1	96.6	32.9	109	70.9	11.8	3.47	2.41	.71	.32
MAX	11	118	234	291	61	363	311	22	5.9	16	1.0	.40
MIN	.70	4.1	30	39	22	42	23	6.1	1.6	1.0	.50	.30
AC-FT	199	2,370	3,880	5,940	1,820	6,700	4,220	723	206	148	44	19

CAL YR 1973 TOTAL 12,150.40 MEAN 33.3 MAX 349 MIN .20 AC-FT 24,100
WTR YR 1974 TOTAL 13,247.00 MEAN 36.3 MAX 363 MIN .30 AC-FT 26,280

SACRAMENTO RIVER BASIN

11427000 NORTH FORK AMERICAN RIVER AT NORTH FORK DAM, CALIF.

LOCATION.--Lat 38°56'10", long 121°01'22", in SW¼NW¼ sec.31, T.13 N., R.9 E., Placer County, on left bank 50 ft (15 m) upstream from spillway of North Fork Dam, 2 mi (3 km) upstream from Middle Fork, and 4 mi (6 km) north-east of Auburn.

DRAINAGE AREA.--342 mi² (886 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 715.0 ft (217.93 m) above mean sea level (levels by Corps of Engineers).

AVERAGE DISCHARGE.--33 years, 841 ft³/s (23.82 m³/s), 609,300 acre-ft/yr (751 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 16,200 ft³/s (459 m³/s) Nov. 12, Jan. 17; maximum gage height, 6.07 ft (1.850 m) Jan. 17; minimum daily discharge, 52 ft³/s (1.47 m³/s) Sept. 8-30.

Period of record: Maximum discharge, 65,400 ft³/s (1,850 m³/s) Dec. 23, 1964 (gage height, 11.87 ft or 3.618 m), from rating curve extended above 24,000 ft³/s (680 m³/s) on basis of computed flow over spillway of dam at gage height 10.22 ft (3.115 m); no flow Aug. 27-30, Sept. 2-11, 1944, Oct. 5, 6, 1963, Nov. 7-10, 1965, caused by operation of valve in North Fork Dam.

REMARKS.--Records good except those for August and September, which are poor. Minor regulation by Lake Clementine, usable capacity, 12,800 acre-ft (15.8 hm³) formed by North Fork Dam. Storage in Big Reservoir and Lake Valley Reservoir, combined capacity, 10,300 acre-ft (12.7 hm³) above station. Lake Valley Canal (see sta 11426190) diverts from North Fork of North Fork American River into Bear River basin for power development in powerhouses of Pacific Gas and Electric Co. Combined storage and diversion have small effect on natural flow. Records of water temperatures for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1931: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	58	97	3,330	2,470	1,200	6,760	7,240	1,810	1,830	340	126	58
2	58	93	1,840	1,910	1,060	8,960	6,900	2,180	1,920	325	121	58
3	58	89	1,330	1,650	981	4,570	4,620	2,100	1,950	297	116	58
4	55	89	1,110	1,490	926	3,120	3,640	2,040	1,770	270	111	55
5	55	102	975	1,370	871	2,450	3,080	2,110	1,560	256	121	55
6	55	285	895	1,360	800	2,170	2,560	2,280	1,560	244	150	55
7	65	1,740	855	1,310	780	2,160	2,300	2,770	1,480	225	131	55
8	85	1,510	795	1,350	741	2,250	2,140	2,980	1,250	297	116	52
9	93	507	765	1,230	722	2,000	2,170	2,920	1,130	2,210	111	52
10	81	1,410	745	1,120	694	1,830	1,900	2,620	1,150	1,980	106	52
11	69	7,520	775	1,050	665	1,720	1,760	2,340	1,160	760	101	52
12	69	9,400	765	1,160	665	2,140	1,770	2,280	1,160	503	97	52
13	69	3,610	1,100	1,600	665	2,130	1,720	2,040	1,100	417	93	52
14	69	2,700	1,080	1,960	629	1,940	1,670	1,910	1,020	362	89	52
15	65	1,580	905	7,740	611	1,960	1,760	1,960	959	311	89	52
16	65	1,670	835	5,840	665	2,020	1,900	1,780	830	290	89	52
17	65	3,950	1,020	11,600	647	2,000	1,870	1,440	741	270	85	52
18	69	4,860	1,370	7,480	620	1,860	2,030	1,220	684	250	81	52
19	69	2,460	1,050	9,650	1,300	1,760	1,710	1,060	665	231	85	52
20	69	1,710	915	6,100	1,150	1,670	1,560	926	611	219	83	52
21	69	1,430	1,020	4,070	970	1,620	1,570	893	557	206	80	52
22	85	1,160	1,530	3,100	1,020	1,570	1,740	1,090	557	200	78	52
23	250	981	1,280	2,470	915	1,530	1,990	1,340	521	188	75	52
24	231	926	1,090	2,100	850	1,520	1,770	1,570	468	176	73	52
25	145	830	985	1,870	810	1,580	1,500	1,730	434	165	70	52
26	136	820	975	1,680	830	1,620	1,360	2,070	378	160	68	52
27	126	732	2,200	1,510	871	2,140	1,240	2,560	362	155	65	52
28	111	684	3,840	1,400	840	3,650	1,240	2,400	348	150	63	52
29	101	712	8,580	1,280	-----	5,520	1,300	2,200	340	145	60	52
30	97	762	5,460	1,200	-----	11,200	1,460	1,820	355	136	58	52
31	97	-----	3,350	1,130	-----	6,800	-----	1,760	-----	131	58	-----
TOTAL	2,789	54,419	52,765	91,250	23,498	94,220	69,470	60,199	28,850	11,869	2,849	1,590
MEAN	90.0	1,814	1,702	2,944	839	3,039	2,316	1,942	962	383	91.9	53.0
MAX	250	9,400	8,580	11,600	1,300	11,200	7,240	2,980	1,950	2,210	150	58
MIN	55	89	745	1,050	611	1,520	1,240	893	340	131	58	52
AC-FT	5,530	107,900	104,700	181,000	46,610	186,900	137,800	119,400	57,220	23,540	5,650	3,150
CAL YR 1973	TOTAL 399,943	MEAN 1,096	MAX 12,100	MIN 40	AC-FT 793,300							
WTR YR 1974	TOTAL 493,768	MEAN 1,353	MAX 11,600	MIN 52	AC-FT 979,400							

PEAK DISCHARGE (BASE, 4,300 FT ³ /S)							
DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-12	1000	6.06	16,200	1-17	0830	6.07	16,200
11-17	2200	4.22	6,840	3-1	2300	5.85	14,900
12-1	0800	3.81	5,320	3-30	0830	5.77	14,500
12-29	1430	5.56	13,300	4-1	2100	4.82	9,480

NOTE.--No gage-height record Aug. 19-29, Sept. 8-13, 15-30. Discharge estimated as natural flow during operation of valve in North Fork Dam.

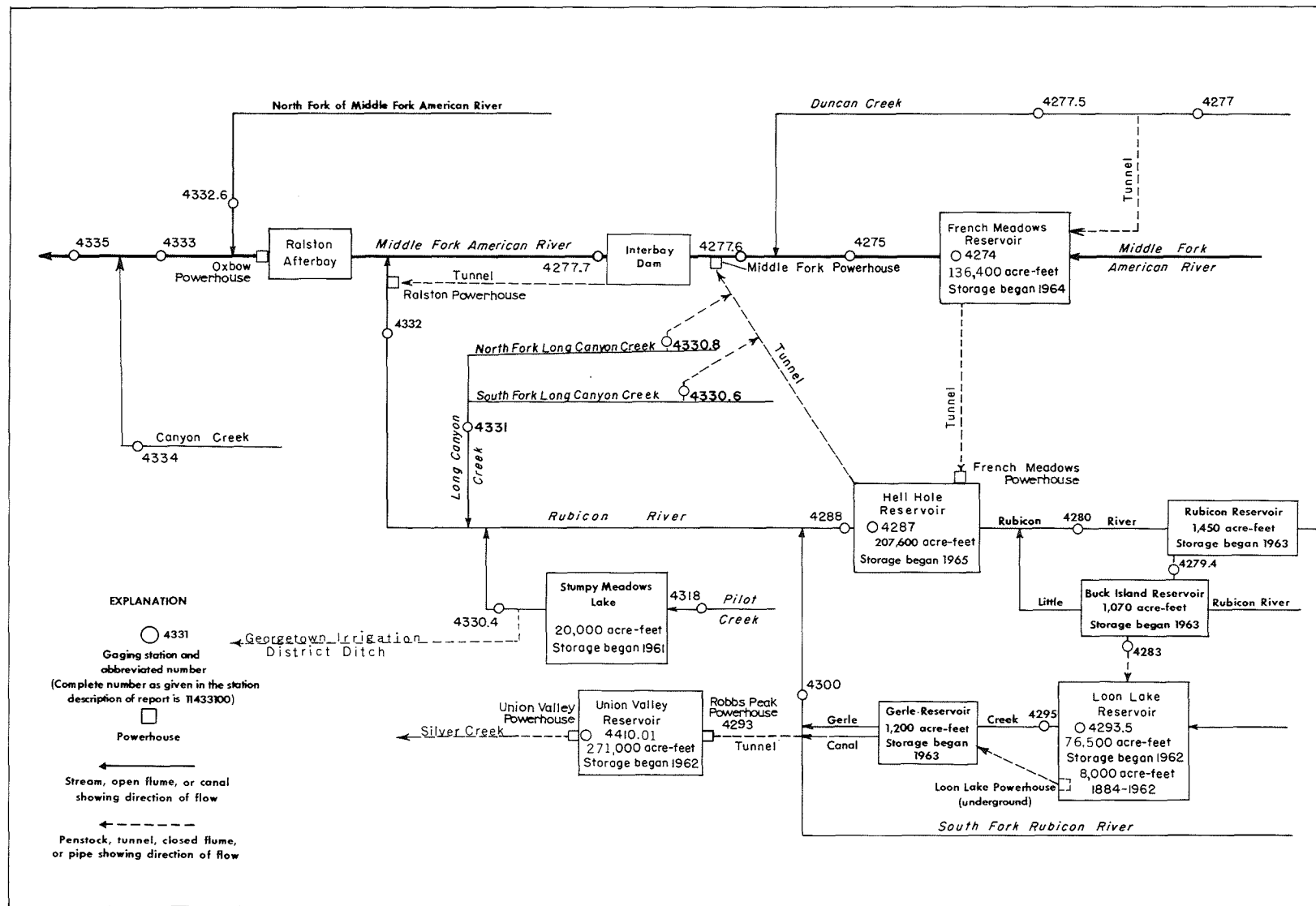


FIGURE 16.--Schematic diagram showing diversions and storage in Middle Fork American and Rubicon river basins.

SACRAMENTO RIVER BASIN

11427400 FRENCH MEADOWS RESERVOIR NEAR FORESTHILL, CALIF.

LOCATION.--Lat 39°06'32", long 120°25'49", in SW¼NE¼ sec.32, T.15 N., R.14 E., Placer County, Tahoe National Forest, on left bank 2.2 mi (3.5 km) upstream from dam on Middle Fork American River, 6.9 mi (11.1 km) upstream from Chipmunk Creek, and 21 mi (34 km) northeast of Foresthill.

DRAINAGE AREA.--47.0 mi² (121.7 km²).

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

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Placer County Water Agency).

EXTREMES.--Current year: Maximum contents, 136,272 acre-ft (168 hm³) June 2 (elevation, 5,262.96 ft or 1,604.150 m); minimum, 58,037 acre-ft (71.6 hm³) Jan. 13 (elevation, 5,195.28 ft or 1,583.521 m).

Period of record: Maximum contents, 137,700 acre-ft (170 hm³) May 19, 1966 (elevation, 5,263.9 ft or 1,604.44 m); minimum since reservoir first filled, 39,483 acre-ft (48.7 hm³) Mar. 15, 1973 (elevation, 5,173.20 ft or 1,576.79 m).

REMARKS.--Reservoir is formed by rockfill dam with earth core. Storage began Dec. 21, 1964. Usable capacity, 125,601 acre-ft (155 hm³) between elevations 5,125 ft (1,562.1 m), minimum operating level and 5,263 ft (1,604.2 m), top of radial gates. Dead storage, 10,804 acre-ft (13.3 hm³). Reservoir is used to store water for hydroelectric power. Up to 400 ft³/s (11.3 m³/s) is diverted in reservoir through tunnel from Duncan Creek. Water is released through tunnel to French Meadows powerplant and then into Hell Hole Reservoir on Rubicon River; releases began Dec. 13, 1965. Records, including extremes, represent total contents at 2400 hours. See schematic diagram of Middle Fork American and Rubicon River basins.

COOPERATION.--Records collected by Placer County Water Agency, under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

REVISIONS (WATER YEARS).--WRD Calif. 1966: 1965.

CAPACITY TABLE (ELEVATION, IN FEET, AND CONTENTS, IN ACRE-FEET)

5,125	10,804	5,200	62,447
5,130	13,075	5,230	94,074
5,150	23,743	5,270	146,502
5,170	37,085		

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	78,159	64,545	70,042	62,105	72,737	68,374	91,612	107,341	136,126	132,624	126,035	111,350
2	77,718	65,000	69,601	61,935	72,371	69,871	92,575	108,144	136,272	132,242	125,507	110,720
3	77,239	65,446	69,121	61,651	72,026	70,605	93,277	109,103	135,769	131,914	125,250	110,092
4	76,791	64,111	68,653	61,358	71,718	71,137	93,915	110,381	135,035	131,275	125,034	109,591
5	76,371	63,823	68,166	61,132	71,505	71,658	94,643	111,765	134,852	131,066	124,616	108,742
6	75,901	63,555	67,770	60,841	71,211	72,146	95,099	113,300	135,416	130,775	124,038	108,232
7	75,588	64,285	67,198	60,419	70,888	72,665	95,668	115,167	135,839	130,623	123,420	108,084
8	75,234	64,092	66,706	59,999	70,585	73,045	96,287	116,854	135,924	130,803	122,791	107,686
9	74,788	63,891	66,227	59,570	70,666	73,392	96,933	118,548	136,008	133,127	122,271	107,155
10	74,353	65,175	65,738	59,078	70,555	73,775	97,462	120,256	136,122	133,967	122,005	106,502
11	73,920	68,682	65,340	58,635	70,283	74,186	98,170	121,447	136,234	134,164	121,739	105,803
12	73,507	71,760	64,855	58,414	69,911	74,773	98,810	122,511	136,234	133,981	121,314	105,154
13	73,053	72,504	64,498	58,037	69,480	75,054	99,594	123,581	136,164	133,981	120,665	104,593
14	72,605	72,738	64,007	58,064	69,071	75,500	100,190	124,656	136,037	133,953	120,202	104,288
15	72,167	72,769	63,487	60,700	68,772	76,016	101,147	125,601	135,938	133,701	119,729	104,045
16	71,728	73,075	62,998	62,732	68,672	76,599	101,868	126,279	135,670	133,211	118,993	103,511
17	71,161	74,043	62,847	66,011	68,652	77,224	102,350	126,561	135,458	132,708	118,731	102,845
18	70,772	74,456	62,627	68,573	68,374	77,812	102,785	126,698	135,487	132,206	118,443	102,205
19	70,381	74,393	62,162	72,095	67,978	78,097	102,978	126,826	135,853	131,774	117,908	101,555
20	69,992	74,166	61,689	73,322	67,385	78,969	103,305	126,826	135,529	131,579	117,295	100,979
21	69,530	73,873	61,405	73,837	66,942	79,608	103,474	126,782	135,106	131,399	116,711	100,704
22	69,071	73,518	60,935	74,146	66,549	80,347	104,045	126,962	134,979	130,983	115,947	100,393
23	69,261	73,117	60,372	74,279	66,441	80,864	104,666	127,463	134,543	130,416	115,547	99,832
24	68,871	72,707	59,905	74,320	66,344	81,554	105,032	128,146	134,150	129,864	115,122	99,189
25	68,473	72,401	59,440	74,330	66,089	82,301	105,105	129,106	133,883	129,423	114,826	98,632
26	68,077	71,993	59,069	74,330	65,924	83,271	105,215	130,540	133,491	128,818	114,314	97,934
27	67,612	71,485	58,792	74,053	66,070	84,234	105,558	131,984	133,036	128,721	113,667	97,344
28	67,168	70,970	58,820	73,917	66,363	85,147	105,925	133,435	132,756	128,351	113,153	96,639
29	66,726	70,666	61,396	73,558	-----	87,244	106,158	133,953	132,754	127,859	112,362	95,936
30	66,305	70,273	61,926	73,270	-----	89,206	106,601	134,572	132,756	127,285	111,855	95,236
31	65,894	-----	62,143	73,025	-----	90,291	-----	135,701	-----	126,673	111,729	-----
MAX	78,159	74,456	70,042	74,330	72,737	90,291	106,601	135,701	136,272	134,164	126,035	111,350
MIN	65,894	63,555	58,792	58,037	65,924	68,374	91,612	107,341	132,754	126,673	111,729	95,236
(a)	5,203.58	5,208.0	5,199.68	5,210.71	5,204.06	5,226.70	5,240.49	5,262.52	5,260.44	5,255.98	5,244.60	5,231.00
(b)	-12,596	+4,379	-8,130	+10,882	-6,662	+23,928	+16,310	+29,100	-2,945	-6,083	-14,944	-16,493
CAL YR 1973	b	-485										
WTR YR 1974	b	+16,746										

a Elevation, in feet, at end of month.

b Change in contents, in acre-feet.

11427500 MIDDLE FORK AMERICAN RIVER AT FRENCH MEADOWS, CALIF.

LOCATION.--Lat 39°06'35", long 120°28'49", in SW¼NW¼ sec.36, T.15 N., R.13 E., Placer County, Tahoe National Forest, on left bank 0.6 mi (1.0 km) downstream from French Meadows Dam, 4.1 mi (6.6 km) upstream from Chipmunk Creek, and 14 mi (23 km) south of Cisco.

DRAINAGE AREA.--47.9 mi² (124.1 km²).

PERIOD OF RECORD.--October 1951 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 4,920 ft (1,500 m), from topographic map. Prior to Oct. 1, 1962, at site 0.8 mi (1.3 km) upstream at different datum.

AVERAGE DISCHARGE.--13 years (1951-64, prior to regulation by French Meadows Reservoir), 149 ft³/s (4.22 m³/s), 107,900 acre-ft/yr (133.0 hm³/yr); 10 years (1964-74), 26.2 ft³/s (0.742 m³/s), 18,980 acre-ft/yr (23.4 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 794 ft³/s (22.5 m³/s) June 2 (gage height, 6.89 ft or 2.100 m); minimum daily, 5.5 ft³/s (0.16 m³/s) Nov. 2-5, Aug. 31 to Sept. 18.

Period of record: Maximum discharge, 21,500 ft³/s (609 m³/s) Jan. 31, 1963 (gage height, 14.20 ft or 4.328 m), from rating curve extended above 1,100 ft³/s (31.2 m³/s) on basis of maximum flow at former site; minimum, 0.3 ft³/s (0.008 m³/s) Oct. 4, 5, 21-25, 1960, Oct. 5, 6, 1961. Maximum discharge since construction of French Meadows Dam in 1964, 1,310 ft³/s (37.1 m³/s) Apr. 30, 1965 (gage height, 7.68 ft or 2.341 m); minimum daily, 0.8 ft³/s (0.023 m³/s) Oct. 22-25, 1964.

REMARKS.--Flow regulated by French Meadows Reservoir 0.6 mi (1.0 km) upstream beginning in December 1964 (see sta 11427400). Diversions from Duncan Creek to French Meadows Reservoir since December 1964 and from French Meadows Reservoir to Hell Hole Reservoir since December 1965. See schematic diagram of Middle Fork American and Rubicon River basins.

COOPERATION.--Records collected by Placer County Water Agency, under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

REVISIONS (WATER YEARS).--WSP 1445: 1953-54. WSP 1931: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.7	5.7	8.3	11	9.0	33	28	13	206	7.1	6.3	5.5
2	5.7	5.5	7.9	9.8	8.7	18	21	13	402	7.1	6.2	5.5
3	5.7	5.5	7.9	9.1	8.5	13	16	12	750	7.1	6.2	5.5
4	5.8	5.5	7.8	8.7	8.4	12	15	12	712	7.1	6.2	5.5
5	5.9	5.5	7.6	8.5	8.2	11	14	12	429	7.1	6.4	5.5
6	5.8	7.0	7.6	8.3	8.1	11	13	12	92	7.1	6.3	5.5
7	5.9	11	7.6	7.9	8.1	11	13	13	53	7.1	6.2	5.5
8	6.0	6.1	7.6	7.9	8.1	10	13	14	141	8.7	6.2	5.5
9	5.8	6.1	7.6	7.7	8.1	9.7	13	13	137	14	6.2	5.5
10	5.7	10	7.6	7.6	8.1	9.7	12	13	137	8.7	6.2	5.5
11	5.7	18	7.6	7.4	8.1	9.7	13	12	143	8.0	6.2	5.5
12	5.7	23	7.6	8.6	8.2	13	13	11	185	7.7	6.2	5.5
13	5.7	13	7.6	8.8	8.2	12	13	11	215	7.5	5.9	5.5
14	5.7	9.7	7.3	14	8.1	12	13	10	168	7.3	5.9	5.5
15	5.7	9.1	7.3	23	8.1	13	14	10	128	7.3	5.9	5.5
16	5.7	12	7.3	25	8.4	14	13	10	126	7.3	5.8	5.5
17	5.7	27	11	39	8.1	14	14	9.8	53	7.3	5.7	5.5
18	5.7	17	9.0	33	8.1	14	14	9.7	6.8	7.3	5.7	5.5
19	5.7	11	7.9	43	8.4	13	13	9.6	6.8	7.0	5.7	6.0
20	5.7	9.7	7.6	23	8.1	13	12	9.3	6.8	6.6	5.7	5.9
21	5.7	8.9	7.6	16	8.1	13	12	9.2	6.8	6.6	5.7	5.9
22	6.1	8.3	7.6	14	8.1	13	13	9.0	6.8	6.6	5.7	5.9
23	6.6	8.0	7.3	12	7.9	14	13	8.9	6.8	6.6	5.7	5.9
24	5.9	7.8	7.3	12	7.9	15	12	8.7	6.6	6.6	5.7	5.9
25	5.9	7.6	7.3	11	7.9	16	11	8.6	6.6	6.6	5.7	5.7
26	5.9	7.6	7.9	10	8.1	19	11	8.4	6.6	6.6	5.7	5.7
27	6.1	7.4	14	10	8.1	23	11	8.4	6.6	6.6	5.7	5.7
28	5.9	7.3	18	9.7	8.1	23	11	8.4	6.6	6.4	5.7	5.7
29	5.7	7.3	41	9.3	-----	37	11	7.9	6.6	6.4	5.7	5.7
30	5.7	7.5	17	9.0	-----	38	12	7.9	6.6	6.4	5.7	5.7
31	5.7	-----	13	9.0	-----	20	-----	70	-----	6.4	5.5	-----
TOTAL	180.2	295.1	305.7	433.3	229.3	497.1	407	384.8	4,164.0	226.2	183.6	168.7
MEAN	5.81	9.84	9.86	14.0	8.19	16.0	13.6	12.4	139	7.30	5.92	5.62
MAX	6.6	27	41	43	9.0	38	28	70	750	14	6.4	6.0
MIN	5.7	5.5	7.3	7.4	7.9	9.7	11	7.9	6.6	6.4	5.5	5.5
AC-FT	357	585	606	859	455	986	807	763	8,260	449	364	335
(a)	12,340	16,030	21,140	21,140	13,200	0	8,660	21,630	20,790	14,780	15,350	16,220
CAL YR 1973	TOTAL 3,015.2	MEAN 8.26	MAX 41	MIN 4.3	AC-FT 5,980							
WTR YR 1974	TOTAL 7,475.0	MEAN 20.5	MAX 750	MIN 5.5	AC-FT 14,830							

a Diversion, in acre-feet, from French Meadows Reservoir to Hell Hole Reservoir through French Meadows powerplant.

SACRAMENTO RIVER BASIN

11427700 DUNCAN CREEK NEAR FRENCH MEADOWS, CALIF.

LOCATION.--Lat 39°08'09", long 120°28'39", in NE¼NW¼ sec.24, T.15 N., R.13 E., Placer County, Tahoe National Forest, on left bank 0.2 mi (0.3 km) upstream from diversion dam, 0.5 mi (0.8 km) downstream from Little Duncan Creek, 2 mi (3 km) northwest of French Meadows, and 20 mi (32 km) northeast of Foresthill.

DRAINAGE AREA.--9.94 mi² (25.74 km²).

PERIOD OF RECORD.--August 1960 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5,270 ft (1,606 m), from topographic map. Prior to Sept. 3, 1965, at site 150 ft (46 m) upstream at datum 9.56 ft (2.914 m) higher.

AVERAGE DISCHARGE.--14 years, 37.5 ft³/s (1.06 m³/s), 27,170 acre-ft/yr (33.5 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 690 ft³/s (19.5 m³/s) Jan. 17 (gage height, 8.16 ft or 2.487 m); minimum daily, 0.97 ft³/s (0.027 m³/s) Oct. 2, 6.
Period of record: Maximum discharge, 3,650 ft³/s (103 m³/s) Dec. 22, 1964 (gage height, 10.6 ft or 3.23 m, from floodmarks), from rating curve extended above 400 ft³/s (11.3 m³/s) on basis of computation of flow over diversion dam; minimum daily, 0.2 ft³/s (0.006 m³/s) Sept. 23-25, 1964.

REMARKS.--No storage or diversion above station. See schematic diagram of Middle Fork American and Rubicon River basins.

COOPERATION.--Records collected by the Placer County Water Agency, under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

REVISIONS (WATER YEARS).--WRD Calif. 1965: 1963.

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.2	3.2	24	67	38	164	100	121	190	11	4.4	1.3
2	.97	3.0	25	62	35	110	86	132	198	10	4.1	1.2
3	1.1	2.8	24	57	34	74	72	136	191	9.3	3.9	1.3
4	1.1	2.4	22	52	33	62	65	146	171	8.4	4.0	1.3
5	1.0	2.7	21	47	30	56	63	162	159	7.7	5.2	1.3
6	.97	35	21	38	30	52	57	190	154	7.1	4.0	1.2
7	2.0	146	21	38	28	47	56	231	137	6.7	3.6	1.2
8	6.4	41	21	36	28	41	57	248	116	30	3.4	1.2
9	3.5	33	21	33	27	39	56	240	106	184	3.1	1.2
10	2.2	174	21	31	27	38	50	219	100	78	2.9	1.2
11	1.7	378	22	30	27	34	52	208	97	45	2.7	1.2
12	1.6	352	20	42	26	34	57	196	89	33	2.6	1.2
13	1.6	129	20	53	26	34	62	181	79	27	2.6	1.2
14	1.5	79	20	110	23	37	71	175	72	22	2.4	1.2
15	1.4	58	19	278	22	43	86	169	62	19	2.3	1.2
16	1.4	54	19	312	23	50	87	150	54	17	2.3	1.2
17	1.4	119	44	408	24	52	101	124	47	15	2.1	1.2
18	1.2	90	36	391	22	51	87	102	41	13	2.1	1.2
19	1.2	60	32	421	23	52	78	84	38	12	2.0	1.1
20	1.3	50	29	238	22	53	81	74	33	11	2.0	.99
21	1.4	43	28	164	21	55	90	80	30	9.8	1.9	.99
22	4.3	37	26	123	20	54	107	98	27	9.0	1.8	.99
23	14	33	25	98	22	56	95	123	25	8.2	1.7	.99
24	7.1	30	24	82	20	58	78	146	22	7.7	1.6	.99
25	7.5	28	25	71	21	60	67	179	19	7.1	1.6	.99
26	6.5	26	26	63	20	73	58	234	17	6.7	1.5	.99
27	5.8	25	35	56	19	77	56	257	16	6.1	1.4	.99
28	5.1	27	63	51	19	69	58	256	14	5.7	1.4	.99
29	4.3	29	297	47	-----	170	65	214	13	5.3	1.4	.99
30	3.5	24	131	43	-----	162	89	188	12	4.8	1.4	.99
31	3.4	-----	82	41	-----	114	-----	182	-----	4.6	1.4	-----
TOTAL	97.64	2,114.1	1,244	3,583	710	2,071	2,187	5,245	2,329	641.2	78.8	33.99
MEAN	3.15	70.5	40.1	116	25.4	66.8	72.9	169	77.6	20.7	2.54	1.13
MAX	14	378	297	421	38	170	107	257	198	184	5.2	1.3
MIN	.97	2.4	19	30	19	34	50	74	12	4.6	1.4	.99
AC-FT	194	4,190	2,470	7,110	1,410	4,110	4,340	10,400	4,620	1,270	156	67
CAL YR 1973	TOTAL	16,422.24	MEAN	45.0	MAX	378	MIN	.54	AC-FT	32,570		
WTR YR 1974	TOTAL	20,334.73	MEAN	55.7	MAX	421	MIN	.97	AC-FT	40,330		

PEAK DISCHARGE (BASE, 250 FT ³ /S)							
DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-12	0530	8.16	678	3-1	1530	7.26	278
12-29	1030	7.77	479	5-8	1530	7.31	294
1-15	0400	7.44	340	5-26	1845	7.27	297
1-17	0030	8.16	690	7-9	1600	7.25	274
1-18	1700	7.90	544				

429

LOCATION.--Lat 39°07'59", long 120°28'58", in NE¼ sec.23, T.15 N., R.13 E., Placer County, Tahoe National Forest, on right bank 800 ft (244 m) downstream from unnamed right bank tributary, 1,000 ft (305 m) downstream from Duncan Creek diversion dam, and 20 mi (32 km) northeast of Foresthill.

COOPERATION.--Records collected by Placer County Water Agency, under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.80	2.2	4.0	5.7	2.6	17	7.4	5.0	53	2.8	4.2	1.1
2	.80	2.1	2.8	4.7	2.4	8.4	6.3	5.0	75	2.7	3.9	1.2
3	.77	1.9	2.7	4.0	2.3	5.4	5.1	4.8	64	4.8	3.7	1.2
4	.77	1.7	2.6	3.6	2.3	4.4	4.6	4.6	40	6.3	3.8	1.1
5	.77	1.6	2.5	3.3	2.2	4.1	4.4	4.5	5.2	6.1	4.5	1.1
6	.77	10	2.4	3.1	2.1	3.8	4.2	4.6	4.4	5.9	3.8	1.1
7	1.9	85	2.4	2.8	2.1	3.5	4.2	19	1.6	5.8	3.5	1.1
8	5.5	12	2.5	2.6	2.1	3.2	4.6	37	1.1	8.3	3.3	1.1
9	2.7	7.9	2.9	2.5	2.2	3.1	4.6	40	.99	34	3.1	1.1
10	1.6	80	3.5	2.3	2.4	3.0	4.2	27	.93	7.9	3.0	1.1
11	1.3	260	3.6	2.2	2.4	2.8	4.1	20	5.4	6.2	2.8	1.1
12	1.2	215	3.2	3.0	2.4	3.1	4.4	12	9.9	3.8	2.7	1.0
13	1.1	11	3.2	3.5	2.2	3.0	4.7	5.5	9.7	3.4	2.6	1.1
14	1.1	6.5	2.7	7.2	2.1	3.3	5.2	2.7	9.6	3.7	2.5	1.1
15	.99	5.0	2.7	69	2.0	4.0	6.7	2.7	9.4	3.4	2.3	1.1
16	.93	4.9	2.8	107	2.1	4.8	6.7	2.5	9.4	3.2	2.3	1.0
17	.91	9.0	5.6	320	1.9	5.1	7.0	2.3	9.3	3.1	2.2	1.1
18	.91	8.0	5.5	270	1.9	5.0	6.3	2.1	8.8	2.9	2.1	1.0
19	.86	6.0	4.9	320	1.9	5.3	4.9	2.0	9.1	2.9	2.0	1.0
20	1.1	5.1	4.5	206	1.7	5.6	4.7	1.9	8.1	2.7	2.0	1.0
21	1.1	4.4	4.4	105	1.7	5.7	4.9	1.8	6.0	2.7	1.8	.96
22	2.9	3.9	4.1	47	1.5	5.6	5.5	1.9	4.8	4.7	1.7	.83
23	9.3	3.5	3.6	18	1.5	5.5	5.4	1.9	4.1	6.5	1.7	.83
24	5.5	3.2	3.4	6.3	1.6	5.9	4.2	1.9	3.6	6.3	1.6	.83
25	6.1	2.8	3.6	3.9	1.7	5.9	3.6	1.9	3.4	6.1	1.5	.83
26	5.4	2.5	3.6	3.6	1.8	6.2	3.0	26	3.3	5.8	1.4	.83
27	4.7	2.5	5.3	3.3	1.7	6.3	2.8	44	3.1	5.4	1.3	.83
28	3.8	2.7	7.4	3.1	1.7	5.7	2.9	57	2.9	5.1	1.3	.83
29	3.0	3.2	179	3.0	-----	11	3.4	36	2.8	4.8	1.2	.83
30	2.4	3.3	83	2.9	-----	14	4.0	24	2.8	4.5	1.2	.83
31	2.5	-----	15	2.8	-----	8.0	-----	34	-----	4.3	1.2	-----
TOTAL	73.48	766.9	379.4	1,541.4	56.5	177.7	144.0	435.6	371.72	176.1	76.2	30.13
MEAN	2.37	25.6	12.2	49.7	2.02	5.73	4.80	14.1	12.4	5.68	2.46	1.00
MAX	9.3	260	179	320	2.6	17	7.4	57	75	34	4.5	1.2
MIN	.77	1.6	2.4	2.2	1.5	2.8	2.8	1.8	.93	2.7	1.2	.83
AC-FT	146	1,520	753	3,060	112	352	286	864	737	349	151	60
CAL YR 1973	TOTAL	4,898.71	MEAN	13.4	MAX	260	MIN	.60	AC-FT	9,720		
WTR YR 1974	TOTAL	4,229.13	MEAN	11.6	MAX	320	MIN	.77	AC-FT	8,390		

SACRAMENTO RIVER BASIN

11427760 MIDDLE FORK AMERICAN RIVER ABOVE MIDDLE FORK POWERHOUSE, NEAR FORESTHILL, CALIF.

LOCATION.--Lat 39°01'31", long 120°35'40", in NW¼NW¼ sec.36, T.14 N., R.12 E., Placer County, Tahoe National Forest, on right bank 300 ft (91 m) upstream from Middle Fork powerhouse, 3.7 mi (6.0 km) upstream from Big Mosquito Creek, and 11 mi (18 km) east of Foresthill.

DRAINAGE AREA.--87.8 mi² (227.4 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 2,540 ft (774 m), from topographic map.

AVERAGE DISCHARGE.--9 years, 106 ft³/s (3.00 m³/s), 76,800 acre-ft/yr (94.7 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,110 ft³/s (59.8 m³/s) Jan. 17 (gage height, 6.04 ft or 1.841 m); minimum daily, 15 ft³/s (0.42 m³/s) Oct. 1, 2, 18, 19.
Period of record: Maximum discharge, 3,900 ft³/s (110 m³/s) Jan. 21, 1970 (gage height, 8.00 ft or 2.438 m); minimum daily, 12 ft³/s (0.340 m³/s) Aug. 31, 1966.

REMARKS.--Records good. Flow regulated by French Meadows Reservoir (see sta 11427400). See schematic diagram of Middle Fork American and Rubicon River basins.

COOPERATION.--Records collected by Placer County Water Agency, under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

REVISIONS (WATER YEARS).--WRD Calif. 1968: 1967(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	17	134	257	163	497	775	197	308	34	29	20
2	15	17	90	206	147	528	729	206	471	33	28	20
3	17	16	79	178	138	338	549	204	917	32	28	19
4	16	16	74	160	131	279	443	202	873	35	27	19
5	16	22	70	149	125	253	383	202	569	35	29	19
6	16	47	67	138	118	236	342	206	201	35	28	19
7	19	172	66	123	113	232	314	217	72	34	27	19
8	28	77	64	115	108	218	297	240	180	57	26	19
9	25	35	63	107	105	205	291	242	171	181	25	19
10	19	125	64	100	102	197	262	219	168	81	25	19
11	18	528	70	95	99	191	250	197	170	54	25	19
12	17	671	67	107	100	239	244	183	220	45	24	18
13	17	177	79	115	96	232	236	163	260	40	24	18
14	17	128	71	167	93	227	235	148	228	38	23	18
15	16	92	67	504	89	242	244	138	165	37	23	18
16	16	109	66	492	93	258	246	130	162	35	23	18
17	16	287	99	1,520	87	261	247	122	134	34	23	17
18	15	288	107	1,120	90	253	251	115	51	33	23	17
19	15	160	92	1,490	116	245	227	108	51	32	22	17
20	16	127	85	974	96	237	214	101	47	32	22	17
21	16	107	96	645	92	231	209	96	45	31	22	17
22	20	91	98	464	90	225	214	93	44	31	21	16
23	56	80	88	361	85	219	225	91	43	34	21	16
24	30	77	82	302	84	217	214	89	42	34	21	16
25	25	70	82	265	84	224	192	87	41	34	21	16
26	24	68	86	238	90	243	182	91	40	33	21	16
27	22	61	197	215	92	303	172	121	39	32	21	17
28	20	59	275	198	96	359	171	135	38	32	20	17
29	19	60	955	184	-----	560	175	123	37	31	20	16
30	18	65	579	171	-----	892	181	99	36	30	20	16
31	17	-----	344	164	-----	641	-----	136	-----	29	20	-----
TOTAL	616	3,849	4,456	11,324	2,922	9,482	8,714	4,701	5,823	1,288	732	532
MEAN	19.9	128	144	365	104	306	290	152	194	41.5	23.6	17.7
MAX	56	671	955	1,520	163	892	775	242	917	181	29	20
MIN	15	16	63	95	84	191	171	87	36	29	20	16
AC-FT	1,220	7,630	8,840	22,460	5,800	18,810	17,280	9,320	11,550	2,550	1,450	1,060
CAL YR 1973	TOTAL 41,656		MEAN 114	MAX 1,020	MIN 14	AC-FT 82,620						
WTR YR 1974	TOTAL 54,439		MEAN 149	MAX 1,520	MIN 15	AC-FT 108,000						

11427770 MIDDLE FORK AMERICAN RIVER BELOW INTERBAY DAM, NEAR FORESTHILL, CALIF.

LOCATION.--Lat 39°01'35", long 120°36'09", in SW¼SE¼ sec.26, T.14 N., R.12 E., Placer County, Tahoe National Forest, on right bank 500 ft (152 m) downstream from Interbay Dam, 3.3 mi (5.3 km) upstream from Big Mosquito Creek, and 10.6 mi (17.1 km) east of Foresthill.

DRAINAGE AREA.--89.1 mi² (230.8 km²).

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

GAGE.--Water-stage recorder and V-notch sharp-crested weir. Altitude of gage is 2,470 ft (753 m), from topographic map.

AVERAGE DISCHARGE.--9 years, 54.1 ft³/s (1.532 m³/s), 39,200 acre-ft/yr (48.3 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,640 ft³/s (46.4 m³/s) Jan. 18 (gage height, 4.68 ft or 1.426 m); minimum daily, 10 ft³/s (0.28 m³/s) June 28.

Period of record: Maximum discharge, 3,770 ft³/s (107 m³/s) Jan. 21, 1970 (gage height, 6.95 ft or 2.118 m); minimum daily, 1.0 ft³/s (0.028 m³/s) Oct. 25-30, 1966, Jan. 19, 1967.

REMARKS.--Flow regulated by French Meadows Reservoir (see sta 11427400) and after Aug. 22, 1966, by Interbay Reservoir, capacity, 130 acre-ft (160,000 m³) between normal operating limits of 2,502.0 ft (762.61 m) and 2,526.0 ft (769.92 m). Water is diverted from Hell Hole Reservoir through tunnel to Middle Fork powerplant and re-diverted to Ralston powerplant. See schematic diagram of Middle Fork American and Rubicon River basins.

COOPERATION.--Records collected by Placer County Water Agency, under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	20	23	23	19	112	121	21	20	19	22	20
2	20	20	23	23	19	22	24	46	20	19	22	20
3	20	20	23	24	19	21	21	32	596	19	22	20
4	21	20	23	22	19	22	21	20	929	19	22	20
5	21	20	23	22	19	20	20	20	617	19	22	20
6	21	20	23	22	19	20	20	23	242	19	22	20
7	21	20	23	22	19	20	20	20	99	20	22	20
8	20	20	23	22	19	20	20	20	251	20	22	20
9	20	20	23	23	19	20	20	20	141	116	22	20
10	20	20	23	24	19	20	20	20	43	123	22	20
11	20	20	23	23	19	20	20	20	19	43	22	20
12	20	104	23	23	19	20	20	20	176	20	22	20
13	20	21	23	23	19	20	20	20	340	20	22	20
14	20	21	23	34	19	20	20	20	304	20	22	20
15	20	21	24	23	19	20	20	20	232	20	22	20
16	20	21	24	23	19	20	20	20	123	20	21	20
17	20	20	24	753	19	20	21	20	22	20	21	20
18	20	23	24	378	19	20	21	20	20	20	21	20
19	20	23	24	689	19	20	21	20	19	20	21	20
20	20	22	24	80	19	20	21	20	19	28	21	20
21	20	22	57	21	19	20	21	20	19	20	21	20
22	20	22	31	19	19	20	21	20	19	27	21	20
23	21	22	24	19	19	20	22	20	19	21	21	20
24	20	22	30	20	19	20	21	20	19	20	20	20
25	20	22	28	20	19	20	21	20	19	20	20	20
26	20	23	24	19	19	20	103	20	19	21	20	20
27	20	23	33	19	19	20	20	20	16	21	20	20
28	20	23	24	19	19	20	20	20	10	21	20	20
29	20	23	216	19	-----	20	21	20	19	21	20	20
30	20	23	90	19	-----	79	20	20	19	22	20	20
31	20	-----	24	19	-----	21	-----	20	-----	22	20	-----
TOTAL	625	721	1,047	2,489	532	777	801	662	4,410	860	658	600
MEAN	20.2	24.0	33.8	80.3	19.0	25.1	26.7	21.4	147	27.7	21.2	20.0
MAX	21	104	216	753	19	112	121	46	929	123	22	20
MIN	20	20	23	19	19	20	20	20	10	19	20	20
AC-FT	1,240	1,430	2,080	4,940	1,060	1,540	1,590	1,310	8,750	1,710	1,310	1,190
(a)	33,040	42,430	8,080	56,550	51,580	46,160	50,130	57,010	49,920	37,540	31,180	38,440

CAL YR 1973 TOTAL 10,299 MEAN 28.2 MAX 386 MIN 18 AC-FT 20,430
WTR YR 1974 TOTAL 14,182 MEAN 38.9 MAX 929 MIN 10 AC-FT 28,130

a Diversion, in acre-feet, to Ralston powerplant.

SACRAMENTO RIVER BASIN

11427940 RUBICON-ROCKBOUND TUNNEL NEAR MEEKS BAY, CALIF.

LOCATION.--Lat 38°59'20", long 120°13'31", in NE¼SE¼ sec.8, T.13 N., R.16 E., El Dorado County, Eldorado National Forest, on right bank at tunnel intake 100 ft (30 m) upstream from diversion dam on Rubicon River, 2.5 mi (4.0 km) upstream from Rubicon Springs, and 6.5 mi (10.5 km) southwest of Meeks Bay.

PERIOD OF RECORD.--December 1963 to current year.

GAGE.--Water-stage recorder. Datum of gage is 6,533.23 ft (1,991.328 m) above mean sea level (levels by Sacramento Municipal Utility District). Auxiliary water-stage recorder since Aug. 26, 1966, 300 ft (91 m) downstream from tunnel outlet at different datum.

AVERAGE DISCHARGE.--11 years, 110 ft³/s (3.115 m³/s), 79,700 acre-ft/yr (98.3 hm³/yr).

EXTREMES.--Period of record: Maximum daily discharge, 1,120 ft³/s (31.7 m³/s) Dec. 23, 1964; no flow at times in most years.

REMARKS.--Records good. Tunnel diverts water from Rubicon River to Rockbound Lake. See schematic diagram of Middle Fork American and Rubicon River basins.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	26	44	103	37	71	44	297	628	330	28	.55
2	0	24	47	65	35	113	42	433	656	290	27	.55
3	0	19	50	51	33	62	35	424	688	234	26	.55
4	0	14	44	46	33	43	32	415	664	221	28	.55
5	0	12	40	41	31	41	40	427	636	204	44	.55
6	0	125	38	39	32	40	38	484	700	185	33	.55
7	0	685	39	38	30	32	41	576	688	168	23	.55
8	0	546	39	35	28	28	50	680	526	202	17	.55
9	0	242	39	32	28	26	54	752	523	920	12	.55
10	.47	936	39	30	28	26	43	704	600	614	10	.65
11	2.2	1,020	40	28	28	26	44	612	640	242	8.1	.75
12	5.1	895	39	28	28	26	71	562	680	158	6.3	.55
13	8.5	425	39	28	26	26	85	478	652	139	4.8	.55
14	14	197	38	52	26	32	105	460	640	131	3.4	.47
15	14	141	36	832	24	47	143	481	586	125	2.4	.39
16	11	109	36	737	26	58	185	376	488	121	1.8	.39
17	7.7	103	55	518	24	67	200	251	430	106	1.2	.31
18	6.0	103	70	410	23	59	231	165	400	95	.95	.31
19	5.1	85	48	617	25	58	152	122	327	91	.85	.24
20	5.1	73	39	273	26	62	140	103	246	88	.85	.24
21	8.1	67	35	150	23	68	168	138	302	87	.85	.17
22	11	62	36	100	23	71	238	254	362	79	.85	.17
23	63	54	34	81	22	80	268	406	370	75	.85	.11
24	52	52	31	68	22	87	163	534	340	71	.85	.11
25	47	50	31	59	24	100	105	612	304	67	.85	.11
26	41	48	31	51	24	80	76	736	268	36	.85	.11
27	40	45	33	47	23	74	61	844	234	.75	.75	.11
28	40	46	44	45	22	56	75	848	242	.85	.75	.11
29	34	49	370	41	-----	81	105	720	304	2.2	.65	.05
30	25	48	456	39	-----	89	159	554	330	20	.65	6.8
31	26	-----	194	38	-----	55	-----	576	-----	28	.65	-----
TOTAL	466.27	6,301	2,154	4,722	754	1,784	3,193	15,024	14,454	5,130.80	287.20	17.65
MEAN	15.0	210	69.5	152	26.9	57.5	106	485	482	166	9.26	.59
MAX	63	1,020	456	832	37	113	268	848	700	920	44	6.8
MIN	0	12	31	28	22	26	32	103	234	.75	.65	.05
AC-FT	925	12,500	4,270	9,370	1,500	3,540	6,330	29,800	28,670	10,180	570	35
CAL YR 1973	TOTAL 41,832.44		MEAN 115	MAX 1,020	MIN 0	AC-FT 82,970						
WTR YR 1974	TOTAL 54,287.92		MEAN 149	MAX 1,020	MIN 0	AC-FT 107,700						

11428000 RUBICON RIVER AT RUBICON SPRINGS, NEAR MEEKS BAY, CALIF.

LOCATION.--Lat 39°01'10", long 120°14'46", in SW¼NE¼ sec.31, T.14 N., R.16 E., El Dorado County, Eldorado National Forest, on right bank 200 ft (61 m) downstream from Rubicon Springs, 0.7 mi (1.1 km) upstream from Miller Creek, and 7 mi (11 km) west of Meeks Bay.

DRAINAGE AREA.--31.4 mi² (81.3 km²).

PERIOD OF RECORD.--February 1910 to March 1914 (published as "at Rubicon Springs"), October 1956 to current year.

GAGE.--Water-stage recorder. Datum of gage is 6,052.97 ft (1,844.945 m) above mean sea level. Feb. 1, 1910, to Mar. 31, 1914, nonrecording gage or water-stage recorder at site 0.4 mi (0.6 km) downstream at different datum.

AVERAGE DISCHARGE (adjusted for diversion to Rubicon-Rockbound tunnel).--21 years (1910-13, 1956-74), 123 ft³/s (3.48 m³/s), 89,110 acre-ft/yr (110 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 3,750 ft³/s (106 m³/s) Nov. 12 (gage height, 8.99 ft or 2.740 m); minimum daily, 2.4 ft³/s (0.07 m³/s) Oct. 6.

Period of record: Maximum discharge, 11,500 ft³/s (326 m³/s) Feb. 1, 1963 (gage height, 14.28 ft or 4.353 m), from rating curve extended above 1,200 ft³/s (34.0 m³/s) on basis of slope-conveyance computation of maximum flow; no flow at times in some years prior to construction of Rubicon diversion dam in 1963.

Flood of December 1955 reached a stage of 13.0 ft (3.96 m), from floodmarks, present site and datum (discharge, 9,270 ft³/s or 263 m³/s).

REMARKS.--Records poor. Low summer flow, beginning in 1950, augmented by release from streamflow maintenance dams on Lakes Clyd, Lois, Middle Velma, and Schmidell, total controlled capacity, 555 acre-ft (684,000 m³). Flow below 1,200 ft³/s (34.0 m³/s) controlled by Rubicon diversion dam 5.5 mi (8.8 km) upstream. Diversion to Rubicon-Rockbound tunnel began Dec. 26, 1963 (see sta 11427940). See schematic diagram of Middle Fork American and Rubicon River basins.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.0	3.2	10	22	14	129	32	84	25	4.3	6.5	6.6
2	3.0	3.2	11	17	13	54	31	83	23	4.3	6.5	6.6
3	3.0	3.0	14	15	12	27	20	75	21	4.2	8.1	6.6
4	3.0	3.0	12	14	13	19	19	75	19	4.1	9.3	6.5
5	3.0	3.7	11	14	12	18	24	75	17	4.0	7.9	6.2
6	2.4	47	12	13	11	17	23	83	16	3.9	7.0	6.2
7	3.0	157	13	12	11	16	27	94	15	3.9	7.0	6.2
8	4.1	33	13	11	11	14	31	89	12	9.4	7.0	6.2
9	2.9	16	13	11	11	14	29	86	11	1,190	6.9	6.2
10	2.6	206	13	11	11	16	19	72	11	58	6.9	6.2
11	2.6	224	13	11	11	15	23	66	10	19	6.6	6.4
12	2.6	170	12	12	11	18	36	59	9.7	12	6.7	6.5
13	2.6	80	12	13	11	20	35	52	9.0	10	6.7	6.6
14	2.6	40	11	22	10	26	43	52	8.3	9.0	6.7	6.6
15	2.6	30	11	318	10	34	57	48	7.7	8.4	6.7	7.0
16	2.6	24	12	155	11	39	55	37	7.2	7.5	6.5	7.4
17	2.6	23	35	185	10	38	63	26	6.8	7.3	6.7	7.4
18	2.6	22	26	157	10	33	53	18	6.5	7.0	6.5	7.4
19	2.6	19	16	162	10	33	33	15	6.4	6.7	6.4	7.4
20	3.0	16	14	62	9.9	34	41	14	6.1	6.5	6.4	7.3
21	2.7	15	14	34	9.8	38	53	18	5.7	6.5	6.3	7.3
22	5.1	13	14	24	9.6	39	68	30	5.5	6.2	6.2	7.3
23	17	12	12	21	9.5	40	54	40	5.3	6.2	6.2	7.3
24	8.4	11	11	19	10	46	31	44	5.1	6.0	6.2	7.2
25	7.0	11	12	18	11	42	22	44	4.9	6.0	6.4	7.6
26	6.0	11	13	17	11	36	19	53	4.6	5.8	6.2	7.7
27	5.3	10	15	15	10	38	18	79	4.5	5.8	6.7	7.7
28	4.3	11	25	15	10	28	26	71	4.3	6.2	6.7	7.7
29	3.7	10	241	14	-----	90	39	32	4.3	6.5	6.7	7.8
30	3.3	10	69	14	-----	60	57	26	4.3	6.7	6.7	7.8
31	3.3	-----	34	14	-----	29	-----	26	-----	6.7	6.7	-----
TOTAL	122.5	1,237.1	744	1,442	303.8	1,100	1,081	1,666	296.2	1,448.1	210.0	208.9
MEAN	3.95	41.2	24.0	46.5	10.9	35.5	36.0	53.7	9.87	46.7	6.77	6.96
MAX	17	224	241	318	14	129	68	94	25	1,190	9.3	7.8
MIN	2.4	3.0	10	11	9.5	14	18	14	4.3	3.9	6.2	6.2
AC-FT	243	2,450	1,480	2,860	603	2,180	2,140	3,300	588	2,870	417	414
MEAN a	1,170	14,950	5,750	12,230	2,100	5,720	8,470	33,100	29,260	13,050	987	449
AC-FT a	19.0	251	93.5	199	37.8	93.0	142	538	492	212	16.1	7.55
CAL YR 1973	TOTAL 7,555.4	MEAN 20.7	MAX 241	MIN 2.4	AC-FT 14,990	MEAN a 135	AC-FT a 97,980					
WTR YR 1974	TOTAL 9,859.6	MEAN 27.0	MAX 1,190	MIN 2.4	AC-FT 19,560	MEAN a 176	AC-FT a 127,240					

a Adjusted for diversion to Rubicon-Rockbound tunnel.

NOTE.--No gage-height record Nov. 8 to Dec. 6.

SACRAMENTO RIVER BASIN

11428300 BUCK-LOON TUNNEL NEAR MEEKS BAY, CALIF.

LOCATION.--Lat 39°00'15", long 120°15'20", in SE¼NW¼ sec.6, T.13 N., R.16 E., El Dorado County, Eldorado National Forest, on right bank at tunnel intake near left abutment of diversion dam, 7.6 mi (12.2 km) southwest of Meeks Bay.

PERIOD OF RECORD.--November 1963 to current year.

GAGE.--Water-stage recorder. Datum of gage is 6,425.0 ft (1,958.34 m) above mean sea level (levels by Sacramento Municipal Utility District).

AVERAGE DISCHARGE.--11 years, 141 ft³/s (3.993 m³/s), 102,200 acre-ft/yr (126 hm³/yr).

EXTREMES.--Period of record: Maximum daily discharge, 1,240 ft³/s (35.1 m³/s) Dec. 23, 1964; no flow many days in most years.

REMARKS.--Records good. Tunnel diverts water from Buck Island Lake and discharges into Loon Lake. Gates are closed in the tunnel entrance during the summer and opened each fall to raise the level of Buck Island Lake for recreation purposes. See schematic diagram of Middle Fork American and Rubicon River basins.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.01	32	71	164	49	76	73	305	818	394	7.8	.05
2	.01	31	58	95	44	172	65	529	867	360	26	.05
3	.03	25	57	72	42	109	53	564	911	298	30	.05
4	.03	19	54	61	40	65	46	532	918	260	32	.05
5	2.7	16	50	58	39	51	48	539	843	245	44	.05
6	2.7	87	47	59	36	50	52	599	904	222	42	.05
7	2.0	714	46	51	35	46	53	717	945	200	32	.05
8	2.0	871	47	46	34	39	62	865	750	215	22	.05
9	2.4	356	47	42	33	33	75	966	655	981	16	.05
10	2.7	1,050	47	38	33	32	65	984	749	982	15	.05
11	2.6	1,210	49	36	32	32	57	843	804	445	12	.05
12	2.4	1,150	49	37	33	35	75	764	874	225	9.0	.05
13	3.6	706	52	36	33	32	98	658	864	173	7.2	.05
14	7.4	303	49	41	31	35	120	594	846	156	6.0	.05
15	11	187	44	695	29	49	159	636	799	149	4.2	.05
16	12	144	42	1,060	30	68	224	531	661	144	2.6	.05
17	11	135	53	839	30	81	243	361	557	132	1.8	.05
18	8.8	136	86	516	29	79	289	236	507	117	1.0	.05
19	6.6	108	71	842	35	74	218	167	437	109	.40	.05
20	6.1	87	52	457	31	75	172	130	325	105	.20	.05
21	5.8	79	48	223	30	81	191	140	330	103	.05	.05
22	8.3	72	50	138	30	84	267	256	418	98	.05	.05
23	62	58	42	104	27	92	346	442	449	91	.05	.05
24	76	61	39	85	26	99	253	651	427	86	.05	.05
25	65	56	38	74	27	117	159	781	378	81	.05	.05
26	56	56	39	66	29	110	110	924	333	34	.05	.05
27	52	52	44	58	31	103	84	1,120	288	.05	.05	.05
28	52	50	50	56	29	90	84	1,130	277	.05	.05	.05
29	47	53	336	51	-----	102	110	1,050	328	.05	.05	.05
30	37	56	664	49	-----	143	164	801	378	.05	.05	.05
31	32	-----	325	48	-----	95	-----	750	-----	.05	.05	78
TOTAL	579.18	7,960	2,746	6,197	927	2,349	4,015	19,565	18,640	6,405.25	311.75	79.45
MEAN	18.7	265	88.6	200	33.1	75.8	134	631	621	207	10.1	2.65
MAX	76	1,210	664	1,060	49	172	346	1,130	945	982	44	78
MIN	.01	16	38	36	26	32	46	130	277	.05	.05	.05
AC-FT	1,150	15,790	5,450	12,290	1,840	4,660	7,960	38,810	36,970	12,700	618	158
CAL YR 1973	TOTAL	52,516.66	MEAN	144	MAX	1,210	MIN	0	AC-FT	104,200		
WTR YR 1974	TOTAL	69,774.63	MEAN	191	MAX	1,210	MIN	.01	AC-FT	138,400		

11428700 HELL HOLE RESERVOIR NEAR MEEKS BAY, CALIF.

LOCATION.--Lat 39°03'54", long 120°24'50", in SE¼NW¼ sec.16, T.14 N., R.14 E., Placer County, Eldorado National Forest, on right bank 0.3 mi (0.5 km) upstream from Hell Hole Dam on Rubicon River, and 15.6 mi (25.1 km) west of Meeks Bay.

DRAINAGE AREA.--114 mi² (295 km²).

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

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Placer County Water Agency).

EXTREMES.--Current year: Maximum contents, 208,946 acre-ft (258 hm³) July 9 (elevation, 4,631.08 ft or 1,411.553 m); minimum, 117,586 acre-ft (145 hm³) Nov. 5 (elevation, 4,543.93 ft or 1,384.990 m).

Period of record: Maximum contents, 209,500 acre-ft (258 hm³) June 17, 1967 (elevation, 4,631.5 ft or 1,411.68 m); minimum since reservoir first filled, 37,499 acre-ft (46.2 hm³) Mar. 23, 1973 (elevation, 4,428.28 ft or 1,349.740 m).

REMARKS.--Reservoir is formed by rockfill dam with earth core. Storage began Dec. 6, 1965. Usable capacity, 207,342 acre-ft (256 hm³) between elevations 4,287.65 ft (1,306.876 m), invert of river outlet and 4,630.0 ft (1,411.22 m), crest of ogee spillway, above mean sea level. Dead storage, 248 acre-ft (306,000 m³). Records, including extremes, represent total contents at 2400 hours. See schematic diagram of Middle Fork American and Rubicon River basins.

COOPERATION.--Records collected by Placer County Water Agency, under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

CAPACITY TABLE (ELEVATION, IN FEET, AND CONTENTS, IN ACRE-FEET)

4,340	5,220	4,500	83,025
4,360	9,835	4,550	122,720
4,380	16,250	4,600	171,865
4,400	24,160	4,650	233,420
4,450	49,610		

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	138,693	120,375	143,552	142,914	167,211	146,187	144,903	149,087	192,249	203,056	195,544	179,966
2	138,121	119,616	142,981	142,924	166,760	147,264	145,588	150,162	195,083	202,833	194,745	179,920
3	137,477	118,973	142,308	142,799	166,265	147,036	145,686	151,600	197,233	202,512	194,321	179,272
4	136,781	118,359	141,618	142,596	165,651	146,207	145,392	153,513	198,467	202,722	193,355	178,695
5	136,106	117,586	140,846	142,452	164,863	145,402	145,089	153,884	199,581	202,277	193,428	177,994
6	135,489	117,830	140,134	142,193	164,133	145,392	144,532	155,594	200,761	202,042	193,355	177,075
7	134,903	119,471	139,435	141,752	163,796	143,680	143,911	157,953	201,623	201,783	192,873	176,720
8	134,373	119,209	138,702	141,286	162,646	142,683	143,484	160,323	202,116	202,079	192,127	176,296
9	133,746	119,022	137,999	140,760	161,568	142,107	142,770	162,928	202,858	208,946	190,784	175,475
10	133,247	122,353	137,282	140,191	160,483	141,592	142,078	165,213	203,601	207,941	190,461	174,872
11	132,670	135,370	136,633	139,608	159,853	140,545	141,331	167,189	204,470	207,202	190,054	174,213
12	132,123	144,037	135,986	139,105	159,278	140,012	140,675	168,849	205,217	206,577	189,231	173,477
13	131,468	145,274	135,352	138,776	158,281	139,232	140,001	170,442	205,728	205,865	188,422	172,856
14	130,723	145,971	134,610	138,851	157,584	138,683	139,529	171,977	206,114	205,092	187,946	172,315
15	130,133	146,542	133,845	143,330	156,743	138,362	139,623	173,273	206,302	204,383	187,199	171,539
16	129,725	147,363	133,112	146,888	155,698	138,504	140,285	174,019	206,427	204,346	187,578	170,408
17	129,044	149,458	132,886	152,661	154,555	138,991	141,427	174,633	206,502	203,489	187,377	169,950
18	128,481	150,707	132,670	157,373	153,729	138,982	141,924	175,147	206,277	202,982	187,353	169,027
19	128,006	151,987	132,166	163,036	153,215	138,710	143,494	174,919	206,089	202,116	186,903	168,338
20	127,210	150,495	131,450	165,870	152,600	138,477	144,173	174,806	205,416	201,253	186,347	167,631
21	126,710	149,991	131,361	167,410	151,905	138,683	144,571	174,861	205,142	200,761	185,839	166,419
22	126,077	149,458	131,629	168,184	151,062	138,495	145,352	175,248	204,993	200,823	185,168	165,607
23	125,140	148,757	131,450	168,560	149,759	138,664	146,572	176,388	204,682	200,392	184,495	164,667
24	124,434	148,058	131,718	168,749	148,757	139,171	147,561	177,580	204,346	199,888	183,967	163,524
25	123,995	147,363	132,346	168,793	147,859	139,103	148,188	179,064	204,234	199,324	183,802	162,322
26	123,447	146,572	132,256	168,826	146,799	139,085	148,740	181,325	204,011	198,650	183,498	161,095
27	122,908	145,784	132,535	168,849	145,421	139,133	148,178	183,744	203,730	198,174	182,865	159,917
28	122,414	145,098	133,238	168,482	144,163	139,529	147,661	186,110	203,983	197,868	182,268	159,334
29	121,874	144,367	139,152	168,195	-----	141,141	147,561	187,768	203,488	197,331	181,709	159,065
30	121,324	143,833	141,762	168,073	-----	142,885	147,969	189,259	203,235	196,577	181,127	158,006
31	120,747	-----	142,654	167,553	-----	143,930	-----	190,695	-----	195,957	180,546	-----
MAX	138,693	151,987	143,552	168,849	167,211	147,264	148,740	190,695	206,502	208,946	195,544	179,966
MIN	120,747	117,586	131,361	138,776	144,163	138,362	139,529	149,087	192,249	195,957	180,546	158,006
(a)	4,547.68	4,573.30	4,572.08	4,596.13	4,573.64	4,573.40	4,577.51	4,616.26	4,626.54	4,620.57	4,607.60	4,687.30
(b)	-18,594	+23,086	-1,179	+24,899	-23,390	-233	+4,039	+42,726	+12,540	-7,278	-15,411	-22,540

CAL YR 1973 b +73,265

WTR YR 1974 b +18,665

a Elevation, in feet, at end of month.

b Change in contents, in acre-feet.

SACRAMENTO RIVER BASIN

11428800 RUBICON RIVER BELOW HELL HOLE DAM, NEAR MEEKS BAY, CALIF.

LOCATION.--Lat 39°03'24", long 120°24'25", in NE¼NE¼ sec.21, T.14 N., R.14 E., Placer County, Eldorado National Forest, on right bank 600 ft (183 m) downstream from outlet of dam, and 15.3 mi (24.6 km) west of Meeks Bay.

DRAINAGE AREA.--114 mi² (295 km²).

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

GAGE.--Water-stage recorder and V-notch sharp-crested weir. Datum of gage is 4,231.52 ft (1,289.767 m) above mean sea level (levels by Placer County Water Agency).

AVERAGE DISCHARGE.--8 years, 28.2 ft³/s (0.799 m³/s), 20,430 acre-ft/yr (25.2 hm³/yr).

EXTREMES.--Current year: Maximum daily discharge, 731 ft³/s (20.7 m³/s) July 10, including flow over spillway; minimum daily, 5.8 ft³/s (0.164 m³/s) Sept. 16, 17.

Period of record: Maximum discharge, 2,290 ft³/s (64.8 m³/s) June 18, 1967, including flow over spillway; no flow Aug. 25 to Sept. 11, 1966.

REMARKS.--Flow regulated by Hell Hole Reservoir beginning December 1965 (see sta 11428700). Water is diverted out of the basin above the station through Buck-Loon tunnel (see sta 11428300). Water is diverted from Middle Fork American River basin by tunnel from French Meadows Reservoir (see sta 11427400) to Hell Hole Reservoir. Water is diverted from Hell Hole Reservoir through a tunnel to Middle Fork powerplant. Diversion began Sept. 8, 1966. During years when Hell Hole Dam spills, records include flow which bypasses the station. See schematic diagram of Middle Fork American and Rubicon River basins.

COOPERATION.--Records collected by Placer County Water Agency, under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.1	13	16	17	20	19	29	21	21	18	15	7.0
2	7.1	12	15	17	20	19	24	21	21	18	15	6.9
3	7.1	12	15	16	19	19	21	21	21	18	16	6.5
4	6.9	12	14	16	19	19	20	21	20	18	16	6.5
5	6.8	12	14	16	19	20	20	21	20	18	13	6.5
6	6.8	14	15	16	19	20	20	22	20	18	9.1	6.5
7	6.8	15	15	16	19	20	19	24	20	18	8.9	6.5
8	6.8	13	15	15	19	19	19	24	19	19	8.9	6.4
9	6.8	13	15	15	19	19	19	24	19	188	8.9	6.3
10	7.1	16	15	15	19	19	19	23	19	731	8.9	6.2
11	7.1	23	15	15	18	19	19	23	19	35	8.9	6.2
12	7.1	26	15	16	18	20	19	23	19	19	8.8	6.2
13	6.9	17	15	17	18	20	19	22	19	18	8.8	5.9
14	6.9	17	15	22	18	20	19	22	19	20	8.7	5.9
15	6.9	16	15	23	18	20	19	22	19	16	8.6	5.9
16	6.8	17	15	23	18	20	19	22	19	16	8.6	5.8
17	6.8	23	17	24	18	20	19	21	18	16	8.6	5.8
18	6.8	20	16	17	18	19	20	20	18	17	8.2	6.9
19	6.8	16	15	16	18	19	19	20	18	17	8.2	8.6
20	6.8	15	14	16	18	18	19	20	18	17	8.2	8.6
21	6.8	15	15	16	18	18	19	20	18	17	8.2	8.5
22	6.7	15	15	15	18	18	19	20	18	17	8.2	8.5
23	7.3	15	14	15	18	18	20	20	18	17	7.9	8.5
24	6.8	15	14	18	18	18	20	21	18	18	7.5	8.5
25	6.8	14	14	18	18	18	20	21	18	18	7.5	8.5
26	6.8	14	15	17	19	19	20	23	18	17	7.5	8.3
27	6.6	14	19	17	20	21	20	22	18	15	7.5	8.2
28	6.6	14	19	16	20	24	20	22	18	15	7.3	8.2
29	6.8	15	33	16	-----	27	20	21	18	15	7.1	8.2
30	9.0	15	21	17	-----	31	20	21	18	15	7.1	8.2
31	13	-----	18	20	-----	23	-----	21	-----	15	7.1	-----
TOTAL	221.4	468	498	533	521	623	599	669	566	1,434	288.2	214.7
MEAN	7.14	15.6	16.1	17.2	18.6	20.1	20.0	21.6	18.9	46.3	9.30	7.16
MAX	13	26	33	24	20	31	29	24	21	731	16	8.6
MIN	6.6	12	14	15	18	18	19	20	18	15	7.1	5.8
AC-FT	439	928	988	1,060	1,030	1,240	1,190	1,330	1,120	2,840	572	426
(a)	31,679	35,747	44,990	39,465	48,006	29,605	35,519	51,196	47,729	37,216	31,430	38,254
CAL YR 1973	TOTAL 5,753.9 MEAN 15.8 MAX 41 MIN 6.6 AC-FT 11,410											
WTR YR 1974	TOTAL 6,635.3 MEAN 18.2 MAX 731 MIN 5.8 AC-FT 13,160											

a Diversion, in acre-feet, from Hell Hole Reservoir to Middle Fork powerplant, furnished by Placer County Water Agency.

11429300 ROBBS PEAK POWERPLANT NEAR KYBURZ, CALIF.

LOCATION.--Lat 38°53'46", long 120°22'40", in SE¼SW¼ sec.11, T.12 N., R.14 E., El Dorado County, Eldorado National Forest, in powerhouse on shore of Union Valley Reservoir, 9.5 mi (15.3 km) northwest of Kyburz.

PERIOD OF RECORD.--October 1962 to current year. Prior to October 1965, published as Robbs Peak tunnel near Riverton.

GAGE.--Discharge computed from powerplant output. Altitude of gage is 4,880 ft (1,487 m), from topographic map. Prior to October 1965, water-stage recorder and concrete control in abandoned section of canal 0.5 mi (0.8 km) upstream at different datum.

AVERAGE DISCHARGE.--12 years, 245 ft³/s (6.938 m³/s), 177,500 acre-ft/yr (219 km³/yr).

EXTREMES.--Period of record: Maximum daily discharge, 1,440 ft³/s (40.8 m³/s) Dec. 22-24, 1964; no flow many days during 1965-74.

REMARKS.--Tunnel diverts at South Fork Rubicon River diversion dam in NE¼ sec.27, T.13 N., R.14 E., and discharges into Union Valley Reservoir (see sta 11441001). Water is imported from Rubicon River basin via Rubicon-Rockbound tunnel and Buck-Loon tunnel to Loon Lake, then via Loon Lake powerplant or Gerle Creek to Robbs Peak tunnel and powerplant. The water is later used in the South Fork American River basin for power development. See schematic diagrams of Middle Fork American and Rubicon River basins and South Fork American River basin.

COOPERATION.--Records furnished by Sacramento Municipal Utility District, rounded to Geological Survey standards.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	12	250	371	410	624	560	775	778	323	174	9.0
2	60	10	262	292	436	719	676	826	781	444	154	0
3	0	0	185	176	329	327	571	736	670	499	119	135
4	0	0	237	224	357	230	616	742	762	267	69	136
5	0	80	271	147	574	377	615	589	750	420	100	132
6	0	54	284	58	455	339	638	743	874	520	130	148
7	0	187	190	172	451	365	462	801	848	129	159	132
8	0	112	9.0	72	453	455	576	803	799	300	162	10
9	0	46	131	108	463	590	672	758	742	783	187	92
10	0	255	111	76	121	286	605	653	784	863	136	0
11	0	688	112	91	378	558	522	644	799	817	41	0
12	48	760	145	95	456	684	669	531	796	801	116	0
13	0	323	270	152	492	297	687	548	755	434	125	0
14	0	176	47	138	578	208	420	648	661	169	114	0
15	0	174	169	748	459	284	644	900	940	108	123	0
16	0	121	158	755	572	307	760	900	801	267	129	0
17	0	543	232	826	163	305	764	749	760	187	113	0
18	0	439	298	807	93	297	782	735	716	175	2.0	0
19	0	203	259	837	479	298	510	333	633	246	109	0
20	0	187	287	676	608	233	367	560	604	183	128	0
21	0	89	227	668	571	310	358	698	584	28	123	0
22	0	174	31	605	425	545	619	743	607	188	120	0
23	0	14	0	524	396	303	739	788	205	176	129	0
24	0	180	0	581	109	319	558	803	546	178	123	0
25	0	62	0	445	0	213	470	800	273	189	0	0
26	0	123	0	583	13	354	438	523	345	168	155	0
27	0	77	413	569	0	422	422	440	248	165	116	0
28	0	160	673	542	77	353	268	724	199	0	127	0
29	60	102	748	500	-----	724	519	816	360	178	131	0
30	0	238	638	439	-----	732	622	783	155	0	115	5.0
31	0	-----	562	421	-----	378	-----	725	-----	150	103	-----
TOTAL	168	5,589	7,199.0	12,698	9,918	12,436	17,129	21,817	18,775	9,355	3,632.0	799.0
MEAN	5.42	186	232	410	354	401	571	704	626	302	117	26.6
MAX	60	760	748	837	608	732	782	900	940	863	187	148
MIN	0	0	0	58	0	208	268	333	155	0	0	0
AC-FT	333	11,090	14,280	25,190	19,670	24,670	33,980	43,270	37,240	18,560	7,200	1,580
CAL YR 1973	TOTAL	98,882.00	MEAN	271	MAX	854	MIN	0	AC-FT	196,100		
WTR YR 1974	TOTAL	119,515.00	MEAN	327	MAX	940	MIN	0	AC-FT	237,100		

SACRAMENTO RIVER BASIN

11429350 LOON LAKE NEAR MEEKS BAY, CALIF.

LOCATION.--Lat 39°00'17", long 120°18'30", in SW¼NW¼ sec.4, T.13 N., R.15 E., El Dorado County, Eldorado National Forest, on right bank at Loon Lake Dam on Gerle Creek, 2.3 mi (3.7 km) upstream from Jerrett Creek, and 11 mi (18 km) southwest of town of Meeks Bay.

DRAINAGE AREA.--7.94 mi² (20.6 km²).

PERIOD OF RECORD.--December 1963 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Sacramento Municipal Utility District).

EXTREMES.--Current year: Maximum contents, 76,300 acre-ft (94.1 hm³) June 14 (elevation, 6,410.1 ft or 1,953.80 m); minimum, 35,400 acre-ft (43.6 hm³) Oct. 5 (elevation, 6,377.0 ft or 1,943.71 m).

Period of record: Maximum contents, 77,700 acre-ft (95.8 hm³) June 6, 1969 (elevation, 6,411.1 ft or 1,954.10 m); minimum since reservoir first filled, 3,690 acre-ft (4.55 hm³) Nov. 3, 1970 (elevation, 6,330.3 ft or 1,929.48 m).

REMARKS.--Reservoir is formed by an earthfill dam completed Dec. 27, 1963. Storage began Dec. 5, 1963. Usable capacity, 74,100 acre-ft (91.4 hm³) between elevations 6,325 ft (1,927.9 m), invert of fishwater release valve and 6,410 ft (1,953.8 m), crest of spillway, above mean sea level. Dead storage, 2,360 acre-ft (2.91 hm³). Prior to September 1962, reservoir was formed by granite-block dam built in 1884, capacity, 8,000 acre-ft (9.86 hm³). Lake receives water from Rubicon River via Rubicon-Rockbound tunnel to Buck Island Lake and from Buck Island Lake to Loon Lake via Buck-Loon tunnel (see sta 11427940, 11428300). Records, including extremes, represent total contents at 2400 hours. See schematic diagram of Middle Fork American and Rubicon River basins.

CAPACITY TABLE (ELEVATION, IN FEET, AND CONTENTS, IN ACRE-FEET)

6,330	3,600
6,340	7,200
6,350	12,500
6,360	19,600
6,370	28,500
6,390	50,000
6,412	79,000

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36,400	37,000	56,200	58,300	64,300	52,300	54,000	49,200	71,900	75,400	71,300	63,500
2	36,300	37,000	55,900	58,200	63,700	53,000	53,500	50,000	72,400	75,200	71,000	63,500
3	36,300	37,000	55,900	58,300	63,600	53,300	53,000	51,100	73,100	74,800	70,700	63,200
4	36,200	37,000	55,700	58,300	63,100	53,500	52,300	52,000	73,700	74,800	70,600	62,800
5	35,400	37,000	55,500	58,600	62,200	53,200	51,500	53,400	74,100	74,200	70,500	62,400
6	36,100	37,200	55,200	58,900	61,700	53,000	50,800	54,700	74,500	73,700	70,300	62,200
7	36,200	38,800	55,300	59,000	61,000	52,800	50,400	56,000	74,800	74,000	69,900	61,800
8	36,200	40,500	55,400	59,100	60,400	52,100	49,500	58,000	74,900	73,800	69,600	61,700
9	36,100	41,300	55,500	59,200	59,600	51,100	49,200	59,900	75,100	75,600	69,300	61,700
10	36,100	43,700	55,500	59,400	59,800	51,100	48,400	61,700	75,100	75,800	69,100	61,700
11	36,100	47,000	55,700	59,400	59,000	49,900	48,000	63,400	75,400	75,400	69,100	61,500
12	36,100	49,800	55,700	59,500	58,300	49,200	47,400	64,900	75,600	74,500	68,800	61,500
13	36,100	51,800	55,500	59,600	57,600	49,200	46,900	66,100	76,100	74,000	68,400	61,400
14	36,000	52,500	55,700	59,900	56,600	49,300	47,200	66,600	76,300	74,500	68,200	61,400
15	36,000	53,000	55,700	61,700	55,900	49,500	47,100	66,300	76,100	74,400	67,900	61,400
16	36,000	53,500	55,500	63,900	54,900	49,800	47,000	66,000	75,800	74,400	67,600	61,400
17	36,000	54,000	55,700	66,000	55,000	50,000	47,000	65,600	75,500	74,200	67,200	61,300
18	36,000	54,400	55,700	67,500	55,000	50,100	47,100	65,000	75,200	74,100	67,200	61,300
19	36,000	54,800	55,500	69,500	54,300	50,400	47,100	65,300	74,900	73,800	66,900	61,300
20	36,000	55,000	55,400	70,500	53,300	50,600	47,600	64,800	74,700	73,700	66,600	61,200
21	35,800	55,200	55,400	70,200	52,400	50,900	48,200	64,000	74,200	73,800	66,300	61,200
22	36,000	55,400	55,500	69,900	51,800	50,500	48,600	63,600	74,000	73,700	66,100	61,200
23	36,200	55,500	55,700	69,300	51,000	50,800	49,000	63,600	74,700	73,500	65,700	61,000
24	36,400	55,700	55,800	68,800	51,100	51,000	49,200	64,000	74,200	73,300	65,400	61,000
25	36,500	55,900	55,800	68,400	51,100	51,400	49,200	64,500	74,500	73,000	65,300	61,000
26	36,600	56,000	56,000	67,600	51,300	51,800	48,900	66,500	74,500	72,800	65,000	60,900
27	36,700	56,200	55,500	67,100	51,300	52,300	48,600	68,600	74,700	72,400	64,800	60,900
28	36,800	56,200	55,000	66,300	51,400	52,600	48,800	69,500	74,900	72,400	64,400	60,800
29	36,800	56,300	56,400	65,800	-----	53,200	48,700	70,300	74,800	72,000	64,100	60,800
30	36,900	56,200	58,000	65,300	-----	53,800	48,600	70,900	75,500	72,000	63,900	60,900
31	37,000	-----	58,000	64,800	-----	54,000	-----	71,300	-----	71,600	63,500	-----
MAX	37,000	56,300	58,000	70,500	64,300	54,000	54,000	71,300	76,300	75,800	71,300	63,500
MIN	35,400	37,000	55,000	58,200	51,000	49,200	46,900	49,200	71,900	71,600	63,500	60,800
(a)	6,378.5	6,394.9	6,396.3	6,401.6	6,391.1	6,393.2	6,388.8	6,406.5	6,409.5	6,400.6	6,398.6	6,398.6
(b)	+500	+19,200	+1,800	+6,800	-13,400	+2,600	-5,400	+22,700	+4,200	-3,900	-8,100	-2,600
CAL YR 1973	b +16,400											
WTR YR 1974	b +24,400											

a Elevation, in feet, at end of month.

b Change in contents, in acre-feet.

11429500 GERLE CREEK BELOW LOON LAKE DAM, NEAR MEEKS BAY, CALIF.

LOCATION.--Lat 39°00'20", long 120°18'52", in NE¼NE¼ sec.5, T.13 N., R.15 E., El Dorado County, Eldorado National Forest, on right bank 0.3 mi (0.5 km) downstream from Loon Lake Dam, and 11 mi (18 km) southwest of Meeks Bay.

DRAINAGE AREA.--8.01 mi² (20.7 km²).

PERIOD OF RECORD.--July 1910 to April 1914 (fragmentary), August 1962 to current year. Prior to August 1962, published as "near Rubicon Springs."

GAGE.--Water-stage recorder and V-notch sharp-crested weir. Altitude of gage is 6,250 ft (1,905 m), from topographic map. Prior to August 1962, nonrecording gage at site 1,400 ft (427 m) upstream at different datum.

AVERAGE DISCHARGE.--9 years (1911, 1962-70, prior to diversion to Loon Lake powerplant), 132 ft³/s (3.738 m³/s), 95,630 acre-ft/yr (118 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 29 ft³/s (0.82 m³/s) June 14 (gage height, 2.53 ft or 0.77 m); minimum daily, 7.4 ft³/s (0.21 m³/s) May 19-21.

Period of record: Maximum discharge, 3,240 ft³/s (91.8 m³/s), unregulated, Feb. 1, 1963 (gage height, 12.65 ft or 3.856 m), from rating curve extended above 600 ft³/s (17.0 m³/s) on basis of slope-area measurement of maximum flow; no flow Oct. 15, 1913. Maximum discharge since construction of Loon Lake Dam in 1963, 1,050 ft³/s (29.7 m³/s) June 5, 1969 (gage height, 9.03 ft or 2.752 m); minimum daily, 6.0 ft³/s (0.17 m³/s) Dec. 2, 3, 1969, Oct. 8-10, 1971.

REMARKS.--Records excellent. Beginning in 1884, flow regulated by Loon Lake (see sta 11429350). Original dam was dismantled during September and October 1962 to permit construction of a new earthfill dam which was completed Dec. 27, 1963. Storage began Dec. 5, 1963. Loon Lake receives water from Rubicon River via Rubicon-Rockbound tunnel to Buck Island Lake and from Buck Island Lake to Loon Lake via Buck-Loon tunnel (see sta 11427940, 11428300). Diversion to Loon Lake powerplant starting August 1971, bypasses station and returns to Gerle Creek at Gerle Creek Dam. See schematic diagram of Middle Fork American and Rubicon River basins.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.5	8.5	9.0	9.0	9.9	13	8.5	8.5	7.7	10	9.9	11
2	8.5	8.5	9.0	9.0	9.9	11	8.2	8.5	7.7	11	9.6	11
3	8.5	8.5	9.0	9.0	9.6	9.9	8.2	8.5	7.7	11	9.6	11
4	8.2	8.5	8.8	9.0	9.6	9.9	8.2	8.5	7.7	11	9.3	10
5	8.2	8.5	8.8	9.0	9.6	9.9	7.9	8.8	7.7	11	9.3	10
6	8.2	9.0	8.8	9.0	9.6	10	7.9	8.8	7.7	11	9.3	11
7	8.8	9.6	8.8	9.0	9.6	10	7.9	9.6	7.7	11	9.0	11
8	8.8	8.5	8.8	9.0	9.6	10	7.9	9.6	7.7	13	9.0	11
9	8.5	8.8	8.8	9.0	9.6	10	7.9	9.6	7.7	16	9.0	11
10	8.2	11	8.8	9.0	9.6	10	7.9	9.3	7.7	16	9.0	11
11	8.2	14	8.8	9.3	9.6	9.9	8.2	9.3	7.7	11	9.0	11
12	8.2	13	8.8	9.3	9.6	10	7.9	9.3	7.7	11	9.3	11
13	7.9	9.6	8.8	9.3	9.6	9.9	7.9	9.3	7.7	10	9.6	11
14	7.9	9.3	8.8	10	9.6	9.9	8.5	9.0	17	10	9.6	12
15	7.9	9.3	8.8	12	9.3	10	8.5	9.0	12	10	9.9	12
16	7.9	9.3	8.8	12	9.9	10	8.2	8.5	11	10	10	12
17	7.9	10	9.0	14	9.6	10	8.2	7.9	10	9.9	11	12
18	7.7	9.9	8.8	14	9.6	9.6	7.7	7.7	10	9.9	11	12
19	7.7	9.6	8.8	14	9.6	9.6	6.9	7.4	10	9.9	11	12
20	7.9	9.6	8.8	11	9.6	9.6	7.4	7.4	9.9	9.9	11	12
21	7.9	9.6	8.8	10	9.6	9.3	7.7	7.4	9.9	9.9	11	12
22	8.5	9.3	8.8	10	9.3	9.0	8.2	7.7	9.9	9.9	11	12
23	8.5	9.3	8.8	10	9.3	9.0	7.7	7.9	9.9	9.9	11	11
24	8.5	9.3	8.8	10	9.3	8.8	6.7	8.5	9.9	9.9	11	11
25	8.5	9.3	8.8	9.9	9.0	8.5	6.7	9.0	9.9	9.9	11	11
26	8.5	9.0	8.8	9.9	9.3	8.5	6.6	9.3	9.9	10	11	11
27	8.5	9.0	8.8	9.9	9.3	8.5	6.6	9.6	9.9	10	11	11
28	8.5	9.0	9.6	9.9	9.3	8.2	6.7	9.3	10	10	11	11
29	8.5	9.0	14	9.9	-----	9.6	7.1	9.0	10	10	11	11
30	8.5	9.0	9.9	9.9	-----	8.8	7.4	8.5	10	10	11	10
31	8.5	-----	9.3	9.9	-----	8.5	-----	7.7	-----	9.9	11	-----
TOTAL	256.5	284.8	281.2	314.2	267.0	298.9	231.3	268.4	279.3	332.0	315.4	336
MEAN	8.27	9.49	9.07	10.1	9.54	9.64	7.71	8.66	9.31	10.7	10.2	11.2
MAX	8.8	14	14	14	9.9	13	8.5	9.6	17	16	11	12
MIN	7.7	8.5	8.8	9.0	9.0	8.2	6.6	7.4	7.7	9.9	9.0	10
AC-FT	509	565	558	623	530	593	459	532	554	659	626	666
(a)	319	1,043	6,465	8,714	16,319	5,901	17,106	21,605	32,794	17,396	7,791	1,504

CAL YR 1973 TOTAL 3,123.1 MEAN 8.56 MAX 14 MIN 6.9 AC-FT 6,190

WTR YR 1974 TOTAL 3,465.0 MEAN 9.49 MAX 17 MIN 6.6 AC-FT 6,870

a Diversion, in acre-feet, to Loon Lake powerplant, furnished by Sacramento Municipal Utility District.

11430000 SOUTH FORK RUBICON RIVER BELOW GERLE CREEK, NEAR GEORGETOWN, CALIF.

LOCATION.--Lat 38°57'17", long 120°24'02", in SW¼SW¼ sec.22, T.13 N., R.14 E., El Dorado County, Eldorado National Forest, on left bank 600 ft (183 m) downstream from Gerle Creek, and 18 mi (29 km) east of Georgetown.

DRAINAGE AREA.--47.6 mi² (123 km²).

PERIOD OF RECORD.--February 1910 to June 1914 (published as Little South Fork Rubicon River below Gerle Creek near Quintette), August 1961 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 4,970 ft (1,515 m), from topographic map. Feb. 1, 1910, to June 21, 1914, nonrecording gage at site about 700 ft (213 m) downstream at different datum.

AVERAGE DISCHARGE (unadjusted).--12 years (1962-74), 23.3 ft³/s (0.660 m³/s), 16,880 acre-ft/yr (20.8 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,070 ft³/s (58.6 m³/s) Nov. 12 (gage height, 7.35 ft or 2.240 m); minimum daily, 4.1 ft³/s (0.12 m³/s) Jan. 11.
Period of record: Maximum discharge, 11,500 ft³/s (326 m³/s) Jan. 31, 1963 (gage height, 12.32 ft or 3.755 m), from rating curve extended above 2,500 ft³/s (70.8 m³/s) on basis of slope-area measurement of maximum flow; minimum, 0.8 ft³/s (0.023 m³/s) Sept. 21, 1962.

REMARKS.--Records good. Beginning in 1884, flow regulated by Loon Lake (see sta 11429350). Original dam was dismantled during September and October 1962 to permit construction of a new earthfill dam which was completed Dec. 27, 1963. Loon Lake receives water from Rubicon River via Rubicon-Rockbound tunnel to Buck Island Lake and from Buck Island Lake to Loon Lake via Buck-Loon tunnel (see sta 11427940, 11428300). Prior to Dec. 3, 1961, water was diverted out of the basin in Georgetown Divide ditch. Robbs Peak tunnel 1.2 mi (1.9 km) upstream (see sta 11429800) began diversion of up to 1,320 ft³/s (37.4 m³/s) to Silver Creek basin October 1962. See schematic diagram of Middle Fork American and Rubicon River basins.

REVISIONS.--WSP 1931: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NCV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27	8.3	7.9	7.1	5.9	136	23	10	65	11	11	11
2	13	6.2	6.3	5.8	6.5	63	16	14	68	12	10	11
3	11	4.4	5.9	5.4	5.4	9.2	11	12	75	12	10	11
4	9.2	4.4	10	5.2	5.1	7.8	9.7	12	16	11	11	11
5	9.2	5.6	6.2	5.1	5.1	7.5	9.2	12	11	11	11	11
6	9.2	7.0	5.9	5.6	5.0	7.2	8.7	12	41	12	11	11
7	10	13	5.6	4.8	4.9	7.0	8.3	12	47	11	11	11
8	9.9	8.9	5.4	4.5	4.9	6.6	8.2	16	21	14	11	11
9	9.6	5.9	5.7	4.3	4.8	6.5	8.6	11	23	368	11	12
10	9.4	86	5.4	4.2	4.7	6.4	7.9	11	13	401	11	9.0
11	9.4	424	5.4	4.1	4.7	6.5	7.8	11	23	105	10	8.6
12	9.4	575	5.4	4.7	4.8	11	7.9	11	20	48	10	8.4
13	9.4	9.8	5.6	4.7	4.7	8.8	7.7	10	16	12	11	8.4
14	9.4	7.9	5.4	6.1	4.6	8.1	7.6	21	10	12	10	8.3
15	9.4	7.1	5.3	25	4.5	8.1	7.8	265	19	11	11	8.2
16	9.4	10	5.2	87	4.7	8.0	7.6	196	11	12	11	8.2
17	9.4	24	7.1	719	4.6	7.9	7.5	60	11	11	11	8.2
18	9.4	15	6.7	176	4.5	7.5	7.5	22	11	11	11	8.2
19	9.4	9.2	5.8	655	6.9	7.4	7.3	12	11	11	11	8.2
20	9.5	8.1	5.1	34	5.8	7.5	6.6	10	11	11	11	8.2
21	9.4	7.4	6.0	13	4.8	7.4	6.4	24	11	12	11	8.2
22	10	6.9	6.0	8.5	4.6	7.2	6.4	38	11	12	11	8.2
23	12	6.4	63	7.6	4.5	7.2	6.8	58	11	11	11	8.4
24	9.6	6.4	92	7.0	28	7.4	6.8	75	11	11	11	8.4
25	9.6	6.1	96	11	34	7.7	6.5	71	11	11	11	8.4
26	9.4	6.0	64	6.7	35	8.5	6.4	22	12	11	11	8.4
27	12	5.8	11	6.4	62	12	6.6	10	11	11	11	8.8
28	14	5.7	12	6.2	5.3	19	7.0	97	11	11	11	11
29	12	5.6	445	6.0	-----	26	7.3	75	11	11	11	10
30	9.2	6.1	87	5.7	-----	32	7.3	52	11	11	11	10
31	9.2	-----	8.4	5.7	-----	15	-----	54	-----	11	11	-----
TOTAL	328.0	1,382.3	1,011.7	1,851.4	280.3	487.4	253.4	1,316	634	1,230	336	281.7
MEAN	10.6	46.1	32.6	59.7	10.0	15.7	8.45	42.5	21.1	39.7	10.8	9.39
MAX	27	575	445	719	62	136	23	265	75	401	11	12
MIN	9.2	4.4	5.1	4.1	4.5	6.4	6.4	10	10	11	10	8.2
AC-FT	651	2,740	2,010	3,670	556	967	503	2,610	1,260	2,440	666	559

CAL YR 1973 TOTAL 5,931.1 MEAN 16.2 MAX 677 MIN 4.4 AC-FT 11,760
WTR YR 1974 TOTAL 9,392.2 MEAN 25.7 MAX 719 MIN 4.1 AC-FT 18,630

11431800 PILOT CREEK ABOVE STUMPY MEADOWS LAKE, CALIF.

LOCATION.--Lat 38°53'41", long 120°34'02", in NE¼NW¼ sec.18, T.12 N., R.13 E., El Dorado County, on right bank 2.1 mi (3.4 km) upstream from Stumpy Meadows Dam, and 12.5 mi (20.1 km) east of Georgetown.

DRAINAGE AREA.--11.7 mi² (30.3 km²).

PERIOD OF RECORD.--October 1960 to current year. Prior to October 1971, published as "above Stumpy Meadows Reservoir."

GAGE.--Water-stage recorder. Altitude of gage is 4,280 ft (1,305 m), from topographic map.

AVERAGE DISCHARGE.--14 years, 25.7 ft³/s (0.728 m³/s), 18,620 acre-ft/yr (23.0 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 394 ft³/s (11.2 m³/s) Mar. 29 (gage height, 3.36 ft or 1.024 m); minimum daily, 3.8 ft³/s (0.11 m³/s) Oct. 4-6.
Period of record: Maximum discharge, 2,380 ft³/s (67.4 m³/s) Dec. 23, 1964 (gage height, 5.92 ft or 1.804 m in gage well, 6.6 ft or 2.01 m, from floodmarks), from rating curve extended above 170 ft³/s (4.81 m³/s) on basis of slope-area measurement of maximum flow; maximum gage height, 8.05 ft (2.454 m) Jan. 31, 1963; minimum daily discharge, 1.9 ft³/s (0.054 m³/s) Aug. 20-26, Sept. 4-7, 10, 1966.

REMARKS.--Records good. No regulation or diversion above station. See schematic diagram of Middle Fork American and Rubicon River basins.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.9	5.0	36	83	43	214	155	52	22	11	8.9	6.0
2	3.9	5.1	25	64	39	196	131	51	21	11	8.8	5.8
3	3.9	5.1	24	55	37	125	114	52	21	11	8.6	5.7
4	3.8	5.1	22	48	35	99	102	52	20	11	8.5	5.5
5	3.8	9.9	21	46	34	84	92	52	20	10	9.0	5.4
6	3.8	25	20	41	32	73	89	51	19	10	8.6	5.6
7	6.3	25	20	36	32	68	80	50	19	10	8.3	5.5
8	8.6	16	19	33	31	63	74	52	18	22	8.1	5.5
9	6.5	12	18	30	30	59	72	49	18	66	7.9	5.4
10	5.1	30	17	29	29	55	68	46	17	37	7.8	5.2
11	5.0	68	18	27	28	56	66	44	17	23	7.6	5.3
12	4.7	109	17	31	28	80	67	42	16	19	7.5	5.1
13	4.6	47	23	29	27	73	66	40	16	17	7.3	5.1
14	4.4	34	21	35	27	70	65	38	16	15	7.4	5.1
15	4.4	27	20	74	26	72	66	36	15	14	7.3	5.1
16	4.3	41	20	97	27	75	60	35	16	14	7.2	5.0
17	4.2	114	31	295	26	76	58	34	15	13	7.1	4.9
18	4.2	102	30	225	26	74	56	33	15	13	7.0	4.8
19	4.1	51	26	309	33	67	56	32	17	12	6.9	4.7
20	4.5	38	25	218	29	62	59	31	16	12	6.9	4.6
21	4.7	30	30	149	28	60	56	30	15	11	7.1	4.6
22	7.2	26	32	115	27	62	53	29	14	11	6.9	4.8
23	18	23	29	95	26	67	51	28	14	11	6.7	4.8
24	9.6	21	27	79	26	92	50	27	13	11	6.5	4.7
25	7.6	20	26	68	25	139	50	26	13	11	6.4	4.6
26	6.8	18	28	60	28	200	51	25	13	11	6.3	4.7
27	6.3	17	66	55	29	309	52	25	13	9.9	6.2	4.7
28	6.0	16	86	51	30	225	55	24	12	9.8	6.1	4.8
29	5.6	16	215	47	-----	288	55	23	12	9.6	6.1	4.8
30	5.3	18	153	44	-----	284	53	23	12	9.4	6.2	4.8
31	5.1	-----	106	41	-----	200	-----	22	-----	9.1	6.2	-----
TOTAL	176.2	974.2	1,251	2,609	838	3,667	2,122	1,154	485	464.8	227.4	152.6
MEAN	5.68	32.5	40.4	84.2	29.9	118	70.7	37.2	16.2	15.0	7.34	5.09
MAX	18	114	215	309	43	309	155	52	22	66	9.0	6.0
MIN	3.8	5.0	17	27	25	55	50	22	12	9.1	6.1	4.6
AC-FT	349	1,930	2,480	5,170	1,660	7,270	4,210	2,290	962	922	451	303
CAL YR 1973	TOTAL 10,182.3	MEAN 27.9	MAX 254	MIN 3.0	AC-FT 20,200							
WTR YR 1974	TOTAL 14,121.2	MEAN 38.7	MAX 309	MIN 3.8	AC-FT 28,010							

		PEAK DISCHARGE (BASE; 100 FT ³ /S)					
DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-12	0700	2.69	178	1-19	1400	3.19	326
11-17	1800	2.71	182	3-1	1930	3.25	346
12-29	1200	3.12	302	3-27	1000	3.28	362
1-17	0630	3.33	382	3-29	2030	3.36	394

11433060 SOUTH FORK LONG CANYON CREEK DIVERSION TUNNEL NEAR VOLCANOVILLE, CALIF.

LOCATION.--Lat 39°03'04", long 120°28'14", in SW¼NE¼ sec.24, T.14 N., R.13 E., Placer County, Eldorado National Forest, on right bank at diversion dam, 3.3 mi (5.3 km) upstream from confluence with North and South Forks Long Canyon Creek, and 17.2 mi (27.7 km) east of Volcanoville.

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

GAGE.--Water-stage recorder and sharp-crested weir. Altitude of gage is 4,630 ft (1,411 m), from topographic map.

AVERAGE DISCHARGE.--9 years, 9.76 ft³/s (0.276 m³/s), 7,070 acre-ft/yr (8.72 hm³/yr).

EXTREMES.--Period of record: Maximum daily discharge, 251 ft³/s (7.11 m³/s) Nov. 12, 1973; no flow for part of each year.

REMARKS.--Tunnel completed in September 1965; diversion began in February 1966. Flow is diverted from South Fork Long Canyon Creek to a tunnel from Hell Hole Reservoir to Middle Fork powerplant on the Middle Fork American River. See schematic diagram of Middle Fork American and Rubicon River basins.

COOPERATION.--Records collected by Placer County Water Agency, under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	0	39	24				0			
2		0	0	31	22				0			
3		0	0	27	21				1.0			
4		0	0	25	20				26			
5		0	0	23	18				23			
6		0	0	20	17				21			
7		12	0	19	16				19			
8		1.6	0	18	16				17			
9		17	0	17	15				15			
10		223	0	16	15				14			
11		250	0	15	14				13			
12		251	0	16	14				11			
13		248	0	18	13				9.3			
14		114	0	30	12				8.7			
15		0	0	88	11				7.4			
16		0	0	96	11				6.5			
17		0	0	110	11				5.9			
18		0	0	90	11				4.8			
19		0	30	87	11				5.0			
20		0	79	71	10				4.0			
21		0	79	64	10				3.0			
22		0	80	58	9.3				2.2			
23		0	75	56	9.0				1.4			
24		0	74	48	9.0				.54			
25		0	73	43	9.3				0			
26		0	78	36	9.6				0			
27		0	114	33	10				0			
28		0	149	31	6.2				0			
29		0	166	29	-----				0			
30		0	76	27	-----				0			
31		-----	53	25	-----		-----		-----			-----
TOTAL	0	1,116.6	1,126	1,306	374.4	0	0	0	218.74	0	0	0
MEAN	0	37.2	36.3	42.1	13.4	0	0	0	7.29	0	0	0
MAX	0	251	166	110	24	0	0	0	26	0	0	0
MIN	0	0	0	15	6.2	0	0	0	0	0	0	0
AC-FT	0	2,210	2,230	2,590	743	0	0	0	434	0	0	0
CAL YR 1973	TOTAL	6,732.11	MEAN	18.4	MAX	251	MIN	0	AC-FT	13,350		
WTR YR 1974	TOTAL	4,141.74	MEAN	11.3	MAX	251	MIN	0	AC-FT	8,220		

11433080 NORTH FORK LONG CANYON CREEK DIVERSION TUNNEL NEAR VOLCANOVILLE, CALIF.

LOCATION.--Lat 39°02'57", long 120°28'56", in SW¼NW¼ sec.24, T.14 N., R.13 E., Placer County, Eldorado National Forest, on left bank at diversion dam, 3.2 mi (5.1 km) upstream from confluence of North and South Forks Long Canyon Creek, and 16.9 mi (27.2 km) east of Volcanoville.

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

GAGE.--Water-stage recorder and Parshall flume. Altitude of gage is 4,700 ft (1,430 m), from topographic map.

AVERAGE DISCHARGE.--9 years, 3.39 ft³/s (0.096 m³/s), 2,460 acre-ft/yr (30.3 hm³/yr).

EXTREMES.--Period of record: Maximum daily discharge, 54 ft³/s (1.53 m³/s) May 27, 1967; no flow for part of each year.

REMARKS.--No regulation or diversion above station. Tunnel completed in September 1965 and diversions began in February 1966. Flow is diverted from North Fork Long Canyon Creek to a tunnel from Hell Hole Reservoir to Middle Fork powerplant on the Middle Fork American River. See schematic diagram of Middle Fork American and Rubicon River basins.

COOPERATION.--Records collected by Placer County Water Agency, under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.12	.16							0	.26		
2	.12	.16							0	.26		
3	.12	.16							0	.26		
4	.12	.16							0	.26		
5	.12	.16							0	.26		
6	.12	3.1							0	.26		
7	.12	7.2							0	.26		
8	.12	.45							0	.26		
9	.12	.26							0	.21		
10	.12	0							.12	0		
11	.12	0							.26	0		
12	.12	0							.26	0		
13	.12	0							.26	0		
14	.12	0							.26	0		
15	.12	0							.26	0		
16	.12	0							.21	0		
17	.12	0							.21	0		
18	.12	0							.21	0		
19	.12	0							.21	0		
20	.12	0							.21	0		
21	.12	0							.21	0		
22	.12	0							.21	0		
23	.16	0							.21	0		
24	.16	0							.21	0		
25	.16	0							.21	0		
26	.16	0							.21	0		
27	.16	0							.21	0		
28	.16	0							.21	0		
29	.16	0							.21	0		
30	.16	0							.21	0		
31	.16	-----			-----		-----		-----	0		-----
TOTAL	4.08	11.81	0	0	0	0	0	0	4.57	2.29	0	0
MEAN	.13	.39	0	0	0	0	0	0	.15	.074	0	0
MAX	.16	7.2	0	0	0	0	0	0	.26	.26	0	0
MIN	.12	0	0	0	0	0	0	0	0	0	0	0
AC-FT	8.1	23	0	0	0	0	0	0	9.1	4.5	0	0
CAL YR 1973	TOTAL	1,580.72	MEAN	4.33	MAX	35	MIN	0	AC-FT	3,140		
WTR YR 1974	TOTAL	22.75	MEAN	.06	MAX	7.2	MIN	0	AC-FT	45		

11433100 LONG CANYON CREEK NEAR FRENCH MEADOWS, CALIF.

LOCATION.--Lat 39°01'16", long 120°30'53", in SE¼NW¼ sec.34, T.14 N., R.13 E., Placer County, Eldorado National Forest, on right bank 75 ft (23 m) downstream from North Fork Long Canyon, 6.5 mi (10.5 km) south of French Meadows, and 18 mi (29 km) east of Foresthill.

DRAINAGE AREA.--18.0 mi² (46.6 km²).

PERIOD OF RECORD.--August 1960 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 4,100 ft (1,250 m), from topographic map.

AVERAGE DISCHARGE (since diversion to Middle Fork American River powerplant).--8 years (1966-74), 34.8 ft³/s (0.986 m³/s), 25,210 acre-ft/yr (31.1 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 968 ft³/s (27.4 m³/s) Dec. 29 (gage height, 7.41 ft or 2.259 m); minimum daily, 1.0 ft³/s (0.028 m³/s) Sept. 29, 30.
Period of record: Maximum discharge, 4,690 ft³/s (133 m³/s) Dec. 23, 1964 (gage height, 11.20 ft or 3.414 m), from rating curve extended above 300 ft³/s (8.50 m³/s) on basis of slope-area measurements at gage heights 6.62 ft (2.018 m) and 10.27 ft (3.130 m); minimum daily, 0.08 ft³/s (0.002 m³/s) Sept. 27, 28, 1968.

REMARKS.--Water is diverted above this station to a diversion tunnel from Hell Hole Reservoir to Middle Fork American River powerplant via South Fork and North Fork Long Canyon diversion tunnels (see sta 11433060, 11433080); diversions began in February 1966. See schematic diagram of Middle Fork American and Rubicon River basins.

COOPERATION.--Records collected by Placer County Water Agency, under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.1	2.4	59	98	54	387	380	116	57	16	5.9	1.9
2	1.2	2.4	45	88	49	278	343	117	54	18	5.6	1.9
3	1.3	2.2	41	78	47	160	244	113	49	18	5.4	1.8
4	1.2	2.3	39	64	45	132	201	114	25	18	5.3	1.8
5	1.3	4.3	36	61	43	116	181	118	24	17	5.1	1.7
6	1.4	11	35	59	39	107	162	127	23	17	4.8	1.7
7	1.8	39	36	55	38	100	154	140	22	16	4.6	1.7
8	2.1	21	36	49	37	93	150	145	20	20	4.1	1.7
9	1.9	12	38	44	37	88	146	140	19	79	3.9	1.7
10	1.9	61	40	42	36	86	127	131	19	40	3.6	1.6
11	2.0	164	42	40	35	82	124	123	18	29	3.5	1.6
12	2.1	217	40	41	35	111	124	116	18	21	3.4	1.6
13	2.2	75	43	45	35	107	117	107	17	17	3.3	1.5
14	2.4	53	40	86	34	107	116	101	17	14	3.1	1.5
15	2.5	43	39	179	33	116	124	97	16	12	3.0	1.5
16	2.6	61	39	198	33	125	120	91	16	12	2.8	1.4
17	2.7	225	72	426	33	120	122	82	16	11	2.8	1.4
18	2.7	166	67	358	33	113	120	74	16	10	2.7	1.4
19	2.9	76	50	504	35	107	104	66	16	9.3	2.6	1.3
20	2.9	57	40	304	34	103	102	60	16	9.6	2.5	1.3
21	3.0	49	45	192	33	100	104	58	16	9.7	2.5	1.3
22	3.7	43	45	143	32	98	111	58	19	9.2	2.5	1.2
23	5.9	38	42	112	31	95	111	58	19	8.8	2.4	1.2
24	3.9	36	39	96	32	94	99	58	18	8.4	2.4	1.2
25	3.9	33	39	86	33	97	91	59	17	8.1	2.3	1.2
26	3.4	31	45	77	35	106	88	67	17	7.8	2.3	1.1
27	2.8	29	111	70	35	139	88	76	16	7.3	2.2	1.1
28	2.6	30	154	65	43	185	94	75	16	7.1	2.2	1.1
29	2.5	32	541	60	-----	320	98	71	16	6.8	2.1	1.0
30	2.4	38	237	57	-----	464	105	65	15	6.3	2.0	1.0
31	2.4	-----	127	53	-----	297	-----	60	-----	6.1	2.0	-----
TOTAL	76.7	1,653.6	2,302	3,830	1,039	4,633	4,250	2,883	647	489.5	102.9	43.4
MEAN	2.47	55.1	74.3	124	37.1	149	142	93.0	21.6	15.8	3.32	1.45
MAX	5.9	225	541	504	54	464	380	145	57	79	5.9	1.9
MIN	1.1	2.2	35	40	31	82	88	58	15	6.1	2.0	1.0
AC-FT	152	3,280	4,570	7,600	2,060	9,190	8,430	5,720	1,280	971	204	86
CAL YR 1973	TOTAL	12,638.10	MEAN	34.6	MAX	595	MIN	.90	AC-FT	25,070		
WTR YR 1974	TOTAL	21,950.10	MEAN	60.1	MAX	541	MIN	1.0	AC-FT	43,540		

11433200 RUBICON RIVER NEAR FORESTHILL, CALIF.

LOCATION.--Lat 38°59'33", long 120°43'14", in SE¼NW¼ sec.11, T.13 N., R.11 E., Placer County, Eldorado National Forest, on right bank 0.6 mi (1.0 km) upstream from Ralston powerhouse, 1.2 mi (1.9 km) upstream from confluence of Rubicon River and Middle Fork American River, and 5.6 mi (9.0 km) southeast of Foresthill.

DRAINAGE AREA.--315 mi² (816 km²).

PERIOD OF RECORD.--October 1958 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,200 ft (366 m), from topographic map. October 1958 to May 17, 1963, at site 2.0 mi (3.2 km) upstream, 150 ft (46 m) downstream from Ralston Bridge, and May 17, 1963, to Mar. 30, 1965, at site 2.1 mi (3.4 km) upstream, 100 ft (30 m) upstream from Ralston Bridge at datum 1,362.20 ft (415.199 m) above mean sea level.

AVERAGE DISCHARGE (prior to construction of Hell Hole Dam).--7 years (1958-65), 609 ft³/s (17.2 m³/s), 440,900 acre-ft/yr (544 hm³/yr); 9 years (1965-74), 315 ft³/s (8.92 m³/s), 228,200 acre-ft/yr (281 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 5,240 ft³/s (148 m³/s) Jan. 17 (gage height, 11.44 ft or 3.487 m); minimum daily, 44 ft³/s (1.25 m³/s) Oct. 6.

Period of record: Maximum discharge, unknown, Dec. 23, 1964 (gage height, 55.4 ft or 16.89 m), from flood-marks), caused by overtopping of the partly constructed Hell Hole Dam; next highest peak discharge, 83,000 ft³/s (2,350 m³/s) Feb. 1, 1963 (gage height, 35.0 ft or 10.67 m, former site and datum); minimum daily, 10 ft³/s (0.28 m³/s) Sept. 20-27, 1962. Maximum discharge since construction of Hell Hole Dam in 1965, 15,100 ft³/s (428 m³/s) Jan. 21, 1970 (gage height, 14.60 ft or 4.450 m); minimum daily, 24 ft³/s (0.68 m³/s) Sept. 12, 1966.

Floods of December 1937, November 1950, and December 1955 had approximate discharges of 44,000 ft³/s (1,250 m³/s), 56,000 ft³/s (1,590 m³/s), and 73,000 ft³/s (2,070 m³/s), respectively, on basis of 1958-64 stage-discharge relation and U.S. Forest Service floodmarks.

REMARKS.--Flow regulated by Hell Hole Reservoir (see sta 11428700), Loon Lake (see sta 11429350), and Stumpy Meadows Lake, capacity, 20,000 acre-ft (24.7 hm³). Water is imported from French Meadows Reservoir on Middle Fork American River through tunnel to French Meadows powerplant on shore of Hell Hole Reservoir. Water is diverted from Hell Hole Reservoir through tunnel to Middle Fork powerplant on Middle Fork American River. Robbs Peak tunnel and powerplant (see sta 11429800) divert water to South Fork American River basin. See schematic diagram of Middle Fork American and Rubicon River basins.

COOPERATION.--Records collected by Placer County Water Agency, under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

REVISIONS (WATER YEARS).--WSP 1931: Drainage area. WRD Calif. 1968: 1967(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	47	55	720	825	583	2,470	2,860	624	305	121	92	61
2	62	57	440	731	529	2,940	2,890	636	292	114	91	61
3	51	57	337	651	492	1,650	2,160	616	285	114	88	61
4	49	57	295	593	467	1,280	1,750	606	261	110	87	58
5	45	67	270	570	445	1,120	1,510	596	191	109	85	58
6	44	153	252	565	419	1,020	1,330	599	188	106	85	57
7	46	185	241	500	398	1,020	1,190	601	236	106	82	55
8	66	218	234	461	382	980	1,100	606	188	130	78	55
9	62	141	234	431	368	904	1,090	575	177	400	72	55
10	57	201	228	407	356	845	969	555	175	1,700	69	55
11	50	1,070	229	390	345	814	911	519	179	549	69	52
12	49	1,750	230	422	345	1,050	878	498	173	206	69	50
13	49	569	314	469	346	1,020	824	472	167	175	69	50
14	49	498	300	593	328	940	792	450	160	151	69	50
15	49	297	258	1,430	317	933	782	579	157	142	69	50
16	49	346	244	1,390	336	932	765	628	160	137	74	50
17	49	940	304	3,960	320	915	743	493	156	133	69	50
18	49	1,160	379	2,560	310	867	752	409	154	129	66	50
19	49	527	307	3,950	541	833	701	359	156	125	66	50
20	49	373	264	2,540	457	792	665	332	157	122	66	50
21	50	327	315	1,790	398	762	643	319	154	118	66	50
22	62	271	444	1,410	419	735	645	323	150	114	66	50
23	165	233	369	1,180	377	717	677	331	146	114	66	50
24	103	221	405	1,030	361	694	716	357	142	110	64	50
25	71	208	387	915	382	697	646	383	134	110	64	53
26	63	206	396	824	397	718	636	379	134	110	64	53
27	62	187	701	741	446	941	600	307	130	106	63	53
28	59	178	948	682	450	1,410	600	302	130	101	61	53
29	59	178	2,440	635	-----	1,810	608	400	129	99	61	55
30	59	185	1,820	591	-----	3,150	615	343	125	95	61	55
31	55	-----	988	562	-----	2,430	-----	315	-----	92	61	-----
TOTAL	1,828	10,915	15,293	33,798	11,314	37,389	31,048	14,512	5,291	6,048	2,212	1,600
MEAN	59.0	364	493	1,090	404	1,206	1,035	468	176	195	71.4	53.3
MAX	165	1,750	2,440	3,960	583	3,150	2,890	636	305	1,700	92	61
MIN	44	55	228	390	310	694	600	302	125	92	61	50
AC-FT	3,630	21,650	30,330	67,040	22,440	74,160	61,580	28,780	10,490	12,000	4,390	3,170
CAL YR 1973	TOTAL	118,627	MEAN	325	MAX	3,140	MIN	44	AC-FT	235,300		
WTR YR 1974	TOTAL	171,248	MEAN	469	MAX	3,960	MIN	44	AC-FT	339,700		

LOCATION.--Lat 39°01'27", long 120°43'03", in NE¼NW¼ sec.35, T.14 N., R.11 E., Placer County, Tahoe National Forest, on right bank 1.0 mi (1.6 km) downstream from El Dorado Canyon, and 4.8 mi (7.7 km) east of Foresthill.

Period of record: Maximum discharge, 13,600 ft³/s (385 m³/s) Jan. 21, 1970 (gage height, 12.80 ft or 3.901 m in gage well, 13.5 ft or 4.11 m, from floodmarks); minimum daily, 17 ft³/s (0.48 m³/s) Oct. 23 to Nov. 5, 1966.

COOPERATION.--Records collected by Placer County Water Agency, under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30	33	703	989	444	2,850	2,960	553	236	81	53	36
2	30	32	462	740	394	2,600	2,470	595	232	81	53	35
3	30	31	362	636	368	1,440	1,550	575	222	80	52	35
4	30	31	332	567	349	1,090	1,220	568	206	80	51	35
5	30	40	277	510	334	873	1,110	579	193	80	52	34
6	30	185	251	580	318	777	969	620	188	80	52	34
7	31	619	236	450	305	771	862	663	178	80	49	33
8	53	341	229	450	293	729	839	670	168	135	47	33
9	44	154	224	400	282	676	813	623	161	570	46	33
10	33	565	224	380	275	631	712	571	155	240	45	32
11	30	1,800	242	360	268	606	666	526	148	140	43	32
12	29	2,630	228	370	269	966	650	491	143	114	43	31
13	28	1,270	328	510	262	907	626	462	136	101	42	31
14	28	849	296	750	252	802	621	433	130	93	42	30
15	27	538	263	2,560	243	830	639	422	124	86	42	32
16	27	708	243	1,940	260	873	648	396	123	82	40	32
17	26	1,990	462	5,830	242	849	647	356	123	80	40	32
18	26	1,800	484	3,120	247	775	663	328	117	75	40	31
19	25	933	375	3,320	405	733	584	302	126	74	40	30
20	25	630	326	2,070	338	688	536	277	124	71	42	30
21	26	497	342	1,410	313	655	523	269	119	70	40	30
22	34	405	384	1,130	309	626	541	269	113	69	40	30
23	151	331	340	905	289	598	579	281	108	67	39	30
24	78	302	307	755	284	584	553	298	102	64	38	29
25	51	274	288	658	283	602	486	306	96	62	40	29
26	45	258	310	580	312	649	461	328	91	62	39	29
27	41	225	1,200	523	332	1,040	437	328	85	60	39	29
28	39	210	1,590	490	336	1,600	446	310	83	58	38	29
29	37	208	3,800	456	-----	2,410	471	285	82	57	37	29
30	34	232	1,910	430	-----	3,820	490	262	82	56	37	29
31	33	-----	1,290	416	-----	2,250	-----	243	-----	54	37	-----
TOTAL	1,181	18,121	18,308	34,285	8,606	35,300	24,772	13,189	4,194	3,102	1,338	944
MEAN	38.1	604	591	1,106	307	1,139	826	425	140	100	43.2	31.5
MAX	151	2,630	3,800	5,830	444	3,820	2,960	670	236	570	53	36
MIN	25	31	224	360	242	584	437	243	82	54	37	29
AC-FT	2,340	35,940	36,310	68,000	17,070	70,020	49,140	26,160	8,320	6,150	2,650	1,870
CAL YR 1973	TOTAL 129,688		MEAN 355	MAX 4,370	MTN 25	AC-FT 257,200						
WTR YR 1974												

SACRAMENTO RIVER BASIN

11433300 MIDDLE FORK AMERICAN RIVER NEAR FORESTHILL, CALIF.

LOCATION.--Lat 39°00'23", long 120°45'40", in NW¼NW¼ sec.4, T.13 N., R.11 E., Placer County, Tahoe National Forest, on right bank 1.7 mi (2.7 km) downstream from Oxbow powerhouse, and 3.2 mi (5.1 km) east of Foresthill.

DRAINAGE AREA.--524 mi² (1,357 km²).

PERIOD OF RECORD.--October 1958 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,060 ft (323 m), from topographic map. Prior to Oct. 22, 1965, at site 3.2 mi (5.1 km) downstream at different datum.

AVERAGE DISCHARGE.--16 years, 1,134 ft³/s (32.11 m³/s), 821,600 acre-ft/yr (1,010 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 16,500 ft³/s (467 m³/s) Jan. 17 (gage height, 14.14 ft or 4.310 m); minimum daily, 87 ft³/s (2.46 m³/s) Aug. 17.

Period of record: Maximum discharge, 310,000 ft³/s (8,780 m³/s) Dec. 23, 1964 (gage height, 69.0 ft or 21.03 m, from floodmarks, site and datum then in use), caused by overtopping of the partly constructed Hell Hole Dam on the Rubicon River, from rating curve extended above 28,000 ft³/s (793 m³/s) on basis of slope-area measurement at gage height 38.0 ft (11.58 m) and slope-conveyance study at gage height 69.0 ft (21.03 m) at site and datum then in use; next highest peak, 113,000 ft³/s (3,200 m³/s) Feb. 1, 1963 (gage height, 38.00 ft or 11.582 m, site and datum then in use); minimum, 35 ft³/s (0.99 m³/s) Oct. 19, 20, 1961.

REMARKS.--Flow regulated by French Meadows Reservoir (see sta 11427400), Hell Hole Reservoir (see sta 11428700), Loon Lake (see sta 11429350), Stumpy Meadows Lake, usable capacity, 20,000 acre-ft (24.7 hm³), and Ralston and Oxbow powerplants. Robbs Peak tunnel (see sta 11429800) and Georgetown Divide ditch, capacity, about 25 ft³/s (0.71 m³/s) divert water out of basin above station. See schematic diagram of Middle Fork American and Rubicon River basins.

COOPERATION.--Records collected by Placer County Water Agency, under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

REVISIONS.--WSP 1931: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	637	555	2,500	2,820	2,070	6,600	7,150	2,280	1,620	769	774	593
2	663	772	2,000	2,510	1,920	7,290	6,810	2,350	1,590	787	910	412
3	642	650	1,750	2,320	1,890	4,410	5,070	2,300	2,000	853	491	781
4	669	675	1,650	2,170	1,810	3,530	4,280	2,250	2,400	628	603	776
5	664	862	1,550	2,080	1,790	3,210	3,800	2,270	2,080	759	810	777
6	629	789	1,500	2,110	1,720	2,990	3,540	2,280	1,640	585	747	882
7	688	1,490	1,500	1,940	1,710	3,020	3,250	2,320	1,500	549	812	454
8	727	1,470	1,500	1,900	1,670	2,910	3,120	2,350	1,540	779	886	487
9	691	943	1,450	1,820	1,650	2,530	3,060	2,300	1,450	1,820	908	805
10	620	1,110	1,450	1,770	1,640	2,370	2,810	2,200	1,350	3,250	468	817
11	647	7,610	1,500	1,610	1,600	2,580	2,740	2,130	1,320	1,680	513	817
12	616	5,460	1,450	1,770	1,610	3,030	2,640	2,050	1,370	1,260	751	884
13	700	2,560	1,700	1,970	1,600	3,030	2,580	1,990	1,540	1,050	909	759
14	713	2,110	1,650	2,360	1,580	2,690	2,520	1,950	1,500	929	865	606
15	680	1,490	1,600	5,090	1,550	2,730	2,350	2,060	1,420	943	1,120	665
16	554	1,400	1,550	4,390	1,610	2,470	2,240	2,090	1,400	801	124	830
17	700	3,380	1,750	11,400	1,560	2,430	2,230	1,920	1,280	1,000	87	885
18	619	3,760	1,900	6,750	1,550	2,370	2,230	1,780	1,220	1,100	90	1,000
19	565	2,380	1,700	9,460	2,020	2,370	2,060	1,710	1,210	857	665	866
20	798	2,140	1,600	6,120	1,810	2,340	2,050	1,640	1,250	638	762	784
21	588	1,970	1,550	4,430	1,720	2,260	2,270	1,630	1,230	675	729	935
22	753	1,740	1,400	3,690	1,760	2,100	2,260	1,640	1,080	837	837	729
23	1,210	1,640	1,600	3,210	1,670	1,850	2,190	1,670	1,210	831	751	898
24	883	1,620	1,200	2,910	1,680	1,750	2,090	1,710	1,040	868	560	1,140
25	668	1,550	1,050	2,680	1,680	2,150	1,880	1,730	964	902	344	1,120
26	678	1,550	1,600	2,510	1,750	2,370	1,760	1,770	961	883	533	1,140
27	684	1,490	2,900	2,350	1,770	2,780	2,150	1,710	914	654	782	1,130
28	651	1,500	3,660	2,220	1,760	3,900	2,160	1,670	867	534	766	951
29	614	1,400	7,850	2,140	-----	5,070	2,190	1,760	726	742	757	645
30	642	1,400	4,880	2,090	-----	8,560	2,200	1,560	604	937	673	1,010
31	638	-----	3,330	1,990	-----	6,050	-----	1,610	-----	894	562	-----
TOTAL	21,231	53,466	64,270	102,580	48,150	103,740	87,680	60,680	40,276	29,794	20,589	24,578
MEAN	685	1,782	2,073	3,309	1,720	3,346	2,923	1,957	1,343	961	664	819
MAX	1,210	5,460	7,850	11,400	2,070	8,560	7,150	2,350	2,400	3,250	1,120	1,140
MIN	554	555	1,050	1,610	1,550	1,750	1,760	1,560	604	534	87	412
AC-FT	42,110	106,000	127,500	203,500	95,510	205,800	173,900	120,400	79,890	59,100	40,840	48,750
CAL YR 1973	TOTAL 477,878		MEAN 1,309		MAX 9,340		MIN 68		AC-FT 947,900			
WTR YR 1974	TOTAL 657,034		MEAN 1,800		MAX 11,400		MIN 87		AC-FT 1,303,000			

SACRAMENTO RIVER BASIN

449

11433400 CANYON CREEK NEAR GEORGETOWN, CALIF.

LOCATION.--Lat 38°56'03", long 120°52'21", in SW¼NW¼ sec.33, T.13 N., R.10 E., El Dorado County, Eldorado National Forest, on right bank 0.7 mi (1.1 km) downstream from West Canyon, and 2.6 mi (4.2 km) northwest of Georgetown.

DRAINAGE AREA.--12.5 mi² (32.4 km²)

PERIOD OF RECORD.--July 1966 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,995 ft (608 m), from topographic map.

AVERAGE DISCHARGE.--8 years, 21.8 ft³/s (0.617 m³/s), 15,790 acre-ft/yr (19.5 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 709 ft³/s (20.1 m³/s) Mar. 2 (gage height, 9.73 ft or 2.966 m); minimum daily, 3.5 ft³/s (0.10 m³/s) Nov. 3, 4.
Period of record: Maximum discharge, 1,300 ft³/s (36.8 m³/s) Jan. 21, 1970 (gage height, 11.01 ft or 3.356 m); minimum daily, 1.8 ft³/s (0.05 m³/s) Oct. 1, 4-12, 1966.

REMARKS.--Records good except those for period of no gage-height record, which are fair. Small diversions above station for irrigation and domestic purposes. See schematic diagram of Middle Fork American and Rubicon River basins. Records of water temperatures for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.1	3.6	142	44	29	303	309	24	11	7.8	6.7	5.7
2	6.4	3.6	38	35	24	337	201	23	24	8.5	6.7	6.0
3	13	3.5	26	30	23	139	119	22	15	8.7	6.6	5.9
4	13	3.5	21	28	22	92	92	21	14	8.6	6.4	5.7
5	7.1	6.5	18	28	22	73	80	20	13	8.5	6.7	5.8
6	5.4	22	16	28	22	70	73	20	11	7.9	6.7	6.3
7	7.3	19	14	27	21	85	64	20	11	7.8	6.6	6.1
8	9.6	12	13	28	20	92	59	21	10	19	6.5	6.1
9	6.6	15	12	26	20	70	58	27	10	38	6.2	6.1
10	4.5	32	12	25	19	60	50	25	11	14	6.1	5.9
11	4.7	78	14	24	19	61	46	24	10	12	6.0	5.7
12	6.1	96	13	41	20	78	43	21	10	12	6.0	5.7
13	5.0	60	43	53	20	62	41	18	10	12	6.2	6.4
14	4.1	28	23	98	19	55	39	18	9.6	10	9.8	6.3
15	4.2	23	19	173	18	55	37	18	9.4	9.7	6.5	6.2
16	4.8	40	17	129	23	53	36	17	9.3	9.1	5.5	6.2
17	5.0	77	24	350	20	48	36	18	9.7	9.0	5.4	6.3
18	5.0	70	22	133	19	44	33	18	9.9	9.0	6.0	6.3
19	4.6	46	15	120	83	43	32	18	12	8.9	5.3	6.2
20	4.0	35	14	93	41	39	31	19	10	8.9	5.6	6.1
21	4.1	27	30	67	36	37	28	18	9.9	8.5	5.6	6.0
22	6.8	23	67	53	46	36	28	17	9.5	8.3	5.6	5.7
23	15	20	35	45	35	34	31	16	9.1	8.1	5.5	5.7
24	6.6	18	25	41	30	32	40	15	8.7	8.1	5.4	5.8
25	4.8	16	21	39	28	32	37	13	8.4	8.1	5.5	5.9
26	4.5	14	25	35	30	32	37	14	8.4	8.2	6.3	5.9
27	4.3	13	97	32	29	46	33	14	8.3	7.7	5.7	6.0
28	4.1	12	124	30	29	90	29	12	8.6	7.6	5.5	6.1
29	3.9	12	237	27	-----	129	27	12	8.0	7.7	5.7	5.1
30	3.8	14	94	26	-----	288	25	12	7.9	7.5	5.6	5.0
31	3.7	-----	56	25	-----	152	-----	11	-----	6.9	5.8	-----
TOTAL	187.1	842.7	1,327	1,933	767	2,767	1,794	566	316.7	316.1	189.7	178.2
MEAN	6.04	28.1	42.8	62.4	27.4	89.3	59.8	18.3	10.6	10.2	6.12	5.94
MAX	15	96	237	350	83	337	309	27	24	38	9.8	6.4
MIN	3.7	3.5	12	24	18	32	25	11	7.9	6.9	5.3	5.0
AC-FT	371	1,670	2,630	3,830	1,520	5,490	3,560	1,120	628	627	376	353

CAL YR 1973 TOTAL 9,698.2 MEAN 26.6 MAX 556 MIN 2.1 AC-FT 19,240
WTR YR 1974 TOTAL 11,184.5 MEAN 30.6 MAX 350 MIN 3.5 AC-FT 22,180

DATE	TIME	PEAK DISCHARGE (BASE, 170 FT ³ /S)	DATE	TIME	G.H.	DISCHARGE
11-12	unknown	8.02 297	1-17	0400	9.62	676
11-28	unknown	-- unknown	3-2	0030	9.73	709
12-1	0530	8.16 320	3-30	0600	8.67	414
12-29	1000	8.99 488	4-1	1500	9.09	517
1-14	2130	7.74 256				

NOTE.--No gage-height record Oct. 26 to Nov. 28.

SACRAMENTO RIVER BASIN

11433420 MAINE BAR CANYON CREEK NEAR GREENWOOD, CALIF.

LOCATION.--Lat 38°55'34", long 120°56'51", in NW¼NW¼ sec.2, T.12 N., R.9 E., El Dorado County, on right bank
2.8 mi (4.5 km) northwest of Greenwood, and 4.5 mi (7.2 km) northeast of Cool.

DRAINAGE AREA.--0.76 mi² (1.97 km²).

PERIOD OF RECORD.--March to September 1972 (discharge measurements only), October 1972 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,520 ft (463 m), from topographic map.

EXTREMES.--Current year: Maximum discharge, 57 ft³/s (1.61 m³/s) Nov. 13 (gage height, 1.56 ft or 0.475 m);
minimum daily, 0.02 ft³/s (0.0006 m³/s) on several days.
Period of record: Maximum discharge, 79 ft³/s (2.24 m³/s) Jan. 12, 1973 (gage height, 1.82 ft or 0.555 m);
minimum daily, 0.01 ft³/s (<0.001 m³/s) July 10-12; July 28 to Aug. 2, 1973.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.07	.03	9.8	4.0	1.4	18	21	.42	.21	.07	.05	.07
2	.07	.02	3.0	2.8	.98	24	9.8	.42	.21	.07	.05	.05
3	.07	.02	1.8	2.4	.76	11	5.8	.42	.21	.07	.05	.05
4	.07	.02	1.5	2.4	.76	6.1	4.0	.42	.21	.07	.05	.03
5	.07	.33	1.1	2.8	.67	4.6	2.4	.42	.21	.07	.05	.03
6	.07	.42	.87	3.7	.58	4.0	2.2	.42	.21	.07	.05	.03
7	.27	2.4	.67	4.3	.58	4.6	2.0	.42	.21	.07	.05	.03
8	.11	.27	.58	4.9	.49	5.5	1.8	.33	.15	.87	.07	.03
9	.05	.33	.49	4.6	.42	4.3	2.2	.33	.15	1.2	.07	.03
10	.05	2.2	.49	4.3	.42	3.4	1.5	.33	.15	.42	.07	.03
11	.05	5.5	.76	3.2	.42	3.4	1.2	.27	.15	.27	.07	.03
12	.05	6.4	.58	4.0	.67	3.7	1.1	.33	.15	.21	.07	.03
13	.05	9.5	5.5	3.2	.76	2.2	.87	.27	.15	.21	.07	.05
14	.05	4.0	2.6	4.6	.67	1.8	.87	.27	.15	.15	.07	.05
15	.05	1.6	1.8	6.8	.58	1.5	.87	.33	.15	.15	.07	.05
16	.05	5.5	1.5	8.0	1.2	1.2	.87	.33	.15	.15	.07	.05
17	.05	7.6	2.4	13	.87	.98	.87	.33	.15	.15	.07	.05
18	.05	6.8	1.6	9.8	.87	.87	.87	.33	.21	.11	.07	.03
19	.03	3.7	1.4	7.2	4.9	.87	.87	.33	.33	.11	.07	.03
20	.03	4.3	1.2	5.5	2.4	.76	.76	.33	.15	.07	.05	.03
21	.03	3.4	4.9	4.3	3.0	.67	.67	.33	.15	.07	.05	.02
22	.33	3.0	7.2	2.2	2.8	.58	.67	.27	.15	.07	.05	.02
23	.33	2.4	3.7	1.8	2.2	.58	1.2	.27	.11	.07	.05	.02
24	.11	1.8	2.8	1.8	1.6	.58	4.0	.27	.11	.07	.05	.02
25	.11	.87	2.0	1.6	1.5	.87	2.4	.21	.11	.07	.05	.02
26	.05	.67	3.0	1.5	1.6	.67	.67	.21	.11	.07	.05	.02
27	.05	.49	8.8	1.4	1.5	3.0	.49	.21	.11	.07	.05	.03
28	.03	.42	9.8	1.2	2.0	5.5	.49	.21	.07	.07	.05	.03
29	.03	.27	14	1.1	-----	8.4	.42	.21	.07	.07	.05	.03
30	.03	.98	6.8	1.1	-----	13	.42	.21	.07	.07	.07	.03
31	.02	-----	4.9	1.2	-----	7.2	-----	.21	-----	.07	.07	-----
TOTAL	2.48	75.24	107.54	120.7	36.60	143.83	73.28	9.66	4.72	5.33	1.83	1.02
MEAN	.080	2.51	3.47	3.89	1.31	4.64	2.44	.31	.16	.17	.059	.034
MAX	.33	9.5	14	13	4.9	24	21	.42	.33	1.2	.07	.07
MIN	.02	.02	.49	1.1	.42	.58	.42	.21	.07	.07	.05	.02
AC-FT	4.9	149	213	239	73	285	145	19	9.4	11	3.6	2.0

CAL YR 1973 TOTAL 583.06 MEAN 1.60 MAX 39 MIN .01 AC-FT 1,160
WTR YR 1974 TOTAL 582.23 MEAN 1.60 MAX 24 MIN .02 AC-FT 1,150

PEAK DISCHARGE (BASE, 20 FT ³ /S)							
DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-13	1700	1.56	57	3-1	1530	1.29	44
12-1	0200	1.10	26	3-30	0430	1.28	38
12-29	0800	1.15	30	4-1	1200	1.30	39
1-17	0130	1.17	31				

451

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	735	626	3,610	3,240	2,140	6,590	8,470	2,140	1,520	583	714	464
2	567	618	2,420	2,800	2,000	10,800	8,710	2,230	1,510	744	829	506
3	633	658	1,990	2,560	1,940	6,050	6,130	2,200	1,700	813	801	546
4	661	624	1,820	2,430	1,850	4,440	4,960	2,150	2,220	774	326	712
5	671	735	1,710	2,340	1,810	3,740	4,300	2,130	2,030	553	703	691
6	592	862	1,660	2,390	1,780	3,420	3,900	2,160	1,530	666	634	847
7	589	1,380	1,630	2,290	1,740	3,410	3,500	2,180	1,440	566	742	502
8	713	1,580	1,600	2,220	1,700	3,530	3,300	2,210	1,430	618	829	480
9	669	1,010	1,570	2,090	1,670	3,010	3,260	2,170	1,410	1,630	848	617
10	628	1,040	1,590	1,980	1,640	2,630	2,960	2,110	1,310	3,090	576	761
11	571	3,430	1,620	1,930	1,610	2,890	2,830	2,020	1,260	1,820	478	729
12	580	5,340	1,580	2,040	1,620	3,290	2,740	1,950	1,260	1,310	575	748
13	706	2,990	1,920	2,230	1,630	3,380	2,620	1,890	1,460	1,150	893	651
14	608	2,540	1,850	2,550	1,600	3,010	2,540	1,870	1,450	961	760	648
15	642	1,670	1,730	5,860	1,560	2,910	2,430	1,900	1,360	852	1,050	418
16	559	1,460	1,650	4,860	1,620	2,790	2,260	2,000	1,340	820	483	670
17	598	3,300	1,810	12,700	1,590	2,520	2,220	1,870	1,230	963	95	740
18	684	4,480	2,090	7,710	1,560	2,500	2,210	1,720	1,200	1,050	90	881
19	417	2,630	1,860	10,100	2,220	2,400	2,100	1,660	1,170	811	264	778
20	772	2,260	1,730	7,340	2,030	2,280	1,960	1,600	1,200	706	705	683
21	564	2,110	1,760	5,170	1,820	2,210	2,230	1,590	1,190	660	852	789
22	661	1,880	2,060	4,170	1,940	2,140	2,220	1,580	1,060	650	628	639
23	1,160	1,690	1,790	3,530	1,790	2,140	2,170	1,590	1,160	795	712	735
24	869	1,660	1,610	3,150	1,780	2,080	2,130	1,610	1,000	830	579	997
25	752	1,580	1,300	2,890	1,750	2,160	1,920	1,660	1,000	777	389	976
26	615	1,600	1,450	2,670	1,790	2,280	1,790	1,670	858	868	418	1,000
27	815	1,500	3,160	2,480	1,840	2,750	2,040	1,610	877	654	729	1,000
28	602	1,480	4,520	2,340	1,830	4,240	2,080	1,600	834	519	697	784
29	465	1,460	6,660	2,250	-----	5,450	2,120	1,650	835	545	706	600
30	616	1,480	5,750	2,150	-----	10,500	2,120	1,510	586	848	699	760
31	608	-----	3,850	2,070	-----	7,620	-----	1,490	-----	818	588	-----
TOTAL	20,322	55,673	71,350	114,530	49,850	119,160	94,220	57,710	38,432	28,444	19,392	21,352
MEAN	656	1,856	2,302	3,695	1,780	3,844	3,141	1,862				

11433800 NORTH FORK AMERICAN RIVER BELOW AUBURN DAMSITE, NEAR AUBURN, CALIF.

LOCATION.--Lat 38°52'20", long 121°03'18", in SE¼SW¼ sec.23, T.12 N., R.8 E., Placer County, on right bank 1,080 ft (329 m) upstream from Knickerbocker Creek, and 2.0 mi (3.2 km) southeast of Auburn.

DRAINAGE AREA.--973 mi² (2,520 km²).

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

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is at mean sea level (levels by Bureau of Reclamation).

EXTREMES.--Current year: Maximum discharge, 34,100 ft³/s (966 m³/s) Jan. 17 (gage height, 79.37 ft or 24.192 m); minimum daily, 173 ft³/s (4.90 m³/s) Aug. 18.
Period of record: Maximum discharge, 34,100 ft³/s (966 m³/s) Jan. 17, 1974 (gage height, 79.37 ft or 24.192 m); minimum daily, 173 ft³/s (4.90 m³/s) Aug. 18, 1974.

REMARKS.--Records good. Natural flow of stream affected by many reservoirs and diversions (see REMARKS for sta 11427000, 11433500).

DISCHARGE IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	823	704	7,010	5,810	3,440	16,100	15,700	3,910	3,380	932	848	527
2	641	662	4,800	4,860	3,020	17,000	15,600	4,320	3,450	1,080	959	569
3	702	716	3,810	4,420	2,860	9,260	10,700	4,240	3,680	1,120	926	610
4	751	670	3,420	4,110	2,720	6,830	7,860	4,160	4,020	1,050	441	774
5	748	790	3,070	3,890	2,630	6,330	6,850	4,200	3,630	817	832	753
6	660	1,110	2,890	3,950	2,530	5,720	6,130	4,360	3,100	919	791	911
7	659	2,810	2,740	3,860	2,450	5,680	5,570	4,650	2,900	798	881	563
8	841	3,090	2,630	3,780	2,390	5,880	5,230	4,960	2,660	924	954	537
9	800	1,590	2,550	3,480	2,330	5,110	5,220	4,870	2,560	3,870	965	676
10	749	2,370	2,540	3,220	2,280	4,540	4,770	4,620	2,490	5,100	688	821
11	663	10,200	2,550	3,060	2,250	4,670	4,520	4,330	2,450	2,600	584	788
12	658	14,900	2,510	3,360	2,240	5,490	4,410	4,230	2,460	1,820	678	808
13	793	6,820	3,210	3,930	2,260	5,560	4,290	3,930	2,590	1,580	995	710
14	685	5,690	3,150	4,620	2,190	4,990	4,170	3,780	2,500	1,330	857	707
15	727	3,800	2,780	13,000	2,140	4,900	4,130	3,840	2,360	1,170	1,150	474
16	646	3,630	2,610	10,100	2,240	4,820	4,120	3,810	2,210	1,120	577	729
17	674	7,220	2,900	23,700	2,210	4,540	4,050	3,340	2,010	1,240	182	799
18	769	9,510	3,640	14,400	2,140	4,360	4,170	2,970	1,920	1,310	173	942
19	490	5,400	2,990	18,900	3,410	4,160	3,800	2,750	1,890	1,050	352	838
20	859	4,320	2,700	12,700	3,240	3,950	3,510	2,560	1,850	934	795	742
21	663	3,860	2,800	8,910	2,790	3,830	3,750	2,490	1,790	874	941	849
22	751	3,270	3,690	6,950	2,980	3,710	3,900	2,700	1,630	858	713	697
23	1,400	2,840	3,120	5,880	2,660	3,620	4,090	2,960	1,720	992	794	794
24	1,120	2,690	2,770	5,150	2,590	3,600	3,860	3,210	1,500	1,020	658	1,060
25	937	2,470	2,350	4,660	2,530	3,740	3,410	3,410	1,450	951	463	1,040
26	751	2,420	2,450	4,290	2,630	3,900	3,180	3,760	1,250	1,040	490	1,060
27	949	2,210	5,150	3,950	2,690	4,790	3,260	4,200	1,250	817	801	1,060
28	697	2,130	7,930	3,720	2,690	7,800	3,330	4,030	1,200	676	767	844
29	535	2,130	16,600	3,500	-----	11,000	3,410	3,880	1,200	696	773	658
30	679	2,200	11,200	3,310	-----	21,600	3,620	3,360	951	993	763	820
31	666	-----	7,210	3,160	-----	14,400	-----	3,280	-----	958	652	-----
TOTAL	23,486	112,222	129,770	202,630	72,530	211,880	160,610	117,110	68,051	40,639	22,443	23,160
MEAN	758	3,741	4,186	6,536	2,590	6,835	5,354	3,778	2,268	1,311	724	772
MAX	1,400	14,900	16,600	23,700	3,440	21,600	15,700	4,960	4,020	5,100	1,150	1,060
MIN	490	662	2,350	3,060	2,140	3,600	3,180	2,490	951	676	173	474
AC-FT	46,580	222,600	257,400	401,900	143,900	420,300	318,600	232,300	135,000	80,610	44,520	45,940

CAL YR 1973 TOTAL 963,662 MEAN 2,640 MAX 24,400 MIN 190 AC-FT 1,911,000
WTR YR 1974 TOTAL 1,184,531 MEAN 3,245 MAX 23,700 MIN 173 AC-FT 2,350,000

NOTE.--No gage-height record Mar. 5 to Apr. 3, May 17 to June 4.

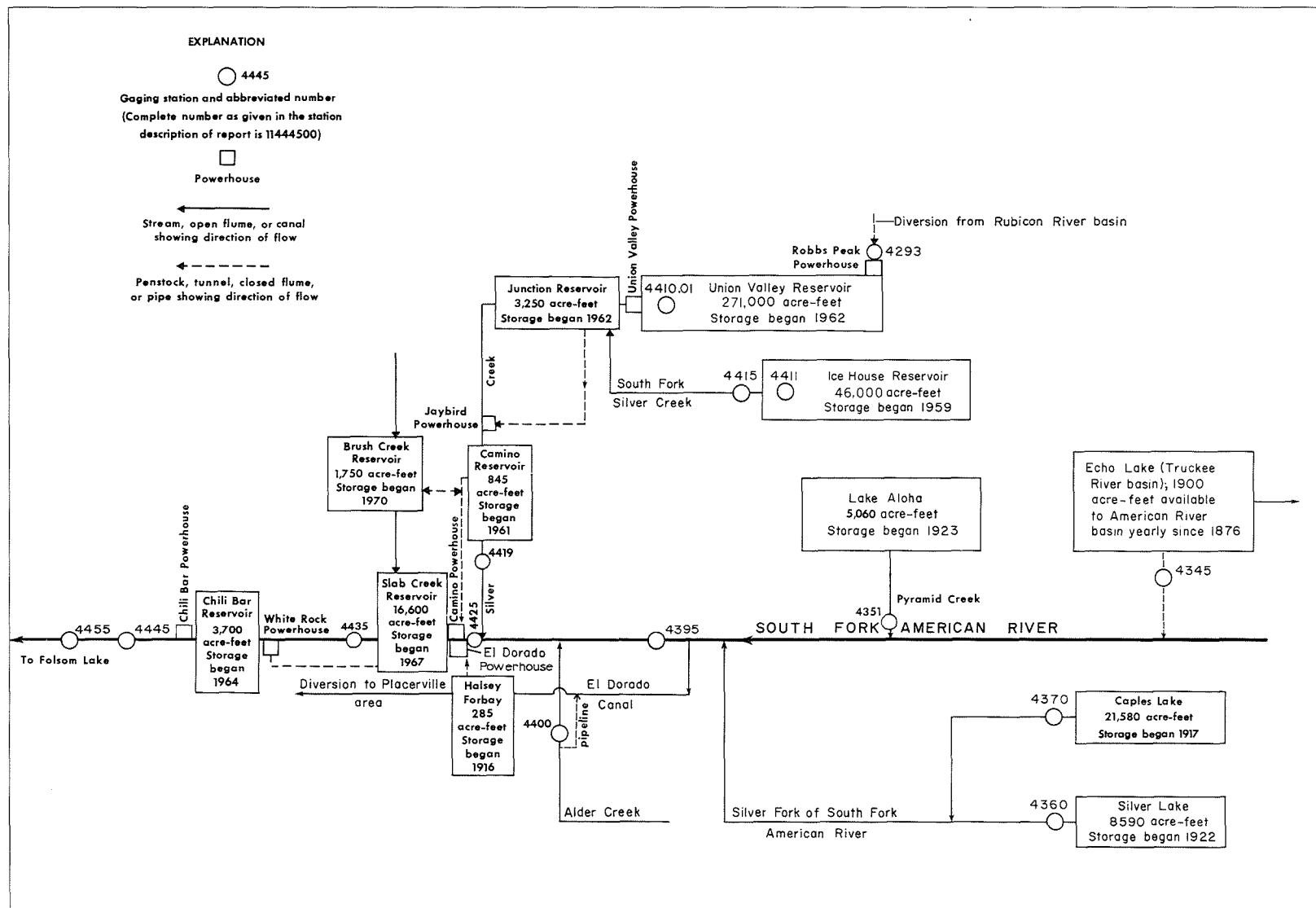


FIGURE 17.--Schematic diagram showing diversions and storage in South Fork American River basin.

SACRAMENTO RIVER BASIN

11434500 ECHO LAKE CONDUIT NEAR PHILLIPS, CALIF.

LOCATION.--Lat 38°49'52", long 120°02'12", in NW¼ sec.6, T.11 N., R.18 E., El Dorado County, Eldorado National Forest, on right bank in Berkeley Municipal Camp, 0.5 mi (0.8 km) downstream from intake, and 2.4 mi (3.9 km) northeast of Phillips.

PERIOD OF RECORD.--August 1923 to current year (diversion seasons only). Monthly discharge only for July 1933, published in WSP 1315-A. Published as Echo Lake flume near Vade prior to 1943 and as Echo Lake conduit near Vade for seasons 1944-53.

GAGE.--Water-stage recorder. Altitude of gage is 7,420 ft (2,262 m), from topographic map. Prior to July 16, 1929, nonrecording gage at site 0.4 mi (0.6 km) upstream at different datum.

EXTREMES.--Period of record: Maximum daily discharge, 31 ft³/s (0.88 m³/s) Sept. 10, 1963, Sept. 13-15, 1971; no flow for most of each year.

REMARKS.--No flow except during diversion season for which discharge is published. Conduit diverts from Echo Lake, capacity, 1,900 acre-ft (2.34 hm³) in Truckee River basin into basin of South Fork American River for power and irrigation. See schematic diagram of South Fork American River basin.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, AUGUST TO OCTOBER 1974

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1								0	9.3	4.8		
2								0	11	3.4		
3								0	30	2.9		
4								0	26	2.2		
5								0	29	1.7		
6								0	28	.70		
7								0	28	0		
8								0	27	0		
9								0	27	0		
10								0	27	0		
11								0	26	0		
12								0	25	0		
13								0	25	0		
14								0	24	0		
15								0	23	0		
16								0	23	0		
17								0	21	0		
18								0	20	0		
19								0	19	0		
20								0	18	0		
21								0	17	0		
22								0	16	0		
23								0	15	0		
24								0	13	0		
25								0	12	0		
26								16	11	0		
27								30	9.8	0		
28								30	8.5	0		
29		-----						29	7.5	0		
30		-----						22	6.4	0		
31		-----		-----		-----		9.3	-----	0	-----	
TOTAL								136.3	582.5	15.70		
MEAN								4.40	19.4	.51		
MAX								30	30	4.8		
MIN								0	6.4	0		
AC-FT								270	1.160	31		

LOCATION.--Lat 38°48'57", long 120°06'58", in NW¼SW¼ sec.9, T.11 N., R.17 E., El Dorado County, Eldorado National Forest, on right bank 0.5 mi (0.8 km) northeast of Twin Bridges, and 2.2 mi (3.5 km) west of Phillips.

EXTREMES.--Current year: Maximum discharge, 431 ft³/s (12.2 m³/s) July 9 (gage height, 3.54 ft or 1.079 m), from rating curve extended above 150 ft³/s (4.25 m³/s); minimum daily, 1.4 ft³/s (0.040 m³/s) Oct. 6. Period of record: Maximum discharge, 858 ft³/s (24.3 m³/s) June 26, 1971 (gage height, 4.62 ft or 1.408 m), from rating curve extended above 150 ft³/s (4.25 m³/s); minimum daily, 0.22 ft³/s (0.006 m³/s) Sept. 25, 1972.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.0	11	25	28	21	24	23	184	187	70	88	66
2	1.9	9.5	32	26	20	23	22	184	184	59	88	53
3	1.8	8.0	24	25	21	23	21	175	197	53	87	44
4	1.6	7.5	21	24	20	22	20	170	193	51	93	29
5	1.5	7.3	20	23	19	21	21	173	207	47	85	18
6	1.4	51	21	22	20	21	22	182	215	44	38	14
7	3.5	225	21	21	19	20	24	206	195	41	35	11
8	6.5	77	20	20	19	19	25	215	177	51	71	9.0
9	8.4	56	21	19	19	19	24	225	206	286	85	8.2
10	9.4	206	22	18	19	19	22	202	201	176	93	7.5
11	11	280	21	17	19	18	24	194	154	94	92	6.7
12	16	172	21	18	18	19	27	182	153	70	93	6.0
13	20	56	21	18	18	20	29	167	151	59	99	7.2
14	19	43	20	24	18	21	34	169	150	61	104	4.6
15	14	32	20	110	17	27	43	156	137	63	102	3.7
16	10	30	19	75	17	27	45	132	121	60	103	3.3
17	8.2	30	22	68	17	26	50	109	112	56	108	3.2
18	6.4	29	20	67	17	24	48	89	106	52	107	3.1
19	5.3	28	19	55	18	24	35	66	88	50	113	3.1
20	5.4	26	18	36	19	25	36	50	80	51	105	3.0
21	5.9	26	19	31	17	26	43	53	88	51	103	2.8
22	8.0	24	19	27	17	25	58	79	90	48	100	2.7
23	23	23	18	26	17	26	55	119	91	49	99	2.6
24	24	23	18	25	17	26	36	148	82	47	96	2.4
25	56	22	18	24	18	27	30	162	73	46	95	2.3
26	41	23	18	23	17	26	27	203	63	33	93	2.4
27	30	22	20	22	17	24	27	216	60	40	91	2.1
28	25	23	25	22	16	24	32	212	64	38	88	2.0
29	21	23	87	22	-----	25	37	180	74	41	85	1.9
30	18	21	51	21	-----	24	55	179	74	47	81	1.7
31	15	-----	30	21	-----	23	-----	188	-----	49	76	-----
TOTAL	420.2	1,614.3	751	978	511	718	995	4,969	3,973	1,983	2,796	326.5
MEAN	13.6	53.8	24.2	31.5	18.3	23.2	33.2	160	132	64.0	90.2	10.9
MAX	56	280	87	110	21	27	58	225	215	286	113	66
MIN	1.4	7.3	18	17	16	18	20	50	60	33	35	1.7
AC-FT	833	3,200	1,490	1,940	1,010	1,420	1,970	9,860	7,880	3,930	5,550	648
CAL YR 1973	TOTAL	15,941.2	MEAN	43.7	MAX	280	MIN	1.4	AC-FT	31,620		
WTR YR 1974	TOTAL	20,035.0	MEAN	54.9	MAX	286	MIN	1.4	AC-FT	39,740		

LOCATION.--Lat 38°42'29", long 120°03'00", in SW¼SW¼ sec.18, T.10 N., R.18 E., Alpine County, Eldorado National Forest, on right bank 500 ft (152 m) downstream from main dam and outlet gate of Caples Lake, and 1.3 mi (2.1 km) east of Kirkwood.

PERIOD OF RECORD.--September 1922 to current year. Records for water year 1945 incomplete, yearly estimate published in WSP 1315-A. Prior to October 1969, published as Twin Lakes Outlet near Kirkwood.

AVERAGE DISCHARGE (including flow over Caples Lake spillway).--52 years, 37.0 ft³/s (1.048 m³/s), 26,810 acre-ft/yr (33.1 hm³/yr).

EXTREMES.--Current year: Maximum combined daily discharge for outlet and spillway, 335 ft³/s (9.49 m³/s) July 9; minimum daily, 2.2 ft³/s (0.062 m³/s) Oct. 19.

Period of record: Maximum combined daily discharge for outlet and spillway, 669 ft³/s (18.9 m³/s)
June 3, 1969; minimum daily, 0.1 ft³/s (0.003 m³/s) Mar. 25-31, 1944, Nov. 27, 28, 1956.

REMARKS.--Flow regulated by Caples Lake 500 ft (152 m) upstream, capacity, 19,750 acre-ft (24.4 hm³), spillway level, 21,580 acre-ft (26.6 hm³) with 3 ft (0.9 m) of flashboards, contents of which were 14,800 acre-ft (18.2 hm³) Sept. 30, 1973, and 18,000 acre-ft (22.2 hm³) Sept. 30, 1974. Flow over Caples Lake spillway occurred May 29 to Aug. 31 and is included in table below. No diversion above station. See schematic diagram of South Fork American River basin.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

REVISIONS. --WSP 1931: Drainage area.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	78	70	3.4	3.3	22	14	28	68	224	117	24	48
2	82	84	3.3	3.3	22	14	41	69	223	121	17	48
3	84	93	3.3	3.3	22	14	40	93	223	120	14	24
4	88	91	3.3	3.3	22	14	39	109	224	120	14	4.3
5	91	91	3.3	3.3	22	14	39	109	225	97	22	4.1
6	93	91	3.3	3.3	22	14	39	119	233	78	27	3.9
7	46	46	3.3	3.3	23	14	39	127	255	68	21	3.8
8	3.3	6.2	3.3	3.3	23	14	32	153	263	49	15	3.6
9	3.2	6.3	3.3	3.3	23	14	26	185	260	335	12	3.5
10	3.1	6.7	3.3	3.3	23	14	26	202	260	176	6.7	3.2
11	3.0	8.6	3.3	3.3	23	14	26	202	244	87	6.4	3.0
12	2.9	7.6	3.3	3.3	18	14	23	201	234	75	6.1	4.5
13	2.8	6.5	3.4	3.3	15	14	19	199	236	64	4.7	7.2
14	2.7	6.7	3.4	3.4	15	14	19	190	232	57	3.4	9.0
15	2.6	5.1	3.4	3.9	14	14	20	175	229	27	3.2	20
16	2.5	3.3	3.3	3.7	14	14	28	157	229	23	3.1	52
17	2.4	3.3	3.4	3.8	14	14	47	127	198	39	2.9	73
18	2.3	3.3	3.4	3.9	14	14	52	114	161	48	3.0	81
19	2.2	3.3	3.4	3.7	14	14	52	114	81	49	8.7	85
20	61	3.3	3.4	3.5	14	14	52	114	44	44	17	86
21	94	3.3	3.4	3.6	14	14	52	114	51	47	20	84
22	93	3.3	3.4	3.8	14	14	53	102	61	50	19	82
23	65	3.3	3.4	22	14	14	53	87	91	36	23	87
24	15	3.3	3.4	33	14	14	53	88	127	30	29	92
25	15	3.3	3.3	33	14	14	58	88	136	30	28	94
26	3.0	3.3	3.3	33	14	14	67	92	124	31	22	96
27	3.0	3.3	3.3	33	14	14	67	100	113	31	14	100
28	20	3.3	3.3	33	14	14	67	165	95	31	14	101
29	34	3.3	3.6	33	-----	14	67	232	84	31	14	101
30	43	3.3	3.4	33	-----	14	67	244	93	30	24	102
31	65	-----	3.4	28	-----	15	-----	233	-----	29	38	-----
TOTAL	1,106.0	671.2	104.0	357.2	491	435	1,291	4,372	5,253	2,170	476.2	1,506.1
MEAN	35.7	22.4	3.35	11.5	17.5	14.0	43.0	141	175	70.0	15.4	50.2
MAX	94	93	3.6	33	23	15	67	244	263	335	38	102
MIN	2.2	3.3	3.3	3.3	14	14	19	68	44	23	2.9	3.0
AC-F T	2,190	1,330	206	709	974	863	2,560	8,670	10,420	4,300	945	2,990
CAL YR 1973	TOTAL 11,479.8		MEAN 31.5	MAX 288	MIN 2.2	AC-FT 22,770						
WTR YR 1974	TOTAL 18,232.7		MEAN 50.0	MAX 335	MIN 2.2	AC-FT 36,160						

LOCATION.--Lat 38°45'49", long 120°19'39", in SW¼SW¼ sec.29, T.11 N., R.15 E., El Dorado County, Eldorado National Forest, on right bank beside U.S. Highway 50, 0.8 mi (1.3 km) downstream from Silver Fork of South Fork., and 1.9 mi (3.1 km) southwest of Kyburz.

PERIOD OF RECORD.--August to December 1907, October 1922 to current year. Prior to October 1956, records for river and El Dorado Canal published separately; combined flow only, October 1956 to September 1960.

GAGE, --Water-stage recorder on river; water-stage recorder for canal diversion. Altitude of gage is 3,840 ft (1,170 m), from topographic map. Prior to Oct. 1, 1962, at datum 1.00 ft (0.305 m) higher.

AVERAGE DISCHARGE (River only).--52 years (1922-74), 293 ft³/s (8,298 m³/s), 212,300 acre-ft/yr (262 hm³/yr).
(Combined river and diversion).--52 years (1922-74), 408 ft³/s (11.55 m³/s), 295,600 acre-ft/yr
(364 hm³/yr).

EXTREMES (River only).--Current year: Maximum discharge, 5,000 ft³/s (142 m³/s) Nov. 12 (gage height, 7.71 ft or 2.350 m); minimum daily, 4.0 ft³/s (0.11 m³/s) Oct. 1-6.

Period of record: Maximum discharge, 17,400 ft³/s (493 m³/s) Dec. 23, 1964 (gage height, 10.92 ft or 3.328 m), from rating curve extended above 6,300 ft³/s (178 m³/s) on basis of contracted-opening measurement at gage height 10.40 ft (3.170 m); minimum daily, 0.3 ft³/s (0.008 m³/s) Nov. 9-11, 1928.

(Combined flow).--Current year: Maximum discharge, 5,130 ft³/s (145 m³/s) Nov. 12; minimum daily, 31 ft³/s (0.88 m³/s) Oct. 18.

Period of record: Maximum discharge, 17,500 ft³/s (496 m³/s) Dec. 23, 1964; minimum daily, 10 ft³/s (0.28 m³/s) Oct. 17, 19, 1929.

REMARKS.--Flow at low and medium stages greatly regulated by four reservoirs since beginning of record, total capacity, 37,100 acre-ft (45.7 hm³). See schematic diagram of South Fork American River basin. For records of combined discharge of river and canal, see following page. Records of water temperatures for the current year are published in Part 2 of this report.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

REVISIONS (WATER YEARS).--WSP 1445: 1923(M), 1925(M), 1927(M), 1928 (river only), 1935-37(M). WSP 1515: 1928 (combined). WSP 1931: Drainage area.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.0	6.3	122	323	240	607	665	1,390	2,000	334	29	8.8
2	4.0	7.9	120	259	214	778	693	1,640	1,940	308	24	8.8
3	4.0	6.3	127	239	202	433	537	1,680	1,930	261	19	8.9
4	4.0	6.3	107	188	195	330	494	1,700	1,890	227	37	13
5	4.0	7.0	98	162	182	321	520	1,810	1,910	199	64	9.0
6	4.0	96	92	162	168	294	510	2,020	1,990	135	26	15
7	16	587	99	138	160	277	507	2,350	1,880	119	7.1	11
8	52	232	95	118	151	255	527	2,530	1,660	126	7.1	9.6
9	46	39	94	106	147	233	545	2,480	1,660	1,740	8.3	9.0
10	39	837	96	94	145	237	463	2,240	1,670	1,210	12	9.5
11	37	2,850	103	91	142	226	467	2,180	1,590	441	7.2	9.4
12	39	2,460	91	99	140	270	552	2,180	1,510	275	6.9	11
13	46	818	99	100	125	273	567	2,010	1,450	180	6.6	9.3
14	49	472	84	115	120	303	668	2,000	1,380	152	8.1	10
15	44	327	77	847	111	378	830	1,950	1,250	126	6.8	9.0
16	39	261	81	837	117	425	908	1,720	1,150	86	6.7	9.8
17	35	352	123	1,510	105	439	1,010	1,430	1,030	86	8.4	9.1
18	28	402	134	1,210	111	389	1,080	1,200	873	82	7.0	8.5
19	21	235	98	1,590	129	391	791	1,030	619	78	9.4	9.1
20	8.5	188	85	1,010	111	398	762	906	450	65	10	11
21	16	165	91	700	106	421	863	915	457	60	10	8.8
22	7.2	140	67	532	100	426	1,100	1,120	470	56	8.9	8.6
23	71	120	52	461	93	438	1,150	1,370	474	47	8.0	8.6
24	14	122	46	434	93	469	870	1,610	492	33	9.0	8.6
25	7.6	107	49	402	99	507	709	1,800	473	25	8.8	8.6
26	6.3	102	53	364	106	461	614	2,190	426	22	8.6	8.3
27	6.1	93	94	329	103	501	565	2,400	370	11	15	7.9
28	6.2	100	161	310	99	496	617	2,490	345	8.7	11	7.8
29	6.5	111	1,310	285	-----	651	704	2,260	322	7.7	9.1	7.9
30	6.3	111	850	267	-----	810	883	2,080	320	8.4	8.8	7.9
31	6.3	-----	458	255	-----	595	-----	2,050	-----	7.4	8.8	-----
TOTAL	677.0	11,360.8	5,256	13,537	3,814	13,032	21,171	56,731	33,981	6,516.2	416.6	280.8
MEAN	21.8	379	170	437	136	420	706	1,830	1,133	210	13.4	9.36
MAX	71	2,850	1,310	1,590	240	810	1,150	2,530	2,000	1,740	64	15
MIN	4.0	6.3	46	91	93	226	463	906	320	7.4	6.6	7.8
AC=FT	1,340	22,530	10,430	26,850	7,570	25,850	41,990	112,500	67,400	12,920	826	55

CAL YR 1973	TOTAL	119,288.6	MEAN	327	MAX	2,870	MIN	4.0	AC=FT	236,600
WTR YR 1974	TOTAL	166,773.4	MEAN	457	MAX	2,850	MIN	4.0	AC=FT	330,800

PEAK DISCHARGE (BASE, 2,000 FT ³ /S)							
DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-12	0700	7.71	5,000	5-7	2130	6.74	3,280
12-29	1445	5.95	2,190	5-27	2145	6.67	3,170
1-18	2315	5.97	2,220	7-9	2015	7.02	3,730

11439500 SOUTH FORK AMERICAN RIVER NEAR KYBURZ, CALIF.--Continued

COMBINED DISCHARGE, IN CUBIC FEET PER SECOND, OF SOUTH FORK AMERICAN RIVER
AND EL DORADO CANAL NEAR KYBURZ, CALIF., WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	152	131	262	464	384	752	804	1,540	2,150	498	192	155
2	154	127	258	400	357	909	822	1,790	2,090	471	188	153
3	150	141	264	368	345	571	667	1,830	2,080	423	183	151
4	153	130	248	326	340	472	624	1,850	2,040	388	201	173
5	151	139	239	300	329	465	650	1,960	2,060	363	228	150
6	155	246	233	301	306	441	640	2,170	2,140	300	181	180
7	177	737	240	276	307	422	637	2,500	2,030	284	147	175
8	81	382	235	256	298	394	656	2,680	1,810	288	158	169
9	48	190	234	244	294	372	674	2,630	1,810	1,900	171	167
10	40	988	236	232	292	376	599	2,390	1,820	1,360	177	175
11	38	2,990	243	229	289	365	607	2,330	1,740	599	170	172
12	40	2,590	232	237	287	409	691	2,330	1,660	440	166	175
13	47	949	239	239	272	412	707	2,160	1,600	344	170	170
14	49	606	224	253	268	442	808	2,150	1,540	316	173	174
15	44	467	218	985	259	517	970	2,100	1,420	291	171	159
16	39	401	222	975	264	564	1,050	1,870	1,320	250	168	159
17	35	492	264	1,650	252	579	1,150	1,580	1,200	251	173	171
18	31	542	274	1,350	258	529	1,220	1,350	1,040	246	170	173
19	36	375	238	1,730	276	531	934	1,180	784	242	169	175
20	79	328	226	1,150	258	539	905	1,060	615	229	174	176
21	157	306	232	838	254	562	1,010	1,070	622	224	175	173
22	160	281	207	670	248	567	1,240	1,270	635	220	174	168
23	236	261	193	599	240	578	1,290	1,520	639	211	169	165
24	143	262	187	572	241	611	1,010	1,760	657	193	171	172
25	163	247	190	540	247	652	852	1,950	638	189	171	172
26	145	242	194	502	253	606	756	2,340	591	184	167	170
27	119	233	235	467	250	646	708	2,550	535	173	179	173
28	109	241	302	449	246	641	760	2,640	510	172	176	172
29	120	251	1,450	428	-----	796	849	2,410	486	165	171	170
30	115	252	990	410	-----	955	1,030	2,230	484	169	165	167
31	126	-----	598	399	-----	741	-----	2,200	-----	162	160	-----
TOTAL	3,292	15,527	9,607	17,839	7,914	17,416	25,320	61,390	38,746	11,545	5,408	5,054
MEAN	106	518	310	575	283	562	844	1,980	1,292	372	174	168
MAX	236	2,990	1,450	1,730	384	955	1,290	2,680	2,150	1,900	228	180
MIN	31	127	187	229	240	365	599	1,060	484	162	147	150
AC-FT	6,530	30,800	19,060	35,380	15,700	34,540	50,220	121,800	76,850	22,900	10,730	10,020
CAL YR 1973	TOTAL	169,342	MEAN	464	MAX	3,020	MIN	31	AC-FT	335,900		
WTR YR 1974	TOTAL	219,058	MEAN	600	MAX	2,990	MIN	31	AC-FT	434,500		

SACRAMENTO RIVER BASIN

11440000 ALDER CREEK NEAR WHITE HALL, CALIF.

LOCATION.--Lat 38°45'19", long 120°22'17", in NE¼SE¼ sec.35, T.11 N., R.14 E., El Dorado County, Eldorado National Forest, on right bank 0.9 mi (1.4 km) upstream from mouth, and 2.2 mi (3.5 km) southeast of White Hall.

DRAINAGE AREA.--22.1 mi² (57.2 km²).

PERIOD OF RECORD.--October 1922 to current year (includes diversions by pipeline).

GAGE.--Water-stage recorder. Broad-crested weir with V-notch since Aug. 28, 1964. Altitude of gage is 3,840 ft (1,170 m), from topographic map. Prior to July 23, 1924, nonrecording gage at same site and datum.

AVERAGE DISCHARGE (including diversions by pipeline).--52 years, 37.9 ft³/s (1.073 m³/s), 27,460 acre-ft/yr (33.9 hm³/yr).

EXTREMES (Creek only).--Current year: Maximum discharge, 1,410 ft³/s (39.9 m³/s) Nov. 12 (gage height, 5.53 ft or 1.686 m), from rating curve extended above 600 ft³/s (17.0 m³/s); minimum daily, 0.02 ft³/s (0.001 m³/s) Oct. 2-6.

Period of record: Maximum discharge, 5,500 ft³/s (156 m³/s) Dec. 23, 1955 (gage height, 8.40 ft or 2.560 m, from floodmarks), from rating curve extended above 600 ft³/s (17.0 m³/s); no flow at times in several years.

REMARKS.--Records include flow diverted 1,300 ft (396 m) above station by pipeline into El Dorado Canal from Oct. 2-8, Oct. 18 to June 13.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

REVISIONS (WATER YEARS).--WSP 1215: 1928(M). WSP 1445: 1925(M), 1929, 1935-36(M), 1938(M), 1940-43(M), 1945(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.52	2.3	44	149	59	179	243	140	44	6.4	4.2	2.1
2	.77	2.3	39	119	54	274	259	155	42	6.0	3.6	2.1
3	.77	2.3	36	102	50	175	206	158	39	5.7	3.3	2.1
4	.77	2.3	33	90	48	138	177	158	36	5.8	3.0	2.1
5	.77	3.4	31	80	45	122	162	161	32	5.3	3.7	2.0
6	.77	16	30	72	46	110	149	168	30	5.2	3.3	1.9
7	3.1	16	30	67	45	102	138	180	28	5.2	2.8	1.9
8	5.6	16	30	60	39	93	133	186	25	5.8	2.7	1.9
9	2.4	8.6	30	56	38	85	133	178	24	27	2.5	1.9
10	1.8	26	30	49	37	82	119	161	22	29	2.5	1.9
11	1.6	134	32	43	35	79	116	147	22	16	2.5	1.9
12	1.4	520	31	45	35	103	118	137	21	13	2.4	1.9
13	1.3	140	34	44	33	106	116	123	19	11	2.1	1.9
14	1.2	51	30	53	32	109	120	113	9.4	10	2.1	1.9
15	1.2	30	29	124	31	118	127	105	12	9.4	2.1	1.9
16	1.4	51	29	171	31	127	131	95	12	8.8	2.1	1.9
17	1.6	80	49	386	29	132	135	85	11	8.2	2.1	1.9
18	2.3	177	52	346	29	125	138	77	11	7.9	2.1	1.8
19	.95	102	46	390	37	121	122	68	12	7.6	2.1	1.7
20	1.2	75	42	290	30	118	116	62	11	7.2	2.1	1.6
21	1.2	64	45	212	32	116	115	56	10	6.9	2.1	1.6
22	1.3	52	43	170	30	114	122	56	9.5	6.8	2.1	1.6
23	14	44	40	142	27	111	130	58	9.1	6.5	2.1	1.6
24	5.6	40	37	120	30	110	118	60	8.6	5.9	2.1	1.6
25	3.3	35	36	105	30	111	104	63	8.1	5.9	2.1	1.6
26	3.0	33	38	94	33	112	94	67	7.8	5.9	2.1	1.6
27	3.0	29	76	82	34	138	90	70	7.6	5.7	2.1	1.6
28	2.8	30	111	76	35	159	96	66	7.3	5.2	2.1	1.6
29	2.4	27	366	70	-----	238	106	59	7.0	4.9	2.1	1.6
30	2.3	32	271	64	-----	293	119	52	6.9	4.5	2.1	1.5
31	1.8	-----	192	61	-----	219	-----	48	-----	4.5	2.1	-----
TOTAL	72.12	1,841.2	1,962	3,932	1,034	4,219	4,052	3,312	544.3	263.2	76.4	54.2
MEAN	2.33	61.4	63.3	127	36.9	136	135	107	18.1	8.49	2.46	1.81
MAX	14	520	366	390	59	293	259	186	44	29	4.2	2.1
MIN	.52	2.3	29	43	27	79	90	48	6.9	4.5	2.1	1.5
AC-FT	143	3,650	3,890	7,800	2,050	8,370	8,040	6,570	1,080	522	152	108
CAL YR 1973	TOTAL 16,062.10 MEAN 44.0 MAX 520 MIN .31 AC-FT 31,860											
WTR YR 1974	TOTAL 21,362.42 MEAN 58.5 MAX 520 MIN .52 AC-FT 42,370											

PEAK DISCHARGE (BASE, 170 FT³/S, Creek only)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-12	1400	5.53	1,410	3-1	2400	4.00	445
11-18	0615	3.36	222	3-30	unknown	--	unknown
12-29	1245	4.22	542	5-7	2115	3.29	202
1-17	0615	4.06	471				

11441001 UNION VALLEY RESERVOIR NEAR RIVERTON, CALIF.

LOCATION.--Lat 38°51'49", long 120°26'15", in NW¼NW¼ sec.29, T.12 N., R.14 E., El Dorado County, Eldorado National Forest, in valve control house near left bank at Union Valley Dam on Silver Creek, 0.7 mi (1.1 km) upstream from Little Silver Creek, and 6.6 mi (10.6 km) north of Riverton.

DRAINAGE AREA.--83.6 mi² (216.5 km²).

PERIOD OF RECORD.--October 1962 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Sacramento Municipal Utility District).

EXTREMES.--Current year: Maximum contents, 272,600 acre-ft (336 hm³) July 9 (elevation, 4,870.6 ft or 1,484.56 m); minimum, 159,300 acre-ft (196 hm³) Sept. 30 (elevation, 4,823.0 ft or 1,470.05 m).
Period of record: Maximum contents, 272,600 acre-ft (336 hm³) July 9, 1974 (elevation, 4,870.6 ft or 1,484.56 m); minimum since reservoir first filled, 90,900 acre-ft (112 hm³) Jan. 27, 1967 (elevation, 4,782.1 ft or 1,457.58 m).

REMARKS.--Reservoir is formed by earthfill dam completed in December 1962. Storage began in May 1962. Usable capacity, 264,000 acre-ft (326 hm³) between elevations 4,645.0 ft (1,415.80 m), minimum operating level and 4,870.0 ft (1,484.38 m), top of radial spillway gates, above mean sea level. Dead storage, 7,000 acre-ft (8.63 hm³). Reservoir receives water from the South Fork Rubicon River via Robbs Peak powerplant (see sta 11429800). Water is used for power development in the South Fork American River basin. Records, including extremes, represent total contents at 2400 hours. See schematic diagram of Middle Fork American and Rubicon River basins and South Fork American River basin.

CAPACITY TABLE (ELEVATION, IN FEET, AND CONTENTS, IN ACRE-FEET)

4,700	25,000	4,800	117,000
4,720	35,000	4,820	153,000
4,740	48,000	4,840	196,000
4,760	65,000	4,870	271,000
4,780	88,000		

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	190,300	176,200	202,600	201,100	216,500	213,400	228,400	232,800	269,600	269,900	260,500	210,100
2	189,600	175,100	203,500	201,300	216,700	215,800	230,500	234,600	269,600	269,400	258,800	209,400
3	189,000	174,700	204,100	200,800	216,900	217,100	231,000	236,200	270,200	269,100	257,000	208,100
4	188,100	174,000	204,800	200,800	216,500	217,100	231,300	237,800	271,000	269,900	256,700	206,600
5	187,600	174,000	205,500	200,200	216,500	217,300	231,800	239,600	271,000	269,400	255,100	205,000
6	187,000	173,800	206,300	199,100	216,000	218,000	231,500	241,100	271,000	268,800	253,400	203,500
7	187,200	176,200	207,000	197,100	216,500	218,500	231,000	243,500	270,200	269,400	251,800	201,900
8	186,800	176,900	207,200	195,300	216,000	218,800	230,900	246,200	269,600	269,600	249,700	201,500
9	186,100	176,600	207,200	193,600	215,800	219,300	231,000	248,600	269,100	272,600	247,800	200,000
10	185,400	179,300	206,100	191,600	215,400	219,300	230,700	250,800	269,400	270,700	245,600	197,500
11	185,000	185,200	204,400	189,800	214,900	219,600	230,500	252,900	269,900	270,500	245,400	195,800
12	184,300	190,700	203,000	188,100	214,700	220,600	230,500	254,500	269,900	270,200	243,500	193,600
13	183,700	192,500	203,000	187,200	214,700	219,800	230,700	256,200	270,200	269,600	241,400	191,600
14	183,700	193,400	202,200	185,700	214,700	218,800	230,700	257,500	269,900	270,200	239,800	189,400
15	183,200	194,200	200,400	188,700	214,300	218,300	231,500	259,400	269,900	269,600	237,800	189,000
16	182,600	194,900	200,200	191,400	214,300	219,000	232,300	261,010	269,900	269,400	235,900	187,200
17	181,900	197,100	200,200	196,200	214,300	218,300	233,100	262,100	269,600	269,100	233,900	185,200
18	181,300	198,600	199,700	200,600	214,000	218,300	233,900	262,400	269,600	268,800	233,300	183,200
19	180,600	198,600	199,100	206,100	214,500	217,100	233,600	262,100	269,900	268,300	231,800	180,600
20	180,200	199,100	198,000	209,400	214,500	216,700	233,100	261,600	269,900	267,800	230,000	178,200
21	180,200	199,500	197,300	211,400	214,500	216,700	232,300	262,100	269,600	268,000	228,100	175,500
22	180,400	200,000	195,100	212,500	214,000	216,700	232,800	262,400	269,400	267,500	225,800	174,000
23	180,200	200,000	193,400	213,200	213,600	216,500	233,600	263,200	269,400	267,200	224,200	172,500
24	179,700	200,000	192,000	213,820	213,600	216,500	233,900	264,200	269,100	266,700	221,900	170,600
25	179,300	200,400	190,900	213,800	212,700	216,500	233,600	265,300	269,100	266,100	221,400	168,500
26	178,800	200,400	189,400	214,000	211,600	216,700	232,800	266,100	269,100	265,300	219,800	166,400
27	178,400	200,200	189,400	214,900	211,000	217,100	232,300	267,000	269,100	264,800	217,300	164,600
28	178,400	200,400	190,300	215,800	210,500	218,800	231,500	268,300	268,800	264,800	215,600	161,800
29	178,200	200,400	195,600	216,000	-----	219,800	231,000	269,400	269,400	264,200	214,000	161,400
30	177,500	201,300	197,800	216,000	-----	223,200	231,500	269,900	269,900	263,200	212,500	159,300
31	176,900	-----	200,000	216,500	-----	224,300	-----	270,200	-----	262,100	210,500	-----
MAX	190,300	201,300	207,200	216,500	216,900	224,300	233,900	270,200	271,000	272,600	260,500	210,100
MIN	176,900	173,800	189,400	185,700	210,500	213,400	228,400	232,800	268,800	262,100	210,500	159,300
(a)	4,831.3	4,842.4	4,841.8	4,849.3	4,846.6	4,852.8	4,855.2	4,869.7	4,869.6	4,866.7	4,846.6	4,823.0
(b)	-14,000	+24,400	-1,300	+16,500	-6,000	+13,800	+7,200	+38,700	-300	-7,800	-51,600	-51,200

CAL YR 1973 b -58,400

WTR YR 1974 b -31,600

a Elevation, in feet, at end of month.

b Change in contents, in acre-feet.

SACRAMENTO RIVER BASIN

11441100 ICE HOUSE RESERVOIR NEAR KYBURZ, CALIF.

LOCATION.--Lat 38°49'26", long 120°21'34", in SE¼SW¼ sec.1, T.11 N., R.14 E., El Dorado County, Eldorado National Forest, on left bank at Ice House Dam on South Fork Silver Creek, 0.5 mi (0.8 km) upstream from Peavine Creek, and 4.8 mi (7.7 km) northwest of Kyburz.

DRAINAGE AREA.--27.2 mi² (70.4 km²).

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

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Sacramento Municipal Utility District).

EXTREMES.--Current year: Maximum contents, 46,000 acre-ft (56.7 hm³) July 9 (elevation, 5,450.1 ft or 1,661.19 m); minimum, 26,800 acre-ft (33.0 hm³) Dec. 21 (elevation, 5,418.9 ft or 1,651.68 m).
Period of record: Maximum contents, 46,400 acre-ft (57.2 hm³) June 27, 1971 (elevation, 5,450.6 ft or 1,661.34 m); minimum since reservoir first filled, 1,740 acre-ft (2.15 hm³) Oct. 5-9, 1962 (elevation, 5,349.85 ft or 1,630.634 m).

REMARKS.--Reservoir is formed by earthfill dam. Storage began Dec. 15, 1959. Usable capacity, 45,800 acre-ft (56.5 hm³) between elevations 5,327.5 ft (1,623.82 m), centerline of fishwater outlet, and 5,450.0 ft (1,661.16 m), top of spillway gates. Dead storage, 160 acre-ft (197,000 m³). Reservoir is used to store water for power development. Records, including, extremes, represent total contents at 2400 hours. See schematic diagram of South Fork American River basin.

REVISIONS (WATER YEARS).--WSP 1931, WRD Calif. 1967: 1960. WRD Calif. 1970: 1969.

CAPACITY TABLE (ELEVATION, IN FEET, AND CONTENTS, IN ACRE-FEET)

5,349	1,600	5,400	17,600
5,350	1,760	5,420	27,400
5,360	3,840	5,450	46,000
5,380	9,600		

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31,800	30,200	31,700	29,200	31,800	30,800	36,500	44,100	45,100	45,700	45,700	44,800
2	31,700	30,100	31,800	29,300	31,800	31,000	36,700	44,300	45,200	45,700	45,700	44,800
3	31,600	30,100	31,900	29,500	31,800	31,200	36,900	44,300	45,400	45,600	45,700	44,800
4	31,500	30,100	32,000	29,600	31,800	31,400	37,000	44,200	45,600	45,500	45,500	44,700
5	31,500	30,200	32,100	29,800	31,600	31,500	37,300	44,200	45,800	45,400	45,500	44,700
6	31,400	30,300	32,200	29,900	31,600	31,600	37,500	44,200	45,900	45,300	45,400	44,600
7	31,400	31,000	32,200	30,100	31,600	31,800	37,700	44,400	45,500	45,100	45,400	44,600
8	31,300	31,300	32,100	30,200	31,500	31,900	37,900	44,600	45,100	45,100	45,300	44,600
9	31,200	31,500	31,500	30,300	31,500	32,100	38,100	44,800	45,100	46,000	45,300	44,600
10	31,200	32,400	31,300	30,400	31,500	32,100	38,300	44,700	45,500	45,700	45,300	44,600
11	31,200	33,900	31,400	30,500	31,400	32,200	38,500	44,500	45,700	45,700	45,300	44,500
12	31,100	35,000	31,100	30,600	31,300	32,300	38,700	44,200	45,700	45,700	45,200	44,400
13	31,000	35,100	30,600	30,700	31,300	32,500	39,000	44,000	45,700	45,700	45,100	44,400
14	31,000	34,900	30,100	30,800	31,200	32,600	39,200	44,000	45,600	45,600	45,100	44,400
15	30,900	34,700	29,600	31,100	31,200	32,700	39,600	44,100	45,700	45,500	45,100	44,400
16	30,900	34,500	29,100	31,600	31,100	33,000	40,000	44,000	45,700	45,500	45,100	44,400
17	30,800	34,500	28,600	32,500	31,000	33,100	40,400	43,700	45,700	45,500	45,100	44,400
18	30,700	34,600	28,100	33,300	31,000	33,300	40,700	43,500	45,700	45,500	45,100	44,300
19	30,700	34,500	27,600	34,000	31,000	33,400	41,000	43,300	45,600	45,500	45,000	44,200
20	30,500	34,100	27,000	34,500	30,900	33,600	41,300	43,200	45,600	45,500	45,000	44,200
21	30,500	33,700	26,800	34,500	30,800	33,700	41,700	43,300	45,500	45,500	45,000	44,200
22	30,400	33,800	26,900	34,300	30,800	33,900	42,100	43,500	45,400	45,500	45,000	44,200
23	30,400	33,500	27,000	34,100	30,800	34,100	42,400	43,900	45,400	45,400	45,100	44,200
24	30,400	33,100	27,000	33,900	30,700	34,300	42,800	44,200	45,400	45,500	45,000	44,100
25	30,400	33,300	27,100	33,600	30,600	34,500	43,100	44,500	45,400	45,400	44,900	44,100
26	30,400	32,900	27,200	33,300	30,500	34,700	43,300	45,100	45,400	45,500	44,900	44,000
27	30,400	32,400	27,400	33,000	30,500	34,900	43,500	45,600	45,600	45,600	44,800	43,900
28	30,300	31,800	27,600	32,700	30,500	35,200	43,900	45,600	45,700	45,600	44,800	43,900
29	30,300	31,500	28,200	32,400	-----	35,500	43,900	45,400	45,700	45,700	44,800	43,900
30	30,300	31,600	28,700	32,100	-----	35,900	43,900	45,100	45,700	45,700	44,800	43,900
31	30,200	-----	29,000	31,800	-----	36,100	-----	45,100	-----	45,700	44,800	-----
MAX	31,800	35,100	32,200	34,500	31,800	36,100	43,900	45,600	45,900	46,000	45,700	44,800
MIN	30,200	30,100	26,800	29,200	30,500	30,800	36,500	43,200	45,100	45,100	44,800	43,900
(a)	5,425.3	5,427.8	5,423.1	5,428.2	5,425.8	5,435.1	5,447.2	5,448.8	5,449.6	5,449.6	5,448.4	5,447.1
(b)	-1,800	+1,400	-2,600	+2,800	-1,300	+5,600	+7,800	+1,200	+600	0	-900	-900

CAL YR 1973 b +8,200
WTR YR 1974 b +11,900

a Elevation, in feet, at end of month.
b Change in contents, in acre-feet.

11441500 SOUTH FORK SILVER CREEK NEAR ICE HOUSE, CALIF.

LOCATION.--Lat 38°49'08", long 120°21'51", in NW¼NW¼ sec.12, T.11 N., R.14 E., El Dorado County, Eldorado National Forest, on right bank 300 ft (91 m) upstream from Peavine Creek, 0.4 mi (0.6 km) downstream from Ice House Dam, and 4.8 mi (7.7 km) northwest of Kyburz.

DRAINAGE AREA.--27.5 mi² (71.2 km²).

PERIOD OF RECORD.--October 1924 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 5,290 ft (1,612 m), from topographic map. Prior to Oct. 1, 1959, at site 0.3 mi (0.5 km) upstream at different datum.

AVERAGE DISCHARGE (adjusted for change in contents in Ice House Reservoir).--50 years, 75.6 ft³/s (2.141 m³/s), 54,770 acre-ft/yr (67.5 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 749 ft³/s (21.2 m³/s) July 9 (gage height, 4.81 ft or 1.466 m); minimum daily, 4.2 ft³/s (0.119 m³/s) Nov. 2.
Period of record: Maximum discharge, 3,940 ft³/s (112 m³/s) Dec. 23, 1955 (gage height, 6.71 ft or 2.045 m, site and datum then in use), from rating curve extended above 540 ft³/s (15.3 m³/s) on basis of slope-area measurement at gage height 6.69 ft (2.039 m); no flow Oct. 31 to Nov. 9, 1958. Maximum discharge since construction of Ice House Dam in 1959, 1,800 ft³/s (51.0 m³/s) Jan. 22, 1970 (gage height, 5.66 ft or 1.725 m), from rating curve extended above 620 ft³/s (17.6 m³/s) on basis of computation of flow over dam of peak flow; minimum daily, 1.2 ft³/s (0.03 m³/s) Mar. 17-19, 1960.

REMARKS.--Records good. Flow regulated by Ice House Reservoir beginning in December 1959 (see sta 11441100). See schematic diagram of South Fork American River basin.

REVISIONS (WATER YEARS).--WSP 1395: 1928, 1938. WSP 1635: Drainage area at former site.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	67	19	8.0	8.0	83	8.4	14	184	390	95	10	10
2	44	4.2	7.6	7.6	83	6.6	8.0	218	390	95	20	11
3	40	4.5	6.6	8.0	83	6.0	8.0	289	319	95	35	12
4	37	4.5	6.3	7.6	83	5.7	8.8	372	265	95	35	11
5	37	4.7	6.3	7.2	83	5.7	10	372	265	95	39	11
6	36	5.2	6.0	7.6	83	5.7	10	372	365	95	53	10
7	37	6.2	6.0	8.0	83	6.0	9.6	372	482	95	62	10
8	37	4.9	106	8.4	83	6.0	12	376	440	56	33	10
9	39	4.7	321	6.9	83	6.3	8.4	430	264	261	9.6	10
10	42	5.2	142	6.9	83	7.2	12	535	140	386	9.2	10
11	42	6.0	5.4	7.2	83	6.9	12	570	178	88	9.2	10
12	41	7.4	187	8.4	83	7.2	6.3	570	269	107	9.2	10
13	41	112	317	8.8	81	7.6	5.4	500	305	107	9.2	10
14	41	188	317	72	81	7.2	5.4	390	265	107	9.2	11
15	41	188	317	99	81	8.0	5.4	337	184	71	9.2	11
16	41	188	317	10	81	7.6	5.4	337	150	50	9.2	11
17	41	117	317	12	81	6.9	5.4	321	150	50	9.2	11
18	41	6.5	317	11	81	8.0	6.0	297	150	50	9.6	11
19	40	126	321	12	81	8.8	6.0	297	150	50	9.6	11
20	39	271	325	9.2	83	8.8	6.3	208	150	50	9.6	11
21	39	215	140	126	83	6.0	6.3	155	184	50	9.6	11
22	40	5.7	6.6	225	85	6.0	6.9	155	184	50	9.6	11
23	40	209	6.3	225	85	6.3	6.6	181	150	42	9.6	10
24	39	229	6.3	225	86	7.2	7.2	245	123	35	10	10
25	38	5.4	6.6	222	88	8.8	6.6	293	83	19	10	10
26	38	199	7.2	218	88	9.6	7.6	293	68	9.2	10	10
27	38	317	9.6	218	88	11	6.6	337	68	9.6	10	10
28	38	317	9.2	218	59	11	8.0	482	80	9.6	10	10
29	38	228	15	218	-----	8.8	118	535	95	10	10	10
30	38	6.9	8.8	218	-----	11	187	488	95	10	10	10
31	38	-----	8.4	173	-----	10	-----	440	-----	10	10	-----
TOTAL	1,248	3,005.0	3,580.2	2,611.8	2,308	236.3	525.2	10,951	6,401	2,352.4	507.8	314
MEAN	40.3	100	115	84.3	82.4	7.62	17.5	353	213	75.9	16.4	10.5
MAX	67	317	325	225	88	11	187	570	482	386	62	12
MIN	36	4.2	5.4	6.9	59	5.7	5.4	155	68	9.2	9.2	10
AC-FT	2,480	5,960	7,100	5,180	4,580	469	1,040	21,720	12,700	4,670	1,010	623

CAL YR 1973 TOTAL 28,126.2 MEAN 77.1 MAX 488 MIN 4.2 AC-FT 55,790 MEAN a 88.4 AC-FT a 63,990
WTR YR 1974 TOTAL 34,040.7 MEAN 93.3 MAX 570 MIN 4.2 AC-FT 67,520 MEAN a 110 AC-FT a 79,420

a Adjusted for change in contents in Ice House Reservoir.

SACRAMENTO RIVER BASIN

11441900 SILVER CREEK BELOW CAMINO DIVERSION DAM, CALIF.

LOCATION.--Lat 38°49'26", long 120°32'18", on line between secs.4 and 5, T.11 N., R.13 E., El Dorado County, Eldorado National Forest, on right bank 300 ft (91 m) downstream from Round Tent Canyon, 0.4 mi (0.6 km) downstream from diversion dam, and 5 mi (8 km) northeast of Pollock Pines.

DRAINAGE AREA.--171 mi² (443 km²).

PERIOD OF RECORD.--October 1960 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,754.06 ft (839.438 m) above mean sea level (Sacramento Municipal Utility District bench mark).

AVERAGE DISCHARGE (unadjusted).--14 years, 105 ft³/s (2.97 m³/s), 76,070 acre-ft/yr (93.8 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 8,280 ft³/s (234 m³/s) Dec. 30 (gage height, 9.22 ft or 2.810 m), from rating curve extended as explained below; minimum daily, 7.5 ft³/s (0.21 m³/s) May 16.

Period of record: Maximum discharge, 19,300 ft³/s (547 m³/s) Jan. 31, 1963 (gage height, 11.28 ft or 3.438 m in gage well, 11.9 ft or 3.63 m, from floodmarks), from rating curve extended above 1,500 ft³/s (42.5 m³/s) on basis of slope-area measurement of maximum flow; minimum daily, 4.6 ft³/s (0.13 m³/s) July 1, 1964.

REMARKS.--Records good. Flow regulated by storage, diversions, and powerplants. Records not adjusted for diversions or changes in storage. See schematic diagram of South Fork American River basin.

REVISIONS (WATER YEARS).--WRD Calif. 1965: 1962(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	16	29	36	14	53	1,050	129	1,210	20	24	22
2	21	9.5	24	26	13	60	1,360	75	828	20	24	23
3	21	9.5	22	23	12	45	756	70	343	22	23	23
4	21	9.2	20	20	12	36	738	67	192	22	23	23
5	21	9.7	20	18	11	32	650	67	341	22	24	23
6	21	11	19	16	11	30	632	76	866	22	23	23
7	21	15	19	15	10	29	731	70	1,020	23	24	22
8	21	12	18	14	9.7	27	639	63	1,060	24	23	23
9	21	11	18	13	9.3	26	567	58	811	328	23	23
10	21	16	17	12	9.0	25	539	62	25	1,680	23	23
11	21	27	18	12	8.6	25	525	64	52	184	23	23
12	21	42	17	13	8.6	34	609	56	219	26	23	23
13	21	26	21	14	8.4	332	359	64	262	26	23	23
14	22	27	20	23	8.2	369	17	56	268	25	23	22
15	21	22	18	41	7.9	435	71	29	347	25	23	22
16	22	25	18	51	8.5	503	96	7.5	73	25	23	23
17	22	37	22	116	8.1	28	101	129	21	24	23	23
18	22	41	23	94	8.6	403	130	21	21	24	23	23
19	21	28	20	103	16	539	98	21	21	24	23	23
20	21	24	17	78	14	549	67	20	21	24	23	23
21	21	22	19	55	13	470	68	20	21	24	23	23
22	20	20	20	40	13	609	72	20	21	24	23	23
23	20	18	19	32	13	456	159	20	21	24	23	23
24	20	18	17	27	12	415	142	138	20	24	23	23
25	20	17	16	24	12	383	105	20	21	23	23	22
26	20	16	18	21	14	391	79	95	21	23	23	23
27	20	15	52	19	15	419	82	335	21	24	23	23
28	20	15	62	17	16	543	80	338	21	24	23	23
29	20	15	366	15	-----	768	85	517	21	24	22	23
30	20	15	390	14	-----	745	86	505	21	24	22	23
31	19	-----	50	14	-----	621	-----	709	-----	23	22	-----
TOTAL	643	588.9	1,429	1,016	315.9	9,400	10,693	3,921.5	8,210	2,851	714	685
MEAN	20.7	19.6	46.1	32.8	11.3	303	356	127	274	92.0	23.0	22.8
MAX	22	42	390	116	16	768	1,360	709	1,210	1,680	24	23
MIN	19	9.2	16	12	7.9	25	17	7.5	20	20	22	22
AC-FT	1,280	1,170	2,830	2,020	627	18,640	21,210	7,780	16,280	5,650	1,420	1,360

CAL YR 1973 TOTAL 9,039.9 MEAN 24.8 MAX 484 MIN 9.1 AC-FT 17,930
WTR YR 1974 TOTAL 40,467.3 MEAN 111 MAX 1,680 MIN 7.5 AC-FT 80,270

11442500 SOUTH FORK AMERICAN RIVER BELOW SILVER CREEK, NEAR POLLOCK PINES, CALIF.

LOCATION.--Lat 38°47'37", long 120°37'02", in NE¼NE¼ sec.22, T.11 N., R.12 E., El Dorado County, Eldorado National Forest, on right bank 350 ft (107 m) upstream from El Dorado powerhouse, 2.4 mi (3.9 km) downstream from Silver Creek, and 2.8 mi (4.5 km) northwest of Pollock Pines.

DRAINAGE AREA.--449 mi² (1,163 km²).

PERIOD OF RECORD.--August to December 1923 (published as "below Silver Creek"), November 1969 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,862.79 ft (567.778 m) above mean sea level. Aug. 11 to Dec. 16, 1923, nonrecording gage at same site at different datum.

EXTREMES.--Current year: Maximum discharge, 6,800 ft³/s (193 m³/s) July 9 (gage height, 11.58 ft or 3.530 m); minimum daily, 21 ft³/s (0.59 m³/s) Nov. 4.
Period of record: Maximum discharge, 22,200 ft³/s (629 m³/s) Jan. 21, 1970 (gage height, 15.22 ft or 4.639 m); minimum daily, 23 ft³/s (0.65 m³/s) July 28-30, Aug. 27, 28, 1972.

REMARKS.--Records good. Flow regulated by storage, diversions, and powerplants. See schematic diagram of South Fork American River basin.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33	32	556	870	535	1,130	2,650	1,650	3,210	443	55	46
2	33	22	347	688	479	1,880	1,340	1,930	2,790	427	83	46
3	33	23	336	629	458	1,190	2,040	2,000	2,280	371	70	46
4	32	21	288	544	435	961	1,820	1,970	2,130	326	72	45
5	32	27	262	489	409	908	1,670	2,070	2,190	304	112	51
6	31	65	246	460	404	859	1,590	2,250	2,790	238	98	45
7	41	504	250	412	381	854	1,620	2,540	2,880	207	74	53
8	76	491	241	370	352	802	1,560	2,760	2,690	214	51	50
9	106	121	232	341	337	743	1,510	2,700	2,450	1,710	50	47
10	78	679	230	310	332	719	1,370	2,500	1,760	3,260	51	46
11	71	2,880	251	306	321	692	1,350	2,400	1,650	858	55	46
12	69	3,040	237	328	321	832	1,480	2,410	1,730	429	51	46
13	73	1,110	307	358	300	1,050	1,300	2,240	1,700	317	50	47
14	81	800	273	453	305	1,140	1,010	2,170	1,660	265	48	45
15	82	555	237	1,310	280	1,260	1,180	2,160	1,640	235	50	47
16	74	476	222	1,510	296	1,340	1,290	1,920	1,310	191	49	45
17	69	637	296	2,790	275	1,020	1,350	1,730	1,130	167	47	45
18	65	912	380	2,100	283	1,150	1,500	1,390	1,030	165	49	46
19	59	539	292	2,720	450	1,310	1,210	1,230	821	158	48	46
20	54	424	256	1,940	365	1,290	1,110	1,110	620	146	50	46
21	40	378	290	1,460	357	1,230	1,170	1,080	595	134	51	48
22	49	310	336	1,160	347	1,360	1,360	1,220	614	127	50	46
23	147	266	259	1,000	310	1,210	1,560	1,440	609	119	49	45
24	115	272	224	908	312	1,200	1,330	1,790	634	102	47	45
25	46	234	208	831	307	1,210	1,140	1,880	612	89	47	45
26	40	242	215	756	329	1,170	1,030	2,230	572	85	48	45
27	36	207	570	681	362	1,300	971	2,700	505	74	48	45
28	34	199	749	650	344	1,490	1,020	2,820	472	63	54	45
29	33	213	2,590	597	-----	1,850	1,090	2,820	438	59	50	45
30	32	221	2,040	561	-----	2,340	1,210	2,570	438	57	50	44
31	32	-----	1,110	537	-----	2,040	-----	2,680	-----	57	47	-----
TOTAL	1,796	15,900	14,330	28,069	9,986	37,530	41,831	64,360	43,950	11,397	1,754	1,387
MEAN	57.9	530	462	905	357	1,211	1,394	2,076	1,465	368	56.6	46.2
MAX	147	3,040	2,590	2,790	535	2,340	2,650	2,820	3,210	3,260	112	53
MIN	31	21	208	306	275	692	971	1,080	438	57	47	44
AC-FT	3,560	31,540	28,420	55,670	19,810	74,440	82,970	127,700	87,170	22,610	3,480	2,750
(a)	20,246	27,403	54,757	70,974	51,071	49,915	69,384	82,398	65,973	40,818	60,554	53,024
(b)	4,806	9,142	9,679	9,389	8,601	9,859	9,553	9,655	8,519	8,781	8,128	7,926
CAL YR 1973	TOTAL 174,881		MEAN 479	MAX 3,040	MIN 21	AC-FT 346,900						
WTR YR 1974	TOTAL 272,290		MEAN 746	MAX 3,260	MIN 21	AC-FT 540,100						

a Diversion, in acre-feet, to Camino powerplant, furnished by Sacramento Municipal Utility District.

b Diversion, in acre-feet, to El Dorado powerplant, furnished by Pacific Gas and Electric Co.

11443500 SOUTH FORK AMERICAN RIVER NEAR CAMINO, CALIF.

LOCATION.--Lat 38°46'23", long 120°42'02", in NE¼SW¼ sec.25, T.11 N., R.11 E., El Dorado County, on right bank 500 ft (152 m) downstream from Slab Creek Dam, 500 ft (152 m) upstream from Iowa Canyon Creek, and 2.8 mi (4.5 km) northwest of Camino.

DRAINAGE AREA.--493 mi² (1,277 km²).

PERIOD OF RECORD.--October 1922 to current year. Monthly discharge only for October 1922, published in WSP 1315-A. Records for the river and the American River flume, published separately October 1922 to September 1956, October 1962 to December 1964 when flume was destroyed. Records of river and flume combined October 1956 to September 1962.

GAGE.--Water-stage recorder. Altitude of gage is 1,620 ft (494 m), from topographic map. Nov. 1, 1950, to Dec. 5, 1951, nonrecording gage, Dec. 6, 1951, to May 27, 1964, water-stage recorder at site 100 ft (30 m) downstream at different datum. May 28, 1964, to Oct. 11, 1966, at site 1,000 ft (305 m) downstream at datum 11.37 ft (3.466 m) lower.

AVERAGE DISCHARGE.--37 years (1922-59, prior to extensive regulation and transbasin diversion in South Fork American River basin), 961 ft³/s (27.2 m³/s), 695,700 acre-ft/yr (858 hm³/yr), combined flow of South Fork American River and American River flume; 15 years (1959-74), 652 ft³/s (18.465 m³/s), 472,400 acre-ft/yr (582 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,480 ft³/s (70.2 m³/s) Dec. 30 (gage height, 11.82 ft or 3.602 m); minimum daily, 16 ft³/s (0.45 m³/s) for several days in November, January, and February.
Period of record: Maximum discharge, 49,800 ft³/s (1,410 m³/s) Dec. 23, 1955 (gage height, 32.6 ft or 9.94 m, from floodmarks, site and datum then in use), from rating curve extended above 24,000 ft³/s (680 m³/s) on basis of computation of maximum flow over dam; minimum daily, 1.3 ft³/s (0.037 m³/s) Aug. 24, 1931.

REMARKS.--Records good. Flow regulated by six reservoirs, total usable capacity, 347,000 acre-ft (428 hm³) and since 1967 diversion from Slab Creek Dam to White Rock powerplant which bypass this station. Echo Lake conduit (see sta 11434500) imports up to 1,900 acre-ft (2.34 hm³) each year from Truckee River basin. Variable amounts of El Dorado Canal water (up to 40 ft³/s or 1.13 m³/s, May to October, and about 7 ft³/s or 0.20 m³/s remainder of the year) diverted for irrigation and domestic use between Pollock Pines and Placerville. Water from Jenkinson Lake in North Fork Consumnes River basin diverted to Camino and substituted for flow from El Dorado Canal in some years. Since October 1962 water is imported from the Upper Rubicon River basin by way of Robbs Peak tunnel (see sta 11429800). See schematic diagram of South Fork American River basin.

REVISIONS (WATER YEARS).--WSP 931: 1928, 1938, 1940(M). WSP 1931: Drainage area at former site.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	24	19	23	17	26	59	88	1,140	56	36	35
2	28	17	162	19	17	26	880	90	789	40	36	35
3	29	18	609	19	17	26	131	92	269	38	36	35
4	30	17	503	19	18	25	84	91	101	39	36	35
5	29	17	473	19	17	25	84	93	70	38	35	35
6	29	17	440	20	17	24	84	96	436	37	33	35
7	28	17	500	20	17	24	84	98	889	37	33	35
8	29	18	355	19	17	24	183	100	729	37	33	35
9	33	17	22	19	16	24	94	413	486	37	35	35
10	35	17	21	19	16	24	93	549	90	616	37	35
11	35	18	21	19	19	24	92	385	69	34	37	36
12	35	294	21	19	21	24	91	395	67	34	37	35
13	35	18	21	18	20	24	92	276	65	34	37	35
14	35	17	21	18	20	24	92	161	66	36	37	35
15	35	17	21	18	20	24	92	183	65	36	37	35
16	35	16	21	18	19	25	93	82	65	36	37	36
17	35	17	20	19	19	25	92	81	64	36	37	36
18	34	17	20	19	20	24	92	79	64	36	37	36
19	32	17	20	20	21	24	92	77	64	36	37	36
20	32	16	20	19	20	23	92	74	64	36	37	37
21	32	17	20	18	20	23	95	69	64	36	38	37
22	32	17	20	18	20	22	96	64	63	36	38	37
23	32	17	20	18	19	22	96	64	62	35	38	38
24	32	17	20	17	19	22	96	66	63	36	38	37
25	32	17	19	17	20	22	95	66	62	35	37	37
26	33	17	19	16	20	22	94	65	62	35	38	38
27	33	17	20	16	20	22	92	66	63	36	38	38
28	33	17	21	17	22	22	91	68	63	36	38	38
29	33	17	837	17	-----	22	91	69	63	36	35	38
30	33	18	1,850	17	-----	22	90	70	63	36	35	38
31	33	-----	272	18	-----	22	-----	91	-----	36	35	-----
TOTAL	999	797	6,428	572	528	732	3,632	4,261	6,280	1,722	1,128	1,083
MEAN	32.2	26.6	207	18.5	18.9	23.6	121	137	209	55.5	36.4	36.1
MAX	35	294	1,850	23	22	26	880	549	1,140	616	38	38
MIN	28	16	19	16	16	22	59	64	62	34	33	35
AC-FT	1,980	1,580	12,750	1,130	1,050	1,450	7,200	8,450	12,460	3,420	2,240	2,150
CAL YR 1973	TOTAL	20,100	MEAN	55.1	MAX	1,850	MIN	12	AC-FT	39,870		
WTR YR 1974	TOTAL	28,162	MEAN	77.2	MAX	1,850	MIN	16	AC-FT	55,860		

11444500 SOUTH FORK AMERICAN RIVER NEAR PLACERVILLE, CALIF.

LOCATION.--Lat 38°46'16", long 120°48'55", in NE¼SW¼ sec.25, T.11 N., R.10 E., El Dorado County, on right bank 700 ft (213 m) downstream from Chili Bar Dam, 0.5 mi (0.8 km) upstream from Big Canyon, and 2.5 mi (4.0 km) north of Placerville.

DRAINAGE AREA.--598 mi² (1,549 km²).

PERIOD OF RECORD.--August 1911 to July 1920, July 1964 to current year. Monthly discharge only for some periods, published in WSP 1315-A.

GAGE.--Water-stage recorder. Datum of gage is 931.05 ft. (283.784 m) above mean sea level (levels by Pacific Gas and Electric Co.). Aug. 11, 1911, to July 31, 1920, nonrecording gage 0.6 mi (1.0 km) downstream at different datum.

AVERAGE DISCHARGE (prior to extensive regulation and transbasin diversion).--9 years (1911-20), 1,132 ft³/s (32.06 m³/s), 820,100 acre-ft/yr (1.01 km³/yr); 10 years (1964-74), 1,596 ft³/s (45.20 m³/s), 1,156,000 acre-ft/yr (1.43 km³/yr).

EXTREMES.--Current year: Maximum discharge, 8,080 ft³/s (229 m³/s) Mar. 1 (gage height, 9.40 ft or 2.865 m); minimum daily, 201 ft³/s (5.69 m³/s) Nov. 30.

Period of record: Maximum discharge, 47,300 ft³/s (1,340 m³/s) Dec. 23, 1964 (gage height, 17.4 ft or 5.30 m, from floodmarks), from rating curve extended above 18,000 ft³/s (510 m³/s) on basis of computations of flow over dam of maximum flow; minimum daily, 0.2 ft³/s (0.006 m³/s) Nov. 12, 1964.

REMARKS.--Flow regulated by storage, diversions, and powerplants. See schematic diagram of South Fork American River basin.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

REVISIONS.--WSP 1931: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	320	901	737	2,320	2,340	3,570	5,460	3,450	4,910	976	1,510	377
2	321	769	461	2,190	2,420	5,770	5,890	3,470	4,750	1,480	1,290	368
3	337	550	601	2,150	810	3,470	4,800	3,420	4,210	1,860	1,440	1,200
4	394	781	464	2,120	1,580	2,730	4,530	4,010	3,980	421	981	1,660
5	435	249	1,110	2,120	1,820	2,680	3,570	3,220	3,930	1,420	1,140	1,300
6	639	952	308	2,130	1,580	3,000	3,350	3,460	4,200	1,470	1,470	1,360
7	760	1,130	824	2,160	1,860	2,110	3,230	3,780	4,690	741	1,670	1,090
8	319	1,470	1,210	2,460	2,020	2,590	3,320	4,010	4,550	1,290	1,440	868
9	367	1,350	1,570	2,410	1,970	2,330	3,680	4,230	4,320	1,880	1,460	1,010
10	668	1,160	1,620	2,550	959	2,280	3,580	4,490	3,890	4,500	1,110	1,460
11	371	2,020	1,640	2,510	1,320	2,340	3,560	4,290	3,820	3,780	1,040	1,370
12	384	4,740	1,670	2,600	1,870	2,920	3,120	4,290	3,360	2,110	1,160	1,400
13	642	4,120	1,750	1,940	1,920	2,660	3,150	4,160	3,270	2,120	1,440	1,370
14	332	2,660	2,010	2,660	1,870	2,520	2,670	4,020	3,380	836	1,400	1,310
15	560	1,650	2,060	4,220	1,900	2,530	3,030	4,070	3,590	708	1,420	781
16	590	1,580	1,810	4,400	2,010	2,870	3,060	3,980	3,340	1,190	1,410	1,060
17	415	1,350	2,030	5,530	897	2,420	3,430	3,960	3,350	819	1,280	1,420
18	646	2,400	2,100	4,790	351	2,930	3,470	3,950	2,190	1,000	941	1,390
19	471	1,620	2,070	4,640	2,060	3,000	3,450	3,980	2,260	1,120	1,230	1,360
20	653	1,660	1,980	4,280	2,160	2,860	2,370	3,780	2,380	975	1,060	1,460
21	392	1,740	2,010	4,110	1,890	2,900	2,260	2,940	2,570	796	1,180	1,110
22	318	1,010	2,270	3,370	2,000	2,190	3,400	2,840	2,840	411	1,110	822
23	330	1,050	2,150	3,510	2,020	2,610	3,420	2,900	1,310	983	1,400	1,220
24	800	1,280	2,090	2,910	753	1,950	3,520	2,450	2,070	1,000	1,410	1,410
25	533	981	1,960	3,170	1,650	2,480	3,510	3,900	1,890	974	1,110	1,370
26	362	1,050	1,980	2,890	1,880	2,540	3,480	3,970	1,190	895	1,100	1,420
27	324	1,240	2,580	1,880	1,860	2,660	3,460	3,970	921	830	1,460	1,450
28	324	1,360	2,840	1,780	1,900	2,820	2,800	3,980	1,130	596	1,490	995
29	499	520	4,540	1,760	-----	2,950	3,360	4,010	1,070	435	1,470	892
30	622	201	5,100	1,840	-----	4,280	3,400	4,020	750	905	1,440	1,150
31	517	-----	2,820	1,730	-----	3,970	-----	4,020	-----	809	1,230	-----
TOTAL	14,645	43,544	58,365	89,130	47,670	88,930	105,330	117,020	90,111	39,330	40,292	35,453
MEAN	472	1,451	1,883	2,875	1,703	2,869	3,511	3,775	3,004	1,269	1,300	1,182
MAX	800	4,740	5,100	5,530	2,420	5,770	5,890	4,490	4,910	4,500	1,670	1,660
MIN	318	201	308	1,730	351	1,950	2,260	2,450	750	411	941	368
AC-FT	29,050	86,370	115,800	176,800	94,550	176,400	208,900	232,100	178,700	78,010	79,920	70,320

CAL YR 1973 TOTAL 564,031 MEAN 1,545 MAX 8,300 MIN 201 AC-FT 1,119,000
WTR YR 1974 TOTAL 769,820 MEAN 2,109 MAX 5,890 MIN 201 AC-FT 1,527,000

11445500 SOUTH FORK AMERICAN RIVER NEAR LOTUS, CALIF.

LOCATION.--Lat 38°49'07", long 120°56'45", in NW¼SW¼ sec.11, T.11 N., R.9 E., El Dorado County, on left bank 0.4 mi (0.6 km) downstream from Greenwood Creek, 2.4 mi (3.9 km) northwest of Lotus, and 3.3 mi (5.3 km) northwest of Coloma.

DRAINAGE AREA.--673 mi² (1,743 km²).

PERIOD OF RECORD.--May 1951 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 635 ft (194 m), from topographic map.

AVERAGE DISCHARGE.--11 years (1951-62, prior to extensive regulation and transbasin diversion), 1,109 ft³/s (31.41 m³/s), 802,900 acre-ft/yr (990 hm³/yr); 12 years (1962-74), 1,558 ft³/s (44.12 m³/s), 1,129,000 acre-ft/yr (1.39 km³/yr).

EXTREMES.--Current year: Maximum discharge, 14,000 ft³/s (396 m³/s) Mar. 1 (gage height, 11.64 ft or 3.548 m); minimum daily, 317 ft³/s (8.98 m³/s) Oct. 1.

Period of record: Maximum discharge, 71,800 ft³/s (2,030 m³/s) Dec. 23, 1955 (gage height, 21.37 ft or 6.514 m); minimum daily, 50 ft³/s (1.42 m³/s) Oct. 21, 22, 1964.

Maximum stage known since 1862 and prior to beginning of record, 20.4 ft (6.22 m), from floodmarks, Nov. 21, 1950 (discharge, 64,500 ft³/s or 1,830 m³/s).

REMARKS.--Records good except those for period of no gage-height record, which are poor. Flow regulated by storage, diversions, and powerplants. See schematic diagram of South Fork American River basin. Records of water temperatures for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1931: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	317	892	1,840	2,720	2,510	4,700	5,800	3,520	4,830	752	1,350	390
2	323	855	706	2,470	2,570	8,830	6,200	3,530	4,700	1,430	1,220	380
3	329	503	882	2,380	1,330	4,410	5,400	3,490	4,150	1,880	1,450	1,200
4	349	831	511	2,350	1,400	3,230	4,900	4,080	3,920	609	1,090	1,660
5	345	371	1,260	2,380	1,920	2,970	3,900	3,270	3,880	1,150	1,020	1,350
6	643	803	409	2,700	1,670	3,180	3,650	3,500	4,100	1,660	1,450	1,400
7	851	1,180	870	2,810	1,840	2,490	3,500	3,800	4,640	557	1,660	1,200
8	353	1,560	1,090	2,790	2,100	2,980	3,600	4,030	4,510	1,260	1,430	950
9	337	1,620	1,650	2,760	2,090	2,660	3,800	4,240	4,280	1,800	1,450	1,100
10	548	1,240	1,700	2,800	1,370	2,470	4,100	4,540	3,860	4,430	1,130	1,460
11	483	1,920	1,750	2,770	1,150	2,590	4,150	4,310	3,760	3,880	1,120	1,400
12	368	5,350	1,780	2,880	1,950	3,200	3,240	4,300	3,370	2,160	1,060	1,410
13	516	4,510	2,090	2,320	1,980	2,900	3,250	4,170	3,240	2,050	1,430	1,400
14	500	3,360	2,240	2,870	2,000	2,720	2,820	4,030	3,290	1,190	1,380	1,350
15	331	1,980	2,220	4,850	1,940	2,710	3,060	4,060	3,550	702	1,410	880
16	719	1,730	1,960	4,880	2,060	3,000	3,150	3,960	3,340	997	1,400	1,100
17	429	1,890	2,200	7,490	1,330	2,570	3,500	3,940	3,280	990	1,380	1,450
18	627	2,850	2,250	5,680	426	3,200	3,560	3,970	2,260	990	961	1,400
19	426	1,890	2,190	5,260	1,770	3,100	3,540	3,980	2,320	997	1,090	1,370
20	593	1,760	2,100	4,760	2,360	3,000	2,650	3,770	2,410	1,170	1,170	1,460
21	582	1,960	2,220	4,480	2,180	3,000	2,370	3,000	2,530	816	1,070	1,110
22	336	1,380	2,690	3,730	2,120	2,400	3,260	2,840	2,710	381	966	820
23	355	942	2,400	3,770	2,190	2,800	3,510	2,900	1,600	1,030	1,350	1,220
24	637	1,380	2,270	3,210	1,240	2,150	3,700	2,430	1,830	962	1,450	1,410
25	571	1,130	2,120	3,310	1,410	2,600	3,670	3,860	2,020	974	838	1,380
26	495	1,060	2,170	3,090	2,130	2,800	3,610	3,940	1,280	950	958	1,420
27	354	1,300	3,350	2,250	2,000	2,900	3,590	3,950	1,010	838	1,440	1,450
28	335	1,450	3,860	1,730	2,000	3,050	2,970	3,950	945	616	1,490	990
29	352	760	5,640	2,040	-----	3,300	3,350	3,970	1,220	380	1,480	890
30	618	330	6,340	1,990	-----	4,550	3,460	3,980	777	971	1,400	1,150
31	534	-----	3,370	1,680	-----	4,350	-----	3,980	-----	810	1,230	-----
TOTAL	14,556	48,787	68,128	101,200	51,036	100,810	111,260	117,290	89,612	39,382	39,323	36,150
MEAN	470	1,626	2,198	3,265	1,823	3,252	3,709	3,784	2,987	1,270	1,268	1,205
MAX	551	5,350	6,340	7,490	2,570	8,830	6,200	4,540	4,830	4,430	1,660	1,660
MIN	317	330	409	1,680	426	2,150	2,370	2,430	777	380	838	380
AC-FT	28,870	96,770	135,100	200,700	101,200	200,000	220,700	232,600	177,700	78,110	78,000	71,700

CAL YR 1973 TOTAL 613,413 MEAN 1,681 MAX 13,400 MIN 314 AC-FT 1,217,000

WTR YR 1974 TOTAL 817,534 MEAN 2,240 MAX 8,830 MIN 317 AC-FT 1,622,000

NOTE.--No gage-height record Mar. 18 to Apr. 10, Aug. 22 to Sept. 30.

11446200 FOLSOM LAKE NEAR FOLSOM, CALIF.

LOCATION.--Lat 38°42'29", long 121°09'22", in NW¼NE¼ sec.24, T.10 N., R.7 E., Sacramento County, near center of dam on American River, 0.7 mi (1.1 km) downstream from South Fork American River, and 2.3 mi (3.7 km) north-east of Folsom.

DRAINAGE AREA.--1,861 mi² (4,820 km²).

PERIOD OF RECORD.--February 1955 to current year. Prior to October 1959, published as Folsom Reservoir near Folsom.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Bureau of Reclamation).

EXTREMES.--Current year: Maximum contents, 974,500 acre-ft (1.20 km³) June 17 (elevation, 462.85 ft or 141.077 m); minimum, 586,400 acre-ft (723 hm³) Feb. 11 (elevation, 424.38 ft or 129.351 m).

Period of record: Maximum contents, 1,024,400 acre-ft (1.26 km³) June 15, 1963 (elevation, 467.23 ft or 142.412 m); minimum since storage pool first filled, 261,500 acre-ft (322 hm³) Jan. 7, 1960 (elevation, 378.23 ft or 115.284 m).

REMARKS.--Reservoir is formed by concrete gravity-type dam with rolled-earth-wing dams, auxiliary dams, and dikes, completed May 14, 1956; storage began Feb. 25, 1955. Total capacity, 1,010,300 acre-ft (1.25 km³) between elevations 205.5 ft (62.64 m), invert of lower tier of river outlets and 466.0 ft (142.04 m), gross pool elevation, all of which is available for release. Spillway design flood pool elevation, 475.4 ft (144.90 m), capacity, 1,120,200 acre-ft (1.38 km³). Records, including extremes, represent usable contents at 2400 hours. See schematic diagram of South Fork American River basin.

COOPERATION.--Records furnished by Bureau of Reclamation.

REVISIONS.--WSP 1931: Drainage area.

CAPACITY TABLE (ELEVATION, IN FEET, AND CONTENTS, IN ACRE-FEET)

370	222,300	420	548,300
380	270,700	440	732,900
390	327,800	460	942,600
400	393,300	480	1,176,000

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	740,600	666,200	621,000	669,700	609,100	652,200	765,800	779,200	937,200	947,100	932,900	863,800
2	739,000	663,900	617,300	655,400	606,400	711,800	774,500	784,100	946,400	945,900	930,900	859,500
3	737,200	661,300	610,700	646,500	601,100	730,900	769,800	788,700	950,600	945,900	929,700	856,200
4	735,500	658,700	608,400	644,800	595,100	738,700	757,100	794,200	953,700	943,200	926,600	857,700
5	733,800	656,700	607,000	642,700	592,600	743,700	742,400	797,900	956,800	940,500	923,900	854,700
6	732,300	656,200	603,700	644,800	591,900	747,400	733,800	802,900	959,600	939,700	922,200	852,100
7	732,400	660,500	601,000	642,200	591,700	744,100	729,000	809,200	963,500	936,000	921,000	848,800
8	731,100	666,200	598,600	632,900	591,400	739,000	723,500	816,500	966,100	936,400	919,500	844,400
9	729,800	669,000	599,000	624,000	591,900	731,600	723,600	823,700	968,300	942,300	918,000	840,300
10	728,100	672,900	599,800	621,300	589,100	722,100	721,900	833,000	968,900	955,700	915,300	837,400
11	722,900	694,100	601,100	618,400	586,400	713,000	723,600	841,400	969,000	963,600	912,700	835,000
12	718,000	729,200	601,800	616,100	587,000	708,200	724,200	848,900	968,700	966,200	909,900	832,500
13	716,100	743,500	606,400	614,900	588,700	703,400	724,700	854,900	970,600	968,000	908,600	829,600
14	715,100	747,100	610,200	618,600	590,300	696,500	724,900	861,000	971,700	967,400	906,800	827,200
15	713,700	743,700	613,100	635,200	591,200	689,600	728,600	867,100	973,300	965,100	905,600	823,000
16	711,700	725,400	615,200	636,900	593,000	686,400	732,700	875,200	974,200	963,300	903,500	818,900
17	704,300	715,800	618,000	665,700	593,100	684,400	737,300	879,400	974,500	962,300	900,500	816,400
18	696,700	711,700	622,700	659,800	591,200	684,500	742,500	882,400	972,600	961,300	896,700	814,200
19	690,200	696,000	625,900	661,800	594,700	684,200	746,800	884,300	971,200	959,000	893,100	811,800
20	688,600	677,700	628,600	650,200	599,500	683,200	748,000	885,100	969,900	957,400	890,900	808,700
21	686,500	658,900	630,800	629,200	603,400	681,900	749,000	885,000	968,200	954,600	889,000	805,900
22	685,500	646,000	635,800	620,100	606,900	679,300	751,800	884,600	966,900	951,100	886,500	802,000
23	684,300	637,600	633,200	625,100	610,200	676,400	756,300	884,600	965,900	951,100	884,800	797,800
24	684,300	630,300	629,300	627,500	611,500	672,000	761,000	888,400	964,000	951,100	883,300	795,800
25	682,900	622,200	623,800	629,100	611,700	668,800	764,100	892,200	963,100	950,800	879,800	792,900
26	681,300	619,600	619,500	629,300	614,300	671,700	766,700	896,100	959,500	950,100	876,500	790,000
27	679,400	617,200	627,100	627,100	616,800	679,100	769,100	900,800	955,900	947,400	875,000	786,600
28	677,100	615,100	645,400	622,800	619,300	692,700	770,800	904,700	953,900	943,900	873,300	782,800
29	673,900	611,700	678,900	619,200	-----	709,900	772,900	908,500	952,800	939,800	871,600	777,600
30	671,200	608,200	687,500	615,700	-----	740,000	775,500	916,800	950,200	937,600	870,000	772,800
31	668,300	-----	680,800	611,400	-----	751,100	-----	926,300	-----	934,900	867,800	-----
MAX	740,600	747,100	687,500	669,700	619,300	751,100	775,500	926,300	974,500	968,000	932,900	863,800
MIN	668,300	608,200	598,600	611,400	586,400	652,200	721,900	779,200	937,200	934,900	867,800	772,800
(a)	433.32	426.82	434.63	427.17	428.04	441.83	444.26	458.52	460.68	459.30	453.13	443.99
(b)	-73,900	-60,100	+72,600	-69,400	+7,900	+131,800	+24,400	+150,800	+23,900	-15,300	-67,100	-95,000
(c)	2,590	710	310	450	910	1,320	2,710	5,580	7,100	6,960	6,360	5,000

CAL YR 1973 b +49,700

WTR YR 1974 b +30,600

a Elevation, in feet, at end of month.

b Change in contents, in acre-feet.

c Evaporation, in acre-feet.

11446500 AMERICAN RIVER AT FAIR OAKS, CALIF.

LOCATION.--Lat 38°38'08", long 121°13'36", in SE¼NE¼ sec.17, T.9 N., R.7 E., Sacramento County, on right bank 2,100 ft (640 m) downstream from Nimbus Dam, 2.4 mi (3.9 km) east of Fair Oaks, 8.1 mi (13.0 km) downstream from South Fork, and at mile 22.2 (35.7 km).

DRAINAGE AREA.--1,888 mi² (4,890 km²).

PERIOD OF RECORD.--November 1904 to current year. Monthly discharge only for some periods, published in WSP 1315-A.

GAGE.--Water-stage recorder. Datum of gage is 71.53 ft (21.802 m) above mean sea level. Prior to Nov. 7, 1930, nonrecording gages or water-stage recorders at several sites 2.2 mi (3.5 km) downstream, all at datum 5.74 ft (1.750 m) lower. Nov. 7, 1930, to Dec. 31, 1957, at site 2.2 mi (3.5 km) downstream at datum 6.74 ft (2.054 m) lower. Dec. 31, 1957, to July 15, 1970, at datum 6.00 ft (1.829 m) higher.

AVERAGE DISCHARGE (adjusted for change in contents, diversions, and evaporation from Folsom Lake since 1955).--70 years, 3,815 ft³/s (108 m³/s), 2,764,000 acre-ft/yr (3.41 km³/yr).

EXTREMES.--Current year: Maximum discharge, 27,600 ft³/s (782 m³/s) Jan. 17 (gage height, 14.46 ft or 4.407 m); minimum daily, 1,800 ft³/s (51.0 m³/s) Sept. 4.

Period of record: Maximum discharge, 180,000 ft³/s (5,100 m³/s) Nov. 21, 1950 (gage height, 31.85 ft or 9.708 m, site and datum then in use); minimum, 3.6 ft³/s (0.10 m³/s) Aug. 16, 1924. Maximum discharge since construction of Folsom Dam in 1953, 115,000 ft³/s (3,260 m³/s) Dec. 23-25, 1964 (gage height, 21.65 ft or 6.599 m); minimum, 86 ft³/s (2.44 m³/s) Apr. 7, 1955.

REMARKS.--Records excellent. Flow regulated by Folsom Lake beginning Feb. 25, 1955 (see sta 11446200). Some minor regulation of high flows by temporary pondage during period of construction January 1953 to February 1955. Diurnal fluctuations from Folsom powerplant re-regulated by Nimbus Reservoir, capacity, 2,800 acre-ft (3.45 km³) between normal operating elevations 118.5 ft (36.12 m) and 125.0 ft (38.1 m), and powerplant. Many diversions above station for irrigation, municipal, and domestic water supply. Diversions of San Juan Suburban Water District, Cordova Water Service, city of Folsom, and State of California are made at Folsom Dam. Diversion to Folsom South Canal from Nimbus Reservoir started in June 1973. Some inflow from Bear and Yuba River basins. Records of water temperatures for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1181: 1928(M). WSP 1515: 1907(M), 1910, 1931(M), 1943(M). WSP 1931: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,090	2,590	6,790	15,500	7,580	4,430	18,200	5,970	3,040	3,110	3,080	3,120
2	2,090	2,590	8,180	15,300	7,500	5,460	20,600	5,990	3,610	3,120	3,100	3,120
3	2,090	2,590	8,060	11,400	7,500	7,520	20,500	5,970	6,090	3,120	3,110	3,080
4	2,080	2,570	5,420	8,090	7,420	7,780	20,600	5,930	6,180	3,130	3,100	1,800
5	2,090	2,570	5,090	8,120	6,470	7,780	19,200	5,970	5,950	3,130	3,100	3,540
6	2,090	2,570	5,130	8,330	5,330	7,780	15,200	5,930	5,780	3,130	3,100	3,680
7	2,090	2,570	5,160	10,000	5,200	10,900	12,200	5,950	6,060	3,130	3,060	3,660
8	2,090	2,570	5,070	12,300	5,200	12,400	12,200	5,950	6,120	3,140	3,060	3,650
9	2,100	2,560	4,210	11,400	5,180	12,400	10,100	6,040	6,130	3,160	3,070	3,670
10	2,360	2,570	4,170	8,120	5,200	12,300	10,000	5,070	6,020	3,150	3,070	3,680
11	4,050	3,250	4,130	8,090	5,240	12,300	8,000	5,090	6,010	3,160	3,070	3,680
12	3,820	5,330	4,150	8,030	4,690	12,300	7,870	5,090	5,830	3,170	3,070	3,660
13	2,250	5,770	4,150	7,950	4,270	11,900	7,820	5,110	5,160	3,170	3,060	3,660
14	2,120	8,300	4,190	8,000	4,170	11,700	7,380	5,130	5,150	3,180	3,140	3,660
15	2,120	7,380	4,190	11,600	4,230	11,500	5,750	5,200	5,150	3,170	3,070	3,670
16	2,290	15,800	4,170	16,300	4,250	9,890	5,790	4,010	5,210	3,170	3,090	3,660
17	5,270	15,700	4,170	20,500	4,250	8,660	5,970	5,460	5,170	3,180	3,100	3,690
18	5,310	16,000	4,170	26,400	4,250	7,950	6,010	6,130	5,190	3,170	3,110	3,660
19	4,290	15,700	4,110	26,300	4,190	8,030	5,970	6,100	5,190	3,190	3,110	3,660
20	2,590	15,700	3,700	26,000	4,190	8,030	6,040	6,130	5,180	3,190	3,110	3,720
21	2,570	15,600	5,110	25,600	4,210	8,030	6,080	6,060	5,180	3,190	3,110	3,760
22	2,560	11,300	5,240	16,700	4,210	8,030	6,040	6,130	5,180	3,170	3,110	3,720
23	2,560	7,980	7,420	8,180	4,230	8,030	6,060	6,130	4,220	2,210	3,100	3,740
24	2,530	8,000	7,550	8,120	4,230	8,030	6,080	3,680	4,210	2,070	3,100	3,720
25	2,530	7,820	7,600	8,030	4,230	7,950	6,080	5,980	4,180	2,030	3,110	3,980
26	2,570	5,510	7,620	8,060	4,230	5,970	6,080	6,060	4,170	2,060	3,110	4,040
27	2,560	5,180	7,600	8,060	4,230	5,130	6,080	6,010	4,140	3,000	3,110	4,050
28	2,570	5,160	5,820	8,060	4,290	5,130	6,080	5,980	3,140	3,040	3,110	4,130
29	2,570	5,130	8,650	7,950	-----	6,580	6,080	5,900	3,100	3,060	3,110	4,100
30	2,570	5,130	15,700	7,520	-----	14,400	6,080	3,390	3,100	3,080	3,110	4,100
31	2,570	-----	15,600	7,550	-----	15,500	-----	3,080	-----	3,070	3,110	-----
TOTAL	83,440	211,490	192,320	381,560	140,170	283,790	286,140	170,620	148,840	93,050	95,970	109,060
MEAN	2,692	7,050	6,204	12,310	5,006	9,155	9,538	5,504	4,961	3,002	3,096	3,635
MAX	5,310	16,000	15,700	26,400	7,580	15,500	20,600	6,130	6,180	3,190	3,140	4,130
MIN	2,080	2,560	3,700	7,520	4,170	4,430	5,750	3,080	3,040	2,030	3,060	1,800
AC-FT	165,500	419,500	381,500	756,800	278,000	562,900	567,600	338,400	295,200	184,600	190,400	216,300
MEAN a	1,599	6,095	7,444	11,230	5,204	11,360	10,070	8,172	5,616	3,010	2,236	2,235
AC-FT a	98,340	362,700	457,700	690,400	289,000	698,700	599,000	502,500	334,200	185,100	137,500	133,000
(b)	4,150	2,620	3,250	2,580	2,190	2,670	4,320	7,730	7,990	8,820	7,860	6,670

CAL YR 1973 TOTAL 1,720,470 MEAN 4,714 MAX 31,900 MIN 1,370 AC-FT 3,413,000 MEANa 4,917 AC-FTA 3,560,000
WTR YR 1974 TOTAL 2,196,450 MEAN 6,018 MAX 26,400 MIN 1,800 AC-FT 4,357,000 MEANa 6,199 AC-FTA 4,488,000

a Adjusted for change in contents, diversions, and evaporation from Folsom Lake.

b Diversions, in acre-feet, to Cordova Water Service, city of Folsom, San Juan Suburban Water District, Folsom South Canal, and to State of California, furnished by Bureau of Reclamation.

11447030 STRONG RANCH SLOUGH AT SACRAMENTO, CALIF.

LOCATION.--Lat 38°36'09", long 121°23'40", in NE¼SW¼ sec.29, T.9 N., R.5 E., Sacramento County, on right bank 3.0 mi (4.8 km) upstream from mouth, and 1.2 mi (1.9 km) east of Sacramento city limits.

DRAINAGE AREA.--5.02 mi² (13.00 km²).

PERIOD OF RECORD.--October 1972 to current year (winter season only).

GAGE.--Water-stage recorder. Altitude of gage is 40 ft (12 m), from topographic map.

EXTREMES.--Current year: Maximum discharge, 566 ft³/s (16.0 m³/s) Nov. 17 (gage height, 7.03 ft or 2.143 m).
Period of record: Maximum discharge, 708 ft³/s (20.1 m³/s) Feb. 27, 1973 (gage height, 7.74 ft or 2.359 m).

REMARKS.--Records good. Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, OCTOBER 1973 TO APRIL 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.1	.25	85	.52	.30	43	37					
2	.82	.08	.52	.16	.18	22	1.8					
3	1.1	.06	.30	3.1	.13	.94	.25					
4	1.1	.06	.16	28	.13	.52	.20					
5	.94	24	.13	3.7	.12	.36	.20					
6	1.6	5.6	.13	22	.12	.36	.16					
7	16	3.6	.08	10	.13	22	.20					
8	.60	.36	.52	.52	.15	2.0	.44					
9	.44	5.6	.08	.25	.14	.13	15					
10	.44	22	.44	.20	.13	.10	.20					
11	.44	32	5.5	10	.13	6.9	.13					
12	.44	38	.16	3.2	.43	3.1	.13					
13	.60	40	6.2	.36	.20	.25	.16					
14	.60	2.2	.20	30	.13	.16	.36					
15	.60	.20	.10	5.9	.14	.20	.36					
16	.60	23	.13	15	1.4	.30	.52					
17	.70	105	.13	19	.40	.25	.70					
18	.82	1.8	.10	20	.16	.30	3.6					
19	.94	.25	.10	2.2	12	.25	.30					
20	.70	1.8	.10	.44	.13	.36	.30					
21	.60	.25	31	.25	6.1	.36	.36					
22	46	.16	4.4	.13	.52	.36	.60					
23	16	.16	.60	.10	.20	.36	8.2					
24	.36	.60	.44	.08	.20	.52	4.0					
25	.36	.44	.30	.13	.20	7.3	.06					
26	.30	.08	35	.10	.20	7.7	.16					
27	.30	.08	52	.13	.20	13	.16					
28	.36	.08	12	.20	10	9.3	.36					
29	.36	4.7	6.5	.16	-----	13	.70					
30	.20	37	.52	.10	-----	26	.70					
31	.13	-----	.60	5.3	-----	1.0	-----					
TOTAL	95.55	349.41	243.44	181.23	34.27	182.38	77.31					
MEAN	3.08	11.6	7.85	5.85	1.22	5.88	2.58					
MAX	46	105	85	30	12	43	37					
MIN	.13	.06	.08	.08	.12	.10	.06					
AC-FT	190	693	483	359	68	362	153					

SACRAMENTO RIVER BASIN

11447360 ARCADE CREEK NEAR DEL PASO HEIGHTS, CALIF.

LOCATION.--Lat 38°38'28", long 121°22'38", in Del Paso Grant, Sacramento County, on right bank 1,200 ft (366 m) upstream from bridge on Interstate Highway 80, and 1.6 mi (2.6 km) east of city limits of Del Paso Heights.

DRAINAGE AREA.--31.5 mi² (81.6 km²).

PERIOD OF RECORD.--July 1963 to current year.

GAGE.--Water-stage recorder and concrete low-water control. Datum of gage is 47.98 ft (14.624 m) above mean sea level (levels by county of Sacramento).

AVERAGE DISCHARGE.--11 years, 17.8 ft³/s (0.504 m³/s), 12,900 acre-ft/yr (15.9 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,620 ft³/s (45.9 m³/s) Dec. 1 (gage height, 13.23 ft or 4.032 m); minimum daily, 0.06 ft³/s (0.002 m³/s) Nov. 1.
Period of record: Maximum discharge, 2,170 ft³/s (61.5 m³/s) Feb. 27, 1973 (gage height, 14.29 ft or 4.356 m); maximum gage height, 14.42 ft (4.395 m) Jan. 21, 1967; no flow for several days in 1963-66, 1971-73.

REMARKS.--Records fair. Low summer flow sustained by residential and industrial waste water.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.0	.06	807	15	6.1	219	232	2.9	3.6	3.6	4.4	3.7
2	1.2	.17	36	4.8	1.9	278	76	2.6	3.7	4.1	5.2	3.4
3	.87	.29	7.7	5.3	1.4	47	8.8	3.2	4.3	4.3	4.7	3.3
4	.98	.53	4.3	121	1.3	7.0	4.7	3.1	4.0	3.8	4.5	3.9
5	1.3	38	3.6	51	1.1	3.7	3.6	3.2	3.6	3.9	5.0	3.7
6	2.0	72	2.3	192	.93	2.6	3.2	3.5	3.8	3.7	4.0	4.0
7	45	29	1.7	128	.93	52	2.9	3.5	3.6	3.3	5.6	3.7
8	21	7.7	1.5	20	1.2	56	2.9	5.3	3.6	133	4.2	3.7
9	3.7	11	1.2	6.5	1.1	5.6	30	3.7	5.1	58	5.0	3.6
10	1.6	100	1.2	3.9	1.1	2.8	8.0	3.4	5.0	5.6	4.2	3.5
11	.90	175	43	17	1.2	16	3.3	3.6	4.7	2.8	4.1	3.5
12	.92	311	28	60	6.1	45	2.6	3.6	5.0	2.6	4.1	3.0
13	.49	172	41	12	5.9	8.0	2.4	3.3	4.2	2.6	4.1	2.9
14	.47	239	14	85	1.4	2.8	2.3	3.7	4.2	3.2	4.2	2.9
15	.70	15	3.4	122	1.6	2.2	1.5	3.6	3.8	4.4	4.4	3.1
16	.70	212	2.2	72	18	1.9	1.7	3.3	4.0	3.6	4.4	3.4
17	.54	535	1.7	227	3.8	1.7	2.1	3.4	4.1	3.8	4.4	3.5
18	.55	204	1.4	115	1.7	1.7	9.5	2.9	4.2	4.3	3.9	3.2
19	.55	14	1.3	57	78	1.5	5.4	3.4	49	4.5	4.1	3.1
20	.49	15	1.1	12	11	1.5	2.1	3.5	5.4	4.3	3.6	3.1
21	.50	14	123	5.4	12	1.4	1.6	3.5	3.8	4.4	3.9	3.0
22	72	5.7	122	3.4	14	1.3	1.8	3.7	3.9	4.7	4.1	3.4
23	126	3.9	11	2.4	3.3	1.2	11	3.8	3.7	4.7	5.0	3.6
24	7.4	8.5	5.4	2.8	1.8	1.2	36	4.0	3.7	5.1	4.3	3.4
25	2.3	5.4	3.1	2.0	1.5	9.4	5.9	4.1	3.7	5.3	4.1	2.8
26	1.3	3.2	75	1.6	2.3	9.4	2.9	4.3	3.8	5.4	4.0	2.4
27	.98	3.4	412	1.4	2.1	23	2.1	4.4	4.6	4.1	4.2	2.8
28	.74	2.9	219	1.3	9.3	39	1.9	4.2	4.8	4.1	4.1	2.5
29	.55	7.1	86	1.3	-----	50	2.7	3.6	4.4	4.5	3.9	2.6
30	.33	74	23	1.3	-----	91	3.0	3.8	4.0	4.4	4.6	2.7
31	.17	-----	6.6	8.3	-----	9.6	-----	3.9	-----	4.6	3.4	-----
TOTAL	297.23	2,278.85	2,089.7	1,357.7	192.06	992.5	473.9	112.0	169.3	310.7	133.7	97.4
MEAN	9.59	76.0	67.4	43.8	6.86	32.0	15.8	3.61	5.64	10.0	4.31	3.25
MAX	126	535	807	227	78	278	232	5.3	49	133	5.6	4.0
MIN	.17	.06	1.1	1.3	.93	1.2	1.5	2.6	3.6	2.6	3.4	2.4
AC-FT	590	4,520	4,140	2,690	381	1,970	940	222	336	616	265	193
CAL YR 1973	TOTAL	13,334.94	MEAN	36.5	MAX	807	MIN	.06	AC-FT	26,450		
WTR YR 1974	TOTAL	8,505.04	MEAN	23.3	MAX	807	MIN	.06	AC-FT	16,870		

PEAK DISCHARGE (BASE, 500 FT ³ /S)							
DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-13	2230	11.00	780	12-1	0500	13.23	1,620
11-17	1900	13.22	1,610	12-27	0400	10.59	678

11447500 SACRAMENTO RIVER AT SACRAMENTO, CALIF.
(International Hydrological Decade River Station)

LOCATION.--Lat 38°35'12", long 121°30'16", Sacramento County, on left bank 1,000 ft (300 m) upstream from I Street Bridge, in city of Sacramento, and 0.5 mi (0.8 km) downstream from American River.

DRAINAGE AREA.--23,508 mi² (60,886 km²).

PERIOD OF RECORD.--January 1904 to July 1905 (gage heights only), June to November 1921, October 1948 to current year. Gage heights collected in this vicinity November 1879 to May 1888, December 1890 to September 1963 are contained in reports of U.S. Weather Bureau.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level. Prior to Oct. 15, 1912, nonrecording gage in vicinity of I Street Bridge. Oct. 15, 1912, to Nov. 16, 1956, water-stage recorder at various sites in vicinity of I Street Bridge. Prior to Nov. 16, 1956, datum of gages at low-water mark of Oct. 23, 1856, 0.12 ft (0.037 m) above mean sea level. Auxiliary water-stage recorder on right bank 10.8 mi (17.4 km) downstream near Freeport.

AVERAGE DISCHARGE.--26 years (1948-74), 24,560 ft³/s (695.5 m³/s), 17,790,000 acre-ft/yr (21.9 km³/yr).

EXTREMES.--Current year: Maximum discharge, 95,000 ft³/s (2,690 m³/s) Jan. 21 (elevation, 27.18 ft or 8.284 m); minimum daily, 15,200 ft³/s (430 m³/s) Oct. 21.

Period of record (1948 to current year): Maximum discharge, 104,000 ft³/s (2,950 m³/s) Nov. 21, 1950 (elevation, 30.14 ft or 9.187 m, site and datum then in use); minimum daily, 5,590 ft³/s (158 m³/s) July 20, 1949.

Maximum discharge known prior to Nov. 21, 1950, 103,000 ft³/s (2,920 m³/s) Jan. 17, 1909 (elevation, 29.6 ft or 9.02 m, present datum), from reports of California Department of Water Resources.

REMARKS.--Records excellent. Natural flow of stream affected by storage reservoirs, power developments, diversions for irrigation, and return flow from irrigated areas. A portion of the flow bypasses station during flood periods through Yolo Bypass (see sta 11426000, 11453000). Water-quality records at or near this gaging station for the current year are published in Part 2 of this report.

COOPERATION.--Records collected and prepared in cooperation with the California Department of Water Resources.

REVISIONS (WATER YEARS).--WRD Calif. 1971: 1966(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17,200	15,900	63,900	76,500	72,100	39,200	84,000	35,300	26,800	17,800	21,900	24,800
2	16,900	16,100	69,200	75,900	71,600	53,300	90,700	32,600	27,000	17,200	21,900	24,800
3	16,800	16,100	68,800	72,600	71,000	68,100	91,900	29,500	29,100	17,400	21,800	25,100
4	16,900	16,100	67,700	69,200	70,400	70,400	91,800	27,600	29,400	17,800	21,900	24,500
5	16,700	16,100	66,000	68,500	69,300	68,800	91,200	26,300	29,600	17,600	22,000	25,200
6	16,700	16,500	65,200	68,500	67,300	66,700	87,000	24,900	28,400	17,800	22,200	26,300
7	16,800	16,600	64,600	69,100	65,700	66,100	82,800	23,600	27,700	17,800	22,100	26,600
8	16,600	17,600	64,100	71,300	64,200	67,800	80,200	25,500	27,200	18,400	22,200	26,900
9	16,700	19,200	63,200	68,800	62,000	70,100	77,800	28,600	26,300	21,500	22,300	27,300
10	16,900	21,500	62,600	63,000	58,500	71,400	76,200	29,100	25,500	24,200	22,800	27,400
11	17,900	25,000	61,700	61,800	54,700	71,400	73,900	29,000	24,700	26,600	23,300	27,600
12	18,200	38,800	60,600	60,200	48,500	70,900	71,900	30,700	24,200	27,100	23,800	27,600
13	17,000	50,400	59,200	59,200	42,800	70,800	70,800	32,000	23,300	26,700	24,100	27,200
14	16,200	59,200	58,300	60,400	43,000	70,100	70,200	32,400	22,700	25,800	24,200	27,000
15	16,100	64,700	56,500	65,300	44,800	68,500	68,400	32,600	23,700	24,900	24,300	26,600
16	15,800	71,800	54,500	76,000	44,300	65,200	68,000	30,900	25,600	24,300	24,500	26,500
17	17,900	75,300	52,500	81,500	44,100	63,000	67,500	29,400	25,200	24,100	24,500	26,500
18	18,500	77,000	50,800	90,400	43,600	63,500	66,800	30,900	22,700	23,600	24,500	26,500
19	17,900	76,300	49,700	93,400	42,500	64,700	66,100	31,500	23,300	23,200	24,800	26,000
20	16,000	75,000	48,400	94,200	42,800	65,400	65,300	32,200	24,400	22,800	24,900	25,200
21	15,200	74,100	49,900	94,100	44,300	65,700	63,400	32,200	24,700	22,500	24,900	24,200
22	15,500	71,300	51,200	90,700	45,400	65,700	59,100	31,400	24,800	22,400	25,000	23,400
23	16,200	66,800	56,600	81,700	45,100	65,700	52,700	29,700	24,400	21,700	25,000	22,900
24	16,600	66,000	60,200	79,200	44,000	65,500	46,700	26,100	23,400	21,200	25,100	22,600
25	17,000	66,000	63,600	78,000	42,600	64,600	43,000	25,900	22,000	20,900	25,300	22,800
26	17,100	64,700	64,500	77,500	41,700	60,700	38,900	27,300	20,700	20,700	25,400	22,700
27	16,700	63,200	66,700	76,600	40,900	55,000	37,100	27,500	19,700	21,600	25,300	22,100
28	16,200	62,300	67,300	75,600	39,700	51,600	35,300	28,000	18,400	21,800	25,600	22,000
29	16,200	61,100	69,700	74,500	-----	53,500	34,100	27,900	18,700	21,600	25,700	21,800
30	16,100	60,400	77,000	73,300	-----	64,600	35,700	27,200	18,800	21,600	25,800	21,700
31	15,900	-----	76,400	72,600	-----	77,100	-----	26,700	-----	21,700	25,300	-----
TOTAL	518,400	1,441.1M	1,910.6M	2,319.6M	1,466.9M	2,005.1M	1,988.5M	904,500	732,400	674,300	742,400	751,800
MEAN	16,720	48,040	61,630	74,830	52,390	64,680	66,280	29,180	24,410	21,750	23,950	25,060
MAX	18,500	77,000	77,000	94,200	72,100	77,100	91,900	35,300	29,600	27,100	25,800	27,600
MIN	15,200	15,900	48,400	59,200	39,700	39,200	34,100	23,600	18,400	17,200	21,800	21,700
AC-FT	1,028M	2,858M	3,790M	4,601M	2,910M	3,977M	3,944M	1,794M	1,453M	1,337M	1,473M	1,491M

CAL YR 1973 TOTAL 12,234,000 MEAN 33,520 MAX 92,700 MIN 12,600 AC-FT 24,270,000
WTR YR 1974 TOTAL 15,455,600 MEAN 42,340 MAX 94,200 MIN 15,200 AC-FT 30,660,000

SACRAMENTO RIVER BASIN

11448500 ADOBE CREEK NEAR KELSEYVILLE, CALIF.

LOCATION.--Lat 38°55'37", long 122°52'47", in SE¼SE¼ sec.32, T.13 N., R.9 W., Lake County, on left bank 2.3 mi (3.7 km) upstream from Highland Creek, and 4.2 mi (6.8 km) southwest of Kelseyville.

DRAINAGE AREA.--6.36 mi² (16.47 km²).

PERIOD OF RECORD.--October 1954 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,476.06 ft (449.903 m) above mean sea level.

AVERAGE DISCHARGE.--20 years, 12.8 ft³/s (0.362 m³/s), 9,270 acre-ft/yr (11.4 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,570 ft³/s (44.5 m³/s) Jan. 16 (gage height, 8.92 ft or 2.719 m); no flow for several months.

Period of record: Maximum discharge, 1,570 ft³/s (44.5 m³/s) Jan. 16, 1974 (gage height, 8.92 ft or 2.719 m); maximum gage height, 9.22 ft (2.810 m) Jan. 31, 1963; no flow at times in each year.

REMARKS.--Records good. Some regulation and diversions above station for irrigation of about 200 acres (809,000 m²).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	.30	180	13	11	310	118	3.0	1.0	.06		
2	0	.35	70	10	7.4	143	67	2.7	1.5	.06		
3	0	.42	31	11	6.6	67	39	2.7	.55	.04		
4	0	.42	21	10	5.9	39	27	2.4	.42	.04		
5	0	22	16	9.5	5.4	27	23	2.4	.42	.04		
6	0	8.4	12	9.5	4.8	22	18	2.2	.33	.02		
7	0	22	9.6	11	4.4	32	15	2.2	.33	.02		
8	0	7.6	8.0	12	3.9	23	13	1.9	.25	.33		
9	0	101	6.7	11	3.7	19	14	1.9	.06	.25		
10	0	283	5.8	10	3.6	19	11	1.7	.04	.15		
11	0	355	11	18	3.4	111	9.5	1.7	.02	.15		
12	0	200	7.5	83	4.9	87	8.4	1.7	0	.11		
13	0	130	43	85	3.7	53	7.9	1.7	.11	.09		
14	0	71	19	198	3.2	34	7.4	1.5	.15	.06		
15	0	85	14	243	2.9	25	6.9	1.5	.15	.09		
16	0	285	12	811	5.1	20	6.4	1.5	.20	.09		
17	0	195	19	139	3.6	16	5.4	1.7	.20	.06		
18	0	130	14	102	6.8	13	5.9	1.7	.33	.04		
19	0	58	12	82	53	11	5.4	1.7	.33	.04		
20	0	33	11	47	17	10	4.9	1.5	.25	.04		
21	0	21	87	28	19	8.9	4.5	1.5	.20	.04		
22	8.3	16	53	20	14	8.4	4.1	1.2	.11	.02		
23	14	14	30	16	12	7.9	4.1	1.2	.11	.02		
24	1.4	12	21	13	10	6.9	4.5	1.0	.11	0		
25	.85	10	16	11	9.0	8.9	4.1	1.0	.09	0		
26	.54	8.8	21	9.3	8.6	23	4.5	.85	.09	0		
27	.42	7.7	35	8.0	7.5	110	3.7	.85	.11	0		
28	.37	6.9	29	7.1	377	83	3.4	.85	.09	0		
29	.32	10	23	6.4	-----	446	3.0	.85	.06	0		
30	.31	390	18	5.7	-----	313	3.0	.69	.06	0		
31	.30	-----	15	10	-----	85	-----	.69	-----	0		-----
TOTAL	26.81	2,483.89	870.6	2,049.5	617.4	2,182.0	452.0	49.98	7.67	1.86	0	0
MEAN	.86	82.8	28.1	66.1	22.1	70.4	15.1	1.61	.26	.060	0	0
MAX	14	390	180	811	377	446	118	3.0	1.5	.33	0	0
MIN	0	.30	5.8	5.7	2.9	6.9	3.0	.69	0	0	0	0
AC-FT	53	4,930	1,730	4,070	1,220	4,330	897	99	15	3.7	0	0

CAL YR 1973 TOTAL 8,305.78 MEAN 22.8 MAX 472 MIN 0 AC-FT 16,470
WTR YR 1974 TOTAL 8,741.71 MEAN 23.9 MAX 811 MIN 0 AC-FT 17,340

PEAK DISCHARGE (BASE, 400 FT³/S)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-10	0630	6.37	447	2-28	1400	7.69	941
11-30	unknown	7.48	850	3-29	2315	7.85	1,010
1-16	0830	8.92	1,570				

11448900 HIGHLAND CREEK ABOVE HIGHLAND CREEK DAM, CALIF.

LOCATION.--Lat 38°55'48", long 122°55'11", in NW¼SE¼ sec.36, T.13 N., R.10 W., Lake County, on left bank 100 ft (30 m) downstream from Pipeline Creek, 1.7 mi (2.7 km) upstream from Highland Creek Dam, and 5.7 mi (9.2 km) southwest of Kelseyville.

DRAINAGE AREA.--11.9 mi² (30.8 km²).

PERIOD OF RECORD.--October 1962 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,490.07 ft (454.173 m) above mean sea level.

AVERAGE DISCHARGE.--12 years, 22.9 ft³/s (0.649 m³/s), 16,590 acre-ft/yr (20.5 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 3,140 ft³/s (88.9 m³/s) Jan. 16 (gage height, 10.91 ft or 3.325 m); minimum daily, 0.03 ft³/s (0.001 m³/s) Sept. 20, 21.
Period of record: Maximum discharge, 3,140 ft³/s (88.9 m³/s) Jan. 16, 1974 (gage height, 10.91 ft or 3.325 m); maximum gage height, 12.15 ft (3.703 m) Dec. 22, 1964; no flow at times in most years.

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

REVISIONS (WATER YEARS).--WRD Calif. 1969: 1968(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.10	.60	407	25	19	705	245	7.8	3.0	.59	.19	.09
2	.32	.56	121	20	15	278	147	7.8	2.8	.59	.16	.07
3	.32	.60	64	21	14	131	87	7.4	2.7	.52	.15	.07
4	.30	.60	41	20	13	75	59	7.0	2.5	.52	.13	.06
5	.30	19	29	18	12	51	49	6.7	2.7	.46	.14	.06
6	.33	6.9	22	18	11	41	39	6.3	2.5	.46	.18	.06
7	.51	15	18	20	11	51	34	6.0	2.3	.52	.15	.05
8	.39	5.4	14	24	10	40	32	6.0	2.1	2.1	.14	.04
9	.39	86	12	24	9.5	32	36	5.4	2.0	2.0	.13	.05
10	.39	258	11	21	9.5	32	27	5.4	1.8	1.5	.12	.06
11	.38	519	24	33	9.1	201	23	5.4	1.7	1.4	.13	.06
12	.38	242	15	182	12	152	21	5.4	1.5	1.2	.15	.05
13	.38	140	86	174	10	89	19	5.1	1.5	1.1	.14	.05
14	.39	81	36	264	8.6	59	17	5.1	1.5	.89	.13	.06
15	.39	84	25	371	8.2	45	16	5.1	1.5	.81	.12	.06
16	.40	371	20	1,660	13	36	15	4.8	1.7	.81	.11	.06
17	.40	242	27	322	9.5	30	14	5.4	1.8	.81	.10	.06
18	.39	145	20	212	14	26	14	5.4	2.0	.73	.09	.05
19	.40	60	17	193	112	23	13	5.1	2.0	.66	.11	.04
20	.56	37	16	127	34	20	12	4.8	1.8	.52	.13	.03
21	1.1	24	129	95	36	18	11	4.8	1.4	.46	.12	.03
22	6.6	22	86	70	28	17	11	4.7	1.2	.41	.08	.04
23	9.7	18	51	49	22	15	11	4.5	1.1	.37	.07	.04
24	1.7	16	36	39	19	14	11	4.2	1.1	.33	.07	.04
25	1.1	13	28	33	16	19	11	4.2	1.1	.30	.06	.04
26	.84	11	44	28	17	39	12	3.7	1.1	.25	.06	.06
27	.71	9.7	83	23	15	209	10	3.5	.98	.25	.06	.07
28	.65	8.6	74	19	911	149	9.1	3.5	.89	.25	.06	.06
29	.60	17	55	17	-----	1,020	8.6	3.5	.81	.23	.07	.05
30	.60	1,000	40	15	-----	709	8.2	3.5	.66	.21	.07	.05
31	.56	-----	31	20	-----	185	-----	3.3	-----	.19	.09	-----
TOTAL	31.58	3,452.96	1,682	4,157	1,418.4	4,511	1,021.9	160.8	51.74	21.44	3.51	1.61
MEAN	1.02	115	54.3	134	50.7	146	34.1	5.19	1.72	.69	.11	.054
MAX	9.7	1,000	407	1,660	911	1,020	245	7.8	3.0	2.1	.19	.09
MIN	.10	.56	11	15	8.2	14	8.2	3.3	.66	.19	.06	.03
AC-FT	63	6,850	3,340	8,250	2,810	8,950	2,030	319	103	43	7.0	3.2

CAL YR 1973 TOTAL 14,986.69 MEAN 41.1 MAX 1,000 MIN 0 AC-FT 29,730
WTR YR 1974 TOTAL 16,513.94 MEAN 45.2 MAX 1,660 MIN .03 AC-FT 32,760

PEAK DISCHARGE (BASE, 1,200 FT³/S)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-30	1945	8.96	1,970	2-28	1330	9.22	2,120
1-16	0845	10.91	3,140	3-29	2245	9.83	2,490

SACRAMENTO RIVER BASIN

11449010 HIGHLAND CREEK BELOW HIGHLAND CREEK DAM, NEAR KELSEYVILLE, CALIF.

LOCATION.--Lat 38°56'54", long 122°54'03", in NE¼ sec.30, T.13 N., R.9 W., Lake County, on left bank 500 ft (152 m) downstream from Highland Creek Dam, and 4.0 mi (6.4 km) southwest of Kelseyville.

DRAINAGE AREA.--14.2 mi² (36.8 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 1,416.52 ft (431.755 m) above mean sea level.

AVERAGE DISCHARGE (unadjusted).--8 years (1966-74), 27.5 ft³/s (0.779 m³/s), 19,920 acre-ft/yr (24.6 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 625 ft³/s (17.7 m³/s) Jan. 16 (gage height, 5.09 ft or 1.551 m); no flow many days.

Period of record: Maximum discharge, 765 ft³/s (21.7 m³/s) Dec. 3, 1970 (gage height, 4.78 ft or 1.457 m); maximum gage height, 5.09 ft (1.551 m) Jan. 16, 1974; no flow many days in each year.

REMARKS.--Records good. Flow completely regulated by Highland Creek Dam 500 ft (152 m) upstream, capacity, 3,500 acre-ft (4.32 hm³). No diversion above station. Records of chemical analyses, water temperatures, and sediment discharge for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.10	0	563	39	20	549	471	9.0	0	.31	0	
2	.10	0	518	32	16	531	173	9.0	0	.31	.18	
3	.07	0	160	34	14	400	70	9.0	0	.22	.82	
4	.07	0	51	33	13	54	65	8.3	0	.22	.82	
5	.07	1.8	39	30	12	61	58	8.3	0	.22	.92	
6	.07	9.0	30	30	12	50	47	7.0	0	.19	1.0	
7	.05	12	24	32	11	58	40	1.3	0	.19	1.2	
8	.03	11	22	37	11	53	37	.26	0	.22	1.2	
9	.01	51	18	38	9.8	42	42	.19	0	.19	1.2	
10	0	227	15	34	9.0	39	34	.16	1.5	.19	1.2	
11	0	450	29	41	9.0	178	29	.16	3.9	.19	1.2	
12	0	373	25	179	11	165	24	.19	3.9	.19	.73	
13	0	144	90	221	12	88	22	.19	3.9	.19	0	
14	0	116	50	231	9.8	68	20	.16	2.7	.19	0	
15	0	79	38	450	9.0	57	17	.22	2.0	.22	0	
16	0	397	31	591	12	47	15	.16	2.0	.22	0	
17	0	252	36	606	12	40	14	.16	1.2	.22	0	
18	0	221	31	563	12	34	13	.22	.63	.22	0	
19	0	80	26	500	82	31	12	.22	.63	.26	0	
20	0	49	24	142	42	27	12	.26	.63	.26	0	
21	0	34	146	75	37	24	11	.26	.55	.26	0	
22	0	29	105	58	36	23	11	.31	.42	.26	0	
23	0	26	67	47	27	22	11	.36	.42	.22	0	
24	0	22	51	41	24	20	11	.48	.42	0	0	
25	0	17	41	38	22	24	12	.48	.42	0	0	
26	0	16	46	32	20	35	12	.48	.36	0	0	
27	0	13	92	29	20	171	12	.22	.36	0	0	
28	0	12	90	22	343	220	11	.03	.36	0	0	
29	0	14	70	19	-----	384	9.8	0	.31	0	0	
30	0	347	55	17	-----	563	9.0	0	.31	0	0	
31	0	-----	45	16	-----	527	-----	0	-----	0	0	-----
TOTAL	.57	3,002.8	2,628	4,257	867.6	4,585	1,324.8	57.07	26.92	5.16	10.47	0
MEAN	.018	100	84.8	137	31.0	148	44.2	1.84	.90	.17	.34	0
MAX	.10	450	563	606	343	563	471	9.0	3.9	.31	1.2	0
MIN	0	0	15	16	9.0	20	9.0	0	0	0	0	0
AC-FT	1.1	5,960	5,210	8,440	1,720	9,090	2,630	113	53	10	21	0

CAL YR 1973 TOTAL 15,191.94 MEAN 41.6 MAX 563 MIN 0 AC-FT 30,130
WTR YR 1974 TOTAL 16,765.39 MEAN 45.9 MAX 606 MIN 0 AC-FT 33,250

11449100 SCOTTS CREEK NEAR LAKEPORT, CALIF.

LOCATION.--Lat 39°05'44", long 122°57'38", in NE¼NW¼ sec.3, T.14 N., R.10 W., Lake County, on left bank at upstream side of Eickhoff Road bridge, 0.9 mi (1.4 km) downstream from small right-bank tributary, and 4.2 mi (6.8 km) northwest of Lakeport.

DRAINAGE AREA.--55.2 mi² (143.0 km²).

PERIOD OF RECORD.--October 1960 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,400 ft (427 m), from topographic map. Prior to Oct. 1, 1968, at site 3.0 mi (4.8 km) upstream at different datum.

AVERAGE DISCHARGE.--14 years, 84.9 ft³/s (2.404 m³/s), 61,510 acre-ft/yr (75.8 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 11,100 ft³/s (314 m³/s) Jan. 16 (gage height, 13.38 ft or 4.078 m); no flow for several months.

Period of record: Maximum discharge, 11,100 ft³/s (314 m³/s) Jan. 16, 1974 (gage height, 13.38 ft or 4.078 m); maximum gage height, 17.88 ft (5.450 m) Dec. 22, 1964, site and datum then in use; no flow for several months in each year.

REMARKS.--Small diversions above station for irrigation.

COOPERATION.--Records furnished by California Department of Water Resources and reviewed by Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	1,650	180	131	2,000	1,350	14	.20			
2		0	550	140	110	1,100	773	13	.10			
3		0	319	137	99	573	472	11	.10			
4		0	226	129	90	377	339	9.6	.10			
5		0	173	121	83	289	289	8.4	0			
6		0	136	114	76	239	231	7.6	0			
7		0	113	113	70	238	193	6.7	0			
8		0	95	131	65	198	173	5.9	0			
9		68	78	132	63	165	208	5.0	0			
10		363	66	124	60	150	164	4.4	0			
11		764	116	140	58	350	141	3.8	0			
12		655	104	361	68	399	124	3.2	0			
13		428	320	624	76	322	111	2.7	0			
14		300	204	1,190	60	262	102	2.4	0			
15		172	151	1,760	57	218	92	2.1	0			
16		808	122	4,500	87	185	83	1.8	0			
17		572	135	1,490	75	156	75	1.6	0			
18		459	109	918	103	134	66	1.5	0			
19		215	91	753	682	120	61	1.4	0			
20		158	91	530	297	109	55	1.1	0			
21		122	545	386	244	98	50	1.0	0			
22		114	438	301	193	89	45	.90	0			
23		108	285	248	155	81	41	.80	0			
24		116	218	211	131	74	39	.60	0			
25		98	173	183	117	93	37	.50	0			
26		82	225	158	115	85	37	.40	0			
27		72	472	138	108	336	31	.40	0			
28		65	489	126	1,500	394	25	.30	0			
29		125	385	117	-----	2,300	19	.30	0			
30		1,880	288	108	-----	2,200	16	.20	0			
31		-----	225	123	-----	902	-----	.20	-----			-----
TOTAL	0	7,744	8,592	15,686	4,973	14,236	5,442	112.80	.50	0	0	0
MEAN	0	258	277	506	178	459	181	3.64	.017	0	0	0
MAX	0	1,880	1,650	4,500	1,500	2,300	1,350	14	.20	0	0	0
MIN	0	0	66	108	57	74	16	.20	0	0	0	0
AC-FT	0	15,360	17,040	31,110	9,860	28,240	10,790	224	1.0	0	0	0
CAL YR 1973	TOTAL	52,811.00	MEAN	145	MAX	2,100	MIN	0	AC-FT	104,800		
WTR YR 1974	TOTAL	56,786.30	MEAN	156	MAX	4,500	MIN	0	AC-FT	112,600		

SACRAMENTO RIVER BASIN

11449500 KELSEY CREEK NEAR KELSEYVILLE, CALIF.

LOCATION.--Lat 38°55'39", long 122°50'33", in SE¼SE¼ sec.34, T.13 N., R.9 W., Lake County, on left bank 1.6 mi (2.6 km) downstream from Widow Creek, and 3.5 mi (5.6 km) south of Kelseyville.

DRAINAGE AREA.--36.6 mi² (94.8 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 1,475.44 ft (449.714 m) above mean sea level. Prior to July 16, 1955, at site 600 ft (183 m) upstream at different datum.

AVERAGE DISCHARGE.--28 years, 76.3 ft³/s (2.161 m³/s), 55,280 acre-ft/yr (68.2 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 8,430 ft³/s (239 m³/s) Jan. 16 (gage height, 13.04 ft or 3.975 m); minimum daily, 4.1 ft³/s (0.12 m³/s) Sept. 22, 23.
Period of record: Maximum discharge, 8,800 ft³/s (249 m³/s) Dec. 21, 1955 (gage height, 12.80 ft or 3.901 m); maximum gage height, 13.48 ft (4.109 m) Jan. 5, 1965; minimum discharge, 0.5 ft³/s (0.014 m³/s) Sept. 1, 1950, but may have been less during August 1950.

REMARKS.--Records fair. No regulation or diversion above station.

REVISIONS (WATER YEARS).--WSP 1285: 1947-48(M), 1950-52(P).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.3	6.8	925	106	107	1,900	840	48	22	12	7.7	5.7
2	4.3	6.6	362	91	91	1,150	1,050	47	21	11	7.6	5.3
3	4.6	6.7	255	98	73	650	340	46	21	11	7.2	5.3
4	4.3	6.9	189	100	57	360	242	44	21	11	6.9	5.0
5	4.3	19	153	93	63	230	215	43	20	11	6.9	5.1
6	4.6	75	126	88	58	187	184	40	19	11	7.5	5.1
7	5.6	141	110	87	54	213	164	38	19	10	7.1	4.8
8	5.6	77	96	87	52	180	150	37	18	16	6.9	5.0
9	5.4	301	85	86	61	158	169	35	17	17	6.5	5.1
10	5.0	770	76	83	54	144	138	34	18	14	6.3	5.4
11	4.8	1,460	105	101	71	375	125	33	17	13	6.0	5.1
12	4.7	1,050	85	365	205	350	114	33	17	12	6.0	4.9
13	4.6	478	242	410	140	255	105	32	17	12	6.0	5.0
14	4.6	338	133	760	105	209	97	31	16	11	6.2	5.0
15	4.5	338	107	1,210	83	179	92	31	16	11	6.3	5.2
16	4.3	1,090	94	3,580	215	159	87	30	16	11	6.2	5.3
17	4.6	645	131	956	100	141	81	30	17	10	6.1	5.1
18	4.6	420	103	613	85	127	78	30	17	10	5.8	4.7
19	4.6	226	90	372	255	112	75	30	17	9.8	6.0	4.6
20	4.7	182	82	286	145	101	71	29	17	9.4	6.3	4.6
21	5.8	144	277	230	160	94	68	28	16	9.3	5.8	4.3
22	31	125	222	198	120	88	65	28	15	9.0	5.5	4.1
23	114	105	159	175	96	83	64	28	14	8.9	5.7	4.1
24	25	91	131	158	82	77	65	27	14	8.7	5.3	4.6
25	13	79	112	143	72	87	63	26	14	8.6	5.1	4.5
26	10	69	122	129	75	100	63	26	14	8.6	4.9	4.7
27	8.4	63	200	117	70	350	58	25	14	8.1	4.9	5.2
28	8.0	58	162	108	2,550	880	55	24	14	8.2	5.3	5.1
29	7.6	62	150	100	-----	700	52	24	13	7.8	5.4	4.8
30	7.2	1,590	129	95	-----	3,150	50	23	12	7.7	5.5	5.1
31	7.0	-----	116	111	-----	2,450	-----	22	-----	7.5	5.7	-----
TOTAL	331.5	10,023.0	5,329	11,136	5,299	15,239	5,020	1,002	503	325.6	190.6	147.8
MEAN	10.7	334	172	359	189	492	167	32.3	16.8	10.5	6.15	4.93
MAX	114	1,590	925	3,580	2,550	3,150	1,050	48	22	17	7.7	5.7
MIN	4.3	6.6	76	83	52	77	50	22	12	7.5	4.9	4.1
AC-FT	658	19,880	10,570	22,090	10,510	30,230	9,960	1,990	998	646	378	293
CAL YR 1973	TOTAL	44,399.4	MEAN	122	MAX	2,700	MIN	1.7	AC-FT	88,070		
WTR YR 1974	TOTAL	54,546.5	MEAN	149	MAX	3,580	MIN	4.1	AC-FT	108,200		

PEAK DISCHARGE (BASE, 2,400 FT³/S)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-11	2245	9.80	2,780	1-16	1030	13.04	8,430
11-16	0415	9.51	2,470	2-28	unknown	11.66	5,440
11-30	2145	10.33	3,400	3-30	unknown	11.70	5,520

11450000 CLEAR LAKE AT LAKEPORT, CALIF.

LOCATION.--Lat 39°02'21", long 122°54'44", in NE¼NE¼ sec.25, T.14 N., R.10 W., Lake County, on private pier at 410 Esplanada Street in Lakeport.

DRAINAGE AREA.--528 mi² (1,368 km²).

PERIOD OF RECORD.--1874-1900 (incomplete), January 1913 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,318.65 ft (401.925 m) above mean sea level. Prior to July 8, 1947, nonrecording gage and July 8, 1947, to Mar. 17, 1949, at municipal wharf at foot of Third Street in Lakeport at datum 0.06 ft (0.018 m) lower. Mar. 18, 1949, to Sept. 30, 1967, at private pier at foot of Fourth Street at datum 0.06 ft (0.018 m) lower.

EXTREMES.--Current year: Maximum daily mean gage height, 9.09 ft (2.771 m) Apr. 3; minimum, 1.28 ft (0.390 m) Nov. 2-4.

Period of record: Maximum gage height observed, 11.12 ft (3.389 m) Jan. 28, 1914; minimum observed, -3.50 ft (-1.067 m) Sept. 24-27, 1920.

REMARKS.--This natural lake is regulated by gates on a dam at outlet, completed in 1915. Capacity between gage heights 0.00 and 7.56 ft (2.304 m), limits stipulated by court decree of 1920, about 319,000 acre-ft (393 hm³). Water is released down natural channel of Cache Creek from which it is diverted for irrigation (see sta 11451000).

MEAN GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.51	1.31	4.62	6.19	7.32	7.81	8.78	7.49	6.75	5.46	4.19	2.88
2	1.50	1.28	4.92	6.20	7.24	8.10	9.03	7.50	6.71	5.42	4.14	2.84
3	1.48	1.28	5.11	6.30	7.15	8.24	9.09	7.50	6.68	5.37	4.09	2.80
4	1.47	1.28	5.20	6.22	7.05	8.26	9.06	7.50	6.63	5.33	4.04	2.78
5	1.45	1.33	5.29	6.15	7.03	8.20	8.97	7.50	6.58	5.26	4.02	2.75
6	1.44	1.36	5.34	6.11	6.99	8.13	8.87	7.49	6.54	5.20	3.98	2.72
7	1.44	1.40	5.37	6.06	6.95	8.09	8.77	7.48	6.52	5.15	3.93	2.69
8	1.43	1.42	5.27	6.00	6.94	8.02	8.65	7.46	6.50	5.17	3.89	2.64
9	1.43	1.47	5.41	5.95	6.95	7.95	8.54	7.40	6.46	5.13	3.84	2.61
10	1.43	1.61	5.46	5.91	6.96	7.86	8.44	7.38	6.42	5.08	3.80	2.59
11	1.41	1.88	5.49	5.89	6.97	7.83	8.32	7.35	6.38	5.05	3.75	2.57
12	1.40	2.18	5.52	5.87	6.98	7.81	8.22	7.30	6.34	5.02	3.70	2.52
13	1.39	2.37	5.57	5.91	7.02	7.79	8.10	7.28	6.30	4.99	3.65	2.50
14	1.38	2.52	5.61	6.02	7.03	7.74	7.98	7.23	6.25	4.95	3.60	2.47
15	1.37	2.62	5.63	6.34	7.05	7.68	7.85	7.19	6.19	4.89	3.55	2.44
16	1.37	2.85	5.62	6.95	7.05	7.61	7.74	7.14	6.17	4.84	3.50	2.42
17	1.36	3.14	5.60	7.73	7.09	7.52	7.62	7.13	6.10	4.81	3.44	2.40
18	1.35	3.29	5.61	8.09	7.12	7.45	7.55	7.11	6.05	4.77	3.37	2.38
19	1.33	3.43	5.61	8.24	7.22	7.44	7.53	7.07	6.00	4.73	3.33	2.35
20	1.34	3.50	5.59	8.30	7.36	7.44	7.55	7.06	5.97	4.69	3.30	2.32
21	1.33	3.56	5.68	8.31	7.45	7.43	7.57	7.04	5.92	4.64	3.26	2.30
22	1.35	3.62	5.77	8.25	7.43	7.42	7.56	7.00	5.87	4.59	3.21	2.28
23	1.37	3.64	5.82	8.18	7.44	7.41	7.57	6.97	5.84	4.55	3.18	2.27
24	1.38	3.66	5.85	8.09	7.43	7.41	7.57	6.95	5.79	4.51	3.14	2.25
25	1.38	3.66	5.86	7.99	7.41	7.43	7.55	6.93	5.72	4.48	3.11	2.23
26	1.37	3.69	5.86	7.89	7.37	7.45	7.54	6.92	5.68	4.44	3.07	2.20
27	1.38	3.74	5.88	7.80	7.36	7.48	7.51	6.88	5.64	4.40	3.03	2.18
28	1.35	3.76	6.04	7.70	7.48	7.60	7.49	6.86	5.61	4.36	2.99	2.16
29	1.35	3.78	6.09	7.60	-----	7.80	7.50	6.82	5.57	4.32	2.96	2.14
30	1.35	4.03	6.17	7.50	-----	8.34	7.50	6.80	5.52	4.27	2.93	2.12
31	1.34	-----	6.19	7.42	-----	8.52	-----	6.77	-----	4.22	2.91	-----
MEAN	1.39	2.62	5.58	7.01	7.17	7.78	8.07	7.18	6.16	4.84	3.51	2.46
MAX	1.51	4.03	6.19	8.31	7.48	8.52	9.09	7.50	6.75	5.46	4.19	2.88
MIN	1.33	1.28	4.62	5.87	6.94	7.41	7.49	6.77	5.52	4.22	2.91	2.12
CAL YR 1973	MEAN 4.81		MAX 7.75	MIN 1.28								
WTR YR 1974	MEAN 5.30		MAX 9.09	MIN 1.28								

SACRAMENTO RIVER BASIN

11451000 CACHE CREEK NEAR LOWER LAKE, CALIF.

LOCATION.--Lat 38°55'27", long 122°33'53", in sec.6, T.12 N., R.6 W., Lake County, on left bank 500 ft (152 m) downstream from Clear Lake Dam, 1.9 mi (3.1 km) downstream from Copsey Creek, and 2.5 mi (4.0 km) northeast of Lower Lake.

DRAINAGE AREA.--528 mi² (1,368 km²).

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

GAGE.--Water-stage recorder and rain gage. Datum of gage is 1,280.34 ft (390.248 m) above mean sea level.

AVERAGE DISCHARGE (unadjusted).--30 years, 364 ft³/s (10.31 m³/s), 263,700 acre-ft/yr (325 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 5,320 ft³/s (151 m³/s) Jan. 17 (gage height, 8.11 ft or 2.472 m); minimum daily, 4.1 ft³/s (0.12 m³/s) Nov. 7, 8.

Period of record: Maximum discharge, 8,000 ft³/s (227 m³/s) Feb. 24, 1958 (gage height, 9.40 ft or 2.865 m); minimum recorded, 0.2 ft³/s (0.006 m³/s) Mar. 15-23, 1950.

REMARKS.--Records good. Flow completely regulated by Clear Lake 500 ft (152 m) upstream (see sta 11450000).

REVISIONS (WATER YEARS).--WRD Calif. 1968: 1966-67.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	87	4.7	4.9	1,100	2,670	3,370	3,550	65	443	592	608	339
2	94	4.5	4.7	1,310	2,620	3,280	3,580	45	450	597	620	320
3	94	4.4	4.8	1,840	2,550	3,200	3,570	82	456	597	592	306
4	94	4.3	4.9	1,980	1,680	3,140	3,500	143	478	620	561	293
5	94	4.2	4.9	1,960	1,030	3,070	3,430	177	492	656	537	268
6	93	4.2	4.9	1,950	1,030	3,030	3,430	254	498	628	515	246
7	93	4.1	4.9	1,940	1,320	3,070	3,350	357	496	586	505	255
8	94	4.1	4.8	1,790	28	3,040	3,280	441	497	489	527	268
9	145	4.2	4.7	1,730	27	2,930	3,270	518	521	395	528	268
10	57	4.5	4.9	1,700	26	2,880	3,200	554	533	358	510	251
11	33	4.7	299	1,670	26	3,130	3,140	524	548	343	495	226
12	76	4.7	506	1,780	26	3,010	3,050	484	570	339	489	219
13	80	4.6	511	1,860	26	2,910	2,950	462	583	366	495	202
14	79	4.4	512	2,090	26	2,870	2,910	443	624	429	496	184
15	63	4.4	774	2,300	26	2,800	2,860	412	673	486	502	184
16	44	4.9	1,010	3,220	26	2,750	2,800	386	674	510	495	182
17	43	4.9	1,010	2,830	25	2,720	1,990	375	670	565	479	146
18	45	4.7	1,010	3,220	26	1,480	1,090	404	670	624	484	107
19	48	4.5	1,010	3,270	26	646	321	432	652	616	488	148
20	47	4.5	1,010	3,250	26	646	27	466	608	605	488	165
21	45	4.5	1,090	3,210	712	647	48	495	566	605	470	165
22	38	4.5	1,130	3,180	1,080	648	41	485	543	581	455	165
23	28	4.5	1,130	3,140	1,080	647	503	442	516	550	425	156
24	30	4.5	1,130	3,080	1,080	644	823	413	504	525	406	148
25	20	4.4	1,120	3,050	1,080	647	838	435	528	537	384	141
26	4.7	4.4	1,110	3,020	1,080	650	849	452	563	539	402	126
27	4.7	4.4	1,090	2,950	751	649	842	446	572	526	439	110
28	4.7	4.3	1,100	2,880	2,280	1,410	311	436	560	522	446	102
29	4.7	4.2	1,100	2,800	-----	3,170	36	463	558	529	419	102
30	4.7	5.1	1,100	2,740	-----	3,730	51	469	578	572	378	94
31	4.7	-----	1,100	2,670	-----	3,410	-----	438	-----	589	345	-----
TOTAL	1,692.2	134.3	19,900.4	75,510	22,383	70,224	59,640	11,998	16,624	16,476	14,983	5,886
MFAN	54.6	4.48	642	2,436	799	2,265	1,988	387	554	531	483	196
MAX	145	5.1	1,130	3,270	2,670	3,730	3,590	554	674	656	620	339
MIN	4.7	4.1	4.7	1,100	25	644	27	45	443	339	345	94
AC-FT	3,360	266	39,470	149,800	44,400	139,300	118,300	23,800	32,970	32,680	29,720	11,670
(a)	2.15	3.36	3.50	5.55	4.78	7.56	.46	0	0	0	0	0

CAL YR 1973 TOTAL 218,888.30 MFAN 600 MAX 3,090 MIN .80 AC-FT 434,200
WTR YR 1974 TOTAL 315,450.90 MFAN 864 MAX 3,730 MIN 4.1 AC-FT 625,700

a Precipitation, in inches.

11451100 NORTH FORK CACHE CREEK AT HOUGH SPRINGS, NEAR CLEARLAKE OAKS, CALIF.

LOCATION.--Lat 39°09'56", long 122°37'08", in SE¼NW¼ sec.10, T.15 N., R.7 W., Lake County, on right bank 0.5 mi (0.8 km) upstream from Spanish Creek, 0.9 mi (1.4 km) upstream from Hough Springs, and 10 mi (16 km) northeast of Clearlake Oaks.

DRAINAGE AREA.--60.2 mi² (155.9 km²).

PERIOD OF RECORD.--October 1971 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,840 ft (561 m), from topographic map. Recording rain gage 9 mi (14 km) southwest of gage. Altitude of gage is 3,450 ft (1,052 m), from topographic map.

EXTREMES.--Current year: Maximum discharge, 7,980 ft³/s (226 m³/s) Jan. 16 (gage height, 9.23 ft or 2.813 m, from floodmarks), from rating curve extended as explained below; minimum daily, 0.60 ft³/s (0.017 m³/s) Sept. 28.

Period of record: Maximum discharge, 7,980 ft³/s (226 m³/s) Jan. 16, 1974 (gage height, 9.23 ft or 2.813 m, from floodmarks), from rating curve extended above 2,400 ft³/s (68.0 m³/s) on basis of slope-area measurement of maximum flow; no flow for several days in 1972.

REMARKS.--Records fair 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 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.78	3.1	1,050	170	226	1,310	1,400	67	22	7.8	3.0	1.1
2	.78	3.3	500	155	176	934	970	64	21	7.3	3.0	1.1
3	.78	2.9	250	145	157	688	754	61	21	6.9	3.0	1.1
4	.78	2.9	210	135	144	530	595	58	20	6.9	2.7	1.1
5	.88	3.5	180	125	132	438	505	55	18	6.9	2.7	1.1
6	.88	22	150	120	122	382	422	53	18	6.9	3.0	.98
7	2.3	45	130	115	116	374	366	51	17	6.4	2.5	.98
8	1.9	54	118	120	109	326	330	49	17	13	2.5	.87
9	2.0	44	105	115	103	278	310	45	16	10	2.2	.87
10	1.7	200	94	110	99	254	258	44	16	8.0	1.9	.87
11	1.7	500	117	120	94	470	230	43	15	7.2	1.9	.87
12	1.5	540	160	210	99	570	198	42	14	6.9	1.7	.77
13	1.5	240	210	350	93	490	178	41	14	6.6	1.7	.77
14	1.5	220	180	1,340	88	418	163	39	13	6.3	1.7	.77
15	1.5	200	150	1,960	84	358	155	38	13	6.1	1.7	.87
16	1.5	600	130	4,450	101	318	142	37	13	5.9	1.7	.77
17	1.5	480	145	2,320	90	270	132	38	13	5.7	1.5	.77
18	1.5	370	135	1,290	96	238	125	41	13	5.5	1.5	.77
19	1.5	220	120	1,160	605	194	119	39	14	5.4	1.5	.68
20	1.5	180	110	886	317	172	110	36	14	5.3	1.7	.68
21	2.2	150	310	665	263	155	104	35	13	5.2	1.7	.68
22	5.1	130	360	525	218	142	98	33	11	5.1	1.3	.68
23	14	110	260	442	182	132	96	32	10	5.0	1.3	.68
24	7.4	95	210	386	161	122	96	30	10	4.9	1.3	.68
25	4.0	85	175	330	146	127	94	29	9.5	4.7	1.1	.68
26	3.3	75	170	290	144	122	94	28	9.5	4.8	1.1	.68
27	3.0	64	270	246	136	400	86	26	9.1	4.4	1.1	.68
28	2.8	55	250	214	898	516	79	25	9.1	4.0	1.1	.60
29	3.1	80	230	187	-----	2,020	74	24	8.2	3.7	1.1	.68
30	3.1	750	215	169	-----	2,510	69	23	8.2	3.4	1.1	.77
31	3.1	-----	200	206	-----	1,260	-----	23	-----	3.0	1.1	-----
TOTAL	79.08	5,524.7	6,894	19,056	5,199	16,518	8,352	1,249	419.6	189.2	56.4	24.60
MEAN	2.55	184	222	615	186	533	278	40.3	14.0	6.10	1.82	.82
MAX	14	750	1,050	4,450	898	2,510	1,400	67	22	13	3.0	1.1
MIN	.78	2.9	94	110	84	122	69	23	8.2	3.0	1.1	.60
AC-FT	157	10,960	13,670	37,800	10,310	32,760	16,570	2,480	832	375	112	49
(a)	8.36	22.02	6.03	12.31	5.71	11.10	6.14	0	0	1.37	1.02	0

CAL YR 1973 TOTAL 57,067.43 MEAN 156 MAX 2,890 MIN .30 AC-FT 113,200
WTR YR 1974 TOTAL 63,561.58 MEAN 174 MAX 4,450 MIN .60 AC-FT 126,100

DATE	TIME	PEAK DISCHARGE (BASE, 1,500 FT ³ /S)	DATE	TIME	G.H.	DISCHARGE
12-1	unknown	6.80	3-1	1430	5.02	1,970
1-16	1100	9.23	3-29	2300	8.18	5,910

a Precipitation, in inches.
NOTE.--No gage-height record Nov. 4 to Jan. 17.

11451500 NORTH FORK CACHE CREEK NEAR LOWER LAKE, CALIF.

LOCATION.--Lat 39°01'09", long 122°34'04", in NE¼ sec.31, T.14 N., R.6 W. (unsurveyed), Lake County, on right bank 500 ft (152 m) upstream from Sweet Hollow Creek, 5 mi (8 km) upstream from mouth, and 7 mi (11 km) northeast of Lower Lake.

DRAINAGE AREA.--197 mi² (510 km²).

PERIOD OF RECORD.--July 1930 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,035.60 ft (315.651 m) above mean sea level. Prior to June 15, 1939, at datum 1.00 ft (0.305 m) higher.

AVERAGE DISCHARGE.--44 years, 199 ft³/s (5.636 m³/s), 144,200 acre-ft/yr (178 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 13,700 ft³/s (388 m³/s) Jan. 16 (gage height, 10.79 ft or 3.289 m); minimum daily, 0.71 ft³/s (0.020 m³/s) Oct. 3.
Period of record: Maximum discharge, 20,300 ft³/s (575 m³/s) Dec. 11, 1937 (gage height, 13.98 ft or 4.261 m, present datum, from floodmarks), from rating curve extended above 7,600 ft³/s (215 m³/s) on basis of slope-area measurement at gage height 13.9 ft (4.24 m) for peak of Feb. 28, 1940; no flow at times in 1930-36, 1949-50, 1956-57.

REMARKS.--Records good except those for June to September, which are fair. No regulation; several small diversions for irrigation of about 150 acres (607,000 m²) above station.

REVISIONS (WATER YEARS).--WSP 831: 1932(M). WSP 1315-A: 1935(M), 1937-38(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.83	3.1	3,810	594	461	2,980	3,230	154	56	21	12	1.5
2	.96	3.3	1,480	515	393	2,350	2,210	146	54	20	12	1.4
3	.71	3.3	877	511	360	1,560	1,520	141	53	19	12	1.3
4	1.1	4.0	675	482	339	1,170	1,060	135	51	19	12	1.1
5	.96	24	544	442	316	913	881	129	50	18	12	1.1
6	1.9	75	459	421	296	740	742	124	49	17	12	.99
7	3.6	146	394	408	283	788	638	121	46	16	12	1.3
8	3.1	175	343	427	268	710	576	108	44	16	11	4.7
9	4.3	139	301	414	257	601	554	106	42	16	11	4.5
10	2.9	773	268	396	249	545	492	100	40	16	11	3.9
11	2.3	1,890	310	404	241	736	443	99	39	16	11	3.0
12	2.1	1,990	307	552	245	1,010	404	97	37	16	11	2.1
13	1.7	827	730	1,150	239	887	371	95	36	16	11	1.6
14	1.6	779	543	2,050	223	738	346	91	34	16	12	1.5
15	1.4	666	436	3,800	214	640	315	87	32	16	11	1.4
16	1.6	2,290	376	8,620	231	566	298	85	31	15	7.6	1.5
17	1.6	1,580	436	4,330	221	511	285	85	30	15	3.5	1.3
18	1.6	1,310	400	2,650	229	467	273	88	29	15	2.9	1.3
19	1.6	683	349	2,360	1,140	423	260	89	28	14	2.7	1.1
20	2.1	549	319	1,810	606	391	243	85	28	14	2.5	.93
21	2.7	466	1,110	1,490	496	359	227	82	27	14	2.4	.92
22	4.8	389	1,320	1,210	447	334	216	80	27	13	2.0	1.1
23	11	338	852	1,020	396	315	209	82	26	13	1.8	1.1
24	9.4	300	700	846	363	297	209	80	25	12	1.8	1.1
25	5.3	263	592	687	339	317	210	77	24	12	1.8	1.1
26	4.3	233	588	599	325	290	203	74	24	11	1.7	1.0
27	6.8	200	973	533	315	399	190	71	23	11	1.6	1.0
28	4.0	182	891	487	1,410	1,050	177	68	22	12	1.6	1.0
29	3.1	187	853	451	-----	3,270	165	65	22	12	1.6	1.0
30	2.9	2,730	764	419	-----	5,860	158	61	21	12	1.6	1.0
31	3.1	-----	664	430	-----	2,630	-----	59	-----	12	1.6	-----
TOTAL	95.36	19,197.7	22,664	40,508	10,902	33,847	17,105	2,964	1,050	465	211.7	47.84
MEAN	3.08	640	731	1,307	389	1,092	570	95.6	35.0	15.0	6.83	1.59
MAX	11	2,730	3,810	8,620	1,410	5,860	3,230	154	56	21	12	4.7
MIN	.71	3.1	268	396	214	290	158	59	21	11	1.6	.92
AC-FT	189	38,080	44,950	80,350	21,620	67,140	33,930	5,880	2,080	922	420	95

CAL YR 1973 TOTAL 135,168.76 MEAN 370 MAX 5,070 MIN .71 AC-FT 268,100
WTR YR 1974 TOTAL 149,057.60 MEAN 408 MAX 8,620 MIN .71 AC-FT 295,700

PEAK DISCHARGE (BASE, 3,500 FT³/S)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-16	0745	7.21	4,060	3-1	1715	7.45	4,490
11-30	2400	8.59	6,990	3-30	0300	9.33	9,030
1-16	1200	10.79	13,700	4-1	1415	6.97	3,660

11451720 BEAR CREEK NEAR RUMSEY, CALIF.

LOCATION (revised).--Lat 38°56'47", long 122°20'48", in NE&SW¼ sec.30, T.13 N., R.4 W., Colusa County, on left bank 0.3 mi (0.5 km) downstream from Brophy Canyon, 1.4 mi (2.3 km) upstream from mouth, and 7.3 mi (11.7 km) northwest of Rumsey.

DRAINAGE AREA.--100 mi² (259 km²).

PERIOD OF RECORD.--October 1958 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 750 ft (229 m), from topographic map.

AVERAGE DISCHARGE.--16 years, 49.2 ft³/s (1.39 m³/s), 35,650 acre-ft/yr (44.0 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 4,650 ft³/s (132 m³/s) Jan. 16 (gage height, 8.85 ft or 2.697 m); minimum daily, 1.2 ft³/s (0.034 m³/s) Oct. 4, 5.

Period of record: Maximum discharge, 9,720 ft³/s (275 m³/s) Jan. 5, 1965 (gage height, 11.93 ft or 3.636 m); no flow July 25, 26, Aug. 20, 1960, July 3 to Sept. 12, 1972.

Maximum stage known since 1955, 12.33 ft (3.758 m) Feb. 24, 1958 (discharge, 9,350 ft³/s or 265 m³/s).

REMARKS.--No regulation or diversion above station.

COOPERATION.--Records furnished by California Department of Water Resources and reviewed by Geological Survey.

REVISIONS (WATER YEARS).--WSP 1931: Drainage area. WRD Calif. 1963: 1962(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.5	1.7	311	58	95	1,130	424	41	16	5.1	2.0	1.9
2	1.3	1.8	133	50	77	485	217	40	16	4.8	2.1	1.8
3	1.3	1.8	81	57	70	212	160	40	16	4.6	2.0	1.7
4	1.2	1.8	63	67	67	146	138	38	16	4.7	1.9	1.6
5	1.2	2.8	54	68	63	124	132	37	15	4.6	1.9	1.6
6	1.4	4.8	47	74	57	115	121	36	15	4.7	1.9	1.6
7	1.8	5.3	42	83	56	267	108	35	14	4.9	1.8	1.6
8	2.0	6.7	39	94	53	197	103	34	13	7.4	1.7	1.4
9	2.5	5.4	36	90	52	117	111	32	13	9.2	1.8	1.4
10	2.2	11	34	78	52	104	100	31	12	6.2	1.7	1.5
11	1.8	194	38	95	50	121	88	31	12	5.4	1.7	1.6
12	1.7	462	42	365	53	139	80	29	11	5.1	2.1	1.9
13	1.6	102	101	943	54	115	75	24	11	4.8	2.3	1.5
14	1.5	117	65	806	48	98	71	24	10	4.5	2.2	1.5
15	1.5	70	45	788	45	92	69	22	9.2	4.1	2.1	1.5
16	1.5	329	39	1,870	50	89	66	21	9.2	4.0	2.0	1.6
17	1.5	317	40	562	45	84	64	21	9.9	4.1	1.9	1.6
18	1.5	239	39	453	45	81	63	22	11	3.9	1.9	1.6
19	1.5	80	34	390	207	73	62	22	11	3.6	1.9	1.5
20	1.5	54	31	276	82	69	59	22	12	3.2	1.9	1.5
21	1.7	46	324	226	61	66	56	25	11	3.0	1.9	1.4
22	3.2	38	272	189	53	65	54	25	9.6	2.9	1.9	1.5
23	8.7	33	87	167	47	63	54	23	8.5	2.8	2.0	1.5
24	6.0	28	65	148	44	61	58	21	8.1	2.8	1.8	1.6
25	3.1	25	55	134	43	70	60	20	7.5	2.7	1.8	1.5
26	2.4	24	60	119	42	69	54	18	7.3	2.6	1.8	1.4
27	2.2	21	180	105	41	70	52	17	7.1	2.5	1.6	1.5
28	2.0	20	103	98	968	105	48	17	7.0	2.3	1.6	1.5
29	1.8	19	78	93	-----	723	45	16	6.6	2.2	1.6	1.5
30	1.6	270	66	88	-----	1,020	43	15	5.6	2.1	1.8	1.6
31	1.6	-----	59	91	-----	243	-----	17	-----	2.0	1.9	-----
TOTAL	66.3	2,531.1	2,663	8,725	2,620	6,413	2,835	816	330.6	126.8	58.5	46.9
MEAN	2.14	84.4	85.9	281	93.6	207	94.5	26.3	11.0	4.09	1.89	1.56
MAX	8.7	462	324	1,870	968	1,130	424	41	16	9.2	2.3	1.9
MIN	1.2	1.7	31	50	41	61	43	15	5.6	2.0	1.6	1.4
AC-FT	132	5,020	5,280	17,310	5,200	12,720	5,620	1,620	656	252	116	93

CAL YR 1973 TOTAL 42,344.40 MEAN 116 MAX 2,420 MIN .50 AC-FT 83,990
WTR YR 1974 TOTAL 27,232.20 MEAN 74.6 MAX 1,870 MIN 1.2 AC-FT 54,020

SACRAMENTO RIVER BASIN

11452000 CACHE CREEK NEAR CAPAY, CALIF.

LOCATION.--Lat 38°43'44", long 122°06'15", in Canada de Capay Grant, Yolo County, on right bank 1.8 mi (2.9 km) upstream from diversion dam, 3.2 mi (5.1 km) northwest of Capay, and 5.4 mi (8.7 km) northwest of Esparto.

DRAINAGE AREA.--1,044 mi² (2,704 km²).

PERIOD OF RECORD.--May 1942 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 225 ft (68.6 m), from river-profile map.

AVERAGE DISCHARGE.--32 years, 688 ft³/s (19.5 m³/s), 498,500 acre-ft/yr (615 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 28,300 ft³/s (801 m³/s) Jan. 16 (gage height, 16.80 ft or 5.121 m); minimum daily, 20 ft³/s (0.57 m³/s) Nov. 4.

Period of record: Maximum discharge, 51,600 ft³/s (1,460 m³/s) Feb. 24, 1958 (gage height, 20.90 ft or 6.370 m), from rating curve extended above 30,000 ft³/s (850 m³/s); no flow Aug. 23 to Sept. 27, 1972.

REMARKS.--Records good. Flow partially regulated by Clear Lake beginning in 1915 (see sta 11450000). About 3,700 acre-ft (4.56 hm³) diverted annually between stations above Rumsey and near Capay for irrigation of approximately 900 acres (3.64 km²), from data furnished by U.S. Soil Conservation Service. Records of chemical analyses for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1395: 1943. WSP 1931: Drainage area.

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NCV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	76	23	7,170	2,050	3,470	9,500	7,610	416	541	645	592	334
2	75	22	2,890	1,970	3,370	8,910	7,480	408	542	660	625	326
3	77	21	1,690	2,370	3,270	6,130	6,270	381	539	665	610	308
4	77	20	1,220	2,900	3,030	5,290	5,660	392	548	656	583	291
5	77	25	978	2,720	1,800	4,840	5,270	423	574	717	549	278
6	78	60	804	2,730	1,650	4,540	5,020	448	576	731	527	259
7	81	140	668	2,720	1,780	4,570	4,760	530	575	683	493	240
8	82	175	579	2,680	1,310	4,760	4,550	623	556	692	497	232
9	83	165	514	2,530	544	4,260	4,430	682	572	553	514	233
10	104	150	480	2,470	492	4,070	4,310	747	596	483	507	230
11	93	1,000	449	2,380	459	4,140	4,130	758	599	437	492	218
12	60	3,000	959	2,920	438	4,750	3,990	709	627	418	482	207
13	53	2,700	1,230	4,330	449	4,470	3,840	670	645	410	478	200
14	65	1,730	1,380	4,300	419	4,180	3,740	642	653	426	481	189
15	68	1,080	1,190	7,670	398	4,010	3,670	606	707	488	475	175
16	67	2,580	1,480	12,100	391	3,900	3,560	570	754	530	486	170
17	53	2,710	1,480	11,800	404	3,790	3,300	537	755	554	468	167
18	47	2,820	1,560	7,360	386	3,440	2,320	539	765	645	460	155
19	47	1,490	1,460	6,880	1,020	1,790	1,600	574	760	693	460	133
20	48	957	1,410	6,160	1,170	1,610	835	591	747	664	466	136
21	50	788	1,890	5,590	867	1,520	705	647	677	659	450	142
22	54	585	3,680	5,160	1,770	1,470	663	656	636	649	435	139
23	78	480	2,610	4,850	1,710	1,430	621	633	603	615	416	137
24	64	398	2,320	4,580	1,660	1,410	1,320	555	586	590	407	134
25	53	347	2,150	4,350	1,630	1,400	1,380	544	573	543	391	128
26	49	311	2,040	4,170	1,620	1,410	1,380	564	611	564	375	126
27	44	280	2,660	3,960	1,570	1,410	1,360	570	639	543	388	121
28	35	247	2,530	3,820	2,410	2,310	1,270	551	643	538	406	114
29	29	227	2,380	3,680	-----	4,830	557	543	616	523	401	109
30	26	923	2,310	3,540	-----	15,400	442	578	627	544	380	108
31	24	-----	2,160	3,450	-----	8,150	-----	554	-----	593	344	-----
TOTAL	1,917	25,454	56,321	138,190	39,487	133,690	96,043	17,641	18,842	18,111	14,638	5,739
MEAN	61.8	848	1,817	4,458	1,410	4,313	3,201	569	628	584	472	191
MAX	104	3,000	7,170	12,100	3,470	15,400	7,610	758	765	731	625	334
MIN	24	20	449	1,970	386	1,400	442	381	539	410	344	108
AC-FT	3,800	50,490	111,700	274,100	78,320	265,200	190,500	34,990	37,370	35,920	29,030	11,380

CAL YR 1973 TOTAL 489,428 MEAN 1,341 MAX 12,600 MIN 20 AC-FT 970,800

WTR YR 1974 TOTAL 566,073 MEAN 1,551 MAX 15,400 MIN 20 AC-FT 1,123,000

11452500 CACHE CREEK AT YOLO, CALIF.

LOCATION.--Lat 38°43'31", long 121°48'22", in Rio Jesus Maria Grant, Yolo County, on left bank 800 ft (244 m) upstream from highway bridge, 0.5 mi (0.8 km) south of Yolo, and 7.3 mi (11.7 km) downstream from Moore Dam.

DRAINAGE AREA.--1,139 mi² (2,950 km²).

PERIOD OF RECORD.--January 1903 to current year. Records for water year 1903 incomplete, yearly estimate published in WSP 1315-A.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level. Prior to summer of 1930, nonrecording gage at 58.24 ft (17.752 m), revised, higher. Summer of 1930 to June 11, 1954, water-stage recorder at datum 56.27 ft (17.151 m) higher. June 11, 1954, to July 16, 1965, at datum 52.27 ft (15.932 m) higher. July 17, 1965, to Apr. 24, 1969, at datum 50.27 ft (15.322 m) higher.

AVERAGE DISCHARGE.--72 years, 533 ft³/s (15.09 m³/s), 386,200 acre-ft/yr (476 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 25,100 ft³/s (711 m³/s) Jan. 17 (gage height, 76.53 ft or 23.326 m); no flow many days.

Period of record: Maximum discharge, 41,400 ft³/s (1,170 m³/s) Feb. 25, 1958 (gage height, 85.35 ft or 26.015 m, present datum); maximum stage observed, 88.44 ft (26.957 m), present datum, Mar. 10, 1904; no flow at times in each year.

REMARKS.--Records fair above 20 ft³/s (0.57 m³/s), poor below. Flow regulated by Clear Lake beginning in 1915 (see sta 11450000). Diversions for irrigation of about 30,000 acres (121 hm²) between stations near Capay and at Yolo, from data furnished by Clear Lake Water Co.

REVISIONS (WATER YEARS).--WSP 1315-A: 1914(M). WSP 1345: 1906. WSP 1445: 1955. WSP 1931: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	6,900	1,670	3,170	9,620	7,350	405	2.5	3.0	2.2	4.5
2		0	3,050	1,560	3,100	9,730	7,700	395	2.6	3.0	2.2	4.6
3		0	1,550	1,830	3,000	6,320	6,270	370	2.7	3.1	2.2	4.7
4		0	1,100	2,710	2,920	5,160	5,540	200	2.7	3.1	2.3	4.8
5		0	852	2,470	1,650	4,640	5,200	65	2.8	3.2	2.3	5.0
6		0	690	2,390	1,500	4,360	4,970	25	2.9	3.3	2.4	5.2
7		0	573	2,410	1,600	4,300	4,670	7.0	3.1	3.5	2.5	5.3
8		0	488	2,400	1,250	4,700	4,490	2.6	3.1	3.9	2.6	5.4
9		0	423	2,140	540	4,200	4,340	2.5	3.2	4.6	2.7	5.4
10		0	378	2,100	480	4,000	4,250	2.3	3.3	6.6	2.8	5.5
11		412	347	2,010	450	4,100	4,050	2.3	3.4	8.0	2.8	5.7
12		3,240	632	2,470	420	4,800	3,930	2.2	3.5	6.0	2.9	5.8
13		1,640	879	4,300	430	4,400	3,800	2.2	3.6	4.8	3.0	6.0
14		1,440	1,290	4,210	400	4,050	3,690	2.2	3.7	4.4	3.3	6.2
15		965	1,050	8,440	380	3,810	3,630	2.2	3.8	4.1	10	6.4
16		1,610	1,220	9,800	380	3,590	3,550	2.1	3.9	3.9	9.5	6.6
17		2,790	1,300	16,600	385	3,430	3,300	2.1	4.1	3.8	8.9	6.8
18		2,820	1,370	7,860	370	3,310	2,260	2.1	4.4	3.6	8.2	7.0
19		1,420	1,310	7,450	910	1,800	1,540	2.1	5.4	3.5	7.8	7.2
20		905	1,270	6,380	1,200	1,600	820	2.0	8.6	3.5	8.0	7.4
21		716	1,340	5,590	880	1,450	680	2.0	11	3.4	9.2	7.7
22		565	3,460	4,940	1,790	1,380	640	2.0	9.0	3.3	10	8.0
23		456	2,290	4,570	1,600	1,360	610	2.0	7.0	3.3	12	8.3
24		380	1,880	4,290	1,580	1,350	1,200	2.0	5.2	3.1	13	8.8
25		325	1,700	4,010	1,590	1,350	1,400	2.0	3.4	3.0	15	9.3
26		281	1,610	3,780	1,540	1,350	1,350	2.1	3.0	2.9	17	9.0
27		248	2,180	3,620	1,500	1,340	1,330	2.2	3.0	2.8	14	8.5
28		217	2,200	3,500	2,200	1,370	1,240	2.2	3.0	2.6	11	7.6
29		193	1,990	3,380	-----	2,340	560	2.3	3.0	2.5	7.0	6.0
30		201	1,900	3,280	-----	15,400	420	2.4	3.0	2.4	5.0	5.4
31		-----	1,760	3,210	-----	8,760	-----	2.4	-----	2.3	4.4	-----
TOTAL	0	20,824	48,982	135,370	37,215	129,370	94,780	1,519.5	123.9	114.5	206.2	194.1
MEAN	0	694	1,580	4,367	1,329	4,173	3,159	49.0	4.13	3.69	6.65	6.47
MAX	0	3,240	6,900	16,600	3,170	15,400	7,700	405	11	8.0	17	9.3
MIN	0	0	347	1,560	370	1,340	420	2.0	2.5	2.3	2.2	4.5
AC-FT	0	41,300	97,160	268,500	73,820	256,600	188,000	3,010	246	227	409	385
CAL YR 1973	TOTAL	402,676.70	MEAN	1,103	MAX	15,000	MIN	0	AC-FT	798,700		
WTR YR 1974	TOTAL	468,699.20	MEAN	1,284	MAX	16,600	MIN	0	AC-FT	929,700		

NOTE.--No gage-height record Apr. 17 to Sept. 30.

SACRAMENTO RIVER BASIN

11453000 YOLO BYPASS NEAR WOODLAND, CALIF.

LOCATION.--Lat 38°40'40", long 121°38'35" (unsurveyed), Yolo County, on left bank 300 ft (91 m) upstream from Sacramento and Woodland railroad bridge, 6 mi (10 km) upstream from Sacramento Bypass, 6 mi (10 km) downstream from Fremont weir, and 7 mi (11 km) east of Woodland.

PERIOD OF RECORD.--October 1939 to current year. Monthly discharge only for some periods, published in WSP 1315-A.

GAGE.--Water-stage recorder. Datum of gage is 3.41 ft (1.039 m) below mean sea level. Prior to Dec. 17, 1941, nonrecording gage, and Dec. 18-31, 1941, water-stage recorder, at datum 0.73 ft (0.222 m) higher. A supplementary water-stage recorder 6 mi (10 km) downstream at different datum is used for records of low flow.

AVERAGE DISCHARGE.--35 years, 4,054 ft³/s (114.8 m³/s), 2,937,000 acre-ft/yr (3,621 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 160,000 ft³/s (4,530 m³/s) Jan. 20 (gage height, 29.35 ft or 8.946 m); minimum daily, 0.35 ft³/s (0.010 m³/s) Aug. 12, 13.
Period of record: Maximum discharge, 272,000 ft³/s (7,700 m³/s) Feb. 8, 1942 (gage height, 32.00 ft or 9.754 m); no flow at times in recent years.

REMARKS.--Records fair. Flow is from Cache Creek and Knights Landing Ridge Cut plus floodwater passing over Fremont weir; during the summer months, the flow consists largely of return water from irrigation. There is some diversion for irrigation between the main and supplementary gage which affects the low-flow record.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NCV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.0	4	8,350	29,500	27,100	5,900	72,100	595	31	7.2	15	14
2	7.8	4	23,200	27,100	23,500	9,900	125,000	311	31	2.2	4.4	27
3	5.6	4	28,000	22,800	19,900	10,200	143,000	270	48	1.8	2.0	52
4	3.7	3	31,000	20,800	17,100	12,100	141,000	160	60	3.0	2.0	46
5	3.7	2	26,500	17,100	14,700	9,560	129,000	95	56	5.0	2.0	44
6	3.3	4	21,700	14,200	9,840	6,520	105,000	80	60	6.2	2.1	35
7	3.7	4	18,200	11,100	6,120	4,910	77,200	75	58	5.2	1.9	34
8	3.7	5	15,800	9,100	4,200	4,860	59,800	72	58	7.6	1.1	35
9	3.7	5	13,900	7,660	2,680	5,160	44,800	70	30	18	1.1	39
10	3.3	5	11,800	5,800	1,670	6,680	34,600	70	22	35	.91	52
11	3.3	20	9,500	4,150	1,340	7,690	26,000	72	10	33	.46	56
12	3.3	52	6,300	3,750	1,100	7,200	19,800	75	5.6	34	.35	53
13	3.3	1,930	3,450	4,390	956	7,100	15,300	85	7.0	33	.35	53
14	3.3	2,580	2,600	5,920	853	6,750	12,900	300	9.0	31	3.5	50
15	3.3	3,720	880	7,660	760	5,260	11,100	403	11	27	9.0	48
16	3.3	9,810	960	15,800	703	4,330	9,700	335	14	11	9.3	46
17	3.3	19,400	1,050	47,600	688	4,090	7,660	200	22	3.2	11	50
18	3.7	30,300	1,100	93,400	622	3,970	5,500	100	33	3.0	10	53
19	3.7	39,500	1,070	144,000	622	3,790	3,920	78	39	2.9	11	56
20	3.7	38,600	1,050	158,000	1,110	3,700	2,850	74	61	2.6	18	70
21	3.0	36,000	1,100	154,000	1,440	3,950	1,600	84	74	2.3	22	80
22	3.7	27,100	2,550	138,000	1,300	4,120	1,010	84	72	2.6	14	84
23	4.6	19,600	1,750	114,000	2,060	4,120	739	78	33	2.9	9.3	80
24	3.3	17,600	1,450	95,800	2,150	3,920	610	74	12	2.6	8.0	76
25	3.7	16,800	1,350	82,500	2,130	3,420	1,080	22	15	2.4	9.3	76
26	3.7	17,300	5,560	73,900	2,100	3,500	1,670	8.8	21	2.2	14	69
27	4.6	16,200	6,280	64,300	2,090	2,530	2,120	12	27	2.0	13	56
28	18	13,300	10,800	54,100	2,000	2,470	1,980	15	26	2.1	9.6	53
29	12	9,160	14,800	43,000	-----	3,290	1,540	20	21	6.6	7.8	47
30	4.1	6,180	21,300	35,800	-----	8,760	960	17	17	7.0	7.6	29
31	3.3	-----	26,200	30,100	-----	27,400	-----	25	-----	11	9.3	-----
TOTAL	145.7	325,192	319,550	1,535.3M	150,834	197,150	1,059.5M	3,959.8	983.6	315.6	229.37	1,563
MEAN	4.70	10,840	10,310	49,530	5,387	6,360	35,320	128	32.8	10.2	7.40	52.1
MAX	18	39,500	31,000	158,000	27,100	27,400	143,000	595	74	35	22	84
MIN	3.0	2.0	880	3,750	622	2,470	610	8.8	5.6	1.8	.35	14
AC-FT	289	645,000	633,800	3,045M	299,200	391,000	2,102M	7,850	1,950	626	455	3,100
CAL YR 1973	TOTAL	2,489,402.80	MEAN	6,820	MAX	111,000	MIN	2.0	AC-FT	4,938,000		
WTR YR 1974	TOTAL	3,594,792.07	MEAN	9,849	MAX	158,000	MIN	.35	AC-FT	7,130,000		

11453500 PUTAH CREEK NEAR GUENOC, CALIF.

LOCATION.--Lat 38°46'44", long 122°30'59", in Guenoc Grant, Lake County, on right bank just upstream from Coyote Valley damsite, 2.8 mi (4.5 km) upstream from Soda Creek, 3.2 mi (5.1 km) downstream from highway bridge at Guenoc.

DRAINAGE AREA.--113 mi² (293 km²).

PERIOD OF RECORD.--February 1904 to September 1906, July 1930 to current year. Monthly discharge only for some periods, published in WSP 1315-A.

GAGE.--Water-stage recorder. Datum of gage is 914.18 ft (278.642 m) above mean sea level. February 1904 to September 1906, nonrecording gage 0.2 mi (0.3 km) upstream at different datum.

AVERAGE DISCHARGE.--46 years, 213 ft³/s (6.032 m³/s), 154,300 acre-ft/yr (190 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 13,300 ft³/s (377 m³/s) Mar. 30 (gage height, 15.42 ft or 4.700 m); no flow Aug. 26, 28, Sept. 3, 4.

Period of record: Maximum discharge, 32,000 ft³/s (906 m³/s) Dec. 11, 1937 (gage height, 22.7 ft or 6.92 m), from rating curve extended above 13,000 ft³/s (368 m³/s); no flow many days in August and September 1964, Oct. 2, 1970, Aug. 26, 28, Sept. 3, 4, 1974.

REMARKS.--Some regulation by Hartmann Dam on Coyote Creek since 1969, capacity, 3,000 acre-ft (3.70 hm³); diversions and ground-water withdrawals for irrigation of about 1,600 acres (6.48 km²) above station.

COOPERATION.--Records furnished by Bureau of Reclamation and reviewed by Geological Survey.

REVISIONS (WATER YEARS).--WSP 1285: 1937(M), 1938, 1940, 1943(M), 1951(M).

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.40	7.2	2,750	385	472	4,040	2,750	132	43	12	2.9	1.4
2	.30	7.6	1,060	329	348	2,700	1,550	122	41	12	3.1	.70
3	.30	7.6	711	336	307	1,420	1,100	118	41	12	3.9	0
4	.30	8.5	556	355	282	989	856	113	40	11	3.6	0
5	.60	35	420	331	260	782	752	109	39	11	3.3	1.0
6	.90	350	348	332	238	664	643	103	37	9.7	1.9	1.3
7	1.1	717	333	352	221	768	559	99	35	9.2	1.2	1.3
8	1.0	383	297	367	208	676	506	96	34	16	1.1	1.4
9	1.0	701	264	343	198	546	566	90	33	21	1.7	1.0
10	.80	2,010	238	318	190	486	474	86	32	20	2.9	.30
11	.40	3,040	288	379	181	1,410	422	84	30	17	1.5	.30
12	.40	3,760	273	938	190	1,520	386	80	29	15	1.0	.50
13	.40	2,120	824	1,640	192	1,060	350	77	28	17	2.4	.80
14	.40	1,630	506	2,880	170	802	326	76	28	16	2.1	1.2
15	.40	1,310	392	3,340	160	666	303	74	28	15	1.5	1.2
16	.30	3,630	333	6,170	183	570	283	73	28	14	2.4	1.2
17	.30	2,240	421	2,910	167	510	266	73	29	13	1.4	.90
18	.40	1,790	371	2,310	161	471	250	74	28	12	.60	.70
19	.30	942	316	1,740	994	407	235	73	26	10	1.3	.50
20	.50	724	284	1,240	464	369	219	69	26	9.8	1.2	.30
21	1.0	582	948	945	373	337	205	66	24	9.2	1.5	.30
22	1.3	472	1,160	771	337	316	195	63	21	9.7	2.0	.30
23	212	398	644	656	290	294	186	60	20	7.2	1.7	.30
24	72	343	513	570	261	274	186	57	19	7.1	1.6	.30
25	28	302	436	507	238	306	178	55	19	8.4	.70	.30
26	17	271	407	455	225	309	179	52	17	6.5	0	.30
27	13	235	754	406	213	949	171	50	15	6.0	.40	.30
28	11	211	607	374	4,020	1,460	156	48	14	6.5	0	.30
29	9.8	195	575	344	-----	5,110	145	48	13	4.6	.70	.30
30	7.3	1,740	492	321	-----	5,980	138	46	12	2.6	1.3	.30
31	6.8	-----	424	345	-----	1,910	-----	45	-----	2.4	1.3	-----
TOTAL	389.70	30,161.9	17,945	32,689	11,543	38,101	14,535	2,411	829	342.9	52.20	19.00
MEAN	12.6	1,005	579	1,054	412	1,229	485	77.8	27.6	11.1	1.68	.63
MAX	212	3,760	2,750	6,170	4,020	5,980	2,750	132	43	21	3.9	1.4
MIN	.30	7.2	238	318	160	274	138	45	12	2.4	0	0
AC-FT	773	59,830	35,590	64,840	22,900	75,570	28,830	4,780	1,640	680	104	38

CAL YR 1973 TOTAL 129,629.34 MEAN 355 MAX 6,900 MIN .14 AC-FT 257,100
WTR YR 1974 TOTAL 149,018.70 MEAN 408 MAX 6,170 MIN 0 AC-FT 295,600

PEAK DISCHARGE (BASE, 5,000 FT³/S)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-12	0300	12.28	7,850	1-16	1230	14.57	11,700
11-16	0800	12.45	8,110	2-28	1830	13.03	9,020
12-1	0100	10.70	5,670	3-30	0230	15.42	13,300

SACRAMENTO RIVER BASIN

11453550 HUNTING CREEK NEAR KNOXVILLE, CALIF.

LOCATION.--Lat 38°46'18", long 122°24'26", in NE¼SE¼ sec.28, T.11 N., R.5 W., Lake County, on right bank 2,400 ft (732 m) upstream from mouth, 5.3 mi (8.5 km) southwest of Knoxville, and 11.2 mi (18.0 km) east of Middletown.

DRAINAGE AREA.--37.8 mi² (97.9 km²).

PERIOD OF RECORD.--July 1969 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 725 ft (221 m), from topographic map.

AVERAGE DISCHARGE.--5 years, 34.5 ft³/s (0.977 m³/s), 25,000 acre-ft/yr (30.8 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,010 ft³/s (56.9 m³/s) Mar. 30 (gage height, 6.37 ft or 1.942 m); minimum daily, 0.70 ft³/s (0.020 m³/s) Oct. 5, 6, 14-21.

Period of record: Maximum discharge, 4,500 ft³/s (127 m³/s) Jan. 23, 1970 (gage height, 8.30 ft or 2.530 m), from rating curve extended above 740 ft³/s (21.0 m³/s) on basis of slope-area measurement of maximum flow; no flow on many days in 1972.

REMARKS.--No regulation or diversion above station. Records of sediment discharge for the current year are published in Part 2 of this report.

COOPERATION.--Records furnished by Bureau of Reclamation and reviewed by Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.80	2.9	208	34	49	528	574	29	11	4.2	2.0	1.4
2	.80	3.2	56	28	43	326	423	29	11	4.2	1.9	1.4
3	.80	3.4	37	36	41	131	318	29	11	4.2	1.8	1.3
4	.80	3.6	30	48	39	89	256	29	9.9	4.0	1.7	1.3
5	.70	13	25	41	34	75	200	28	9.5	4.0	1.7	1.3
6	.70	5.0	22	45	32	68	172	29	9.2	3.9	1.9	1.3
7	1.1	11	19	51	31	155	155	29	8.6	4.0	1.9	1.2
8	1.2	4.6	17	57	30	102	135	29	8.0	7.5	1.8	1.2
9	1.8	14	16	52	29	71	123	27	8.0	7.5	1.8	1.1
10	1.2	109	15	48	28	65	106	26	7.5	5.9	1.6	1.0
11	1.2	324	19	54	27	86	89	27	7.4	5.2	1.5	1.1
12	1.5	306	17	186	30	134	73	26	6.9	4.8	1.5	1.2
13	1.4	224	54	188	29	90	65	25	6.9	4.2	1.6	1.2
14	.70	94	26	359	26	73	59	25	6.9	4.2	1.7	1.2
15	.70	38	19	360	24	59	57	24	6.8	4.0	1.8	1.2
16	.70	358	17	760	30	53	55	24	6.7	4.0	1.7	1.2
17	.70	302	23	254	26	47	52	25	6.9	4.0	1.8	1.2
18	.70	116	19	283	25	44	50	26	7.3	3.7	1.7	1.2
19	.70	47	15	168	82	42	47	26	7.4	3.6	1.6	1.2
20	.70	33	15	122	36	38	44	23	7.4	3.3	1.5	1.2
21	.70	26	191	98	30	36	43	22	6.8	3.0	1.5	1.1
22	3.6	21	120	83	29	34	41	22	6.2	3.1	1.4	.90
23	8.8	18	50	75	26	31	39	20	5.7	2.7	1.4	.90
24	6.9	15	38	69	24	30	43	19	5.5	2.7	1.4	.90
25	5.2	13	32	65	23	31	39	17	5.2	2.5	1.4	.90
26	4.6	12	50	60	23	31	37	16	5.2	2.5	1.4	.90
27	3.8	11	132	56	22	70	38	15	5.2	2.5	1.4	.90
28	3.4	10	82	53	717	179	34	13	5.0	2.4	1.4	.90
29	3.2	9.7	52	50	-----	606	31	13	4.6	2.3	1.4	.90
30	2.7	250	42	48	-----	775	29	13	4.2	2.1	1.4	.90
31	2.5	-----	37	47	-----	497	-----	12	-----	2.1	1.4	-----
TOTAL	64.30	2,397.4	1,495	3,878	1,585	4,596	3,427	717	217.9	118.3	50.0	33.60
MEAN	2.07	79.9	48.2	125	56.6	148	114	23.1	7.26	3.82	1.61	1.12
MAX	8.8	358	208	760	717	775	574	29	11	7.5	2.0	1.4
MIN	.70	2.9	15	28	22	30	29	12	4.2	2.1	1.4	.90
AC-FT	128	4,760	2,970	7,690	3,140	9,120	6,800	1,420	432	235	99	67

CAL YR 1973 TOTAL 19,439.38 MEAN 53.3 MAX 1,220 MIN .70 AC-FT 38,560
WTR YR 1974 TOTAL 18,579.50 MEAN 50.9 MAX 775 MIN .70 AC-FT 36,850

DATE	TIME	PEAK DISCHARGE (BASE, 1,000 FT ³ /S)	DATE	TIME	G.H.	DISCHARGE
11-12	0130	5.24 1,060	1-16	1130	6.02	1,680
11-16	0600	5.51 1,260	2-28	2030	6.15	1,800
11-30	2300	5.17 1,000	3-30	unknown	6.37	2,010

NOTE.--No gage-height record Mar. 14 to Apr. 23.

11453570 ADAMS CREEK NEAR KNOXVILLE, CALIF.

LOCATION.--Lat 38°42'17", long 122°17'44", in NE¼NE¼ sec.21, T.10 N., R.4 W., Napa County, on left bank 20 ft (6.1 m) downstream from road ford, 0.2 mi (0.3 km) upstream from mouth, 8.8 mi (14.2 km) southeast of Knoxville, and 18 mi (29 km) southeast of Middletown.

DRAINAGE AREA.--7.42 mi² (19.22 km²).

PERIOD OF RECORD.--October 1969 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 480 ft (146 m), from topographic map.

AVERAGE DISCHARGE.--5 years, 3.90 ft³/s (0.110 m³/s), 2,830 acre-ft/yr (3.49 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 290 ft³/s (8.21 m³/s) Mar. 29 (gage height, 3.17 ft or 0.966 m), from rating curve extended above 61 ft³/s (1.73 m³/s); no flow many days.
Period of record: Maximum discharge, 745 ft³/s (21.1 m³/s) Jan. 23, 1970 (gage height, 4.85 ft or 1.478 m), from rating curve extended above 53 ft³/s (1.50 m³/s) on basis of slope-area measurement of maximum flow; no flow many days in each year.

REMARKS.--No storage or diversion above station. Records of sediment discharge for the current year are published in Part 2 of this report.

COOPERATION.--Records furnished by Bureau of Reclamation and reviewed by Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	.60	18	4.6	7.4	57	22	5.9	2.7	.90	.20	.10
2	0	.60	2.2	4.6	5.9	31	16	5.9	2.7	.80	.20	.10
3	0	.60	2.0	8.1	5.4	13	14	5.6	2.8	.80	.20	.10
4	0	.60	2.0	18	5.4	11	13	5.2	2.5	.80	.20	.10
5	0	1.2	2.6	8.3	5.4	9.8	13	5.4	2.6	.80	.20	.10
6	0	1.5	1.9	6.2	5.2	9.5	13	5.2	2.1	.80	.20	.10
7	0	1.3	1.9	7.4	4.3	14	12	5.0	1.9	.90	.20	.10
8	0	1.1	1.8	5.9	3.6	10	12	4.8	1.7	2.5	.20	.10
9	0	1.2	1.8	4.0	3.3	8.9	13	4.2	1.7	1.6	.20	.10
10	0	2.6	1.8	3.9	3.3	8.5	11	4.0	1.7	1.1	.20	.10
11	0	11	2.2	5.2	3.3	9.6	10	3.9	1.7	.90	.20	0
12	0	20	1.9	9.0	4.6	10	9.8	3.9	1.6	.90	.20	0
13	0	20	6.0	5.5	4.3	8.9	10	4.0	1.6	1.0	.20	0
14	0	11	2.3	27	3.6	7.9	9.8	3.9	1.6	.80	.20	0
15	0	4.6	2.0	27	3.3	7.9	9.5	3.9	1.6	.70	.20	0
16	0	18	2.0	43	4.5	7.9	9.2	3.7	1.7	.60	.20	0
17	0	32	2.0	22	3.9	8.2	9.2	3.7	1.9	.60	.20	0
18	0	13	1.9	31	3.9	7.6	9.2	3.9	2.1	.60	.20	0
19	0	4.6	1.8	18	10	6.8	9.2	3.9	2.0	.50	.20	0
20	0	3.9	1.8	15	5.2	6.8	9.2	4.0	2.0	.50	.10	0
21	0	3.3	24	14	4.6	6.8	9.2	3.9	1.7	.40	.10	0
22	.10	3.3	16	13	4.3	6.8	9.2	3.9	1.5	.50	.10	0
23	.50	3.3	5.3	12	3.6	6.8	9.2	3.7	1.4	.40	.10	0
24	.30	2.8	4.6	12	3.1	6.6	9.3	3.2	1.4	.30	.10	0
25	.30	2.8	4.6	11	2.8	7.9	7.9	3.2	1.3	.30	.10	0
26	.20	2.8	8.4	9.2	2.8	6.9	7.9	3.1	1.2	.40	.10	0
27	.20	2.1	15	8.6	2.8	14	7.2	2.8	1.1	.30	.10	0
28	.20	2.1	8.8	8.6	96	14	6.3	2.7	1.1	.30	.10	0
29	.30	2.0	5.4	8.6	-----	93	6.3	2.8	1.0	.30	.10	0
30	.30	16	4.6	8.6	-----	50	5.9	3.0	1.0	.30	.10	0
31	.50	-----	4.6	8.6	-----	17	-----	2.8	-----	.20	.10	-----
TOTAL	2.90	189.90	161.2	387.9	215.8	484.1	312.5	125.1	52.9	21.80	5.00	1.00
MEAN	.094	6.33	5.20	12.5	7.71	15.6	10.4	4.04	1.76	.70	.16	.033
MAX	.50	32	24	43	96	93	22	5.9	2.8	2.5	.20	.10
MIN	0	.60	1.8	3.9	2.8	6.6	5.9	2.7	1.0	.20	.10	0
AC-FT	5.8	377	320	769	428	960	620	248	105	43	9.9	2.0

CAL YR 1973 TOTAL 2,331.56 MEAN 6.39 MAX 163 MIN 0 AC-FT 4,620
WTR YR 1974 TOTAL 1,960.10 MEAN 5.37 MAX 96 MIN 0 AC-FT 3,890

PEAK DISCHARGE (BASE, 100 FT ³ /S)							
DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-17	1430	2.78	165	2-28	1700	3.12	274
11-30	2330	2.64	130	3-29	1100	3.17	290
1-16	1200	2.67	137				

11453580 NEVADA CREEK NEAR KNOXVILLE, CALIF.

LOCATION.--Lat 38°42'42", long 122°17'31", in NW¼SW¼ sec.15, T.10 N., R.4 W., Napa County, on right bank 150 ft (46 m) downstream from road ford, 0.6 mi (1.0 km) upstream from Adams Creek, 8.4 mi (13.5 km) southeast of Knoxville, and 18 mi (29 km) southeast of Middletown.

DRAINAGE AREA.--7.06 mi² (18.29 km²).

PERIOD OF RECORD.--September 1969 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 500 ft (152 m), from topographic map.

AVERAGE DISCHARGE.--5 years, 4.04 ft³/s (0.114 m³/s), 2,930 acre-ft/yr (3.61 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 358 ft³/s (10.1 m³/s) Mar. 29 (gage height, 5.43 ft or 1.655 m), from rating curve extended as explained below; no flow many days.

Period of record: Maximum discharge, 841 ft³/s (23.8 m³/s) Jan. 23, 1970 (gage height, 7.75 ft or 2.362 m), from rating curve extended above 110 ft³/s (3.12 m³/s) on basis of slope-area measurement of maximum flow; no flow many days in each year.

REMARKS.--No regulation or diversion above station. Records of sediment discharge for the current year are published in Part 2 of this report.

COOPERATION.--Records furnished by Bureau of Reclamation and reviewed by Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	19	3.0	3.8	72	23	3.1	.80	.20	0	.10
2	0	0	3.6	2.6	3.4	34	14	3.0	.70	.20	0	.10
3	0	0	2.7	4.1	3.3	14	11	2.9	.60	.20	0	.10
4	0	0	2.1	11	3.1	11	10	2.8	.50	.20	0	0
5	0	.10	1.8	5.2	2.9	10	9.9	2.7	.40	.20	0	0
6	0	.10	1.5	6.0	3.0	9.0	9.1	2.7	.30	.20	0	0
7	0	.10	1.4	6.3	2.8	18	8.5	2.5	.30	.20	.10	0
8	0	.10	1.2	5.2	2.7	11	8.3	2.3	.20	.30	.10	0
9	0	.10	1.1	4.0	2.7	8.7	8.9	2.3	.20	.20	.10	0
10	0	.20	1.1	3.5	2.6	8.1	7.7	2.1	.20	.20	.10	0
11	0	5.9	1.6	3.3	2.5	9.3	7.2	2.1	.20	.20	.10	0
12	0	19	1.2	4.9	3.0	11	6.7	1.9	.10	.20	.10	0
13	0	23	3.5	4.0	2.7	8.7	6.6	1.9	.10	.10	.10	0
14	0	6.8	1.9	9.6	2.4	7.8	6.3	1.8	.10	.10	.10	0
15	0	1.6	1.4	5.6	2.2	7.4	6.2	1.7	.10	.10	.10	0
16	0	21	1.2	57	2.9	7.1	6.0	1.7	.10	.10	.10	0
17	0	37	1.4	21	2.2	6.9	5.8	1.9	.10	.10	.10	0
18	0	8.8	1.1	31	2.2	6.6	5.8	2.1	.10	.10	.10	0
19	0	3.7	1.0	14	5.7	6.3	5.5	2.0	.10	.10	.10	0
20	0	2.8	1.0	10	3.2	5.9	5.1	1.8	.10	.10	.10	0
21	0	1.9	24	8.2	2.9	6.0	4.8	1.8	.10	.10	.10	0
22	.10	1.6	9.0	7.3	2.7	6.0	4.7	1.7	.10	.10	.10	0
23	.10	1.3	4.0	6.5	2.5	5.9	4.9	1.5	.10	.10	.10	0
24	0	1.1	3.3	5.9	2.3	5.6	5.5	1.4	.10	.10	.10	0
25	0	1.1	2.8	5.4	2.2	6.6	4.8	1.4	.10	0	.10	0
26	.10	1.0	5.9	4.9	2.3	6.2	4.6	1.3	.10	0	.10	0
27	.10	.80	9.8	4.4	2.2	12	4.2	1.1	.10	0	.10	0
28	.10	.80	5.4	4.1	105	13	3.6	1.0	.10	0	.10	0
29	.10	.80	4.2	3.9	-----	129	3.3	1.1	.20	0	.10	0
30	0	18	3.5	3.8	-----	71	3.2	1.0	.20	0	.10	0
31	0	-----	3.3	3.9	-----	16	-----	.80	-----	0	.10	-----
TOTAL	.60	158.70	126.0	269.6	181.4	550.1	215.2	59.40	6.50	3.70	2.50	.30
MEAN	.019	5.29	4.06	8.70	6.48	17.7	7.17	1.92	.22	.12	.081	.010
MAX	.10	37	24	57	105	129	23	3.1	.80	.30	.10	.10
MIN	0	0	1.0	2.6	2.2	5.6	3.2	.80	.10	0	0	0
AC-FT	1.2	315	250	535	360	1,090	427	118	13	7.3	5.0	.6

CAL YR 1973 TOTAL 2,688.57 MEAN 7.37 MAX 183 MIN 0 AC-FT 5,330
WTR YR 1974 TOTAL 1,574.00 MEAN 4.31 MAX 129 MIN 0 AC-FT 3,120

PEAK DISCHARGE (BASE, 100 FT ³ /S)						
DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.
11-13	1700	4.18	172	1-16	1200	4.26
11-17	1400	4.60	227	2-28	1800	4.95
11-30	2300	4.09	161	3-29	1130	5.43
12-21	1930	4.04	158			

11453600 POPE CREEK NEAR POPE VALLEY, CALIF.

LOCATION.--Lat 38°37'48", long 122°19'52", in SW¼ sec.17, T.9 N., R.4 W., Napa County, on left bank 0.2 mi (0.3 km) upstream from Lake Berryessa, 0.7 mi (1.1 km) downstream from Maxwell Creek, and 5.2 mi (8.4 km) east of Pope Valley.

DRAINAGE AREA.--78.3 mi² (202.8 km²).

PERIOD OF RECORD.--December 1960 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 450 ft (137 m), from topographic map.

AVERAGE DISCHARGE.--13 years (1961-74), 96.3 ft³/s (2.727 m³/s), 69,770 acre-ft/yr (86.0 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 5,960 ft³/s (169 m³/s) Mar. 30 (gage height, 12.31 ft or 3.752 m); minimum daily, 0.10 ft³/s (0.003 m³/s) Oct. 2-6.
Period of record: Maximum discharge, 18,000 ft³/s (510 m³/s) Jan. 31, 1963 (gage height, 19.79 ft or 6.032 m), from rating curve extended above 7,700 ft³/s (218 m³/s); no flow many days in 1960-68, 1971-73.

REMARKS.--No regulation or diversion above station.

COOPERATION.--Records furnished by California Department of Water Resources and reviewed by the Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.20	.40	860	127	155	2,160	1,610	39	11	3.5	6.3	6.2
2	.10	.40	256	104	111	1,310	1,170	36	10	3.1	6.1	11
3	.10	.40	159	154	97	596	640	37	10	3.1	5.0	12
4	.10	.40	119	315	90	367	432	35	9.4	3.2	5.6	6.0
5	.10	1.7	95	214	83	284	316	33	9.0	3.0	5.6	4.7
6	.10	.89	78	220	77	239	250	26	8.8	2.6	5.6	7.8
7	.40	162	68	234	73	329	212	26	8.1	2.6	5.1	7.3
8	.50	202	60	199	69	264	191	27	7.4	4.6	5.1	6.6
9	.50	108	54	170	66	200	220	23	7.1	5.4	5.1	5.6
10	.40	293	48	147	65	176	174	21	7.1	5.0	5.0	4.9
11	.40	631	82	152	62	349	150	19	6.9	5.5	3.7	4.4
12	.30	1,120	77	369	75	584	131	17	7.6	3.7	2.1	4.1
13	.30	644	247	505	75	379	111	16	7.6	3.7	1.7	4.0
14	.30	780	127	1,050	64	267	102	15	7.1	5.8	1.3	4.0
15	.30	483	90	1,080	60	220	94	16	7.1	7.2	.70	4.1
16	.30	736	74	1,680	67	190	88	17	6.5	6.9	.50	4.6
17	.40	857	96	972	62	168	83	14	6.6	5.1	1.4	4.6
18	.40	864	80	1,090	60	148	78	19	6.8	5.0	1.1	4.1
19	.40	580	64	728	643	130	74	16	7.2	6.1	1.8	3.8
20	.40	381	59	452	214	115	67	16	7.4	11	2.7	3.6
21	.50	276	477	328	157	100	63	15	7.0	8.1	2.4	3.4
22	1.0	191	390	262	130	94	60	16	5.6	6.4	2.6	4.4
23	20	140	190	224	107	88	60	15	5.7	4.6	3.2	6.4
24	24	104	140	193	93	82	64	12	5.5	4.3	4.4	6.4
25	9.7	80	115	172	84	102	60	13	5.0	4.9	5.7	6.4
26	4.2	66	139	152	79	101	62	13	5.1	4.9	5.1	6.4
27	2.1	55	296	136	74	315	55	12	5.0	4.9	4.6	6.7
28	1.4	47	223	125	2,190	512	52	12	4.9	5.4	4.8	5.6
29	1.0	42	267	115	-----	1,830	42	12	4.4	5.4	5.0	5.6
30	.60	493	193	107	-----	2,370	42	13	4.1	6.2	4.1	5.9
31	.40	-----	151	120	-----	659	-----	11	-----	6.4	5.0	-----
TOTAL	70.90	9,427.30	5,374	11,896	5,182	14,728	6,753	612	211.0	157.6	118.40	170.6
MEAN	2.29	314	173	384	185	475	225	19.7	7.03	5.08	3.82	5.69
MAX	24	1,120	860	1,680	2,190	2,370	1,610	39	11	11	6.3	12
MIN	.10	.40	48	104	60	82	42	11	4.1	2.6	.50	3.4
AC-FT	141	18,700	10,660	23,600	10,280	29,210	13,390	1,210	419	313	235	338

CAL YR 1973 TOTAL 54,538.00 MEAN 149 MAX 3,830 MIN 0 AC-FT 108,200
WTR YR 1974 TOTAL 54,700.80 MEAN 150 MAX 2,370 MIN .10 AC-FT 108,500

SACRAMENTO RIVER BASIN

11453900 LAKE BERRYESSA NEAR WINTERS, CALIF.

LOCATION.--Lat 38°30'48", long 122°06'13", in SE¼NW¼ sec.29, T.8 N., R.2 W., Napa County, near center of Monticello Dam on Putah Creek, 7.4 mi (11.9 km) west of Winters.

DRAINAGE AREA.--566 mi² (1,466 km²).

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

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Bureau of Reclamation).

EXTREMES.--Current year: Maximum contents, 1,676,000 acre-ft (2.07 km³) Mar. 30 (elevation, 443.80 ft or 135.270 m); minimum, 1,376,000 acre-ft (1.70 km³) Nov. 2-4 (elevation, 427.88 ft or 130.418 m).

Period of record: Maximum contents, 1,733,000 acre-ft (2.14 km³) Jan. 24, 1970 (elevation, 446.67 ft or 136.415 m); minimum since irrigation pool first filled, 1,077,900 acre-ft (1.33 km³) Oct. 10, 11, 1962 (elevation, 410.60 ft or 125.151 m).

REMARKS.--Reservoir is formed by concrete arch-gravity dam completed November 1956. Usable capacity, 1,592,000 acre-ft (1.96 km³) between elevations 253.25 ft (77.191 m), invert of outlet valves and 440 ft (134.1 m), crest of glory-hole spillway, above mean sea level. Dead storage, 10,340 acre-ft (12.7 hm³). Water is released down Putah Creek and is diverted into Putah South diversion canal for irrigation of about 46,000 acres (186 km²) in the lower Sacramento Valley. Total diverted during year was 205,000 acre-ft (253 hm³). Releases for irrigation began in May 1959. Records, including extremes, show total contents at 2400 hours.

COOPERATION.--Records furnished by Bureau of Reclamation and reviewed by Geological Survey, rounded to Geological Survey standards.

REVISIONS (WATER YEARS).--WSP 1735: 1958-60. WSP 1931: Drainage area.

CAPACITY TABLE (ELEVATION, IN FEET, AND CONTENTS, IN ACRE-FEET)

400	911,200
410	1,068,000
420	1,236,000
430	1,414,000
450	1,800,000

CONTENTS, IN THOUSANDS OF ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,388	1,377	1,506	1,561	1,628	1,661	1,672	1,617	1,585	1,537	1,488	1,438
2	1,388	1,376	1,511	1,561	1,627	1,667	1,667	1,617	1,584	1,535	1,486	1,437
3	1,387	1,376	1,512	1,564	1,626	1,665	1,662	1,616	1,582	1,534	1,484	1,436
4	1,386	1,376	1,513	1,567	1,625	1,660	1,656	1,616	1,580	1,532	1,482	1,434
5	1,385	1,377	1,514	1,569	1,624	1,656	1,651	1,615	1,580	1,530	1,480	1,433
6	1,384	1,378	1,515	1,571	1,622	1,652	1,645	1,615	1,578	1,528	1,479	1,432
7	1,384	1,380	1,516	1,572	1,621	1,650	1,640	1,615	1,575	1,526	1,477	1,431
8	1,384	1,381	1,516	1,574	1,620	1,647	1,636	1,614	1,574	1,526	1,476	1,430
9	1,383	1,383	1,517	1,575	1,620	1,645	1,633	1,613	1,572	1,524	1,474	1,428
10	1,382	1,390	1,518	1,577	1,619	1,641	1,631	1,612	1,571	1,523	1,472	1,427
11	1,382	1,404	1,519	1,579	1,618	1,642	1,630	1,611	1,569	1,522	1,471	1,425
12	1,382	1,419	1,520	1,583	1,618	1,644	1,629	1,610	1,567	1,521	1,468	1,424
13	1,381	1,429	1,523	1,588	1,618	1,643	1,627	1,609	1,566	1,520	1,467	1,423
14	1,381	1,434	1,524	1,602	1,617	1,641	1,627	1,608	1,564	1,518	1,465	1,422
15	1,381	1,437	1,525	1,616	1,616	1,640	1,626	1,606	1,562	1,516	1,463	1,420
16	1,380	1,453	1,526	1,642	1,617	1,638	1,625	1,605	1,561	1,515	1,461	1,419
17	1,380	1,467	1,527	1,650	1,616	1,636	1,624	1,603	1,559	1,514	1,460	1,418
18	1,379	1,473	1,528	1,655	1,615	1,634	1,624	1,602	1,558	1,512	1,458	1,417
19	1,378	1,475	1,529	1,656	1,619	1,633	1,623	1,601	1,556	1,511	1,457	1,416
20	1,378	1,477	1,530	1,654	1,619	1,631	1,622	1,600	1,554	1,509	1,455	1,415
21	1,378	1,479	1,536	1,651	1,619	1,630	1,622	1,599	1,553	1,507	1,454	1,414
22	1,379	1,480	1,541	1,649	1,619	1,628	1,621	1,598	1,552	1,505	1,453	1,413
23	1,379	1,481	1,543	1,646	1,618	1,627	1,621	1,597	1,550	1,503	1,451	1,412
24	1,379	1,482	1,545	1,643	1,618	1,626	1,621	1,595	1,549	1,501	1,450	1,411
25	1,379	1,483	1,546	1,640	1,617	1,626	1,620	1,594	1,547	1,500	1,448	1,410
26	1,379	1,483	1,548	1,638	1,617	1,625	1,620	1,593	1,545	1,498	1,446	1,409
27	1,378	1,483	1,552	1,635	1,616	1,627	1,619	1,592	1,543	1,496	1,445	1,408
28	1,378	1,484	1,555	1,634	1,640	1,631	1,619	1,591	1,542	1,495	1,443	1,407
29	1,377	1,484	1,557	1,632	-----	1,656	1,618	1,589	1,540	1,493	1,442	1,406
30	1,377	1,495	1,558	1,630	-----	1,676	1,618	1,588	1,539	1,491	1,440	1,405
31	1,377	-----	1,560	1,629	-----	1,671	-----	1,586	-----	1,489	1,439	-----
MAX	1,388	1,495	1,560	1,656	1,640	1,676	1,672	1,617	1,585	1,537	1,488	1,438
MIN	1,377	1,376	1,506	1,561	1,615	1,625	1,618	1,586	1,539	1,489	1,439	1,405
(a)	427.95	434.35	437.77	441.37	441.94	443.52	440.80	439.16	436.68	434.05	431.34	429.49
(b)	-12.5	+118.0	+64.7	+69.3	+11.1	+30.9	-53.0	-31.7	-47.3	-49.6	-50.4	-34.0
(c)	5,027	1,513	1,012	1,863	2,184	3,063	5,558	11,734	13,676	13,363	11,554	8,950

CAL YR 1973 b +372.1
WTR YR 1974 b +15.5

a Elevation, in feet, at end of month.
b Change in contents, in thousands of acre-feet.
c Evaporation, in acre-feet.

11454000 PUTAH CREEK NEAR WINTERS, CALIF.

LOCATION.--Lat 38°30'55", long 122°04'51", in NE¼NE¼ sec.28, T.8 N., R.2 W., Yolo County, on left bank 1 mi (2 km) downstream from Cold Canyon, 1.3 mi (2.1 km) downstream from Monticello Dam, and 6 mi (10 km) west of Winters.

DRAINAGE AREA.--574 mi² (1,487 km²).

PERIOD OF RECORD.--July 1930 to current year.

GAGE.--Water-stage recorder. Datum of gage is 160.75 ft (48.997 m) above mean sea level (river-profile survey). June 28, 1930, to Feb. 29, 1940, at datum about 1 ft (0.3 m) higher.

AVERAGE DISCHARGE (adjusted for change in contents and evaporation from Lake Berryessa).--44 years, 528 ft³/s (14.95 m³/s), 382,500 acre-ft/yr (472 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 7,700 ft³/s (218 m³/s) Mar. 30 (gage height, 15.48 ft or 4.718 m); minimum daily, 20 ft³/s (0.57 m³/s) Nov. 15.

Period of record: Maximum discharge, 81,000 ft³/s (2,290 m³/s) Feb. 27, 1940 (gage height, 30.5 ft or 9.30 m, present datum), from rating curve extended above 30,000 ft³/s (850 m³/s); no flow Sept. 6-15, 1950, July 26 to Sept. 1, Sept. 6-9, 1955. Maximum discharge since construction of Monticello Dam in 1957, 16,300 ft³/s (462 m³/s) Jan. 24, 1970 (gage height, 18.85 ft or 5.745 m); minimum daily, 6.1 ft³/s (0.17 m³/s) Dec. 19, 1967.

Maximum stage known since at least 1905, that of Feb. 27, 1940, on basis of records for station at Winters.

REMARKS.--Records good. Flow regulated by Lake Berryessa beginning January 1957 (see sta 11453900). Records of water temperatures for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 901: 1937-38(M). WSP 1285: 1932(M), 1935-36(M), 1940(M), 1942-43(M), 1951, 1952(M). WSP 1565: 1957. WSP 1931: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NCV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	307	70	74	50	1,280	3,310	6,830	549	680	690	669	483
2	275	71	53	50	1,200	5,090	5,920	512	664	718	654	451
3	260	71	60	52	1,120	5,090	5,080	491	688	770	677	461
4	269	71	70	68	1,060	4,580	5,290	474	708	777	674	508
5	266	72	70	58	1,010	4,040	4,630	482	731	702	682	501
6	259	66	60	54	903	3,560	4,070	472	749	658	667	464
7	196	61	62	51	836	3,230	3,610	476	759	713	651	476
8	114	61	71	50	776	3,070	3,260	543	745	636	651	484
9	107	62	62	50	743	2,760	2,940	559	736	497	673	529
10	122	63	54	57	700	2,500	2,140	561	736	479	686	525
11	132	65	58	72	672	2,320	1,460	572	753	467	659	514
12	155	66	58	109	637	2,490	1,390	594	763	461	642	490
13	185	24	54	79	619	2,520	1,280	633	746	472	642	467
14	162	41	53	24	590	2,410	1,210	634	705	507	660	456
15	140	20	53	344	567	2,260	1,140	661	731	538	632	472
16	179	37	53	1,210	556	2,110	1,070	673	720	576	626	471
17	207	49	53	3,090	529	1,960	1,030	668	702	656	629	465
18	180	32	53	3,580	503	1,820	964	656	706	698	576	464
19	164	47	53	4,030	608	1,680	911	647	723	764	567	456
20	158	53	51	3,910	677	1,550	864	637	735	774	576	428
21	147	53	52	3,640	679	1,440	825	635	739	765	596	410
22	117	54	55	3,280	668	1,330	790	607	729	770	607	391
23	71	54	52	2,970	644	1,240	747	643	693	764	604	379
24	71	55	51	2,630	619	1,150	741	679	677	818	615	358
25	70	56	51	2,410	602	1,120	727	694	669	797	617	359
26	71	56	50	2,200	586	1,090	687	699	684	770	614	356
27	71	55	53	1,940	551	1,070	662	672	690	763	589	354
28	71	55	52	1,750	866	1,400	637	657	674	727	585	358
29	71	55	51	1,590	-----	2,100	599	676	665	730	582	352
30	71	60	52	1,460	-----	6,260	577	672	680	739	571	349
31	70	-----	51	1,340	-----	7,150	-----	690	-----	716	533	-----
TOTAL	4,738	1,655	1,745	42,198	20,801	83,700	62,081	18,818	21,380	20,912	19,406	13,231
MEAN	153	55.2	56.3	1,361	743	2,700	2,069	607	713	675	626	441
MAX	307	72	74	4,030	1,280	7,150	6,830	699	763	818	686	529
MIN	70	20	50	24	503	1,070	577	472	664	461	533	349
AC-FT	9,400	3,280	3,460	83,700	41,260	166,000	123,100	37,330	42,410	41,480	38,490	26,240

CAL YR 1973 TOTAL 143,189 MEAN 392 MAX 1,110 MIN 20 AC-FT 284,000 MEAN a 1,020 AC-FT a 738,300
WTR YR 1974 TOTAL 310,665 MEAN 851 MAX 7,150 MIN 20 AC-FT 616,200 MEAN a 982 AC-FT a 711,200

a Adjusted for change in contents and evaporation from Lake Berryessa.

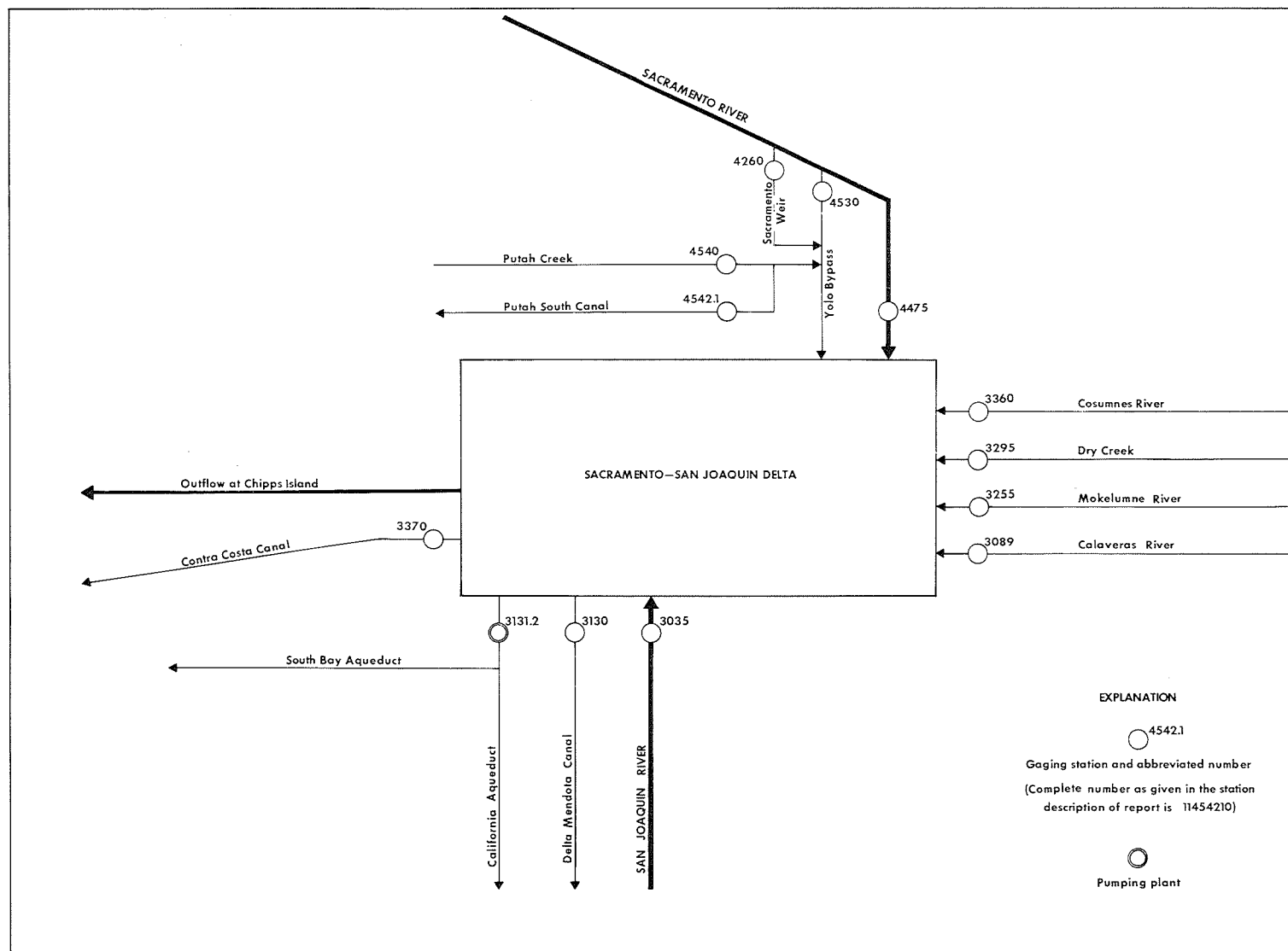


FIGURE 18.--Schematic diagram showing principal inflows and diversions, Sacramento-San Joaquin Delta.

LOCATION.--See schematic diagram of inflows and diversions, Sacramento-San Joaquin Delta.

DRAINAGE AREA.--Total drainage area of inflow streams tabulated below is 39,699 mi² (102,820 km²).

PERIOD OF RECORD.--October 1971 to current year. Data for periods prior to October 1971, can be obtained from published records for stations tabulated below.

COOPERATION.--Records for Delta-Mendota, Contra Costa, and Putah South Canals furnished by Bureau of Reclamation, California Aqueduct by California Department of Water Resources.

SUMMARY OF PRINCIPAL INFLOWS AND DIVERSIONS IN THE
SACRAMENTO-SAN JOAQUIN DELTA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

Inflows, in thousands of acre-feet													
Month												Water year	
Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.		
11303500 SAN JOAQUIN RIVER NEAR VERNALIS													
156.6	135.7	220.5	478.5	282.9	296.2	348.1	252.5	229.7	100.6	99.29	169.3	2,770	
11308900 CALAVERAS RIVER BELOW NEW HOGAN DAM													
1.44	.78	11.65	26.32	1.12	26.42	2.55	9.29	12.85	12.64	13.43	8.92	127.4	
11325500 MOKELUMNE RIVER AT WOODBRIDGE													
23.19	82.69	51.57	106.3	22.5	68.62	79.18	47.42	54.66	21.71	25.60	32.74	616.1	
11329500 DRY CREEK NEAR GALT													
0	5.02	28.99	39.96	7.79	29.19	21.58	3.41	.83	.67	.03	.03	137.5	
11336000 COSUMNES RIVER AT McCONNELL													
1.78	30.79	84.77	129.4	34.24	134.4	107.6	46.04	11.57	5.80	.10	.02	586.6	
11426000 SACRAMENTO WEIR SPILL													
0	4.22	3.18	28.7	1.15	2.08	14.75	0	0	0	0	0	54.08	
11447500 SACRAMENTO RIVER AT SACRAMENTO													
1,028	2,858	3,790	4,601	2,910	3,977	3,944	1,794	1,453	1,337	1,473	1,491	30,660	
11453000 YOLO BYPASS NEAR WOODLAND													
.29	645.0	633.8	3,045	299.2	391.0	2,102	7.85	1.95	.63	.46	3.10	7,130	
11454000 PUTAH CREEK NEAR WINTERS													
9.40	3.28	3.46	83.70	41.26	166.0	123.1	37.33	42.41	41.48	38.49	26.24	616.2	
Total	1,221	3,766	4,828	8,539	3,600	5,091	6,743	2,198	1,807	1,528	1,650	1,731	43,020

Diversions, in thousands of acre-feet													
Month													Water year
Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.		
11313000 DELTA-MENDOTA CANAL													
205.5	178.1	95.4	75.9	192.9	260.6	152.6	269.3	261.6	276.6	277.9	197.6	2,444	
11313120 CALIFORNIA AQUEDUCT (DELTA PUMPING PLANT)													
151.4	105.9	109.1	44.48	110.7	116.7	90.27	158.4	262.4	361.4	283.4	91.07	1,885	
11337000 CONTRA COSTA CANAL													
6.46	5.01	3.43	3.55	3.21	4.03	4.64	7.04	11.18	12.18	11.84	6.86	79.42	
11454210 PUTAH SOUTH CANAL													
7.70	1.99	1.95	6.20	9.26	2.05	9.94	31.75	36.88	37.61	36.25	23.46	205.0	
Total	371.1	291.0	209.9	130.1	316.1	383.4	257.4	466.5	572.1	687.8	609.4	319.0	4,613

NOTE.--Minor inflow streams and diversions are not included.

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- or flood-flow analyses, depending on the type of data collected. In addition, discharge measurements are made at other sites not included in the partial-record program. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

Records collected at partial-record stations are presented in two tables. The first is a table of discharge measurements at low-flow partial-record stations and the second is a table of annual maximum discharge at crest-stage stations. Discharge measurements made at miscellaneous sites for both low flow and high flow are given in a third table.

Low-flow partial-record stations

Measurements of streamflow in the area covered by this report made at low-flow partial-record stations are given in the following table. Most of these measurements were made during periods of base flow when streamflow is primarily from ground-water storage. These measurements, when correlated with the simultaneous discharge of a nearby stream where continuous records are available, will give a picture of the low-flow potentiality of 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 1974

Station No.	Station name	Location	Drainage area (mi ²)	Period of record	Measurements	
					Date	Discharge (ft ³ /s)
PYRAMID AND WINNEMUCCA LAKE BASINS						
10336700	Incline Creek near Crystal Bay, Nevada	SW¼NE¼ sec.22, T.16 N., R.18 E., Washoe County, 500 ft (150 m) upstream from culvert on Lake- shore Boulevard, 1,000 ft (300 m) upstream from mouth, just below confluence with major tributary, and 3 mi (5 km) east of Crystal Bay.	7.0	1966-69c 1969-71a,c 1972-73a,c 1974c	8-21-74 9-16-74	b 3.73 b 4.49
10336760	Edgewood Creek at Stateline, Nevada	NE¼NE¼ sec.27, T.13 N., R.18 E., Douglas County, on upstream side of culvert on U.S. High- way 50 and 0.5 mi (0.8 km) northeast of Stateline.	5.5	1967-74c	10-4-73 11-8-73 1-8-74 3-8-74 4-12-74 5-9-74 6-26-74 7-24-74 8-22-74	3.22 5.04 4.05 5.26 8.80 12.0 3.65 b 2.56 b 2.54
SAN JOAQUIN RIVER BASIN						
11264700	Porcupine Creek at Porcupine Flat Campgrounds, near Yosemite Village	NE¼SW¼ sec.33, T.1 S., R.22 E., Mariposa County, in Yosemite National Park, at Porcupine Flat Campgrounds, 1,500 ft (457 m) downstream from high- way bridge, and 4.1 mi (6.6 km) northeast of Yosemite Village.	3.60	1970-74	8-7-74 9-17-74	b 1.82 b .07
11265000	Tenaya Creek near Yosemite	Unsurveyed, Mariposa County, in Yosemite National Park, at bridge 0.7 mi (1.1 km) upstream from mouth and 1.7 mi (2.7 km) east of Yosemite National Park headquarters.	47	1904-9a 1912-58a 1961 1966-71 1974	9-18-74	b 1.87
11265700	Yosemite Creek at Yosemite Creek Campgrounds, near Yosemite Village	SW¼NE¼ sec.30, T.1 S., R.22 E., Mariposa County, in Yosemite National Park, at Yosemite Creek Campgrounds and 5.6 mi (9.0 km) north of Yosemite Village.	18.5	1970-74	8-14-74 9-17-74	b 10.8 b .06
11266200	Sentinel Creek near Yosemite Village	Unsurveyed, T.2 S., R.22 E., Mariposa County, in Yosemite National Park, 200 ft (61 m) downstream from Deer Meadows, 1.3 mi (2.1 km) southeast of Glacier Point Hotel, and 2.3 mi (3.7 km) south of Yosemite Village.	1.40	1971-74	8-14-74 9-18-74	0 0

See footnotes at end of table.

Low-flow partial-record stations--Continued

DISCHARGE MEASUREMENTS MADE AT LOW-FLOW PARTIAL-RECORD STATIONS DURING WATER YEAR 1974--Continued

Station No.	Station name	Location	Drainage area (mi ²)	Period of record	Measurements	
					Date	Discharge (ft ³ /s)
SAN JOAQUIN RIVER BASIN--Continued						
11266600	Cascade Creek near El Portal	NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.19, T.2 S., R.21 E., Mariposa County, in Yosemite National Park, 200 ft (61 m) upstream from unnamed trib- utary, 6.2 mi (10.0 km) north- east of El Portal, and 6.5 mi (10.5 km) west of Yosemite Village.	10.3	1971-74	8-8-74 9-17-74	b 0.70 b .60
11266700	Tamarack Creek at Tamarack Flat Campground, near El Portal	NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec.23, T.2 S., R.20 E., Mariposa County, in Yosemite National Park, at culvert on Big Oak Flat Road at Tamarack Flat Campground, 5.7 mi (9.2 km) northeast of El Portal, and 8.2 mi (13.2 km) west of Yosemite Village.	4.31	1970-74	8-8-74 9-17-74	b 1.50 b .23
11266800	Wildcat Creek near El Portal	SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.25, T.2 S., R.20 E., Mariposa County, in Yosemite National Park, upstream from highway bridge and 4.9 mi (7.9 km) northeast of El Portal.	1.24	1971-74	8-8-74 9-18-74	b .07 b .09
11266900	Crane Creek above diversion dam, near El Portal	SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.34, T.2 S., R.20 E., Mariposa County, in Yosemite National Park, 40 ft (12 m) upstream from head of diver- sion ditch and 2.8 mi (4.5 km) northeast of El Portal.	8.10	1964-74d	8-7-74 9-18-74	b 2.28 b .78
11267100	Moss Creek near El Portal	SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec.25, T.2 S., R.19 E., Mariposa County, in Stanislaus National Forest, 120 ft (37 m) downstream from road crossing, 300 ft (91 m) downstream from unnamed tributary, and 4.7 mi (7.6 km) northwest of El Portal.	4.45	1971-74	8-8-74 9-17-74	b .92 b .38
11279400	Smoky Jack Creek at Smoky Jack Campground, near Yosemite Village	NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec.31, T.1 S., R.21 E., Tuolumne County, in Yosemite National Park, 12 ft (4 m) downstream from culvert on Tioga Road, 8.5 mi (13.7 km) northeast of Yosemite Village, and 10.6 mi (17.1 km) northeast of El Portal.	4.15	1970-74	8-7-74 9-17-74	b .37 b .09
SACRAMENTO RIVER BASIN						
11433430	Buckeye Canyon Creek tributary near Greenwood	SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec.3, T.12 N., R.9 E., El Dorado County, 3.3 mi (5.3 km) northwest of Green- wood and 3.5 mi (5.6 km) northeast of Cool.	.08	1972-74	11-13-73 12-13-73 1-15-74 3-1-74 3-1-74 4-15-74 5-22-74 6-28-74 8-23-74	.12 .30 .44 1.78 1.32 .05 .01 0 0
11433440	Wildcat Canyon Creek near Cool	NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.4, T.12 N., R.9 E., El Dorado County, 3.3 mi (5.3 km) northeast of Cool and 3.5 mi (5.6 km) northwest of Greenwood.	.30	1972-74	11-14-73 12-13-73 1-15-74 3-1-74 4-15-74 5-22-74 6-28-74 8-23-74	.41 .54 1.24 1.21 .16 .03 0 0
11433450	Browns Bar Canyon Creek near Cool	SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.4, T.12 N., R.9 E., El Dorado County, 2.7 mi (4.3 km) northeast of Cool and 3.8 mi (6.1 km) north- west of Greenwood.	.75	1972-74	11-14-73 12-13-73 1-15-74 3-1-74 4-15-74 5-22-74 6-28-74 8-23-74	2.33 3.16 5.31 8.13 .64 .07 .003 0

See footnotes at end of table.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Low-flow partial-record stations--Continued

DISCHARGE MEASUREMENTS MADE AT LOW-FLOW PARTIAL-RECORD STATIONS DURING WATER YEAR 1974--Continued

Station No.	Station name	Location	Drainage area (mi ²)	Period of record	Measurements	
					Date	Discharge (ft ³ /s)
SACRAMENTO RIVER BASIN--Continued						
11433900	Paymaster Creek near Cool	SE¼NW¼ sec.17, T.12 N., R.9 E., El Dorado County, 400 ft (122 m) upstream from culvert on Pay- master trail, 0.9 mi (1.4 km) northeast of Cool.	--	1972-74	11-14-73 12-13-73 1-15-74 1-15-74 3-1-74 3-1-74 4-15-74 5-22-74 6-28-74 8-23-74	0.54 1.09 1.29 1.07 9.50 4.32 .07 .02 0 0

a Operated as a continuous-record gaging station.

b Base flow.

c Published in Water Resources Data for Nevada.

d Published as miscellaneous measurements 1964-70.

Crest-stage partial-record stations

The following table contains annual maximum discharges 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 the current 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 obtained.

ANNUAL MAXIMUM DISCHARGE AT CREST-STAGE PARTIAL-RECORD STATIONS DURING WATER YEAR 1974

Station No.	Station name	Location	Drain- age area (mi ²)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (ft ³ /s)
EAGLE LAKE BASIN							
10359250	Pine Creek near Westwood	NE¼SW¼ sec.5, T.31 N., R.8 E., Lassen County, 1.3 mi (2.1 km) southwest of Bogard Guard Station and 19 mi (31 km) north of Westwood.	24.8	1950-61a 1966-74	3-30-74	3.72	115
10359270	Aspen Creek near West- wood	NE¼NE¼ sec.21, T.33 N., R.8 E., Lassen County, in Lassen National Forest, at culvert on Forest Service road 34 N 28, 3.7 mi (6.0 km) northwest of Harvey Valley Ranger Station, and 27.5 mi (44.2 km) north of Westwood.	4.70	1970-74b	3-30-74	2.39	12
10359290	Pine Creek tributary near Susan- ville	NW¼NW¼ sec.17, T.33 N., R.10 E., Lassen County, in Lassen National Forest, at culvert on Forest Service road 35 N 5, 28 mi (45 km) north of Susanville.	4.70 (low flow) 16.8 (extreme flood flow)	1971-74b	3-30-74	5.07	82
BUENA VISTA LAKE BASIN							
11185300	Golden Trout Creek near Cartago	NW¼SW¼ sec.10, T.18 S., R.34 E., Tulare County, Inyo National Forest, 0.5 mi (0.8 km) upstream from Tunnel Ranger Station, and 15 mi (24 km) west of Cartago.	23.6	1956-67a 1969a 1970 1972-74	6-7-74	3.08	148

See footnotes at end of table.

Crest-stage partial-record stations--Continued

ANNUAL MAXIMUM DISCHARGE AT CREST-STAGE PARTIAL-RECORD STATIONS DURING WATER YEAR 1974--Continued

Station No.	Station name	Location	Drain- age area (mi ²)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (ft ³ /s)
BUENA VISTA LAKE BASIN--Continued							
11185400	Little Kern River near Quaking Aspen Camp	SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.31, T.20 S., R.33 E., Tulare County, Sequoia National Forest, 600 ft (183 m) upstream from mouth, and 5 mi (8 km) east of Quaking Aspen Camp.	132	1957-68a 1969a 1970 1972-74	6-7-74	4.74	804
11188200	South Fork Kern River near Olancha	NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.18, T.20 S., R.36 E., Tulare County, Sequoia National Forest, 2.0 mi (3.2 km) downstream from Snake Creek, and 9.7 mi (15.6 km) southwest of Olancha.	146	1956-67a 1969a 1970 1973-74	6-7-74	3.98	527
TULARE LAKE BASIN							
11197360	Franciscan Creek at Kecks Corner, near Lost Hills	SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.13, T.26 S., R.17 E., Kern County, on left bank 0.35 mi (0.56 km) south of Kecks Corner, 0.9 mi (1.4 km) downstream from Barrel Valley Creek, and 25 mi (40 km) north- west of Lost Hills.	20.8	1969c 1974	--	--	0
11197370	Bitterwater Creek near Lost Hills	NW $\frac{1}{4}$ SE $\frac{1}{4}$ sec.21, T.27 S., R.18 E., Kern County, 0.2 mi (0.3 km) downstream from Cedar Canyon, 21 mi (34 km) west of Lost Hills.	76.4	1962-74	--	--	0
11205680	Frazier Creek near Strathmore	NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.32, T.20 S., R.28 E., Tulare County, at culvert on County Road No. J28, 5.9 mi (9.5 km) east of Strathmore.	3.05	1974	1-17-74	5.25	d 33
11205690	Lewis Creek near Lindsay	NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec.13, T.20 S., R.27 E., Tulare County, at culvert on Road 258, 0.25 mi (0.40 km) downstream from unnamed tributary and 7.0 mi (11.3 km) southeast of Lindsay.	21.5	1969c 1974	1-17-74	10.18	143
11210970	Antelope Creek at Woodlake	SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.25, T.17 S., R.26 E., Tulare County, at culvert on State Highway 216 and 0.6 mi (1.0 km) west of town of Woodlake.	19.2	1969c 1974	1-17-74	4.29	d 8.9
11216800	Rock Creek at Dinkey Creek	NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.5, T.10 S., R.26 E., Fresno County, 0.4 mi (0.6 km) northwest of town of Dinkey Creek and 0.5 mi (0.8 km) upstream from mouth.	7.6	1960-70a 1971-74	4-1-74	5.96	495
11220000	Big Creek above Pine Flat Lake, near Trimmer	SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.4, T.12 S., R.25 E., Fresno County, on right bank 2.4 mi (3.9 km) upstream from mouth and 2.7 mi (4.3 km) northeast of Trimmer.	70.0	1953-73a 1974	4-1-74	6.00	2,200
11220500	Sycamore Creek above Pine Flat Lake, near Trimmer	SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec.1, T.12 S., R.24 E., Fresno County, on right bank 0.1 mi (0.2 km) downstream from Little Dry Creek, 1.7 mi (2.7 km) northwest of Trimmer, and 4.8 mi (7.7 km) upstream from mouth.	56.1	1953-73a 1974	4-1-74	7.54	4,160
SAN JOAQUIN RIVER BASIN							
11267300	South Fork Merced River at Wawona	SW $\frac{1}{4}$ sec.34, T.4 S., R.21 E., Mariposa County, 1,000 ft (305 m) downstream from highway bridge at Wawona, and 1,200 ft (366 m) upstream from Big Creek.	100	1958-68a 1970-74	5-26-74	6.01	2,350

See footnotes at end of table.

Crest-stage partial-record stations--Continued

ANNUAL MAXIMUM DISCHARGE AT CREST-STAGE PARTIAL-RECORD STATIONS DURING WATER YEAR 1974--Continued

Station No.	Station name	Location	Drain- age area (mi ²)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (ft ³ /s)
SAN JOAQUIN RIVER BASIN--Continued							
11304000	Corral Hollow Creek near Tracy	SE¼NE¼ sec.24, T.3 S., R.4 E., San Joaquin County, just upstream from highway bridge, 0.8 mi (1.3 km) downstream from Elk Ravine, and 6.3 mi (10.1 km) southwest of Tracy.	61.6	1959-65a 1967 1972-74	1-8-74	2.56	149
11305500	San Antonio Creek near San Andreas	NE¼ sec.10, T.3 N., R.12 E., Calaveras County, 800 ft (244 m) downstream from highway bridge, 1.9 mi (3.1 km) upstream from mouth, and 5 mi (8 km) southeast of San Andreas.	48.0	1950-59a 1962-74	3-1-74	5.42	2,290
11309000	Cosgrove Creek near Valley Springs	SE¼ sec.35, T.4 N., R.10 E., Calaveras County, 0.4 mi (0.6 km) upstream from mouth, and 2.7 mi (4.3 km) south of Valley Springs.	21.1	1930-69a 1970-71 1973-74	3-1-74	6.13	1,220
11334200	Middle Fork Cosumnes River near Somerset	NW¼NW¼ sec.19, T.9 N., R.12 E., El Dorado County, 1,000 ft (305 m) downstream from county road bridge, and 1.8 mi (2.9 km) southwest of Somerset.	107	1957-71a 1973-74	1-19-74	10.28	2,760
11352900	Beaver Creek near Hat Creek	NE¼NE¼ sec.12, T.34 N., R.6 E., Lassen County, in Lassen National Forest, at culvert on Forest Service road 35 N 10, 13.6 mi (21.9 km) east of Hat Creek, and 15 mi (24 km) south of Pittville.	23.2	1970-74b	3-30-74	3.21	118
11355400	Bunchgrass Creek near Manzanita Lake	NE¼SW¼ sec.3, T.32 N., R.3 E., Shasta County, in Lassen National Forest, at culvert on Forest Service road 32 N 46, 8.7 mi (14.0 km) northwest of town of Manzanita Lake.	.62	1970-74b	3-30-74	5.22	64
SACRAMENTO RIVER BASIN							
11365500	Squaw Creek above Shasta Lake	SE¼ sec.29, T.35 N., R.2 W., Shasta County, 1.3 mi (2.1 km) upstream from Salt Creek, 2 mi (3 km) upstream from Shasta Lake, and 10 mi (16 km) west of town of Montgomery Creek.	64.0	1944-66a 1969-74	1-16-74	21.9	17,800
11373200	Oak Run Creek near Oak Run	SE¼NW¼ sec.25, T.33 N., R.2 W., Shasta County, 800 ft (244 m) downstream from road bridge and 1.1 mi (1.8 km) northwest of town of Oak Run.	11.0	1957-66a 1969-74	1-16-74	7.87	3,860
11376100	South Fork Bailey Creek near Manzanita Lake	Unsurveyed, Shasta County, in Lassen National Forest, at culvert on Forest Service road 31 N 12F, 4.4 mi (7.1 km) southwest of town of Manzanita Lake, and 5.2 mi (8.4 km) southeast of Viola.	3.67	1970-74b	11-10-73	9.94	208
11377500	Paynes Creek near Red Bluff	SE¼ sec.22, T.28 N., R.3 W., Tehama County, 0.4 mi (0.6 km) upstream from mouth and 6.5 mi (10.5 km) northeast of Red Bluff.	92.8	1950-66a 1967-70 1972-74	1-16-74	9.58	5,680
11380500	Elder Creek at Gerber	Lat 40°03'05", long 122°09'53", in Saucos Grant, Tehama County, 1.0 mi (1.6 km) west of Gerber and 3.5 mi (5.6 km) upstream from mouth.	136	1949-69a 1970 1972-74	1-16-74	13.80	11,500

See footnotes at end of table.

Crest-stage partial-record stations--Continued

ANNUAL MAXIMUM DISCHARGE AT CREST-STAGE PARTIAL-RECORD STATIONS DURING WATER YEAR 1974--Continued

Station No.	Station name	Location	Drain- age area (mi ²)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (ft ³ /s)
SACRAMENTO RIVER BASIN--Continued							
11381810	Snake Creek near Paskenta	SE¼NW¼ sec.29, T.25 N., R.8 W., Tehama County, in Mendocino National Forest, at culvert on Forest Service road 23 N 01, 14.5 mi (23.3 km) northwest of Paskenta.	2.45	1972-74b	1-16-74	80.2	350
11382950	North Fork Calf Creek near Butte Meadows	SW¼SW¼ sec.28, T.27 N., R.4 E., Tehama County, in Lassen National Forest, at culvert, on Forest Service road 27 N 12, 1.8 mi (2.9 km) upstream from Deer Creek, 5.6 mi (9.0 km) north of Butte Meadows, and 11.2 mi (18.0 km) south of town of Mill Creek.	1.26	1970-74b	1-16-74	13.41	17
11384400	South Fork Stony Creek near Stonyford	NW¼SW¼ sec.27, T.17 N., R.8 W., Colusa County, in Mendocino National Forest, at culvert on Forest Service road 18 N 1, 12.5 mi (20.1 km) southwest of Stonyford.	2.52	1970-74b	1-16-74	28.56	586
11386200	South Fork Elk Creek near Elk Creek	NW¼SE¼ sec.13, T.20 N., R.7 W., Glenn County, at culvert on Forest Service road 20 N 1, 1.0 mi (1.6 km) upstream from confluence with North Fork Elk Creek, and 3.2 mi (5.1 km) southwest of Elk Creek.	10.6	1970-74b	1-16-74	21.85	160
11386300	Kill Dry Creek near Alder Springs	NW¼NE¼ sec.24, T.22 N., R.9 W., Glenn County, in Mendocino National Forest, at culvert on Forest Service road 24 N 2, 3.4 mi (5.5 km) upstream from Grindstone Creek, and 8.8 mi (14.2 km) northwest of Alder Springs.	1.84	1970-74b	1974	--	--
11387800	North Fork Stony Creek near Newville	SW¼ sec.6, T.22 N., R.5 W., Glenn County, on right bank 150 ft (46 m) downstream from Bedford Creek and 2.7 mi (4.3 km) east of Newville.	63.4	1963-73a 1974	1-16-74	7.67	5,180
11389650	Scotts John Creek near Stirling City	SE¼NE¼ sec.17, T.26 N., R.5 E., Butte County, in Lassen National Forest, at culvert on Forest Service road 26 N 27, 15 mi (24 km) northeast of Stirling City.	3.76	1970-74b	3-30-74	4.31	87
11397900	Benner Creek near Chester	SE¼SE¼ sec.11, T.29 N., R.6 E., Plumas County, in Lassen National Forest, at culvert on Forest Service road 29 N 12, 5.6 mi (9.0 km) northwest of Chester.	7.67	1970-74b	1-16-74	4.14	71
11417100	Poorman Creek near Washington	SW¼ sec.1, T.17 N., R.10 E., Nevada County, Tahoe National Forest, just down- stream from U.S. Forest Service bridge, 0.4 mi (0.6 km) west of Washington, and 1.4 mi (2.3 km) downstream from Deadman Creek.	23.1	1961-71a 1972 1974	11-12-73	6.34	916
11433430	Buckeye Canyon Creek tribu- tary near Greenwood	SE¼NW¼ sec.3, T.12 N., R.9 E., El Dorado County, 3.3 mi (5.3 km) northwest of Greenwood and 3.5 mi (5.6 km) northeast of Cool.	.08	1972-73c 1974	11-13-73	.86	4.8

See footnotes at end of table.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS

Crest-stage partial-record stations--Continued

ANNUAL MAXIMUM DISCHARGE AT CREST-STAGE PARTIAL-RECORD STATIONS DURING WATER YEAR 1974--Continued

Station No.	Station name	Location	Drain- age area (mi ²)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (ft ³ /s)
SACRAMENTO RIVER BASIN--Continued							
11433440	Wildcat Canyon Creek near Cool	NE¼SE¼ sec.4, T.12 N., R.9 E., El Dorado County, 3.3 mi (5.3 km) northeast of Cool and 3.5 mi (5.6 km) northeast of Greenwood.	0.30	1972-73c 1974	11-13-73	1.00	16
11433450	Browns Bar Canyon Creek near Cool	SE¼SW¼ sec.4, T.12 N., R.9 E., El Dorado County, 2.7 mi (4.3 km) northeast of Cool and 3.8 mi (6.1 km) northwest of Greenwood.	.75	1972-73c 1974	11-13-73	1.80	38
11433900	Paymaster Creek near Cool	SE¼NW¼ sec.17, T.12 N., R.9 E., El Dorado County, 0.9 mi (1.4 km) northeast of Cool.	--	1972-73c 1974	11-13-73	1.84	27
11449350	Burns Valley Creek near Clearlake Highlands	Lat 38°58'33", long 122°36'42", in SE¼ sec.15, T.13 N., R.7 W., Lake County, on right bank 500 ft (152 m) downstream from small right-bank tributary, and 2.7 mi (4.3 km) northeast of Clearlake Highlands.	4.37	1963-69a 1970-74	1-23-70 1-16-74	e 6.02 5.13	e 584 406

a Operated as a continuous-record gaging station.

b Data for water years prior to 1973 published in Floods from Small Drainage Areas, Compilation, October 1958 to September 1973.

c Published as miscellaneous measurement.

d Estimated.

e Revised, superseding figures published in WRD Calif. 1971.

Measurements at miscellaneous sites

Measurements of streamflow at points other than gaging stations or partial-record stations are given in the following table.

DISCHARGE MEASUREMENTS MADE AT MISCELLANEOUS SITES DURING WATER YEAR 1974

Stream and/or name and No.	Tributary to	Location	Drain- age area (mi ²)	Measured pre- viously (water year)	Measurements	
					Date	Discharge (ft ³ /s)
EAGLE LAKE BASIN						
Pine Creek nr Westwood (10359250)	Eagle Lake	NE¼SW¼ sec.5, T.31 N., R.8 E., Lassen County, 1.3 mi (2.1 km) southwest of Bogard Guard Station, and 19 mi (31 km) north of Westwood.	24.8	1950-61a 1964 1967-73	9-18-74	b 2.59
BUENA VISTA LAKE BASIN						
Golden Trout Creek nr Cartago (11185300)	Kern River	NW¼SW¼ sec.10, T.18 S., R.34 E., Tulare County, 0.5 mi (0.8 km) upstream from Tunnel Ranger Station, and 15 mi (24 km) west of Cartago.	23.6	1956-67a 1969a 1970-73	9-10-74	b 12.4
Little Kern River nr Quaking Aspen Camp (11185400)	Kern River	SE¼SE¼ sec.31, T.20 S., R.33 E., Tulare County, 600 ft (183 m) upstream from mouth, and 5 mi (8 km) east of Quaking Aspen Camp.	132	1957-69a 1970-73	9-10-74	b 17.5
South Fork Kern River nr Olancho (11188200)	Kern River	NW¼SW¼ sec.18, T.20 S., R.36 E., Tulare County, 2.0 mi (3.2 km) downstream from Snake Creek, and 9.7 mi (15.6 km) south- west of Olancho.	146	1956-67a 1969a 1970-73	9-19-74	b 12.7

See footnotes at end of table.

Measurements at miscellaneous sites--Continued

DISCHARGE MEASUREMENTS MADE AT MISCELLANEOUS SITES DURING WATER YEAR 1974--Continued

Stream and/or name and No.	Tributary to	Location	Drain- age area (mi ²)	Measured pre- viously (water year)	Measurements	
					Date	Discharge (ft ³ /s)
BUENA VISTA LAKE BASIN--Continued						
Kelso Creek nr Weldon (11189700)	South Fork Kern River	NW¼ sec.20, T.27 S., R.35 E., Kern County, 0.5 mi (0.8 km) upstream from Woolstaff Creek, and 7 mi (11 km) southeast of Weldon.	101	1958-66a 1968-73	9-19-74	b 1.79
TULARE LAKE BASIN						
South Fork Kings River nr Cedar Grove (11212500)	Kings River	NW¼ sec.8, T.13 S., R.30 E., Fresno County, 0.3 mi (0.5 km) downstream from Grizzly Creek, and 4.5 mi (7.2 km) west of Cedar Grove.	408	1950-57a 1959-60 1963-66 1968 1970-73	9-11-74	b 163
Copper Creek ^{1/}	South Fork Kings River	S½ sec.11, T.13 S., R.31 E., Fresno County, 0.5 mi (0.8 km) upstream from South Fork Kings River, and 5.9 mi (9.5 km) northeast of Cedar Grove.	7.29	1965-68 1970-73	9-11-74	b 1.37
Sheep Creek	South Fork Kings River	SE¼ sec.14, T.13 S., R.30 E., Fresno County, 0.7 mi (1.1 km) upstream from South Fork Kings River, and 0.7 mi (1.1 km) southwest of Cedar Grove.	7.62	1965-68 1970-73	9-11-74	b 2.07
Lewis Creek	South Fork Kings River	SW¼ sec.11, T.13 S., R.30 E., Fresno County, 0.3 mi (0.5 km) upstream from South Fork Kings River and 1.5 mi (2.4 km) north- west of Cedar Grove.	16.42	1965-68 1970-73	9-11-74	b 3.81
Rock Creek at Dinkey Creek (11216800)	Dinkey Creek	NE¼SW¼ sec.5, T.10 S., R.26 E., Fresno County, 0.4 mi (0.6 km) northwest of town of Dinkey Creek, and 0.5 mi (0.8 km) upstream from mouth.	7.60	1961-70a 1971-73	9-31-74	b .73
Dinkey Creek at mouth (11218000)	North Fork Kings River	Sec.3, T.12 S., R.26 E., Fresno County, 0.5 mi (0.8 km) upstream from mouth, and 0.5 mi (0.8 km) northwest of Balch Camp.	132	1920-37a 1959 1961-68 1970-73	9-27-74	b 13.4
SAN JOAQUIN RIVER BASIN						
Yosemite Creek at Yosemite (11266000)	Merced River	Lat 37°44'45", long 119°35'40", Mariposa County, in Yosemite National Park, 0.3 mi (0.5 km) upstream from mouth, and 0.7 mi (1.1 km) west of Yosemite National Park headquarters.	42.7	1904-9a 1912-26a 1960 1966-69 1971-73	9-18-74	0
South Fork Merced River at Wawona (11267300)	Merced River	SW¼ sec.34, T.4 S., R.21 E., Mariposa County, in Yosemite National Park, 1,000 ft (305 m) downstream from highway bridge at Wawona, and 1,200 ft (366 m) upstream from Big Creek.	100	1958-68a 1969-71	9-18-74	b 2.87
Hunter Creek	North Fork Tuolumne River	SW¼NE¼ sec.19, T.1 N., R.20 E., Tuolumne County, at road ford, 5.5 mi (8.8 km) southeast of Tuolumne.	--	1911 1964 1967-73	10-18-73 9-26-74	b .83 b .63

See footnotes at end of table.

Measurements at miscellaneous sites--Continued

DISCHARGE MEASUREMENTS MADE AT MISCELLANEOUS SITES DURING WATER YEAR 1974--Continued

Stream and/or name and No.	Tributary to	Location	Drainage area (mi ²)	Measured previously (water year)	Measurements	
					Date	Discharge (ft ³ /s)
SACRAMENTO RIVER BASIN						
Horse Creek at Little Valley, nr Pittville (11352500)	Pit River	NE¼ sec.15, T.35 N., R.7 E., Lassen County, 100 ft (30 m) downstream from railroad bridge, 0.5 mi (0.8 km) northeast of Little Valley, and 13 mi (21 km) southeast of Pittville.	237	1929-31a 1960-67a 1968-73	9-26-74	b 7.56
Fall River nr Dana (11353700)	Pit River	NE¼ sec.30, T.38 N., R.4 E., Shasta County, 0.7 mi (1.1 km) southeast of Dana and 1 mi (2 km) downstream from large springs below Bear Creek.	c 123	1959-67a 1968-73	9-26-74	b 490
Squaw Creek ab Shasta Lake (11365500)	Pit River	SE¼ sec.29, T.35 N., R.2 W., Shasta County, 1.3 mi (2.1 km) upstream from Salt Creek, 2 mi (3 km) upstream from Shasta Lake, and 10 mi (16 km) west of town of Montgomery Creek.	64.0	1945-67a 1968-73	9-16-74	b 16.7
McCloud River	Pit River	SW¼NE¼ sec.12, T.39 N., R.2 W., Siskiyou County, 500 ft (152 m) upstream from Lower Falls and 6 mi (10 km) southeast of McCloud.	--	1964 1968 1970 1972-73	9-6-74	b 77.0
South Cow Creek nr Millville (11372200)	Cow Creek	NW¼NE¼ sec.16, T.31 N., R.2 W., Shasta County, 2.5 mi (4.0 km) upstream from Old Cow Creek and 4.4 mi (7.1 km) east of Millville.	77.3	1957-72a	9-17-74	b 26.6
Oak Run Creek nr Oak Run (11373200)	Cow Creek	SE¼NW¼ sec.25, T.33 N., R.2 W., Shasta County, 800 ft (244 m) downstream from road bridge, 1.1 mi (1.8 km) northwest of town of Oak Run, 3.2 mi (5.1 km) upstream from Tracy Creek, and 12.2 mi (19.6 km) northeast of Millville.	11.0	1957-66a 1967-73	2-15-74 9-16-74	22.0 b 3.36
Tells Creek	Silver Creek	SE¼NE¼ sec.11; T.12 N., R.14 E., El Dorado County, at Loon Lake road crossing, 10 mi (16 km) northeast of Riverton.	--	1964-68 1969-71	9-13-74	b .87

1. Published as Cooper Creek 1966-68.

a Operated as a continuous-record gaging station.

b Base flow.

c Hydrologic Drainage Boundary uncertain due to ground-water exchange.

INDEX

	Page		Page
Accuracy of data.....	8	Bowman-Spaulding Canal at Jordan Creek siphon	
Acre-foot, definition of.....	3	venturi, near Emigrant Gap.....	397
Adams Creek near Knoxville.....	489	Bridgeport Reservoir near Bridgeport.....	21
Adobe Creek near Kelseyville.....	474	Britton, Lake, near Burney.....	273
Alder Creek (American River basin) near White Hall	460	Browns Bar Canyon Creek near Cool.....	497,502
Almanor, Lake, at Prattville.....	346	Buckeye Canyon Creek tributary near Greenwood...497,501	
American River, at Fair Oaks.....	470	Buckeye Creek near Bridgeport.....	19
Middle Fork, above Middle Fork powerhouse, near		Buck-Loon tunnel near Meeks Bay.....	434
Foresthill.....	430	Bucks Lake near Bucks Lodge.....	355
at French Meadows.....	427	Buena Vista Lake basin, crest-stage stations in...498	
below interbay dam, near Foresthill.....	431	discharge measurements at miscellaneous sites in	502
near Auburn.....	451	Bunchgrass Creek near Manzanita Lake.....	500
near Foresthill.....	448	Burney Creek near Burney.....	272
North Fork, at North Fork Dam.....	424	Burns Valley Creek near Clearlake Highlands.....	502
below Auburn damsite, near Auburn.....	452	Butt Creek below Almanor-Butt Creek tunnel, near	
of Middle Fork, near Foresthill.....	447	Prattville.....	348
South Fork, below Silver Creek, near Pollock		Butte Creek (Sacramento River basin), at Butte	
Pines.....	465	Meadows.....	315
near Camino.....	466	near Chico.....	317
near Kyburz.....	458		
near Lotus.....	468	Cache Creek, at Yolo.....	485
near Placerville.....	467	near Capay.....	484
American River basin, Middle Fork, schematic		near Lower Lake.....	480
diagram of.....	425	North Fork, at Hough Springs, near Clearlake	
South Fork, schematic diagram of.....	453	Oaks.....	481
Antelope Creek, at Woodlake.....	499	near Lower Lake.....	482
near Red Bluff.....	300	Calaveras River, below New Hogan Dam, near Valley	
Antelope Lake.....	324	Springs.....	234
Arcade Creek near Del Paso Heights.....	472	North Fork, near San Andreas.....	232
Ash Creek at Adin.....	269	South Fork, near San Andreas.....	231
Aspen Creek near Westwood.....	498	Calf Creek, North Fork, near Butte Meadows.....	501
Avenal Creek near Avenal.....	87	Caliente Creek above Tehachapi Creek, near	
		Caliente.....	84
Bailey Creek, South Fork, near Manzanita Lake....	500	California Aqueduct at Delta powerplant, near	
Bangor Canal below Miners Ranch Reservoir, near		Byron.....	495
Oroville.....	342	Camanche Reservoir near Clements.....	248
Bass Lake near Bass Lake.....	149	Camp Creek near Somerset.....	254
Battle Creek below Coleman Fish Hatchery, near		Cantua Creek near Cantua Creek.....	158
Cottonwood.....	297	Canyon Creek, below Bowman Lake.....	398
Bear Creek (tributary to Sacramento River) near		near Georgetown.....	449
Rumsey.....	483	Caples Lake Outlet near Kirkwood.....	457
Bear Creek (tributary to San Joaquin River) near		Carson River, East Fork, below Markleeville	
Lockeford.....	235	Creek, near Markleeville.....	30
Bear Creek (tributary to South Fork San Joaquin		East Fork, near Gardnerville, Nev.....	31
River) near Lake Thomas A. Edison.....	135	West Fork, at Woodfords.....	32
Bear River (tributary to Feather River), below		Cascade Creek near El Portal.....	497
Drum Afterbay, near Blue Canyon.....	409	Cherokee Canal near Nelson.....	318
below Dutch Flat Afterbay, near Dutch Flat.....	411	Cherry Creek, below Cherry Valley Dam, near Hetch	
below Rollins Dam, near Colfax.....	414	Hetchy.....	188
near Wheatland.....	416	below Dion R. Holm powerhouse, near Mather.....	192
Bear River (tributary to North Fork Mokelumne		near Early Intake.....	191
River) near Salt Springs Dam.....	242	Cherry Lake near Hetch Hetchy.....	187
Bear River basin, schematic diagram of.....	404	Chicago Park flume near Dutch Flat.....	410
Bear River Canal intake (Feather River basin) near		Chowchilla River, below Raynor Creek, near Raymond	
Colfax.....	413	near Raymond.....	164
Beardsley Lake near Strawberry.....	213	West Fork, near Mariposa.....	163
Beaver Creek near Hat Creek.....	500	Clavey River near Buck Meadows.....	198
Bell Creek near Pinecrest.....	197	Clear Creek, at French Gulch.....	286
Benner Creek near Chester.....	501	near Igo.....	290
Berry Creek near Sattley.....	326	Clear Lake at Lakeport.....	479
Berryessa, Lake, near Winters.....	492	Cole Creek near Salt Springs Dam.....	241
Bidwell Creek below Mill Creek, near Fort Bidwell.	70	Collection and computation of data.....	5
Big Chico Creek near Chico.....	305	Contents, definition of.....	3
Big Creek (tributary to Tuolumne River) above		Contra Costa Canal near Oakley.....	261
Whites Gulch, near Groveland.....	199	Control, definition of.....	4
Big Creek (tributary to Tuolumne River) near		Conversion factors, (SI) units.....	13
Groveland.....	200	Cooperation, report of.....	2
Big Creek (Tulare Lake basin) above Pine Flat		Corral Hollow Creek near Tracy.....	500
Reservoir, near Trimmer.....	499	Cosgrove Creek near Valley Springs.....	500
Big Creek diversion near Fish Camp.....	169	Cosumnes River, at McConnell.....	259
Big Grizzly Creek at Grizzly Valley Dam, near		at Michigan Bar.....	257
Portola.....	327	Middle Fork, near Somerset.....	500
Bitterwater Creek near Lost Hills.....	499	North Fork, near El Dorado.....	255
Black Butte Lake near Orland.....	311	South Fork, near River Pines.....	256
Blackwood Creek near Tahoe City.....	42	Cottonwood Creek (Sacramento River basin), Middle	
Boardman Canal near Emigrant Gap.....	406	Fork, near Ono.....	292
Boca Reservoir at Boca.....	63	near Cottonwood.....	296
Borel Canal below Isabella Dam.....	76	near Olinda.....	294
Bowman Lake near Graniteville.....	395	North Fork, near Igo.....	293
Bowman-Spaulding Canal intake near Graniteville..	396	South Fork, near Cottonwood.....	295

	Page		Page
Cottonwood Creek (Tulare Lake basin) near Elderwood.....	114	Feather River basin, reservoirs in.....	324
Courtright Reservoir, contents of.....	119	South Fork, schematic diagram of.....	332
Cow Creek near Millville.....	291	Florence Lake near Big Creek.....	133
Crane Creek above diversion dam, near El Portal...	497	Folsom Lake near Folsom.....	469
Cubic foot per second, definition of.....	4	Foothill ditch below Terminus Dam.....	111
Data, accuracy of.....	8	Forbes Creek, North Fork, near Dutch Flat.....	422
explanation of.....	5	Fordyce Creek below Fordyce Dam, near Cisco.....	389
other data available.....	9	Forest Creek near Wilseyville.....	243
Davis, Lake.....	324	Franciscan Creek at Kecks Corner, near Lost Hills.	499
Deer Creek (tributary to Cosumnes River) near Sloughhouse.....	258	Frazier Creek near Strathmore.....	499
Deer Creek (tributary to Sacramento River) near Vina.....	304	French Meadows Reservoir near Foresthill.....	426
Deer Creek (tributary to Tulare Lake basin), diversion near Terra Bella.....	91	Frenchman Lake.....	324
near Fountain Springs.....	90	Fresno River, near Daulton.....	162
Deer Creek (tributary to Yuba River) near Smartville.....	401	near Knowles.....	161
Definition of terms and abbreviations.....	3	Friant-Kern Canal at Friant.....	155
Del Puerto Creek near Patterson.....	180	Ft ³ /s-day, definition of.....	3
Delta-Mendota Canal at Tracy pumping plant, near Tracy.....	236	Gage height, definition of.....	4
Discharge, definition of.....	4	Gaging station, definition of.....	4
Dollar Creek near Tahoe City.....	46	Gerle Creek below Loon Lake Dam, near Meeks Bay...	439
Don Pedro Reservoir near La Grange.....	202	Glenbrook Creek at Glenbrook, Nev.....	49
Donnell Lake near Dardanelle.....	211	Golden Trout Creek near Cartago.....	498
Donner Creek at Donner Lake, near Truckee.....	54	Granite Creek near Cattle Mountain.....	131
Downstream order and station numbers.....	5	Grass Lake Creek near Meyers.....	34
Drainage area, definition of.....	4	Green Creek near Bridgeport.....	15
Drum Canal, above Drum Forebay, near Blue Canyon..	392	Hat Creek near Hat Creek.....	271
at tunnel outlet, near Emigrant Gap.....	391	Hell Hole Reservoir near Meeks Bay.....	435
Dry Creek (tributary to Kaweah River) near Lemoncove.....	113	Helm Creek below Courtright Dam.....	120
Dry Creek (tributary to Mokelumne River basin) near Galt.....	253	Hetch Hetchy Reservoir at Hetch Hetchy.....	183
Dry Creek (tributary to Merced River) near Snelling.....	176	Highland Creek (Sacramento River basin), above Highland Creek Dam.....	475
Dry Creek (tributary to Yuba River) near Browns Valley.....	402	below Highland Creek Dam, near Kelseyville.....	476
Duncan Creek, below diversion dam, near French Meadows.....	429	Highland Creek (San Joaquin River basin) below Spicer Meadows Reservoir.....	216
near French Meadows.....	428	Hunting Creek near Knoxville.....	488
Dutch Flat No. 1 powerplant near Dutch Flat.....	407	Huntington Lake near Big Creek.....	141
Dutch Flat No. 2 flume near Blue Canyon.....	408	Huntington-Shaver conduit outlet near Shaver Lake.	143
Eagle Creek near Camp Richardson.....	39	Hydrologic bench-mark station, definition of.....	4
Eagle Lake basin, crest-stage stations in.....	498	Hydrologic conditions.....	10
discharge measurements at miscellaneous sites in	502	Ice House Reservoir near Kyburz.....	462
East Park Reservoir near Stonyford.....	308	Incline Creek near Crystal Bay, Nev.....	496
East Walker River, above Strosnider ditch, near Mason, Nev.....	24	Independence Creek near Truckee.....	59
below Sweetwater Creek, near Bridgeport.....	23	Indian Creek, near Boulder Creek Guard Station,	
near Bridgeport.....	22	near Taylorsville.....	350
Echo Lake conduit near Phillips.....	454	near Crescent Mills.....	352
Edgewood Creek at Stateline, Nev.....	496	International Hydrological Decade (IHD) River Station, definition of.....	5
Elder Creek, at Gerber.....	500	Introduction.....	1
near Paskenta.....	301	Iron Canyon Creek below Iron Canyon Dam, near Big Bend.....	277
Eleanor Creek near Hetch Hetchy.....	190	Iron Canyon Reservoir near Big Bend.....	273
Eleanor, Lake, near Hetch Hetchy.....	189	Isabella Lake near Lake Isabella.....	78
Elk Creek, South Fork, near Elk Creek.....	501	Jackson Meadows Reservoir near Sierra City.....	374
Explanation of surface-water data.....	5	James B. Black powerplant near Big Bend.....	276
Fall River (tributary to Middle Fork Feather River) near Feather Falls.....	331	James Bypass near San Joaquin.....	159
Fallen Leaf Lake near Camp Richardson.....	37	Jenkinson Lake, contents of.....	254
Falls Creek near Hetch Hetchy.....	182	Judge Francis Carr powerplant near French Gulch...	287
Feather River, at Nicolaus.....	417	Kaweah, Lake, near Lemoncove.....	110
at Oroville.....	367	Kaweah River, at Three Rivers.....	107
at Yuba City.....	372	below Terminus Dam.....	112
below Shanghai Bend, near Olivehurst.....	405	East Fork, near Three Rivers.....	105
East Branch of North Fork, near Rich Bar.....	354	Marble Fork, at Potwisha Camp.....	103
Middle Fork, near Clito.....	329	Middle Fork, near Potwisha Camp.....	101
near Merrimac.....	330	South Fork, at Three Rivers.....	108
near Portola.....	328	Kaweah River basin, schematic diagram of.....	100
near Gridley.....	369	Kelsey Creek near Kelseyville.....	478
North Fork, at Pulga.....	356	Kern River, at Kernville.....	75
below Belden Dam.....	349	below Isabella Dam.....	79
near Prattville.....	347	near Bakersfield.....	82
South Fork, above Little Grass Valley Reservoir.	333	near Democrat Springs.....	80
at Ponderosa Dam.....	343	near Kernville.....	73
below diversion dam, near Strawberry Valley...	336	near Quaking Aspen Camp.....	72
below Forbestown Dam.....	340	South Fork, near Olancho.....	499
below Little Grass Valley Dam.....	335	near Onyx.....	77
West Branch, near Paradise.....	357	Kern River basin, schematic diagram of.....	71
Feather River at Lake Oroville, schematic diagram of.....	358	Kill Dry Creek near Alder Springs.....	501
Feather River basin, North Fork, schematic diagram of.....	345	Kings River, above North Fork, near Trimmer.....	117
		below North Fork, near Trimmer.....	124
		below Pine Flat Dam.....	126
		North Fork, above Dinkey Creek, at Balch Camp.....	122
		below Dinkey Creek, near Balch Camp.....	123
		below Meadow Brook.....	118
		near Cliff Camp.....	121
		Kings River basin, schematic diagram of.....	116

	Page		Page
Lake Valley Canal near Emigrant Gap.....	421	Long Canyon Creek, South Fork, diversion tunnel, near Volcanoville.....	443
Lakes and reservoirs:		Loon Lake near Meeks Bay.....	438
Almanor, Lake, at Prattville.....	346	Los Gatos Creek (Tulare Lake basin) above Nunez Canyon, near Coalinga.....	128
Antelope Lake.....	324	Lost Creek near Clipper Mills.....	339
Bass Lake near Bass Lake.....	149	Lower Twin Lake near Bridgeport.....	17
Beardsley Lake near Strawberry.....	213		
Berryessa, Lake, near Winters.....	492	Madera Canal at Friant.....	154
Black Butte Lake near Orland.....	311	Maine Bar Canyon Creek near Greenwood.....	450
Boca Reservoir at Boca.....	63	Mammoth Pool Reservoir near Big Creek.....	138
Bowman Lake near Graniteville.....	395	Mariposa Creek near Catheys Valley.....	166
Bridgeport Reservoir near Bridgeport.....	21	Marlette Creek near Carson City, Nev.....	48
Britton, Lake, near Burney.....	273	Marlette Lake near Carson City, Nev.....	47
Bucks Lake near Bucks Lodge.....	355	Marsh Creek near Byron.....	262
Camanche Reservoir near Clements.....	248	Martis Creek Lake near Truckee.....	55
Cherry Lake near Hetch Hetchy.....	187	Martis Creek near Truckee.....	56
Clear Lake at Lakeport.....	479	Maxwell Creek at Coulterville.....	172
Courtright Reservoir.....	119	McCloud-Iron Canyon diversion tunnel near McCloud.....	280
Davis, Lake.....	324	McCloud, Lake, near McCloud.....	273
Don Pedro Reservoir near La Grange.....	202	McCloud River, above Shasta Lake.....	283
Donnell Lake near Dardanelle.....	211	at Ah-Di-Na, near McCloud.....	282
East Park Reservoir near Stonyford.....	308	below McCloud Dam, near McCloud.....	281
Eleanor, Lake, near Hetch Hetchy.....	189	near McCloud.....	279
Fallen Leaf Lake near Camp Richardson.....	37	McCloud River basin, reservoirs in.....	273
Florence Lake near Big Creek.....	133	schematic diagram of.....	265
Folsom Lake near Folsom.....	469	McClure, Lake, at Exchequer.....	173
French Meadows Reservoir near Foresthill.....	426	Meeks Creek at Meeks Bay.....	40
Frenchman Lake.....	324	Melones Lake near Sonora.....	224
Hell Hole Reservoir near Meeks Bay.....	435	Merced River, at Happy Isles Bridge, near Yosemite	167
Hetch Hetchy Reservoir at Hetch Hetchy.....	183	at Pohono Bridge, near Yosemite.....	168
Huntington Lake near Big Creek.....	141	at Shaffer Bridge, near Cressey.....	175
Ice House Reservoir near Kyburz.....	462	below Merced Falls Dam, near Snelling.....	174
Iron Canyon Reservoir near Big Bend.....	273	near Briceburg.....	171
Isabella Lake near Lake Isabella.....	78	near Stevinson.....	177
Jackson Meadows Reservoir near Sierra City.....	374	South Fork, at Wawona.....	499
Jenkinson Lake.....	772	near El Portal.....	170
Kaweah, Lake, near Lemoncove.....	110	Miami Creek near Oakhurst.....	160
Little Grass Valley Reservoir near La Porte.....	334	Middle Tuolumne River at Oakland Recreation Camp..	194
Loon Lake near Meeks Bay.....	438	Middle Yuba River, below Jackson Meadows Dam, near Sierra City.....	375
Lower Twin Lake near Bridgeport.....	17	below Our House Dam.....	378
Martis Creek Lake near Truckee.....	55	near Camptonville.....	377
McCloud, Lake, near McCloud.....	273	Mill Creek (Sacramento River basin) near Los Molinos.....	302
McClure, Lake, at Exchequer.....	173	Mill Creek (Tulare Lake basin) near Piedra.....	127
Mammoth Pool Reservoir near Big Creek.....	138	Millerton Lake at Friant.....	156
Marlette Lake near Carson City, Nev.....	47	Milton-Bowman tunnel outlet near Graniteville.....	376
Melones Lake near Sonora.....	224	Miners Ranch Canal below Ponderosa Dam, near Forbestown.....	341
Millerton Lake at Friant.....	156	Miscellaneous sites, discharge measurements at...	502
New Bullards Bar Reservoir near North San Juan..	386	Modesto Canal near La Grange.....	203
New Camp Far West Reservoir near Wheatland.....	415	Mokelumne River, at Woodbridge.....	251
New Hogan Lake near Valley Springs.....	233	below Camanche Dam.....	249
Oroville, Lake, near Oroville.....	359	Middle Fork, at West Point.....	244
Pardee Reservoir near Valley Springs.....	247	near Mokelumne Hill.....	246
Pine Flat Lake near Piedra.....	125	North Fork, below Salt Springs Dam.....	240
Prosser Creek Reservoir near Boca.....	57	South Fork, near West Point.....	245
Pyramid Lake near Nixon, Nev.....	33	Mokelumne River basin, schematic diagram of.....	237
Redinger Lake near Auberry.....	145	Mono Creek below Lake Thomas A. Edison.....	137
Rollins Reservoir near Colfax.....	412	Morrison Creek near Sacramento.....	260
Salt Springs Reservoir near West Point.....	238	Moss Creek near El Portal.....	497
Shasta Lake near Redding.....	284	Mud Creek near Chico.....	306
Shaver Lake near Big Creek.....	144		
Sly Creek Reservoir near Strawberry Valley.....	337	Nevada Creek near Knoxville.....	490
Spaulding, Lake, near Emigrant Gap.....	390	New Bullards Bar Reservoir near North San Juan...	386
Stampede Reservoir near Boca.....	61	New Camp Far West Reservoir near Wheatland.....	415
Stony Gorge Reservoir near Elk Creek.....	308	New Colgate powerplant near French Corral.....	385
Success Lake near Success.....	98	New Hogan Lake near Valley Springs.....	233
Tahoe, Lake, at Tahoe City.....	52	North Honcut Creek near Bangor.....	370
Thomas A. Edison, Lake, near Big Creek.....	136	North Shirttail Creek near Dutch Flat.....	423
Topaz Lake near Topaz.....	28	North Yuba River, above Slate Creek, near Strawberry Valley.....	382
Tulare Lake in Kings County.....	86	below Goodyears Bar.....	381
Tulloch Reservoir near Knights Ferry.....	225	below New Bullards Bar Dam, near North San Juan.	387
Union Valley Reservoir near Riverton.....	461		
Upper Twin Lake near Bridgeport.....	16	Oak Run Creek near Oak Run.....	500
Whiskeytown Lake near Igo.....	289	Oakdale Canal near Knights Ferry.....	227
Wishon Reservoir.....	119	Onion Creek near Soda Springs.....	420
Lemoncove ditch below Terminus Dam.....	109	Oregon Creek, at Camptonville.....	379
Lewis Creek near Lindsay.....	499	below Log Cabin Dam, near Camptonville.....	380
Lily Creek near Pinecrest.....	195	Orestimba Creek near Newman.....	179
Little Butte Creek near Magalia.....	316	Oroville, Lake, near Oroville.....	359
Little Grass Valley Reservoir near La Porte.....	334	Oroville-Wyandotte Canal near Clipper Mills.....	338
Little Grizzly Creek near Genesee.....	351	Other data available.....	9
Little Kern River near Quaking Aspen Camp.....	499		
Little Last Chance Creek below Frenchman Dam, near Chilcoot.....	325	Pacific Gas and Electric Co. conduit No. 3 near Bass Lake.....	150
Little Stony Creek above East Park Reservoir, near Lodoga.....	307	Pacific Gas and Electric Co. lateral at intake, near Oroville.....	364
Little Truckee River, above Boca Reservoir, near Boca.....	62		
at Boca.....	64		
Little Walker River near Bridgeport.....	25		
Long Canyon Creek, near French Meadows.....	445		
North Fork, diversion tunnel, near Volcanoville.	444		

	Page		Page
Palermo Canal near Oroville.....	360	San Emigdio Creek at San Emigdio Ranchhouse.....	83
Pardee Reservoir near Valley Springs.....	247	San Joaquin River, above Shakeflat Creek, near	
Partial-record station, crest-stage.....	498	Big Creek.....	139
definition of.....	4	above Willow Creek, near Auberry.....	146
discharge at.....	496	at Miller Crossing.....	130
low-flow.....	496	below Friant.....	157
Paymaster Creek near Cool.....	498, 502	below Kerckhoff powerhouse, near Prather.....	153
Paynes Creek near Red Bluff.....	500	near Newman.....	178
Philadelphia Canal near Strawberry.....	221	near Vernalis.....	230
Pilot Creek, above Stumpy Meadows Lake.....	441	South Fork, near Florence Lake.....	134
below Mutton Canyon, near Georgetown.....	442	San Joaquin River basin, crest-stage stations in..	499
Pine Creek, near Susanville.....	69	discharge measurements at miscellaneous sites in	502
near Westwood.....	498	low-flow partial-record stations in.....	496
tributary near Susanville.....	498	schematic diagram of.....	129
Pine Flat Lake near Piedra.....	125	Sand Creek near Orange Cove.....	115
Pioneer ditch below Success Dam.....	97	Scotts Creek near Lakeport.....	477
Pit River, at Big Bend.....	275	Scotts John Creek near Stirling City.....	501
below Pit No. 4 Dam.....	274	Selected references.....	11
near Bieber.....	270	Sentinel Creek near Yosemite Village.....	496
near Canby.....	268	Shasta Lake near Redding.....	284
near Montgomery Creek.....	278	Shaver Lake near Big Creek.....	144
North Fork, at Alturas.....	266	Silver Creek (American River basin), below Camino	
South Fork, near Likely.....	267	diversion dam.....	464
Pit River basin, reservoirs in.....	273	South Fork, near Ice House.....	463
schematic diagram of.....	265	Silver Lake Outlet near Kirkwood.....	456
Pitman Creek below Tamarack Creek.....	142	Slate Creek below diversion dam, near Strawberry	
Poorman Creek near Washington.....	501	Valley.....	384
Pope Creek near Pope Valley.....	491	Slate Creek tunnel near Strawberry Valley.....	383
Porcupine Creek at Porcupine Flat Campgrounds,		Sly Creek Reservoir near Strawberry Valley.....	337
near Yosemite Village.....	496	Smoky Jack Creek at Smoky Jack Campgrounds, near	
Poso Creek near Oildale.....	88	Yosemite Village.....	497
Precipitation:		Snake Creek near Paskenta.....	501
Cache Creek, near Lower Lake.....	480	Soquel diversion near Sugar Pine.....	147
North Fork, at Hough Springs, near Clearlake		South Diversion Canal near Orland.....	310
Oaks.....	481	South Honcut Creek near Bangor.....	371
Prosser Creek, near Boca.....	58	South San Joaquin Canal near Knights Ferry.....	226
Reservoir near Boca.....	57	South Yuba Canal near Emigrant Gap.....	393
Publications.....	9	South Yuba River, at Jones Bar, near Grass Valley.	399
Putah Creek, near Guenoc.....	487	at Langs Crossing, near Emigrant Gap.....	394
near Winters.....	493	near Cisco.....	388
Putah South Canal at intake, near Winters.....	495	Spanish Creek above Blackhawk Creek, at Keddie....	353
Pyramid Creek at Twin Bridges.....	455	Spaulding, Lake, near Emigrant Gap.....	390
Pyramid Lake near Nixon, Nev.....	33	Special networks and programs.....	4
Pyramid and Winnemucca Lake basins, low-flow		Spring Creek powerplant at Keswick.....	288
partial-record stations in.....	496	Squaw Creek above Shasta Lake.....	500
Quail Lake Creek near Homewood.....	41	Stage-discharge relation, definition of.....	4
Records of discharge collected by agencies other		Stampepe Reservoir near Boca.....	61
than the Geological Survey.....	10	Stanislaus River, at Ripon.....	229
Red Bank Creek near Red Bluff.....	299	below Goodwin Dam, near Knights Ferry.....	228
Redinger Lake near Auberry.....	145	Clark Fork, near Dardanelle.....	210
References, selected.....	11	Middle Fork, at Hells Half Acre Bridge, near	
Reservoirs. See lakes and reservoirs.		Pinecrest.....	212
Richvale Canal at intake, near Oroville.....	363	at Kennedy Meadows, near Dardanelle.....	209
Robbs Peak powerplant near Kyburz.....	437	below Beardsley Dam.....	214
Robinson Creek at Twin Lakes Outlet, near		near Hathaway Pines.....	218
Bridgeport.....	18	North Fork, below Silver Creek.....	215
Rock Creek at Dinkey Creek.....	499	near Avery.....	217
Rollins Reservoir near Colfax.....	412	South Fork, at Strawberry.....	220
Rubicon River, at Rubicon Springs, near Meeks Bay.	433	near Long Barn.....	223
below Hell Hole Dam, near Meeks Bay.....	436	Stanislaus River basin, schematic diagram of.....	208
near Foresthill.....	446	Stone Corral Creek near Sites.....	322
South Fork, below Gerle Creek, near Georgetown..	440	Stony Creek, below Black Butte Dam, near Orland..	312
Rubicon River basin, schematic diagram of.....	425	near Fruto.....	309
Rubicon-Rockbound tunnel near Meeks Bay.....	432	North Fork, near Newville.....	501
Sacramento River, above Bend Bridge, near Red		South Fork, near Stonyford.....	501
Bluff.....	298	Stony Creek basin, reservoirs in.....	508
at Butte City.....	313	Stony Gorge Reservoir near Elk Creek.....	308
at Colusa.....	314	Strong Ranch Slough at Sacramento.....	471
at Delta.....	264	Success Lake near Success.....	98
at Keswick.....	285	Sucker Run near Forbestown.....	344
at Knights Landing.....	323	Susan River at Susanville.....	67
at Sacramento.....	473	Sutter-Butte Canal at intake, near Oroville.....	365
at Verona.....	418	Sutter Creek near Sutter Creek.....	252
below Wilkins Slough, near Grimes.....	319	Swauger Creek near Bridgeport.....	20
near Mt Shasta.....	263	Sycamore Creek above Pine Flat Lake, near Trimmer.	499
Sacramento River basin, crest-stage stations in..	500	Tahoe, Lake, at Tahoe City.....	52
discharge measurements at miscellaneous sites in	504	Tamarack Creek at Tamarack Flat Campground, near	
low-flow partial-record stations in.....	497	El Portal.....	497
Sacramento-San Joaquin Delta, inflows and		Taylor Creek near Camp Richardson.....	38
diversions.....	495	Tehachapi Creek near Tehachapi.....	85
Sacramento-San Joaquin Delta, inflows and		Tenaya Creek near Yosemite.....	496
diversions, schematic diagram of.....	494	Thermalito Afterbay near Oroville.....	361
Sacramento Weir spill to Yolo Bypass, near		Thermalito Afterbay release to Feather River, near	
Sacramento.....	419	Oroville.....	366
Sagehen Creek near Truckee.....	60	Thomas A. Edison, Lake, near Big Creek.....	136
Salt Springs Reservoir near West Point.....	238	Thomes Creek at Paskenta.....	303
San Antonio Creek near San Andreas.....	500	Tiger Creek powerhouse conduit below Salt	
		Springs Dam.....	239
		Topaz Lake near Topaz.....	28

	Page		Page
Trout Creek, at South Lake Tahoe.....	51	Walker Creek at Artois.....	321
near Tahoe Valley.....	50	Ward Creek, at State Highway 89, near Tahoe Pines..	45
Truckee River, at Farad.....	65	near Tahoe Pines.....	43
at Reno, Nev.....	66	tributary near Tahoe Pines.....	44
at Tahoe City.....	53	Ward tunnel intake at Florence Lake.....	132
Tulare Lake basin, crest-stage stations in.....	499	Ward tunnel outlet at Huntington Lake.....	140
discharge measurements at miscellaneous		West Walker River, at Hoye Bridge, near	
sites in.....	503	Wellington, Nev.....	29
reservoirs in.....	119	below Little Walker River, near Coleville.....	26
Tulare Lake in Kings County.....	86	near Coleville.....	27
Tule River, below Success Dam.....	99	Western Canal at intake, near Oroville.....	362
near Springville.....	95	Whiskeytown Lake near Igo.....	289
North Fork, of Middle Fork, near Springville...	93	White River near Ducor.....	89
South Fork, near Success.....	96	Wildcat Canyon Creek near Cool.....	497, 502
Tule River basin, schematic diagram of.....	92	Wildcat Creek near El Portal.....	497
Tulloch Reservoir near Knights Ferry.....	225	Willow Creek (Honey Lake basin) near Susanville...	68
Tuolumne Canal near Long Barn.....	222	Willow Creek (Sacramento River basin), South Fork	
Tuolumne River, above Early Intake, near Mather...	185	near Fruto.....	320
at Modesto.....	207	Willow Creek (tributary to San Joaquin River), at	
below Early Intake, near Mather.....	186	mouth, near Auberry.....	152
below La Grange Dam, near La Grange.....	205	North Fork, near Bass Lake.....	151
near Hetch Hetchy.....	184	near Sugar Pine.....	148
North Fork, near Long Barn.....	201	Wishon Reservoir, contents of.....	119
South Fork, near Oakland Recreation Camp.....	193	Woodbridge Canal at Woodbridge.....	250
Tuolumne River basin, schematic diagram of.....	181	WRD, definition of.....	4
Turlock Canal near La Grange.....	204	WSP, definition of.....	4
Union Valley Reservoir near Riverton.....	461	Yolo Bypass near Woodland.....	486
Upper Truckee River, at South Lake Tahoe.....	36	Yosemite Creek at Yosemite Creek Campgrounds,	
near Meyers.....	35	near Yosemite Village.....	496
Upper Twin Lake near Bridgeport.....	16	Yuba River, below Englebright Dam, near Smartville	400
Virginia Creek near Bridgeport.....	14	near Marysville.....	403
		Yuba River basin, schematic diagram of.....	373

U. S. DEPARTMENT OF THE INTERIOR
Geological Survey
855 Oak Grove Avenue
Menlo Park, California 94025

POSTAGE AND FEES PAID
U.S. DEPARTMENT OF THE INTERIOR
INT 413

