

Magnitude and Frequency of Floods in the United States

Part 11. Pacific Slope Basins in California

Volume 1. Coastal Basins South of the Klamath River Basin
and Central Valley Drainage from the West

By L. E. YOUNG and R. W. CRUFF

GEOLOGICAL SURVEY WATER-SUPPLY PAPER 1685



UNITED STATES DEPARTMENT OF THE INTERIOR

STEWART L. UDALL, *Secretary*

GEOLOGICAL SURVEY

William T. Pecora, *Director*

Library of Congress catalog-card No. GS 64-192

CONTENTS

	Page
Abstract.....	1
Introduction.....	1
Purpose and scope.....	1
Acknowledgments.....	2
Flood-frequency analysis.....	4
Selection of gaging-station records.....	4
Flood frequency at a gaging station.....	6
Hydrologic characteristics.....	7
Topography.....	7
Climate.....	8
Runoff.....	9
Multiple-regression procedures.....	9
Regional analysis.....	10
South coast region.....	11
North coast region.....	11
Regression equations.....	11
Procedure for estimating flood frequency.....	25
Illustrative problem.....	26
Limitations.....	27
Discussion of results.....	28
Flood records at gaging stations and miscellaneous sites.....	29
Maximum known floods.....	32
Tia Juana River basin.....	50
Campo Creek near Campo, Calif.....	50
Otay River basin.....	50
Jamul Creek near Jamul, Calif.....	50
Sweetwater River basin.....	51
Sweetwater River near Descanso, Calif.....	51
San Diego River basin.....	52
Boulder Creek near Lakeside, Calif.....	52
San Vicente Creek at San Vicente Dam, at Foster, Calif.....	52
San Diego River near Santee, Calif.....	53
San Dieguito River basin.....	54
Santa Ysabel Creek near Mesa Grande, Calif.....	54
Santa Ysabel Creek near Ramona, Calif.....	55
Santa Ysabel Creek near San Pasqual, Calif.....	56
Guejito Creek near San Pasqual, Calif.....	56
Santa Maria Creek near Ramona, Calif.....	57
San Luis Rey River basin.....	58
West Fork San Luis Rey River near Warner Springs, Calif.....	58
San Luis Rey River at Lake Henshaw, near Mesa Grande, Calif.....	58
San Luis Rey River near Pala, Calif.....	59
San Luis Rey River at Monserate Narrows, near Pala, Calif.....	59
San Luis Rey River near Bonsall, Calif.....	60
San Luis Rey River at Oceanside, Calif.....	61

Flood records at gaging stations and miscellaneous sites—Continued		Page
Santa Margarita River basin.....		61
Temecula Creek near Aguanga, Calif.....		61
Temecula Creek at Nigger Canyon, near Temecula, Calif.....		62
Murrieta Creek at Temecula, Calif.....		62
Santa Margarita River near Temecula, Calif.....		63
Santa Margarita River near Fallbrook, Calif.....		64
De Luz Creek near Fallbrook, Calif.....		65
Santa Margarita River at Ysidora, Calif.....		65
Las Flores Creek basin.....		66
Las Flores Creek near Oceanside, Calif.....		66
San Onofre Creek basin.....		67
San Onofre Creek near San Onofre, Calif.....		67
San Onofre Creek at San Onofre, Calif.....		67
San Mateo Creek basin.....		68
San Mateo Creek near San Clemente, Calif.....		68
Cristianitos Creek near San Clemente, Calif.....		69
San Mateo Creek at San Onofre, Calif.....		69
San Juan Creek basin.....		70
San Juan Creek near San Juan Capistrano, Calif.....		70
Arroyo Trabuco near San Juan Capistrano, Calif.....		71
Aliso Creek basin.....		72
Aliso Creek at El Toro, Calif.....		72
Peters Canyon Wash basin.....		72
San Diego Creek near Irvine, Calif.....		72
Santa Ana River basin.....		73
Santa Ana River near Mentone, Calif.....		73
Mill Creek near Yucaipa, Calif.....		74
Mill Creek near Mentone, Calif.....		75
Plunge Creek near East Highlands, Calif.....		76
City Creek near Highland, Calif.....		77
Little San Gorgonio Creek near Beaumont, Calif.....		78
San Timoteo Creek near Redlands, Calif.....		79
San Timoteo Creek near Loma Linda, Calif.....		80
East Twin Creek near Arrowhead Springs, Calif.....		80
Waterman Canyon Creek near Arrowhead Springs, Calif.....		81
Lytle Creek near Fontana, Calif.....		82
Cajon Creek near Keenbrook, Calif.....		83
Lone Pine Creek near Keenbrook, Calif.....		84
Devil Canyon Creek near San Bernardino, Calif.....		85
Lytle Creek (east channel) at San Bernardino, Calif.....		86
Warm Creek near Colton, Calif.....		86
Lytle Creek (west channel) at Colton, Calif.....		87
Santa Ana River at Riverside Narrows, near Arlington, Calif.....		88
Day Creek near Etiwanda, Calif.....		89
San Jacinto River near San Jacinto, Calif.....		90
Bautista Creek near Hemet, Calif.....		91
San Jacinto River near Elsinore, Calif.....		91
San Antonio Creek near Claremont, Calif.....		92
Cucamonga Creek near Upland, Calif.....		93
Chino Creek near Prado, Calif.....		94
Santa Ana River at county line, below Prado Dam, Calif.....		94
Carbon Creek near Yorba Linda, Calif.....		95

Flood records at gaging stations and miscellaneous sites—Continued

Santa Ana River basin—Continued	Page
Santiago Creek near Villa Park, Calif.....	96
Santiago Creek at Santa Ana, Calif.....	96
Santa Ana River at Santa Ana, Calif.....	97
San Gabriel River basin.....	98
East Fork San Gabriel River at Camp Bonita, Calif.....	98
East Fork San Gabriel River near Camp Bonita, Calif.....	98
Bear Creek near Camp Rincon, Calif.....	99
North Fork San Gabriel River at Camp Rincon, Calif.....	99
West Fork San Gabriel River at Camp Rincon, Calif.....	99
San Gabriel River near Azusa, Calif.....	100
Rogers Creek near Azusa, Calif.....	101
Fish Creek near Duarte, Calif.....	102
Dalton Creek near Glendora, Calif.....	103
San Dimas Creek near San Dimas, Calif.....	104
Little Dalton Creek near Glendora, Calif.....	104
San Jose Creek near Whittier, Calif.....	105
San Gabriel River at Pico, Calif.....	106
Brea Creek at Fullerton, Calif.....	107
Coyote Creek near Artesia, Calif.....	107
Los Angeles River basin.....	108
Los Angeles River at Sepulveda Dam, Calif.....	108
Pacoima Creek near San Fernando, Calif.....	109
Tujunga Creek below Mill Creek, near Colby Ranch, Calif.....	110
Tujunga Creek near Colby Ranch, Calif.....	110
Fox Creek near Colby Ranch, Calif.....	111
Tujunga Creek near Sunland, Calif.....	111
Haines Creek near Tujunga, Calif.....	112
Little Tujunga Creek near San Fernando, Calif.....	112
Los Angeles River at Los Angeles, Calif.....	113
Arroyo Seco near Pasadena, Calif.....	114
Los Angeles River near Downey, Calif.....	115
Sawpit Creek near Monrovia, Calif.....	116
Santa Anita Creek near Sierra Madre, Calif.....	116
Little Santa Anita Creek near Sierra Madre, Calif.....	117
Eaton Creek near Pasadena, Calif.....	118
Los Angeles River at Long Beach, Calif.....	120
Ballona Creek basin.....	121
Ballona Creek near Culver City, Calif.....	121
Topanga Creek basin.....	121
Topanga Creek near Topanga Beach, Calif.....	121
Malibu Creek basin.....	122
Malibu Creek at Crater Camp, near Calabasas, Calif.....	122
Conejo Creek near Camarillo, Calif.....	123
Calleguas Creek basin.....	123
Honda Barranca near Somis, Calif.....	123
Santa Clara River basin.....	124
Santa Clara River near Saugus, Calif.....	124
Santa Clara River at Los Angeles-Ventura County line, Calif.....	124
Piru Creek above Lake Piru, Calif.....	125
Piru Creek near Piru, Calif.....	125
Hopper Creek near Piru, Calif.....	126

Flood records at gaging stations and miscellaneous sites—Continued

	Page
Santa Clara River basin—Continued	
Sespe Creek near Wheeler Springs, Calif.....	127
Sespe Creek near Sespe, Calif.....	127
Sespe Creek near Fillmore, Calif.....	128
Santa Paula Creek near Santa Paula, Calif.....	129
Ventura River basin.....	130
Matilija Creek above reservoir, near Matilija Hot Springs, Calif.....	130
Matilija Creek at Matilija Hot Springs, Calif.....	130
North Fork Matilija Creek at Matilija Hot Springs, Calif.....	131
San Antonio Creek at Casitas Springs, Calif.....	132
Coyote Creek near Oak View, Calif.....	132
Santa Ana Creek near Oak View, Calif.....	133
Coyote Creek near Ventura, Calif.....	133
Ventura River near Ventura, Calif.....	134
Carpinteria Creek basin.....	135
Carpinteria Creek near Carpinteria, Calif.....	135
Atascadero Creek basin.....	135
Atascadero Creek near Goleta, Calif.....	135
San Jose Creek basin.....	136
San Jose Creek near Goleta, Calif.....	136
Santa Ynez River basin.....	137
Santa Cruz Creek near Santa Ynez, Calif.....	137
Cachuma Creek near Santa Ynez, Calif.....	138
Santa Ynez River near Santa Ynez, Calif.....	139
Santa Agueda Creek near Santa Ynez, Calif.....	139
Zanja de Cota Creek near Santa Ynez, Calif.....	140
Alisal Creek near Solvang, Calif.....	141
Santa Ynez River at Solvang, Calif.....	141
Zaca Creek at Buellton, Calif.....	142
Salsipuedes Creek near Lompoc, Calif.....	143
Santa Ynez River near Lompoc, Calif.....	144
Santa Ynez River at barrier, near Surf, Calif.....	144
San Antonio Creek basin.....	145
San Antonio Creek at Harris, Calif.....	145
San Antonio Creek near Casmalia, Calif.....	146
Santa Maria River basin.....	146
Cuyama River near Ventucopa, Calif.....	146
Cuyama River near Santa Maria, Calif.....	147
Alamo Creek near Santa Maria, Calif.....	148
Huasna River near Santa Maria, Calif.....	149
Sisquoc River near Sisquoc, Calif.....	150
La Brea Creek near Sisquoc, Calif.....	151
Tepusquet Creek near Sisquoc, Calif.....	151
Sisquoc River near Garey, Calif.....	152
Santa Maria River at Guadalupe, Calif.....	153
Arroyo Grande basin.....	154
Arroyo Grande near Arroyo Grande, Calif.....	154
Arroyo Grande at Arroyo Grande, Calif.....	154
Santa Rosa Creek basin.....	155
Santa Rosa Creek near Cambria, Calif.....	155
Arroyo de la Cruz basin.....	156
Arroyo de la Cruz near San Simeon, Calif.....	156

Flood records at gaging stations and miscellaneous sites—Continued	Page
Big Sur River basin.....	157
Big Sur River near Big Sur, Calif.....	157
Carmel River basin.....	158
Carmel River at Robles del Rio, Calif.....	158
Salinas River basin.....	158
Salinas River near Pozo, Calif.....	158
Jack Creek near Templeton, Calif.....	159
Salinas River at Paso Robles, Calif.....	160
Huerhuero Creek near Creston, Calif.....	161
Estrella Creek near Estrella, Calif.....	161
Nacimiento River near Bryson, Calif.....	162
Nacimiento River near San Miguel, Calif.....	162
San Antonio River at Pleyto, Calif.....	163
Salinas River near Bradley, Calif.....	164
San Lorenzo Creek below Bitterwater Creek, near King City, Calif.....	164
Arroyo Seco near Soledad, Calif.....	165
Salinas River near Spreckels, Calif.....	166
Pajaro River basin.....	167
Pacheco Creek near Dunneville, Calif.....	167
Llagas Creek near Morgan Hill, Calif.....	168
Uvas Creek near Morgan Hill, Calif.....	168
San Benito River below McCoy Creek, near Hernandez, Calif.....	169
San Benito River near Willow Creek School, Calif.....	170
Tres Pinos Creek near Tres Pinos, Calif.....	171
San Benito River near Hollister, Calif.....	171
Pajaro River at Chittenden, Calif.....	172
Corralitos Creek near Corralitos, Calif.....	173
Corralitos Creek at Freedom, Calif.....	174
Aptos Creek basin.....	174
Aptos Creek at Aptos, Calif.....	174
Soquel Creek basin.....	175
West Branch Soquel Creek near Soquel, Calif.....	175
Soquel Creek at Soquel, Calif.....	175
San Lorenzo River basin.....	176
Zayante Creek at Zayante, Calif.....	176
San Lorenzo River at Big Trees, Calif.....	177
Branciforte Creek at Santa Cruz, Calif.....	178
Scott Creek basin.....	179
Scott Creek above Little Creek, near Davenport, Calif.....	179
Pescadero Creek basin.....	179
Pescadero Creek near Pescadero, Calif.....	179
Purissima Creek basin.....	180
Purissima Creek near Half Moon Bay, Calif.....	180
Atherton Drainage Channel basin.....	181
Sharon Creek near Menlo Park, Calif.....	181
San Francisquito Creek basin.....	181
San Francisquito Creek tributary near Stanford University, Calif.....	181
Los Trancos Creek tributary near Stanford University, Calif.....	182
Los Trancos Creek at Stanford University, Calif.....	182
San Francisquito Creek at Stanford University, Calif.....	183
San Francisquito Creek at Palo Alto, Calif.....	183

Flood records at gaging stations and miscellaneous sites—Continued	Page
Matadero Creek basin.....	184
Matadero Creek at Palo Alto, Calif.....	184
Stevens Creek basin.....	185
Stevens Creek near Cupertino, Calif.....	185
Guadalupe River basin.....	185
Alamitos Creek near Edenvale, Calif.....	185
Guadalupe Creek at Guadalupe, Calif.....	186
Los Gatos Creek at Los Gatos, Calif.....	187
Los Gatos Creek below Los Gatos, Calif.....	187
Guadalupe River at San Jose, Calif.....	188
Saratoga Creek at Saratoga, Calif.....	189
Coyote Creek basin.....	190
Coyote Creek near Madrone, Calif.....	190
Coyote Creek at Coyote, Calif.....	191
Coyote Creek near Edenvale, Calif.....	191
Alameda Creek basin.....	192
Arroyo Valle near Livermore, Calif.....	192
Arroyo Valle at Pleasanton, Calif.....	193
Alameda Creek near Niles, Calif.....	193
San Lorenzo Creek basin.....	194
San Lorenzo Creek at Hayward, Calif.....	194
Pinole Creek basin.....	195
Pinole Creek at Pinole, Calif.....	195
Pacheco Creek basin.....	196
San Ramon Creek at San Ramon, Calif.....	196
San Ramon Creek at Walnut Creek, Calif.....	196
Walnut Creek at Walnut Creek, Calif.....	197
Tulare Lake basin.....	198
Los Gatos Creek above Nunez Canyon, near Coalinga, Calif.....	198
Los Gatos Creek near Coalinga, Calif.....	199
Warthan Creek tributary No. 1 near Coalinga, Calif.....	199
Warthan Creek tributary No. 2 near Coalinga, Calif.....	199
San Joaquin River basin.....	200
Fine Gold Creek near Friant, Calif.....	200
Panoche Creek below Silver Creek, near Panoche, Calif.....	200
Little Panoche Creek tributary No. 1 near Panoche, Calif.....	201
Wolf Creek near Volta, Calif.....	201
San Luis Creek near Los Banos, Calif.....	202
Orestimba Creek near Newman, Calif.....	202
Del Puerto Creek tributary No. 1 near Patterson, Calif.....	203
Del Puerto Creek tributary No. 2 near Patterson, Calif.....	204
Corral Hollow Creek near Tracy, Calif.....	204
Mountain House Creek tributary near Altamont, Calif.....	205
Mountain House Creek near Midway, Calif.....	205
Marsh Creek near Byron, Calif.....	205
Sacramento River basin.....	206
Middle Fork Cottonwood Creek near Ono, Calif.....	206
North Fork Cottonwood Creek at Ono, Calif.....	207
North Fork Cottonwood Creek near Igo, Calif.....	207
Cottonwood Creek near Cottonwood, Calif.....	208
Elder Creek near Paskenta, Calif.....	209
Elder Creek near Henleyville, Calif.....	210

Flood records at gaging stations and miscellaneous sites—Continued

Sacramento River basin—Continued	Page
Elder Creek at Gerber, Calif.....	210
Thomes Creek at Paskenta, Calif.....	211
Stony Creek above Stony Gorge Reservoir, Calif.....	213
Stony Creek near Fruto, Calif.....	213
Stony Creek below Black Butte Dam, near Orland, Calif.....	214
Stony Creek near Hamilton City, Calif.....	214
Adobe Creek near Kelseyville, Calif.....	216
Highland Creek near Kelseyville, Calif.....	216
Kelsey Creek near Kelseyville, Calif.....	217
North Fork Cache Creek near Lower Lake, Calif.....	218
Bear Creek near Rumsey, Calif.....	219
Cache Creek at Yolo, Calif.....	219
Putah Creek tributary near Whispering Pines, Calif.....	221
Putah Creek near Guenoc, Calif.....	221
Putah Creek near Winters, Calif.....	222
Putah Creek at Winters, Calif.....	223
Putah Creek near Davis, Calif.....	223
Napa River basin.....	224
Sulphur Creek near St. Helena, Calif.....	224
Napa River near St. Helena, Calif.....	225
Lake Hennessey tributary near Rutherford, Calif.....	226
Conn Creek near St. Helena, Calif.....	226
Dry Creek near Napa, Calif.....	227
Sonoma Creek basin.....	227
Sonoma Creek near Kenwood, Calif.....	227
Sonoma Creek at Boyes Hot Springs, Calif.....	228
Petaluma River basin.....	228
Petaluma River at Petaluma, Calif.....	228
Novato Creek basin.....	229
Novato Creek near Novato, Calif.....	229
Corte Madera Creek basin.....	230
Corte Madera Creek at Ross, Calif.....	230
Lagunitas Creek basin.....	231
Nicasio Creek near Point Reyes Station, Calif.....	231
Russian River basin.....	232
Russian River near Ukiah, Calif.....	232
East Fork Russian River tributary near Potter Valley, Calif.....	232
East Fork Russian River near Calpella, Calif.....	233
East Fork Russian River near Ukiah, Calif.....	234
Robinson Creek near Ukiah, Calif.....	234
Slide Creek near Ukiah, Calif.....	235
Russian River near Hopland, Calif.....	235
Feliz Creek near Hopland, Calif.....	236
Russian River near Cloverdale, Calif.....	237
Big Sulphur Creek near Cloverdale, Calif.....	237
Franz Creek near Kellogg, Calif.....	238
Russian River near Healdsburg, Calif.....	239
Dry Creek tributary near Hopland, Calif.....	240
Dry Creek near Cloverdale, Calif.....	240
Dutcher Creek near Asti, Calif.....	241
Mark West Creek at Mark West Springs, Calif.....	241
Russian River near Guerneville, Calif.....	242

Flood records at gaging stations and miscellaneous sites—Continued	Page
Gualala River basin.....	243
South Fork Gualala River near Annapolis, Calif.....	243
Garcia River basin.....	243
Garcia River near Point Arena, Calif.....	243
Navarro River basin.....	244
Navarro River near Navarro, Calif.....	244
Noyo River basin.....	245
Noyo River near Fort Bragg, Calif.....	245
Mattole River basin.....	245
Mattole River near Petrolia, Calif.....	245
North Fork Mattole River at Petrolia, Calif.....	246
Eel River basin.....	247
Eel River at Van Arsdale Dam, near Potter Valley, Calif.....	247
Outlet Creek near Longvale, Calif.....	248
Eel River above Dos Rios, Calif.....	249
Black Butte River near Covelo, Calif.....	249
Middle Fork Eel River below Black Butte River, near Covelo, Calif.....	250
Middle Fork Eel River near Covelo, Calif.....	251
Short Creek near Covelo, Calif.....	251
Mill Creek near Covelo, Calif.....	252
Eel River below Dos Rios, Calif.....	252
North Fork Eel River near Mina, Calif.....	253
Eel River at Alderpoint, Calif.....	254
South Fork Eel River near Branscomb, Calif.....	255
Tenmile Creek near Laytonville, Calif.....	256
South Fork Eel River near Miranda, Calif.....	256
Eel River at Scotia, Calif.....	257
Van Duzen River near Dinsmores, Calif.....	258
South Fork Van Duzen River near Bridgeville, Calif.....	259
Van Duzen River at Bridgeville, Calif.....	259
Van Duzen River near Bridgeville, Calif.....	260
Yager Creek near Carlotta, Calif.....	261
Elk River basin.....	261
Elk River near Falk, Calif.....	261
Jacoby Creek basin.....	262
Jacoby Creek near Freshwater, Calif.....	262
Mad River basin.....	263
Mad River near Forest Glen, Calif.....	263
North Fork Mad River near Korbelt, Calif.....	263
Mad River near Arcata, Calif.....	264
Little River basin.....	265
Little River at Crannell, Calif.....	265
Redwood Creek basin.....	266
Redwood Creek near Blue Lake, Calif.....	266
Redwood Creek at Orick, Calif.....	266
Selected references.....	268
Index.....	269

ILLUSTRATIONS

[Plates are in pocket]

PLATE 1, 2. Maps of Pacific slope basins in California showing—	
1. Gaging stations and flood-frequency regions A and B.	
2. Mean annual precipitation.	
FIGURE 1. Map of conterminous United States showing area covered by this report.....	Page 3
2-7. Nomographs for computing floods of indicated frequency in region A:	
2. 1.2 years.....	13
3. 2.33 years.....	14
4. 5 years.....	15
5. 10 years.....	16
6. 25 years.....	17
7. 50 years.....	18
8-13. Nomographs for computing floods of indicated frequency in region B:	
8. 1.2 years.....	19
9. 2.33 years.....	20
10. 5 years.....	21
11. 10 years.....	22
12. 25 years.....	23
13. 50 years.....	24
14. Flood magnitude-frequency curve for stream-gaging station in illustrative problem.....	27

TABLES

TABLE 1. Summary of regression equations.....	Page 25
2. Maximum and mean annual floods and hydrologic characteristics at gaging stations used to define regional flood-frequency relations.....	32
3. Maximum floods at gaging stations not used to define regional flood-frequency relations.....	40
4. Peak discharges at miscellaneous sites and unusual floods at short-term gaging stations.....	47

MAGNITUDE AND FREQUENCY OF FLOODS IN THE UNITED STATES

PART 11. PACIFIC SLOPE BASINS IN CALIFORNIA— COASTAL BASINS SOUTH OF THE KLAMATH RIVER BASIN AND CENTRAL VALLEY DRAINAGE FROM THE WEST

By L. E. YOUNG and R. W. CRUFF

ABSTRACT

This report presents a method for determining the probable magnitude of floods for any recurrence interval between 1.2 and 50 years for any stream, gaged or ungaged, in the area studied. This report and a companion report (U.S. Geological Survey Water-Supply Paper 1686) cover the region designated as "Part 11" in the series of Geological Survey reports entitled "Surface Water Supply of the United States." The area covered by this report includes those streams in California that drain into the Pacific Ocean between Mexico on the south and the Klamath River basin on the north, plus those streams that drain from the west into the Central Valley south of the Clear Creek basin. The area has been divided into two regions of differing flood-frequency characteristics.

The hydrologic basin characteristics having the most significant effect on the flood magnitude were drainage area, mean annual precipitation, and altitude. These were used as independent variables to derive equations for determining flood magnitudes with recurrence intervals of 1.2, 2.33, 5, 10, 25, and 50 years. From the equations, flood magnitude-frequency relations can be constructed. The procedure for computing flood magnitude is not applicable at sites where the drainage area is less than 10 square miles or where the usable storage exceeds 4.5 million cubic feet (103 acre-feet) per square mile.

INTRODUCTION

PURPOSE AND SCOPE

This volume is one of a series of flood-frequency reports covering the conterminous United States. The objectives of this report are (1) to present all significant flood-peak data for the region covered by the report and (2) to present relations derived from an analysis of the flood data whereby the flood magnitude and its probability of occurrence at any site on any stream in the area, with certain limitations, can be evaluated. The limitations are discussed in the section of the report titled "Selection of gaging-station records."

The area covered by this report, volume 1, and a companion report, volume 2, U.S. Geological Survey Water-Supply Paper 1686, comprises the Pacific slope basins in California and is combined in a single report designated Part 11 in the series of reports published by the Geological Survey entitled "Surface Water Supply of the United States." The two volumes are needed in the current nationwide series entitled "Magnitude and Frequency of Floods in the United States" because the flood data for Part 11 are too voluminous to be contained in a single report. Figure 1 shows the Part 11 area in the conterminous United States. The area covered by this report is shaded and includes those streams that drain into the Pacific Ocean between Mexico on the south and the Klamath River basin on the north, plus those streams that drain from the west into the Central Valley south of Clear Creek. The report area, in turn, was divided into two regions. This division was not arbitrary; the regional boundaries were established on the basis of topography, physiography, and flood magnitude-frequency characteristics that are described in this study.

The relation between flood peaks and hydrologic characteristics was investigated by a multiple-regression analysis of the data. The hydrologic characteristics that were considered included topographic, climatic, and runoff variables. Statistical tests were applied to eliminate those hydrologic characteristics that were not significant. The equations defined are based on a comprehensive study of all flood data available in the area and provide a means for determining the most probable flood magnitude for any recurrence interval between 1.2 and 50 years, within the scope of the data.

Flood-peak data through the 1965 water year for gaging stations with 5 years or more of record prior to the 1964 water year are tabulated in this report, and, in addition, significantly large flood peaks at miscellaneous sites and at gaging stations with less than 5 years of record are included.

ACKNOWLEDGMENTS

This report was prepared in the Menlo Park district office of the Water Resources Division, U.S. Geological Survey, under the general direction of Walter Hofmann, district chief for California. Technical guidance and review were furnished by A. Rice Green and M. A. Benson, hydrologists, U.S. Geological Survey, Washington, D.C., and S. E. Rantz, hydrologist, U.S. Geological Survey, Menlo Park, Calif. Acknowledgment is made of the contributions to this report, primarily in the assembling of the data, by E. D. Cobb and Maxine A. Rose, hydraulic engineer and engineering technician, respectively, U.S. Geological Survey, Menlo Park, Calif.

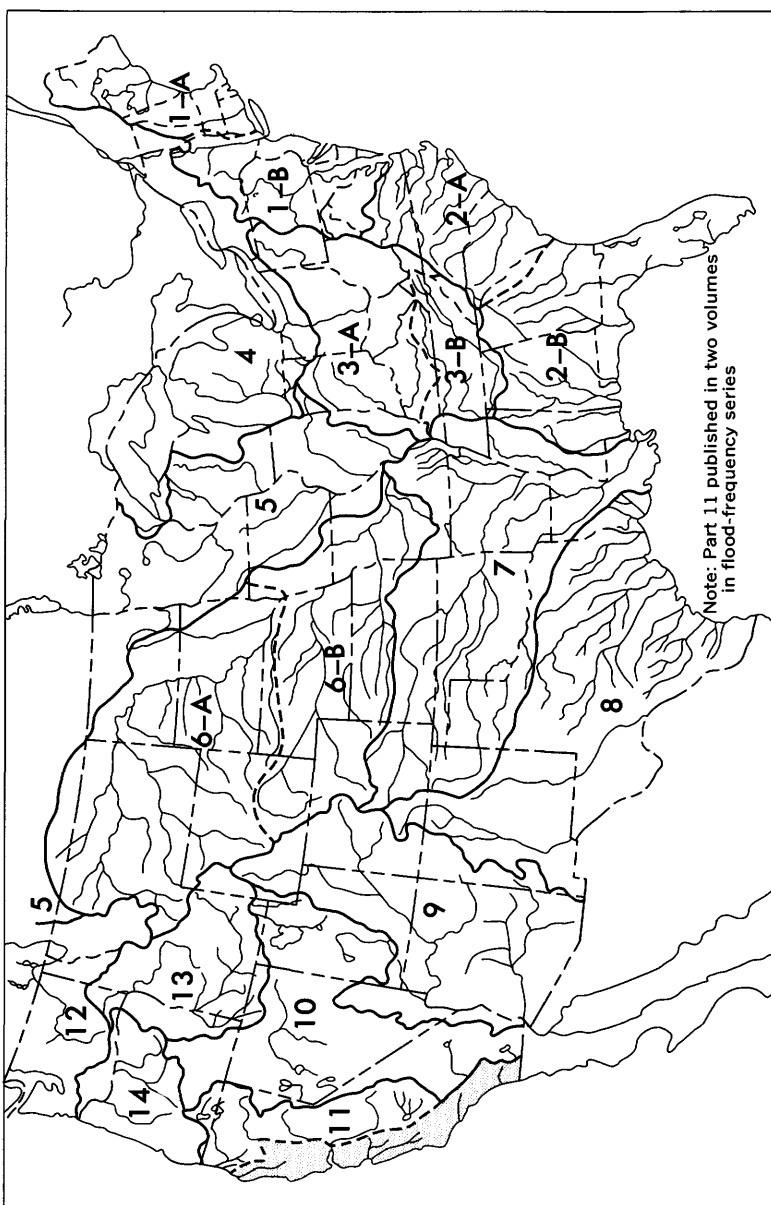


FIGURE 1.—Map of conterminous United States. The area covered by this report is shaded.

The streamflow records used, unless otherwise stated, were collected by the U.S. Geological Survey in cooperation with many Federal, State, county, and municipal agencies. Detailed acknowledgment of cooperation is given in the series of water-supply papers published by the Geological Survey entitled "Surface Water Supply of the United States, Part 11, Pacific slope basins in California."

FLOOD-FREQUENCY ANALYSIS

Flood data can be analyzed as an annual flood series or as a partial-duration series. An annual flood series consists of the highest momentary peak discharge for each water year. A partial-duration series includes all peaks above a selected base discharge, regardless of their relation to a given time period. The two methods have been shown to give virtually the same results for recurrence intervals greater than 10 years (Langbein, 1949). Owing to the fact that most designers are interested in flood magnitudes with recurrence intervals of 10 years or more, the choice of series is of little practical importance. However, because of its relative simplicity, theoretical soundness (Chow, 1950), and availability of the data, the annual flood series was used for this report.

After selecting the type of flood series, it is necessary to decide on one of the several methods available for analyzing the flood magnitude-frequency relation. In the past the Geological Survey has used a method described by Dalrymple (1960) and now widely known as the index-flood method. However, as a part of the continual appraisal of methodology, another method was investigated and described by Benson (1962 and 1964). This method based on the correlation of flood magnitudes with significant hydrologic variables of the basin has been shown by Cruff and Rantz (1965) to be an improvement over the index-flood method, and consequently was used to define the flood magnitude-frequency relations presented in this report.

SELECTION OF GAGING-STATION RECORDS

The U.S. Geological Survey (1959, 1960, and 1964) compilation reports contain streamflow data collected by the Survey prior to September 30, 1960 for all gaging stations in the Part 11 area. These reports were used to ensure that all available streamflow records were considered for inclusion in this report. Flood-peak data at miscellaneous sites and at gaging stations are included in the tables of this report. However, only those stations with at least 10 years of record prior to the 1964 water year were considered for use in the flood-frequency analysis.

There are several reasons why some of the gaging-station records that were considered could not be used in the analysis. Obviously, those that contain annual peak discharges seriously affected by artificial storage or diversion could not be used. However, where possible, diversion and flow in the stream were combined to provide a usable record of flood peaks.

Criteria for deciding when a station with at least 10 years of stream-flow record was not suitable for use in the flood-frequency analysis are listed below.

1. Ten annual momentary maximum discharges not available. Station records with 10 years of streamflow data do not always contain annual peaks for all 10 years. Also, some of the older records contain daily maximum discharges rather than momentary maximums, and unless the daily figures could be adjusted to give reliable figures of momentary maximum discharges they were not used.
2. Less than 25-percent difference between drainage areas of adjacent stations on the same stream, the percentage difference being based on the size of the smaller drainage area. Only the station with the longer record was used unless there was a period of nonoverlapping record. If a nonoverlapping period existed, the shorter record was combined with the longer record by a ratio based on the size of the drainage areas.
3. More than 4.5 million cubic feet (103 acre-feet) of usable storage per square mile (Benson, 1962, p. 8). If record was available for at least 10 years prior to the construction of reservoirs that caused the criterion to be exceeded, the record prior to that time was used.
4. Some special indication of excessive diversion or regulation, even though not exceeding the usable storage criterion. A situation of this kind may arise where the gage is directly below a large reservoir.
5. Drainage areas smaller than 10 square miles. Only a few records are available on streams in this category, and most of them are grouped in one part of the study area. A project is presently (1965) underway to obtain data needed to define flood magnitude-frequency relations throughout California for small streams.

After the above criteria were met, records from 138 gaging stations remained for use in the flood-frequency analysis for the area covered by this report. The location of gaging stations not excessively regulated by storage or diversion and with 5 or more years of record prior to the 1964 water year is shown in plate 1. The 138 gaging sta-

tions used in the flood-frequency analysis are shown by solid circles, and those tabulated but not used are shown by open circles.

FLOOD FREQUENCY AT A GAGING STATION

Many of the gaging-station records used in this study were short-time samples, but in order to obtain reasonable areal coverage it was necessary that they be used. Whenever possible, the time base of the short-term stations was extended by graphically correlating the available annual peak discharges with peak discharges from one or more nearby long-term stations. The correlation, providing it appeared reasonable, was then used to estimate annual peaks for the years without record at the short-term station.

When the record of annual peaks for a station was ready for analysis, each peak was assigned an order number according to its magnitude, starting with the largest as number 1. Next, the plotting position or recurrence interval, T , for each of the peaks was computed by means of the formula

$$T = \frac{n+1}{m}$$

where n = the number of years of record and m = the relative magnitude (order number) of the event.

The recurrence intervals were adjusted, where appropriate, on the basis of historical or qualitative information. For example, several stations in northwestern California have 34 years of record (1932-65), and the 1965 and 1956 peaks are greatest and second greatest, respectively, during the period of record. Without considering historical information prior to 1932, the recurrence intervals for these two floods would be 35 and 17.5 years, respectively. However, in 1862 a flood estimated to be about equal in magnitude to the 1956 flood occurred, and local records reaching back to 1853 indicate that the peaks of 1862 and 1956 were exceeded only by the 1965 peak. Therefore, the 1965 peak has an order of magnitude of 1 in at least 112 years, giving it a recurrence interval of 113 years instead of the 35 years originally computed. Furthermore, the two peak discharges that occurred in 1862 and 1956 have orders of magnitude of 2 and 3 in 112 years, giving them recurrence intervals of 56.5 and 37.7 years, respectively. The recurrence intervals for other peaks during the period of record were not adjusted. All recorded peaks were then plotted at their appropriate recurrence intervals on extreme-value probability paper (Powell, 1943), and a straight line or gentle curve of best fit was drawn by eye. Estimated peaks were not plotted; their only purpose was to adjust the time base (order number) of the recorded peaks. Because the computed recurrence intervals of the larger (less frequent) floods are not as reliable as

those of the smaller (more frequent) floods, the larger floods tend to scatter more than the smaller floods when plotted on extreme-value probability paper.

Peak-discharge values were selected from each frequency curve at recurrence intervals of 1.2, 2.33, 5, 10, 25, and 50 years. Flood magnitudes for the four shorter recurrence intervals were available for all sites. However, because of the limitations on using peak-discharge figures obtained by correlation, the magnitudes for the 25- and 50-year floods were not available at all sites. The table below lists the number of flood peaks available for analysis for each of the six recurrence intervals. The flood peaks are the dependent variables that were correlated with pertinent hydrologic characteristics.

<i>Recurrence interval (years)</i>	<i>Number of annual peaks</i>	
	<i>Region A</i>	<i>Region B</i>
1.2-----	105	33
2.33-----	105	33
5-----	105	33
10-----	105	33
25-----	97	33
50-----	61	19

HYDROLOGIC CHARACTERISTICS

The rate of runoff from a basin is controlled by its many hydrologic characteristics. To describe the relation between peak discharge and the characteristics, it is first necessary to determine which of the hydrologic characteristics are significantly related to flood peaks and can also be evaluated numerically. Selection of the hydrologic characteristics used in this study was made on the basis of studies by others in this and other areas (for example, Benson, 1962), as well as from first-hand knowledge of the area. The hydrologic characteristics considered in this analysis can be separated into three groups: topography, climate, and runoff.

TOPOGRAPHY

Six topographic characteristics were considered in the analysis. They are drainage area, main-channel length, an index of main-channel slope, an index of basin altitude (above mean sea level), percentage of drainage area above an altitude of 5,000 feet, and percentage of drainage area covered by lakes and ponds. Geological Survey topographic maps of the 7.5- and 15-minute series were used in determining the various topographic characteristics.

The drainage area (*A*) is the area of the drainage basin, in square miles, measured in a horizontal plane. It is probably the most important of these characteristics. The drainage area for the stations used in the analysis ranges from 10 to 4,157 square miles.

The main-channel length (L) used in the analysis is the length, in miles, of the longest continuous stream channel from the gaging station to the drainage divide. The main-channel length for the stations used in this analysis ranges from 6.1 to 183 miles.

To determine the main-channel slope index (S), points at 10 and 85 percent of the total channel length upstream from the gaging station were located, and the altitude at these points was determined. The channel slope, in feet per mile, was computed as the difference in altitude divided by the distance between the two points. The slope index for the stations used in the analysis ranges from 8.7 to 810 feet per mile.

The basin-altitude index (E) used in the analysis is the average of the altitudes of the two points 10 and 85 percent of the distance along the main channel upstream from the gaging station. It is expressed in thousands of feet. The altitude index for the stations used in the analysis ranges from 0.36 to 5.97. The altitude index is a substitute for the more commonly used mean altitude of the basin. The altitude index was used because a high degree of correlation was found to exist between the altitude index and the mean altitude of the basin and because the altitude index is much easier to compute.

The percentage of the drainage basin above an altitude of 5,000 feet (A_2) was determined by placing a grid over a contour map of the entire drainage basin. The altitudes at the grid intersection points were then listed, and the percentage of the area above 5,000 feet was determined as the percentage of the listed altitudes that were above 5,000 feet. The values for the stations used in the analysis range from 0 to 86 percent.

The percentage of the drainage area covered by lakes and ponds (La), both natural and manmade, was determined by measuring the area of lakes and ponds within the basin and expressing it as a percentage of the drainage area of the basin. The percentage of the area covered by lakes and ponds for the stations used in the analysis ranges from 0 to 2.8 percent.

CLIMATE

Two climatic characteristics were considered for this analysis—mean annual precipitation and rainfall intensity. The mean annual precipitation (P) is the long-term average annual precipitation over the entire basin, in inches. A map with isohyets showing mean annual precipitation was used to determine the basinwide average of mean annual precipitation for each basin. The map is shown in plate 2. The mean annual precipitation for the basins used in this analysis ranges from 15 to 82 inches.

The rainfall intensity (I) used for the analysis is the 24-hour rainfall, in inches, with a recurrence interval of 25 years. This value was

determined for each basin from isohyets presented by the U.S. Weather Bureau (1961). The rainfall intensity for the basins used in the analysis ranges from 3.7 to 15 inches.

RUNOFF

The mean annual runoff (R), in inches, was the only runoff characteristic considered. A base period of 30 years (1934-63) was used. Many stations did not have discharge records for the entire base period, and such gaps in the record were filled by correlations with records for nearby stations. The mean annual runoff for the stations used in the analysis ranges from 0.11 to 70.2 inches.

MULTIPLE-REGRESSION PROCEDURES

Multiple regression is defined as the relation between one dependent and two or more independent variables. Use of multiple-regression analysis in flood magnitude-frequency studies requires the development of regression equations expressing flood magnitude as a function of hydrologic basin characteristics. Past experience has shown that the logarithms of peak discharges are linearly related to the logarithms of most hydrologic variables. The equations have the empirical form:

$$Q_T = aB^bC^cD^d \dots \quad (1)$$

where

Q_T = discharge, corresponding to a recurrence interval of T years;

a = regression constant;

b, c, d = regression coefficients; and

B, C, D = hydrologic characteristics.

The regression equation is derived by a least-square correlation of the T -year discharges with the corresponding hydrologic characteristics for all sites used in the analysis. Statistical tests are made so that those variables having little or no significance can be eliminated from the equation.

Electronic computing techniques allow rapid computation of regression equations, whereas previously computation either by desk calculator or by graphical solution was required. Computation by desk calculator for more than two variables is a slow, tedious process, and graphical solutions become subjective and often inaccurate for more than three variables. Thus, when numerous variables are used, the multiple-regression analysis is practical only if an electronic computer is available.

The multiple-regression computer program used in this analysis provides a wealth of statistical information. Computer input data

consisted of the flood discharges (dependent variables) for each of the selected recurrence intervals of T years and the hydrologic characteristics (independent variables) for the corresponding basins. Among other statistics, the output data consisted of simple correlation coefficients between each pair of variables, a multiple correlation coefficient, the regression equation constant and coefficients, and the standard error of estimate of the logarithms of the dependent variable. The computed values of the dependent variable, based on the derived regression equation, and the departure between the observed and computed values of the dependent variable for each station used in the analysis were also available. The observed values are those T -year floods which were used as input data for the computer.

The computer program used provided for the elimination of the least significant independent variable (hydrologic characteristic) after an equation was derived and recomputation of the data without this variable. This procedure was repeated until only one independent variable remained. This type of analysis made it possible to determine when no large improvement in the results was obtained by the use of additional hydrologic characteristics. The following table shows the amount of improvement indicated by the multiple-correlation coefficient and the standard error of estimate of the dependent variable. Improvement is indicated by the approach of the correlation coefficient and standard error to 1.0 and 0, respectively. It is evident from these data that the inclusion of other variables in addition to A , P , and E causes no significant improvement in the correlation coefficient or standard error.

<i>Hydrologic characteristics</i>	<i>Multiple-correlation coefficient</i>	<i>Standard error of estimate (percent)</i>
A -----	0.73	73
A, P -----	.93	38
A, P, E -----	.94	35
A, P, E, A_2 -----	.95	35
A, P, E, A_2, La -----	.95	36
A, P, E, A_2, La, R -----	.95	36
A, P, E, A_2, La, R, I -----	.95	37
$A, P, E, A_2, La, R, I, L$ -----	.95	37
$A, P, E, A_2, La, R, I, L, S$ -----	.95	38

REGIONAL ANALYSIS

Because of the lack of long-term records of natural flow for every stream, one must analyze the available data on a regional basis to derive a regression equation for estimating data for ungaged or short-record sites. For multiple-regression analysis, the regions used should be such that the available hydrologic characteristics will correlate reliably with T -year flood peaks within the region.

As a preliminary analysis, the entire area designated Part 11 was used as one flood-frequency region. The results from this analysis were used to determine if the Part 11 area could be used as a single homogeneous flood-frequency region or whether it would be desirable to delineate smaller regions. Also, this analysis was used to eliminate hydrologic characteristics that were found to be insignificant. On the basis of the preliminary analysis, the physiographic regions delineated by Fenneman (1931), and the major drainage divides, six flood-frequency regions were delineated. The area covered by this report contains two of these regions (pl. 1), each of which is described below. The remaining four regions are considered in a companion report, Water-Supply Paper 1686 (Young and Cruff, 1967).

SOUTH COAST REGION

The south coast region (A) includes streams in California that drain into the Pacific Ocean between Lower California (Mexico) on the south and San Francisco Bay on the north plus streams that drain from the west into the San Joaquin River valley (pl. 1). The region has a subhumid climate. Snow occurs at high altitudes but remains on the ground for only short periods of time. The altitude within the region ranges from sea level along the coast to 11,485 feet atop San Geronio Mountain in southern California. Most of the floods in the region are caused by general winter frontal-type storms that produce heavy runoff from large areas. A few floods are caused by local summer thunderstorms. Floods in the region are generally flashy with peaks lasting a short time.

NORTH COAST REGION

The north coast region (B) includes streams that drain into the Pacific Ocean between San Francisco Bay on the south and the Klamath River basin on the north plus streams that drain from the west into the Sacramento River south of the Clear Creek basin (pl. 1). The climate of the region ranges from subhumid to humid, with marked wet and dry seasons. The altitude ranges from sea level to more than 8,000 feet. Floods within the region are also caused by winter frontal-type storms, which cover large areas. Peaks from these floods generally last a short time.

REGRESSION EQUATIONS

Standard multiple-regression techniques as described by Benson (1962 and 1964) were used in analyzing the available flood data. As a result, equations relating floods of selected frequencies to selected

hydrologic characteristics have been developed for each flood-frequency region.

Drainage area, altitude, and mean annual precipitation were used at all selected recurrence intervals from 1.2 to 50 years to derive regression equations for use in region A. The equations are:

$$Q_{1.2} = 0.0014A^{0.54}E^{-0.67}P^{2.94} \quad (2)$$

$$Q_{2.33} = 0.0778A^{0.66}E^{-0.59}P^{2.20} \quad (3)$$

$$Q_5 = 1.02A^{0.67}E^{-0.44}P^{1.66} \quad (4)$$

$$Q_{10} = 5.12A^{0.65}E^{-0.28}P^{1.32} \quad (5)$$

$$Q_{25} = 21.4A^{0.63}E^{-0.09}P^{1.05} \quad (6)$$

$$Q_{50} = 137A^{0.55}E^{-0.02}P^{0.72} \quad (7)$$

Drainage area and mean annual precipitation were used to derive regression equations for recurrence intervals from 1.2 to 50 years for use in region B. The equations are:

$$Q_{1.2} = 0.155A^{0.80}P^{1.61} \quad (8)$$

$$Q_{2.33} = 1.74A^{0.77}P^{1.25} \quad (9)$$

$$Q_5 = 3.06A^{0.77}P^{1.21} \quad (10)$$

$$Q_{10} = 3.68A^{0.78}P^{1.22} \quad (11)$$

$$Q_{25} = 3.57A^{0.79}P^{1.27} \quad (12)$$

$$Q_{50} = 7.67A^{0.79}P^{1.14} \quad (13)$$

Equations 2 to 13 are shown in nomograph form on figures 2 to 13. Use of the nomographs is described in the section "Illustrative problem."

A summary of the regression equations is shown in table 1. The number of stations used to define the equation, the values of the regression constant and coefficients, the multiple-correlation coefficient, and the standard error is shown for each equation.

The standard error of estimate, here referred to as standard error, is a measure of the departure of the computed flood magnitudes from those observed. The computed standard errors ranged from 51 to 161 percent for region A and from 24 to 35 percent for region B. The percentages are the average of the plus and minus percentages computed from the standard errors in log units.

The coefficient of multiple correlation is determined by the ratio of the standard error of the estimated values to the standard deviation of the observed or original values of the dependent variable. It is a measure of the combined importance of the independent variables in explaining the variation in the dependent variable. A value of 1.0 would indicate a perfect correlation, whereas a value of 0 would indicate no correlation. The computed coefficients ranged from 0.605 to 0.841 for region A and from 0.965 to 0.978 for region B.

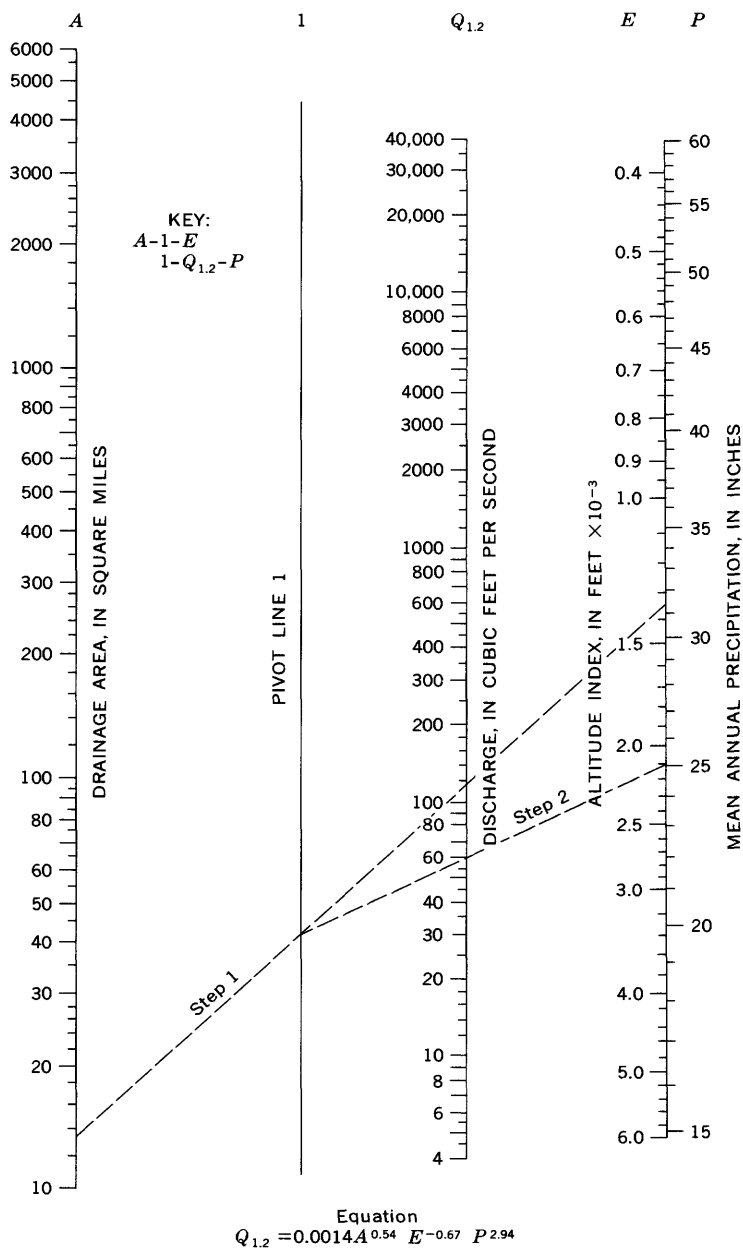


FIGURE 2.—Nomograph for computing 1.2-year flood in region A.

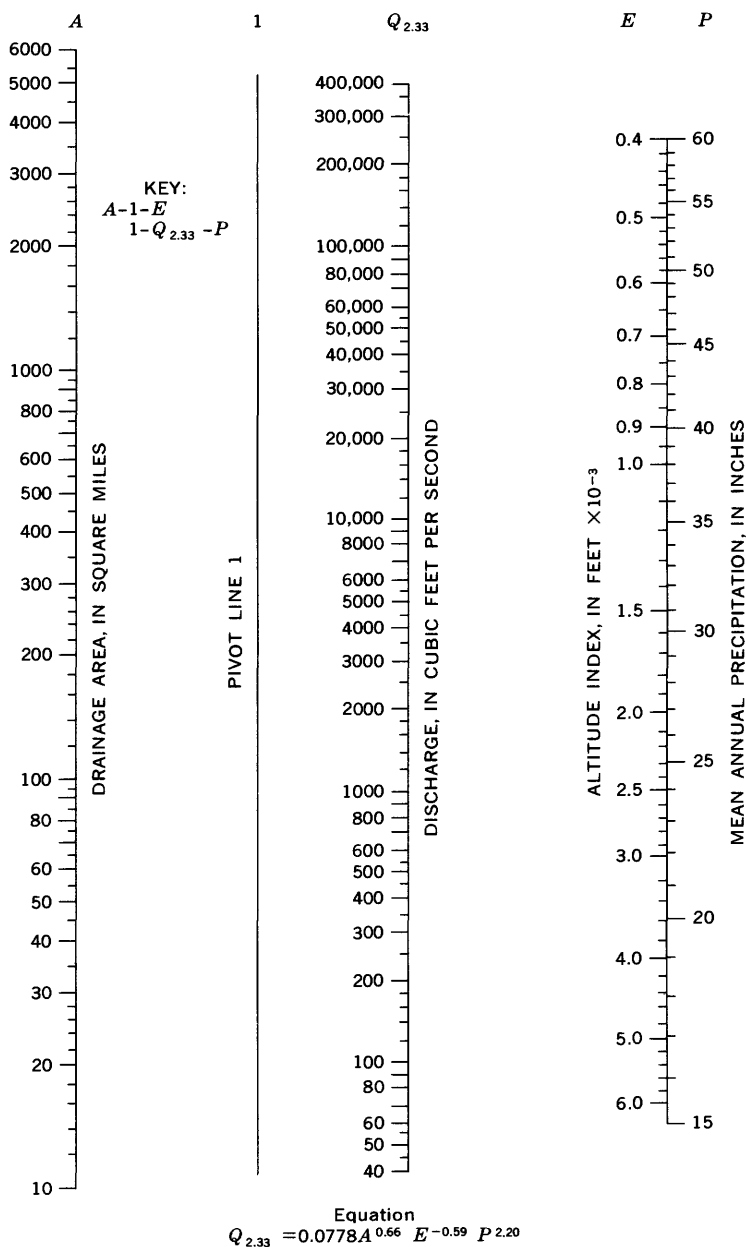


FIGURE 3.—Nomograph for computing 2.33-year flood in region A.

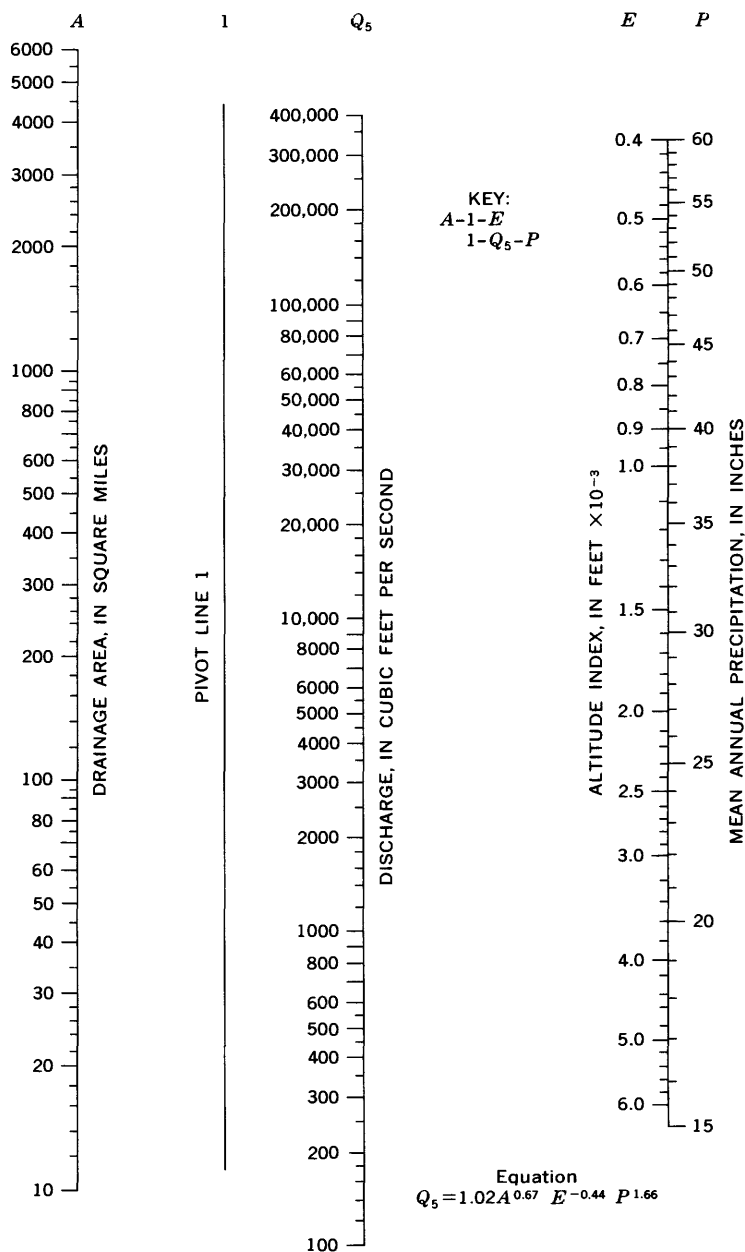
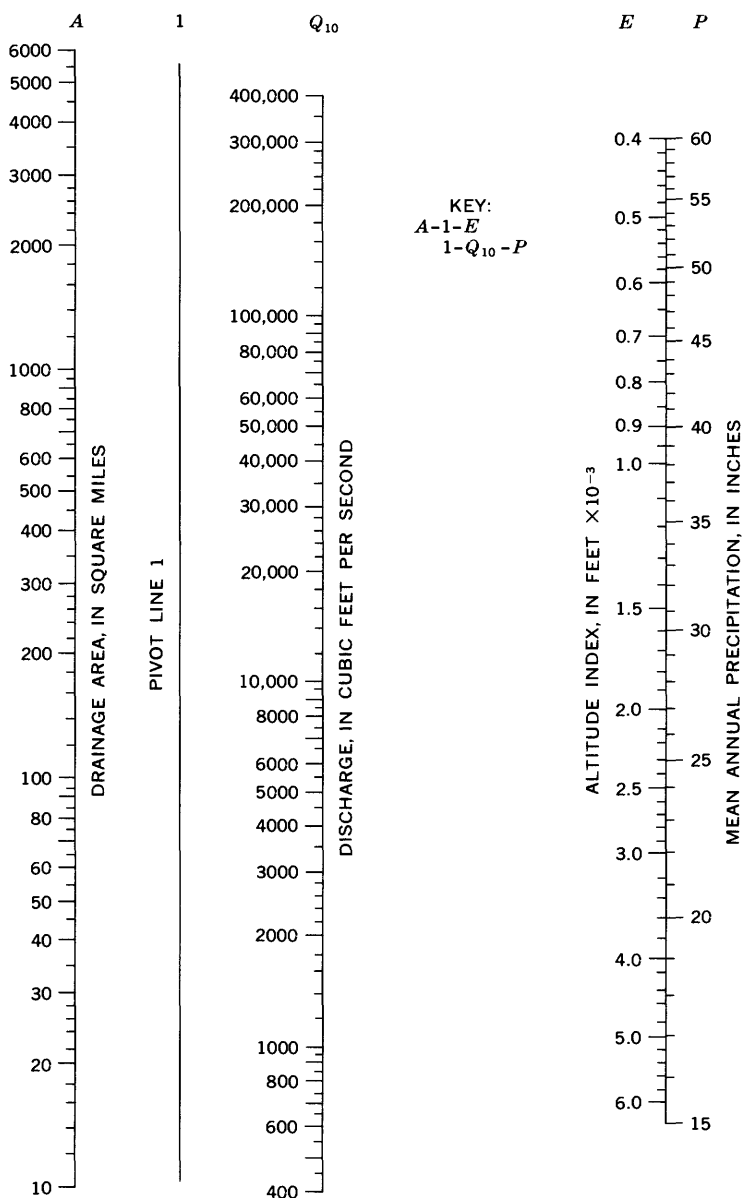


FIGURE 4.—Nomograph for computing 5-year flood in region A.



Equation
 $Q_{10} = 5.12 A^{0.65} E^{-0.28} P^{1.32}$

FIGURE 5.—Nomograph for computing 10-year flood in region A.

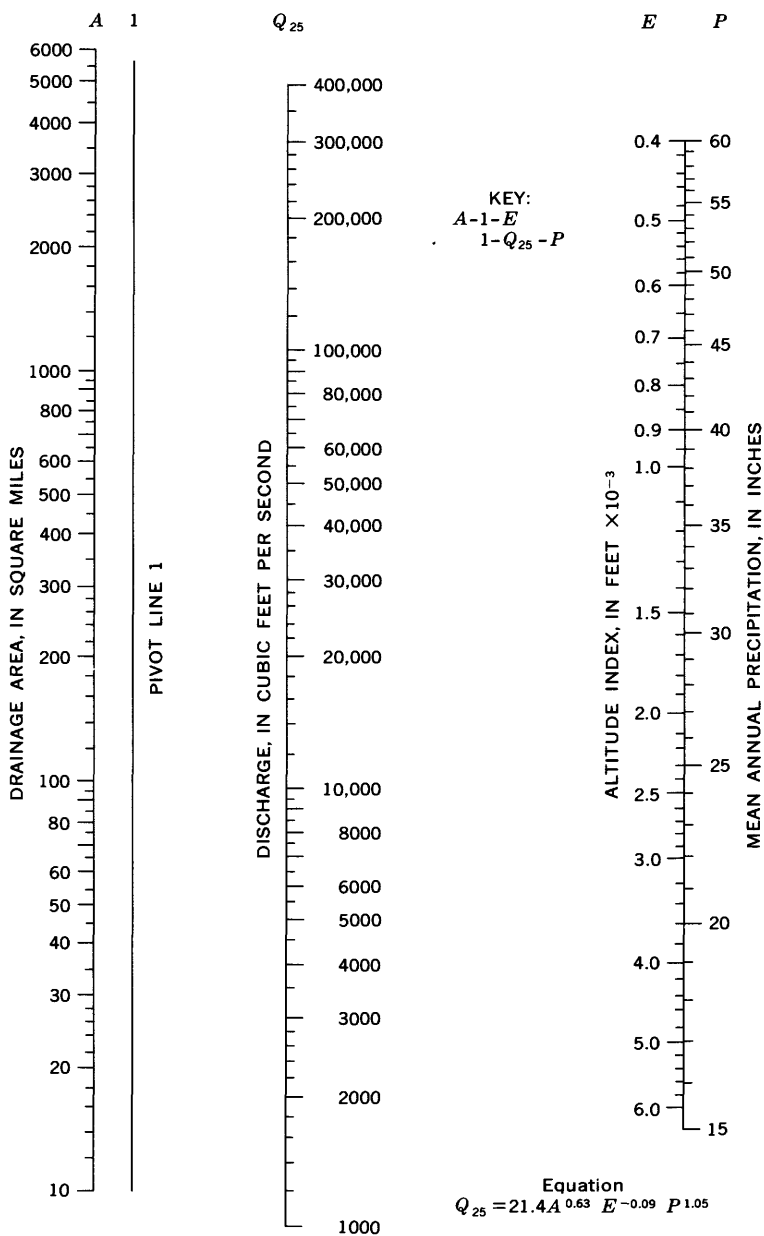


FIGURE 6.—Nomograph for computing 25-year flood in region A.

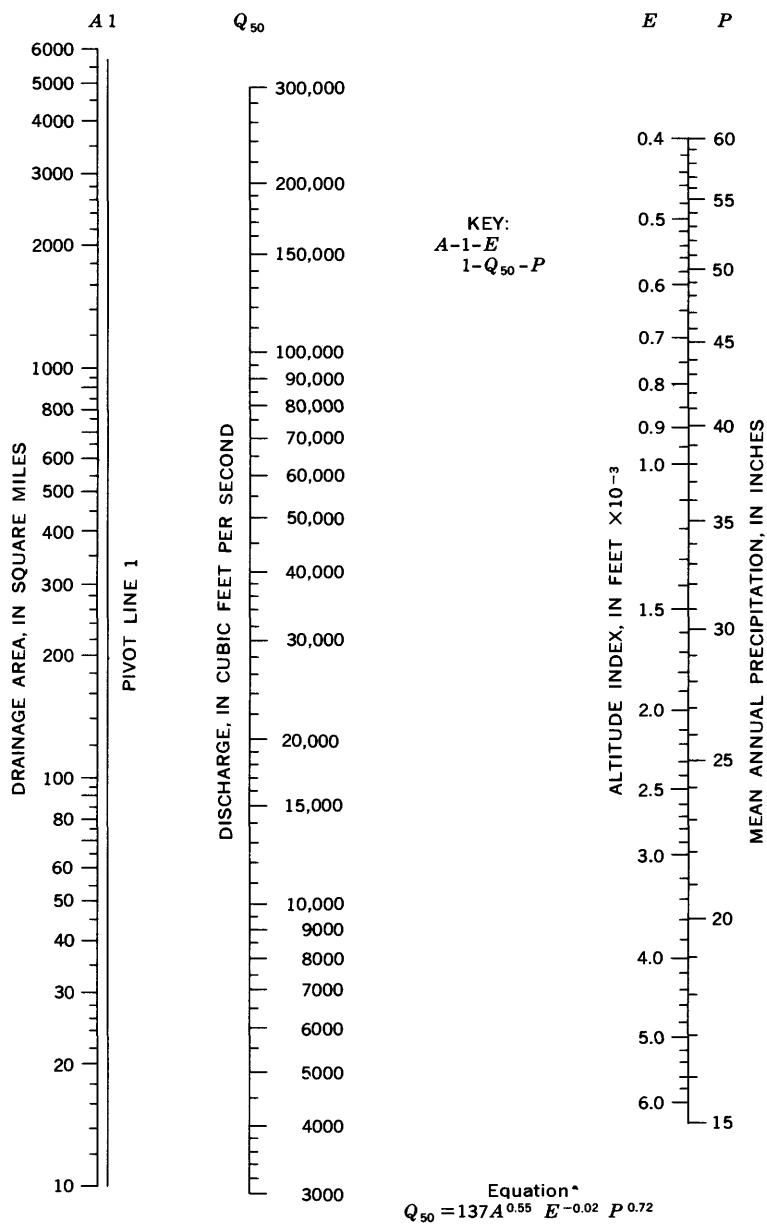


FIGURE 7.—Nomograph for computing 50-year flood in region A.

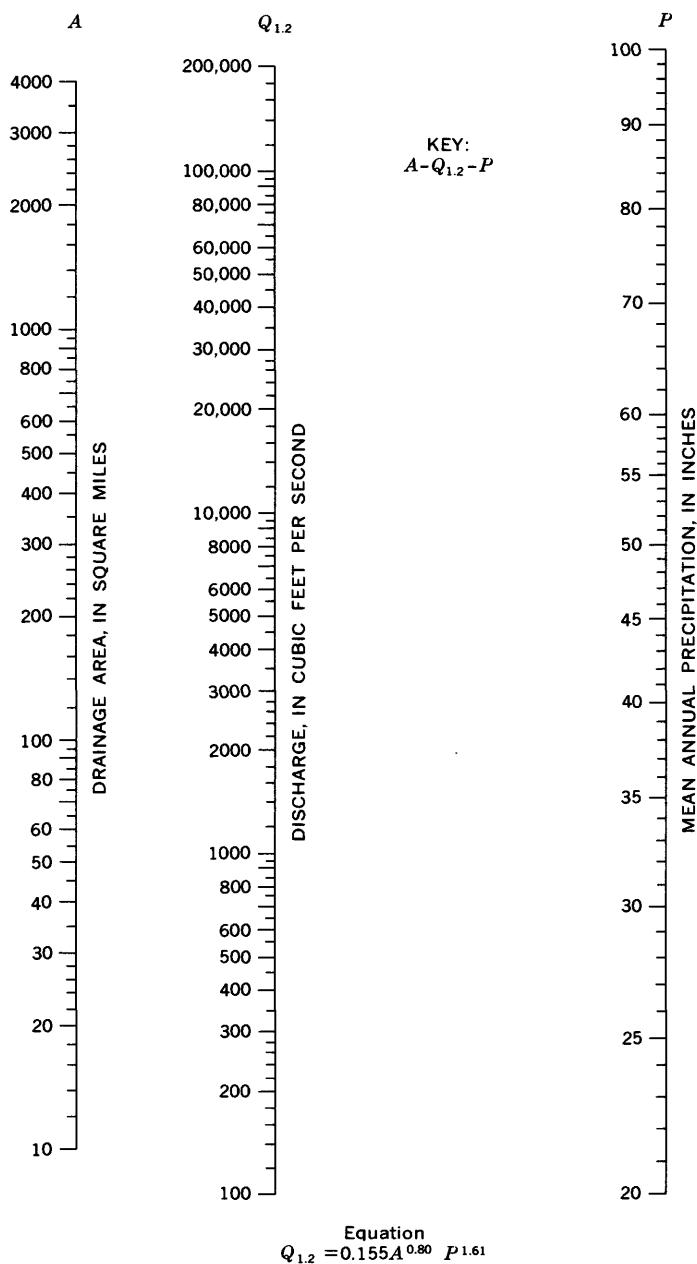


FIGURE 8.—Nomograph for computing 1.2-year flood in region B.

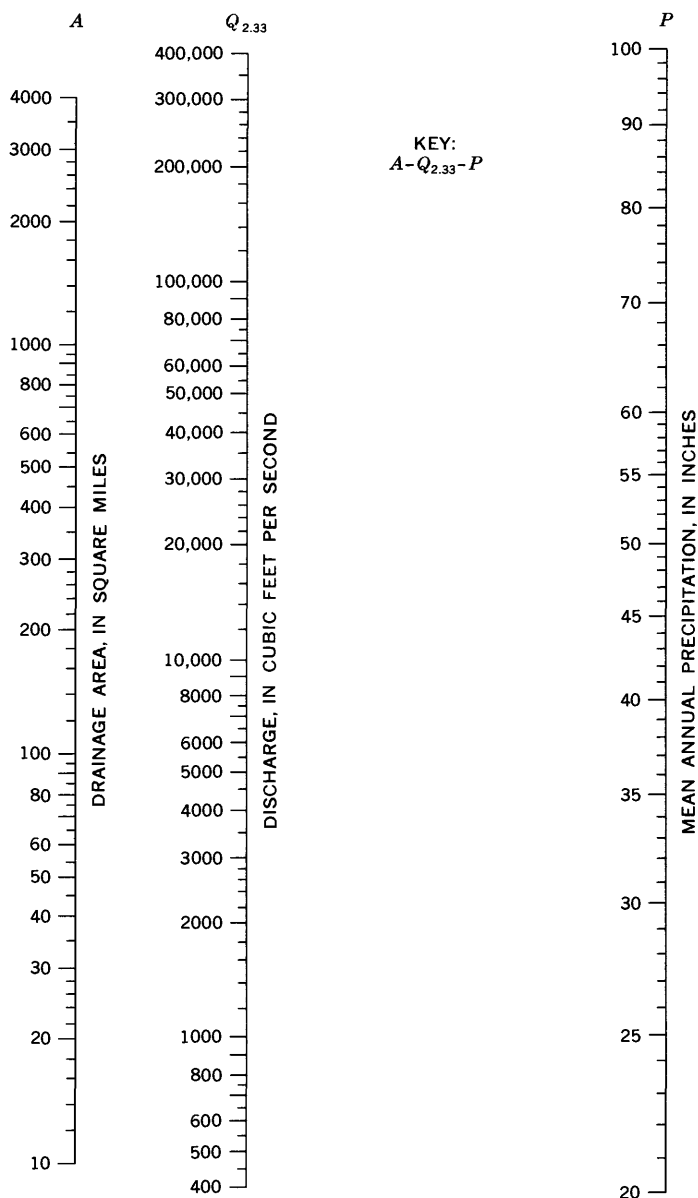


FIGURE 9.—Nomograph for computing 2.33-year flood in region B.

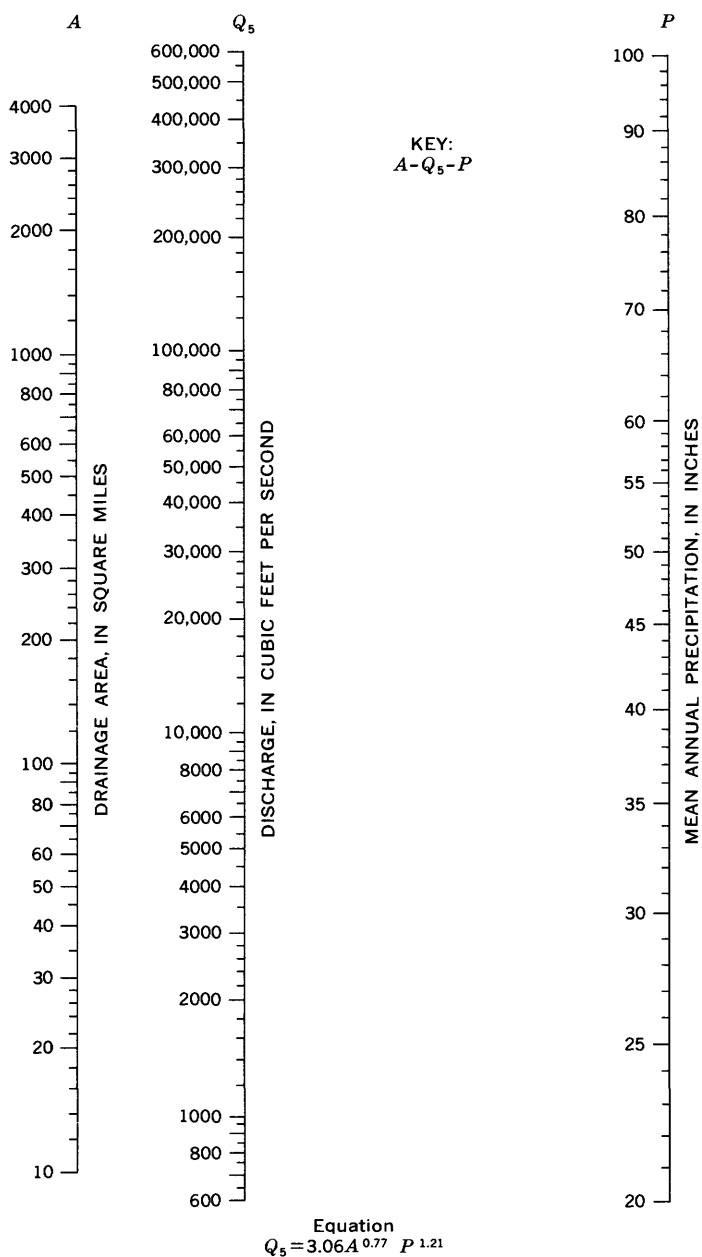


FIGURE 10.—Nomograph for computing 5-year flood in region B.

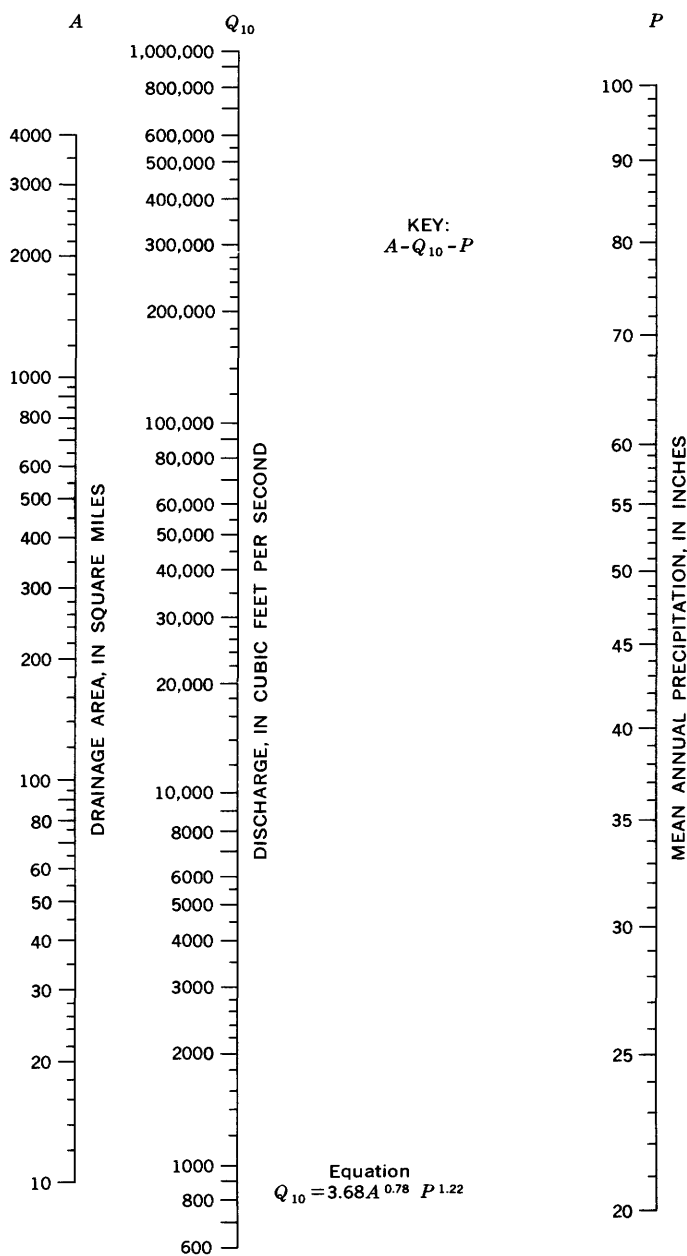


FIGURE 11.—Nomograph for computing 10-year flood in region B.

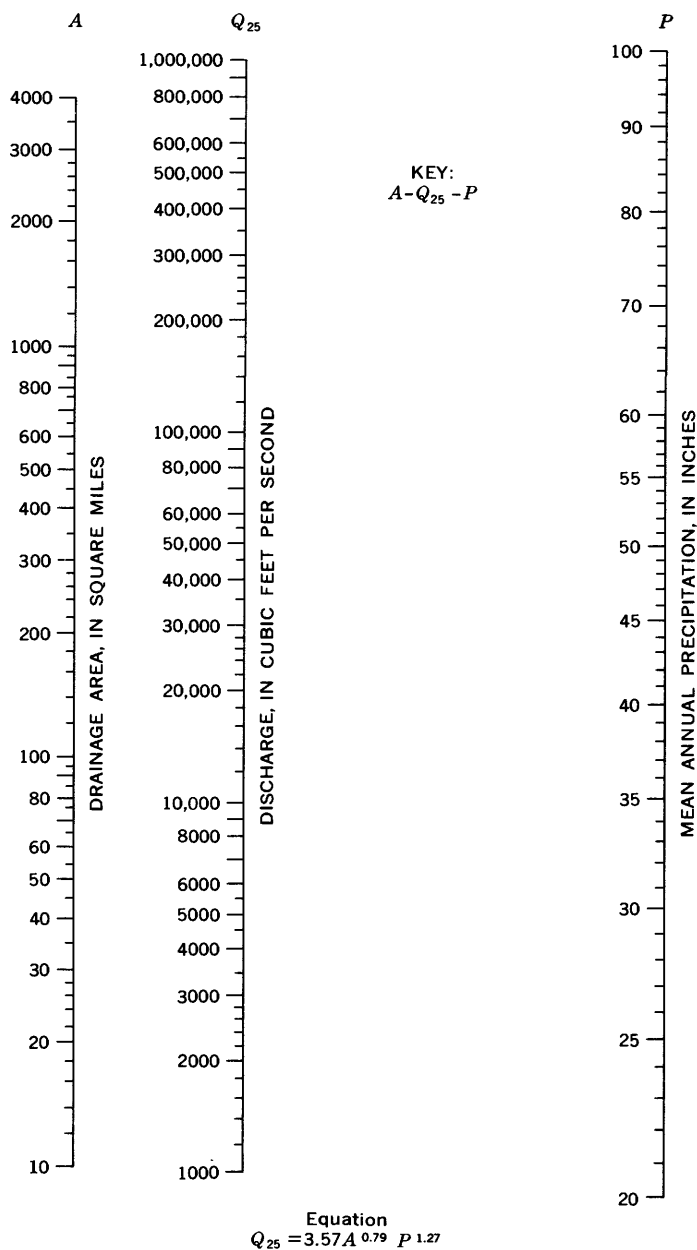


FIGURE 12.—Nomograph for computing 25-year flood in region B.

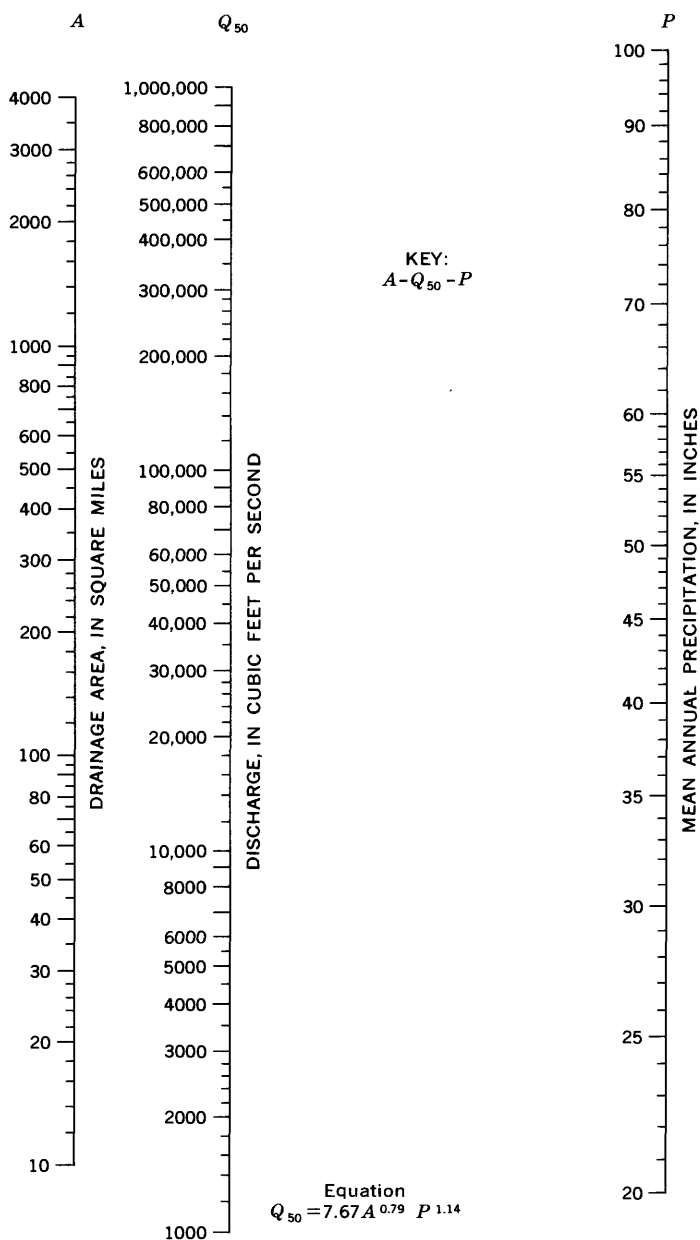


FIGURE 13.—Nomograph for computing 50-year flood in region B.

TABLE 1.—*Summary of regression equations*

[T =recurrence interval, in years. Number of stations shown is number used to determine regression equation $Q_T = aA^bE^cP^d$. Independent variables: A =drainage area, E =basin-altitude index, P =mean annual precipitation]

T	Number of stations	Regression constant a	Regression coefficients			Coefficient of multiple correlation	Standard error (percent)
			b	c	d		
Region A							
[Independent variables: A, E, P]							
1.2.....	105	0.0014	0.54	−0.67	2.94	0.60	161
2.33.....	105	.0778	.66	−.59	2.20	.78	77
5.....	105	1.02	.67	−.44	1.66	.83	58
10.....	105	5.12	.65	−.28	1.32	.84	55
25.....	97	21.4	.63	−.09	1.05	.82	55
50.....	61	137	.55	−.02	.72	.81	51
Region B							
[Independent variables: A, P]							
1.2.....	33	0.155	0.80	-----	1.61	0.96	35
2.33.....	33	1.74	.77	-----	1.25	.97	27
5.....	33	3.06	.77	-----	1.21	.98	26
10.....	33	3.68	.78	-----	1.22	.98	25
25.....	33	3.57	.79	-----	1.27	.98	27
50.....	19	7.67	.79	-----	1.14	.97	24

PROCEDURE FOR ESTIMATING FLOOD FREQUENCY

The equations presented in this report should not be used individually to determine the flood discharge for any selected recurrence interval. Instead, a flood magnitude-frequency relation should be developed by solving the equations for each flood level (recurrence intervals 1.2, 2.33 . . . 50 years) and plotting each computed discharge as a function of its frequency on probability paper. Any probability paper with frequency expressed either as a recurrence interval, T , or as probability of recurrence, p , where

$$p = \frac{1}{T}$$

can be used. Because of the inherent scatter in the data used to develop the equations, the plotted points may not lie on a smooth curve. A smooth curve, fitted by eye as closely as possible to the plotted points, should be drawn and used to represent the flood magnitude-frequency relation.

The general procedures in defining a flood-frequency relation for a site, gaged or ungaged, in the report area are:

1. Determine the hydrologic region in which the site is located by referring to plate 1.

2. Determine the significant hydrologic characteristics for the site: A , E , and P if in region A, or A and P if in region B. A and E are determined from topographic maps, and P is determined from plate 2.
3. Solve the equations or nomographs, applicable to the region—equations 2 to 7 if in region A and equations 8 to 13 if in region B.
4. Plot the computed flood discharges as a function of their frequencies on probability paper.
5. Draw a smooth curve through the plotted points.

ILLUSTRATIVE PROBLEM

To illustrate the computation procedure, assume that one is interested in the annual peak discharge having a recurrence interval of 50 years at gaging station 11-1195. The method used to determine this discharge is outlined below:

1. Determine the hydrologic region in which the site is located. It is in region A.
2. Determine the significant hydrologic characteristics for the site. In this example A , E , and P are used, where $A=13.1$ square miles, $E=1.34$, and $P=25$ inches.
3. From the equations or nomographs for region A, the discharges for the several recurrence intervals are determined. The nomographs are used by drawing a series of straight lines as indicated by the key on the nomograph. Figure 2, the nomograph for the 1.2-year flood in region A, is used here to illustrate the procedure. The key given on figure 2 indicates that the first step is to draw a straight line between the A and E scales, intersecting these scales at the appropriate values for the basin under study. The second step, according to the key, is to draw a straight line intersecting the pivot line (1) and the P scale. This line is drawn to intersect the pivot line at the same point as the line from the first step and to intersect the P scale at the appropriate precipitation value. The intercept of this line on the $Q_{1.2}$ scale is the discharge in cubic feet per second (cfs). In this way the various discharges were determined, as follows: $Q_{1.2}=60$ cfs, $Q_{2.33}=422$ cfs, $Q_5=1,040$ cfs, $Q_{10}=1,790$ cfs, $Q_{25}=3,130$ cfs, and $Q_{50}=5,060$ cfs.
4. Plot the discharges as a function of their recurrence interval, or probability of recurrence, and draw a smooth line through the points. Figure 14 shows the plot for this sample problem.
5. From figure 14 the discharge having a recurrence interval of 50 years is found to be 5,000 cfs.

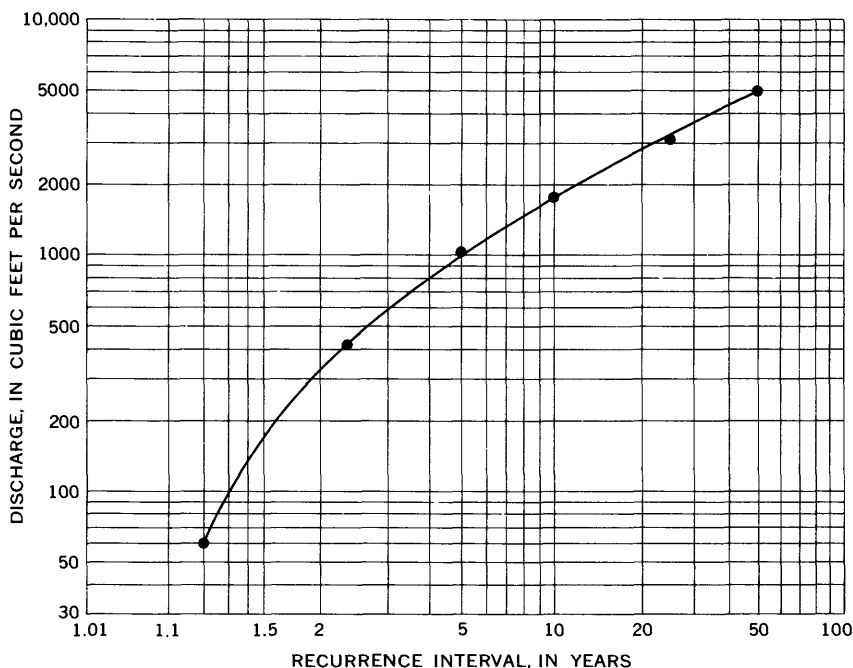


FIGURE 14.—Flood magnitude-frequency curve for stream-gaging station in illustrative problem.

The graph in figure 14 can also be used to determine the recurrence interval of any known discharge within the limits of the data. For example, from figure 14 the recurrence interval of a flood peak of 2,500 cfs at the gaging station is found to be 16 years.

LIMITATIONS

In using the methods presented in this report for determining flood magnitude-frequency relations, there are some limitations that should be considered. The limitation of primary importance is that the equations or nomographs apply only to sites within the hydrologic regions for which they were derived. Also, the procedure is not applicable to sites where the usable storage within the basin exceeds 4.5 million cubic feet (103 acre-feet) per square mile or where the site is just downstream from a large reservoir, even though the storage limitation is not exceeded. Furthermore, the procedure should not be used for sites where the drainage area is less than 10 square miles.

The relations were derived on the basis of hydrologic characteristics whose range in magnitude lay within limits imposed by the available

data. The limits for region A are: drainage area 10 to 4,200 square miles, altitude index 1.32 to 6.0, and mean annual precipitation 14 to 51 inches. For region B the limits are: drainage area 18 to 3,200 square miles and mean annual precipitation 28 to 82 inches.

It is emphasized that the outlined procedures for defining flood-frequency relations are valid for sites for which the hydrologic characteristics have values within the limits given above; use under any other conditions may lead to erroneous results. The methods presented should only be used for flood magnitude-frequency definition for recurrence intervals ranging between 1.2 and 50 years.

DISCUSSION OF RESULTS

Table 1 indicates that the small floods—those that have a recurrence interval less than 5 years—cannot be estimated as reliably as the large floods. The reason in part is that for small floods the runoff is often generated in only a part of the drainage basin. The large floods usually result from more general storms which cause runoff from most or all of the basin, and therefore more consistent results are obtained for the large floods.

The median of the ratios of observed to computed flood values at each site for the selected T -year floods was used as an indication of the reliability of the regional analysis. As a final step, the median values were plotted on maps for each region and were found to be randomly distributed geographically above and below the value of 1.0. For most stations the variation was within a reasonable range, but for a few stations the median values departed greatly from 1.0. The extreme departures also were randomly distributed geographically above and below the value of 1.0.

For a few stations, flood-frequency relations computed by the regional method will give results considerably different than would be obtained by a single station analysis. For some stations, the difference may be due to a record being too short to give true results when used in a single station analysis. For other stations, the difference may be due to failure to consider some pertinent variable that differs from that of other streams in the region. Furthermore, the variable may be such that it cannot now be readily expressed numerically; for example, the infiltration characteristics of the basin, which in this study were hopefully believed to have been accounted for in the delineation of regional boundaries.

As more gaging stations are installed in different areas where varying hydrologic characteristics will be sampled and as the period of record at existing gaging stations grows longer, more information

will be available that will better define the flood magnitude-frequency relation. An example is the December 1964 flood. In some areas this flood was considerably greater than any flood previously recorded; this caused the magnitude-frequency relation for many stations to differ from the relation that would have been obtained had the analysis been made before the flood.

The hydrologic characteristics in the final equations represent the smallest number of easily definable hydrologic characteristics that together best define the peak flows. As it becomes possible to evaluate numerically more hydrologic characteristics (such as geology, soil type, and physiography), it may be possible to use some of these variables for further refinement of the analysis in this report.

FLOOD RECORDS AT GAGING STATIONS AND MISCELLANEOUS SITES

A summary of pertinent data relative to maximum known floods in the report area prior to October 1965 is contained in tables 2, 3, and 4: table 2 for gaging stations used in the analysis, table 3 for gaging stations having more than 5 years of record prior to October 1963 but not used in the analysis, and table 4 for miscellaneous sites and gaging stations having less than 5 years of record prior to October 1963. The stations are listed by their permanent network numbers. Those listed in tables 2 and 3 are shown on plate 1. The part number has been omitted from the number in all tables, it being understood that all of the stations are in Part 11. The miscellaneous (M) sites in table 4 have been numbered consecutively in a downstream order beginning with M1.

Following the tables is a compilation of flood peaks for each of the stations listed in tables 2 and 3. All available annual maximum flood peaks are listed for each station and, in addition, all flood peaks above a selected base discharge are listed for those years for which the data were readily available. For stations where the flood flow is affected by regulation or diversion, or where records are inadequate to define secondary peaks, only the annual maximum flood data are presented.

Underlines in the tabular data have the following significance:

1. A horizontal line in the water-year column indicates discontinuous records.
2. A line across the gage-height column indicates a change in gage datum and thereby shows that the gage heights above and below the line are not comparable. No lines are used if gage heights have been adjusted to a common datum.
3. Lines across the date and discharge columns indicate a change in site of sufficient magnitude to affect the stage-discharge relation.

Accompanying each list of flood data are descriptive and historical data pertaining to the gage site. These data show the most recent gage location; the type and history of the gage; the drainage area above the gage; a description of how the stage-discharge relation was defined; and when available, the bankfull stage, historical flood data, and other miscellaneous information that might be of use to persons interested in flood magnitude and frequency.

MAXIMUM KNOWN FLOODS

Table 2.--Maximum and mean annual floods and hydrologic characteristics at gaging stations used to define regional flood-frequency relations

No.	Gaging station	Flood region	Drainage area (sq mi)	Altitude index (ft x 10 ⁻³)	Mean annual precipitation (inches)	Period of known floods (water years)	Areal Q _{2.33} (cfs)	Maximum Flood		
								Date	Gage height (feet)	Discharge Cfs per sq mi
Otay River basin										
140	Jamul Creek near Jamul, Calif...	A	70.3	1.52	17	1938-65	500	March Dec. 1, 1947	8.0 5.42	- 56.9 14
Sweetwater River basin										
150	Sweetwater River near Descanso, Calif.	A	45.5	3.85	28	1906-27, 1957-65	660	Feb. 16, 1921	13.2	11,200 246 47
San Diego River basin										
225	San Diego River near Santee, Calif.	A	377	1.68	20	1915-65	2,250	Jan. 27, 1916	25.1	70,200 186 *2.30
San Dieguito River basin										
240	Santa Ysabel Creek near Mesa Grande, Calif.	A	54.0	2.88	29	1914-24, 1937-53	960	Jan. 27, 1916	11.0	21,100 391 *1.61
255	Santa Ysabel Creek near Ramona, Calif.	A	112	2.30	27	1913-22, 1944-65	1,520	Jan. 27, 1916	14.0	28,400 254 *1.49
270	Quejito Creek near San Pasqual, Calif.	A	22.5	2.00	20	1947-65	300	Apr. 3, 1958	5.83	1,660 73.8 10
285	Santa Maria Creek near Ramona, Calif.	A	57.6	1.86	19	1914-20, 1947-65	500	Jan. 27, 1916	15.9	7,140 124 32
San Luis Rey River basin										
400	San Luis Rey River at Monserate Narrows, near Pala, Calif.	A	373	1.40	25	1936-37, 1939-41, 1947-65	2,030	Feb. 7, 1937 Apr. 3, 1958	8.7 -	- 5.34 2
410	San Luis Rey River near Bonsall, Calif.	A	512	1.22	22	1891, 1915, 1918, 1930-65	2,600	February 1891	-	128,000 250 *3.46
Santa Margarita River basin										
425.2	Temecula Creek at Nigger Canyon, near Temecula, Calif.	A	320	2.80	16	1923-48	810	Feb. 16, 1927	19.5	17,100 53.4 34
430	Murrieta Creek at Temecula, Calif.	A	222	1.81	15	1931-65	720	Jan. 23, 1943	13.82	17,500 78.8 48
440	Santa Margarita River near Temecula, Calif.	A	588	2.58	16	1923-65	1,330	Feb. 16, 1927	14.6	25,000 42.5 34
445	Santa Margarita River near Fallbrook, Calif.	A	644	1.96	16	1925-65	1,600	Feb. 16, 1927	15.6	33,100 51.4 43
449	De Luz Creek near Fallbrook, Calif.	A	47.5	.95	21	1952-65	830	Jan. 16, 1952 Apr. 1, 1958	12.50 -	- 2,800 58.9 7
460	Santa Margarita River at Ysidora, Calif.	A	739	1.73	17	1924-27, 1931-65	2,180	Feb. 16, 1927	18.00	33,600 45.5 39

Las Flores Creek basin

461	Las Flores Creek near Oceanside, Calif.	A	26.6	0.40	15	1952-55	460	Jan. 16, 1952	4.75	960	36.1	4
San Onofre Creek basin												
462	San Onofre Creek near San Onofre, Calif.	A	34.6	0.92	15	1951-55	330	Apr. 1, 1958 Jan. 6, 1959	- 5.94	2,680 -	77.5 -	15 -
San Mateo Creek basin												
463	San Mateo Creek near San Clemente, Calif.	A	80.8	1.29	20	1953-55	880	Apr. 1, 1958	9.10	4,800	59.4	11
463.5	Cristianitos Creek near San Clemente, Calif.	A	29.0	.61	15	1951-55	380	Apr. 16, 1952 Apr. 1, 1958	- 7.48	1,800 -	62.1 -	9 -
San Juan Creek basin												
465	San Juan Creek near San Juan Capistrano, Calif.	A	106	1.30	19	1929-55	940	Mar. 2, 1938	-	13,000	123	44
470	Arroyo Trabuco near San Juan Capistrano, Calif.	A	35.7	1.22	20	1932-55	550	Feb. 6, 1937 Mar. 2, 1938	- 7.50	9,240 -	259 -	*1.16 -
Peters Canyon Wash basin												
485	San Diego Creek near Irvine, Calif.	A	40.3	0.58	14	1950-55	400	Jan. 18, 1952	7.70	4,040	100	24
Santa Ana River basin												
540	Mill Creek near Yucaipa, Calif.	A	38.1	5.97	30	1920-38, 1948-55 1920-55	570	Mar. 2, 1938	-	18,100	475	*1.52
555	Plunge Creek near East Highlands, Calif.	A	17.1	3.42	30	1920-55	425	Mar. 2, 1938	-	5,340	312	35
570	San Timoteo Creek near Redlands, Calif.	A	119	2.92	17	1927-55	490	Mar. 2, 1938	-	7,460	62.7	24
620	Lytle Creek near Fontana, Calif.	A	46.3	4.36	33	1920-21, 1926-27, 1931-38, 1943, 1947-65	890	Mar. 2, 1938	-	25,200	544	*1.89
630	Cajon Creek near Keenbrook, Calif.	A	40.6	3.67	19	1920-55	260	Mar. 2, 1938	-	14,500	357	*1.99
635	Lone Pine Creek near Keenbrook, Calif.	A	15.1	4.43	19	1920-55	130	Mar. 2, 1938	-	6,180	409	*1.54
665	Santa Ana River at Riverside Narrows, near Arlington, Calif.	A	851	3.59	24	1928-55	3,350	Mar. 2, 1938	-	100,000	118	*1.79
700	Bautista Creek near Hemet, Calif.	A	39.4	3.18	17	1948-55	220	Apr. 3, 1958	4.65	1,440	36.5	8
730	San Antonio Creek near Claremont, Calif.	A	16.9	5.42	34	1918-55	420	Mar. 2, 1938	-	21,400	1,266	*2.97
734.7	Cucamonga Creek near Upland, Calif.	A	10.1	4.30	35	1928-55	385	Mar. 2, 1938	-	10,300	1,020	*1.89
735	Chino Creek near Prado, Calif...	A	141	2.55	17	1929-40	590	Mar. 2, 1938	-	5,200	36.9	13
770	Santiago Creek near Villa Park, Calif.	A	84.6	2.06	22	1921-55	850	Feb. 16, 1927 Jan. 16, 1952	- 9.40	11,000 -	130 -	35 -

* Ratio of peak discharge to that of 50-year flood.

Table 2.--Maximum and mean annual floods and hydrologic characteristics at gaging stations used to define regional flood-frequency relations--Continued

No.	Gaging station	Flood region	Drainage area (sq mi.)	Altitude index (ft x 10 ⁻³)	Mean annual precip-itation (inches)	Period of known floods (water years)	Areal Q _{2.33} (cfs)	Maximum flood				
								Date	Gage height (feet)	Discharge Cfs per sq mi	Recur-rence interval (years)	
San Gabriel River basin												
805	East Fork San Gabriel River near Camp Bonita, Calif.	A	88.2	3.65	31	1933-65	1,300	Mar. 2, 1938	-	46,000	522	*2.67
820	West Fork San Gabriel River at Camp Rincon, Calif.	A	104	3.04	35	1928-65	2,130	Mar. 2, 1938	-	34,000	327	*1.48
835	San Gabriel River near Azusa, Calif.	A	214	3.28	33	1901,1910-11, 1914-65	2,850	Mar. 2, 1938	-	65,700	307	*1.90
870	San Jose Creek near Whittier, Calif.	A	88.7	1.20	18	1914,1929-64	760	Jan. 1, 1934	12.12	13,100	148	*1.04
890	Brea Creek at Fullerton, Calif.	A	23.6	.60	15	1932-65	340	Mar. 14, 1941	5.45	3,700	157	28
905	Coyote Creek near Artesia, Calif.	A	122	.43	15	1931-63	1,170	Jan. 18, 1952	14.30	7,360	60.3	16
Los Angeles River basin												
930	Pacoima Creek near San Fernando, Calif.	A	28.5	3.16	25	1914,1917-27, 1931-65	435	February 1914	-	5,400	189	30
940	Tujunga Creek below Mill Creek, near Colby Ranch, Calif.	A	64.9	3.60	24	1948-65	620	Feb. 11, 1962	10.90	2,860	44.1	8
955	Tujunga Creek near Sunland, Calif.	A	106	2.76	29	1917-65	1,570	Mar. 2, 1938	-	50,000	472	*2.62
965	Little Tujunga Creek near San Fernando, Calif.	A	21.1	1.64	27	1914,1929-65	600	Mar. 2, 1938	-	8,500	403	*1.17
980	Arroyo Seco near Pasadena, Calif.	A	16.0	2.60	28	1914-65	435	Mar. 2, 1938	-	8,620	539	*1.39
Topanga Creek basin												
1040	Topanga Creek near Topanga Beach, Calif.	A	18.0	0.63	23	1930-65	670	Dec. 21, 1933 Mar. 2, 1938	11.27 -	7,960	442	*1.28
Malibu Creek basin												
1055	Malibu Creek at Carter Camp, near Calabasas, Calif.	A	105	0.96	20	1931-65	1,250	Mar. 15, 1952	19.1	13,560	129	43
Santa Clara River basin												
1080	Santa Clara River near Saugus, Calif.	A	411	2.24	15	1930-55	980	Mar. 2, 1938	-	24,000	58.4	49
1085	Santa Clara River at Los Angeles-Ventura County line, Calif.	A	644	2.00	16	1953-65	1,580	Feb. 11, 1962	9.65	9,100	14.6	8
1100	Piru Creek near Piru, Calif.	A	437	2.92	18	1933-56	1,300	Mar. 2, 1938	-	35,600	82.4	*1.21
1105	Hopper Creek near Piru, Calif.	A	23.6	1.89	22	1934-65	385	Mar. 2, 1938	-	8,000	339	*1.16
1115	Sespe Creek near Wheeler Springs, Calif.	A	49.5	4.20	29	1949-65	720	Feb. 10, 1962	10.6	3,800	76.8	10
1130	Sespe Creek near Fillmore, Calif.	A	251	2.76	28	1933-65	2,450	Mar. 2, 1938	-	56,000	223	*1.71
1135	Santa Paula Creek near Santa Paula, Calif.	A	40.0	2.78	28	1933-65	740	Mar. 2, 1938	10.56	13,500	338	*1.23

Ventura River basin

1155	Matilija Creek at Matilija Hot Springs, Calif.	A	54.6	2.71	35	1933-65	1,500	Mar. 2, 1938	-	15,900	291	*1.03
1160	North Fork Matilija Creek at Matilija Hot Springs, Calif.	A	15.6	2.02	31	1934-65	580	Mar. 2, 1938	-	5,580	358	34
1175	San Antonio Creek at Casitas Springs, Calif.	A	51.2	1.36	23	1950-65	870	Jan. 15, 1952 Apr. 5, 1958	13.1	-	-	-
1180	Coyote Creek near Ventura, Calif.	A	41.2	2.26	25	1935-58	660	Mar. 2, 1938	12.00	5,240 11,500	102 279	16 *1.08
1185	Ventura River near Ventura, Calif.	A	188	2.09	27	1933-65	2,250	Mar. 2, 1938	19.2	39,200	208	*1.57

Carpinteria Creek basin

1195	Carpinteria Creek near Carpinteria, Calif.	A	13.1	1.34	25	1941-65	415	Jan. 15, 1952	7.75	2,440	186	16
------	--	---	------	------	----	---------	-----	---------------	------	-------	-----	----

Atascadero Creek basin

1200	Atascadero Creek near Goleta, Calif.	A	18.8	1.42	25	1942-65	530	Jan. 15, 1952 Feb. 5, 1952	12.00	4,500	239	27
------	--------------------------------------	---	------	------	----	---------	-----	-------------------------------	-------	-------	-----	----

Santa Ynez River basin

1245	Santa Cruz Creek near Santa Ynez, Calif.	A	73.9	2.26	27	1942-65	1,170	Apr. 3, 1958	10.27	-	-	-
1250	Cachuma Creek near Santa Ynez, Calif.	A	23.8	1.64	25	1951-62	540	Feb. 9, 1952 Jan. 15, 1952	- 6.05	4,520 4,500	61.2 161	8 21
1265	Santa Agueda Creek near Santa Ynez, Calif.	A	55.8	1.37	20	1941-65	670	Feb. 19, 1958	6.14	5,560	99.6	19
1300	Zaca Creek at Buellton, Calif...	A	39.4	1.42	18	1941-63	420	Mar. 3, 1941	6.80	874	22.2	4
1325	Salpuedes Creek near Lompoc, Calif.	A	47.1	.82	22	1941-65	1,160	Mar. 15, 1952	20.8	11,400	242	*1.09
1335	Santa Ynez River near Lompoc, Calif.	A	790	1.50	23	1907, 1914, 1929-60	4,900	Jan. 9, 1907	22.0	120,000	152	*2.38

San Antonio Creek basin

1360	San Antonio Creek at Harris, Calif.	A	93.5	0.73	16	1941-55	830	Mar. 15, 1952	10.19	1,800	19.2	4
------	-------------------------------------	---	------	------	----	---------	-----	---------------	-------	-------	------	---

Santa Maria River basin

1365	Cuyama River near Ventucopa, Calif.	A	89.9	4.32	20	1945-58	465	Jan. 15, 1952 Feb. 19, 1958	6.3	- 7,210	- 80.2	- 24
1370	Cuyama River near Santa Maria, Calif.	A	904	2.27	16	1930-62	1,880	Mar. 3, 1938	16.6	17,500	19.1	14
1375	Alamo Creek near Santa Maria, Calif.	A	86.6	1.26	20	1944-62	930	Jan. 15, 1952	8.00	-	-	-
1380	Huana River near Santa Maria, Calif.	A	117	.94	20	1930-61	1,430	Apr. 3, 1958 Feb. 11, 1938	11.26	3,120 11,400	36.0 97.4	6 28
1385	Sisquoc River near Sisquoc, Calif.	A	281	2.24	24	1930-65	2,110	Mar. 2, 1938	8.1	11,000	39.1	10
1390	La Brea Creek near Sisquoc, Calif.	A	93.8	1.54	23	1944-65	1,200	Jan. 15, 1952	5.94	3,320	35.4	5

* Ratio of peak discharge to that of 50-year flood.

Table 2.--Maximum and mean annual floods and hydrologic characteristics at gaging stations used to define regional flood-frequency relations--Continued

No.	Gaging station	Flood region	Drainage area (sq mi)	Altitude index (ft x 10 ⁻³)	Mean annual precip-itation (inches)	Period of known floods (water years)	Areal Q _{2.33} (cfs)	Date	Maximum flood		
									Gage height (feet)	Discharge Cfs per sq mi	Recur-rence interval (years)
Santa Maria River basin--Continued											
1395	Tepusquet Creek near Sisquoc, Calif.	A	28.6	1.10	22	1944-65	610	Jan. 15, 1952	5.93	-	-
1400	Sisquoc River near Garey, Calif.	A	472	1.79	23	1941-65	3,250	Feb. 9, 1962	-	500	2
1410	Santa Maria River at Guadalupe, Calif.	A	1,742	1.64	19	1941-65	4,900	Jan. 23, 1943	8.46	13,000	8
								Jan. 16, 1952	8.18	32,800	12
Arroyo Grande basin											
1415	Arroyo Grande at Arroyo Grande, Calif.	A	102	0.81	20	1940-65	1,420	Jan. 15, 1952	11.97	5,370	9
Arroyo de la Cruz basin											
1425	Arroyo de la Cruz near San Simeon, Calif.	A	41.2	0.42	31	1951-65	2,750	Dec. 23, 1955	12.40	17,700	430
											*1.44
Big Sur River basin											
1430	Big Sur River near Big Sur, Calif.	A	46.5	1.40	51	1951-65	4,400	Apr. 2, 1958	11.56	5,680	122
											3
Salinas River basin											
1435	Salinas River near Pozo, Calif.	A	74.1	1.58	19	1943-65	660	Jan. 21, 1943	13.35	7,210	97.3
1470	Jack Creek near Templeton, Calif.	A	25.3	1.32	34	1950-65	1,250	Jan. 25, 1956	9.56	5,040	199
1495	Nacimiento River near San Miguel, Calif.	A	343	.96	29	1938-57	6,400	Dec. 23, 1955	13.15	58,600	171
1500	San Antonio River at Pleyto, Calif.	A	284	1.20	21	1930-65	2,380	Apr. 3, 1958	6.44	19,100	67.2
1520	Arroyo Seco near Soledad, Calif.	A	244	1.24	34	1906-65	5,850	Apr. 3, 1958	14.40	28,300	116
1525	Salinas River near Spreckels, Calif.	A	4,156	.78	17	1862, 1911, 1914, 1930-65	11,100	Apr. 1862	31	-	-
								Feb. 12, 1938	-	75,000	18.0
											18
Pajaro River basin											
1540	Uvas Creek near Morgan Hill, Calif.	A	30.4	0.95	38	1931-63	2,300	Dec. 23, 1955	14.3	10,300	339
1565	San Benito River near Willow Creek School, Calif.	A	251	1.95	18	1938-65	1,150	Apr. 3, 1958	8.35	8,210	32.7
1575	Tres Pinos Creek near Tres Pinos, Calif.	A	206	1.66	18	1938-65	1,100	Apr. 4, 1941	7.75	8,060	39.1
1585	San Benito River near Hollister, Calif.	A	586	1.56	18	1950-65	2,250	Apr. 3, 1958	16.30	11,600	19.8
1590	Pajaro River at Chittenden, Calif.	A	1,186	1.36	19	1938-65	4,500	Dec. 24, 1955	-	24,000	20.2
								Apr. 3, 1958	33.11	-	10

Sequel Creek basin

1600	Sequel Creek at Sequel, Calif....	A	40.2	0.84	40	1937, 1951-65	3,300	Dec. 23, 1955	22.33	15,900	393	*1.05
San Lorenzo River basin												
1605	San Lorenzo River at Big Trees, Calif.	A	111	0.54	48	1937-65	11,100	Dec. 23, 1955	22.55	30,400	274	31
1615	Branchfortie Creek at Santa Cruz, Calif.	A	17.3	.32	40	1941-43, 1953-65	3,100	Dec. 22, 1955	22.04	8,100	468	30
Pescadero Creek basin												
1625	Pescadero Creek near Pescadero, Calif.	A	45.9	0.48	38	1952-65	4,400	Dec. 23, 1955	21.27	9,420	205	11
Guadalupe River basin												
1680	Los Gatos Creek at Los Gatos, Calif.	A	38.6	1.26	48	1930-44, 1954-65	3,600	Feb. 27, 1940	14.71	7,110	184	6
Coyote Creek basin												
1700	Coyote Creek near Madrone, Calif.	A	196	1.03	25	1903, 1905-12, 1917-65	2,950	Mar. 7, 1911	-	25,000	128	49
Alameda Creek basin												
1790	Alameda Creek near Niles, Calif.	A	633	1.09	22	1892, 1917, 1919-65	4,700	Dec. 23, 1955	14.9	29,000	45.8	20
San Lorenzo Creek basin												
1810	San Lorenzo Creek at Hayward, Calif.	A	37.5	0.45	24	1940, 1942, 1947-65	1,410	Dec. 22, 1955 Oct. 13, 1962	20.82 -	7,460	199	26
Pinole Creek basin												
1821	Pinole Creek at Pinole, Calif....	A	10.0	0.40	22	1939-65	540	Apr. 2, 1958	11.63	1,660	166	8
Pacheco Creek basin												
1830	San Ramon Creek at Walnut Creek, Calif.	A	50.8	0.51	20	1953-65	1,110	Dec. 23, 1955	14.55	-	-	-
1835	Walnut Creek at Walnut Creek, Calif.	A	79.2	.48	20	1953-65	1,520	Jan. 31, 1965 Apr. 2, 1958	- 20.2	7,980 12,200	157 154	30 46
Tulare Lake basin												
2245	Los Gatos Creek above Nunez Canyon, near Coalinga, Calif.	A	95.8	1.70	15	1950-65	440	Apr. 3, 1958 Feb. 9, 1962	- 7.25	2,560 2,560	26.7 26.7	8 8
San Joaquin River basin												
2745	Orestimba Creek near Newman, Calif.	A	134	0.76	16	1932-65	1,020	Apr. 2, 1958	-	10,200	76.1	28
3375	Marsh Creek near Byron, Calif....	A	42.6	.72	16	1954-65	500	Feb. 1, 1963 Dec. 23, 1955 Jan. 31, 1963	9.72 12.98 -	- - 3,980	- - 91.1	- - 18

* Ratio of peak discharge to that of 50-year flood.

Table 2.--Maximum and mean annual floods and hydrologic characteristics at gaging stations used to define regional flood-frequency relations--Continued

No.	Gaging station	Flood region	Drainage area (sq mi)	Altitude index (ft x 10 ⁻³)	Mean annual precipitation (inches)	Period of known floods (water years)	Areal Q _{2.33} (cfs)	Date	Maximum flood			
									Gage height (feet)	Cfs	Discharge cfs per sq mi	Recurrence interval (years)
Sacramento River basin												
3760	Cottonwood Creek near Cottonwood, Calif.	B	922	-	40	1941-65	33,000	Dec. 22, 1964	19.64	60,000	65.1	8
3795	Elder Creek near Paskenta, Calif.	B	92.9	-	36	1949-65	4,950	Feb. 24, 1958	13.90	11,700	126	19
3805	Elder Creek at Gerber, Calif.	B	136	-	28	1950-65	4,800	Jan. 5, 1965	14.90	14,100	104	*1.01
3820	Thomas Creek at Paskenta, Calif.	B	194	-	35	1921-65	8,600	Dec. 24, 1964	15.32	37,800	195	*1.51
4495	Kelsey Creek near Kelseyville, Calif.	B	36.6	-	45	1947-65	3,200	Dec. 21, 1955	-	8,800	240	33
4515	North Fork Cache Creek near Lower Lake, Calif.	B	197	-	39	1931-65	9,900	Jan. 5, 1965	13.48	-	-	-
4535	Putah Creek near Guenoc, Calif.	B	113	-	52	1904-65	9,300	Dec. 11, 1937	12.98	20,300	103	11
4540	Putah Creek near Winters, Calif.	B	574	-	35	1931-65	19,300	Dec. 11, 1937	22.7	32,000	283	*1.16
Napa River basin												
4560	Napa River near St. Helena, Calif.	B	81.4	-	48	1930-32, 1940-65	6,600	Dec. 22, 1955	15.17	12,600	155	9
4565	Conn Creek near St. Helena, Calif.	B	52.1	-	35	1930-59	3,050	Feb. 27, 1940	11.80	7,700	148	18
4570	Dry Creek near Napa, Calif.	B	17.4	-	35	1952-65	1,350	Feb. 24, 1958	8.11	3,450	199	40
Petaluma River basin												
4590	Petaluma River at Petaluma, Calif.	B	30.9	-	28	1949-63	1,530	Dec. 22, 1955	13.55	1,860	60.2	3
Corte Madera Creek basin												
4600	Corte Madera Creek at Ross, Calif.	B	18.1	-	42	1952-65	1,750	Dec. 22, 1955	17.45	3,620	200	14
Russian River basin												
4610	Russian River near Ukiah, Calif.	B	99.7	-	45	1912-13, 1953-65	7,000	Dec. 22, 1964	19.44	17,900	180	25
4615	East Fork Russian River near Calpella, Calif.	B	93.8	-	45	1942-65	6,500	Dec. 22, 1964	20.21	18,700	199	36
4625	Russian River near Hopland, Calif.	B	362	-	40	1938-65	16,700	December 1937	30.0	-	-	-
4640	Russian River near Healdsburg, Calif.	B	793	-	47	1890, 1895, 1938-65	36,000	Dec. 22, 1955	30.8	45,000	124	31
4645	Dry Creek near Cloverdale, Calif.	B	87.8	-	44	1938, 1942-65	6,300	Dec. 22, 1964	18.09	71,300	90	11
4670	Russian River near Guerneville, Calif.	B	1,340	-	42	1861-62, 1907, 1914-15, 1937, 1940-65	48,000	Dec. 23, 1955	49.7	18,100	206	44
								Dec. 22, 1964	-	93,400	69.6	11

Qualala River basin												
44675	South Fork Qualala River near Annapolis, Calif.	B	161	-	60	1951-65	15,000	Dec. 22, 1955	24.57	55,000	342	*1.26
Navarro River basin												
44680	Navarro River near Navarro, Calif.	B	303	-	50	1938, 1951-65	19,100	Dec. 22, 1955	40.60	64,500	213	*1.16
Noyo River basin												
44685	Noyo River near Fort Bragg, Calif.	B	106	-	55	1952-65	9,600	Dec. 22, 1964	26.30	24,000	226	27
Mattole River basin												
44690	Mattole River near Petrolia, Calif.	B	242	-	82	1912-13, 1951-65	30,500	Dec. 22, 1955	29.60	90,400	374	*1.05
Eel River basin												
44729	Black Butte River near Covelo, Calif.	B	162	-	50	1938, 1954-65	11,600	Dec. 22, 1964	26.4	29,000	179	26
44730	Middle Fork Eel River below Black Butte River, near Covelo, Calif.	B	367	-	60	1952-65	28,000	Dec. 22, 1964	31.7	132,000	360	*1.53
44740	Eel River below Dos Rios, Calif.	B	1,484	-	60	1912-13, 1952-65	81,000	Dec. 22, 1964	62.5	460,000	310	*1.83
44745	North Fork Eel River near Mina, Calif.	B	250	-	60	1938, 1954-65	20,800	Dec. 22, 1964	33.6	133,000	532	*2.15
44755	South Fork Eel River near Branscomb, Calif.	B	43.9	-	78	1947-65	7,550	Dec. 22, 1955	16.20	20,100	458	42
44765	South Fork Eel River near Miranda, Calif.	B	537	-	73	1941-65	48,000	Dec. 22, 1964	46.0	199,000	370	*1.42
44770	Eel River at Scotia, Calif.....	B	3,113	-	64	1911-65	154,000	Dec. 23, 1964	72.0	752,000	242	*1.47
44785	Van Duzen River near Bridgeville, Calif.	B	216	-	70	1951-65	22,000	Dec. 22, 1964	22.6	48,700	226	16
Mad River basin												
44810	Mad River near Arcata, Calif....	B	484	-	67	1911-13, 1951-65	39,000	Dec. 22, 1955	27.30	77,800	161	11
Redwood Creek basin												
44825	Redwood Creek at Orick, Calif....	B	278	-	68	1912-13, 1953-65	25,000	Dec. 22, 1964	24.0	50,500	182	10

* Ratio of peak discharge to that of 50-year flood.

Table 3.--Maximum floods at gaging stations not used to define regional flood-frequency relations

No.	Gaging station	Flood region	Drainage area (sq mi)	Period of known floods (water years)	Date	Maximum flood		
						Gage height (feet)	Cfs	Discharge Cfs per sq mi
Tia Juana River basin								
125	Campo Creek near Campo, Calif.....	A	84	1937-65	Feb. 6, 1937	3.80	880	10.5
San Diego River basin								
175	Boulder Creek near Lakeside, Calif.....	A	34.0	1913-16, 1920-26	Jan. 27, 1916	9.5	3,000	88.2
220	San Vicente Creek at San Vicente Dam, at Foster, Calif.	A	74.2	1937-41	Feb. 7, 1937	6.80	9,400	127
San Diego River basin								
260	Santa Ysabel Creek near San Pasqual, Calif.....	A	128	1906-10, 1912, 1957-65	Mar. 24, 1906	-	8,000	62.5
San Luis Rey River basin								
330	West Fork San Luis Rey River near Warner Springs, Calif.	A	25.5	1914, 1958-65	Mar. 16, 1958	10.77	2,060	80.8
350	San Luis Rey River at Lake Henshaw, near Mesa Grande, Calif.	A	207	1915-22	Jan. 27, 1916	18.0	58,600	293
385	San Luis Rey River near Pala, Calif.....	A	317	1904-16	Jan. 27, 1916	18.1	75,000	237
420	San Luis Rey River at Oceanside, Calif.....	A	557	1913-16, 1930-42, 1947-65	Jan. 27, 1916	-	95,600	172
Santa Margarita River basin								
424	Temecula Creek near Aguanga, Calif.....	A	132	1958-65	Apr. 3, 1958	6.57	3,540	26.8
San Onofre Creek basin								
462.5	San Onofre Creek at San Onofre, Calif.....	A	42.2	1947-65	Jan. 16, 1952 Apr. 1, 1958	7.63 -	3,600	61.6
San Mateo Creek basin								
463.7	San Mateo Creek at San Onofre, Calif.....	A	132	1947-65	Jan. 26, 1956 Apr. 1, 1958	a 8.67 -	4,650	35.2
Aliso Creek basin								
475	Aliso Creek at El Toro, Calif.....	A	7.97	1931-65	Feb. 6, 1937	11.20	1,950	245
Santa Ana River basin								
515	Santa Ana River near Mentone, Calif.....	A	209	1891, 1916-65	Feb. 23, 1891	-	53,700	257
550	Mill Creek near Mentone, Calif.....	A	46.3	1939-65	Dec. 23, 1945	-	2,500	32.4
558	City Creek near Highland, Calif.....	A	19.5	1920-65	Mar. 2, 1938	-	6,500	354
565	Little San Geronimo Creek near Beaumont, Calif.	A	3.23	1949-65	Aug. 23, 1955	2.18	319	98.8

			125	1955-65	July 25, 1956	4.59	-	8.40	-
575	San Timoteo Creek near Loma Linda, Calif.....	A			Apr. 1, 1958	-	1,050	384	4
585	East Twin Creek near Arrowhead Springs, Calif..	A	8.76	1920-65	Mar. 2, 1958	-	3,560	505	-
586	Waterman Canyon Creek near Arrowhead Springs, Calif.	A	4.65	1921-65	Mar. 2, 1958	-	2,550	592	-
636.8	Devil Canyon Creek near San Bernardino, Calif..	A	5.61	1920-65	Mar. 2, 1958	-	3,320	21,500	-
640	Lytle Creek (east channel) at San Bernardino, Calif.	A	-	1925-57	Mar. 2, 1958	-	27,500	105	41
660	Warm Creek near Colton, Calif.....	A	262	1921-62	Mar. 2, 1938	-	30,020	915	-
661	Lytle Creek (west channel) at Colton, Calif.....	A	-	1891, 1929-45	Feb. 24, 1891	-	45,000	319	*2.37
670	Day Creek near Etiwanda, Calif.....	A	4.59	1928-65	Mar. 2, 1938	-	16,000	22.0	-
695	San Jacinto River near San Jacinto, Calif.....	A	141	1921-65	Feb. 16, 1927	11.8	100,000	66.4	-
705	San Jacinto River near Esplanore, Calif.....	A	728	1916-65	Mar. 17, 1927	11.8	2,500	123	19
745	Santa Ana River at county line, below Prado Dam, Calif.	A	1,506	1920-40, 1953-60	Mar. 3, 1938	17.32	4,400	46.3	-
757.4	Carbon Creek near Yorba Linda, Calif.....	A	20.4	1927, 1931-38, 1945, 1950-61	1927	-	46,300	27.5	-
775	Santiago Creek at Santa Ana, Calif.....	A	95.0	1930-65	Mar. 2, 1938	-	-	-	-
780	Santa Ana River at Santa Ana, Calif.....	A	1,685	1923-65	Feb. 22, 1944	9.32	-	-	-
					Mar. 3, 1938	10.20	-	-	-
				San Gabriel River basin					
800	East Fork San Gabriel River at Camp Bonita, Calif.	A	58.2	1928-32	Feb. 8, 1932	-	3,340	57.4	6
810	Bear Creek near Camp Rincon, Calif.....	A	28.2	1930-36	Jan. 1, 1934	8.0	1,600	56.7	4
815	North Fork San Gabriel River at Camp Rincon, Calif.	A	18.6	1930-36	Jan. 1, 1934	5.80	276	14.8	2
840	Rogers Creek near Azusa, Calif.....	A	6.64	1918-62	Jan. 6, 1959	-	2,400	361	-
845	Fish Creek near Duarte, Calif.....	A	6.36	1918-65	Feb. 11, 1959	12.55	-	330	-
860	Dalton Creek near Glendora, Calif.....	A	7.5	1920-41, 1943-62	Mar. 2, 1938	-	2,100	330	-
864	San Dimas Creek near San Dimas, Calif.....	A	18.3	1917-56	Jan. 23, 1943	5.78	2,100	330	-
865	Little Dalton Creek near Glendora, Calif.....	A	2.72	1914, 1938-65	Dec. 2, 1961	6.40	3,040	405	-
875	San Gabriel River at Pico, Calif.....	A	448	1929-65	Mar. 2, 1938	5.24	5,000	273	-
					Mar. 20, 1961	5.24	1,700	625	-
					Mar. 2, 1938	-	22,700	50.7	-
				Los Angeles River basin					
924.5	Los Angeles River at Sepulveda Dam, Calif.....	A	158	1930-65	Feb. 12, 1962	10.00	13,400	84.8	-
945	Tujunga Creek near Colby Ranch, Calif.....	A	67.5	1931-50	Jan. 23, 1943	15.40	14,800	219	*1.03
950	Fox Creek near Colby Ranch, Calif.....	A	9.22	1931-37	Feb. 2, 1936	-	410	44.5	-
960	Haines Creek near Tujunga, Calif.....	A	1.2	1914, 1917-29, 1932-34, 1937-61	February 1914	-	4,620	3,850	-
975	Los Angeles River at Los Angeles, Calif.....	A	514	1930-65	Mar. 2, 1938	-	67,000	130	-
985	Los Angeles River near Downey, Calif.....	A	599	1929-65	Mar. 2, 1938	-	79,700	133	-
995	Sawpit Creek near Monrovia, Calif.....	A	5.3	1917-38, 1943-61	Mar. 2, 1938	-	1,800	340	-
1000	Santa Anita Creek near Sierra Madre, Calif.....	A	9.71	1917-65	Mar. 2, 1938	-	5,200	536	-
1005	Little Santa Anita Creek near Sierra, Madre, Calif.	A	1.84	1917-62	Mar. 2, 1938	-	536	291	-
1010	Eaton Creek near Pasadena, Calif.....	A	6.47	1916-65	Mar. 2, 1938	-	2,400	371	-
1030	Los Angeles River at Long Beach, Calif.....	A	-	1929-65	Mar. 2, 1938	-	99,000	-	-

* Ratio of peak discharge to that of 50-year flood.

a Result of failure of temporary dam.

Table 3.--Maximum floods at gaging stations not used to define regional flood-frequency relations--Continued

No.	Gaging station	Flood region	Drainage area (sq mi.)	Period of known floods (water years)	Date	Dage height (feet)	Maximum flood		
							cfs	cfs per sq mi	Discharge
Ballona Creek basin									
1035	Ballona Creek near Culver City, Calif.....	A	111	1928-65	Mar. 2, 1938	-	19,000	171	-
Malibu Creek basin									
1065	Conejo Creek near Camarillo, Calif.....	A	69.8	1927-31	-	-	0	-	-
Calleguas Creek basin									
1070	Honda Barranca near Somis, Calif.....	A	2.57	1955-65	Feb. 19, 1962	8.21	450	175	-
Santa Clara River basin									
1096	Piru Creek above Lake Piru, Calif.....	A	372	1938, 1956-65	Mar. 2, 1938	-	35,000	94.1	*1.32
1120	Sespe Creek near Sespe, Calif.....	A	210	1918-27	Apr. 7, 1926	16.0	27,000	129	48
Ventura River basin									
1145	Matilija Creek above reservoir, near Matilija, Hot Springs, Calif.....	A	50.7	1949-65	Jan. 15, 1952	12.1	8,800	174	20
1176	Coyote Creek near Oak View, Calif.....	A	13.2	1959-65	Feb. 9, 1962	7.45	1,700	129	10
1178	Santa Anna Creek near Oak View, Calif.....	A	9.11	1959-65	Feb. 9, 1962	6.77	2,220	244	-
San Jose Creek basin									
1205	San Jose Creek near Goleta, Calif.....	A	5.51	1941-65	Apr. 4, 1941	6.95	1,960	356	-
Santa Ynez River basin									
1260	Santa Ynez River near Santa Ynez, Calif.....	A	422	1935-52, 1956-65	Mar. 2, 1938	17.90	43,700	104	*1.12
1275	Zanja de Cota Creek near Santa Ynez, Calif.....	A	13.8	1955-61	Mar. 21, 1958	9.4	460	33.3	3
1284	Allisal Creek near Solvang, Calif.....	A	11.5	1955-65	Feb. 19, 1958	-	2,900	252	17
1285	Santa Ynez River at Solvang, Calif.....	A	579	1932, 1935-36, 1947-65	Feb. 9, 1962	8.15	-	-	-
1355	Santa Ynez River at barrier, near Surf, Calif..	A	895	1948-65	Jan. 15, 1952	14.80	37,000	63.9	32
					Jan. 9, 1907	-	60,000	67.0	*1.15
San Antonio Creek basin									
1361	San Antonio Creek near Casmalia, Calif.....	A	135	1952, 1956-65	January 1952	13.0	-	-	-
					Feb. 19, 1962	-	1,300	9.63	3
Arroyo Grande basin									
1413	Arroyo Grande near Arroyo Grande, Calif.....	A	68.3	1959-65	Feb. 9, 1962	4.50	1,280	18.7	3
Santa Rosa Creek basin									
1422	Santa Rosa Creek near Cambria, Calif.....	A	12.5	1958-65	December 1955	15.2	-	-	-
					Feb. 1, 1960	-	2,520	202	7

1432	Carmel River at Robles del Rio Calif.....	A	193	1956-65	Dec. 23, 1955 Apr. 2, 1958	11.7 -	7,100	36.8	7
Carmel River basin									
Salinas River basin									
1475	Salinas River at Paso Robles, Calif.....	A	389	1940-65	Feb. 10-13, 1938 Mar. 9, 1943	16.9 -	- 14,200	36.5	-
1476	Huerfano Creek near Creston, Calif.....	A	101	1959-65	Feb. 9, 1962	5.75	808	8.00	4
1485	Estrella Creek near Estrella, Calif.....	A	924	1955-65	Apr. 6, 1958	7.20	8,850	9.58	7
1488	Nacimiento River near Bryson, Calif.....	A	140	1956-65	Dec. 23, 1955	24.63	30,300	216	*1.27
1505	Salinas River near Bradley, Calif.....	A	2,536	1949-65	Apr. 3, 1958	12.53	28,400	11.2	-
1513	San Lorenzo Creek below Bitterwater Creek, near King City, Calif.	A	233	1959-65	Feb. 10, 1963	8.13	2,130	9.14	3
Pajaro River basin									
1530	Pacheco Creek near Dunneville, Calif.....	A	146	1940-65	Dec. 23, 1955	18.6	12,600	86.2	-
1535	Liagas Creek near Morgan Hill, Calif.....	A	19.6	1952-65	Apr. 2, 1958	8.45	5,190	163	-
1560	San Benito River below McCoy Creek, near Hernandez, Calif.	A	108	1950-63	Apr. 2, 1958	8.93	6,690	61.9	17
1591.5	Corralitos Creek near Corralitos, Calif.....	A	10.6	1958-65	Apr. 2, 1958	-	1,970	186	3
1592	Corralitos Creek at Freedom, Calif.....	A	27.8	1956, 1957-65	Jan. 31, 1963 Dec. 22, 1955	7.62 15.6	- 3,620	- 130	4
1597	Aptos Creek at Aptos, Calif.....	A	12.2	1959-65	Jan. 31, 1963	10.82	2,110	173	4
Soquel Creek basin									
1598	West Branch Soquel Creek near Soquel, Calif....	A	12.2	1959-65	Jan. 31, 1963	10.88	4,120	338	9
San Lorenzo River basin									
1603	Zayante Creek at Zayante, Calif.....	A	11.1	1958-65	Apr. 2, 1958	7.70	3,700	333	7
Scott Creek basin									
1619	Scott Creek above Little Creek, near Davenport, Calif.	A	25.0	1959-65	Feb. 13, 1962	9.36	1,970	78.8	2
Purisima Creek basin									
1626	Purisima Creek near Half Moon Bay, Calif.....	A	4.83	1959-65	Jan. 31, 1963	5.31	301	62.3	-
Atherton drainage channel basin									
1629	Sharon Creek near Menlo Park, Calif.....	A	0.38	1958-65	Apr. 2, 1958 Jan. 31, 1963	4.2 -	- 68	- 179	- -
San Francisco Creek basin									
1629.5	San Francisco Creek tributary near Stanford University, Calif.	A	0.26	1959-64	Mar. 5, 1962	2.98	39	150	-
1632	Los Trancos Creek tributary near Stanford University, Calif.	A	.47	1959-65	Jan. 31, 1963	2.63	66	140	-
1635	Los Trancos Creek at Stanford University, Calif.	A	7.50	1931-41	Feb. 27, 1940	4.07	647	86.4	-
1645	San Francisco Creek at Stanford University, Calif.	A	37.5	1931-41, 1951-65	Dec. 22, 1955	13.60	5,560	148	-
1655	San Francisco Creek at Palo Alto, Calif.....	A	40.9	1931-41	Feb. 27, 1940	17.22	3,100	75.8	-
* Ratio of peak discharge to that of 50-year flood.									

* Ratio of peak discharge to that of 50-year flood.

Table 3.--Maximum floods at gaging stations not used to define regional flood-frequency relations--Continued

No.	Gaging station	Flood region	Drainage area (sq mi)	Period of known floods (water years)	Date	Gage height (feet)	Maximum flood	
							Cfs	Cfs per sq mi
Matadero Creek basin								
1660	Matadero Creek at Palo Alto, Calif.....	A	7.24	1953-65	Apr. 2, 1958 Dec. 22, 1955	10.30 -	- 854	- 118
Stevens Creek basin								
1665	Stevens Creek near Cupertino, Calif.....	A	18.1	1930-59	Dec. 23, 1955	8.25	1,420	78.4
Guadalupe River basin								
1670	Alamitos Creek near Edenvale, Calif.....	A	34.6	1930-58	Apr. 2, 1958	-	4,500	130
1675	Guadalupe Creek at Guadalupe, Calif.....	A	12.7	1930-59	Apr. 2, 1958	6.31	2,750	216
1685	Los Gatos Creek below Los Gatos, Calif.....	A	42.6	1945-53	Feb. 1, 1945	10.55	-	-
1690	Guadalupe River at San Jose, Calif.....	A	146	1930-65	Jan. 12, 1952	-	5,800	136
1695	Saratoga Creek at Saratoga, Calif.....	A	9.22	1934-65	Apr. 2, 1958	16.55	9,150	62.7
					Dec. 22, 1955	6.40	2,730	296
Coyote Creek basin								
1705	Coyote Creek at Coyote, Calif.....	A	204	1917-23	Feb. 10, 1922	15.4	10,300	50.5
1715	Coyote Creek near Edenvale, Calif.....	A	229	1917-62	Feb. 10, 1922	12.8	10,000	43.7
Alameda Creek basin								
1765	Arroyo Valle near Livermore, Calif.....	A	147	1956-65	Dec. 23, 1955	13.93	18,200	124
1766	Arroyo Valle at Pleasanton, Calif.....	A	171	1958-65	Apr. 3, 1958	25.36	11,300	66.1
Pacheco Creek basin								
1825	San Ramon Creek at San Ramon, Calif.....	A	5.89	1953-65	Oct. 13, 1962	16.98	1,600	272
Tulare Lake basin								
2250	Los Gatos Creek near Coalinga, Calif.....	A	105	1932-41	Feb. 11, 1938	6.23	4,520	43.0
2250.5	Warthan Creek tributary No. 1 near Coalinga, Calif.	A	.13	1959-65	Feb. 9, 1963	5.85	92	70.8
2250.75	Warthan Creek tributary No. 2 near Coalinga, Calif.	A	.012	1959-65	-	-	0	-
San Joaquin River basin								
2480	Fine Gold Creek near Priant, Calif.....	A	92.6	1937-58	Mar. 12, 1938	20.4	10,300	111
2555	Panoche Creek below Silver Creek, near Panoche, Calif.	A	293	1950-53, 1958-65	Jan. 12, 1952 Apr. 2, 1958	7.05 -	5,090	17.4 8
2555.5	Little Panoche Creek tributary No. 1 near Panoche, Calif.	A	.33	1959-65	Jan. 19, 1962	7.16	58	176
2529.5	Wolf Creek near Volta, Calif.....	A	2.82	1959-65	Feb. 1, 1963	5.70	207	73.4
2530	San Luis Creek near Los Banos, Calif.....	A	84.6	1950-63	Apr. 2, 1958	7.99	3,420	40.4
2746	Del Puerto Creek tributary No. 1 near Patterson, Calif.	A	.71	1959-65	Feb. 1, 1963	93.73	3,20	28.2
2746.1	Del Puerto Creek tributary No. 2 near Patterson	A	.02	1959-65	Feb. 16, 1959	5.73	.5	25.0

	A	61.6	1959-65	Feb. 16, 1959	2.78	-	-
3040	Corral Hollow Creek near Tracy, Calif.,.....			Mar. 6, 1962	-	145	2.35
3129.25	Mountain House Creek tributary near Altamont, Calif.,.....	.27	1959-65	Feb. 1, 1960	-	2	7.41
3129.5	Mountain House Creek near Midway, Calif.,.....	11.7	1959-65	Feb. 8, 1960	4.12	60	5.13
Sacramento River basin							
3744	Middle Fork Cottonwood Creek near Ono, Calif.,.....	249	1957-65	Dec. 22, 1964	19.08	13,500	54.1
3755	North Fork Cottonwood Creek at Ono, Calif.,.....	58.8	1908-14	Feb. 2, 1909	9.8	7,400	126
3757	North Fork Cottonwood Creek near Igo, Calif.,.....	88.7	1956-65	Dec. 21, 1955	-	12,100	136
3800	Elder Creek near Henleyville, Calif.,.....	130	1931-41	Feb. 28, 1941	10.8	14,000	108
3855	Stony Creek above Stony Gorge Reservoir, Calif.,.....	280	1901-12, 1961-65	Dec. 10, 1937	13.1	28,000	100
3870	Stony Creek near Fruto, Calif.,.....	598	1956-65	Dec. 23, 1964	15.49	40,200	67.2
3880	Stony Creek below Black Butte Dam near Orland, Calif.,.....	740	1941-65	Feb. 25, 1958	11.82	36,300	49.0
3885	Stony Creek near Hamilton City, Calif.,.....	777	1955-65	Dec. 23, 1964	18.31	40,200	51.7
4485	Adobe Creek near Kelseyville, Calif.,.....	6.36	1955-65	Jan. 31, 1963	9.22	1,500	236
4490	Highland Creek near Kelseyville, Calif.,.....	12.6	1955-65	Feb. 24, 1958	12.19	3,080	244
4517.2	Bear Creek near Rumsey, Calif.,.....	100	1958-65	Feb. 24, 1958	12.33	9,720	97.2
4525	Cache Creek at Yolo, Calif.,.....	1,137	1903-65	Feb. 25, 1958	33.11	41,400	36.4
4531.5	Putah Creek tributary near Whispering Pines, Calif.,.....	25	1959-65	Feb. 1, 1963	13.60	58	232
4545	Putah Creek at Winters, Calif.,.....	635	1906-31	Dec. 31, 1913	39.0	60,000	94.5
4550	Putah Creek near Davis, Calif.,.....	638	1949-62	Dec. 22, 1955	24.36	46,600	73.0
Napa River basin							
4559.5	Sulphur Creek near St. Helena, Calif.,.....	4.50	1956-65	Dec. 21, 1955	15.80	-	-
4564	Lake Hennessey tributary near Rutherford, Calif.,.....	1.04	1959-65	Dec. 23, 1964	-	980	218
Sonoma Creek basin							
4584	Sonoma Creek near Kenwood, Calif.,.....	6.06	1959-63	Feb. 24, 1958	13.25	1,510	249
4585	Sonoma Creek at Boyes Hot Springs, Calif.,.....	62.2	1956-63	Dec. 22, 1955	17.10	8,880	143
Novato Creek basin							
4595	Novato Creek near Novato, Calif.,.....	17.5	1947-65	Jan. 20, 1964	8.74	1,330	76
Lagunitas Creek basin							
4605	Nicasio Creek near Point Reyes Station, Calif.,.....	36.6	1954-60	Dec. 22, 1955	14.57	9,010	246
Russian River basin							
4614	East Fork Russian River tributary near Potter Valley, Calif.,.....	0.15	1959-65	Dec. 22, 1964	14.46	121	807
4620	East Fork Russian River near Ukiah, Calif.,.....	105	1912-13, 1952-65	Dec. 21, 1955	16.86	13,300	127
4621	Robinson Creek near Ukiah, Calif.,.....	19.8	1956-62	Feb. 24, 1958	17.08	2,880	145
4621.25	Slide Creek near Ukiah, Calif.,.....	.57	1959-65	Dec. 23, 1964	16.00	153	268
4627	Feliz Creek near Hopland, Calif.,.....	31.1	1956, 1959-65	Dec. 22, 1964	14.10	6,080	19
4630	Russian River near Cloverdale, Calif.,.....	502	1952-65	Dec. 22, 1964	31.05	53,500	107
4632	Big Sulphur Creek near Cloverdale, Calif.,.....	82.3	1956-65	Dec. 22, 1955	22.2	20,000	243

* Ratio of peak discharge to that of 50-year flood.

Table 3.--Maximum floods at gaging stations not used to define regional flood-frequency relations--Continued

No.	Gaging station	Flood region	Drainage area (sq mi.)	Period of known floods (water years)	Date	Maximum flood		
						Discharge	Discharge	Recurrence
						Age height (feet)	Cfs	interval (years)
Russian River basin--Continued								
4639.4	Franz Creek near Kellogg, Calif.....	B	15.7	1956-65	Dec. 22, 1955	10.69	-	-
4640.5	Dry Creek tributary near Hopland, Calif.....	B		1959-65	Jan. 5, 1965	-	5,780	368
4650.5	Dutcher Creek near Asti, Calif.....	B	1.27	1959-65	Dec. 22, 1964	12.8	4,300	339
4654.5	Mark West Creek at Mark West Springs, Calif.....	B	2.24	1959-65	Feb. 16, 1959	9.46	381	170
		B	30.4	1958-62	Feb. 8, 1960	20.34	13,500	444
4676	Garcia River near Point Arena, Calif.....	B	Garcia River basin					*1.96
		B	98.5	1952-56, 1963-65	Dec. 22, 1955	20.75	26,300	267
4695	North Fork Mattole River at Petrolia, Calif....	B	Mattole River basin					*1.09
		B	37.6	1952-57	Dec. 21, 1955	10.60	9,600	255
4715	Eel River at Van Arsdale Dam, near Potter Valley, Calif.....	B	349	1910-65	Dec. 22, 1964	33.9	64,100	184
4722	Outlet Creek near Longvale, Calif.....	B	161	1957-65	Dec. 22, 1964	30.6	77,900	484
4725	Eel River above Dos Rios, Calif.....	B	705	1951-65	Dec. 22, 1964	55.4	184,000	261
4735	Middle Fork Eel River near Covelo, Calif.....	B	406	1912-22	Dec. 31, 1913	(b)	45,000	111
4736	Short Creek near Covelo, Calif.....	B	15.2	1956, 1959-65	Dec. 21, 1955	10.51	3,780	249
4737	Mill Creek near Covelo, Calif.....	B	96.9	1957-65	Dec. 22, 1964	20.97	24,100	249
4750	Eel River at Alderpoint, Calif.....	B	2,079	1956-65	Dec. 22, 1964	87.2	561,000	270
4757	Tenmile Creek near Laytonville, Calif.....	B	50.3	1956-65	Dec. 22, 1955	22.9	16,300	324
4775	Van Duzen River near Pismo, Calif.....	B	85.1	1954-65	Dec. 22, 1964	22.5	27,000	317
4777	South Fork Duzen River near Bridgeville, Calif.....	B	36.2	1954-65	Dec. 22, 1964	18.70	13,600	376
4780	Van Duzen River at Bridgeville, Calif.....	B	202	1912-13, 1940-51	Jan. 26, 1912	26.0	22,000	109
4790	Yager Creek near Carlotta, Calif.....	B	127	1954-60	Dec. 22, 1955	17.4	28,000	220
4797	Elk River near Falk, Calif.....	B	44.2	1958-65	Dec. 22, 1964	28.09	3,430	77.6
4800	Jacoby Creek near Freshwater, Calif.....	B	6.07	1955-65	Dec. 30, 1954	7.20	1,670	275
4805	Mad River near Forest Glen, Calif.....	B	143	1954-65	Dec. 22, 1955	23.6	39,200	274
4808	North Fork Mad River near Korb, Calif.....	B	40.5	1958-65	Dec. 22, 1964	20.02	15,400	380
4812	Little River at Cramell, Calif.....	B	44.3	1956-65	Dec. 22, 1964	11.06	8,240	186
4815	Redwood Creek near Blue Lake, Calif.....	B	67.5	1953-65	Dec. 22, 1964	16.05	15,400	243

* Ratio of peak discharge to that of 50-year flood.

Table 4.--Peak discharges at miscellaneous sites and unusual floods at short-term gaging stations

No.	Stream and vicinity	Location		Flood region	Drainage area (sq mi)	Areal Q2.33 (cfs)	Date	Maximum flood	
		Latitude	Longitude					Cfs	Discharge cfs per sq mi
Sweetwater River basin									
160 M1	Sweetwater River near Dehesa, Calif.....	32°46'20"	116°48'05"	A	112	1,100	January 1916	24,300	217
	Sweetwater River near Jamacho, Calif.....	32°42'45"	116°57'25"	A	172	1,200	January 1916	43,000	250
San Diego River basin									
230	San Diego River at San Diego, Calif.....	32°45'40"	117°11'50"	A	434	3,600	Jan. 27, 1916	75,000	173
San Dieguito River basin									
300	San Dieguito River at Lake Hodges, Calif.....	33°02'48"	117°07'33"	A	303	1,970	Jan. 27, 1916	72,100	238
Santa Ana River basin									
M2 M3	Warm Creek at San Bernardino, Calif.....	34°06'15"	117°16'55"	A	57.8	400	Mar. 2, 1938	3,650	63.1
	Chino Creek near Chino, Calif.....	33°56'50"	117°40'05"	A	88.2	790	Mar. 2, 1938	5,000	56.7
Calleguas Creek basin									
M4	Calleguas Creek near Camarillo, Calif.....	34°10'40"	119°02'30"	A	249	1,500	Mar. 2, 1938	10,900	43.8
M5	Happy Camp Creek at Moorepark, Calif.....	34°17'10"	118°51'30"	A	12.0	193	Mar. 2, 1938	235	19.6
M6	Arroyo Conejo near Camarillo, Calif.....	34°12'15"	118°55'00"	A	35.1	350	Mar. 2, 1938	4,500	128
Santa Clara River basin									
M7	Santa Clara River near Ravenna, Calif.....	34°26'20"	118°18'35"	A	116	290	Mar. 2, 1938	28,200	243
M8	Santa Clara River near Santa Paula, Calif.....	34°19'40"	119°04'35"	A	1,533	3,900	Mar. 2, 1938	120,000	78.3
M9	Agua Dulce Creek near Lang, Calif.....	34°26'30"	118°19'55"	A	29.5	94	Mar. 2, 1938	1,930	65.4
M10	San Francisco Creek near Saugus, Calif.....	34°31'15"	118°21'55"	A	40.5	370	Mar. 2, 1938	5,000	123
M11	Castaic Creek near Castaic, Calif.....	34°32'40"	118°37'40"	A	77.7	75	Mar. 2, 1938	6,520	83.9
M12	Aliso Creek near Santa Paula, Calif.....	34°19'45"	119°09'10"	A	12.5	390	Mar. 2, 1938	3,170	254
Ventura River basin									
1170	San Antonio Creek near Ojai, Calif.....	34°25'25"	119°15'30"	A	33.9	620	Mar. 2, 1938	6,110	180
M13	Santa Ana Creek near Oak View, Calif.....	34°23'45"	119°20'25"	A	11.3	380	Mar. 2, 1938	3,780	335
Carmel River basin									
M14	Carmel River near Carmel, Calif.....	36°32'20"	121°52'25"	A	246	2,600	Jan. 31, 1963	7,360	29.9
Salinas River basin									
1455	Salinas River near Santa Margarita, Calif.....	35°24'20"	120°34'05"	A	148	1,050	Feb. 11, 1938	13,600	92.0
1470.7	Santa Rita Creek near Templeton, Calif.....	35°31'26"	120°45'54"	A	18.2	710	Feb. 9, 1962	2,320	127
1497	San Antonio River at Sam Jones Bridge, near Lockwood, Calif.	35°54'45"	121°07'50"	A	211	2,200	Jan. 31, 1963	14,400	68.2
1518.7	Arroyo Seco near Greenfield, Calif.....	36°14'15"	121°28'50"	A	113	3,800	Jan. 31, 1963	10,400	92.0
1519.5	Sand Creek near Paisano Springs, Calif.....	36°15'48"	121°25'48"	A	14.8	195	Jan. 31, 1963	673	45.5
See footnotes at end of table.									

See footnotes at end of table.

Table 4.--Peak discharges at miscellaneous sites and unusual floods at short-term gaging stations--Continued

No.	Stream and vicinity	Location		Flood region	Drainage area (sq mi.)	Areal Q2.33 (cfs)	Date	Maximum flood	
		Latitude	Longitude					Cfs	Discharge Cfs per sq mi
									Recur- rence interval (years)
Pajaro River basin									
1529	Cedar Creek near Bell Station, Calif.....	37°08'00"	121°19'35"	A	12.8	280	Jan. 31, 1963	3,490	273
1542	Uvas Creek near Gilroy, Calif.....	36°59'35"	121°34'20"	A	71.2	3,400	Feb. 1, 1963	7,160	101
Scott Creek basin									
M15	Scott Creek near Davenport, Calif.....	37°04'10"	122°13'50"	A	13.6	1,800	Dec. 23, 1955	6,430	473
San Francisco Creek basin									
1629.4	San Francisco Creek below Ladera damsite, near Stanford University, Calif.	37°24'12"	122°12'11"	A	28.5	1,900	Jan. 31, 1963	2,680	101
Coyote Creek basin									
1698	Coyote Creek near Gilroy, Calif.....	37°04'12"	121°29'15"	A	110	960	Jan. 31, 1963	10,100	91.8
1721	Upper Penitencia Creek at San Jose, Calif.....	37°23'43"	121°49'38"	A	21.5	560	Dec. 23, 1964	800	37.2
Alameda Creek basin									
1740	San Antonio Creek near Sunol, Calif.....	37°24'13"	121°51'12"	A	37.0	780	Dec. 23, 1955	5,810	157
1760	Arroyo Wacho near Livermore, Calif.....	37°26'15"	121°41'10"	A	36.7	550	Dec. 23, 1955	1,880	51.2
1762	Arroyo Wacho near Pleasanton, Calif.....	37°41'19"	121°52'14"	A	143	1,000	Feb. 1, 1963	1,760	12.3
1770	Arroyo de la Laguna near Pleasanton, Calif....	37°36'25"	121°52'30"	A	406	2,350	Dec. 23, 1955	24,800	61.1
Pacheco Creek basin									
1845	Pine Creek at Concord, Calif.....	37°58'13"	122°02'42"	A	27.0	590	Apr. 2, 1958	1,160	43.0
Tulare Lake basin									
M16	Warthan Creek near Coalinga, Calif.....	36°06'50"	120°22'50"	A	112	600	Dec. 23, 1955	783	6.99
San Joaquin River basin									
2630.5	Garzas Creek near Gustine, Calif.....	37°14'00"	121°08'00"	A	51.2	390	Feb. 1, 1963	1,770	34.6
M18	Kellogg Creek near Byron, Calif.....	37°51'15"	121°41'45"	A	24.1	370	Dec. 23, 1955	1,310	54.4
Sacramento River basin									
M20	North Fork Cottonwood Creek near Oro, Calif..	40°27'15"	122°33'45"	B	36.8	3,600	Dec. 21, 1955	12,100	329
M21	Dry Creek near Cottonwood, Calif.....	40°16'35"	122°32'30"	B	127	5,700	Jan. 15, 1956	8,180	62.9
3758.2	South Fork Cottonwood Creek near Cottonwood, Calif.	40°18'58"	122°26'52"	B	218	10,100	Dec. 22, 1964	13,400	61.5
M22	Red Bank Creek above Last Chance Creek, near Red Bluff, Calif.	40°06'13"	122°31'20"	B	40.4	2,080	Jan. 15, 1956	2,990	74.0
3788	Red Bank Creek near Red Bluff, Calif.....	40°05'25"	122°24'45"	B	93.5	3,250	Jan. 1, 1965	9,730	104
3845	Stony Creek near Stonyford, Calif.....	39°22'10"	122°36'13"	B	102	6,800	Dec. 22, 1955	13,000	127
3906.85	South Fork Willow Creek near Pruto, Calif....	39°32'35"	122°23'20"	B	38.9	1,190	Jan. 5, 1965	1,920	49.4

3906.8	Salt Creek near Williams, Calif.....	39°06'30"	122°18'20"	B	12.9	680	Feb. 14, 1962	427	33.1	2
4489	Highland Creek above Highland Dam, Calif.....	38°55'45"	122°55'10"	B	11.9	1,100	Dec. 22, 1964	2,880	242	40
4491	Scotts Creek near Lakeport, Calif.....	39°03'45"	122°56'50"	B	52.3	3,350	Dec. 22, 1964	6,860	166	26
4506	Copesey Creek near Lower Lake, Calif.....	38°53'21"	122°35'47"	B	13.2	970	Jan. 30, 1963	2,340	177	15
4541	Pleasants Creek near Winters, Calif.....	38°28'40"	122°01'43"	B	15.9	1,000	Jan. 31, 1963	3,780	238	*1.26
Walker Creek basin										
M29	North Fork Walker Creek near Tomales, Calif..	38°12'35"	122°50'55"	B	19.9	1,140	Dec. 22, 1955	2,720	137	16
4608	Walker Creek near Tomales, Calif.....	38°12'35"	122°51'35"	B	37.1	2,020	Jan. 31, 1961	3,430	92.5	6
Salmon Creek basin										
4609.2	Salmon Creek at Bodega, Calif.....	38°20'54"	122°58'45"	B	15.7	1,620	Jan. 31, 1963	1,430	91.1	2
Russian River basin										
4609.4	Russian River near Redwood Valley, Calif.....	39°19'10"	123°13'20"	B	14.1	1,330	Dec. 22, 1964	4,400	309	*1.21
4639	Nacama Creek near Kellogg, Calif.....	38°38'25"	122°45'45"	B	43.4	3,900	Dec. 22, 1964	8,920	206	16
4650	Dry Creek near Healdsburg, Calif.....	38°43'15"	122°59'50"	B	131	10,800	Dec. 22, 1955	28,900	221	*1.02
4652	Dry Creek near Geyserville, Calif.....	38°41'55"	122°57'25"	B	162	11,100	Dec. 22, 1964	31,800	196	50
4658	Santa Rosa Creek near Santa Rosa, Calif.....	38°27'25"	122°37'50"	B	12.5	1,080	Feb. 8, 1960	3,200	256	*1.03
Alder Creek basin										
4676.5	Alder Creek near Manchester, Calif.....	38°59'45"	123°40'50"	B	26.7	2,600	Dec. 22, 1955	5,030	189	11
Navarro River basin										
4678	Rancheria Creek near Boonville, Calif.....	38°59'35"	123°26'00"	B	65.6	5,900	Dec. 22, 1964	20,000	332	*1.12
Albion River basin										
4680.1	Albion River near Comptche, Calif.....	39°15'40"	123°37'00"	B	14.5	1,520	Dec. 21, 1964	2,050	141	4
Big River basin										
4680.7	South Fork Big River near Comptche, Calif....	39°13'45"	123°27'55"	B	36.3	3,700	Dec. 22, 1964	8,200	211	17
4681	Big River near Mendocino, Calif.....	39°19'00"	123°41'00"	B	151	11,000	Dec. 22, 1955	31,500	208	43
Pudding Creek basin										
4685.4	Pudding Creek near Fort Bragg, Calif.....	39°27'20"	123°43'20"	B	12.5	1,840	Dec. 23, 1955	1,940	164	3
Tenmile River basin										
4686	Middle Fork Tenmile River near Fort Bragg, Calif.	39°34'20"	123°41'45"	B	32.9	4,700	Dec. 21, 1964	5,670	172	3
Bel River basin										
4718	Tomki Creek near Willits, Calif.....	39°25'10"	123°13'40"	B	43.8	4,350	Dec. 22, 1964	18,100	417	*1.39
4731	Williams Creek near Covelo, Calif.....	39°49'30"	123°08'25"	B	30.4	3,300	Dec. 22, 1964	11,300	309	*1.15
4735.3	Mill Creek below Alder Creek, near Covelo, Calif.	39°50'30"	123°16'35"	B	17.1	2,000	Dec. 22, 1964	5,400	316	34
4739	Elk Creek near Hearst, Calif.....	39°38'57"	123°07'12"	B	84.1	6,650	Dec. 22, 1964	23,900	234	*1.14
4744	Hullis Creek near Covelo, Calif.....	39°54'50"	123°14'55"	B	25.9	3,300	Dec. 22, 1964	13,000	502	*1.38
4766	Ball Creek near Weott, Calif.....	40°21'05"	124°00'10"	B	28.1	5,100	Dec. 22, 1964	6,520	232	4
4767	Larabee Creek near Holmes, Calif.....	40°24'30"	123°54'00"	B	84.1	10,000	Dec. 22, 1964	11,400	136	3

* Ratio of peak discharge to that of 50-year flood.

TIA JUANA RIVER BASIN

125. Campo Creek near Campo, Calif.

Location.--Lat 32°35'25", long 116°31'30", in SE $\frac{1}{4}$ sec.24, T.18 S., R.4 E., on left bank just upstream from bridge on State Highway 94, about 3.5 miles southwest of Campo.

Drainage area.--84 sq mi, approximately, of which 4 sq mi is in Mexico.

Gage.--Recording. Prior to Dec. 1, 1954, at datum 1 ft higher. Datum of gage is 2,179.08 ft above mean sea level (State Highway Department bench mark).

Stage-discharge relation.--Defined by current-meter measurements below 110 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Peaks partly regulated by a small conservation reservoir a quarter of a mile upstream, beginning August 1956. Prior to Oct. 1, 1951, only annual peaks are shown. Base for partial-duration series, 20 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1937	Feb. 6, 1937	3.80	880	1954	Mar. 25, 1954	0.93	18
1938	Mar. 3, 1938	2.73	378				
1939	Mar. 4, 1939	1.33	66	1955	July 19, 1955	2.93	137
1940	Apr. 1, 1940	1.39	70		Aug. 23, 1955	2.13	38
				1956	Apr. 13, 1956	1.42	1.8
1941	Dec. 24, 1940	3.30	605				
1942	Mar. 14, 1942	1.65	96	1957	-	-	0
1943	Jan. 27, 1943	2.82	428				
1944	Feb. 23, 1944	2.40	270	1958	Apr. 4, 1958	3.70	367
1945	Nov. 12, 1944	1.80	133		Apr. 7, 1958	1.93	20
				1959	Feb. 16, 1959	1.13	.3
1946	Dec. 22, 1945	2.27	235				
1947	Nov. 23, 1946	1.04	26	1960	Apr. 27, 1960	1.17	.4
1948	Dec. 1, 1947	.27	.8				
1949	Feb. 28, 1949	.60	5.2	1961	-	-	0
1950	Mar. 25, 1950	.44	1.5				
				1962	-	-	0
1951	Apr. 29, 1951	.52	2.7				
				1963	-	-	0
1952	Jan. 18, 1952	.98	26				
	Mar. 11, 1952	3.32	623	1964	Jan. 22, 1964	1.13	.2
	Mar. 16, 1952	2.00	161				
	July 26, 1952	1.08	31	1965	Feb. 6, 1965	1.17	.5
1953	Mar. 2, 1953	.69	7.0				

OTAY RIVER BASIN

140. Jamul Creek near Jamul, Calif.

Location.--Lat 32°38'15", long 116°53'00", in NE $\frac{1}{4}$ sec.4, T.18 S., R.1 E., on right bank 300 ft upstream from county road crossing at upper end of Lower Otay Reservoir, 1.4 miles downstream from Dulzura Creek, and 5.5 miles south of Jamul.

Drainage area.--70.3 sq mi.

Gage.--Recording. Prior to Oct. 1, 1951, at datum 1.00 ft higher. Datum of gage is 511.64 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 1,200 cfs.

Bankfull stage.--Not subject to overflow.

Historical data.--Flood of March 1938 reached a stage of 8.0 ft (present datum), from floodmarks; artificial control was not in place at that time.

Remarks.--Low peaks may be affected by water diverted from Cottonwood Creek by Dulzura conduit into Jamul Creek via Dulzura Creek. Only annual peaks are shown.

Peak stages and discharges of Jamul Creek near Jamul, Calif.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1938	March 1938	8.0	-	1952	Mar. 16, 1952	5.04	2,030
1940	Apr. 10, 1940	1.12	30	1953	Dec. 2, 1952	2.20	33
				1954	Mar. 22, 1954	4.37	1,310
				1955	Jan. 18, 1955	1.37	5.5
1942	Mar. 14, 1942	2.32	276	1956	Mar. 12, 1956	2.54	44
1943	Jan. 27, 1943	2.73	545	1957	Feb. 14, 1957	1.45	7.7
1944	Feb. 23, 1944	3.45	1,390	1958	Apr. 3, 1958	4.27	1,220
1945	Nov. 12, 1944	2.55	311	1959	Feb. 21, 1959	1.11	1.5
1946	Dec. 23, 1945	3.18	1,140	1960	Jan. 12, 1960	1.78	14
1947	-	-	48				
1948	Dec. 1, 1947	5.42	4,000	1961	-	-	0
1949	Jan. 12, 1949	2.97	550	1962	Feb. 25, 1962	2.94	91
1950	Feb. 11, 1950	1.16	30	1963	-	-	0
				1964	-	-	0
1951	Feb. 16, 1951	2.62	363	1965	Apr. 10, 1965	2.54	46

SWEETWATER RIVER BASIN

150. Sweetwater River near Descanso, Calif.

Location.--Lat 32°50'05", long 116°37'20", in NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.25, T.15 S., R.3 E., on right bank at county road bridge, 0.7 mile downstream from unnamed tributary and 1.3 miles south of Descanso.

Drainage area.--45.5 sq mi.

Gage.--Nonrecording prior to June 25, 1927; recording thereafter. Prior to June 25, 1927, at several sites within 0.1 mile upstream at various datums (datum lowered 1.63 ft on Nov. 5, 1918). Datum of gage is 3,269.24 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 200 cfs and extended above on basis of slope-area measurement at 11,200 cfs prior to June 25, 1927; below 530 cfs thereafter.

Bankfull stage.--8 ft.

Remarks.--Low peaks may be affected by diversion to Sweetwater diversion ditch (capacity, 0.5 cfs) 0.3 mile above station since beginning of record. Peaks in the years 1906-27 are maximum observed. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1906	Mar. 24, 1906	9.25	3,000	1921	Mar. 13, 1921	2.46	-
1907	Jan. 18, 1907	-	180	1922	Dec. 26, 1921	7.03	1,700
1908	Sept. 10, 1908	-	65	1923	Dec. 14, 1922	3.09	103
1909	Jan. 22, 1909	-	595	1924	Apr. 5, 1924	2.74	67
1910	Jan. 1, 1910	-	712	1925	Apr. 23, 1925	3.12	116
1911	Feb. 4, 1911	-	140	1926	Apr. 6, 1926	5.10	600
1912	Mar. 8, 1912	-	450	1927	Feb. 16, 1927	13.2	11,200
1913	Sept. 12, 1913	-	160				
1914	Feb. 21, 1914	6.50	595	1957	May 21, 1957	2.67	7.0
1915	Feb. 10, 1915	5.5	1,750	1958	Apr. 3, 1958	6.60	1,290
				1959	Feb. 16, 1959	2.82	41
1916	Jan. 27, 1916	-	9,870	1960	Apr. 28, 1960	2.54	16
1917	Apr. 16, 1917	1.9	320				
1918	Mar. 12, 1918	4.3	1,720	1961	Jan. 26, 1961	2.18	1.3
1919	Apr. 2, 1919	2.79	28	1962	Mar. 24, 1962	3.21	38
1920	Feb. 22, 1920	4.70	463	1963	Mar. 17, 1963	2.52	6.5
				1964	Mar. 24, 1964	3.06	28
1921	Nov. 5, 1920	-	12	1965	Apr. 10, 1965	5.05	415

175. Boulder Creek near Lakeside, Calif.
(Published as "at mouth" 1913-16)

Location.--Lat 32°58'30", long 116°44'05", in NW $\frac{1}{4}$ sec.12, T.14 S., R.2 E., just upstream from mouth and 14 miles northeast of Lakeside.

Drainage area.--34.0 sq mi.

Gage.--Nonrecording. Prior to Jan. 28, 1916, at different datums. Oct. 1, 1919, to Jan. 21, 1924, at datum 0.15 ft higher. Altitude of gage is 840 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 66 cfs.

Remarks.--Peaks regulated by Cuyamaca Reservoir (capacity, 11,540 acre-ft in 1962) beginning in 1887. All peaks except that of 1916 are maximum observed. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1913	Feb. 22, 1913	-	26	1921	Mar. 14, 1921	0.92	31
1914	Jan. 27, 1914	-	83	1922	Dec. 26, 1921	6.32	900
1915	Feb. 11, 1915	5.15	200	1923	Dec. 14, 1922	1.40	61
1916	Jan. 27, 1916	9.5	3,000	1924	Apr. 5, 1924	1.22	51
				1925	Dec. 23, 1924	1.98	106
1920	Feb. 22, 1920	3.20	226	1926	Apr. 6, 1926	4.10	350

220. San Vicente Creek at San Vicente Dam, at Foster, Calif.
(Published as San Vicente Creek at Foster 1937-41)

Location.--Lat 32°54'40", long 116°55'35", in sec.31, T.14 S., R.1 E., at left end of upstream face of San Vicente Dam and 0.5 mile north of Foster.

Drainage area.--74.2 sq mi.

Gage.--Recording. October 1936 to September 1941, at different datums. Datum of gage is 460.0 ft above mean sea level.

Stage-discharge relation.--Defined by current-meter measurements below 1,500 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1937	Feb. 7, 1937	6.80	9,400	1940	Feb. 4, 1940	2.02	225
1938	Mar. 2, 1938	5.59	5,270	1941	Dec. 24, 1940	5.63	4,500
1939	Feb. 4, 1939	2.05	593				

225. San Diego River near Santee, Calif.

Location.--Lat 32°49'27", long 117°03'17", in Ex Mission San Diego Grant, on right bank in Mission Gorge, 0.2 mile upstream from left tributary and 6 miles west of Santee, San Diego County.

Drainage area.--377 sq mi.

Gage.--Nonrecording at site $1\frac{1}{2}$ miles upstream at different datum prior to Nov. 10, 1920; recording thereafter. Nov. 10, 1920, to Dec. 1, 1954, at datum 1.0 ft higher. Altitude of gage is 180 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 2,000 cfs and extended above on basis of slope-area measurement at 70,200 cfs prior to Nov. 10, 1920; below 4,600 cfs and extended on basis of slope-area measurement at 45,400 cfs thereafter.

Remarks.--Peaks regulated by El Capitan Reservoir (capacity, 112,810 acre-ft) beginning in 1935, Cuyamaca Reservoir (capacity, 11,540 acre-ft) beginning in 1887, and San Vicente Reservoir (capacity, 90,230 acre-ft) beginning in 1943. Low peaks may be affected by diversions above station by city of San Diego for municipal supply and by Helix Irrigation District. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1915	Feb. 11, 1915	13.6	3,960	1941	Apr. 13, 1941	7.75	9,250
1916	Jan. 27, 1916	25.1	70,200	1942	Jan. 1, 1942	.90	117
1917	Feb. 23, 1917	11.4	1,040	1943	Jan. 27, 1943	3.25	1,400
1918	Mar. 12, 1918	13.5	12,000	1944	Feb. 23, 1944	2.59	857
1919	Mar. 22, 1919	6.20	99	1945	Nov. 14, 1944	1.39	252
1920	Mar. 26, 1920	10.8	1,580	1946	Dec. 23, 1945	2.63	885
1921	Mar. 14, 1921	.53	15	1948	Dec. 1, 1947	1.21	190
1922	Dec. 26, 1921	10.2	16,700	1949	Jan. 13, 1949	2.09	550
1923	Dec. 14, 1922	1.70	360	1950	Feb. 7, 1950	.53	18
1926	Apr. 6, 1926	5.30	4,540	1951	Mar. 1, 1951	.26	1.8
1927	Feb. 16, 1927	18.1	45,400	1952	Jan. 18, 1952	5.57	4,390
1928	Feb. 4, 1928	1.18	156	1953	Mar. 2, 1953	.90	7.4
1929	Apr. 5, 1929	1.90	440	1954	Mar. 25, 1954	2.23	658
1930	Mar. 16, 1930	2.35	760	1955	Jan. 19, 1955	2.29	90
1931	Feb. 5, 1931	3.90	2,400	1956	Apr. 14, 1956	2.17	62
1932	Feb. 16, 1932	7.20	7,400	1957	Jan. 9, 1957	4.41	-
1933	Jan. 30, 1933	2.95	1,230	1958	Jan. 29, 1957	-	165
1934	Mar. 23, 1934	.42	7	1959	Apr. 3, 1958	5.85	2,750
1935	Feb. 6, 1935	3.12	1,090	1959	Feb. 21, 1959	2.48	140
1936	Feb. 16, 1936	3.08	1,240	1960	Jan. 12, 1960	2.74	196
1937	Feb. 7, 1937	9.4	14,200	1961	Mar. 28, 1961	2.48	140
1938	Mar. 3, 1938	7.05	7,350	1962	Jan. 20, 1962	4.99	1,640
1939	Feb. 4, 1939	2.53	766	1963	Mar. 17, 1963	3.32	348
1940	Feb. 3, 1940	3.00	1,170	1964	Jan. 22, 1964	3.83	478
				1965	Apr. 9, 1965	4.45	460

240. Santa Ysabel Creek near Mesa Grande, Calif.

Location.--Lat 33°07'25", long 116°47'45", on line between secs. 17 and 20, T.12 S., R.2 E., 0.5 mile upstream from Black Canyon Creek, 1 mile downstream from Sutherland Dam, and 4 miles southwest of Mesa Grande.

Drainage area.--54.0 sq mi.

Gage.--Recording. Prior to Oct. 1, 1936, at site 1 mile upstream at different datums. Datum was lowered 0.31 ft Apr. 21, 1916, and 0.21 ft Oct. 12, 1916. Altitude of gage is 1,715 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 4,800 cfs and extended above on basis of slope-area measurement at 14,000 cfs prior to Oct. 1, 1936; defined by current-meter measurements below 1,140 cfs thereafter.

Bankfull stage.--Not subject to overflow.

Remarks.--Only annual peaks are shown prior to Oct. 1, 1944. Base for partial-duration series, 110 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1914	Feb. 21, 1914	4.20	908	1945	Mar. 23, 1945	2.53	558
1915	Feb. 11, 1915	4.53	1,040		Aug. 18, 1945	2.13	262
1916	Jan. 27, 1916	11.0	21,100	1946	Dec. 23, 1945	4.40	2,500
1917	Feb. 23, 1917	3.17	510		Jan. 5, 1946	1.84	113
1918	Mar. 12, 1918	4.75	1,390	1947	Nov. 23, 1946	2.30	385
1919	Mar. 14, 1919	2.35	192				
1920	Aug. 2, 1920	3.45	820	1948	Feb. 6, 1948	1.73	75
1921	Mar. 14, 1921	2.12	68	1949	Feb. 7, 1949	1.81	109
1922	Dec. 26, 1921	6.80	4,780				
1923	Dec. 13, 1922	2.60	307	1950	Feb. 7, 1950	1.74	91
1924	Mar. 27, 1924	2.10	111				
1937	Feb. 7, 1937	6.50	6,100	1951	Jan. 30, 1951	1.74	78
1938	Mar. 2, 1938	7.30	8,000				
1939	Feb. 3, 1939	2.40	445	1952	Dec. 30, 1951	2.91	849
1940	Apr. 1, 1940	2.38	445		Jan. 16, 1952	2.39	438
					Jan. 18, 1952	3.31	1,220
1941	Dec. 24, 1940	4.85	3,130		Jan. 25, 1952	1.86	113
1942	Feb. 22, 1942	2.30	408		Mar. 1, 1952	2.22	303
1943	Jan. 27, 1943	3.28	1,080		Mar. 7, 1952	2.33	385
1944	Feb. 23, 1944	2.80	760		Mar. 11, 1952	2.95	840
					Mar. 13, 1952	2.67	624
1945	Nov. 12, 1944	1.90	188		Mar. 16, 1952	3.23	1,110
	Mar. 4, 1945	2.05	215		Apr. 11, 1952	2.22	348
	Mar. 15, 1945	2.70	680				
	Mar. 17, 1945	2.32	400	1953	Jan. 7, 1953	1.78	85

255. Santa Ysabel Creek near Ramona, Calif.

Location--Lat 33°06'25", long 116°51'55", in SW¹/₄ NW¹/₄ NE¹/₄ sec. 27, T. 12 S., R. 1 E., on left bank 1.6 miles downstream from Temescal Creek and 4.5 miles north of Ramona.

Drainage area--112 sq mi.

Gage--Nonrecording prior to Feb. 3, 1923; recording thereafter. Prior to Jan. 31, 1916, at site 0.5 mile upstream at different datum. Jan. 31, 1916, to Feb. 3, 1923, at datum 0.3 ft higher. Datum of gage is 847.88 ft above mean sea level (levels by city of San Diego Water Department).

Stage-discharge relation--Defined by current-meter measurements below 1,310 cfs and extended above on basis of slope-area measurement at 28,400 cfs prior to Jan. 31, 1916; below 4,000 cfs thereafter.

Bankfull stage--9 ft.

Remarks--Peaks regulated by Sutherland Reservoir (capacity, 29,680 acre-ft) beginning in July 1954. Peaks for the years 1913-15, and 1918-20 are maximum observed. Only annual peaks are shown prior to 1944 and subsequent to Sept. 30, 1953. Base for partial-duration series, 110 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1913	Feb. 25, 1913	-	172	1949	Feb. 7, 1949	2.35	184
1914	Feb. 21, 1914	-	1,960				
1915	Feb. 11, 1915	8.05	3,330	1950	Jan. 29, 1950	-	110
					Feb. 7, 1950	2.30	174
1916	Jan. 27, 1916	14.0	28,400	1951	Jan. 30, 1951	2.10	130
1917	Feb. 23, 1917	4.55	2,540				
1918	Mar. 12, 1918	9.1	2,500	1952	Dec. 30, 1951	6.06	2,080
1919	Mar. 14, 1919	2.10	110		Jan. 16, 1952	5.69	1,670
1920	Mar. 26, 1920	4.60	740		Jan. 18, 1952	6.69	2,510
					Jan. 25, 1952	2.55	199
1921	Mar. 14, 1921	2.60	122		Mar. 1, 1952	3.40	452
1922	Dec. 20, 1921	11.6	9,860		Mar. 8, 1952	3.67	504
					Mar. 11, 1952	5.55	1,470
1944	Feb. 23, 1944	4.83	1,580		Mar. 13, 1952	4.25	730
	Feb. 26, 1944	3.93	857		Mar. 16, 1952	6.18	2,060
	Mar. 2, 1944	3.04	261		Apr. 8, 1952	3.02	195
	Mar. 5, 1944	3.13	302		Apr. 11, 1952	3.73	422
	Mar. 14, 1944	4.38	1,020				
				1953	Jan. 7, 1953	2.09	125
1945	Nov. 12, 1944	3.13	290				
	Feb. 3, 1945	2.84	245	1954	Mar. 22, 1954	6.10	1,280
	Mar. 4, 1945	3.44	458		Jan. 18, 1955	2.38	13
	Mar. 15, 1945	4.69	1,140	1955			
	Mar. 17, 1945	3.26	394		Jan. 27, 1956	4.64	496
	Mar. 23, 1945	4.05	734		Mar. 20, 1957	2.43	12
1946	Dec. 22, 1945	-	3,800	1958	Apr. 3, 1958	8.62	3,420
	Dec. 23, 1945	8.35	4,200	1959	Feb. 17, 1959	3.10	94
	Jan. 5, 1946	-	137	1960	Feb. 10, 1960	2.56	21
	Mar. 31, 1946	-	145				
				1961	-	-	0
1947	Nov. 23, 1946	3.84	544	1962	Jan. 20, 1962	3.08	86
				1963	Feb. 10, 1963	3.68	174
1948	Feb. 6, 1948	1.83	96	1964	Mar. 24, 1964	2.08	3.0
				1965	Apr. 10, 1965	2.79	171
1949	Jan. 23, 1949	-	140				

260. Santa Ysabel Creek near San Pasqual, Calif.
(Published as "near Escondido" prior to Oct. 1, 1912)

Location.--Lat 33°05'10", long 116°54'56", in NE¼NW¼SE¼ sec.31, T.12 S., R.1 E., on left bank 1.1 miles downstream from Clevenger Canyon and 2 miles east of San Pasqual.

Drainage area.--128 sq mi.

Gage.--Nonrecording at site a quarter of a mile downstream at different datum prior to Sept. 30, 1912; recording thereafter. Altitude of gage is 510 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 5,300 cfs prior to Sept. 30, 1912; below 610 cfs and extended above on basis of slope-area measurement at 3,750 cfs thereafter.

Remarks.--Peaks regulated by Sutherland Reservoir (capacity, 29,680 acre-ft) beginning in July 1954. Peaks prior to 1957 are maximum observed. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1906	Mar. 24, 1906	-	8,000	1958	Apr. 3, 1958	9.78	3,750
1907	Jan. 18, 1907	-	500	1959	Feb. 17, 1959	2.23	74
1908	Feb. 3, 1908	-	146	1960	Feb. 11, 1960	1.71	20
1909	Jan. 22, 1909	-	6,800				
1910	Jan. 1, 1910	2.7	3,950	1961	Jan. 27, 1961	.67	.2
				1962	Mar. 23, 1962	1.99	50
1912	Mar. 10, 1912	-	630	1963	Feb. 10, 1963	3.00	176
				1964	Mar. 24, 1964	.68	.3
1957	Mar. 1, 1957	1.64	15	1965	Apr. 10, 1965	2.79	171

270. Guejito Creek near San Pasqual, Calif.

Location.--Lat 33°06'57", long 116°57'08", in NW¼NW¼SE¼ sec.23, T.12 S., R.1 W., on left bank 0.3 mile upstream from Rockwood Canyon Creek and 1.8 miles north of San Pasqual.

Drainage area.--22.5 sq mi.

Gage.--Recording. Altitude of gage is 560 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 440 cfs and extended above on basis of slope-area measurement at 1,660 cfs.

Bankfull stage.--3 ft.

Remarks.--Low peaks may be affected by diversions for irrigation since beginning of record. Only annual peaks are shown prior to Oct. 1, 1951. Base for partial-duration series, 30 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1947	Dec. 28, 1946	2.14	16	1954	Jan. 25, 1954	-	(a)
	Mar. 21, 1947	-	-		Feb. 13, 1954	-	(a)
1948	Dec. 5, 1947	2.18	16		Mar. 22, 1954	-	(a)
1949	Feb. 7, 1949	2.35	30		Mar. 25, 1954	-	(a)
1950	Feb. 7, 1950	2.38	34				
1951	Jan. 29, 1951	2.49	45	1955	Jan. 19, 1955	2.26	24
1952	Dec. 30, 1951	3.53	368	1956	Jan. 27, 1956	3.97	403
	Jan. 13, 1952	2.61	61	1957	Jan. 29, 1957	2.12	16
	Jan. 18, 1952	4.11	842				
	Mar. 1, 1952	2.68	63	1958	Feb. 4, 1958	3.13	150
	Mar. 7, 1952	2.89	99		Feb. 25, 1958	2.42	34
	Mar. 11, 1952	2.73	71		Mar. 16, 1958	4.69	750
	Mar. 16, 1952	3.89	611		Mar. 22, 1958	5.48	1,230
	Apr. 10, 1952	2.69	65		Mar. 27, 1958	2.77	72
1953	Nov. 15, 1952	2.40	32		Apr. 1, 1958	5.33	1,180
	Dec. 2, 1952	2.38	36		Apr. 3, 1958	5.83	1,660
					Apr. 7, 1958	3.66	293

a Discharge unknown; exceeded base.

Peak stages and discharges of Guejito Creek near San Pasqual, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1959	Feb. 17, 1959	2.47	39	1962	Feb. 21, 1962	2.61	71
					Feb. 25, 1962	2.50	42
1960	Feb. 2, 1960	2.56	48	1963	Feb. 11, 1963	2.77	77
	Feb. 10, 1960	2.84	97	1964	Mar. 23, 1964	1.77	7.5
1961	Mar. 28, 1961	.79	1.6	1965	Apr. 10, 1965	3.02	125
1962	Jan. 20, 1962	2.37	30				

285. Santa Maria Creek near Ramona, Calif.

Location--Lat 33°03'08", long 116°56'41", in SE¹SE¹SE¹ sec.11, T.13 S., R.1 W., on left bank 3.75 miles northwest of Ramona and 4.6 miles upstream from mouth.

Drainage area--57.6 sq mi.

Gage--Recording. Prior to Oct. 1, 1946, at datum 1.78 ft lower. Datum of gage is 1,294.44 ft above mean sea level, datum of 1927.

Stage-discharge relation--Defined by current-meter measurements below 800 cfs and extended above on basis of slope-area measurement at 7,140 cfs.

Bankfull stage--6 ft.

Remarks--Low peaks may be affected by water pumped from stream for municipal supply beginning during period 1920-47. Only annual peaks are shown prior to Oct. 1, 1953. Base for partial-duration series, 20 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1914	Feb. 21, 1914	-	904	1956	Mar. 31, 1956	-	-
1915	Feb. 10, 1915	7.05	1,890	1958	Mar. 16, 1958	2.62	241
1916	Jan. 27, 1916	15.9	7,140		Mar. 22, 1958	5.42	5,220
1917	Feb. 23, 1917	3.03	118		Mar. 28, 1958	1.79	30
1918	Mar. 12, 1918	6.0	1,370		Apr. 3, 1958	4.03	1,580
1919	Mar. 21, 1919	2.50	38		Apr. 7, 1958	2.98	437
1920	Mar. 26, 1920	3.45	198	1959	Feb. 22, 1959	1.22	2.1
1947	Mar. 21, 1947	1.26	1.2	1960	Feb. 10, 1960	1.69	20
1948	Mar. 24, 1948	1.05	.3	1961	-	-	0
1949	Feb. 7, 1949	1.80	12	1962	Feb. 21, 1962	1.85	40
1950	Mar. 25, 1950	1.04	.7	1963	-	-	0
1951	-	-	0	1964	-	-	0
1952	Mar. 16, 1952	4.16	1,800	1965	Apr. 12, 1965	1.62	15
1953	Nov. 16, 1952	1.81	37				
1954	Feb. 14, 1954	2.17	96				
	Mar. 22, 1954	3.43	795				
	Mar. 25, 1954	2.88	380				
1955	Jan. 18, 1955	1.72	24				

330. West Fork San Luis Rey River near Warner Springs, Calif.

Location.--Lat 33°17'50", long 116°45'30", in San Jose del Valle Grant, on left bank 0.1 mile downstream from small unnamed tributary, 2.5 miles upstream from mouth, and 7.5 miles west of Warner Springs, San Diego County.

Drainage area.--25.5 sq mi.

Gage.--Recording. Prior to Oct. 1, 1956, at different datum. Altitude of gage is 2,800 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 400 cfs and extended above on basis of slope-area measurement at 2,060 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1914	Feb. 19, 1914	4.39	580	1961	Jan. 26, 1961	4.60	0.2
				1962	Mar. 6, 1962	5.81	72
1958	Mar. 16, 1958	10.77	2,060	1963	Feb. 10, 1963	5.04	15
1959	Feb. 16, 1959	6.72	210	1964	Apr. 1, 1964	6.17	117
1960	Feb. 29, 1960	6.33	114	1965	Apr. 9, 1965	7.36	405

350. San Luis Rey River at Lake Henshaw, near Mesa Grande, Calif.
(Published as "near Mesa Grande" prior to 1923)

Location.--Lat 33°14'20", long 116°45'43", in Valle de San Jose Grant, at Henshaw Dam, 4 miles north of Mesa Grande, San Diego County.

Drainage area.--207 sq mi.

Gage.--Recording. Altitude of gage is 2,580 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 10,000 cfs and extended above on basis of slope-area measurement at 58,600 cfs.

Historical data.--Flood of 1916 reported by Father Doyle to be highest since at least 1862.

Remarks.--Henshaw Dam, 1 mile upstream (capacity, 194,300 acre-ft), closed Oct. 7, 1922. No flow over spillway since dam was completed. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1915	Feb. 11, 1915	7.15	3,240	1919	Mar. 14, 1919	4.58	650
				1920	Feb. 22, 1920	6.95	2,630
1916	Jan. 27, 1916	18.0	58,600				
1917	Apr. 16, 1917	6.0	1,980	1921	Mar. 14, 1921	3.90	315
1918	Mar. 12, 1918	10.15	7,950	1922	Dec. 26, 1921	10.50	11,000

385. San Luis Rey River near Pala, Calif.

Location.--Lat 33°21'11", long 117°01'50", in NW $\frac{1}{4}$ sec.31, T.9 S., R.1 W., 0.7 mile downstream from Agua Tibia Creek and 2.7 miles east of Pala.

Drainage area.--317 sq mi (revised).

Gage.--Nonrecording at site 550 ft downstream at different datum prior to Sept. 19, 1912; recording thereafter. Datum lowered 4.66 ft Nov. 13, 1906. Altitude of gage is 520 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 5,200 cfs prior to Sept. 19, 1912; below 810 cfs and extended above on basis of slope-area measurement at 75,500 cfs thereafter.

Remarks.--Peaks may be affected by diversion to Escondido Mutual Water Co.'s canal (capacity, about 45 cfs) since beginning of record. Peaks prior to 1913 are maximum observed. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1904	Mar. 23, 1904	-	348	1911	Feb. 4, 1911	-	1,600
1905	Mar. 17, 1905	-	6,400	1913	Feb. 22, 1913	-	205
1906	Mar. 24, 1906	12.0	22,000	1914	Feb. 21, 1914	12.5	6,680
1907	Jan. 18, 1907	-	2,900	1915	Feb. 11, 1915	12.38	6,510
1908	Feb. 3, 1908	-	819	1916	Jan. 27, 1916	18.1	75,000
1909	Jan. 22, 1909	12.0	4,600				
1910	Jan. 1, 1910	12.4	5,400				

400. San Luis Rey River at Monserate Narrows, near Pala, Calif.

Location.--Lat 33°20'15", long 117°08'10", in NE $\frac{1}{4}$ sec.6, T.10 S., R.2 W., on left bank 4 miles southwest of Pala and 6 miles northeast of Bonsall.

Drainage area.--373 sq mi.

Gage.--Recording. Prior to October 1946, at different datum. Oct. 22, 1946, to Nov. 30, 1954, at datum 1.0 ft higher. Altitude of gage is 270 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 1,150 cfs.

Bankfull stage.--8 ft.

Remarks.--Peaks regulated by Lake Henshaw (capacity, 194,300 acre-ft) beginning Oct. 7, 1922. Low peaks may be affected by several diversions above station. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1936	Feb. 16, 1936	1.95	181	1954	Mar. 23, 1954	1.96	236
1937	Feb. 7, 1937	8.7	-	1955	Dec. 12, 1954	1.93	38
1939	Dec. 21, 1938	1.39	346	1956	Jan. 27, 1956	3.19	351
1940	Apr. 1, 1940	1.37	242	1957	-	-	0
1941	Dec. 24, 1940	3.50	1,820	1958	Apr. 3, 1958	4.67	1,990
1947	Dec. 27, 1946	2.39	80	1959	Feb. 17, 1959	2.08	22
1948	Dec. 5, 1947	1.41	12	1960	-	-	0
1949	Mar. 21, 1949	2.00	29	1961	-	-	0
1950	Feb. 12, 1950	1.36	7.3	1962	-	-	0
1951	Jan. 30, 1951	1.37	6.0	1963	-	-	0
1952	Mar. 16, 1952	3.65	855	1964	-	-	0
				1965	-	-	0

410. San Luis Rey River near Bonsall, Calif.

Location.--Lat 33°15'13", long 117°14'48", in SW $\frac{1}{4}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.1, T.11 S., R.4 W., on left bank 0.7 mile downstream from bridge on State Highway 76 and 2.8 miles southwest of Bonsall.

Drainage area.--512 sq mi.

Gage.--Nonrecording at site 0.8 mile upstream at different datums prior to September 1918; recording thereafter. October 1929 to Nov. 15, 1945, at datum 3.44 ft higher and Nov. 16, 1945, to Sept. 16, 1946, at datum 1.44 ft higher. Datum of gage is 108.10 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 3,200 cfs prior to September 1918; below 2,400 cfs and extended above on basis of mean depth-mean velocity relation thereafter.

Bankfull stage.--9 ft.

Historical data.--Peak discharge for the flood of February 1891, as determined by F. C. Finkle, consulting engineer, Los Angeles, Calif., using the slope-area method, was 128,000 cfs at site about 4 miles upstream. The flood of Feb. 11, 1915, reached a stage of 7.0 ft and a discharge of 9,000 cfs, determined at site about 3 miles upstream.

Remarks.--Peaks regulated by Lake Henshaw (capacity, 194,300 acre-ft) beginning Oct. 7, 1922. Low peaks may be affected by several diversions since beginning of record. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1891	February 1891	-	128,000	1946	Dec. 23, 1945	6.20	2,230
				1947	Mar. 21, 1947	4.15	54
1915	Feb. 11, 1915	7.0	9,000	1948	Dec. 5, 1947	4.82	225
				1949	Jan. 13, 1949	4.32	34
1918	Mar. 12, 1918	3.2	-	1950	-	-	0
				1951	-	-	0
1930	May 5, 1930	3.83	486	1952	Mar. 16, 1952	7.93	1,290
1931	Feb. 4, 1931	3.12	148	1953	Nov. 15, 1952	4.48	43
1932	Feb. 16, 1932	7.05	6,140	1954	Mar. 16, 1954	3.85	4.1
1933	Jan. 20, 1933	2.36	214	1955	Jan. 18, 1955	3.59	2.0
1934	Feb. 25, 1934	1.54	51				
1935	Dec. 14, 1934	3.05	388	1956	-	-	0
				1957	Jan. 29, 1957	3.58	.6
1936	Feb. 16, 1936	2.92	371	1958	Apr. 7, 1958	8.73	1,660
1937	Feb. 7, 1937	12.95	16,700	1959	-	-	0
1938	Mar. 3, 1938	12.60	18,100	1960	Sept. 11, 1960	4.07	8.5
1939	Dec. 21, 1938	2.24	619				
1940	Feb. 3, 1940	2.60	680	1961	Jan. 26, 1961	3.62	.1
				1962	Feb. 19, 1962	4.39	5.8
1941	Dec. 24, 1940	6.00	4,760	1963	Feb. 10, 1963	4.00	1.5
1942	Mar. 15, 1942	2.39	688	1964	Nov. 21, 1963	4.37	4.9
1943	Jan. 23, 1943	5.40	3,770	1965	-	-	0
1944	Feb. 23, 1944	2.57	900				
1945	Mar. 16, 1945	2.18	592				

420. San Luis Rey River at Oceanside, Calif.
(Published as "near Oceanside" 1912-14)

Location.--Lat 33°12'48", long 117°22'33", in SW $\frac{1}{4}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.14, T.11 S., R.5 W., on right bank 0.7 mile upstream from bridge on U.S. Highway 101, 1.1 miles upstream from mouth, and 1.2 miles north of Oceanside.

Drainage area.--557 sq mi.

Gage.--Nonrecording prior to October 1929; recording thereafter. Prior to January 1916, at site three-quarters of a mile upstream, and January 1916 at site a quarter of a mile downstream, at different datums. Altitude of gage is 20 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 1,800 cfs prior to September 1914; below 55,400 cfs for January 1916; below 2,400 cfs and extended above on basis of mean depth-mean velocity relation and comparison with station near Bonsall thereafter.

Bankfull stage.--15 ft.

Remarks.--Peaks regulated by Lake Henshaw (capacity, 194,300 acre-ft) beginning Oct. 7, 1922. Low peaks may be affected by several diversions above station since beginning of record. Peaks prior to 1916 are maximum observed. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1913	Feb. 26, 1913	-	340	1947	-	-	0
1914	Feb. 21, 1914	4.9	6,300	1948	-	-	0
1915	Feb. 11, 1915	4.9	7,000	1949	-	-	0
				1950	-	-	0
1916	Jan. 27, 1916	-	95,600				
				1951	-	-	0
1930	May 6, 1930	4.62	330	1952	Mar. 16, 1952	9.34	468
				1953	Nov. 30, 1952	6.85	0.9
1931	-	-	0	1954	-	-	0
1932	Feb. 16, 1932	6.72	4,030	1955	-	-	0
1933	Jan. 30, 1933	4.97	146				
1934	-	-	0	1956	-	-	0
1935	Feb. 7, 1935	5.36	325	1957	-	-	0
				1958	Apr. 8, 1958	12.68	1,760
1936	Feb. 17, 1936	4.73	97	1959	-	-	0
1937	Feb. 7, 1937	12.00	16,500	1960	-	-	0
1938	Mar. 3, 1938	10.75	16,500				
1939	Dec. 21, 1938	5.50	570	1961	-	-	0
1940	Feb. 3, 1940	6.20	745	1962	-	-	0
				1963	-	-	0
1941	Dec. 24, 1940	8.21	2,680	1964	-	-	0
1942	Jan. 2, 1942	6.70	300	1965	-	-	0

SANTA MARGARITA RIVER BASIN

424. Temecula Creek near Aguanga, Calif.

Location.--Lat 33°27'33", long 116°55'22", in NE $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.19, T.8 S., R.1 E., on right bank, 1.6 miles downstream from Long Canyon and 3.5 miles northwest of Aguanga.

Drainage area.--132 sq mi.

Gage.--Recording. Altitude of gage is 1,590 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 800 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Base for partial-duration series, 50 cfs.

Peak stages and discharges of Temecula Creek near Aguanga, Calif.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1958	Feb. 4, 1958	3.50	410	1961	Aug. 22, 1961	2.31	90
	Mar. 16, 1958	4.26	781	1962	Jan. 20, 1962	2.42	106
	Mar. 22, 1958	4.22	767		Feb. 12, 1962	1.99	51
	Mar. 27, 1958	2.54	126		Feb. 21, 1962	2.13	56
	Apr. 1, 1958	5.65	2,120		Mar. 6, 1962	2.02	52
	Apr. 3, 1958	6.57	3,540	1963	Feb. 10, 1963	1.97	49
	Apr. 7, 1958	3.30	320		Mar. 23, 1964	2.35	86
1959	Feb. 16, 1959	2.99	232	1965	Apr. 2, 1965	2.54	115
1960	Feb. 29, 1960	1.98	54		Apr. 10, 1965	4.06	640
1961	Aug. 19, 1961	2.32	92				

425.2. Temecula Creek at Nigger Canyon, near Temecula, Calif.

Location.--Lat 33°29'44", long 116°58'44", in Pauba Grant, at upper end of Nigger Canyon, 500 ft downstream from Vail Dam and 10 miles east of Temecula, Riverside County.

Drainage area.--320 sq mi.

Gage.--Recording. Prior to Oct. 16, 1930, at site 300 ft upstream at several different datums. Altitude of gage is 1,350 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 12,500 cfs and extended above on basis of slope-area measurement at 17,100 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1923	Jan. 31, 1923	7.9	90	1937	Feb. 6, 1937	8.90	12,800
1924	Mar. 27, 1924	8.87	342	1938	Mar. 2, 1938	11.27	14,600
1925	Apr. 5, 1925	9.21	79	1939	Dec. 20, 1938	4.96	163
				1940	Apr. 1, 1940	4.73	252
1926	Apr. 6, 1926	11.20	940	1941	Dec. 24, 1940	6.85	4,220
1927	Feb. 16, 1927	19.5	17,100		Dec. 29, 1940	2.64	-
1928	Aug. 21, 1928	10.95	60	1942	Feb. 22, 1942	-	142
1929	Aug. 14, 1929	11.90	450	1943	Jan. 23, 1943	4.60	3,300
1931	Feb. 5, 1931	1.34	45	1944	Feb. 22, 1944	4.26	1,000
1932	Feb. 9, 1932	3.75	1,000	1945	Mar. 15, 1945	2.69	350
1933	Jan. 29, 1933	2.40	76	1946	July 24, 1946	3.50	1,000
1934	Jan. 1, 1934	1.53	45		Nov. 23, 1946	2.04	100
1935	Aug. 23, 1935	3.20	436		Mar. 26, 1948	1.48	41
1936	Feb. 15, 1936	2.80	170				

430. Murrieta Creek at Temecula, Calif.

Location.--Lat 33°28'47", long 117°08'35", in Temecula Grant, on right bank 0.4 mile upstream from mouth and 1.0 mile south of Temecula, Riverside County.

Drainage area.--222 sq mi.

Gage.--Recording. Altitude of gage is 970 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 10,000 cfs.

Bankfull stage.--10 ft.

Remarks.--Only annual peaks are shown prior to Oct. 1, 1946. Base for partial-duration series, 55 cfs.

Peak stages and discharges of Murrieta Creek at Temecula, Calif.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1931	Feb. 5, 1931	3.03	340	1953	Nov. 16, 1952	1.53	57
1932	Feb. 16, 1932	7.76	5,100	1953	Dec. 2, 1952	3.01	530
1933	Jan. 20, 1933	2.63	274	1953	Dec. 20, 1952	2.67	365
1934	Feb. 24, 1934	1.23	23	1954	Jan. 19, 1954	3.53	694
1935	Dec. 14, 1934	2.97	228	1954	Jan. 25, 1954	3.76	893
1936	Feb. 15, 1936	6.00	2,580	1954	Feb. 14, 1954	5.19	2,100
1937	Feb. 6, 1937	8.23	5,870	1954	Mar. 22, 1954	2.75	302
1938	Mar. 2, 1938	8.7	16,800	1955	Jan. 18, 1955	3.15	502
1939	Feb. 3, 1939	3.63	731	1955	Feb. 27, 1955	1.95	100
1940	Jan. 8, 1940	9.23	7,550	1956	Jan. 27, 1956	2.02	116
1941	Dec. 24, 1940	9.00	7,140	1957	Jan. 13, 1957	1.70	57
1942	Feb. 22, 1942	1.59	54	1957	Jan. 29, 1957	2.21	137
1943	Jan. 23, 1943	13.82	17,500	1957	Mar. 1, 1957	2.99	438
1944	Feb. 22, 1944	6.57	4,000	1958	Feb. 4, 1958	4.20	1,190
1945	Nov. 12, 1944	4.47	1,600	1958	Feb. 19, 1958	2.29	174
1946	Dec. 22, 1945	3.48	650	1958	Feb. 25, 1958	1.64	62
1947	Nov. 23, 1946	1.94	80	1958	Mar. 16, 1958	5.24	2,140
1947	Dec. 26, 1946	2.25	125	1958	Mar. 22, 1958	3.43	657
1947	Dec. 27, 1946	2.01	95	1958	Mar. 27, 1958	2.73	314
1948	Feb. 5, 1948	1.61	57	1958	Apr. 1, 1958	7.92	5,730
1949	Dec. 27, 1948	.88	12	1958	Apr. 3, 1958	7.25	4,660
1950	Mar. 26, 1950	.58	3.6	1958	Apr. 7, 1958	4.87	1,740
1951	Jan. 11, 1951	.94	15	1959	Feb. 16, 1959	2.64	280
1952	Dec. 12, 1951	1.53	60	1960	Jan. 12, 1960	1.49	44
1952	Dec. 30, 1951	3.85	830	1962	Jan. 22, 1962	1.72	71
1952	Jan. 13, 1952	4.82	1,460	1962	Feb. 12, 1962	1.77	63
1952	Jan. 16, 1952	9.80	9,140	1962	Feb. 19, 1962	3.26	410
1952	Jan. 18, 1952	8.85	7,440	1963	Feb. 10, 1963	6.87	3,700
1952	Jan. 25, 1952	1.66	66	1963	Mar. 17, 1963	1.77	76
1952	Mar. 1, 1952	2.30	207	1964	Jan. 22, 1964	1.95	42
1952	Mar. 7, 1952	5.93	3,180	1965	Apr. 10, 1965	3.61	555
1952	Mar. 11, 1952	2.65	331				
1952	Mar. 13, 1952	1.73	77				
1952	Mar. 16, 1952	8.08	6,300				
1952	Apr. 10, 1952	3.90	1,100				

440. Santa Margarita River near Temecula, Calif.
(Published as "Temecula Creek at Railroad Canyon, near Temecula"
prior to October 1952)

Location.--Lat 33°28'26", long 117°08'30", in Temecula Grant, on left bank at upper end of Temecula Canyon, 0.1 mile downstream from Murrieta Creek and 1.4 miles south of Temecula, Riverside County.

Drainage area.--588 sq mi.

Gage.--Recording. Altitude of gage is 950 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 10,000 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Peaks partly regulated by Vail Lake (capacity, 49,370 acre-ft) beginning in November 1948. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1923	Feb. 12, 1923	1.71	92	1928	Feb. 4, 1928	1.12	45
1924	Mar. 26, 1924	2.75	86	1929	Apr. 15, 1929	1.65	158
1925	Dec. 16, 1924	2.92	52	1930	Jan. 27, 1930	3.20	1,900
1926	Apr. 7, 1926	6.08	2,300	1931	Feb. 5, 1931	2.35	528
1927	Feb. 16, 1927	14.6	25,000	1932	Feb. 16, 1932	7.15	8,500

Peak stages and discharges of Santa Margarita River near Temecula, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1933	Jan. 20, 1933	1.98	290	1949	Jan. 13, 1949	2.01	39
1934	Feb. 24, 1934	1.26	54	1950	Nov. 10, 1949	1.82	28
1935	Feb. 6, 1935	2.22	296				
				1951	Jan. 11, 1951	2.13	36
1936	Feb. 15, 1936	4.50	2,870	1952	Jan. 16, 1952	9.55	13,200
1937	Feb. 7, 1937	10.70	16,400	1953	Dec. 1, 1952	4.00	645
1938	Mar. 2, 1938	13.91	21,700	1954	Feb. 14, 1954	5.90	2,150
1939	Feb. 3, 1939	2.75	835	1955	Jan. 18, 1955	4.12	550
1940	Jan. 8, 1940	7.75	7,620				
				1956	Jan. 27, 1956	2.90	132
1941	Dec. 24, 1940	7.70	7,530	1957	Mar. 1, 1957	3.95	472
1942	Feb. 22, 1942	-	400	1958	Apr. 1, 1958	9.20	5,720
	Mar. 15, 1942	2.05	-	1959	Feb. 16, 1959	3.38	284
1943	Jan. 23, 1943	12.00	18,200	1960	Feb. 29, 1960	2.49	89
1944	Feb. 22, 1944	5.13	4,500				
1945	Nov. 12, 1944	3.35	1,600	1961	Jan. 26, 1961	1.83	16
				1962	Feb. 19, 1962	4.66	524
1946	Dec. 22, 1945	2.84	1,100	1963	Feb. 10, 1963	7.95	3,720
1947	Dec. 26, 1946	1.73	180	1964	Jan. 22, 1964	2.27	44
1948	Feb. 5, 1948	1.91	79	1965	Apr. 10, 1965	3.95	552

445. Santa Margarita River near Fallbrook, Calif.

Location--Lat 33°25'54", long 117°15'44", in NE $\frac{1}{4}$ SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.14, T.9 S., R.4 W., on right bank 180 ft upstream from De Luz Road, 1.3 miles northwest of Fallbrook, and 1.9 miles downstream from Sandia Canyon.

Drainage area--644 sq mi.

Gage--Recording. Prior to Oct. 1, 1955, at site 1.7 miles upstream at different datum. Altitude of gage is 280 ft (from topographic map).

Stage-discharge relation--Defined by current-meter measurements below 8,800 cfs and extended above on basis of slope-area measurement at 33,100 cfs prior to Oct. 1, 1955; defined below 4,130 cfs thereafter.

Bankfull stage--4 ft.

Remarks--Peaks partly regulated by Vail Lake (capacity, 49,370 acre-ft) beginning in November 1948. Low peaks may be affected by several small diversions above station. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1925	Dec. 16, 1924	2.05	285	1946	Dec. 22, 1945	3.05	1,300
1926	Apr. 7, 1926	5.65	2,900	1947	Nov. 13, 1946	1.87	500
1927	Feb. 16, 1927	15.6	33,100	1948	Dec. 5, 1947	1.61	320
1928	Nov. 1, 1927	4.10	47	1949	Jan. 14, 1949	.86	53
1929	Sept. 1, 1929	4.39	105	1950	Nov. 10, 1949	.72	30
1930	Dec. 27, 1929	5.50	-				
				1951	Apr. 29, 1951	.78	18
1931	Feb. 5, 1931	4.30	380	1952	Jan. 16, 1952	8.53	14,590
1932	Feb. 16, 1932	5.10	8,800	1953	Dec. 20, 1952	2.67	355
1933	Jan. 21, 1933	1.90	304	1954	Feb. 14, 1954	6.32	2,590
1934	Jan. 1, 1934	4.15	205	1955	Jan. 19, 1955	4.41	557
1935	Feb. 7, 1935	4.28	270				
				1956	Jan. 27, 1956	4.10	314
1936	Feb. 15, 1936	4.06	2,180	1957	Mar. 1, 1957	4.09	322
1937	Feb. 6, 1937	7.90	17,000	1958	Apr. 1, 1958	8.77	4,720
1938	Mar. 2, 1938	14.00	28,000	1959	Feb. 17, 1959	3.21	157
1939	Feb. 3, 1939	4.50	824	1960	Jan. 12, 1960	2.74	59
1940	Jan. 8, 1940	6.80	10,500				
				1961	Jan. 26, 1961	2.34	8.6
1941	Dec. 24, 1940	6.80	10,700	1962	Feb. 20, 1962	3.96	364
1942	Mar. 15, 1942	1.15	226	1963	Feb. 10, 1963	8.30	4,090
1943	Jan. 23, 1943	10.72	22,000	1964	Jan. 22, 1964	2.67	39
1944	Feb. 22, 1944	5.06	5,000	1965	Apr. 10, 1965	4.16	450
1945	Nov. 12, 1944	3.86	1,800				

449. De Luz Creek near Fallbrook, Calif.

Location.--Lat 33°22'10", long 117°19'15", in NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec.29, T.9 S., R.4 W., on left bank 0.65 mile upstream from mouth and 4.2 miles west of Fallbrook.

Drainage area.--47.5 sq mi.

Gage.--Recording. Prior to Dec. 23, 1958, at site 750 ft upstream at same datum. Altitude of gage is 150 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 300 cfs and extended above on basis of slope-area measurements at 1,800, 2,580, and 2,800 cfs prior to Dec. 23, 1958; below 400 cfs thereafter.

Bankfull stage.--14 ft.

Remarks.--Base for partial-duration series, 200 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1952	Jan. 13, 1952	9.10	720	1958	Mar. 22, 1958	9.23	620
	Jan. 16, 1952	12.50	2,580		Mar. 27, 1958	8.60	354
	Mar. 7, 1952	10.16	1,330		Apr. 1, 1958	12.07	2,800
	Mar. 10, 1952	7.58	211		Apr. 3, 1958	11.07	2,160
	Apr. 10, 1952	8.95	535		Apr. 7, 1958	9.43	620
1953	Jan. 7, 1953	8.19	214	1959	Feb. 16, 1959	7.08	490
1954	Jan. 19, 1954	11.12	1,800	1960	Feb. 2, 1960	5.51	29
	Jan. 25, 1954	9.25	630		-	-	0
	Feb. 13, 1954	10.44	1,320	1962	Jan. 20, 1962	6.35	216
	Mar. 30, 1954	8.42	218		Feb. 19, 1962	6.45	240
1955	Feb. 28, 1955	7.87	54	1963	Feb. 10, 1963	5.72	58
1956	Jan. 26, 1956	9.55	782	1964	Jan. 22, 1964	5.71	45
1957	Mar. 1, 1957	7.78	43	1965	Apr. 10, 1965	6.80	557
1958	Feb. 4, 1958	9.37	428				
	Mar. 16, 1958	11.62	2,200				

460. Santa Margarita River at Ysidora, Calif.

Location.--Lat 33°14'38", long 117°22'56", in NE $\frac{1}{4}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.3, T.11 S., R.5 W., on right bank 1 mile downstream from Ysidora and 2.5 miles upstream from mouth.

Drainage area.--739 sq mi.

Gage.--Recording. Prior to Feb. 17, 1927, at site 1 mile upstream at different datum. Feb. 2, 1931, to Nov. 27, 1935, at datum 1.00 ft higher. Altitude of gage is 10 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 2,600 cfs and extended above on basis of slope-area measurement at 33,600 cfs prior to Feb. 16, 1927; below 11,700 cfs thereafter.

Bankfull stage.--14 ft.

Remarks.--Low peaks may be affected by diversions above station for irrigation of Santa Margarita and Pauba Ranches since beginning of record. Flow partly regulated by Vail Lake (capacity, 49,370 acre-ft) beginning in November 1948. Water-stage recorder graph furnished by Santa Margarita Ranch (U.S. Navy) and Pauba Ranch. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1924	Mar. 28, 1924	-	76	1931	Feb. 5, 1931	3.51	642
1925	Jan. 27, 1925	-	20	1932	Feb. 16, 1932	6.46	6,000
				1933	Jan. 30, 1933	2.25	381
				1934	Jan. 1, 1934	4.08	1,660
1926	Apr. 8, 1926	13.82	4,000	1935	Feb. 7, 1935	2.65	445
1927	Feb. 16, 1927	18.00	33,600				

SANTA MARGARITA RIVER BASIN

Peak stages and discharges of Santa Margarita River at Ysidora, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1936	Feb. 15, 1936	5.40	2,580	1951	-	-	0
1937	Feb. 7, 1937	10.50	23,000	1952	Jan. 16, 1952	12.63	7,670
1938	Mar. 3, 1938	12.70	31,000	1953	Jan. 9, 1953	-	-
1939	Feb. 4, 1939	6.78	811	1954	Feb. 14, 1954	10.80	4,320
1940	Jan. 8, 1940	9.10	9,650	1955	-	-	0
1941	Dec. 24, 1940	9.75	9,600	1956	-	-	0
1942	Feb. 23, 1942	7.50	212	1957	-	-	0
1943	Jan. 23, 1943	14.05	19,000	1958	Apr. 2, 1958	12.78	5,000
1944	Feb. 23, 1944	9.28	4,800	1959	-	-	0
1945	Nov. 12, 1944	8.80	3,500	1960	-	-	0
1946	Dec. 22, 1945	8.33	2,000	1961	-	-	0
1947	Dec. 26, 1946	7.39	422	1962	-	-	0
1948	Feb. 6, 1948	6.31	37	1963	-	-	0
1949	Feb. 25, 1949	6.38	34	1964	-	-	0
1950	-	-	0	1965	-	-	0

LAS FLORES CREEK BASIN

461. Las Flores Creek near Oceanside, Calif.

Location--Lat 33°17'32", long 117°27'21", in NW $\frac{1}{4}$ SE $\frac{1}{4}$ sec.24, T.10 S., R.6 W., on upstream side and at center of bridge on Atchison, Topeka and Santa Fe Railway, 0.5 mile upstream from mouth and 8.5 miles northwest of Oceanside.

Drainage area--26.6 sq mi.

Gage--Recording. Altitude of gage is 35 ft (from topographic map).

Stage-discharge relation--Defined by current-meter measurements below 500 cfs and extended above on basis of a field estimate at 740 cfs and a contracted-opening measurement at 960 cfs.

Banfkull stage--8 ft.

Remarks--Base for partial-duration series, 100 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1952	Jan. 16, 1952	4.75	960	1958	Apr. 3, 1958	2.70	545
	Jan. 18, 1952	3.42	565		Apr. 7, 1958	3.04	618
	Mar. 7, 1952	2.82	406				
	Mar. 15, 1952	3.05	465	1959	Jan. 6, 1959	2.60	520
	Apr. 10, 1952	3.29	529		Feb. 11, 1959	1.32	187
1953	Dec. 2, 1952	1.43	100	1960	Feb. 2, 1960	1.60	238
1954	Jan. 19, 1954	1.97	230		Apr. 27, 1960	.91	100
	Jan. 25, 1954	1.63	161	1961	Jan. 26, 1961	.62	8.5
	Feb. 13, 1954	2.61	425	1962	Dec. 2, 1961	1.10	142
1955	Jan. 18, 1955	.66	13		Jan. 20, 1962	1.35	194
1956	Jan. 27, 1956	3.78	666		Feb. 8, 1962	1.55	238
					Feb. 19, 1962	1.05	132
1957	Jan. 29, 1957	.79	19	1963	Sept. 18, 1963	.56	27
1958	Feb. 25, 1958	.96	103	1964	Nov. 20, 1963	.88	102
	Mar. 16, 1958	3.65	740	1965	Apr. 1, 1965	.87	80
	Mar. 22, 1958	1.22	166				
	Apr. 1, 1958	2.80	570				

462. San Onofre Creek near San Onofre, Calif.

Location.--Lat 33°23'23", long 117°30'50", in SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.16, T.9 S., R.6 W., on left bank 0.3 mile southwest of Tent Camp No. 2, 0.5 mile downstream from ford on Basilone Road, 4 miles east of San Onofre, and 5 miles upstream from mouth.

Drainage area.--34.6 sq mi.

Gage.--Recording. Prior to June 1957, at datum 1.00 ft higher. Altitude of gage is 170 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 370 cfs and extended above on basis of slope-area measurements at 1,340 and 1,860 cfs, and comparison with discharges for station on San Onofre Creek at San Onofre.

Bankfull stage.--6 ft.

Remarks.--Base for partial-duration series, 150 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1951	Apr. 29, 1951	1.78	32	1958	Mar. 22, 1958	3.05	266
1952	Jan. 13, 1952	3.88	720		Apr. 1, 1958	5.90	2,680
	Jan. 16, 1952	5.60	1,860		Apr. 7, 1958	3.37	495
	Mar. 7, 1952	3.39	725	1959	Jan. 6, 1959	5.94	1,340
	Mar. 11, 1952	3.42	480		Feb. 11, 1959	3.54	321
	Mar. 15, 1952	4.91	1,350		Feb. 16, 1959	2.58	184
	Apr. 10, 1952	3.27	418	1960	Jan. 12, 1960	3.35	460
1953	Nov. 16, 1952	2.40	96		Feb. 1, 1960	3.18	381
1954	Jan. 19, 1954	4.56	1,110		Apr. 27, 1960	2.78	229
	Jan. 25, 1954	3.57	555	1961	Nov. 27, 1960	1.47	24
	Feb. 13, 1954	3.79	692	1962	Dec. 2, 1961	2.45	275
	Mar. 30, 1954	2.03	196		Jan. 20, 1962	3.08	588
1955	Jan. 18, 1955	1.62	76		Feb. 8, 1962	2.08	179
1956	Jan. 26, 1956	4.05	940		Feb. 11, 1962	2.26	206
1957	Mar. 1, 1957	1.12	43		Feb. 19, 1962	2.87	465
1958	Feb. 4, 1958	4.13	623	1963	Feb. 10, 1963	2.08	128
	Feb. 19, 1958	2.89	229	1964	Jan. 22, 1964	2.14	131
	Feb. 25, 1958	2.96	291	1965	Apr. 9, 1965	3.72	1,060
	Mar. 16, 1958	5.02	1,700				

462.5. San Onofre Creek at San Onofre, Calif.

Location.--Lat 33°23'00", long 117°34'22", in SE $\frac{1}{4}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.14, T.9 S., R.7 W., on left bank 0.2 mile north of San Onofre, 0.3 mile upstream from U.S. Highway 101, and 0.5 mile upstream from mouth.

Drainage area.--42.2 sq mi.

Gage.--Recording. Altitude of gage is 15 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 1,600 cfs.

Bankfull stage.--11 ft.

Remarks.--Low peaks may be affected by pumping above station for irrigation and water supply. Base for partial-duration series, 150 cfs.

Peak stages and discharges of San Onofre Creek at San Onofre, Calif.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1947	-	-	0	1958	Feb. 4, 1958	5.22	595
1948	-	-	0		Feb. 9, 1958	3.61	203
					Feb. 25, 1958	3.83	268
1949	-	-	0		Mar. 16, 1958	6.06	1,660
					Mar. 22, 1958	3.67	220
1950	-	-	0		Apr. 1, 1958	6.90	2,600
					Apr. 7, 1958	4.35	462
1951	-	-	0	1959	Jan. 6, 1959	6.92	990
					Feb. 11, 1959	5.40	370
1952	Jan. 13, 1952	3.90	614				
	Jan. 16, 1952	7.63	2,060	1960	Jan. 12, 1960	4.93	242
	Jan. 18, 1952	5.26	1,020		Feb. 2, 1960	5.17	302
	Mar. 7, 1952	4.50	758		Apr. 27, 1960	4.85	222
	Mar. 11, 1952	3.56	375				
	Apr. 10, 1952	3.58	345	1961	-	-	0
1953	Jan. 7, 1953	2.33	20	1962	Dec. 2, 1961	4.81	212
					Jan. 20, 1962	5.68	454
1954	Jan. 19, 1954	4.60	560		Feb. 19, 1962	5.16	300
	Jan. 25, 1954	3.94	231				
	Feb. 13, 1954	4.24	380	1963	Mar. 17, 1963	4.44	36
1955	Jan. 18, 1955	3.96	1.8	1964	-	-	0
1956	Jan. 26, 1956	5.69	662	1965	Apr. 10, 1965	7.65	1,400
1957	Apr. 21, 1957	2.82	16				

SAN MATEO CREEK BASIN

463. San Mateo Creek near San Clemente, Calif.

Location.--Lat 33°28'15", long 117°28'20", in SE 1/4 sec. 23, T.8 S., R.6 W., on left bank 0.4 mile downstream from mouth of Devil Canyon and 8.6 miles north-east of San Clemente.

Drainage area.--80.8 sq mi.

Gage.--Recording. Altitude of gage is 405 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 750 cfs and extended above on basis of slope-area measurements at 1,410 and 1,800 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Brush fire denuded the basin in 1959. Base for partial-duration series, 200 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1953	Jan. 7, 1953	4.43	60	1959	Feb. 11, 1959	5.29	341
					Feb. 16, 1959	5.68	519
1954	Jan. 19, 1954	7.67	1,410				
	Jan. 25, 1954	7.03	941	1960	Jan. 14, 1960	6.62	762
	Feb. 13, 1954	6.18	450		Feb. 1, 1960	6.92	894
	Mar. 25, 1954	5.49	205		Apr. 27, 1960	6.26	500
1955	Jan. 18, 1955	5.83	286	1961	Jan. 26, 1961	3.70	2.7
1956	Jan. 27, 1956	7.81	1,720	1962	Jan. 20, 1962	6.75	380
					Feb. 11, 1962	6.48	350
1957	Mar. 1, 1957	4.28	32		Feb. 19, 1962	6.35	288
					Mar. 19, 1962	6.17	221
1958	Feb. 4, 1958	7.54	1,730				
	Feb. 19, 1958	5.53	327	1963	Feb. 10, 1963	7.54	1,300
	Mar. 16, 1958	9.05	4,100				
	Mar. 22, 1958	7.05	1,440	1964	Jan. 22, 1964	5.34	55
	Apr. 1, 1958	9.10	4,800				
	Apr. 7, 1958	6.05	825	1965	Apr. 9, 1965	7.31	2,230

463.5. Cristianitos Creek near San Clemente, Calif.

Location.--Lat 33°26'57", long 117°34'13", in SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec.25, T.8 S., R.7 W., on right bank 900 ft downstream from Talenga Canyon, 2.3 miles upstream from mouth, and 2.8 miles northeast of San Clemente.

Drainage area.--29.0 sq mi.

Gage.--Recording. Prior to Sept. 19, 1952, at datum 3.92 ft higher. Altitude of gage is 165 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 360 cfs and extended above on basis of slope-area measurements at 1,050 and 1,800 cfs.

Bankfull stage.--8 ft.

Remarks.--Base for partial-duration series, 100 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1951	-	-	0	1958	Feb. 25, 1958	4.68	214
1952	Jan. 13, 1952	3.54	342		Mar. 16, 1958	7.34	1,080
	Jan. 16, 1952	4.94	1,800		Mar. 22, 1958	5.13	349
	Jan. 18, 1952	3.00	720		Mar. 27, 1958	4.95	283
	Mar. 7, 1952	2.40	495		Apr. 1, 1958	7.48	1,130
	Mar. 15, 1952	2.60	565		Apr. 3, 1958	5.88	574
	Apr. 10, 1952	1.20	159		Apr. 7, 1958	5.58	484
1953	Nov. 15, 1952	4.58	134	1959	Feb. 11, 1959	4.39	107
	Nov. 22, 1952	4.61	204	1960	Jan. 14, 1960	4.75	232
	Dec. 2, 1952	4.85	271		Feb. 1, 1960	5.03	319
	Dec. 20, 1952	4.48	165		Apr. 27, 1960	4.89	277
	Dec. 30, 1952	4.28	132	1961	-	-	0
	Jan. 7, 1953	4.16	117		-	-	-
1954	Jan. 19, 1954	4.26	119	1962	Dec. 2, 1961	6.21	454
	Jan. 25, 1954	4.67	206		Jan. 20, 1962	6.02	378
	Feb. 13, 1954	4.86	292		Feb. 8, 1962	4.98	107
	Mar. 30, 1954	4.08	115		Feb. 19, 1962	6.02	398
1955	Jan. 10, 1955	3.85	57	1963	Feb. 10, 1963	7.16	890
1956	Jan. 27, 1956	6.06	504		Mar. 17, 1963	5.53	232
1957	Jan. 29, 1957	3.60	3.9	1964	Mar. 23, 1964	4.72	69
1958	Feb. 4, 1958	4.33	111	1965	Apr. 9, 1965	5.00	110

463.7. San Mateo Creek at San Onofre, Calif.

Location.--Lat 33°23'46", long 117°35'21", in NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec.14, T.9 S., R.7 W., on right bank 0.3 mile upstream from U.S. Highway 101, 0.8 mile upstream from mouth, 1.3 miles northwest of San Onofre, and 2.25 miles downstream from Cristianitos Creek.

Drainage area.--132 sq mi.

Gage.--Recording. Altitude of gage is 20 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 4,470 cfs.

Bankfull stage.--8 ft.

Remarks.--Low peaks regulated by percolation basins. Base for partial-duration series, 150 cfs.

SAN MATEO CREEK BASIN

Peak stages and discharges of San Mateo Creek at San Onofre, Calif.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1947	Dec. 27, 1946	2.70	0.4	1956	Jan. 26, 1956	8.67	a4,570
1948	-	-	0	1957	-	-	0
1949	-	-	0	1958	Feb. 4, 1958	4.89	735
1950	-	-	0		Mar. 7, 1958	6.85	948
1951	-	-	0		Mar. 16, 1958	5.93	4,420
					Mar. 22, 1958	3.32	714
					Mar. 28, 1958	2.30	404
					Apr. 1, 1958	5.62	4,650
					Apr. 7, 1958	3.96	1,580
1952	Jan. 13, 1952	4.93	2,460				
	Jan. 16, 1952	5.37	3,520				
	Mar. 7, 1952	4.45	1,590	1959	Feb. 17, 1959	6.28	a4,000
	Mar. 11, 1952	3.52	514				
	Mar. 15, 1952	-	2,600	1961	-	-	0
	Apr. 10, 1952	3.79	321				
1953	Dec. 2, 1952	3.87	345	1962	Feb. 11, 1962	5.64	1,940
	Dec. 20, 1952	3.36	169		Feb. 19, 1962	5.20	1,560
1954	Jan. 19, 1954	5.78	1,260	1963	-	-	0
	Jan. 25, 1954	5.11	828	1964	-	-	0
	Feb. 14, 1954	4.41	484	1965	-	-	0
	Mar. 25, 1954	3.52	202				
1955	-	-	0				

a Result of failure of temporary dam.

SAN JUAN CREEK BASIN

465. San Juan Creek near San Juan Capistrano, Calif.

Location.--Lat 33°31'08", long 117°37'27", in NE $\frac{1}{4}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.32, T.7 S., R.7 W., on right pier of bridge on State Highway 74, 2.5 miles northeast of San Juan Capistrano.

Drainage area.--106 sq mi.

Gage.--Recording. Prior to Feb. 28, 1934, at site 2 $\frac{1}{2}$ miles downstream at different datum. Feb. 28, 1934, to Dec. 10, 1938, at different datum. Dec. 11, 1938, to Dec. 17, 1941, at datum 2.00 ft higher. Altitude of gage is 150 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 600 cfs and extended above on basis of velocity-area study prior to Feb. 28, 1934; below 2,000 cfs and extended above on basis of slope-area measurements at 3,930 and 13,000 cfs thereafter.

Bankfull stage.--7 ft.

Remarks.--Low peaks may be affected by Capistrano Water Co.'s canal which diverts water 500 ft upstream from station. Only annual peaks are shown prior to Oct. 1, 1943. Base for partial-duration series, 200 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1929	Mar. 10, 1929	0.82	4.0	1944	Feb. 22, 1944	4.28	1,360
1930	Mar. 16, 1930	2.90	1,230		Feb. 26, 1944	3.12	539
1931	Feb. 5, 1931	1.52	277	1945	Feb. 2, 1945	3.26	500
1932	Feb. 9, 1932	2.15	1,200		Mar. 4, 1945	2.66	210
1933	Jan. 19, 1933	2.18	199		Mar. 15, 1945	3.41	600
1934	Jan. 1, 1934	2.95	318	1946	Dec. 23, 1945	3.13	350
1935	Apr. 8, 1935	2.22	135	1947	Nov. 13, 1946	2.42	59
1936	Feb. 16, 1936	2.66	407	1948	Feb. 5, 1948	1.99	9.4
1937	Feb. 6, 1937	-	8,300	1949	Feb. 27, 1949	1.78	3.6
1938	Mar. 2, 1938	-	13,000	1950	Jan. 11, 1950	2.02	3.6
1939	Dec. 19, 1938	2.78	275	1951	Mar. 2, 1951	1.87	1.8
1940	Feb. 3, 1940	3.18	790				
1941	Feb. 21, 1941	a3.46	1,950				
1942	Mar. 15, 1942	1.28	21				
1943	Jan. 23, 1943	-	5,800				

a Occurred Feb. 20, 1941.

Peak stages and discharges of San Juan Creek near San Juan Capistrano, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1952	Jan. 16, 1952	4.37	1,640	1960	Feb. 2, 1960	2.65	800
	Mar. 7, 1952	2.49	575	1961	Jan. 28, 1961	1.06	1.8
	Mar. 11, 1952	2.08	358				
	Mar. 16, 1952	4.65	3,330				
1953	Dec. 20, 1952	1.49	29	1962	Dec. 2, 1961	2.25	240
				Jan. 20, 1962	2.45	352	
1954	Jan. 25, 1954	2.87	458	Feb. 8, 1962	2.18	206	
				Feb. 12, 1962	2.52	400	
1955	Jan. 18, 1955	1.76	18	Feb. 15, 1962	2.40	320	
				Feb. 19, 1962	2.63	484	
1956	Jan. 27, 1956	4.80	3,750	Mar. 6, 1962	2.27	250	
				Mar. 19, 1962	2.60	460	
1957	Jan. 13, 1957	2.31	14	1963	Feb. 10, 1963	2.48	129
1958	Mar. 16, 1958	6.50	3,920	1964	Nov. 21, 1963	1.82	13
	Mar. 22, 1958	5.38	2,360				
	Mar. 27, 1958	2.58	290	1965	Apr. 10, 1965	1.92	11
	Apr. 3, 1958	4.32	2,110				
1959	Feb. 11, 1959	2.50	260				

470. Arroyo Trabuco near San Juan Capistrano, Calif.

(Published as Trabuco Creek prior to October 1956)

Location.--Lat 33°31'36", long 117°40'08", in NE1/4 sec.36, T.7 S., R.8 W., on downstream side of right pier of county road bridge (formerly U.S. Highway 101), 1.8 miles north of San Juan Capistrano.

Drainage area.--35.7 sq mi.

Gage.--Recording. Altitude of gage is 180 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 960 cfs.

Bankfull stage.--9 ft.

Remarks.--Records furnished by Orange County Flood Control District. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1932	Feb. 8, 1932	3.42	381	1949	Jan. 13, 1949	1.79	3.6
1933	Jan. 19, 1933	3.07	39	1950	Jan. 11, 1950	1.96	3.8
1934	Jan. 1, 1934	4.3	63				
1935	Jan. 5, 1935	5.35	198	1951	Jan. 8, 1951	1.95	.2
1936	Feb. 15, 1936	-	160	1952	Jan. 16, 1952	3.55	850
1937	Feb. 6, 1937	6.80	9,240	1953	Dec. 1, 1952	1.86	3.6
1938	Mar. 2, 1938	7.50	4,400	1954	Jan. 25, 1954	2.55	66
1939	Feb. 3, 1939	2.57	188	1955	Jan. 18, 1955	2.01	3.7
1940	Feb. 3, 1940	4.15	358				
1941	Feb. 21, 1941	3.70	876	1956	Jan. 27, 1956	3.35	745
				1957	Jan. 13, 1957	1.95	3.1
1943	Jan. 23, 1943	4.80	2,850	1958	Mar. 16, 1958	4.17	1,930
1944	Feb. 22, 1944	2.92	896	1959	Feb. 21, 1959	1.80	2.0
1945	Mar. 15, 1945	2.16	218	1960	Feb. 1, 1960	2.44	182
1946	Dec. 23, 1945	1.94	133	1961	Nov. 6, 1960	1.87	1.6
1947	Nov. 23, 1946	2.43	92	1962	Feb. 21, 1962	2.82	93
1948	Dec. 5, 1947	1.86	6.7	1963	Feb. 10, 1963	2.27	9.2
				1964	Nov. 20, 1963	2.51	11
				1965	Apr. 8, 1965	2.27	31

475. Aliso Creek at El Toro, Calif.

Location.--Lat 33°37'34", long 117°41'03", in Canada de los Alisos Grant, near center of channel on upstream side of Second Street Bridge at El Toro, Orange County.

Drainage area.--7.97 sq mi.

Gage.--Recording. Prior to July 1962, at different datum. Altitude of gage is 440 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 370 cfs.

Bankfull stage.--6 ft.

Remarks.--Records furnished by Orange County Flood Control District. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1931	-	-	2.9	1949	Jan. 12, 1949	5.95	2.3
1932	Feb. 1, 1932	4.85	508	1950	Feb. 6, 1950	6.59	85
1933	Jan. 19, 1933	4.39	352				
1934	Jan. 1, 1934	6.35	495	1951	-	-	0
1935	Mar. 2, 1935	8.10	1,240	1952	Jan. 16, 1952	9.54	950
				1953	Dec. 1, 1952	5.95	133
1936	Feb. 12, 1936	8.60	1,420	1954	Feb. 13, 1954	6.03	122
1937	Feb. 6, 1937	11.20	1,950	1955	Jan. 18, 1955	6.08	15
1938	Mar. 2, 1938	10.3	1,280				
1939	Feb. 3, 1939	7.0	231	1956	Jan. 26, 1956	7.60	506
1940	Feb. 3, 1940	-	528	1957	Jan. 13, 1957	5.65	2.1
				1958	Mar. 16, 1958	9.30	965
1941	Mar. 1, 1941	8.70	633	1959	Jan. 6, 1959	5.95	2.1
1942	Apr. 11, 1942	5.80	20	1960	Jan. 12, 1960	6.28	32
1943	Jan. 23, 1943	9.80	942				
1944	Feb. 22, 1944	9.62	881	1961	-	-	0
1945	Nov. 14, 1944	9.03	680	1962	Feb. 15, 1962	2.63	73
				1963	Feb. 10, 1963	2.31	88
1946	Dec. 22, 1945	7.25	183	1964	Nov. 20, 1963	2.37	67
1947	Nov. 23, 1946	6.70	90	1965	Apr. 10, 1965	2.83	73
1948	Dec. 5, 1947	6.90	103				

PETERS CANYON WASH BASIN

485. San Diego Creek near Irvine, Calif.

Location.--Lat 33°40'20", long 117°47'10", in San Joaquin Grant, on left bank 200 ft downstream from Jeffrey Road Bridge and 1.5 miles west of Irvine, Orange County.

Drainage area.--40.3 sq mi.

Gage.--Recording. Datum of gage is 102.86 ft above mean sea level (levels by Orange County Flood Control District).

Stage-discharge relation.--Defined by current-meter measurements below 400 cfs and extended above on basis of slope-area measurement at 4,040 cfs.

Bankfull stage.--11 ft.

Remarks.--Base for partial-duration series, 200 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1950	Feb. 6, 1950	2.38	244	1953	Nov. 15, 1952	2.93	755
1951	May 5, 1951	.62	.4		Nov. 29, 1952	2.50	560
					Dec. 1, 1952	4.66	1,740
1952	Jan. 13, 1952	3.90	1,280		Dec. 20, 1952	2.19	434
	Jan. 16, 1952	6.75	3,260		Dec. 30, 1952	2.08	382
	Jan. 18, 1952	7.70	4,040	1954	Jan. 19, 1954	2.73	659
	Mar. 7, 1952	3.30	1,020		Jan. 25, 1954	1.75	251
	Mar. 16, 1952	4.25	1,700		Feb. 13, 1954	2.95	722

Peak stages and discharges of San Diego Creek near Irvine, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1954	Mar. 16, 1954	1.95	294	1960	Jan. 12, 1960	3.66	942
1955	Jan. 10, 1955	2.43	259		Jan. 14, 1960	3.00	530
	Jan. 18, 1955	2.70	360		Feb. 1, 1960	3.70	970
	Feb. 27, 1955	3.60	900		Feb. 29, 1960	2.40	235
					Apr. 27, 1960	3.73	991
1956	Jan. 26, 1956	3.93	914	1961	Nov. 6, 1960	4.10	1,140
1957	Feb. 23, 1957	2.55	298		Nov. 26, 1960	2.45	244
	Feb. 28, 1957	2.70	370	1962	Dec. 2, 1961	3.29	470
	Apr. 21, 1957	2.55	298		Jan. 20, 1962	2.67	231
					Feb. 11, 1962	3.45	550
1958	Feb. 4, 1958	3.40	582		Feb. 15, 1962	3.15	410
	Feb. 19, 1958	3.15	440		Feb. 20, 1962	3.79	734
	Feb. 25, 1958	2.97	343	1963	Feb. 9, 1963	3.22	439
	Mar. 12, 1958	3.12	423		Mar. 16, 1963	2.97	338
	Mar. 16, 1958	5.35	1,880	1964	Nov. 20, 1963	5.90	2,210
	Apr. 1, 1958	4.90	1,540		Jan. 21, 1964	3.28	342
	Apr. 6, 1958	4.35	1,160		Mar. 23, 1964	3.06	261
1959	Jan. 6, 1959	3.50	835	1965	Apr. 1, 1965	3.20	410
	Feb. 16, 1959	2.50	275				
	Feb. 21, 1959	2.65	345				

SANTA ANA RIVER BASIN

515. Santa Ana River near Mentone, Calif.

Location.--Lat 34°06'40", long 117°05'54", in NW $\frac{1}{4}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.4, T.1 S., R.2 W., on left bank near mouth of canyon, 1.8 miles upstream from Mill Creek and 3.5 miles northeast of Mentone.

Drainage area.--209 sq mi.

Gage.--Nonrecording prior to Sept. 2, 1917; recording thereafter. Datum of gage is 1,984.28 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 1,500 cfs and extended above on basis of slope-area measurements at 24,000, 29,100, and 52,300 cfs.

Bankfull stage.--Not subject to overflow.

Historical floods.--Peak discharge for flood of February 23, 1891, was 53,700 cfs, determined by slope-area measurement, from notes furnished by F. C. Finkle, consulting engineer, Los Angeles.

Remarks.--Peaks partly regulated by Big Bear Lake (capacity since 1912, 72,200 acre-ft) beginning in 1884. Peaks may be affected by diversion to Southern California Edison Co.'s canal below powerplant No. 2 since beginning of record. Only annual peaks are shown prior to Oct. 1, 1949. Base for partial-duration series, 150 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1891	Feb. 23, 1891	-	53,700	1930	May 3, 1930	2.50	-
1916	Jan. 27, 1916	-	29,100	1931	Aug. 29, 1931	5.50	1,500
1917	Feb. 25, 1917	2.1	164				
1918	Mar. 7, 1918	5.54	3,780	1933	Jan. 29, 1933	2.18	73
1919	Sept. 29, 1919	2.28	145	1934	Dec. 31, 1933	5.50	1,880
1920	Feb. 22, 1920	5.48	2,700	1935	Apr. 8, 1935	3.80	780
1921	Mar. 14, 1921	4.20	1,100	1936	Feb. 11, 1936	4.70	820
1922	Dec. 20, 1921	5.45	3,600	1937	Feb. 6, 1937	7.10	8,000
1923	Dec. 13, 1922	5.0	1,800	1938	Mar. 2, 1938	14.3	52,300
1924	Mar. 27, 1924	2.18	194	1939	Sept. 25, 1939	7.35	772
1925	July 23, 1925	1.61	67	1940	Jan. 8, 1940	-	1,390
1926	Apr. 6, 1926	5.03	1,850	1941	Dec. 24, 1940	8.56	3,080
1927	Feb. 16, 1927	-	24,000	1942	Apr. 4, 1942	4.95	134
1928	Feb. 4, 1928	2.72	354	1943	Jan. 23, 1943	9.20	5,200
1929	Apr. 4, 1929	2.89	520	1944	Feb. 22, 1944	7.00	890

Peak stages and discharges of Santa Ana River near Mentone, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1945	Feb. 2, 1945	8.28	2,500	1958	Dec. 17, 1957	6.99	314
1946	Dec. 23, 1945	8.88	4,000		Jan. 26, 1958	6.95	265
1947	Nov. 23, 1946	7.75	1,450		Feb. 4, 1958	7.52	492
1948	Apr. 3, 1948	6.56	157		Feb. 19, 1958	6.92	314
1949	Jan. 20, 1949	6.62	108		Mar. 16, 1958	8.60	1,290
					Mar. 22, 1958	7.63	574
1950	Dec. 19, 1949	6.84	170		Apr. 1, 1958	8.72	1,370
	Feb. 7, 1950	-	350		Apr. 3, 1958	9.45	2,170
					July 29, 1958	6.85	169
1951	May 14, 1951	6.09	38		Sept. 8, 1958	6.80	180
				1959	Feb. 16, 1959	8.03	652
1952	Dec. 30, 1951	7.80	1,020				
	Jan. 13, 1952	7.11	380	1960	Apr. 27, 1960	6.36	82
	Jan. 16, 1952	7.50	740				
	Mar. 10, 1952	6.80	231	1961	Nov. 6, 1960	6.08	41
	Mar. 15, 1952	7.40	618				
1953	Jan. 7, 1953	6.94	244	1962	Dec. 2, 1961	8.19	520
					Jan. 20, 1962	7.19	332
1954	Jan. 19, 1954	7.95	1,080		Feb. 8, 1962	7.90	700
	Jan. 25, 1954	8.53	2,050		Feb. 11, 1962	8.11	848
	Feb. 14, 1954	6.92	267		Feb. 15, 1962	7.62	445
	Mar. 22, 1954	8.13	1,940	1963	Feb. 10, 1963	8.40	880
	Mar. 25, 1954	6.55	231		Sept. 19, 1963	6.77	192
1955	Nov. 11, 1954	6.55	278	1964	Apr. 2, 1964	6.57	92
1956	Jan. 26, 1956	8.17	1,200	1965	Apr. 2, 1965	6.67	152
					Apr. 9, 1965	7.88	688
1957	Jan. 13, 1957	8.60	1,710				

540. Mill Creek near Yucaipa, Calif.

(Published as "near Craftonville" prior to October 1954)

Location--Lat 34°05'27", long 117°02'12", in NW $\frac{1}{4}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.13, T.1 S., R.2 W., on left bank 50 ft downstream from bridge on State Highway 190-D, 3.9 miles north of Yucaipa, and 5.3 miles upstream from mouth.

Drainage area--38.1 sq mi.

Gage--Recording. Prior to August 1926, at site 100 ft upstream at different datums. August 1926 to Mar. 2, 1938, at site 500 ft downstream at different datum. Datum of gage is 2,916.36 ft above mean sea level (Southern California Edison Co. bench mark).

Stage-discharge relation--Defined by current-meter measurements below 260 cfs prior to August 1926; below 400 cfs and extended above on basis of slope-area measurement at 18,100 cfs for period August 1926 to Mar. 2, 1938; below 160 cfs and extended above on basis of slope-area measurements at 410 and 1,060 cfs thereafter.

Bankfull stage--Not subject to overflow.

Remarks--Low peaks may be affected by Mill Creek power canals Nos. 1, 2, and 3 diverting from points 100 ft, 3 miles, and 6 miles above station, respectively, since beginning of record. Only annual peaks are shown prior to Oct. 1, 1951. Base for partial-duration series, 50 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1920	Feb. 22, 1920	2.00	650	1930	May 13, 1930	2.05	55
1921	Mar. 14, 1921	.90	280	1931	July 27, 1931	3.40	-
1922	Dec. 20, 1921	4.80	896	1932	Feb. 9, 1932	3.56	400
1923	Dec. 13, 1922	3.20	440	1933	Jan. 29, 1933	1.27	12
				1934	Jan. 1, 1934	3.10	328
1925	Dec. 16, 1924	-	3	1935	Aug. 23, 1935	2.82	246
1926	Apr. 5, 1926	5.2	900	1936	Feb. 11, 1936	3.60	620
1927	Feb. 16, 1927	5.5	4,500	1937	Feb. 6, 1937	5.70	2,390
1928	Feb. 4, 1928	2.19	105	1938	Mar. 2, 1938	-	18,100

Peak stages and discharges of Mill Creek near Yucaipa, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1948	Feb. 5, 1948	6.61	4.5	1957	Jan. 7, 1957	8.37	92
1949	Apr. 19, 1949	-	-		Jan. 13, 1957	8.97	256
1950	Feb. 6, 1950	-	170				
	Sept. 6, 1950	8.06	-	1958	Dec. 15, 1957	8.80	199
1951	Apr. 29, 1951	7.74	46		Dec. 17, 1957	8.30	132
1952	Oct. 25, 1951	8.32	393		Jan. 26, 1958	8.45	53
	Dec. 5, 1951	-	600		Feb. 4, 1958	8.20	73
	Dec. 12, 1951	8.52	594		Feb. 19, 1958	8.05	50
	Dec. 30, 1951	8.63	738		Feb. 25, 1958	8.08	56
	Jan. 13, 1952	-	150		Mar. 16, 1958	8.48	252
	Jan. 16, 1952	-	225		Mar. 22, 1958	8.36	149
	Mar. 7, 1952	-	180		Apr. 1, 1958	8.55	215
	Mar. 10, 1952	-	150		Apr. 3, 1958	8.74	266
	Mar. 15, 1952	-	250		July 29, 1958	10.30	990
	Sept. 19, 1952	8.54	715		Sept. 7, 1958	7.93	56
1953	Nov. 8, 1952	7.87	57	1959	Feb. 16, 1959	9.10	415
	Nov. 14, 1952	8.12	85	1960	Apr. 27, 1960	8.33	84
	Jan. 7, 1953	7.95	133		July 22, 1960	8.45	167
	Apr. 27, 1953	8.07	178	1961	Aug. 23, 1961	9.0	1,060
	Aug. 11, 1953	7.78	63	1962	Dec. 2, 1961	6.35	208
1954	Jan. 19, 1954	8.41	100		Jan. 20, 1962	5.82	53
	Jan. 25, 1954	8.67	190		Feb. 8, 1962	5.88	92
	Feb. 14, 1954	8.19	80		Feb. 11, 1962	5.78	65
	Mar. 22, 1954	8.42	184	1963	Feb. 10, 1963	6.20	108
	Mar. 30, 1954	8.02	88		Sept. 18, 1963	6.35	150
	June 25, 1954	9.31	410	1964	Oct. 18, 1963	6.70	135
	July 18, 1954	8.40	111		Nov. 15, 1963	6.45	74
1955	Nov. 11, 1954	8.52	139		Nov. 20, 1963	6.40	64
	Feb. 17, 1955	8.48	90		Jan. 22, 1964	6.38	61
	July 23, 1955	8.40	113		Apr. 1, 1964	6.54	94
	Aug. 13, 1955	8.33	84	1965	Dec. 27, 1964	6.50	105
	Aug. 23, 1955	8.23	65		Aug. 14, 1965	7.04	235
1956	Jan. 27, 1956	8.78	193				

550. Mill Creek near Mentone, Calif.

Location.--Lat 34°05'14", long 117°06'46", in NE $\frac{1}{4}$ SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec.17, T.1 S., R.2 W., on downstream side of right pier of Bear Valley Mutual Water Co.'s pipeline crossing, 0.4 mile upstream from mouth and 1.6 miles northeast of Mentone.

Drainage area.--46.3 sq mi.

Gage.--Recording. Altitude of gage is 1,780 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 380 cfs and extended above on basis of field estimate at 450 cfs and a slope-area measurement at 1,500 cfs.

Bankfull stage.--19 ft.

Remarks.--Low peaks may be affected by diversions for Zanja and Mill Creek spreading grounds. Only annual peaks are shown prior to Oct. 1, 1945. Base for partial-duration series, 50 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1939	Sept. 25, 1939	6.40	720	1947	Nov. 13, 1946	4.00	50
1940	Jan. 8, 1940	5.40	660		Nov. 23, 1946	4.55	400
					Dec. 25, 1946	3.51	65
1941	Dec. 24, 1940	6.30	680		Dec. 26, 1946	3.81	110
1942	Apr. 4, 1942	3.88	51		Dec. 27, 1946	3.75	100
1943	Jan. 23, 1943	5.75	680	1948	Dec. 5, 1947	2.71	3.0
1944	Feb. 22, 1944	4.14	51				
1945	Nov. 12, 1944	6.24	700	1949	-	-	0
1946	Dec. 23, 1945	-	1,500	1950	Feb. 7, 1950	3.50	27
	July 24, 1946	4.03	60				

Peak stages and discharges of Mill Creek near Mentone, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1951	Jan. 11, 1951	2.63	2.6	1958	Dec. 15, 1957	4.59	144
1952	Dec. 5, 1951	4.72	249		Jan. 26, 1958	4.45	124
	Dec. 30, 1951	4.62	137		Feb. 4, 1958	4.27	100
	Jan. 13, 1952	4.55	124		Feb. 19, 1958	3.80	51
	Jan. 16, 1952	4.71	156		Mar. 16, 1958	4.59	144
	Mar. 10, 1952	4.51	98		Mar. 22, 1958	4.30	104
	Mar. 15, 1952	4.65	144		Apr. 1, 1958	4.62	149
	May 4, 1952	4.20	59		Apr. 3, 1958	4.75	172
					Apr. 21, 1958	4.15	161
1953	Nov. 15, 1952	4.12	66		July 29, 1958	4.67	138
1954	Jan. 19, 1954	4.24	72	1959	Feb. 16, 1959	5.10	215
	Jan. 25, 1954	4.74	163	1960	July 22, 1960	4.48	83
	Feb. 14, 1954	4.57	91	1961	Aug. 23, 1961	6.18	450
	Mar. 22, 1954	4.67	148	1962	Dec. 2, 1961	4.66	114
	June 25, 1954	4.83	184		Feb. 8, 1962	4.32	63
	July 18, 1954	3.98	42		Feb. 15, 1962	4.27	60
1955	Nov. 11, 1954	4.23	96	1963	Sept. 18, 1963	4.03	33
	Aug. 13, 1955	4.15	83	1964	Oct. 18, 1963	4.18	44
	Aug. 23, 1955	4.22	92	1965	Apr. 8, 1965	4.23	49
1956	Jan. 27, 1956	4.77	176				
1957	Jan. 7, 1957	4.13	76				
	Jan. 13, 1957	5.05	219				

555. Plunge Creek near East Highlands, Calif.

Location.--Lat 34°07'06", long 117°08'27", in SW $\frac{1}{4}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.1, T.1 S., R.3 W., on left bank at mouth of canyon at crossing of North Fork ditch siphon, 1.8 miles northeast of East Highlands.

Drainage area.--17.1 sq mi.

Gage.--Recording. Altitude of gage is 1,590 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 780 cfs and extended above on basis of slope-area measurement at 5,340 cfs.

Bankfull stage.--13 ft.

Remarks.--Low peaks may be affected by diversions for irrigation at points 0.5, 1.0, and 2.5 miles above station since beginning of record. Only annual peaks are shown prior to Oct. 1, 1942. Base for partial-duration series, 130 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1920	Feb. 22, 1920	2.07	440	1940	Jan. 8, 1940	1.88	660
1921	Mar. 14, 1921	3.15	1,100	1941	Dec. 24, 1940	1.90	710
1922	Feb. 9, 1922	3.13	924	1942	Dec. 10, 1941	1.18	132
1923	Dec. 13, 1922	2.30	390	1943	Jan. 23, 1943	2.60	1,700
1924	Mar. 27, 1924	1.70	218		Feb. 22, 1943	1.75	530
1925	Apr. 5, 1925	.95	20		Mar. 5, 1943	2.05	850
1926	Apr. 5, 1926	2.95	840	1944	Feb. 22, 1944	1.64	380
1927	Feb. 16, 1927	3.80	1,420	1945	Nov. 12, 1944	1.49	238
1928	Feb. 4, 1928	2.35	240		Feb. 2, 1945	2.32	1,200
1929	Apr. 5, 1929	2.32	176		Mar. 15, 1945	1.63	370
1930	May 3, 1930	2.18	143	1946	Dec. 22, 1945	2.12	860
1931	Apr. 26, 1931	2.32	170		Dec. 23, 1945	2.50	1,500
1932	Feb. 9, 1932	2.82	359		Mar. 30, 1946	1.50	340
1933	Jan. 29, 1933	1.77	80	1947	Nov. 20, 1946	1.70	170
1934	Dec. 31, 1933	2.92	380		Nov. 23, 1946	1.64	159
1935	Jan. 9, 1935	2.04	210		Dec. 27, 1946	1.67	165
1936	Feb. 11, 1936	2.60	330	1948	Apr. 3, 1948	1.83	195
1937	Feb. 6, 1937	3.90	725				
1938	Mar. 2, 1938	-	5,340				
1939	Sept. 25, 1939	1.70	480				

Peak stages and discharges of Plunge Creek near East Highlands, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1949	Jan. 20, 1949	1.14	69	1958	Dec. 15, 1957	1.27	159
1950	Dec. 19, 1949	1.62	156	Dec. 17, 1957	1.63	348	
	Feb. 7, 1950	1.53	139	Jan. 26, 1958	1.48	205	
				Feb. 4, 1958	1.82	384	
1951	Apr. 29, 1951	1.00	52	Feb. 19, 1958	1.53	262	
				Mar. 16, 1958	2.26	668	
1952	Dec. 30, 1951	1.88	360	Mar. 22, 1958	2.18	606	
	Jan. 16, 1952	1.92	340	Mar. 27, 1958	1.35	159	
	Mar. 10, 1952	1.52	173	Apr. 1, 1958	2.40	756	
	Mar. 15, 1952	1.55	187	Apr. 3, 1958	2.92	1,720	
1953	Dec. 2, 1952	1.06	62	1959	Feb. 16, 1959	2.03	602
1954	Jan. 19, 1954	1.63	184	1960	Feb. 8, 1960	.89	29
	Jan. 25, 1954	2.56	683	1961	Nov. 6, 1960	.82	26
	Feb. 14, 1954	1.66	223				
	Mar. 22, 1954	2.24	475				
		Mar. 25, 1954	1.53	153	1962	Dec. 2, 1961	2.04
1955	Feb. 27, 1955	1.01	49	Jan. 20, 1962	1.37	141	
				Feb. 9, 1962	1.60	215	
				Feb. 15, 1962	1.48	182	
1956	Jan. 27, 1956	2.87	1,630	1963	Feb. 9, 1963	1.23	99
1957	Jan. 13, 1957	2.23	825	1964	Apr. 1, 1964	1.04	48
	Feb. 23, 1957	1.40	256	1965	Apr. 9, 1965	1.83	371
	Feb. 28, 1957	2.87	1,630				
	Mar. 9, 1957	1.30	215				
		May 19, 1957	1.31	210			

558. City Creek near Highland, Calif.

Location.--Lat 34°08'38", long 117°11'16", in SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.27, T.1 N., R.3 W., on right bank 0.6 mile upstream from Highland Avenue and 1.5 miles northeast of Highland.

Drainage area.--19.5 sq mi.

Gage.--Recording. Prior to Mar. 1, 1939, at site a quarter of a mile downstream at different datum. Altitude of gage is 1,580 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 350 cfs and extended above on basis of slope-area measurement and rainfall-runoff study at 6,900 cfs prior to Mar. 1, 1939; defined below 500 cfs thereafter.

Bankfull stage.--Not subject to overflow.

Remarks.--Low peaks may be affected by diversion to City Creek Water Co.'s canal since about 1890. Only annual peaks are shown prior to Oct. 1, 1939. Base for partial-duration series, 150 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1920	Mar. 22, 1920	3.67	350	1936	Feb. 2, 1936	8.35	580
1921	Mar. 14, 1921	6.20	1,320	1937	Feb. 6, 1937	10.20	1,500
1922	Jan. 2, 1922	5.75	1,090	1938	Mar. 2, 1938	-	6,900
1923	Dec. 13, 1922	6.45	720	1939	Jan. 5, 1939	4.72	400
1924	Nov. 9, 1923	5.47	345	1940	Jan. 8, 1940	3.00	378
1925	Apr. 4, 1925	3.55	74		Feb. 26, 1940	-	236
1926	Apr. 5, 1926	9.75	2,360		Mar. 31, 1940	-	263
				1941	Dec. 24, 1940	-	432
1927	Feb. 16, 1927	9.8	1,930		Feb. 20, 1941	5.30	2,420
1928	Feb. 4, 1928	6.03	369		Mar. 1, 1941	-	284
1929	Apr. 4, 1929	6.42	196		Mar. 4, 1941	-	342
1930	May 3, 1930	6.36	78		Apr. 4, 1941	-	292
1931	Apr. 26, 1931	6.55	146	1942	Dec. 10, 1941	1.94	172
1932	Feb. 9, 1932	8.10	442				
1933	Jan. 29, 1933	6.30	62	1943	Jan. 23, 1943	5.17	2,300
1934	Jan. 1, 1934	7.85	374				
1935	Jan. 9, 1935	6.88	166			Feb. 21, 1943	-

Peak stages and discharges of City Creek near Highland, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1943	Feb. 22, 1943	-	872	1954	Mar. 22, 1954	3.42	450
	Mar. 4, 1943	-	590		Nov. 11, 1954	2.50	115
	Mar. 5, 1943	-	840	1956	Jan. 27, 1956	4.08	862
1944	Feb. 22, 1944	3.58	1,030		Jan. 5, 1957	2.70	166
1945	Nov. 12, 1944	2.83	500	1957	Jan. 13, 1957	4.86	1,600
	Feb. 2, 1945	3.50	940		Feb. 28, 1957	6.25	314
	Mar. 15, 1945	2.75	430	1958	May 11, 1957	4.72	201
1946	Dec. 22, 1945	3.43	514		May 19, 1957	4.92	201
	Dec. 23, 1945	4.33	1,000	1958	Oct. 11, 1957	6.80	400
	Mar. 30, 1946	3.18	333		Dec. 17, 1957	5.45	570
1947	Nov. 13, 1946	3.03	285		Jan. 26, 1958	4.65	540
	Nov. 20, 1946	2.97	265		Feb. 3, 1958	5.14	1,350
	Nov. 23, 1946	2.69	180		Feb. 19, 1958	3.18	304
	Dec. 27, 1946	2.67	175		Feb. 25, 1958	2.70	170
					Mar. 16, 1958	3.38	432
1948	Apr. 3, 1948	2.93	250		Mar. 22, 1958	3.50	475
1949	Jan. 20, 1949	2.43	100		Mar. 27, 1958	2.68	190
1950	Dec. 19, 1949	2.86	198		Apr. 3, 1958	4.67	1,060
1951	Apr. 23, 1951	2.29	71	1959	Feb. 16, 1959	3.63	358
1952	Dec. 30, 1951	3.50	490	1960	Feb. 9, 1960	2.45	42
	Jan. 13, 1952	3.18	336	1961	Nov. 5, 1960	2.83	92
	Jan. 16, 1952	4.13	937	1962	Dec. 2, 1961	4.14	648
	Mar. 10, 1952	2.91	232		Jan. 20, 1962	3.38	268
	Mar. 15, 1952	3.35	415		Feb. 9, 1962	3.38	216
1953	Dec. 2, 1952	2.65	132	1963	Feb. 10, 1963	3.06	163
1954	Jan. 19, 1954	2.94	239	1964	Apr. 1, 1964	2.95	64
	Jan. 25, 1954	3.73	631	1965	Apr. 9, 1965	3.92	226
	Feb. 14, 1954	2.66	155				

565. Little San Geronio Creek near Beaumont, Calif.

Location.--Lat 34°01'45", long 116°56'40", in NW¹₄SW¹₄NW¹₄ sec.1, T.2 S., R.1 W., on downstream side of left abutment of bridge on Oak Glen Road, 3.0 miles upstream from Wallace Creek and 7 miles north of Beaumont.

Drainage area.--3.23 sq mi.

Gage.--Recording. Altitude of gage is 4,320 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 1.0 cfs and extended above on basis of slope-area measurement at 319 cfs.

Bankfull stage.--8 ft.

Remarks.--Low peaks for the entire period of record may be affected by several small diversions above station for irrigation. Only annual peaks are shown prior to Oct. 1, 1951. Base for partial-duration series, 10 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1949	Feb. 25, 1949	-	-	1957	Jan. 13, 1957	1.38	4.4
1950	Feb. 6, 1950	-	20	1958	Apr. 1, 1958	1.44	12
1951	July 16, 1951	1.44	18	1959	Feb. 16, 1959	1.47	16
1952	Dec. 30, 1951	1.78	13	1960	Apr. 27, 1960	1.18	.7
1953	Nov. 14, 1952	1.36	3.0	1961	Aug. 21, 1961	1.39	5.0
1954	Jan. 25, 1954	1.40	1.4	1962	Feb. 21, 1962	1.37	6.2
1955	Jan. 19, 1955	1.72	61	1963	Feb. 10, 1963	1.21	.9
	Jan. 22, 1955	1.48	13	1964	Apr. 1, 1964	1.30	3.5
	Feb. 4, 1955	1.46	11	1965	-	-	0
	Aug. 11, 1955	1.62	34				
	Aug. 23, 1955	2.18	319				
1956	Jan. 26, 1956	1.60	30				

570. San Timoteo Creek near Redlands, Calif.

Location.--Lat 34°01'59", long 117°12'29", in NE¹/₄NE¹/₄NE¹/₄ sec.5, T.2 S., R.3 W., on downstream side of right abutment of county highway bridge, 2.0 miles southwest of Redlands and 3.4 miles downstream from Yucaipa Creek.

Drainage area.--119 sq mi.

Gage.--Recording. Prior to Oct. 30, 1934, at site 2 miles upstream at different datum. Altitude of gage is 1,280 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 142 cfs prior to Oct. 30, 1934; below 1,200 cfs and extended above on basis of slope-area measurement at 7,460 cfs thereafter.

Bankfull stage.--12 ft.

Remarks.--Records for water years 1927 and 1928 furnished by Department of Water Resources, State of California. Only annual peaks are shown prior to Oct. 1, 1946. Base for partial-duration series, 50 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1927	Feb. 16, 1927	-	3,000	1953	Nov. 15, 1952	1.93	198
1928	Feb. 4, 1928	-	60		Dec. 20, 1952	2.15	272
1929	Dec. 3, 1928	1.66	24		Dec. 30, 1952	1.66	125
1930	Mar. 15, 1930	2.10	87	1954	Jan. 19, 1954	3.00	677
1931	Feb. 4, 1931	2.18	63		Jan. 25, 1954	3.22	794
1932	Feb. 9, 1932	-	-		Feb. 13, 1954	2.96	647
1933	Oct. 1, 1932	-	-		Mar. 22, 1954	1.42	67
1934	Dec. 31, 1933	-	150		Mar. 24, 1954	1.63	109
1935	Aug. 13, 1935	6.0	4,700	1955	Nov. 11, 1954	1.40	58
1936	Feb. 12, 1936	3.55	635		Jan. 10, 1955	1.45	69
1937	Feb. 6, 1937	5.50	3,600		Jan. 18, 1955	1.83	167
1938	Mar. 2, 1938	-	7,460	1956	Jan. 27, 1956	2.08	247
1939	Sept. 11, 1939	2.0	113		July 26, 1956	1.92	194
1940	Jan. 8, 1940	4.00	1,700	1957	Mar. 9, 1957	1.93	161
1941	Dec. 24, 1940	3.55	1,150	1958	Jan. 26, 1958	1.55	104
1942	Aug. 10, 1942	1.23	34		Feb. 4, 1958	2.23	381
1943	Jan. 23, 1943	6.35	6,480		Feb. 19, 1958	1.75	188
1944	Feb. 22, 1944	3.10	690		Mar. 6, 1958	1.39	56
1945	Nov. 12, 1944	3.75	1,100		Mar. 16, 1958	1.73	167
1946	Dec. 23, 1945	3.75	1,100		Mar. 22, 1958	1.70	158
1947	Nov. 8, 1946	1.73	120		Apr. 1, 1958	3.05	890
	Nov. 13, 1946	2.62	460		Apr. 3, 1958	2.20	449
	Nov. 14, 1946	2.13	265		Apr. 7, 1958	2.15	432
	Nov. 23, 1946	2.95	620	1959	Oct. 25, 1958	2.12	418
	Dec. 26, 1946	1.64	90		Sept. 13, 1959	1.80	237
1948	Dec. 5, 1947	1.80	158	1960	Feb. 10, 1960	1.75	143
	Feb. 5, 1948	2.60	450	1961	Aug. 19, 1961	3.73	1,080
1949	Mar. 22, 1949	1.92	194	1962	Dec. 2, 1961	2.80	530
1950	Jan. 12, 1950	1.53	87		Jan. 20, 1962	2.55	408
	Feb. 6, 1950	1.55	114		Feb. 15, 1962	2.00	187
1951	Jan. 11, 1951	1.50	80		Feb. 19, 1962	2.30	300
1952	Dec. 30, 1951	1.55	92		Mar. 19, 1962	1.67	90
	Jan. 13, 1952	2.00	170	1963	Feb. 10, 1963	2.21	167
	Jan. 16, 1952	2.99	637	1964	Jan. 22, 1964	1.55	97
	Jan. 18, 1952	2.94	613	1965	Apr. 8, 1965	2.56	412
	Mar. 7, 1952	2.72	522		Aug. 11, 1965	2.55	407
	Mar. 10, 1952	1.45	76		Aug. 14, 1965	2.35	320
	Mar. 16, 1952	3.34	842		Sept. 18, 1965	3.17	708
	Apr. 19, 1952	1.52	78				
	Apr. 26, 1952	1.71	125				

575. San Timoteo Creek near Loma Linda, Calif.

Location.--Lat 34°04'03", long 117°16'42", in San Bernardino Grant, on right bank 100 ft downstream from Waterman Avenue Bridge, 0.2 mile upstream from mouth, and 1.5 miles northwest of Loma Linda, San Bernardino County.

Drainage area.--125 sq mi.

Gage.--Recording. Prior to Apr. 10, 1958, at site 100 ft upstream at datum 5.51 ft higher. Apr. 10, 1958, to June 12, 1961, at site 100 ft upstream at datum 4.51 ft higher. Altitude of gage is 1,010 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 400 cfs.

Bankfull stage.--14 ft.

Remarks.--Base for partial-duration series, 50 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1955	Nov. 11, 1954	4.09	209	1959	Jan. 6, 1959	2.00	89
	Jan. 10, 1955	3.35	54		Feb. 11, 1959	1.90	69
	Jan. 18, 1955	4.01	185	1960	Dec. 24, 1959	2.02	93
	Aug. 24, 1955	3.67	64		Jan. 12, 1960	2.03	95
1956	Jan. 26, 1956	4.30	349		Sept. 2, 1960	2.17	128
	July 25, 1956	4.59	133		Mar. 28, 1961	2.03	89
1957	Dec. 27, 1956	3.33	52	1961	Aug. 19, 1961	4.37	491
	Jan. 15, 1957	3.55	82		Dec. 2, 1961	4.00	500
	Feb. 28, 1957	3.78	76	1962	Jan. 20, 1962	3.50	380
	Mar. 9, 1957	3.61	179		Feb. 19, 1962	3.08	292
1958	Dec. 15, 1957	3.57	50	1963	Feb. 10, 1963	2.95	215
	Feb. 4, 1958	4.38	245		Mar. 16, 1963	2.08	110
	Feb. 19, 1958	2.95	82		Sept. 18, 1963	3.72	256
	Mar. 16, 1958	2.63	184	1964	Nov. 20, 1963	2.95	89
	Mar. 22, 1958	2.13	110		Jan. 22, 1964	3.15	123
	Mar. 27, 1958	1.99	112	1965	Apr. 10, 1965	3.50	200
	Apr. 1, 1958	4.23	1,050		Sept. 18, 1965	4.67	635
	Apr. 7, 1958	1.70	196				
1959	Oct. 25, 1958	2.60	260				

585. East Twin Creek near Arrowhead Springs, Calif.

(Published as Strawberry Creek near Arrowhead Springs prior to October 1952)

Location.--Lat 34°10'45", long 117°15'53", in NW¼NE¼ sec. 14, T.1 N., R.4 W., on right bank 100 ft upstream from Del Rosa Water Co.'s diversion dam, 0.5 mile south of Arrowhead Springs, and 1.0 mile downstream from Strawberry Creek.

Drainage area.--8.76 sq mi.

Gage.--Recording. Altitude of gage is 1,590 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 310 cfs and extended above on basis of slope-area measurement at 1,400 cfs.

Bankfull stage.--7 ft.

Remarks.--Only annual peaks are shown prior to Oct. 1, 1946. Base for partial-duration series, 40 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1920	Feb. 22, 1920	3.10	162	1926	Apr. 7, 1926	3.5	228
1921	Mar. 14, 1921	3.70	360	1927	Feb. 16, 1927	4.35	480
1922	Jan. 2, 1922	3.87	408	1928	Feb. 4, 1928	2.60	74
1923	Dec. 14, 1922	2.95	121	1929	Apr. 4, 1929	2.80	130
1924	Mar. 27, 1924	2.35	70	1930	May 3, 1930	2.37	34
1925	Nov. 10, 1924	1.80	26	1931	Apr. 26, 1931	2.76	38

Peak stages and discharges of East Twin Creek near Arrowhead Springs, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1932	Dec. 28, 1931	3.75	300	1954	Jan. 25, 1954	-	1,800
1933	Jan. 29, 1933	2.37	27		Feb. 13, 1954	-	350
1934	Jan. 1, 1934	3.35	240		Mar. 22, 1954	3.17	138
1935	Dec. 14, 1934	3.00	118		Mar. 30, 1954	2.76	60
1936	Feb. 2, 1936	3.30	212	1955	Nov. 11, 1954	4.39	1,280
1937	Feb. 6, 1937	4.15	492		Dec. 3, 1954	3.60	355
1938	Mar. 2, 1938	-	3,360		Feb. 27, 1955	2.73	69
1939	Jan. 5, 1939	4.05	401	1956	Nov. 21, 1955	2.70	40
1940	Jan. 8, 1940	3.70	292		Jan. 26, 1956	3.88	521
1941	Feb. 20, 1941	5.00	922	1957	Jan. 13, 1957	3.10	111
1942	Dec. 10, 1941	3.15	102		Feb. 23, 1957	2.80	55
1943	Jan. 23, 1943	5.45	1,400		May 19, 1957	3.10	117
1944	Feb. 22, 1944	4.04	441	1958	Dec. 17, 1957	3.23	327
1945	Feb. 2, 1945	4.02	430		Jan. 26, 1958	3.03	213
1946	Dec. 23, 1945	4.28	575		Feb. 3, 1958	3.35	407
1947	Nov. 13, 1946	3.05	84		Feb. 19, 1958	2.73	87
	Nov. 20, 1946	3.37	162		Feb. 25, 1958	2.71	59
	Nov. 23, 1946	3.13	100		Mar. 16, 1958	3.06	225
	Dec. 26, 1946	3.08	90		Mar. 22, 1958	3.11	247
	Dec. 27, 1946	2.93	65		Mar. 27, 1958	2.67	84
1948	Apr. 3, 1948	3.46	174		Apr. 1, 1958	3.20	307
	Apr. 29, 1948	2.79	48		Apr. 3, 1958	3.35	495
1949	Feb. 27, 1949	2.58	32		Apr. 7, 1958	2.95	120
1950	Nov. 10, 1949	2.77	68	1959	Feb. 11, 1959	2.70	42
	Dec. 19, 1949	3.05	128		Feb. 16, 1959	2.73	48
	Feb. 7, 1950	3.23	181	1960	Feb. 8, 1960	2.38	22
1951	Apr. 28, 1951	2.67	41	1961	Nov. 6, 1960	2.55	29
1952	Dec. 5, 1951	2.76	54	1962	Dec. 2, 1961	2.78	48
	Dec. 30, 1951	3.32	171		Jan. 20, 1962	2.82	52
	Jan. 13, 1952	3.17	174		Feb. 9, 1962	2.98	101
	Jan. 16, 1952	3.90	467		Feb. 15, 1962	2.76	58
	Jan. 18, 1952	3.12	120		Feb. 19, 1962	2.77	59
	Mar. 10, 1952	3.07	102	1963	Sept. 18, 1963	2.67	37
	Mar. 15, 1952	3.42	209	1964	Apr. 1, 1964	2.38	19
1953	Mar. 20, 1953	2.47	25	1965	Apr. 10, 1965	3.15	114
1954	Jan. 19, 1954	-	1,900				

586. Waterman Canyon Creek near Arrowhead Springs, Calif.

Location.--Lat 34°11'35", long 117°16'25", in NE 1/4 NW 1/4 sec. 11, T. 1 N., R. 4 W., on left bank 0.8 mile northwest of Arrowhead Springs and 1.3 miles north of San Bernardino National Forest boundary.

Drainage area.--4.65 sq mi.

Gage.--Recording. Altitude of gage is 2,050 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 140 cfs and extended above on basis of rainfall-runoff studies.

Bankfull stage.--Not subject to overflow.

Remarks.--Only annual peaks are shown prior to Oct. 1, 1942. Base for partial-duration series, 35 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1921	Mar. 14, 1921	2.95	152	1928	Feb. 4, 1928	3.08	39
1922	Jan. 2, 1922	3.43	250	1930	May 3, 1930	3.40	17
1923	Dec. 14, 1922	2.06	52	1931	Apr. 26, 1931	3.5	50
1924	Mar. 26, 1924	3.28	36	1933	Jan. 16, 1933	2.95	22
1925	Nov. 10, 1924	2.55	12	1934	Dec. 31, 1933	3.32	114
1926	Apr. 7, 1926	3.40	44				
1927	Feb. 16, 1927	4.0	110				

Peak stages and discharges of Waterman Canyon Creek near Arrowhead Springs, Calif.--Con.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1935	Dec. 14, 1934	3.86	114	1952	Dec. 29, 1951	2.77	40
1936	Feb. 2, 1936	4.15	182		Jan. 13, 1952	2.74	40
1937	Feb. 6, 1937	4.10	390		Jan. 16, 1952	3.17	115
1938	Mar. 2, 1938	-	2,350		Mar. 15, 1952	2.92	62
1939	Sept. 25, 1939	2.90	205	1953	Mar. 20, 1953	-	-
1940	Jan. 7, 1940	2.80	122	1954	Jan. 19, 1954	2.90	56
1941	Feb. 20, 1941	-	190		Jan. 25, 1954	3.08	87
	Mar. 4, 1941	2.87	-		Feb. 13, 1954	3.17	108
1942	Dec. 10, 1941	2.28	41	1955	Nov. 11, 1954	3.67	296
1943	Jan. 23, 1943	4.50	620		Dec. 3, 1954	3.39	200
	Feb. 22, 1943	2.85	152	1956	Nov. 21, 1955	2.63	36
	Mar. 3, 1943	2.93	164		Jan. 26, 1956	3.64	296
	Apr. 5, 1943	2.25	49	1957	Jan. 13, 1957	2.94	77
1944	Dec. 21, 1943	2.86	54		Feb. 23, 1957	2.73	46
	Feb. 22, 1944	3.40	185		May 19, 1957	3.13	90
1945	Nov. 11, 1944	3.33	165	1958	Dec. 17, 1957	3.35	177
	Feb. 2, 1945	3.71	278		Jan. 26, 1958	3.32	168
	Mar. 15, 1945	3.25	171		Feb. 4, 1958	3.23	156
1946	Dec. 21, 1945	3.18	125		Mar. 16, 1958	3.00	80
	Dec. 22, 1945	3.40	185		Mar. 22, 1958	2.94	71
	Dec. 23, 1945	3.58	240		Apr. 1, 1958	3.03	94
	Mar. 30, 1946	2.85	56		Apr. 3, 1958	3.45	199
1947	Nov. 13, 1946	2.80	47	1959	Feb. 16, 1959	2.98	75
	Nov. 20, 1946	3.40	185	1960	Feb. 8, 1960	2.49	16
	Nov. 23, 1946	2.86	58	1961	Nov. 6, 1960	2.51	23
	Dec. 26, 1946	2.74	38	1962	Dec. 2, 1961	2.76	50
1948	Apr. 3, 1948	3.18	126		Jan. 20, 1962	2.83	62
1949	Feb. 26, 1949	2.55	19		Feb. 9, 1962	2.78	60
1950	Nov. 10, 1949	-	42	1963	Sept. 18, 1963	3.18	128
	Dec. 19, 1949	3.02	105	1964	Apr. 1, 1964	2.73	46
	Feb. 7, 1950	-	65	1965	Apr. 9, 1965	3.08	84
1951	Apr. 28, 1951	2.73	34				
1952	Dec. 5, 1951	2.82	49				

620. Lytle Creek near Fontana, Calif.

(Published as Lytle Creek and Fontana pipeline near Fontana prior to 1932)

Location--Lat 34°12'42", long 117°27'24", in NW¹SE¹SE¹ sec.36, T.2 N., R.6 W., on right bank at downstream side of highway bridge abutment, 0.7 mile upstream from right tributary and 8 miles north of Fontana.

Drainage area--46.3 sq mi.

Gage--Recording. Prior to Mar. 22, 1938, at site 1 mile downstream at different datum. Altitude of gage is 2,380 ft (from topographic map).

Stage-discharge relation--Defined by current-meter measurements below 700 cfs prior to Mar. 22, 1938; below 550 cfs thereafter.

Remarks--Low peaks may be affected by diversions to Southern California Edison Co.'s Lytle Creek conduit since beginning of record and by Fontana Union Water Co.'s infiltration line since 1949. Only annual peaks are shown prior to Oct. 1, 1954. Base for partial-duration series, 200 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1920	Mar. 2, 1920	-	291	1931	Apr. 26, 1931	3.25	417
1921	Mar. 13, 1921	-	160	1932	Feb. 8, 1932	3.65	865
				1933	Jan. 19, 1933	3.14	100
1926	Apr. 6, 1926	4.55	500	1934	Jan. 1, 1934	5.30	560
1927	Feb. 16, 1927	5.40	5,300	1935	Apr. 8, 1935	5.80	1,500

Peak stages and discharges of Lytle Creek near Fontana, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1936	Feb. 2, 1936	5.05	730	1958	Dec. 15, 1957	2.50	214
1937	Feb. 6, 1937	5.10	1,250		Jan. 26, 1958	2.52	229
1938	Mar. 2, 1938	-	25,200		Feb. 4, 1958	2.73	241
1943	Jan. 23, 1943	-	4,800		Feb. 19, 1958	2.77	555
1947	Nov. 20, 1946	-	1,000		Mar. 16, 1958	2.78	240
1948	Apr. 3, 1948	-	140		Apr. 3, 1958	4.52	1,190
1949	Jan. 20, 1949	-	200	1959	Feb. 11, 1959	3.97	326
1950	Dec. 19, 1949	2.23	207		Feb. 16, 1959	4.72	832
1951	Apr. 28, 1951	1.86	65	1960	Jan. 10, 1960	3.40	96
1952	Jan. 16, 1952	3.25	1,500	1961	Jan. 26, 1961	3.50	102
1953	Dec. 1, 1952	2.71	98	1962	Dec. 2, 1961	5.75	760
1954	Jan. 25, 1954	4.03	780		Feb. 9, 1962	-	300
1955	Nov. 11, 1954	3.44	114	1963	Feb. 10, 1963	4.30	122
1956	Jan. 26, 1956	3.83	964	1964	Apr. 1, 1964	2.90	277
1957	Jan. 10, 1957	2.38	258	1965	Apr. 9, 1965	2.82	80
	Jan. 12, 1957	3.15	575				
	Feb. 23, 1957	2.32	238				

630. Cajon Creek near Keenbrook, Calif.

Location.--Lat 34°16'03", long 117°27'30", in SE $\frac{1}{4}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec.12, T.2 N., R.6 W., on right bank 1,600 ft upstream from Lone Pine Creek and 1.2 miles north of Keenbrook.

Drainage area.--40.6 sq mi.

Gage.--Recording. Prior to Oct. 24, 1935, at site 1,300 ft downstream at different datum. Altitude of gage is 2,630 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 305 cfs and float measurement to 560 cfs prior to Oct. 24, 1935; below 800 cfs and extended above on basis of slope-area measurements at 1,190, 1,400, 1,560, 11,000 and 14,500 cfs thereafter.

Bankfull stage.--Not subject to overflow.

Remarks.--Only annual peaks are shown prior to Oct. 1, 1946. Base for partial-duration series, 140 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1920	Mar. 22, 1920	4.61	740	1942	Dec. 28, 1941	2.45	-
1921	Mar. 14, 1921	4.60	740		Aug. 10, 1942	-	94
1922	Dec. 20, 1921	9.0	5,000	1943	Jan. 23, 1943	17.8	11,000
1923	Sept. 13, 1923	4.43	800	1944	Feb. 22, 1944	7.47	4,000
1924	Mar. 26, 1924	4.61	135	1945	Nov. 11, 1944	2.67	742
1925	Apr. 4, 1925	4.95	157	1946	Mar. 30, 1946	8.67	780
1926	May 2, 1926	5.5	335	1947	Nov. 13, 1946	8.60	750
1927	Feb. 15, 1927	5.45	950		Dec. 26, 1946	8.47	700
1928	Feb. 4, 1928	3.52	205	1948	Dec. 5, 1947	6.32	135
1929	Mar. 10, 1929	4.98	175	1949	Dec. 26, 1948	5.60	-
1930	Mar. 14, 1930	6.77	720		Jan. 20, 1949	-	110
1931	Apr. 26, 1931	6.12	350	1950	Jan. 8, 1950	4.66	40
1932	Feb. 9, 1932	10.50	2,600	1951	Nov. 13, 1950	4.51	22
1933	Jan. 19, 1933	7.25	610	1952	Jan. 12, 1952	7.13	1,240
1934	Jan. 1, 1934	5.40	570		Jan. 16, 1952	7.10	1,350
1935	Oct. 17, 1934	7.08	2,200		Mar. 7, 1952	5.17	441
1936	Feb. 23, 1936	3.00	290		Mar. 15, 1952	7.45	482
1937	Dec. 27, 1936	4.30	760	1953	Dec. 1, 1952	6.75	84
1938	Mar. 2, 1938	-	14,500				
1939	Sept. 25, 1939	5.12	1,220				
1940	Jan. 8, 1940	7.25	2,560				
1941	Mar. 4, 1941	7.60	2,810				

Peak stages and discharges of Cajon Creek near Keenbrook, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1954	Jan. 19, 1954	7.15	312	1959	Feb. 11, 1959	3.88	375
	Jan. 24, 1954	7.40	461		Feb. 16, 1959	5.32	1,400
	Feb. 13, 1954	7.33	406	1960	Jan. 10, 1960	3.83	8 ^a
	Mar. 17, 1954	6.67	170		Nov. 6, 1960	4.14	93
1955	Nov. 11, 1954	7.62	606	1962	Nov. 20, 1961	5.30	318
1956	Jan. 26, 1956	7.58	575		Dec. 2, 1961	7.32	1,190
	Jan. 13, 1957	8.50	1,560		Feb. 11, 1962	-	a3,000
1957	Feb. 23, 1957	3.38	229		Feb. 15, 1962	2.95	204
					Feb. 19, 1962	3.04	269
1958	Dec. 17, 1957	3.22	191	1963	Feb. 9, 1963	3.18	283
	Feb. 4, 1958	4.40	750		Jan. 22, 1964	2.92	184
	Feb. 19, 1958	3.48	327	1965	Apr. 1, 1965	3.54	304
	Feb. 25, 1958	2.93	182		Apr. 8, 1965	3.86	499
	Mar. 16, 1958	3.03	198		Apr. 9, 1965	4.38	559
	Mar. 27, 1958	2.86	180		Aug. 11, 1965	3.34	200
	Apr. 3, 1958	6.30	1,660				
1959	Jan. 6, 1959	3.50	261				

a Estimated.

635. Lone Pine Creek near Keenbrook, Calif.

Location--Lat 34°15'59", long 117°27'47", in SE¹SE¹SW¹ sec.12, T.2 N., R.6 W., on right bank 50 ft upstream from the Atchison, Topeka and Santa Fe Railway Co. bridge, 150 ft upstream from mouth, and 1.1 miles north of Keenbrook.

Drainage area--15.1 sq mi.

Gage--Recording except for period Mar. 2 to Sept. 30, 1938, which was nonrecording. Prior to Sept. 30, 1938, at datum 0.98 ft higher. Datum of gage is 2,605.92 ft above mean sea level, datum of 1929, supplementary adjustment of 1946.

Stage-discharge relation--Defined by current-meter measurements below 130 cfs and extended above on basis of slope-area measurements at 540 and 6,180 cfs.

Bankfull stage--Not subject to overflow.

Remarks--Only annual peaks are shown prior to Oct. 1, 1949. Base for partial-duration series, 80 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1920	Mar. 22, 1920	2.70	210	1953	Dec. 1, 1952	2.42	38
1921	Mar. 14, 1921	2.72	215	1954	Jan. 25, 1954	3.85	224
1922	Dec. 19, 1921	4.1	650		Feb. 13, 1954	2.93	81
1923	Dec. 12, 1922	1.65	50	1955	Nov. 11, 1954	2.45	38
1924	Mar. 26, 1924	2.52	40		Jan. 26, 1956	3.10	111
1925	June 30, 1925	2.70	89	1956	Jan. 13, 1957	4.93	540
1926	Apr. 8, 1926	3.18	196		Feb. 4, 1958	3.34	189
1927	Feb. 15, 1927	4.07	460	1958	Apr. 1, 1958	3.54	166
1928	Feb. 4, 1928	2.56	61		Apr. 3, 1958	5.60	800
1929	Mar. 10, 1929	3.18	196	1959	Jan. 6, 1959	2.97	84
1930	Mar. 14, 1930	3.57	300		Feb. 16, 1959	4.00	256
1931	Apr. 26, 1931	3.07	170	1960	Jan. 10, 1960	1.95	13
1932	Feb. 8, 1932	4.37	565		Nov. 6, 1960	1.90	14
1933	Jan. 19, 1933	3.98	428	1962	Nov. 20, 1961	3.82	256
1934	Jan. 1, 1934	3.60	308		Dec. 2, 1961	3.50	195
1935	Oct. 17, 1934	4.30	540		Feb. 11, 1962	3.34	167
1936	Feb. 23, 1936	3.60	254	1963	Feb. 9, 1963	2.90	104
1937	Dec. 27, 1936	4.00	365		Jan. 22, 1964	2.49	25
1938	Mar. 2, 1938	-	6,180	1965	Apr. 8, 1965	3.39	100
1950	Jan. 8, 1950	2.07	10				
1951	Nov. 13, 1950	1.69	2.1				
1952	Jan. 12, 1952	3.88	290				
	Jan. 16, 1952	3.47	171				
	Jan. 18, 1952	3.19	113				
	Mar. 7, 1952	3.03	94				
	Mar. 15, 1952	4.17	302				

636.8. Devil Canyon Creek near San Bernardino, Calif.

Location.--Lat 34°12'12", long 117°20'02", in Muscupiabe Grant, on right bank 1.0 mile downstream from confluence of East Fork and West Fork, and 7.0 miles northwest of San Bernardino, San Bernardino County.

Drainage area.--5.61 sq mi.

Gage.--Recording. Altitude of gage is 1,900 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 65 cfs and extended above on basis of rainfall-runoff studies.

Bankfull stage.--5 ft.

Remarks.--Peaks may be affected by diversion by city of San Bernardino for water spreading beginning in June 1921, and for municipal supply beginning in 1925. Only annual peaks are shown prior to Oct. 1, 1944. Base for partial-duration series, 25 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1920	Feb. 22, 1920	2.30	68	1950	Dec. 19, 1949	2.60	72
1921	Mar. 14, 1921	2.52	86	1951	-	-	0
1922	Jan. 2, 1922	3.12	111				
1923	Dec. 13, 1922	2.46	57	1952	Dec. 29, 1951	2.30	27
1924	Mar. 26, 1924	4.20	-		Jan. 13, 1952	2.23	35
1925	Nov. 10, 1924	1.48	9.5		Jan. 16, 1952	2.57	79
					Mar. 15, 1952	2.48	50
1926	Apr. 7, 1926	3.75	220				
1927	Feb. 16, 1927	3.55	182	1953	Mar. 20, 1953	1.96	11
1928	Feb. 4, 1928	2.72	58				
1929	Apr. 4, 1929	2.59	34	1954	Jan. 19, 1954	2.35	36
1930	May 3, 1930	2.42	26		Jan. 25, 1954	2.65	71
					Feb. 13, 1954	2.31	31
1931	Apr. 26, 1931	2.68	34		Mar. 30, 1954	2.17	27
1932	Feb. 9, 1932	3.25	78				
1933	Jan. 30, 1933	1.98	5.5	1955	Nov. 11, 1954	6.82	(b)
1934	Jan. 1, 1934	2.94	56		Dec. 3, 1954	4.20	(b)
1935	Apr. 8, 1935	2.50	27		Dec. 9, 1954	3.34	(b)
					Jan. 18, 1955	-	(b)
1936	Feb. 11, 1936	2.52	29				
1937	Feb. 6, 1937	3.17	146	1956	Jan. 26, 1956	2.80	77
1938	Mar. 2, 1938	-	3,320				
1939	Sept. 24, 1939	2.42	30	1957	Jan. 13, 1957	3.72	67
1940	Jan. 8, 1940	2.55	40		May 19, 1957	2.50	46
1941	Dec. 24, 1940	2.58	60	1958	Dec. 17, 1957	2.35	28
1942	Dec. 10, 1941	2.17	21		Jan. 26, 1958	2.45	41
1943	Jan. 23, 1943	4.15	642		Feb. 4, 1958	2.40	41
1944	Feb. 22, 1944	2.80	93		Mar. 16, 1958	2.45	43
					Mar. 22, 1958	2.45	47
1945	Nov. 11, 1944	2.82	97		Mar. 27, 1958	2.18	28
	Feb. 2, 1945	2.83	99		Apr. 3, 1958	2.75	113
	Mar. 15, 1945	2.48	47				
				1959	Feb. 16, 1959	2.70	45
1946	Dec. 22, 1945	2.53	53				
	Dec. 23, 1945	2.78	90	1960	Feb. 8, 1960	1.78	10
	Mar. 30, 1946	2.70	75				
				1961	-	-	0
1947	Nov. 13, 1946	2.43	41				
	Nov. 20, 1946	3.10	162	1962	Feb. 9, 1962	2.36	57
	Nov. 23, 1946	2.48	47				
	Dec. 26, 1946	2.38	36	1963	Feb. 10, 1963	1.77	11
1948	Apr. 3, 1948	2.27	27				
				1964	Apr. 1, 1964	1.93	15
1949	Jan. 20, 1949	1.98	12	1965	Apr. 9, 1965	2.29	47

a Backwater from debris.

b Discharge unknown; exceeded base.

640. Lytle Creek (east channel) at San Bernardino, Calif.

Location.--Lat 34°05'50", long 117°18'47", in San Bernardino Grant, 10 ft downstream from Mount Vernon Avenue Bridge in San Bernardino, San Bernardino County.

Gage.--Recording. Prior to Mar. 3, 1938, at site a quarter mile upstream at different datum. Altitude of gage is 1,050 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 850 cfs and extended above on basis of slope-area measurement at 7,800 cfs and contracted-opening measurement at 21,500 cfs.

Remarks.--Since 1945, Lytle Creek flood-control dam has diverted all flow away from this channel directly to Warm Creek. Capacity of flood-control channel, 30,000 cfs. Only annual peaks are shown for all years except 1950. Base for partial-duration series, 12 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1929	-	-	0	1946	Dec. 22, 1945	1.38	15
1930	Mar. 15, 1930	-	-	1947	Nov. 13, 1946	1.64	13
				1948	Dec. 1, 1947	1.45	12
1931	-	-	0	1949	Feb. 26, 1949	1.83	-
1932	Feb. 9, 1932	6.85	700		May 19, 1949	-	9.2
1933	Jan. 19, 1933	6.6	610				
1934	Jan. 1, 1934	6.45	555	1950	Nov. 10, 1949	1.66	36
1935	Oct. 18, 1934	-	500		Jan. 8, 1950	1.70	31
					Feb. 6, 1950	1.61	18
1936	Feb. 11, 1936	-	208	1951	May 13, 1951	1.65	15
1937	Feb. 14, 1937	5.20	1,060	1952	Dec. 30, 1951	-	-
1938	Mar. 2, 1938	-	21,500	1953	Nov. 14, 1952	1.59	14
1939	Sept. 25, 1939	4.20	1,760	1954	Feb. 2, 1954	1.76	19
1940	Jan. 8, 1940	3.65	1,180	1955	Nov. 11, 1954	1.63	21
1941	Dec. 24, 1940	2.90	970	1956	Jan. 26, 1956	2.05	20
1942	Dec. 29, 1941	-	-	1957	Jan. 13, 1957	2.61	20
1943	Jan. 23, 1943	6.7	7,800				
1944	Feb. 22, 1944	2.20	1,300				
1945	Nov. 12, 1944	1.54	425				

660. Warm Creek near Colton, Calif.

Location.--Lat 34°04'09", long 117°18'28", in San Bernardino Grant, on right bank 200 ft upstream from "F" Street Bridge, 0.5 mile upstream from mouth, and 0.9 mile east of Colton, San Bernardino County.

Drainage area.--262 sq mi.

Gage.--Recording. Prior to Sept. 13, 1958, at site 200 ft downstream at different datum. Sept. 13, 1958, to Feb. 14, 1960, at site 350 ft downstream at same datum. Altitude of gage is 950 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 2,300 cfs and extended above on basis of slope-area measurement at 27,500 cfs prior to Sept. 13, 1958; below 53 cfs and extended on basis of slope-area measurement at 990 cfs for period Sept. 13, 1958, to Feb. 14, 1960. Defined by current-meter measurements below 298 cfs and extended on basis of velocity-area study at 755 cfs thereafter.

Remarks.--Since 1945, peaks may be affected by Lytle Creek flood channel (capacity, 30,000 cfs), which enters Warm Creek above station and includes flow which formerly was recorded at stations on Lytle Creek (east and west channels). Only annual peaks are shown prior to Oct. 1, 1946. Base for partial-duration series, 500 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1921	Mar. 14, 1921	5.88	2,100	1926	Apr. 5, 1926	6.65	1,300
1922	Dec. 21, 1921	6.58	2,780	1927	Feb. 16, 1927	6.70	2,140
1923	Dec. 13, 1922	5.39	1,600	1928	Feb. 4, 1928	4.50	495
1924	Nov. 9, 1923	4.15	230	1929	Apr. 4, 1929	3.45	294
1925	May 19, 1925	3.45	173	1930	Mar. 15, 1930	3.40	286

Peak stages and discharges of Warm Creek near Colton, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1931	Nov. 28, 1930	4.07	340	1952	Mar. 7, 1952	4.38	718
1932	Feb. 9, 1932	5.60	1,100		Mar. 15, 1952	5.42	1,120
1933	Jan. 19, 1933	5.60	930				
1934	Jan. 1, 1934	5.40	930	1953	Nov. 15, 1952	4.73	692
1935	Oct. 18, 1934	6.56	592		Dec. 2, 1952	4.61	724
1936	Feb. 2, 1936	6.50	605	1954	Jan. 19, 1954	5.69	1,020
1937	Feb. 6, 1937	7.40	1,520		Jan. 25, 1954	6.69	1,710
1938	Mar. 2, 1938	-	27,500		Feb. 13, 1954	4.60	855
1939	Sept. 25, 1939	8.53	1,900		Mar. 21, 1954	3.55	500
1940	Jan. 8, 1940	8.75	1,440				
				1955	Nov. 11, 1954	5.88	1,290
1941	Feb. 20, 1941	9.05	1,910		Jan. 18, 1955	4.62	1,010
1942	Dec. 10, 1941	-	355				
	Mar. 14, 1942	6.20	-	1956	Jan. 26, 1956	6.70	2,060
1943	Jan. 23, 1943	-	9,200				
1944	Feb. 22, 1944	6.40	2,680	1957	Jan. 13, 1957	6.50	1,940
1945	Feb. 2, 1945	5.43	800				
				1958	Oct. 21, 1957	2.38	530
1946	Dec. 23, 1945	a6.13	2,900		Dec. 15, 1957	2.72	722
					Dec. 17, 1957	2.45	568
1947	Nov. 13, 1946	6.40	1,200		Jan. 26, 1958	2.32	525
	Nov. 14, 1946	4.64	530		Feb. 4, 1958	4.05	2,650
	Nov. 20, 1946	5.35	1,350		Mar. 16, 1958	4.58	1,070
	Dec. 26, 1946	4.25	1,100		Mar. 22, 1958	4.88	828
					Apr. 1, 1958	6.45	2,580
1948	Dec. 5, 1947	4.32	780		Apr. 3, 1958	-	-
	Apr. 3, 1948	3.78	550				
				1959	Jan. 6, 1959	4.75	990
1949	Jan. 13, 1949	3.61	-		Feb. 11, 1959	4.18	846
	Feb. 27, 1949	-	421		Feb. 16, 1959	4.43	734
1950	Nov. 10, 1949	4.44	401	1960	Dec. 24, 1959	4.30	540
					Jan. 10, 1960	4.30	540
1951	Jan. 11, 1951	4.87	748		Jan. 12, 1960	4.50	660
					Feb. 2, 1960	4.72	794
1952	Dec. 29, 1951	4.81	724				
	Jan. 13, 1952	5.40	960	1961	Nov. 6, 1960	5.48	610
	Jan. 16, 1952	6.83	1,980				
	Jan. 18, 1952	5.92	1,310	1962	Dec. 2, 1961	5.77	755

a Occurred Dec. 22, 1945.

661. Lytle Creek (west channel) at Colton, Calif.

Location.--Lat 34°04'10", long 117°19'05", in San Bernardino Grant, on F Street near Colton Avenue at Colton, San Bernardino County.

Gage.--Recording. Altitude of gage is 980 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 970 cfs and extended above on basis of slope-area measurements at 7,900 and 13,000 cfs.

Historical data.--Flood of Feb. 24, 1891, at San Bernardino reached a peak discharge of 30,020 cfs, by slope-area measurement by F.C. Finkle, consulting engineer, Los Angeles.

Remarks.--Peaks may be affected by diversion by Fontana pipeline, irrigation, and ground-water recharge. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1891	Feb. 24, 1891	-	30,020	1937	Feb. 6, 1937	1.75	16
				1938	Mar. 2, 1938	-	7,900
1929	-	-	0	1939	-	-	0
1930	-	-	0	1940	Jan. 8, 1940	-	-
1931	-	-	0	1941	Feb. 20, 1941	1.60	30
1932	-	-	0	1942	Mar. 14, 1942	1.37	6.7
1933	-	-	0	1943	Jan. 23, 1943	9.6	13,000
1934	-	-	0	1944	Feb. 22, 1944	3.74	2,000
1935	Jan. 5, 1935	-	20	1945	Dec. 28, 1944	.57	4.4
1936	Feb. 13, 1936	-	-				

665. Santa Ana River at Riverside Narrows, near Arlington, Calif.

Location.--Lat 33°57'53", long 117°27'55", in SW $\frac{1}{4}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.25, T.2 S., R.6 W., on right bank at downstream side of bridge on Pedley Road, 1.8 miles downstream from Union Pacific Railroad bridge, 3.3 miles northwest of Arlington, and 12 miles upstream from Temescal Creek.

Drainage area.--851 sq mi.

Gage.--Recording. Prior to Nov. 15, 1943, at site $1\frac{1}{2}$ miles upstream at different datum. During this period temporary stations were maintained at different sites and datums within a quarter of a mile of the permanent gage. Nov. 15, 1943, to Aug. 31, 1954, at datum 3.00 ft higher. Sept. 1, 1954, to Jan. 17, 1955, at datum 2.00 ft higher. Datum of gage is 666.87 ft above mean sea level (levels by Riverside County engineer).

Stage-discharge relation.--Defined by current-meter measurements below 12,800 cfs and by slope-area measurement at 100,000 cfs prior to Nov. 15, 1943. Defined by current-meter measurements below 5,300 cfs thereafter.

Bankfull stage.--22 ft.

Remarks.--Peaks partly regulated by Big Bear Lake (capacity, 72,200 acre-ft) beginning in 1912. Since August 1949, peak flows may be affected by release of Colorado River water into Santa Ana River about 1.1 miles above station by the Metropolitan Water District of Southern California. Only annual peaks are shown prior to Oct. 1, 1947. Base for partial-duration series, 500 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1928	Feb. 4, 1928	-	1,250	1953	Dec. 20, 1952	2.01	310
1929	Apr. 5, 1929	2.07	659				
1930	Mar. 15, 1930	1.60	457	1954	Jan. 19, 1954	2.53	1,470
					Jan. 25, 1954	3.55	3,650
1931	Feb. 5, 1931	2.27	195		Feb. 14, 1954	2.26	1,110
1932	Dec. 29, 1931	6.10	4,740		Mar. 23, 1954	1.87	672
1933	Jan. 20, 1933	-	1,100				
1934	Jan. 1, 1934	5.90	1,820	1955	Jan. 18, 1955	4.31	1,160
1935	Aug. 14, 1935	5.18	1,000				
				1956	Jan. 26, 1956	6.02	4,450
1936	Feb. 12, 1936	6.69	1,100				
1937	Feb. 7, 1937	-	12,000	1957	Jan. 13, 1957	5.57	3,450
1938	Mar. 2, 1938	-	100,000				
1939	Sept. 25, 1939	-	1,050	1958	Dec. 17, 1957	3.55	642
1940	Jan. 8, 1940	3.72	3,000		Feb. 4, 1958	5.18	1,820
					Mar. 16, 1958	4.48	1,580
1941	Dec. 24, 1940	4.30	3,900		Mar. 22, 1958	4.12	1,250
1942	Dec. 10, 1941	4.07	391		Apr. 1, 1958	6.62	4,260
1943	Jan. 23, 1943	15.1	18,400		Apr. 3, 1958	6.50	4,080
1944	Feb. 22, 1944	4.36	3,600				
1945	Feb. 2, 1945	3.94	2,500	1959	Feb. 17, 1959	2.93	306
1946	Dec. 23, 1945	5.12	6,000	1960	Feb. 2, 1960	3.38	472
1947	Dec. 26, 1946	3.58	-				
				1961	Nov. 26, 1960	3.10	127
1948	Dec. 5, 1947	3.23	620				
	Feb. 6, 1948	3.16	520	1962	Dec. 2, 1961	4.79	774
	Apr. 4, 1948	3.34	720		Jan. 20, 1962	5.62	1,760
					Feb. 8, 1962	3.83	660
1949	Jan. 13, 1949	3.14	226		Feb. 12, 1962	5.08	1,630
					Feb. 16, 1962	4.15	900
1950	Feb. 6, 1950	3.34	306		Feb. 19, 1962	5.50	2,130
1951	Apr. 29, 1951	1.99	127	1963	Feb. 10, 1963	5.18	1,000
					Sept. 19, 1963	4.68	710
1952	Dec. 20, 1951	3.30	1,150				
	Jan. 13, 1952	2.47	502	1964	Nov. 20, 1963	4.47	388
	Jan. 16, 1952	4.37	3,410				
	Jan. 18, 1952	4.92	4,880	1965	Nov. 17, 1964	4.50	620
	Mar. 7, 1952	2.60	526		Apr. 10, 1965	5.75	808
	Mar. 16, 1952	4.65	3,950				

670. Day Creek near Etiwanda, Calif.

Location.--Lat 34°11'05", long 117°32'20", in NW $\frac{1}{4}$ NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.8, T.1 N., R.6 W., on left bank 0.5 mile downstream from confluence of two main forks and 4 miles north of Etiwanda.

Drainage area.--4.59 sq mi.

Gage.--Recording. Prior to Jan. 7, 1929, at site 125 ft downstream at different datum. Jan. 7, 1929, to Mar. 2, 1938, at site 200 ft upstream at different datum. May 2 to Sept. 2, 1938, at site 200 ft downstream at different datum. Altitude of gage is 2,870 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 20 cfs prior to Jan. 7, 1929; below 75 cfs, Jan. 7, 1929, to Mar. 2, 1938; throughout range thereafter.

Remarks.--Low peaks may be affected by Etiwanda Water Co. diversion. Only annual peaks are shown prior to Oct. 1, 1948. Base for partial-duration series, 25 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1928	Feb. 4, 1928	-	29	1952	Mar. 15, 1952	2.23	92
1929	Mar. 10, 1929	1.46	90				
1930	May 3, 1930	.94	29	1953	Dec. 1, 1952	1.68	28
1931	Apr. 26, 1931	1.65	118	1954	Jan. 19, 1954	2.34	106
1932	Feb. 9, 1932	1.60	105		Jan. 25, 1954	3.28	242
1933	Jan. 19, 1933	1.66	20		Feb. 13, 1954	2.21	65
1934	Jan. 1, 1934	2.42	84				
1935	Apr. 8, 1935	2.10	172	1955	Nov. 11, 1954	2.15	57
					Dec. 3, 1954	2.30	54
1936	Feb. 11, 1936	2.55	192		Jan. 1, 1955	1.80	26
1937	Mar. 15, 1937	2.05	80				
1938	Mar. 2, 1938	-	4,200	1956	Jan. 26, 1956	2.73	195
1939	Sept. 25, 1939	-	261				
1940	Jan. 8, 1940	3.25	286	1957	Jan. 13, 1957	2.70	176
					Feb. 23, 1957	1.84	33
1941	Apr. 4, 1941	2.75	175				
1942	Dec. 10, 1941	1.78	20	1958	Dec. 15, 1957	3.35	355
1943	Jan. 23, 1943	-	1,500		Dec. 17, 1957	2.93	207
1944	Feb. 22, 1944	2.57	139		Jan. 26, 1958	2.60	164
1945	Nov. 11, 1944	-	400		Feb. 4, 1958	2.73	192
					Feb. 19, 1958	2.10	30
1946	Mar. 30, 1946	3.05	250		Mar. 16, 1958	2.65	111
1947	Nov. 20, 1946	3.00	232		Apr. 3, 1958	3.17	301
1948	Apr. 28, 1948	2.22	81				
				1959	Jan. 6, 1959	1.92	40
1949	Jan. 20, 1949	1.55	24		Feb. 11, 1959	1.90	37
					Feb. 16, 1959	3.05	367
1950	Nov. 10, 1949	-	48				
	Dec. 19, 1949	-	81	1960	Apr. 27, 1960	1.93	41
	Feb. 6, 1950	-	42				
	Sept. 6, 1950	-	580	1961	Jan. 26, 1961	1.95	44
1951	Nov. 13, 1950	1.99	47	1962	Nov. 20, 1961	1.70	26
	Apr. 28, 1951	1.80	35		Dec. 2, 1961	2.68	174
					Jan. 20, 1962	1.82	34
1952	Oct. 25, 1951	2.25	96		Feb. 9, 1962	2.25	94
	Nov. 20, 1951	1.81	31		Feb. 15, 1962	1.92	31
	Dec. 5, 1951	2.81	214				
	Dec. 12, 1951	1.80	30	1963	Feb. 9, 1963	2.38	114
	Dec. 31, 1951	2.58	159		Sept. 18, 1963	2.06	56
	Jan. 12, 1952	2.18	75				
	Jan. 16, 1952	2.35	94	1964	Apr. 1, 1964	1.47	16
	Jan. 18, 1952	2.15	57				
	Mar. 10, 1952	1.80	35	1965	Apr. 9, 1965	1.52	18

695. San Jacinto River near San Jacinto, Calif.

Location.--Lat 33°44'15", long 116°49'35", in SW¹/₄SE¹/₄NE¹/₄ sec.13, T.5 S., R.1 E., on downstream side of right pier of bridge on State Highway 74, 1 mile downstream from North Fork and 8.2 miles southeast of San Jacinto.

Drainage area.--141 sq mi.

Gage.--Recording prior to Feb. 15, 1927, December 1929 to Feb. 6, 1937, and after Jan. 24, 1948; nonrecording Feb. 15, 1927, to December 1929, and Feb. 7, 1937, to Jan. 23, 1948. Prior to Feb. 15, 1927, at site 150 ft upstream at different datum. Feb. 15, 1927, to Jan. 23, 1948, at same site at various datums. Datum of gage is 1,982.75 ft above mean sea level (Corps of Engineers bench mark).

Stage-discharge relation.--Defined by current-meter measurements below 1,500 cfs prior to Feb. 15, 1927; below 1,800 cfs thereafter.

Bankfull stage.--14 ft.

Remarks.--Peaks partly regulated by Hemet Reservoir (capacity since 1923, 11,882 acre-ft) beginning in 1893. Low peaks may be affected by diversions above station for irrigation and domestic use. Peaks for the years 1941-44 are maximum observed. Only annual peaks are shown prior to Oct. 1, 1949. Base for partial-duration series, 100 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1921	Mar. 13, 1921	4.12	324	1952	Apr. 10, 1952	5.12	482
1922	Feb. 10, 1922	6.30	2,180				
1923	Dec. 13, 1922	4.50	630	1953	Jan. 8, 1953	4.26	115
1924	Mar. 6, 1924	3.75	238				
1925	Dec. 23, 1924	3.28	113	1954	Jan. 25, 1954	6.05	786
					Feb. 14, 1954	4.45	202
1926	Apr. 6, 1926	6.75	2,700		Mar. 22, 1954	5.68	760
1927	Feb. 16, 1927	-	45,000		Mar. 25, 1954	4.53	198
1928	Dec. 30, 1927	3.00	42		Mar. 30, 1954	4.42	159
1930	May 5, 1930	2.52	203	1955	Feb. 17, 1955	5.04	340
					July 19, 1955	4.77	255
1931	Aug. 31, 1931	7.15	6,000		Aug. 13, 1955	4.36	113
1932	Dec. 28, 1931	5.70	3,150				
1933	Apr. 29, 1933	2.76	94	1956	Jan. 27, 1956	6.65	1,080
1934	Jan. 1, 1934	3.20	295		July 17, 1956	5.21	384
1935	Feb. 6, 1935	3.18	280				
1936	Feb. 11, 1936	3.15	287	1957	Jan. 13, 1957	4.95	292
1937	Feb. 6, 1937	-	14,000		Mar. 1, 1957	4.40	135
1938	Mar. 2, 1938	-	14,300				
1939	Mar. 27, 1939	1.90	220	1958	Jan. 26, 1958	4.34	123
1940	Jan. 8, 1940	3.1	470		Feb. 4, 1958	5.31	416
					Mar. 16, 1958	6.93	1,480
1941	Mar. 5, 1941	3.20	820		Mar. 22, 1958	7.28	1,780
1942	Mar. 20, 1942	2.24	101		Apr. 1, 1958	6.17	985
1943	Mar. 4, 1943	-	1,420		Apr. 3, 1958	7.26	1,770
1944	Mar. 7, 1944	-	66		Aug. 15, 1958	5.82	785
1945	Feb. 2, 1945	-	800		Aug. 16, 1958	6.86	1,450
				1959	Feb. 16, 1959	5.69	715
1946	Dec. 22, 1945	-	2,000		Sept. 13, 1959	4.77	328
1947	Nov. 23, 1946	-	117				
1948	Apr. 4, 1948	4.10	60	1960	Dec. 10, 1959	4.57	185
1949	Mar. 20, 1949	3.94	56		Feb. 2, 1960	4.23	101
1950	Jan. 29, 1950	4.27	125	1961	Aug. 19, 1961	4.70	215
	Feb. 7, 1950	4.81	200				
	Feb. 11, 1950	4.28	128	1962	Sept. 22, 1962	4.32	119
1951	July 18, 1951	4.05	44				
				1963	Feb. 10, 1963	4.33	160
1952	Dec. 30, 1951	7.61	1,600		Sept. 18, 1963	4.17	128
	Jan. 16, 1952	5.52	669				
	Jan. 18, 1952	5.63	766	1964	Apr. 1, 1964	4.78	129
	Mar. 10, 1952	4.91	372				
	Mar. 16, 1952	4.60	255	1965	Dec. 27, 1964	4.36	115
	Apr. 8, 1952	4.81	336		Apr. 10, 1965	4.47	126

700. Bautista Creek near Hemet, Calif.

Location.--Lat 33°41'40", long 116°51'00", in NE $\frac{1}{4}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.35, T.5 S., R.1 E., on left bank a quarter of a mile upstream from unnamed tributary, 6 miles upstream from mouth, and 8 miles southeast of Hemet.

Drainage area.--39.4 sq mi.

Gage.--Recording. Altitude of gage is 2,250 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 600 cfs and extended above on basis of slope-area measurement at 1,170 cfs.

Bankfull stage.--13 ft.

Remarks.--Base for partial-duration series, 20 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1948	Dec. 5, 1947, Feb. 5, 1948	2.82	10	1956	Jan. 27, 1956	3.00	143
				1957	Jan. 13, 1957	2.01	3.6
1949	-	-	0	1958	Feb. 4, 1958	3.39	206
1950	-	-	0		Mar. 16, 1958	3.33	223
					Mar. 22, 1958	3.52	312
1951	July 28, 1951	2.92	22		Apr. 1, 1958	3.85	512
					Apr. 3, 1958	4.65	1,440
1952	Dec. 30, 1951	4.46	576		Apr. 7, 1958	-	300
	Jan. 18, 1952	3.92	546		July 29, 1958	-	25
	Jan. 18, 1952	3.96	578	1959	Jan. 6, 1959	2.65	21
	Mar. 11, 1952	3.91	530		Feb. 11, 1959	2.75	30
	Mar. 13, 1952	2.55	41				
	Mar. 16, 1952	3.28	195	1960	Dec. 10, 1959	2.80	24
1953	Nov. 15, 1952	1.14	3.3	1961	Nov. 6, 1960	2.95	42
1954	Jan. 25, 1954	2.53	25	1962	Dec. 2, 1961	2.90	37
	Feb. 14, 1954	2.63	60				
	Mar. 22, 1954	2.88	113	1963	Sept. 18, 1963	2.58	5.0
	Mar. 25, 1954	2.94	129				
	July 13, 1954	2.55	47	1964	Mar. 23, 1964	2.66	18
1955	July 19, 1955	4.43	1,170	1965	Apr. 10, 1965	3.14	32

705. San Jacinto River near Elsinore, Calif.

Location.--Lat 33°39'51", long 117°17'35", in SE $\frac{1}{4}$ SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.9, T.6 S., R.4 W., on right bank 2 miles east of Elsinore and 2.1 miles downstream from Railroad Canyon Dam.

Drainage area.--728 sq mi.

Gage.--Nonrecording prior to Oct. 28, 1921; recording thereafter. Prior to Feb. 13, 1916, at site 0.75 mile downstream at different datum. Feb. 13, 1916, to Oct. 27, 1921, at present site at different datum. Altitude of gage is 1,270 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 680 cfs and extended above on basis of slope-area measurement at 14,000 cfs prior to Feb. 13, 1916. Defined by current-meter measurements below 2,000 cfs and extended above on basis of slope-area measurement at 16,000 cfs thereafter.

Bankfull stage.--Not subject to overflow.

Remarks.--Peaks partly regulated by Hemet Reservoir (capacity, 11,882 acre-ft) since 1893, and regulated since 1928 by Railroad Canyon Reservoir (capacity, 12,000 acre-ft) 2.1 miles above station. Peaks for the years 1917-20 are maximum observed. Only annual peaks are shown.

Peak stages and discharges of San Jacinto River near Elsinore, Calif.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1916	Jan. 28, 1916	19.0	14,000	1941	Mar. 18, 1941	7.52	1,480
1917	Feb. 26, 1917	2.52	130	1942	Oct. 2, 1941	2.92	11
1918	Mar. 12, 1918	4.28	750	1943	Mar. 5, 1943	7.08	1,170
1919	Mar. 17, 1919	1.40	6.5	1944	Feb. 24, 1944	4.62	120
1920	Mar. 27, 1920	3.26	234	1945	Nov. 15, 1944	3.20	12
1921	-	-	0	1946	Dec. 22, 1945	2.99	6.3
1922	Dec. 26, 1921	-	1,930	1947	Dec. 26, 1946	2.71	2.3
1923	Apr. 13, 1923	3.27	64	1948	Feb. 6, 1948	2.46	.7
1924	Mar. 26, 1924	3.20	56	1949	Apr. 28, 1949	2.53	.7
1925	June 26, 1925	3.38	77	1950	Dec. 7, 1949	3.39	18
1926	Apr. 8, 1926	7.60	2,200	1951	-	-	0
1927	Feb. 17, 1927	11.8	16,000	1952	Mar. 15, 1952	5.56	658
1928	Feb. 4, 1928	2.56	2.0	1953	Mar. 2, 1953	2.33	.5
1929	Apr. 4, 1929	2.44	.4	1954	Feb. 13, 1954	3.14	29
1930	Mar. 16, 1930	3.07	8.5	1955	July 19, 1955	2.48	2.3
1931	Feb. 5, 1931	2.88	6.5	1956	-	-	0
1932	Mar. 3, 1932	5.41	654	1957	Jan. 14, 1957	2.82	13
1933	Jan. 20, 1933	2.93	20	1958	Apr. 7, 1958	6.36	840
1934	Mar. 24, 1934	2.95	20	1959	Jan. 6, 1959	2.29	.8
1935	May 2, 1935	2.85	4.7	1960	Nov. 4, 1959	2.46	.8
1936	Feb. 22, 1936	2.88	3.6	1961	-	-	0
1937	Feb. 9, 1937	7.80	2,260	1962	Feb. 21, 1962	2.31	.2
1938	Mar. 5, 1938	8.41	2,790	1963	-	-	0
1939	Mar. 24, 1939	5.47	503	1964	Mar. 23, 1964	4.85	308
1940	Feb. 3, 1940	3.39	38	1965	Apr. 23, 1965	4.99	305

730. San Antonio Creek near Claremont, Calif.

Location.--Lat 34°12'58", long 117°40'04", in SE $\frac{1}{4}$ SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec.36, T.2 N., R.8 W., on right bank 0.5 mile upstream from Southern California Edison Co.'s Sierra powerplant and 8.8 miles northeast of Claremont.

Drainage area.--16.9 sq mi.

Gage.--Recording. Prior to Jan. 10, 1939, at site 50 ft downstream at different datum. Altitude of gage is 3,400 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 300 cfs and extended above on basis of slope-area measurement at 21,400 cfs and rainfall-runoff studies prior to Jan. 10, 1939. Defined by current-meter measurements below 160 cfs and extended on basis of slope-area measurement at 2,100 cfs thereafter.

Remarks.--Low peaks affected by Southern California Edison Co. diversion 0.5 mile upstream. Diversion started prior to beginning of record. Only annual peaks are shown prior to Oct. 1, 1950. Base for partial-duration series, 50 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1918	Mar. 7, 1918	4.00	362	1936	Feb. 2, 1936	3.75	58
1919	Nov. 26, 1918	1.42	1.6	1937	Feb. 14, 1937	5.00	175
1920	Mar. 2, 1920	2.89	99	1938	Mar. 2, 1938	-	21,400
1921	Mar. 14, 1921	2.68	68	1939	Sept. 25, 1939	3.55	380
1922	Dec. 19, 1921	8.20	1,020	1940	Jan. 8, 1940	2.55	102
1923	Dec. 13, 1922	2.90	89	1941	Mar. 12, 1941	2.93	203
1924	Mar. 26, 1924	1.94	11	1942	Dec. 10, 1941	1.79	22
1925	Apr. 6, 1925	2.05	16	1943	Jan. 23, 1943	5.66	2,100
1926	Apr. 5, 1926	3.93	348	1944	Apr. 8, 1944	2.30	102
1927	Feb. 16, 1927	5.35	718	1945	Nov. 11, 1944	3.38	373
1928	Feb. 4, 1928	-	10	1946	Dec. 23, 1945	3.06	250
1929	Mar. 10, 1929	3.76	7.5	1947	Dec. 26, 1946	2.98	225
1930	Mar. 26, 1930	3.92	31	1948	Apr. 28, 1948	1.59	20
1931	Apr. 26, 1931	3.94	43	1949	Apr. 20, 1949	1.32	10
1932	Feb. 9, 1932	5.18	191	1950	Dec. 18, 1949	1.34	10
1933	Jan. 19, 1933	2.62	6.5	1951	Apr. 28, 1951	1.00	3.9
1934	Jan. 1, 1934	3.96	119	1952	Apr. 7, 1952	2.26	74
1935	Apr. 8, 1935	3.80	101				

Peak stages and discharges of San Antonio Creek near Claremont, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1953	Dec. 1, 1952	1.80	24	1958	Apr. 3, 1958	3.18	291
1954	Jan. 19, 1954	2.35	79	1959	Feb. 16, 1959	1.97	82
	Jan. 25, 1954	2.57	124	1960	Apr. 27, 1960	1.54	8.8
	Feb. 13, 1954	2.15	53				
1955	Feb. 27, 1955	1.84	19	1961	Jan. 26, 1961	1.44	4.4
1956	Jan. 26, 1956	2.18	51	1962	Nov. 20, 1961	2.20	57
1957	Jan. 13, 1957	2.47	94	1962	Dec. 2, 1961	2.40	87
					Feb. 11, 1962	2.83	182
1958	Dec. 15, 1957	2.84	231	1963	Feb. 9, 1963	2.01	36
	Jan. 28, 1958	2.37	100	1964	Jan. 21, 1964	1.58	9.1
	Feb. 4, 1958	2.85	178				
	Feb. 19, 1958	2.26	72				
	Mar. 16, 1958	2.45	116				
	Mar. 22, 1958	2.45	124	1965	Apr. 30, 1965	1.98	36

734.7. Cucamonga Creek near Upland, Calif.

Location--Lat 34°10'26", long 117°37'51", in SW¹SE¹NE¹ sec.17, T.1 N., R.7 W., on right bank 0.5 mile downstream from unnamed tributary on left and 5.3 miles north of Upland.

Drainage area--10.1 sq mi.

Gage--Recording. Prior to Jan. 17, 1935, and Apr. 15, 1935, to Nov. 11, 1936, at site 2,500 ft downstream at different datums. Jan. 18 to Apr. 14, 1935, at site 1,200 ft downstream at different datum. Nov. 12, 1936, to Dec. 13, 1938, at site 300 ft downstream at different datum. Altitude of gage is 2,360 ft (from topographic map).

Stage-discharge relation--Defined by current-meter measurements below 126 cfs prior to Nov. 11, 1936; below 116 cfs and extended on basis of rainfall-runoff study at 10,300 cfs for period Nov. 12, 1936, to Dec. 13, 1938; below 348 cfs and extended above on basis of slope-area measurement at 1,400 cfs thereafter.

Remarks--Records for 1928 furnished by Department of Water Resources, State of California. Only annual peaks are shown prior to Oct. 1, 1951. Base for partial-duration series, 80 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1928	Feb. 4, 1928	-	72	1951	Apr. 28, 1951	2.15	17
1929	Mar. 10, 1929	1.88	118	1952	Jan. 12, 1952	2.84	87
1930	Mar. 4, 1930	1.80	83		Jan. 16, 1952	3.33	208
1931	Apr. 26, 1931	1.98	117		Jan. 18, 1952	2.91	142
	Feb. 9, 1932	2.10	340		Mar. 15, 1952	2.87	115
1933	Jan. 19, 1933	1.55	110	1953	Dec. 1, 1952	2.46	47
1934	Dec. 31, 1933	2.04	313				
1935	Dec. 14, 1934	2.00	197	1954	Jan. 19, 1954	-	(a)
1936	Feb. 11, 1936	2.93	475		Jan. 25, 1954	-	(a)
1937	Feb. 6, 1937	4.05	274		Feb. 13, 1954	4.48	575
1938	Mar. 2, 1938	-	10,300		Mar. 20, 1954	2.91	95
1939	Sept. 25, 1939	4.08	534	1955	Nov. 11, 1954	3.10	131
1940	Jan. 8, 1940	4.25	628				
1941	Feb. 19, 1941	3.88	424	1956	Jan. 26, 1956	4.32	474
1942	Dec. 10, 1941	2.81	54	1957	Jan. 13, 1957	3.19	144
1943	Jan. 23, 1943	6.36	1,400				
1944	Feb. 22, 1944	3.89	334				
1945	Nov. 11, 1944	4.85	675				
1946	Dec. 23, 1945	4.79	650				
1947	Nov. 20, 1946	4.40	500				
1948	Apr. 3, 1948	2.59	48	1958	Dec. 15, 1957	3.70	270
1949	Jan. 20, 1949	2.23	19		Jan. 26, 1958	3.12	100
1950	Dec. 19, 1949	3.10	140		Feb. 4, 1958	3.68	259
					Feb. 19, 1958	2.93	60
					Mar. 16, 1958	3.71	171
					Apr. 1, 1958	3.76	295
					Apr. 3, 1958	4.05	410

a Discharge unknown; exceeded base.

Peak stages and discharges of Cucamonga Creek near Upland, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1959	Feb. 11, 1959	3.05	121	1962	Jan. 20, 1962	3.23	203
	Feb. 16, 1959	4.17	423		Feb. 9, 1962	3.00	148
1960	Apr. 27, 1960	2.47	38	1963	Feb. 9, 1963	3.28	139
1961	Nov. 12, 1960	2.12	9.9	1964	Apr. 1, 1964	2.77	49
1962	Nov. 20, 1961	3.50	280	1965	Apr. 9, 1965	3.04	93
	Dec. 2, 1961	3.44	205				

735. Chino Creek near Prado, Calif.

Location.--Lat 33°53'47", long 117°38'32", in El Rincon Grant, on former Chino-Rincon road, 0.4 mile north of Prado Dam and 1 mile west of Prado, Riverside County.

Drainage area.--141 sq mi.

Gage.--Recording. Prior to Apr. 2, 1931, at different datum. Altitude of gage is 470 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 200 cfs and extended above on basis of slope-area measurement at 5,200 cfs.

Remarks.--Low peaks may be affected by numerous diversions above station for irrigation. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1929	Apr. 5, 1929	3.50	85	1935	Mar. 7, 1935	6.07	262
1930	Jan. 11, 1930	4.52	181				
1931	Feb. 5, 1931	3.38	82	1936	Feb. 13, 1936	7.42	433
1932	Feb. 8, 1932	8.22	580	1937	Feb. 6, 1937	10.30	725
1933	Jan. 30, 1933	6.00	250	1938	Mar. 2, 1938	-	5,200
1934	Jan. 1, 1934	10.50	1,440	1939	Feb. 3, 1939	7.25	384
				1940	Jan. 8, 1940	9.12	722

745. Santa Ana River at county line, below Prado Dam, Calif.
(Published as "near Prado" 1919-42, 1945-50)

Location.--Lat 33°52'14", long 117°40'17", in NW¼ sec.36, T.3 S., R.8 W., on right bank 175 ft upstream from Riverside-Orange County line, 2.9 miles downstream from Prado Dam, and 6.1 miles west of Corona.

Drainage area.--1,506 sq mi.

Gage.--Recording. Prior to Mar. 17, 1927, at site 500 ft downstream at datum 2.39 ft higher, and Mar. 17, 1927, to Mar. 29, 1938, at datum 1.11 ft lower. Datum of gage is 407.34 ft above mean sea level, unadjusted.

Stage-discharge relation.--Defined by current-meter measurements below 3,800 cfs and extended above on basis of slope-area measurement at 6,700 cfs and depth-velocity studies prior to Mar. 29, 1938; defined by current-meter measurements below 3,530 cfs thereafter. Peak discharge for Mar. 3, 1938, estimated on basis of results of slope-area measurement, depth-velocity studies and comparison with records for Santa Ana River at Santa Ana.

Bankfull stage.--10 ft.

Remarks.--Peaks regulated by Big Bear Lake (capacity, 72,200 acre-ft) beginning in 1912 and by Prado Reservoir (capacity, 222,800 acre-ft) beginning in 1940. Only annual peaks are shown.

Peak stages and discharges of Santa Ana River at county line, below Prado Dam, Calif.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1920	Feb. 23, 1920	5.45	7,560	1935	Jan. 5, 1935	3.98	855
1921	Mar. 14, 1921	5.60	2,900	1936	Feb. 15, 1936	5.26	1,280
1922	Dec. 21, 1921	8.02	6,700	1937	Feb. 7, 1937	11.45	11,700
1923	Dec. 14, 1922	3.90	1,080	1938	Mar. 3, 1938	17.32	100,000
1924	Mar. 27, 1924	2.53	1,600	1939	Sept. 28, 1939	3.58	1,150
1925	Apr. 5, 1925	1.93	467	1940	Jan. 8, 1940	4.55	4,060
1926	Apr. 6, 1926	7.40	5,850	1953	Dec. 20, 1952	3.27	350
1927	Feb. 16, 1927	11.5	18,000	1954	Feb. 14, 1954	5.51	924
1928	Feb. 4, 1928	3.50	1,600	1955	Jan. 19, 1955	5.46	653
1929	Apr. 5, 1929	3.92	1,000	1956	Jan. 27, 1956	6.47	1,190
1930	Mar. 15, 1930	3.96	735	1957	Jan. 13, 1957	6.15	726
1931	Feb. 5, 1931	3.61	369	1958	Apr. 3, 1958	7.42	1,200
1932	Feb. 9, 1932	7.64	4,800	1959	Jan. 6, 1959	4.23	505
1933	Jan. 20, 1933	5.23	1,540	1960	Feb. 2, 1960	3.58	344
1934	Jan. 1, 1934	-	3,300				

757.4. Carbon Creek near Yorba Linda, Calif.

Location.--Lat 33°53'22", long 117°50'40", in NW¹/₄ NW¹/₄ NE¹/₄ sec. 29, T.3 S., R.9 W., on downstream side of left abutment of Yorba Linda Boulevard Bridge, 1.8 miles west of Yorba Linda.

Drainage area.--20.4 sq mi.

Gage.--Recording. At different sites and datums 1927-35, and 1936-43. Datum of gage is 288.60 ft above mean sea level, unadjusted.

Stage-discharge relation.--Defined by current-meter measurements below 300 cfs subsequent to Oct. 1, 1949.

Remarks.--Peaks for the years 1931-38 and 1943 were furnished by Orange County Flood Control District. Base for partial-duration series, 25 cfs. Only annual peaks are shown prior to Oct. 1, 1949.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1927	-	-	a2,500	1953	Nov. 15, 1952	3.84	25
1931	-	-	21	1954	Jan. 25, 1954	4.07	180
1932	Feb. 8, 1932	-	279		Feb. 13, 1954	3.77	64
1933	Jan. 29, 1933	-	186	1955	Nov. 11, 1954	3.88	92
1934	Jan. 1, 1934	-	728	1956	Jan. 26, 1956	4.80	155
1935	Mar. 7, 1935	-	102				
1936	Feb. 12, 1936	-	330	1957	Feb. 1, 1957	3.70	22
1937	Feb. 6, 1937	-	830				
1938	Mar. 2, 1938	-	1,760	1958	Dec. 17, 1957	3.98	49
					Feb. 4, 1958	5.15	768
1943	January 1943	-	900		Feb. 19, 1958	3.63	38
					Feb. 25, 1958	3.68	51
1950	Feb. 6, 1950	2.78	1.0		Mar. 16, 1958	4.12	163
1951	Nov. 13, 1950	2.96	2.3		Mar. 21, 1958	3.56	28
1952	Dec. 29, 1951	4.31	218		Apr. 3, 1958	5.35	935
	Jan. 13, 1952	3.88	169		Apr. 7, 1958	4.82	529
	Jan. 16, 1952	4.64	448	1959	Feb. 11, 1959	3.93	32
	Jan. 18, 1952	4.60	616				
	Mar. 7, 1952	3.50	240	1960	Jan. 12, 1960	4.02	40
	Mar. 10, 1952	3.15	36		Feb. 1, 1960	4.08	50
	Mar. 15, 1952	3.80	136	1961	Jan. 26, 1961	3.93	8.4

a From Engineering and Geological Reports for Flood Control Projects: "Control and Conservation of Flood Waters in Orange County, Calif." by Etcheverry, Means, Thompson, Elliot.

770. Santiago Creek near Villa Park, Calif.

Location.--Lat 33°49'22", long 117°46'33", in NE $\frac{1}{4}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.13, T.4 S., R.9 W., on right bank 1.4 miles downstream from Weir Canyon and 2.7 miles northeast of Villa Park.

Drainage area.--84.6 sq mi.

Gage.--Recording. Altitude of gage is 430 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 315 cfs and extended above on basis of slope-area measurement at 11,000 cfs.

Remarks.--Peaks regulated by Santiago Reservoir (capacity, 25,000 acre-ft) since December 1931. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1921	Mar. 14, 1921	4.20	685	1943	Jan. 23, 1943	4.17	2,420
1922	Feb. 9, 1922	5.72	1,900	1944	Feb. 22, 1944	4.81	3,000
1923	Dec. 12, 1922	1.93	17	1945	Feb. 2, 1945	1.85	330
1924	Dec. 27, 1923	2.25	20				
1925	Apr. 4, 1925	1.85	15	1946	Dec. 23, 1945	2.60	150
				1947	Nov. 23, 1946	1.97	40
1926	Apr. 6, 1926	6.25	2,500	1948	Dec. 4, 1947	1.18	1.1
1927	Feb. 16, 1927	8.4	11,000	1949	Dec. 26, 1948	3.24	407
1928	Feb. 4, 1928	1.85	355	1950	Feb. 6, 1950	4.29	804
1929	Dec. 12, 1928	.64	34				
1930	Mar. 15, 1930	2.00	379	1951	Nov. 13, 1950	2.90	139
				1952	Jan. 16, 1952	9.40	3,300
1931	Feb. 7, 1931	1.70	322	1953	Dec. 1, 1952	5.75	955
1932	Dec. 28, 1931	1.75	226	1954	Feb. 13, 1954	5.02	494
1933	Jan. 20, 1933	1.41	144	1955	Jan. 18, 1955	3.83	104
1934	Jan. 1, 1934	1.96	271				
1935	Oct. 17, 1934	1.60	194	1956	Jan. 26, 1956	6.00	868
				1957	Jan. 13, 1957	4.28	144
1936	Feb. 15, 1936	1.50	142	1958	Apr. 3, 1958	6.25	825
1937	Feb. 6, 1937	4.45	2,570	1959	Jan. 6, 1959	4.16	128
1938	Mar. 2, 1938	6.27	5,200	1960	Jan. 12, 1960	3.43	26
1939	Feb. 3, 1939	.84	76				
1940	Feb. 3, 1940	1.60	50	1961	Nov. 6, 1960	5.25	388
				1962	Jan. 20, 1962	4.08	98
1941	Mar. 4, 1941	3.90	1,800	1963	Mar. 3, 1963	3.17	4.6
1942	Dec. 10, 1941	.70	2.0				

775. Santiago Creek at Santa Ana, Calif.

Location.--Lat 33°46'09", long 117°52'54", in NE $\frac{1}{4}$ SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec.1, T.5 S., R.10 W., on left bank at end of Baker Street, Santa Ana, 2,400 ft upstream from mouth.

Drainage area.--95.0 sq mi.

Gage.--Recording. Prior to June 22, 1948, at datum 0.96 ft higher. Altitude of gage is 110 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 1,200 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Peaks regulated by Santiago Reservoir (capacity, 25,000 acre-ft), beginning in December 1931. Low peaks may be affected in the winter season by water wasted from Santa Ana River by Santa Ana Valley Irrigation Co.'s canal into Santiago Creek 3 miles above station. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1930	Mar. 15, 1930	3.02	400	1935	Mar. 7, 1935	3.10	500
1931	Apr. 26, 1931	1.92	105	1936	Feb. 15, 1936	2.85	400
1932	Dec. 28, 1931	2.58	272	1937	Feb. 6, 1937	6.90	3,270
1933	Jan. 20, 1933	2.13	226	1938	Mar. 2, 1938	7.40	4,400
1934	Jan. 1, 1934	3.25	550	1939	Feb. 3, 1939	3.25	500

Peak stages and discharges of Santiago Creek at Santa Ana, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1940	Feb. 3, 1940	2.85	376	1953	Dec. 2, 1952	3.57	301
1941	Mar. 14, 1941	4.42	1,990	1954	Feb. 13, 1954	3.91	454
1942	Dec. 10, 1941	2.70	200	1955	Jan. 10, 1955	3.17	68
1943	Jan. 23, 1943	6.73	3,440	1956	Jan. 26, 1956	5.55	1,270
1944	Feb. 22, 1944	9.32	3,600	1957	Feb. 23, 1957	3.35	85
1945	Feb. 2, 1945	2.58	134	1958	Apr. 3, 1958	5.38	895
1946	Dec. 22, 1945	3.23	280	1959	Jan. 6, 1959	3.88	348
1947	Nov. 14, 1946	2.80	186	1960	Feb. 1, 1960	3.54	189
1948	Apr. 3, 1948	1.87	28	1961	Nov. 26, 1960	2.62	53
1949	Dec. 17, 1948	3.41	104	1962	Dec. 2, 1961	3.28	157
1950	Feb. 6, 1950	6.00	1,040	1963	Feb. 10, 1963	3.40	241
1951	Nov. 13, 1950	3.94	237	1964	Nov. 20, 1963	4.50	621
1952	Jan. 16, 1952	9.85	3,740	1965	Apr. 1, 1965	3.65	275

780. Santa Ana River at Santa Ana, Calif.

Location--Lat 33°44'56", long 117°54'30", in NW $\frac{1}{4}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec.10, T.5 S., R.10 W., on center pier of Fifth Street Bridge in Santa Ana, 1.8 miles downstream from Santiago Creek.

Drainage area--1,685 sq mi.

Gage--Recording. Prior to Jan. 24, 1929, at different datum. Jan. 25, 1929, to June 20, 1948, at site 450 ft upstream at different datum. June 21, 1948, to May 2, 1960, at different datum and Feb. 28 to Oct. 1, 1961, at datum 2.00 ft higher. Datum of gage is 71.20 ft above mean sea level (Orange County bench mark).

Stage-discharge relation--Defined by current-meter measurements below 9,500 cfs and extended above on basis of slope-area measurement at 46,300 cfs prior to June 21, 1948; defined below 1,800 cfs and extended on basis of slope-area measurement at 4,720 cfs thereafter.

Bankfull stage--18 ft.

Remarks--Peaks regulated by several reservoirs, including Big Bear Lake (capacity, 72,200 acre-ft), beginning in 1884, and Prado flood-control reservoir (capacity, 222,800 acre-ft) beginning in 1941. Peaks may be affected by ground-water withdrawals, diversions, importation from Metropolitan Water District, municipal use and return flow from irrigation. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1923	Jan. 31, 1923	0.64	158	1946	Dec. 22, 1945	2.20	810
1924	Apr. 7, 1924	.84	200	1947	Nov. 14, 1946	1.51	243
1925	Apr. 25, 1925	.75	200	1948	Apr. 3, 1948	1.12	25
1926	Apr. 6, 1926	4.20	5,300	1949	Jan. 13, 1949	2.19	2.7
1927	Feb. 16, 1927	8.2	25,000	1950	Feb. 6, 1950	4.55	666
1928	Feb. 4, 1928	2.40	370	1951	Nov. 13, 1950	3.32	80
1929	Jan. 4, 1929	1.56	23	1952	Jan. 16, 1952	6.38	3,790
1930	Mar. 15, 1930	2.72	226	1953	Dec. 2, 1952	3.57	213
1932	Feb. 9, 1932	2.60	2,800	1954	Feb. 13, 1954	4.25	592
1933	Jan. 20, 1933	1.68	470	1955	Jan. 10, 1955	3.51	66
1934	Jan. 1, 1934	2.22	1,530	1956	Jan. 26, 1956	5.38	1,040
1935	Oct. 18, 1934	1.66	378	1957	Jan. 13, 1957	2.65	-
1936	Feb. 12, 1936	1.84	580	1958	Apr. 3, 1958	ae.75	9,000
1937	Feb. 7, 1937	-	9,500	1959	Jan. 6, 1959	2.56	172
1938	Mar. 3, 1938	10.20	46,300	1960	Feb. 1, 1960	3.28	350
1939	Feb. 3, 1939	1.05	860	1961	Jan. 26, 1961	-	20
1940	Jan. 8, 1940	1.80	2,760	1962	Feb. 8, 1962	3.46	610
1941	Mar. 14, 1941	2.78	4,920	1963	Mar. 18, 1963	ae.44	4,720
1942	Mar. 14, 1942	1.19	350	1964	Nov. 20, 1963	3.31	1,000
1943	Jan. 23, 1943	2.56	4,400	1965	Apr. 1, 1965	3.22	432
1944	Feb. 22, 1944	4.10	6,700				
1945	Feb. 23, 1945	1.92	700				

a Result of temporary dam failure.

800. East Fork San Gabriel River at Camp Bonita, Calif.

Location.--Lat 34°13'50", long 117°46'05", near east line sec.25, T.2 N., R.9 W., at Camp Bonita, 500 ft upstream from Cattle Canyon and 8.5 miles northeast of Glendora.

Drainage area.--58.2 sq mi.

Gage.--Recording. Altitude of gage is 1,840 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 190 cfs.

Remarks.--Records furnished by Los Angeles County Flood Control District. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1928	Feb. 4, 1928	5.73	266	1931	Apr. 26, 1931	4.35	267
1929	Mar. 10, 1929	4.32	448	1932	Feb. 8, 1932	-	3,340
1930	May 3, 1930	3.46	122				

805. East Fork San Gabriel River near Camp Bonita, Calif.
(Published as "San Gabriel River" prior to 1940)

Location.--Lat 34°14'08", long 117°48'16", in NE¹/₄ sec.27, T.2 N., R.9 W., on right bank 1,600 ft upstream from mouth of Graveyard Canyon, 2.5 miles upstream from confluence with West Fork, and 2.5 miles west of Camp Bonita.

Drainage area.--88.2 sq mi.

Gage.--Recording. Prior to Dec. 10, 1938, at site 0.6 mile downstream at different datum. Datum of gage is 1,567.04 ft above mean sea level.

Stage-discharge relation.--Defined by current-meter measurements below 21,300 cfs prior to Dec. 10, 1938; below 2,800 cfs thereafter.

Remarks.--Records furnished by Los Angeles County Flood Control District. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1933	Jan. 19, 1933	4.02	1,250	1950	Feb. 6, 1950	7.89	248
1934	Jan. 1, 1934	5.79	8,500	1951	Apr. 28, 1951	6.84	39
1935	Apr. 8, 1935	4.92	1,080	1952	Jan. 16, 1952	10.68	1,110
1936	Feb. 11, 1936	-	1,290	1953	Dec. 1, 1952	8.10	116
1937	Feb. 14, 1937	-	2,180	1954	Jan. 25, 1954	10.55	1,690
1938	Mar. 2, 1938	-	46,000	1955	Nov. 11, 1954	9.00	203
1939	Dec. 18, 1938	8.60	716	1956	Jan. 26, 1956	10.23	1,020
1940	Jan. 8, 1940	8.73	1,360	1957	Jan. 13, 1957	10.6	1,060
1941	Feb. 20, 1941	8.46	1,870	1958	Apr. 3, 1958	11.33	2,720
1942	Aug. 10, 1942	7.14	349	1959	Feb. 16, 1959	10.46	947
1943	Jan. 23, 1943	10.50	25,000	1960	Apr. 28, 1960	8.59	94
1944	Feb. 22, 1944	11.05	2,410	1961	Nov. 12, 1960	8.77	112
1945	Nov. 11, 1944	11.25	2,810	1962	Feb. 11, 1962	11.76	3,600
1946	Dec. 21, 1945	10.90	2,760	1963	Feb. 9, 1963	10.04	607
1947	Dec. 26, 1946	10.40	1,900	1964	Jan. 22, 1964	8.91	202
1948	Apr. 29, 1948	10.05	210	1965	Apr. 9, 1965	9.50	274
1949	Apr. 24, 1949	9.75	70				

810. Bear Creek near Camp Rincon, Calif.

Location.--Lat 34°14'30", long 117°53'05", 500 ft upstream from mouth and 1.4 miles west of Camp Rincon.

Drainage area.--28.2 sq mi (revised).

Gage.--Recording. Prior to Dec. 20, 1935, at site 1.5 miles upstream at different datum. Altitude of gage is 1,630 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 1,180 cfs prior to Dec. 20, 1935; throughout range of stage thereafter.

Remarks.--Records furnished by Los Angeles County Flood Control District. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1930	May 3, 1930	3.70	108	1933	Jan. 19, 1933	5.29	566
1931	Apr. 26, 1931	5.30	527	1934	Jan. 1, 1934	8.0	1,600
1932	Feb. 9, 1932	7.78	1,510	1936	Feb. 12, 1936	4.20	410

815. North Fork San Gabriel River at Camp Rincon, Calif.

Location.--Lat 34°14'50", long 117°51'50", in NE $\frac{1}{4}$ sec.19, T.2 N., R.9 W., 0.7 mile upstream from mouth and 1 mile north of Camp Rincon.

Drainage area.--18.6 sq mi.

Gage.--Recording. Altitude of gage is 1,775 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 126 cfs.

Remarks.--Records furnished by Los Angeles County Flood Control District. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1930	May 3, 1930	3.24	18	1934	Jan. 1, 1934	5.80	276
1931	Apr. 26, 1931	4.15	16	1935	Apr. 8, 1935	5.35	111
1932	Feb. 8, 1932	5.79	223	1936	Feb. 2, 1936	5.00	85
1933	Jan. 19, 1933	5.40	126				

820. West Fork San Gabriel River at Camp Rincon, Calif.

Location.--Lat 34°14'30", long 117°51'50", in SE $\frac{1}{4}$ sec.19, T.2 N., R.9 W., on right bank 0.2 mile upstream from Camp Rincon, 0.5 mile downstream from North Fork, and 6 miles downstream from Cogswell Dam.

Drainage area.--104 sq mi.

Gage.--Recording. Prior to Nov. 19, 1930, at site 1 $\frac{1}{2}$ miles downstream at different datum. Aug. 27, 1938, to July 3, 1941, at datum 6.41 ft higher. Datum of gage is 1,474.94 ft above mean sea level (levels by Los Angeles County Flood Control District).

Stage-discharge relation.--Defined by current-meter measurements below 550 cfs prior to Nov. 19, 1930; below 5,400 cfs thereafter.

Remarks.--Records furnished by Los Angeles County Flood Control District.

Peaks regulated by Cogswell flood-control reservoir (capacity, 10,630 acre-ft), beginning in April 1934. Only annual peaks are shown.

Peak stages and discharges of West Fork San Gabriel River at Camp Rincon, Calif.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1928	Feb. 4, 1928	5.88	1,625	1947	Dec. 26, 1946	11.76	4,150
1929	Apr. 4, 1929	4.60	775	1948	Apr. 29, 1948	8.71	329
1930	Mar. 15, 1930	4.57	750	1949	Jan. 20, 1949	7.79	78
				1950	Dec. 18, 1949	8.77	280
1931	Apr. 26, 1931	5.92	1,530	1951	Apr. 29, 1951	7.35	28
1932	Feb. 9, 1932	8.73	3,790	1952	Jan. 16, 1952	12.93	7,520
1933	Jan. 19, 1933	8.42	5,500	1953	Dec. 1, 1952	9.36	475
1934	Jan. 1, 1934	9.15	5,320	1954	Jan. 25, 1954	10.49	953
1935	Apr. 8, 1935	6.83	1,840	1955	Apr. 30, 1955	8.71	165
1936	Feb. 12, 1936	5.50	752	1956	Jan. 26, 1956	10.97	1,230
1937	Feb. 14, 1937	7.11	2,000	1957	Jan. 13, 1957	11.14	1,670
1938	Mar. 2, 1938	-	34,000	1958	Apr. 3, 1958	12.43	3,570
1939	Sept. 25, 1939	-	2,530	1959	Jan. 6, 1959	12.04	2,380
1940	Jan. 8, 1940	10.10	1,220	1960	Jan. 10, 1960	8.04	128
1941	Mar. 4, 1941	-	2,970	1961	Nov. 5, 1960	9.15	447
1942	Dec. 29, 1941	7.32	288	1962	Feb. 11, 1962	14.75	7,830
1943	Jan. 23, 1943	15.30	20,000	1963	Feb. 9, 1963	10.81	2,010
1944	Feb. 22, 1944	12.65	5,760	1964	June 24, 1964	8.84	414
1945	Nov. 11, 1944	11.79	3,950	1965	Apr. 9, 1965	9.32	534
1946	Mar. 30, 1946	11.39	2,620				

835. San Gabriel River near Azusa, Calif.

Location.--Lat 34°10'11", long 117°53'16", in SW¹NW¹SW¹ sec.13, T.1 N., R.10 W., on right bank 1.1 miles downstream from Morris Dam and 2.7 miles northeast of Azusa.

Drainage area.--214 sq mi.

Gage.--Nonrecording prior to August 1917; recording thereafter. Prior to Sept. 30, 1937, at several sites from 1½ to 2 miles downstream at different datum. Oct. 1, 1937, to Feb. 21, 1938, at site half a mile downstream at different datum. Feb. 22, 1938, to Feb. 7, 1939, at site a quarter of a mile upstream at different datum. Datum lowered 4.35 ft May 9, 1950. Datum of gage is 867.59 ft above mean sea level (from Los Angeles County Flood Control District bench mark).

Stage-discharge relation.--Defined by current-meter measurements below 9,000 cfs and extended above on basis of float measurements at 18,400 and 32,400 cfs prior to Sept. 30, 1937; below 97 cfs for period Sept. 30, 1937, to Feb. 21, 1938; below 11,800 cfs thereafter.

Remarks.--Peaks regulated by Cogswell and San Gabriel flood-control reservoirs (combined capacity, 54,500 acre-ft) beginning in April 1934 and July 1939, respectively, and by Morris Reservoir (capacity, 35,000 acre-ft) beginning in December 1933. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1901	Feb. 5, 1901	-	6,250	1926	Apr. 7, 1926	9.4	14,900
				1927	Feb. 16, 1927	10.2	18,200
1910	Jan. 1, 1910	10.3	13,900	1928	Feb. 4, 1928	5.08	1,810
				1929	Mar. 10, 1929	4.30	895
1911	Mar. 10, 1911	-	13,500	1930	Mar. 15, 1930	3.82	586
1914	Feb. 20, 1914	-	18,100	1931	Apr. 26, 1931	5.56	1,450
1915	Jan. 29, 1915	7.8	2,770	1932	Feb. 9, 1932	7.25	7,500
				1933	Jan. 19, 1933	6.90	5,820
1916	Jan. 18, 1916	12.0	40,000	1934	Jan. 1, 1934	6.92	6,120
				1935	Feb. 9, 1935	4.28	507
1918	Mar. 17, 1918	9.45	8,680				
1919	Feb. 11, 1919	4.98	230	1936	Apr. 10, 1936	4.19	455
1920	Mar. 2, 1920	7.93	5,000	1937	Feb. 20, 1937	5.84	1,950
				1938	Mar. 2, 1938	-	65,700
1921	Mar. 14, 1921	7.45	4,000				
1922	Dec. 19, 1921	15.0	22,300	1940	June 24, 1940	5.16	506
1923	Dec. 13, 1922	5.46	3,670				
1924	Mar. 26, 1924	3.70	510	1941	Mar. 4, 1941	7.27	4,460
1925	Apr. 4, 1925	5.10	3,000	1942	Apr. 20, 1942	4.94	422

Peak stages and discharges of San Gabriel River near Azusa, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1943	Jan. 23, 1943	9.27	12,100	1955	Aug. 5, 1955	5.19	-
1944	Feb. 22, 1944	5.70	5,170		Sept. 26, 1955	-	10
1945	Feb. 6, 1945	2.91	988				
1946	Dec. 23, 1945	3.04	980	1956	Sept. 30, 1956	5.48	45
1947	Dec. 31, 1946	4.87	2,980	1957	Apr. 14, 1957	7.33	656
1948	June 2, 1948	3.30	1,320	1958	Apr. 5, 1958	9.22	2,780
1949	Oct. 27, 1948	1.16	79	1959	Feb. 24, 1959	6.64	364
1950	July 31, 1950	5.17	8.2	1960	-	-	0
1951	Apr. 27, 1951	6.20	168	1961	May 6, 1961	5.07	9.1
1952	Jan. 18, 1952	-	-	1962	Feb. 12, 1962	8.50	1,650
1953	Oct. 28, 1952	-	-	1963	Sept. 4, 1963	4.79	45
1954	Apr. 16, 1954	12.32	9,420	1964	Aug. 26, 1964	4.87	50
				1965	June 12, 1965	5.90	291

840. Rogers Creek near Azusa, Calif.

Location.--Lat 34°09'55", long 117°54'20", in NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 23, T.1 N., R.10 W., on left bank 0.5 mile upstream from mouth and 2.2 miles north of Azusa.

Drainage area.--6.64 sq mi.

Gage.--Recording. Since June 26, 1959, supplementary water-stage recorder 300 ft downstream at different datum. Altitude of gage is 800 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 500 cfs and extended above on basis of velocity-area study at 700 cfs and field estimate at 2,400 cfs.

Remarks.--Brush fire denuded the basin in 1924 and 1958. Only annual peaks are shown prior to Oct. 1, 1951. Base for partial-duration series, 35 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1918	Mar. 10, 1918	5.25	332	1950	Dec. 18, 1949	4.36	132
1919	Feb. 11, 1919	1.98	17				
1920	Mar. 2, 1920	4.15	206	1951	Apr. 28, 1951	2.97	10
1921	Mar. 14, 1921	4.40	244	1952	Dec. 30, 1951	4.52	119
1922	Feb. 9, 1922	6.70	576		Jan. 12, 1952	4.50	130
1923	Dec. 13, 1922	3.66	130		Jan. 16, 1952	7.68	867
1924	Mar. 26, 1924	3.15	28		Jan. 18, 1952	5.28	248
1925	Apr. 4, 1925	6.50	555		Mar. 7, 1952	4.11	82
1926	Apr. 7, 1926	10.4	1,800		Mar. 10, 1952	3.89	65
1927	Feb. 16, 1927	9.95	1,200		Mar. 15, 1952	4.51	135
1928	Feb. 4, 1928	4.33	64	1953	Dec. 1, 1952	4.40	115
1929	Mar. 10, 1929	4.30	62				
1930	Mar. 15, 1930	3.84	60	1954	Jan. 19, 1954	3.90	62
1931	Apr. 26, 1931	3.50	38		Jan. 25, 1954	5.71	327
1932	Dec. 28, 1931	5.15	296		Feb. 13, 1954	4.25	98
1933	Jan. 19, 1933	4.61	200	1955	Jan. 18, 1955	3.24	18
1934	Jan. 1, 1934	6.80	825	1956	Jan. 26, 1956	6.40	485
1935	Apr. 8, 1935	5.96	576				
1936	Feb. 2, 1936	5.80	520	1957	Jan. 13, 1957	4.11	90
1937	Dec. 31, 1936	4.85	190		Feb. 23, 1957	3.92	70
1938	Mar. 2, 1938	-	2,070	1958	Dec. 17, 1957	4.12	85
1939	Dec. 19, 1938	6.08	153		Jan. 26, 1958	3.77	52
1940	Jan. 8, 1940	6.25	196		Feb. 4, 1958	4.47	125
1941	Mar. 4, 1941	6.95	408		Feb. 19, 1958	4.13	91
1942	Dec. 29, 1941	4.23	32		Feb. 25, 1958	3.60	41
1943	Jan. 23, 1943	8.5	1,700		Mar. 16, 1958	5.04	220
1944	Feb. 22, 1944	6.48	494		Mar. 27, 1958	3.57	44
1945	Feb. 2, 1945	5.48	300		Apr. 3, 1958	6.32	472
1946	Dec. 23, 1945	6.04	400		Apr. 7, 1958	4.16	101
1947	Nov. 20, 1946	5.35	271	1959	Jan. 6, 1959	11.7	2,400
1948	Apr. 29, 1948	3.01	13		Feb. 11, 1959	12.55	2,000
1949	Jan. 20, 1949	3.22	22		Feb. 16, 1959	-	(a)

a Discharge unknown; exceeded base.

Peak stages and discharges of Rogers Creek near Azusa, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1960	Apr. 27, 1960	3.04	43	1962	Jan. 20, 1962	4.00	105
1961	Jan. 26, 1961	3.33	60		Feb. 11, 1962	7.1	700
					Feb. 15, 1962	-	(a)
1962	Dec. 2, 1961	3.65	112		Feb. 20, 1962	-	(a)

a Discharge unknown; exceeded base.

845. Fish Creek near Duarte, Calif.

Location--Lat 34°10'00", long 117°55'25", in SW $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.15, T.1 N., R.10 W., on left bank 0.8 mile upstream from mouth of canyon and 3 miles northeast of Duarte.

Drainage area--6.36 sq mi.

Gage--Recording, except nonrecording at different datum Mar. 3 to Dec. 7, 1938. Prior to Mar. 3, 1938, at different datum. Dec. 8, 1938, to Oct. 3, 1951, at datum 1 ft higher. Altitude of gage is 1,000 ft (from topographic map).

Stage-discharge relation--Defined by current-meter measurements below 250 cfs and extended above on basis of slope-area measurement at 2,100 cfs and broad-crested-weir study.

Bankfull stage--7 ft.

Remarks--Fires in 1924 and 1958 denuded the entire drainage basin. Only annual peaks are shown prior to Oct. 1, 1947. Base for partial-duration series, 60 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1918	Mar. 10, 1918	4.50	330	1951	Apr. 28, 1951	0.87	16
1919	Feb. 11, 1919	2.59	21				
1920	Mar. 2, 1920	4.10	255	1952	Dec. 5, 1951	2.68	63
					Dec. 30, 1951	3.38	166
1921	Mar. 13, 1921	4.20	286		Jan. 12, 1952	3.61	224
1922	Feb. 9, 1922	4.90	505		Jan. 16, 1952	5.85	1,360
1923	Dec. 12, 1922	3.75	186		Jan. 17, 1952	3.90	330
1924	Mar. 26, 1924	2.95	58		Mar. 7, 1952	2.87	89
1925	Apr. 4, 1925	8.0	-		Mar. 10, 1952	2.83	83
					Mar. 15, 1952	3.52	201
1926	Apr. 7, 1926	7.75	-		Apr. 7, 1952	2.67	70
1927	Feb. 16, 1927	6.00	945				
1928	Feb. 4, 1928	3.56	97	1953	Dec. 1, 1952	3.68	252
1929	Mar. 10, 1929	3.72	71				
1930	Jan. 15, 1930	3.82	72	1954	Jan. 19, 1954	2.82	80
					Jan. 25, 1954	4.17	376
1931	Apr. 26, 1931	3.72	70		Feb. 13, 1954	3.13	124
1932	Dec. 28, 1931	4.61	415				
1933	Jan. 19, 1933	4.22	299	1955	Jan. 18, 1955	2.33	39
1934	Jan. 1, 1934	5.20	640				
1935	Apr. 8, 1935	4.95	420	1956	Jan. 26, 1956	4.67	544
1936	Feb. 2, 1936	6.44	676	1957	Jan. 13, 1957	3.03	108
1937	Dec. 30, 1936	5.05	252		Feb. 23, 1957	2.85	88
1938	Mar. 2, 1938	-	2,100				
1939	Dec. 19, 1938	2.53	172	1958	Dec. 17, 1957	3.22	140
1940	Jan. 8, 1940	2.80	225		Jan. 26, 1958	3.15	134
					Feb. 4, 1958	3.46	216
1941	Mar. 4, 1941	3.38	443		Feb. 19, 1958	3.30	153
1942	Dec. 10, 1941	1.41	44		Feb. 25, 1958	2.49	60
1943	Jan. 23, 1943	5.78	2,100		Mar. 16, 1958	3.70	239
1944	Feb. 22, 1944	3.80	680		Apr. 3, 1958	4.75	608
1945	Nov. 11, 1944	3.40	400				
				1959	Oct. 24, 1958	2.80	68
1946	Dec. 23, 1945	3.59	540		Jan. 6, 1959	6.57	2,000
1947	Dec. 26, 1946	3.22	400		Feb. 11, 1959	a14.5	-
					Feb. 16, 1959	a14.5	-
1948	Apr. 28, 1948	1.42	28	1960	Apr. 27, 1960	8.25	84
1949	Jan. 20, 1949	1.28	35				
1950	Nov. 10, 1949	1.68	66	1961	Nov. 12, 1960	7.65	230
	Dec. 18, 1949	2.33	157		Jan. 26, 1961	8.42	210

a Result of debris wave.

Peak stages and discharges of Fish Creek near Duarte, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1962	Dec. 2, 1961	8.10	420	1964	Jan. 21, 1964	3.50	178
	Jan. 20, 1962	7.35	200		Apr. 1, 1964	2.94	79
	Feb. 11, 1962	8.05	770	1965	Apr. 1, 1965	3.03	76
1963	Feb. 9, 1963	4.23	346		Apr. 9, 1965	3.56	163

860, Dalton Creek near Glendora, Calif.

Location.--Lat 34°09'30", long 117°49'40", in center of sec.21, T.1 N., R.9 W., on right bank 0.6 mile upstream from mouth of canyon, 1.7 miles downstream from Big Dalton Dam, and 2.6 miles northeast of Glendora.

Drainage area.--7.5 sq mi, approximately.

Gage.--Recording. Prior to Aug. 26, 1953, at datum 1.00 ft higher. Altitude of gage is 1,170 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 100 cfs and extended to 3,040 cfs on basis of slope-area measurement at 2,810 cfs.

Remarks.--Low peaks may be affected by diversion of Glendora Irrigation Co. at dam 1.5 miles above station starting prior to beginning of record. Peaks partly regulated by Big Dalton flood-control reservoir (capacity, 950 acre-ft) since August 1929. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1920	Mar. 2, 1920	4.03	1,000	1941	Mar. 5, 1941	1.70	93
1921	Mar. 14, 1921	3.00	450	1943	Jan. 24, 1943	2.43	277
1922	Dec. 21, 1921	2.70	320	1944	Feb. 22, 1944	2.08	161
1923	Dec. 13, 1922	1.87	61	1945	Nov. 11, 1944	1.52	55
1924	Apr. 24, 1924	1.34	12	1946	Dec. 23, 1945	2.10	166
1925	Apr. 5, 1925	1.15	1.8	1947	Nov. 20, 1946	1.01	14
1926	Apr. 5, 1926	2.60	270	1948	Feb. 5, 1948	1.17	23
1927	Feb. 16, 1927	3.30	660	1949	Sept. 16, 1949	.86	11
1928	Feb. 4, 1928	1.26	13	1950	Jan. 23, 1950	1.12	23
1929	Apr. 5, 1929	1.07	6.5	1951	Jan. 11, 1951	.65	2.6
1930	Mar. 15, 1930	1.17	3.1	1952	Jan. 16, 1952	1.88	132
1931	Mar. 11, 1931	1.47	15	1953	Jan. 10, 1953	1.34	45
1932	Feb. 11, 1932	1.76	57	1954	Jan. 25, 1954	2.12	22
1933	Jan. 19, 1933	1.15	2.3	1955	Oct. 1, 1954	1.72	6.4
1934	Jan. 1, 1934	2.13	130	1956	Jan. 26, 1956	3.05	152
1935	Apr. 8, 1935	1.42	14	1957	Nov. 9, 1956	1.95	12
1936	Feb. 11, 1936	1.64	120	1958	Apr. 5, 1958	2.86	121
1937	Feb. 6, 1937	2.63	42	1959	Apr. 13, 1959	2.16	23
1938	Mar. 2, 1938	4.90	850	1960	July 24, 1960	1.55	1.6
1939	Jan. 5, 1939	.83	7.3	1961	Nov. 12, 1960	2.72	79
1940	Jan. 8, 1940	.86	8.5	1962	Dec. 2, 1961	6.40	3,040

864. San Dimas Creek near San Dimas, Calif.

Location.--Lat 34°08'45", long 117°46'35", in SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec.25, T.1 N., R.9 W., on left bank at mouth of San Dimas Canyon, 0.7 mile downstream from San Dimas Dam and 3 miles northeast of San Dimas.

Drainage area.--18.3 sq mi.

Gage.--Recording. Prior to Oct. 27, 1927, at datum 3.18 ft higher; Oct. 27, 1927, to Dec. 30, 1938, at different datum; and Dec. 31, 1938, to Oct. 21, 1953, at datum 1.00 ft higher. Altitude of gage is 1,240 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 1,970 cfs and extended above on basis of critical-velocity computation, release records at San Dimas Dam, and computed inflow between dam and gage. Subject to changes during 1917-38, owing to several modifications to the artificial control.

Remarks.--Peaks regulated by San Dimas flood-control reservoir (capacity, 1,042 acre-ft) beginning in 1922. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1917	Dec. 24, 1916	4.90	1,300	1938	Mar. 2, 1938	-	5,000
1918	Mar. 7, 1918	5.09	394	1939	Jan. 10, 1939	1.16	23
1919	Feb. 11, 1919	3.80	37	1940	Feb. 4, 1940	1.34	36
1920	Mar. 2, 1920	6.15	1,010				
				1941	Feb. 20, 1941	2.28	-
1921	Mar. 14, 1921	7.70	800		Mar. 3, 1941	-	163
1922	Feb. 9, 1922	5.95	1,140	1942	Dec. 12, 1941	1.20	24
1923	Dec. 12, 1922	6.54	49	1943	Jan. 23, 1943	4.38	1,970
1924	July 12, 1924	5.20	10	1944	Feb. 22, 1944	3.39	749
1925	Jan. 26, 1925	4.83	6.2	1945	Feb. 2, 1945	2.08	95
1926	Apr. 5, 1926	6.82	65	1946	Dec. 23, 1945	-	250
1927	Feb. 17, 1927	8.00	475	1947	Dec. 26, 1946	1.86	67
1928	Apr. 13, 1928	1.80	54	1948	July 27, 1948	.52	5.5
1929	Feb. 2, 1929	1.00	7	1949	Jan. 25, 1949	.56	6.5
1930	Mar. 5, 1930	1.64	28	1950	May 17, 1950	-	7.1
					June 6, 1950	.62	-
1931	Apr. 26, 1931	.65	3.7				
1932	Feb. 9, 1932	2.14	96	1951	Apr. 12, 1951	.35	5.0
1933	Jan. 23, 1933	1.51	16	1952	Mar. 16, 1952	2.66	292
1934	Jan. 1, 1934	2.37	210	1953	July 6, 1953	.68	7.3
1935	Mar. 28, 1935	2.50	300	1954	Jan. 25, 1954	3.37	161
				1955	Nov. 16, 1954	2.01	15
1936	Apr. 10, 1936	2.22	152				
1937	Feb. 7, 1937	2.22	127	1956	Jan. 26, 1956	3.05	90

865. Little Dalton Creek near Glendora, Calif.

Location.--Lat 34°10'03", long 117°50'15", in NE $\frac{1}{4}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.17, T.1 N., R.9 W., on left bank 0.2 mile upstream from Angeles National Forest boundary and 2.6 miles northeast of Glendora.

Drainage area.--2.7 sq mi.

Gage.--Recording. Datum of gage is 1,334.38 ft above mean sea level (levels by Los Angeles County Flood Control District).

Stage-discharge relation.--Defined by current-meter measurements below 250 cfs and extended above on basis of slope-area measurement at 960 cfs.

Bankfull stage.--7 ft.

Historical data.--Flood of February 1914 reached a discharge of 1,020 cfs, result of slope-area measurement at site 0.8 mile downstream, below diversion.

Remarks.--Records furnished by Los Angeles County Flood Control District. Fire in 1959 denuded the entire drainage basin. Only annual peaks are shown.

Peak stages and discharges of Little Dalton Creek near Glendora, Calif.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1914	February 1914	-	1,020	1951	Jan. 11, 1951	0.58	5.4
1938	Mar. 2, 1938	-	960	1952	Jan. 16, 1952	2.83	118
1939	Jan. 5, 1939	2.62	36	1953	Dec. 1, 1952	.72	13
1940	Jan. 7, 1940	2.06	63	1954	Jan. 25, 1954	.85	58
				1955	Jan. 18, 1955	.41	4.3
1941	Mar. 4, 1941	2.42	73	1956	Jan. 26, 1956	1.86	180
1942	Dec. 29, 1941	.72	10	1957	Jan. 13, 1957	.60	12
1943	Jan. 23, 1943	3.10	182	1958	Apr. 3, 1958	2.03	180
1944	Feb. 22, 1944	2.85	198.	1959	Feb. 16, 1959	1.11	64
1945	Nov. 11, 1944	2.32	96	1960	Feb. 8, 1960	.37	2.2
1946	Dec. 21, 1945	1.18	111	1961	Jan. 26, 1961	2.16	314
1947	Nov. 20, 1946	1.05	57	1962	Nov. 20, 1961	5.24	1,700
1948	Apr. 3, 1948	.40	4.0	1963	Feb. 9, 1963	2.82	122
1949	Mar. 4, 1949	.30	1.9	1964	Jan. 21, 1964	2.35	28
1950	Dec. 18, 1949	.69	8.1	1965	Apr. 9, 1965	2.65	62

870. San Jose Creek near Whittier, Calif.

Location.--Lat 34°01'25", long 118°02'05", in Paso de Bartolo Grant, on downstream side of Workman Mill Road Bridge, 3 miles north of Whittier, Los Angeles County.

Drainage area.--88.7 sq mi.

Gage.--Recording. Prior to Sept. 27, 1937, at datum 2.0 ft higher. Datum of gage is 214.85 ft above mean sea level (levels by Los Angeles County Flood Control District). Subsequent to Sept. 13, 1955, supplementary recording gage on San Jose flood channel $1\frac{1}{2}$ miles upstream.

Stage-discharge relation.--Defined by current-meter measurements below 7,600 cfs and extended above on basis of float measurement at 13,100 cfs.

Bankfull stage.--16 ft.

Historical data.--Peak discharge for the winter of 1914 was 9,070 cfs, as determined by slope-conveyance study made at a site near the Old Workman Mill Ranch.

Remarks.--Records furnished by Los Angeles County Flood Control District. Beginning in 1956, San Jose flood channel $1\frac{1}{2}$ miles upstream diverts all flows in excess of 200 cfs from San Jose Creek to San Gabriel River above Whittier Narrows Reservoir. Peak discharges represent combined flow of San Jose Creek and San Jose flood channel. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1929	Mar. 10, 1929	2.66	77	1947	Dec. 26, 1946	3.41	833
1930	Jan. 15, 1930	2.99	264	1948	Dec. 6, 1947	2.16	160
				1949	Jan. 20, 1949	2.14	107
1931	Feb. 4, 1931	3.46	323	1950	Feb. 6, 1950	3.39	747
1932	Feb. 9, 1932	5.02	1,540				
1933	Jan. 29, 1933	3.99	825	1951	Jan. 29, 1951	1.96	97
1934	Jan. 1, 1934	12.12	13,100	1952	Jan. 18, 1952	7.60	4,400
1935	Oct. 17, 1934	5.74	2,450	1953	Dec. 2, 1952	3.87	961
				1954	Feb. 13, 1954	6.22	2,590
1936	Feb. 12, 1936	5.74	1,010	1955	Jan. 18, 1955	5.30	1,420
1937	Feb. 14, 1937	-	4,070				
1938	Mar. 2, 1938	10.3	9,350	1956	Jan. 26, 1956	-	5,380
1939	Sept. 25, 1939	5.34	1,950	1957	Mar. 1, 1957	-	1,200
1940	Feb. 1, 1940	5.18	1,570	1958	Apr. 3, 1958	-	4,150
				1959	Jan. 6, 1959	-	2,820
1941	Feb. 28, 1941	5.98	2,500	1960	Apr. 27, 1960	-	1,380
1942	Dec. 10, 1941	2.31	180				
1943	Jan. 23, 1943	9.40	8,040	1961	Jan. 26, 1961	-	479
1944	Feb. 22, 1944	8.70	6,000	1962	Feb. 11, 1962	-	4,000
1945	Nov. 11, 1944	3.91	1,480	1963	Mar. 16, 1963	-	1,960
				1964	Jan. 22, 1964	-	1,250
1946	Dec. 23, 1945	4.10	1,390				

875. San Gabriel River at Pico, Calif.

Location.--Lat 34°00'25", long 118°04'05", on Paso de Bartolo Grant, in downstream end of mid-span pier of Beverly Boulevard Bridge, 0.7 mile downstream from San Jose Creek and 0.8 mile northeast of Pico, Los Angeles County.

Drainage area.--448 sq mi.

Gage.--Recording. Prior to Feb. 4, 1937, at site 0.8 mile downstream; Feb. 4, 1937, to Nov. 14, 1947, at site 1,200 ft downstream, and Nov. 15, 1947, to Mar. 5, 1952, at site 1,000 ft downstream, all at different datums. Altitude of gage is 180 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 5,000 cfs prior to Feb. 4, 1937; below 11,400 cfs for period Feb. 4, 1937, to Nov. 14, 1947; below 10,100 cfs for period Nov. 15, 1947, to Mar. 5, 1952; and below 7,600 cfs thereafter.

Bankfull stage.--16 ft.

Remarks.--Records furnished by Los Angeles County Flood Control District. Peaks regulated by Cogswell flood-control reservoir (capacity, 10,634 acre-ft) beginning in 1934, San Gabriel flood-control reservoir (capacity, 43,928 acre-ft) beginning in 1939, Morris Reservoir (capacity, 35,000 acre-ft) beginning in 1934, Santa Fe flood-control reservoir (capacity, 36,800 acre-ft) beginning in 1943, Whittier Narrows flood-control reservoir (capacity, 36,160 acre-ft) beginning in 1956, and several small flood-control reservoirs (combined capacity, 19,100 acre-ft). Peaks may be affected by diversions above station for irrigation, power development, and ground-water replenishment. Colorado River water is released to San Gabriel River at sites 4.7 and 6.7 miles upstream for ground-water replenishment in the San Gabriel River. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1929	Mar. 10, 1929	1.77	397	1947	Dec. 30, 1946	6.25	3,240
1930	Jan. 11, 1930	2.25	1,020	1948	Feb. 6, 1948	5.93	84
				1949	Jan. 20, 1949	6.57	144
1931	Feb. 4, 1931	1.79	404	1950	Feb. 6, 1950	9.84	845
1932	Feb. 9, 1932	3.70	3,830				
1933	Jan. 29, 1933	2.36	1,450	1951	Jan. 30, 1951	5.03	27
1934	Jan. 1, 1934	-	22,000	1952	Jan. 16, 1952	10.86	14,000
1935	Oct. 17, 1934	5.68	5,400	1953	Dec. 2, 1952	8.26	1,450
				1954	Feb. 13, 1954	9.33	5,450
1936	Feb. 12, 1936	5.80	3,400	1955	Jan. 18, 1955	8.72	1,590
1937	Feb. 14, 1937	-	6,970				
1938	Mar. 2, 1938	-	22,700	1956	Jan. 26, 1956	10.90	12,400
1939	Sept. 25, 1939	5.80	2,110	1957	Mar. 1, 1957	8.97	3,600
1940	Feb. 1, 1940	5.75	2,110	1958	Apr. 7, 1958	10.27	6,890
				1959	Jan. 6, 1959	9.37	3,870
1941	Mar. 13, 1941	7.0	6,070	1960	Jan. 12, 1960	9.15	2,390
1942	Dec. 10, 1941	5.27	412				
1943	Jan. 23, 1943	9.10	14,800	1961	Jan. 26, 1961	8.70	1,330
1944	Feb. 22, 1944	8.95	14,100	1962	Feb. 11, 1962	10.31	8,810
1945	Nov. 12, 1944	6.65	4,210	1963	Mar. 16, 1963	9.13	4,320
				1964	Jan. 22, 1964	8.69	3,380
1946	Dec. 23, 1945	6.80	4,660	1965	Apr. 9, 1965	9.57	5,590

890. Brea Creek at Fullerton, Calif.

Location.--Lat 33°52'25", long 117°55'30", in SE $\frac{1}{4}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.28, T.3 S., R.10 W., between Malden Avenue and Spadra Road at Fullerton.

Drainage area.--23.6 sq mi.

Gage.--Recording. Prior to Sept. 30, 1935, at site a quarter of a mile up-stream and Oct. 1, 1935, to Jan. 19, 1940, at site a quarter of a mile down-stream at different datums. Altitude of gage is 160 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 320 cfs and extended to 1,600 cfs on basis of slope-conveyance studies prior to Sept. 30, 1935; below 1,300 cfs for period Oct. 1, 1935, to Jan. 19, 1940; below 430 cfs and extended to 3,700 cfs on basis of slope-conveyance studies thereafter.

Bankfull stage.--12 ft.

Remarks.--Records furnished by Orange County Flood Control District. Peaks regulated by Brea flood-control reservoir (capacity, 4,100 acre-ft) beginning in 1942. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1932	Feb. 9, 1932	3.60	427	1949	Feb. 27, 1949	0.37	51
1933	Jan. 19, 1933	3.78	150	1950	Feb. 6, 1950	.46	70
1934	Jan. 1, 1934	4.30	502				
1935	Oct. 17, 1934	7.60	1,600	1951	Nov. 13, 1950	.41	62
				1952	Jan. 18, 1952	1.67	538
1936	Feb. 12, 1936	3.10	285	1953	Dec. 1, 1952	.50	76
1937	Feb. 6, 1937	6.95	1,280	1954	Feb. 13, 1954	.62	106
1938	Mar. 2, 1938	9.55	1,970	1955	Jan. 18, 1955	.44	66
1939	Sept. 25, 1939	-	1,100				
1940	Feb. 1, 1940	-	373	1956	Jan. 26, 1956	1.32	364
				1957	Jan. 13, 1957	.31	33
1941	Mar. 14, 1941	5.45	3,700	1958	Apr. 7, 1958	1.30	355
1942	Dec. 10, 1941	.42	63	1959	Jan. 6, 1959	.49	74
1943	Mar. 3, 1943	1.45	425	1960	Jan. 12, 1960	.61	103
1944	Feb. 29, 1944	1.75	581				
1945	Feb. 5, 1945	-	279	1961	Nov. 26, 1960	.24	20
				1962	Feb. 11, 1962	1.07	258
1946	Dec. 23, 1945	.87	182	1963	Feb. 10, 1963	.90	192
1947	Dec. 31, 1946	.39	57	1964	Nov. 20, 1963	.75	144
1948	Dec. 5, 1947	.30	30	1965	Apr. 1, 1965	.75	144

905. Coyote Creek near Artesia, Calif.

Location.--Lat 33°50'20", long 118°03'34", in NE $\frac{1}{4}$ NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.8, T.4 S., R.11 W., on downstream side of Centralia Road Bridge, 2 miles southeast of Artesia and 3.7 miles upstream from mouth.

Drainage area.--122 sq mi.

Gage.--Recording. Prior to Feb. 9, 1956, at several sites about half a mile upstream at different datums. Datum of gage is 20.2 ft above mean sea level (levels by Los Angeles County Flood Control District).

Stage-discharge relation.--Defined by current-meter measurements below 3,900 cfs and extended above on basis of a float measurement at 6,920 cfs prior to Feb. 9, 1956; below 4,700 cfs thereafter.

Remarks.--Records furnished by Los Angeles County Flood Control District. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1931	Feb. 5, 1931	-	218	1936	Feb. 12, 1936	-	486
1932	Feb. 9, 1932	-	799	1937	Feb. 6, 1937	-	4,190
1933	Jan. 30, 1933	-	283	1938	Mar. 2, 1938	-	3,610
1934	Jan. 1, 1934	-	2,020	1939	Sept. 25, 1939	-	1,660
1935	Dec. 13, 1934	-	3,190	1940	Feb. 3, 1940	6.94	827

Peak stages and discharges of Coyote Creek near Artesia, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1941	Feb. 28, 1941	11.13	2,750	1953	Dec. 2, 1952	6.73	518
1942	Dec. 10, 1941	7.89	351	1954	Feb. 13, 1954	8.32	1,190
1943	Jan. 23, 1943	12.23	1,480	1955	Jan. 18, 1955	6.96	611
1944	Feb. 22, 1944	12.52	3,550				
1945	Nov. 12, 1944	7.20	488	1956	Jan. 26, 1956	8.49	3,770
				1957	Jan. 13, 1957	6.49	334
1946	Dec. 23, 1945	7.70	920	1958	Apr. 7, 1958	8.53	2,230
1947	Nov. 14, 1946	5.07	145	1959	Apr. 26, 1959	6.87	558
1948	Dec. 13, 1947	4.00	23	1960	Feb. 1, 1960	11.28	2,390
1949	Jan. 21, 1949	3.93	11				
1950	Feb. 6, 1950	6.15	240	1961	Jan. 26, 1961	8.78	1,380
				1962	Feb. 11, 1962	13.01	5,810
1951	Jan. 30, 1951	4.76	11	1963	Feb. 10, 1963	11.98	4,640
1952	Jan. 18, 1952	14.30	7,360				

LOS ANGELES RIVER BASIN

924.5. Los Angeles River at Sepulveda Dam, Calif.
(Published as "below Sepulveda Dam" 1941-45)

Location--Lat 34°09'42", long 118°27'57", in Ex Mission de San Fernando Grant, on right bank of outlet channel of Sepulveda Dam, 200 ft upstream from Sepulveda Boulevard in city of Los Angeles and 1.85 miles southwest of Van Nuys, Los Angeles County.

Drainage area--158 sq mi.

Gage--Recording. Prior to Aug. 23, 1941, at site 1 mile downstream at different datum; Aug. 23, 1941, to Sept. 30, 1950, at site 900 ft downstream at different datum; Oct. 1, 1950, to Aug. 29, 1953, at site 800 ft upstream at datum 5.99 ft higher. Altitude of gage is 670 ft (from topographic map).

Stage-discharge relation--Defined by current-meter measurements below 570 cfs prior to Aug. 23, 1941; below 4,720 cfs for period Aug. 23, 1941, to Sept. 30, 1950; below 5,900 cfs and extended on basis of float-measurement at 7,820 cfs for period Sept. 30, 1950, to Aug. 29, 1953; below 7,300 cfs thereafter.

Bankfull stage--16 ft.

Remarks--Numerous discharge measurements furnished by Los Angeles County Flood Control District. Peaks regulated by Sepulveda flood-control reservoir (capacity, 17,400 acre-ft) beginning in 1941. Peaks may be affected by imported Owens River water being discharged into Los Angeles River from upstream distributing reservoirs. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1930	Mar. 15, 1930	-	389	1948	Mar. 24, 1948	3.38	284
1931	Feb. 4, 1931	-	1,800	1949	Dec. 17, 1948	2.50	149
1932	Feb. 8, 1932	-	2,000	1950	Feb. 6, 1950	-	413
1933	Jan. 19, 1933	-	1,720	1951	Jan. 29, 1951	3.53	297
1934	Jan. 1, 1934	-	7,380	1952	Jan. 15, 1952	14.56	8,520
1935	Jan. 5, 1935	-	886	1953	Dec. 1, 1952	5.91	1,480
				1954	Feb. 13, 1954	4.89	4,000
1936	Feb. 12, 1936	-	286	1955	Jan. 18, 1955	3.39	2,220
1937	Feb. 14, 1937	-	2,630				
1938	Mar. 2, 1938	-	12,000	1956	Jan. 26, 1956	5.48	4,670
1939	Dec. 15, 1938	-	2,980	1957	Jan. 13, 1957	4.27	3,160
1940	Jan. 8, 1940	-	2,690	1958	Dec. 15, 1957	8.45	10,300
				1959	Jan. 6, 1959	8.39	10,200
1941	Feb. 20, 1941	-	6,610	1960	Jan. 11, 1960	5.58	5,320
1942	Dec. 28, 1941	-	1,040				
1943	Jan. 23, 1943	-	2,710	1961	Nov. 5, 1960	5.86	5,770
1944	Feb. 22, 1944	7.90	5,030	1962	Feb. 12, 1962	10.00	13,400
1945	Feb. 2, 1945	2.10	1,000	1963	Feb. 9, 1963	7.07	7,820
				1964	Jan. 22, 1964	5.79	5,650
1946	Dec. 21, 1945	-	2,500	1965	Apr. 9, 1965	6.10	5,540
1947	Dec. 26, 1946	4.11	881				

930. Pacoima Creek near San Fernando, Calif.

Location.--Lat 34°20'02", long 118°23'55", in SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.24, T.3 N., R.15 W., on right bank 500 ft downstream from Pacoima Dam, a third of a mile upstream from mouth of canyon, and 4 miles northeast of San Fernando.

Drainage area.--28.5 sq mi.

Gage.--Recording. Prior to September 1929, at site 0.5 mile downstream at different datum. September 1929 to Mar. 23, 1933, records based on outflow from Pacoima Dam. Mar. 24, 1933, to Feb. 1, 1935, at site 450 ft downstream at different datum. Altitude of gage is 1,650 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 510 cfs prior to September 1929; below 54 cfs for period September 1929 to Mar. 23, 1933; below 75 cfs for period Mar. 23, 1933, to Feb. 1, 1935; below 370 cfs and extended on basis of outflow records for Pacoima Dam thereafter.

Bankfull stage.--10 ft.

Historical data.--In reports of the Board of Engineers for Flood Control to the Board of Supervisors, Los Angeles Co., Calif., the flood of February 1914 had a maximum discharge of 5,400 cfs (computed by slope-area method).

Remarks.--Records furnished by Los Angeles County Flood Control District beginning in 1929. Peaks regulated by Pacoima flood-control reservoir (capacity, 4,710 acre-ft) beginning in 1929. Spillway flow enters creek below station. Spill over Pacoima spillway occurred only in 1938 and 1944; peaks for those years include spill bypassing gage. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1914	February 1914	-	5,400	1942	July 15, 1942	2.00	97
1917	Dec. 24, 1916	4.68	1,440	1943	Jan. 23, 1943	-	598
1918	Mar. 7, 1918	3.10	506	1944	Mar. 2, 1944	3.22	326
1919	Feb. 11, 1919	1.81	34	1945	Feb. 2, 1945	3.33	397
1920	Mar. 22, 1920	5.79	1,330	1946	Feb. 5, 1946	2.4	241
1921	May 21, 1921	3.73	440	1947	Jan. 7, 1947	2.30	237
1922	Dec. 19, 1921	6.00	1,810	1948	June 12, 1948	1.46	6.4
1923	Dec. 13, 1922	3.70	370	1949	June 24, 1949	1.77	10
1924	Mar. 26, 1924	2.07	29	1950	Apr. 4, 1950	2.87	314
1925	Apr. 5, 1925	2.51	118	1951	June 12, 1951	2.17	17
1927	Feb. 16, 1927	15.40	1,860	1952	Jan. 18, 1952	4.45	634
1931	Feb. 14, 1931	-	4.0	1953	Nov. 17, 1952	1.83	163
1932	Feb. 16, 1932	-	75	1954	Apr. 5, 1954	2.74	292
1933	Apr. 13, 1933	-	81	1955	Apr. 21, 1955	.57	42
1934	Jan. 28, 1934	2.15	54	1956	May 17, 1956	.87	66
1935	Aug. 21, 1935	4.22	174	1957	May 7, 1957	.75	63
1936	May 13, 1936	-	153	1958	Feb. 5, 1958	3.48	420
1937	Feb. 18, 1937	4.52	233	1960	Aug. 2, 1960	1.23	4.2
1938	Mar. 3, 1938	-	2,440	1962	Apr. 7, 1962	3.90	511
1939	Jan. 20, 1939	.78	51	1963	Sept. 25, 1963	.40	23
1940	Feb. 4, 1940	1.79	169	1964	June 15, 1964	1.37	117
1941	Mar. 6, 1941	3.86	431	1965	May 7, 1965	1.35	5.3

940. Tujunga Creek below Mill Creek, near Colby Ranch, Calif.

Location.--Lat 34°18'33", long 118°08'40", on left bank 500 ft downstream from Mill Creek and 2 miles west of Colby Ranch, Los Angeles County.

Drainage area.--64.9 sq mi.

Gage.--Recording. Altitude of gage is 2,650 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 1,700 cfs.

Remarks.--Records furnished by Los Angeles County Control District. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1948	Apr. 29, 1948	6.32	111	1957	Jan. 13, 1957	7.43	313
1949	Mar. 4, 1949	5.12	13	1958	Apr. 3, 1958	9.52	1,770
1950	Feb. 6, 1950	5.45	36	1959	Feb. 16, 1959	7.63	421
				1960	Jan. 10, 1960	5.17	13
1951	Jan. 29, 1951	5.00	6.7				
1952	Jan. 18, 1952	9.05	1,380	1961	Nov. 6, 1960	6.03	82
1953	Dec. 2, 1952	5.74	65	1962	Feb. 11, 1962	10.90	2,860
1954	Jan. 25, 1954	7.14	260	1963	Feb. 9, 1963	6.87	292
1955	May 1, 1955	5.53	41	1964	Apr. 1, 1964	6.43	93
				1965	Apr. 19, 1965	6.94	99
1956	Jan. 26, 1956	7.50	324				

945. Tujunga Creek near Colby Ranch, Calif.

Location.--Lat 34°18'22", long 118°09'24", just downstream from Lucas Creek, 400 ft upstream from crossing of Edison Road, 3.5 miles west of Colby Ranch, Los Angeles County, and 4 miles upstream from Big Tujunga Dam.

Drainage area.--67.5 sq mi.

Gage.--Recording. Prior to Aug. 17, 1932, at site 300 ft downstream at different datum. Altitude of gage is 2,410 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 116 cfs prior to Aug. 17, 1932; below 3,100 cfs thereafter.

Historical data.--Flood of Jan. 23, 1943, was exceeded by flood of Mar. 2, 1938.

Remarks.--Records furnished by Los Angeles County Flood Control District. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1931	Feb. 5, 1931	6.56	216	1941	Feb. 20, 1941	-	1,380
1932	Feb. 8, 1932	7.30	2,550	1942	Dec. 10, 1941	6.88	112
1933	Jan. 19, 1933	8.67	324	1943	Jan. 23, 1943	15.40	14,800
1934	Jan. 1, 1934	11.90	1,520	1944	Feb. 22, 1944	11.40	3,300
1935	Apr. 8, 1935	9.73	640	1945	Nov. 11, 1944	10.33	1,870
1936	Feb. 12, 1936	-	159	1946	Mar. 30, 1946	11.01	2,700
1937	Feb. 6, 1937	10.65	1,030	1947	Dec. 26, 1946	10.45	1,500
1938	Mar. 2, 1938	-	-	1948	Apr. 29, 1948	7.23	140
1939	Dec. 19, 1938	9.25	543	1949	Jan. 20, 1949	6.43	16
1940	Jan. 8, 1940	-	1,890	1950	Feb. 6, 1950	6.82	40

950. Fox Creek near Colby Ranch, Calif.

Location.--Lat 34°18'30", long 118°10'40", 0.5 mile upstream from mouth and 4 miles west of Colby Ranch, Los Angeles County.

Drainage area.--9.22 sq mi.

Gage.--Recording. Altitude of gage is 2,500 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 170 cfs.

Remarks.--Records furnished by Los Angeles County Flood Control District. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1931	Feb. 4, 1931	1.12	7	1935	Oct. 18, 1934	3.03	314
1932	Feb. 8, 1932	2.58	400				
1933	Jan. 19, 1933	1.77	115	1936	Feb. 2, 1936	-	410
1934	Jan. 1, 1934	2.58	215	1937	Dec. 27, 1936	-	270

955. Tujunga Creek near Sunland, Calif.

Location.--Lat 34°18'02", long 118°16'02", near center of SW $\frac{1}{4}$ sec.32, T.3 N., R.13 W., on left bank 1,000 ft upstream from Gold Canyon; 2 miles upstream from mouth of canyon, and 4 miles northeast of Sunland.

Drainage area.--106 sq mi.

Gage.--Recording. Prior to Oct. 1, 1932, at site 1,000 ft upstream at different datum. Datum of gage is 1,571.80 ft above mean sea level (levels by Los Angeles County Flood Control District).

Stage-discharge relation.--Defined by current-meter measurements below 1,600 cfs prior to Oct. 1, 1932; below 6,900 cfs and extended on basis of comparison with record at flood-control dam thereafter.

Bankfull stage.--12 ft.

Remarks.--Records furnished by Los Angeles County Flood Control District since 1932. Peaks regulated by Big Tujunga flood control reservoir (capacity, 4,240 acre-ft) beginning in 1931. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1917	Dec. 24, 1916	3.35	1,960	1942	Dec. 28, 1941	8.53	165
1918	Mar. 11, 1918	3.25	1,760	1943	Jan. 23, 1943	16.85	23,000
1919	Feb. 11, 1919	1.92	136	1944	Feb. 22, 1944	11.76	4,760
1920	Mar. 22, 1920	-	1,400	1945	Feb. 2, 1945	9.01	897
1921	Mar. 13, 1921	2.27	411	1946	Mar. 30, 1946	9.45	1,300
1922	Dec. 19, 1921	6.20	8,600	1947	Dec. 25, 1946	8.76	745
1923	Dec. 13, 1922	2.90	900	1948	Feb. 5, 1948	7.05	53
1924	Mar. 26, 1924	1.24	87	1949	Jan. 20, 1949	6.37	20
1925	Apr. 5, 1925	2.23	325	1950	Nov. 10, 1949	6.83	73
1926	Apr. 7, 1926	-	4,000	1951	Nov. 13, 1950	6.14	10
1927	Feb. 16, 1927	4.55	3,830	1952	Jan. 18, 1952	11.25	2,960
1928	Feb. 4, 1928	-	850	1953	Dec. 2, 1952	9.07	-
1929	Apr. 4, 1929	1.90	216		Nov. 15, 1952	-	108
1930	May 3, 1930	2.07	260	1954	Jan. 25, 1954	9.69	387
				1955	Jan. 18, 1955	9.03	73
1931	Feb. 4, 1931	2.16	228	1956	Jan. 27, 1956	10.46	301
1932	Feb. 8, 1932	3.56	1,330	1957	Jan. 13, 1957	9.92	60
1933	Jan. 19, 1933	9.09	1,390	1958	Apr. 3, 1958	12.15	1,670
1934	Jan. 1, 1934	9.19	1,450	1959	Feb. 11, 1959	10.44	245
1935	Apr. 8, 1935	7.96	671	1960	Jan. 12, 1960	9.82	22
1936	Feb. 2, 1936	-	494				
1937	Dec. 27, 1936	-	495	1961	Nov. 5, 1960	10.33	86
1938	Mar. 2, 1938	-	50,000	1962	Feb. 11, 1962	14.27	4,770
1939	Dec. 20, 1938	9.47	380	1963	Feb. 9, 1963	12.42	412
				1964	Jan. 22, 1964	11.66	166
1941	Feb. 21, 1941	12.21	1,650	1965	Apr. 9, 1965	12.31	220

960. Haines Creek near Tujunga, Calif.

Location.--Lat 34°15'50", long 118°16'15", in NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec.17, T.2 N., R.13 W., on right bank 0.5 mile upstream from mouth of canyon and 1.5 miles northeast of Tujunga.

Drainage area.--1.2 sq mi, approximately.

Gage.--Recording prior to Sept. 30, 1961; crest-stage gage thereafter. Altitude of gage is 2,430 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 3.2 cfs and extended to 265 cfs on basis of velocity-area studies.

Bankfull stage.--Not subject to overflow.

Historical data.--According to T. H. Olmstead in reports of the Board of Engineers for Flood Control to the Board of Supervisors, Los Angeles County, Calif., the flood of February 1914 had a maximum discharge of 4,620 cfs (computed by slope-area method).

Remarks.--City of Los Angeles diverts most of flow through two infiltration galleries upstream from station. Diversion probably has a large effect on all of the low peaks. Fire in 1919 denuded the entire basin. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1914	February 1914	-	4,620	1941	Dec. 17, 1940	3.10	54
1917	Feb. 22, 1917	0.6	.5	1942	Dec. 28, 1941	2.04	9
1918	Mar. 10, 1918	1.37	6.8	1943	Jan. 23, 1943	3.93	142
1919	Feb. 11, 1919	.73	.8	1944	Feb. 22, 1944	3.35	74
1920	Mar. 22, 1920	1.16	4.0	1945	Feb. 2, 1945	2.39	18
1921	May 21, 1921	1.15	3.8	1946	Mar. 30, 1946	2.20	12
1922	Jan. 2, 1922	1.74	15	1947	Dec. 25, 1946	1.88	6.2
1923	Dec. 12, 1922	.70	.8	1948	Feb. 5, 1948	1.32	.3
1924	Mar. 2, 1924	.47	.2	1950	Jan. 8, 1950	1.15	.1
1925	Apr. 4, 1925	.80	1.1	1951	Apr. 25, 1951	1.11	.1
1926	Apr. 5, 1926	1.59	11	1952	Jan. 15, 1952	3.51	89
1927	Feb. 16, 1927	1.13	4.3	1953	Dec. 1, 1952	2.13	11
1928	Feb. 4, 1928	.37	.1	1954	Mar. 16, 1954	1.77	4.4
1929	Apr. 4, 1929	.43	.1	1955	Apr. 30, 1955	1.80	5.6
1932	Feb. 9, 1932	.96	3.8	1956	Jan. 26, 1956	1.63	3.6
1933	Jan. 19, 1933	1.60	12	1957	Feb. 23, 1957	1.17	.3
1934	Jan. 1, 1934	all 0	-	1958	Apr. 3, 1958	2.56	20
1937	Dec. 27, 1936	-	40	1959	Jan. 6, 1959	2.58	22
1938	Mar. 2, 1938	4.6	265	1960	Jan. 11, 1960	1.23	.6
1939	Mar. 9, 1939	2.16	12	1961	Nov. 5, 1960	1.70	4.3
1940	Jan. 8, 1940	4.30	-				

a Caused by mud flow.

965. Little Tujunga Creek near San Fernando, Calif.

Location.--Lat 34°16'30", long 118°22'20", in Tujunga Grant, on downstream side of Foothill Boulevard Bridge, 4 miles east of San Fernando, Los Angeles County.

Drainage area.--21.1 sq mi.

Gage.--Recording. Datum of gage is 1,067.89 ft above mean sea level (levels by Los Angeles County Flood Control District).

Stage-discharge relation.--Defined by current-meter measurements below 1,850 cfs and extended to 3,810 cfs on basis of float measurements.

Bankfull stage.--5 ft.

Historical data.--Peak discharge for the flood of January or February 1914 was 4,100 cfs, as determined by slope-conveyance study.

Remarks.--Records furnished by Los Angeles County Flood Control District. Only annual peaks are shown.

Peak stages and discharges of Little Tujunga Creek near San Fernando, Calif.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1929	-	-	0	1947	Nov. 20, 1946	4.05	200
1930	-	-	0	1948	Mar. 24, 1948	3.33	16
1931	Feb. 4, 1931	3.20	30	1949	May 19, 1949	3.13	.9
1932	Feb. 9, 1932	5.21	660	1950	Dec. 18, 1949	3.22	9.8
1933	Jan. 19, 1933	5.10	450	1951	Jan. 11, 1951	3.40	13
1934	Jan. 1, 1934	6.06	1,360	1952	Jan. 16, 1952	5.60	2,110
1935	Dec. 13, 1934	3.32	89	1953	Dec. 1, 1952	3.70	138
1936	Feb. 2, 1936	-	653	1954	Feb. 13, 1954	3.88	198
1937	Feb. 14, 1937	4.75	964	1955	Jan. 18, 1955	3.51	35
1938	Mar. 2, 1938	-	8,500	1956	Jan. 26, 1956	4.17	445
1939	Mar. 9, 1939	3.46	175	1957	Feb. 28, 1957	3.82	112
1940	Jan. 8, 1940	5.90	2,090	1958	Apr. 3, 1958	4.72	559
1941	Mar. 4, 1941	5.06	1,310	1959	Jan. 6, 1959	3.86	84
1942	Dec. 28, 1941	3.98	198	1960	Feb. 1, 1960	3.20	6.7
1943	Jan. 23, 1943	5.45	3,700	1961	Nov. 5, 1960	4.23	266
1944	Feb. 22, 1944	5.60	4,220	1962	Feb. 11, 1962	5.40	1,630
1945	Nov. 11, 1944	4.62	244	1963	Feb. 10, 1963	3.59	52
1946	Mar. 30, 1946	4.00	156	1964	Jan. 22, 1964	4.20	256
				1965	Apr. 9, 1965	2.79	223

975. Los Angeles River at Los Angeles, Calif.

Location.--Lat 34°04'55", long 118°13'35", on right bank near Figueroa Street, Los Angeles, 800 ft upstream from Arroyo Seco.

Drainage area.--514 sq mi.

Gage.--Recording. Prior to May 26, 1938, at site 150 ft downstream at different datum. May 26, 1938, to Dec. 8, 1939, at site 350 ft downstream at different datum. Datum of gage is 292.58 ft above mean sea level (levels by Los Angeles County Flood Control District).

Stage-discharge relation.--Defined by current-meter measurements below 22,000 cfs and extended on basis of slope-conveyance studies prior to May 26, 1938. Peak of Mar. 2, 1938, determined by slope-area measurement. Defined by current-meter measurements below 3,710 cfs for period May 26, 1938, to Dec. 8, 1939; below 20,200 cfs thereafter.

Bankfull stage.--30 ft.

Remarks.--Records furnished by Los Angeles County Flood Control District. Peaks regulated by Pacoima flood-control reservoir (capacity, 4,710 acre-ft) beginning February 1929, Big Tujunga flood-control reservoir (capacity, 4,240 acre-ft) beginning July 1931, Hansen flood-control reservoir (capacity, 32,000 acre-ft) beginning September 1940, Sepulveda flood-control reservoir (capacity, 17,400 acre-ft) beginning December 1941, and several debris basins. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1930	Mar. 15, 1930	3.54	500	1948	Mar. 24, 1948	3.15	4,900
1931	Feb. 4, 1931	7.35	4,540	1949	Dec. 17, 1948	2.10	1,530
1932	Feb. 8, 1932	6.75	3,020	1950	Feb. 6, 1950	2.33	2,840
1933	Jan. 19, 1933	7.71	5,780	1951	Jan. 11, 1951	2.82	3,600
1934	Jan. 1, 1934	16.4	22,000	1952	Jan. 16, 1952	7.76	25,300
1935	Apr. 8, 1935	-	2,400	1953	Dec. 20, 1952	4.04	7,270
1936	Mar. 30, 1936	6.85	2,420	1954	Feb. 13, 1954	4.62	9,580
1937	Feb. 14, 1937	-	2,410	1955	Jan. 18, 1955	3.93	6,850
1938	Mar. 2, 1938	-	67,000	1956	Jan. 26, 1956	5.90	15,300
1939	Jan. 5, 1939	11.15	3,710	1957	Feb. 23, 1957	7.24	22,200
1940	Jan. 8, 1940	4.40	8,900	1958	Feb. 19, 1958	7.14	19,700
1941	Feb. 20, 1941	7.04	11,900	1959	Jan. 6, 1959	6.53	17,200
1942	Dec. 10, 1941	4.26	5,260	1960	Jan. 12, 1960	4.44	8,960
1943	Jan. 23, 1943	8.38	23,900	1961	Nov. 5, 1960	4.15	7,890
1944	Feb. 22, 1944	5.90	14,600	1962	Feb. 12, 1962	10.20	32,500
1945	Feb. 2, 1945	3.33	4,900	1963	Feb. 9, 1963	7.06	18,070
1946	Dec. 22, 1945	3.33	5,240	1964	Jan. 22, 1964	5.43	12,250
1947	Dec. 25, 1946	3.25	5,320	1965	Apr. 9, 1965	5.55	12,500

980. Arroyo Seco near Pasadena, Calif.

Location.--Lat 34°13'20", long 118°10'36", near north line of sec.31, T.2 N., R.12 W., on right bank 1.5 miles upstream from Millard Canyon and 5.5 miles northwest of Pasadena.

Drainage area.--16.0 sq mi.

Gage.--Nonrecording prior to Oct. 1, 1916; recording thereafter. Prior to Oct. 1, 1916, at different datum. Oct. 1, 1916, to Oct. 19, 1945, at datum 4.00 ft lower. Datum of gage is 1,397.88 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 1,170 cfs and extended above on basis of slope-area measurement at 8,620 cfs.

Bankfull stage.--8.8 ft.

Remarks.--Peaks for the years 1914-16 are maximum observed. Only annual peaks are shown prior to Oct. 1, 1946. Base for partial-duration series, 150 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1914	Feb. 20, 1914	12.5	5,800	1951	Apr. 29, 1951	1.70	12
1915	Feb. 3, 1915	5.6	634	1952	Dec. 30, 1951	3.25	241
1916	Jan. 17, 1916	9.3	3,150		Jan. 12, 1952	4.03	474
1917	Dec. 24, 1916	4.79	760		Jan. 16, 1952	4.75	1,090
1918	Mar. 10, 1918	4.10	570		Jan. 18, 1952	4.10	589
1919	Feb. 11, 1919	2.72	92		Mar. 15, 1952	3.89	510
1920	Mar. 2, 1920	3.74	450	1953	Dec. 2, 1952	1.80	49
1921	Mar. 13, 1921	4.30	650	1954	Jan. 24, 1954	4.00	571
1922	Dec. 19, 1921	7.75	2,800		Feb. 13, 1954	3.09	241
1923	Dec. 13, 1922	3.5	370	1955	Apr. 30, 1955	2.39	107
1924	Mar. 26, 1924	2.35	81	1956	Jan. 26, 1956	4.30	815
1925	Apr. 4, 1925	2.95	210	1957	Feb. 23, 1957	2.84	158
1926	Apr. 7, 1926	5.95	1,450	1958	Dec. 15, 1957	3.00	197
1927	Feb. 16, 1927	5.9	1,400		Jan. 26, 1958	3.13	223
1928	Feb. 4, 1928	3.45	298		Feb. 3, 1958	4.17	680
1929	Apr. 4, 1929	2.78	155		Feb. 19, 1958	3.21	233
1930	May 3, 1930	2.65	143		Mar. 16, 1958	3.63	385
1931	Feb. 3, 1931	2.70	151		Mar. 22, 1958	2.93	183
1932	Dec. 28, 1931	3.95	480		Apr. 3, 1958	4.23	715
1933	Jan. 19, 1933	4.85	-	1959	Jan. 6, 1959	3.34	281
1934	Jan. 1, 1934	6.38	950		Feb. 11, 1959	3.35	284
1935	Oct. 17, 1934	8.60	2,000		Feb. 16, 1959	3.54	351
1936	Feb. 12, 1936	5.20	706	1960	Jan. 12, 1960	2.88	170
1937	Feb. 6, 1937	4.50	640	1961	Nov. 6, 1960	4.30	768
1938	Mar. 2, 1938	-	8,620		Jan. 26, 1961	2.75	162
1939	Dec. 18, 1938	7.70	375	1962	Dec. 2, 1961	3.98	558
1940	Jan. 8, 1940	7.92	452		Jan. 20, 1962	3.40	290
1941	Feb. 20, 1941	8.57	1,340		Feb. 9, 1962	2.85	200
1942	Dec. 10, 1941	6.57	146		Feb. 11, 1962	5.06	1,500
1943	Jan. 23, 1943	11.86	5,660		Feb. 15, 1962	2.93	180
1944	Feb. 22, 1944	9.00	1,800	1963	Feb. 9, 1963	3.75	464
1945	Nov. 11, 1944	8.38	1,210	1964	Jan. 21, 1964	2.94	182
1946	Mar. 30, 1946	4.17	680	1965	Apr. 9, 1965	3.00	194
1947	Nov. 13, 1946	3.75	420				
	Nov. 20, 1946	4.07	580				
	Dec. 25, 1946	4.05	600				
1948	Apr. 29, 1948	1.84	45				
1949	Jan. 20, 1949	1.60	35				
1950	Nov. 10, 1949	2.76	150				

985. Los Angeles River near Downey, Calif.

Location--Lat 33°56'57", long 118°10'24", in San Antonio Grant, on right bank 400 ft downstream from Firestone Boulevard Bridge, 1 mile upstream from Rio Hondo, and 2.5 miles west of Downey, Los Angeles County.

Drainage area--599 sq mi.

Gage--Recording. Prior to Apr. 11, 1938, at site 1,600 ft downstream at different datum. Apr. 11, 1938, to Nov. 3, 1949, at datum 0.96 ft lower and Nov. 4, 1949, to Dec. 11, 1956, at datum 2.25 ft higher, both at site 400 ft upstream. Datum of gage is 96.12 ft above mean sea level (levels by Los Angeles County Flood Control District).

Stage-discharge relation--Defined by current-meter measurements below 20,000 cfs and extended above on basis of slope-area measurement at 79,700 cfs prior to Apr. 11, 1938. Defined below 22,000 cfs for period Apr. 11, 1938, to Dec. 11, 1956; below 19,800 cfs thereafter.

Bankfull stage--23 ft.

Remarks--Records furnished by Los Angeles County Flood Control District. Peaks regulated by Devils Gate, Upper San Fernando, and Pacoima reservoirs (combined capacity, 16,300 acre-ft) beginning prior to 1929; by Tujunga Reservoir (capacity, 4,240 acre-ft) beginning in 1931; by Hansen flood-control reservoir (capacity, 32,000 acre-ft) beginning in 1940; by Lower San Fernando reservoir (capacity, 20,500 acre-ft) beginning in 1941; and by Sepulveda flood-control reservoir (capacity, 17,400 acre-ft) beginning in December 1941. City of Los Angeles at times discharges imported Owens River water into Los Angeles River. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1929	Nov. 14, 1928	4.76	2,010	1947	Dec. 25, 1946	7.30	14,900
1930	Mar. 15, 1930	4.41	2,210	1948	Mar. 24, 1948	6.95	8,980
				1949	Dec. 17, 1948	6.43	5,300
1931	Feb. 4, 1931	6.49	4,360	1950	Feb. 6, 1950	2.67	8,480
1932	Feb. 8, 1932	8.17	4,780				
1933	Jan. 19, 1933	9.66	7,070	1951	Jan. 11, 1951	2.25	5,480
1934	Jan. 1, 1934	11.2	29,400	1952	Jan. 16, 1952	7.98	32,900
1935	Jan. 5, 1935	6.71	10,400	1953	Nov. 15, 1952	4.95	14,100
				1954	Feb. 13, 1954	5.75	19,500
1936	Feb. 12, 1936	-	5,730	1955	Jan. 18, 1955	4.60	13,700
1937	Dec. 30, 1936	-	10,100				
1938	Mar. 2, 1938	-	79,700	1956	Jan. 26, 1956	8.35	28,900
1939	Sept. 25, 1939	-	10,800	1957	Feb. 23, 1957	5.90	24,600
1940	Jan. 8, 1940	6.80	7,610	1958	Feb. 19, 1958	6.89	34,100
				1959	Jan. 6, 1959	6.12	24,200
1941	Feb. 20, 1941	8.15	14,800	1960	Jan. 12, 1960	4.51	10,700
1942	Dec. 10, 1941	6.42	8,210				
1943	Jan. 23, 1943	10.60	27,500	1961	Nov. 5, 1960	3.93	7,810
1944	Feb. 22, 1944	8.25	24,800	1962	Feb. 12, 1962	7.08	28,400
1945	Feb. 2, 1945	5.75	6,970	1963	Feb. 9, 1963	5.93	19,340
				1964	Jan. 21, 1964	4.62	11,400
1946	Dec. 22, 1945	6.57	12,500	1965	Apr. 9, 1965	5.80	18,700

995. Sawpit Creek near Monrovia, Calif.

Location.--Lat 34°10'23", long 117°59'18", in SW $\frac{1}{4}$ SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec.13, T.1 N., R.11 W., 0.1 mile downstream from Monrovia Creek, 0.3 mile downstream from Sawpit Dam, and 1.7 miles north of Monrovia.

Drainage area.--5.3 sq mi.

Gage.--Recording. Prior to Nov. 20, 1925, and Apr. 12 to Oct. 29, 1938, at site 0.1 mile upstream at different datum. Nov. 20, 1925, to Mar. 2, 1938, at site 0.1 mile downstream at different datum (datum raised 0.69 ft Dec. 15, 1927). Oct. 30, 1938, to Oct. 3, 1951, at present site at datum 1.00 ft higher. Altitude of gage is 1,100 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurement below 100 cfs prior to Nov. 20, 1925; below 150 cfs Nov. 20, 1925, to Mar. 2, 1938; below 120 cfs and extended on basis of computation of flow over dam at 441 cfs thereafter.

Remarks.--Peaks regulated by Sawpit flood-control reservoir (capacity, 320 acre-ft) beginning in June 1927. Low peaks may be affected by city of Monrovia diversion about 1 mile upstream from Monrovia Creek. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1917	Dec. 24, 1916	2.64	228	1938	Mar. 2, 1938	-	1,800
1918	Mar. 10, 1918	2.65	256				
1919	-	-	0	1943	Jan. 23, 1943	3.90	441
1920	Mar. 2, 1920	2.01	58	1944	Feb. 22, 1944	2.22	124
				1945	Nov. 11, 1944	1.75	75
1921	Mar. 14, 1921	2.45	130	1946	Dec. 23, 1945	2.23	125
1922	Dec. 21, 1921	-	184	1947	Dec. 26, 1946	1.39	46
	Feb. 9, 1922	4.35	-	1948	Mar. 14, 1948	.16	.8
1923	Dec. 13, 1922	2.73	47	1949	Feb. 9, 1949	.76	16
1924	Mar. 26, 1924	1.75	4.6	1950	Nov. 10, 1949	.77	13
1925	Apr. 4, 1925	-	950				
1926	Apr. 7, 1926	-	-	1951	Jan. 15, 1951	1.30	47
1927	Feb. 16, 1927	7.4	900	1952	Jan. 16, 1952	3.48	154
1928	Feb. 4, 1928	.7	4	1953	Dec. 1, 1952	2.62	61
1929	Mar. 10, 1929	1.27	8.0	1954	Jan. 24, 1954	-	-
1930	Mar. 17, 1930	1.86	-	1955	Jan. 18, 1955	5.48	32
1931	Apr. 26, 1931	1.14	12	1956	Jan. 26, 1956	4.25	113
1932	Feb. 9, 1932	2.02	52	1957	Jan. 15, 1957	2.65	14
1933	Jan. 19, 1933	1.67	34	1958	Apr. 1, 1958	3.75	165
1934	Jan. 1, 1934	5.00	350	1959	Jan. 6, 1959	3.95	181
1935	Apr. 8, 1935	3.15	145	1960	Apr. 27, 1960	4.15	109
1936	Feb. 12, 1936	3.60	202	1961	Nov. 12, 1960	3.52	19
1937	Feb. 6, 1937	3.54	100				

1000. Santa Anita Creek near Sierra Madre, Calif.

Location.--Lat 34°11'30", long 118°00'59", in SW $\frac{1}{4}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.10, T.1 N., R.11 W., on right bank at head of Hermits Falls, 0.9 mile upstream from Big Santa Anita Dam and 3 miles northeast of Sierra Madre.

Drainage area.--9.71 sq mi.

Gage.--Recording. Prior to Mar. 2, 1938, at datum 0.4 ft lower. Mar. 18 to Sept. 27, 1938, at datum 0.7 ft higher. Datum of gage is 1,475.3 ft above mean sea level (levels by U.S. Forest Service).

Stage-discharge relation.--Defined by current-meter measurements below 450 cfs and extended above on basis of a velocity-area study at 2,530 cfs. Peak discharge on Mar. 2, 1938 (5,200 cfs) based on inflow to Big Santa Anita flood-control reservoir.

Remarks.--Fire in 1953 denuded the entire basin. Only annual peaks are shown prior to Oct. 1, 1947. Base for partial-duration series, 40 cfs.

Peak stages and discharges of Santa Anita Creek near Sierra Madre, Calif.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1917	Dec. 24, 1916	4.50	335	1952	Jan. 18, 1952	4.40	373
1918	Mar. 11, 1918	4.75	372	1952	Mar. 7, 1952	2.03	76
1919	Feb. 11, 1919	1.93	34	1952	Mar. 10, 1952	1.92	62
1920	Mar. 2, 1920	4.30	292	1952	Mar. 15, 1952	3.68	250
1921	Mar. 13, 1921	5.65	496	1953	Dec. 1, 1952	2.94	169
1922	Feb. 9, 1922	7.30	781	1954	Jan. 19, 1954	-	(a)
1923	Dec. 13, 1922	4.00	250	1954	Jan. 24, 1954	-	(a)
1924	Mar. 26, 1924	2.05	40	1954	Feb. 13, 1954	-	(a)
1925	Apr. 4, 1925	2.50	70	1954	Mar. 16, 1954	-	(a)
1926	Apr. 7, 1926	10.7	1,880	1954	Mar. 20, 1954	2.65	58
1927	Feb. 16, 1927	6.5	645	1954	Mar. 30, 1954	-	(a)
1928	Feb. 4, 1928	2.08	42	1955	Nov. 11, 1954	3.20	76
1929	Mar. 10, 1929	2.40	61	1955	Jan. 18, 1955	2.36	50
1930	Jan. 15, 1930	2.04	39	1955	Apr. 30, 1955	2.41	52
1931	Apr. 26, 1931	2.80	98	1956	Jan. 26, 1956	5.82	661
1932	Feb. 9, 1932	4.60	336	1957	Jan. 13, 1957	2.88	169
1933	Jan. 19, 1933	5.02	390	1957	Feb. 23, 1957	2.80	159
1934	Jan. 1, 1934	6.10	564	1958	Feb. 25, 1958	2.20	71
1935	Apr. 8, 1935	5.60	630	1958	Mar. 16, 1958	3.97	358
1936	Feb. 12, 1936	4.52	349	1958	Mar. 22, 1958	2.65	122
1937	Dec. 27, 1936	5.40	570	1958	Mar. 27, 1958	2.25	76
1938	Mar. 2, 1938	-	5,200	1958	Apr. 1, 1958	4.20	415
1939	Sept. 25, 1939	3.60	252	1958	Apr. 3, 1958	5.84	867
1940	Jan. 8, 1940	4.10	349	1959	Jan. 6, 1959	5.32	710
1941	Apr. 4, 1941	4.45	465	1959	Feb. 11, 1959	3.15	195
1942	Dec. 28, 1941	1.71	42	1959	Feb. 16, 1959	3.55	269
1943	Jan. 23, 1943	12.33	2,530	1960	Feb. 1, 1960	1.57	17
1944	Feb. 22, 1944	6.00	704	1961	Nov. 5, 1960	2.18	60
1945	Nov. 11, 1944	4.20	340	1961	Jan. 26, 1961	2.14	57
1946	Dec. 23, 1945	4.86	460	1962	Dec. 2, 1961	2.97	152
1947	Nov. 20, 1946	4.32	346	1962	Jan. 20, 1962	2.39	91
1948	Apr. 28, 1948	1.64	47	1962	Feb. 11, 1962	7.46	1,300
1949	Jan. 20, 1949	1.41	32	1962	Feb. 15, 1962	2.73	135
1950	Nov. 10, 1949	2.44	115	1962	Feb. 19, 1962	2.18	71
1950	Dec. 18, 1949	2.54	125	1963	Feb. 9, 1963	4.90	590
1950	Feb. 6, 1950	1.68	50	1964	Jan. 22, 1964	1.76	46
1950	Apr. 8, 1950	1.70	51	1964	Apr. 1, 1964	1.94	64
1951	Jan. 11, 1951	1.11	18	1965	Apr. 1, 1965	2.39	121
1952	Dec. 30, 1951	2.78	146	1965	Apr. 9, 1965	2.58	133
1952	Jan. 12, 1952	3.85	286				
1952	Jan. 16, 1952	8.15	1,260				

a Discharge unknown; exceeded base.

1005. Little Santa Anita Creek near Sierra Madre, Calif.

Location.--Lat 34°11'13", long 118°02'35", in SE¹/₄SW¹/₄NW¹/₄ sec.9, T.1 N., R.11 W., on right bank 1.3 miles upstream from Sierra Madre Dam and 2 miles north of Sierra Madre.

Drainage area.--1.84 sq mi.

Gage.--Recording. Prior to Apr. 7, 1926, at different datum. Altitude of gage is 2,200 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 75 cfs and extended above on basis of inflow to Sierra Madre flood-control reservoir.

Remarks.--Fire in 1953 denuded the entire drainage basin. Only annual peaks are shown prior to Oct. 1, 1947. Base for partial-duration series, 7.0 cfs.

Peak stages and discharges of Little Santa Anita Creek near Sierra Madre, Calif.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1917	Dec. 24, 1916	2.32	32	1952	Jan. 16, 1952	2.25	105
1918	Mar. 10, 1918	2.30	58		Jan. 18, 1952	1.66	31
1919	Feb. 11, 1919	1.75	5.9		Mar. 7, 1952	1.24	8.9
1920	Mar. 2, 1920	2.28	55		Mar. 10, 1952	1.22	8.6
					Mar. 15, 1952	1.72	35
1921	Mar. 13, 1921	2.55	98		Apr. 7, 1952	1.35	16
1922	Feb. 9, 1922	2.74	93				
1923	Dec. 13, 1922	2.25	36	1953	Nov. 15, 1952	1.15	8.3
1924	Mar. 26, 1924	1.62	3.0		Dec. 1, 1952	1.64	30
1925	Apr. 5, 1925	1.73	5.5				
				1954	Jan. 19, 1954	-	(a)
1926	Apr. 7, 1926	11.75	300		Jan. 24, 1954	-	(a)
1927	Feb. 16, 1927	2.40	100		Feb. 13, 1954	-	(a)
1928	Feb. 4, 1928	1.55	25		Mar. 16, 1954	1.22	11
1929	Apr. 4, 1929	1.42	14		Mar. 30, 1954	1.65	36
1930	Jan. 15, 1930	1.34	5				
				1955	Nov. 11, 1954	1.17	8.0
1931	Apr. 26, 1931	1.40	12		Jan. 18, 1955	1.16	7.8
1932	Feb. 9, 1932	1.92	47				
1933	Jan. 19, 1933	2.20	72	1956	Jan. 26, 1956	1.87	46
1934	Dec. 31, 1933	2.40	89				
1935	Apr. 8, 1935	2.20	80	1957	Jan. 13, 1957	1.60	30
					Feb. 23, 1957	1.75	37
1936	Feb. 12, 1936	1.80	42		Mar. 9, 1957	1.17	7.8
1937	Dec. 27, 1936	2.00	60				
1938	Mar. 2, 1938	-	536	1958	Dec. 12, 1957	1.33	14
1939	Sept. 25, 1939	1.45	9		Dec. 16, 1957	1.40	17
1940	Jan. 8, 1940	1.85	35		Jan. 26, 1958	1.21	9.4
					Feb. 4, 1958	1.79	39
1941	Apr. 4, 1941	2.13	75		Feb. 19, 1958	1.94	52
1942	Dec. 10, 1941	1.16	8.6		Mar. 16, 1958	1.45	19
1943	Mar. 4, 1943	3.75	324		Mar. 21, 1958	1.30	12
1944	Feb. 22, 1944	2.07	63		Apr. 3, 1958	1.86	45
1945	Nov. 11, 1944	1.92	50				
				1959	Jan. 6, 1959	2.10	67
1946	Dec. 21, 1945	2.05	62		Feb. 11, 1959	1.40	17
1947	Nov. 13, 1946	2.11	60		Feb. 16, 1959	1.32	16
				1960	Apr. 26, 1960	.88	2.3
1948	Apr. 28, 1948	1.27	12				
1949	Jan. 20, 1949	.94	3.1	1961	Nov. 5, 1960	1.43	18
					Jan. 26, 1961	1.28	12
1950	Nov. 10, 1949	1.62	26				
	Dec. 18, 1949	1.51	22	1962	Dec. 2, 1961	1.40	17
	Feb. 6, 1950	1.13	7.0		Jan. 20, 1962	1.20	9.2
	Mar. 24, 1950	1.20	10		Feb. 11, 1962	2.80	147
	Apr. 8, 1950	1.25	13		Feb. 15, 1962	1.26	11
					Feb. 19, 1962	1.26	11
1951	Jan. 11, 1951	.95	3.2		Mar. 6, 1962	1.20	9.2

a Discharge unknown; exceeded base.

1010. Eaton Creek near Pasadena, Calif.

Location.--Lat 34°11'37", long 118°06'13", in SW $\frac{1}{4}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.2, T.1 N., R.12 W., on right bank at mouth of canyon just upstream from bridge on old Mount Wilson toll road, and 4.5 miles northeast of Pasadena.

Drainage area.--6.47 sq mi.

Gage.--Recording. Prior to Oct. 28, 1938, at site 75 ft downstream at different datum. Oct. 28, 1938, to Nov. 4, 1959, at present site at datum 1.00 ft higher. Altitude of gage is 1,230 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 330 cfs prior to Oct. 28, 1938; below 813 cfs and extended on basis of inflow to Eaton flood-control reservoir thereafter.

Bankfull stage.--4 ft.

Historical data.--Flood of January 1916 reached 1,500 cfs, from slope-area measurement by local engineering student.

Remarks.--Peaks may be affected by diversion above station by city of Pasadena since beginning of record. Only annual peaks are shown prior to Oct. 1, 1941. Base for partial-duration series, 55 cfs.

Peak stages and discharges of Eaton Creek near Pasadena, Calif.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1916	January 1916	-	1,500	1947	Nov. 20, 1946	1.92	210
1918	Mar. 11, 1918	3.47	470	1947	Dec. 26, 1946	1.80	160
1919	Feb. 11, 1919	2.16	54	1947	Dec. 27, 1946	1.53	86
1920	Mar. 2, 1920	2.77	180	1948	Apr. 29, 1948	1.10	42
1921	Mar. 13, 1921	3.18	421	1949	Jan. 20, 1949	.75	18
1922	Dec. 19, 1921	4.60	1,120	1950	Nov. 10, 1949	1.44	75
1923	Dec. 13, 1922	2.33	149	1951	Apr. 28, 1951	.61	12
1924	Mar. 26, 1924	1.80	37	1952	Dec. 30, 1951	1.33	118
1925	Apr. 4, 1925	2.0	43	1952	Jan. 12, 1952	1.42	107
1926	Apr. 7, 1926	5.0	1,360	1952	Jan. 16, 1952	2.02	454
1927	Feb. 16, 1927	4.10	863	1952	Mar. 15, 1952	1.84	168
1928	Feb. 4, 1928	3.5	569	1953	Dec. 1, 1952	1.28	52
1929	Apr. 4, 1929	2.90	235	1954	Jan. 24, 1954	1.75	225
1930	May 3, 1930	2.37	81	1954	Feb. 13, 1954	1.11	56
1931	Apr. 26, 1931	2.27	61	1955	Apr. 30, 1955	1.10	35
1932	Feb. 9, 1932	3.65	361	1956	Jan. 26, 1956	2.70	429
1933	Jan. 19, 1933	2.96	182	1957	Jan. 13, 1957	1.39	65
1934	Jan. 1, 1934	3.52	330	1957	Feb. 23, 1957	1.38	64
1935	Apr. 8, 1935	3.30	274	1958	Dec. 17, 1957	1.44	72
1936	Feb. 12, 1936	2.85	143	1958	Jan. 26, 1958	1.47	76
1937	Dec. 27, 1936	3.50	305	1958	Feb. 3, 1958	2.28	292
1938	Mar. 2, 1938	-	2,400	1958	Feb. 19, 1958	1.87	163
1939	Dec. 18, 1938	2.32	201	1958	Mar. 16, 1958	1.92	178
1940	Jan. 8, 1940	2.40	220	1958	Apr. 1, 1958	2.73	465
1941	Feb. 20, 1941	2.80	317	1959	Jan. 6, 1959	1.87	163
1942	Dec. 10, 1941	1.33	54	1959	Feb. 11, 1959	1.65	110
1943	Jan. 23, 1943	3.49	813	1959	Feb. 16, 1959	1.63	105
1943	Jan. 31, 1943	1.65	110	1960	Jan. 12, 1960	1.29	4.0
1943	Feb. 22, 1943	1.85	160	1961	Jan. 26, 1961	1.64	13
1943	Feb. 22, 1943	1.83	155	1962	Dec. 2, 1961	2.35	60
1943	Feb. 24, 1943	1.70	120	1962	Feb. 11, 1962	3.90	539
1943	Mar. 4, 1943	2.40	344	1963	Feb. 9, 1963	2.85	158
1944	Dec. 20, 1943	1.45	74	1964	Apr. 1, 1964	2.32	56
1944	Feb. 22, 1944	2.49	390	1965	Apr. 1, 1965	2.48	78
1944	Mar. 1, 1944	2.05	203	1965	Apr. 9, 1965	2.47	64
1945	Nov. 11, 1944	2.16	251				
1945	Feb. 2, 1945	1.92	177				
1945	Mar. 15, 1945	1.56	92				
1946	Dec. 22, 1945	1.83	186				
1946	Dec. 23, 1945	2.12	271				
1946	Mar. 30, 1946	2.06	268				
1947	Nov. 13, 1946	2.10	230				

1030. Los Angeles River at Long Beach, Calif.

Location.--Lat 33°49'05", long 118°12'15", in Los Cerritos Grant, on right bank 5,000 ft upstream from Willow Street, 3.4 miles north of Long Beach, Los Angeles County, and 3.7 miles upstream from mouth.

Gage.--Recording. Prior to Oct. 31, 1931, at site 3 miles downstream at different datum. Oct. 31, 1931, to Jan. 19, 1956, at site 2 miles downstream at datum 11.01 ft lower. Datum of gage is 11.91 ft above mean sea level (levels by Los Angeles County Flood Control District)

Stage-discharge relation.--Defined by current-meter measurements below 2,800 cfs prior to Oct. 31, 1931; below 35,000 cfs thereafter.

Bankfull stage.--23 ft.

Remarks.--Records furnished by Los Angeles County Flood Control District.

Peaks regulated by Hansen flood-control reservoir (capacity, 33,500 acre-ft) beginning in 1940, Sepulveda flood-control reservoir (capacity, 17,000 acre-ft) beginning in 1941, and several small flood-control reservoirs. Peaks may be affected by occasional discharges of imported Owens River water in San Fernando and Chatsworth Reservoirs by the city of Los Angeles and by many small diversions above station for domestic use and irrigation. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1929	Mar. 10, 1929	10.15	2,870	1947	Dec. 26, 1946	7.88	18,800
1930	Mar. 15, 1930	9.70	1,970	1948	Mar. 24, 1948	6.45	9,310
				1949	Dec. 17, 1948	5.48	5,520
1931	Feb. 3, 1931	11.50	3,700	1950	Feb. 6, 1950	6.80	9,090
1932	Feb. 9, 1932	9.87	8,380				
1933	Jan. 19, 1933	10.14	8,710	1951	Jan. 29, 1951	7.37	9,040
1934	Jan. 1, 1934	12.55	37,500	1952	Jan. 16, 1952	11.05	47,800
1935	Apr. 8, 1935	9.12	11,100	1953	Nov. 15, 1952	8.62	21,100
				1954	Feb. 13, 1954	9.42	34,800
1936	Feb. 12, 1936	-	10,400	1955	Jan. 18, 1955	6.85	17,800
1937	Feb. 14, 1937	-	20,500				
1938	Mar. 2, 1938	-	99,000	1956	Jan. 26, 1956	-	40,500
1939	Sept. 25, 1939	10.65	17,300	1957	Feb. 23, 1957	7.45	23,000
1940	Feb. 2, 1940	9.00	8,440	1958	Feb. 19, 1958	9.84	43,800
				1959	Jan. 6, 1959	8.17	31,000
1941	Mar. 4, 1941	11.10	18,200	1960	Jan. 12, 1960	6.80	21,700
1942	Dec. 10, 1941	11.24	10,800				
1943	Jan. 23, 1943	17.44	37,900	1961	Jan. 26, 1961	4.60	9,450
1944	Feb. 22, 1944	13.70	34,000	1962	Feb. 12, 1962	9.64	42,200
1945	Nov. 12, 1944	11.10	11,600	1963	Feb. 9, 1963	8.18	31,400
				1964	Jan. 22, 1964	5.84	15,980
1946	Dec. 22, 1945	10.20	12,800	1965	Apr. 9, 1965	8.05	30,100

1035. Ballona Creek near Culver City, Calif.

Location.--Lat 33°59'48", long 118°24'07", in La Ballona Grant, on downstream side of Sawtelle Boulevard Bridge, 1.7 miles south of Culver City, Los Angeles County, and 4 miles upstream from mouth.

Drainage area.--Prior to January 1951, 111 sq mi; 89.5 sq mi thereafter (change due to tributary channel realignment).

Gage.--Recording. Prior to May 14, 1936, at site 1 mile downstream at different datum. May 14, 1936, to Oct. 23, 1961, at datum 0.2 ft higher. Datum of gage is 11.06 ft above mean sea level (levels by Los Angeles County Flood Control District).

Stage-discharge relation.--Defined by current-meter measurements below 9,000 cfs prior to May 14, 1936; below 18,300 cfs thereafter.

Bankfull stage.--22 ft.

Historical data.--Peak discharge for flood of January or February 1914 was 6,480 cfs, as determined by slope-conveyance study at site 2.4 miles upstream.

Remarks.--Records furnished by Los Angeles County Flood Control District.

Peaks may be affected by occasional discharge of imported Owens River water into the creek above station from several distribution reservoirs of the City of Los Angeles Department of Water and Power. After December 1950, flow of Sepulveda Creek excluded. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1928	May 8, 1928	10.0	1,170	1947	Dec. 25, 1946	12.42	9,630
1929	Mar. 10, 1929	14.15	4,990	1948	Mar. 24, 1948	13.47	12,700
1930	Jan. 11, 1930	14.07	4,460	1949	Feb. 7, 1949	10.40	5,740
				1950	Feb. 6, 1950	12.19	7,670
1931	Apr. 26, 1931	14.1	6,280				
1932	Dec. 28, 1931	15.07	6,130	1951	Jan. 10, 1951	10.13	5,460
1933	Jan. 19, 1933	14.96	7,000	1952	Jan. 16, 1952	13.75	12,800
1934	Jan. 1, 1934	18.5	11,300	1953	Nov. 15, 1952	13.15	11,500
1935	Apr. 8, 1935	17.83	11,200	1954	Feb. 13, 1954	15.16	18,900
				1955	Jan. 18, 1955	11.93	9,370
1936	Feb. 12, 1936	-	8,070				
1937	Dec. 12, 1936	-	8,940	1956	Jan. 26, 1956	15.10	18,700
1938	Mar. 2, 1938	-	19,000	1957	Feb. 23, 1957	13.62	13,860
1939	Dec. 18, 1938	12.1	9,920	1958	Feb. 19, 1958	14.06	15,200
1940	Feb. 3, 1940	12.05	9,730	1959	Jan. 6, 1959	11.40	8,170
				1960	Jan. 11, 1960	13.65	12,500
1941	Dec. 23, 1940	14.63	17,300				
1942	Dec. 10, 1941	10.80	7,500	1961	Nov. 5, 1960	11.46	7,700
1943	Jan. 22, 1943	13.00	13,210	1962	Feb. 19, 1962	9.75	12,900
1944	Feb. 22, 1944	11.60	8,800	1963	Mar. 16, 1963	9.44	12,100
1945	Nov. 11, 1944	12.02	9,380	1964	Jan. 22, 1964	6.70	6,420
				1965	Apr. 9, 1965	11.82	17,600
1946	Dec. 22, 1945	11.0	7,750				

TOPANGA CREEK BASIN

1040. Topanga Creek near Topanga Beach, Calif.

Location.--Lat 34°03'50", long 118°35'10", in Boca de Santa Monica Grant, on downstream side of right abutment of highway bridge, 1.7 miles north of Topanga Beach, Los Angeles County.

Drainage area.--18.0 sq mi.

Gage.--Recording. Prior to June 5, 1940, at different datum. June 5, 1940, to Dec. 9, 1941, at site 400 ft upstream at different datum. Datum of gage is 265.60 ft above mean sea level (levels by Los Angeles County Flood Control District).

Stage-discharge relation.--Defined by current-meter measurements below 5,100 cfs prior to June 5, 1940; below 3,900 cfs thereafter.

Remarks.--Records furnished by Los Angeles County Flood Control District. Only annual peaks are shown.

Peak stages and discharges of Topanga Creek near Topanga Beach, Calif.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1930	Mar. 15, 1930	3.10	340	1948	Mar. 24, 1948	4.36	276
1931	Feb. 4, 1931	6.40	1,370	1949	Dec. 26, 1948	3.45	63
1932	Feb. 8, 1932	5.40	1,250	1950	Dec. 18, 1949	4.02	275
1933	Jan. 19, 1933	5.87	1,430	1951	Jan. 11, 1951	3.09	21
1934	Dec. 31, 1933	11.27	4,510	1952	Jan. 15, 1952	10.04	6,050
1935	Jan. 5, 1935	5.44	1,200	1953	Dec. 1, 1952	5.15	702
1936	Feb. 22, 1936	-	528	1954	Feb. 13, 1954	7.07	2,090
1937	Mar. 15, 1937	5.83	1,130	1955	Jan. 18, 1955	3.93	151
1938	Mar. 2, 1938	11.20	7,960	1956	Jan. 26, 1956	6.11	1,540
1940	Feb. 1, 1940	9.65	1,280	1957	Feb. 23, 1957	5.08	655
1941	Feb. 20, 1941	-	1,100	1958	Apr. 3, 1958	7.57	3,950
1942	Dec. 28, 1941	5.69	385	1959	Jan. 6, 1959	6.08	1,510
1943	Jan. 22, 1943	8.60	2,200	1960	Apr. 27, 1960	5.39	539
1944	Feb. 22, 1944	8.85	5,070	1961	Jan. 26, 1961	3.30	28
1945	Feb. 2, 1945	5.67	964	1962	Feb. 10, 1962	7.73	2,790
1946	Dec. 23, 1945	5.40	905	1963	Feb. 9, 1963	5.11	569
1947	Nov. 20, 1946	5.03	567	1964	Jan. 21, 1964	4.15	196
				1965	Apr. 9, 1965	5.16	716

MALIBU CREEK BASIN

1055. Malibu Creek at Crater Camp, near Calabasas, Calif.

Location.--Lat 34°04'38", long 118°42'03", in SW¹ sec.18, T.1 S., R.17 W., on right bank 700 ft downstream from Cold Creek, 0.2 mile downstream from Crater Camp, and 6 miles southwest of Calabasas.

Drainage area.--105 sq mi.

Gage.--Recording. Datum of gage is 430.51 ft above mean sea level (levels by Los Angeles County Flood Control District).

Stage-discharge relation.--Defined by current-meter measurements below 6,000 cfs.

Remarks.--Records furnished by Los Angeles County Flood Control District. Peaks regulated by many small recreational reservoirs. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1931	Feb. 4, 1931	8.88	1,070	1949	May 18, 1949	4.36	0.6
1932	Feb. 9, 1932	10.88	3,100	1950	Feb. 6, 1950	7.80	674
1933	Jan. 19, 1933	10.81	4,460	1951	Jan. 11, 1951	4.45	2.9
1934	Jan. 1, 1934	13.73	9,650	1952	Mar. 15, 1952	19.1	13,560
1935	Jan. 5, 1935	-	2,060	1953	Nov. 15, 1952	6.66	322
1936	Feb. 23, 1936	-	147	1954	Feb. 13, 1954	9.23	2,250
1937	Feb. 14, 1937	10.98	2,760	1955	Jan. 18, 1955	2.60	45
1938	Mar. 2, 1938	15.90	10,000	1956	Jan. 26, 1956	7.30	3,600
1939	Dec. 20, 1938	5.95	331	1957	Feb. 23, 1957	2.53	46
1940	Feb. 2, 1940	7.15	690	1958	Apr. 3, 1958	10.03	4,260
1941	Feb. 20, 1941	11.30	3,620	1959	Jan. 6, 1959	8.90	3,180
1942	Dec. 28, 1941	4.58	140	1960	Apr. 27, 1960	2.88	84
1943	Jan. 22, 1943	18.31	12,200	1961	Jan. 26, 1961	2.04	8.0
1944	Feb. 22, 1944	16.36	7,700	1962	Feb. 10, 1962	12.50	7,060
1945	Feb. 2, 1945	5.96	516	1963	Mar. 16, 1963	3.15	104
1946	Mar. 30, 1946	6.63	506	1964	Jan. 22, 1964	2.73	65
1947	Nov. 13, 1946	8.86	820	1965	Apr. 9, 1965	5.17	521
1948	Mar. 24, 1948	5.26	113				

1065. Conejo Creek near Camarillo, Calif.

Location.--Lat 34°12'34", long 118°59'37", in Calleguas Grant, at U.S. Highway 101 bridge, 2.7 miles east of Camarillo, Ventura County.

Drainage area.--69.8 sq mi.

Gage.--Nonrecording. Altitude of gage is 110 ft (from topographic map).

Remarks.--No flow during entire period of record, 1927-31.

CALLEGUAS CREEK BASIN

1070. Honda Barranca near Somis, Calif.

Location.--Lat 34°16'08", long 119°02'56", in Las Posas Grant, on upstream side of left abutment of bridge on Price Road, 1,600 ft upstream from Arroyo Colorado and 3.1 miles west of Somis, Ventura County.

Drainage area.--2.57 sq mi.

Gage.--Recording and, since 1960, crest-stage gage. Altitude of gage is 350 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 35 cfs and extended above on basis of field estimate at 450 cfs.

Bankfull stage.--12 ft.

Remarks.--Base for partial-duration series, 15 cfs. Only annual peak shown for 1965.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1955	Jan. 18, 1955	2.50	23	1960	Feb. 1, 1960	2.10	9.3
1956	Jan. 26, 1956	3.40	79	1961	Nov. 6, 1960	2.00	7.0
1957	Feb. 28, 1957	2.32	16	1962	Feb. 10, 1962	4.71	184
1958	Feb. 19, 1958	3.38	77		Feb. 15, 1962	4.35	151
	Feb. 25, 1958	3.92	130		Feb. 19, 1962	8.21	450
	Mar. 15, 1958	3.19	62	1963	Feb. 9, 1963	3.20	63
	Mar. 22, 1958	3.42	81		Mar. 16, 1963	2.41	19
	Mar. 27, 1958	3.12	57	1964	Jan. 21, 1964	4.65	180
	Mar. 30, 1958	3.47	85	1965	Apr. 9, 1965	5.93	285
	Apr. 3, 1958	3.26	68				
	Apr. 6, 1958	4.09	150				
1959	Feb. 16, 1959	1.80	3.3				

1080. Santa Clara River near Saugus, Calif.

Location.--Lat 34°25'35", long 118°35'08", in San Francisco Grant, at bridge on U.S. Highway 99 and 2.8 miles northwest of Saugus, Los Angeles County.

Drainage area.--411 sq mi.

Gage.--Recording. Prior to Sept. 21, 1938, at site 1,000 ft downstream at different datum. Datum of gage is 1,038.24 ft above mean sea level (levels by Los Angeles County Flood Control District).

Stage-discharge relation.--Defined by current-meter measurements below 2,100 cfs prior to Sept. 21, 1938; below 4,700 cfs and extended above on basis of float measurements to 8,700 cfs thereafter.

Remarks.--Records furnished by Los Angeles County Flood Control District. Low peak discharges may be affected by diversion above station for irrigation. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1930	Mar. 15, 1930	5.05	193	1943	Jan. 23, 1943	12.5	15,000
1931	Feb. 7, 1931	7.20	2,310	1944	Feb. 22, 1944	11.24	22,200
1932	Feb. 9, 1932	9.98	2,090	1945	Feb. 2, 1945	6.83	517
1933	Jan. 19, 1933	12.84	618	1946	Mar. 30, 1946	6.62	500
1934	Jan. 1, 1934	15.07	3,870	1947	Dec. 26, 1946	7.77	1,620
1935	Jan. 5, 1935	14.43	608	1948	Mar. 24, 1948	-	350
1936	Feb. 23, 1936	-	833	1949	Mar. 11, 1949	5.97	9.9
1937	Dec. 27, 1936	-	3,410	1950	Feb. 6, 1950	6.22	8.5
1938	Mar. 2, 1938	-	24,000	1951	Jan. 29, 1951	5.93	6.2
1939	Dec. 15, 1938	9.48	4,620	1952	Jan. 16, 1952	13.32	7,600
1940	Feb. 1, 1940	6.47	676	1953	Dec. 1, 1952	10.78	-
1941	Mar. 4, 1941	9.43	5,050	1954	Jan. 19, 1954	9.05	626
1942	Dec. 28, 1941	6.25	443	1955	Jan. 18, 1955	9.12	746

1085. Santa Clara River at Los Angeles-Ventura County line, Calif.

Location.--Lat 34°23'59", long 118°42'14", in San Francisco Grant, on downstream end of old diversion weir on right bank, 0.8 mile west of Los Angeles-Ventura County line.

Drainage area.--644 sq mi.

Gage.--Recording. Datum of gage is 794.93 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 2,200 cfs and extended above on basis of slope-area measurement at 9,100 cfs.

Bankfull stage.--20 ft.

Remarks.--Gage-height record and discharge measurements furnished by Ventura County Water Resources Division. Base for partial-duration series, 750 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1953	Nov. 15, 1952	1.53	490	1958	Dec. 15, 1957	5.00	2,910
1954	Feb. 13, 1954	3.92	755		Feb. 4, 1958	4.85	2,360
1955	Jan. 18, 1955	3.31	548		Feb. 19, 1958	3.68	997
1956	Jan. 26, 1956	3.38	878		Feb. 25, 1958	4.20	1,880
1957	Mar. 1, 1957	3.99	1,580		Mar. 16, 1958	4.08	1,980
					Apr. 3, 1958	6.75	7,070
					Apr. 7, 1958	4.95	2,620

Peak stages and discharges of Santa Clara River at Los Angeles-Ventura County line, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1959	Jan. 6, 1959	4.85	2,040	1962	Feb. 19, 1962	-	(a)
1960	Apr. 27, 1960	3.88	109	1963	Feb. 9, 1963	6.90	718
1961	Nov. 6, 1960	4.80	190		Mar. 16, 1963	7.47	1,340
1962	Dec. 2, 1961	6.35	1,800	1964	Jan. 22, 1964	6.78	536
	Feb. 11, 1962	9.65	9,100	1965	Apr. 9, 1965	7.18	1,390

a Discharge unknown; exceeded base.

1096. Piru Creek above Lake Piru, Calif.

Location--Lat 34°31'40", long 118°45'21", in SE¹SW¹ sec.10, T.5 N., R.18 W., on right bank at Blue Point, 1.0 mile downstream from Aqua Blanca Creek, 4.6 miles upstream from Santa Felicia Dam, and 8.0 miles northeast of Piru.

Drainage area--372 sq mi.

Gage--Recording. Datum of gage is 1,063.62 ft above mean sea level (levels by Ventura County Water Resources Division).

Stage-discharge relation--Defined by current-meter measurements below 4,020 cfs and extended above on basis of slope-area measurement at 12,200 cfs.

Bankfull stage--14 ft.

Historical data--Maximum discharge known, 35,000 cfs, occurred Mar. 2, 1938.

Remarks--Base for partial-duration series, 800 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1938	Mar. 2, 1938	-	35,000	1960	Jan. 10, 1960	3.19	292
1956	Jan. 27, 1956	6.21	1,230	1961	Nov. 6, 1960	3.78	528
1957	Jan. 13, 1957	7.70	3,600	1962	Dec. 2, 1961	5.26	1,390
1958	Dec. 17, 1957	5.26	1,120		Feb. 10, 1962	12.20	12,200
	Feb. 4, 1958	8.14	4,530		Feb. 19, 1962	-	-
	Feb. 13, 1958	6.68	2,400	1963	Feb. 9, 1963	3.73	512
	Mar. 16, 1958	6.48	2,100	1964	Nov. 20, 1963	3.26	318
	Mar. 22, 1958	6.20	1,900	1965	Apr. 9, 1965	3.56	484
	Apr. 1, 1958	7.24	3,130				
	Apr. 3, 1958	10.35	8,600				
	Apr. 7, 1958	5.40	1,610				
1959	Feb. 16, 1959	7.35	3,820				

1100. Piru Creek near Piru, Calif.
(Published as "at Piru" prior to 1935)

Location--Lat 34°25'32", long 118°45'39", in southern part of Temescal Grant, 2.0 miles northeast of Piru, Ventura County, and 3 miles upstream from mouth.

Drainage area--432 sq mi.

Gage--Recording. Prior to Sept. 30, 1934, at site 2.0 miles downstream at different datum Oct. 1, 1934, to Sept. 30, 1940, at site 60 ft downstream at different datum; datum lowered 2.00 ft Feb. 20, 1939. Altitude of gage is 750 ft (from topographic map).

Stage-discharge relation--Defined by current-meter measurements below 490 cfs and extended above on basis of slope-area measurement at 35,600 cfs prior to Sept. 30, 1934; defined by current-meter measurements below 6,500 cfs thereafter.

Remarks--Peaks regulated by Lake Piru (capacity, 101,220 acre-ft) beginning Nov. 3, 1955. Only annual peaks are shown.

Peak stages and discharges of Piru Creek near Piru, Calif.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1933	Jan. 19, 1933	2.90	1,200	1946	Dec. 22, 1945	5.48	3,000
1934	Jan. 1, 1934	5.20	12,000	1947	Dec. 25, 1946	4.93	2,500
1935	Jan. 5, 1935	6.1	3,660	1948	Mar. 24, 1948	2.81	420
1936	Feb. 12, 1936	3.90	1,040	1949	Mar. 12, 1949	1.98	165
1937	Feb. 14, 1937	6.90	5,000	1950	Feb. 6, 1950	2.92	472
1938	Mar. 2, 1938	-	35,600	1951	Jan. 11, 1951	.60	30
1939	Dec. 19, 1938	2.00	2,600	1952	Jan. 15, 1952	7.75	7,010
1940	Feb. 1, 1940	4.75	1,470	1953	Dec. 20, 1952	3.22	618
1941	Feb. 21, 1941	8.75	7,500	1954	Feb. 13, 1954	3.87	1,150
1942	Dec. 29, 1941	3.91	948	1955	Apr. 30, 1955	2.79	330
1943	Jan. 22, 1943	12.27	20,000	1956	May 15, 1956	1.60	103
1944	Mar. 22, 1944	8.45	8,500				
1945	Feb. 2, 1945	5.65	3,350				

a Occurred Mar. 4, 1941.

1105. Hopper Creek near Piru, Calif.

Location.--Lat 34°24'03", long 118°49'32", in NE1/4NE1/4SW1/4 sec.25, T.4 N., R.19 W., on downstream end of center pier of bridge on State Highway 126, 1 mile upstream from mouth and 2.1 miles southwest of Piru.

Drainage area.--23.6 sq mi.

Gage.--Recording. Altitude of gage is 590 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 690 cfs and extended above on basis of slope-area measurements at 1,840, 3,690, and 8,000 cfs.

Bankfull stage.--11 ft.

Remarks.--Water-stage recorder graph and discharge measurements furnished by Ventura County Water Resources Division. Only annual peaks are shown prior to Oct. 1, 1955. Base for partial-duration series, 90 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1934	Dec. 31, 1933	-	5,300	1958	Feb. 19, 1958	4.63	540
1935	Jan. 5, 1935	-	750		Feb. 25, 1958	4.17	430
1936	Feb. 2, 1936	5.60	810		Mar. 16, 1958	5.69	1,270
1938	Mar. 2, 1938	-	8,000		Mar. 22, 1958	4.30	562
1939	Jan. 5, 1939	-	1,250		Mar. 27, 1958	3.13	154
1940	Feb. 25, 1940	-	221		Apr. 1, 1958	4.40	835
1941	Feb. 21, 1941	-	1,340		Apr. 3, 1958	8.66	3,690
1943	Jan. 22, 1943	-	4,200		Apr. 7, 1958	3.74	374
1944	Feb. 22, 1944	-	1,350	1959	Jan. 6, 1959	3.59	268
1945	Feb. 2, 1945	5.58	1,020		Feb. 11, 1959	3.03	418
1946	Dec. 21, 1945	5.10	710		Feb. 16, 1959	3.34	496
1947	Nov. 13, 1946	-	578	1960	Jan. 10, 1960	2.23	184
1948	Mar. 24, 1948	-	100		Feb. 1, 1960	1.99	118
1949	Mar. 11, 1949	-	90		Apr. 27, 1960	2.44	249
1950	Feb. 6, 1950	-	1,000	1961	Nov. 6, 1960	1.71	61
1951	Jan. 19, 1951	-	18	1962	Nov. 20, 1961	2.85	300
1952	Jan. 15, 1952	-	2,200		Dec. 2, 1961	3.56	535
1953	Dec. 1, 1952	-	128		Feb. 10, 1962	5.35	1,840
1954	Feb. 13, 1954	-	148		Feb. 15, 1962	3.65	390
1955	Feb. 27, 1955	4.68	255		Feb. 19, 1962	4.10	499
1956	Dec. 25, 1955	4.19	149	1963	Feb. 9, 1963	4.15	470
	Jan. 26, 1956	4.92	992		Mar. 28, 1963	3.13	138
1957	Jan. 13, 1957	5.85	1,160		Sept. 19, 1963	3.01	110
	Feb. 23, 1957	4.36	458	1964	Nov. 20, 1963	3.72	307
	Feb. 28, 1957	3.32	114		Jan. 21, 1964	3.50	235
1958	Dec. 16, 1957	5.66	1,020		Apr. 1, 1964	3.24	151
	Jan. 25, 1958	3.88	268	1965	Dec. 20, 1964	3.81	304
	Feb. 3, 1958	5.76	1,180		Apr. 1, 1965	3.28	142
					Apr. 9, 1965	4.28	504

1115. Sespe Creek near Wheeler Springs, Calif.

Location.--Lat 34°34'40", long 119°15'25", in SW¹/₄SW¹/₄ sec.30, T.6 N., R.22 W., on right bank at Sespe Gorge, 1.6 miles upstream from Tule Creek, 5 miles upstream from Cold Springs damsite, and 5 miles northeast of Wheeler Springs.

Drainage area.--49.5 sq mi.

Gage.--Recording. Datum of gage is 3,500.65 ft above mean sea level (levels by Ventura County Water Resources Division).

Stage-discharge relation.--Defined by current-meter measurements below 1,900 cfs and extended above on basis of field estimate at 3,800 cfs.

Bankfull stage.--Not subject to overflow.

Remarks --Base for partial-duration series, 50 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1949	Mar. 10, 1949	3.07	21	1958	Feb. 3, 1958	9.00	2,820
1950	Feb. 6, 1950	3.56	53		Feb. 19, 1958	8.20	2,050
1951	Mar. 1, 1951	3.04	16		Feb. 25, 1958	5.15	318
1952	Jan. 12, 1952	6.53	972		Mar. 15, 1958	6.28	739
	Jan. 15, 1952	9.52	2,260		Mar. 21, 1958	6.67	954
	Jan. 25, 1952	4.37	210		Apr. 3, 1958	9.16	3,010
	Mar. 10, 1952	3.62	64		Apr. 8, 1958	6.12	674
	Mar. 19, 1952	4.40	215		Sept. 7, 1958	4.79	177
	Mar. 25, 1952	5.29	496	1959	Jan. 6, 1959	5.78	527
	Apr. 7, 1952	3.83	109		Feb. 11, 1959	4.65	169
	Apr. 29, 1952	3.48	51		Feb. 16, 1959	8.02	1,880
1953	Dec. 1, 1952	4.13	151		Apr. 25, 1959	4.44	126
	Dec. 20, 1952	3.93	115	1960	Jan. 10, 1960	4.44	128
1954	Nov. 14, 1953	4.08	142		Feb. 1, 1960	4.31	105
	Jan. 25, 1954	4.86	353	1961	Nov. 5, 1960	6.13	674
	Feb. 13, 1954	5.63	616		Jan. 26, 1961	4.58	154
1955	Dec. 3, 1954	3.72	69	1962	Nov. 25, 1961	4.21	73
1956	Dec. 24, 1955	4.17	117		Dec. 2, 1961	6.17	500
	Jan. 26, 1956	5.51	468		Feb. 10, 1962	10.6	3,800
	May 9, 1956	3.93	74		Mar. 6, 1962	4.33	105
1957	Jan. 12, 1957	8.55	1,720	1963	Feb. 9, 1963	6.83	978
	Feb. 23, 1957	5.23	336		Mar. 28, 1963	4.95	180
	Mar. 1, 1957	4.26	121	1964	Nov. 20, 1963	4.55	100
1958	Dec. 16, 1957	7.16	1,260		Jan. 21, 1964	4.39	69
					Apr. 1, 1964	5.61	376
				1965	Apr. 16, 1965	4.79	69

1120. Sespe Creek near Sespe, Calif.

Location.--Lat 34°30'02", long 118°56'50", in Los Padres National Forest, 1.0 mile downstream from West Fork Sespe Creek, 3.7 miles upstream from intake of Fillmore Canal, and 8 miles north of Sespe.

Drainage area.--210 sq mi.

Gage.--Nonrecording prior to Feb. 16, 1924; recording thereafter. Prior to Oct. 10, 1920, at site 200 ft upstream at different datum. Oct. 10, 1920, to Feb. 16, 1924, at datum 3.0 ft higher. Altitude of gage is 1,350 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 17,400 cfs prior to Oct. 10, 1920; below 3,160 cfs and extended above on basis of float-measurements thereafter.

Remarks.--Peaks prior to 1924 are maximum observed. Only annual peaks are shown.

Peak stages and discharges of Sespe Creek near Sespe, Calif.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1916	Jan. 17, 1916	18.7	18,600	1922	Feb. 9, 1922	11.2	17,500
1917	Feb. 24, 1917	12.0	3,830	1923	Dec. 13, 1922	6.40	1,540
1918	Feb. 22, 1918	14.7	7,500	1924	Mar. 26, 1924	6.12	270
				1925	Apr. 4, 1925	6.45	360
1920	Mar. 22, 1920	11.0	2,900				
1921	Mar. 13, 1921	5.50	1,190	1926	Apr. 7, 1926	16.0	27,000
				1927	Nov. 26, 1926	10.20	3,460

1130. Sespe Creek near Fillmore, Calif.
(Published as "at Sespe" prior to 1935)

Location.--Lat 34°27'03", long 118°55'30", in NE¹ NW¹ NE¹ sec. 12, T.4 N., R.20 W., on right bank 0.1 mile downstream from Little Sespe Creek and 3.5 miles north of Fillmore.

Drainage area.--251 sq mi.

Gage.--Recording. Prior to Nov. 5, 1934, at site 3 miles downstream at different datum. Nov. 5, 1934, to Mar. 2, 1938, at present site at different datum. Altitude of gage is 580 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 8,760 cfs prior to Nov. 4, 1934; below 16,200 cfs and extended above on basis of slope-area measurements at 44,000 and 56,000 cfs thereafter.

Bankfull stage.--17 ft.

Remarks.--Low peaks may be affected by diversion 1 mile upstream by Fillmore Irrigation Co. beginning prior to 1928. Only annual peaks are shown prior to Oct. 1, 1944. Base for partial-duration series, 1,300 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1933	Jan. 19, 1933	11.00	12,000	1954	Jan. 24, 1954	10.52	4,350
1934	Dec. 31, 1933	16.2	34,000		Feb. 13, 1954	10.54	4,400
1935	Jan. 5, 1935	8.70	12,500		Mar. 20, 1954	9.57	2,570
1936	Feb. 12, 1936	6.42	7,200	1955	Apr. 30, 1955	9.55	785
1937	Feb. 14, 1937	9.00	12,800				
1938	Mar. 2, 1938	-	56,000	1956	Jan. 26, 1956	11.39	3,900
1939	Mar. 9, 1939	9.45	5,000				
1940	Feb. 25, 1940	9.70	5,500	1957	Jan. 13, 1957	12.80	7,650
					Feb. 23, 1957	10.08	2,970
1941	Mar. 4, 1941	13.40	17,300				
1942	Dec. 28, 1941	7.82	3,150	1958	Dec. 17, 1957	11.58	6,080
1943	Jan. 23, 1943	19.10	44,000		Feb. 4, 1958	13.35	12,100
1944	Feb. 22, 1944	13.45	13,000		Feb. 19, 1958	12.13	7,690
					Feb. 25, 1958	9.95	2,610
1945	Nov. 11, 1944	10.20	4,100		Mar. 16, 1958	11.95	7,150
	Feb. 2, 1945	13.00	11,500		Mar. 22, 1958	12.04	7,420
					Apr. 1, 1958	13.20	11,500
1946	Dec. 22, 1945	12.40	9,600		Apr. 3, 1958	16.15	28,400
	Feb. 3, 1946	8.22	1,350				
	Mar. 30, 1946	12.95	11,300	1959	Jan. 6, 1959	8.89	2,440
					Feb. 11, 1959	9.38	2,900
1947	Nov. 13, 1946	9.59	3,150		Feb. 16, 1959	11.56	8,280
	Nov. 20, 1946	9.52	3,040				
	Nov. 23, 1946	8.56	1,720	1960	Jan. 10, 1960	7.90	1,330
	Dec. 25, 1946	10.52	4,850				
1948	Mar. 24, 1948	7.53	748	1961	Nov. 6, 1960	7.57	836
1949	Mar. 11, 1949	7.50	725				
1950	Feb. 6, 1950	-	3,000	1962	Dec. 2, 1961	9.27	2,730
					Feb. 10, 1962	14.25	25,600
1951	Jan. 11, 1951	6.02	47		Feb. 15, 1962	6.97	2,720
					Feb. 19, 1962	6.79	2,510
1952	Jan. 12, 1952	11.59	7,070	1963	Feb. 10, 1963	7.80	4,400
	Jan. 15, 1952	15.65	23,200				
	Jan. 18, 1952	11.41	6,530	1964	Nov. 20, 1963	6.73	2,410
	Mar. 15, 1952	12.90	11,400		Jan. 21, 1964	5.70	1,340
	Mar. 26, 1952	9.45	2,150		Apr. 1, 1964	6.71	2,590
1953	Dec. 1, 1952	10.02	3,370	1965	Dec. 20, 1964	6.45	1,710
	Dec. 20, 1952	9.92	3,090		Apr. 9, 1965	6.70	2,440

1135. Santa Paula Creek near Santa Paula, Calif.

Location.--Lat 34°23'44", long 119°04'32", in NW $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.27, T.4 N., R.21 W., on right bank 15 ft upstream from Santa Paula Water Works diversion dam, 150 ft upstream from Mud Creek, and 3 miles north of Santa Paula.

Drainage area.--40.0 sq mi.

Gage.--Recording. Altitude of gage is 650 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 2,000 cfs and extended above on basis of slope-area measurement at 13,500 cfs.

Bankfull stage.--12 ft.

Remarks.--Only annual peaks shown prior to Oct. 1, 1944. Base for partial-duration series, 200 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1933	Jan. 19, 1933	4.86	2,650	1953	Dec. 20, 1952	3.05	219
1934	Dec. 31, 1933	8.30	8,500				
1935	Jan. 5, 1935	4.00	1,530	1954	Jan. 24, 1954	3.84	977
					Feb. 13, 1954	3.32	575
1936	Feb. 12, 1936	4.95	2,900		Mar. 20, 1954	3.07	356
1937	Feb. 14, 1937	4.32	1,350				
1938	Mar. 2, 1938	10.56	13,500	1955	Apr. 30, 1955	2.63	78
1939	Mar. 9, 1939	3.26	371				
1940	Feb. 25, 1940	3.34	364	1956	Jan. 26, 1956	3.87	835
1941	Mar. 4, 1941	5.00	3,150	1957	Jan. 13, 1957	3.92	825
1942	Dec. 29, 1941	3.10	554				
1943	Jan. 22, 1943	9.30	10,000	1958	Dec. 16, 1957	4.20	1,360
1944	Feb. 22, 1944	4.51	1,900		Feb. 4, 1958	4.75	2,000
					Feb. 19, 1958	3.64	787
1945	Nov. 11, 1944	3.98	1,200		Feb. 25, 1958	3.42	609
	Feb. 2, 1945	5.05	2,500		Mar. 15, 1958	4.14	1,290
	Mar. 17, 1945	3.14	213		Mar. 22, 1958	4.04	1,180
					Apr. 1, 1958	5.03	2,330
1946	Dec. 21, 1945	4.08	1,100		Apr. 3, 1958	8.80	9,130
	Mar. 30, 1946	4.30	1,350				
				1959	Jan. 6, 1959	3.65	787
1947	Nov. 13, 1946	3.55	530		Feb. 11, 1959	3.80	934
	Nov. 20, 1946	3.90	850		Feb. 16, 1959	3.82	954
	Nov. 23, 1946	3.20	300				
	Dec. 25, 1946	3.47	a470	1960	Feb. 2, 1960	2.82	156
	Dec. 27, 1946	3.13	265				
1948	Mar. 24, 1948	2.59	85	1961	Nov. 12, 1960	2.95	178
1949	Mar. 11, 1949	2.79	147				
1950	Feb. 6, 1950	3.70	660	1962	Nov. 20, 1961	3.02	219
					Feb. 10, 1962	5.40	3,150
1951	Apr. 28, 1951	1.82	7.9		Feb. 15, 1962	3.55	580
					Feb. 19, 1962	3.67	676
1952	Dec. 30, 1951	3.29	316	1963	Feb. 9, 1963	3.78	684
	Jan. 12, 1952	4.44	1,620				
	Jan. 15, 1952	8.00	7,300	1964	Nov. 20, 1963	3.26	396
	Jan. 18, 1952	4.16	1,310		Jan. 21, 1964	3.01	270
	Mar. 7, 1952	3.14	231		Apr. 1, 1964	3.54	572
	Mar. 15, 1952	4.55	1,740	1965	Dec. 20, 1964	3.35	305
	Mar. 24, 1952	2.86	354		Apr. 9, 1965	3.76	548

a A second peak of equal magnitude occurred on this day.

1145. Matilija Creek above reservoir, near Matilija Hot Springs, Calif.
(Published as "near Matilija" prior to 1954)

Location.--Lat 34°29'41", long 119°19'48", in SW $\frac{1}{4}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.19, T.5 N., R.23 W., on left bank 1.6 miles upstream from Matilija Dam and 1.7 miles northwest of Matilija Hot Springs.

Drainage area.--50.7 sq mi.

Gage.--Recording. Datum of gage is 1,160.20 ft above mean sea level (levels by Ventura County Water Resources Division).

Stage-discharge relation.--Defined by current-meter measurements below 5,050 cfs and extended above on basis of slope-area measurements at 5,480 and 8,800 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Base for partial-duration series, 200 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1949	Mar. 11, 1949	3.73	60	1958	Feb. 3, 1958	9.67	3,120
1950	Feb. 6, 1950	3.94	155		Feb. 19, 1958	8.70	2,060
					Feb. 25, 1958	5.68	394
1951	Apr. 28, 1951	2.85	5.7		Mar. 15, 1958	7.73	1,280
					Mar. 21, 1958	7.98	1,430
1952	Jan. 12, 1952	8.80	2,540		Apr. 1, 1958	8.97	2,290
	Jan. 15, 1952	12.1	8,800		Apr. 3, 1958	11.30	5,440
	Jan. 18, 1952	7.27	1,500	1959	Jan. 6, 1959	6.35	565
	Mar. 15, 1952	10.0	4,100		Feb. 11, 1959	6.35	505
	Mar. 25, 1952	4.99	346		Feb. 16, 1959	8.75	2,500
1953	Dec. 1, 1952	4.85	223	1960	Jan. 10, 1960	4.32	73
	Dec. 20, 1952	4.80	235	1961	Jan. 26, 1961	3.95	42
1954	Jan. 24, 1954	5.50	420	1962	Dec. 2, 1961	5.49	280
	Feb. 13, 1954	5.85	582		Feb. 9, 1962	11.60	6,570
1955	Jan. 18, 1955	3.78	66		Feb. 19, 1962	4.12	496
1956	Jan. 26, 1956	6.30	1,040	1963	Feb. 9, 1963	4.71	863
1957	Jan. 13, 1957	7.13	1,820	1964	Apr. 1, 1964	3.94	344
	Feb. 23, 1957	5.05	322	1965	Dec. 20, 1964	3.93	292
1958	Dec. 16, 1957	8.73	2,080		Apr. 9, 1965	4.05	328

1155. Matilija Creek at Matilija Hot Springs, Calif.
(Published as "at Matilija" prior to October 1953)

Location.--Lat 34°28'58", long 119°18'03", in SW $\frac{1}{4}$ NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.28, T.5 N., R.23 W., on right bank 0.2 mile east of Matilija Hot Springs, 0.2 mile upstream from North Fork, and 0.45 mile downstream from Matilija Dam.

Drainage area.--54.6 sq mi.

Gage.--Recording. Prior to Feb. 11, 1939, at site 0.6 mile upstream at different datum. Altitude of gage is 900 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 3,000 cfs and extended above on basis of slope-area measurement at 15,900 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Peaks regulated by Matilija Reservoir (capacity, 7,020 acre-ft) beginning Mar. 14, 1948. Low peaks may be affected by water diverted at dam to Ventura River basin and Ojai Valley for irrigation beginning May 1951. Only annual peaks are shown.

Peak stages and discharges of Matilija Creek at Matilija Hot Springs, Calif.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1933	Jan. 19, 1933	6.40	4,460	1951	July 26, 1951	4.38	127
1934	Dec. 31, 1933	7.20	7,000	1952	Jan. 15, 1952	8.0	3,530
1935	Jan. 15, 1935	4.94	2,050	1953	Jan. 26, 1953	2.87	64
1936	Feb. 2, 1936	4.35	1,430	1954	Mar. 20, 1954	3.35	164
1937	Feb. 14, 1937	5.65	2,180	1955	Apr. 30, 1955	2.11	8.5
1938	Mar. 2, 1938	-	15,900	1956	May 9, 1956	2.97	70
1939	Mar. 9, 1939	4.75	1,040	1957	Apr. 17, 1957	3.29	97
1940	Feb. 25, 1940	5.12	1,320	1958	Apr. 3, 1958	8.40	5,130
1941	Mar. 4, 1941	7.25	4,290	1959	Feb. 16, 1959	6.05	1,990
1942	Dec. 28, 1941	4.52	780	1960	Oct. 29, 1959	2.44	50
1943	Jan. 22, 1943	11.90	15,000	1961	Jan. 26, 1961	1.53	6.6
1944	Feb. 22, 1944	7.60	4,900	1962	Feb. 10, 1962	7.95	5,130
1945	Feb. 2, 1945	6.30	2,800	1963	Feb. 9, 1963	2.35	68
1946	Mar. 30, 1946	7.20	4,500	1964	Apr. 8, 1964	2.24	49
1947	Nov. 20, 1946	6.7	3,500	1965	Apr. 3, 1965	3.93	460
1950	Nov. 3, 1949	3.72	85				

1160. North Fork Matilija Creek at Matilija Hot Springs, Calif.

Location.--Lat 34°29'33", long 119°18'20", in NE¼NW¼NE¼ sec.29, T.5 N., R.23 W., on right bank at bridge on U.S. Highway 399, 0.7 mile north of Matilija Hot Springs and 0.8 mile upstream from mouth.

Drainage area.--15.6 sq mi.

Gage.--Recording. Prior to Nov. 12, 1948, at site 0.3 mile downstream at different datum. Datum of gage is 1,142.02 ft above mean sea level (levels by Ventura County Water Resources Division).

Stage-discharge relation.--Defined by current-meter measurements below 730 cfs prior to Nov. 12, 1948; below 1,450 cfs and extended above on basis of slope-area measurement at 4,530 cfs thereafter.

Remarks.--Gage-height record and discharge measurements furnished by Ventura County Water Resources Division. Only annual peaks are shown prior to Oct. 1, 1955. Base for partial-duration series, 40 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1934	Dec. 31, 1933	-	2,770	1958	Feb. 4, 1958	4.85	1,160
1935	Jan. 14, 1935	-	1,160		Feb. 19, 1958	4.45	965
1936	Feb. 2, 1936	-	460		Feb. 25, 1958	2.34	161
1937	Dec. 27, 1936	-	920		Mar. 15, 1958	3.62	618
1938	Mar. 2, 1938	-	5,580		Mar. 21, 1958	4.47	975
1939	Mar. 9, 1939	-	154		Apr. 1, 1958	4.45	965
1940	Feb. 25, 1940	-	349		Apr. 3, 1958	9.00	4,530
1941	Mar. 4, 1941	-	1,100		Apr. 7, 1958	3.55	590
1943	Jan. 22, 1943	-	2,700	1959	Jan. 6, 1959	2.98	319
1944	Feb. 22, 1944	-	1,580		Feb. 10, 1959	3.88	722
1945	Feb. 2, 1945	10.50	557		Feb. 16, 1959	4.35	915
1946	Mar. 30, 1946	9.85	750		Feb. 21, 1959	2.19	66
1947	Dec. 25, 1946	-	415		Apr. 25, 1959	2.65	198
1948	Apr. 28, 1948	-	18	1960	Feb. 1, 1960	2.17	62
1949	Mar. 10, 1949	-	91	1961	Jan. 26, 1961	2.26	74
1950	Feb. 6, 1950	-	157	1962	Dec. 2, 1961	2.96	205
1951	Jan. 11, 1951	-	3.5		Feb. 9, 1962	4.95	1,940
1952	Jan. 15, 1952	-	2,820		Feb. 15, 1962	2.55	272
1953	Dec. 1, 1952	-	268		Feb. 19, 1962	2.22	190
1954	Feb. 13, 1954	-	280		Mar. 6, 1962	1.50	57
1955	Apr. 30, 1955	-	31	1963	Feb. 9, 1963	3.90	730
1956	Dec. 25, 1955	1.84	72		Mar. 28, 1963	1.39	49
	Jan. 26, 1956	2.80	340	1964	Nov. 20, 1963	1.42	47
	May 9, 1956	1.75	96		Jan. 21, 1964	1.95	120
1957	Jan. 13, 1957	4.05	795		Apr. 1, 1964	3.55	563
	Feb. 23, 1957	2.68	288	1965	Dec. 20, 1964	2.43	205
	Feb. 28, 1957	1.88	117		Apr. 9, 1965	2.37	190
1958	Dec. 16, 1957	5.12	1,300				

1175. San Antonio Creek at Casitas Springs, Calif.

Location.--Lat 34°22'49", long 119°18'13", in Santa Ana Grant, on downstream side of bridge on U.S. Highway 399, 0.2 mile upstream from mouth and 0.9 mile north of Casitas Springs, Ventura County.

Drainage area.--51.2 sq mi.

Gage.--Recording. Datum of gage is 307.55 ft above mean sea level (levels by Ventura County Water Resources Division).

Stage-discharge relation.--Defined by current-meter measurements below 2,000 cfs and extended above on basis of slope-area measurement at 5,240 cfs.

Bankfull stage.--11 ft.

Remarks.--Gage-height records furnished by Ventura County Water Resources Division. Only annual peaks are shown prior to Oct. 1, 1957. Base for partial-duration series, 200 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1950	Feb. 6, 1950	4.95	1,200	1959	Jan. 6, 1959	-	200
1951	-	-	0		Feb. 11, 1959	6.42	252
1952	Jan. 15, 1952	13.1	3,800		Feb. 16, 1959	6.59	356
1953	Nov. 15, 1952	5.58	283	1960	Feb. 1, 1960	6.52	196
1954	Feb. 13, 1954	6.31	381	1961	Nov. 5, 1960	6.72	217
1955	Jan. 18, 1955	5.25	130	1962	Nov. 20, 1961	7.73	698
1956	Jan. 26, 1956	6.86	690		Feb. 8, 1962	7.74	848
1957	Feb. 23, 1957	6.61	570		Feb. 10, 1962	9.75	2,260
1958	Dec. 17, 1957	6.25	340		Feb. 15, 1962	8.17	962
	Feb. 4, 1958	7.19	814		Feb. 19, 1962	8.80	1,510
	Feb. 19, 1958	6.95	980	1963	Feb. 9, 1963	7.91	1,150
	Feb. 25, 1958	6.95	980		Mar. 16, 1963	6.10	325
	Mar. 16, 1958	6.92	976	1964	Nov. 20, 1963	5.65	155
	Mar. 22, 1958	6.86	904	1965	Apr. 9, 1965	7.08	710
	Mar. 27, 1958	5.17	294				
	Apr. 1, 1958	9.84	2,870				
	Apr. 3, 1958	12.50	5,240				
	Apr. 6, 1958	8.84	1,920				

1176. Coyote Creek near Oak View, Calif.

Location.--Lat 34°25'00", long 119°22'00", in Santa Ana Grant, on right bank 1,000 ft downstream from Los Padres National Forest boundary, 0.6 mile upstream from Poplin Creek, and 4.2 miles west of Oak View, Ventura County.

Drainage area.--13.2 sq mi.

Gage.--Recording. Altitude of gage is 560 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 1,100 cfs and extended above on basis of slope-area measurement at 1,700 cfs.

Remarks.--Discharge measurements furnished by Ventura River Municipal Water District. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1959	Feb. 16, 1959	4.55	222	1963	Feb. 9, 1963	4.68	299
1960	Feb. 1, 1960	3.79	119	1964	Apr. 1, 1964	4.79	302
				1965	Dec. 20, 1964	4.57	268
1961	Nov. 12, 1960	2.02	1.6		Apr. 9, 1965	6.00	925
1962	Feb. 9, 1962	7.45	1,700				

1178. Santa Ana Creek near Oak View, Calif.

Location.--Lat 34°25'25", long 119°20'25", in Santa Ana Grant, on downstream end of right abutment of bridge, 400 ft upstream from unnamed tributary and 3.0 miles northwest of Oak View, Ventura County.

Drainage area.--9.11 sq mi.

Gage.--Recording. Altitude of gage is 610 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 1,200 cfs.

Remarks.--Discharge measurements furnished by Ventura River Municipal Water District. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1959	Feb. 16, 1959	4.65	340	1963	Feb. 9, 1963	4.69	485
1960	Feb. 2, 1960	3.43	70	1964	Apr. 1, 1964	3.95	202
				1965	Dec. 20, 1964	4.25	215
1961	Nov. 12, 1960	2.57	1.2		Apr. 9, 1965	4.68	362
1962	Feb. 9, 1962	6.77	2,220				

1180. Coyote Creek near Ventura, Calif.

Location.--Lat 34°21'26", long 119°18'46", near southeast corner of Santa Ana Grant, on right bank 200 ft downstream from county highway bridge, 0.3 mile upstream from mouth, and 5.5 miles northwest of Ventura, Ventura County.

Drainage area.--41.2 sq mi.

Gage.--Recording. Prior to Aug. 20, 1952, at datum 1.16 ft higher. Altitude of gage is 230 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 3,000 cfs and extended above on basis of slope-area measurement at 11,500 cfs.

Bankfull stage.--8 ft.

Remarks.--Only annual peaks are shown prior to Oct. 1, 1944. Base for partial-duration series, 450 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1935	Jan. 5, 1935	5.7	2,900	1951	Jan. 11, 1951	0.68	1.6
1936	Feb. 12, 1936	4.55	1,410	1952	Jan. 12, 1952	5.94	2,250
1937	Feb. 14, 1937	6.50	5,600		Jan. 15, 1952	11.6	9,180
1938	Mar. 2, 1938	12.00	11,500		Mar. 15, 1952	9.15	7,690
1939	Mar. 9, 1939	3.95	598				
1940	Feb. 25, 1940	5.39	2,240	1953	Dec. 20, 1952	-	(a)
					Dec. 30, 1952	-	(a)
1941	Mar. 1, 1941	8.05	8,900				
1942	Dec. 28, 1941	3.61	435	1954	Jan. 25, 1954	4.3	1,280
1943	Jan. 22, 1943	9.82	11,000		Feb. 13, 1954	4.1	1,140
1944	Feb. 22, 1944	9.05	9,000				
1945	Feb. 2, 1945	8.65	8,000	1955	Jan. 18, 1955	2.60	199
	Mar. 17, 1945	3.58	520	1956	Jan. 26, 1956	6.35	2,650
1946	Dec. 21, 1945	3.88	650	1957	Mar. 1, 1957	4.76	620
	Dec. 22, 1945	3.99	700				
	Mar. 30, 1946	4.91	1,500	1958	Feb. 4, 1958	5.66	1,070
1947	Nov. 20, 1946	5.30	1,800		Feb. 19, 1958	5.72	1,100
	Dec. 25, 1946	3.9	600		Feb. 25, 1958	5.36	912
					Mar. 16, 1958	5.23	1,120
1948	Mar. 24, 1948	1.53	8.0		Mar. 22, 1958	4.59	764
1949	Dec. 16, 1948	1.34	2.0		Apr. 1, 1958	5.36	1,160
					Apr. 3, 1958	6.18	1,690
					Apr. 7, 1958	4.61	1,110
1950	Feb. 6, 1950	3.54	1,000				

a Discharge unknown; exceeded base.

1185. Ventura River near Ventura, Calif.

Location--Lat 34°21'05", long 119°18'23", in southeast corner of Santa Ana Grant, on right bank 500 ft downstream from county highway bridge at Foster Memorial Park, 0.2 mile downstream from Coyote Creek, and 5 miles north of Ventura, Ventura County.

Drainage area--188 sq mi.

Gage--Recording. Prior to Nov. 2, 1949, at site 370 ft upstream. Altitude of gage is 200 ft (from topographic map).

Stage-discharge relation--Defined by current-meter measurements below 7,700 cfs and extended above on basis of slope-area and contracted-opening measurements at 39,200 cfs prior to Nov. 2, 1949; below 15,000 cfs and extended above on basis of slope-area measurement at 18,700 cfs thereafter.

Bankfull stage--13 ft.

Remarks--Flow regulated by Matilija Reservoir (capacity, 7,020 acre-ft) since Mar. 14, 1948, and by Casitas Reservoir (capacity, 267,000 acre-ft) since Oct. 1, 1959. Only annual peaks are shown prior to Oct. 1, 1944. Base for partial-duration series, 500 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1933	Jan. 19, 1933	12.20	13,000	1953	Dec. 30, 1952	6.19	801
1934	Dec. 31, 1933	14.8	23,000				
1935	Jan. 5, 1935	9.40	6,010	1954	Jan. 25, 1954	8.17	2,120
					Feb. 13, 1954	8.78	3,030
1936	Feb. 12, 1936	8.18	3,330		Mar. 20, 1954	7.60	1,460
1937	Feb. 14, 1937	10.68	13,900				
1938	Mar. 2, 1938	19.2	39,200	1955	Jan. 18, 1955	5.94	203
1939	Mar. 9, 1939	6.90	2,840				
1940	Feb. 25, 1940	6.98	4,330	1956	Jan. 26, 1956	9.95	4,050
1941	Mar. 1, 1941	10.65	15,200	1957	Jan. 13, 1957	7.66	936
1942	Dec. 28, 1941	5.12	1,190		Mar. 1, 1957	7.41	790
1943	Jan. 22, 1943	14.58	35,000				
1944	Feb. 22, 1944	9.96	20,000	1958	Dec. 17, 1957	8.85	1,890
					Feb. 4, 1958	11.83	4,840
1945	Nov. 11, 1944	4.07	1,200		Feb. 19, 1958	11.95	5,000
	Feb. 2, 1945	9.20	17,000		Feb. 25, 1958	10.65	3,350
	Mar. 17, 1945	3.80	870		Mar. 16, 1958	11.70	4,670
1946	Dec. 21, 1945	5.55	4,500		Mar. 22, 1958	11.55	4,740
	Mar. 30, 1946	6.5	8,000		Mar. 27, 1958	7.88	1,070
					Apr. 3, 1958	17.25	18,700
1947	Nov. 20, 1946	4.87	2,400		Apr. 7, 1958	10.72	4,930
	Nov. 23, 1946	3.92	800	1959	Jan. 6, 1959	8.19	1,910
	Dec. 25, 1946	4.21	1,150		Feb. 11, 1959	7.65	1,420
	Dec. 25, 1946	4.41	1,500		Feb. 16, 1959	9.50	3,220
1948	Mar. 24, 1948	2.16	2.4	1960	Feb. 1, 1960	7.38	966
1950	Feb. 6, 1950	8.36	2,000	1961	Nov. 6, 1960	6.77	308
1951	Mar. 1, 1951	3.53	.3	1962	Feb. 10, 1962	13.55	12,400
1952	Jan. 15, 1952	15.5	29,500		Feb. 15, 1962	10.57	3,840
	Mar. 7, 1952	7.08	1,440		Feb. 19, 1962	10.70	4,100
	Mar. 15, 1952	14.45	24,600	1963	Feb. 9, 1963	9.86	1,060
1953	Nov. 15, 1952	5.86	539	1964	Nov. 20, 1963	7.83	132
	Dec. 1, 1952	6.00	640				
	Dec. 20, 1952	6.44	1,040	1965	Apr. 9, 1965	11.43	398
	Dec. 28, 1952	6.09	712				

1195. Carpinteria Creek near Carpinteria, Calif.

Location.--Lat 34°24'04", long 119°29'08", in El Rincon Grant, on left bank at upstream side of bridge on State Highway 150, 200 ft downstream from Gobernado Creek and 1.8 miles northeast of Carpinteria, Santa Barbara County.

Drainage area.--13.1 sq mi.

Gage.--Recording. Prior to July 1, 1958, at datum 2.00 ft higher. Altitude of gage is 130 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 500 cfs and extended above on basis of slope-area measurement at 2,440 cfs.

Bankfull stage.--8 ft.

Remarks.--Only annual peaks are shown prior to Oct. 1, 1947. Base for partial-duration series, 25 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1941	Mar. 3, 1941	a5.65	803	1954	Mar. 20, 1954	2.23	62
1942	Dec. 29, 1941	2.83	29	1955	Jan. 18, 1955	2.12	31
1943	Jan. 22, 1943	7.30	1,450	1956	Jan. 26, 1956	3.45	230
1944	Feb. 22, 1944	4.45	450	1957	Feb. 28, 1957	2.74	77
1945	Feb. 2, 1945	6.35	1,100	1958	Dec. 16, 1957	4.45	588
1946	Mar. 30, 1946	3.67	208		Jan. 26, 1958	2.78	105
1947	Nov. 20, 1946	5.25	700		Feb. 4, 1958	3.52	335
1948	Mar. 24, 1948	2.64	22		Feb. 19, 1958	3.40	299
1949	Dec. 17, 1948	3.00	61		Feb. 25, 1958	4.60	742
1950	Dec. 8, 1949	2.31	28		Mar. 15, 1958	3.40	210
	Jan. 11, 1950	3.12	35		Mar. 21, 1958	4.08	591
	Feb. 6, 1950	3.70	215		Apr. 3, 1958	6.59	1,980
1951	Jan. 11, 1951	2.15	.8	1959	Feb. 11, 1959	3.32	31
1952	Dec. 30, 1951	3.50	120		Feb. 16, 1959	4.17	149
	Jan. 12, 1952	5.20	683	1960	Feb. 1, 1960	3.25	44
	Jan. 15, 1952	7.75	2,440	1961	Nov. 5, 1960	4.04	146
	Jan. 18, 1952	3.48	358	1962	Feb. 10, 1962	7.01	1,160
	Mar. 7, 1952	2.00	34		Feb. 15, 1962	5.88	462
	Mar. 15, 1952	4.95	1,000		Feb. 19, 1962	6.71	856
	Apr. 7, 1952	1.90	36	1963	Feb. 9, 1963	4.50	105
1953	Nov. 15, 1952	2.29	72	1964	Apr. 1, 1964	4.55	89
	Dec. 20, 1952	2.04	41	1965	Dec. 20, 1964	4.29	58
	Dec. 28, 1952	1.94	32		Apr. 9, 1965	5.62	326
	Dec. 30, 1952	2.26	62				
1954	Jan. 19, 1954	2.04	35				
	Jan. 24, 1954	3.07	227				
	Feb. 13, 1954	2.37	55				

a Occurred Mar. 28, 1941.

ATASCADERO CREEK BASIN

1200. Atascadero Creek near Goleta, Calif.
(Published as "Alascadero Creek" prior to 1948)

Location.--Lat 34°25'29", long 119°48'39", in La Goleta Grant, on downstream side of left-bank abutment of private road bridge, 400 ft downstream from Maria Ygnacio Creek, 1.3 miles upstream from mouth, and 1.3 miles southeast of Goleta, Santa Barbara County.

Drainage area.--18.8 sq mi.

Gage.--Recording. Altitude of gage is 20 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 950 cfs and extended above on basis of comparison with records for nearby streams.

Bankfull stage.--11 ft.

Remarks.--Only annual peaks are shown prior to Oct. 1, 1949. Base for partial-duration series, 60 cfs.

ATASCADERO CREEK BASIN

Peak stages and discharges of Atascadero Creek near Goleta, Calif.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1942	Apr. 14, 1942	4.92	118	1958	Jan. 26, 1958	6.64	152
1943	Jan. 22, 1943	10.6	1,900		Feb. 4, 1958	8.65	646
1944	Feb. 22, 1944	9.0	1,050		Feb. 19, 1958	8.75	675
1945	Feb. 2, 1945	9.0	1,050		Feb. 25, 1958	10.06	1,060
					Mar. 15, 1958	6.96	245
1946	Dec. 22, 1945	5.98	265		Mar. 21, 1958	6.60	190
1947	Nov. 20, 1946	8.60	920		Mar. 27, 1958	6.19	139
1948	Mar. 24, 1946	5.72	60		Apr. 1, 1958	10.03	1,070
1949	Mar. 4, 1949	6.41	84		Apr. 3, 1958	11.30	1,600
					Apr. 6, 1958	7.62	376
1950	Feb. 6, 1950	7.23	180				
1951	Mar. 1, 1951	4.54	2.1	1959	Jan. 5, 1959	5.77	66
					Feb. 16, 1959	6.58	182
1952	Dec. 30, 1951	7.84	242		Feb. 21, 1959	6.55	172
	Jan. 12, 1952	10.62	1,300	1960	Feb. 1, 1960	6.67	128
	Jan. 15, 1952	10.85	4,500				
	Jan. 18, 1952	9.64	500	1961	Nov. 5, 1960	8.03	331
	Jan. 25, 1952	7.78	400		Nov. 12, 1960	7.38	210
	Mar. 7, 1952	6.86	100		Jan. 26, 1961	3.92	137
	Mar. 15, 1952	10.57	2,000				
1953	Nov. 15, 1952	6.63	95	1962	Nov. 20, 1961	8.66	438
	Dec. 20, 1952	5.95	74		Dec. 2, 1961	7.80	230
	Dec. 28, 1952	6.09	170		Jan. 20, 1962	7.18	107
	Dec. 30, 1952	6.33	232		Feb. 9, 1962	12.00	1,950
	Jan. 13, 1953	5.63	89		Feb. 15, 1962	10.38	1,170
1954	Jan. 24, 1954	6.47	235		Feb. 19, 1962	11.85	1,880
	Mar. 20, 1954	5.74	68		Mar. 6, 1962	7.08	77
	Feb. 13, 1954	5.65	67	1963	Feb. 9, 1963	8.78	732
1955	Dec. 9, 1954	6.00	67		Mar. 16, 1963	7.77	382
	Jan. 18, 1955	6.34	102		Mar. 28, 1963	7.34	275
1956	Dec. 24, 1955	7.50	432		Apr. 14, 1963	6.44	102
	Dec. 26, 1955	6.56	172		Apr. 25, 1963	7.08	216
	Jan. 26, 1956	8.36	1,090	1964	Nov. 19, 1963	7.82	345
1957	Jan. 13, 1957	6.89	408		Jan. 21, 1964	6.98	148
	Feb. 23, 1957	6.58	288		Mar. 22, 1964	8.50	529
	Feb. 28, 1957	6.37	201		Apr. 1, 1964	6.80	122
1958	Dec. 5, 1957	5.90	70	1965	Nov. 9, 1964	11.61	1,530
	Dec. 16, 1957	7.98	382		Dec. 20, 1964	8.40	480
					Mar. 31, 1965	7.12	238
					Apr. 4, 1965	6.05	124
					Apr. 9, 1965	10.75	1,220

SAN JOSE CREEK BASIN

1205. San Jose Creek near Goleta, Calif.

Location.--Lat 34°27'33", long 119°48'29", in La Goleta Grant, on left pier of Patterson Avenue Bridge, 1.1 miles downstream from unnamed tributary and 1.7 miles northeast of Goleta, Santa Barbara County.

Drainage area.--5.51 sq mi.

Gage.--Recording. Prior to Dec. 24, 1955, at datum 5.50 ft higher. Dec. 24, 1955, to Jan. 10, 1960, at datum 1.5 ft higher. Altitude of gage is 100 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 850 cfs and extended above on basis of slope-area measurements at 978 and 1,340 cfs.

Bankfull stage.--13 ft.

Remarks.--Low peaks may be affected by numerous small diversions upstream for irrigation. Only annual peaks are shown prior to Oct. 1, 1942. Base for partial-duration series, 100 cfs.

Peak stages and discharges of San Jose Creek near Goleta, Calif.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1941	Apr. 4, 1941	6.95	1,960	1956	Dec. 26, 1955	4.80	440
1942	Apr. 14, 1942	3.13	210		Jan. 26, 1956	4.06	489
					Apr. 11, 1956	2.87	108
1943	Jan. 21, 1943	7.24	1,780				
	Jan. 22, 1943	6.95	1,750	1957	Jan. 13, 1957	3.54	210
	Feb. 22, 1943	2.39	132		Feb. 23, 1957	3.02	276
	Mar. 4, 1943	2.65	232		Feb. 28, 1957	2.66	167
					Apr. 17, 1957	3.05	286
1944	Feb. 22, 1944	2.76	200				
	Mar. 4, 1944	2.46	147	1958	Dec. 16, 1957	3.69	463
					Jan. 25, 1958	3.05	268
1945	Nov. 11, 1944	3.92	330		Feb. 3, 1958	3.04	264
	Feb. 2, 1945	4.40	390		Feb. 19, 1958	3.41	383
	Feb. 2, 1945	4.70	500		Feb. 25, 1958	4.17	585
					Mar. 15, 1958	2.90	215
1947	Nov. 20, 1946	4.48	500		Mar. 21, 1958	3.49	407
					Apr. 1, 1958	3.52	416
1948	Mar. 24, 1948	1.93	23		Apr. 3, 1958	5.00	790
1949	Mar. 4, 1949	3.10	150	1959	Jan. 5, 1959	2.86	254
	Mar. 10, 1949	2.87	114		Feb. 16, 1959	2.58	174
1950	Feb. 6, 1950	3.63	230	1960	Apr. 27, 1960	3.22	51
1951	Jan. 11, 1951	1.32	5.2	1961	Nov. 12, 1960	4.08	102
1952	Dec. 30, 1951	3.78	285	1962	Dec. 2, 1961	3.98	123
	Jan. 12, 1952	4.21	524		Feb. 9, 1962	8.10	1,150
	Jan. 15, 1952	6.60	1,340		Feb. 15, 1962	5.35	700
	Jan. 18, 1952	2.41	258		Feb. 19, 1962	7.15	1,010
	Mar. 15, 1952	4.32	713				
				1963	Feb. 9, 1963	3.94	258
1953	Dec. 20, 1952	1.86	120				
				1964	Nov. 20, 1963	3.37	148
1954	Jan. 24, 1954	2.19	162		Apr. 1, 1964	3.08	102
1955	Jan. 18, 1955	1.82	119	1965	Dec. 20, 1964	3.42	157
					Apr. 9, 1965	4.40	360
1956	Dec. 24, 1955	8.02	978				

SANTA YNEZ RIVER BASIN

1245. Santa Cruz Creek near Santa Ynez, Calif.

Location.--Lat 34°35'48", long 119°54'28", in San Marcos Grant, on right bank 0.6 mile downstream from Pine Canyon and 9.9 miles east of Santa Ynez, Santa Barbara County.

Drainage area.--73.9 sq mi.

Gage.--Recording. Prior to Jan. 22, 1943, at site 1.9 miles downstream at different datum. Jan. 22, 1943, to Sept. 26, 1952, at site 1.7 miles downstream at different datum. Datum of gage is 786.63 ft above mean sea level (levels by Bureau of Reclamation).

Stage-discharge relation.--Defined by current-meter measurements below 210 cfs prior to Jan. 22, 1943; below 750 cfs for period Jan. 22, 1943, to Sept. 26, 1952; and below 2,100 cfs thereafter.

Bankfull stage.--9 ft.

Remarks.--Only annual peak for water year 1942. Base for partial-duration series, 100 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1942	Dec. 28, 1941	3.96	2472	1945	Mar. 17, 1945	3.07	253
1944	Feb. 22, 1944	5.20	2,500	1946	Dec. 21, 1945	4.09	900
	Mar. 4, 1944	3.49	680		Mar. 30, 1946	4.50	1,300
	Mar. 10, 1944	2.99	395				
1945	Nov. 11, 1944	3.46	660	1947	Nov. 20, 1946	4.05	910
	Feb. 1, 1945	3.99	1,050		Nov. 23, 1946	3.65	625
	Feb. 2, 1945	5.33	2,700		Dec. 25, 1946	3.10	350
					Dec. 25, 1946	2.71	200

a Annual peak only.

Peak stages and discharges of Santa Cruz Creek near Santa Ynez, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1947	Dec. 27, 1946	2.32	110	1958	Dec. 17, 1957	6.75	533
1948	Apr. 10, 1948	1.67	19		Jan. 26, 1958	6.62	491
1949	Mar. 4, 1949	2.61	130		Feb. 4, 1958	9.05	1,950
	Mar. 11, 1949	2.63	140		Feb. 8, 1958	5.90	254
1950	Feb. 6, 1950	4.40	1,160		Feb. 19, 1958	7.18	838
1951	Mar. 2, 1951	1.53	1.5		Feb. 25, 1958	6.91	700
1952	Dec. 30, 1951	4.37	655		Mar. 15, 1958	7.29	803
	Jan. 12, 1952	5.95	1,670		Mar. 22, 1958	9.22	2,080
	Jan. 15, 1952	7.00	2,690		Mar. 27, 1958	6.28	348
	Jan. 18, 1952	4.57	1,120	1959	Apr. 1, 1958	10.20	3,080
	Jan. 25, 1952	2.40	243		Apr. 3, 1958	10.27	3,580
	Mar. 7, 1952	1.79	106		Apr. 6, 1958	6.89	1,240
	Mar. 10, 1952	1.84	114				
	Mar. 15, 1952	5.15	1,340		Jan. 6, 1959	5.11	288
	Mar. 25, 1952	2.39	182		Feb. 11, 1959	6.05	713
1953	Dec. 2, 1952	5.48	102		Feb. 16, 1959	6.45	930
	Jan. 8, 1953	5.83	214		Feb. 21, 1959	5.03	259
	Jan. 13, 1953	5.90	261	1960	Feb. 1, 1960	6.40	918
1954	Jan. 24, 1954	9.30	1,540	1961	Dec. 2, 1960	4.03	35
	Feb. 13, 1954	6.27	354	1962	Feb. 9, 1962	9.75	4,520
	Mar. 20, 1954	5.50	128		Feb. 15, 1962	5.17	298
1955	Feb. 17, 1955	5.65	168		Feb. 19, 1962	5.57	458
1956	Dec. 25, 1955	6.70	650	1963	Feb. 9, 1963	5.29	398
	Jan. 26, 1956	8.95	2,040	1964	Apr. 1, 1964	4.50	145
1957	Jan. 13, 1957	6.50	559	1965	Dec. 20, 1964	4.39	125
	Feb. 28, 1957	5.40	112		Jan. 7, 1965	4.49	143
					Apr. 9, 1965	5.16	308
					Apr. 16, 1965	4.53	151

1250. Cachuma Creek near Santa Ynez, Calif.

Location.--Lat 34°36'30", long 119°56'04", in Tequepis Grant, on right bank 3.2 miles downstream from Lazaro Canyon and 8.3 miles east of Santa Ynez, Santa Barbara County.

Drainage area.--23.8 sq mi.

Gage.--Recording. Prior to Aug. 13, 1953, at site 1.3 miles upstream at different datum. Altitude of gage is 758.5 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 172 cfs prior to Aug. 13, 1953; below 780 cfs thereafter.

Bankfull stage.--10 ft.

Remarks.--Base for partial-duration series, 100 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1951	Nov. 19, 1950	3.24	56	1958	Dec. 17, 1957	4.80	170
1952	Dec. 30, 1951	3.90	143		Jan. 26, 1958	4.97	238
	Jan. 12, 1952	4.44	630		Feb. 4, 1958	5.52	633
	Jan. 15, 1952	6.05	4,300		Feb. 14, 1958	5.09	354
	Jan. 18, 1952	4.75	1,010		Feb. 25, 1958	4.72	218
	Mar. 15, 1952	5.23	1,850		Mar. 15, 1958	4.37	178
	Mar. 19, 1952	3.75	182		Mar. 21, 1958	6.09	1,270
1953	Jan. 13, 1953	3.51	105		Apr. 1, 1958	6.10	1,280
1954	Jan. 24, 1954	5.36	462		Apr. 6, 1958	5.63	824
	Mar. 20, 1954	4.59	104	1959	Feb. 10, 1959	5.09	344
1955	Jan. 18, 1955	4.37	54		Feb. 21, 1959	4.71	135
1956	Dec. 24, 1955	4.86	155	1960	Feb. 2, 1960	4.68	123
	Jan. 26, 1956	5.41	448	1961	Nov. 6, 1960	4.25	27
1957	Feb. 28, 1957	4.26	51	1962	Feb. 11, 1962	6.02	780
					Feb. 19, 1962	5.05	220

1260. Santa Ynez River near Santa Ynez, Calif.

Location.--Lat 34°35'30", long 119°59'45", on boundary between Canada de los Pinos and Lomas de la Purification Grants on right bank, 1.1 miles downstream from Cachuma Dam and 5 miles southeast of Santa Ynez, Santa Barbara County.

Drainage area.--422 sq mi.

Gage.--Recording. Prior to Oct. 1, 1955, at site 2.1 miles downstream at different datum. Datum of gage is 552.9 ft, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 20,000 cfs and extended on basis of float measurement at 34,100 cfs prior to Sept. 30, 1955; defined by current-meter measurements below 1,350 cfs thereafter.

Bankfull stage.--Not subject to overflow.

Remarks.--Peaks regulated by Jameson Lake (capacity, 6,900 acre-ft) since 1930, Gibraltar Reservoir (capacity, 7,490 acre-ft prior to 1949 and 14,777 acre-ft thereafter) since 1920, and Cachuma Reservoir (capacity, 204,874 acre-ft) since November 1952. Water diverted out of basin from Jameson Lake and Gibraltar and Cachuma Reservoirs for municipal supply. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1935	Jan. 15, 1935	8.40	3,600	1949	Mar. 20, 1949	2.73	9.0
1936	Feb. 15, 1936	7.75	1,890	1950	Feb. 6, 1950	5.05	700
1937	Feb. 6, 1937	10.67	7,990	1951	-	-	0
1938	Mar. 2, 1938	17.90	43,700	1952	Jan. 15, 1952	17.07	39,400
1939	Mar. 10, 1939	6.87	1,410				
1940	Feb. 26, 1940	6.18	710	1956	Apr. 18, 1956	4.15	170
1941	Mar. 4, 1941	13.2	21,200	1958	Apr. 13, 1958	5.97	1,760
1942	Dec. 28, 1941	5.71	1,210	1959	Jan. 8, 1959	4.02	444
1943	Jan. 23, 1943	16.45	33,000				
1944	Feb. 22, 1944	11.53	16,000	1961	Apr. 11, 1961	2.35	48
1945	Feb. 2, 1945	10.48	9,700	1962	Feb. 25, 1962	4.45	845
				1963	Feb. 10, 1963	3.06	280
1946	Mar. 30, 1946	9.05	7,000	1964	Feb. 20, 1964	4.75	33
1947	Nov. 20, 1946	5.73	1,300	1965	Apr. 11, 1965	2.86	182
1948	-	-	0				

a Occurred Apr. 23, 1964.

1265. Santa Agueda Creek near Santa Ynez, Calif.

Location.--Lat 34°35'40", long 120°01'30", in Canada de los Pinos Grant, on left downstream wingwall of highway bridge, 0.8 mile upstream from mouth and 3.5 miles southeast of Santa Ynez, Santa Barbara County.

Drainage area.--55.8 sq mi.

Gage.--Recording. Prior to Oct. 1, 1955, at datum 1.0 ft higher. Altitude of gage is 520 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 2,000 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Only annual peaks are shown prior to Oct. 1, 1943. Base for partial-duration series, 50 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1941	Mar. 3, 1941	4.60	1,580	1945	Nov. 11, 1944	1.90	200
1942	Dec. 29, 1941	2.63	327		Feb. 2, 1945	3.25	960
1943	Jan. 22, 1943	3.40	1,280		Mar. 15, 1945	1.87	222
					Mar. 17, 1945	1.90	233
1944	Feb. 22, 1944	3.34	1,120				
	Mar. 4, 1944	2.57	560	1946	Dec. 22, 1945	1.59	115

Peak stages and discharges of Santa Agueda Creek near Santa Ynez, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1946	Mar. 29, 1946	2.35	400	1957	Feb. 28, 1957	1.92	19
1947	Nov. 20, 1946	1.90	250	1958	Dec. 17, 1957	3.25	425
	Nov. 23, 1946	1.45	150		Jan. 26, 1958	2.94	285
1948	Mar. 24, 1948	.86	5.0		Feb. 4, 1958	4.63	1,480
1949	Dec. 26, 1948	1.67	138		Feb. 19, 1958	6.14	5,560
1950	Feb. 6, 1950	1.94	225		Feb. 25, 1958	3.25	787
1951	Nov. 19, 1950	1.94	125		Mar. 15, 1958	2.18	189
1952	Dec. 30, 1951	2.22	73		Mar. 21, 1958	5.99	5,260
	Jan. 12, 1952	4.48	1,480		Mar. 27, 1958	2.40	359
	Jan. 15, 1952	4.83	1,670		Apr. 1, 1958	5.00	2,660
	Jan. 18, 1952	4.29	1,380		Apr. 6, 1958	4.72	2,180
	Mar. 7, 1952	1.75	133	1959	Feb. 11, 1959	2.53	140
	Mar. 10, 1952	1.67	114		Feb. 16, 1959	2.17	57
	Mar. 15, 1952	4.54	1,540		Feb. 21, 1959	2.37	135
	Mar. 19, 1952	1.81	227	1960	Feb. 1, 1960	2.37	57
1953	Dec. 1, 1952	1.56	123		Feb. 10, 1960	2.20	64
	Dec. 28, 1952	1.74	172	1961	Nov. 6, 1960	2.55	148
	Dec. 30, 1952	2.06	324		Jan. 26, 1961	2.19	51
	Jan. 13, 1953	2.12	350	1962	Feb. 9, 1962	4.88	2,470
1954	Jan. 25, 1954	2.89	475		Feb. 15, 1962	2.45	205
	Mar. 20, 1954	1.34	131		Feb. 19, 1962	3.01	487
1955	Jan. 18, 1955	1.84	238	1963	Feb. 10, 1963	2.25	64
1956	Dec. 24, 1955	2.46	265	1964	-	-	0
	Jan. 26, 1956	4.00	880	1965	Apr. 9, 1965	3.00	355

1275. Zanja de Cota Creek near Santa Ynez, Calif.
(Published as Zanja Cota near Santa Ynez prior to October 1960)

Location.--Lat 34°35'10", long 120°05'42", in Canada de los Pinos Grant (on boundary), on right bank 75 ft downstream from Mitchell Ranch Road, 0.2 mile upstream from mouth, and 2.0 miles southwest of Santa Ynez, Santa Barbara County.

Drainage area.--13.8 sq mi.

Gage.--Recording. Prior to Aug. 6, 1959, at site 700 ft upstream at different datum. Altitude of gage is 430 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 170 cfs prior to Aug. 6, 1959; below 5.3 cfs thereafter.

Bankfull stage.--Not subject to overflow.

Remarks.--Peaks regulated by small reservoir 0.2 mile upstream since August 1959. Low peaks may be affected by small diversions upstream for irrigation of about 300 acres. Base for partial-duration series, 50 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1955	Jan. 18, 1955	2.04	25	1958	Mar. 27, 1958	4.27	117
1956	Jan. 26, 1956	4.02	53		Apr. 1, 1958	7.44	334
1957	Oct. 10, 1956	2.95	40		Apr. 6, 1958	6.71	271
1958	Dec. 8, 1957	3.18	a52	1959	Jan. 5, 1959	4.49	67
	Feb. 19, 1958	7.50	295		Feb. 2, 1959	3.90	53
	Feb. 25, 1958	3.90	74	1960	Jan. 10, 1960	2.36	5.1
	Mar. 21, 1958	9.4	460	1961	May 15, 1961	2.87	7.6

a. Due in part to failure of dam 0.2 mile upstream.

1284. Alisal Creek near Solvang, Calif.

Location.--Lat 34°34'55", long 120°08'40", in Nojoqui Grant, on right bank at footbridge, 0.3 mile upstream from mouth and 1.1 miles southwest of Solvang, Santa Barbara County.

Drainage area.--11.5 sq mi.

Gage.--Recording. Prior to Dec. 25, 1955, at different datum. Oct. 1, 1956, to Jan. 23, 1961, at datum 1.0 ft higher. Altitude of gage is 380 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 1,000 cfs and extended above on basis of area-velocity studies.

Bankfull stage.--16 ft.

Remarks.--Base for partial-duration series, 100 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1955	Jan. 18, 1955	6.63	428	1959	Feb. 21, 1959	2.57	271
1956	Dec. 25, 1955	8.25	2,200 (a)	1960	Apr. 27, 1960	1.94	121
	Jan. 26, 1956	-		1961	Jan. 26, 1961	3.50	250
1957	Jan. 12, 1957	2.76	172	1962	Dec. 2, 1961	6.30	1,480
	Feb. 23, 1957	2.96	215		Feb. 9, 1962	8.15	2,500
1958	Dec. 16, 1957	2.77	174		Feb. 15, 1962	6.86	1,760
	Jan. 25, 1958	2.39	100		Feb. 18, 1962	6.15	1,400
	Feb. 3, 1958	4.30	720		Mar. 6, 1962	3.11	122
	Feb. 19, 1958	7.10	2,900	1963	Feb. 9, 1963	4.75	722
	Feb. 25, 1958	3.83	502		Mar. 16, 1963	3.62	267
	Mar. 15, 1958	3.70	450		Mar. 28, 1963	3.93	376
	Mar. 21, 1958	5.85	1,730	1964	Nov. 19, 1963	3.23	152
	Mar. 27, 1958	3.09	456		Jan. 6, 1965	3.25	139
	Apr. 3, 1958	5.62	2,140		Apr. 9, 1965	3.88	307
1959	Jan. 6, 1959	1.92	117				
	Feb. 10, 1959	2.68	304				
	Feb. 16, 1959	4.25	1,060				

a Discharge unknown; exceeded base.

1285. Santa Ynez River at Solvang, Calif.

Location.--Lat 34°35'05", long 120°08'35", in San Carlos de Jonata Grant, on downstream side of right abutment of Mission Bridge, 25 ft downstream from Alisal Creek and 0.9 mile south of Solvang, Santa Barbara County.

Drainage area.--579 sq mi.

Gage.--Recording. Prior to Nov. 30, 1940, on former Mission Bridge at different datum. Oct. 1, 1946, to July 28, 1953, at datum 0.66 ft higher. Altitude of gage is 350 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 10,000 cfs.

Bankfull stage.--10 ft.

Remarks.--Peaks regulated by Jameson Lake (capacity, 6,900 acre-ft) beginning in December 1930, Gibraltar Reservoir (capacity, 7,490 acre-ft prior to 1949 and 14,777 acre-ft thereafter) beginning in 1920, and Lake Cachuma (capacity, 204,874 acre-ft) beginning in November 1952. Water diverted out of basin from Jameson Lake and Gibraltar and Cachuma Reservoirs for municipal supply. Peak for the year 1932 is maximum observed. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1932	Feb. 9, 1932	-	18,700	1947	Nov. 20, 1946	6.15	1,250
1935	Apr. 8, 1935	6.14	4,810	1948	Mar. 24, 1948	4.65	13
				1949	Mar. 10, 1949	5.80	525
				1950	Dec. 7, 1949	6.32	750
1936	Feb. 15, 1936	6.10	2,700				

Peak stages and discharges of Santa Ynez River at Solvang, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1951	Mar. 1, 1951	3.66	12	1959	Feb. 16, 1959	5.50	1,150
1952	Jan. 15, 1952	14.80	37,000	1960	Apr. 27, 1960	2.91	137
1953	Dec. 28, 1952	5.44	625	1961	Jan. 26, 1961	3.47	273
1954	Jan. 25, 1954	a3.08	380	1962	Feb. 11, 1962	7.20	3,600
1955	Jan. 18, 1955	2.56	218	1963	Feb. 9, 1963	5.16	612
1956	Dec. 25, 1955	7.18	-	1964	Nov. 20, 1963	5.08	150
1957	Feb. 23, 1957	4.53	271	1965	Apr. 9, 1965	5.58	402
1958	Mar. 21, 1958	8.60	8,300				

a Occurred Mar. 20, 1954.

1300. Zaca Creek at Buellton, Calif.

(Published as La Zaca Creek at Buellton, prior to October 1960)

Location.--Lat 34°36'150", long 120°11'30", in San Carlos de Jonata Grant, on right bank upstream from culvert on State Highway 150 in Buellton, Santa Barbara County, 1 mile upstream from mouth.

Drainage area.--39.4 sq mi.

Gage.--Recording. Altitude of gage is 340 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 300 cfs and extended above on basis of velocity-area study.

Bankfull stage.--12 ft.

Remarks.--Only annual peaks are shown prior to Oct. 1, 1950. Base for partial-duration series, 10 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1941	Mar. 3, 1941	6.60	874	1956	Dec. 24, 1955	3.45	10
1942	Dec. 28, 1941	3.39	44		Jan. 26, 1956	3.61	23
1943	Jan. 22, 1943	4.32	340	1957	May 11, 1957	3.45	8.3
1944	Feb. 22, 1944	3.93	225	1958	Feb. 4, 1958	4.25	52
1945	Feb. 2, 1945	2.92	32		Feb. 19, 1958	4.23	52
1946	Mar. 29, 1946	2.89	21		Feb. 25, 1958	4.34	54
1947	Nov. 20, 1946	2.51	8		Mar. 21, 1958	4.68	85
1948	Mar. 24, 1948	2.34	4		Mar. 27, 1958	4.10	47
1949	Mar. 4, 1949	3.78	185		Apr. 3, 1958	5.24	273
1950	Dec. 8, 1949	3.34	88		Apr. 6, 1958	5.12	254
1951	Oct. 26, 1950	2.64	6.8	1959	Feb. 21, 1959	2.99	30
1952	Jan. 12, 1952	3.68	86	1960	Feb. 1, 1960	2.40	7.7
	Jan. 15, 1952	5.30	622	1961	Jan. 26, 1961	2.58	5.0
	Jan. 18, 1952	3.65	126	1962	Dec. 2, 1961	2.69	11
	Jan. 25, 1952	3.07	51		Feb. 9, 1962	4.85	320
	Mar. 15, 1952	4.88	364		Feb. 11, 1962	5.65	560
1953	Dec. 27, 1952	2.71	13		Feb. 16, 1962	3.38	99
	Dec. 30, 1952	3.23	70		Feb. 18, 1962	5.15	392
1954	Jan. 19, 1954	2.44	8.0		Mar. 6, 1962	2.78	17
1955	Dec. 3, 1954	2.79	17	1963	Feb. 9, 1963	2.95	30
	Jan. 9, 1955	2.88	24		Mar. 28, 1963	3.16	49
	Jan. 18, 1955	2.76	15				

1325. Salsipuedes Creek near Lompoc, Calif.

Location.--Lat 34°35'20", long 120°24'27", in W $\frac{1}{2}$ sec.24, T.6 N., R.34 W., on right bank at highway bridge on Jalama Road, 0.4 mile downstream from El Jaro Creek and 4.4 miles southeast of Lompoc.

Drainage area.--47.1 sq mi.

Gage.--Recording. Altitude of gage is 240 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 7,400 cfs and extended above on basis of slope-area measurement at 11,400 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Only annual peaks are shown prior to Oct. 1, 1944. Base for partial-duration series, 100 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1941	Mar. 3, 1941	19.95	6,100	1955	Jan. 18, 1955	3.09	382
1942	Dec. 28, 1941	15.9	4,810		Apr. 21, 1955	2.27	129
1943	Jan. 22, 1943	9.90	1,950				
1944	Feb. 29, 1944	10.85	2,340	1956	Dec. 26, 1955	7.65	2,400
					Jan. 25, 1956	7.75	2,440
1945	Feb. 2, 1945	6.00	600				
	Mar. 25, 1945	5.50	430	1957	Feb. 23, 1957	3.62	780
1946	Mar. 29, 1946	6.24	630	1958	Jan. 25, 1958	3.20	328
	Mar. 30, 1946	5.08	310		Feb. 3, 1958	7.43	2,490
	Mar. 31, 1946	5.32	370		Feb. 19, 1958	8.70	3,210
					Feb. 25, 1958	8.60	3,150
1947	Nov. 23, 1946	3.99	96		Mar. 15, 1958	6.00	1,730
					Mar. 21, 1958	9.10	3,450
1948	Mar. 24, 1948	4.61	200		Mar. 27, 1958	5.25	1,200
					Apr. 3, 1958	6.65	2,060
1949	Dec. 26, 1948	5.33	373		Apr. 7, 1958	8.03	2,820
	Mar. 3, 1949	5.80	500				
	Mar. 10, 1949	8.63	1,450	1959	Jan. 5, 1959	2.40	152
					Feb. 11, 1959	2.12	104
1950	Dec. 7, 1949	4.62	240		Feb. 16, 1959	8.74	b3,230
	Jan. 11, 1950	4.08	141		Feb. 21, 1959	3.20	366
	Jan. 14, 1950	3.97	124				
	Feb. 6, 1950	5.76	513	1960	Feb. 1, 1960	4.58	815
					Apr. 27, 1960	2.95	262
1951	Mar. 1, 1951	3.32	52				
				1961	Nov. 26, 1960	3.52	402
1952	Dec. 30, 1951	4.14	108		Dec. 1, 1960	3.78	483
	Jan. 12, 1952	6.61	732		Jan. 26, 1961	2.28	114
	Jan. 15, 1952	10.3	2,200				
	Jan. 17, 1952	4.83	341	1962	Dec. 2, 1961	5.97	1,670
	Jan. 18, 1952	4.66	301		Jan. 20, 1962	3.34	356
	Mar. 25, 1952	4.99	381		Jan. 22, 1962	3.28	341
	Mar. 6, 1952	20.8	11,400		Feb. 9, 1962	14.90	7,400
	Mar. 15, 1952				Feb. 15, 1962	8.70	3,210
1953	Nov. 15, 1952	1.99	112		Feb. 18, 1962	8.70	3,210
	Dec. 1, 1952	-	(a)		Feb. 20, 1962	4.40	720
	Dec. 20, 1952	-	(a)		Mar. 5, 1962	8.25	2,940
	Dec. 27, 1952	5.00	1,320				
	Dec. 30, 1952	7.70	3,060	1963	Feb. 9, 1963	6.19	1,800
	Jan. 13, 1953	-	(a)		Mar. 16, 1963	3.92	532
					Mar. 28, 1963	7.57	2,540
1954	Nov. 14, 1953	-	150		Apr. 14, 1963	3.20	344
	Jan. 24, 1954	2.14	106		Apr. 25, 1963	2.97	288
	Feb. 13, 1954	2.45	182				
	Mar. 19, 1954	4.48	1,030	1964	Nov. 20, 1963	2.31	134
	Mar. 28, 1954	-	500				
1955	Jan. 10, 1955	2.51	192	1965	Jan. 6, 1965	3.24	346
					Apr. 9, 1965	4.97	1,060

a Discharge unknown; exceeded base.

b Partly caused by failure of temporary dam 0.5 mile upstream.

1335. Santa Ynez River near Lompoc, Calif.

Location.--Lat 34°38'39", long 120°25'48", near east boundary of La Mission Vieja de la Purisima Grant, on downstream end of center pier of bridge on State Highway 150, 1.5 miles east of Lompoc, Santa Barbara County, and 2.5 miles downstream from Salsipuedes Creek.

Drainage area.--790 sq mi.

Gage.--Nonrecording prior to Dec. 14, 1928; recording thereafter. Prior to June 26, 1917, at site 600 ft upstream at datum 11.29 ft higher. May 28, 1926, to Mar. 11, 1932, at site 600 ft upstream at datum 5.77 ft higher. Mar. 11, 1932, to Dec. 1, 1939, at site 600 ft upstream at datum 4.23 ft lower. Datum of gage is 79.28 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Prior to Dec. 2, 1939, defined by current-meter measurements below 18,500 cfs and extended above on basis of float measurement at 38,000 cfs and discharge vs mean-depth studies; defined by current-meter measurements below 9,200 cfs and extended above on basis of float-measurements at gage heights 9.88, 12.42, and 17.6 ft thereafter.

Bankfull stage.--15 ft.

Remarks.--Flow regulated by Jameson Lake (capacity, 6,900 acre-ft) beginning in December 1930, Gibraltar Reservoir (capacity, 7,490 acre-ft prior to 1949 and 14,777 acre-ft thereafter) beginning in 1920, and Cachuma Reservoir (capacity, 204,874 acre-ft) beginning in November 1952. Water diverted out of basin from Jameson Lake and Gibraltar and Cachuma Reservoirs for municipal supply. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1907	Jan. 9, 1907	22.0	120,000	1943	Jan. 23, 1943	19.65	32,000
1914	Jan. 25, 1914	13.0	75,000	1944	Feb. 22, 1944	13.06	15,000
				1945	Feb. 3, 1945	10.89	6,800
1929	Feb. 3, 1929	5.15	1,520	1946	Mar. 30, 1946	10.05	5,000
1930	Mar. 15, 1930	4.37	396	1947	Dec. 26, 1946	6.75	575
1931	Jan. 7, 1931	3.76	177	1948	Mar. 24, 1948	5.61	80
				1949	Mar. 10, 1949	7.55	1,500
1932	Feb. 9, 1932	14.0	22,600	1950	Feb. 6, 1950	5.38	850
1933	Jan. 20, 1933	13.15	1,930	1951	-	-	0
1934	Jan. 1, 1934	15.9	4,280				
1935	Apr. 9, 1935	14.96	2,980	1952	Jan. 16, 1952	17.6	39,000
1936	Feb. 16, 1936	15.20	2,530	1953	Dec. 30, 1952	8.68	1,940
				1954	Mar. 19, 1954	8.05	1,040
1937	Feb. 7, 1937	19.10	10,700	1955	Jan. 18, 1955	7.09	394
1938	Mar. 3, 1938	28.10	45,000	1956	Dec. 25, 1955	11.25	6,070
1939	Mar. 10, 1939	15.20	1,700				
1940	Feb. 28, 1940	8.42	752	1957	Feb. 23, 1957	6.72	267
1941	Mar. 5, 1941	18.90	20,200	1958	Mar. 22, 1958	11.63	6,520
				1959	Feb. 16, 1959	7.32	1,770
1942	Dec. 28, 1941	10.56	3,880	1960	Feb. 1, 1960	5.78	654

1355. Santa Ynez River at barrier, near Surf, Calif.

Location.--Lat 34°41'20", long 120°35'05", in Lompoc Grant, on upstream side at center of salt-water barrier, 1.0 mile upstream from mouth and 1.2 miles east of Surf, Santa Barbara County.

Drainage area.--895 sq mi.

Gage.--Recording. Datum of gage is 5.5 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 790 cfs and extended above on basis of weir formula.

Historical data.--Flood of Jan. 9, 1907, had a mean daily discharge in excess of 60,000 cfs. Flood of Mar. 3, 1938, produced a peak discharge of about 45,000 cfs.

Remarks.--Peaks regulated by Jameson Lake (capacity, 6,900 acre-ft) beginning in 1930, Gibraltar Reservoir (capacity, 7,490 acre-ft prior to 1949 and 14,777 acre-ft thereafter) beginning in 1920, and Lake Cachuma (capacity, 204,874 acre-ft) beginning in November 1952. Water diverted out of the basin from Jameson Lake, Gibraltar Reservoir, and Lake Cachuma for municipal supply. Only annual peaks are shown.

Peak stages and discharges of Santa Ynez River at barrier, near Surf, Calif.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1907	Jan. 9, 1907	-	60,000	1956	Dec. 25, 1955	4.78	5,240
1938	Mar. 3, 1938	-	45,000	1957	Feb. 23, 1957	1.37	12
1948	Mar. 25, 1948	0.77	1.9	1958	Apr. 3, 1958	23.60	6,500
1949	Mar. 11, 1949	2.58	1,250	1959	Feb. 17, 1959	2.62	1,390
1950	Feb. 6, 1950	2.05	250	1960	Feb. 2, 1960	-	50
1951	Mar. 1, 1951	1.17	1.6	1961	Dec. 3, 1960	-	5
1952	Jan. 16, 1952	6.50	36,000	1962	Feb. 11, 1962	3.26	4,260
1953	Dec. 30, 1952	3.04	3,100	1963	Feb. 10, 1963	2.55	1,180
1954	Mar. 20, 1954	2.23	468	1964	Apr. 2, 1964	1.13	6.5
1955	Jan. 19, 1955	1.84	102	1965	Apr. 10, 1965	2.05	250

a Occurred at different time than peak discharge.

SAN ANTONIO CREEK BASIN

1360. San Antonio Creek at Harris, Calif.

Location.--Lat 34°45'45", long 120°25'25", in Los Alamos Grant, on left bank just downstream from highway bridge, 0.25 mile south of Harris, Santa Barbara County, and 0.6 mile upstream from Harris Canyon Creek.

Drainage area.--93.5 sq mi.

Gage.--Recording. Prior to May 5, 1942, at site 0.5 mile downstream at datum 17.62 ft lower. Datum of gage is 306.56 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 480 cfs prior to May 5, 1942; below 110 cfs thereafter.

Remarks.--Only annual peaks are shown prior to Oct. 1, 1949. Base for partial-duration series, 5.0 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1941	Mar. 3, 1941	10.1	1,580	1952	Mar. 6, 1952	4.98	120
1942	Dec. 28, 1941	7.90	740	1952	Mar. 10, 1952	3.62	13
1943	Jan. 23, 1943	4.74	336	1952	Mar. 15, 1952	10.19	1,800
1944	Feb. 22, 1944	5.71	700	1953	Nov. 15, 1952	3.43	29
1945	Feb. 2, 1945	4.77	350	1953	Nov. 22, 1952	2.88	6.6
1946	Mar. 31, 1946	4.48	145	1953	Dec. 1, 1952	4.75	177
1947	Nov. 20, 1946	3.28	7.0	1953	Dec. 20, 1952	3.52	36
1948	Mar. 24, 1948	3.00	2.1	1953	Dec. 28, 1952	3.93	70
1949	Mar. 3, 1949	4.19	77	1953	Dec. 30, 1952	4.35	117
1950	Feb. 6, 1950	3.18	5.0	1953	Jan. 13, 1953	3.43	30
1951	-	-	0	1954	Nov. 14, 1953	3.45	28
1952	Jan. 6, 1952	3.67	9.6	1954	Jan. 19, 1954	3.15	13
1952	Jan. 12, 1952	4.22	31	1954	Jan. 24, 1954	3.68	39
1952	Jan. 15, 1952	6.39	403	1954	Mar. 16, 1954	3.25	20
1952	Jan. 18, 1952	4.53	68	1954	Mar. 20, 1954	3.37	21
1952	Jan. 25, 1952	4.76	93	1955	Jan. 16, 1955	3.54	7.0
				1955	Jan. 18, 1955	4.99	128

1361. San Antonio Creek near Casmalia, Calif.

Location.--Lat 34°46'56", long 120°31'47", in Jesus Maria Grant, on Camp Cook Military Reservation on downstream side of left center pile bent of San Antonio road bridge, 0.7 mile east of junction of San Antonio road with Lompoc-Casmalia road and 3.8 miles south of Casmalia, Santa Barbara County.

Drainage area.--135 sq mi.

Gage.--Recording. Prior to June 27, 1958, at datum 2.00 ft higher. Altitude of gage is 160 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 1,090 cfs.

Bankfull stage.--20 ft.

Historical data.--Flood of January 1952 reached a stage of 13.0 ft.

Remarks.--Only annual peak is shown for 1952. Base for partial-duration series, 50 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1952	January 1952	13.0	-	1960	Feb. 2, 1960	6.00	267
					Apr. 27, 1960	4.00	68
1956	Nov. 14, 1955	3.43	66				
	Dec. 25, 1955	3.96	130	1961	Dec. 1, 1960	4.02	42
	Jan. 25, 1956	6.15	463				
1957	Feb. 28, 1957	2.52	27	1962	Nov. 20, 1961	3.84	51
					Dec. 2, 1961	5.19	141
1958	Jan. 26, 1958	3.29	66		Jan. 20, 1962	4.16	66
	Feb. 3, 1958	3.15	74		Feb. 11, 1962	9.22	1,250
	Feb. 19, 1958	4.50	133		Feb. 15, 1962	6.80	545
	Feb. 25, 1958	6.42	389		Feb. 19, 1962	9.35	1,300
	Mar. 16, 1958	3.10	86		Mar. 6, 1962	4.72	158
	Mar. 22, 1958	4.73	283				
	Mar. 27, 1958	5.23	400	1963	Feb. 9, 1963	3.98	58
	Apr. 1, 1958	9.25	1,200		Mar. 17, 1963	4.08	66
	Apr. 6, 1958	8.05	1,180		Mar. 28, 1963	4.58	105
1959	Jan. 6, 1959	3.92	100	1964	Nov. 20, 1963	6.73	326
	Feb. 21, 1959	3.98	105				
	Apr. 7, 1959	3.36	60	1965	Apr. 10, 1965	4.38	86

SANTA MARIA RIVER BASIN

1365. Cuyama River near Ventucopa, Calif.

Location.--Lat 34°41'20", long 119°21'25", in NE $\frac{1}{4}$ sec. 19, T.7 N., R.23 W., on downstream side near left end of Ozena Bridge on U.S. Highway 399, 4.5 miles downstream from confluence of Dry Canyon and Alamo Creek and 12 miles southeast of Ventucopa.

Drainage area.--89.9 sq mi.

Gage.--Recording. Subsequent to Mar. 15, 1946, two gages were in operation concurrently, depending on location of flow in the channel. The gages are at different datums. Altitude of gage is 3,500 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 1,400 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Only annual peaks are shown prior to Oct. 1, 1947. Base for partial-duration series, 50 cfs.

Peak stages and discharges of Cuyama River near Ventucopa, Calif.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1945	Feb. 2, 1945	4.03	-	1954	Mar. 20, 1954	2.86	57
1946	Mar. 30, 1946	5.40	1,000	1955	Dec. 3, 1954	3.32	112
1948	Mar. 24, 1948	4.00	47		Dec. 9, 1954	3.05	60
1949	Mar. 10, 1949	4.39	101		Feb. 17, 1955	3.25	103
1950	Dec. 8, 1949	4.97	300		Apr. 30, 1955	3.03	68
	Jan. 17, 1950	-	121	1956	Dec. 24, 1955	3.78	287
	Feb. 6, 1950	-	256		Jan. 26, 1956	4.03	400
1951	Jan. 20, 1951	4.37	80		Apr. 12, 1956	3.47	79
	Apr. 30, 1951	4.40	52		Apr. 15, 1956	3.43	90
1952	Jan. 15, 1952	6.3	2,000	1957	Jan. 12, 1957	5.65	1,840
1953	Dec. 1, 1952	3.25	225		Feb. 23, 1957	4.90	1,020
	Dec. 20, 1952	2.87	144		Feb. 28, 1957	3.82	79
	Dec. 28, 1952	-	(a)		Mar. 10, 1957	3.71	52
	Jan. 13, 1953	2.32	51		Apr. 16, 1957	3.75	62
1954	Nov. 14, 1953	4.33	974	1958	Dec. 16, 1957	4.88	1,440
	Jan. 19, 1954	3.33	196		Jan. 26, 1958	3.73	84
	Jan. 21, 1954	2.80	57		Feb. 4, 1958	5.13	2,060
	Jan. 24, 1954	4.26	652		Feb. 19, 1958	6.23	7,210
	Feb. 13, 1954	4.55	592		Feb. 25, 1958	5.25	285
					Mar. 16, 1958	5.30	320
					Mar. 22, 1958	5.69	689
					Apr. 3, 1958	7.54	6,640
					Sept. 7, 1958	7.30	3,150

a Discharge unknown; exceeded base.

1370. Cuyama River near Santa Maria, Calif.

Location.--Lat 35°00'42", long 120°16'43", in Suey Grant, on right bank 60 ft downstream from highway bridge, 2.6 miles upstream from Alamo Creek, and 8.9 miles northeast of Santa Maria, Santa Barbara County.

Drainage area.--904 sq mi.

Gage.--Recording. Prior to Oct. 3, 1936, at different datum. Oct. 3, 1936, to Feb. 2, 1945, at site 200 ft upstream at datum 1.31 ft higher. Feb. 3 to June 21, 1945, at datum 0.78 ft higher. June 21, 1945, to July 8, 1947, at datum 1.00 ft higher. Datum of gage is 608.93 ft above mean sea level.

Stage-discharge relation.--Defined by current-meter measurements below 5,000 cfs and extended above on basis of slope-area measurement at 17,300 cfs Oct. 3, 1936, to Feb. 2, 1945; defined by current-meter measurements below 2,900 cfs and extended above on basis of peak discharge at station below Buckhorn Canyon thereafter.

Bankfull stage.--Not subject to overflow.

Remarks.--Only annual peaks are shown prior to Oct. 1, 1947. Base for partial-duration series, 200 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1930	Mar. 14, 1930	1.52	101	1946	Dec. 22, 1945	4.65	1,000
1931	Feb. 5, 1931	2.56	450	1947	Nov. 13, 1946	2.95	500
1932	Feb. 9, 1932	4.72	4,480	1948	Mar. 26, 1948	2.08	23
1933	Jan. 19, 1933	2.67	511	1949	Mar. 4, 1949	2.23	31
1934	Jan. 2, 1934	2.36	382	1950	Feb. 6, 1950	3.24	150
1935	Apr. 8, 1935	3.10	820	1951	Jan. 12, 1951	2.51	18
1936	Feb. 16, 1936	2.27	492	1952	Jan. 12, 1952	5.28	670
1937	Feb. 6, 1937	7.60	5,220		Jan. 16, 1952	7.70	6,200
1938	Mar. 3, 1938	16.6	17,300		Jan. 28, 1952	3.28	340
1939	Dec. 15, 1938	4.62	415		Mar. 7, 1952	3.60	510
1940	Feb. 26, 1940	3.78	224		Mar. 10, 1952	2.97	204
1941	Mar. 5, 1941	7.90	4,600		Mar. 16, 1952	7.06	4,850
1942	Apr. 22, 1942	4.68	782		Mar. 25, 1952	4.04	338
1943	Jan. 23, 1943	11.30	8,400				
1944	Feb. 22, 1944	6.20	1,900				
1945	Feb. 3, 1945	5.67	1,400				

a Occurred Mar. 4, 1941.

b Occurred Mar. 2, 1951.

Peak stages and discharges of Cuyama River near Santa Maria, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1953	Jan. 13, 1953	3.65	207	1958	Feb. 25, 1958	5.28	728
1954	Jan. 24, 1954	5.90	1,350		Mar. 17, 1958	5.08	550
	Feb. 14, 1954	4.10	375		Mar. 23, 1958	5.28	632
	Mar. 16, 1954	5.59	1,130		Mar. 27, 1958	5.24	662
	Mar. 20, 1954	3.73	253		Apr. 4, 1958	7.70	7,200
					Sept. 8, 1958	7.28	2,870
1955	Jan. 18, 1955	3.53	151	1959	Jan. 7, 1959	4.92	944
1956	Jan. 25, 1956	5.25	770		Feb. 11, 1959	3.62	224
					Feb. 17, 1959	5.22	1,130
1957	Jan. 14, 1957	4.34	272	1960	Feb. 10, 1960	2.86	69
1958	Dec. 17, 1957	4.25	221	1961	Nov. 7, 1960	4.57	259
	Jan. 26, 1958	4.50	312				
	Feb. 5, 1958	5.56	928	1962	Feb. 11, 1962	7.90	8,800
	Feb. 20, 1958	6.81	2,230				

1375. Alamo Creek near Santa Maria, Calif.

Location--Lat 35°01'20", long 120°18'10", in Suey Grant, on downstream side of center pier of highway bridge, 1.2 miles upstream from mouth and 9 miles northeast of Santa Maria, Santa Barbara County.

Drainage area--86.6 sq mi.

Gage--Recording. Prior to May 12, 1958, at datum 2.00 ft higher. Datum of gage is 579.14 ft above mean sea level, datum of 1929.

Stage-discharge relation--Defined by current-meter measurements below 1,820 cfs.

Bankfull stage--7 ft.

Remarks--Only annual peaks are shown prior to Oct. 1, 1950. Base for partial-duration series, 50 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1944	Mar. 4, 1944	4.14	560	1955	Jan. 18, 1955	2.16	8.8
1945	Feb. 2, 1945	4.34	700	1956	Jan. 26, 1956	4.66	1,360
1946	Dec. 22, 1945	2.14	10	1957	Apr. 17, 1957	1.75	2.3
1947	Nov. 20, 1946	2.13	8.7		Jan. 26, 1958	4.01	520
1948	Mar. 24, 1948	2.33	2.6		Feb. 3, 1958	3.51	464
1949	Dec. 26, 1948	2.30	4.1		Feb. 20, 1958	4.23	740
1950	Feb. 6, 1950	4.16	614		Feb. 25, 1958	4.81	1,000
1951	Oct. 27, 1950	3.92	248		Mar. 15, 1958	4.02	760
	Nov. 19, 1950	3.83	209		Mar. 22, 1958	4.12	810
1952	Dec. 30, 1951	4.48	302		Mar. 27, 1958	3.67	608
	Jan. 12, 1952	5.54	810		Apr. 3, 1958	7.65	3,120
	Jan. 15, 1952	8.00	2,820	1959	Feb. 10, 1959	3.73	4.2
	Jan. 18, 1952	4.39	388		Feb. 1, 1960	5.06	5.6
	Jan. 25, 1952	3.94	292	1961	Jan. 26, 1961	5.23	3.3
	Mar. 7, 1952	4.03	292		Feb. 9, 1962	7.50	1,620
	Mar. 10, 1952	3.14	93		Feb. 15, 1962	-	250
	Mar. 15, 1952	6.59	2,690		Feb. 19, 1962	-	450
1953	Mar. 19, 1952	3.60	585		Mar. 6, 1962	-	250
	Dec. 3, 1952	2.58	60				
	Jan. 8, 1953	2.84	91				
	Jan. 14, 1953	3.00	124				
1954	Jan. 25, 1954	4.43	598				

1380. Huasna River near Santa Maria, Calif.

Location.--Lat 35°01'16", long 120°19'18", in Suey Grant, at State Highway 166 bridge, on downstream side of first pier from right bank, 0.3 mile upstream from mouth and 8 miles northeast of Santa Maria, Santa Barbara County.

Drainage area.--117 sq mi.

Gage.--Recording prior to Oct. 1, 1959, at sites within 0.1 mile upstream and 50 ft downstream at different datums.

Stage-discharge relation.--Defined by current-meter measurements below 1,100 cfs and extended above on basis of slope-area measurement at 11,400 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Only annual peaks are shown prior to Oct. 1, 1946. Base for partial-duration series, 40 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1930	Mar. 14, 1930	1.92	10	1952	Mar. 19, 1952	2.98	822
1931	Jan. 2, 1931	1.68	11		Apr. 8, 1952	1.45	116
1932	Dec. 28, 1931	8.30	4,900	1953	Dec. 2, 1952	1.49	71
1933	Jan. 19, 1933	4.80	1,240		Dec. 28, 1952	1.24	46
1934	Dec. 31, 1933	2.70	37		Dec. 31, 1952	1.53	82
1935	Apr. 8, 1935	6.78	3,110		Jan. 8, 1953	2.63	359
					Jan. 14, 1953	2.04	202
1936	Feb. 23, 1936	5.80	2,360	1954	Jan. 25, 1954	4.88	811
1937	Feb. 6, 1937	10.93	10,000		Feb. 14, 1954	2.45	86
1938	Feb. 11, 1938	11.26	11,400		Feb. 18, 1954	2.31	75
1939	Mar. 9, 1939	1.37	16		Mar. 21, 1954	2.10	54
1940	Jan. 10, 1940	3.24	493		Mar. 30, 1954	2.62	133
1941	Mar. 4, 1941	6.60	4,000	1955	Jan. 10, 1955	2.70	144
1942	Dec. 28, 1941	3.43	701		Jan. 18, 1955	1.99	41
1943	Jan. 23, 1943	7.44	4,700	1956	Dec. 24, 1955	3.17	187
1944	Mar. 4, 1944	4.53	1,500		Dec. 27, 1955	2.93	144
1945	Feb. 2, 1945	4.75	1,000		Jan. 25, 1956	7.06	2,260
1946	Mar. 30, 1946	3.80	480	1957	Dec. 2, 1956	2.87	129
1947	Nov. 20, 1946	2.01	32	1958	Dec. 20, 1957	3.05	163
1948	Mar. 24, 1948	1.73	6.5		Jan. 27, 1958	2.52	71
1949	Mar. 4, 1949	1.63	7.1		Feb. 5, 1958	3.25	208
1950	Feb. 6, 1950	4.72	900		Feb. 20, 1958	3.29	218
	Apr. 9, 1950	-	139		Feb. 25, 1958	6.18	1,530
1951	Nov. 19, 1950	3.54	414		Mar. 15, 1958	5.60	1,150
	Jan. 19, 1951	2.63	137		Mar. 22, 1958	5.48	980
1952	Dec. 5, 1951	2.94	182		Mar. 27, 1958	5.07	775
	Dec. 30, 1951	4.96	1,320		Apr. 3, 1958	8.42	4,230
	Jan. 12, 1952	-	900		Apr. 6, 1958	7.52	2,640
	Jan. 15, 1952	8.12	4,060	1959	Feb. 11, 1959	2.67	60
	Jan. 25, 1952	3.17	654	1960	Feb. 2, 1960	4.00	300
	Mar. 7, 1952	2.45	346		Feb. 10, 1960	2.61	67
	Mar. 10, 1952	1.77	174	1961	Dec. 1, 1960	3.16	58
	Mar. 15, 1952	5.55	2,510		Jan. 2, 1961	3.34	142

1385. Sisquoc River near Sisquoc, Calif.

Location.--Lat 34°50'25", long 120°10'00", in sec.20, T.9 N., R.31 W., on left bank 2.2 miles upstream from La Brea Creek and 7 miles east of Sisquoc.

Drainage area.--281 sq mi.

Gage.--Recording. Prior to Aug. 24, 1951, at site 0.2 mile downstream at datum 3.70 ft lower. Datum of gage is 624.30 ft above mean sea level, datum of 1929 (Corps of Engineers bench mark).

Stage-discharge relation.--Defined by current-meter measurements below 2,800 cfs prior to Aug. 24, 1951; below 1,400 cfs and extended above on basis of slope-area measurement at 6,880 cfs thereafter.

Bankfull stage.--Not subject to overflow.

Historical data.--Maximum discharge known, 11,000 cfs Mar. 2, 1938 (gage height, 8.1 ft from high-water mark in well).

Remarks.--Low peaks occurring since 1944 are not equivalent to those prior to 1934 as point of diversion above station was moved below station in 1938. Only annual peaks are shown prior to Oct. 1, 1945. Base for partial-duration series, 100 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1930	Mar. 17, 1930	2.14	126	1954	Feb. 13, 1954	4.72	986
1931	Feb. 5, 1931	2.00	93		Mar. 20, 1954	4.06	386
1932	Feb. 8, 1932	6.17	6,240	1955	Feb. 17, 1955	3.97	408
1933	Jan. 19, 1933	3.18	800	1956	Dec. 25, 1955	5.26	865
1938	Mar. 2, 1938	8.1	11,000		Jan. 26, 1956	6.30	1,750
1944	Feb. 22, 1944	5.43	4,700		May 10, 1956	3.50	165
1945	Feb. 2, 1945	5.33	4,500	1957	Jan. 13, 1957	4.58	743
1946	Dec. 22, 1945	3.69	1,600		Feb. 23, 1957	3.65	214
	Mar. 30, 1946	4.57	3,900		Mar. 1, 1957	3.57	138
1947	Nov. 20, 1946	3.37	1,100	1958	Dec. 17, 1957	5.12	958
	Nov. 23, 1946	3.21	1,150		Jan. 26, 1958	4.77	656
	Dec. 25, 1946	2.61	500		Feb. 4, 1958	6.75	2,620
	Dec. 26, 1946	2.56	460		Feb. 19, 1958	7.05	2,980
1948	Apr. 28, 1948	.88	2.9		Feb. 25, 1958	5.45	1,280
1949	Mar. 11, 1949	1.98	200		Mar. 16, 1958	5.78	1,610
1950	Feb. 6, 1950	3.14	1,210		Mar. 22, 1958	7.20	3,160
	Feb. 11, 1950	3.95	178		Apr. 3, 1958	10.62	7,640
	Apr. 9, 1950	1.82	165	1959	Jan. 6, 1959	4.55	342
1951	Nov. 19, 1950	.78	4.5		Feb. 11, 1959	5.43	1,260
1952	Dec. 30, 1951	4.15	332		Feb. 16, 1959	5.70	1,530
	Jan. 12, 1952	6.76	2,860		Feb. 21, 1959	4.07	198
	Jan. 15, 1952	10.08	6,880	1960	Feb. 2, 1960	5.10	850
	Jan. 18, 1952	6.45	2,450	1961	Nov. 26, 1960	3.33	5.1
	Jan. 25, 1952	5.13	1,100	1962	Dec. 2, 1961	4.50	310
	Mar. 7, 1952	4.23	484		Feb. 9, 1962	9.00	5,360
	Mar. 15, 1952	7.44	3,580		Feb. 15, 1962	4.35	730
	Mar. 26, 1952	4.79	864		Feb. 19, 1962	4.55	850
1953	Dec. 2, 1952	3.81	180		Mar. 7, 1962	3.50	345
	Dec. 20, 1952	3.79	180	1963	Feb. 10, 1963	3.70	465
	Dec. 31, 1952	3.96	275	1964	Jan. 22, 1964	3.48	240
	Jan. 8, 1953	4.09	354		Apr. 1, 1964	3.66	332
	Jan. 14, 1953	4.31	524	1965	Jan. 9, 1965	3.70	294
1954	Jan. 25, 1954	6.90	3,000		Apr. 9, 1965	4.76	800

a At site 200 ft downstream at different datum.

1390. La Brea Creek near Sisquoc, Calif.

Location.--Lat 34°51'10", long 120°11'55", in SE¼ sec.13, T.9 N., R.32 W., on right bank 2,100 ft upstream from mouth and 5.5 miles east of Sisquoc.

Drainage area.--93.8 sq mi.

Gage.--Recording. Altitude of gage is 550 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements.

Bankfull stage.--5 ft.

Remarks.--Only annual peaks are shown prior to Oct. 1, 1945. Base for partial-duration series, 30 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1944	Feb. 22, 1944	5.22	1,600	1955	Jan. 18, 1955	3.33	191
1945	Feb. 2, 1945	4.46	785		Feb. 16, 1955	3.21	155
					Feb. 27, 1955	2.61	47
1946	Mar. 30, 1946	3.33	155	1956	Jan. 27, 1956	4.18	513
1947	-	-	0	1957	-	-	0
1948	-	-	0	1958	Feb. 4, 1958	3.28	148
1949	-	-	0		Feb. 19, 1958	3.70	330
1950	Apr. 9, 1950	2.6	12		Feb. 25, 1958	3.63	295
1951	-	-	0		Mar. 15, 1958	3.65	305
					Mar. 22, 1958	3.83	402
1952	Jan. 12, 1952	4.58	824		Mar. 27, 1958	3.68	320
	Jan. 15, 1952	5.94	3,320		Apr. 1, 1958	5.30	1,970
	Jan. 25, 1952	3.27	78		Apr. 6, 1958	3.78	560
	Mar. 7, 1952	3.74	212	1959	Feb. 10, 1959	2.13	1.9
	Mar. 10, 1952	3.48	123	1960	-	-	0
	Mar. 15, 1952	5.63	2,630	1961	-	-	0
	Apr. 7, 1952	2.43	41	1962	Feb. 11, 1962	4.90	1,360
1953	Dec. 31, 1952	2.52	54		Feb. 16, 1962	2.91	138
	Jan. 13, 1953	3.12	178		Feb. 19, 1962	3.22	240
1954	Nov. 14, 1953	3.02	109		Mar. 22, 1962	2.45	39
	Jan. 24, 1954	4.95	1,430	1963	-	-	0
	Feb. 13, 1954	2.74	62	1964	-	-	0
	Mar. 16, 1954	4.50	910	1965	Apr. 9, 1965	3.45	275
	Mar. 20, 1954	3.30	181				
	Mar. 25, 1954	2.52	39				
	Mar. 30, 1954	3.32	188				
1955	Dec. 9, 1954	2.82	73				

1395. Tepusquet Creek near Sisquoc, Calif.

Location.--Lat 34°52'20", long 120°14'35", in NE¼ sec.9, T.9 N., R.32 W., on downstream wingwall of right bridge abutment, 1.1 miles upstream from mouth and 3 miles east of Sisquoc.

Drainage area.--28.6 sq mi.

Gage.--Recording. Prior to Dec. 9, 1948, at datum 0.9 ft higher. Altitude of gage is 500 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 220 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Only annual peaks are shown prior to Oct. 1, 1945. Base for partial-duration series, 10 cfs.

Peak stages and discharges of Tepusquet Creek near Sisquoc, Calif.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1944	Feb. 21, 1944	3.86	200	1954	Mar. 30, 1954	2.06	35
1945	Feb. 2, 1945	2.66	50	1955	Jan. 18, 1955	b2.50	-
1946	Mar. 30, 1946	2.23	7.5	1956	Dec. 24, 1955	3.54	116
1947	Nov. 13, 1946	1.83	1.8		Jan. 25, 1956	4.30	196
1948	Apr. 28, 1948	1.86	1.5	1957	Apr. 17, 1957	1.60	1.5
1949	Mar. 5, 1949	2.03	5	1958	Jan. 26, 1958	2.13	13
1950	Mar. 24, 1950	2.05	3.1		Feb. 3, 1958	2.27	16
1951	Feb. 28, 1951	a1.97	1.5		Feb. 25, 1958	3.01	169
1952	Jan. 12, 1952	4.69	126		Mar. 15, 1958	2.47	40
	Jan. 15, 1952	5.93	318		Mar. 22, 1958	2.54	50
	Mar. 7, 1952	1.77	40		Mar. 27, 1958	2.49	43
	Mar. 10, 1952	1.33	19		Apr. 3, 1958	3.55	295
	Mar. 13, 1952	1.15	12		Apr. 7, 1958	3.28	243
	Mar. 15, 1952	3.57	167	1959	Feb. 21, 1959	2.12	1.6
	Mar. 19, 1952	1.74	42	1960	Feb. 2, 1960	2.25	26
1953	Nov. 22, 1952	1.95	25	1961	Oct. 6, 1960	2.01	.7
	Dec. 1, 1952	1.70	12	1962	Feb. 9, 1962	4.25	500
	Dec. 31, 1952	1.78	18		Feb. 14, 1962	2.90	147
	Jan. 14, 1953	2.02	31		Feb. 19, 1962	2.50	72
1954	Nov. 14, 1953	2.52	64	1963	Feb. 9, 1963	2.11	9.8
	Jan. 24, 1954	4.80	234	1964	Jan. 22, 1964	1.98	2.6
	Feb. 14, 1954	1.89	29	1965	Apr. 9, 1965	2.41	36
	Mar. 16, 1954	2.63	72				
	Mar. 20, 1954	2.85	88				

a Occurred July 27, 1951.

b Backwater from debris.

1400. Sisquoc River near Garey, Calif.

Location.--Lat 34°53'38", long 120°18'20", in SW $\frac{1}{4}$ sec.36, T.10 N., R.33 W., near right bank on downstream side of county road bridge, 0.6 mile northeast of Garey and 3.7 miles downstream from Tepusquet Creek.

Drainage area.--472 sq mi.

Gage.--Recording. Prior to Aug. 27, 1954, at site 3 miles upstream at different datum. Aug. 28, 1954, to Nov. 1, 1956, at site 0.7 mile upstream at different datum. Nov. 1, 1956, to Sept. 30, 1959, at same site at different datums. Datum of gage is 360.8 ft above mean sea level (Santa Barbara County bench mark).

Stage-discharge relation.--Defined by current-meter measurements below 2,000 cfs and extended above on basis of records for upstream stations prior to Nov. 1, 1956; defined below 2,300 cfs thereafter.

Bankfull stage.--10 ft.

Remarks.--Only annual peaks are shown prior to Oct. 1, 1946. Base for partial-duration series, 100 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1941	Mar. 5, 1941	7.70	7,000	1948	-	-	0
1942	Apr. 22, 1942	4.85	875	1949	Mar. 11, 1949	3.48	50
1943	Jan. 23, 1943	8.46	13,000	1950	Feb. 6, 1950	4.56	900
1944	Feb. 22, 1944	6.43	6,600	1951	-	-	0
1945	Feb. 2, 1945	6.25	5,400	1952	Dec. 30, 1951	-	400
1946	Mar. 30, 1946	5.87	4,000		Jan. 12, 1952	5.97	2,580
1947	Nov. 20, 1946	4.46	765		Jan. 15, 1952	7.46	8,910
	Nov. 23, 1946	4.76	900		Jan. 18, 1952	4.55	2,880
	Dec. 25, 1946	-	375				
	Dec. 26, 1946	4.07	360				

Peak stages and discharges of Sisquoc River near Garey, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1952	Jan. 25, 1952	2.62	838	1958	Feb. 4, 1958	6.68	2,180
	Mar. 7, 1952	2.05	511		Feb. 19, 1958	-	2,500
	Mar. 15, 1952	5.75	4,900		Feb. 25, 1958	-	1,000
	Mar. 26, 1952	3.47	618		Mar. 16, 1958	-	2,000
1953	Dec. 20, 1952	1.61	125		Mar. 22, 1958	-	3,000
	Dec. 31, 1952	2.03	185		Apr. 3, 1958	9.6	8,000
	Jan. 8, 1953	2.15	228	1959	Feb. 11, 1959	5.44	1,000
	Jan. 14, 1953	3.00	480		Feb. 16, 1959	4.87	594
1954	Jan. 25, 1954	-	(a)	1960	Jan. 12, 1960	4.67	3.6
	Feb. 14, 1954	-	(a)		-	-	0
	Mar. 16, 1954	2.09	160	1962	Feb. 10, 1962	7.80	7,200
	Mar. 20, 1954	2.83	426		Feb. 19, 1962	5.18	920
	Mar. 30, 1954	2.48	268		Mar. 7, 1962	4.16	258
1955	Feb. 17, 1955	4.22	137		Mar. 22, 1962	5.02	114
1956	Dec. 25, 1955	5.18	740	1963	Feb. 10, 1963	-	150
	Jan. 27, 1956	b7.38	2,120		-	-	0
1957	Oct. 19, 1956	4.08	105	1965	Apr. 10, 1965	5.75	900
	Dec. 17, 1957	4.32	211				
1958	Jan. 26, 1958	4.48	263				

a Discharge unknown; exceeded base.

b Occurred Jan. 25, 1956, backwater from gravel dike.

1410. Santa Maria River at Guadalupe, Calif.

Location--Lat 34°58'35", long 120°34'15", in Guadalupe Grant, on downstream side of fifth bridge pier from left bank on State Highway 1, 0.5 mile north of Guadalupe, Santa Barbara County, and 4.5 miles upstream from mouth.

Drainage area--1,742 sq mi.

Gage--Recording. Prior to Aug. 11, 1955, at site 100 ft upstream at same datum. Datum of gage is 64.92 ft above mean sea level, datum of 1929, supplementary adjustment of 1934 (Corps of Engineers bench mark).

Stage-discharge relation--Defined by current-meter measurements below 8,000 cfs prior to Aug. 11, 1955; below 18,800 cfs thereafter.

Bankfull stage--7 ft.

Remarks--Peaks partly regulated by Twitchell Reservoir (capacity, 240,000 acre-ft), beginning in February 1959, on Cuyama River 8 miles upstream from mouth. Only annual peaks are shown prior to Oct. 1, 1945, and after Oct. 1, 1958. Base for partial-duration series, 100 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1941	Mar. 5, 1941	8.00	14,700	1952	Jan. 18, 1952	4.54	2,490
1943	Jan. 23, 1943	7.36	13,800		Jan. 25, 1952	-	(a)
1944	Feb. 22, 1944	6.08	5,000		Mar. 15, 1952	6.62	13,300
1945	Feb. 2, 1945	5.55	3,700		Mar. 27, 1952	3.31	248
1946	Dec. 23, 1945	4.50	2,100	1953	Jan. 14, 1953	3.90	84
	Mar. 30, 1946	4.95	3,500	1954	Jan. 25, 1954	4.91	2,090
1948	-	-	0	1955	-	-	0
1949	-	-	0	1956	Jan. 27, 1956	b5.88	-
1950	Feb. 7, 1950	5.10	3,600		-	-	0
1951	-	-	0	1958	Feb. 5, 1958	3.24	123
	Jan. 13, 1952	5.55	6,100		Feb. 21, 1958	3.65	385
1952	Jan. 16, 1952	8.18	32,800		Feb. 25, 1958	4.21	2,000
					Mar. 16, 1958	3.38	625

a Discharge unknown; exceeded base.

b Occurred Jan. 25, 1956, owing to backwater from road embankment.

SANTA MARIA RIVER BASIN

Peak stages and discharges of Santa Maria River at Guadalupe, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1958	Mar. 22, 1958	3.66	1,080	1961	-	-	0
	Mar. 28, 1958	3.54	852	1962	Feb. 11, 1962	5.75	7,300
	Apr. 3, 1958	7.30	20,300	1963	-	-	0
1959	-	-	0	1964	-	-	0
1960	-	-	0	1965	-	-	0

ARROYO GRANDE BASIN

1413. Arroyo Grande near Arroyo Grande, Calif.

Location--Lat 35°11'10", long 120°29'55", in NW $\frac{1}{4}$ sec.32, T.31 S., R.14 E., on downstream side of county road bridge, 0.9 mile downstream from Lopez Canyon Creek and 6 $\frac{1}{4}$ miles northeast of Arroyo Grande.

Drainage area--68.3 sq mi.

Gage--Recording. Altitude of gage is 360 ft (from topographic map).

Stage-discharge relation--Defined by current-meter measurements below 570 cfs.

Bankfull stage--19 ft.

Remarks--Base for partial-duration series, 40 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1959	Jan. 6, 1959	3.01	45	1962	Feb. 19, 1962	3.16	460
	Feb. 16, 1959	2.66	61		Feb. 26, 1962	2.28	156
1960	Feb. 1, 1960	4.32	700		Mar. 6, 1962	1.72	54
1961	-	-	0	1963	Feb. 10, 1963	1.70	60
1962	Jan. 20, 1962	3.89	252	1964	-	-	0
	Feb. 9, 1962	4.50	1,280	1965	Jan. 6, 1965	-	500
	Feb. 15, 1962	3.87	822		Apr. 10, 1965	6.00	290

1415. Arroyo Grande at Arroyo Grande, Calif.

Location--Lat 35°07'30", long 120°34'05", in Pismo Grant, on left bank at Arroyo Grande, San Luis Obispo County, 0.7 mile upstream from U.S. Highway 101.

Drainage area--102 sq mi.

Gage--Recording. Prior to July 10, 1947, at datum 0.50 ft higher. Datum of gage is 97.77 ft above mean sea level, datum of 1929, supplementary adjustment of 1934.

Stage-discharge relation--Defined by current-meter measurements below 2,600 cfs.

Bankfull stage--Not subject to overflow.

Remarks--Only annual peaks are shown prior to Oct. 1, 1944. Base for partial-duration series, 40 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1940	Jan. 10, 1940	3.77	565	1944	Mar. 4, 1944	4.78	1,000
1941	Mar. 4, 1941	8.80	3,100	1945	Feb. 2, 1945	4.28	880
1942	Dec. 28, 1941	4.27	775		Mar. 17, 1945	2.93	300
1943	Mar. 9, 1943	8.35	2,800		Mar. 26, 1945	3.31	410

Peak stages and discharges of Arroyo Grande at Arroyo Grande, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1946	Mar. 30, 1946	2.66	230	1956	Jan. 25, 1956	8.53	2,650
1947	Nov. 20, 1946	1.56	62		Feb. 23, 1956	2.19	46
1948	Mar. 16, 1948	1.50	31	1957	Mar. 23, 1957	1.63	11
1949	Mar. 3, 1949	3.10	216	1958	Feb. 3, 1958	2.87	141
1950	Feb. 6, 1950	5.10	582		Feb. 5, 1958	2.39	72
1951	Nov. 20, 1950	1.91	61		Feb. 19, 1958	4.78	840
	May 11, 1951	1.90	64		Feb. 25, 1958	6.72	1,950
	June 8, 1951	2.00	67		Mar. 15, 1958	4.76	770
1952	Dec. 3, 1951	1.73	52		Mar. 21, 1958	4.42	650
	Dec. 30, 1951	4.91	534		Mar. 27, 1958	4.70	790
	Jan. 6, 1952	1.67	47		Apr. 1, 1958	10.13	4,030
	Jan. 12, 1952	3.80	440	1959	Apr. 3, 1958	9.17	3,460
	Jan. 15, 1952	11.97	5,370		Apr. 6, 1958	7.37	2,440
	Jan. 25, 1952	4.66	721		Jan. 5, 1959	3.68	344
	Mar. 7, 1952	2.63	155		Feb. 16, 1959	2.23	57
	Mar. 10, 1952	2.42	111		Feb. 21, 1959	2.09	44
	Mar. 15, 1952	7.14	1,900	1960	Feb. 1, 1960	4.30	610
	Mar. 19, 1952	3.87	479		Feb. 10, 1960	2.25	60
1953	Nov. 15, 1952	2.38	125	1961	Oct. 4, 1960	2.17	51
	Dec. 1, 1952	2.75	203		Nov. 14, 1960	2.25	59
	Dec. 7, 1952	2.05	70		Nov. 26, 1960	2.27	61
	Dec. 28, 1952	2.14	80		Dec. 1, 1960	2.75	122
	Dec. 30, 1952	2.91	252	1962	Dec. 3, 1961	2.40	85
	Jan. 8, 1953	3.42	392		Jan. 20, 1962	3.54	302
1954	Nov. 14, 1953	2.75	195		Feb. 9, 1962	6.95	2,130
	Jan. 25, 1954	3.51	308		Feb. 15, 1962	5.09	1,010
	Feb. 18, 1954	1.71	44		Mar. 6, 1962	3.15	248
	Mar. 20, 1954	2.04	52	1963	Feb. 10, 1963	2.53	97
	Mar. 30, 1954	2.68	141	1964	Feb. 17, 1964	1.93	28
1955	Jan. 18, 1955	2.37	84	1965	Nov. 1, 1964	2.29	67
1956	Dec. 24, 1955	5.17	812		Jan. 7, 1965	3.78	432
					Apr. 9, 1965	2.81	165

SANTA ROSA CREEK BASIN

1422. Santa Rosa Creek near Cambria, Calif.

Location.--Lat 35°34'35", long 120°59'50", in NE $\frac{1}{4}$ sec.21, T.27 S., R.9 E., on left bank 4.8 miles east of Cambria.

Drainage area.--12.5 sq mi.

Gage.--Recording. Altitude of gage is 270 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 920 cfs and extended above on basis of slope-area measurement at 2,520 cfs.

Bankfull stage.--Not subject to overflow.

Historical data.--Flood of December 1955 reached a stage of 15.2 ft (from floodmarks).

Remarks.--Base for partial-duration series, 300 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1956	December 1955	15.2	-	1958	Mar. 27, 1958	5.26	448
1958	Dec. 16, 1957	6.16	774		Apr. 3, 1958	7.89	1,420
	Jan. 24, 1958	6.00	710		Apr. 6, 1958	5.53	529
	Feb. 2, 1958	5.98	730	1959	Feb. 16, 1959	5.64	563
	Feb. 19, 1958	6.38	902	1960	Feb. 1, 1960	10.36	2,520
	Feb. 24, 1958	7.95	1,440		Feb. 8, 1960	5.38	484
	Mar. 15, 1958	5.97	698				
	Mar. 21, 1958	7.16	1,120				

Peak stages and discharges of Santa Rosa Creek near Cambria, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1961	Dec. 1, 1960	5.26	448	1963	Feb. 9, 1963	-	(a)
	Jan. 26, 1961	5.32	466		Feb. 13, 1963	-	(a)
1962	Dec. 1, 1961	4.67	412		Mar. 27, 1963	7.05	1,520
	Jan. 20, 1962	6.98	1,480		Apr. 14, 1963	5.39	676
	Feb. 9, 1962	8.19	2,250	1964	Nov. 19, 1963	5.16	544
	Feb. 15, 1962	6.50	1,200		Nov. 10, 1964	5.17	457
	Feb. 19, 1962	4.50	345	1965	Dec. 26, 1964	6.01	830
	Mar. 5, 1962	4.68	408		Jan. 6, 1965	7.40	1,730
	Jan. 31, 1963	6.73	1,330		Apr. 9, 1965	5.00	345

a Discharge unknown; exceeded base.

ARROYO DE LA CRUZ BASIN

1425. Arroyo de la Cruz near San Simeon, Calif.

Location.--Lat 35°43'25", long 121°17'00", in Piedra Blanca Grant, on right bank 1.6 miles upstream from mouth and 7 miles northwest of town of San Simeon, San Luis Obispo County.

Drainage area.--41.2 sq mi.

Gage.--Recording. Altitude of gage is 22 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 7,600 cfs and extended on basis of slope-area measurement at 17,700 cfs.

Bankfull stage.--9 ft.

Remarks.--Base for partial-duration series, 1,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1951	Dec. 3, 1950	7.48	3,350	1957	May 18, 1957	7.03	3,340
	Dec. 8, 1950	5.79	1,390		Dec. 16, 1957	6.70	2,760
	Jan. 11, 1951	6.50	2,120		Jan. 24, 1958	7.06	3,180
	Jan. 18, 1951	6.50	1,900		Feb. 2, 1958	7.35	3,570
1952	Dec. 3, 1951	9.95	6,680	1958	Feb. 4, 1958	5.95	2,020
	Dec. 28, 1951	10.75	11,400		Feb. 12, 1958	5.37	1,530
	Jan. 12, 1952	8.40	4,960		Feb. 19, 1958	8.32	5,040
	Jan. 14, 1952	10.80	11,600		Feb. 24, 1958	8.90	6,400
	Jan. 25, 1952	9.00	6,300		Mar. 14, 1958	7.05	3,090
	Mar. 15, 1952	8.03	4,250		Mar. 21, 1958	8.25	5,110
					Mar. 23, 1958	7.35	3,580
1953	Dec. 1, 1952	8.15	3,780		Mar. 27, 1958	5.56	1,460
	Dec. 7, 1952	11.34	11,500		Mar. 30, 1958	6.42	2,340
	Dec. 19, 1952	7.42	2,060		Apr. 3, 1958	8.12	4,980
	Dec. 30, 1952	8.80	4,880		Apr. 5, 1958	7.00	3,220
	Jan. 7, 1953	9.65	7,950	1959	Feb. 10, 1959	7.09	3,220
	Jan. 13, 1953	5.05	1,040		Feb. 16, 1959	8.02	4,830
	Mar. 19, 1953	6.12	1,960		Feb. 21, 1959	5.38	1,390
	Apr. 27, 1953	8.13	4,430		Sept. 19, 1959	5.94	1,840
1954	Jan. 24, 1954	7.30	3,100	1960	Jan. 24, 1960	7.00	3,080
	Feb. 13, 1954	6.32	1,970		Feb. 1, 1960	12.23	17,000
	Feb. 17, 1954	6.38	2,020		Feb. 8, 1960	7.87	4,430
	Mar. 16, 1954	6.46	2,100	1961	Dec. 1, 1960	5.86	2,080
	Mar. 19, 1954	5.62	1,390		Jan. 26, 1961	6.89	3,170
	Mar. 29, 1954	7.80	3,860	1962	Dec. 2, 1961	8.76	6,120
	Apr. 27, 1954	5.88	1,590		Jan. 20, 1962	8.48	5,600
1955	Dec. 9, 1954	5.95	1,650		Feb. 9, 1962	9.50	7,750
	Jan. 18, 1955	5.90	1,610		Feb. 15, 1962	9.38	7,450
	Apr. 21, 1955	5.40	1,240		Feb. 18, 1962	6.58	2,470
					Mar. 5, 1962	6.83	2,820
1956	Dec. 20, 1955	5.88	1,590	1963	Oct. 14, 1962	5.52	1,250
	Dec. 23, 1955	12.40	17,700		Dec. 16, 1962	6.65	2,620
	Dec. 26, 1955	6.30	2,510		Jan. 31, 1963	11.41	13,700
	Jan. 25, 1956	11.70	14,900		Feb. 9, 1963	6.23	2,130
	Feb. 23, 1956	8.25	5,190				
1957	Feb. 24, 1957	7.08	3,410				

Peak stages and discharges of Arroyo de la Cruz near San Simeon, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1963	Feb. 13, 1963	5.90	1,800	1965	Nov. 10, 1964	5.60	1,500
	Mar. 16, 1963	5.14	1,130		Dec. 19, 1964	5.13	1,120
	Mar. 27, 1963	6.30	2,200		Dec. 21, 1964	5.22	1,180
	Apr. 14, 1963	6.46	2,390		Jan. 3, 1965	6.78	2,780
1964	Nov. 14, 1963	5.91	1,810		Jan. 6, 1965	9.04	6,680
	Nov. 19, 1963	11.51	14,100		Apr. 9, 1965	6.17	2,070
	Jan. 21, 1964	6.72	2,700				

BIG SUR RIVER BASIN

1430. Big Sur River near Big Sur, Calif.
(Published as Sur River at Big Sur prior to October 1959)

Location.--Lat 36°14'45", long 121°46'20", in SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.29, T.19 S., R.2 E., on right bank at downstream side of bridge, 0.4 mile upstream from Post Creek and 2.6 miles southeast of Big Sur.

Drainage area.--46.5 sq mi.

Gage.--Nonrecording at site 0.9 mile downstream at different datum prior to Oct. 1, 1951; recording thereafter. Altitude of gage is 400 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 1,400 cfs prior to Oct. 1, 1951; below 1,400 cfs and extended above on basis of slope-area measurement at 5,220 cfs thereafter.

Bankfull stage.--Not subject to overflow.

Remarks.--Only annual peak is shown for 1951. Base for partial-duration series, 700 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1951	Nov. 19, 1950	9.8	4,200	1958	Feb. 2, 1958	5.84	1,010
1952	Dec. 3, 1951	7.14	1,890	1958	Feb. 19, 1958	5.85	1,010
	Dec. 28, 1951	8.82	3,180		Feb. 24, 1958	6.86	1,700
	Jan. 12, 1952	8.94	3,290		Mar. 15, 1958	6.64	1,510
	Jan. 14, 1952	9.90	4,150		Mar. 21, 1958	6.33	1,290
	Jan. 25, 1952	8.76	3,120		Apr. 2, 1958	11.56	5,680
	Mar. 15, 1952	6.93	1,710		Apr. 5, 1958	7.41	2,050
	Mar. 18, 1952	6.07	1,120	1959	Feb. 16, 1959	6.02	1,030
1953	Dec. 1, 1952	5.73	945	1959	Sept. 19, 1959	6.22	1,170
	Dec. 7, 1952	8.52	2,920				
	Jan. 8, 1953	6.52	1,400				
	Jan. 13, 1953	5.32	744	1960	Jan. 24, 1960	5.58	820
	Mar. 19, 1953	6.63	1,450	1960	Feb. 1, 1960	7.72	2,280
	Apr. 27, 1953	6.04	1,100		Feb. 8, 1960	6.25	1,280
1954	Jan. 17, 1954	5.94	1,050	1961	Dec. 1, 1960	5.45	760
	Feb. 13, 1954	5.64	900	1962	Feb. 10, 1962	8.67	3,040
	Feb. 17, 1954	5.56	860	1962	Feb. 15, 1962	8.80	3,160
1955	Dec. 2, 1954	5.18	630		Mar. 5, 1962	5.48	820
				1963	Oct. 13, 1962	7.43	2,040
1956	Dec. 20, 1955	5.98	1,070	1963	Feb. 1, 1963	11.23	5,400
	Dec. 23, 1955	11.05	5,220		Feb. 10, 1963	5.68	918
	Dec. 26, 1955	7.14	1,840		Apr. 14, 1963	6.30	1,340
	Jan. 1, 1956	5.82	1,000				
	Jan. 25, 1956	8.18	2,640	1964	Nov. 5, 1963	5.64	924
	Feb. 22, 1956	8.16	2,630	1964	Nov. 14, 1963	5.31	726
					Nov. 19, 1963	5.71	966
1957	Feb. 24, 1957	7.43	2,010		Jan. 20, 1964	6.48	1,470
	May 18, 1957	6.38	1,250	1965	Dec. 22, 1964	5.38	768
1958	Dec. 16, 1957	5.55	741	1965	Dec. 26, 1964	5.57	882
	Jan. 24, 1958	7.15	1,870		Jan. 3, 1965	5.40	780
					Jan. 6, 1965	7.37	2,100

CARMEL RIVER BASIN

1432. Carmel River at Robles del Rio, Calif.

Location.--Lat 36°28'28", long 121°43'40", in Los Laureles Grant, on downstream side of county road bridge at Robles del Rio, Monterey County, 0.2 mile downstream from Hitchcock Canyon and 11 miles southeast of town of Carmel.

Drainage area.--193 sq mi.

Gage.--Recording. Altitude of gage is 270 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 2,700 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Peaks regulated by Los Padres Reservoir (capacity, 3,000 acre-ft) and San Clemente Reservoir (capacity, 1,600 acre-ft) beginning prior to 1955. Base for partial-duration series, 1,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1956	Dec. 23, 1955	11.7	6,900	1960	Feb. 2, 1960	5.46	838
1958	Jan. 26, 1958	7.32	1,140	1961	Jan. 26, 1961	3.12	22
	Feb. 3, 1958	7.87	1,660	1962	Feb. 10, 1962	7.70	2,490
	Feb. 19, 1958	8.55	2,250		Feb. 15, 1962	7.58	2,340
	Feb. 24, 1958	8.63	2,330	1963	Jan. 31, 1963	9.60	4,950
	Mar. 16, 1958	8.23	1,960		Apr. 15, 1963	6.46	1,120
	Mar. 21, 1958	8.60	2,300	1964	Jan. 21, 1964	6.60	995
	Mar. 27, 1958	6.95	1,040				
	Apr. 2, 1958	10.50	7,100	1965	Jan. 7, 1965	6.95	1,220
	Apr. 6, 1958	8.00	3,040				
1959	Feb. 16, 1959	7.50	2,500				

SALINAS RIVER BASIN

1435. Salinas River near Pozo, Calif.

Location.--Lat 35°18'20", long 120°24'20", in SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 18, T.30 S., R.15 E., on right bank 0.4 mile downstream from highway bridge, 1.5 miles downstream from Pozo Creek, 1.7 miles west of Pozo, and 7 miles upstream from Salinas Dam.

Drainage area.--74.1 sq mi.

Gage.--Recording. Altitude of gage is 1,350 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 4,500 cfs.

Bankfull stage.--10 ft.

Remarks.--Only annual peaks are shown prior to Oct. 1, 1948. Base for partial-duration series, 100 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1943	Jan. 21, 1943	13.35	7,210	1952	Dec. 5, 1951	6.47	-
1944	Feb. 22, 1944	9.09	2,230		Dec. 30, 1951	9.23	1,730
1945	Feb. 2, 1945	11.35	3,530		Jan. 12, 1952	10.46	3,510
					Jan. 15, 1952	12.5	5,750
1946	Mar. 29, 1946	8.48	1,540		Jan. 25, 1952	6.70	830
1947	Nov. 20, 1946	7.37	966		Mar. 7, 1952	6.05	562
1948	Apr. 10, 1948	4.55	82		Mar. 15, 1952	10.65	3,700
1949	Mar. 4, 1949	5.77	347	1953	Nov. 15, 1952	4.56	137
	Mar. 10, 1949	-	225		Dec. 1, 1952	6.15	638
1950	Feb. 6, 1950	9.60	2,000		Dec. 19, 1952	4.63	125
	Apr. 8, 1950	-	208		Dec. 27, 1952	4.73	170
1951	Jan. 19, 1951	5.71	196		Dec. 30, 1952	5.47	443
					Jan. 8, 1953	6.11	624

Peak stages and discharges of Salinas River near Pozo, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1954	Jan. 24, 1954	8.05	1,530	1959	Feb. 16, 1959	4.97	354
	Feb. 13, 1954	5.80	553		Feb. 1, 1960	6.55	805
	Feb. 17, 1954	5.17	320		Feb. 10, 1960	4.08	100
	Mar. 20, 1954	4.82	217				
	Mar. 30, 1954	4.94	251	1961	Dec. 1, 1960	3.94	68
1955	Jan. 31, 1955	4.62	115				
	Feb. 27, 1955	4.79	142	1962	Dec. 2, 1961	4.15	116
1956	Dec. 23, 1955	6.67	815		Jan. 20, 1962	5.52	496
	Jan. 25, 1956	10.65	3,920		Feb. 9, 1962	9.90	2,960
1957	May 19, 1957	3.79	40		Feb. 15, 1962	5.86	598
					Feb. 19, 1962	6.12	676
1958	Jan. 26, 1958	5.26	371		Mar. 6, 1962	4.77	294
	Feb. 4, 1958	6.34	805	1963	Feb. 1, 1963	4.01	132
	Feb. 19, 1958	5.65	536		Feb. 10, 1963	5.67	541
	Feb. 25, 1958	8.79	2,220		Feb. 13, 1963	3.97	116
	Mar. 15, 1958	6.78	2,090		Apr. 15, 1963	4.97	343
	Mar. 21, 1958	7.38	1,330		Apr. 20, 1963	4.48	226
	Mar. 27, 1958	6.00	643		Apr. 25, 1963	3.92	105
	Mar. 30, 1958	5.11	316	1964	Nov. 19, 1963	a3.77	34
	Apr. 3, 1958	11.26	4,360				
	Apr. 6, 1958	8.95	2,200	1965	Jan. 6, 1965	6.12	676
1959	Feb. 11, 1959	4.61	255		Apr. 9, 1965	6.95	960

a Occurred May 12, 1964; backwater from beaver dam.

1470. Jack Creek near Templeton, Calif.

Location--Lat 35°34', long 120°48', in Paso de Robles Grant, on left bank 1.4 miles upstream from mouth, 1.8 miles northwest of Oakdale School, and 5.6 miles west of Templeton, San Luis Obispo County.

Drainage area--25.3 sq mi.

Gage--Recording. Altitude of gage is 980 ft (from topographic map).

Stage-discharge relation--Defined by current-meter measurements below 1,500 cfs and extended above on basis of slope-area measurement at 5,040 cfs.

Bankfull stage--Not subject to overflow.

Remarks--Base for partial-duration series, 500 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1950	Jan. 14, 1950	-	1,280	1956	Dec. 26, 1955	5.47	855
	Feb. 6, 1950	6.30	1,350		Dec. 31, 1955	5.11	684
	Mar. 24, 1950	-	707		Jan. 25, 1956	9.56	5,040
1951	Nov. 19, 1950	5.51	911		Feb. 23, 1956	4.95	612
1952	Dec. 4, 1951	6.89	1,810	1957	May 18, 1957	4.56	488
	Dec. 28, 1951	6.67	1,640				
	Jan. 12, 1952	5.72	1,040	1958	Dec. 16, 1957	4.98	622
	Jan. 15, 1952	7.81	2,690		Jan. 24, 1958	6.14	1,260
	Jan. 25, 1952	6.58	1,560		Feb. 4, 1958	5.00	625
	Mar. 15, 1952	5.68	1,020		Feb. 19, 1958	6.46	1,520
1953	Dec. 1, 1952	4.72	516		Feb. 24, 1958	7.19	2,080
	Dec. 7, 1952	6.83	1,760		Mar. 15, 1958	6.15	1,270
	Dec. 28, 1952	5.00	635		Mar. 21, 1958	5.83	1,040
	Dec. 30, 1952	5.88	1,160		Mar. 27, 1958	4.80	522
	Jan. 7, 1953	5.83	1,120		Apr. 3, 1958	8.01	2,940
1954	Jan. 24, 1954	5.41	856		Apr. 6, 1958	5.56	894
	Feb. 14, 1954	5.42	861	1959	Feb. 16, 1959	6.12	1,270
	Feb. 17, 1954	4.72	516		Feb. 1, 1960	8.48	3,490
	Mar. 19, 1954	4.85	569		Feb. 8, 1960	4.86	545
1955	Jan. 18, 1955	5.39	815	1961	Dec. 1, 1960	5.36	795
	Feb. 27, 1955	6.34	1,380	1962	Dec. 1, 1961	5.17	700
1956	Dec. 23, 1955	6.50	1,500		Jan. 20, 1962	7.62	2,490
					Feb. 9, 1962	9.08	4,320

Peak stages and discharges of Jack Creek near Templeton, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1962	Feb. 15, 1962	7.37	2,240	1964	Nov. 19, 1963	4.65	450
	Mar. 6, 1962	4.83	530				
1963	Jan. 31, 1963	6.90	1,820	1965	Dec. 26, 1964	5.14	685
	Feb. 9, 1963	5.26	745		Jan. 6, 1965	6.42	1,440
	Mar. 28, 1963	5.91	1,100		Apr. 4, 1965	5.01	620

1475. Salinas River at Paso Robles, Calif.

Location--Lat 35°37'40", long 120°41'05", in Paso de Robles Grant, on downstream side of left pier of bridge on State Highway 41 at Paso Robles, San Luis Obispo County, 3.5 miles upstream from Huerfuer Creek.

Drainage area--389 sq mi.

Gage--Nonrecording prior to June 14, 1951; recording thereafter. Datum of gage is 670.61 ft above mean sea level (levels by Corps of Engineers).

Stage-discharge relation--Defined by current-meter measurements below 6,000 cfs and extended above on basis of velocity-area studies.

Bankfull stage--Not subject to overflow.

Historical data--Flood of Feb. 10-13, 1938, reached a stage of 16.9 ft.

Remarks--Peaks regulated by Salinas Reservoir (capacity, 26,000 acre-ft) beginning in 1941. Peaks in the years 1947 and 1950 are maximum observed. Only annual peaks are shown prior to Oct. 1, 1950. Base for partial-duration series, 1,100 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1938	Feb. 10-13, 1938	16.9	-	1957	May 19, 1957	7.30	340
1940	Jan. 10, 1940	11.32	4,420	1958	Jan. 25, 1958	9.77	2,030
1941	Mar. 5, 1941	13.65	9,870		Feb. 4, 1958	11.17	2,950
1942	Jan. 25, 1942	12.3	6,700		Feb. 19, 1958	12.25	4,780
1943	Mar. 9, 1943	16.2	14,200		Feb. 25, 1958	12.80	5,600
1944	Feb. 22, 1944	12.55	6,590		Mar. 16, 1958	11.95	4,120
1945	Feb. 2, 1945	12.35	6,260		Mar. 22, 1958	11.52	3,570
					Mar. 27, 1958	10.48	2,410
1946	Mar. 30, 1946	9.62	2,500		Mar. 30, 1958	10.07	2,060
1947	Nov. 23, 1946	8.30	1,080		Apr. 3, 1958	17.24	13,000
1948	Apr. 10, 1948	10.0	2,930		Apr. 7, 1958	14.18	7,530
1949	Mar. 4, 1949	11.3	4,650	1959	Feb. 16, 1959	9.26	978
1950	Feb. 6, 1950	11.03	4,260		Feb. 1, 1960	11.27	3,060
1951	Dec. 3, 1950	8.74	1,650	1960	Feb. 1, 1960	11.27	3,060
1952	Dec. 5, 1951	8.68	1,500	1961	-	-	0
	Dec. 30, 1951	10.58	3,340	1962	Jan. 20, 1962	10.02	2,120
	Jan. 15, 1952	14.45	8,580		Feb. 9, 1962	15.18	9,460
	Jan. 25, 1952	12.54	5,860		Feb. 15, 1962	13.44	6,330
	Mar. 15, 1952	13.85	7,690		Feb. 18, 1962	10.72	2,470
					Mar. 6, 1962	10.38	2,050
1953	Dec. 7, 1952	10.04	2,510	1963	Feb. 1, 1963	11.09	2,530
	Dec. 30, 1952	9.00	1,540		Feb. 10, 1963	10.57	1,960
	Jan. 8, 1953	10.43	2,750		Mar. 28, 1963	10.21	1,580
1954	Jan. 25, 1954	8.88	1,460	1964	Jan. 22, 1964	8.12	237
1955	Jan. 18, 1955	8.03	1,040				
1956	Dec. 24, 1955	10.95	2,900	1965	Jan. 6, 1965	11.78	3,420
	Dec. 26, 1955	9.62	1,710		Apr. 9, 1965	10.21	1,710
	Jan. 25, 1956	16.73	12,000				

1476. Huerhuero Creek near Creston, Calif.

Location.--Lat 35°35'00", long 120°33'15", in NE $\frac{1}{4}$ sec.15, T.27 S., R.13 E., on left bank 1 mile northwest of Genesee School and 4.6 miles northwest of Creston.

Drainage area.--101 sq mi.

Gage.--Recording. Altitude of gage is 930 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 140 cfs and extended above on basis of slope-area measurement at 808 cfs.

Bankfull stage.--8 ft.

Remarks.--Base for partial-duration series, 40 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1959	Feb. 11, 1959	3.10	78	1962	Feb. 18, 1962	5.37	681
	Feb. 16, 1959	3.20	96		Feb. 20, 1962	4.47	411
1960	Feb. 1, 1960	2.57	2.5		Mar. 6, 1962	3.86	250
1961	Jan. 26, 1961	2.58	4.8	1963	Feb. 9, 1963	2.30	4.6
					Jan. 22, 1964	2.68	36
1962	Feb. 9, 1962	5.75	808	1965	Apr. 9, 1965	2.15	1.6
	Feb. 11, 1962	3.56	182				
	Feb. 16, 1962	3.57	184				

1485. Estrella Creek near Estrella, Calif.

Location.--Lat 35°42'35", long 120°38'20", in NW $\frac{1}{4}$ sec.36, T.25 S., R.12 E., on right bank 0.2 mile downstream from mouth of Ranchito Canyon and 1.9 miles northwest of Estrella.

Drainage area.--924 sq mi, not including Carrizo Plains.

Gage.--Recording. Altitude of gage is 710 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 2,000 cfs and extended above on basis of slope-area measurement at 8,850 cfs.

Remarks.--Low peaks may be affected by pumpage upstream for irrigation. Base for partial-duration series, 200 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1955	Jan. 19, 1955	2.84	220	1959	Feb. 17, 1959	3.02	395
	Feb. 27, 1955	2.83	250	1960	Feb. 1, 1960	2.36	60
1956	Dec. 25, 1955	3.33	637		Dec. 1, 1960	2.14	16
	Jan. 25, 1956	3.92	1,310	1962	Feb. 9, 1962	3.32	628
1957	Dec. 24, 1956	2.13	15		Feb. 12, 1962	5.02	3,140
					Feb. 16, 1962	3.13	474
1958	Feb. 4, 1958	2.84	275		Feb. 19, 1962	4.22	1,730
	Feb. 19, 1958	4.00	1,440		Mar. 6, 1962	-	(a)
	Mar. 15, 1958	2.90	305	1963	Feb. 1, 1963	2.83	278
	Mar. 17, 1958	4.26	2,140		Feb. 9, 1963	3.48	780
	Mar. 22, 1958	3.85	1,240	1964	Nov. 19, 1963	2.29	48
	Mar. 28, 1958	2.72	214		Apr. 10, 1965	2.10	11
	Apr. 1, 1958	4.10	1,590				
	Apr. 3, 1958	7.05	8,410				
	Apr. 6, 1958	7.20	8,850				

a Discharge unknown; exceeded base.

SALINAS RIVER BASIN

1488. Nacimiento River near Bryson, Calif.

Location.--Lat 35°48'06", long 121°06'50", in NW $\frac{1}{4}$ sec.33, T.24 S., R.8 E., on right bank 0.6 mile upstream from Turtle Creek, 1.6 miles west of Bryson, and 10 miles southwest of Lockwood.

Drainage area.--140 sq mi.

Gage.--Recording. Altitude of gage is 860 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 13,000 cfs and extended above on basis of slope-area measurement at 30,300 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Base for partial-duration series, 4,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1956	Dec. 27, 1955	24.63	30,300	1960	Feb. 1, 1960	15.52	12,300
	Dec. 26, 1955	14.12	9,790	1961	Dec. 1, 1960	12.98	8,070
	Jan. 25, 1956	17.00	14,700		Dec. 2, 1961	12.14	6,900
	Feb. 23, 1956	11.66	6,260	1962	Jan. 20, 1962	11.60	5,900
1957	Jan. 13, 1957	10.12	4,300		Feb. 9, 1962	18.02	16,600
	Feb. 24, 1957	12.60	7,540		Feb. 15, 1962	18.45	17,500
1958	Jan. 24, 1958	13.51	9,000		Mar. 6, 1962	10.88	4,860
	Feb. 3, 1958	12.54	7,580	1963	Jan. 31, 1963	21.08	22,800
	Feb. 19, 1958	13.16	8,450		Feb. 9, 1963	10.54	4,420
	Feb. 24, 1958	15.84	12,800	1964	Jan. 21, 1964	11.71	6,070
	Mar. 15, 1958	13.08	8,130		Jan. 3, 1965	10.27	4,080
	Mar. 21, 1958	15.25	11,800	1965	Jan. 6, 1965	14.80	11,700
	Apr. 3, 1958	20.96	23,100				
	Apr. 6, 1958	11.30	5,980				
1959	Feb. 16, 1959	14.78	11,100				

1495. Nacimiento River near San Miguel, Calif.

Location.--Lat 35°47'00", long 120°47'24", in SE $\frac{1}{4}$ sec.4, T.25 S., R.11 E., 4 miles upstream from mouth and 5.5 miles northwest of San Miguel.

Drainage area.--343 sq mi.

Gage.--Recording. Datum of gage is 555.48 ft above mean sea level (levels by Corps of Engineers).

Stage-discharge relation.--Defined by current-meter measurements below 23,000 cfs and extended above on basis of slope-area measurement at 58,600 cfs.

Historical data.--Flood of February 1938 reached a peak stage of 9.2 ft, discharge 41,000 cfs, from slope-area measurement.

Remarks.--Flow regulated by Nacimiento Reservoir (usable capacity, 340,000 acre-ft) beginning in November 1956. Only annual peaks are shown in 1938, 1940-47 and 1957. Base for partial-duration series, 9,600 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1938	February 1938	9.2	41,000	1948	Apr. 10, 1948	6.00	9,160
1940	Feb. 28, 1940	6.74	17,100	1949	Mar. 3, 1949	9.24	27,500
1941	Apr. 4, 1941	8.16	28,100	1950	Feb. 5, 1950	-	11,600
1942	Jan. 23, 1942	9.15	36,200		Feb. 6, 1950	7.39	15,000
1943	Jan. 21, 1943	10.45	50,800	1951	Nov. 19, 1950	7.60	15,400
1944	Feb. 29, 1944	7.85	24,600		Dec. 29, 1951	9.32	27,500
1945	Feb. 2, 1945	9.73	42,500	1952	Jan. 12, 1952	8.72	23,500
1946	Dec. 22, 1945	6.82	12,200		Jan. 15, 1952	12.57	53,100
1947	Nov. 23, 1946	5.58	7,540				

Peak stages and discharges of Nacimiento River near San Miguel, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1952	Jan. 25, 1952	7.87	17,800	1956	Dec. 23, 1955	13.15	58,600
	Mar. 15, 1952	8.80	23,900		Dec. 26, 1955	7.64	16,400
1953	Dec. 7, 1952	8.17	19,600		Jan. 25, 1956	10.27	34,200
1954	Feb. 14, 1954	5.73	7,860		Feb. 23, 1956	6.28	9,820
1955	Jan. 18, 1955	5.32	5,460	1957	Mar. 15-19, 1957	1.64	535

1500. San Antonio River at Pleyto, Calif.

Location.--Lat 35°51'55", long 120°59'30", in Pleyto Grant, on downstream side of left abutment of highway bridge at old townsite of Pleyto, Monterey County, 1.1 miles downstream from Copperhead Creek and 15 miles west of Bradley.

Drainage area.--284 sq mi.

Gage.--Recording. Prior to May 10, 1939, at datum 1.00 ft higher. Altitude of gage is 720 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 4,500 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Only annual peaks are shown prior to Oct. 1, 1943. Base for partial-duration series, 470 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1930	Feb. 22, 1930	3.04	1,110	1953	Dec. 7, 1952	3.00	990
1931	Jan. 9, 1931	1.21	59		Jan. 8, 1953	3.65	1,570
1932	Dec. 28, 1931	4.55	7,460		Mar. 20, 1953	2.60	700
1933	Jan. 29, 1933	2.03	624	1954	Feb. 14, 1954	3.00	990
1934	Jan. 1, 1934	3.56	3,120		Feb. 18, 1954	2.71	777
1935	Apr. 8, 1935	3.96	4,650	1955	Jan. 19, 1955	1.88	324
1936	Feb. 22, 1936	3.83	4,100	1956	Dec. 23, 1955	5.84	14,500
1937	Feb. 14, 1937	4.49	6,390		Dec. 26, 1955	4.30	2,850
1938	Feb. 11, 1938	5.10	12,500		Dec. 31, 1955	3.32	1,110
1939	Mar. 10, 1939	1.14	317		Jan. 25, 1956	5.32	8,800
1940	Feb. 28, 1940	5.47	10,300		Feb. 23, 1956	3.10	900
1941	Feb. 11, 1941	5.58	11,400	1957	Feb. 25, 1957	4.10	2,500
1942	Jan. 25, 1942	5.42	9,800	1958	Jan. 26, 1958	3.81	1,940
1943	Jan. 22, 1943	5.54	11,000		Feb. 4, 1958	3.64	1,700
1944	Feb. 22, 1944	-	1,200		Feb. 8, 1958	2.75	743
	Feb. 29, 1944	-	2,420		Feb. 13, 1958	2.43	545
	Mar. 4, 1944	4.36	3,030		Feb. 19, 1958	4.71	3,840
1945	Feb. 2, 1945	5.85	13,500		Feb. 25, 1958	5.25	5,680
	Mar. 26, 1945	-	958		Mar. 16, 1958	5.08	4,480
1946	Dec. 22, 1945	3.82	1,870		Mar. 22, 1958	5.18	4,970
	Dec. 25, 1945	-	1,300		Mar. 27, 1958	3.82	1,700
1947	Nov. 23, 1946	2.87	909		Mar. 30, 1958	3.64	1,480
1948	Apr. 10, 1948	1.90	344		Apr. 3, 1958	6.44	19,100
1949	Mar. 4, 1949	3.02	1,420		Apr. 6, 1958	4.80	3,490
	Mar. 11, 1949	-	910	1959	Jan. 10, 1959	3.10	1,120
1950	Feb. 5, 1950	4.56	4,010		Feb. 11, 1959	2.51	660
1951	Nov. 19, 1950	4.20	2,940		Feb. 16, 1959	3.84	2,350
	Dec. 4, 1950	3.25	1,390		Feb. 21, 1959	3.16	1,200
1952	Dec. 5, 1951	2.06	496	1960	Feb. 2, 1960	4.06	2,440
	Dec. 29, 1951	4.82	4,980		Feb. 9, 1960	2.84	910
	Jan. 12, 1952	4.43	3,590	1961	Jan. 27, 1961	1.23	84
	Jan. 15, 1952	5.55	11,200	1962	Feb. 9, 1962	5.44	6,710
	Jan. 25, 1952	5.51	10,700		Feb. 15, 1962	5.50	7,200
	Mar. 15, 1952	4.08	2,250		Feb. 19, 1962	3.20	940
					Mar. 6, 1962	3.13	884
				1963	Jan. 31, 1963	6.35	14,800

Peak stages and discharges of San Antonio River at Pleyto, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1963	Feb. 10, 1963	3.73	1,480	1965	Dec. 27, 1964	2.95	546
	Feb. 13, 1963	3.53	1,240		Jan. 3, 1965	3.74	1,670
	Mar. 28, 1963	2.77	588		Jan. 6, 1965	4.49	3,900
	Apr. 15, 1963	3.20	980				
1964	Jan. 22, 1964	2.71	630				

1505. Salinas River near Bradley, Calif.

Location--Lat 35°55'40", long 120°52'00", in NE $\frac{1}{4}$ sec.15, T.23 S., R.10 E., on left bank 6 miles northwest of Bradley and 7 miles downstream from San Antonio River.

Drainage area--2,536 sq mi.

Gage--Recording. Altitude of gage is 450 ft (from topographic map).

Stage-discharge relation--Defined by current-meter measurements below 19,000 cfs.

Bankfull stage-- Not subject to overflow.

Remarks--Peaks partly regulated by Salinas Reservoir (usable capacity, 26,000 acre-ft) beginning in December 1941 and Nacimiento Reservoir (usable capacity, 340,000 acre-ft) beginning in November 1956. Only annual peaks are shown subsequent to 1956. Base for partial-duration series, 4,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1949	Mar. 3, 1949	10.79	15,200	1954	Feb. 14, 1954	8.77	8,690
	Mar. 11, 1949	-	6,990		Feb. 18, 1954	7.61	4,910
1950	Jan. 14, 1950	-	4,440		Mar. 21, 1954	7.30	4,080
	Feb. 6, 1950	10.66	15,500	1955	Jan. 18, 1955	7.76	5,330
1951	Nov. 19, 1950	10.18	12,800	1956	Dec. 24, 1955	12.01	25,000
	Dec. 4, 1950	7.88	4,720		Dec. 26, 1955	10.00	14,000
1952	Dec. 5, 1951	7.84	4,630		Dec. 31, 1955	7.14	4,590
	Dec. 30, 1951	10.09	16,200		Jan. 27, 1956	11.22	20,200
	Jan. 12, 1952	10.82	19,400		Feb. 23, 1956	8.23	7,290
	Jan. 15, 1952	12.35	26,800	1957	Feb. 25, 1957	5.58	1,840
	Jan. 25, 1952	10.74	19,100		Apr. 3, 1958	12.53	28,400
	Mar. 16, 1952	11.07	20,600		Feb. 25, 1959	6.58	2,910
1953	Dec. 7, 1952	9.73	14,500		Feb. 2, 1960	5.30	940
	Dec. 31, 1952	7.63	5,790	1962	Feb. 10, 1962	9.78	11,700
	Jan. 9, 1953	9.35	11,000	1963	Feb. 1, 1963	9.87	12,200
1954	Jan. 25, 1954	8.22	6,750	1964	Jan. 31, 1964	4.61	708
				1965	Jan. 7, 1965	7.42	4,720

1513. San Lorenzo Creek below Bitterwater Creek, near King City, Calif.

Location--Lat 36°16'05", long 121°03'50", in NW $\frac{1}{4}$ sec.24, T.19 S., R.8 E., on left bank 1.2 miles downstream from Bitterwater Creek, 5 miles northeast of King City, and 10 miles upstream from mouth.

Drainage area--233 sq mi.

Gage--Recording. Altitude of gage is 480 ft (from topographic map).

Stage-discharge relation--Defined by current-meter measurements below 800 cfs.

Remarks--Base for partial-duration series, 200 cfs.

Peak stages and discharges of San Lorenzo Creek below Bitterwater Creek, near King City, Calif.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1959	Feb. 18, 1959	6.39	1,030	1963	Jan. 31, 1963	6.30	940
	Feb. 21, 1959	5.16	504		Feb. 10, 1963	8.13	2,130
1960	Feb. 2, 1960	4.45	133		Feb. 13, 1963	5.73	635
					Mar. 28, 1963	5.29	424
1961	Dec. 1, 1960	4.91	294	1964	Nov. 20, 1963	6.10	585
1962	Dec. 2, 1961	5.03	290		Jan. 22, 1964	4.92	145
	Feb. 9, 1962	8.02	2,050	1965	Jan. 6, 1965	5.29	256
	Feb. 15, 1962	7.70	1,830		Apr. 9, 1965	5.28	253
	Feb. 19, 1962	4.69	222				
	Mar. 6, 1962	5.44	498				

1520. Arroyo Seco near Soledad, Calif.

Location.--Lat 36°16'50", long 121°19'20", in sec.16, T.19 S., R.6 E., on left bank just downstream from bridge, 1.5 miles downstream from Vaquero Creek and 10 miles south of Soledad.

Drainage area.--244 sq mi.

Gage.--Nonrecording prior to June 16, 1929; recording thereafter. Prior to Dec. 3, 1941, at site 1 mile upstream at different datum. Dec. 3, 1941, to Sept. 30, 1959, at datum 2.00 ft higher. Datum of gage is 342.20 ft above mean sea level (Corps of Engineers bench mark).

Stage-discharge relation.--Defined by current-meter measurements below 7,500 cfs prior to Dec. 3, 1941; below 4,600 cfs and extended above on basis of slope-area measurement at 27,700 cfs thereafter.

Bankfull stage.--Not subject to overflow.

Remarks.--Peaks for the years 1906-12, 1915-18, 1921-25 and 1929, are maximum observed. Only annual peaks are shown prior to Oct. 1, 1943. Base for partial-duration series, 1,400 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1906	Jan. 13, 1906	16.4	10,800	1934	Jan. 1, 1934	11.01	7,110
1907	Mar. 23, 1907	16.3	10,700	1935	Apr. 8, 1935	12.12	8,540
1908	Feb. 2, 1908	9.3	2,520	1936	Feb. 13, 1936	13.70	11,100
1909	Jan. 26, 1909	14.0	7,400		Feb. 13, 1937	14.42	12,200
1910	Mar. 21, 1910	10.8	3,710		Feb. 11, 1938	16.5	16,000
1911	Mar. 6, 1911	20.0	17,300		Mar. 9, 1939	5.96	1,580
1912	Mar. 12, 1912	7.6	1,350	1940	Feb. 27, 1940	15.0	13,600
1913	Jan. 15, 1913	8.4	1,900	1941	Apr. 4, 1941	13.00	10,600
1914	Jan. 25, 1914	20.5	17,500		Jan. 24, 1942	11.10	14,100
1915	Feb. 9, 1915	12.2	7,200		Jan. 21, 1943	11.55	16,100
1916	Jan. 17, 1916	15.3	13,700	1944	Feb. 3, 1944	-	2,150
1917	Feb. 21, 1917	16.5	16,000		Feb. 21, 1944	-	1,710
1918	Mar. 12, 1918	9.4	5,030		Feb. 29, 1944	-	5,460
1919	Feb. 10, 1919	10.0	5,800		Mar. 4, 1944	9.20	7,100
1920	Apr. 15, 1920	9.0	4,550	1945	Feb. 2, 1945	12.55	21,100
1921	Jan. 30, 1921	12.0	8,500		Mar. 15, 1945	-	1,680
1922	Feb. 9, 1922	15.8	14,600		Mar. 25, 1945	-	1,660
1923	Dec. 10, 1922	6.75	2,040				
1924	Jan. 27, 1924	6.70	1,900	1946	Dec. 5, 1945	-	1,880
1925	Nov. 9, 1924	-	-		Dec. 21, 1945	10.47	11,600
	Feb. 23, 1925	5.9	1,300		Dec. 25, 1945	-	3,260
1926	Feb. 13, 1926	12.0	8,500	1947	Nov. 20, 1946	7.55	3,480
1927	Nov. 27, 1926	16.5	16,000		Nov. 23, 1946	-	3,370
1928	Mar. 24, 1928	10.0	5,800				
1929	Feb. 3, 1929	9.5	5,150	1948	Apr. 9, 1948	5.22	972
1930	Mar. 4, 1930	9.03	4,590	1949	Mar. 3, 1949	7.60	3,460
1931	Jan. 1, 1931	5.35	810		Mar. 11, 1949	-	3,030
1932	Dec. 27, 1931	13.70	11,100	1950	Jan. 14, 1950	-	3,030
1933	Jan. 29, 1933	7.31	2,540				

Peak stages and discharges of Arroyo Seco near Soledad, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1950	Feb. 4, 1950	9.63	8,460	1958	Feb. 25, 1958	9.94	9,840
	Feb. 6, 1950	-	4,420		Mar. 15, 1958	9.67	8,900
1951	Nov. 19, 1950	12.46	20,600		Mar. 21, 1958	9.26	7,700
	Dec. 3, 1950	8.18	4,540		Mar. 27, 1958	6.63	2,360
					Apr. 3, 1958	14.40	28,300
1952	Dec. 3, 1951	7.68	3,590		Apr. 6, 1958	9.00	5,600
	Dec. 28, 1951	10.38	11,200	1959	Jan. 10, 1959	6.82	1,950
	Jan. 12, 1952	11.14	14,300		Feb. 16, 1959	9.27	6,120
	Jan. 14, 1952	11.32	15,000		Feb. 18, 1959	6.53	1,940
	Jan. 25, 1952	9.35	7,550		Feb. 21, 1959	5.95	1,450
	Mar. 15, 1952	8.77	5,900	1960	Feb. 1, 1960	11.56	6,580
					Feb. 8, 1960	9.80	3,460
1953	Dec. 1, 1952	6.47	2,000	1961	Dec. 1, 1960	9.15	2,600
	Dec. 7, 1952	9.80	9,050				
	Jan. 8, 1952	6.98	2,640	1962	Dec. 2, 1961	8.48	1,880
	Mar. 19, 1953	7.58	3,250		Jan. 20, 1962	8.08	1,530
	Apr. 27, 1953	5.95	1,550		Feb. 9, 1962	12.77	10,300
1954	Feb. 13, 1954	7.33	3,120		Feb. 15, 1962	12.08	8,240
	Feb. 17, 1954	5.82	1,450		Mar. 6, 1962	9.22	2,680
1955	Dec. 2, 1954	6.17	1,740	1963	Oct. 14, 1962	9.10	2,800
	Apr. 21, 1955	6.50	2,080		Jan. 31, 1963	15.55	24,300
1956	Dec. 20, 1955	7.24	2,580		Feb. 9, 1963	9.71	3,570
	Dec. 23, 1955	14.30	27,700		Feb. 13, 1963	8.73	1,850
	Dec. 26, 1955	9.30	7,400		Mar. 28, 1963	9.10	2,400
	Dec. 31, 1955	6.39	1,490		Apr. 7, 1963	8.45	1,460
	Jan. 25, 1956	10.52	11,500		Apr. 14, 1963	9.74	3,630
	Feb. 23, 1956	8.05	4,320				
				1964	Nov. 6, 1963	8.73	1,850
1957	Jan. 13, 1957	7.12	2,730		Nov. 19, 1963	9.15	2,480
	Feb. 25, 1957	8.36	4,950		Jan. 21, 1964	10.34	4,850
	May 19, 1957	6.80	2,400	1965	Dec. 23, 1964	8.84	1,700
1958	Jan. 24, 1958	9.36	7,220		Dec. 27, 1964	9.72	3,470
	Feb. 3, 1958	8.18	4,580		Jan. 3, 1965	9.36	2,610
	Feb. 19, 1958	8.47	5,300		Jan. 6, 1965	11.40	7,700

1525. Salinas River near Spreckels, Calif.

Location.--Lat 36°37'50", long 121°40'40", in El Toro Grant, on right bank 80 ft upstream from bridge on Salinas-Monterey highway, 0.5 mile upstream from Toro Creek, 2 miles west of Spreckels, Monterey County, and 4 miles south of Salinas. Auxiliary gage on first pier near left end of bridge.

Drainage area.--4,156 sq mi.

Gage.--Recording. Datum of gage is 19.87 ft above mean sea level, datum of 1929, supplementary adjustment of 1955.

Stage-discharge relation.--Defined by current-meter measurements below 26,000 cfs and extended above on basis of velocity-area studies.

Bankfull stage.--Not subject to overflow.

Historical data.--The flood of 1862 reached a stage of about 31 ft, referred to the "near Spreckels" gage, from statements of a witness, Charles Bardin.

Remarks.--Low peaks may be affected by diversions for municipal use and irrigation of about 95,000 acres. Peaks partly regulated by Salinas Reservoir (usable capacity, 26,000 acre-ft) beginning Dec. 6, 1941, and Nacimiento Reservoir (usable capacity, 340,000 acre-ft) beginning in November 1956. Peaks in the years 1947 and 1948 are maximum observed. Only annual peaks are shown prior to Oct. 1, 1947, and subsequent to Oct. 1, 1956. Base for partial-duration series, 270 cfs.

Peak stages and discharges of Salinas River near Spreckels, Calif.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1862	-	31	-	1951	Dec. 11, 1950	8.68	632
1911	-	26.1	-		Dec. 18, 1950	6.42	289
					Jan. 22, 1951	9.32	1,020
1914	-	25.2	-	1952	Dec. 31, 1951	18.73	5,450
					Jan. 16, 1952	26.85	31,600
1930	Mar. 7, 1930	7.19	2,460		Jan. 26, 1952	24.81	20,700
					Mar. 16, 1952	25.08	24,400
1931	Feb. 18, 1931	3.13	64				
1932	Dec. 29, 1931	20.40	42,100	1953	Dec. 9, 1952	10.47	1,250
1933	Jan. 31, 1933	7.61	2,850		Jan. 1, 1953	13.47	3,140
1934	Jan. 2, 1934	13.50	8,060		Jan. 9, 1953	18.45	8,930
1935	Apr. 9, 1935	18.70	16,900		Jan. 16, 1953	12.27	2,230
					Mar. 23, 1953	8.47	541
1936	Feb. 24, 1936	20.64	20,500				
1937	Feb. 8, 1937	23.90	27,100	1954	Feb. 16, 1954	11.84	1,850
1938	Feb. 12, 1938	25.0	75,000		Feb. 20, 1954	13.02	2,780
1939	Mar. 12, 1939	2.84	1,140		Mar. 23, 1954	13.37	3,060
1940	Feb. 28, 1940	15.65	26,700		Apr. 2, 1954	12.72	2,540
1941	Mar. 4, 1941	19.9	45,400	1955	Mar. 3, 1955	7.57	(b)
1942	Jan. 26, 1942	16.0	30,000				
1943	Jan. 22, 1943	18.95	42,800	1956	Dec. 25, 1955	24.52	23,600
1944	Mar. 1, 1944	15.0	25,500		Jan. 28, 1956	20.35	10,300
1945	Feb. 3, 1945	21.4	44,800		Jan. 2, 1956	15.54	3,770
					Jan. 26, 1956	23.00	17,800
1946	Dec. 23, 1945	11.7	10,900		Feb. 25, 1956	15.12	3,470
1947	Mar. 10, 1947	3.88	268				
				1957	-	-	(c)
1948	Nov. 17, 1947	2.48	20	1958	Apr. 4, 1958	23.15	35,600
				1959	Feb. 17, 1959	9.96	4,790
1949	Mar. 5, 1949	15.8	5,540	1960	Feb. 10, 1960	7.50	1,750
	Mar. 13, 1949	-	3,050				
				1962	Feb. 17, 1962	13.30	6,550
1950	Feb. 7, 1950	17.71	5,270	1963	Feb. 1, 1963	15.22	7,570
				1964	Jan. 23, 1964	10.25	609
1951	Nov. 20, 1950	11.49	1,300	1965	Jan. 8, 1965	14.25	2,830

a Occurred Jan. 12, 1940.

b Discharge unknown; less than 270 cfs.

c Discharge unknown; less than 50 cfs.

PAJARO RIVER BASIN

1530. Pacheco Creek near Dunneville, Calif.

Location--Lat 36°58'50", long 121°22'45", in Ausaymas y San Felipe Grant, on right bank 350 ft downstream from private road bridge and 3.3 miles north-east of Dunneville, Santa Clara County.

Drainage area--146 sq mi.

Gage--Nonrecording prior to Aug. 19, 1960; recording thereafter. Prior to Nov. 17, 1950, at site 350 ft upstream at datum 6.00 ft higher. Nov. 17, 1950, to Aug. 18, 1960, at site 350 ft upstream at datum 4.00 ft higher. Datum of gage is 230.70 ft above mean sea level, datum of 1947.

Stage-discharge relation--Defined by current-meter measurements below 1,400 cfs and extended on basis of slope-area measurement at 12,600 cfs.

Bankfull stage--Not subject to overflow.

Remarks--Peaks partly regulated by Pacheco Lake (capacity 6,150 acre-ft) beginning prior to 1940. Peaks for the years 1941, 1946, 1949 and 1957-58 are maximum observed. Only annual peaks are shown.

Peak stages and discharges of Pacheco Creek near Dunneville, Calif.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1940	Feb. 27, 1940	9.90	3,650	1953	Dec. 7, 1952	5.65	985
1941	Mar. 3, 1941	10.6	4,070	1954	Mar. 30, 1954	3.08	65
1942	Feb. 6, 1942	6.2	1,740	1955	Jan. 18, 1955	5.40	865
1943	Jan. 21, 1943	14.4	6,300	1956	Dec. 23, 1955	18.6	12,600
1944	Mar. 4, 1944	8.6	2,970	1957	Feb. 25, 1957	2.78	103
1945	Feb. 2, 1945	15.8	7,200	1958	Apr. 3, 1958	14.00	7,700
1946	Dec. 23, 1945	3.7	642	1959	Feb. 16, 1959	11.95	5,680
1947	Nov. 23, 1946	4.3	890	1960	Feb. 8, 1960	8.6	3,150
1948	-	-	0	1961	-	-	0
1949	Mar. 12, 1949	3.00	350	1962	Feb. 15, 1962	8.11	1,080
1950	Feb. 5, 1950	3.90	710	1963	Feb. 1, 1963	17.7	8,900
1951	Dec. 3, 1950	16.4	6,340	1964	Jan. 22, 1964	6.96	574
1952	Jan. 14, 1952	15.0	6,040	1965	Jan. 7, 1965	8.13	1,220

1535. Llagas Creek near Morgan Hill, Calif.

Location.--Lat 37°06'50", long 121°41'25", in Las Uvas Grant, on right bank 500 ft upstream from Llagas Avenue Bridge, 0.3 mile downstream from Chesbro Dam, 0.3 mile upstream from small tributary, and 2.3 miles west of Morgan Hill, Santa Clara County.

Drainage area.--19.6 sq mi.

Gage.--Recording. Altitude of gage is 445 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 1,600 cfs and extended above on basis of computation of flow over dam at 3,190 cfs.

Bankfull stage.--10 ft.

Remarks.--Peaks regulated by Chesbro Reservoir (capacity 7,500 acre-ft) beginning in 1955. Only annual peaks are shown subsequent to Oct. 1, 1955. Base for partial-duration series, 500 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1952	Dec. 4, 1951	4.98	741	1956	Dec. 23, 1955	3.39	334
	Dec. 28, 1951	4.67	608	1957	Oct. 1-2, 1956	1.43	25
	Jan. 12, 1952	8.18	2,760	1958	Apr. 2, 1958	8.45	3,190
	Jan. 14, 1952	7.48	2,260	1959	Feb. 21-26, 1959	1.95	75
	Jan. 25, 1952	4.87	776	1960	June 6-12, 1960	1.39	16
	Mar. 14, 1952	5.87	1,260	1961	Nov. 14, 1960	2.66	177
1953	Dec. 7, 1952	6.30	1,500	1962	Mar. 7, 1962	3.10	302
1954	Feb. 13, 1954	4.26	609	1963	Feb. 1, 1963	4.51	906
1955	Feb. 27, 1955	3.13	249	1964	Oct. 5-8, 1963	1.65	47
				1965	Apr. 16, 1965	2.07	92

1540. Uvas Creek near Morgan Hill, Calif.

Location.--Lat 37°04'00", long 121°41'30" in Las Uvas Grant, on right bank 500 ft upstream from Uvas Dam, 0.6 mile downstream from Eastman Canyon, and 4.8 miles southwest of Morgan Hill, Santa Clara County.

Drainage area.--30.4 sq mi.

Gage.--Recording. Altitude of gage is 390 ft.

Stage-discharge relation.--Defined by current-meter measurements below 4,600 cfs and extended above on basis of slope-area measurements at 6,580 and 10,300 cfs.

Remarks.--Only annual peaks are shown prior to Oct. 1, 1948. Base for partial-duration series 740 cfs.

Peak stages and discharges of Uvas Creek near Morgan Hill, Calif.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1931	Jan. 2, 1931	4.30	385	1951	Dec. 3, 1950	9.73	3,550
1932	Dec. 27, 1931	10.82	4,340	1951	Dec. 8, 1950	9.88	3,720
1933	Jan. 29, 1933	5.85	1,020	1951	Jan. 18, 1951	6.22	1,130
1934	Dec. 12, 1933	5.70	970	1952	Dec. 1, 1951	7.26	1,630
1935	Mar. 6, 1935	6.40	1,340	1952	Dec. 4, 1951	6.96	1,480
1936	Jan. 11, 1936	9.0	3,020	1952	Dec. 28, 1951	7.40	1,700
1937	Feb. 13, 1937	10.6	4,180	1952	Jan. 12, 1952	10.22	4,090
1938	Dec. 11, 1937	13.70	8,630	1952	Jan. 14, 1952	10.00	3,850
1939	Mar. 8, 1939	5.97	975	1952	Jan. 25, 1952	7.95	2,010
1940	Feb. 27, 1940	11.37	5,720	1952	Mar. 14, 1952	7.70	1,860
1941	Apr. 4, 1941	10.75	4,700	1952	Mar. 18, 1952	6.73	1,360
1942	Jan. 24, 1942	10.45	4,340	1953	Dec. 1, 1952	5.37	741
1943	Jan. 21, 1943	12.35	6,740	1953	Dec. 7, 1952	10.76	4,680
1944	Feb. 28, 1944	7.96	1,990	1953	Jan. 7, 1953	5.83	940
1945	Feb. 1, 1945	13.5	8,300	1953	Mar. 19, 1953	6.53	1,280
1946	Dec. 21, 1945	7.46	1,660	1954	Jan. 17, 1954	6.96	1,370
1947	Nov. 22, 1946	7.53	1,700	1954	Feb. 13, 1954	6.54	1,160
1948	Mar. 24, 1948	4.26	305	1954	Feb. 17, 1954	5.55	751
1949	Feb. 7, 1949	-	997	1955	Feb. 27, 1955	6.13	1,090
1949	Mar. 2, 1949	-	968	1956	Dec. 19, 1955	8.67	2,540
1949	Mar. 11, 1949	6.97	1,380	1956	Dec. 23, 1955	14.3	10,300
1950	Jan. 14, 1950	8.87	2,710	1956	Jan. 25, 1956	8.45	2,300
1950	Feb. 6, 1950	-	1,050	1956	Feb. 22, 1956	9.90	3,720
1951	Nov. 18, 1950	10.54	4,450	1957	Feb. 24, 1957	6.42	1,040

1560. San Benito River below McCoy Creek, near Hernandez, Calif.

Location.--Lat 36°23'22", long 120°53'42", in SW $\frac{1}{4}$ sec. 4, T.18 S., R.10 E., on right bank 0.7 mile upstream from Lorenzo Vasquez Canyon, 3.1 miles downstream from McCoy Creek, 4.3 miles downstream from Hernandez Dam, and 6 miles west of Hernandez.

Drainage area.--108 sq mi.

Gage.--Recording. Altitude of gage is 2,000 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 630 cfs and extended above on basis of slope-area measurements at 3,140 and 6,690 cfs.

Remarks.--Peaks regulated by Hernandez Dam (capacity 18,700 acre-ft) beginning in December, 1961. Only annual peaks are shown in 1956, 1958 and 1962. Base for partial-duration series, 100 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1950	Feb. 6, 1950	3.85	338	1953	Dec. 20, 1952	4.30	540
	Apr. 8, 1950	3.42	196	1953	Dec. 27, 1952	3.98	406
1951	Nov. 19, 1950	3.41	233	1953	Dec. 30, 1952	4.42	588
	Dec. 4, 1950	-	121	1953	Jan. 8, 1953	5.25	1,010
	Dec. 8, 1950	-	116	1953	Jan. 13, 1953	3.13	135
	Dec. 14, 1950	-	136	1953	June 16, 1953	3.01	126
	Jan. 18, 1951	-	123	1956	Dec. 24, 1955	7.03	a3,140
1952	Dec. 4, 1951	4.71	715	1958	Apr. 2, 1958	8.93	a6,690
	Dec. 28, 1951	6.42	1,800	1960	Feb. 1, 1960	4.95	852
	Jan. 6, 1952	3.82	367	1960	Feb. 10, 1960	3.58	268
	Jan. 12, 1952	6.32	1,730	1961	Dec. 1, 1960	5.13	981
	Jan. 14, 1952	7.5	3,600	1961	Jan. 26, 1961	3.83	356
	Jan. 24, 1952	5.75	1,320	1961	May 19, 1961	3.95	387
	Mar. 14, 1952	5.88	1,420	1962	Feb. 9, 1962	4.32	a470
	Mar. 18, 1952	4.23	512	1963	May 13, 1963	3.51	137
	Mar. 24, 1952	3.92	402				
1953	Dec. 1, 1952	3.91	398				
	Dec. 7, 1952	4.52	629				

a Annual peak only.

1565. San Benito River near Willow Creek School, Calif.

Location.--Lat 36°36'50", long 121°12'50", in SW¹/₄ sec.21, T.15 S., R.7 E., on right bank 1.7 miles downstream from Willow Creek, 1.8 miles northwest of Willow Creek School, and 10.4 miles northwest of San Benito.

Drainage area.--251 sq mi.

Gage.--Recording. Prior to Jan. 28, 1948, at same site at datum 896.8 ft above mean sea level, unadjusted. Jan. 28, 1948, to Nov. 10, 1955, at site 0.9 mile upstream at different datum. Datum of gage is 878.57 ft above mean sea level, datum of 1929, supplementary adjustment of 1943.

Stage-discharge relation.--Defined by current-meter measurements below 1,600 cfs prior to Jan. 28, 1948; below 2,900 cfs and extended above basis of slope-area measurement at 3,790 cfs for period Jan. 28, 1948, to Nov. 10, 1955; below 600 cfs and extended above on basis of slope-area measurement at 8,210 cfs thereafter.

Bankfull stage.--Not subject to overflow.

Historical data.--Flood of February 1938 reached a stage of about 9.0 ft (former datum), from floodmarks.

Remarks.--Peaks regulated by Hernandez Dam (capacity, 18,700 acre-ft) beginning in December 1961. Only annual peaks are shown prior to Oct. 1, 1946, and subsequent to Oct. 1, 1961. Base for partial-duration series, 150 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1938	February 1938	9.0	-	1954	Feb. 13, 1954	6.87	798
1940	Feb. 25, 1940	4.45	1,750		Feb. 18, 1954	5.76	256
1941	Apr. 4, 1941	7.8	6,200		Mar. 17, 1954	5.46	154
1942	Jan. 25, 1942	4.9	2,300		Mar. 19, 1954	6.31	494
1943	Mar. 9, 1943	4.35	1,680		Mar. 30, 1954	6.28	479
1944	Feb. 29, 1944	4.06	1,330	1955	Dec. 3, 1954	5.89	196
1945	Feb. 2, 1945	5.08	2,460		Jan. 18, 1955	6.57	297
1946	Dec. 22, 1945	3.57	928	1956	Dec. 24, 1955	5.20	3,790
1947	Nov. 23, 24, 1946	1.95	150		Dec. 26, 1955	2.88	666
1948	Apr. 10, 1948	3.92	430		Dec. 31, 1955	2.77	590
1949	Mar. 3, 1949	6.40	2,000		Jan. 6, 1956	1.92	191
	Mar. 20, 1949	-	152		Jan. 25, 1956	3.99	1,770
1950	Feb. 6, 1950	4.16	214	1957	Jan. 13, 1957	2.68	451
	Apr. 9, 1950	-	158		Feb. 25, 1957	2.95	770
1951	Nov. 19, 1950	4.2	67		Mar. 1, 1957	1.89	177
1952	Dec. 5, 1951	5.90	534	1958	Dec. 17, 1957	2.83	355
	Dec. 29, 1951	7.15	1,820		Jan. 26, 1958	2.82	572
	Jan. 12, 1952	7.95	2,850		Feb. 4, 1958	4.88	3,690
	Jan. 15, 1952	8.65	3,920		Feb. 19, 1958	5.08	3,600
	Jan. 25, 1952	7.35	2,060		Feb. 25, 1958	3.60	1,370
	Mar. 15, 1952	8.37	3,470		Mar. 16, 1958	5.51	4,260
	Mar. 19, 1952	5.49	555		Mar. 22, 1958	5.21	3,760
	Mar. 25, 1952	5.02	343		Apr. 3, 1958	8.35	8,210
1953	Dec. 2, 1952	5.28	297		Apr. 5, 1958	-	(a)
	Dec. 7, 1952	5.72	516	1959	Feb. 16, 1959	4.70	1,330
	Dec. 20, 1952	5.64	472		Feb. 21, 1959	3.54	543
	Dec. 28, 1952	5.20	265	1960	Feb. 2, 1960	3.68	423
	Dec. 31, 1952	5.63	466	1961	Dec. 2, 1960	3.49	545
	Jan. 8, 1953	6.13	758		Jan. 27, 1961	2.32	169
1954	Nov. 14, 1953	5.83	282	1962	Feb. 15, 1962	4.42	1,090
	Jan. 25, 1954	5.97	338	1963	Feb. 10, 1963	2.83	168
				1964	Jan. 21, 1964	3.25	305
				1965	Jan. 8, 1965	3.46	-
					Apr. 10, 1965	-	114

a Discharge unknown; exceeded base.

1575. Tres Pinos Creek near Tres Pinos, Calif.

Location.--Lat 36°45'13", long 121°17'03", in Santa Ana y Quien Sabe Grant, on right bank 3.5 miles southeast of Tres Pinos, San Benito County, and 6.2 miles upstream from mouth.

Drainage area.--206 sq mi.

Gage.--Recording. Altitude of gage is 570 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 3,500 cfs.

Bankfull stage.--9 ft.

Remarks.--Low peaks may be affected by diversions for irrigation. Only annual peaks are shown prior to Oct. 1, 1945. Base for partial-duration series, 450 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1938	February 1938	9.0	-	1956	Dec. 31, 1955	4.83	1,800
1940	Feb. 25, 1940	a7.2	4,500		Jan. 5, 1956	3.37	522
					Jan. 15, 1956	3.89	1,070
1941	Apr. 4, 1941	7.75	8,060		Jan. 23, 1956	4.10	1,080
1942	Feb. 6, 1942	3.63	896		Jan. 26, 1956	5.23	2,270
1943	Mar. 9, 1943	4.78	2,520	1957	Dec. 16, 1956	2.38	54
1944	Feb. 22, 1944	2.78	506	1958			
1945	Feb. 2, 1945	3.22	749		Feb. 4, 1958	4.36	1,370
1946	Jan. 5, 1946	2.55	400		Feb. 19, 1958	4.86	1,310
					Feb. 25, 1958	3.84	488
1947	Nov. 20, 1946	1.24	7.8		Mar. 16, 1958	7.02	4,670
					Mar. 21, 1958	5.68	2,350
1948	Apr. 10, 1948	1.61	62		Mar. 30, 1958	4.08	593
					Apr. 3, 1958	7.41	5,490
1949	Mar. 3, 1949	2.82	525	Apr. 6, 1958	5.92	2,650	
1950	Jan. 14, 1950	2.09	218	1959	Jan. 8, 1959	3.59	283
1951	Nov. 19, 1950	4.15	642	1960	Feb. 10, 1960	4.19	593
1952	Dec. 30, 1951	4.36	1,110	1961	Jan. 26, 1961	2.75	4.1
	Jan. 12, 1952	7.54	4,840	1962	Feb. 10, 1962	4.73	607
	Jan. 14, 1952	4.60	1,940		Feb. 15, 1962	5.08	978
	Jan. 25, 1952	5.52	2,680		Feb. 18, 1962	4.79	661
	Mar. 15, 1952	6.76	3,830		Mar. 6, 1962	4.68	564
1953	Jan. 14, 1953	3.04	247	1963	Mar. 28, 1963	4.30	43
1954	Jan. 24, 1954	2.90	292	1964	Jan. 23, 1964	4.53	43
1955	Jan. 18, 1955	2.77	217	1965	Dec. 23, 1964	5.34	1,260
1956	Dec. 23, 1955	6.90	4,750		Dec. 27, 1964	5.05	830
					Jan. 7, 1965	5.58	1,650

a Occurred Jan. 11, 1940.

1585. San Benito River near Hollister, Calif.

Location.--Lat 36°47'17", long 121°22'11", in SW $\frac{1}{4}$ sec.24, T.13 S., R.5 E., on left bank 1,500 ft downstream from Bird Creek, 0.9 mile downstream from Tres Pinos Creek, 2.7 miles west of Tres Pinos, and 4.8 miles southeast of Hollister.

Drainage area.--586 sq mi.

Gage.--Recording. Altitude of gage is 370 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 1,200 cfs and extended above on basis of flood-routing study.

Bankfull stage.--Not subject to overflow.

Remarks.--Peaks regulated by Hernandez Dam (capacity, 18,700 acre-ft) beginning in December 1961. Only annual peaks are shown subsequent to December 1961. Base for partial-duration series, 600 cfs.

Peak stages and discharges of San Benito River near Hollister, Calif.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1950	Jan. 28, 1950	3.19	108	1958	Feb. 4, 1958	8.84	3,330
1951	Nov. 19, 1950	6.56	1,490		Feb. 19, 1958	9.62	3,810
1952	Dec. 29, 1951	8.08	2,750		Feb. 25, 1958	7.90	2,200
	Jan. 12, 1952	10.32	4,960		Mar. 16, 1958	11.90	6,370
	Jan. 15, 1952	9.97	4,610		Mar. 22, 1958	10.60	4,860
	Jan. 25, 1952	9.35	3,990		Mar. 28, 1958	5.80	725
	Mar. 15, 1952	10.80	5,490		Apr. 3, 1958	16.30	11,600
1953	Jan. 8, 1953	5.43	835		Apr. 6, 1958	10.88	5,580
1954	Feb. 14, 1954	4.86	595	1959	Feb. 16, 1959	6.83	1,740
1955	Jan. 19, 1955	4.09	347		Feb. 21, 1959	5.00	667
1956	Dec. 24, 1955	12.55	7,460	1960	Feb. 2, 1960	4.63	430
	Dec. 31, 1955	7.39	2,150	1961	Dec. 3, 1960	2.98	26
	Jan. 23, 1956	5.05	680	1962	Feb. 15, 1962	6.21	1,350
	Jan. 27, 1956	9.08	3,720	1963	Feb. 10, 1963	4.02	339
1957	Feb. 25, 1957	4.62	489	1964	Jan. 24, 1964	3.11	44
				1965	Jan. 7, 1965	5.46	906

a Occurred Jan. 13, 1957.

1590. Pajaro River at Chittenden, Calif.
(Published as "near Chittenden" prior to October 1954)

Location.--Lat 36°54'01", long 121°35'48", in Salsipuedes Grant, on downstream side of right bank pier of State highway bridge, 0.6 mile downstream from Pescadero Creek, 0.6 mile southeast of Chittenden, Santa Cruz County, and 2.3 miles downstream from San Benito River.

Drainage area.--1,186 sq mi.

Gage.--Nonrecording October 1939 to Dec. 19, 1946, June 12-20, 1947, Sept. 24 to Dec. 18, 1947, and May 7, 1948, to May 12, 1949; recording remainder of time. Prior to May 13, 1949, at site 100 ft downstream at same datum. Datum of gage is 81.81 ft above mean sea level (levels by U.S. Weather Bureau).

Stage-discharge relation.--Defined by current-meter measurements below 10,000 cfs prior to May 13, 1949; below 10,100 cfs and extended on basis of slope-conveyance study thereafter.

Bankfull stage.--Not subject to overflow.

Historical data.--Flood in February 1938 reached a stage of 31.3 ft, from flood-marks.

Remarks.--Peaks regulated by Pacheco Lake (capacity, 6,150 acre-ft) beginning in 1960, San Felipe Lake, beginning in 1958, Uvas Reservoir (capacity, 10,000 acre-ft) beginning in 1957 and Chesbro Reservoir (capacity, 7,500 acre-ft) beginning in 1955. Peaks for the years 1942 and 1945-46 are maximum observed. Only annual peaks are shown prior to Oct. 1, 1947. Base for partial-duration series, 400 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1938	February 1938	31.3	-	1949	Mar. 12, 1949	14.63	1,980
1940	Feb. 28, 1940	25.5	9,880		Mar. 20, 1949	-	433
1941	Apr. 4, 1941	26.2	11,100	1950	Jan. 14, 1950	-	465
1942	Jan. 25, 1942	19.2	5,390		Feb. 5, 1950	11.73	1,430
1943	Jan. 21, 1943	24.0	9,000	1951	Nov. 19, 1950	22.68	7,810
1944	Feb. 29, 1944	20.6	6,080		Dec. 4, 1950	19.59	5,310
1945	Feb. 2, 1945	25.8	10,700		Dec. 8, 1950	22.73	7,660
1946	Dec. 25, 1945	11.82	1,500		Dec. 14, 1950	9.10	805
1947	Nov. 23, 1946	10.65	896		Jan. 18, 1951	10.46	1,190
1948	Apr. 30, 1948	6.38	220		Mar. 5, 1951	12.24	1,700
1949	Mar. 4, 1949	-	1,710	1952	Dec. 5, 1951	13.80	2,210
					Dec. 30, 1951	17.18	3,620
					Jan. 12, 1952	24.32	9,220

Peak stages and discharges of Pajaro River at Chittenden, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1952	Jan. 15, 1952	25.15	10,000	1958	Apr. 3, 1958	33.11	23,500
	Jan. 25, 1952	22.82	7,740		Apr. 6, 1958	24.43	10,400
	Mar. 7, 1952	10.00	1,080	1959	Jan. 10, 1959	11.31	1,350
	Mar. 15, 1952	22.09	7,080		Feb. 11, 1959	-	-
1953	Dec. 7, 1952	16.42	2,870		Feb. 16, 1959	16.04	3,390
	Dec. 31, 1952	9.80	930		Feb. 19, 1959	12.35	1,690
	Jan. 9, 1953	14.08	2,010		Feb. 21, 1959	14.85	2,740
	Jan. 14, 1953	10.74	1,130		Sept. 19, 1959	13.14	2,240
	Mar. 20, 1953	9.10	790	1960	Feb. 1, 1960	12.08	1,600
					Feb. 8, 1960	14.96	2,880
1954	Feb. 14, 1954	9.89	682	1961	Mar. 17, 1961	5.56	23
	Feb. 18, 1954	8.65	501	1962	Feb. 10, 1962	9.50	1,180
1955	Jan. 18, 1955	9.87	871		Feb. 15, 1962	12.58	2,910
	Feb. 27, 1955	8.79	638		Feb. 19, 1962	10.30	1,550
1956	Dec. 20, 1955	11.18	1,180		Mar. 6, 1962	11.76	2,360
	Dec. 24, 1955	32.46	24,000	1963	Feb. 1, 1963	20.76	11,600
	Dec. 31, 1955	17.74	3,380		Feb. 13, 1963	10.82	2,600
	Jan. 6, 1956	13.90	1,850		Mar. 28, 1963	8.50	1,160
	Jan. 16, 1956	13.36	1,710		Apr. 7, 1963	11.22	2,920
	Jan. 27, 1956	24.12	8,830		Apr. 14, 1963	8.78	1,300
	Feb. 23, 1956	13.31	1,700		Apr. 21, 1963	9.02	1,430
1957	Feb. 25, 1957	10.91	1,110	1964	Jan. 22, 1964	9.24	1,460
	May 19, 1957	10.40	1,040	1965	Dec. 23, 1964	10.86	2,200
1958	Jan. 26, 1958	8.22	506		Dec. 27, 1964	9.61	1,590
	Feb. 5, 1958	15.02	1,890		Dec. 31, 1964	9.55	1,570
	Feb. 12, 1958	8.32	470		Jan. 3, 1965	8.64	1,200
	Feb. 20, 1958	19.80	4,470		Jan. 6, 1965	12.80	3,300
	Feb. 25, 1958	19.59	4,600		Jan. 9, 1965	6.33	462
	Mar. 16, 1958	23.66	8,140				
	Mar. 22, 1958	23.14	8,830				

1591.5. Corralitos Creek near Corralitos, Calif.

Location--Lat 37°00'20", long 121°48'25", in Los Corralitos Grant, on left bank 0.5 mile downstream from Mormon Gulch, 1.2 miles upstream from Corralitos, Santa Cruz County, and 7 miles northwest of Watsonville.

Drainage area--10.6 sq mi.

Gage--Recording. Altitude of gage is 310 ft (from topographic map).

Stage-discharge relation--Defined by current-meter measurements below 630 cfs and extended above on basis of estimate of flow over dam at 1,970 cfs.

Bankfull stage--Not subject to overflow.

Remarks--Low peaks may be affected by diversion of 3.9 cfs for municipal supply of city of Watsonville. Base for partial-duration series, 200 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1958	Jan. 29, 1958	3.50	216	1962	Feb. 9, 1962	4.79	537
	Feb. 2, 1958	3.85	253		Feb. 14, 1962	5.55	800
	Feb. 12, 1958	3.92	217		Mar. 6, 1962	3.90	306
	Feb. 19, 1958	4.35	353	1963	Oct. 13, 1962	6.13	1,050
	Feb. 24, 1958	3.91	261		Jan. 31, 1963	7.62	1,920
	Mar. 21, 1958	3.90	260		Apr. 6, 1963	4.97	531
	Apr. 2, 1958	7.55	1,970		Apr. 14, 1963	3.51	259
	Apr. 5, 1958	3.46	222		Apr. 19, 1963	3.42	244
1959	Jan. 9, 1959	5.10	568	1964	Jan. 20, 1964	3.74	299
	Feb. 16, 1959	5.14	588	1965	Dec. 22, 1964	6.00	990
	Sept. 18, 1959	4.40	368		Dec. 26, 1964	3.81	312
1960	Feb. 1, 1960	5.34	719		Jan. 5, 1965	4.60	485
	Feb. 8, 1960	5.66	844				
1961	Nov. 26, 1960	1.80	28				

PAJARO RIVER BASIN

1592. Corralitos Creek at Freedom, Calif.

Location.--Lat 36°56'22", long 121°46'10", in Los Corralitos Grant, on right bank just upstream from Green Valley Road Bridge, 0.25 mile north of Freedom, Santa Cruz County, and 2.3 miles north of Watsonville.

Drainage area.--27.8 sq mi.

Gage.--Recording. Altitude of gage is 80 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 800 cfs and extended on basis of contracted-opening measurement at 3,620 cfs.

Bankfull stage.--16 ft.

Historical data.--Flood of Dec. 22, 1955, reached a stage of 15.6 ft, from floodmarks (discharge, 3,620 cfs, determined on basis of contracted-opening measurement of peak flow).

Remarks.--Base for partial-duration series, 350 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1955	Dec. 22, 1955	15.6	3,620	1961	Nov. 26, 1960	2.74	46
1957	May 18, 1957	7.67	715	1962	Feb. 9, 1962	5.66	738
1958	Feb. 2, 1958	4.79	438		Feb. 14, 1962	6.66	1,050
	Feb. 12, 1958	5.08	510		Mar. 6, 1962	4.60	435
	Feb. 19, 1958	5.41	625	1963	Oct. 13, 1962	7.70	1,350
	Feb. 24, 1958	4.85	518		Jan. 31, 1963	11.80	2,580
	Mar. 15, 1958	4.54	440		Feb. 13, 1963	5.04	539
	Mar. 21, 1958	4.94	541		Mar. 27, 1963	4.76	447
	Apr. 2, 1958	12.59	2,680		Apr. 6, 1963	7.48	1,280
	Apr. 5, 1958	5.18	604		Apr. 14, 1963	5.62	726
					Apr. 19, 1963	5.57	711
1959	Jan. 9, 1959	6.30	898	1964	Jan. 20, 1964	5.54	702
	Feb. 16, 1959	6.50	950		Dec. 22, 1964	9.65	1,800
	Sept. 19, 1959	6.12	850	1965	Dec. 26, 1964	6.18	754
1960	Feb. 1, 1960	6.80	962		Jan. 6, 1965	6.70	910
	Feb. 8, 1960	7.50	1,140				

APTOS CREEK BASIN

1597. Aptos Creek at Aptos, Calif.

Location.--Lat 36°58'35", long 121°54'05", in Aptos Grant, on left bank at Aptos, Santa Cruz County, 0.6 mile upstream from mouth.

Drainage area.--12.2 sq mi.

Gage.--Recording. Altitude of gage is 10 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 980 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Base for partial-duration series, 100 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1959	Jan. 9, 1959	5.70	299	1962	Feb. 14, 1962	6.02	560
	Feb. 16, 1959	5.72	283		Mar. 6, 1962	5.72	398
	Sept. 18, 1959	5.25	223	1963	Oct. 13, 1962	6.46	428
1960	Feb. 1, 1960	5.84	299		Jan. 31, 1963	10.82	2,110
	Feb. 8, 1960	5.85	302		Feb. 13, 1963	5.42	213
1961	Nov. 26, 1960	3.41	24		Mar. 27, 1963	5.74	315
					Apr. 6, 1963	7.23	699
				Apr. 14, 1963	6.72	600	
1962	Feb. 9, 1962	4.75	244	Apr. 19, 1963	5.78	365	

Peak stages and discharges of Aptos Creek at Aptos, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1964	Jan. 21, 1964	5.30	262	1965	Jan. 3, 1965	5.52	255
1965	Dec. 22, 1964	7.55	968		Jan. 6, 1965	5.58	275
	Dec. 26, 1964	5.87	365		Apr. 9, 1965	5.01	136

SOQUEL CREEK BASIN

1598. West Branch Soquel Creek near Soquel, Calif.

Location--Lat 37°03'05", long 121°56'20", in NW $\frac{1}{4}$ sec.23, T.10 S., R.1 W., on left bank 0.5 mile upstream from Soquel Creek and 4.5 miles north of Soquel.

Drainage area--12.2 sq mi.

Gage--Recording. Altitude of gage is 220 ft (from topographic map).

Stage-discharge relation--Defined by current-meter measurements below 740 cfs and extended above on basis of slope-area measurement at 2,110 cfs.

Bankfull stage--12 ft.

Remarks--Base for partial-duration series, 300 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1959	Jan. 9, 1959	6.14	1,130	1963	Feb. 9, 1963	4.87	403
	Feb. 16, 1959	7.05	1,880		Feb. 13, 1963	5.08	500
					Mar. 27, 1963	5.20	560
1960	Feb. 1, 1960	6.03	1,040		Apr. 6, 1963	5.82	880
	Feb. 8, 1960	5.20	565		Apr. 14, 1963	6.72	1,370
					Apr. 19, 1963	4.85	395
1961	Nov. 26, 1960	3.78	91	1964	Jan. 20, 1964	5.10	510
1962	Feb. 9, 1962	5.40	665	1965	Dec. 22, 1964	6.64	1,280
	Feb. 14, 1962	7.00	1,620		Dec. 26, 1964	4.80	320
	Mar. 6, 1962	4.85	420		Jan. 3, 1965	5.19	488
1963	Oct. 13, 1962	7.96	2,110		Jan. 5, 1965	6.83	1,400
	Jan. 31, 1963	10.68	4,120		Apr. 9, 1965	4.85	340

1600. Soquel Creek at Soquel, Calif.

Location--Lat 36°59'29", long 121°57'17", in NE $\frac{1}{4}$ sec.10, T.11 S., R.1 W., on left bank 0.2 mile upstream from highway bridge in town of Soquel and 0.4 mile downstream from Bates Creek.

Drainage area--40.2 sq mi.

Gage--Nonrecording 1937, 1938; recording subsequent to May 1951. Altitude of gage is 40 ft (from topographic map).

Stage-discharge relation--Defined by current-meter measurements below 2,900 cfs and extended above on basis of slope-area measurements at 5,120 and 15,800 cfs.

Bankfull stage--16 ft.

Historical data--Flood of Feb. 13, 1937, reached a stage of 12.6 ft, from floodmarks, and a discharge of 5,950 cfs, from precipitation records and comparison with nearby streams. Flood of winter of 1950-51 reached a stage of about 15.33 ft.

Remarks--Only annual peaks are shown prior to Oct. 1, 1951. Base for partial-duration series, 750 cfs.

SOQUEL CREEK BASIN

Peak stages and discharges of Soquel Creek at Soquel, Calif.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1937	Feb. 13, 1937	12.6	5,950	1958	Feb. 19, 1958	10.46	3,030
1951	Winter 1951	15.33	-		Feb. 24, 1958	9.54	2,470
1952	Dec. 1, 1951	7.62	1,090		Mar. 15, 1958	6.80	986
	Dec. 4, 1951	8.97	1,980		Mar. 21, 1958	8.45	1,820
	Dec. 28, 1951	10.58	3,500		Apr. 2, 1958	13.24	5,080
	Jan. 12, 1952	11.63	4,910		Apr. 5, 1958	7.45	1,370
	Jan. 14, 1952	11.63	4,910	1959	Jan. 9, 1959	8.90	2,370
	Jan. 25, 1952	9.91	2,810		Feb. 16, 1959	9.58	2,770
	Feb. 1, 1952	7.10	820		Sept. 18, 1959	6.55	835
	Mar. 14, 1952	9.80	2,700	1960	Feb. 1, 1960	9.15	2,240
1953	Dec. 7, 1952	11.45	4,630		Feb. 8, 1960	8.38	1,780
	Dec. 30, 1952	6.99	794	1961	Nov. 26, 1960	4.68	106
	Jan. 7, 1953	8.87	2,030	1962	Feb. 9, 1962	8.61	1,860
	Mar. 19, 1953	7.53	1,080		Feb. 14, 1962	10.20	2,940
	Apr. 27, 1953	6.97	818		Mar. 6, 1962	6.89	1,030
1954	Jan. 17, 1954	7.68	1,180	1963	Oct. 13, 1962	13.34	5,160
	Feb. 13, 1954	7.25	945		Jan. 31, 1963	16.27	7,950
1955	Nov. 15, 1954	6.35	578		Feb. 9, 1963	6.38	869
1956	Dec. 19, 1955	7.82	1,340		Feb. 13, 1963	6.80	1,060
	Dec. 23, 1955	22.33	15,800		Mar. 27, 1963	7.21	1,190
	Dec. 26, 1955	11.17	3,390		Apr. 6, 1963	8.93	2,110
	Jan. 15, 1956	8.54	1,180		Apr. 14, 1963	10.30	2,930
	Jan. 25, 1956	8.00	1,320		Apr. 19, 1963	6.77	977
	Feb. 22, 1956	8.21	1,500	1964	Jan. 21, 1964	7.55	1,390
1957	Oct. 30, 1956	7.09	865	1965	Dec. 22, 1964	10.47	3,180
	Feb. 24, 1957	7.57	1,060		Dec. 26, 1964	6.80	1,140
	May 18, 1957	9.01	2,010		Jan. 3, 1965	7.10	1,280
1958	Feb. 2, 1958	7.46	1,440		Jan. 5, 1965	8.93	2,230
	Feb. 12, 1958	6.99	1,100		Apr. 9, 1965	6.57	1,030

a Backwater from log jam.

SAN LORENZO RIVER BASIN

1603. Zayante Creek at Zayante, Calif.

Location.--Lat 37°05'10", long 122°02'45", in SE $\frac{1}{4}$ sec.2, T.10 S., R.2 W., on left bank at Zayante Road Bridge in town of Zayante, 0.4 mile upstream from Lompico Creek, 2.0 miles east of Ben Lomond, and 3.2 miles upstream from mouth.

Drainage area.--11.1 sq mi.

Gage.--Recording. Altitude of gage is 390 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 1,200 cfs and extended above on basis of slope-area measurement at 3,700 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Base for partial-duration series, 450 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1958	Feb. 7, 1958	4.09	486	1963	Oct. 13, 1962	4.50	780
	Feb. 19, 1958	5.23	1,140		Jan. 31, 1963	6.86	2,830
	Feb. 24, 1958	4.00	450		Feb. 10, 1963	2.79	143
	Mar. 21, 1958	4.14	508		Feb. 12, 1963	3.11	214
	Apr. 2, 1958	7.70	3,700		Mar. 27, 1963	3.29	260
1959	Jan. 9, 1959	4.72	783		Apr. 6, 1963	3.51	322
	Feb. 16, 1959	5.40	1,300		Apr. 14, 1963	4.03	508
1960	Feb. 1, 1960	4.86	880		Apr. 19, 1963	2.77	132
1961	Mar. 15, 1961	2.09	45	1964	Nov. 19, 1963	3.20	220
1962	Feb. 9, 1962	4.15	580		Jan. 20, 1964	4.10	560
	Feb. 14, 1962	5.07	1,010	1965	Dec. 22, 1964	4.10	560
					Dec. 26, 1964	3.06	156
					Jan. 3, 1965	3.77	410
					Jan. 5, 1965	5.00	1,100

1605. San Lorenzo River at Big Trees, Calif.

Location.--Lat 37°01'40", long 122°03'30", in Canada del Rincon Grant, on right bank 0.5 mile south of Big Trees station on Southern Pacific Railroad, 1.6 miles downstream from Zayante Creek, and 4 miles north of Santa Cruz, Santa Cruz County.

Drainage area.--111 sq mi.

Gage.--Recording. Datum of gage is 217.0 ft above mean sea level (levels by Topographic Division).

Stage-discharge relation.--Defined by current-meter measurements below 11,000 cfs and extended above on basis of slope-area measurement at 30,400 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Only annual peaks are shown prior to Oct. 1, 1943. Base for partial-duration series, 1,400 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1937	Feb. 14, 1937	14.1	9,910	1956	Dec. 23, 1955	22.55	30,400
1938	Jan. 31, 1938	16.3	13,800		Dec. 26, 1955	12.12	7,410
1939	Mar. 9, 1939	4.45	678		Jan. 7, 1956	5.83	1,650
1940	Feb. 27, 1940	21.1	24,000		Jan. 15, 1956	-	2,000
					Jan. 25, 1956	-	2,500
1941	Feb. 9, 1941	17.15	15,500		Feb. 22, 1956	8.30	3,470
1942	Jan. 24, 1942	16.10	13,400				
1943	Jan. 21, 1943	16.35	13,900	1957	Feb. 24, 1957	7.15	2,560
					May 18, 1957	6.01	1,760
1944	Mar. 4, 1944	7.12	1,890				
1945	Feb. 1, 1945	-	10,300	1958	Dec. 16, 1957	5.48	1,440
	Feb. 2, 1945	15.98	13,200		Jan. 26, 1958	5.78	1,620
					Feb. 2, 1958	7.27	2,650
1946	Dec. 22, 1945	-	2,140		Feb. 7, 1958	10.03	5,080
	Dec. 24, 1945	-	1,960		Feb. 12, 1958	6.32	1,970
	Dec. 27, 1945	8.35	2,810		Feb. 19, 1958	14.28	10,300
					Feb. 24, 1958	9.04	4,130
1947	Nov. 22, 1946	6.30	1,450		Mar. 15, 1958	5.97	1,730
1948	Apr. 29, 1948	6.18	1,390		Mar. 21, 1958	8.53	3,670
1949	Mar. 10, 1949	9.56	3,880		Mar. 27, 1958	5.52	1,460
					Apr. 2, 1958	17.76	17,200
1950	Jan. 14, 1950	-	2,180		Apr. 5, 1958	7.35	2,710
	Jan. 17, 1950	-	2,080	1959	Jan. 5, 1959	6.06	1,820
	Feb. 6, 1950	11.58	6,190		Jan. 9, 1959	10.05	5,130
					Feb. 16, 1959	11.35	6,690
1951	Nov. 18, 1950	14.50	10,600		Sept. 18, 1959	5.59	1,590
	Dec. 3, 1950	12.25	7,110	1960	Feb. 1, 1960	7.70	2,990
	Dec. 8, 1950	12.33	7,330		Feb. 8, 1960	6.75	2,280
1952	Dec. 4, 1951	11.93	6,660	1961	Nov. 26, 1960	3.81	639
	Dec. 28, 1951	10.95	5,400	1962	Feb. 9, 1962	7.83	3,090
	Jan. 12, 1952	16.85	14,900		Feb. 14, 1962	10.98	6,090
	Jan. 14, 1952	13.66	9,190		Mar. 5, 1962	6.61	2,180
	Jan. 25, 1952	9.77	4,090				
	Feb. 1, 1952	6.59	1,600	1963	Oct. 13, 1962	12.10	7,390
	Mar. 15, 1952	14.81	11,100		Jan. 31, 1963	15.80	13,000
	Mar. 18, 1952	7.24	1,990		Feb. 9, 1963	6.34	1,990
1953	Dec. 7, 1952	13.69	9,250		Feb. 13, 1963	5.68	1,560
	Dec. 19, 1952	6.48	1,540		Mar. 27, 1963	6.21	1,900
	Dec. 30, 1952	7.01	1,860		Apr. 6, 1963	5.62	1,520
	Jan. 7, 1953	9.33	3,650		Apr. 14, 1963	6.68	2,230
	Mar. 19, 1953	6.94	1,810	1964	Nov. 19, 1963	6.51	2,110
1954	Jan. 17, 1954	8.22	2,710		Jan. 21, 1964	7.29	2,660
	Feb. 17, 1954	6.63	1,630	1965	Dec. 22, 1964	10.53	5,590
1955	Dec. 2, 1954	8.95	3,300		Dec. 26, 1964	5.98	1,560
	Jan. 18, 1955	6.48	1,540		Jan. 3, 1965	7.08	2,510
					Jan. 5, 1965	12.93	8,450
1956	Dec. 19, 1955	9.11	3,450		Apr. 9, 1965	5.49	1,440

1615. Branciforte Creek at Santa Cruz, Calif.

Location.--Lat 36°58'00", long 122°01'00", on right bank in Santa Cruz, Santa Cruz County, 15 ft downstream from Market Street Bridge and 1.0 mile upstream from mouth.

Drainage area.--17.3 sq mi.

Gage.--Nonrecording prior to Nov. 25, 1941; recording thereafter. Prior to Nov. 25, 1941, at site 150 ft downstream and Nov. 26, 1941, to Sept. 30, 1943, at site 75 ft downstream, both at datum 4.52 ft higher. Datum of gage is 11.22 ft above mean sea level (levels by Corps of Engineers).

Stage-discharge relation.--Defined by current-meter measurements below 2,500 cfs prior to Sept. 30, 1943; below 530 cfs and extended above on basis of slope-area measurement at 8,100 cfs thereafter.

Bankfull stage.--Not subject to overflow.

Remarks.--Only annual peaks are shown prior to Oct. 1, 1952. Base for partial-duration series, 600 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1941	Feb. 9, 1941	15.1	3,910	1959	Jan. 9, 1959	10.78	1,630
1942	Jan. 24, 1942	10.72	2,370		Feb. 16, 1959	9.85	1,240
1943	Jan. 21, 1943	10.88	2,430		Sept. 18, 1959	8.14	662
1953	Dec. 7, 1952	12.28	1,890	1960	Jan. 11, 1960	9.07	954
	Dec. 30, 1952	8.80	942		Feb. 1, 1960	12.08	2,210
	Jan. 7, 1953	10.34	1,330		Feb. 8, 1960	9.67	1,170
	Apr. 27, 1953	8.89	964	1961	Nov. 26, 1960	7.56	503
1954	Mar. 29, 1954	6.29	426	1962	Jan. 19, 1962	8.95	763
1955	Jan. 18, 1955	7.82	720		Feb. 9, 1962	10.22	1,290
1956	Dec. 22, 1955	22.04	8,100		Feb. 13, 1962	10.81	1,640
	Dec. 26, 1955	11.14	1,490		Mar. 6, 1962	9.54	987
	Jan. 15, 1956	8.12	690	1963	Jan. 31, 1963	13.34	2,820
	Jan. 25, 1956	9.37	1,000		Feb. 12, 1963	8.61	819
1957	May 18, 1957	6.45	382		Mar. 16, 1963	8.15	658
1958	Feb. 2, 1958	10.90	1,480		Mar. 27, 1963	9.40	1,040
	Feb. 7, 1958	11.09	1,590		Apr. 6, 1963	9.14	934
	Feb. 12, 1958	10.00	1,370		Apr. 14, 1963	10.34	1,430
	Feb. 19, 1958	14.01	2,760		Apr. 19, 1963	10.00	1,280
	Feb. 24, 1958	9.61	1,090	1964	Jan. 20, 1964	9.05	903
	Mar. 15, 1958	8.27	729	1965	Dec. 22, 1964	11.98	2,170
	Mar. 21, 1958	9.85	1,110		Dec. 26, 1964	8.91	1,080
	Apr. 2, 1958	13.40	2,230		Jan. 5, 1965	8.72	963
					Apr. 9, 1965	8.27	759

1619. Scott Creek above Little Creek, near Davenport, Calif.

Location.--Lat 37°03'50", long 122°13'45", in Agua Puerco y las Trancas Grant, on right bank 600 ft upstream from Little Creek, 2.0 miles upstream from mouth, and 4.2 miles north of Davenport, Santa Cruz County.

Drainage area.--25.0 sq mi.

Gage.--Recording. --Altitude of gage is 30 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 650 cfs and extended on basis of slope-area measurement at 1,060 cfs.

Bankfull stage.--8 ft.

Remarks.--Base for partial-duration series, 300 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1959	Jan. 9, 1959	6.68	806	1963	Jan. 31, 1963	8.71	1,560
	Feb. 16, 1959	5.36	417		Feb. 9, 1963	7.60	1,150
	Feb. 18, 1959	5.13	360		Feb. 13, 1963	4.80	483
1960	Feb. 1, 1960	5.64	500	1964	Mar. 27, 1963	4.30	485
	Feb. 8, 1960	5.29	412		Apr. 6, 1963	5.00	673
					Apr. 14, 1963	3.36	318
1961	Nov. 26, 1960	3.83	122		Apr. 19, 1963	3.65	384
				1964	Nov. 19, 1963	4.84	605
1962	Feb. 9, 1962	5.27	398		Jan. 20, 1964	5.30	720
	Feb. 13, 1962	9.36	1,970	1965	Dec. 22, 1964	7.98	1,590
	Mar. 5, 1962	4.59	342		Dec. 26, 1964	4.87	765
1963	Oct. 13, 1962	7.35	1,060		Jan. 5, 1965	7.24	1,390
	Dec. 15, 1962	5.06	326				

PESCADERO CREEK BASIN

1625. Pescadero Creek near Pescadero, Calif.

Location.--Lat 37°15'40", long 122°19'40", in SW¹/₄ sec.5, T.8 S., R.4 W., on left bank at downstream side of highway bridge, 3.0 miles east of Pescadero and 5.3 miles upstream from mouth.

Drainage area.--45.9 sq mi.

Gage.--Recording. Datum of gage is 62.3 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 2,700 cfs and extended on basis of slope-area measurement at 9,420 cfs.

Bankfull stage.--22 ft.

Remarks.--Base for partial-duration series, 500 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1952	Dec. 4, 1951	12.73	2,310	1956	Dec. 19, 1955	11.58	1,900
	Dec. 28, 1951	10.37	1,480		Dec. 23, 1955	21.27	9,420
	Jan. 12, 1952	14.16	2,860		Dec. 26, 1955	14.15	2,830
	Jan. 14, 1952	12.52	2,230		Jan. 7, 1956	7.72	534
	Jan. 25, 1952	9.47	1,210		Jan. 15, 1956	12.00	1,780
	Feb. 1, 1952	7.13	646		Jan. 25, 1956	9.87	1,030
	Mar. 14, 1952	15.39	3,870		Feb. 22, 1956	10.54	1,110
1953	Dec. 1, 1952	6.45	517	1957	Feb. 24, 1957	8.46	610
	Dec. 7, 1952	15.61	4,030		May 18, 1957	9.43	908
	Dec. 30, 1952	7.00	636	1958	Jan. 26, 1958	8.17	730
	Jan. 7, 1953	7.28	683		Jan. 29, 1958	7.42	578
	Mar. 19, 1953	7.46	720		Feb. 2, 1958	10.08	1,470
1954	Jan. 17, 1954	8.51	953		Feb. 7, 1958	9.19	1,210
1955					Feb. 12, 1958	7.50	734
	Dec. 2, 1954	8.04	840		Feb. 19, 1958	13.42	2,860

Peak stages and discharges of Pescadero Creek near Pescadero, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1958	Feb. 24, 1958	10.84	1,740	1962	Feb. 15, 1962	10.80	1,720
	Mar. 15, 1958	6.54	513		Mar. 5, 1962	7.83	808
	Mar. 23, 1958	9.35	1,260	1963	Oct. 13, 1962	16.38	4,620
	Apr. 2, 1958	19.72	7,630		Jan. 31, 1963	18.80	6,700
	Apr. 5, 1958	8.98	1,140		Feb. 9, 1963	8.14	946
1959	Jan. 9, 1959	7.32	764		Feb. 13, 1963	-	(a)
	Feb. 16, 1959	9.79	1,380		Mar. 28, 1963	7.10	680
1960	Feb. 1, 1960	6.26	509	1964	Jan. 20, 1964	9.06	1,170
	Feb. 8, 1960	7.83	816	1965	Dec. 23, 1964	10.06	1,470
1961	Mar. 15, 1961	4.16	150		Jan. 5, 1965	14.26	3,310
					Apr. 16, 1965	7.24	678
1962	Feb. 9, 1962	7.72	780				

a Discharge unknown; exceeded base.

PURISIMA CREEK BASIN

1626. Purisima Creek near Half Moon Bay, Calif.

Location--Lat 37°26'06", long 122°22'23", in Canada de Verde y Arroyo de la Purisima Grant, on left bank 15 ft downstream from county road bridge, 3.6 miles southeast of Half Moon Bay, San Mateo County, and 4.0 miles upstream from mouth.

Drainage area--4.83 sq mi.

Gage--Recording. Altitude of gage is 380 ft (from topographic map).

Stage-discharge relation--Defined by current-meter measurements below 65 cfs and extended above on basis of slope-area measurement at 290 cfs.

Remarks--Base for partial-duration series, 20 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1959	Sept. 18, 1959	4.30	32	1963	Jan. 31, 1963	5.31	301
					Feb. 9, 1963	-	(a)
1960	Jan. 11, 1960	4.41	25		Feb. 13, 1963	-	(a)
	Feb. 8, 1960	4.53	49		Mar. 28, 1963	4.05	32
1961	Mar. 14, 1961	3.92	14		Apr. 6, 1963	4.32	62
					Apr. 19, 1963	4.02	29
1962	Feb. 9, 1962	4.50	57	1964	Nov. 19, 1963	3.99	27
	Feb. 13, 1962	4.71	85		Jan. 20, 1964	4.77	142
	Feb. 18, 1962	4.01	22	1965	Dec. 23, 1964	4.53	107
	Mar. 5, 1962	4.16	30		Jan. 5, 1965	4.52	105
1963	Oct. 13, 1962	5.28	290		Apr. 9, 1965	4.13	46
	Dec. 16, 1962	3.96	20		Apr. 16, 1965	4.13	46

a Discharge unknown; exceeded base.

1629. Sharon Creek near Menlo Park, Calif.

Location.--Lat 37°25'45", long 122°13'02", in Pulgas Grant, at Atherton city boundary, 900 ft upstream from Atherton drainage channel and 2.6 miles southwest of Menlo Park, San Mateo County.

Drainage area.--0.38 sq mi.

Gage.--Recording. Datum of gage is 146.18 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 18 cfs and extended above on basis of slope-area measurement at 56 cfs.

Historical data.--Flood of Apr. 2, 1958, reached a stage of about 4.2 ft, from floodmarks.

Remarks.--Only annual peak is shown in 1958. Base for partial-duration series, 9 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1958	Apr. 2, 1958	4.2	-	1963	Dec. 15, 1962	2.02	15
1959	Feb. 16, 1959	2.40	27		Jan. 31, 1963	3.07	68
1960	Feb. 8, 1960	2.41	27		Feb. 12, 1963	2.07	17
	Feb. 9, 1960	2.01	12		Apr. 19, 1963	2.03	15
1961	Mar. 17, 1961	1.16	.1	1964	Nov. 5, 1963	2.31	12
1962	Nov. 20, 1961	1.90	9.1		Nov. 19, 1963	2.35	19
	Nov. 29, 1961	1.94	10		Nov. 23, 1963	1.99	14
	Feb. 9, 1962	1.95	10		Jan. 20, 1964	2.74	48
	Feb. 13, 1962	2.42	26	1965	Nov. 10, 1964	2.24	21
	Feb. 14, 1962	2.60	33		Dec. 22, 1964	2.22	27
	Mar. 5, 1962	3.10	56		Dec. 27, 1964	2.05	16
1963	Oct. 13, 1962	2.37	30		Jan. 5, 1965	2.17	23
					Jan. 23, 1965	2.18	25
					Apr. 9, 1965	1.89	9.1

SAN FRANCISQUITO CREEK BASIN

1629.5 San Francisquito Creek tributary near Stanford University, Calif.

Location.--Lat 37°24'43", long 122°11'52", in Pulgas Grant, on left bank 130 ft upstream from mouth, 200 ft downstream from ranch road bridge, 0.4 mile west of gate at Alpine Road, and 1.8 miles southwest of Stanford University Post Office, Santa Clara County.

Drainage area.--0.26 sq mi.

Gage.--Recording. Datum of gage is 174.73 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 16 cfs and extended above on basis of slope-area measurement at 39 cfs.

Remarks.--Base for partial-duration series, 5 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1959	Feb. 16, 1959	2.03	9.3	1963	Oct. 13, 1962	2.13	12
1960	Feb. 8, 1960	2.10	11		Jan. 31, 1963	2.96	38
	Feb. 9, 1960	1.86	5.8		Feb. 9, 1963	2.42	20
1961	Nov. 25, 1960	1.22	.3		Feb. 12, 1963	2.14	12
1962	Feb. 13, 1962	2.09	11		Mar. 16, 1963	1.83	5.2
	Feb. 14, 1962	2.39	19		Mar. 27, 1963	2.05	9.8
	Feb. 18, 1962	1.9	6.5	1964	Nov. 5, 1963	1.85	5.6
	Mar. 5, 1962	2.98	39		Nov. 19, 1963	2.21	14
					Jan. 20, 1964	2.81	33
					Jan. 21, 1964	2.20	14

1632. Los Trancos Creek tributary near Stanford University, Calif.

Location.--Lat 37°24'18", long 122°11'09", in El Corte de Madera Grant, on right bank 350 ft east of wooden water tanks, 0.4 mile east of Ladera, 0.6 mile upstream from mouth, and 1.7 miles southwest of Stanford University Post Office, Santa Clara County.

Drainage area.--0.47 sq mi.

Gage.--Recording. Datum of gage is 269.13 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 8 cfs and extended above on basis of slope-area measurement at 57 cfs.

Remarks.--Base for partial-duration series, 6 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1959	Feb. 16, 1959	2.32	37	1963	Feb. 9, 1963	2.27	36
1960	Feb. 8, 1960	1.80	10		Feb. 12, 1963	1.64	6.7
	Feb. 9, 1960	1.68	7.0		Mar. 27, 1963	1.62	6.1
1961	Nov. 25, 1960	1.14	.1	1964	Jan. 20, 1964	1.70	8.3
					Jan. 21, 1964	1.67	7.5
1962	Feb. 13, 1962	1.70	8.3	1965	Dec. 28, 1964	1.72	7.8
	Feb. 14, 1962	2.17	29		Dec. 30, 1964	1.84	12
	Mar. 5, 1962	2.53	57		Jan. 5, 1965	2.14	25
1963	Jan. 31, 1963	2.63	66		Jan. 23, 1965	1.86	12

1635. Los Trancos Creek at Stanford University, Calif.

Location.--Lat 37°24'35", long 122°11'35", in El Corte de Madera Grant, about 800 ft upstream from mouth and 1.6 miles southwest of Stanford University Post Office, Santa Clara County.

Drainage area.--7.50 sq mi.

Gage.--Recording. Altitude of gage is 160 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 320 cfs.

Remarks.--Medium and low peaks may be affected by diversion for irrigation through Los Trancos Canal, beginning in 1931. Only annual peaks are shown prior to Oct. 1, 1937. Base for partial-duration series, 300 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1931	-	-	0	1938	Mar. 2, 1938	2.79	308
1932	Feb. 8, 1932	2.93	320	1939	Mar. 9, 1939	.73	7
1933	Jan. 27, 1933	1.78	89				
1934	Feb. 26, 1934	1.99	119	1940	Feb. 27, 1940	4.07	647
1935	Apr. 7, 1935	2.12	137		Mar. 30, 1940	-	370
1936	Feb. 21, 1936	2.08	131	1941	Feb. 11, 1941	4.05	641
1937	Mar. 21, 1937	3.13	399		Apr. 4, 1941	-	568
1938	Feb. 13, 1938	3.10	385				

1645. San Francisquito Creek at Stanford University, Calif.

Location.--Lat 37°25'24", long 122°11'18", in San Francisquito Grant at golf course, on right bank 1.1 miles downstream from Los Trancos Creek and 1.1 miles west of Stanford University Post Office, Santa Clara County.

Drainage area.--37.5 sq mi.

Gage.--Recording. Altitude of gage is 120 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 4,300 cfs.

Bankfull stage.--17 ft.

Remarks.--Low peaks are partly regulated by Searsville Lake (capacity, 952 acre-ft) since beginning of record. Low peaks may also be affected by diversions to Los Trancos and Lagunita Canals for irrigation on Stanford University campus, subsequent to 1930 and 1931 respectively. Only annual peaks are shown prior to Oct. 1, 1950. Base for partial-duration series, 700 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1931	-	-	0	1956	Jan. 14, 1956	6.95	1,820
1932	Dec. 27, 1931	5.20	1,160		Jan. 26, 1956	5.10	1,010
1933	Jan. 27, 1933	4.18	730		Feb. 22, 1956	4.76	877
1934	Feb. 26, 1934	4.03	670				
1935	Apr. 8, 1935	6.35	1,560	1957	May 18, 1957	a2.59	-
1936	Feb. 21, 1936	6.72	1,660	1958	Jan. 29, 1958	4.24	756
1937	Feb. 4, 1937	9.15	2,620		Feb. 2, 1958	4.72	964
1938	Feb. 11, 1938	6.02	1,330		Feb. 7, 1958	4.33	792
	Mar. 2, 1938	5.96	1,330		Feb. 12, 1958	4.60	910
	Mar. 13, 1938	6.03	1,330		Feb. 19, 1958	5.14	1,170
1939	Feb. 8, 1939	2.02	120		Feb. 24, 1958	5.55	1,360
1940	Feb. 27, 1940	9.4	3,100		Mar. 16, 1958	4.28	772
1941	Feb. 11, 1941	8.08	2,410		Mar. 20, 1958	5.31	1,260
					Mar. 23, 1958	6.38	1,790
1951	Nov. 18, 1950	10.4	3,650		Apr. 1, 1958	6.45	1,820
	Dec. 3, 1950	7.95	2,340		Apr. 2, 1958	11.04	4,460
	Dec. 8, 1950	5.68	1,290		Apr. 5, 1958	5.47	1,340
	Mar. 4, 1951	5.30	1,120	1959	Feb. 16, 1959	4.48	868
1952	Dec. 4, 1951	5.90	1,380	1960	Feb. 8, 1960	4.84	1,020
	Dec. 28, 1951	5.70	1,300				
	Jan. 12, 1952	6.40	1,610	1961	Nov. 26, 1960	.83	12
	Jan. 14, 1952	7.00	1,880				
	Jan. 25, 1952	4.60	836	1962	Feb. 14, 1962	4.54	799
	Feb. 1, 1952	4.87	944		Mar. 5, 1962	5.02	996
	Mar. 14, 1952	7.90	2,320	1963	Oct. 13, 1962	5.38	1,130
1953	Dec. 7, 1952	7.15	1,950		Jan. 31, 1963	9.28	3,270
1954	Mar. 19, 1954	3.15	332		Mar. 27, 1963	4.32	722
1955	Feb. 27, 1955	4.55	797	1964	Jan. 21, 1964	4.92	948
1956	Dec. 22, 1955	13.60	5,560	1965	Dec. 23, 1964	5.35	1,120
	Dec. 26, 1955	6.20	1,470		Jan. 5, 1965	5.10	1,020
					Apr. 9, 1965	4.26	701

a Occurred May 21, 1957.

1655. San Francisquito Creek at Palo Alto, Calif.

Location.--Lat 37°27'10", long 122°08'20", in Rancho de las Pulgas Grant, 175 ft upstream from Newell Avenue Bridge, in Palo Alto, Santa Clara County, and about 2 miles upstream from mouth.

Drainage area.--40.9 sq mi.

Gage.--Recording. Altitude of gage is 5 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 2,860 cfs.

Remarks.--Low peaks may be partly regulated by Searsville Lake (capacity, 952 acre-ft). Low peaks may also be affected by diversions to Los Trancos and Lagunita Canals, for irrigation on Stanford University campus, subsequent to 1930 and 1931 respectively. Only annual peaks are shown.

SAN FRANCISQUITO CREEK BASIN

Peak stages and discharges of San Francisquito Creek at Palo Alto, Calif.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1931	-	-	0	1937	Feb. 4, 1937	16.05	2,550
1932	Dec. 27, 1931	10.07	1,170	1938	Feb. 11, 1938	11.46	1,400
1933	Jan. 27, 1933	7.30	651	1939	Feb. 8, 1939	3.44	127
1934	Feb. 26, 1934	6.91	582	1940	Feb. 27, 1940	17.22	3,100
1935	Apr. 8, 1935	11.80	1,540				
1936	Feb. 21, 1936	12.20	1,570	1941	Feb. 11, 1941	14.4	2,200

MATADERO CREEK BASIN

1660. Matadero Creek at Palo Alto, Calif.

Location.--Lat 37°25'10", long 122°08'10", in Rinconada de San Francisquito Grant, on right bank on Ash Street, 150 ft upstream from Lambert Avenue Bridge and 2.1 miles southeast of post office at Palo Alto, Santa Clara County.

Drainage area.--7.24 sq mi.

Gage.--Recording. Prior to Sept. 25, 1958, at site 150 ft downstream at different datum. Altitude of gage is 25 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 390 cfs and extended on basis of slope-area measurement at 854 cfs prior to Sept. 25, 1958; defined by current-meter measurements below 60 cfs and extended on basis of critical-depth determination at 340 cfs thereafter.

Bankfull stage.--9 ft.

Remarks.--Base for partial-duration series, 50 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1953	Dec. 6, 1952	7.1	535	1959	Jan. 5, 1959	1.21	60
	Dec. 27, 1952	5.74	188		Jan. 9, 1959	1.25	66
	Dec. 30, 1952	5.74	188		Feb. 16, 1959	2.85	340
	Jan. 7, 1953	5.83	205	1960	Feb. 8, 1960	1.70	139
1954	Mar. 19, 1954	4.30	26	1961	Nov. 25, 1960	1.10	45
1955	Jan. 18, 1955	5.63	170	1962	Feb. 9, 1962	1.51	82
	Feb. 27, 1955	5.57	160		Feb. 14, 1962	2.58	275
1956	Dec. 19, 1955	4.75	64		Feb. 18, 1962	1.65	102
	Dec. 22, 1955	4.98	854		Mar. 5, 1962	2.94	365
	Dec. 26, 1955	7.50	590	1963	Oct. 13, 1962	1.61	96
	Jan. 7, 1956	5.39	135		Jan. 31, 1963	3.97	641
	Jan. 15, 1956	6.44	336		Feb. 9, 1963	2.40	235
	Jan. 20, 1956	5.42	139		Mar. 16, 1963	1.39	67
	Jan. 27, 1956	6.18	284		Mar. 27, 1963	1.83	130
	Feb. 22, 1956	5.08	97	1964	Nov. 19, 1963	1.65	102
1957	Feb. 24, 1957	4.31	28		Jan. 20, 1964	2.34	223
1958	Jan. 26, 1958	5.86	218	1965	Nov. 8, 1964	1.49	88
	Feb. 2, 1958	6.56	312		Nov. 10, 1964	1.44	81
	Feb. 12, 1958	5.34	145		Dec. 23, 1964	1.88	153
	Feb. 19, 1958	7.10	376		Dec. 28, 1964	1.37	71
	Feb. 24, 1958	7.61	431		Dec. 30, 1964	1.36	70
	Mar. 16, 1958	6.97	361		Jan. 5, 1965	2.24	219
	Mar. 20, 1958	9.92	625		Jan. 24, 1965	1.45	82
	Mar. 23, 1958	6.77	310				
	Apr. 2, 1958	10.30	672				
	Apr. 5, 1958	8.11	476				

a Occurred Dec. 23, 1955, backwater from culvert.

1665. Stevens Creek near Cupertino, Calif.

Location.--Lat 37°18'20", long 122°04'25", in SW $\frac{1}{4}$ sec.22, T.7 S., R.2 W., on left bank on downstream side of highway bridge, 0.6 mile downstream from Stevens Creek Dam and 2.5 miles southwest of Cupertino.

Drainage area.--18.1 sq mi.

Gage.--Recording. Altitude of gage is 385 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurement below 1,410 cfs.

Remarks.--Peaks regulated by Stevens Creek Reservoir (capacity 3,860 acre-ft) beginning in December 1935. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1930	Mar. 4, 1930	3.75	500	1945	Apr. 27, 1945	2.45	90
1931	Jan. 1, 1931	1.93	104	1946	Dec. 5, 1945	2.02	39
1932	Dec. 27, 1931	4.57	709	1947	June 17, 1947	1.78	18
1933	Jan. 27, 1933	2.73	200	1948	Apr. 4, 1948	2.07	42
1934	Jan. 1, 1934	3.63	389	1949	Dec. 26, 1948	2.15	50
1935	Apr. 8, 1935	3.60	409	1950	July 24, 1950	1.93	27
1936	Feb. 18, 1936	2.96	242	1951	Mar. 5, 1951	3.44	362
1937	Mar. 25, 1937	2.64	124	1952	Mar. 15, 1952	6.10	810
1938	Feb. 13, 1938	4.66	494	1953	Mar. 19, 1953	3.09	217
1939	June 1, 1939	2.52	103	1954	Jan. 17, 1954	1.91	25
1940	Feb. 28, 1940	7.05	1,090	1955	May 4, 1955	2.47	90
1941	Feb. 11, 1941	5.40	700	1956	Dec. 23, 1955	8.25	1,420
1942	Feb. 6, 1942	3.42	346	1957	Dec. 2, 1956	3.30	173
1943	Jan. 21, 1943	2.65	128	1958	Apr. 2, 1958	7.58	1,220
1944	Apr. 11, 1944	1.97	32	1959	Feb. 16, 1959	2.79	87

GUADALUPE RIVER BASIN

1670. Alamitos Creek near Edenvale, Calif.

Location.--Lat 37°14'08", long 121°52'08", in SW $\frac{1}{4}$ sec.16, T.8 S., R.1 E., on right bank 0.6 mile upstream from confluence with Guadalupe Creek and 3.2 miles southwest of Edenvale.

Drainage area.--34.6 sq mi.

Gage.--Recording prior to Jan. 14, 1952, Dec. 19, 1952, to Sept. 30, 1953, and subsequent to May 18, 1956; nonrecording Jan. 14 to Dec. 18, 1952, Oct. 1, 1953, to Dec. 23, 1955, and Jan. 3 to May 17, 1956. Prior to Dec. 18, 1952, at site 1,400 ft downstream at different datums. Dec. 19, 1952, to Dec. 23, 1955, at site 0.2 mile downstream; Jan. 3 to May 17, 1956, at site 0.2 mile upstream at different datums. Altitude of gage is 200 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 1,800 cfs prior to Dec. 18, 1952, below 110 cfs and extended above on basis of slope-area measurement at 4,140 cfs for period Dec. 19, 1952, to Dec. 23, 1955. Defined by current-meter measurements below 240 cfs subsequent to May 17, 1956. Peak of Apr. 2, 1958, estimated on basis of peak outflows of Calero and Almaden Reservoirs plus estimated inflow between the reservoirs and the gage.

Remarks.--Peaks regulated by Calero Reservoir (capacity, 9,213 acre-ft) and Almaden Reservoir (capacity, 2,000 acre-ft) beginning in 1935. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1930	Mar. 5, 1930	6.04	1,770	1935	Mar. 7, 1935	4.77	582
1931	-	-	0	1936	Feb. 12, 1936	4.08	270
1932	Dec. 27, 1931	6.60	2,670	1937	Feb. 13, 1937	6.05	1,840
1933	Jan. 29, 1933	3.75	175	1938	Dec. 11, 1937	6.35	2,280
1934	Jan. 1, 1934	5.78	1,490	1939	Apr. 13, 1939	3.20	47

Peak stages and discharges of Alamitos Creek near Edenvale, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1940	Feb. 28, 1940	6.60	2,440	1950	Feb. 6, 1950	3.26	83
1941	Apr. 4, 1941	6.60	2,520	1951	Dec. 8, 1950	5.75	650
1942	Jan. 24, 1942	5.24	815	1952	Jan. 12, 1952	5.20	2,000
1943	Jan. 22, 1943	6.52	2,390	1953	Dec. 7, 1952	10.20	268
1944	Mar. 4, 1944	4.40	314	1954	Feb. 13, 1954	.76	98
1945	Feb. 2, 1945	6.07	1,700	1955	Jan. 18, 1955	.89	136
1946	Dec. 21, 1945	4.81	500	1956	Dec. 23, 1955	6.6	4,140
1947	Feb. 16, 1947	3.54	36	1957	Feb. 24, 1957	3.82	262
1948	Apr. 6, 1948	3.68	45	1958	Apr. 2, 1958	-	4,500
1949	Mar. 11, 1949	4.36	269				

1675. Guadalupe Creek at Guadalupe, Calif.
(Published as Los Capitancillos Creek 1945-53)

Location--Lat 37°13'05", long 121°54'35", in SW $\frac{1}{4}$ sec.19, T.8 S., R.1 E., on left bank 0.5 mile northwest of Guadalupe and 3.5 miles upstream from confluence with Alamitos Creek.

Drainage area--12.7 sq mi.

Gage--Recording. Altitude of gage is 325 ft (from topographic map).

Stage-discharge relation--Defined by current-meter measurements below 840 cfs.

Remarks--Peaks regulated by Guadalupe Reservoir (capacity, 3,500 acre-ft) beginning in 1936. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1930	Mar. 5, 1930	3.55	962	1945	Feb. 1, 1945	3.45	850
1931	Jan. 1, 1931	1.51	50	1946	Dec. 21, 1945	2.04	181
1932	Dec. 28, 1931	4.05	1,160	1947	Nov. 23, 1946	1.31	52
1933	Jan. 29, 1933	2.20	234	1948	Apr. 29, 1948	2.10	205
1934	Jan. 1, 1934	2.90	525	1949	Mar. 11, 1949	2.20	238
1935	Mar. 6, 1935	2.43	370	1950	Jan. 14, 1950	1.65	102
1936	Feb. 11, 1936	1.90	182	1951	Dec. 8, 1950	2.09	202
1937	Feb. 13, 1937	2.80	520	1952	Jan. 12, 1952	4.22	1,330
1938	Feb. 10, 1938	3.95	1,150	1953	Dec. 7, 1952	1.94	161
1939	Mar. 8, 1939	1.59	84	1954	Feb. 13, 1954	1.94	161
1940	Feb. 27, 1940	3.20	705	1955	Feb. 26, 1955	2.14	230
1941	Apr. 4, 1941	3.68	988	1956	Dec. 22, 1955	4.20	1,320
1942	Jan. 24, 1942	2.40	310	1957	Feb. 24, 1957	2.10	216
1943	Jan. 21, 1943	3.23	722	1958	Apr. 2, 1958	6.31	2,750
1944	Mar. 4, 1944	1.91	152	1959	Feb. 16, 1959	2.95	571

1680. Los Gatos Creek at Los Gatos, Calif.

Location.--Lat 37°12'30", long 121°59'15", in NE¹ sec.29, T.8 S., R.1 W., on left bank 0.3 mile downstream from Trout Creek, 0.5 mile downstream from Lexington Reservoir, and 1.0 mile south of Los Gatos.

Drainage area.--38.6 sq mi.

Gage.--Recording. Prior to Oct. 1, 1943, at site 1 mile downstream at different datum. Oct. 1, 1943, to May 31, 1944, at site 0.5 mile downstream at different datum. Altitude of gage is 460 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 2,300 cfs and extended above on basis of field estimate and velocity-area study at 7,100 cfs prior to 1943. Defined by current-meter measurements below 970 cfs for period Oct. 1, 1943, to May 31, 1944; below 1,700 cfs and extended on basis of computation of flow over dam at 3,540 cfs thereafter.

Bankfull stage.--Not subject to overflow.

Remarks.--Peaks regulated by Lake Elsman (capacity, 6,150 acre-ft) beginning in 1951 and Lexington Reservoir (capacity, 21,430 acre-ft) beginning in 1952. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1930	Mar. 5, 1930	8.33	2,160	1944	Mar. 4, 1944	3.98	1,270
1931	Jan. 1, 1931	3.45	221	1954	Nov. 13, 1953	4.71	175
1932	Dec. 27, 1931	9.75	3,340	1955	May 19, 1955	3.85	81
1933	Jan. 29, 1933	4.63	582	1956	Feb. 23, 1956	7.45	1,460
1934	Jan. 1, 1934	6.00	1,080	1957	Apr. 17, 1957	3.90	73
1935	Jan. 9, 1935	6.15	1,040	1958	Apr. 2, 1958	9.90	3,540
1936	Feb. 11, 1936	6.90	1,310	1959	Sept. 18, 1959	5.46	311
1937	Feb. 13, 1937	12.90	5,500	1960	Feb. 21, 1960	4.55	103
1938	Dec. 11, 1937	12.20	4,800	1961	Mar. 17, 1961	4.43	92
1939	Mar. 9, 1939	4.76	485	1962	July 6, 1962	5.05	181
1940	Feb. 27, 1940	14.71	7,110	1963	Feb. 2, 1963	7.77	1,660
1941	Apr. 4, 1941	11.60	4,150	1964	July 8, 1964	5.32	198
1942	Jan. 24, 1942	9.65	2,700	1965	Apr. 4-6, 1965	5.13	153
1943	Jan. 21, 1943	12.07	4,610				

1685. Los Gatos Creek below Los Gatos, Calif.

Location.--Lat 37°14', long 121°58', in Rinconada de Los Gatos Grant, 350 ft downstream from Cypress Road Bridge and 0.9 mile northeast of railroad station in Los Gatos, Santa Clara County.

Drainage area.--42.6 sq mi.

Gage.--Recording. Altitude of gage is 310 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 2,600 cfs and extended above on basis of comparison with station at Los Gatos to 5,800 cfs.

Remarks.--Peaks regulated by Lake Elsman (capacity, 6,150 acre-ft) beginning in 1951 and Lexington Reservoir (capacity, 21,430 acre-ft) beginning in 1952. Only annual peaks are shown prior to Oct. 1, 1946, and subsequent to Oct. 1, 1952. Base for partial-duration series, 600 cfs.

Peak stages and discharges of Los Gatos Creek below Los Gatos, Calif.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1945	Feb. 1, 1945	10.55	5,600	1951	Nov. 18, 1950	8.59	3,810
1946	Dec. 21, 1945	7.05	1,980		Dec. 3, 1950	6.45	1,780
					Dec. 8, 1950	6.60	1,930
1947	Nov. 23, 1946	-	604	1952	Dec. 4, 1951	5.38	1,410
	Feb. 12, 1947	5.74	664		Dec. 28, 1951	5.02	1,120
1948	Apr. 29, 1948	6.76	1,530		Jan. 12, 1952	10.00	5,800
					Jan. 14, 1952	5.45	3,050
1949	Mar. 3, 1949	-	1,070		Jan. 16, 1952	3.24	1,270
	Mar. 11, 1949	7.58	2,550		Jan. 25, 1952	2.98	1,120
1950	Jan. 14, 1950	-	872		Mar. 15, 1952	5.40	3,000
	Feb. 6, 1950	7.25	2,230		Mar. 18, 1952	2.95	1,100
1951	Nov. 16, 1950	5.88	880	1953	Dec. 7, 1952	6.93	672

1690. Guadalupe River at San Jose, Calif.
(Published as Guadalupe Creek prior to 1944)

Location.--Lat 37°20'00", long 121°54'00", at San Jose, Santa Clara County, on right bank 100 ft downstream from Los Gatos Creek.

Drainage area.--146 sq mi.

Gage.--Recording. Altitude of gage is 80 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 7,200 cfs.

Bankfull stage.--4 ft.

Remarks.--Peaks regulated by Almaden Reservoir (capacity, 1,960 acre-ft) beginning in 1936, Calero Reservoir (capacity, 9,630 acre-ft) beginning in 1936, Guadalupe Reservoir (capacity, 3,460 acre-ft) beginning in 1936, Lake Elsmar (capacity, 6,150 acre-ft) beginning in 1951, and Lexington Reservoir (capacity, 21,460 acre-ft) beginning in 1952. Peaks may be affected by diversions upstream by San Jose Water Works for urban use and by diversions to percolation ponds. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1930	Mar. 5, 1930	7.64	4,330	1948	Apr. 29, 1948	4.40	890
1931	-	-	0	1949	Mar. 10, 1949	7.29	2,500
1932	Dec. 27, 1931	11.12	6,700	1950	Feb. 6, 1950	6.65	1,340
1933	Jan. 29, 1933	2.07	365	1951	Nov. 18, 1950	9.0	2,730
1934	Jan. 1, 1934	5.37	2,450	1952	Jan. 12, 1952	15.2	8,000
1935	Jan. 9, 1935	4.35	1,650	1953	Dec. 7, 1952	7.07	738
1936	Feb. 21, 1936	3.45	910	1954	Feb. 13, 1954	6.55	485
1937	Feb. 13, 1937	9.64	6,070	1955	Jan. 18, 1955	6.71	608
1938	Dec. 11, 1937	9.80	6,660	1956	Dec. 23, 1955	13.94	5,570
1939	Mar. 9, 1939	2.67	338	1957	Feb. 24, 1957	7.04	666
1940	Feb. 27, 1940	11.88	8,680	1958	Apr. 2, 1958	16.55	9,150
1941	Apr. 4, 1941	9.50	6,330	1959	Feb. 16, 1959	5.44	1,590
1942	Jan. 24, 1942	7.73	4,090	1960	Feb. 1, 1960	2.18	125
1943	Jan. 23, 1943	10.68	6,350	1961	Dec. 1, 1960	2.68	279
1944	Mar. 4, 1944	5.37	1,960	1962	Feb. 15, 1962	4.10	1,380
1945	Feb. 2, 1945	11.25	6,600	1963	Oct. 13, 1962	10.86	6,300
1946	Dec. 22, 1945	5.52	1,640	1964	Jan. 20, 1964	5.10	1,980
1947	Nov. 23, 1946	3.03	394	1965	Jan. 5, 1965	4.26	1,340

1695. Saratoga Creek at Saratoga, Calif.
(Published as Campbell Creek prior to October 1951)

Location--Lat 37°15'15", long 122°02'25", in Quito Grant, on right bank on downstream side of private road bridge, 0.5 mile southwest of Saratoga, Santa Clara County, and 0.7 mile downstream from diversion dam.

Drainage area--9.22 sq mi.

Gage--Recording. Altitude of gage is 500 ft (from topographic map).

Stage-discharge relation--Defined by current-meter measurements below 510 cfs and extended above on basis of slope-area measurement at 2,730 cfs.

Bankfull stage--7 ft.

Remarks--Only annual peaks are shown prior to Oct. 1, 1956. Base for partial-duration series, 110 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1934	Jan. 1, 1934	3.13	314	1958	Feb. 19, 1958	4.15	442
1935	Jan. 4, 1935	2.90	254		Feb. 24, 1958	4.25	478
1936	Feb. 21, 1936	2.80	268		Mar. 16, 1958	3.35	204
1937	Feb. 13, 1937	3.8	910		Mar. 21, 1958	4.12	432
1938	Feb. 2, 1938	3.71	611		Apr. 2, 1958	4.95	772
1939	Mar. 8, 1939	2.41	110		Apr. 5, 1958	3.93	367
1940	Feb. 27, 1940	a5.90	2,540	1959	Jan. 9, 1959	3.10	147
1941	Apr. 4, 1941	3.78	608		Feb. 16, 1959	4.75	683
1942	Jan. 24, 1942	3.80	620		Feb. 18, 1959	3.10	147
1943	Jan. 21, 1943	4.80	1,650	1960	Feb. 1, 1960	3.02	133
1944	Mar. 4, 1944	2.68	175		Feb. 8, 1960	3.24	178
1945	Feb. 1, 1945	4.15	898	1961	Dec. 1, 1960	3.00	129
1946	Dec. 21, 1945	3.13	287	1962	Feb. 9, 1962	3.96	377
1947	Nov. 22, 1946	2.46	100		Feb. 14, 1962	4.12	432
1948	Apr. 29, 1948	2.63	134		Feb. 18, 1962	2.99	127
1949	Mar. 11, 1949	3.08	293		Mar. 5, 1962	3.47	234
1950	Feb. 5, 1950	2.95	222	1963	Oct. 13, 1962	4.78	696
1951	Nov. 18, 1950	4.07	826		Jan. 31, 1963	5.68	1,160
1952	Jan. 12, 1952	4.63	1,240		Feb. 12, 1963	3.00	129
1953	Dec. 7, 1952	3.58	494		Mar. 27, 1963	3.08	144
1954	Jan. 17, 1954	2.98	232		Apr. 14, 1963	2.96	135
1955	Feb. 26, 1955	2.50	107	1964	Jan. 20, 1964	3.84	338
1956	Dec. 22, 1955	6.40	2,730	1965	Nov. 10, 1964	2.90	137
1957	Feb. 24, 1957	3.42	225		Dec. 23, 1964	3.98	388
1958	Dec. 16, 1957	3.05	138		Jan. 5, 1965	4.40	535
	Jan. 26, 1958	3.33	199		Jan. 23, 1965	2.80	121
	Feb. 3, 1958	3.81	328		Apr. 9, 1965	3.10	172

a Occurred Mar. 1, 1940.

1700. Coyote Creek near Madrone, Calif.

Location.--Lat 37°10'06", long 121°38'55", near southeast corner of La Laguna Seca Grant, on right bank 1.2 miles downstream from Anderson Dam and 1.8 miles northeast of Madrone, Santa Clara County.

Drainage area.--196 sq mi.

Gage.--Nonrecording prior to Feb. 4, 1930; recording for periods of high water in 1907-12 and subsequent to Feb. 4, 1930. Prior to Oct. 1, 1912, 1.1 miles upstream at different datum. Dec. 15, 1916, to Mar. 1, 1950, at site 1.4 miles upstream at different datum. Altitude of gage is 375 ft (from topographic map).

Stage-discharge relation.--Basic data not available for period 1902-12, as records were furnished by Duryea, Haehl and Gilman. Defined by current-meter measurements below 8,700 cfs for period Dec. 15, 1916, to Mar. 1, 1950; below 3,400 cfs thereafter.

Remarks.--Peaks regulated by Coyote Lake (capacity, 24,510 acre-ft) beginning in February 1936 and Anderson Lake (capacity, 81,310 acre-ft) beginning in December 1950. Peaks for the years 1918, 1920, and 1924-25 are maximum observed. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1903	Mar. 31, 1903	-	15,000	1937	Mar. 22, 1937	10.40	4,060
1905	Mar. 19, 1905a	-	3,000	1938	Feb. 11, 1938	12.2	6,670
				1939	Mar. 9, 1939	5.21	283
1906	Jan. 19, 1906a	-	8,350	1940	Feb. 29, 1940	10.28	3,920
1907	Dec. 11, 1906a	-	8,210	1941	Apr. 4, 1941	10.48	4,180
1908	Jan. 25, 1908a	-	2,150	1942	Feb. 6, 1942	8.67	2,230
1909	Jan. 21, 1909a	-	8,230	1943	Jan. 21, 1943	11.42	5,450
1910	Dec. 9, 1909a	-	3,000	1944	Mar. 4, 1944	9.5	3,050
1911	Mar. 7, 1911a	-	25,000	1945	Feb. 2, 1945	12.15	6,580
1912	Mar. 12, 1912a	-	1,210	1946	Jan. 5, 1946	5.96	504
1917	Feb. 21, 1917	14.5	10,100	1947	Nov. 23, 1946	4.85	196
1918	Mar. 12, 1918	8.5	2,090	1948	Apr. 12, 1948	4.97	221
1919	Feb. 10, 1919	13.0	8,030	1949	Mar. 11, 1949	6.34	663
1920	Mar. 22, 1920	6.9	970	1950	Jan. 28, 1950	5.60	365
1921	Jan. 30, 1921	11.2	5,130	1951	Nov. 22, 1950	4.00	230
1922	Feb. 10, 1922	14.0	9,760	1952	Mar. 31, 1952	2.70	93
1923	Jan. 24, 1923	-	9,200	1953	Dec. 7, 1952	2.70	93
1924	Jan. 27, 1924	2.62	8	1954	Sept. 17, 1954	5.20	460
1925	Feb. 23, 1925	7.0	1,000	1955	Apr. 17, 18, June 11, 12, 1955	2.80	113
1926	Feb. 13, 1926	12.5	7,180	1956	May 16, 17, 1956	2.70	98
1927	Feb. 16, 1927	12.0	6,340	1957	July 14, 1957	2.97	127
1928	Mar. 27, 1928	10.0	3,580	1958	Apr. 3, 1958	9.65	5,750
1929	Feb. 3, 1929	6.80	920	1959	Apr. 5, 1959	2.77	176
1930	Mar. 5, 1930	12.10	6,500	1960	Oct. 20, 1959	2.78	170
1931	Feb. 15, 1931	4.61	178	1961	Apr. 13, 1961	2.81	180
1932	Dec. 28, 1931	14.48	10,600	1962	Feb. 22, 1962	2.79	183
1933	Jan. 29, 1933	8.72	2,080	1963	July 17, 1963	3.05	245
1934	Jan. 1, 1934	8.65	2,010	1964	Mar. 25, 1964	2.94	217
1935	Apr. 8, 1935	11.35	5,340	1965	June 19, 1965	2.74	113
1936	Feb. 22, 1936	6.85	1,020				

a Month in which peak occurred is known; date in month is that on which maximum daily discharge, and presumably the peak, occurred.

1705. Coyote Creek at Coyote, Calif.
(Published as "Coyote River" prior to Oct. 1, 1923)

Location.--Lat 37°13'45", long 121°44'20", near north end of La Laguna Seca Grant, a quarter of a mile upstream from ford and 1,000 ft east of Coyote, Santa Clara County.

Drainage area.--204 sq mi.

Gage.--Nonrecording. Altitude of gage is 250 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 5,200 cfs and extended above on basis of surface-float measurements at 8,420 and 9,260 cfs.

Remarks.--Peaks in the years 1917-18 and 1920, are maximum observed. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1917	Feb. 21, 1917	15.2	9,900	1921	Jan. 17, 1921	14	6,080
1918	Mar. 12, 1918	10.5	1,470	1922	Feb. 10, 1922	15.4	10,300
1919	Feb. 10, 1919	14.5	8,300	1923	Jan. 24, 1923	15.0	9,000
1920	Mar. 22, 1920	9.4	1,030				

1715. Coyote Creek near Edenvale, Calif.
(Published as "Coyote River" prior to Oct. 1, 1926)

Location.--Lat 37°16'15", long 121°47'47", at east boundary of Santa Teresa Grant, on left bank at "The Narrows," 1.5 miles northeast of Edenvale, Santa Clara County, and 7 miles south of San Jose.

Drainage area.--229 sq mi.

Gage.--Nonrecording prior to Dec. 14, 1934; recording thereafter. Prior to Dec. 14, 1934, at site 250 ft upstream at same datum. Altitude of gage is 190 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 8,400 cfs prior to Dec. 14, 1934; below 5,200 cfs thereafter.

Bankfull stage.--Not subject to overflow.

Remarks.--Peaks regulated by Coyote Reservoir (capacity, 24,510 acre-ft) beginning in February 1936, a percolating reservoir beginning in January 1935, and Anderson Reservoir (capacity, 91,310 acre-ft) beginning in December 1950. Peak in the year 1919 is maximum observed. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1917	Feb. 21, 1917	12.2	8,590	1931	-	-	0
1918	Mar. 12, 1918	5.6	915	1932	Dec. 28, 1931	11.2	8,520
1919	Feb. 11, 1919	10.0	5,940	1933	Jan. 29, 1933	6.0	1,820
1920	Mar. 22, 1920	5.35	800	1934	Jan. 1, 1934	5.80	1,620
				1935	Apr. 8, 1935	7.00	4,250
1921	Jan. 30, 1921	8.90	4,430				
1922	Feb. 10, 1922	12.8	10,000	1936	Feb. 23, 1936	4.39	861
1923	Jan. 24, 1923	-	8,800	1937	Mar. 21, 1937	6.78	4,220
1924	-	-	0	1938	Feb. 11, 1938	8.7	7,920
1925	Feb. 13, 1925	5.70	1,130	1939	Mar. 9, 1939	3.31	182
				1940	Feb. 29, 1940	6.72	3,230
1926	Feb. 13, 1926	9.3	5,010				
1927	Feb. 16, 1927	9.0	4,630	1941	Apr. 4, 1941	7.05	3,810
1928	Mar. 27, 1928	7.80	3,430	1942	Jan. 24, 1942	5.60	2,420
1929	Feb. 4, 1929	4.05	326	1943	Jan. 21, 1943	7.25	5,350
1930	Mar. 5, 1930	8.5	4,200	1944	Mar. 5, 1944	5.60	2,420

Peak stages and discharges of Coyote Creek near Edenvale, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1945	Feb. 2, 1945	7.35	5,550	1954	July 18, 1954	2.73	24
				1955	May 28, 1955	2.81	34
1946	Jan. 5, 1946	3.71	346				
1947	Nov. 25, 1946	3.14	95	1956	Dec. 23, 1955	5.02	1,610
1948	-	-	0	1957	Feb. 25, 1957	2.91	47
1949	Mar. 12, 1949	3.77	329	1958	Apr. 3, 1958	7.80	6,250
1950	Jan. 28, 1950	3.29	143	1959	Feb. 16, 1959	4.97	1,410
				1960	Jan. 13, 1960	3.05	71
1951	Dec. 8, 1950	3.80	400				
1952	Jan. 12, 1952	4.77	768	1961	Oct. 4, 1960	2.68	16
1953	Jan. 9, 1953	3.16	102	1962	Mar. 7, 1962	3.33	159

ALAMEDA CREEK BASIN

1765. Arroyo Valle near Livermore, Calif.

Location--Lat 37°37'24", long 121°45'28", in Valle de San Jose Grant, on right bank 900 ft downstream from highway bridge, 1.1 miles upstream from Dry Creek, 4.1 miles south of Livermore, Alameda County, and 6.9 miles southeast of Pleasanton.

Drainage area--147 sq mi.

Gage--Recording. Altitude of gage is 500 ft (from topographic map).

Stage-discharge relation--Defined by current-meter measurements below 6,300 cfs.

Bankfull stage--14 ft.

Historical data--Flood of Dec. 23, 1955, reached a stage of 13.93 ft (discharge, 18,200 cfs, as determined from contracted-opening and slope-area measurements of peak flow).

Remarks--Only annual peak is shown for 1956. Base for partial-duration series, 200 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1956	Dec. 23, 1955	13.93	18,200	1962	Feb. 10, 1962	5.20	1,450
1958	Jan. 26, 1958	5.88	1,820		Feb. 15, 1962	6.05	2,590
	Feb. 3, 1958	4.43	590		Mar. 6, 1962	5.23	1,610
	Feb. 5, 1958	4.37	552	1963	Feb. 1, 1963	9.34	8,810
	Feb. 12, 1958	4.10	406		Feb. 13, 1963	4.61	834
	Feb. 19, 1958	8.23	5,770		Mar. 28, 1963	4.10	475
	Feb. 25, 1958	6.38	2,450		Apr. 7, 1963	4.11	481
	Mar. 16, 1958	5.83	1,850		Apr. 15, 1963	3.82	325
	Mar. 22, 1958	6.58	2,730	1964	Jan. 21, 1964	3.74	288
	Apr. 2, 1958	10.91	12,200				
	Apr. 6, 1958	5.22	1,670	1965	Dec. 23, 1964	5.62	1,980
					Dec. 28, 1964	4.14	499
	Jan. 10, 1959	3.55	358		Jan. 6, 1965	4.82	1,020
1959	Feb. 16, 1959	8.15	6,680		Jan. 24, 1965	3.95	392
	Feb. 21, 1959	4.77	1,180		Apr. 10, 1965	4.77	973
1960	Feb. 9, 1960	5.10	1,330				
1961	Mar. 18, 1961	2.54	14				

1766. Arroyo Valle at Pleasanton, Calif.

Location.--Lat 37°40'02", long 121°53'02", in Valle de San Jose Grant, on right bank 0.4 mile northwest of Pleasanton, Alameda County, and 5.8 miles west of Livermore.

Drainage area.--171 sq mi.

Gage.--Recording. Altitude of gage is 350 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 7,000 cfs.

Bankfull stage.--31 ft.

Remarks.--Base for partial-duration series, 200 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1958	Jan. 27, 1958	8.55	782	1962	Feb. 11, 1962	9.12	523
	Feb. 3, 1958	7.80	545		Feb. 15, 1962	14.90	2,180
	Feb. 5, 1958	7.55	478		Mar. 6, 1962	12.34	1,610
	Feb. 13, 1958	6.90	340	1963	Feb. 1, 1963	23.70	8,860
	Feb. 19, 1958	17.40	5,340		Feb. 13, 1963	9.84	799
	Feb. 25, 1958	12.62	2,540		Mar. 28, 1963	8.33	352
	Mar. 16, 1958	11.01	1,750		Apr. 7, 1963	8.24	333
	Mar. 22, 1958	13.51	3,010		Apr. 15, 1963	8.08	300
	Apr. 3, 1958	25.36	11,300	1964	Jan. 23, 1964	7.66	217
	Apr. 6, 1958	11.01	1,750		Dec. 23, 1964	14.35	2,040
1959	Feb. 16, 1959	16.94	5,040	1965	Dec. 28, 1964	8.98	575
	Feb. 18, 1959	7.77	581		Jan. 6, 1965	11.09	1,180
	Feb. 21, 1959	9.24	1,070		Jan. 24, 1965	8.20	374
1960	Feb. 9, 1960	10.55	1,080		Apr. 11, 1965	10.43	969
1961	-	-	0				

1790. Alameda Creek near Niles, Calif.
(Published as "at Sunol Glen" prior to 1922)

Location.--Lat 37°35'14", long 121°57'35", in NW¹/₄ sec.15, T.4 S., R.1 W., on right bank 0.3 mile downstream from railroad bridge and 1.2 miles northeast of Niles.

Drainage area.--633 sq mi.

Gage.--Recording. Prior to Dec. 17, 1923, at site 800 ft upstream at different datum. Datum of gage is 85.65 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 16,900 cfs.

Bankfull stage.--16 ft.

Historical data.--The mean daily discharge for the flood of Nov. 30, 1892, was 16,200 cfs, from records furnished by Spring Valley Water Co.

Remarks.--Peaks regulated by Calaveras Reservoir (usable capacity, 96,800 acre-ft) beginning in 1916. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1917	Feb. 25, 1917	10.45	10,200	1926	Feb. 13, 1926	9.65	6,630
1919	Feb. 10, 1919	11.99	13,600	1927	Feb. 18, 1927	7.40	3,650
	Apr. 15, 1920	3.57	1,070	1928	Mar. 27, 1928	8.50	4,850
1920				1929	Feb. 4, 1929	4.02	288
1921	Jan. 19, 1921	6.33	3,860	1930	Mar. 5, 1930	8.45	4,720
1922	Feb. 10, 1922	12.44	15,900	1931	May 1, 1931	3.52	107
1923	Dec. 13, 1922	5.88	3,190	1932	Dec. 28, 1931	9.87	6,300
1924	Oct. 10, 1923	1.00	40	1933	Jan. 27, 1933	5.05	905
1925	Feb. 6, 1925	7.10	2,900	1934	Jan. 1, 1934	6.51	2,100

ALAMEDA CREEK BASIN

Peak stages and discharges of Alameda Creek near Niles, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1935	Apr. 8, 1935	5.95	1,800	1951	Nov. 19, 1950	12.5	18,400
1936	Feb. 14, 1936	8.80	5,450	1952	Jan. 12, 1952	13.92	24,300
1937	Mar. 22, 1937	10.30	7,350	1953	Dec. 7, 1952	5.62	1,470
1938	Feb. 11, 1938	11.46	10,500	1954	Feb. 14, 1954	4.56	592
1939	Feb. 8, 1939	4.79	783	1955	Jan. 18, 1955	4.70	690
1940	Feb. 27, 1940	10.60	8,600	1956	Dec. 23, 1955	14.9	29,000
1941	Apr. 5, 1941	9.62	6,720	1957	Feb. 25, 1957	5.05	970
1942	Jan. 25, 1942	8.90	5,510	1958	Apr. 3, 1958	14.17	25,500
1943	Jan. 23, 1943	9.94	7,290	1959	Feb. 16, 1959	7.46	4,260
1944	Mar. 5, 1944	6.97	2,820	1960	Feb. 8, 1960	6.12	2,120
1945	Feb. 2, 1945	10.54	10,700	1961	Dec. 31, 1960	2.88	22
1946	Dec. 25, 1945	4.69	713	1962	Feb. 15, 1962	6.96	3,340
1947	Mar. 10, 1947	3.61	167	1963	Feb. 1, 1963	10.48	11,500
1948	Mar. 24, 1948	3.36	104	1964	Jan. 22, 1964	5.89	1,850
1949	Mar. 12, 1949	4.76	755	1965	Dec. 23, 1964	8.01	5,320
1950	Jan. 17, 1950	5.55	1,380				

SAN LORENZO CREEK BASIN

1810. San Lorenzo Creek at Hayward, Calif.

Location.--Lat 37°41'11", long 122°03'44", in San Lorenzo Grant, on right bank of bridge on B Street, just outside city limits of Hayward, Alameda County, 0.5 mile downstream from Crow Creek.

Drainage area.--37.5 sq mi.

Gage.--Nonrecording prior to Oct. 1, 1946; recording thereafter. Datum of gage is 133.16 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 2,700 cfs and extended above on basis of slope-area measurements at 3,440, 4,790 and 7,460 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Peak for the year 1940 is maximum observed. Only annual peaks are shown prior to Oct. 1, 1946. Base for partial-duration series, 350 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1940	Feb. 27, 1940	13.13	2,990	1952	Dec. 29, 1951	9.83	1,520
1942	Jan. 24, 1942	15.7	4,200		Jan. 12, 1952	11.10	1,990
1947	Mar. 10, 1947	5.30	390		Jan. 14, 1952	10.58	1,790
1948	Mar. 23, 1948	3.48	98		Jan. 25, 1952	7.31	734
1949	Feb. 6, 1949	-	366		Feb. 1, 1952	8.63	1,120
	Mar. 11, 1949	5.64	461	1953	Mar. 14, 1952	6.73	585
1950	Jan. 17, 1950	7.64	921		Mar. 18, 1952	7.34	741
	Jan. 28, 1950	-	376		Dec. 7, 1952	9.01	1,330
	Feb. 6, 1950	-	371		Jan. 7, 1953	6.27	537
1951	Nov. 18, 1950	6.75	731		Jan. 20, 1953	5.71	408
	Dec. 3, 1950	12.70	2,610	1954	Feb. 14, 1954	6.16	491
	Dec. 8, 1950	7.80	983	1955	Jan. 18, 1955	5.51	348
	Jan. 11, 1951	5.56	408	1956	Dec. 22, 1955	20.82	4,790
	Jan. 18, 1951	9.23	1,400		Dec. 26, 1955	9.97	1,390
	Jan. 22, 1951	7.27	818		Jan. 7, 1956	9.50	1,260
	Feb. 5, 1951	6.90	718		Jan. 15, 1956	11.57	1,850
	Mar. 5, 1951	6.98	739		Jan. 25, 1956	9.66	1,500
1952	Dec. 1, 1951	6.10	502		Jan. 27, 1956	7.03	608
	Dec. 3, 1951	7.50	857	1957	Feb. 22, 1956	7.50	730
					May 18, 1957	5.97	332

Peak stages and discharges of San Lorenzo Creek at Hayward, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1958	Jan. 26, 1958	6.78	718	1962	Feb. 9, 1962	6.90	495
	Jan. 29, 1958	8.36	1,270		Feb. 15, 1962	8.17	1,030
	Feb. 2, 1958	7.60	1,000		Feb. 18, 1962	7.75	843
	Feb. 9, 1958	6.10	500		Mar. 5, 1962	6.68	413
	Feb. 12, 1958	10.02	1,910				
	Feb. 19, 1958	8.06	1,170	1963	Oct. 13, 1962	19.73	7,460
	Feb. 24, 1958	8.64	1,370		Jan. 31, 1963	14.38	3,630
	Mar. 16, 1958	5.64	362		Mar. 27, 1963	7.16	382
	Mar. 21, 1958	7.27	890				
	Mar. 30, 1958	9.31	1,620	1964	Jan. 20, 1964	8.58	768
	Apr. 2, 1958	17.45	5,100				
	Apr. 5, 1958	10.87	2,250	1965	Dec. 24, 1964	8.32	597
					Dec. 29, 1964	8.14	542
1959	Feb. 16, 1959	5.79	312		Jan. 3, 1965	7.49	357
1960	Feb. 8, 1960	8.43	1,270		Jan. 5, 1965	10.35	1,420
1961	Nov. 26, 1960	5.23	147				

PINOLE CREEK BASIN

1821. Pinole Creek at Pinole, Calif.

Location.--Lat 37°58'21", long 122°14'43", in Pinole Grant, on left bank 0.2 mile downstream from county bridge on Pinole Valley Road and 0.8 mile upstream from Pinole city boundary, Contra Costa County.

Drainage area.--10.0 sq mi.

Gage.--Recording. Altitude of gage is 170 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 680 cfs.

Remarks.--Records furnished by East Bay Municipal Utility District. Only annual peaks are shown prior to Oct. 1, 1959. Base for partial-duration series 80 cfs

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1939	Mar. 8, 1939	2.10	11	1960	Feb. 8, 1960	4.05	243
1940	Feb. 28, 1940	9.85	1,070	1961	Jan. 26, 1961	2.16	18
1941	Apr. 4, 1941	8.49	866				
1942	Feb. 6, 1942	9.3	1,000	1962	Feb. 9, 1962	4.50	344
1943	Jan. 22, 1943	7.80	753		Feb. 14, 1962	5.96	554
1944	Mar. 4, 1944	4.32	243		Mar. 5, 1962	5.15	440
1945	Feb. 1, 1945	5.40	383				
1946	Dec. 22, 1945	4.70	292	1963	Oct. 13, 1962	7.18	797
1947	Mar. 3, 1947	2.10	31		Jan. 30, 1963	6.30	639
1948	Mar. 22, 1948	1.67	13		Feb. 9, 1963	4.32	314
1949	Mar. 11, 1949	3.32	197		Feb. 12, 1963	3.80	224
1950	Feb. 4, 1950	3.65	252		Mar. 28, 1963	4.86	398
					Apr. 6, 1963	4.01	261
1951	Dec. 3, 1950	5.15	607		Apr. 14, 1963	3.75	215
1952	Jan. 14, 1952	8.44	924		Apr. 18, 1963	3.37	150
1953	Dec. 7, 1952	7.04	705	1964	Jan. 20, 1964	4.85	390
1954	Feb. 17, 1954	4.04	226				
1955	Feb. 26, 1955	3.35	145	1965	Dec. 23, 1964	3.09	113
1956	Dec. 22, 1955	6.99	697		Dec. 26, 1964	3.11	115
1957	Feb. 28, 1957	3.47	162		Dec. 29, 1964	3.58	187
1958	Apr. 2, 1958	11.63	1,660		Jan. 3, 1965	3.78	219
1959	Jan. 17, 1959	4.36	288		Jan. 5, 1965	6.77	724

1825. San Ramon Creek at San Ramon, Calif.

Location.--Lat 37°46'20", long 121°59'40", in sec.8, T.2 S., R.1 W., on right bank 0.2 mile downstream from Bollinger Creek and 1.0 mile southwest of San Ramon.

Drainage area.--5.89 sq mi.

Gage.--Recording. Altitude of gage is 530 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 140 cfs and extended above on basis of computations of flow through a culvert at 1,350 and 1,600 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Base for partial-duration series, 100 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1953	Dec. 7, 1952	3.72	212	1958	Mar. 20, 1958	3.35	133
	Jan. 7, 1953	3.09	149		Mar. 23, 1958	3.17	117
	Jan. 20, 1953	2.66	106		Mar. 29, 1958	5.09	294
1954	Jan. 17, 1954	2.71	111		Apr. 2, 1958	15.30	1,490
	Feb. 14, 1954	3.17	157		Apr. 5, 1958	4.25	214
	Feb. 17, 1954	3.47	187	1959	Feb. 16, 1959	2.86	96
1955	Jan. 18, 1955	3.04	97	1960	Feb. 8, 1960	5.96	381
1956	Dec. 22, 1955	14.2	1,350	1961	Mar. 14, 1961	2.50	25
	Dec. 26, 1955	3.83	173	1962	Feb. 9, 1962	4.54	233
	Jan. 7, 1956	3.88	228		Feb. 14, 1962	5.32	343
	Jan. 15, 1956	3.78	218	1963	Oct. 13, 1962	16.98	1,600
	Jan. 25, 1956	4.30	270		Jan. 31, 1963	12.09	1,250
	Feb. 22, 1956	3.76	216		Apr. 14, 1963	3.11	110
1957	May 18, 1957	3.74	169	1964	Jan. 20, 1964	5.57	480
1958	Jan. 26, 1958	4.88	273		Dec. 23, 1964	6.30	579
	Jan. 29, 1958	4.24	214	1965	Dec. 26, 1964	3.60	196
	Feb. 2, 1958	3.76	170		Jan. 5, 1965	5.40	456
	Feb. 8, 1958	3.12	113		Jan. 23, 1965	3.88	231
	Feb. 12, 1958	4.55	242				
	Feb. 19, 1958	3.79	173				
	Feb. 24, 1958	4.90	275				

1830. San Ramon Creek at Walnut Creek, Calif.

Location.--Lat 37°53'04", long 122°03'00", on boundary between Arroyo de las Nueces y Bolbones and San Ramon Grants, on left bank 0.3 mile downstream from small tributary, 1.1 miles south of town of Walnut Creek, Contra Costa County, and 1.2 miles upstream from confluence with Las Trampas Creek.

Drainage area.--50.8 sq mi.

Gage.--Recording. Altitude of gage is 170 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 2,200 cfs and extended above on basis of slope-area measurements at 4,500 and 6,890 cfs.

Bankfull stage.--17 ft.

Remarks.--Base for partial-duration series, 500 cfs.

Peak stages and discharges of San Ramon Creek at Walnut Creek, Calif.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1953	Dec. 7, 1952	7.60	1,880	1958	Mar. 22, 1958	5.84	1,020
	Jan. 7, 1953	6.64	1,400		Mar. 30, 1958	6.57	1,310
	Jan. 14, 1953	5.18	562		Apr. 2, 1958	13.16	6,530
	Jan. 20, 1953	5.16	554		Apr. 5, 1958	7.00	1,500
1954	Feb. 17, 1954	5.07	520	1959	Feb. 16, 1959	3.49	356
1955	Jan. 18, 1955	4.19	252	1960	Feb. 8, 1960	7.40	2,070
1956	Dec. 23, 1955	14.55	6,890	1961	Nov. 26, 1960	2.35	59
	Dec. 26, 1955	6.70	1,370	1962	Feb. 14, 1962	6.53	1,550
	Jan. 7, 1956	6.35	1,180		Feb. 18, 1962	5.10	810
	Jan. 15, 1956	6.80	1,420		Mar. 5, 1962	4.54	594
	Jan. 20, 1956	5.05	550	1963	Oct. 13, 1962	9.02	4,500
	Jan. 25, 1956	8.85	2,650		Jan. 31, 1963	14.40	7,980
	Jan. 27, 1956	5.25	618		Feb. 12, 1963	4.78	652
	Feb. 22, 1956	6.16	1,070		Mar. 27, 1963	4.90	700
1957	May 18, 1957	3.50	124		Apr. 14, 1963	4.58	578
1958	Jan. 26, 1958	5.33	834	1964	Jan. 20, 1964	7.82	2,130
	Jan. 29, 1958	5.23	804	1965	Dec. 23, 1964	8.47	2,550
	Feb. 2, 1958	5.60	925		Dec. 29, 1964	4.91	714
	Feb. 7, 1958	4.43	582		Jan. 3, 1965	5.06	774
	Feb. 12, 1958	7.64	1,830		Jan. 5, 1965	8.05	2,270
	Feb. 19, 1958	8.17	2,150		Jan. 23, 1965	5.73	1,050
	Feb. 24, 1958	8.12	2,120				
	Mar. 16, 1958	4.81	678				

1835. Walnut Creek at Walnut Creek, Calif.

Location.--Lat 37°54'21", long 122°03'22", in Arroyo de las Nueces y Bolbones Grant, on right bank at Southern Pacific Railroad bridge at town of Walnut Creek, Contra Costa County, 0.7 mile downstream from confluence of San Ramon and Las Trampas Creeks.

Drainage area.--79.2 sq mi.

Gage.--Recording. Prior to June 20, 1957, at site 0.6 mile upstream at different datum. Altitude of gage is 120 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 2,400 cfs and extended above on basis of records for upstream station prior to June 20, 1957; by current-meter measurements below 12,100 cfs and extended above on basis of records for upstream stations thereafter.

Bankfull stage.--21 ft.

Remarks.--Peaks slightly regulated by Lafayette Reservoir (capacity, 5,220 acre-ft) beginning in 1932. Base for partial-duration series, 600 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1953	Dec. 7, 1952	11.15	3,660	1956	Feb. 22, 1956	9.48	2,740
	Dec. 30, 1952	5.40	643	1957	May 18, 1957	6.06	624
	Jan. 7, 1953	7.84	1,840	1958	Jan. 26, 1958	6.15	2,200
	Jan. 14, 1953	5.70	775		Jan. 29, 1958	5.34	1,590
	Jan. 20, 1953	5.84	841		Feb. 2, 1958	5.96	2,070
1954	Feb. 17, 1954	6.23	1,040		Feb. 7, 1958	5.00	1,210
1955	Jan. 18, 1955	4.98	476		Feb. 12, 1958	8.00	3,500
1956	Dec. 19, 1955	5.56	727		Feb. 19, 1958	7.30	3,010
	Dec. 23, 1955	23.22	11,000		Feb. 24, 1958	8.58	3,910
	Dec. 26, 1955	9.95	3,000		Mar. 16, 1958	5.20	1,430
	Jan. 7, 1956	8.01	1,940		Mar. 20, 1958	6.30	2,310
	Jan. 15, 1956	9.42	2,710		Mar. 23, 1958	5.30	1,550
	Jan. 20, 1956	5.68	781		Mar. 30, 1958	5.99	2,090
	Jan. 25, 1956	12.26	4,270		Apr. 2, 1958	20.2	12,200
	Jan. 27, 1956	5.85	858		Apr. 5, 1958	7.47	3,130
	Feb. 19, 1956	5.52	709	1959	Feb. 16, 1959	all.96	857

a Occurred Sept. 18, 1959; backwater from temporary road crossing.

Peak stages and discharges of Walnut Creek at Walnut Creek, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1960	Feb. 8, 1960	7.88	3,420	1963	Feb. 12, 1963	4.82	1,040
1961	Mar. 14, 1961	3.96	360		Mar. 27, 1963	5.00	1,170
1962	Jan. 19, 1962	4.44	617		Apr. 14, 1963	4.23	682
	Feb. 9, 1962	5.67	1,750	1964	Jan. 20, 1964	6.95	2,760
	Feb. 13, 1962	5.55	1,660	1965	Dec. 23, 1964	6.24	3,340
	Feb. 14, 1962	7.55	3,200		Dec. 29, 1964	4.00	735
	Feb. 18, 1962	4.82	962		Jan. 3, 1965	4.47	1,100
	Mar. 5, 1962	5.22	1,400		Jan. 5, 1965	6.72	4,200
1963	Oct. 13, 1962	13.68	10,900		Jan. 23, 1965	4.85	1,450
	Jan. 31, 1963	12.55	9,180		Apr. 9, 1965	3.98	721

TULARE LAKE BASIN

2245. Los Gatos Creek above Nunez Canyon, near Coalinga, Calif.

Location.--Lat 36°12'55", long 120°28'10", in NE¼SW¼ sec.5, T.20 S., R.14 E., on right bank 50 ft downstream from highway bridge, 1.1 miles upstream from Nunez Canyon, 3.0 miles downstream from White Creek, and 8 miles northwest of Coalinga.

Drainage area.--95.8 sq mi.

Gage.--Recording. Prior to Aug. 2, 1959, at site 100 ft downstream at same datum. Altitude of gage is 1,100 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 260 cfs and extended above on basis of contracted-opening measurement at 2,560 cfs prior to Aug. 2, 1959; defined by current-meter measurements below 110 cfs and extended on basis of contracted-opening measurement at 2,560 cfs thereafter.

Bankfull stage.--Not subject to overflow.

Remarks.--Base for partial-duration series, 40 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1950	Feb. 6, 1950	1.96	61	1957	Apr. 17, 1957	2.16	113
1951	Oct. 27, 1950	1.88	39	1958	Jan. 26, 1958	2.18	108
1952	Dec. 5, 1951	2.26	145		Feb. 4, 1958	3.65	670
	Dec. 29, 1951	3.40	890		Feb. 19, 1958	4.61	1,210
	Jan. 12, 1952	3.15	645		Feb. 25, 1958	2.97	368
	Jan. 15, 1952	3.60	1,120		Mar. 15, 1958	4.18	949
	Jan. 25, 1952	3.70	1,250		Mar. 21, 1958	4.58	1,190
	Mar. 15, 1952	3.10	600		Mar. 27, 1958	2.83	232
	Mar. 18, 1952	2.40	194		Apr. 3, 1958	6.51	2,560
1953	Dec. 1, 1952	2.78	373		Apr. 6, 1958	4.10	900
	Dec. 7, 1952	2.52	243	1959	Feb. 16, 1959	4.32	854
	Dec. 20, 1952	1.93	48		Feb. 21, 1959	3.23	168
	Dec. 28, 1952	2.12	100	1960	Feb. 1, 1960	3.68	231
	Dec. 30, 1952	2.35	176	1961	Dec. 1, 1960	3.39	117
	Jan. 8, 1953	2.90	410	1962	Dec. 2, 1961	3.97	124
1954	Nov. 14, 1953	2.62	288		Feb. 9, 1962	7.25	2,560
	Jan. 24, 1954	2.71	334		Feb. 15, 1962	4.75	365
	Feb. 13, 1954	2.57	265		Mar. 6, 1962	4.14	152
	Mar. 16, 1954	2.24	138	1963	Jan. 31, 1963	4.79	381
	Mar. 19, 1954	2.31	162		Feb. 9, 1963	5.18	570
1955	Feb. 27, 1955	1.96	50		Feb. 13, 1963	4.19	167
1956	Dec. 23, 1955	3.09	592	1964	Nov. 20, 1963	4.65	325
	Dec. 26, 1955	2.34	172		Jan. 22, 1964	3.91	55
	Dec. 31, 1955	2.38	187	1965	Jan. 6, 1965	4.39	119
	Jan. 25, 1956	3.19	681		Apr. 12, 1965	4.13	61
1957	Jan. 13, 1957	2.39	190				
	Feb. 24, 1957	1.95	48				

2250. Los Gatos Creek near Coalinga, Calif.

Location.--Lat 37°13', long 120°27', in SW $\frac{1}{4}$ sec.4, T.20 S., R.14 E., at mouth of canyon, 3 miles downstream from Diaz Creek and $7\frac{1}{2}$ miles northwest of Coalinga.

Drainage area.--105 sq mi.

Gage.--Recording. Prior to Oct. 13, 1933, at datum 1 ft higher. Altitude of gage is 1,000 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 150 cfs and extended on basis of velocity-area and intake-drawdown studies.

Bankfull stage.--Not subject to overflow.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1932	Dec. 28, 1931	3.66	1,050	1937	Feb. 6, 1937	3.6	700
1933	Jan. 29, 1933	.9	20	1938	Feb. 11, 1938	6.23	4,520
1934	Dec. 31, 1933	3.15	900	1939	Mar. 21, 1939	4.50	1,900
1935	Nov. 15, 1934	2.45	510	1940	Feb. 25, 1940	3.46	1,100
1936	Feb. 22, 1936	3.50	940	1941	Apr. 4, 1941	5.58	4,000

2250.5. Warthan Creek tributary No. 1 near Coalinga, Calif.

Location.--Lat 36°05'55", long 120°32'00", in SE $\frac{1}{4}$ sec.14, T.21 S., R.13 E., at culvert on State Highway 198, 10.5 miles southwest of Coalinga.

Drainage area.--0.13 sq mi.

Gage.--Crest-stage gage. Altitude of gage is 1,500 ft (from topographic map).

Stage-discharge relation.--Defined by culvert computations.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1959	Feb. 16, 1959	5.38	4.5	1963	Feb. 9, 1963	5.85	9.2
1960	Feb. 1, 1960	-	.3	1964	-	-	0
				1965	-	-	0
1961	Nov. 5, 1960	-	0				
1962	Feb. 6, 1962	5.68	7.2				

2250.75. Warthan Creek tributary No. 2 near Coalinga, Calif.

Location.--Lat 36°05'30", long 120°28'50", in N $\frac{1}{2}$ sec.20, T.21 S., R.14 E., at culvert on State Highway 198, 7.5 miles southwest of Coalinga.

Drainage area.--0.012 sq mi.

Gage.--Crest-stage gage. Altitude of gage is 1,200 ft (from topographic map).

Stage-discharge relation.--No flow for entire period of record, 1959-65.

2480. Fine Gold Creek near Friant, Calif.

Location.--Lat 37°04'00", long 119°38'50", in NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec.14, T.10 S., R.21 E., on right bank 1,500 ft downstream from Willow Creek and 5.5 miles northeast of Friant.

Drainage area.--92.6 sq mi.

Gage.--Recording. Altitude of gage is 620 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 6,500 cfs.

Remarks.--Only annual peaks are shown prior to Oct. 1, 1944. Base for partial-duration series, 500 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1937	Feb. 6, 1937	16.45	6,780	1951	Dec. 4, 1950	14.00	4,900
1938	Mar. 12, 1938	20.4	10,300		Jan. 18, 1951	7.22	1,140
1939	Mar. 27, 1939	3.55	238				
1940	Jan. 25, 1940	13.53	4,550	1952	Dec. 29, 1951	7.88	1,310
					Jan. 15, 1952	9.22	1,880
1941	Feb. 12, 1941	-	4,000		Jan. 25, 1952	10.80	2,730
1942	Dec. 30, 1941	9.34	1,950		Mar. 18, 1952	9.03	1,790
1943	Jan. 21, 1943	14.56	5,320		Mar. 18, 1952	7.14	1,050
1944	Mar. 4, 1944	4.98	548				
				1953	Dec. 31, 1952	5.30	615
1945	Feb. 2, 1945	13.63	4,630		Jan. 13, 1953	6.76	1,050
	Feb. 3, 1945	-	1,570				
	Mar. 15, 1945	-	1,680	1954	Feb. 14, 1954	5.06	548
	Mar. 23, 1945	-	1,010				
	Mar. 26, 1945	-	1,360	1955	Jan. 1, 1955	4.75	334
1946	Dec. 22, 1945	-	636	1956	Dec. 23, 1955	17.94	7,450
	Dec. 25, 1945	-	514		Dec. 26, 1955	8.12	1,370
	Mar. 30, 1946	6.55	942		Jan. 23, 1956	6.52	831
					Jan. 25, 1956	13.38	3,940
1947	Dec. 27, 1946	7.93	1,480				
1948	Apr. 10, 1948	5.95	810	1957	May 19, 1957	4.97	407
1949	Mar. 4, 1949	6.58	1,010				
1950	Feb. 5, 1950	5.67	726	1958	Feb. 3, 1958	8.87	1,660
					Feb. 25, 1958	9.79	2,050
					Mar. 16, 1958	13.83	4,230
					Mar. 22, 1958	13.12	3,800
					Apr. 3, 1958	13.52	4,040
1951	Nov. 19, 1950	15.58	6,110		Apr. 6, 1958	8.02	1,330

2555. Panoche Creek below Silver Creek, near Panoche, Calif.

Location.--Lat 36°37'08", long 120°40'22", in SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.16, T.15 S., R.12 E., on right bank 1.1 miles downstream from Silver Creek, 9 miles east of Panoche, and 18 miles southwest of Mendota.

Drainage area.--293 sq mi.

Gage.--Recording. Datum of gage is 558.26 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 870 cfs and extended above on basis of slope-area measurements at 2,510 and 5,090 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Only annual peak is shown for 1958. Base for partial-duration series, 50 cfs.

Peak stages and discharges of Panoche Creek below Silver Creek, near Panoche, Calif.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1950	Sept. 18, 1950	6.25	2,510	1958	Apr. 2, 1958	7.01	5,090
1951	Oct. 26, 1950	2.59	148	1959	Feb. 16, 1959	3.25	410
1952	Dec. 5, 1951	2.22	55		Feb. 21, 1959	3.04	313
	Dec. 28, 1951	3.10	332	1960	Jan. 9, 1960	1.15	.3
	Jan. 12, 1952	7.05	3,160	1961	Jan. 26, 1961	1.44	1.0
	Jan. 15, 1952	4.21	1,090				
	Jan. 25, 1952	4.38	1,080	1962	Feb. 9, 1962	4.53	1,330
	Mar. 15, 1952	6.00	2,300		Feb. 15, 1962	4.46	1,260
	Mar. 19, 1952	2.09	80		Mar. 6, 1962	3.26	415
	Apr. 9, 1952	2.17	95				
1953	Nov. 15, 1952	-	640	1963	Feb. 9, 1963	2.85	170
	Dec. 1, 1952	3.3	470				
	Dec. 17, 1952	2.3	119	1964	Jan. 22, 1964	2.16	25
	Dec. 20, 1952	-	(a)				
	Dec. 28, 1952	4.34	1,050	1965	Oct. 28, 1964	2.96	147
	Dec. 30, 1952	2.28	114				
	Jan. 8, 1953	2.25	107				

a Discharge unknown, exceeded base.

2555.5. Little Panoche Creek tributary No. 1 near Panoche, Calif.

Location.--Lat 36°43'05", long 120°51'50", in SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec.10, T.14 S., R.10 E., on right bank 1.0 mile north of Mercy Hot Springs and 8.7 miles north of Panoche.

Drainage area.--0.33 sq mi.

Gage.--Recording. Altitude of gage is 1,080 ft (from topographic map).

Stage-discharge relation.--Defined by computations of flow through a culvert at 0.73 and 4.9 cfs and extended on basis of estimate based on field survey of flow through a culvert at 58 cfs.

Bankfull stage.--13 ft.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1959	Feb. 20, 1959	5.32	0.7	1963	Feb. 9, 1963	5.47	2.2
1960	Feb. 9, 1960	5.30	.6	1964	Jan. 21, 1964	5.33	1.0
				1965	Apr. 10, 1965	5.54	3.0
1961	Nov. 6, 1960	5.65	4.9				
1962	Jan. 19, 1962	7.16	58				

2629.5. Wolf Creek near Volta, Calif.

Location.--Lat 37°04'05", long 121°09'40", in San Louis Gonzaga Grant, at culvert on State Highway 152, 13 miles west of Volta.

Drainage area.--2.82 sq mi.

Gage.--Crest-stage gage. Altitude of gage is 410 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements to 13 cfs and extended above on basis of slope-area measurement at 207 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges of Wolf Creek near Volta, Calif.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1959	Feb. 21, 1959	3.14	15	1962	Feb. 18, 1962	4.06	56
1960	Feb. 10, 1960	3.28	19	1963	Feb. 1, 1963	5.70	207
				1964	-	-	0
1961	-	-	0	1965	Jan. 20, 1965	3.17	16

2630. San Luis Creek near Los Banos, Calif.

Location.--Lat 37°03'55", long 121°04'15", in San Luis Gonzaga Grant, on left bank 300 ft downstream from Cottonwood Creek and 11.5 miles west of Los Banos, Merced County.

Drainage area.--84.6 sq mi.

Gage.--Recording. Altitude of gage is 231 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 470 cfs and extended above on basis of slope-area measurements at 2,760 and 3,420 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Only annual peaks are shown in 1956 and 1958. Base for partial-duration series, 100 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1950	-	-	0	1956	Dec. 23, 1955	7.07	2,640
				1958	Apr. 2, 1958	7.99	3,420
1951	Nov. 19, 1950	5.60	2,760				
	Dec. 3, 1950	5.08	1,680	1959	Feb. 16, 1959	4.16	305
	Dec. 8, 1950	3.87	504		Feb. 21, 1959	4.23	328
1952	Dec. 4, 1951	3.45	296	1960	Feb. 10, 1960	3.98	344
	Dec. 28, 1951	3.62	372				
	Jan. 12, 1952	3.96	556	1961	Jan. 26, 1961	2.03	2.6
	Jan. 14, 1952	5.52	2,560				
	Jan. 25, 1952	4.77	1,250	1962	Feb. 11, 1962	3.10	117
	Mar. 15, 1952	3.00	156		Feb. 15, 1962	4.93	798
	Mar. 19, 1952	4.41	879		Feb. 18, 1962	4.15	410
1953	Dec. 7, 1952	3.14	191	1963	Feb. 1, 1963	7.41	2,930
	Jan. 13, 1953	3.17	200		Feb. 13, 1963	3.58	255

2745. Orestimba Creek near Newman, Calif.

Location.--Lat 37°19'09", long 121°07'12", on line between secs.17 and 20, T.7 S., R.8 E., at left bank pair of county road bridge, 3 miles downstream from Oso Creek and 5 miles west of Newman.

Drainage area.--134 sq mi.

Gage.--Recording. Prior to Oct. 1, 1958, at datum 3.00 ft higher. Datum of gage is 188.86 ft above mean sea level, adjustment of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 5,000 cfs.

Bankfull stage.--10 ft.

Remarks.--Only annual peaks are shown prior to Oct. 1, 1946. Base for partial-duration series, 50 cfs.

Peak stages and discharges of Orestimba Creek near Newman, Calif.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1932	Feb. 8, 1932	5.15	4,260	1956	Dec. 26, 1955	2.12	421
1933	Jan. 29, 1933	2.3	345		Dec. 31, 1955	1.92	310
1934	Jan. 1, 1934	2.61	516		Jan. 5, 1956	1.74	231
1935	Apr. 8, 1935	3.56	1,320		Jan. 8, 1956	1.85	278
					Jan. 20, 1956	1.30	100
1936	Feb. 13, 1936	3.45	1,200		Jan. 25, 1956	2.76	956
1937	Feb. 13, 1937	4.28	2,180		Feb. 23, 1956	1.68	208
1938	Feb. 11, 1938	4.80	3,230				
1939	Mar. 9, 1939	1.82	115	1957	Feb. 24, 1957	3.15	1,440
1940	Feb. 27, 1940	4.90	3,440		Mar. 1, 1957	1.12	60
1941	Apr. 4, 1941	4.72	3,070	1958	Jan. 26, 1958	2.17	564
1942	Jan. 24, 1942	4.05	1,880		Feb. 5, 1958	1.56	189
1943	Jan. 21, 1943	5.95	6,450		Feb. 12, 1958	1.40	130
1944	Feb. 29, 1944	3.53	1,290		Feb. 19, 1958	4.05	3,200
1945	Feb. 2, 1945	5.74	5,970		Feb. 25, 1958	2.69	1,070
					Mar. 16, 1958	3.56	2,240
1946	Dec. 25, 1945	2.87	782		Mar. 21, 1958	2.85	1,250
					Apr. 2, 1958	6.57	10,200
1947	-	-	0		Apr. 6, 1958	3.05	1,240
1948	-	-	0	1959	Jan. 10, 1959	5.42	120
					Feb. 12, 1959	5.24	73
1949	Mar. 12, 1949	2.19	335		Feb. 16, 1959	8.85	5,380
					Feb. 21, 1959	6.82	1,290
1950	Feb. 5, 1950	1.80	175				
				1960	Feb. 5, 1960	5.37	109
1951	Nov. 19, 1950	3.65	1,470		Feb. 10, 1960	6.06	448
	Dec. 3, 1950	4.49	2,920				
	Dec. 8, 1950	3.87	1,710	1961	-	-	0
	Jan. 19, 1951	1.41	77				
	Mar. 5, 1951	1.40	75	1962	Feb. 10, 1962	6.43	796
					Feb. 15, 1962	7.14	1,740
1952	Dec. 4, 1951	3.12	1,010		Mar. 2, 1962	5.27	80
	Dec. 30, 1951	2.15	345		Mar. 6, 1962	5.91	337
	Jan. 12, 1952	4.70	3,660				
	Jan. 14, 1952	3.87	2,110	1963	Feb. 1, 1963	9.72	8,300
	Jan. 25, 1952	3.93	2,210		Feb. 10, 1963	5.42	209
	Mar. 7, 1952	1.76	206		Feb. 13, 1963	6.31	810
	Mar. 15, 1952	3.72	1,880		Mar. 28, 1963	5.66	202
	Mar. 18, 1952	2.00	295		Apr. 7, 1963	6.10	480
	Apr. 10, 1952	1.34	92		Apr. 14, 1963	5.36	86
					Apr. 21, 1963	5.40	100
1953	Dec. 7, 1952	1.71	147				
	Dec. 31, 1952	1.29	59	1964	Jan. 22, 1964	5.59	156
	Jan. 9, 1953	1.22	50				
				1965	Dec. 31, 1964	5.57	148
1954	-	-	0		Jan. 3, 1965	5.75	240
					Jan. 6, 1965	6.20	560
1955	Jan. 19, 1955	.86	16		Jan. 24, 1965	5.30	62
					Apr. 10, 1965	5.80	270
1956	Dec. 23, 1955	5.18	5,620				

2746. Del Puerto Creek tributary No. 1 near Patterson, Calif.

Location.--Lat 37°24'15", long 121°26'10", in NE¼NW¼ sec.21, T.6 S., R.5 E., at culvert on county road 17.5 miles southwest of Patterson.

Drainage area.--0.71 sq mi.

Gage.--Crest-stage gage prior to Oct. 1, 1963; recording thereafter. Altitude of gage is 1,730 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 6 cfs and extended above on basis of culvert computations.

Remarks.--Only annual peaks are shown.

Peak stages and discharges of Del Puerto Creek tributary No. 1 near Patterson, Calif.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1959	Feb. 16, 1959	93.57	17	1962	Mar. 7, 1962	93.56	17
1960	Feb. 10, 1960	93.05	5.0	1963	Feb. 1, 1963	93.73	20
				1964	Jan. 20, 1964	7.61	1.3
1961	-	-	0	1965	Dec. 22, 1964	7.94	9.0

2746.1 Del Puerto Creek tributary No. 2 near Patterson, Calif.

Location.--Lat 37°25'25", long 121°20'30", in NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.8, T.6 S., R.6 E., on left bank 0.5 mile downstream from Fall Canyon and 12 miles southwest of Patterson.

Drainage area.--0.02 sq mi.

Gage.--Recording. Altitude of gage is 1,020 ft (from topographic map).

Stage-discharge relation.--Defined by culvert computation to 0.5 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1959	Feb. 16, 1959	5.73	0.5	1962	-	-	0
1960	-	-	0	1963	-	-	0
				1964	-	-	0
1961	-	-	0	1965	-	-	0

3040. Corral Hollow Creek near Tracy, Calif.

Location.--37°39'24", long 121°28'40", in SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.24, T.3 S., R.4 E., on left bank just upstream from highway bridge, 0.8 mile downstream from Elk Ravine and 6.3 miles southwest of Tracy.

Drainage area.--61.6 sq mi.

Gage.--Recording. Altitude of gage is 330 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 135 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Base for partial-duration series, 40 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1959	Feb. 16, 1959	2.78	129	1962	Mar. 6, 1962	2.54	145
	Feb. 21, 1959	2.58	94	1963	Feb. 1, 1963	2.04	56
1960	Feb. 10, 1960	2.28	91	1964	Jan. 21, 1964	1.39	4.2
1961	Jan. 26, 1961	1.69	8.5	1965	Jan. 7, 1965	2.10	54
1962	Feb. 15, 1962	2.45	74				

3129.25 Mountain House Creek tributary near Altamont, Calif.

Location.--Lat 37°44'42", long 121°37'50", in SW¹NE¹ sec.22, T.2 S., R.3 E., at culvert on old U.S. Highway 50, 1.8 miles east of Altamont.

Drainage area.--0.27 sq mi.

Gage.--Crest-stage gage. Altitude of gage is 506 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 0.34 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1959	Feb. 16, 1959	-	0.5	1962	Feb. 9, 1962	-	0.2
1960	Feb. 1, 1960	-	2	1963	Feb. 1, 1963	6.25	.5
				1964	June 9, 1964	5.81	.1
1961	Jan. 31, 1961	5.84	.2	1965	Jan. 19, 1965	-	.3

3129.5. Mountain House Creek near Midway, Calif.

Location.--Lat 37°44'45", long 121°35'00", in SW¹NW¹ sec.19, T.2 S., R.4 E., at culvert on county road 2.5 miles northwest of Midway.

Drainage area.--11.7 sq mi.

Gage.--Crest-stage gage. Altitude of gage is 265 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 2 cfs and extended on basis of culvert computations to 38 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1959	Feb. 16, 1959	2.92	10	1962	Mar. 6, 1962	2.74	22
1960	Feb. 8, 1960	4.12	60	1963	Feb. 1, 1963	2.65	19
				1964	Jan. 21, 1964	2.60	8
1961	Jan. 31, 1961	2.64	3.6	1965	Dec. 23, 1964	2.50	5.9

3375. Marsh Creek near Byron, Calif.

Location.--Lat 37°52'25", long 121°43'35", in Los Meganos Grant, on right bank 40 ft downstream from highway bridge on Marsh Creek road and 5.0 miles west of Byron, Contra Costa County.

Drainage area.--42.6 sq mi.

Gage.--Recording. Datum of gage is 177.87 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 320 cfs and extended above on basis of slope-area measurement at 3,800 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Only annual peaks are shown prior to Oct. 1, 1958. Base for partial-duration series, 40 cfs.

SAN JOAQUIN RIVER BASIN

Peak stages and discharges of Marsh Creek near Byron, Calif.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1954	Feb. 14, 1954	4.53	32	1963	Oct. 13, 1962	4.14	200
1955	Feb. 27, 1955	4.48	86		Jan. 31, 1963	11.62	3,880
					Feb. 13, 1963	4.38	235
1956	Dec. 23, 1955	12.98	3,800		Mar. 28, 1963	4.66	305
1957	Feb. 24, 1957	4.38	144		Apr. 7, 1963	4.32	221
1958	Apr. 2, 1958	10.90	3,380		Apr. 14, 1963	5.07	436
					Apr. 20, 1963	3.95	139
1959	Feb. 11, 1959	2.11	53	1964	Jan. 21, 1964	4.93	391
	Feb. 16, 1959	3.11	186				
	Feb. 21, 1959	2.33	74	1965	Dec. 23, 1964	7.84	1,570
1960	Feb. 8, 1960	5.57	590		Dec. 29, 1964	5.05	372
1961	-	-	0		Jan. 3, 1965	5.08	380
					Jan. 6, 1965	5.27	442
1962	Feb. 10, 1962	3.55	92		Jan. 24, 1965	3.88	111
	Feb. 14, 1962	5.30	505		Apr. 9, 1965	4.16	160
	Feb. 18, 1962	4.17	206		Apr. 16, 1965	3.85	106
	Mar. 5, 1962	3.92	156				

SACRAMENTO RIVER BASIN

3744. Middle Fork Cottonwood Creek near Ono, Calif.

Location.--Lat 40°23'25", long 122°31'15", in SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.3, T.29 N., R.6 W., on left bank 0.4 mile upstream from North Fork and 7.8 miles southeast of Ono.

Drainage area.--249 sq mi.

Gage.--Recording. Altitude of gage is 550 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 7,700 cfs.

Bankfull stage.--10 ft.

Remarks.--Base for partial-duration series, 1,800 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1957	Feb. 24, 1957	11.45	4,920	1960	Mar. 8, 1960	8.57	2,100
1958	Oct. 13, 1957	10.65	4,000	1961	Jan. 31, 1961	11.08	4,480
	Dec. 21, 1957	9.32	2,550		Feb. 9, 1961	8.72	1,980
	Dec. 28, 1957	9.61	2,850	1962	Feb. 14, 1962	9.45	2,680
	Jan. 26, 1958	12.09	5,690		Mar. 5, 1962	9.72	2,970
	Jan. 29, 1958	12.13	5,740	1963	Oct. 13, 1962	8.67	1,940
	Feb. 4, 1958	11.27	4,700		Jan. 31, 1963	11.71	5,230
	Feb. 7, 1958	10.07	3,360		Feb. 10, 1963	10.47	3,800
	Feb. 12, 1958	13.22	7,050		Feb. 12, 1963	9.34	2,570
	Feb. 15, 1958	11.47	4,940		Mar. 27, 1963	9.52	2,750
	Feb. 18, 1958	14.74	9,090		Apr. 8, 1963	9.86	3,130
	Feb. 24, 1958	14.64	8,950		Apr. 14, 1963	9.24	2,470
	Mar. 22, 1958	9.39	2,620	1964	Jan. 20, 1964	12.74	6,470
	Mar. 24, 1958	9.11	2,340	1965	Dec. 22, 1964	19.08	13,500
	Mar. 29, 1958	9.19	2,420		Jan. 5, 1965	11.56	5,280
	Apr. 2, 1958	9.06	2,290		Jan. 23, 1965	8.74	2,400
	Apr. 5, 1958	11.88	5,440		Apr. 8, 1965	8.52	2,200
1959	Jan. 12, 1959	9.70	2,940		Apr. 20, 1965	11.98	5,740
	Feb. 16, 1959	10.24	3,530				
1960	Feb. 8, 1960	13.66	7,620				

3755. North Fork Cottonwood Creek at Ono, Calif.

Location.--Lat 40°28'20", long 122°37'20", near center of sec.11, T.30 N., R.7 W., at highway bridge 250 ft downstream from Rector (formerly Byron) Creek, 0.3 mile southwest of Ono, and 0.5 mile upstream from Eagle Creek.

Drainage area.--58.8 sq mi.

Gage.--Nonrecording. Altitude of gage is 850 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 1,200 cfs.

Bankfull stage.--18 ft.

Remarks.--All peaks are maximum observed. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1908	Feb. 9, 1908	7.5	2,200	1911	Mar. 6, 1911	8.0	3,000
1909	Feb. 2, 1909	9.8	7,400	1912	Jan. 25, 1912	7.4	2,050
1910	Dec. 8, 1909,			1913	Jan. 18, 1913	6.7	1,160
	Mar. 22, 1910	6.8	1,270	1914	Dec. 31, 1913	9.0	5,200

3757. 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., near right bank on downstream side of bridge on Gas Point Road, 1.2 miles downstream from Huling Creek, 4.4 miles south of Igo, and 4.5 miles upstream from Middle Fork.

Drainage area.--88.7 sq mi.

Gage.--Recording. Altitude of gage is 630 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 6,400 cfs.

Bankfull stage.--Not subject to overflow.

Historical data.--Flood of Dec. 21, 1955, reached a peak discharge of 12,100 cfs, by slope-area measurement at site 1.2 miles upstream (above Huling Creek).

Remarks.--Records furnished by the California Department of Water Resources. Peaks regulated by Rainbow Lake (capacity, 4,800 acre-ft) beginning prior to 1957. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1956	Dec. 21, 1955	-	12,100	1961	Jan. 31, 1961	36.38	9,130
1957	Feb. 24, 1957	33.97	3,590	1962	Jan. 31, 1962	35.20	5,960
1958	Feb. 18, 1958	35.59	6,930	1963	Jan. 31, 1963	35.92	7,810
1959	Feb. 16, 1959	33.69	2,930	1964	Jan. 20, 1964	35.89	7,810
1960	Feb. 8, 1960	35.70	7,210	1965	Dec. 22, 1964	41.7	11,000

3760. Cottonwood Creek near Cottonwood, Calif.

Location.--Lat 40°23'10", long 122°14'15", in NE¹ sec.7, T.29 N., R.3 W., on right bank 2 miles east of Cottonwood and 2.4 miles upstream from mouth.

Drainage area.--922 sq mi.

Gage.--Recording. Altitude of gage is 370 ft (from river-profile map).

Stage-discharge relation.--Defined by current-meter measurements below 43,000 cfs.

Bankfull stage.--20 ft.

Historical data.--Flood of December 1937 or February 1940 reached a stage of about 15.5 ft, by levels obtained Aug. 18, 1940.

Remarks.--Only annual peaks are shown prior to Oct. 1, 1943. Base for partial-duration series, 7,100 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1941	Mar. 1, 1941	15.4	52,300	1956	Dec. 6, 1955	8.44	9,100
1942	Feb. 5, 1942	14.10	42,600		Dec. 19, 1955	13.54	30,900
1943	Jan. 21, 1943	13.42	32,000		Dec. 22, 1955	15.23	49,000
					Jan. 7, 1956	7.75	7,400
1944	Feb. 3, 1944	6.70	5,800		Jan. 15, 1956	12.91	26,200
					Jan. 20, 1956	7.96	7,900
1945	Feb. 1, 1945	-	8,160		Jan. 26, 1956	8.58	9,470
	Feb. 2, 1945	9.88	16,100		Feb. 21, 1956	15.14	47,900
1946	Dec. 4, 1945	-	13,100	1957	Feb. 24, 1957	10.80	15,900
	Dec. 22, 1945	-	11,300				
	Dec. 23, 1945	-	12,300	1958	Oct. 13, 1957	9.02	11,000
	Dec. 25, 1945	-	13,000		Dec. 21, 1957	7.26	7,120
	Dec. 27, 1945	12.06	22,000		Dec. 28, 1957	7.91	8,500
	Jan. 4, 1946	-	17,400		Jan. 26, 1958	12.95	26,400
					Jan. 29, 1958	10.69	15,700
1947	Feb. 12, 1947	9.84	13,200		Feb. 4, 1958	11.00	16,700
	Mar. 3, 1947	-	12,100		Feb. 7, 1958	9.10	11,200
					Feb. 9, 1958	8.46	9,710
1948	Apr. 29, 1948	8.40	9,870		Feb. 12, 1958	12.50	23,600
					Feb. 14, 1958	10.50	15,100
1949	Mar. 3, 1949	-	8,730		Feb. 19, 1958	15.20	48,600
	Mar. 4, 1949	-	7,310		Feb. 24, 1958	14.58	41,200
	Mar. 19, 1949	12.04	21,900		Mar. 22, 1958	9.41	11,800
					Mar. 24, 1958	8.93	10,500
1950	Feb. 6, 1950	8.63	10,700		Mar. 29, 1958	9.51	12,100
					Apr. 2, 1958	9.48	12,000
1951	Dec. 4, 1950	9.55	12,400		Apr. 6, 1958	11.42	18,200
	Dec. 14, 1950	10.31	14,800				
	Jan. 22, 1951	10.15	14,200	1959	Jan. 12, 1959	8.54	9,370
	Feb. 4, 1951	-	-		Feb. 16, 1959	11.40	18,900
1952	Dec. 1, 1951	8.94	10,500	1960	Feb. 1, 1960	8.10	7,980
	Dec. 27, 1951	14.15	32,600		Feb. 3, 1960	7.90	7,440
	Jan. 11, 1952	9.45	12,300		Feb. 8, 1960	12.78	26,100
	Jan. 14, 1952	11.24	20,100				
	Jan. 24, 1952	8.35	8,870	1961	Dec. 1, 1960	8.08	8,090
	Feb. 2, 1952	9.59	12,900		Jan. 31, 1961	10.80	16,700
					Feb. 9, 1961	7.79	8,350
1953	Dec. 7, 1952	12.03	20,300	1962	Dec. 1, 1961	7.67	8,040
	Dec. 10, 1952	8.12	8,230		Feb. 15, 1962	11.26	18,300
	Dec. 20, 1952	9.15	11,000		Mar. 6, 1962	10.96	17,200
	Dec. 27, 1952	9.15	11,000				
	Dec. 30, 1952	9.03	10,600	1963	Oct. 12, 1962	7.32	7,150
	Jan. 7, 1953	9.07	10,800		Jan. 31, 1963	12.28	23,100
	Jan. 9, 1953	9.06	10,700		Feb. 10, 1963	9.08	10,000
	Jan. 13, 1953	11.15	17,000		Mar. 27, 1963	9.45	12,200
	Jan. 18, 1953	9.87	13,000		Apr. 14, 1963	9.42	12,100
1954	Jan. 17, 1954	11.70	19,000	1964	Jan. 20, 1964	13.25	13,000
	Jan. 23, 1954	8.65	9,600				
	Jan. 28, 1954	11.82	19,500	1965	Nov. 11, 1964	11.10	7,250
	Feb. 12, 1954	10.52	15,000		Dec. 22, 1964	19.64	60,000
	Feb. 17, 1954	8.57	9,440		Jan. 5, 1965	16.69	28,500
	Mar. 9, 1954	9.78	12,700		Apr. 9, 1965	12.96	10,300
	Mar. 21, 1954	9.04	10,700		Apr. 21, 1965	13.45	12,200
	Apr. 5, 1954	8.49	9,230				
1955	Jan. 19, 1955	7.59	7,020				

3795. Elder Creek near Paskenta, Calif.

Location.--Lat 40°01'30", long 122°30'30", in NW $\frac{1}{4}$ sec.14, T.25 N., R.6 W., on right bank 2.5 miles downstream from South Fork, 8 miles northeast of Flournoy, and 11 miles north of Paskenta.

Drainage area.--92.9 sq mi.

Gage.--Recording. Altitude of gage is 720 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 2,200 cfs and extended above on basis of slope-area measurements at 7,160 and 10,700 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Base for partial-duration series, 1,200 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1949	Mar. 2, 1949	-	1,220	1958	Jan. 25, 1958	9.93	4,390
	Mar. 11, 1949	8.78	3,690		Jan. 29, 1958	8.58	2,820
	Mar. 19, 1949	-	1,490		Feb. 2, 1958	11.20	6,340
	Mar. 22, 1949	-	1,940		Feb. 7, 1958	8.83	3,070
1950	Feb. 5, 1950	6.13	928	Feb. 9, 1958	8.07	2,310	
				Feb. 12, 1958	9.80	4,230	
1951				Feb. 15, 1958	10.15	4,710	
	Oct. 29, 1950	7.77	1,910	Feb. 18, 1958	13.64	11,200	
	Nov. 16, 1950	7.48	1,670	Feb. 24, 1958	13.90	11,700	
	Dec. 3, 1950	7.11	1,410	Mar. 20, 1958	10.25	4,840	
	Jan. 21, 1951	8.28	2,350	Mar. 23, 1958	10.42	5,070	
	Feb. 4, 1951	7.79	1,920	Mar. 29, 1958	8.24	2,600	
1952				Apr. 2, 1958	8.24	2,590	
	Dec. 3, 1951	7.62	1,870	Apr. 5, 1958	10.35	5,020	
	Dec. 27, 1951	9.77	4,700				
	Jan. 11, 1952	7.08	1,410	1959	Jan. 8, 1959	8.15	2,250
	Jan. 14, 1952	8.89	3,300		Feb. 16, 1959	9.66	4,050
Feb. 1, 1952	8.28	2,530					
1953				1960	Feb. 1, 1960	8.75	2,900
	Dec. 6, 1952	10.97	7,160		Feb. 8, 1960	10.45	5,120
	Dec. 19, 1952	7.37	1,650				
	Dec. 26, 1952	7.30	1,590	1961	Dec. 1, 1960	8.58	2,760
	Dec. 30, 1952	7.43	1,700		Feb. 2, 1961	8.50	2,670
	Jan. 7, 1953	8.62	2,930				
	Jan. 9, 1953	7.46	1,720	1962	Dec. 1, 1961	6.82	1,210
	Jan. 12, 1953	7.8	2,030		Feb. 13, 1962	9.33	3,610
			Mar. 5, 1962		9.52	3,840	
1954				1963			
	Nov. 13, 1953	6.78	1,200		Oct. 12, 1962	7.00	1,330
	Jan. 17, 1954	10.58	6,290		Jan. 31, 1963	10.29	4,890
	Jan. 23, 1954	6.87	1,360		Feb. 9, 1963	9.85	4,270
	Jan. 28, 1954	9.04	3,590		Mar. 27, 1963	9.64	3,990
Feb. 12, 1954	8.64	3,100	Apr. 14, 1963	9.46	3,760		
1955				1964			
	Nov. 15, 1954	7.65	2,020		Nov. 23, 1963	6.87	1,240
Dec. 5, 1954	6.82	1,320	Jan. 20, 1964	8.11	2,280		
1956				1965			
	Dec. 19, 1955	10.97	7,160		Nov. 10, 1964	9.90	4,340
	Dec. 21, 1955	12.52	8,840		Dec. 22, 1964	13.23	10,300
	Jan. 15, 1956	8.17	2,540		Jan. 5, 1965	12.84	9,480
Feb. 21, 1956	11.08	7,420	Jan. 23, 1965	7.14	1,360		
1957				Apr. 8, 1965	9.53	3,850	
	Feb. 23, 1957	9.63	4,020	Apr. 15, 1965	8.01	2,080	
1958	Oct. 13, 1957	7.83	2,110				

3800. Elder Creek near Henleyville, Calif.

Location.--Lat 40°01'55", long 122°17'30", on line between secs.10 and 11, T.25 N., R.4 W., at bridge on Paskenta-Red Bluff road, 0.7 mile upstream from Spring Branch and 6 miles northeast of Henleyville.

Drainage area.--130 sq mi.

Gage.--Recording. Altitude of gage is 360 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 7,200 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1931	Jan. 23, 1931	3.97	910	1937	Mar. 12, 1937	6.44	6,210
1932	Dec. 26, 1931	6.35	4,020	1938	Dec. 10, 1937	10.4	10,700
1933	Jan. 29, 1933	4.1	1,150	1939	Oct. 2, 1938	3.40	535
1934	Jan. 1, 1934	7.26	6,300	1940	Feb. 28, 1940	10.3	13,100
1935	Feb. 7, 1935	4.85	2,310				
1936	Feb. 21, 1936	6.9	5,750	1941	Feb. 28, 1941	10.8	14,000

3805. Elder Creek at Gerber, Calif.

Location.--Lat 40°03'05", long 122°09'53", in Saucos Grant, on right bank 1.0 mile west of Gerber, Tehama County, and 3.5 miles upstream from mouth.

Drainage area.--136 sq mi.

Gage.--Recording. Prior to Oct. 1, 1961, at site about 150 ft upstream at datum 4.32 ft higher. Datum of gage is 232.14 ft above mean sea level (from Bureau of Reclamation bench mark).

Stage-discharge relation.--Defined by current-meter measurements below 9,600 cfs prior to Oct. 1, 1961; below 1,600 cfs thereafter.

Bankfull stage.--23 ft.

Remarks.--Base for partial-duration series, 1,200 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1950	Feb. 6, 1950	5.72	1,160	1954	Jan. 28, 1954	8.59	3,800
1951	Oct. 30, 1950	6.18	1,460		Feb. 12, 1954	9.29	4,640
	Nov. 16, 1950	6.30	1,540		Feb. 17, 1954	6.60	1,940
	Dec. 3, 1950	6.47	1,660		Mar. 21, 1954	5.84	1,420
	Dec. 14, 1950	5.97	1,320	1955	Nov. 15, 1954	8.31	3,490
	Jan. 21, 1951	9.81	5,310		Dec. 5, 1954	6.33	1,730
	Feb. 5, 1951	7.32	2,580				
1952	Dec. 3, 1951	7.80	2,850	1956	Dec. 19, 1955	11.60	7,760
	Dec. 27, 1951	11.36	7,420		Dec. 22, 1955	13.38	9,480
	Jan. 11, 1952	7.09	2,160		Jan. 15, 1956	7.48	2,980
	Jan. 14, 1952	9.24	4,570		Jan. 25, 1956	5.56	1,470
	Jan. 24, 1952	6.24	1,500		Feb. 21, 1956	10.81	6,670
	Feb. 1, 1952	7.46	2,510	1957	Feb. 24, 1957	8.60	4,090
	Mar. 14, 1952	6.40	1,610		Mar. 15, 1957	5.36	1,240
1953	Dec. 1, 1952	6.31	1,550	1958	Oct. 13, 1957	6.49	1,950
	Dec. 7, 1952	11.55	7,690		Dec. 16, 1957	5.42	1,270
	Dec. 19, 1952	7.48	2,530		Jan. 26, 1958	10.70	5,980
	Dec. 27, 1952	7.02	2,110		Jan. 29, 1958	8.05	3,180
	Dec. 30, 1952	7.52	2,570		Feb. 2, 1958	12.02	7,660
	Jan. 7, 1953	8.12	3,200		Feb. 7, 1958	9.02	4,150
	Jan. 12, 1953	8.14	3,220		Feb. 9, 1958	8.65	3,980
1954	Jan. 17, 1954	12.25	8,720		Feb. 12, 1958	10.98	6,320
	Jan. 23, 1954	5.52	1,230		Feb. 15, 1958	8.07	3,300
					Feb. 19, 1958	14.40	11,000

Peak stages and discharges of Elder Creek at Gerber, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1958	Feb. 24, 1958	13.95	10,300	1962	Mar. 6, 1962	10.02	5,000
	Mar. 21, 1958	9.33	4,880				
	Mar. 23, 1958	6.93	3,030	1963	Oct. 12, 1962	7.42	1,310
	Mar. 29, 1958	8.82	4,480		Jan. 31, 1963	10.60	6,200
	Apr. 2, 1958	8.00	3,830		Feb. 10, 1963	9.57	4,170
	Apr. 6, 1958	10.25	5,710		Feb. 12, 1963	7.94	1,870
1959	Jan. 8, 1959	5.99	2,340		Mar. 27, 1963	9.72	4,440
	Feb. 16, 1959	10.20	5,660		Apr. 6, 1963	8.55	2,620
1960	Feb. 1, 1960	7.00	2,790		Apr. 14, 1963	9.58	4,190
	Feb. 8, 1960	8.65	4,120	1964	Nov. 23, 1963	7.35	1,240
1961	Dec. 1, 1960	6.43	2,610		Jan. 20, 1964	8.53	2,600
	Jan. 31, 1961	-	2,320	1965	Nov. 10, 1964	9.64	3,800
	Feb. 2, 1961	7.01	2,960		Dec. 22, 1964	13.90	11,700
1962	Feb. 9, 1962	7.66	1,570		Jan. 5, 1965	14.90	14,100
	Feb. 13, 1962	9.57	4,170		Jan. 23, 1965	7.54	1,510
					Apr. 8, 1965	10.75	5,420
					Apr. 15, 1965	8.25	2,170

3820. Thomas Creek at Paskenta, Calif.
(Published as Thomas Creek prior to 1943)

Location.--Lat 39°52'55", long 122°33'05", in NW $\frac{1}{4}$ sec.4, T.23 N., R.6 W., on left bank 0.25 mile upstream from Digger Creek and 0.3 mile upstream from highway bridge at Paskenta.

Drainage area.--194 sq mi.

Gage.--Nonrecording prior to Oct. 1, 1930; recording thereafter. Prior to Oct. 1, 1930, at site 0.3 mile downstream; Oct. 1, 1930, to Dec. 28, 1938, at site 1,300 ft upstream; and Dec. 29, 1938, to June 20, 1942, at site 1,000 ft upstream. All gages at different datums. June 21, 1942, to Sept. 30, 1959, at datum 1.75 ft higher. Altitude of gage is 750 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 7,000 cfs prior to Oct. 1, 1930, and Oct. 1, 1930, to Dec. 28, 1938; defined below 6,800 cfs, for period Dec. 29, 1938, to June 20, 1942; below 10,400 cfs thereafter.

Bankfull stage.--13 ft.

Remarks.--Peaks for the years 1921-24, 1926, 1929 and 1930 are maximum observed. Only annual peaks are shown prior to Oct. 1, 1943. Base for partial-duration series, 1,600 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1921	Nov. 18, 1920	8.9	13,100	1940	Feb. 28, 1940	14.3	17,000
1922	Dec. 26, 1921	7.0	7,100	1941	Feb. 28, 1941	13.7	13,200
1923	Dec. 28, 1922	5.6	3,900		Feb. 5, 1942	11.62	8,120
1924	Feb. 7, 1924	4.65	2,000	1943	Jan. 21, 1943	10.92	18,600
1925	Feb. 4, 1925	9.0	13,500				
1926	Feb. 4, 1926	8.50	11,700	1944	Mar. 10, 1944	4.98	1,160
1927	Feb. 20, 1927	9.1	13,900				
1928	Mar. 26, 1928	10.5	19,600	1945	Feb. 2, 1945	-	1,680
1929	Dec. 25, 1928	5.0	2,620		Feb. 5, 1945	-	1,640
1930	Dec. 14, 1929	6.00	4,750		Feb. 8, 1945	5.79	2,310
1931	Jan. 23, 1931	8.00	3,460	1946	Nov. 28, 1945	-	2,990
1932	Dec. 26, 1931	6.39	2,080		Dec. 22, 1945	-	2,180
1933	Apr. 4, 1933	5.00	1,140		Dec. 24, 1945	-	2,240
1934	Mar. 28, 1934	6.18	1,970		Dec. 27, 1945	-	6,980
1935	Apr. 8, 1935	7.80	3,170		Dec. 28, 1945	8.48	8,990
					Jan. 4, 1946	-	3,410
1936	Jan. 15, 1936	12.45	8,290	1947	Feb. 12, 1947	7.20	5,210
1937	Mar. 12, 1937	6.13	2,180		Mar. 10, 1947	-	2,400
1938	Dec. 10, 1937	16.8	16,500				
1939	Dec. 3, 1938	7.10	1,550				

Peak stages and discharges of Thomes Creek at Faskenta, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1948	Oct. 16, 1947	-	2,600	1958	Dec. 21, 1957	5.20	2,680
	Jan. 2, 1948	-	1,820		Dec. 28, 1957	5.74	3,480
	Jan. 7, 1948	7.30	5,470		Jan. 25, 1958	5.18	2,650
	Apr. 16, 1948	-	1,700		Jan. 29, 1958	8.02	8,520
	Apr. 21, 1948	-	2,020		Feb. 2, 1958	5.35	2,890
1949	Mar. 18, 1949	5.20	1,660		Feb. 4, 1958	5.28	2,790
1950	Jan. 23, 1950	-	2,300		Feb. 7, 1958	5.20	2,680
	Mar. 17, 1950	-	2,340		Feb. 9, 1958	4.85	2,200
	Mar. 19, 1950	6.20	3,040		Feb. 12, 1958	7.90	8,180
1951	Oct. 29, 1950	6.69	4,000		Feb. 16, 1958	6.48	4,820
	Dec. 3, 1950	7.85	6,980		Feb. 18, 1958	8.96	11,400
	Jan. 21, 1951	7.98	7,360		Feb. 24, 1958	9.78	14,300
	Feb. 4, 1951	8.02	7,480		Mar. 20, 1958	4.93	2,610
	Feb. 11, 1951	5.28	1,760		Apr. 5, 1958	4.81	2,430
1952	Dec. 1, 1951	6.70	4,020	1959	Jan. 8, 1959	4.62	2,170
	Dec. 27, 1951	7.38	5,680		Jan. 12, 1959	6.82	5,520
	Jan. 14, 1952	-	(a)		Feb. 16, 1959	4.47	1,830
	Feb. 1, 1952	8.44	8,860	1960	Feb. 1, 1960	6.66	2,310
	Feb. 16, 1952	5.40	1,930		Feb. 8, 1960	12.32	18,700
	Mar. 25, 1952	5.89	2,560		Mar. 7, 1960	8.16	5,200
	Apr. 6, 1952	5.31	1,830	1961	Dec. 1, 1960	7.02	2,810
1953	Dec. 6, 1952	5.26	1,780		Dec. 17, 1960	6.88	2,130
	Jan. 9, 1953	8.98	10,800		Jan. 31, 1961	8.39	4,990
	Jan. 12, 1953	7.40	5,730		Feb. 2, 1961	7.37	3,000
	Jan. 18, 1953	6.98	4,660		Feb. 9, 1961	7.06	2,520
	Apr. 27, 1953	6.26	3,160	1962	Feb. 9, 1962	6.14	1,330
1954	Jan. 17, 1954	6.63	3,870	1963	Oct. 12, 1962	8.50	5,620
	Jan. 23, 1954	6.44	3,490		Nov. 26, 1962	6.90	2,660
	Jan. 28, 1954	6.78	4,200		Dec. 2, 1962	8.65	5,960
	Feb. 12, 1954	7.18	5,160		Dec. 15, 1962	6.00	1,620
	Mar. 9, 1954	7.27	5,390		Jan. 31, 1963	12.63	19,200
	Apr. 4, 1954	6.18	3,020		Feb. 10, 1963	8.43	5,470
1955	Nov. 15, 1954	5.64	2,190		Feb. 12, 1963	6.58	1,940
1956	Dec. 6, 1955	5.26	1,750		Mar. 27, 1963	7.58	3,380
	Dec. 19, 1955	9.11	10,300		Apr. 6, 1963	8.33	5,020
	Dec. 21, 1955	12.14	23,500		Apr. 14, 1963	7.83	4,030
	Jan. 15, 1956	9.28	10,900	1964	Nov. 14, 1963	6.90	1,900
	Jan. 23, 1956	6.36	2,950		Nov. 23, 1963	7.54	2,940
	Feb. 21, 1956	7.67	5,880		Jan. 20, 1964	7.79	3,390
1957	Oct. 30, 1956	5.00	1,640	1965	Nov. 10, 1964	6.34	1,650
	Feb. 24, 1957	7.79	7,870		Dec. 1, 1964	6.55	1,900
	Mar. 5, 1957	4.85	2,200		Dec. 11, 1964	6.30	1,600
	May 18, 1957	4.67	1,970		Dec. 22, 1964	15.32	37,800
1958	Oct. 9, 1957	4.59	1,880		Jan. 5, 1965	7.36	5,100
	Oct. 13, 1957	6.30	4,460		Jan. 23, 1965	7.61	5,700
	Nov. 13, 1957	6.70	5,260		Apr. 8, 1965	6.18	1,910
					Apr. 15, 1965	6.08	1,770
					Apr. 19, 1965	7.50	4,200

a Discharge unknown; exceeded base.

3855. Stony Creek above Stony Gorge Reservoir, Calif.
(Published as "near Elk Creek" prior to 1934)

Location.--Lat 39°30'05", long 122°30'30", in NE $\frac{1}{4}$ sec.15, T.19 N., R.6 W.,
6 miles downstream from Little Stony Creek and 6 miles upstream from
Stony Gorge Dam.

Drainage area.--280 sq mi.

Gage.--Nonrecording prior to Oct. 29, 1933; recording thereafter. Prior to
Nov. 15, 1928, at site 4.5 miles downstream at different datum. Nov. 15,
1928, to Oct. 29, 1933, at site 6 miles downstream at different datum.
Altitude of gage is 950 ft (from topographic map).

Stage-discharge relation.--Information not available prior to 1932. Defined by
current-meter measurements below 7,100 cfs and extended above on basis of
studies of change in contents in Stony Gorge Reservoir thereafter.

Remarks.--Records for 1919-34 furnished by Bureau of Reclamation. Peaks partly
regulated by East Park Reservoir (usable capacity, 50,600 acre-ft), be-
ginning in 1910. Peaks may be affected by diversion during winter months to
East Park feeder canal for storage in East Park Reservoir. Only annual
peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1921	Jan. 31, 1921	-	10,200	1937	Feb. 4, 1937	7.5	6,090
				1938	Dec. 10, 1937	13.1	28,000
1934	Dec. 30, 1933	6.43	3,820	1939	Dec. 3, 1938	3.94	712
1935	Mar. 6, 1935	5.73	2,810	1940	Feb. 28, 1940	12.40	18,100
1936	Feb. 21, 1936	8.60	9,000	1941	Feb. 28, 1941	10.85	12,800

3870. Stony Creek near Fruto, Calif.

Location.--Lat 39°40'15", long 122°31'05", in SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec.15, T.21 N., R.6 W.,
on right bank 0.3 mile downstream from Grindstone Creek and 6.5 miles north-
west of Fruto.

Drainage area.--599 sq mi.

Gage.--Nonrecording prior to Oct. 6, 1912; recording thereafter. Prior to
Oct. 6, 1912, at site 1.0 mile downstream at different datum. Altitude
of gage is 600 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 18,000
cfs prior to Oct. 6, 1912; below 5,400 cfs thereafter.

Bankfull stage.--5 ft.

Historical data.--Floodmark at 12.2 ft was found in 1959 and is believed to be
for peak of Feb. 24, 1958.

Remarks.--All peaks prior to Oct. 6, 1912, are maximum observed. Peaks regu-
lated by East Park Reservoir (usable capacity, 50,600 acre-ft) beginning in
1910 and by Stony Gorge Reservoir (usable capacity, 50,100 acre-ft) begin-
ning in 1928. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1901	Feb. 19, 1901	14.0	18,000	1911	Mar. 6, 1911	15.0	25,000
1902	Feb. 24, 1902	15.1	25,700	1912	Jan. 26, 1912	7.1	1,830
1903	Nov. 9, 1902	11.5	11,600				
1904	Feb. 16, 24, 1904	14.0	23,200	1961	Dec. 1, 1960	8.00	4,740
1905	Jan. 22, 1905	11.5	11,600	1962	Mar. 6, 1962	8.98	6,910
				1963	Jan. 31, 1963	11.64	16,000
1906	Jan. 18, 1906	14.5	22,200	1964	Jan. 20, 1964	6.47	3,400
1907	Mar. 18, 1907	14.5	22,200	1965	Dec. 23, 1964	14.48	18,700
1908	Feb. 9, 1908	11.5	11,600		Jan. 6, 1965	13.56	15,100
1909	Feb. 2, 1909	16.3	36,000				
1910	Mar. 21, 1910	12.0	13,000				

3880. Stony Creek below Black Butte Dam, near Orland, Calif.
(Published as "at Black Butte damsite" prior to Oct. 1, 1962)

Location.--Lat 39°49'00", long 122°19'25" in SW $\frac{1}{4}$ sec.28, T.23 N., R.4 W., on downstream side of road bridge, 0.6 mile downstream from diversion dam and 8.1 miles northwest of Orland.

Drainage area.--740 sq mi.

Gage.--Recording prior to Dec. 12, 1960; nonrecording thereafter. Prior to Dec. 12, 1960, at site 0.6 mile upstream at different datum. Altitude of gage is 360 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 7,500 cfs and extended on basis of slope-area measurement at 36,300 cfs prior to Dec. 12, 1960; defined by current-meter measurements below 5,500 cfs thereafter.

Bankfull stage.--Not subject to overflow.

Remarks.--Peaks regulated by East Park Reservoir (usable capacity, 50,600 acre-ft) beginning in 1910 and Stony Gorge Reservoir (usable capacity, 50,100 acre-ft) beginning in 1928. Peaks may be affected by many diversions above station for irrigation and by diversion 0.6 mile above station to South Diversion Canal (capacity, about 300 cfs) since beginning of record. Peaks in the years 1962 and 1964 are maximum observed. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1956	Dec. 22, 1955	11.33	19,300	1961	Feb. 2, 1961	9.27	3,880
1957	Feb. 24, 1957	7.28	5,360	1962	Mar. 6, 1962	9.35	5,870
1958	Feb. 24, 1958	11.82	36,300	1963	Feb. 1, 1963	13.37	10,700
1959	Feb. 16, 1959	9.13	13,000	1964	Oct. 29, 1963	8.33	426
1960	Feb. 8, 1960	9.06	12,500	1965	Dec. 25, 1964	10.41	19,400

3885. Stony Creek near Hamilton City, Calif.

Location.--Lat 39°43'25", long 122°02'47", in Capay Grant, on right bank 2.3 miles southwest of Hamilton City, 6 miles upstream from mouth, and 8 miles east of Orland, Glenn County.

Drainage area.--777 sq mi.

Gage.--Recording. Prior to February 1946, at site 3 miles upstream at different datum. Altitude of gage is 150 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 30,100 cfs prior to February 1946; below 30,000 cfs thereafter.

Bankfull stage.--18 ft.

Historical data.--According to a resident, T. J. Bennett, whose family has lived near the stream and 3 miles downstream from the gage since 1862, the flood of 1937 or of 1940 was the greatest of knowledge. Both the flood of 1937 and that of 1940 are believed to be somewhat higher than that of Mar. 1, 1941.

Remarks.--Peaks regulated by East Park Reservoir (usable capacity, 50,620 acre-ft) beginning in 1910 and Stony Gorge Reservoir (usable capacity, 50,100 acre-ft) beginning in 1928. Peaks may be affected by diversions for irrigation of about 17,200 acres in Orland Project, Bureau of Reclamation. Only annual peaks are shown prior to Oct. 1, 1947. Base for partial-duration series, 2,000 cfs.

Peak stages and discharges of Stony Creek near Hamilton City, Calif.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1941	Mar. 1, 1941	6.35	37,500	1956	Dec. 20, 1955	13.33	11,300
1942	Feb. 6, 1942	4.57	23,800	Dec. 22, 1955	15.96	22,100	
1943	Jan. 21, 1943	4.55	22,100	Jan. 1, 1956	9.20	2,460	
1944	Feb. 3, 1944	2.00	2,820	Jan. 5, 1956	9.18	2,440	
1945	Feb. 3, 1945	3.26	2,360	Jan. 8, 1956	10.63	4,470	
				Jan. 11, 1956	10.41	4,120	
1946	Dec. 25, 1945	5.7	18,100	Jan. 16, 1956	13.19	10,300	
1947	Feb. 12, 1947	9.55	3,170	Jan. 27, 1956	11.05	5,190	
				Feb. 22, 1956	14.92	17,900	
1948	Apr. 15, 1948	9.20	1,980				
1949	Mar. 11, 1949	13.59	11,000	1957	Feb. 24, 1957	10.72	5,500
	Mar. 20, 1949	-	3,830				
	Mar. 24, 1949	-	2,540	1958	Jan. 26, 1958	12.35	8,690
				Jan. 30, 1958	10.80	5,100	
1950	Feb. 6, 1950	8.45	1,810	Feb. 3, 1958	12.76	9,330	
				Feb. 5, 1958	13.86	13,300	
1951	Dec. 4, 1950	11.25	5,390	Feb. 7, 1958	11.86	8,460	
	Dec. 7, 1950	9.10	2,470	Feb. 9, 1958	12.84	11,500	
	Dec. 14, 1950	9.78	3,260	Feb. 12, 1958	13.96	15,300	
	Jan. 22, 1951	14.10	11,600	Feb. 19, 1958	17.52	35,100	
	Feb. 5, 1951	10.98	4,930	Feb. 25, 1958	18.31	39,900	
	Feb. 12, 1951	9.28	2,480	Mar. 3, 1958	9.10	4,060	
				Mar. 22, 1958	12.64	12,200	
1952	Dec. 28, 1951	10.47	4,590	Mar. 30, 1958	10.35	6,120	
	Jan. 15, 1952	11.81	6,920	Apr. 2, 1958	11.82	9,760	
	Jan. 25, 1952	10.24	4,220	Apr. 6, 1958	12.29	10,600	
	Feb. 2, 1952	13.67	11,200				
	Feb. 17, 1952	9.20	2,640	1959	Jan. 9, 1959	9.34	3,720
	Mar. 15, 1952	10.04	3,900	Feb. 16, 1959	12.81	11,400	
	Mar. 27, 1952	9.25	2,720				
1953	Dec. 7, 1952	12.74	10,300	1960	Feb. 8, 1960	12.63	10,800
	Dec. 20, 1952	10.80	5,380	Mar. 8, 1960	9.19	3,410	
	Dec. 27, 1952	10.21	4,140	Mar. 13, 1960	8.15	2,150	
	Dec. 30, 1952	10.75	5,270				
	Jan. 7, 1953	11.62	7,310	1961	Dec. 1, 1960	9.27	3,520
	Jan. 10, 1953	13.58	12,800	Feb. 2, 1961	10.56	5,890	
	Jan. 13, 1953	12.28	9,040				
	Jan. 19, 1953	10.73	5,230	1962	Feb. 15, 1962	11.06	5,910
				Mar. 6, 1962	11.46	6,780	
1954	Jan. 17, 1954	12.10	7,980				
	Jan. 24, 1954	9.11	2,770	1963	Feb. 1, 1963	12.32	9,300
	Jan. 29, 1954	9.02	2,660	Feb. 10, 1963	11.15	7,240	
	Feb. 13, 1954	10.67	5,130	Mar. 28, 1963	11.14	7,220	
	Feb. 17, 1954	10.01	4,060	Apr. 7, 1963	10.06	4,890	
	Mar. 10, 1954	9.06	2,710	Apr. 15, 1963	11.23	7,430	
	Mar. 22, 1954	8.71	2,250				
	Apr. 5, 1954	10.04	4,100	1964	Oct. 12, 1963	4.97	52
				1965	Dec. 23, 1964	15.49	40,200
1955	Dec. 6, 1954	8.12	1,520	Jan. 5, 1965	13.07	23,700	

a Occurred Jan. 23, 1943.

4485. Adobe Creek near Kelseyville, Calif.

Location.--Lat 38°55'40", long 122°52'45", in SE $\frac{1}{4}$ sec.5, T.12 N., R.9 W., on left bank 2.5 miles upstream from Highland Creek and 4.2 miles south of Kelseyville.

Drainage area.--6.36 sq mi.

Gage.--Recording. Datum of gage is 1,478.1 ft above mean sea level (levels by Topographic Division).

Stage-discharge relation.--Defined by current-meter measurements below 380 cfs and extended above on basis of computed flow over dam at 1,250 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Base for partial-duration series, 250 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1955	Nov. 15, 1954	6.32	416	1960	Feb. 1, 1960	6.50	470
	Dec. 5, 1954	5.85	281		Feb. 8, 1960	7.76	891
1956					Mar. 7, 1960	5.90	294
	Dec. 19, 1955	8.00	975	1961	Dec. 1, 1960	7.40	765
	Dec. 21, 1955	8.72	1,250		Jan. 31, 1961	7.03	636
	Jan. 7, 1956	7.70	870		Feb. 11, 1961	6.11	353
	Jan. 15, 1956	5.92	299		Mar. 14, 1961	5.87	286
	Feb. 21, 1956	-	(a)		Mar. 16, 1961	5.83	276
1957	Feb. 24, 1957	7.39	762	1962	Dec. 1, 1961	6.51	473
1958	Dec. 17, 1957	6.78	554		Feb. 9, 1962	6.21	383
	Jan. 26, 1958	6.12	356		Feb. 13, 1962	7.55	818
	Jan. 29, 1958	6.85	575		Mar. 5, 1962	6.68	524
	Feb. 4, 1958	6.49	467	1963	Oct. 12, 1962	9.18	1,430
	Feb. 9, 1958	6.14	362		Dec. 15, 1962	6.10	350
	Feb. 12, 1958	7.08	653		Jan. 31, 1963	9.22	1,450
	Feb. 18, 1958	6.14	362		Mar. 27, 1963	6.76	548
	Feb. 24, 1958	8.57	1,190		Apr. 6, 1963	5.87	286
	Mar. 21, 1958	6.59	497		Apr. 14, 1963	6.60	500
	Mar. 29, 1958	6.80	560	1964	Jan. 20, 1964	7.50	800
	Apr. 2, 1958	7.67	860	1965	Nov. 10, 1964	6.65	515
	Apr. 5, 1958	6.24	392		Dec. 22, 1964	9.11	1,500
1959	Jan. 5, 1959	5.88	289		Jan. 5, 1965	8.38	1,170
	Jan. 8, 1959	6.28	404		Jan. 23, 1965	5.92	299
	Jan. 12, 1959	6.96	611		Apr. 15, 1965	6.28	404
	Feb. 16, 1959	6.76	548				
	Feb. 18, 1959	5.94	304				

a Discharge unknown; exceeded base.

4490. Highland Creek near Kelseyville, Calif.

Location.--Lat 38°56'10", long 122°54'25", in NW $\frac{1}{4}$ sec.31, T.13 N., R.9 W., on downstream side of middle pier of Highland Springs Road bridge at Highland Springs, 1.6 miles upstream from mouth and 4.8 miles southwest of Kelseyville.

Drainage area.--12.6 sq mi (revised).

Gage.--Recording. Datum of gage is 1,444.46 ft above mean sea level (levels by Topographic Division).

Stage-discharge relation.--Defined by current-meter measurements below 1,640 cfs.

Remarks.--Base for partial-duration series, 300 cfs. Only annual peaks are shown for 1963-65.

Peak stages and discharges of Highland Creek near Kelseyville, Calif.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1955	Nov. 15, 1954	6.4	408	1958	Apr. 2, 1958	10.55	1,690
	Dec. 5, 1954	5.95	306		Apr. 5, 1958	7.66	738
1956	Dec. 19, 1955	10.92	1,820	1959	Jan. 5, 1959	6.85	530
	Dec. 21, 1955	-	1,800		Jan. 8, 1959	7.77	771
	Dec. 26, 1955	7.90	800		Jan. 12, 1959	8.93	1,130
	Jan. 7, 1956	9.68	1,390		Feb. 16, 1959	9.83	1,440
	Jan. 15, 1956	7.50	680		Feb. 18, 1959	5.90	318
	Feb. 21, 1956	11.04	1,860	1960	Feb. 1, 1960	7.72	756
	Feb. 25, 1956	6.41	373		Feb. 8, 1960	9.40	1,290
1957	Jan. 13, 1957	7.04	545	1961	Dec. 1, 1960	10.85	1,800
	Feb. 24, 1957	9.63	1,370		Jan. 31, 1961	7.92	806
1958	Oct. 9, 1957	7.50	680		Feb. 11, 1961	7.22	596
	Dec. 17, 1957	9.03	1,160		Mar. 14, 1961	6.81	488
	Jan. 25, 1958	8.08	854		Mar. 16, 1961	6.61	442
	Jan. 29, 1958	7.62	716	1962	Dec. 1, 1961	12.08	-
	Feb. 4, 1958	8.40	950		Feb. 15, 1962	-	-
	Feb. 12, 1958	8.13	869	1963	Oct. 12, 1962	10.90	2,320
	Feb. 18, 1958	7.97	821		Jan. 20, 1964	9.70	1,520
	Feb. 24, 1958	12.19	2,280	1965	Dec. 22, 1964	12.15	3,060
	Mar. 21, 1958	8.24	912				
	Mar. 29, 1958	9.83	1,440				

a Backwater from dam construction.

4495. Kelsey Creek near Kelseyville, Calif.

Location.--Lat 38°55'45", long 122°50'35", in SE $\frac{1}{4}$ sec.34, T.13 N., R.9 W., on left bank 1.6 miles downstream from Widow Creek and 3.5 miles south of Kelseyville.

Drainage area.--36.6 sq mi.

Gage.--Recording. Prior to July 16, 1955, at site 600 ft upstream at different datum. Datum of gage is 1,475.1 ft above mean sea level (levels by Topographic Division).

Stage-discharge relation.--Defined by current-meter measurements below 2,000 cfs and extended above on basis of computation of flow over dam at 8,150 cfs prior to July 16, 1955; defined below 2,600 cfs and extended above on basis of computation of flow over dam at 8,800 cfs thereafter.

Bankfull stage.--Not subject to overflow.

Remarks.--Base for partial-duration series, 1,600 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1947	Nov. 22, 1946	9.38	2,940	1953	Dec. 1, 1952	8.60	2,420
	Feb. 11, 1947	-	1,610		Dec. 6, 1952	13.85	7,040
1948	Mar. 23, 1948	8.06	2,110		Dec. 26, 1952	7.25	1,720
1949	Mar. 10, 1949	7.22	1,570		Jan. 9, 1953	12.58	5,700
1950	Jan. 13, 1950	8.65	2,450		Mar. 19, 1953	7.51	1,840
	Feb. 6, 1950	8.14	2,150	1954	Jan. 17, 1954	14.8	8,150
1951	Oct. 29, 1950	8.09	2,120		Feb. 12, 1954	7.58	1,870
	Nov. 16, 1950	10.00	3,400	1955	Nov. 15, 1954	7.72	1,940
	Dec. 3, 1950	11.38	4,560	1956	Dec. 19, 1955	12.32	7,840
	Jan. 18, 1951	7.66	1,910		Dec. 21, 1955	12.80	8,800
	Jan. 21, 1951	-	(a)		Dec. 26, 1955	9.05	2,410
1952	Dec. 1, 1951	9.71	3,170		Jan. 7, 1956	10.15	3,340
	Dec. 26, 1951	9.98	3,380		Feb. 21, 1956	11.56	6,410
	Jan. 14, 1952	10.52	3,620	1957	Feb. 24, 1957	11.19	5,740
	Feb. 1, 1952	9.37	2,930	1958	Dec. 17, 1957	8.91	2,290

a Discharge unknown; exceeded base.

Peak stages and discharges of Kelsey Creek near Kelseyville, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1958	Jan. 26, 1958	8.68	2,020	1961	Jan. 31, 1961	8.92	2,260
	Jan. 29, 1958	8.89	2,270				
	Feb. 2, 1958	8.55	1,860	1962	Dec. 1, 1961	9.03	2,390
	Feb. 12, 1958	9.15	2,530		Feb. 9, 1962	8.72	2,050
	Feb. 18, 1958	8.58	1,910		Feb. 14, 1962	10.02	3,730
	Feb. 24, 1958	12.48	8,160		Mar. 5, 1962	9.25	2,690
	Mar. 20, 1958	10.88	5,160				
	Mar. 29, 1958	9.99	3,700	1963	Oct. 12, 1962	11.63	6,530
	Apr. 2, 1958	10.40	4,370		Jan. 31, 1963	12.80	6,300
1959	Jan. 5, 1959	8.34	1,720		Mar. 27, 1963	9.46	2,930
	Jan. 8, 1959	8.22	1,610		Apr. 6, 1963	8.40	1,750
	Jan. 12, 1959	9.42	2,890		Apr. 14, 1963	8.77	2,100
	Feb. 17, 1959	10.12	3,880	1964	Jan. 20, 1964	10.95	5,310
1960	Feb. 1, 1960	8.69	2,020	1965	Nov. 10, 1964	8.92	2,200
	Feb. 8, 1960	11.02	5,440		Dec. 22, 1964	12.85	7,640
1961	Dec. 1, 1960	10.89	5,200		Jan. 5, 1965	13.48	8,750
					Apr. 15, 1965	8.42	1,760

4515. North Fork Cache Creek near Lower Lake, Calif.

Location.--Lat 39°01'10", long 122°34'00", in NE¹ sec.31, T.14 N., R.6 W., on right bank 500 ft upstream from Sweet Hollow Creek, 5 miles upstream from mouth, and 7 miles northeast of Lower Lake.

Drainage area.--197 sq mi.

Gage.--Recording. Prior to June 15, 1939, at datum 1.00 ft higher. Datum of gage is 1,035.60 ft above mean sea level, preliminary adjustment of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 7,200 cfs and extended above on basis of slope-area measurement at 20,000 cfs.

Bankfull stage.--5 ft.

Remarks.--Only annual peaks are shown prior to Oct. 1, 1943. Base for partial-duration series, 3,500 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1931	Jan. 23, 1931	4.68	1,300	1951	Nov. 16, 1950	7.82	3,790
1932	Dec. 26, 1931	9.65	11,000		Dec. 3, 1950	10.54	10,200
1933	Jan. 27, 1933	5.40	2,540		Jan. 18, 1951	7.72	3,630
1934	Dec. 30, 1933	6.28	3,880		Jan. 21, 1951	10.09	8,990
1935	Mar. 6, 1935	6.53	3,100		Feb. 4, 1951	7.96	4,030
					Feb. 11, 1951	7.98	4,060
1936	Feb. 21, 1936	8.45	7,480				
1937	Feb. 4, 1937	10.06	11,700	1952	Dec. 1, 1951	8.99	6,180
1938	Dec. 11, 1937	12.98	20,300		Dec. 3, 1951	8.33	4,810
1939	Dec. 3, 1938	2.78	536		Dec. 26, 1951	8.94	6,070
1940	Feb. 28, 1940	13.9	20,000		Jan. 14, 1952	8.39	4,920
					Feb. 1, 1952	10.27	9,460
1941	Apr. 4, 1941	10.60	10,400				
1942	Feb. 6, 1942	11.5	12,800	1953	Dec. 7, 1952	11.04	11,500
1943	Jan. 21, 1943	11.90	13,900		Dec. 27, 1952	7.56	3,800
					Jan. 9, 1953	9.29	6,940
1944	Mar. 4, 1944	9.82	8,290	1954	Jan. 17, 1954	11.02	11,500
					Jan. 23, 1954	7.69	3,990
1945	Feb. 1, 1945	-	3,600				
	Feb. 3, 1945	8.21	4,480	1955	Dec. 6, 1954	5.44	1,670
	Feb. 5, 1945	-	4,320				
1946	Dec. 25, 1945	-	4,560	1956	Dec. 19, 1955	10.53	10,100
	Dec. 27, 1945	10.20	9,280		Dec. 22, 1955	12.56	15,900
					Dec. 26, 1955	8.12	4,560
1947	Feb. 12, 1947	7.51	3,310		Jan. 7, 1956	9.76	8,140
					Jan. 15, 1956	8.81	5,880
1948	Mar. 23, 1948	7.18	2,880		Jan. 26, 1956	7.64	3,740
					Feb. 22, 1956	10.72	10,600
1949	Mar. 10, 1949	7.80	3,720				
1950	Feb. 6, 1950	8.01	4,120	1957	Feb. 24, 1957	8.75	5,760

Peak stages and discharges of North Fork Cache Creek near Lower Lake, Calif.--Con.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1958	Dec. 18, 1957	7.84	4,060	1961	Dec. 1, 1960	8.51	5,100
	Jan. 26, 1958	8.37	5,010				
	Jan. 29, 1958	8.23	4,750	1962	Feb. 13, 1962	9.17	7,520
	Feb. 4, 1958	8.11	4,540		Mar. 5, 1962	7.97	4,780
	Feb. 9, 1958	8.70	5,660				
	Feb. 12, 1958	10.00	8,760	1963	Oct. 12, 1962	8.50	5,900
	Feb. 18, 1958	9.25	6,840		Jan. 31, 1963	11.44	13,400
	Feb. 24, 1958	11.75	13,500		Mar. 27, 1963	7.74	4,340
	Mar. 21, 1958	8.50	5,080	1964	Jan. 20, 1964	8.55	6,020
	Mar. 29, 1958	8.26	4,580				
	Apr. 2, 1958	9.87	8,420	1965	Dec. 22, 1964	12.7	19,700
1959	Feb. 16, 1959	9.01	6,230		Jan. 5, 1965	11.47	15,700
1960	Feb. 8, 1960	11.03	11,500				

4517.2. Bear Creek near Rumsey, Calif.

Location--Lat 39°56'35", long 122°20'40", in NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.30, T.13 N., R.4 W., on left bank 0.3 mile downstream from Brophy Canyon, 1.4 miles upstream from mouth, and 7.3 miles northwest of Rumsey.

Drainage area--100 sq mi.

Gage--Recording. Altitude of gage is 750 ft (from topographic map).

Stage-discharge relation--Defined by current-meter measurements below 2,300 cfs.

Bankfull stage--Not subject to overflow.

Remarks--Records furnished by California Department of Water Resources. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1958	Feb. 24, 1958	12.33	8,100	1962	Feb. 14, 1962	9.59	5,040
1959	Feb. 16, 1959	9.42	5,340	1963	Jan. 31, 1963	9.95	5,600
1960	Feb. 8, 1960	8.37	3,770	1964	Jan. 20, 1964	7.41	2,640
				1965	Jan. 5, 1965	11.93	9,720
1961	Dec. 1, 1960	6.85	2,360				

a Maximum stage since 1955.

4525. Cache Creek at Yolo, Calif.

Location--Lat 38°43'30", long 121°48'25", in Rio Jesus Maria Grant, on left bank 800 ft upstream from highway bridge and 0.5 mile south of Yolo, Yolo County.

Drainage area--1,138 sq mi.

Gage--Nonrecording prior to summer of 1930; recording thereafter. Prior to summer of 1930, at datum 5.97 ft higher. Summer of 1930 to June 11, 1954, at datum 4.00 ft higher. Datum of gage is 52.27 ft above mean sea level, adjustment of 1929.

Stage-discharge relation--Defined by current-meter measurements below 34,800 cfs.

Bankfull stage--30 ft.

Remarks--Peaks regulated by Clear Lake (usable capacity, 319,000 acre-ft) beginning in 1915. Peaks may be affected by diversion above station for irrigation. Peaks for the years 1903, 1905, 1906, 1908, 1910, 1912, 1913, 1917-20, 1923, 1924, and 1929 are maximum observed. Only annual peaks are shown prior to Oct. 1, 1943, and subsequent to Sept. 30, 1955. Base for partial-duration series, 2,200 cfs.

SACRAMENTO RIVER BASIN

Peak stages and discharges of Cache Creek at Yolo, Calif.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1903	Jan. 28, 1903	-	7,300	1947	Feb. 12, 1947	8.45	4,160
1904	Mar. 10, 1904	a28.2	17,000		Mar. 4, 1947	-	3,090
1905	Dec. 31, 1904	-	14,000	1948	Apr. 16, 1948	5.94	2,310
1906	Jan. 19, 1906	-	19,000	1949	Mar. 12, 1949	12.97	8,520
1907	Mar. 23, 1907	27.2	20,300	1950	Feb. 5, 1950	9.02	4,970
1908	Feb. 3, 1908	-	7,730	1951	Nov. 17, 1950	5.85	2,740
1909	Feb. 3, 1909	27.8	20,800		Dec. 4, 1950	17.63	11,700
1910	Jan. 24, 1910	-	6,800		Dec. 14, 1950	6.49	3,390
1911	Mar. 7, 1911	-	20,800		Jan. 19, 1951	-	(d)
1912	Mar. 13, 1912	-	925		Jan. 22, 1951	15.24	10,500
1913	Jan. 19, 1913	-	4,800		Feb. 5, 1951	7.77	4,400
1914	Feb. 21, 1914	-	20,800		Feb. 12, 1951	12.84	8,450
1915	Feb. 2, 1915	27.8	21,100		Mar. 7, 1951	7.54	4,210
1916	Jan. 3, 1916	28.9	20,300	1952	Dec. 2, 1951	9.18	5,540
1917	Feb. 25, 1917	25.1	18,800		Dec. 4, 1951	8.76	4,970
1918	Feb. 24, 1918	3.9	1,170		Dec. 28, 1951	10.70	6,800
1919	Feb. 11, 1919	12.1	7,750		Jan. 8, 1952	5.80	2,680
1920	Apr. 17, 1920	3.1	862		Jan. 12, 1952	12.15	7,340
1921	Jan. 30, 1921	24.3	18,000		Jan. 14, 1952	19.10	14,900
1922	Feb. 20, 1922	11.5	7,100		Jan. 20, 1952	10.00	5,600
1923	Dec. 13, 1922	5.6	2,340		Jan. 25, 1952	14.44	9,490
1924	Feb. 9, 1924	3.3	1,190		Feb. 2, 1952	19.72	15,700
1925	Feb. 12, 1925	23.7	18,400		Mar. 16, 1952	9.34	5,140
1926	Apr. 8, 1926	18.4	14,200		Mar. 19, 1952	9.09	4,960
1927	Feb. 18, 1927	22.8	17,200	1953	Dec. 7, 1952	18.53	15,200
1928	Mar. 27, 1928	20.3	15,100		Dec. 20, 1952	5.90	3,140
1929	Feb. 4, 1929	4.5	2,050		Dec. 27, 1952	9.18	5,850
1930	Feb. 23, 1930	9.85	6,550		Dec. 30, 1952	6.77	3,840
1931	Jan. 24, 1931	4.56	1,230		Jan. 9, 1953	18.96	15,800
1932	Dec. 27, 1931	21.17	14,900		Jan. 13, 1953	10.60	7,060
1933	Jan. 28, 1933	6.38	2,210		Jan. 21, 1953	9.24	5,900
1934	Dec. 30, 1933	8.82	4,240		Mar. 20, 1953	4.66	2,320
1935	Mar. 7, 1935	20.00	13,800	1954	Jan. 17, 1954	18.38	15,100
1936	Feb. 22, 1936	21.53	15,200		Jan. 24, 1954	5.60	3,030
1937	Feb. 14, 1937	21.42	12,800		Feb. 13, 1954	4.83	2,450
1938	Dec. 11, 1937	29.10	19,300		Feb. 18, 1954	6.21	3,780
1939	Mar. 10, 1939	1.92	170		Mar. 13, 1954	-	(d)
1940	Feb. 28, 1940	29.0	b38,700		Mar. 26, 1954	6.09	3,680
1941	Apr. 5, 1941	27.1	25,900		Apr. 7, 1954	6.09	3,680
1942	Feb. 6, 1942	28.64	c34,100	1955	Dec. 6, 1954	7.22	1,550
1943	Jan. 22, 1943	25.00	23,000	1956	Feb. 23, 1956	30.00	27,400
1944	Feb. 3, 1944	-	4,460	1957	Feb. 25, 1957	16.91	9,710
	Mar. 4, 1944	15.3	10,600	1958	Feb. 25, 1958	33.11	41,400
1945	Feb. 1, 1945	-	4,460	1959	Feb. 17, 1959	22.32	16,400
	Feb. 3, 1945	10.54	5,970	1960	Feb. 8, 1960	20.42	14,200
	Feb. 6, 1945	-	4,300	1961	Dec. 1, 1960	11.56	6,190
1946	Dec. 22, 1945	-	5,060	1962	Feb. 15, 1962	23.33	17,700
	Dec. 25, 1945	-	6,740	1963	Feb. 1, 1963	26.92	24,000
	Dec. 28, 1945	16.08	12,200	1964	Jan. 21, 1964	13.17	7,340
	Jan. 5, 1946	-	4,010	1965	Jan. 6, 1965	31.5	37,600

a Backwater from Sacramento River.

b Including 10,000 cfs estimated overflow.

c Including 6,000 cfs estimated overflow.

d Discharge unknown; exceeded base.

4531.5. Putah Creek tributary near Whispering Pines, Calif.

Location.--Lat 38°47'10", long 122°41'30", in NE $\frac{1}{4}$ sec.25, T.11 N., R.8 W., at culvert on State Highway 29, 2 miles southeast of Whispering Pines.

Drainage area.--0.25 sq mi.

Gage.--Crest-stage gage. Altitude of gage is 1,600 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 7 cfs and extended above on basis of culvert computation at 58 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1959	Feb. 16, 1959	11.99	35	1962	Feb. 14, 1962	12.41	40
1960	Feb. 8, 1960	11.94	30	1963	Feb. 1, 1963	13.60	58
				1964	Jan. 20, 1964	11.55	24
1961	Jan. 31, 1961	11.40	17	1965	Dec. 22, 1964	13.00	50

4535. Putah Creek near Guenoc, Calif.

Location.--Lat 38°46'45", long 122°31'00", in Guenoc land grant, on right bank just upstream from Coyote Valley damsite, 2.8 miles upstream from Soda Creek, 3.2 miles downstream from highway bridge at Guenoc, Lake County, and 5.6 miles northeast of Middletown.

Drainage area.--113 sq mi.

Gage.--Nonrecording prior to September 1906; recording subsequent to July 1930. Prior to September 1906, at site a quarter of a mile upstream at different datum. Datum of gage is 913.4 ft above mean sea level (river-profile survey).

Stage-discharge relation.--Defined by current-meter measurements below 14,500 cfs prior to September 1906; below 13,000 cfs thereafter.

Bankfull stage.--17 ft.

Remarks.--Peaks shown for the years 1905 and 1906 are maximum observed. Only annual peaks are shown prior to Oct. 1, 1943. Base for partial-duration series, 5,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1904	Mar. 10, 1904	20.1	24,600	1946	Dec. 27, 1945	12.23	7,700
1905	Jan. 22, 1905	15.4	16,000	1947	Feb. 12, 1947	11.8	7,100
1906	Jan. 16, 1906	17	18,700		Mar. 3, 1947	-	(a)
1931	Jan. 23, 1931	8.84	3,270	1948	Apr. 8, 1948	10.16	4,970
1932	Dec. 26, 1931	14.03	11,400	1949	Mar. 11, 1949	10.98	5,480
1933	Jan. 27, 1933	11.16	6,320	1950	Jan. 13, 1950	-	6,730
1934	Dec. 29, 1933	11.15	6,320		Feb. 6, 1950	12.05	6,800
1935	Mar. 6, 1935	14.45	12,200	1951	Nov. 16, 1950	11.50	6,100
1936	Feb. 21, 1936	16.80	17,000		Dec. 3, 1950	15.98	14,000
1937	Feb. 4, 1937	19.35	22,200		Jan. 21, 1951	10.87	5,340
1938	Dec. 11, 1937	22.7	32,000	1952	Dec. 1, 1951	13.61	8,960
1939	Jan. 5, 1939	6.18	1,270		Dec. 3, 1951	11.32	5,880
1940	Feb. 27, 1940	21.5	28,300		Dec. 27, 1951	12.22	7,020
1941	Apr. 4, 1941	14.3	11,600		Jan. 14, 1952	13.57	8,900
1942	Feb. 6, 1942	17.08	16,800		Jan. 24, 1952	10.60	5,040
1943	Jan. 21, 1943	20.5	25,400		Feb. 1, 1952	14.32	11,100
1944	Mar. 5, 1944	15.32	12,200	1953	Dec. 7, 1952	18.53	20,100
1945	Feb. 1, 1945	12.34	7,860		Dec. 26, 1952	11.08	5,780
	Feb. 2, 1945	-	5,300		Jan. 9, 1953	18.37	19,700
	Feb. 5, 1945	-	7,070		Mar. 19, 1953	11.94	7,030
1946	Dec. 21, 1945	-	6,020	1954	Jan. 17, 1954	16.28	14,900
	Dec. 24, 1945	-	5,310				

a Discharge unknown; exceeded base.

Peak stages and discharges of Putah Creek near Guenoc, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1954	Jan. 23, 1954	10.71	5,290	1959	Feb. 16, 1959	15.08	12,500
	Feb. 12, 1954	11.15	5,880				
1955	Nov. 15, 1954	9.80	4,200	1960	Feb. 1, 1960	11.08	6,050
					Feb. 8, 1960	17.90	18,600
1956	Dec. 19, 1955	16.60	15,600	1961	Dec. 1, 1960	10.73	5,620
	Dec. 22, 1955	21.80	29,200		Jan. 31, 1961	11.72	6,900
	Dec. 26, 1955	12.42	7,770				
	Jan. 7, 1956	13.18	8,990	1962	Feb. 9, 1962	10.70	5,580
	Feb. 20, 1956	15.93	14,200		Feb. 13, 1962	14.70	11,800
					Mar. 5, 1962	10.74	5,630
1957	Feb. 24, 1957	13.90	10,300				
1958	Dec. 18, 1957	11.14	5,900	1963	Oct. 12, 1962	13.30	9,280
	Jan. 29, 1958	12.90	8,660		Jan. 31, 1963	20.91	26,500
	Feb. 9, 1958	11.24	6,030		Mar. 27, 1963	11.45	6,540
	Feb. 12, 1958	13.11	9,040		Apr. 6, 1963	10.45	5,280
	Feb. 18, 1958	12.05	7,090	1964	Jan. 20, 1964	13.10	8,960
	Feb. 24, 1958	19.20	22,200				
	Mar. 21, 1958	11.46	6,310	1965	Dec. 22, 1964	19.15	21,700
	Mar. 29, 1958	10.47	5,370		Jan. 5, 1965	17.98	18,800
	Apr. 2, 1958	15.35	13,000		Jan. 23, 1965	10.23	5,020
1959	Jan. 12, 1959	10.22	5,000				

4540. Putah Creek near Winters, Calif.

Location.--Lat 38°30'55", long 122°04'50", in NE¹/₄ sec.28, T.8 N., R.2 W., on left bank 1.3 miles downstream from Monticello Dam, 6 miles west of Winters, and 8 miles downstream from Capell Creek.

Drainage area.--574 sq mi.

Gage.--Recording. Prior to Feb. 29, 1940, at datum about 1 ft higher. Datum of gage is 160.75 ft above mean sea level (river-profile survey).

Stage-discharge relation.--Defined by current-meter measurements below 30,000 cfs.

Bankfull stage.--Not subject to overflow.

Historical data.--Maximum stage known since at least 1905, that of Feb. 27, 1940, on basis of records for station at Winters.

Remarks.--Peaks regulated by Lake Berryessa (usable capacity, 1,592,000 acre-ft) beginning Jan. 11, 1957. Only annual peaks are shown prior to Oct. 1, 1946, and subsequent to Sept. 30, 1955. Base for partial-duration series, 6,600 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1931	Jan. 23, 1931	11.70	4,820	1948	Mar. 24, 1948	13.70	6,540
1932	Dec. 27, 1931	21.8	34,100				
1933	Jan. 27, 1933	14.67	10,500	1949	Mar. 11, 1949	19.67	22,700
1934	Dec. 30, 1933	15.18	11,700				
1935	Mar. 6, 1935	23.20	41,000	1950	Jan. 14, 1950	-	8,200
					Feb. 4, 1950	19.27	21,500
1936	Feb. 21, 1936	22.85	39,200				
1937	Feb. 4, 1937	25.4	50,800	1951	Nov. 16, 1950	15.45	10,100
1938	Dec. 11, 1937	24.8	48,100		Nov. 18, 1950	14.24	7,580
1939	Mar. 9, 1939	7.95	1,260		Dec. 3, 1950	24.32	41,600
1940	Feb. 27, 1940	29.5	81,000		Dec. 14, 1950	15.49	10,200
					Jan. 18, 1951	13.97	7,050
1941	Apr. 4, 1941	24.3	41,400		Jan. 22, 1951	16.36	12,200
1942	Feb. 6, 1942	28.55	67,200				
1943	Jan. 21, 1943	29.0	70,300	1952	Dec. 1, 1951	17.58	15,000
1944	Mar. 4, 1944	21.40	29,600		Dec. 3, 1951	17.86	15,900
1945	Feb. 1, 1945	19.38	21,700		Dec. 28, 1951	16.92	13,700
					Jan. 12, 1952	16.87	13,500
1946	Dec. 27, 1945	17.88	16,500		Jan. 14, 1952	20.60	25,100
					Jan. 16, 1952	15.38	9,550
1947	Feb. 12, 1947	17.30	14,800		Jan. 24, 1952	17.76	15,800
	Mar. 3, 1947	-	8,980		Feb. 1, 1952	19.30	19,700

Peak stages and discharges of Putah Creek near Winters, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1953	Dec. 7, 1952	25.08	45,700	1955	Nov. 15, 1954	12.78	4,960
	Dec. 20, 1952	13.92	6,960		Dec. 22, 1955	26.73	55,400
	Dec. 27, 1952	16.40	12,300		Feb. 24, 1957	6.70	568
	Dec. 30, 1952	14.38	7,860		Feb. 18, 1958	9.14	1,240
	Jan. 9, 1953	23.52	37,600		Feb. 16, 1959	8.44	906
	Jan. 13, 1953	15.03	9,170		June 28, 1960	6.84	397
	Mar. 19, 1953	16.13	11,600				
1954	Jan. 17, 1954	22.75	33,000	1961	July 4, 1961	7.55	585
	Jan. 23, 1954	14.18	7,220		June 28, 1962	7.38	524
	Feb. 13, 1954	17.25	14,100		Jan. 31, 1963	8.77	1,060
	Feb. 17, 1954	15.93	10,800		July 19-21, 1964	7.75	658
	Apr. 5, 1954	13.84	6,810		Jan. 7, 1965	14.96	7,740

4545. Putah Creek at Winters, Calif.

Location.--Lat 38°31'15", long 121°58'00", in Rio de los Putos Grant, just downstream from Southern Pacific Co.'s railroad bridge at Winters, Yolo County.

Drainage area.--635 sq mi (revised).

Gage.--Nonrecording, except during high flows of 1922, 1925-28, and 1930, when recording gage was in use. Datum of gage is 92.38 ft above mean sea level, adjustment of 1912.

Stage-discharge relation.--Defined by current-meter measurements below 22,500 cfs.

Remarks.--Peaks for the years 1906, 1908, 1910-12, 1914-21, 1923 and 1924 are maximum observed. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1906	Jan. 19, 1906	24.0	25,400	1920	Apr. 16, 1920	9.0	2,830
1907	Mar. 19, 1907	29.0	37,300	1921	Jan. 30, 1921	29.2	33,500
1908	Feb. 2, 1908	14.25	8,600	1922	Feb. 19, 1922	20.8	17,000
1909	Jan. 8, 1909	27.5	33,400	1923	Dec. 10, 1922	23.4	21,900
1910	Dec. 9, 1909	17.4	12,900	1924	Feb. 8, 1924	18.2	13,100
1911	Mar. 7, 1911	26.22	28,300	1925	Feb. 11, 1925	35.1	53,600
1912	Jan. 26, 1912	10.90	4,530	1926	Apr. 8, 1926	25.5	24,500
1913	Jan. 18, 1913	18.6	14,600	1927	Apr. 2, 1927	29.2	31,300
1914	Dec. 31, 1913	39.0	60,000	1928	Mar. 27, 1928	31.0	34,700
1915	Feb. 2, 1915	30.0	40,400	1929	Feb. 4, 1929	14.8	7,860
1916	Jan. 3, 1916	35.0	53,300	1930	Dec. 15, 1929	25.3	22,700
1917	Feb. 24, 1917	29.0	37,300	1931	Jan. 23, 1931	11.33	3,350
1918	Mar. 19, 1918	9.8	3,790				
1919	Feb. 10, 1919	26.0	30,000				

4550. Putah Creek near Davis, Calif.

Location.--Lat 38°31'24", long 121°47'10", in SE $\frac{1}{4}$ sec.19, T.8 N., R.2 E., on right bank in Los Putos Grant, 3.3 miles southwest of Davis, Yolo County, and 9.9 miles east of Winters.

Drainage area.--638 sq mi.

Gage.--Recording. Altitude of gage is 45 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 46,400 cfs.

Remarks.--Peaks regulated by Lake Berryessa (usable capacity, 1,592,000 acre-ft) beginning Jan. 11, 1957. Peaks may be affected by diversions above station for irrigation of about 38,900 acres, beginning in May 1959. Only annual peaks are shown subsequent to Oct. 1, 1955. Base for partial-duration series, 5,000 cfs.

Peak stages and discharges of Putah Creek near Davis, Calif.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1949	Mar. 12, 1949	17.2	21,200	1953	Dec. 20, 1952	9.61	6,280
1950	Jan. 14, 1950	-	6,460		Dec. 27, 1952	12.31	11,000
	Feb. 4, 1950	16.48	20,000		Dec. 30, 1952	9.66	6,560
					Jan. 9, 1953	20.79	36,400
1951	Nov. 19, 1950	9.92	6,200		Jan. 13, 1953	10.63	8,030
	Dec. 3, 1950	20.88	33,200		Mar. 20, 1953	11.38	9,460
	Dec. 14, 1950	10.72	7,540	1954	Jan. 17, 1954	17.37	29,700
	Jan. 18, 1951	9.30	5,360		Jan. 23, 1954	8.04	5,560
	Jan. 22, 1951	11.81	9,440		Feb. 13, 1954	11.15	12,100
					Feb. 18, 1954	10.67	10,800
					Apr. 5, 1954	8.06	6,320
1952	Dec. 1, 1951	13.13	11,900	1955	Nov. 16, 1954	6.98	4,370
	Dec. 3, 1951	13.50	12,700				
	Dec. 28, 1951	13.36	12,400	1956	Dec. 22, 1955	24.36	46,600
	Jan. 12, 1952	13.34	13,500		Feb. 24, 1957	3.93	1,150
	Jan. 14, 1952	16.74	21,200		Feb. 24, 1958	8.93	6,390
	Jan. 17, 1952	11.36	9,420		Feb. 16, 1959	10.67	8,250
	Jan. 20, 1952	9.00	5,350		Feb. 8, 1960	4.32	1,050
	Jan. 25, 1952	13.71	14,400				
	Feb. 2, 1952	13.83	14,600	1961	Jan. 31, 1961	2.78	242
	Mar. 15, 1952	9.97	6,850	1962	Feb. 15, 1962	8.08	3,570
1953	Dec. 7, 1952	21.5	39,000				

NAPA RIVER BASIN

4559.5. Sulphur Creek near St. Helena, Calif.

Location--Lat 38°29'20", long 122°28'50", in NE $\frac{1}{4}$ sec.2, T.7 N., R.6 W., at bridge on private road, 1.3 miles southwest of St. Helena.

Drainage area--4.50 sq mi.

Gage--Crest-stage gage. Altitude of gage is 300 ft (from topographic map).

Stage-discharge relation--Defined by current-meter measurements below 170 cfs and extended above on basis of slope-area measurement at 924 cfs.

Bankfull stage--15 ft.

Remarks--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1956	Dec. 21, 1955	15.80	-	1961	Jan. 31, 1961	11.04	400
				1962	Feb. 14, 1962	11.48	435
1958	Feb. 24, 1958	13.53	924	1963	Oct. 14, 1962	12.43	645
1959	Feb. 16, 1959	11.67	470	1964	Jan. 20, 1964	10.46	235
1960	Feb. 8, 1960	13.32	860	1965	Dec. 23, 1964	10.80	980

4560. Napa River near St. Helena, Calif.

Location.--Lat 38°29'40", long 122°25'50", in SE¹ sec.32, T.8 N., R.5 W., on right bank 0.2 mile upstream from highway bridge, 1.3 miles northeast of Zinfandel, and 2.5 miles east of St. Helena.

Drainage area.--81.4 sq mi.

Gage.--Recording. Prior to Nov. 22, 1958, at datum 1.00 ft higher. Altitude of gage is 200 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 12,000 cfs.

Bankfull stage.--15 ft.

Historical data.--The peak of Feb. 27, 1940, probably exceeded any discharge during the period of no record, 1933-38.

Remarks.--Only annual peaks are shown prior to Oct. 1, 1943. Base for partial-duration series, 2,300 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1930	Dec. 15, 1929	8.80	4,480	1954	Jan. 17, 1954	11.75	8,020
1931	Jan. 23, 1931	4.32	920		Feb. 12, 1954	8.80	4,630
1932	Dec. 27, 1931	9.75	5,980		Feb. 17, 1954	6.24	2,430
1940	Feb. 27, 1940	14.5	11,700	1955	Nov. 15, 1954	8.67	670
1941	Apr. 4, 1941	11.64	7,870	1956	Dec. 19, 1955	12.45	8,920
1942	Feb. 6, 1942	14.6	11,800		Dec. 22, 1955	15.17	12,600
1943	Jan. 21, 1943	11.43	7,600		Dec. 26, 1955	11.01	7,090
1944	Mar. 4, 1944	9.10	4,910		Jan. 7, 1956	8.03	3,920
1945	Feb. 1, 1945	8.75	4,560		Jan. 15, 1956	8.64	4,470
	Feb. 2, 1945	-	2,330		Jan. 25, 1956	8.28	4,140
1946	Dec. 27, 1945	8.23	4,060		Feb. 22, 1956	12.37	8,820
1947	Feb. 12, 1947	6.88	2,890	1957	Feb. 24, 1957	7.09	3,110
1948	Mar. 23, 1948	6.12	2,310	1958	Jan. 29, 1958	9.25	4,520
1949	Mar. 11, 1949	9.42	4,820		Feb. 2, 1958	6.91	2,600
1950	Jan. 14, 1950	-	2,550		Feb. 12, 1958	9.62	4,880
	Feb. 4, 1950	9.42	4,910		Feb. 18, 1958	8.39	3,750
1951	Dec. 3, 1950	11.9	7,680		Feb. 24, 1958	13.43	9,640
	Jan. 18, 1951	6.27	2,420		Mar. 29, 1958	6.64	2,410
	Jan. 21, 1951	7.10	3,070		Apr. 2, 1958	11.77	7,360
1952	Dec. 1, 1951	8.18	4,010	1959	Feb. 17, 1959	9.22	4,890
	Dec. 3, 1951	7.70	3,580	1960	Feb. 8, 1960	14.48	11,600
	Jan. 14, 1952	8.43	4,280	1961	Jan. 31, 1961	6.38	2,160
	Jan. 24, 1952	8.11	3,990	1962	Feb. 13, 1962	11.60	7,730
	Feb. 1, 1952	8.65	4,480	1963	Oct. 13, 1962	8.55	4,050
1953	Dec. 7, 1952	12.47	8,950		Jan. 31, 1963	15.30	12,300
	Dec. 27, 1952	6.30	2,480		Mar. 27, 1963	7.78	3,330
	Jan. 9, 1953	9.70	5,550		Apr. 6, 1963	7.47	3,050
	Mar. 19, 1953	6.27	2,460	1964	Jan. 20, 1964	9.52	5,020
				1965	Dec. 22, 1964	14.90	11,700
					Dec. 26, 1964	6.95	2,620
					Jan. 5, 1965	14.96	11,800

a Occurred Jan. 18, 1955.

NAPA RIVER BASIN

4564. Lake Hennessey tributary near Rutherford, Calif.

Location.--Lat 38°29'00", long 122°21'15", in SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.6, T.7 N., R.4 W., at culvert on State Highway 128, 4 miles northeast of Rutherford.

Drainage area.--1.04 sq mi.

Gage.--Crest-stage gage. Altitude of gage is 330 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 26 cfs and extended above on basis of computation of flow thru culvert at 149 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1959	Feb. 16, 1959	5.53	53	1963	Jan. 31, 1963	7.71	149
1960	Feb. 8, 1960	5.61	59	1964	Jan. 20, 1964	4.45	22
				1965	Jan. 5, 1965	8.50	184
1961	Jan. 31, 1961	4.14	4.1				
1962	Feb. 14, 1962	5.69	64				

4565. Conn Creek near St. Helena, Calif.

Location.--Lat 38°28'55", long 122°22'25", in SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.1, T.7 N., R.5 W., in outlet pool at toe of Conn Dam, 1.8 miles upstream from bridge on State Highway 28, 5.4 miles east of St. Helena, and 8 miles upstream from mouth.

Drainage area.--52.1 sq mi.

Gage.--Recording. Prior to Aug. 5, 1952, at site 1.6 miles downstream at different datum. Subsequent to Aug. 5, 1952, auxiliary gage in spillway. Altitude of spillway gage is 315 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 6,000 cfs prior to Aug. 5, 1952; below 1,300 cfs thereafter.

Remarks.--Peaks regulated by Lake Hennessey (capacity, 31,000 acre-ft), beginning in December 1945, and may be affected by diversion from Lake Hennessey for municipal use. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1930	Dec. 15, 1929	7.62	2,000	1945	Feb. 1, 1945	6.90	2,590
1931	Jan. 23, 1931	4.41	289	1946	Dec. 27, 1945	1.81	20
1932	Dec. 27, 1931	8.31	2,720	1947	Feb. 12, 1947	1.84	20
1933	Jan. 29, 1933	5.55	768	1948	June 1, 1948	2.32	66
1934	Jan. 1, 1934	5.61	850	1949	Mar. 11, 1949	al.86	26
1935	Mar. 6, 1935	8.80	2,750	1950	Mar. 24, 1950	2.72	72
1936	Feb. 21, 1936	9.5	3,310	1951	Dec. 3, 1950	6.38	1,320
1937	Feb. 4, 1937	10.3	4,600	1952	Jan. 14, 1952	7.30	1,300
1938	Feb. 2, 1938	8.8	3,470	1953	Jan. 9, 1953	1.57	996
1939	Mar. 9, 1939	3.91	142	1954	Feb. 17, 1954	.86	401
1940	Feb. 27, 1940	11.80	7,700	1955	(b)	.89	9.4
1941	Apr. 4, 1941	9.10	4,670	1956	Dec. 23, 1955	3.70	3,600
1942	Feb. 6, 1942	10.9	6,880	1957	Jan. 9, 1957	1.61	41
1943	Jan. 21, 1943	8.95	4,700	1958	Feb. 24, 1958	3.39	3,140
1944	Mar. 4, 1944	5.50	1,440	1959	Feb. 19, 1959	1.34	683

a Occurred July 11, 1949.

b Occurred on many days in June 1955.

4570. Dry Creek near Napa, Calif.

Location.--Lat 38°21'23", long 122°21'50", in Napa Grant, on right bank 3.7 miles upstream from mouth and 5.5 miles northwest of Napa, Napa County.

Drainage area.--17.4 sq mi.

Gage.--Recording. Prior to June 14, 1955, at site 350 ft downstream at different datum. Altitude of gage is 190 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 450 cfs prior to June 14, 1955; below 2,600 cfs thereafter.

Remarks.--Base for partial-duration series, 450 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1952	Dec. 1, 1951	5.30	1,280	1958	Feb. 12, 1958	4.85	585
	Dec. 3, 1951	3.97	671		Feb. 19, 1958	5.08	727
	Jan. 14, 1952	4.60	945		Feb. 24, 1958	8.11	3,460
	Jan. 16, 1952	3.88	634		Mar. 20, 1958	5.32	845
	Feb. 1, 1952	3.80	602		Mar. 29, 1958	5.29	824
	Mar. 14, 1952	4.33	824		Apr. 2, 1958	7.59	2,870
					Apr. 5, 1958	5.04	657
1953	Dec. 6, 1952	7.05	2,380	1959	Feb. 16, 1959	5.76	1,240
	Dec. 30, 1952	3.57	473				
	Jan. 7, 1953	4.55	905	1960	Feb. 8, 1960	6.28	1,680
	Apr. 27, 1953	3.57	473				
1954	Jan. 17, 1954	6.12	1,750	1961	Jan. 31, 1961	4.36	320
	Feb. 12, 1954	3.94	659				
	Feb. 17, 1954	3.58	516	1962	Feb. 9, 1962	4.65	472
1955	Apr. 21, 1955	2.50	161		Feb. 13, 1962	5.96	1,400
				1963	Oct. 13, 1962	5.30	940
1956	Dec. 19, 1955	7.25	2,600		Jan. 31, 1963	6.88	2,230
	Dec. 22, 1955	7.00	2,350		Mar. 27, 1963	4.83	624
	Dec. 26, 1955	5.89	1,340	1964	Jan. 20, 1964	5.57	1,140
	Jan. 7, 1956	5.17	789				
	Jan. 15, 1956	4.93	633	1965	Dec. 23, 1964	5.51	1,100
	Feb. 22, 1956	6.18	1,590		Jan. 5, 1965	7.62	2,970
1957	Feb. 24, 1957	4.70	500		Jan. 23, 1965	4.57	467
1958	Jan. 29, 1958	4.77	5.38				

SONOMA CREEK BASIN

4584. Sonoma Creek near Kenwood, Calif.

Location.--Lat 38°26'32", long 122°32'15", in NE $\frac{1}{4}$ sec.20, T.7 N., R.6 W., at bridge on private road, 2.0 miles north of Kenwood.

Drainage area.--6.06 sq mi.

Gage.--Crest-stage gage. Altitude of gage is 580 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 880 cfs and extended above on basis of slope-area measurement at 1,430 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1958	Feb. 24, 1958	13.25	1,510	1962	Feb. 13, 1962	12.62	685
1959	Feb. 16, 1959	12.53	640	1963	Jan. 31, 1963	13.10	910
1960	Feb. 8, 1960	-	1,430	1964	Jan. 20, 1964	12.95	850
1961	Dec. 1, 1960	11.83	395				

4585. Sonoma Creek at Boyes Hot Springs, Calif.

Location.--Lat 38°18'49", long 122°29'09", in Agua Caliente Grant, on left bank 10 ft downstream from county highway bridge at Boyes Hot Springs, Sonoma County, and 2.2 miles northwest of Sonoma.

Drainage area.--62.2 sq mi.

Gage.--Recording. Altitude of gage is 75 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 4,100 cfs and extended above on basis of slope-area measurement at 8,880 cfs.

Bankfull stage.--16 ft.

Historical data.--Flood of 1937 reached a stage of about 19 ft, according to local residents.

Remarks.--Base for partial-duration series, 1,400 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1956	Dec. 19, 1955	14.50	6,620	1959	Feb. 16, 1959	12.15	4,690
	Dec. 22, 1955	17.10	8,880				
	Dec. 26, 1955	14.09	6,270	1960	Feb. 1, 1960	7.95	1,900
	Jan. 7, 1956	11.14	3,860		Feb. 8, 1960	14.40	6,530
	Jan. 15, 1956	11.17	3,890		Mar. 7, 1960	6.95	1,500
	Jan. 25, 1956	8.17	1,800	1961	Jan. 31, 1961	8.42	2,300
	Feb. 20, 1956	11.25	3,950				
	Feb. 22, 1956	13.10	5,430	1962	Dec. 1, 1961	7.05	1,560
	Feb. 25, 1956	7.80	1,580		Jan. 13, 1962	8.50	2,350
1957	Feb. 24, 1957	7.59	1,450		Feb. 9, 1962	8.66	2,440
					Feb. 13, 1962	13.25	5,550
1958	Dec. 18, 1957	7.96	1,910		Mar. 5, 1962	8.02	2,190
	Jan. 26, 1958	7.80	1,810	1963	Oct. 13, 1962	10.85	3,800
	Jan. 29, 1958	9.52	2,890		Jan. 31, 1963	12.17	4,710
	Feb. 4, 1958	8.32	2,120		Feb. 12, 1963	7.62	1,860
	Feb. 7, 1958	7.90	1,870		Mar. 27, 1963	10.02	3,260
	Feb. 12, 1958	10.72	3,680		Apr. 6, 1963	8.68	2,450
	Feb. 18, 1958	10.20	3,330	1964	Jan. 20, 1964	11.69	4,360
	Feb. 24, 1958	14.17	6,330				
	Mar. 21, 1958	9.75	3,040		Nov. 10, 1964	6.18	1,500
	Mar. 29, 1958	8.93	2,500		Dec. 23, 1964	11.45	4,480
	Apr. 2, 1958	14.14	6,310		Dec. 26, 1964	6.91	1,880
	Apr. 5, 1958	8.60	2,290		Jan. 5, 1965	15.56	7,520
1959	Jan. 9, 1959	8.52	2,240				

PETALUMA RIVER BASIN

4590. Petaluma River at Petaluma, Calif.

(Published as Petaluma Creek near Petaluma prior to October 1958)

Location.--Lat 38°15'40", long 122°39'35", in Roblar de la Miseria Grant, on right bank 70 ft downstream from county highway bridge in Petaluma, Sonoma County, and 1.3 miles downstream from Lichau Creek.

Drainage area.--30.9 sq mi.

Gage.--Recording. Altitude of gage is 20 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 1,400 cfs.

Bankfull stage.--13 ft.

Remarks.--Base for partial-duration series, 400 cfs.

Peak stages and discharges of Petaluma River at Petaluma, Calif.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1949	Mar. 11, 1949	10.45	1,130	1956	Jan. 14, 1956	13.53	1,860
1950	Jan. 17, 1950	-	755		Jan. 20, 1956	9.32	610
	Jan. 28, 1950	-	822		Jan. 25, 1956	11.40	1,140
	Feb. 4, 1950	12.19	1,270		Feb. 20, 1956	10.90	990
					Feb. 22, 1956	12.40	1,460
1951	Nov. 18, 1950	7.22	462	1957	Feb. 26, 1957	5.97	124
	Dec. 3, 1950	12.55	1,360				
	Dec. 7, 1950	10.07	837	1958	Jan. 26, 1958	8.97	689
	Dec. 14, 1950	10.80	980		Jan. 30, 1958	7.93	542
	Jan. 22, 1951	11.87	1,210		Feb. 2, 1958	10.04	894
	Feb. 5, 1951	11.48	1,130		Feb. 7, 1958	10.19	923
1952	Dec. 1, 1951	7.96	508		Feb. 10, 1958	8.72	653
	Dec. 3, 1951	11.86	1,210		Feb. 12, 1958	11.70	1,290
	Jan. 11, 1952	10.80	976		Feb. 19, 1958	12.42	1,500
	Jan. 14, 1952	11.65	1,160		Feb. 24, 1958	13.44	1,810
	Jan. 16, 1952	11.51	1,130		Mar. 21, 1958	10.93	1,070
	Jan. 24, 1952	11.90	1,220		Apr. 2, 1958	12.04	1,390
	Feb. 1, 1952	9.26	661		Apr. 6, 1958	8.80	670
	Mar. 15, 1952	10.86	989	1959	Feb. 16, 1959	12.38	1,470
1953	Dec. 7, 1952	11.28	1,080		Feb. 20, 1959	7.14	430
	Dec. 19, 1952	10.30	866	1960	Feb. 8, 1960	10.56	985
	Dec. 27, 1952	11.27	1,080		Mar. 7, 1960	7.71	509
	Dec. 30, 1952	8.58	533				
	Jan. 7, 1953	9.82	770	1961	Jan. 31, 1961	9.97	886
	Jan. 19, 1953	8.41	506		Feb. 11, 1961	6.63	404
	Apr. 27, 1953	7.82	416				
1954	Jan. 17, 1954	9.37	559	1962	Feb. 9, 1962	6.91	547
	Feb. 17, 1954	8.97	474		Feb. 13, 1962	10.33	1,230
	Mar. 21, 1954	8.85	450		Feb. 14, 1962	11.55	1,530
1955	Jan. 18, 1955	9.28	540		Feb. 18, 1962	6.60	508
					Mar. 5, 1962	8.24	821
1956	Dec. 19, 1955	12.91	1,640	1963	Oct. 13, 1962	7.01	587
	Dec. 22, 1955	13.55	1,860		Jan. 31, 1963	10.76	1,320
	Dec. 26, 1955	13.53	1,860		Feb. 12, 1963	9.17	999
	Dec. 31, 1955	8.39	418		Mar. 28, 1963	8.81	929
	Jan. 7, 1956	11.93	1,300		Apr. 6, 1963	7.43	667
					Apr. 14, 1963	6.13	428

NOVATO CREEK BASIN

4595. Novato Creek near Novato, Calif.

Location.--Lat 38°06'45", long 122°35'05", in Novato Grant, on right bank 500 ft downstream from highway bridge and 1 mile west of U.S. Highway 101 in Novato, Marin County.

Drainage area.--17.5 sq mi.

Gage.--Recording. Altitude of gage is 45 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 900 cfs.

Bankfull stage.--14 ft.

Remarks.--Peaks regulated by Stafford Lake (capacity, 4,500 acre-ft) beginning Dec. 1, 1951. Peaks may be affected by diversion from Stafford Lake for municipal water supply beginning Apr. 25, 1952. Only annual peaks are shown subsequent to the year 1961. Base for partial-duration series, 200 cfs.

Peak stages and discharges of Novato Creek near Novato, Calif.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1947	Mar. 3, 1947	3.20	239	1954	Feb. 17, 1954	4.25	446
1948	Mar. 23, 1948	2.67	132	1955	Dec. 9, 1954	2.88	218
1949	Feb. 6, 1949	-	242	1956	Dec. 19, 1955	6.59	872
	Mar. 5, 1949	-	262		Dec. 22, 1955	7.88	1,120
	Mar. 11, 1949	6.41	748		Dec. 26, 1955	7.45	1,030
	Mar. 19, 1949	-	403		Dec. 31, 1955	3.11	219
1950	Jan. 16, 1950	-	455		Jan. 7, 1956	5.00	545
	Jan. 28, 1950	-	258		Jan. 15, 1956	5.92	724
	Feb. 4, 1950	7.15	978		Jan. 20, 1956	3.15	225
1951	Nov. 18, 1950	4.22	441		Jan. 25, 1956	4.02	369
	Dec. 3, 1950	7.97	1,130		Feb. 20, 1956	3.20	233
	Dec. 6, 1950	4.47	485		Feb. 22, 1956	5.98	736
	Dec. 14, 1950	3.93	392		Feb. 25, 1956	3.16	227
	Jan. 18, 1951	3.61	338	1957	Feb. 24, 1957	3.68	312
	Jan. 21, 1951	5.33	639	1958	Jan. 25, 1958	4.64	466
	Feb. 5, 1951	5.29	632		Jan. 29, 1958	3.27	213
	Mar. 6, 1951	2.98	234		Feb. 4, 1958	4.62	464
1952	Dec. 3, 1951	5.08	594		Feb. 9, 1958	4.40	420
	Jan. 12, 1952	5.45	661		Feb. 12, 1958	5.01	542
	Jan. 14, 1952	6.77	906		Feb. 18, 1958	6.38	815
	Jan. 16, 1952	4.45	481		Feb. 24, 1958	8.24	1,190
	Jan. 25, 1952	4.26	448		Mar. 29, 1958	3.45	250
	Feb. 1, 1952	3.11	254		Apr. 2, 1958	6.80	899
	Mar. 14, 1952	6.16	790		Apr. 5, 1958	4.14	366
	Mar. 18, 1952	2.82	211	1959	Feb. 16, 1959	6.07	754
1953	Dec. 6, 1952	5.22	620	1960	Feb. 8, 1960	4.68	476
	Dec. 19, 1952	4.01	406	1961	Jan. 31, 1961	2.78	151
	Dec. 26, 1952	6.18	794		Feb. 9, 1962	5.85	710
	Dec. 30, 1952	3.34	300	1963	Jan. 30, 1963	5.77	733
	Jan. 7, 1953	3.56	334	1964	Jan. 20, 1964	8.74	1,330
1954	Jan. 13, 1953	4.24	445	1965	Jan. 5, 1965	7.53	1,120
	Jan. 17, 1954	3.97	399				

CORTE MADERA CREEK BASIN

4600. Corte Madera Creek at Ross, Calif.

Location.--Lat 37°57'45", long 122°33'20", in Punta de Quentin Grant, on left bank behind fire station at Ross, Marin County, 1.7 miles southwest of San Rafael and 4 miles upstream from mouth.

Drainage area.--18.1 sq mi.

Gage.--Recording. Altitude of gage is 8 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 1,600 cfs.

Bankfull stage.--18 ft.

Remarks.--Peaks partly regulated by Phoenix Lake (capacity, 612 acre-ft) beginning in 1908. Peaks may be affected by diversion on tributary above station by Marin Municipal Water District. Base for partial-duration series, 1,000 cfs.

Peak stages and discharges of Corte Madera at Ross, Calif.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1952	Dec. 1, 1951	11.12	1,460	1958	Feb. 7, 1958	11.43	1,540
	Dec. 3, 1951	16.65	3,300		Feb. 9, 1958	10.66	1,350
	Jan. 12, 1952	9.36	1,050		Feb. 12, 1958	12.10	1,710
	Jan. 14, 1952	15.16	2,720		Feb. 18, 1958	14.68	2,550
	Jan. 24, 1952	11.50	1,560		Feb. 24, 1958	15.15	2,710
	Mar. 14, 1952	13.78	2,240		Mar. 21, 1958	10.04	1,180
1953	Dec. 7, 1952	16.59	3,280	1959	Apr. 2, 1958	16.23	3,130
	Dec. 19, 1952	10.98	1,420		Feb. 16, 1959	12.58	1,870
	Jan. 7, 1953	10.29	1,260	1960	Feb. 8, 1960	14.87	2,610
1954	Jan. 17, 1954	12.82	1,940		Dec. 1, 1960	7.33	519
	Feb. 17, 1954	10.91	1,410	1962	Feb. 9, 1962	13.75	2,040
1955	Dec. 5, 1954	17.37	648		Feb. 13, 1962	16.01	2,690
	Dec. 19, 1955	15.59	2,880		Mar. 5, 1962	11.46	1,430
1956	Dec. 22, 1955	17.45	3,620	1963	Oct. 13, 1962	10.29	1,070
	Dec. 26, 1955	10.90	1,410		Jan. 30, 1963	15.24	2,460
	Jan. 7, 1956	9.54	1,080		Mar. 28, 1963	11.84	1,470
	Feb. 19, 1956	10.70	1,360	1964	Jan. 20, 1964	10.07	1,040
	Feb. 22, 1956	12.40	1,810		Dec. 23, 1964	10.73	1,180
1957	Feb. 23, 1957	7.63	652	1965	Jan. 5, 1965	11.57	1,400
	Jan. 25, 1958	15.90	3,000				
1958	Jan. 29, 1958	10.31	1,260				

a Occurred Apr. 21, 1955.

LAGUNITAS CREEK BASIN

4605. Nicasio Creek near Point Reyes Station, Calif.
(Formerly published as Arroyo Nicasio)Location.--Lat 38°04'20", long 122°45'30", in Nicasio (Buckelew) Grant, on left bank 0.9 mile upstream from mouth and 2.7 miles east of Point Reyes Station, Marin County.Drainage area.--36.6 sq mi.Gage.--Recording. Altitude of gage is 60 ft (from topographic map).Stage-discharge relation.--Defined by current-meter measurements below 2,900 cfs and extended above on basis of slope-area measurement at 9,010 cfs.Remarks.--Base for partial-duration series, 1,400 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1954	Jan. 17, 1954	12.88	6,860	1958	Jan. 25, 1958	8.59	2,560
	Feb. 17, 1954	9.04	3,040		Jan. 29, 1958	7.64	1,890
1955	Dec. 9, 1954	5.99	995		Feb. 7, 1958	7.69	1,940
	Dec. 19, 1955	13.20	7,240		Feb. 9, 1958	9.11	2,910
1956	Dec. 22, 1955	14.57	9,010		Feb. 12, 1958	9.30	3,090
	Dec. 26, 1955	11.32	5,050		Feb. 18, 1958	8.72	2,620
	Jan. 7, 1956	10.22	3,920		Feb. 24, 1958	12.53	6,170
	Jan. 14, 1956	8.98	2,830		Mar. 29, 1958	6.87	1,420
	Feb. 20, 1956	6.93	1,470		Apr. 2, 1958	12.28	6,110
	Feb. 22, 1956	9.99	3,690		Apr. 5, 1958	7.45	1,780
1957	Feb. 24, 1957	5.84	920	1959	Feb. 16, 1959	10.46	4,230
				1960	Feb. 8, 1960	10.80	4,500

4610. Russian River near Ukiah, Calif.

Location.--Lat 39°12'07", long 123°11'55", in Yokayo Rancho Grant, on left bank 200 ft downstream from York Creek, 0.7 mile upstream from East Fork, and 3.6 miles north of Ukiah, Mendocino County.

Drainage area.--99.7 sq mi.

Gage.--Nonrecording prior to October 1952; recording thereafter. Prior to October 1952, at bridge 0.6 mile downstream at different datum. Oct. 1, 1952, to Feb. 16, 1959, at datum 2.00 ft higher. Feb. 17, 1959, to Sept. 30, 1961, at datum 1.00 ft higher. Datum of gage is 612.02 ft above mean sea level (levels by Corps of Engineers).

Stage-discharge relation.--Defined by current-meter measurements below 3,500 cfs prior to October 1952; below 13,000 cfs and extended above on basis of slope-area measurement at 18,900 cfs thereafter.

Bankfull stage.--18 ft.

Remarks.--Only annual peaks are shown prior to Oct. 1, 1952. Base for partial-duration series, 4,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1912	Mar. 15, 1912	11.8	4,620	1958	Feb. 18, 1958	8.63	5,100
1913	Nov. 6, 1912	19.5	13,600		Feb. 24, 1958	14.62	13,400
					Apr. 2, 1958	11.16	8,410
1953	Dec. 6, 1952	17.45	10,600		Apr. 5, 1958	7.69	4,130
	Dec. 26, 1952	10.77	4,260				
	Jan. 8, 1953	12.59	5,730	1959	Jan. 5, 1959	8.33	4,760
	Jan. 17, 1953	15.99	8,990		Jan. 12, 1959	9.04	5,590
1954	Jan. 17, 1954	15.48	9,280		Feb. 16, 1959	8.80	5,300
	Jan. 23, 1954	10.94	5,200				
	Feb. 12, 1954	11.12	5,360	1960	Feb. 1, 1960	9.15	4,580
1955	Dec. 5, 1954	8.80	3,480		Feb. 8, 1960	16.55	14,900
1956	Dec. 6, 1955	14.00	9,600		Mar. 7, 1960	9.00	4,980
	Dec. 19, 1955	17.36	15,600				
	Dec. 21, 1955	19.0	18,900	1961	Dec. 1, 1960	8.47	4,450
	Jan. 7, 1956	8.52	4,620		Feb. 11, 1961	9.61	5,610
	Jan. 15, 1956	14.55	13,300	1962	Dec. 1, 1961	8.94	4,190
	Feb. 21, 1956	12.05	9,470		Jan. 19, 1962	9.40	4,600
1957	Jan. 20, 1957	11.24	8,340		Feb. 13, 1962	12.85	8,320
	Feb. 24, 1957	9.92	6,490	1963	Oct. 12, 1962	10.74	5,940
	Mar. 4, 1957	8.09	4,340		Dec. 2, 1962	11.55	6,810
1958	Oct. 13, 1957	8.88	5,240		Jan. 31, 1963	15.43	11,800
	Jan. 29, 1958	10.62	7,440	1964	Jan. 20, 1964	13.28	8,850
	Feb. 3, 1958	8.81	5,110	1965	Dec. 22, 1964	19.44	17,900
	Feb. 9, 1958	11.20	8,300		Dec. 26, 1964	7.20	4,020
	Feb. 12, 1958	15.13	14,200		Jan. 5, 1965	16.24	13,500

4614. East Fork Russian River tributary near Potter Valley, Calif.

Location.--Lat 39°15'30", long 123°06'55", in NE $\frac{1}{4}$ sec. 7, T.16 N., R.11 W., at culvert on Potter Valley road, 4.4 miles south of Potter Valley.

Drainage area.--0.15 sq mi.

Gage.--Recording prior to Sept. 25, 1962; crest-stage gage thereafter. Altitude of gage is 900 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 8 cfs and extended above on basis of culvert computations at 19, 65, and 94 cfs.

Remarks.--Only annual peaks are shown subsequent to 1961. Base for partial-duration series, 10 cfs.

Peak stages and discharges of East Fork Russian River tributary near Potter Valley, Calif.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1959	Jan. 8, 1959	7.55	11	1961	Feb. 9, 1961	7.73	15
	Jan. 12, 1959	7.92	19		Feb. 11, 1961	7.82	17
	Feb. 15, 1959	7.64	13		Mar. 14, 1961	7.58	11
1960	Feb. 1, 1960	8.29	28		Mar. 16, 1961	7.75	15
	Feb. 8, 1960	8.29	28	1962	Dec. 13, 1961	8.79	34
	Mar. 12, 1960	9.72	65		Oct. 12, 1962	11.72	94
1961	Dec. 1, 1960	8.90	44		Jan. 20, 1964	8.43	27
					Dec. 22, 1964	14.46	121

4615. East Fork Russian River near Calpella, Calif.

Location.--Lat 39°14'35", long 123°08'10", in NW¼ sec.13, T.16 N., R.12 W., on left bank 0.5 mile downstream from Cold Creek and 3.6 miles east of Calpella.

Drainage area.--93.8 sq mi.

Gage.--Recording. Prior to May 28, 1957, at site 0.9 mile downstream at different datum. Altitude of gage is 800 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 8,600 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Peaks are greatly affected by importation of water from Eel River through Potter Valley powerhouse (capacity, about 350 cfs) since beginning of record. Only annual peaks are shown prior to Oct. 1, 1947. Base for partial-duration series, 3,300 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1942	Feb. 5, 1942	12.35	8,900	1955	Dec. 5, 1954	7.94	2,800
1943	Jan. 21, 1943	13.67	11,200	1956	Dec. 6, 1955	10.28	5,540
1944	Mar. 4, 1944	10.55	6,020		Dec. 19, 1955	12.74	9,280
1945	Feb. 2, 1945	8.25	3,100		Dec. 21, 1955	15.06	13,300
1946	Dec. 27, 1945	13.12	10,200		Jan. 7, 1956	9.33	4,300
1947	Mar. 3, 1947	9.65	4,710	Jan. 15, 1956	12.48	8,870	
1948	Mar. 23, 1948	9.84	4,980	Feb. 21, 1956	11.58	7,430	
1949	Feb. 10, 1949	9.28	4,240	1957	Jan. 20, 1957	10.20	5,430
1950	Jan. 13, 1950	-	3,710	1958	Feb. 24, 1957	9.62	4,660
	Feb. 4, 1950	9.24	4,190		Mar. 4, 1957	8.50	3,350
	Mar. 23, 1950	-	3,620		Jan. 26, 1958	8.46	3,890
1951	Dec. 3, 1950	13.4	10,700		Jan. 29, 1958	9.92	5,190
	Jan. 18, 1951	8.66	3,530	Feb. 3, 1958	8.88	4,270	
	Jan. 21, 1951	13.7	11,300	Feb. 9, 1958	11.30	6,700	
	Feb. 4, 1951	13.0	10,000	Feb. 12, 1958	13.82	9,490	
	Feb. 11, 1951	9.94	5,120	Feb. 18, 1958	9.38	4,710	
	1952	Dec. 1, 1951	12.0	8,300	Feb. 24, 1958	15.55	11,600
Dec. 3, 1951		10.12	5,380	Mar. 29, 1958	8.46	3,890	
Dec. 27, 1951		11.50	7,500	Apr. 2, 1958	10.56	5,880	
Jan. 11, 1952		8.60	3,680	Apr. 5, 1958	8.50	3,920	
Jan. 14, 1952		10.47	5,900	1959	Jan. 12, 1959	9.28	4,620
Feb. 1, 1952		11.74	7,880		Feb. 16, 1959	8.46	3,890
1953	Dec. 6, 1952	12.75	9,580	1960	Feb. 8, 1960	13.55	9,160
	Dec. 26, 1952	10.40	5,800	Mar. 7, 1960	9.17	4,500	
	Jan. 8, 1953	10.97	6,660	1961	Dec. 1, 1960	10.55	5,850
	Jan. 14, 1953	8.50	3,350		Dec. 16, 1960	7.80	3,340
	Jan. 17, 1953	11.05	6,780		Feb. 11, 1961	8.69	4,070
	Jan. 20, 1953	8.49	3,340		Mar. 14, 1961	8.28	3,720
1954	Jan. 17, 1954	13.30	10,500	1962	Dec. 1, 1961	8.70	4,080
	Jan. 23, 1954	9.20	4,140		Feb. 13, 1962	11.17	6,490
	Feb. 12, 1954	9.50	4,500		Mar. 5, 1962	9.38	4,690

Peak stages and discharges of East Fork Russian River near Calpella, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1963	Oct. 12, 1962	8.10	3,580	1965	Dec. 22, 1964	20.21	18,700
	Dec. 2, 1962	9.54	4,840		Jan. 5, 1965	17.19	14,400
	Jan. 31, 1963	12.49	7,940				
1964	Jan. 20, 1964	12.85	8,340				

4620. East Fork Russian River near Ukiah, Calif.

Location.--Lat 39°11'45", long 123°11'30", in Yokayo Rancho Grant, on right bank of outlet channel, 500 ft downstream from Coyote Dam, 1,300 ft upstream from mouth, and 3.2 miles northeast of Ukiah, Mendocino County.

Drainage area.--105 sq mi; 104 sq mi at site used 1951-55.

Gage.--Nonrecording prior to Oct. 1, 1913; recording thereafter. Prior to Oct. 1, 1913, at site half a mile upstream at different datum. Oct. 1, 1951, to June 8, 1956, at site 1.0 mile upstream at different datum. Datum of gage is 614.43 ft above mean sea level (levels by Corps of Engineers).

Stage-discharge relation.--Defined by current-meter measurements below 900 cfs prior to Oct. 1, 1913; below 1,700 cfs for period Oct. 1, 1951, to June 1956; below 4,250 cfs thereafter.

Bankfull stage.--16 ft.

Remarks.--Low peaks may be affected by diversion from Eel River through Potter Valley powerhouse. All peaks affected by storage in Lake Mendocino (capacity 122,500 acre-ft) beginning in November 1958. Only annual peaks are shown for the years 1912, 1913 and subsequent to 1958. Base for partial-duration series, 3,200 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1912	Mar. 15, 1912	11.7	6,500	1955	Dec. 5, 1954	9.75	2,500
1913	Jan. 18, 1913	11.5	6,140	1956	Dec. 6, 1955	12.15	4,880
1952	Dec. 1, 1951	14.3	7,980		Dec. 19, 1955	-	8,800
	Dec. 3, 1951	12.55	5,370		Dec. 21, 1955	16.86	13,300
	Dec. 27, 1951	14.0	7,500		Jan. 7, 1956	-	4,100
	Jan. 11, 1952	10.63	3,230		Jan. 15, 1956	-	8,400
	Jan. 14, 1952	12.67	5,540		Feb. 21, 1956	-	7,500
	Feb. 1, 1952	14.03	7,550	1958	Feb. 24, 1958	9.15	4,300
1953	Dec. 7, 1952	15.20	9,540				
	Dec. 26, 1952	11.39	4,170		Feb. 19, 1959	4.93	1,030
	Jan. 9, 1953	13.65	6,940		Mar. 4, 1960	6.49	1,910
	Jan. 14, 1953	10.54	3,390				
	Jan. 17, 1953	13.54	6,760		Feb. 10, 1961	6.53	1,940
	Jan. 20, 1953	10.37	3,230		Apr. 11, 1962	8.79	3,840
1954	Jan. 17, 1954	15.60	10,300		Dec. 19, 1962	9.14	4,200
	Jan. 23, 1954	10.68	3,280		Nov. 24, 1963	9.16	4,380
	Feb. 12, 1954	10.86	3,460		Dec. 30, 1964	10.82	6,780

4621. Robinson Creek near Ukiah, Calif.

Location.--Lat 39°05'30", long 123°13'10", in NE $\frac{1}{4}$ sec.7, T.14 N., R.12 W., 100 ft above county road bridge, 2.3 miles above mouth, and 3.5 miles south of Ukiah.

Drainage area.--19.8 sq mi.

Gage.--Crest-stage gage. Altitude of gage is 598 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 240 cfs and extended above on basis of slope-area measurement at 2,880 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges of Robinson Creek near Ukiah, Calif.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1956	Dec. 21, 1955	15.33	-	1960	Feb. 8, 1960	15.29	2,050
1958	Feb. 24, 1958	17.08	2,880	1961	Dec. 1, 1960	12.85	1,030
1959	Jan. 12, 1959	13.77	1,390	1962	Feb. 13, 1962	14.09	1,510

4621.25. Slide Creek near Ukiah, Calif.

Location.--Lat 39°04'15", long 123°12'35", in SW $\frac{1}{4}$ sec.17, T.14 N., R.12 W., at culvert on Boonville road, 5.5 miles south of Ukiah.

Drainage area.--0.57 sq mi.

Gage.--Crest-stage gage. Altitude of gage is 900 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 43 cfs and extended above on basis of culvert computation at 65 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1959	Feb. 21, 1959	13.64	65	1962	Feb. 13, 1962	13.00	49
1960	Feb. 8, 1960	13.20	54	1963	Jan. 31, 1963	13.61	64
				1964	Jan. 20, 1964	12.43	36
1961	Mar. 14, 1961	12.07	28	1965	Dec. 23, 1964	16.00	153

4625. Russian River near Hopland, Calif.

Location.--Lat 39°01'35", long 123°07'45", in Rancho de Sanel Grant, on right bank at abandoned highway bridge, 0.2 mile downstream from McNab Creek, 4 miles north of Hopland, Mendocino County, and 17 miles upstream from Sulphur Creek.

Drainage area.--362 sq mi.

Gage.--Nonrecording prior to Sept. 9, 1943; recording thereafter. Datum of gage is 497.43 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 35,000 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Peaks regulated by Lake Mendocino (capacity, 122,500 acre-ft) beginning in November 1958. Peaks are affected by importation of water from Eel River into East Fork Russian River through Potter Valley powerhouse (capacity, about 350 cfs) since at least 1910. Only annual peaks are shown prior to Oct. 1, 1943. Base for partial-duration series, 9,600 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1938	December 1937	30.0	-	1946	Dec. 29, 1945	-	13,300
					Jan. 4, 1946	-	16,200
1940	Feb. 28, 1940	24.9	34,100	1947	Feb. 12, 1947	-	9,830
1941	Feb. 11, 1941	21.6	21,700		Mar. 10, 1947	15.35	10,400
1942	Feb. 6, 1942	22.8	24,500				
1943	Jan. 21, 1943	26.12	34,000	1948	Mar. 23, 1948	16.3	11,600
1944	Mar. 4, 1944	16.49	12,300	1949	Feb. 11, 1949	15.17	9,730
1945	Feb. 2, 1945	14.69	9,470	1950	Mar. 24, 1950	14.67	8,980
1946	Dec. 4, 1945	-	12,800	1951	Dec. 3, 1950	24.7	31,200
	Dec. 25, 1945	-	10,100		Jan. 18, 1951	15.06	10,100
	Dec. 27, 1945	24.40	30,100		Jan. 21, 1951	25.66	33,900

Peak stages and discharges of Russian River near Hopland, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1951	Feb. 4, 1951	19.92	19,000	1958	Jan. 26, 1958	14.70	10,800
1952	Dec. 1, 1951	18.12	15,400		Feb. 3, 1958	15.66	12,700
	Dec. 3, 1951	16.05	11,100		Feb. 9, 1958	15.86	13,000
	Dec. 28, 1951	20.70	20,800		Feb. 12, 1958	19.25	21,700
	Jan. 14, 1952	17.34	14,000		Feb. 18, 1958	19.72	12,800
	Feb. 1, 1952	19.28	17,800		Feb. 24, 1958	22.85	32,300
1953					Apr. 2, 1958	16.56	14,500
	Dec. 7, 1952	22.10	24,100	1959	Feb. 16, 1959	14.46	10,400
	Dec. 27, 1952	15.42	10,500	1960			
	Jan. 9, 1953	20.00	19,200		Feb. 8, 1960	19.65	22,500
1954	Jan. 18, 1953	20.99	21,400	1961	Feb. 11, 1961	13.89	9,320
	Jan. 17, 1954	23.34	27,400	1962	Feb. 13, 1962	16.65	14,500
1955	Dec. 5, 1954	11.82	5,820	1963			
1956					Oct. 12, 1962	14.26	9,970
	Dec. 6, 1955	16.80	13,000		Dec. 2, 1962	14.58	10,500
	Dec. 19, 1955	23.06	32,700		Jan. 31, 1963	19.24	21,200
	Dec. 22, 1955	27.00	45,000	1964			
	Jan. 7, 1956	14.38	10,200		Jan. 20, 1964	17.72	17,000
	Jan. 15, 1956	21.63	28,400	1965			
1957	Feb. 22, 1956	19.47	21,900		Dec. 22, 1964	26.01	41,500
	Feb. 24, 1957	16.12	13,400		Jan. 5, 1965	21.11	26,800

4627. Feliz Creek near Hopland, Calif.

Location--Lat 38°58'20", long 123°08'30", in Rancho de Sanel Grant, on left bank just upstream from county road bridge, 0.1 mile upstream from Johnson Creek and 1.4 miles west of Hopland, Mendocino County.

Drainage area--31.1 sq mi.

Gage--Recording. Altitude of gage is 500 ft (from topographic map).

Stage-discharge relation--Defined by current-meter measurements below 1,400 cfs and extended above on basis of slope-area measurement at 2,710 cfs.

Bankfull stage--13 ft.

Remarks--Only annual peak is shown for 1956. Base for partial-duration series, 2,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1956	Dec. 23, 1955	13.60	2,710	1963	Oct. 12, 1962	11.80	2,190
1959	Jan. 8, 1959	11.82	2,010		Jan. 31, 1963	13.43	2,910
	Feb. 16, 1959	13.18	2,540	1964	Jan. 20, 1964	13.60	2,710
1960	Feb. 8, 1960	12.55	2,290	1965			
1961					Dec. 22, 1964	14.10	6,080
	Dec. 1, 1960	12.72	2,590		Jan. 5, 1965	12.85	5,080
1962	Feb. 13, 1962	13.35	2,880		Apr. 15, 1965	9.28	2,400

4630. Russian River near Cloverdale, Calif.

Location.--Lat 38°52'55", long 123°03'15", in SW $\frac{1}{4}$ sec.14, T.12 N., R.11 W., on left bank at Lambert Ranch, 400 ft downstream from Cummysky Creek and 5 miles northwest of Cloverdale.

Drainage area.--502 sq mi.

Gage.--Recording. Datum of gage is 373.44 ft above mean sea level (levels by Corps of Engineers).

Stage-discharge relation.--Defined by current-meter measurements below 21,000 cfs and extended above on basis of determination of peak flow at upstream and downstream stations.

Bankfull stage.--20 ft.

Remarks.--Peaks regulated by Lake Mendocino (capacity, 122,500 acre-ft) beginning in November 1958. Peaks are affected by importation of water from Eel River into East Fork Russian River through Potter Valley Powerhouse (capacity, about 350 cfs) since at least 1910. Base for partial-duration series, 12,400 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1952	Dec. 1, 1951	18.35	17,100	1958	Feb. 4, 1958	18.21	16,600
	Dec. 3, 1951	16.16	12,700		Feb. 9, 1958	17.55	15,200
	Dec. 28, 1951	20.4	21,500		Feb. 12, 1958	20.73	22,800
	Jan. 14, 1952	18.28	17,000		Feb. 19, 1958	18.70	17,900
	Feb. 2, 1952	19.53	19,600		Feb. 24, 1958	26.18	38,100
1953				1959	Apr. 2, 1958	19.45	19,800
	Dec. 7, 1952	21.2	23,200				
	Jan. 9, 1953	21.2	23,200		Jan. 12, 1959	16.89	13,600
	Jan. 18, 1953	19.93	20,500		Feb. 16, 1959	18.83	18,100
1954	Jan. 17, 1954	25.55	33,300	1960	Feb. 8, 1960	21.66	24,900
1955	Dec. 6, 1954	12.84	6,740	1961	Dec. 1, 1960	17.65	15,400
1956				1962			
	Dec. 20, 1955	22.50	27,300		Feb. 13, 1962	19.51	19,400
	Dec. 22, 1955	30.9	53,000				
	Jan. 7, 1956	17.85	15,800		Jan. 31, 1963	21.75	25,200
	Jan. 15, 1956	23.34	29,700		Mar. 27, 1963	16.91	13,900
	Feb. 22, 1956	22.90	28,400	1964	Jan. 20, 1964	18.23	16,600
1957	Feb. 24, 1957	20.00	20,600				
1958					Dec. 22, 1964	31.05	53,500
	Jan. 26, 1958	16.95	13,700	1965	Jan. 5, 1965	23.89	31,200
	Jan. 29, 1958	16.27	12,600				

4632. Big Sulphur Creek near Cloverdale, Calif.

Location.--Lat 38°49'25", long 122°59'05", in NW $\frac{1}{4}$ sec.10, T.11 N., R.10 W., on right bank 500 ft downstream from unnamed tributary, 1.9 miles upstream from mouth, and 3.1 miles northeast of Cloverdale.

Drainage area.--82.3 sq mi.

Gage.--Recording. Altitude of gage is 380 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 2,900 cfs and extended above on basis of slope-area measurement at 20,000 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Only annual peak is shown for 1956. Base for partial-duration series, 3,200 cfs.

Peak stages and discharges of Big Sulphur Creek near Cloverdale, Calif.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1956	Dec. 22, 1955	22.2	20,000	1961	Dec. 1, 1960	12.50	7,300
1958	Dec. 17, 1957	8.88	3,430		Jan. 31, 1961	10.79	5,370
	Jan. 26, 1958	8.92	3,470		Feb. 11, 1961	9.21	3,810
	Jan. 29, 1958	10.52	5,170	1962	Dec. 1, 1961	9.65	4,210
	Feb. 4, 1958	8.79	3,430		Feb. 9, 1962	9.32	3,910
	Feb. 9, 1958	10.10	4,580		Feb. 13, 1962	12.13	6,860
	Feb. 12, 1958	10.70	5,320		Mar. 5, 1962	9.77	4,320
	Feb. 18, 1958	9.00	3,610	1963	Oct. 12, 1962	11.30	5,930
	Feb. 24, 1958	14.46	9,960		Dec. 15, 1962	9.15	3,760
	Mar. 20, 1958	11.30	5,910		Jan. 31, 1963	13.65	8,680
	Mar. 29, 1958	10.47	5,110		Mar. 27, 1963	10.07	4,620
	Apr. 2, 1958	11.90	6,500		Apr. 6, 1963	9.28	3,870
					Apr. 14, 1963	9.38	3,960
1959	Jan. 5, 1959	8.63	3,290	1964	Jan. 20, 1964	11.21	5,830
	Jan. 8, 1959	9.55	4,120				
	Jan. 12, 1959	11.30	5,930	1965	Nov. 10, 1964	8.56	3,240
	Feb. 16, 1959	11.80	6,480		Dec. 22, 1964	15.08	15,700
1960	Feb. 1, 1960	10.25	4,800		Jan. 5, 1965	13.19	11,600
	Feb. 8, 1960	12.90	7,780		Apr. 15, 1965	9.03	4,540
	Mar. 7, 1960	8.75	3,400				

4639.4. Franz Creek near Kellogg, Calif.
(Published as Frans Creek prior to Oct. 1, 1957)

Location.--Lat 38°36'30", long 122°41'35" in Mallacames Grant, 50 ft below bridge on Franz Valley Road and 2 miles southwest of Kellogg.

Drainage area.--15.7 sq mi.

Gage.--Crest-stage gage prior to 1964; recording thereafter. Altitude of gage is 350 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 320 cfs and extended above on basis of slope-area measurements at 3,030 and 4,130 cfs.

Bankfull stage.--5 ft.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1956	Dec. 22, 1955	10.69	4,130	1961	Jan. 31, 1961	7.81	1,380
1958	Feb. 24, 1958	8.74	2,400	1962	Feb. 13, 1962	8.55	3,030
1959	Feb. 16, 1959	7.55	1,140	1964	Jan. 20, 1964	5.65	1,740
1960	Feb. 8, 1960	9.35	3,400	1965	Jan. 5, 1965	8.31	5,780

4640. Russian River near Healdsburg, Calif.

Location.--Lat 38°36'48", long 122°50'07", in Sotoyome Grant, on left bank 2 miles east of Healdsburg, Sonoma County, and 3.5 miles upstream from Dry Creek.

Drainage area.--793 sq mi.

Gage.--Recording. Datum of gage is 76.84 ft above mean sea level, datum of 1929 (levels by Corps of Engineers).

Stage-discharge relation.--Defined by current-meter measurements below 53,000 cfs.

Bankfull stage.--Not subject to overflow.

Historical data.--Flood of Jan. 24-25, 1890, reached highest peak known in 25 years and that of Jan. 23-24, 1895, was greater than flood of 1890, as described in the newspaper, Healdsburg Enterprise.

Remarks.--Peaks regulated by Lake Mendocino (capacity, 122,500 acre-ft) beginning in November 1958. Peaks may be affected by importation of water from Eel River into East Fork Russian River since beginning of record. Only annual peaks are shown prior to Oct. 1, 1943. Base for partial-duration series, 19,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1938	December 1937	30.8	-	1955	Dec. 6, 1954	9.65	10,400
1940	Feb. 28, 1940	30.0	67,000	1956	Dec. 20, 1955	21.78	45,100
1941	Feb. 11, 1941	20.05	32,800		Dec. 22, 1955	26.16	65,400
1942	Feb. 6, 1942	22.96	43,200		Jan. 7, 1956	16.10	25,800
1943	Jan. 21, 1943	25.45	53,300		Jan. 15, 1956	17.90	36,000
					Feb. 22, 1956	21.07	47,900
1944	Mar. 4, 1944	15.23	19,400	1957	Feb. 24, 1957	16.75	32,600
1945	Feb. 5, 1945	13.97	19,200	1958	Feb. 4, 1958	14.90	24,300
1946	Dec. 22, 1945	-	19,400		Feb. 12, 1958	16.20	28,200
	Dec. 28, 1945	21.05	41,800		Feb. 19, 1958	15.11	24,900
1947	Feb. 12, 1947	13.81	19,300		Feb. 25, 1958	22.35	50,900
1948	Mar. 24, 1948	13.05	18,400		Apr. 2, 1958	16.31	28,600
1949	Mar. 11, 1949	15.61	24,400	1959	Jan. 9, 1959	14.07	22,000
1950	Feb. 4, 1950	15.27	23,400		Jan. 12, 1959	13.14	19,400
1951	Dec. 4, 1950	19.5	42,800		Feb. 16, 1959	16.70	29,800
	Jan. 22, 1951	19.5	42,800	1960	Feb. 8, 1960	18.53	36,100
	Feb. 5, 1951	13.56	19,200	1961	Dec. 1, 1960	14.59	23,500
1952	Dec. 1, 1951	14.47	22,100		Jan. 31, 1961	13.04	19,100
	Dec. 27, 1951	17.78	35,100	1962	Feb. 13, 1962	17.35	32,000
	Jan. 15, 1952	14.61	22,600	1963	Oct. 13, 1962	13.88	21,500
	Feb. 2, 1952	15.12	24,500		Feb. 1, 1963	20.10	41,800
1953	Dec. 7, 1952	18.85	39,800		Mar. 28, 1963	13.11	19,300
	Jan. 9, 1953	19.10	42,900	1964	Jan. 21, 1964	14.11	22,100
	Jan. 18, 1953	13.95	24,100	1965	Dec. 23, 1964	27.00	71,300
1954	Jan. 17, 1954	22.68	53,700		Jan. 5, 1965	20.95	45,000

4640.5. Dry Creek tributary near Hopland, Calif.

Location.--Lat 38°53'10", long 123°09'15", in sec.13, T.12 N., R.12 W., at culvert on State Highway 128, 6.5 miles southwest of Hopland.

Drainage area.--1.27 sq mi.

Gage.--Crest-stage gage. Altitude of gage is 800 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 28 cfs and extended above on basis of culvert computation at 189 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1959	Feb. 16, 1959	8.90	158	1962	Feb. 13, 1962	9.25	185
1960	Feb. 8, 1960	8.11	113	1963	Jan. 31, 1963	9.38	193
				1964	Jan. 20, 1964	7.51	80
1961	Dec. 1, 1960	7.77	94	1965	Dec. 22, 1964	12.80	430

4645. Dry Creek near Cloverdale, Calif.

Location.--Lat 38°44'59", long 123°05'28", in NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.5, T.10 N., R.11 W., on left bank 500 ft downstream from Smith Creek and 5 miles southwest of Cloverdale.

Drainage area.--87.8 sq mi.

Gage.--Recording. Altitude of gage is 320 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 9,400 cfs and extended above on basis of slope-area measurement at 17,600 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Only annual peak is shown for 1938. Base for partial-duration series, 3,800 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1938	December 1937	18	-	1953	Dec. 6, 1952	13.63	11,300
					Dec. 26, 1952	8.25	4,570
					Jan. 9, 1953	9.68	6,920
1942	Dec. 16, 1941	8.46	5,020				
	Jan. 23, 1942	9.60	6,280	1954	Jan. 17, 1954	14.68	12,800
	Feb. 5, 1942	10.02	6,780		Jan. 23, 1954	7.78	3,990
1943	Jan. 21, 1943	16.65	15,600				
1944	Mar. 4, 1944	8.20	4,660	1955	Dec. 2, 1954	6.41	2,410
1945	Feb. 1, 1945	-	3,340				
	Feb. 5, 1945	7.83	4,160	1956	Dec. 18, 1955	14.43	12,100
					Dec. 22, 1955	17.80	17,600
1946	Dec. 4, 1945	-	6,050		Jan. 15, 1956	8.64	4,270
	Dec. 27, 1945	12.15	9,400		Feb. 21, 1956	11.00	7,200
1947	Feb. 11, 1947	7.68	3,980	1957	Feb. 24, 1957	9.92	5,800
1948	Jan. 7, 1948	6.71	2,880				
1949	Mar. 11, 1949	7.63	4,170	1958	Feb. 3, 1958	8.15	4,200
1950	Feb. 3, 1950	7.81	4,370		Feb. 9, 1958	8.26	4,310
	Feb. 5, 1950	-	3,600		Feb. 12, 1958	11.52	7,880
					Feb. 18, 1958	9.72	5,560
1951	Dec. 3, 1950	15.0	13,200		Feb. 24, 1958	16.56	15,500
	Jan. 21, 1951	10.60	7,480		Mar. 29, 1958	8.70	4,240
	Feb. 4, 1951	6.82	3,320		Apr. 2, 1958	11.03	7,240
1952	Dec. 1, 1951	11.41	8,450	1959	Jan. 8, 1959	11.49	7,840
	Dec. 3, 1951	8.89	5,750		Jan. 12, 1959	9.15	4,800
	Dec. 26, 1951	8.95	5,830		Feb. 16, 1959	13.49	10,600
	Jan. 14, 1952	8.15	4,780	1960	Feb. 8, 1960	14.50	12,200
	Feb. 1, 1952	8.32	4,980				
				1961	Dec. 1, 1960	9.92	5,800
					Jan. 31, 1961	9.84	5,710
				1962	Jan. 13, 1962	15.66	14,100

Peak stages and discharges of Dry Creek near Cloverdale, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1963	Oct. 12, 1962	10.13	5,480	1965	Dec. 22, 1964	18.09	18,100
	Jan. 31, 1963	17.91	17,700		Jan. 5, 1965	14.32	11,900
	Mar. 27, 1963	9.19	4,250				
1964	Jan. 20, 1964	9.55	4,720				

4650.5. Dutcher Creek near Asti, Calif.

Location--Lat 38°43'20", long 122°58'35", in Tzabaco Grant, at culvert on Dutcher Creek road, 3 miles south of Asti.

Drainage area--2.24 sq mi.

Gage--Crest-stage gage. Altitude of gage is 240 ft (from topographic map).

Stage-discharge relation--Defined by current-meter measurements below 75 cfs and extended above on basis of culvert computation at 381 cfs.

Remarks--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1959	Feb. 16, 1959	9.46	381	1962	Feb. 13, 1962	8.90	325
1960	Feb. 8, 1960	7.13	165	1963	Jan. 31, 1963	8.14	250
				1964	Jan. 20, 1964	6.02	84
1961	Jan. 31, 1961	7.15	167	1965	Dec. 22, 1964	9.04	335

4654.5. Mark West Creek at Mark West Springs, Calif.

Location--Lat 38°33'00", long 122°43'10", in SW¹/₄ sec.11, T.8 N., R.8 W., 0.8 mile downstream from Porter Creek near Mark West Springs.

Drainage area--30.4 sq mi.

Gage--Crest-stage gage. Altitude of gage is 440 ft (from topographic map).

Stage-discharge relation--Defined by current-meter measurements below 350 cfs and extended above on basis of slope-area measurement at 4,040 cfs.

Remarks--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1958	Feb. 24, 1958	13.92	4,040	1961	Jan. 31, 1961	11.97	2,200
1959	Feb. 16, 1959	13.65	3,750	1962	Feb. 13, 1962	14.25	4,400
1960	Feb. 8, 1960	20.34	13,500				

4670. Russian River near Guerneville, Calif.
(Prior to October 1945, published as "at Guerneville")

Location.--Lat 38°30'00", long 122°56'05", in NE $\frac{1}{4}$ sec.35, T.8 N., R.10 W., on left bank 0.6 mile downstream from Hobson Creek and 3.4 miles east of Guerneville.

Drainage area.--1,340 sq mi.

Gage.--Nonrecording at site 5.3 miles downstream at different datum prior to Oct. 1, 1954; recording thereafter. Altitude of gage is 30 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 82,400 cfs prior to Oct. 1, 1954; below 68,000 cfs thereafter.

Bankfull stage.--11 ft.

Remarks.--Peaks regulated by Lake Mendocino (capacity, 122,500 acre-ft) beginning in November 1958. Peaks are affected by importation of water from Eel River through Potter Valley powerhouse from beginning of record and by many diversions above station for irrigation and for Wohler pumping plant beginning in May 1959. Peaks prior to the year 1955 are maximum observed. Only annual peaks are shown prior to Oct. 1, 1954. Base for partial-duration series, 23,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1861-2	-	a50	-	1957	Feb. 25, 1957	33.77	45,900
1907	-	ab45	-	1958	Feb. 5, 1958	32.83	41,000
1914	-	a42.5	-		Feb. 7, 1958	27.04	27,700
1915	-	a44	-		Feb. 10, 1958	29.45	32,300
					Feb. 12, 1958	34.45	45,500
1937	-	a42.5	-		Feb. 19, 1958	34.74	46,300
					Feb. 25, 1958	42.95	68,700
1940	Feb. 28, 1940	46.87	88,400		Mar. 22, 1958	26.61	26,900
					Mar. 30, 1958	26.59	26,900
1941	Apr. 5, 1941	31.8	48,100		Apr. 3, 1958	35.59	48,600
1942	Feb. 6, 1942	39.0	67,800		Apr. 6, 1958	28.08	29,700
1943	Jan. 22, 1943	39.5	69,200	1959	Jan. 9, 1959	30.65	35,200
1944	Mar. 4, 1944	25.2	32,000		Jan. 12, 1959	26.52	26,500
1945	Feb. 1, 1945	26.7	34,600		Feb. 16, 1959	35.98	48,900
1946	Dec. 28, 1945	35.22	56,800	1960	Feb. 8, 1960	40.80	63,100
1947	Feb. 12, 1947	21.7	23,600		Mar. 7, 1960	26.15	25,800
1948	Mar. 24, 1948	21.6	23,400	1961	Dec. 1, 1960	28.73	31,000
1949	Mar. 12, 1949	29.48	41,400		Jan. 31, 1961	29.73	33,100
1950	Feb. 5, 1950	30.79	44,900		Feb. 11, 1961	24.79	23,800
1951	Dec. 4, 1950	34.7	53,600	1962	Feb. 9, 1962	25.08	24,300
1952	Dec. 28, 1951	29.8	41,300		Feb. 13, 1962	38.91	57,400
1953	Jan. 10, 1953	34.15	52,200		Mar. 6, 1962	28.61	30,900
1954	Jan. 17, 1954	38.35	59,900	1963	Oct. 13, 1962	28.56	30,800
1955	Dec. 6, 1954	19.32	13,500		Feb. 1, 1963	43.70	71,800
1956	Dec. 20, 1955	42.35	69,400		Mar. 28, 1963	28.87	31,400
	Dec. 23, 1955	49.7	90,100		Apr. 14, 1963	26.03	26,100
	Dec. 26, 1955	30.0	36,800	1964	Jan. 21, 1964	29.88	33,400
	Jan. 8, 1956	34.1	46,700	1965	Dec. 23, 1964	49.6	93,400
	Jan. 15, 1956	37.45	55,700		Jan. 6, 1965	42.35	67,700
	Jan. 26, 1956	24.35	24,100				
	Feb. 22, 1956	42.30	69,200				

a Approximately; stage above normal low water, at site 4 miles upstream from Guerneville.

b Reported to have occurred also about March 1879 and either in 1890 or 1895.

4675. South Fork Gualala River near Annapolis, Calif.

Location.--Lat 38°42'14", long 123°25'13", in German Grant, on left bank 2,700 ft downstream from Wheatfield Fork Gualala River and 3.1 miles southwest of Annapolis, Sonoma County.

Drainage area.--161 sq mi.

Gage.--Recording. Prior to Aug. 30, 1962, at site 1,700 ft upstream at different datum. Altitude of gage is 60 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 13,000 cfs and extended above on basis of slope-area measurement at 55,000 cfs prior to Aug. 30, 1962; defined by current-meter measurements below 6,400 cfs and extended on basis of slope-area measurement at 12,000 cfs thereafter.

Remarks.--Base for partial-duration series, 10,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1951	Dec. 3, 1950	18.16	34,100	1958	Jan. 29, 1958	12.69	13,700
	Jan. 21, 1951	13.85	19,000		Feb. 12, 1958	15.73	22,300
	Feb. 4, 1951	11.31	12,300		Feb. 19, 1958	12.84	14,100
1952	Dec. 1, 1951	17.01	29,500	1959	Feb. 24, 1958	19.56	35,400
	Dec. 3, 1951	16.07	26,200		Mar. 29, 1958	11.34	10,400
	Dec. 26, 1951	14.79	21,900		Apr. 2, 1958	13.11	14,800
	Jan. 14, 1952	10.53	10,500	1960	Jan. 8, 1959	13.37	15,700
	Jan. 24, 1952	10.83	11,100		Jan. 12, 1959	12.15	12,500
	Feb. 1, 1952	13.31	17,400		Feb. 16, 1959	14.71	19,100
	Mar. 14, 1952	10.37	10,100	1961	Feb. 8, 1960	19.07	33,700
1953	Dec. 7, 1952	18.10	33,900		Mar. 5, 1960	12.17	11,800
	Dec. 26, 1952	11.37	12,400		Dec. 1, 1960	13.63	15,800
	Jan. 9, 1953	12.64	15,600	1962	Jan. 31, 1961	13.68	15,900
1954	Jan. 17, 1954	18.60	35,900		Feb. 11, 1961	11.58	11,000
	Jan. 23, 1954	10.56	10,500		Feb. 9, 1962	11.34	10,400
	Apr. 4, 1954	11.50	12,800	1963	Feb. 13, 1962	20.18	37,700
1955	Apr. 21, 1955	10.26	9,870		Oct. 12, 1962	12.13	11,800
1956	Dec. 6, 1955	10.48	10,400		Jan. 31, 1963	16.86	23,000
	Dec. 19, 1955	15.96	24,700	1964	Mar. 27, 1963	11.83	11,200
	Dec. 22, 1955	24.57	55,000		Apr. 6, 1963	12.39	12,500
	Jan. 15, 1956	12.35	12,800		Jan. 20, 1964	13.60	15,000
	Feb. 21, 1956	14.28	18,000	1965	Dec. 21, 1964	15.94	21,400
1957	Feb. 23, 1957	10.53	8,760		Jan. 5, 1965	15.69	20,800
1958	Oct. 13, 1957	12.38	12,900				

GARCIA RIVER BASIN

4676. Garcia River near Point Arena, Calif.

Location.--Lat 38°55'35", long 123°37'45", in SW¹/₄SW¹/₄ sec.3, T.12 N., R.16 W., on left bank 0.9 mile downstream from North Fork Garcia River and 3.5 miles northeast of town of Point Arena.

Drainage area.--98.5 sq mi.

Gage.--Crest-stage gage at site 15 ft upstream at different datum during water years 1952-56; recording thereafter. Altitude of gage is 50 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 4,200 cfs and extended above on basis of slope-area measurement at 26,300 cfs for 1952-56. Defined by current-meter measurements below 3,600 cfs and extended above on basis of slope-area measurement at 23,900 cfs after Aug. 1, 1962.

Remarks.--Only annual peaks are shown for 1952-56. Base for partial-duration series, 5,000 cfs.

Peak stages and discharges of Garcia River near Point Arena, Calif.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1952	Dec. 26, 1951	18.81	19,400	1963	Jan. 31, 1963	15.11	23,900
1953	Dec. 7, 1952	18.32	17,300		Mar. 27, 1963	9.51	7,190
1954	Jan. 17, 1954	19.7	22,200		Apr. 14, 1963	9.37	6,880
1955	Apr. 21, 1955	13.35	4,970	1964	Jan. 20, 1964	11.46	12,100
1956	Dec. 22, 1955	20.75	26,300	1965	Dec. 21, 1964	15.72	26,100
1963	Oct. 12, 1962	8.82	5,740		Jan. 5, 1965	13.80	19,400

NAVARRO RIVER BASIN

4680. Navarro River near Navarro, Calif.

Location.--Lat 39°10'15", long 123°39'55", in SE $\frac{1}{4}$ sec.7, T.15 N., R.16 W., on left bank 2.7 miles downstream from North Fork, 5.4 miles upstream from mouth, and 6.6 miles west of Navarro.

Drainage area.--303 sq mi.

Gage.--Recording. Altitude of gage is 20 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 19,000 cfs and extended above on basis of slope-area measurement at 64,500 cfs.

Bankfull stage.--20 ft.

Remarks.--Only annual peak is shown in 1938. Base for partial-duration series, 7,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1938	December 1937	38.2	-	1958	Jan. 29, 1958	18.69	8,990
1951	Dec. 3, 1950	28.0	20,200		Feb. 4, 1958	17.60	8,030
	Jan. 21, 1951	28.41	20,700		Feb. 9, 1958	17.99	8,370
	Feb. 4, 1951	17.80	9,320		Feb. 12, 1958	24.78	16,200
1952	Dec. 1, 1951	20.95	12,400		Feb. 18, 1958	24.83	16,200
	Dec. 3, 1951	17.69	9,220		Feb. 24, 1958	34.61	34,100
	Dec. 27, 1951	27.27	19,400		Apr. 2, 1958	21.89	12,500
	Jan. 14, 1952	20.36	11,900	1959	Jan. 9, 1959	21.20	11,600
	Feb. 2, 1952	19.69	11,200		Jan. 12, 1959	21.45	11,900
1953	Dec. 7, 1952	26.64	18,700		Feb. 16, 1959	27.57	19,600
	Jan. 9, 1953	26.47	18,500	1960	Feb. 8, 1960	30.98	24,800
	Jan. 18, 1953	23.04	14,700	1961	Dec. 1, 1960	17.33	8,530
1954	Jan. 17, 1954	33.42	30,400		Feb. 11, 1961	18.28	9,510
	Jan. 23, 1954	15.86	7,570	1962	Dec. 1, 1961	16.24	7,440
	Feb. 12, 1954	17.56	9,100		Feb. 13, 1962	29.00	22,300
	Apr. 5, 1954	15.60	7,340		Feb. 15, 1962	18.65	9,920
1955	Jan. 19, 1955	12.18	4,340		Mar. 6, 1962	16.05	7,250
1956	Dec. 19, 1955	32.48	27,900	1963	Oct. 12, 1962	17.78	8,980
	Dec. 22, 1955	40.60	64,500		Jan. 31, 1963	34.34	33,100
	Jan. 7, 1956	17.40	7,760		Mar. 27, 1963	17.42	8,620
	Jan. 15, 1956	27.20	19,100		Apr. 14, 1963	16.50	7,700
	Feb. 21, 1956	28.40	20,800	1964	Jan. 20, 1964	25.80	17,900
1957	Feb. 24, 1957	23.44	14,200	1965	Dec. 22, 1964	38.64	52,100
1958	Jan. 26, 1958	17.08	7,560		Jan. 5, 1965	32.28	28,000
					Apr. 15, 1965	16.20	7,650

4685. Noyo River near Fort Bragg, Calif.

Location.--Lat 39°25'41", long 123°44'10", in SW $\frac{1}{4}$ sec.10, T.18 N., R.17 W., on right bank 0.7 mile downstream from South Fork and 3.5 miles east of Fort Bragg.

Drainage area.--106 sq mi.

Gage.--Recording. Datum of gage is 12.1 ft above mean sea level (planetable survey).

Stage-discharge relation.--Defined by current-meter measurements below 3,600 cfs and extended above to 22,000 cfs on basis of slope-conveyance study.

Bankfull stage.--10 ft.

Remarks.--Base for partial-duration series, 2,400 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1952	Dec. 1, 1951	12.55	4,180	1958	Jan. 29, 1958	14.95	4,450
	Dec. 3, 1951	9.83	2,480		Feb. 9, 1958	16.33	5,470
	Dec. 27, 1951	24.56	16,000		Feb. 12, 1958	19.17	8,230
	Jan. 14, 1952	11.55	3,480		Feb. 19, 1958	14.27	4,160
	Feb. 1, 1952	14.68	5,790		Feb. 24, 1958	18.25	7,040
1953				1959	Apr. 2, 1958	-	5,500
	Dec. 7, 1952	17.56	8,260		Jan. 9, 1959	-	(a)
	Jan. 9, 1953	15.95	6,810		Jan. 12, 1959	14.45	4,280
	Jan. 18, 1953	22.05	13,000		Feb. 16, 1959	13.59	3,870
	Jan. 20, 1953	11.55	3,480	1960	Feb. 8, 1960	21.75	12,000
1954	Mar. 20, 1953	10.42	2,790		Mar. 5, 1960	13.40	3,780
	Jan. 17, 1954	20.87	11,700	1961	Jan. 31, 1961	-	(a)
	Jan. 23, 1954	12.98	4,190		Feb. 11, 1961	-	4,000
1955	Jan. 28, 1954	12.24	3,670	1962	Jan. 19, 1962	10.60	2,540
	Dec. 31, 1954	12.26	3,680		Feb. 13, 1962	18.60	7,460
1956	Dec. 6, 1955	13.50	4,600	1963	Dec. 2, 1962	14.15	4,130
	Dec. 19, 1955	17.23	8,450		Jan. 31, 1963	15.83	5,050
	Dec. 22, 1955	25.64	22,000		Apr. 6, 1963	11.19	2,830
	Jan. 7, 1956	11.40	2,540	1964	Jan. 20, 1964	17.72	6,570
	Jan. 15, 1956	20.43	9,700	1965	Dec. 22, 1964	26.30	24,000
1957	Feb. 21, 1956	17.02	5,920		Jan. 6, 1965	11.80	3,070
	Mar. 5, 1957	13.24	3,710				
1958	Dec. 21, 1957	10.65	2,620				

a Discharge unknown; exceeded base.

MATTOLE RIVER BASIN

4690. Mattole River near Petrolia, Calif.

Location.--Lat 40°18'40", long 124°16'10", in NW $\frac{1}{4}$ sec.11, T.2 S., R.2 W., on right bank 0.2 mile downstream from Clear Creek, 1.2 miles southeast of Petrolia, and 1.3 miles upstream from North Fork.

Drainage area.--242 sq mi.

Gage.--Nonrecording prior to December 1913, and Oct. 1 to Dec. 12, 1950; recording thereafter. Prior to December 1913, at several sites upstream within 0.7 mile of present site at various datums. Dec. 11, 1950, to July 14, 1955, at site 0.7 mile upstream at datum 7.48 ft higher. Altitude of gage is 40 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 4,600 cfs and extended above on basis of rating for 1952, which is defined to 26,000 cfs, prior to December 1913. Defined by current-meter measurements below 26,000 cfs for period December 1950 to July 1955; below 24,000 cfs and extended above on basis of slope-area measurement at 90,400 cfs thereafter.

Bankfull stage.--32 ft.

Remarks.--Peak for the year 1913 is maximum observed. Only annual peaks are shown prior to Oct. 1, 1950. Base for partial-duration series, 10,000 cfs.

Peak stages and discharges of Mattole River near Petrolia, Calif.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1912	Jan. 25, 1912	27.1	48,000	1958	Dec. 28, 1957	12.10	11,100
1913	Nov. 6, 1912	20.2	30,000		Jan. 12, 1958	12.64	11,500
1951	Oct. 28, 1950	-	34,000		Jan. 29, 1958	21.85	41,400
	Nov. 16, 1950	-	18,000		Feb. 5, 1958	11.62	10,100
	Dec. 3, 1950	-	18,000		Feb. 7, 1958	13.50	14,800
	Jan. 17, 1951	13.07	17,800		Feb. 9, 1958	12.55	12,200
	Jan. 21, 1951	15.03	22,900		Feb. 12, 1958	20.32	35,600
	Feb. 4, 1951	17.82	30,100		Feb. 15, 1958	17.50	26,000
1952	Nov. 28, 1951	10.75	11,800		Feb. 18, 1958	16.98	24,400
	Dec. 1, 1951	19.15	33,600		Feb. 24, 1958	17.82	27,000
	Dec. 4, 1951	11.13	12,700		Apr. 2, 1958	15.50	20,000
	Dec. 27, 1951	12.77	17,000	1959	Jan. 8, 1959	17.18	25,000
	Jan. 10, 1952	10.61	11,400		Jan. 12, 1959	20.97	37,900
	Jan. 14, 1952	10.77	11,800		Jan. 27, 1959	12.85	13,500
	Jan. 20, 1952	10.31	10,700		Feb. 14, 1959	20.85	37,400
	Jan. 24, 1952	11.77	14,400	1960	Feb. 8, 1960	25.34	62,000
	Feb. 1, 1952	17.05	28,100		Mar. 7, 1960	12.40	11,100
1953	Dec. 7, 1952	15.53	24,200		Mar. 30, 1960	13.02	12,500
	Dec. 10, 1952	14.59	21,700		May 25, 1960	14.25	15,700
	Dec. 30, 1952	11.62	14,000	1961	Nov. 25, 1960	15.56	19,200
	Jan. 9, 1953	15.19	23,300		Dec. 17, 1960	18.30	28,000
	Jan. 12, 1953	11.49	13,600		Jan. 31, 1961	19.75	33,500
	Jan. 18, 1953	17.13	28,300		Feb. 11, 1961	22.40	46,000
	Mar. 19, 1953	11.24	13,000		Feb. 13, 1961	12.16	11,400
1954	Nov. 23, 1953	16.74	27,300		Mar. 15, 1961	12.33	11,800
	Jan. 16, 1954	19.30	34,000	1962	Dec. 20, 1961	12.25	11,600
	Jan. 23, 1954	13.44	18,700		Jan. 19, 1962	12.92	12,900
	Jan. 28, 1954	18.08	30,800		Feb. 9, 1962	13.09	13,300
	Feb. 12, 1954	10.78	11,800		Feb. 13, 1962	15.05	17,800
	Mar. 9, 1954	11.18	12,900	1963	Oct. 12, 1962	14.57	16,700
	Apr. 4, 1954	13.06	17,800		Nov. 26, 1962	17.07	23,600
1955	Dec. 31, 1954	10.08	10,000		Dec. 2, 1962	13.90	15,100
	Apr. 20, 1955	12.68	16,800		Dec. 15, 1962	11.90	10,900
1956	Dec. 6, 1955	11.19	11,400		Jan. 31, 1963	18.32	28,000
	Dec. 19, 1955	19.93	38,900		Mar. 27, 1963	14.46	16,400
	Dec. 22, 1955	29.60	90,400		Apr. 14, 1963	16.51	21,900
	Dec. 26, 1955	10.23	10,100	1964	Nov. 9, 1963	13.40	14,000
	Jan. 7, 1956	11.20	11,800		Nov. 14, 1963	12.00	11,100
	Jan. 15, 1956	16.57	25,200		Nov. 23, 1963	12.18	11,500
	Feb. 21, 1956	17.40	28,200		Jan. 20, 1964	21.65	43,200
1957	Feb. 24, 1957	15.2	22,300	1965	Nov. 28, 1964	12.89	12,900
	Mar. 12, 1957	11.30	11,900		Dec. 22, 1965	27.66	78,500
	May 18, 1957	12.85	14,600		Jan. 5, 1965	13.30	13,800
1958	Nov. 13, 1957	15.94	21,300		Jan. 23, 1965	11.51	10,100
	Dec. 21, 1957	16.75	23,700		Apr. 19, 1965	15.80	19,900

4695. North Fork Mattole River at Petrolia, Calif.

Location.--Lat 40°19'35", long 124°17'35", in NE $\frac{1}{4}$ sec.4, T.2 S., R.2 W., on left bank 0.5 mile west of Petrolia and 0.7 mile upstream from mouth.

Drainage area.--37.6 sq mi.

Gage.--Recording. Prior to Oct. 6, 1953, at site 200 ft downstream at same datum. Altitude of gage is 50 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 3,800 cfs.

Remarks.--Base for partial-duration series, 1,700 cfs.

Peak stages and discharges of North Fork Mattole River at Petrolia, Calif.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1952	Nov. 11, 1951	7.76	3,580	1955	Nov. 15, 1954	8.13	1,990
	Dec. 1, 1951	8.25	4,950		Dec. 5, 1954	7.90	1,760
	Dec. 4, 1951	6.87	1,760		Dec. 9, 1954	7.90	1,760
	Dec. 26, 1951	7.70	3,420		Dec. 30, 1954	9.60	5,760
	Jan. 10, 1952	7.32	2,570		Apr. 20, 1955	8.14	3,180
	Jan. 13, 1952	7.61	3,210	1956	Nov. 19, 1955	7.65	2,220
	Jan. 20, 1952	6.90	1,810		Dec. 6, 1955	7.80	2,500
	Feb. 1, 1952	7.98	4,150		Dec. 19, 1955	9.19	5,540
	Feb. 16, 1952	6.92	1,840		Dec. 21, 1955	10.60	9,600
					Dec. 26, 1955	8.53	3,780
1953	Dec. 6, 1952	7.34	2,260		Jan. 4, 1956	8.28	3,170
	Dec. 10, 1952	8.06	3,560		Jan. 6, 1956	9.00	5,000
	Jan. 9, 1953	7.67	2,800		Jan. 12, 1956	8.15	2,860
	Jan. 17, 1953	8.63	4,950		Jan. 15, 1956	9.70	6,860
1954	Nov. 23, 1953	8.60	5,140		Jan. 22, 1956	7.95	2,590
	Jan. 16, 1954	7.82	2,860		Feb. 21, 1956	9.40	6,040
	Jan. 22, 1954	7.80	2,500	1957	Oct. 26, 1956	7.45	1,850
	Jan. 27, 1954	9.00	5,080		Jan. 19, 1957	8.85	2,510
	Feb. 12, 1954	8.46	3,370		Feb. 23, 1957	8.70	2,650
	Feb. 17, 1954	8.42	2,440		Feb. 26, 1957	8.67	2,040
	Mar. 9, 1954	8.20	2,440		May. 17, 1957	8.69	2,090
	Apr. 4, 1954	8.00	1,940				

EEL RIVER BASIN

4715. Eel River at Van Arsdale Dam, near Potter Valley, Calif.
(Published as South Eel River prior to October 1929)

Location.--Lat 39°23'25", long 123°06'55", in NE $\frac{1}{4}$ sec.30, T.18 N., R.11 W., on left bank 500 ft downstream from Van Arsdale Dam and 5 miles north of town of Potter Valley.

Drainage area.--349 sq mi.

Gage.--Recording prior to Mar. 3, 1927, and after Feb. 28, 1937; nonrecording Oct. 1, 1927, to Feb. 28, 1937. Prior to Mar. 3, 1927, at reservoir 800 ft upstream from Van Arsdale Dam at different datum. Altitude of gage is 1,400 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 7,000 cfs prior to Mar. 3, 1927. Defined by current-meter measurements below 16,000 cfs and extended above on basis of computed flow over Van Arsdale Dam thereafter. Subject to changes owing to flashboards being added to dam crest at times.

Bankfull stage.--Not subject to overflow.

Remarks.--Water-stage-recorder graph and some discharge measurements furnished by Pacific Gas and Electric Co. Peaks regulated by Lake Pillsbury (usable capacity, 86,400 acre-ft) beginning in December 1921. Peaks are affected by diversion from Van Arsdale Reservoir through tunnel to Potter Valley powerhouse (capacity, about 350 cfs) since at least 1910. Peaks for the years 1910-23, 1925-27 and 1936 are maximum observed. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1910	Jan. 24, 1910	4.33	9,220	1923	Apr. 8, 1923	5.43	2,060
1911	Jan. 19, 1911	5.83	14,100	1925	Feb. 11, 1925	7.80	17,800
1912	Jan. 25, 1912	4.58	9,940				
1913	Jan. 18, 1913	6.33	15,900	1926	Apr. 8, 1926	7.53	8,060
1914	Dec. 31, 1913	11.60	38,000	1927	Feb. 21, 1927	8.1	22,800
1915	Feb. 1, 2, 1915	10.10	31,500	1928	Mar. 26, 1928	27.0	40,000
1916	Jan. 23, 1916	8.05	22,300	1929	Feb. 4, 1929	6.85	830
1917	Feb. 24, 1917	11.60	39,700	1930	Mar. 5, 1930	11.8	5,720
1918	Feb. 6, 1918	5.00	11,300	1931	Jan. 23, 1931	7.25	1,020
1919	Feb. 9, 1919	6.90	18,000	1932	Dec. 26, 1931	11.4	5,160
1920	Apr. 15, 1920	7.0	6,800	1933	Mar. 17, 1933	11.0	3,420
1921	Nov. 18, 1920	6.7	15,600	1934	Dec. 30, 1933	12.20	4,600
1922	Feb. 19, 1922	3.90	2,810	1935	Apr. 8, 1935	14.80	7,960

Peak stages and discharges of Eel River at Van Arsdale Dam, near Potter Valley, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1936	Jan. 15, 1936	20.6	17,300	1951	Jan. 22, 1951	20.0	19,700
1937	Mar. 12, 1937	11.86	4,360	1952	Feb. 1, 1952	21.67	26,100
1938	Dec. 11, 1937	30.9	44,100	1953	Jan. 9, 1953	22.80	29,100
1939	Mar. 13, 1939	10.90	3,200	1954	Apr. 5, 1954	16.25	13,400
1940	Feb. 28, 1940	26.6	37,700	1955	Apr. 26, 1955	7.80	1,000
1941	Apr. 4, 1941	20.35	21,700	1956	Dec. 22, 1955	31.4	48,600
1942	Feb. 6, 1942	20.80	22,700	1957	Feb. 25, 1957	16.35	12,600
1943	Jan. 21, 1943	23.6	31,600	1958	Feb. 24, 1958	21.75	25,200
1944	Mar. 4, 1944	13.55	7,320	1959	Feb. 16, 1959	14.25	9,500
1945	Feb. 3, 1945	13.86	6,940	1960	Feb. 8, 1960	22.30	28,700
1946	Dec. 27, 1945	19.50	18,600	1961	Jan. 31, 1961	13.78	9,000
1947	Mar. 10, 1947	14.88	9,120	1962	Feb. 13, 1962	15.95	11,000
1948	Apr. 15, 1948	13.71	7,080	1963	Jan. 31, 1963	24.10	27,900
1949	Mar. 19, 1949	13.33	6,470	1964	Jan. 20, 1964	11.70	4,710
1950	Feb. 6, 1950	13.92	7,430	1965	Dec. 22, 1964	33.9	64,100

4722. Outlet Creek near Longvale, Calif.

Location.--Lat 39°37'05", long 123°21'20", in NE¹ sec.1, T.20 N., R.14 W., on right bank 0.2 mile downstream from Bloody Run Creek, 0.9 mile upstream from mouth, and 8.2 miles downstream from Longvale.

Drainage area.--161 sq mi.

Gage.--Recording. Altitude of gage is 1,020 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 9,900 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Base for partial-duration series, 5,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1957	Jan. 20, 1957	11.02	8,330	1961	Dec. 17, 1960	11.08	8,420
	Feb. 24, 1957	12.41	10,500		Jan. 31, 1961	11.64	9,260
	Mar. 4, 1957	9.04	5,600		Feb. 11, 1961	11.09	8,440
	Mar. 12, 1957	8.95	5,490		Mar. 14, 1961	8.67	5,150
	May 18, 1957	8.87	5,390				
1958	Oct. 13, 1957	10.85	8,040	1962	Dec. 1, 1961	8.85	5,370
	Nov. 13, 1957	12.11	10,000		Jan. 19, 1962	12.12	9,990
	Dec. 17, 1957	10.37	7,400		Feb. 8, 1962	8.59	5,010
	Dec. 21, 1957	10.78	7,950		Feb. 13, 1962	12.45	10,500
	Jan. 29, 1958	13.80	12,700		Mar. 6, 1962	9.49	6,170
	Feb. 12, 1958	14.32	15,200				
	Feb. 24, 1958	14.13	14,700	1963	Oct. 12, 1962	12.35	10,400
	Apr. 2, 1958	13.32	12,000		Nov. 26, 1962	12.00	9,800
1959	Jan. 5, 1959	10.02	6,880		Dec. 2, 1962	13.85	12,800
	Jan. 8, 1959	9.70	6,440		Jan. 51, 1963	17.03	22,800
	Jan. 12, 1959	13.43	12,100		Mar. 27, 1963	9.94	6,770
	Jan. 27, 1959	8.75	5,250		Apr. 6, 1963	9.52	6,210
	Feb. 16, 1959	12.01	9,820	1964	Nov. 23, 1963	10.21	7,140
1960	Feb. 1, 1960	11.58	9,170		Jan. 20, 1964	14.31	15,200
	Feb. 8, 1960	20.27	33,500	1965	Nov. 28, 1964	9.55	5,480
	Mar. 7, 1960	10.85	8,080		Dec. 22, 1964	30.6	77,900
					Jan. 5, 1965	15.26	17,600
1961	Dec. 1, 1960	9.88	6,680		Jan. 24, 1965	10.56	7,210

4725. Eel River above Dos Rios, Calif.

Location.--Lat 39°41'20", long 123°21'30", in SW $\frac{1}{4}$ sec.7, T.21 N., R.13 W., on left bank 1.8 miles upstream from Middle Fork and 2.1 miles south of Dos Rios.

Drainage area.--705 sq mi.

Gage.--Recording. Altitude of gage is 950 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 27,000 cfs, and extended above on basis of slope-area measurement at 123,000 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Peaks regulated by Lake Pillsbury (capacity, 86,400 acre-ft) beginning in December 1921. Peaks affected by diversion through Potter Valley powerhouse (capacity, about 350 cfs) since beginning of record. Only annual peaks are shown prior to Oct. 1, 1952. Base for partial-duration series, 14,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1951	Jan. 22, 1951	27.97	51,000	1958	Mar. 30, 1958	16.47	14,500
1952	Dec. 27, 1951	28.40	52,800		Apr. 2, 1958	21.90	28,500
1953	Dec. 7, 1952	25.07	39,300	1959	Jan. 12, 1959	18.25	18,100
	Jan. 7, 1953	17.42	16,700		Feb. 16, 1959	19.65	21,600
	Jan. 9, 1953	28.90	55,000	1960	Feb. 1, 1960	17.45	15,100
	Jan. 14, 1953	18.35	18,800		Feb. 8, 1960	34.75	75,800
	Jan. 18, 1953	20.78	25,200		Mar. 7, 1960	21.80	27,400
	Mar. 19, 1953	16.64	15,000	1961	Dec. 1, 1960	-	(a)
	Apr. 27, 1953	19.28	21,100		Dec. 17, 1960	18.73	15,900
1954	Jan. 17, 1954	26.22	43,700		Jan. 31, 1961	20.46	20,100
	Jan. 23, 1954	19.38	21,400		Feb. 11, 1961	21.0	21,500
	Jan. 28, 1954	19.60	22,000	1962	Jan. 19, 1962	18.45	15,300
	Feb. 13, 1954	17.70	17,300		Feb. 13, 1962	22.45	25,600
	Apr. 5, 1954	18.15	18,400		Mar. 6, 1962	18.50	15,400
1955	Dec. 5, 1954	14.00	9,800	1963	Oct. 12, 1962	19.87	18,600
1956	Dec. 6, 1955	18.63	19,500		Dec. 2, 1962	21.3	22,300
	Dec. 19, 1955	23.97	34,700		Jan. 31, 1963	32.40	59,600
	Dec. 22, 1955	45.4	123,000		Mar. 28, 1963	18.70	15,800
	Jan. 15, 1956	27.63	47,500		Apr. 6, 1963	20.87	21,200
1957	Feb. 25, 1957	21.70	27,100		Apr. 14, 1963	19.27	17,100
1958	Oct. 13, 1957	16.63	14,900	1964	Jan. 20, 1964	23.25	27,800
	Nov. 13, 1957	16.40	14,400	1965	Dec. 22, 1964	55.4	184,000
	Jan. 29, 1958	20.65	24,600		Jan. 6, 1965	-	45,000
	Feb. 9, 1958	19.46	21,000		Jan. 24, 1965	-	24,000
	Feb. 12, 1958	25.75	40,300		Apr. 16, 1965	-	17,000
	Feb. 24, 1958	28.10	49,400				

a Discharge unknown; exceeded base.

4729. Black Butte River near Covelo, Calif.

Location.--Lat 39°49'10", long 123°04'40", in SE $\frac{1}{4}$ sec.28, T.23 N., R.11 W., on right bank 600 ft upstream from highway bridge, 0.6 mile upstream from mouth, and 9.5 miles east of Covelo.

Drainage area.--162 sq mi.

Gage.--Nonrecording at site 0.1 mile downstream at different datum prior to Sept. 30, 1957; recording thereafter. Altitude of gage is 1,490 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 2,400 cfs and extended above on basis of slope-area measurement at 25,000 cfs prior to Oct. 1, 1957; defined below 4,200 cfs thereafter.

Remarks.--Only annual peaks are shown prior to Oct. 1, 1959. Base for partial-duration series, 5,500 cfs.

Peak stages and discharges of Black Butte River near Covelo, Calif.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1938	Dec. 11, 1937	36.2	26,000	1962	Feb. 13, 1962	10.35	3,900
1954	Jan. 17, 1954	-	12,100	1963	Oct. 12, 1962	14.48	9,020
1955	Dec. 31, 1954	-	3,730		Dec. 2, 1962	14.10	8,450
1956	Dec. 21, 1955	a21.0	25,000		Jan. 31, 1963	17.77	14,900
1957	Feb. 25, 1957	-	8,700		Mar. 27, 1963	12.80	6,660
1959	Jan. 12, 1959	12.85	6,720	1964	Jan. 20, 1964	12.93	6,820
1960	Feb. 8, 1960	18.50	16,400	1965	Dec. 22, 1964	26.4	29,000
	Mar. 7, 1960	12.30	6,060		Jan. 5, 1965	-	7,000
1961	Jan. 31, 1961	10.41	3,950				

a Adjusted to present datum.

4730. Middle Fork Eel River below Black Butte River near Covelo, Calif.

Location.--Lat 39°49'35", long 123°05'30", in NW¹ sec.28, T.23 N., R.11 W., on right bank 0.2 mile downstream from Black Butte River and 8.6 miles east of Covelo.

Drainage area.--367 sq mi.

Gage.--Recording. Altitude of gage is 1,430 ft (from river-profile map).

Stage-discharge relation.--Defined by current-meter measurements below 19,000 cfs, and extended above on basis of slope-area measurement at 89,100 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Base for partial-duration series, 10,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1952	Dec. 1, 1951	13.28	21,400	1958	Dec. 28, 1957	12.09	14,000
	Dec. 27, 1951	15.22	31,300		Jan. 29, 1958	15.12	30,100
	Feb. 1, 1952	15.28	31,700		Feb. 12, 1958	14.67	27,400
1953	Jan. 9, 1953	16.85	41,100		Feb. 14, 1958	12.65	16,200
	Jan. 12, 1953	12.82	19,200		Feb. 18, 1958	13.65	21,400
	Jan. 17, 1953	13.86	24,300		Feb. 24, 1958	17.63	44,900
	Jan. 20, 1953	12.07	15,800	1959	Jan. 8, 1959	11.42	11,400
	Apr. 27, 1953	11.93	15,200		Jan. 12, 1959	15.12	30,100
1954	Jan. 17, 1954	15.69	34,000	1960	Feb. 1, 1960	11.33	11,000
	Jan. 23, 1954	12.46	17,600		Feb. 8, 1960	21.33	67,100
	Jan. 28, 1954	12.83	19,200		Mar. 7, 1960	13.28	19,200
	Feb. 12, 1954	12.90	19,600	1961	Dec. 17, 1960	11.05	10,200
	Mar. 9, 1954	12.29	16,800		Jan. 31, 1961	12.14	13,900
	Apr. 4, 1954	11.40	13,000	1962	Feb. 13, 1962	10.69	9,190
1955	Dec. 31, 1954	10.77	10,600	1963	Oct. 12, 1962	15.55	32,400
1956	Dec. 6, 1955	11.50	13,400		Nov. 26, 1962	11.07	10,200
	Dec. 19, 1955	17.54	45,200		Dec. 2, 1962	15.08	29,600
	Dec. 21, 1955	25.0	89,100		Jan. 31, 1963	20.24	60,500
	Jan. 15, 1956	18.15	48,000		Mar. 27, 1963	12.42	13,400
	Jan. 22, 1956	12.08	13,600		Apr. 6, 1963	13.27	19,200
	Feb. 21, 1956	14.55	26,400		Apr. 14, 1963	12.12	13,800
1957	Feb. 24, 1957	16.18	36,200	1964	Jan. 20, 1964	13.53	20,500
1958	Oct. 13, 1957	11.92	13,400	1965	Dec. 22, 1964	31.7	132,000
	Nov. 13, 1957	14.90	28,800		Jan. 5, 1965	-	30,000
	Dec. 21, 1957	11.92	13,400				

4735. Middle Fork Eel River near Covelo, Calif
(Published as Middle Eel River prior to 1919)

Location.--Lat 39°48'35", long 123°08'15", in E $\frac{1}{2}$ sec.36, T.23 N., R.12 W., a quarter of a mile west of old Covelo ranger station, half a mile downstream from Williams Creek, and 6 miles east of Covelo.

Drainage area.--406 sq mi (revised).

Gage.--Nonrecording. Altitude of gage is 1,360 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 6,000 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Peaks for the years 1915-18, 1920-22 are maximum observed. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1912	Jan. 25, 1912	20.5	17,000	1918	Feb. 6, 1918	17.0	10,000
1913	Nov. 6, 1912	22.0	20,100	1920	Apr. 15, 1920	16.1	8,280
1914	Dec. 31, 1913	(a)	45,000				
1915	Feb. 1, 1915	25.0	26,200	1921	Nov. 18, 1920	21.3	18,600
1916	Feb. 10, 1916	18.7	13,400	1922	Feb. 18, 1922	17.8	11,600
1917	Feb. 24, 1917	23.3	22,800				

a Between 30 and 31 ft.

4736. Short Creek near Covelo, Calif.

Location.--Lat 39°49'50", long 123°10'50", in NE $\frac{1}{4}$ sec.27, T.23 N., R.12 W., on left bank 0.4 mile downstream from unnamed tributary, 0.7 mile upstream from wooden bridge, and 4.5 miles northeast of Covelo.

Drainage area.--15.2 sq mi.

Gage.--Recording. Altitude of gage is 1,480 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 690 cfs and extended above on basis of slope-area measurement at 3,780 cfs.

Remarks.--Records furnished by Bureau of Reclamation. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1956	Dec. 21, 1955	10.56	3,780	1962	Feb. 13, 1962	5.92	973
1959	Jan. 12, 1959	6.50	1,030	1963	Jan. 31, 1963	6.99	1,460
				1964	Jan. 20, 1964	5.86	952
1960	Feb. 8, 1960	7.55	1,630	1965	Dec. 22, 1964	9.20	3,600
1961	Feb. 11, 1961	5.75	822		Jan. 5, 1965	5.96	1,080

4737. Mill Creek near Covelo, Calif.

Location.--Lat 39°44'45", long 123°10'15", in SW $\frac{1}{4}$ sec.23, T.22 N., R.12 W., on right bank 50 ft upstream from unnamed tributary, 0.65 mile downstream from county road bridge, and 5.2 miles southeast of Covelo.

Drainage area.--96.9 sq mi.

Gage.--Recording. Altitude of gage is 1,280 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 2,300 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Records furnished by Bureau of Reclamation. Base for partial-duration series, 3,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1957	Jan. 20, 1957	10.63	3,140	1960	Feb. 1, 1960	11.13	3,490
	Feb. 24, 1957	12.18	4,240		Feb. 8, 1960	15.15	10,000
1958					Mar. 7, 1960	11.76	5,420
	Oct. 13, 1957	11.29	3,600	1961	Dec. 1, 1960	10.77	4,380
	Dec. 17, 1957	11.98	4,050		Jan. 31, 1961	11.33	4,950
	Dec. 21, 1957	11.64	3,830		Feb. 11, 1961	12.11	5,820
	Dec. 28, 1957	11.83	3,960		Mar. 24, 1961	10.60	4,210
	Jan. 12, 1958	11.58	3,790	1962	Feb. 13, 1962	11.94	5,620
	Jan. 24, 1958	11.00	3,410				
	Jan. 29, 1958	13.12	5,060				
	Feb. 3, 1958	10.78	3,260	1963	Jan. 31, 1963	14.50	8,950
	Feb. 9, 1958	13.05	5,000				
	Feb. 12, 1958	14.10	5,930	1964	Jan. 20, 1964	13.60	7,630
	Feb. 18, 1958	12.33	4,360				
	Feb. 24, 1958	14.35	6,150	1965	Dec. 22, 1964	20.97	24,100
	Apr. 2, 1958	12.60	4,600		Jan. 5, 1965	14.50	8,960
					Jan. 24, 1965	9.55	3,220
1959	Jan. 12, 1959	12.55	4,560				
	Feb. 14, 1959	11.48	3,720				
	Feb. 16, 1959	11.90	4,010				

4740. Eel River below Dos Rios, Calif.
(Published as "at Two Rivers" 1912-13)

Location.--Lat 39°44'15", long 123°22'15", in NE $\frac{1}{4}$ sec.25, T.22 N., R.14 W., on left bank 1.1 miles downstream from Burger Creek, 1.7 miles northwest of Dos Rios, and 2.2 miles downstream from Middle Fork.

Drainage area.--1,484 sq mi.

Gage.--Nonrecording prior to Dec. 30, 1913; recording subsequent to Oct. 1, 1951. Prior to Dec. 30, 1913, at bridge 500 ft downstream from Middle Fork at different datum. Altitude of gage is 800 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 120,000 cfs and extended on basis of slope-conveyance study.

Bankfull stage.--Not subject to overflow.

Remarks.--Peaks partly regulated by Lake Pillsbury (capacity, 86,400 acre-ft) beginning in December 1921. Peaks are affected by diversion through Potter Valley powerhouse (capacity, about 350 cfs) since beginning of record. Only annual peaks are shown prior to Oct. 1, 1951. Base for partial-duration series, 22,000 cfs.

Peak stages and discharges of Eel River below Dos Rios, Calif.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1912	Jan. 25, 1912	33	60,400	1958	Nov. 14, 1957	21.60	47,300
1913	Jan. 18, 1913	37	74,700		Dec. 21, 1957	19.63	36,900
1952	Dec. 1, 1951	22.20	48,900		Jan. 29, 1958	24.85	69,700
	Dec. 3, 1951	17.96	30,100		Feb. 12, 1958	28.50	94,800
	Dec. 27, 1951	31.4	117,000		Feb. 15, 1958	21.76	48,400
	Jan. 14, 1952	16.53	24,400		Feb. 18, 1958	23.82	62,600
	Jan. 26, 1952	16.20	23,100		Feb. 24, 1958	31.84	119,000
	Feb. 1, 1952	29.95	106,000		Apr. 2, 1958	22.22	51,600
1953	Dec. 7, 1952	25.78	75,500	1959	Jan. 9, 1959	18.12	30,000
	Dec. 10, 1952	17.31	27,500		Jan. 12, 1959	23.25	58,700
	Dec. 27, 1952	16.40	23,900		Feb. 14, 1959	18.96	33,900
	Dec. 30, 1952	17.36	27,700		Feb. 16, 1959	20.67	41,700
	Jan. 7, 1953	18.57	32,600	1960	Feb. 1, 1960	19.38	35,400
	Jan. 9, 1953	32.08	123,000		Feb. 8, 1960	39.60	185,000
	Jan. 12, 1953	20.48	41,200		Mar. 7, 1960	22.40	52,400
	Jan. 18, 1953	23.21	59,300	1961	Dec. 1, 1960	22.36	52,200
	Jan. 20, 1953	21.42	45,400		Dec. 17, 1960	19.08	33,900
	Mar. 19, 1953	17.85	29,700		Jan. 31, 1961	21.22	45,300
	Apr. 27, 1953	19.13	35,100		Feb. 2, 1961	17.48	26,700
1954	Jan. 17, 1954	30.60	111,000		Feb. 11, 1961	21.29	45,700
	Jan. 23, 1954	21.60	46,200	1962	Jan. 19, 1962	17.38	26,200
	Jan. 28, 1954	22.89	52,000		Feb. 13, 1962	22.60	53,600
	Feb. 12, 1954	20.59	41,700		Mar. 6, 1962	17.32	25,900
	Mar. 9, 1954	18.39	31,900	1963	Oct. 12, 1962	24.15	63,500
	Apr. 4, 1954	18.23	31,200		Nov. 26, 1962	17.75	27,900
1955	Dec. 6, 1954	15.52	20,400		Dec. 2, 1962	24.18	63,700
1956	Dec. 6, 1955	19.15	36,800		Jan. 31, 1963	36.60	159,000
	Dec. 19, 1955	29.95	106,000		Mar. 27, 1963	20.87	43,300
	Dec. 22, 1955	43.86	283,000		Apr. 6, 1963	22.28	51,700
	Jan. 7, 1956	20.48	41,100		Apr. 14, 1963	19.35	35,200
	Jan. 15, 1956	31.54	118,000	1964	Nov. 23, 1963	18.51	31,300
	Jan. 23, 1956	17.60	27,200		Jan. 20, 1964	26.13	76,900
	Feb. 21, 1956	31.25	116,000	1965	Dec. 22, 1964	62.5	460,000
1957	Jan. 20, 1957	16.64	23,100		Jan. 5, 1965	29.85	105,000
	Feb. 24, 1957	26.02	76,100		Jan. 24, 1965	22.90	55,400
	Mar. 5, 1957	17.50	25,800		Apr. 16, 1965	20.10	39,000
	May 18, 1957	17.08	24,900				
1958	Oct. 13, 1957	19.45	36,100				

4745. North Fork Eel River near Mina, Calif.

Location.--Lat 39°56'15", long 123°20'45", in SW $\frac{1}{4}$ sec.8, T.24 N., R.13 W., on right bank 1.2 miles upstream from Asbill Creek, 2 miles south of Mina, and 8.8 miles northeast of Nashmead.

Drainage area.--250 sq mi.

Gage.--Nonrecording prior to June 22, 1954; recording thereafter. Prior to June 22, 1954, at bridge 0.2 mile downstream at different datum. Altitude of gage is 1,030 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 11,400 cfs prior to June 22, 1954; defined below 8,000 cfs and extended above on basis of slope-area measurement at 58,400 cfs thereafter.

Historical data.--Flood of December 1937 reached a stage of about 30.7 ft (former site and datum), from information by local residents.

Remarks.--Base for partial-duration series, 8,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1938	December 1937	30.7	-	1956	Dec. 6, 1955	14.27	9,370
1954	Jan. 17, 1954	25.4	23,200		Dec. 19, 1955	18.25	22,000
1955	Dec. 31, 1954	15.34	12,000		Dec. 22, 1955	24.00	58,400
					Jan. 7, 1956	13.83	8,490
					Jan. 15, 1956	17.94	20,800

Peak stages and discharges of North Fork Eel River near Mina, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1956	Feb. 21, 1956	19.90	29,800	1960	Mar. 7, 1960	13.70	8,240
1957	Jan. 20, 1957	13.60	8,050	1961	Dec. 1, 1960	15.24	11,700
	Feb. 24, 1957	16.41	15,200		Dec. 17, 1960	14.47	9,810
	Mar. 12, 1957	13.62	8,090		Jan. 31, 1961	16.38	15,100
1958	Oct. 13, 1957	13.75	8,470		Feb. 11, 1961	15.08	11,300
	Nov. 13, 1957	16.75	16,600	1962	Jan. 19, 1962	14.50	9,880
	Dec. 18, 1957	14.80	10,500		Feb. 13, 1962	15.18	11,600
	Dec. 21, 1957	16.61	16,100	1963	Oct. 12, 1962	16.63	15,900
	Dec. 28, 1957	13.95	8,860		Nov. 26, 1962	16.50	15,500
	Jan. 29, 1958	17.23	18,100		Dec. 2, 1962	17.18	17,800
	Feb. 12, 1958	16.70	16,400		Jan. 31, 1963	19.25	26,600
	Feb. 14, 1958	13.99	8,940		Mar. 27, 1963	15.68	12,900
	Feb. 18, 1958	15.70	13,200		Apr. 6, 1963	13.62	8,090
	Feb. 24, 1958	17.78	19,900		Apr. 14, 1963	13.58	8,020
1959	Jan. 9, 1959	14.52	10,000	1964	Jan. 20, 1964	19.50	27,800
	Jan. 12, 1959	17.92	20,900	1965	Dec. 22, 1964	33.6	133,000
	Feb. 16, 1959	16.60	16,000		Jan. 5, 1965	-	15,000
1960	Feb. 1, 1960	13.65	8,140		Jan. 24, 1965	-	14,000
	Feb. 8, 1960	22.35	45,600				

4750. Eel River at Alderpoint, Calif.

Location--Lat 40°10'35", long 123°36'20", in NW $\frac{1}{4}$ sec.27, T.3 S., R.5 E., on left bank at Alderpoint, 600 ft downstream from Carter Creek and 11.4 miles northeast of Garberville.

Drainage area--2,079 sq mi.

Gage--Recording. Altitude of gage is 270 ft (from topographic map).

Stage-discharge relation--Defined by current-meter measurements below 110,000 cfs and extended above on basis of slope-area measurement at 376,000 cfs.

Bankfull stage--Not subject to overflow.

Remarks--Peaks regulated by Lake Pillsbury (capacity, 86,400 acre-ft) beginning in December 1921. Peaks affected by diversion through Potter Valley powerhouse (capacity, about 350 cfs) since beginning of record. Base for partial-duration series, 41,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1956	Dec. 6, 1955	22.55	49,600	1960	Feb. 1, 1960	22.23	48,700
	Dec. 19, 1955	42.60	128,000		Feb. 8, 1960	55.70	220,000
	Dec. 22, 1955	72.5	376,000		Mar. 7, 1960	25.79	60,800
	Jan. 8, 1956	22.95	50,800	1961	Dec. 1, 1960	27.60	67,100
	Jan. 15, 1956	43.35	132,000		Dec. 17, 1960	23.75	53,600
	Feb. 21, 1956	44.81	141,000		Jan. 31, 1961	25.25	58,900
1957	Feb. 24, 1957	36.40	99,600		Feb. 11, 1961	26.46	63,100
1958	Oct. 13, 1957	19.90	41,700	1962	Feb. 13, 1962	27.10	65,400
	Nov. 14, 1957	25.29	59,000	1963	Oct. 13, 1962	29.80	74,800
	Dec. 21, 1957	23.15	51,500		Dec. 3, 1962	30.66	77,800
	Jan. 29, 1958	31.58	81,000		Jan. 31, 1963	52.60	195,000
	Feb. 4, 1958	20.61	43,800		Mar. 28, 1963	25.43	59,500
	Feb. 9, 1958	24.22	55,300		Apr. 6, 1963	25.70	60,400
	Feb. 12, 1958	37.25	103,000		Apr. 15, 1963	21.50	45,800
	Feb. 15, 1958	26.07	61,700	1964	Nov. 23, 1963	20.89	43,700
	Feb. 19, 1958	33.24	87,000		Jan. 20, 1964	36.59	100,000
	Feb. 24, 1958	43.60	134,000	1965	Dec. 22, 1964	87.2	561,000
	Apr. 2, 1958	28.07	68,700		Jan. 6, 1965	-	92,000
1959	Jan. 9, 1959	22.13	48,400				
	Jan. 12, 1959	30.06	75,700				
	Feb. 16, 1959	26.66	63,800				

4755. South Fork Eel River near Branscomb, Calif.

Location.--Lat 39°43'09", long 123°39'06", in NW $\frac{1}{4}$ sec.32, T.22 N., R.16 W., on right bank 0.4 mile upstream from Jack of Hearts Creek and 4.7 miles north of Branscomb.

Drainage area.--43.9 sq mi.

Gage.--Recording. Altitude of gage is 1,380 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 4,600 cfs and extended on basis of slope-area measurement at 20,100 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Base for partial-duration series, 2,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1947	Mar. 10, 1947	5.90	2,000	1956	Feb. 12, 1956	8.91	5,210
1948	Oct. 16, 1947	-	2,460	1957	Oct. 30, 1956	5.88	2,070
	Jan. 2, 1948	-	2,610		Jan. 19, 1957	6.45	2,530
	Jan. 7, 1948	8.5	4,200		Feb. 24, 1957	7.40	3,400
1949	Dec. 5, 1948	-	2,460		Feb. 26, 1957	6.15	2,290
	Feb. 10, 1949	-	3,100		Mar. 12, 1957	6.50	2,570
	Mar. 18, 1949	7.48	3,230		May 18, 1957	6.73	2,760
1950	Jan. 13, 1950	-	3,250	1958	Nov. 13, 1957	9.67	6,360
	Jan. 17, 1950	all.08	4,180		Dec. 21, 1957	8.05	4,180
	Mar. 19, 1950	-	2,120		Dec. 28, 1957	7.47	3,500
1951	Oct. 29, 1950	10.9	3,320		Jan. 29, 1958	10.60	7,860
	Nov. 16, 1950	8.34	2,170		Feb. 12, 1958	9.38	5,890
	Dec. 3, 1950	9.4	2,650		Feb. 24, 1958	7.08	3,050
	Jan. 17, 1951	8.7	4,400		Apr. 2, 1958	7.28	3,280
	Jan. 21, 1951	11.1	8,740	1959	Jan. 8, 1959	6.01	2,130
	Feb. 4, 1951	10.1	7,020		Jan. 12, 1959	9.72	6,410
1952	Dec. 1, 1951	7.96	3,760		Jan. 27, 1959	6.68	2,710
	Dec. 27, 1951	10.90	8,380		Feb. 16, 1959	6.47	2,520
	Feb. 1, 1952	8.58	4,320	1960	Feb. 8, 1960	15.30	17,900
1953	Dec. 7, 1952	10.18	7,160		Mar. 7, 1960	6.88	2,890
	Dec. 10, 1952	7.30	3,180	1961	Dec. 17, 1960	7.48	3,480
	Jan. 9, 1953	9.14	5,540		Jan. 31, 1961	7.67	3,690
	Jan. 18, 1953	9.80	6,540		Feb. 11, 1961	6.58	2,630
	Mar. 20, 1953	7.02	2,960	1962	Jan. 19, 1962	8.14	4,220
1954	Nov. 23, 1953	7.83	3,650		Feb. 13, 1962	7.10	3,100
	Jan. 17, 1954	10.75	8,120	1963	Oct. 12, 1962	7.87	3,910
	Jan. 23, 1954	7.36	3,230		Nov. 26, 1962	7.18	3,180
	Jan. 28, 1954	7.96	3,760		Dec. 2, 1962	10.14	7,090
	Apr. 4, 1954	6.62	2,640		Jan. 31, 1963	8.03	4,090
1955	Dec. 31, 1954	6.20	2,300		Apr. 6, 1963	7.21	3,210
1956	Dec. 6, 1955	7.80	3,830	1964	Nov. 23, 1963	6.02	2,190
	Dec. 19, 1955	8.97	5,300		Jan. 20, 1964	10.00	6,860
	Dec. 22, 1955	16.20	20,100	1965	Nov. 28, 1964	6.10	2,250
	Jan. 7, 1956	5.81	2,020		Dec. 22, 1964	16.05	19,700
	Jan. 15, 1956	10.45	7,620		Jan. 6, 1965	6.58	2,630

a Occurred at different time than peak discharge.

4757. Tenmile Creek near Laytonville, Calif.

Location.--Lat 39°45'45", long 123°32'30", in NW $\frac{1}{4}$ sec.16, T.22 N., R.15 W., on right bank 0.1 mile downstream from Step Gulch Creek and 6.0 miles northwest of Laytonville.

Drainage area.--50.3 sq mi.

Gage.--Recording. Altitude of gage is 1,450 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 4,300 cfs, and extended above on basis of slope-area measurement at 16,300 cfs.

Remarks.--Base for partial-duration series, 5,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1956	Dec. 22, 1955	22.9	16,300	1961	Jan. 31, 1961	12.88	5,780
1958	Oct. 13, 1957	12.75	5,650	1962	Feb. 13, 1962	12.12	5,020
	Nov. 13, 1957	13.10	5,990	1963	Oct. 12, 1962	12.23	5,130
	Dec. 21, 1957	12.27	5,160		Nov. 26, 1962	13.45	6,350
	Jan. 29, 1958	14.44	7,330		Dec. 2, 1962	13.36	6,260
	Feb. 12, 1958	14.50	7,390		Jan. 31, 1963	16.63	9,530
	Feb. 24, 1958	14.28	7,170	1964	Jan. 20, 1964	13.86	6,760
	Apr. 2, 1958	12.28	5,170		Dec. 22, 1964	21.3	14,500
1959	Jan. 12, 1959	14.75	7,650				
1960	Feb. 8, 1960	19.14	12,200				

4765. South Fork Eel River near Miranda, Calif.

Location.--Lat 40°10'55", long 123°46'30", in NW $\frac{1}{4}$ sec.30, T.3 S., R.4 E., on right bank at Sylvandale campgrounds on U.S. Highway 101, 0.5 mile upstream from Rocky Glen Creek, 4.3 miles southeast of Miranda, and 20 miles upstream from mouth.

Drainage area.--537 sq mi.

Gage.--Nonrecording prior to Oct. 31, 1944; recording thereafter. Datum of gage is 217.29 ft above mean sea level (levels by California Division of Highways).

Stage-discharge relation.--Defined by current-meter measurements below 52,000 cfs and extended above on basis of slope-area measurement at 173,000 cfs.

Remarks.--Peaks for the years 1941-43 are maximum observed. Base for partial-duration series, 28,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1941	Jan. 25, 1941	19.2	36,800	1952	Dec. 1, 1951	19.32	37,300
1942	Dec. 18, 1941	26.3	66,000		Dec. 27, 1951	23.56	53,700
1943	Jan. 21, 1943	26.95	69,200		Feb. 1, 1952	23.08	51,800
1944	Mar. 4, 1944	12.4	15,400	1953	Dec. 7, 1952	23.03	51,600
1945	Feb. 3, 1945	15.10	23,000		Jan. 9, 1953	22.01	47,500
1946	Dec. 27, 1945	27.73	73,200		Jan. 18, 1953	21.57	45,800
	Dec. 29, 1945	-	50,900	1954	Nov. 23, 1953	17.35	30,300
1947	Mar. 3, 1947	15.30	23,700		Jan. 17, 1954	26.27	65,800
	Jan. 7, 1948	18.90	35,700		Jan. 23, 1954	17.34	30,300
1948	Mar. 18, 1949	20.60	42,000		Jan. 28, 1954	22.37	49,000
	Jan. 18, 1950	19.57	38,200	1955	Dec. 31, 1954	12.21	16,000
1951	Oct. 28, 1950	18.7	35,000	1956	Dec. 19, 1955	23.06	53,800
	Dec. 3, 1950	16.7	28,100		Dec. 22, 1955	42.7	173,000
	Jan. 18, 1951	17.91	32,200		Jan. 15, 1956	23.45	56,500
	Jan. 21, 1951	24.1	56,000	1957	Feb. 21, 1956	21.75	48,900
	Feb. 4, 1951	23.74	54,500		Feb. 24, 1957	17.60	33,000

Peak stages and discharges of South Fork Eel River near Miranda, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1958	Nov. 14, 1957	-	33,000	1961	Dec. 17, 1960	17.92	34,100
	Dec. 21, 1957	16.95	31,100		Jan. 31, 1961	17.59	33,000
	Jan. 29, 1958	22.33	51,700		Feb. 11, 1961	17.91	34,100
	Feb. 12, 1958	21.44	47,800	1962	Jan. 19, 1962	15.07	25,000
	Feb. 15, 1958	16.33	29,000		Oct. 13, 1962	18.00	33,500
	Feb. 19, 1958	18.53	36,400	1963	Dec. 3, 1962	19.05	37,200
	Feb. 24, 1958	18.30	35,600		Jan. 31, 1963	25.20	64,500
	Apr. 2, 1958	17.96	34,500	1964	Jan. 20, 1964	24.00	59,000
1959	Jan. 9, 1959	16.87	30,800		Dec. 22, 1964	46.0	199,000
	Jan. 12, 1959	21.55	48,300				
	Feb. 15, 1959	16.50	29,600				
1960	Feb. 8, 1960	34.61	117,000				

4770. Eel River at Scotia, Calif.

Location--Lat 40°29'30", long 124°05'55", in SW $\frac{1}{4}$ sec.5, T.1 N., R.1 E., near center of span in left pier of bridge on U.S. Highway 101, 0.5 mile north of Scotia and 6 miles upstream from Van Duzen River.

Drainage area--3,113 sq mi.

Gage--Nonrecording prior to Dec. 12, 1940; recording thereafter. Datum of gage is 36.15 ft above mean sea level, datum of 1929.

Stage-discharge relation--Defined by current-meter measurements below 300,000 cfs.

Bankfull stage--Not subject to overflow.

Remarks--Peaks slightly regulated by Lake Pillsbury (capacity, 86,400 acre-ft) beginning in December 1921. Peaks are affected by diversion through Potter Valley powerhouse (capacity, about 350 cfs) beginning prior to 1911. Peaks for the years 1911, 1915, 1918, 1920-26, 1929, 1930 and 1932 are maximum observed. Only annual peaks are shown prior to Oct. 1, 1945. Base for partial-duration series, 72,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1911	Jan. 20, 1911	-	136,000	1941	Dec. 24, 1940	36.4	150,000
1912	Jan. 26, 1912	-	170,000	1942	Feb. 6, 1942	42.2	209,000
1913	Jan. 18, 1913	-	150,000	1943	Jan. 21, 1943	50.75	315,000
1914	Jan. 22, 1914	52.5	309,000	1944	Mar. 4, 1944	24.60	57,800
1915	Feb. 2, 1915	55.5	351,000	1945	Feb. 3, 1945	30.55	99,100
1917	Feb. 25, 1917	51.25	292,000	1946	Dec. 4, 1945	-	103,000
1918	Feb. 7, 1918	27.7	78,600		Dec. 23, 1945	-	98,000
1919	Jan. 17, 1919	38.3	149,000		Dec. 27, 1945	44.60	239,000
1920	Apr. 16, 1920	25.0	62,000		Jan. 5, 1946	-	78,300
1921	Nov. 19, 1920	38.2	148,000	1947	Feb. 12, 1947	29.02	86,100
1922	Feb. 19, 1922	34.50	123,000		Mar. 10, 1947	-	72,100
1923	Dec. 28, 1922	26.9	73,400	1948	Jan. 8, 1948	32.6	114,000
1924	Feb. 8, 1924	26.9	73,400		Mar. 18, 1949	35.4	140,000
1925	Feb. 6, 1925	35.20	127,000	1949	Jan. 18, 1950	32.85	117,000
1926	Feb. 4, 1926	42.20	176,000	1951	Oct. 29, 1950	33.33	121,000
1927	Feb. 21, 1927	45.2	221,000		Dec. 4, 1950	37.37	160,000
1928	Mar. 27, 1928	46.3	233,000		Jan. 18, 1951	35.5	141,000
1929	Feb. 4, 1929	21.30	41,000		Jan. 22, 1951	45.39	249,000
1930	Dec. 15, 1929	34.10	120,000		Feb. 5, 1951	40.55	193,000
1931	Jan. 23, 1931	29.0	87,000	1952	Dec. 1, 1951	35.4	140,000
1932	Dec. 27, 1931	36.10	127,000		Dec. 27, 1951	46.50	262,000
1933	Mar. 17, 1933	26.10	56,100		Feb. 2, 1952	43.6	223,000
1934	Mar. 29, 1934	24.8	50,900	1953	Dec. 7, 1952	39.95	177,000
1935	Apr. 8, 1935	29.62	79,900		Jan. 9, 1953	42.98	215,000
1936	Jan. 16, 1936	44.7	216,000		Jan. 18, 1953	37.36	151,000
1937	Feb. 5, 1937	37.0	134,000		Mar. 20, 1953	30.20	94,400
1938	Dec. 11, 1937	55.1	345,000				
1939	Dec. 3, 1938	35.90	133,000				
1940	Feb. 28, 1940	52.25	305,000				

Peak stages and discharges of Eel River at Scotia, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1954	Jan. 17, 1954	45.20	245,000	1959	Jan. 9, 1959	29.59	102,000
	Jan. 23, 1954	32.10	109,000		Jan. 12, 1959	34.58	145,000
	Jan. 28, 1954	39.18	169,000		Feb. 15, 1959	30.55	110,000
	Feb. 13, 1954	30.35	96,400	1960	Feb. 8, 1960	51.45	343,000
	Apr. 6, 1954	28.00	80,000		Mar. 8, 1960	27.16	83,300
1955	Dec. 31, 1954	23.29	52,400	1961	Dec. 1, 1960	28.23	90,000
1956	Dec. 6, 1955	27.65	77,800		Dec. 17, 1960	28.90	94,400
	Dec. 20, 1955	43.15	217,000		Jan. 31, 1961	29.42	97,900
	Dec. 22, 1955	61.90	541,000		Feb. 11, 1961	31.45	113,000
	Jan. 7, 1956	27.75	82,500	1962	Feb. 14, 1962	29.92	107,000
	Jan. 16, 1956	42.20	205,000		Feb. 16, 1962	27.10	84,800
	Feb. 22, 1956	43.45	221,000	1963	Oct. 13, 1962	32.48	128,000
1957	Feb. 25, 1957	36.11	153,000		Dec. 3, 1962	32.89	132,000
1958	Nov. 14, 1957	29.45	98,200		Feb. 1, 1963	47.00	252,000
	Dec. 22, 1957	28.53	91,900		Mar. 28, 1963	28.55	90,800
	Jan. 30, 1958	35.30	145,000		Apr. 6, 1963	28.12	87,800
	Feb. 10, 1958	27.34	84,400		Apr. 15, 1963	26.50	76,800
	Feb. 12, 1958	38.16	174,000	1964	Jan. 21, 1964	39.40	178,000
	Feb. 15, 1958	31.64	118,000	1965	Dec. 23, 1964	72.0	752,000
	Feb. 19, 1958	36.27	161,000		Jan. 6, 1965	36.04	148,000
	Feb. 25, 1958	40.35	202,000				
	Apr. 3, 1958	32.23	124,000				

4775. Van Duzen River near Dinsmores, Calif.

Location--Lat 40°29'05", long 123°39'25", in NW $\frac{1}{4}$ sec.7, T.1 N., R.5 E., on right bank 10 ft upstream from private road bridge, 0.3 mile upstream from South Fork, and 2.8 miles west of Dinsmores.

Drainage area--85.1 sq mi. At site August 1953 to September 1958, 81.7 sq mi.

Gage--Recording. Datum of gage is 1,996.58 ft above mean sea level, datum of 1929, supplementary adjustment of 1956. Prior to Oct. 1, 1958, at site 1.7 miles upstream at different datum.

Stage-discharge relation--Defined by current-meter measurements below 13,000 cfs.

Remarks--Base for partial-duration series, 3,400 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1954	Nov. 23, 1953	7.86	4,620	1957	May 18, 1957	7.48	4,310
	Jan. 16, 1954	14.60	14,000	1958	Nov. 13, 1957	11.50	9,100
	Jan. 23, 1954	10.76	8,290		Dec. 17, 1957	7.70	4,260
	Jan. 28, 1954	11.06	8,710		Dec. 21, 1957	10.30	7,470
	Feb. 12, 1954	10.91	8,500		Dec. 28, 1957	7.98	4,550
	Mar. 9, 1954	8.15	4,940		Jan. 29, 1958	14.22	13,000
	Apr. 4, 1954	8.49	5,330		Feb. 7, 1958	7.05	3,600
1955	Dec. 6, 1954	6.92	3,620		Feb. 12, 1958	10.43	7,640
	Dec. 31, 1954	8.08	4,860		Feb. 16, 1958	10.29	7,450
1956	Nov. 19, 1955	8.15	4,940		Feb. 18, 1958	10.25	7,400
	Dec. 6, 1955	6.95	3,650		Feb. 24, 1958	11.61	9,250
	Dec. 19, 1955	13.63	12,100	1964	Nov. 14, 1963	9.85	4,290
	Dec. 22, 1955	19.25	21,400		Nov. 23, 1963	9.56	3,910
	Jan. 4, 1956	7.87	4,670		Jan. 20, 1964	15.0	13,200
	Jan. 15, 1956	11.67	9,340	1965	Dec. 22, 1964	22.5	27,000
	Feb. 21, 1956	-	13,000		Jan. 6, 1965	-	8,200
1957	Oct. 30, 1956	7.80	4,600		Jan. 23, 1965	-	8,000
	Feb. 24, 1957	11.05	8,470		Apr. 18, 1965	-	6,600

4777. South Fork Van Duzen River near Bridgeville, Calif.

Location.--Lat 40°26'40", long 123°39'15", in SE¹/₄ sec.19, T.1 N., R.5 E., on right bank 0.2 mile upstream from Butte Creek, 3 miles upstream from mouth, and 7.8 miles east of Bridgeville.

Drainage area.--36.2 sq mi.

Gage.--Crest-stage gage prior to Aug. 31, 1957; recording thereafter. Prior to Aug. 31, 1957, at site 0.1 mile upstream at different datum. Altitude of gage is 2,350 ft (from topographic map).

Stage-discharge relation.--Peak of 1956 by slope-area measurement at 8,990 cfs. Defined by current-meter measurements below 2,900 cfs subsequent to September 1958.

Remarks.--Only annual peaks are shown prior to 1959. Base for partial-duration series, 2,800 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1954	Jan. 16, 1954	-	-	1961	Feb. 10, 1961	10.55	3,500
1955	Dec. 31, 1954	-	3,200	1962	Feb. 13, 1962	9.09	2,220
1956	Dec. 22, 1955	11.91	8,990	1963	Oct. 12, 1962	11.52	4,420
1957	Feb. 24, 1957	-	4,400		Nov. 28, 1962	11.62	4,520
1959	Jan. 9, 1959	10.65	3,980		Dec. 2, 1962	11.54	4,440
	Jan. 12, 1959	13.37	6,570		Jan. 31, 1963	12.20	5,120
	Jan. 27, 1959	9.42	3,050	1964	Jan. 20, 1964	13.63	6,760
	Feb. 16, 1959	9.92	3,340	1965	Dec. 22, 1964	18.70	13,600
1960	Feb. 8, 1960	14.00	7,200		Jan. 5, 1965	10.98	3,880
1961	Nov. 25, 1960	10.02	3,020		Jan. 23, 1965	11.07	3,970
	Dec. 17, 1960	10.02	3,020		Apr. 18, 1965	10.32	3,290
	Jan. 31, 1961	10.23	3,210				

4780. Van Duzen River at Bridgeville, Calif.

Location.--Lat 40°28'05", long 123°47'55", in NW¹/₄ sec.13, T.1 N., R.3 E., at highway bridge at Bridgeville, 1 mile downstream from Little Larrabee Creek.

Drainage area.--202 sq mi.

Gage.--Nonrecording. Prior to December 1939, at datum 0.32 ft higher. Datum of gage is 590.66 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 12,000 cfs.

Remarks.--Only annual peaks are shown prior to Oct. 1, 1948. Base for partial-duration series, 8,500 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1912	Jan. 25, 1912	26.0	22,000	1949	Feb. 22, 1949	20.0	13,400
1913	Nov. 6, 1912	21.0	14,300		Mar. 18, 1949	-	12,900
1940	Feb. 28, 1940	23.9	19,000	1950	Jan. 17, 1950	21.00	14,800
1941	Dec. 24, 1940	21.8	15,900		Mar. 17, 1950	-	11,800
1942	Dec. 18, 1941	24.0	19,200	1951	Oct. 28, 1950	23.6	18,600
1943	Jan. 21, 1943	25.5	21,600		Nov. 16, 1950	17.8	10,600
1944	Jan. 5, 1944	14.75	7,130		Dec. 3, 1950	18.0	10,800
1945	Feb. 2, 1945	17.4	10,100		Dec. 14, 1950	16.2	8,670
1946	Dec. 27, 1945	20.25	13,800		Jan. 17, 1951	17.8	10,600
1947	Feb. 12, 1947	19.0	12,100		Jan. 21, 1951	22.55	17,000
1948	Jan. 7, 1948	21.9	16,100		Feb. 4, 1951	20.6	14,200

4785. Van Duzen River near Bridgeville, Calif.

Location.--Lat 40°27'50", long 123°51'25", in E½ sec.17, T.1 N., R.3 E., on downstream side of right pier of bridge on State Highway 36, 0.3 mile downstream from Pip Creek, 0.5 mile upstream from Rogers Creek, and 4 miles west of Bridgeville.

Drainage area.--216 sq mi.

Gage.--Recording. Altitude of gage is 400 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 15,000 cfs and extended above on basis of slope-area measurement at 43,500 cfs.

Bankfull stage.--22 ft.

Remarks.--Base for partial-duration series, 9,100 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1951	Oct. 28, 1950	-	20,000	1958	Nov. 13, 1957	14.69	18,700
	Nov. 16, 1950	-	12,000		Dec. 17, 1957	11.50	11,000
	Dec. 3, 1950	13.20	12,400		Dec. 21, 1957	13.16	14,800
	Dec. 14, 1950	11.45	9,210		Dec. 28, 1957	10.66	9,240
	Jan. 17, 1951	12.89	11,800		Jan. 29, 1958	15.45	22,600
	Jan. 21, 1951	16.10	18,000		Feb. 12, 1958	12.67	14,900
	Feb. 4, 1951	14.45	14,700		Feb. 16, 1958	12.90	15,500
					Feb. 18, 1958	13.12	16,100
					Feb. 24, 1958	14.52	20,000
1952	Dec. 1, 1951	15.57	16,900				
	Dec. 27, 1951	14.75	15,300	1959	Jan. 9, 1959	14.17	19,000
	Feb. 1, 1952	16.84	19,500		Jan. 12, 1959	17.95	31,400
1953	Dec. 7, 1952	15.70	17,200		Jan. 27, 1959	10.83	10,400
	Dec. 10, 1952	14.13	14,100		Feb. 16, 1959	12.85	15,400
	Dec. 30, 1952	12.11	10,400				
	Jan. 9, 1953	16.25	20,000	1960	Feb. 8, 1960	17.60	30,000
	Jan. 17, 1953	17.30	22,300		Mar. 7, 1960	10.84	10,400
	Jan. 20, 1953	12.54	11,900				
1954	Nov. 23, 1953	12.16	13,000	1961	Nov. 25, 1960	12.32	14,100
	Jan. 16, 1954	17.23	25,200		Dec. 17, 1960	12.68	15,000
	Jan. 23, 1954	14.34	18,200		Jan. 31, 1961	13.58	17,500
	Jan. 28, 1954	15.83	21,800		Feb. 11, 1961	14.23	19,100
	Feb. 12, 1954	14.40	18,400	1962	Feb. 9, 1962	10.18	9,260
	Mar. 9, 1954	11.20	10,700		Feb. 13, 1962	11.38	11,800
	Apr. 4, 1954	12.50	13,800				
1955	Dec. 6, 1954	10.74	9,630	1963	Oct. 12, 1962	14.33	19,400
	Dec. 31, 1954	14.26	20,900		Nov. 26, 1962	14.60	20,200
1956	Dec. 6, 1955	11.07	11,000		Dec. 2, 1962	14.48	19,800
	Dec. 19, 1955	17.17	30,200		Jan. 31, 1963	15.60	23,100
	Dec. 22, 1955	21.3	43,500		Mar. 27, 1963	12.39	14,200
	Jan. 4, 1956	11.06	11,000		Mar. 30, 1963	10.74	10,400
	Jan. 7, 1956	10.36	9,290		Apr. 14, 1963	10.76	10,500
	Jan. 15, 1956	14.12	20,500	1964	Nov. 14, 1963	10.97	10,900
	Jan. 22, 1956	10.44	9,480		Nov. 23, 1963	10.27	9,440
	Feb. 21, 1956	17.43	31,100		Jan. 20, 1964	18.10	32,000
	Nov. 19, 1956	12.80	16,300	1965	Nov. 28, 1964	10.28	9,460
1957	Oct. 30, 1956	10.50	9,620		Dec. 10, 1964	10.53	9,970
	Feb. 24, 1957	14.16	19,000		Dec. 22, 1964	22.6	48,700
	Mar. 12, 1957	10.94	9,800		Jan. 6, 1965	-	15,000
	May 18, 1957	10.86	9,640		Jan. 24, 1965	-	15,000
					Apr. 18, 1965	-	12,000

4790. Yager Creek near Carlotta, Calif.

Location.--Lat 40°34'10", long 124°03'10", in SE $\frac{1}{4}$ sec.10, T.2 N., R.1 E., on right bank 0.6 mile upstream from Cooper Mill Creek and 2.3 miles north of Carlotta.

Drainage area.--127 sq mi.

Gage.--Recording. Prior to Dec. 22, 1955, at site 0.2 mile upstream at different datum. Altitude of gage is 190 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 8,200 cfs and extended above on basis of slope-conveyance study at 28,000 cfs prior to Dec. 23, 1955; defined by current-meter measurements below 6,850 cfs thereafter.

Remarks.--Only annual peak is shown for the year 1956. Base for partial-duration series, 4,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1954	Nov. 23, 1953	10.75	9,300	1958	Dec. 17, 1957	11.26	6,210
	Dec. 3, 1953	8.13	4,660		Dec. 21, 1957	12.36	8,000
	Jan. 16, 1954	9.28	6,600		Dec. 28, 1957	11.30	6,270
	Jan. 22, 1954	8.72	5,620		Jan. 12, 1958	9.98	4,170
	Jan. 27, 1954	9.60	7,180		Jan. 29, 1958	12.60	8,260
	Feb. 12, 1954	7.55	4,020		Feb. 7, 1958	9.95	4,130
1955	Dec. 31, 1954	13.85	16,400		Feb. 12, 1958	12.80	8,580
					Feb. 16, 1958	11.65	6,730
1956	Dec. 22, 1955	17.4	28,000		Feb. 18, 1958	11.40	6,330
					Feb. 24, 1958	13.30	9,440
1957	Oct. 30, 1956	12.10	7,460		Apr. 2, 1958	10.93	5,580
	Dec. 11, 1956	11.68	6,790	1959	Jan. 8, 1959	11.74	7,200
	Jan. 14, 1957	10.74	5,280		Jan. 12, 1959	13.50	12,300
	Jan. 20, 1957	11.95	7,220		Jan. 27, 1959	12.79	10,500
	Feb. 24, 1957	11.91	7,160		Feb. 14, 1959	14.14	13,900
	Mar. 4, 1957	12.08	7,450		Feb. 18, 1959	11.60	7,900
	Mar. 11, 1957	12.08	7,450	1960	Feb. 8, 1960	13.50	12,300
					Mar. 12, 1960	9.47	4,260
1958	Nov. 13, 1957	14.85	12,100				

ELK RIVER BASIN

4797. Elk River near Falk, Calif.

Location.--Lat 40°42'10", long 124°09'20", in NW $\frac{1}{4}$ sec.26, T.4 N., R.1 W., on left bank 500 ft downstream from Clapp Gulch, 1,300 ft downstream from confluence of North and South Forks, 2 miles northwest of Falk, and 5 miles south of Eureka.

Drainage area.--44.2 sq mi.

Gage.--Recording. Altitude of gage is 50 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 1,900 cfs.

Bankfull stage.--23 ft.

Remarks.--Base for partial-duration series, 1,100 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1958	Nov. 13, 1957	22.65	2,480	1958	Feb. 24, 1958	17.21	1,760
	Dec. 18, 1957	13.31	1,170		Apr. 2, 1958	17.92	1,880
	Dec. 21, 1957	19.85	2,220	1959	Jan. 8, 1959	13.69	1,220
	Dec. 28, 1957	13.90	1,250		Jan. 12, 1959	21.72	2,570
	Jan. 12, 1958	13.96	1,260		Jan. 27, 1959	22.12	2,220
	Jan. 29, 1958	19.58	2,170		Feb. 14, 1959	27.62	3,220
	Feb. 12, 1958	22.80	2,790		Feb. 18, 1959	19.76	1,840
	Feb. 16, 1958	16.54	1,660				
	Feb. 18, 1958	15.98	1,570				

ELK RIVER BASIN

Peak stages and discharges of Elk River near Falk, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1960	Feb. 8, 1960	22.12	2,090	1963	Apr. 10, 1963	15.90	1,190
	Mar. 12, 1960	15.46	1,160		Apr. 12, 1963	23.02	2,220
	May 26, 1960	15.32	1,140	1964	Nov. 9, 1963	21.19	1,950
1961	Nov. 25, 1960	16.95	1,340		Jan. 6, 1964	22.50	2,140
	Dec. 17, 1960	15.75	1,190		Jan. 17, 1964	16.12	1,220
	Jan. 31, 1961	16.72	1,310		Jan. 20, 1964	27.13	2,950
	Feb. 11, 1961	22.58	2,160		Feb. 1, 1964	15.23	1,100
	Feb. 13, 1961	15.54	1,160		Mar. 11, 1964	18.52	1,550
1962	Dec. 20, 1961	15.83	1,200	1965	Nov. 28, 1964	17.50	1,360
	Jan. 19, 1962	22.34	2,120		Dec. 2, 1964	16.81	1,250
	Feb. 8, 1962	15.57	1,170		Dec. 10, 1964	18.39	1,510
1963	Oct. 12, 1962	17.41	1,400		Dec. 22, 1964	28.09	3,430
	Nov. 12, 1962	16.72	1,310		Dec. 25, 1964	22.04	2,150
	Nov. 26, 1962	22.20	2,100		Jan. 5, 1965	21.89	2,120
	Dec. 2, 1962	19.48	1,690		Jan. 24, 1965	18.31	1,490
					Apr. 15, 1965	20.48	1,670

JACOBY CREEK BASIN

4800. Jacoby Creek near Freshwater, Calif.

Location.--Lat 40°47'30", long 124°00'10", 1m NW $\frac{1}{4}$ sec.30, T.5 N., R.2 E., on left bank 300 ft downstream from unnamed tributary, 3.7 miles northeast of Freshwater, and 6.5 miles southeast of Arcata.

Drainage area.--6.07 sq mi.

Gage.--Recording. Altitude of gage is 800 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 580 cfs and extended above on basis of critical-depth measurement at 1,490 cfs.

Remarks.--Only annual peaks are shown in 1955 and 1965. Base for partial-duration series, 300 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1955	Dec. 30, 1954	7.20	1,670	1959	Feb. 14, 1959	4.59	749
1956	Dec. 21, 1955	6.75	1,490	1960	Feb. 8, 1960	4.28	644
	Jan. 15, 1956	3.49	317	1961	Feb. 11, 1961	2.98	276
	Feb. 21, 1956	3.85	422	1962	Dec. 19, 1961	3.35	368
1957	Dec. 11, 1956	3.95	516		Jan. 19, 1962	3.43	389
	Mar. 4, 1957	3.64	429	1963	Nov. 26, 1962	3.27	348
	Mar. 11, 1957	3.87	494		Dec. 2, 1962	3.62	446
1958	Nov. 13, 1957	4.54	729	1964	Nov. 8, 1963	3.76	488
	Dec. 21, 1957	3.13	380		Jan. 6, 1964	4.01	563
	Jan. 29, 1958	3.36	370		Jan. 20, 1964	5.03	900
	Feb. 12, 1958	4.03	569	1965	Dec. 22, 1964	6.83	1,530
1959	Jan. 12, 1959	3.39	377				
	Jan. 27, 1959	3.31	357				

4805. Mad River near Forest Glen, Calif.

Location.--Lat 40°27'30", long 123°30'35", in SW $\frac{1}{4}$ sec.16, T.1 N., R.6 E., on right bank 0.7 mile downstream from Lamb Creek and 7.0 miles northwest of Forest Glen.

Drainage area.--143 sq mi.

Gage.--Recording except for Jan. 13 to June 18, 1956, which was nonrecording. Prior to Dec. 23, 1955, at site 0.7 mile upstream at different datum. Jan. 13 to June 18, 1956, at former site at datum 4.17 ft lower than former datum. Datum of gage is 2,408.18 ft above mean sea level, datum of 1929, supplementary adjustment of 1956.

Stage-discharge relation.--Defined by current meter measurements below 1,300 cfs, and extended on basis of slope-conveyance study to 13,800 cfs prior to Dec. 23, 1955, and Jan. 13 to June 18, 1956. Defined by current-meter measurements below 8,100 cfs and extended above on basis of slope-area measurement at 39,200 cfs subsequent to June 18, 1956.

Remarks.--Peaks regulated by Ruth Reservoir (capacity, 42,000 acre-ft) beginning in July 1961. Only annual peaks are shown subsequent to 1961. Base for partial-duration series, 3,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1954	Nov. 23, 1953	10.41	3,960	1958	Dec. 28, 1957	7.42	3,230
	Jan. 17, 1954	16.02	12,900		Jan. 12, 1958	7.33	3,130
	Jan. 23, 1954	12.60	6,440		Jan. 29, 1958	11.26	9,440
	Jan. 28, 1954	14.50	9,560		Feb. 12, 1958	10.46	8,080
	Feb. 12, 1954	12.35	6,100		Feb. 15, 1958	9.56	6,550
	Mar. 9, 1954	10.19	3,760		Feb. 18, 1958	10.32	7,840
	Apr. 5, 1954	9.87	3,470		Feb. 24, 1958	10.60	8,320
1955	Dec. 31, 1954	8.96	2,700	1959	Jan. 9, 1959	9.67	7,220
1956	Dec. 6, 1955	10.32	3,880		Jan. 12, 1959	9.74	7,390
	Dec. 19, 1955	15.55	11,800		Feb. 16, 1959	9.83	7,620
	Dec. 22, 1955	23.6	39,200	1960	Feb. 8, 1960	14.93	16,400
	Jan. 15, 1956	18.9	9,440		Mar. 5, 1960	7.10	3,370
	Jan. 22, 1956	13.5	3,120	1961	Dec. 1, 1960	7.61	3,990
	Feb. 21, 1956	20.15	12,000		Dec. 17, 1960	7.68	4,080
1957	Feb. 24, 1957	10.73	8,570		Jan. 31, 1961	8.12	4,670
	Mar. 6, 1957	6.65	3,000		Feb. 11, 1961	8.14	4,700
	Mar. 12, 1957	7.22	3,290	1962	Feb. 18, 1962	5.18	1,380
1958	Nov. 14, 1957	9.41	6,300		Feb. 1, 1963	8.74	5,540
	Dec. 18, 1957	7.40	3,210		Jan. 20, 1964	9.93	7,300
	Dec. 21, 1958	9.21	5,960		Dec. 22, 1964	16.80	20,100

4808. North Fork Mad River near Korbek, Calif.

Location.--Lat 40°53'10", long 123°56'30", in SW $\frac{1}{4}$ sec.22, T.6 N., R.2 E., on left bank 0.5 mile downstream from Bald Mountain Creek, 1.2 miles northeast of Korbek, and 2.5 miles east of town of Blue Lake.

Drainage area.--40.5 sq mi.

Gage.--Recording. Altitude of gage is 250 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 6,100 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Base for partial-duration series, 1,500 cfs.

Peak stages and discharges of North Fork Mad River near Korbel, Calif.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1958	Nov. 13, 1957	15.50	6,520	1961	Feb. 11, 1961	8.90	2,520
	Dec. 21, 1957	11.93	3,700		Feb. 13, 1961	8.50	2,200
	Dec. 28, 1957	10.84	2,890		Mar. 25, 1961	7.88	1,750
	Jan. 12, 1958	8.68	1,520	1962	Dec. 19, 1961	13.20	5,760
	Jan. 29, 1958	13.43	4,970		Jan. 19, 1962	8.95	2,360
	Feb. 12, 1958	11.98	3,740	1963	Oct. 9, 1962	11.03	4,020
	Feb. 15, 1958	10.25	2,460		Nov. 12, 1962	9.89	3,110
	Feb. 24, 1958	8.98	1,550		Nov. 26, 1962	11.40	4,320
1959	Jan. 12, 1959	10.18	2,480		Dec. 2, 1962	12.82	5,460
	Jan. 27, 1959	12.62	4,230		Apr. 6, 1963	10.98	4,220
	Feb. 14, 1959	12.33	4,010		Apr. 12, 1963	8.41	2,210
	Mar. 30, 1959	8.76	1,510	1964	Nov. 8, 1963	15.55	8,080
1960	Feb. 8, 1960	16.17	7,170		Jan. 6, 1964	10.70	2,770
	Mar. 30, 1960	10.16	2,130		Jan. 17, 1964	9.07	1,710
	May 26, 1960	10.45	2,340		Jan. 20, 1964	15.75	8,400
1961	Nov. 25, 1960	9.43	2,990	1965	Dec. 22, 1964	20.02	ais,400
	Dec. 17, 1960	7.93	1,780				
	Jan. 31, 1961	8.57	2,260				

a Annual peak only.

4810. Mad River near Arcata, Calif.

Location.--Lat 40°54'35", long 124°03'35", in NW¹ sec.15, T.6 N., R.1 E., on right bank 100 ft upstream from bridge on U.S. Highway 299, 1.0 mile downstream from Warren Creek, and 2.8 miles northeast of Arcata.

Drainage area.--484 sq mi.

Gage.--Nonrecording prior to October 1913; recording subsequent to Aug. 15, 1950. Prior to October 1913, at site 0.1 mile upstream at different datum. Aug. 15, 1950, to July 23, 1956, at site 0.6 mile upstream at datum 6.00 ft higher. Datum of gage is 17.79 ft above mean sea level, datum of 1929, supplementary adjustment of 1956. Auxiliary gage 0.5 mile downstream at different datum.

Stage-discharge relation.--Defined by current-meter measurements below 5,200 cfs prior to October 1913; below 34,000 cfs and extended above on basis of slope-area measurement at 77,800 cfs for period Aug. 15, 1950, to July 23, 1956; defined below 23,000 cfs thereafter.

Bankfull stage.--38 ft.

Remarks.--Peaks regulated by Ruth Reservoir (usable capacity, 42,000 acre-ft) beginning in July 1961. Only annual peaks are shown prior to Oct. 1, 1950. Peaks for the years 1911-13 are maximum observed. Base for partial-duration series, 14,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1911	Jan. 19, 1911	22.00	14,800	1954	Nov. 23, 1953	16.85	30,600
1912	Jan. 25, 1912	24.7	21,200		Jan. 17, 1954	16.15	27,900
1913	Dec. 16, 1912	23.3	17,800		Jan. 28, 1954	14.65	22,700
1951	Oct. 28, 1950	16.32	29,000	1955	Dec. 31, 1954	19.92	48,300
	Dec. 3, 1950	15.74	26,600				
	Dec. 14, 1950	12.59	14,800	1956	Dec. 6, 1955	11.17	16,400
	Jan. 18, 1951	16.04	27,800		Dec. 19, 1955	14.99	29,800
	Jan. 21, 1951	17.23	33,100		Dec. 22, 1955	27.30	77,800
	Feb. 4, 1951	17.65	35,000		Jan. 15, 1956	16.95	36,600
1952	Dec. 1, 1951	14.35	20,900		Jan. 22, 1956	12.30	20,400
	Dec. 27, 1951	16.06	27,400		Feb. 21, 1956	17.65	39,200
	Dec. 29, 1951	12.68	15,800	1957	Dec. 11, 1956	12.70	17,100
	Feb. 1, 1952	19.52	42,100		Feb. 24, 1957	14.49	24,500
	Feb. 16, 1952	12.90	15,800		Feb. 26, 1957	13.36	19,700
1953	Dec. 7, 1952	14.74	22,200		Mar. 5, 1957	13.00	18,500
	Dec. 10, 1952	13.04	16,200		Mar. 11, 1957	13.70	21,100
	Jan. 9, 1953	15.49	25,200	1958	Nov. 13, 1957	17.64	44,900
	Jan. 17, 1953	26.15	75,000		Dec. 21, 1957	13.52	23,600
	Jan. 20, 1953	13.18	16,700		Dec. 28, 1957	11.70	15,800

Peak stages and discharges of Mad River near Arcata, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1958	Jan. 29, 1958	15.19	31,500	1962	Dec. 19, 1961	12.26	23,500
	Feb. 12, 1958	15.03	30,600				
	Feb. 15, 1958	13.55	20,300		Oct. 12, 1962	12.40	26,000
	Feb. 19, 1958	13.28	19,200		Nov. 26, 1962	10.78	19,100
	Feb. 24, 1958	14.96	30,300		Dec. 2, 1962	12.98	28,900
1959	Jan. 9, 1959	12.65	19,900	1963	Jan. 31, 1963	9.71	15,000
	Jan. 12, 1959	15.60	33,700		Apr. 6, 1963	9.90	16,200
	Jan. 27, 1959	12.73	20,200		Apr. 12, 1963	9.87	16,000
	Feb. 15, 1959	14.19	26,500		Apr. 15, 1963	9.55	14,900
1960	Feb. 8, 1960	17.85	48,000	1964	Jan. 20, 1964	16.04	39,200
1961	Nov. 25, 1960	12.16	16,600	1965	Dec. 10, 1964	11.20	16,600
	Dec. 17, 1960	11.08	14,700		Dec. 23, 1964	23.40	70,400
	Jan. 13, 1961	11.28	15,300		Jan. 6, 1965	10.32	15,800
	Feb. 11, 1961	13.80	24,200		Jan. 24, 1965	9.77	15,100

LITTLE RIVER BASIN

4812. Little River at Crannell, Calif.

Location--Lat 41°00'40", long 124°04'50", in NE¹ sec.8, T.7 N., R.1 E., on right bank at Crannell, 0.5 mile upsteem from Coon Creek and 9.1 miles north of Arcata.

Drainage area--44.3 sq mi.

Gage--Recording. Datum of gage is 17.62 ft above mean sea level, datum of 1929.

Stage-discharge relation--Defined by current-meter measurements below 2,700 cfs.

Bankfull stage--23 ft.

Historical data--Flood of Jan. 17, 1953, reached a stage of 15.7 ft, observed by an employee of Hammond Lumber Co.

Remarks--Base for partial-duration series, 1,500 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1956	Nov. 19, 1955	5.82	2,390	1961	Nov. 25, 1960	6.90	3,400
	Dec. 6, 1955	4.73	1,510		Dec. 17, 1960	5.00	1,790
	Dec. 18, 1955	6.37	2,920		Jan. 31, 1961	6.84	3,350
	Dec. 22, 1955	9.63	6,380		Feb. 10, 1961	6.27	2,830
	Jan. 15, 1956	8.84	5,430		Feb. 13, 1961	4.65	1,540
	Jan. 22, 1956	6.47	3,030		Mar. 25, 1961	4.39	1,360
	Jan. 27, 1956	5.12	1,800				
	Feb. 21, 1956	6.83	3,450		Dec. 19, 1961	8.26	4,780
					Jan. 19, 1962	5.98	2,570
1957	Dec. 11, 1956	8.90	5,500	1962	Oct. 9, 1962	6.66	3,180
	Feb. 26, 1957	6.85	3,470		Nov. 12, 1962	6.09	2,670
	Mar. 4, 1957	6.97	3,610		Nov. 26, 1962	7.70	4,190
	Mar. 11, 1957	9.96	6,800		Dec. 2, 1962	8.15	4,660
					Apr. 6, 1963	6.16	2,730
1958	Nov. 13, 1957	8.28	4,800	1963	Apr. 12, 1963	5.12	1,890
	Dec. 21, 1957	9.02	5,640				
	Dec. 28, 1957	5.89	2,540		Nov. 9, 1963	10.34	7,290
	Jan. 29, 1958	9.32	6,000		Jan. 6, 1964	6.04	2,630
	Feb. 12, 1958	7.93	4,420		Jan. 20, 1964	10.83	7,930
	Feb. 15, 1958	6.45	3,080				
1959	Jan. 12, 1959	6.67	3,190	1964	Nov. 28, 1964	5.3	2,030
	Jan. 27, 1959	6.90	3,400		Dec. 1, 1964	-	1,850
	Feb. 14, 1959	7.32	3,810		Dec. 10, 1964	7.72	4,140
	Feb. 18, 1959	4.41	1,380		Dec. 22, 1964	11.06	8,240
					Dec. 25, 1964	8.01	4,500
1960	Feb. 8, 1960	9.55	6,280	1965	Jan. 5, 1965	4.76	1,620
	Mar. 7, 1960	4.38	1,360		Jan. 11, 1965	5.36	2,080
	Mar. 30, 1960	5.69	2,340				
	May 26, 1960	6.52	3,060				

4815. Redwood Creek near Blue Lake, Calif.

Location.--Lat 40°54'20", long 123°48'55", in NE $\frac{1}{4}$ sec.15, T.6 N., R.3 E., on right bank 400 ft upstream from Lupton Creek and 9.1 miles east of town of Blue Lake.

Drainage area.--67.5 sq mi.

Gage.--Recording. Altitude of gage is 850 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 5,800 cfs.

Remarks.--Base for partial-duration series, 1,900 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1953	Jan. 17, 1953	15.3	-	1957	Oct. 30, 1956	7.16	3,100
1954	Nov. 23, 1953	11.35	8,310	Dec. 11, 1956	6.63	2,530	
	Dec. 3, 1953	6.60	2,480	Jan. 20, 1957	6.97	2,890	
	Jan. 17, 1954	7.75	3,550	Feb. 26, 1957	7.41	3,370	
	Jan. 22, 1954	6.56	2,450	Mar. 4, 1957	8.55	4,870	
	Jan. 28, 1954	7.36	3,160	Mar. 11, 1957	9.28	5,890	
	Feb. 12, 1954	5.79	1,980	1958	Nov. 13, 1957	10.78	7,960
	1955	Dec. 31, 1954	11.64		9,200	Dec. 17, 1957	6.10
1956		Dec. 6, 1955	7.01		2,960	Dec. 21, 1957	8.42
	Dec. 19, 1955	9.42	6,090		Dec. 28, 1957	7.84	4,100
	Dec. 21, 1955	13.68	12,100		Jan. 12, 1958	5.65	1,980
	Dec. 26, 1955	6.95	2,860		Jan. 29, 1958	8.20	4,350
	Jan. 4, 1956	6.18	2,080		Feb. 12, 1958	7.28	3,450
	Jan. 15, 1956	10.47	7,560	Feb. 15, 1958	7.70	3,940	
	Jan. 22, 1956	9.75	6,550	Feb. 18, 1958	6.73	2,890	
Feb. 21, 1956	9.75	6,550	Feb. 24, 1958	7.60	3,820		
				1965	Dec. 22, 1964	16.05	16,400

a Annual peak only.

4825. Redwood Creek at Orick, Calif.

Location.--Lat 41°17'20", long 124°03'30", in NE $\frac{1}{4}$ sec.4, T.10 N., R.1 E., on downstream side of left pier of bridge on U.S. Highway 101 at Orick, 0.9 mile downstream from Prairie Creek.

Drainage area.--278 sq mi.

Gage.--Nonrecording at different datum prior to Aug. 9, 1913; recording subsequent to October 1953. Altitude of gage is 10 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 24,000 cfs.

Bankfull stage.--22 ft.

Remarks.--Peaks for the years 1912-13 are maximum observed. Only annual peaks are shown prior to Oct. 1, 1953. Base for partial-duration series, 7,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)	
1912	Feb. 17, 1912	-	19,500	1956	Dec. 22, 1955	23.95	50,000	
1913	Nov. 6, 1912	-	12,500		Jan. 15, 1956	20.00	22,200	
1953	Jan. 18, 1953	23.95	50,000		Jan. 22, 1956	16.00	17,500	
					Feb. 21, 1956	18.05	20,000	
1954	Nov. 24, 1953	19.22	27,200	1957	Oct. 30, 1956	13.47	10,400	
	Jan. 16, 1954	15.50	16,200			Dec. 11, 1956	14.66	13,700
	Jan. 23, 1954	12.85	9,180			Jan. 20, 1957	12.71	8,500
	Jan. 28, 1954	14.35	13,100			Feb. 26, 1957	14.07	12,100
1955	Dec. 31, 1954	19.54	28,100		Mar. 5, 1957	14.16	11,700	
					Mar. 12, 1957	18.48	24,100	
1956	Nov. 19, 1955	12.22	8,770	1958	Nov. 13, 1957	17.94	22,200	
	Dec. 6, 1955	12.58	9,630			Dec. 21, 1957	16.58	17,600
	Dec. 19, 1955	14.78	15,000			Dec. 28, 1957	14.89	12,500

Peak stages and discharges of Redwood Creek at Orick, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1958	Jan. 29, 1958	17.30	20,000	1962	Jan. 19, 1962	13.00	8,540
	Feb. 12, 1958	15.88	15,300	1963	Oct. 9, 1962	12.64	7,820
	Feb. 15, 1958	15.99	15,700		Oct. 12, 1962	13.58	9,820
	Feb. 25, 1958	14.04	10,300		Nov. 27, 1962	12.70	7,940
1959	Jan. 12, 1959	16.52	17,500		Dec. 2, 1962	19.02	26,100
	Jan. 27, 1959	15.24	13,500		Feb. 1, 1963	12.71	7,960
	Feb. 15, 1959	16.04	15,900		Apr. 6, 1963	14.08	11,000
	Feb. 19, 1959	13.53	8,710		Apr. 15, 1963	-	9,000
1960	Feb. 8, 1960	18.70	24,900	1964	Nov. 8, 1963	19.18	26,600
	Mar. 30, 1960	12.66	7,920		Jan. 7, 1964	12.75	8,040
	May 26, 1960	13.40	9,480		Jan. 20, 1964	21.97	37,700
1961	Nov. 25, 1960	15.55	14,700	1965	Nov. 28, 1964	12.12	7,540
	Dec. 17, 1960	12.45	7,500		Dec. 1, 1964	13.56	10,700
	Jan. 31, 1961	12.64	7,710		Dec. 10, 1964	16.75	19,800
	Feb. 11, 1961	15.05	13,300		Dec. 22, 1964	24.0	50,500
	Feb. 13, 1961	13.03	8,580		Jan. 6, 1965	-	15,500
	Mar. 25, 1961	13.00	8,500		Jan. 11, 1965	-	14,000
1962	Dec. 19, 1961	17.81	21,800				

- Benson, M. A., 1962, Factors influencing the occurrence of floods in a humid region of diverse terrain: U.S. Geol. Survey Water-Supply Paper 1580-B, 64 p.
- _____, 1964, Factors affecting the occurrence of floods in the southwest: U.S. Geol. Survey Water-Supply Paper 1580-D, 72 p.
- Chow, Ven Te, 1950, Discussion of annual floods and the partial-duration flood series, by W. B. Langbein: Am. Geophys. Union Trans., v. 31, p. 939-941.
- Cruff, R. W., and Rantz, S. E., 1965, A comparison of methods used in flood-frequency studies for coastal basins in California: U.S. Geol. Survey Water-Supply Paper 1580-E, 56 p.
- Dalrymple, Tate, 1960, Flood-frequency analyses: U.S. Geol. Survey Water-Supply Paper 1543-A, 80 p.
- Fenneman, N. M., 1931, Physiography of western United States: New York, McGraw-Hill Book Co., 534 p.
- Langbein, W. B., 1949, Annual floods and the partial-duration flood series: Am. Geophys. Union Trans., v. 30, p. 879-881.
- Powell, R. W., 1943, A simple method of estimating flood frequency: Civil Eng., v. 13, p. 105-107.
- U.S. Geological Survey, 1959, Compilation of records of surface waters of the United States through September 1950, Part 11-B, Pacific slope basins in California, Central Valley: U.S. Geol. Survey Water-Supply Paper 1315-A, 459 p.
- _____, 1960, Compilation of records of surface waters of the United States through September 1950, Part 11-A, Pacific slope basins in California, except Central Valley: U.S. Geol. Survey Water-Supply Paper 1315-B, p. 461-874.
- _____, 1964, Compilation of records of surface waters of the United States, October 1950 to September 1960, Part 11, Pacific slope basins in California: U.S. Geol. Survey Water-Supply Paper 1735, 715 p.
- U.S. Weather Bureau, 1961, Rainfall frequency atlas of the United States: U.S. Weather Bur. Tech. Paper 40, 115 p.
- Young, L. E., and Cruff, R. W., 1967, Magnitude and frequency of floods in the United States, Part 11, Pacific slope basins in California, Volume 2, Klamath and Smith River basins and Central Valley drainage from the east: U.S. Geol. Survey Water-Supply Paper 1686. (In press.)

INDEX

	Page		Page
Adobe Creek near Kelseyville, Calif...	216	Cedar Creek near Bell Station, Calif...	48
Agua Dulce Creek near Lang, Calif.....	47	Chino Creek, near Chino, Calif.....	47
Alameda Creek near Niles, Calif.....	193	near Prado, Calif.....	94
Alameda Creek basin.....	192,193	City Creek near Highland, Calif.....	77
Alamitos Creek near Edenvale, Calif.....	185	Conejo Creek near Camarillo, Calif.....	123
Alamo Creek near Santa Maria, Calif.....	148	Conn Creek near St. Helena, Calif.....	226
Albion River near Comptche, Calif.....	49	Copsey Creek near Lower Lake, Calif....	49
Alder Creek near Manchester, Calif.....	49	Corral Hollow Creek near Tracy, Calif.....	204
Alisal Creek near Solvang, Calif.....	141	Corralitos Creek, at Freedom, Calif....	174
Aliso Creek, at El Toro, Calif.....	72	near Corralitos, Calif.....	173
near Santa Paula, Calif.....	47	Corte Madera Creek at Ross, Calif.....	230
Aliso Creek basin.....	47,72	Corte Madera Creek basin.....	230
Analysis of data.....	4	Cottonwood Creek, near Cottonwood, Calif.....	208
selection of gaging-stations.....	6	Middle Fork, near Ono, Calif.....	206
at a gaging station.....	7	North Fork, near Igo, Calif.....	207
hydrologic characteristics.....	9	near Ono, Calif.....	48
multiple-regression procedures.....	10	South Fork, near Cottonwood, Calif....	48
regional analysis.....	174	Coyote Creek (tributary to San Fran- cisco Bay), at Coyote, Calif.....	191
Aptos Creek at Aptos, Calif.....	174	near Edenvale, Calif.....	191
Aptos Creek basin.....	174	near Gilroy, Calif.....	191
Arroyo Conejo near Camarillo, Calif....	47	near Madrone, Calif.....	190
Arroyo de la Cruz near San Simeon, Calif.....	156	Coyote Creek (San Gabriel River basin) near Artesia, Calif.....	107
Arroyo de la Cruz basin.....	156	Coyote Creek (Ventura River basin), near Oak View, Calif.....	132
Arroyo de la Laguna near Pleasanton, Calif.....	48	near Ventura, Calif.....	133
Arroyo Grande, at Arroyo Grande, Calif.....	154	Coyote Creek basin.....	48,190,191
near Arroyo Grande, Calif.....	154	Cristianitos Creek near San Clemente, Calif.....	69
Arroyo Grande basin.....	154	Cucamonga Creek near Upland, Calif....	93
Arroyo Mocho, near Livermore, Calif....	48	Cuyama River, near Santa Maria, Calif..	147
near Pleasanton, Calif.....	48	near Ventucopa, Calif.....	146
Arroyo Seco near Greenfield, Calif.....	47	Dalton Creek near Glendora, Calif.....	103
Arroyo Seco (Los Angeles River basin) near Pasadena, Calif.....	114	Day Creek near Etiwanda, Calif.....	89
Arroyo Seco (Salinas River basin) near Soledad, Calif.....	165	De Luz Creek near Fallbrook, Calif.....	65
Arroyo Trabucco near San Juan Capi- strano, Calif.....	71	Del Puerto Creek, tributary No. 1 near Patterson, Calif.....	203
Arroyo Valle, at Pleasanton, Calif.....	193	tributary No. 2 near Patterson, Calif.....	204
near Livermore, Calif.....	192	Devil Canyon Creek near San Bernardino, Calif.....	85
Atascadero Creek near Goleta, Calif....	135	Discussion of results.....	28
Atascadero Creek basin.....	135	Dry Creek (Sacramento River basin) near near Cottonwood, Calif.....	48
Atherton Drainage Channel basin.....	181	Dry Creek (tributary to Napa River) near Napa, Calif.....	227
Ballona Creek near Culver City, Calif..	121	Dry Creek (tributary to Russian River), near Cloverdale, Calif.....	240
Ballona Creek basin.....	121	near Geyserville, Calif.....	49
Bautista Creek near Hemet, Calif.....	91	near Healdsburg, Calif.....	49
Bear Creek (tributary to Cache Creek) near Rumsey, Calif.....	219	tributary near Hopland, Calif.....	240
Bear Creek (San Gabriel River basin) near Camp Rincón, Calif.....	99	Dutcher Creek near Asti, Calif.....	241
Big River, near Mendocine, Calif.....	49	East Twin Creek near Arrowhead Springs, Calif.....	80
South Fork, near Comptche, Calif....	49	Eaton Creek near Pasadena, Calif.....	118
Big Sulphur Creek near Cloverdale, Calif.....	237	Eel River, above Dos Rios, Calif.....	249
Big Sur River near Big Sur, Calif.....	157	at Alderpoint, Calif.....	254
Big Sur River basin.....	157	at Scotia, Calif.....	257
Black Butte River near Covelo, Calif....	249	at Van Arsdale Dam, near Potter Valley, Calif.....	247
Boulder Creek near Lakeside, Calif.....	52	below Dos Rios, Calif.....	252
Branciforte Creek at Santa Cruz, Calif.....	178	Middle Fork, below Black Butte River, near Covelo, Calif.....	250
Brea Creek at Fullerton, Calif.....	107	near Covelo, Calif.....	252
Bull Creek near Weott, Calif.....	49	North Fork, near Mina, Calif.....	253
Cache Creek, at Yolo, Calif.....	219	South Fork, near Branscomb, Calif....	255
North Fork, near Lower Lake, Calif..	235	near Miranda, Calif.....	256
Cachuma Creek near Santa Ynez, Calif....	138	Eel River basin.....	247-261
Cajon Creek near Keenbrook, Calif.....	83	Elder Creek, at Gerber, Calif.....	210
Calleguas Creek near Camarillo, Calif.....	47	near Henleyville, Calif.....	210
Calleguas Creek basin.....	47,123	near Paskenta, Calif.....	209
Campo Creek near Campo, Calif.....	50	Elk Creek near Hearst, Calif.....	49
Carbon Creek near Yorba Linda, Calif....	95	Elk River near Falk, Calif.....	261
Carmel River, at Robles del Rio, Calif.....	158	Elk River basin.....	261
near Carmel, Calif.....	47	Estrella Creek near Estrella, Calif....	153
Carmel River basin.....	47,158	Feliz Creek near Hopland, Calif.....	236
Carpinteria Creek near Carpinteria, Calif.....	135		
Carpinteria Creek basin.....	135		
Castaic Creek near Castaic, Calif.....	47		

	Page		Page
Fine Gold Creek near Friant, Calif.....	200	Marsh Creek near Byron, Calif.....	205
Fish Creek near Duarte, Calif.....	102	Matadero Creek at Palo Alto, Calif.....	184
Flood records at gaging stations and miscellaneous sites.....	29	Matadero Creek basin.....	184
Fox Creek near Colby Ranch, Calif.....	111	Matilija Creek, at Matilija Hot Springs, Calif.....	130
Franz Creek near Kellogg, Calif.....	238	above Reservoir, near Matilija Hot Springs, Calif.....	130
Garcia River near Point Arena, Calif..	243	North Fork, at Matilija Hot Springs, Calif.....	131
Garcia River basin.....	243	Mattole River, near Petrolia, Calif....	245
Garzas Creek near Gustine, Calif.....	48	North Fork, at Petrolia, Calif.....	246
Guadalupe Creek at Guadalupe, Calif....	186	Mattole River basin.....	245, 246
Guadalupe River at San Jose, Calif.....	188	Maximum known floods.....	32
Guadalupe River basin.....	185-189	Middle Fork Tenmile River near Fort Bragg, Calif.....	49
Gualala River, South Fork, near Annapolis, Calif.....	243	Mill Creek (Eel River basin), below Alder Creek, near Covelo, Calif..	49
Guejito Creek near San Pasqual, Calif..	56	near Covelo, Calif.....	284
Haines Creek near Tujunga, Calif.....	112	Mill Creek (Santa Ana River basin), near Mentone, Calif.....	75
Happy Camp Creek at Moorepark, Calif.....	47	near Yucaipa, Calif.....	74
Highland Creek, above Highland Dam, Calif.....	49	Mountain House Creek, near Midway, Calif.....	205
near Kelseyville, Calif.....	216	tributary near Altamont, Calif.....	205
Honda Barranca near Somis, Calif.....	123	Murrieta Creek at Temecula, Calif.....	62
Hopper Creek near Piru, Calif.....	126	Nacimiento River, near Bryson, Calif...	162
Huasna River near Santa Maria, Calif..	149	near San Miguel, Calif.....	162
Huerfuerdo Creek near Creston, Calif....	161	Napa River near St. Helena, Calif.....	225
Hulls Creek near Covelo, Calif.....	49	Napa River basin.....	224-227
Jack Creek near Templeton, Calif.....	159	Navarro River near Navarro, Calif.....	244
Jacoby Creek near Freshwater, Calif....	262	Navarro River basin.....	244
Jacoby Creek basin.....	262	Nicasio Creek near Point Reyes Station, Calif.....	231
Jamul Creek near Jamul, Calif.....	50	Novato Creek near Novato, Calif.....	229
Kellogg Creek near Byron, Calif.....	48	Novato Creek basin.....	229
Kelsey Creek near Kelseyville, Calif..	217	Noyo River near Fort Bragg, Calif.....	245
La Brea Creek near Sisquoc, Calif.....	151	Noyo River basin.....	245
Lake Hennessey tributary near Ruther- ford, Calif.....	226	Orestimba Creek near Newman, Calif.....	202
Larabee Creek near Holmes, Calif.....	49	Outlet Creek near Longvale, Calif.....	248
Las Flores Creek near Oceanside, Calif.....	66	Pacheco Creek near Dunneville, Calif...	167
Las Flores Creek basin.....	66	Pacoina Creek near San Fernando, Calif..	109
Little Dalton Creek near Glendora, Calif.....	104	Pajaro River at Chittenden, Calif.....	172
Little Panoche Creek tributary No. 1 near Panoche, Calif.....	201	Pajaro River basin.....	167-174
Little River at Crannell, Calif.....	265	Panoche Creek below Silver Creek, near Panoche, Calif.....	200
Little River basin.....	265	Pescadero Creek near Pescadero, Calif..	179
Little San Geronio Creek near Beau- mont, Calif.....	78	Pescadero Creek basin.....	179
Little Santa Anita Creek near Sierra Madre, Calif.....	117	Petaluma River at Petaluma, Calif.....	228
Little Tujunga Creek near San Fer- nando, Calif.....	112	Petaluma River basin.....	228
Llagas Creek near Morgan Hill, Calif..	168	Peters Canyon Wash basin.....	72
Lone Pine Creek near Keenbrook, Calif..	84	Pine Creek at Concord, Calif.....	48
Los Angeles River, at Long Beach, Calif.....	120	Pinole Creek at Pinole, Calif.....	195
at Los Angeles, Calif.....	113	Pinole Creek basin.....	195
at Sepulveda Dam, Calif.....	108	Piru Creek, above Lake Piru, Calif....	125
near Downey, Calif.....	115	near Piru, Calif.....	125
Los Angeles River basin.....	108-120	Pleasants Creek near Winters, Calif....	49
Los Gatos Creek, above Nuez Canyon, near Coalinga, Calif.....	198	Plunge Creek near East Highlands, Calif.....	76
at Los Gatos, Calif.....	187	Procedure for estimating flood frequency.....	25
below Los Gatos, Calif.....	187	Pudding Creek near Fort Bragg, Calif...	49
near Coalinga, Calif.....	199	Purissima Creek near Half Moon Bay, Calif.....	180
Los Trancos Creek, at Stanford Univer- sity, Calif.....	182	Purissima Creek basin.....	180
tributary near Stanford University, Calif.....	182	Purpose and scope.....	1
Lytile Creek (east channel) at San Bernardino, Calif.....	86	Putah Creek, at Winters, Calif.....	223
Lytile Creek (west channel) at Colton, Calif.....	82	near Davis, Calif.....	223
Lytile Creek near Fontana, Calif.....	49	near Guenoc, Calif.....	221
Maacama Creek near Kellogg, Calif.....	264	near Winters, Calif.....	222
Mad River, near Arcata, Calif.....	263	tributary near Whispering Pines, Calif.....	221
near Forest Glen, Calif.....	263	Rancheria Creek near Boonville, Calif..	49
North Fork, near Korb, Calif.....	263	Red Bank Creek, above Last Change Creek, near Red Bluff, Calif.....	48
Mad River basin.....	263, 264	near Red Bluff, Calif.....	48
Malibu Creek at Crater Camp, near Calabasas, Calif.....	122	Redwood Creek, at Orick, Calif.....	266
Malibu Creek basin.....	122	near Blue Lake, Calif.....	266
Mark West Creek at Mark West Springs, Calif.....	241	Redwood Creek basin.....	266
		Robinson Creek near Ukiah, Calif.....	234
		Rogers Creek near Azusa, Calif.....	101
		Russian River, East Fork, near Cal- pella, Calif.....	233
		East Fork, near Ukiah, Calif.....	234
		tributary near Potter Valley, Calif..	232
		near Cloverdale, Calif.....	237

	Page		Page
Russian River, near Guerneville, Calif.....	242	San Mateo Creek, at San Onofre, Calif..	69
near Healdsburg, Calif.....	239	near San Clemente, Calif.....	68
near Hopland, Calif.....	235	San Mateo Creek basin.....	68, 69
near Redwood Valley, Calif.....	49	San Onofre Creek, at San Onofre, Calif..	67
near Ukiah, Calif.....	232	near San Onofre, Calif.....	67
Russian River basin.....	232-242	San Onofre Creek basin.....	67
Salinas River, at Paso Robles, Calif..	160	San Ramon Creek, at San Ramon, Calif..	196
near Bradley, Calif.....	164	at Walnut Creek, Calif.....	196
near Pozo, Calif.....	158	San Timoteo Creek, near Loma Linda, Calif.....	80
near Santa Margarita, Calif.....	47	near Redlands, Calif.....	79
near Spreckels, Calif.....	166	San Vicente Creek at San Vicente Dam, at Foster, Calif.....	52
Salinas River basin.....	47, 158-166	Sand Creek near Paraiso Springs, Calif.	47
Salmon Creek at Bodega, Calif.....	49	Santa Agueda Creek near Santa Ynez, Calif.....	139
Salispuedes Creek near Lompoc, Calif..	143	Santa Ana Creek, near Oak View, Calif..	47
Salt Creek near Williams, Calif.....	49	near Oak View, Calif.....	133
San Antonio Creek (Alameda Creek basin) near Sunol, Calif.....	48	Santa Ana River, at county line, below Prado Dam, Calif.....	94
San Antonio Creek (Santa Ana River basin) near Claremont, Calif....	92	at Riverside Narrows, near Arlington, Calif.....	88
San Antonio Creek (tributary to Pacific Ocean), at Harris, Calif.....	145	at Santa Ana, Calif.....	97
near Casimela, Calif.....	146	near Mentone, Calif.....	73
San Antonio Creek (Ventura River basin) at Casitas Springs, Calif.....	132	Santa Ana River basin.....	73-95
near Ojai, Calif.....	47	Santa Anita Creek near Sierra Madre, Calif.....	116
San Antonio Creek basin.....	47, 145, 146	Santa Clara River, at Los Angeles- Ventura County line, Calif.....	124
San Antonio River, at Pleyto, Calif.....	163	near Ravenna, Calif.....	47
at Sam Jones Bridge, near Lockwood, Calif.....	47	near Santa Paula, Calif.....	124
San Benito River, below McCoy Creek, near Hernandez, Calif.....	169	near Saugus, Calif.....	124-129
near Hollister, Calif.....	171	Santa Clara River basin.....	137
near Willow Creek School, Calif.....	170	Santa Cruz Creek near Santa Ynez Calif.	137
San Diego Creek near Irvine, Calif.....	72	Santa Margarita River, at Ysidora, Calif.....	65
San Diego River, at San Diego, Calif..	47	near Fallbrook, Calif.....	64
near Santee, Calif.....	53	near Temecula, Calif.....	63
San Diego River basin.....	47, 52, 53	Santa Margarita River basin.....	61-65
San Dieguito River at Lake Hodges, Calif.....	47	Santa Maria Creek near Ramona, Calif..	57
San Dieguito River basin.....	47	Santa Maria River at Guadalupe, Calif..	153
San Dimas Creek near San Dimas, Calif.	104	Santa Maria River basin.....	146
San Francisco Creek at Palo Alto, Calif.....	183	Santa Paula Creek near Santa Paula, Calif.....	129
at Stanford University, Calif.....	183	Santa Rita Creek near Templeton, Calif.	47
below Ladera damsite, near Stanford University, Calif.....	48	Santa Rosa Creek, (tributary to Pacific Ocean) near Cambria, Calif.....	155
near Saugus, Calif.....	47	Santa Rosa Creek (tributary to Russian River) near Santa Rosa, Calif....	49
tributary near Stanford University, Calif.....	181	Santa Rosa Creek basin.....	155
San Francisco Creek basin.....	47, 48, 181-183	Santa Ynez River, at barrier, near Surf, Calif.....	144
San Gabriel River, at Pico, Calif.....	106	at Solvang, Calif.....	141
East Fork, near Camp Bonita, Calif..	98	near Lompoc, Calif.....	144
near Azusa, Calif.....	100	near Santa Ynez, Calif.....	139
North Fork, at Camp Rincon, Calif..	99	Santa Ynez River basin.....	137-144
West Fork, at Camp Rincon, Calif..	99	Santa Ysabel Creek near Mesa Grande, Calif.....	54
San Gabriel River basin.....	98-107	near Ramona, Calif.....	55
San Jacinto River, near Elsinore, Calif.....	91	near San Pasqual, Calif.....	56
near San Jacinto, Calif.....	90	Santiago Creek, at Santa Ana, Calif....	96
San Jose Creek (tributary to Pacific Ocean) near Goleta, Calif.....	136	near Villa Park, Calif.....	96
San Jose Creek (tributary to San Gabriel River) near Whittier, Calif.....	105	Saratoga Creek at Saratoga, Calif.....	189
San Juan Creek near San Juan Capistrano, Calif.....	70	Sawpit Creek near Monrovia, Calif.....	116
San Juan Creek basin.....	70	Scott Creek, above Little Creek, near Davenport, Calif.....	179
San Lorenzo Creek (tributary to Salinas River) below Bitterwater Creek, near King City, Calif....	164	near Davenport, Calif.....	48
San Lorenzo Creek (tributary to San Francisco Bay), at Hayward, Calif.....	194	Scott Creek basin.....	179
San Lorenzo Creek basin.....	194	Scotts Creek near Lakeport, Calif.....	49
San Lorenzo River at Big Trees, Calif.	177	Selected references.....	268
San Lorenzo River basin.....	176-178	Sespe Creek, near Fillmore, Calif.....	128
San Luis Creek near Los Banos, Calif..	202	near Sespe, Calif.....	127
San Luis Rey River, at Lake Henshaw, near Mesa Grande, Calif.....	58	near Wheeler Springs, Calif.....	127
at Monserate Narrows, near Pala, Calif.....	59	Sharon Creek near Menlo Park, Calif..	181
at Oceanside, Calif.....	61	Short Creek near Covelo, Calif.....	252
near Bonsall, Calif.....	60	Sisquoc River near Garey, Calif.....	152
near Pala, Calif.....	59	near Sisquoc, Calif.....	150
West Fork, near Warner Springs, Calif.....	58	Slide Creek near Ukiah, Calif.....	235
San Luis Rey River basin.....	58-61	Sonoma Creek, at Boyes Hot Springs, Calif.....	228
		near Kenwood, Calif.....	227
		Sonoma Creek basin.....	227, 228
		Soquel Creek at Soquel, Calif.....	175
		West Branch, near Soquel, Calif.....	175
		Soquel Creek basin.....	175, 176
		Stevens Creek near Cupertino, Calif..	185
		Stevens Creek basin.....	185
		Stony Creek, above Stony Gorge Reser- voir, Calif.....	213
		below Black Butte Dam, near Orland, Calif.....	214

	Page		Page
Stony Creek, near Fruto, Calif.....	213	Van Duzen River, near Bridgeville,	
near Hamilton City, Calif.....	214	Calif.....	260
near Stonyford, Calif.....	48	near Dinsmores, Calif.....	258
Sulphur Creek near St. Helena, Calif..	224	South Fork, near Bridgeville, Calif..	259
Sweetwater River, near Dehesa, Calif..	47	Ventura River near Ventura, Calif.....	134
near Descanso, Calif.....	51	Ventura River basin.....	130-134
near Jamacho, Calif.....	47		
Sweetwater River basin.....	47-51	Warm Creek, at San Bernardino,	
		Calif.....	47
Temecula Creek, at Nigger Canyon,		Walker Creek near Tomales, Calif.....	49
near Temecula, Calif.....	62	North Fork, near Tomales, Calif.....	49
near Aguanga, Calif.....	61	Walnut Creek at Walnut Creek, Calif....	197
Tenmile Creek near Laytonville, Calif.	256	Warm Creek near Colton, Calif.....	86
Tepusquet Creek near Siquoc, Calif....	151	Warthan Creek, near Coalinga, Calif.....	48
Thomes Creek at Paskents, Calif.....	211	tributary No. 1 near Coalinga,	
Tomki Creek near Willits, Calif.....	49	Calif.....	199
Topanga Creek near Topanga Beach,		tributary No. 2 near Coalinga,	
Calif.....	121	Calif.....	199
Topanga Creek basin.....	121	Waterman Canyon Creek near Arrowhead	
Tres Pinos Creek near Tres Pinos, Calif.	171	Springs, Calif.....	81
Tujunga Creek, below Mill Creek, near		Williams Creek near Covelo, Calif.....	49
Colby Ranch, Calif.....	110	Willow Creek, South Fork, near Fruto,	
near Colby Ranch, Calif.....	110	Calif.....	48
near Sunland, Calif.....	111	Wolf Creek near Volta, Calif.....	201
Upper Penitencia Creek at San Jose,		Yager Creek near Carlotta, Calif.....	261
Calif.....	48		
Uvas Creek, near Gilroy, Calif.....	48	Zaca Creek at Buslilton, Calif.....	142
near Morgan Hill, Calif.....	168	Zanja de Cota Creek near Santa Ynez,	
		Calif.....	140
Van Duzen River at Bridgeville, Calif.	259	Zayante Creek at Zayante, Calif.....	176

