FLOODS
OF JANUARY AND FEBRUARY 1969 IN CENTRAL AND SOUTHERN CALIFORNIA

OPEN-FILE REPORT

U.S. DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
Water Resources Division
Menlo Park, California, 1969

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Los Angeles River at Los Feliz Boulevard bridge in Los Angeles, January 25, 1969. Bridge is about 5 miles north-northwest of Civic Center, near southeast corner of Griffith Park and southwest corner of Glendale. Griffith Park in background. Los Angeles Times photograph.

UNITED STATES
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By

A. O. Waananen

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ABSTRACT

Floods of unprecedented magnitude in late January and late February 1969 created havoc in the Santa Clara River and Santa Ynez River basins, and recordbreaking floods occurred in many other basins in central and southern California. The loss of 51 lives was directly attributable to the floods. Flood damage was estimated to be more than a quarter of a billion dollars.

The floods resulted from a series of storms in January and February, notably the heavy rains of January 18-22, 24-27, and February 22-25. Rain was particularly heavy in the San Bernardino, San Gabriel, Santa Monica, and Santa Ynez Mountains, and in the southern Sierra Nevada. Maximum precipitation of 33 inches was observed January 24-27 at Mount Baldy Notch in the San Gabriel Mountains; the total precipitation for January and February at this station was nearly 85 inches.

Peak discharge in streams in coastal basins west of Los Angeles generally exceeded the record flows of March 1938, while those in basins east of Los Angeles approached or equaled the 1938 flows. The peak discharges of 165,000 cfs (cubic feet per second) January 25 in Santa Clara River at Saticoy and 100,000 cfs in Santa Ynez River near Lompoc far exceeded the previous maximum flows of record.

The suspended-sediment concentration and discharge observed in several streams greatly exceeded any previously observed. The maximum concentration observed was 75,000 mg/l (milligrams per liter) in Santa Clara River at Saticoy, but peak concentration was estimated to be as high as 160,000 mg/l. Erosion of streambanks, channels, and flood-plain areas and the deposition of sediment and other debris were particularly severe. Mudslides in canyon areas added to the problems. An estimated load of more than 150,000 tons of dissolved solids was discharged to the sea January 18-31 by the Santa Clara River.

Ground-water levels showed substantial rises following the floods as a result of percolation of storm runoff and floodflows, notably in alluvial-fan areas such as the foothills of the San Gabriel Mountains.

INTRODUCTION

Recordbreaking floods in January and February 1969, caused by a series of storms between January 18 and February 25, brought widespread and severe damage to large areas in central and southern California. The major flood-affected area, shown in figure 1, includes the basins of many streams that have their sources in the central and south-coastal ranges, and the southern part of the San Joaquin Valley and the southern Sierra Nevada foothills ranging from the Kern River basin on the south to the Mariposa Creek basin north of Fresno.

The floods were generally the greatest in 30 years of record, and in southern California approached the magnitude of the great flood of March 1938. In a few major streams such as the Santa Clara, Santa Ynez, and Salinas Rivers the flows exceeded any prior peak flows of record, and may have approached the magnitude of the legendary floods of 1861-62.

Purpose and Scope

Agencies concerned with flood control, the alleviation of flooding, or the design of structures within the reach of floodwaters are planning measures, both emergency and long range, for further reduction of damage from future floods of comparable magnitude. These agencies require prompt information on the magnitude of the 1969 floods for use in planning and design. In recognition of the pressing need for information on floodflows, this interim report presents a summary of pertinent streamflow and sediment data obtained by the U.S. Geological Survey as of March 31, 1969.

The streamflow and sediment data presented are provisional. The areal coverage for streamflow data is not complete as the time available before the deadline date for this report was insufficient to permit computation of discharge-hydrograph data for many of the gaging stations within the flood area. Many of these stations also were inoperative after the flood. Consequently, detailed flood-hydrograph data are tabulated only for the selected gaging stations shown in figure 2. Values of peak stage, peak discharge, and recurrence interval, however, are listed for these and other gaging stations. The list of peak discharges is not complete for all gaging stations operated in the area of severe flooding because indirect measurements of peak discharge were necessary at many sites, and some computations remained to be completed.

Sediment data are included for all sediment-sampling stations operated by the Geological Survey in the flood-affected area. Detailed suspended-sediment data for selected stations (fig. 2) are included with the detailed streamflow data for these sites.

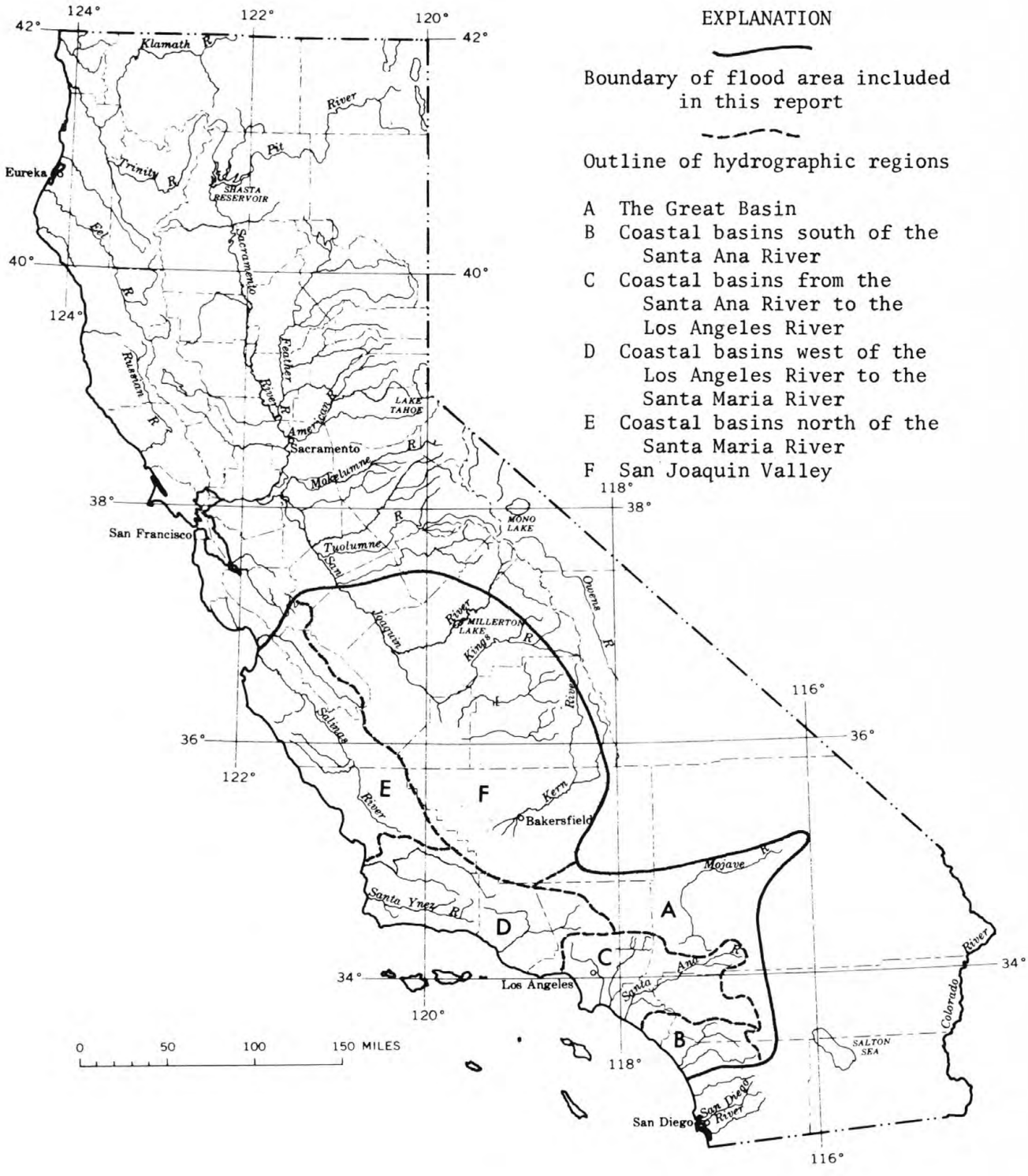

FIGURE 1.--Area affected by flooding in January and February 1969 and the hydrographic regions used in this report.

FIGURE 2.--Location of gaging stations for which detailed discharge and suspended-sediment data are given in this report.

To facilitate presentation of the data, the flood-affected area has been divided into six hydrographic regions, as outlined and named in figure 1. The gaging stations for which data are tabulated are numbered in downstream order, in accordance with the permanent numbering system used by the Geological Survey. In text references, the station identification includes the network number shown in parentheses, as Palm Canyon Creek near Palm Springs, Calif. (10-2585).

Acknowledgments

The data in this report were collected as part of the cooperative programs between the U.S. Geological Survey and several Federal, State, county, and municipal agencies. The report was prepared by the Geological Survey, Water Resources Division, under the general direction of R. Stanley Lord, district chief in charge of water-resources investigations in California.

The cooperation of the U.S. Weather Bureau, U.S. Army Corps of Engineers, and county flood-control districts in central and southern California in furnishing unpublished precipitation, streamflow, and reservoir data and estimates of flood damage is gratefully acknowledged.

DESCRIPTION OF THE STORMS

Southern California was experiencing an unseasonal drought until about January 11, 1969. December precipitation in southern California and in a few areas in the central part had been less than normal for the month, with that at the Los Angeles Civic Center only 45 percent of normal. Precipitation in basins on the east side of the San Joaquin Valley in central California, however, had been above normal, notably at the higher altitudes in the Sierra Nevada. Early January precipitation was minor. Subsequent to January 11 a series of major storms struck California, in January and again in February. These produced heavy rain and caused resultant severe floods.

January Storms

The first significant storm in January struck central and southern California January 13. Moderate precipitation occurred principally January 13 and 14.

A series of storms that began January 18 and continued until January 27 brought warm rain to a wide area of California. These storms were caused by a strong flow of warm, moist air originating in the tropical zone southwest of southern California. They occurred as a series of Pacific storms that crossed the central and southern parts of the State at about 12-hour intervals. A brief high-pressure ridge of air moved through on January 22-23 and caused a break in the 10-day storm period. Total precipitation January 18-27 averaged 10-15 inches in the lowlands in southern California--and less on the San Joaquin Valley floor--but exceeded 30-35 inches in mountain areas. The greatest rainfall totals, more than 45 inches, were observed at Opids Camp and Mount Baldy in the San Gabriel Mountains north and east of Los Angeles and at San Marcos Pass in the Santa Ynez Mountains north of Santa Barbara. Daily rainfall as great as 15.56 inches occurred at Opids Camp in Los Angeles County, and 14.52 inches was observed at a site 6.5 miles north of Carpinteria in Santa Barbara County, as reported by the U.S. Weather Bureau. Despite the large daily and storm totals the precipitation intensities during the storms were mostly moderate, with few sites or periods with hourly precipitation greater than 1 inch. The greatest precipitation observed for the month of January was 53.70 inches at the community of Mount Baldy Notch in San Bernardino County.

The storm precipitation January 18-27 occurred during two distinct storm periods, January 18-22 and January 24-27. The distribution of precipitation during these periods is shown in the isohyetal maps in figures 3 and 4. The isohyetal maps are highly generalized, as orographic influences cause wide variations in precipitation over small areas in the part of the State affected by these storms and floods. Daily precipitation totals January 18-22 ranged from less than 1 inch at some stations, notably those in desert areas, to more than 10 inches in the San Gabriel Mountains. Storm totals exceeded 24 inches at several sites, with a maximum of 27.29 inches reported at the Giant Forest in Sequoia National Park. Daily precipitation January 24-27 ranged from less than 1 inch in the desert areas to more than 14 inches in the San Bernardino, San Gabriel, and Santa Ynez Mountains, and 1-day totals of more than 10 inches were observed at many reporting stations. The storm totals for this storm exceeded 24 inches at several sites, with a maximum of 33.15 inches reported at the community of Mount Baldy Notch. The maximum daily and total precipitation for each storm, the total for January 18-27, and the monthly totals for January and February at selected stations in the report area are given in table 1.

Precipitation in the Sierra Nevada was heavy during the storm periods, as shown in figures 3 and 4, and occurred generally as rain over a large part of the east-side San Joaquin Valley basins, but as snow at altitudes above 7,000 feet.

Precipitation data indicate that the month of January 1969 was the wettest January in many years at most of the reporting stations in central and southern California, and at some the wettest month of record. New records for rainfall amounts were established at many points.

February Storm

Recurrent precipitation during February, heavy at times, culminated with heavy rain February 22-25 that produced much above normal precipitation totals for the month that approached or exceeded records in several areas in California. At Fresno in the San Joaquin Valley the month was the wettest February of record. In the south-coastal area the totals for the month averaged 150 percent of normal. In southern California an average of 8-12 inches of rain occurred during February in the lowland areas and 20-25 inches in mountain areas. Rainfall intensities were generally moderate, but a 24-hour total of 13.48 inches was recorded February 24-25 at Opids Camp and 12.55 inches at Cogswell Dam, both in the San Gabriel Mountains. Temperatures during the periods of heavy precipitation in February were cooler than in January with the snow levels at altitudes as low as 5,000 feet above mean sea level. As a result a substantial part of the precipitation at the high altitudes in the mountains occurred as snow, and record snow accumulations occurred at many locations in the Sierra Nevada.

The precipitation distribution during the storm period February 22-25 is shown by the isohyets in figure 5, and data for selected stations are listed in table 1. Storm totals reached 24.50 inches at Matilija Canyon in the Santa Ynez Mountains north of Ventura and 23.86 inches at Lake Arrowhead in the San Bernardino Mountains.

Total precipitation reported for the 2-month period January-February 1969 reached a maximum of 84.65 inches at Mount Baldy Notch, 81.86 inches at Lake Arrowhead, and 78.78 inches at Opids Camp. At Los Angeles the combined January-February precipitation was the largest 2-month total since that of February-March 1884.

TABLE 1.--*Precipitation, in inches, at selected stations during January and February 1969*

[Data from U.S. Weather Bureau. Dates shown refer to those in Climatological Data reports of the U.S. Weather Bureau]

Precipitation station and subbasin	Altitude (feet)	January 18-22		January 24-27		Total January 18-27	January total	February 22-25		February total
		Maximum 1-day	Storm total	Maximum 1-day	Storm total			Maximum 1-day	Storm total	
The Great Basin										
Nightingale (Whitewater River)	4,025	0.30	0.71	1.70	1.90	2.61	3.45	0.35	0.77	3.54
Morongo Valley (Whitewater River)	2,580	1.37	3.16	4.64	6.96	10.17	11.37	1.12	2.03	4.93
Mount San Jacinto WSP (Whitewater River)	8,417	3.07	5.44	6.59	9.61	15.05	18.30	3.97	9.97	16.65
Palm Springs (Whitewater River)	411	.37	.79	2.17	2.61	3.40	3.79		.56	1.56
Lake Arrowhead (Mojave River)	5,205	5.14	15.53	14.24	25.66	41.19	45.92	9.75	23.86	35.94
Hesperia (Mojave River)	3,195	1.41	2.16	1.64	3.09	5.25	5.31	2.40	6.03	6.07
Big Pines Park FC838 (Antelope Valley)	6,862	4.09	9.39	5.74	13.65	23.04	25.47	6.96	14.25	20.18
Fairmont (Antelope Valley)	3,060	3.45	6.49	3.03	7.15	13.92	14.40	6.34	9.84	14.69
Coastal basins south of the Santa Ana River										
Escondido (Escondido Creek)	660	.72	1.67	2.17	3.35	5.02	7.23	1.05	2.97	6.43
Henshaw Dam (San Luis Rey River)	2,700	2.25	5.44	5.14	9.36	15.38	19.09	3.48	9.82	16.72
Palomar Mountain Observatory (San Luis Rey River and Santa Margarita River)	5,545	2.69	5.61	8.00	14.63	20.41	25.78	6.00	13.27	24.23
Oceanside (San Luis Rey River)	84	.43	1.01	1.67	2.96	3.97	5.11	1.88	3.55	6.42
Temecula (Santa Margarita River)	970	1.43	3.11	4.05	7.38	10.54	-	3.52	8.57	13.81
Laguna Beach (Aliso Creek)	35	1.33	2.89	2.62	3.66	6.55	7.90	2.38	6.23	9.06
Coastal basins from the Santa Ana River to the Los Angeles River										
Big Bear Lake (Santa Ana River)	6,745	3.77	6.55	9.40	14.50	20.96	24.87	6.43	12.80	19.89
Mount Baldy Notch (Santa Ana River)	7,735	7.35	16.80	14.00	33.15	49.95	53.70	6.45	14.75	30.95
Riverside Fire Station R3 (Santa Ana River)	840	.59	1.59	2.19	3.51	5.10	6.76	2.41	5.27	8.00
Elsinore (San Jacinto River)	1,285	2.11	3.12	3.59	4.93	8.05	9.40	2.97	7.09	11.65
Corona (Santa Ana River)	710	1.22	3.28	3.66	5.71	8.99	10.90	2.60	6.08	9.08
Colbys FC53D (Los Angeles River)	3,675	7.51	12.40	11.91	19.15	31.55	33.12	10.13	18.29	25.65
Los Angeles Civic Center (Los Angeles River)	270	3.30	6.65	3.43	6.25	13.15	14.94	2.11	3.83	8.03

Coastal basins west of the Los Angeles River to the Santa Maria River										
Topanga Patrol Station FC6 (Topanga Creek)	745	5.81	13.25	9.54	14.20	27.45	31.62	3.23	6.57	11.99
Piru 2ESE (Santa Clara River)	730	2.20	6.29	4.54	7.82	15.27	16.93	3.86	6.50	10.42
Piedra Blanca Guard Station (Santa Clara River)	3,065	6.71	20.28	8.65	13.50	34.28	35.68	10.00	14.44	21.98
Matilija Canyon (Ventura River)	1,540		24.86		18.50	43.86			24.50	
Gibraltar Dam No. 2 (Santa Ynez River)	1,550	6.47	14.97	9.19	14.70	29.67	31.18	6.69	11.78	18.23
Salsipuedes Gaging Station (Santa Ynez River)	250	2.27	6.25	2.72	3.84	10.60	11.82	1.52	2.91	7.86
Cuyama (Santa Maria River)	2,255	.69	1.28	.73	1.20	2.48	3.01	1.66	2.58	4.13
Twitchell Dam (Santa Maria River)	582	1.46	5.30	2.42	4.62	10.01	11.44	1.82	3.95	8.36
Coastal basins north of the Santa Maria River										
Arroyo Grande (Arroyo Grande)	105	-	5.81	2.06	3.14	9.41	10.71	2.30	4.14	8.05
Big Sur State Park (Big Sur River)	235	6.85	12.32	3.03	5.69	18.65	23.50	1.63	4.96	17.61
Santa Margarita 25W (Salinas River)	1,200	5.49	11.07	3.20	7.53	18.95	21.67	4.47	7.83	15.81
San Antonio Mission (Salinas River)	1,060	2.50	6.76	2.75	5.69	12.76	15.36	2.40	4.06	10.10
Priest Valley (Salinas River)	2,300	3.60	8.00	3.37	5.58	13.86	16.89	3.25	5.47	10.66
Spreckels Highway Bridge (Salinas River)	60	1.76	4.35	1.30	2.93	7.75	9.10	.61	2.22	6.48
Hollister 1SW (San Benito Creek)	279	1.35	2.88	1.68	2.86	6.08	7.57	1.05	2.10	5.29
San Joaquin Valley										
Johnsondale (Kern River)	4,680	3.56	11.43	5.33	11.08	22.55	24.94	3.93	6.40	12.39
Delano (Tulare Lake)	323	1.87	2.72	1.08	1.60	4.32	5.36	1.55	2.08	3.55
Springville 7ENE (Tule River)	2,470	3.12	8.53	3.34	6.42	15.44	17.36	4.47	6.21	14.74
Grant Grove (Kings River)	6,600	7.51	21.49	6.68	11.89	34.46	38.18	5.66	9.04	18.55
Coalinga 14WNW (Tulare Lake)	1,640	2.79	6.47	2.43	4.42	11.15	13.26	3.60	5.28	9.33
Auberry 1NNE (San Joaquin River)	2,006	3.20	8.09	2.25	3.42	11.70	14.43	2.87	5.04	10.94
Panoche (San Joaquin River)	1,265	1.00	1.96	1.10	2.09	4.38	5.18	1.74	2.52	4.85

Isohyets by U.S. Geological Survey; data from U.S. Weather Bureau

FIGURE 3.--Isohyets of total precipitation January 18-22, 1969, in the flood area.

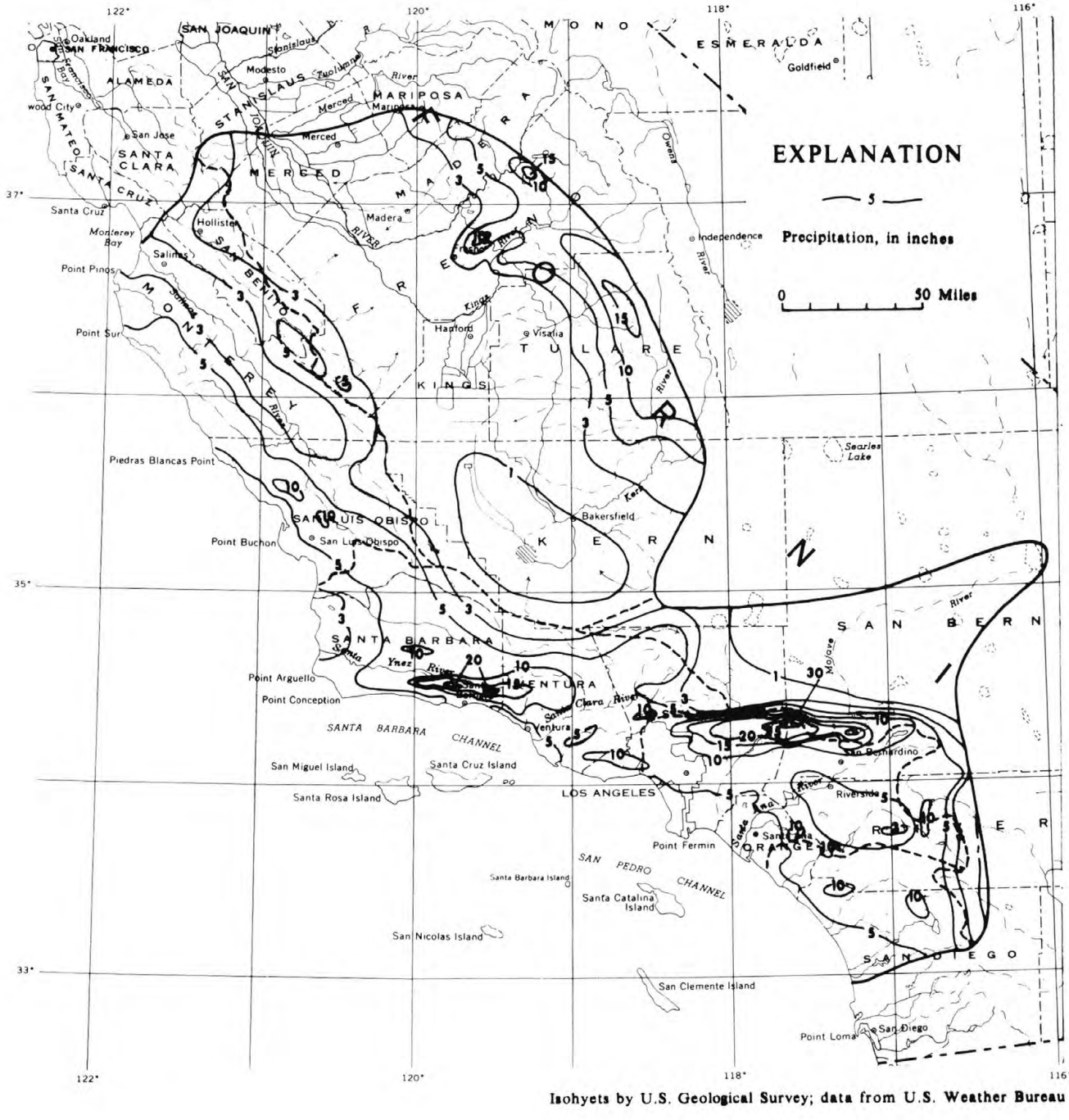

FIGURE 4.--Isohyets of total precipitation January 24-27, 1969, in the flood area.

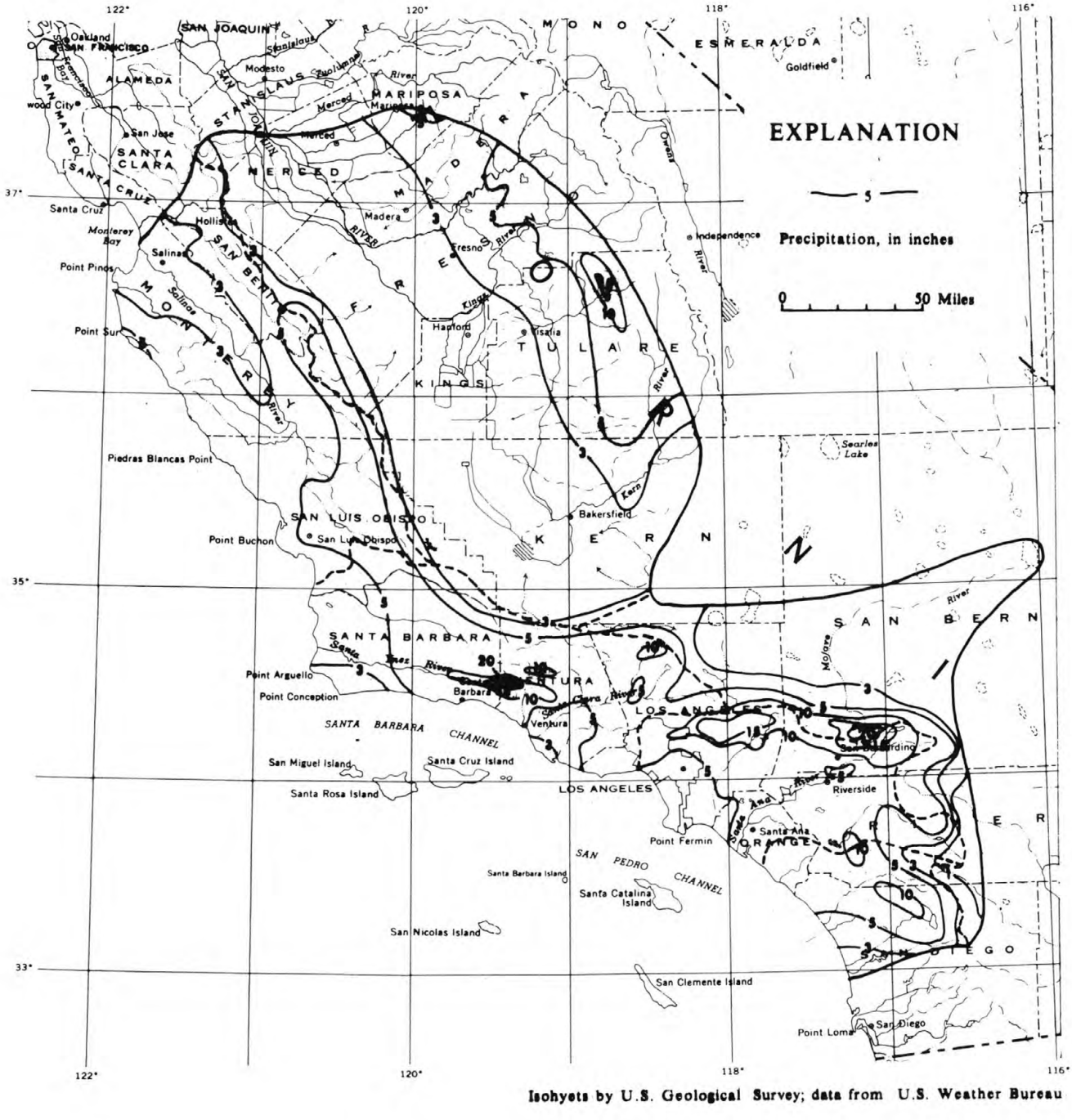

FIGURE 5.--Isohyets of total precipitation February 22-25, 1969, in the flood area.

DESCRIPTION OF THE FLOODS

Heavy rain January 18-22 (fig. 3) brought widespread but generally moderate flooding in central and southern California. Flooding and associated damage was severe, however, in localized areas, notably at San Luis Obispo and in the Glendora-Azusa foothill area of the San Gabriel Mountains. Ten campers lost their lives when trapped by the rising water of Sespe Creek in Ventura County, and four other drownings were reported elsewhere in the region.

Then, with only one day of relief, the storm of January 24-27 produced extremely heavy precipitation over the same area (fig. 4). The rain during the January 18-22 storm had saturated the soils over much of the area covered by this report and created conditions that were favorable for heavy runoff. The time distribution of precipitation during the January 24-27 storm was conducive to rapid and intense runoff, as the heaviest precipitation occurred near the end of the storm when streams already were carrying high floodflows. The resulting floods were extreme, and the effects were catastrophic. Runoff in mountain and foothill areas in the San Gabriel Mountains and coastal areas west of Los Angeles was extremely heavy. Bridges, roads, and streets were washed out; rail transportation was interrupted; homes were destroyed or damaged; and severe landslides occurred. Twenty-five lives were lost as a direct result of the floods, and about 10,000 persons were evacuated from their homes. Sediment and other debris carried by the streams created additional problems.

The flood of January 25, 1969, was generally comparable to that of March 1938. The 1938 flood had been the most damaging flood of recent times in southern California, at least since the legendary flood of 1861-62, and the peak discharges have been widely used as a standard for comparing flood magnitudes. In Los Angeles County the 1938 and 1969 floods were comparable. East of Los Angeles County the 1938 flood was greater while west of Los Angeles County the 1969 flood was greater. In the Santa Clara, Ventura, and Santa Ynez river basins, in Ventura and Santa Barbara Counties, the floodflows were of unprecedented magnitude. Major floodflows that approached or exceeded prior record flows occurred also in central-coastal and San Joaquin Valley streams, notably in the Salinas River and Kings River basins.

Intermittent precipitation, sometimes heavy, that coninued throughout February maintained saturated soil conditions. Severe floods recurred as a result of the February 22-25 storm (fig. 5). This storm was generally lighter than the January storms, but it was heavier south of Los Angeles. Extreme flooding occurred in the Santiago Creek and the lower Santa Ana River basins in Orange County. Flows in the Santa Clara River and Santa Ynez River basins again exceeded maximum flows of record prior to 1969, and new record flows occurred in the Salinas River. Twelve lives were lost as a direct result of the February floods. Flood damage was severe, and extensive losses resulted from new mudslides and debris flows and the recurrence of erosion and slides in areas damaged in January.

Erosion was particularly severe in southern California in areas that have steep slopes and sparse vegetation. The erosion was often accompanied by landslides in canyon areas and on slopes denuded when vegetation was destroyed by recent fires. Tremendous quantities of sediment were transported by the streams. Part of this sediment was derived from the beds and banks of the streams, as shown by the damage to embankments, levees, banks, and channels and by the scour that caused failure and destruction of bridge abutments, piers, and approaches. Floating debris combined with high sediment discharge--composed of materials that included boulders as much as several feet in diameter--clogged channels at many bridges and culverts. The overtopping and erosion of bridge approaches and highway embankments were common and contributed to the loss of many highway bridges and structures and damage to roadways.

Suspended-sediment concentration and discharge in many streams greatly exceeded any previously measured in the flood-affected area. Suspended-sediment concentration reached a maximum of about 160,000 mg/l (milligrams per liter) January 25 in the Santa Clara River at Saticoy (11-1139.2) and the maximum daily sediment discharge was 20,000,000 tons January 25.

Corollary to the transport of sediment by streams is the deposition of sediment with decrease in the transporting ability of the streams. Sediment deposits several feet thick were left on flood plains, on flooded streets and highways, and in inundated homes and yards. In foothill areas along the San Gabriel and Santa Ynez Mountains, for example, great quantities of sediment, including boulders, transported by the torrents of debris- and sediment-laden water were deposited on streets and lawns and in homes. Large quantities of sediment also were deposited in reservoirs and in the lower reaches of rivers.

Despite the high floodflows during the January and February floods the operation of reservoir storage and the extensive flood-control facilities available in many parts of the report area substantially reduced the magnitudes of floodflows in many critical areas, thereby preventing much additional damage.

The floods in each hydrographic region of the flood-affected area are described briefly in the sections that follow. The discussions include references to streamflows generally and to suspended-sediment concentration and discharge when pertinent.

The Great Basin

The Great Basin streams in the flood-affected area are those that drain the interior slopes of the coastal ranges from the Whitewater River basin to Antelope Valley. The lower Mojave River basin is included in the area of flooding (fig. 1) as major flow occurred along the main stem and reached Soda Lake and Silver Lake.

Precipitation January 18-22 in the region was generally light and produced relatively minor runoff. Heavy rains January 24-27, however, caused intensive runoff comparable to that in November and December 1965. Flooding was severe in the Palm Springs area with extensive damage to highways and residential property. High flows occurred in the Mojave River and Antelope Valley basins also with heavy damage to highways, bridges, and ranch properties. (See figs. 6 and 7.)

The peak discharge of 2,900 cfs (cubic feet per second) January 25 in Tahquitz Creek near Palm Springs (10-2580) duplicated the maximum discharge of record established in November 1965, and the 1,490 cfs in Palm Canyon Creek near Palm Springs (10-2585) was almost identical to that in November 1965. The peak discharge of 16,200 cfs January 25 in Whitewater River at White Water (10-2560), however, was only 68 percent of that in 1965 and 39 percent of the record flow in March 1938. Discharge hydrographs for the January and February floods in Palm Canyon Creek near Palm Springs and Deep Creek near Hesperia (10-2605) are shown in figure 8.

Snow Creek near White Water (10-2565), west of Palm Springs, had a peak discharge of 13,000 cfs January 25, equivalent to a runoff of 1,200 cfs per sq mi (cubic feet per second per square mile).

In the Mojave River basin the floodflows January 25 and 26 were somewhat greater than those in 1965, with the peak discharge of 23,000 cfs in Deep Creek near Hesperia the highest discharge since the record peak flow of 46,600 cfs in March 1938. At Barstow (10-2625) the Mojave River reached a peak discharge January 25 of 29,000 cfs, 45 percent of the record discharge in March 1938. The highest flows since at least 1938 reached the lower Mojave River, with a peak flow of 18,000 cfs January 26 at Afton (10-2630), and continued through Soda Lake and the town of Baker to Silver Lake. Widespread flooding occurred in the Mojave River lowlands, and water was waist deep in Baker. Many persons were forced to flee from their homes in the lowlands and all bridges and crossings between Victorville and Barstow were impassable.

Heavy rains February 22-25 in the mountain areas caused a recurrence of severe flooding in the upper Whitewater River and the Mojave River basins. Deep Creek near Hesperia had a peak discharge of 17,600 cfs February 25, less than that in January, while the 20,000 cfs in West Fork Mojave River near Hesperia (10-2610) was 152 percent of the peak flow in January but only 76 percent of that in March 1938. Flows in the lower Mojave River were closely comparable to the high flows in January.

FIGURE 6.--Floodflow in the Mojave River near Victorville, flood of January 25, 1969. Photograph by Daily Press, Victorville, Calif.

FIGURE 7.--Highway bridge over Mojave River near Helendale, destroyed by flood of January 25, 1969. Photograph by Daily Press, Victorville, Calif.

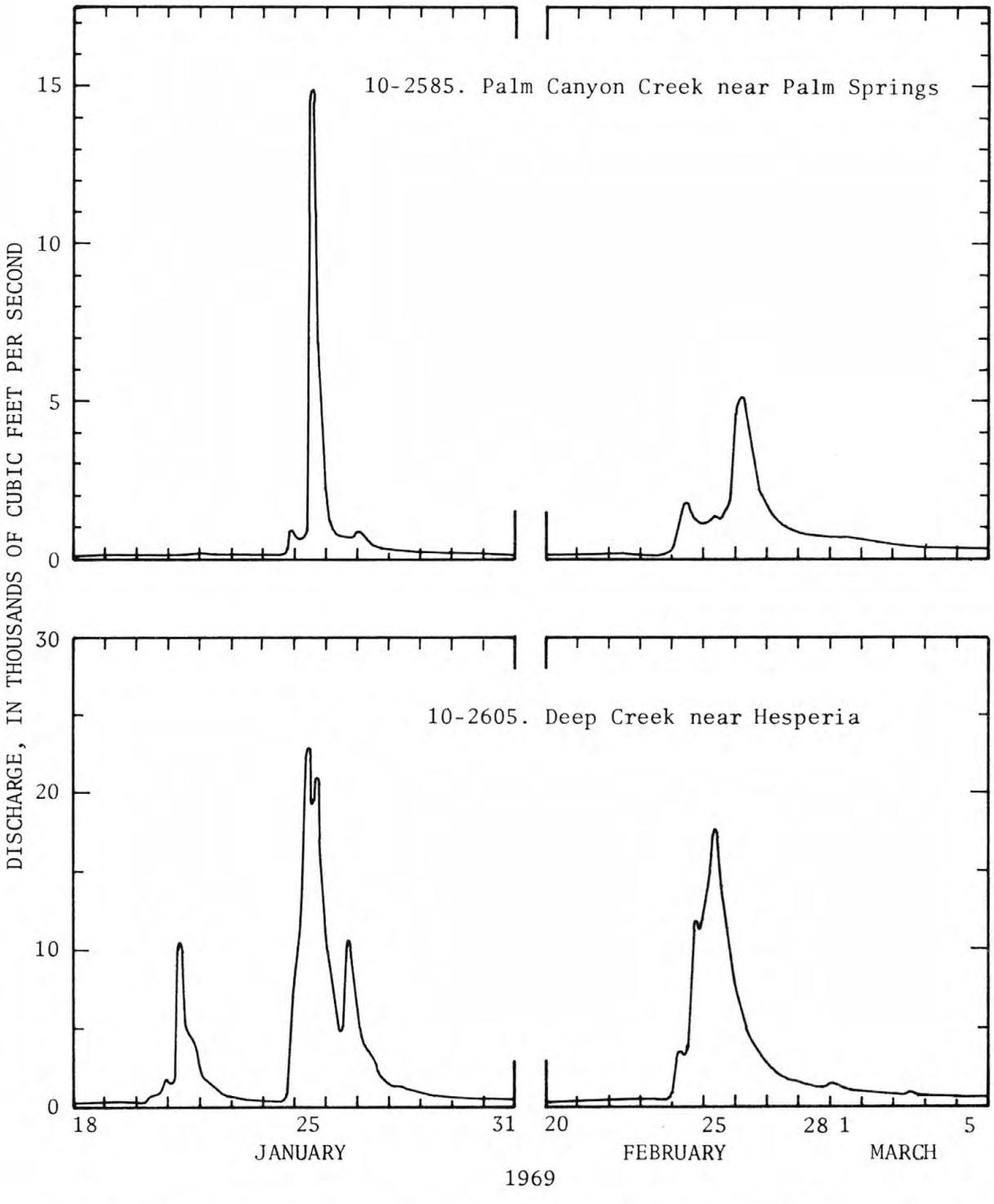

FIGURE 8.--Discharge hydrographs for selected streams in the Great Basin, January 18-31 and February 20-March 5, 1969.

Coastal Basins South of the Santa Ana River

The principal streams in the coastal basins south of the Santa Ana River within the flood-affected area include the San Dieguito, San Luis Rey, and Santa Margarita Rivers and San Juan Creek.

Precipitation January 18-22 and January 24-27 in this hydrographic region was generally lighter than in areas north of Los Angeles, but was great enough to cause significant flooding. Runoff from the January 18-22 storm was minor. The partial saturation of the soils, however, created conditions favorable for high runoff from the rain January 24-27. In general, the resulting floodflows in many streams exceeded the maximum flows of 1965 and 1966 but not the long-time record flows.

Peak discharge of Santa Ysabel Creek near Ramona (11-0255) was 6,180 cfs January 25, slightly more than that in December 1966 but only 22 percent of the record flow in January 1916, and the peak discharge in West Fork San Luis Rey River near Warner Springs (11-0330) was 3,900 cfs the same day, only 93 percent of that in 1966. Murrieta Creek at Temecula (11-0430) had a peak discharge of 6,770 cfs January 25, about 39 percent of the maximum flow of record in 1943, but the peak flow in San Juan Creek at San Juan Capistrano (11-0465) was 13,000 cfs January 25, equal to the maximum of record in 1938.

Precipitation during the storm of February 22-25 was greater than that during either of the January storms and caused floods throughout the region. In most streams these floods were greater than those in January. Destruction of bridges and damage to roadways by erosion and mudslides rendered many highways impassable. Erosion damage was severe in canyon areas such as Laguna Canyon, where residents were stranded for a time, and in Arroyo Trabuco canyon. The floods in January and February forced a number of residents to leave their homes in low-lying areas and caused extensive damage to utilities in the San Juan Creek basin near San Juan Capistrano. (See figs. 9 and 10.)

Murrieta Creek at Temecula had a peak discharge of 10,400 cfs February 25, the third highest in a record extending to 1924. The peak discharge of 20,000 cfs in Santa Margarita River near Fallbrook (11-0445) the same day was the fourth highest in a record covering the same period. The peak discharge of 22,400 cfs February 25 in San Juan Creek near San Juan Capistrano, however, was 1.7 times the maximum of record.

A suspended-sediment concentration of 10,100 mg/l was observed in Santa Margarita River at Ysidora (11-0460) February 25, about 2 hours before the peak of the flood.

Discharge hydrographs for San Luis Rey River at Oceanside (11-0420) and Santa Margarita River at Ysidora are shown in figure 11; these demonstrate the relative magnitude and duration of the floods in January and February.

FIGURE 9.--San Juan Creek floodflows passing under Coast Highway bridge at San Juan Capistrano, February 25, 1969. Los Angeles Times photograph.

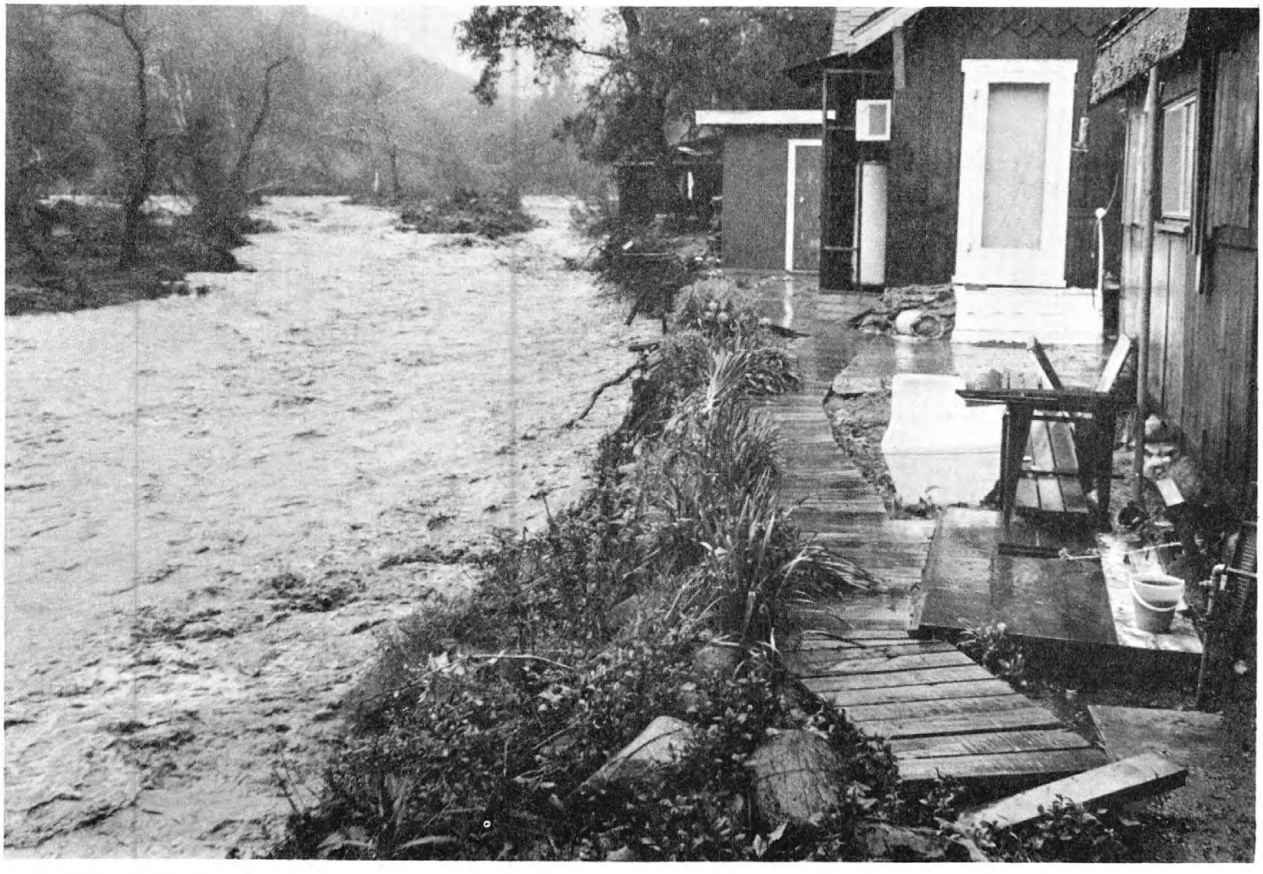

FIGURE 10.--Flood damage along Arroyo Trabuco near San Juan Capistrano, February 25, 1969. Photograph courtesy of The Register, Orange County, Calif.

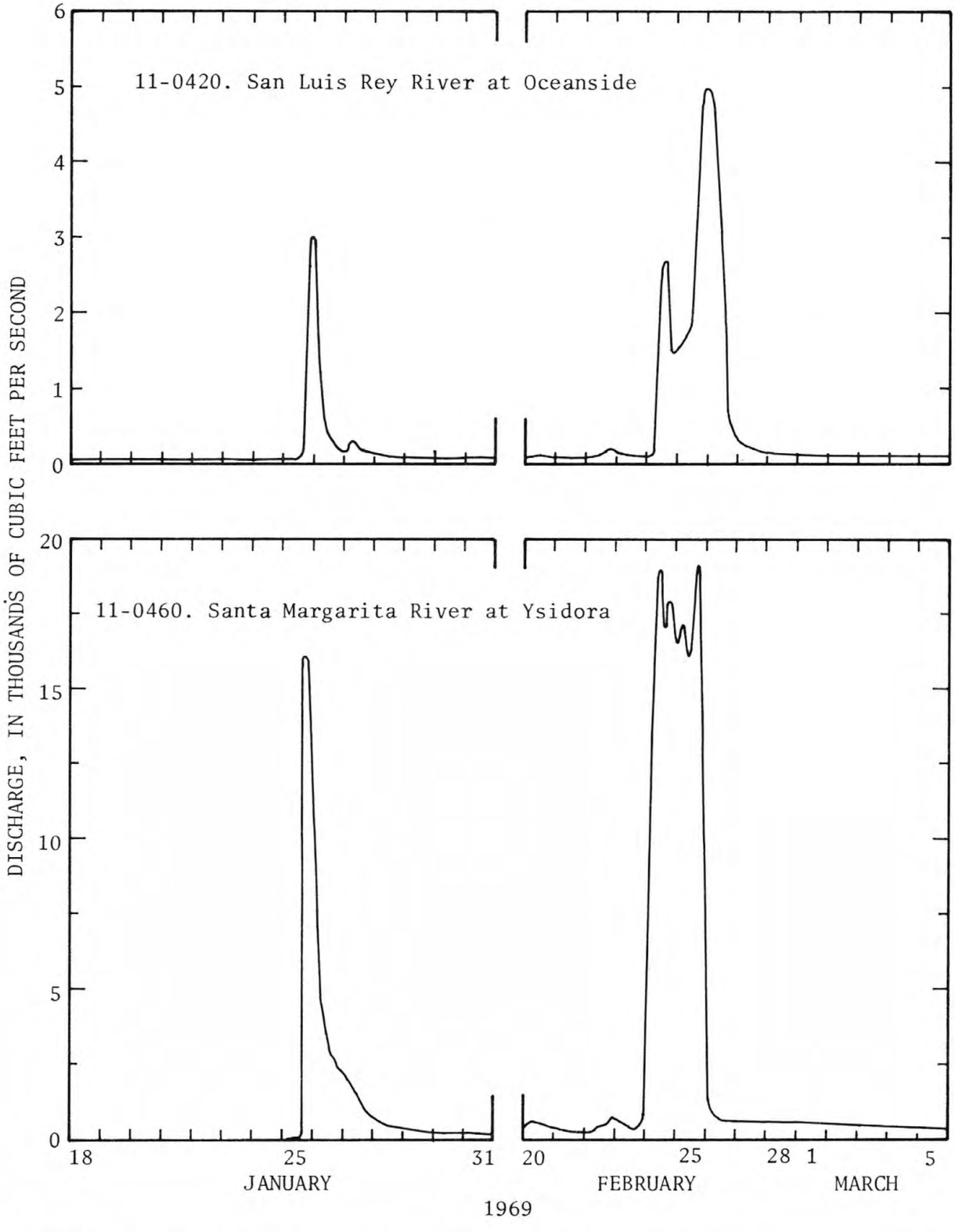

FIGURE 11.--Discharge hydrographs for selected streams in coastal basins south of the Santa Ana River, January 18-31 and February 20-March 5, 1969.

Coastal Basins from the Santa Ana River to the Los Angeles River

The streams in this hydrographic region drain the Pacific slopes between and including the Santa Ana River basin on the south and the Los Angeles River basin on the west. The Santa Ana River basin has a drainage area of about 2,400 square miles, and is the largest in the region.

Heavy rain during the storm of January 18-22 caused moderate floods and mudslides in canyon and foothill areas along the San Gabriel Mountains, particularly in the Glendora-Azusa area in Los Angeles County. Rain of greater magnitude occurred January 24-27 (fig. 4); a total of 33.15 inches during the storm was observed at the community of Mount Baldy Notch in the San Gabriel Mountains.

In the Santa Ana River basin major flooding occurred in the upper reaches of the river and in mountain tributaries. The rampaging water of streams such as Cucamonga, Deer, Day, and Cajon Creeks damaged or destroyed--by erosion--an aggregate of several hundred miles of improved flood channels. Roads and bridges were washed out and the main lines of the Southern Pacific and Santa Fe railroads were severely damaged by floods in Cajon Creek. Floodflows discharged by canyon streams onto the alluvial fans in the foothills exceeded the capacities of the channels and overflows occurred through residential areas; about 1,000 persons were evacuated in the town of Cucamonga alone. Farther downstream, near the junction of the San Bernardino, Riverside, and Orange County lines, flows in the Santa Ana River were effectively controlled by storage in the Prado flood-control reservoir. Flooding was heavy also in canyon areas in the Santiago River basin in Orange County where about 1,000 persons were marooned in the Silverado Canyon area. (See fig. 12.)

In Los Angeles County flooding in the San Gabriel River and Los Angeles River basins occurred principally in the headwater tributaries. Floodflows in the main San Gabriel and Los Angeles Rivers were detained in flood-control reservoirs and released at rates compatible with the capacities of the flood channels downstream. In the mountain and foothill areas, however, the extreme floodflows in the tributary streams overtopped the banks of these streams and caused havoc. Bridges, roads, and streets were washed out, many homes were damaged or destroyed, and thousands of persons were evacuated. Debris flows occurred again at Glendora and added to the damage caused by the January 18-22 storm. (See fig. 13.) Damage of a similar nature, but less severe, occurred in Highland Park, Sherman Oaks, Verdugo Hills, Brentwood, Bel-Air, Hollywood Hills, Encino, and Glendale. Mudslides added to the damage and the problems in these communities and in other areas in the region. On the coastal plain street flooding was commonplace in many towns, including Manhattan Beach, El Segundo, and Long Beach.

FIGURE 12.--Erosion and damage by Santiago Creek along River Lane in Santa Ana, February 25, 1969. Photograph courtesy of The Register, Orange County, Calif.

FIGURE 13.--Sediment damage at Glendora, January 22, 1969. Note size of sediment transported. Los Angeles Times photograph.

Peak discharges during the January floods generally were comparable to or exceeded those in November and December 1965 and December 1966, but were substantially less than the record flows in 1938. Unprecedented floods occurred, however, in many smaller streams draining the San Gabriel Mountains. In Cucamonga Creek near Upland (11-0734.7) in the Santa Ana River basin the peak discharge of 14,100 cfs January 25 was 137 percent of the record flow in 1938, equivalent to a runoff of 1,400 cfs per sq mi. The peak discharge of 2,750 cfs the same day in Santiago Creek at Modjeska (11-0758) was nearly twice the maximum flow in November 1965. In the San Gabriel River basin Fish Creek near Duarte (11-0845) had a peak flow of 13,000 cfs January 25, nearly 6 times the record peak in December 1965 in a 53-year record, and equivalent to a runoff of 2,040 cfs per sq mi.

Arroyo Seco near Pasadena (11-0980) in the Los Angeles River basin had a peak discharge of 8,540 cfs January 25, which was almost equal to the record flow in 1938. Los Angeles River at Long Beach (11-1030) had a record flow of 102,000 cfs January 25, despite upstream regulation, as a result of floodflow diversion from Whittier Narrows Reservoir in the San Gabriel River basin. Discharge hydrographs for Arroyo Seco near Pasadena and Plunge Creek near East Highlands (11-0555) are shown in figure 14.

Rain during the February 22-25 storm was generally heavy throughout the region, but the totals were less than for the January storms except in the San Jacinto and Santa Ana Mountains in the southeastern part. Severe flooding recurred in areas still saturated from the January storms and the subsequent intermittent rain. In the Santa Ana River basin the peak discharge of 12,400 cfs February 25 in Little San Gorgonio Creek near Beaumont (11-0565) was extreme, equivalent to a runoff of 3,700 cfs per sq mi. City Creek near Highland (11-0558) had a peak discharge of 7,000 cfs February 25, slightly greater than the record peak of 1938. Flooding and associated erosion and mudslides were especially devastating in Silverado Canyon in the Santiago Creek basin. The February 25 peak discharge in Santiago Creek at Modjeska was 6,520 cfs, 2.4 times that in January and 4.3 times that in November 1965, while the 6,600 cfs at the station at Santa Ana (11-0775) was 1.5 times the record flow in 1938. The February peak discharges in upstream tributaries of the Los Angeles River, such as Pacoima, Tujunga and Little Tujunga Creeks, exceeded those in January. (See fig. 15.)

Suspended-sediment concentration in Santa Ana River at Santa Ana (11-0780) reached a peak of about 150,000 mg/1 February 25, and the sediment discharge February 20-March 5 was about 10,000,000 tons.

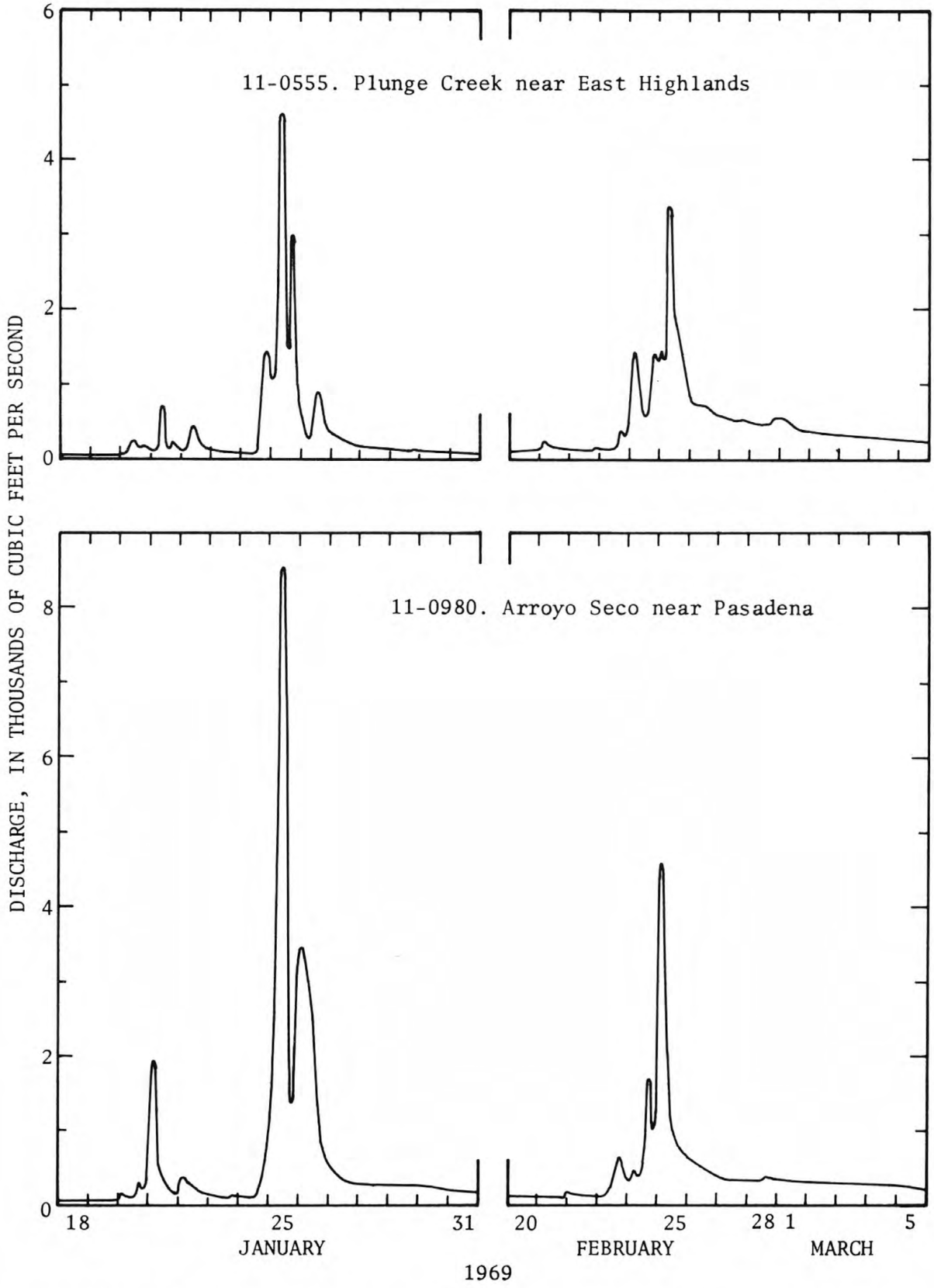

FIGURE 14.--Discharge hydrographs for selected streams in coastal basins from the Santa Ana River to the Los Angeles River, January 18-31 and February 20-March 5, 1969.

FIGURE 15.—Tujunga Creek on the rampage in Los Angeles, February 25, 1969. Photograph by Harold Morby, Golden West Broadcasters.

Coastal Basins West of the Los Angeles River to the Santa Maria River

The streams in this hydrographic region drain the Pacific slopes west and north of the Los Angeles River basin up to and including the Santa Maria River basin. The Santa Clara, Ventura, Santa Ynez, and Santa Maria Rivers are the principal streams in this region.

Precipitation January 18-22 was very heavy throughout the region. A total of 24.86 inches was observed in Matilija Canyon north of Ventura. This was followed by heavy precipitation January 24-27 in almost an equal quantity. The resulting flood discharges were unprecedented, and flood damage was correspondingly high. Torrential flows in Topanga and Malibu Creeks caused heavy damage to channels, highways, and residences. (See fig. 16.) Mudslides contributed to problems throughout the region.

In the Santa Paula-Fillmore-Piru area in Ventura County the Santa Clara River and Santa Paula Creek spilled over their banks, and about 3,000 persons were evacuated. Along the Ventura River and in the Ojai Valley the communities of Live Oak, Oak View, and Meiners Oaks were hard hit and some residents were evacuated. Highway damage was heavy throughout Ventura County. In Santa Barbara County small streams south of the Santa Ynez River were in extreme flood. The heaviest damage occurred in Montecito and Carpinteria where streams such as Santa Monica and Franklin Creeks left their channels, overflowed through residential areas, and left heavy sediment deposits in urban areas downstream. On the Santa Ynez River the spillways of Gibraltar and Cachuma Dams discharged flows that equaled or slightly exceeded the design flows. The structures were not damaged by the high flows, but flood damage was severe downstream in the Solvang and Lompoc areas. In northern Santa Barbara County severe flooding occurred in the Santa Maria River basin, and damage from erosion and sediment deposition in tributary basins was heavy.

A new record peak discharge of 33,700 cfs occurred January 25 in Malibu Creek at Crater Camp, near Calabasas (11-1055), 164 percent of the previous record discharge in December 1965.

In the Santa Clara River basin the peak discharge of 60,000 cfs January 25 in Sespe Creek near Fillmore (11-1130) was 107 percent of the record flow in March 1938, and the 16,000 cfs the same day in Santa Paula Creek near Santa Paula (11-1135) was 119 percent of that in 1938. Floodflows in the main Santa Clara River far exceeded prior record flows. At the Los Angeles-Ventura County line (11-1085) the 82,000 cfs January 25 was 2.6 times the record discharge in December 1965; at Saticoy (11-1139.2), near the mouth, the peak flow of 165,000 cfs was 1.4 times the record flow in 1938. Discharge hydrographs for the January and February floods in Sespe Creek near Fillmore and Huasna River near Arroyo Grande (11-1379) are shown in figure 17.

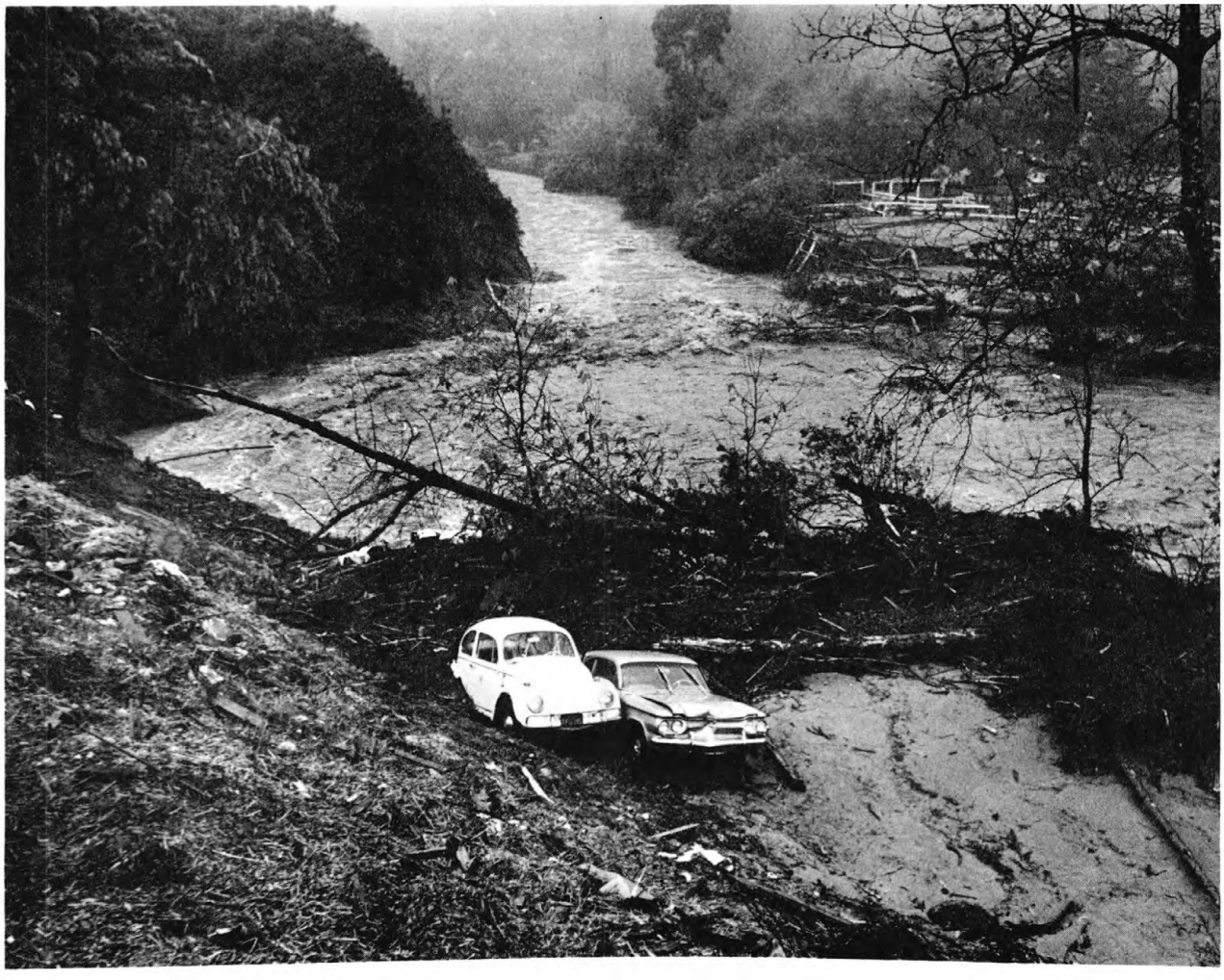

FIGURE 16.--Cars swept away by swollen Topanga Creek west of Los Angeles, January 25, 1969. Los Angeles Times photograph.

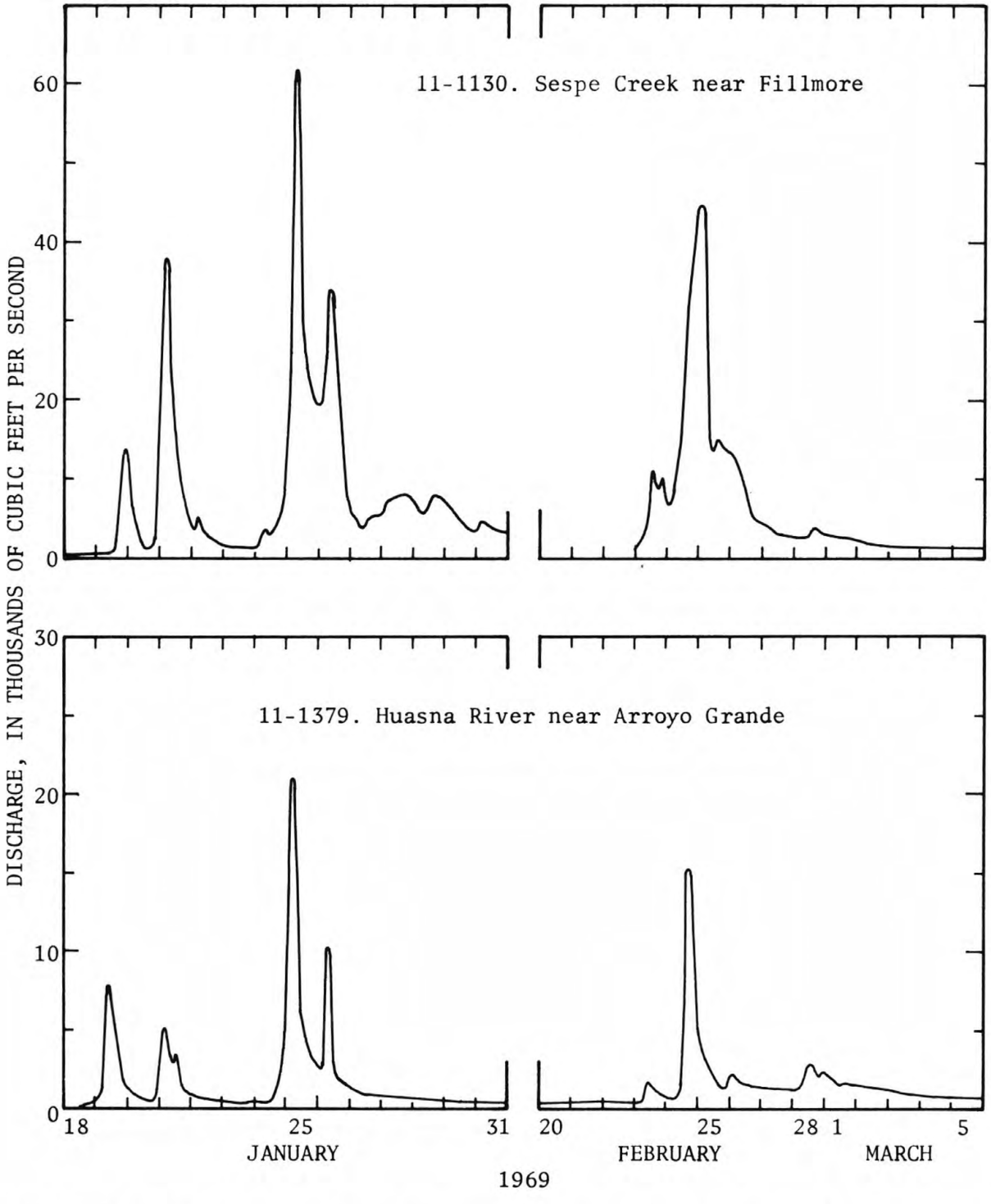

FIGURE 17.--Discharge hydrographs for selected streams in coastal basins west of the Los Angeles River to the Santa Maria River, January 18-31 and February 20-March 5, 1969.

Record peak discharges occurred throughout the Ventura River basin and in coastal basins in the vicinity of Santa Barbara. Flows in Matilija Creek and Ventura River were about 1.3 times the record peak flows in 1938. Carpinteria Creek near Carpinteria (11-1195) had a peak discharge of 4,900 cfs January 25, nearly twice the previous record flow in 1966.

In the Santa Ynez River basin floodflows also far exceeded the previous maximum flows. The peak discharge of 100,000 cfs January 25 in Santa Ynez River near Lompoc (11-1335), for example, was 2.2 times the peak flow in 1938 and may have been comparable to the peak flow in 1907 when a daily flow of 62,000 cfs was reported. In some midbasin tributaries, however, the peak flows were less than prior record flows.

The magnitudes of floodflows in the Santa Maria River basin were generally comparable to those in December 1966, but peak flows in some streams were greater. The peak discharge of 21,000 cfs January 25 in Huasna River near Arroyo Grande, for example, was 1.5 times that in 1966, and the peak flow of 24,300 cfs in Santa Maria River at Guadalupe (11-1410) was 138 percent of that in 1966, although only 67 percent of the record flow in 1952.

Heavy precipitation occurred February 22-25 in the same areas that were hard hit in January, and caused recurrence of extreme flooding in the region. The peak discharge in Piru Creek above Lake Piru (11-1096) in the Santa Clara River basin was 31,200 cfs February 25, 1.5 times that in January. Lake Piru filled and spill occurred for the first time since storage began in 1955. Santa Paula Creek near Santa Paula had a peak flow that was 1.3 times that in January. At Saticoy the peak discharge of the Santa Clara River was 152,000 cfs, nearly equal to that in January, and 1.3 times the prior record flow in 1938. Owing to heavy stream-channel damage in January and channel obstruction by debris the Santa Clara River flows were diverted from the main channel near the mouth and discharged through the marina at Ventura north of the channel. The marina was destroyed and damage to vessels and facilities was very heavy. (See fig. 18.)

February floodflows in the Santa Ynez River basin were generally less than those in January, but the peak discharges at main-stem gaging stations were still greater than previous record flows. The peak discharge at the downstream station near Lompoc February 25 was 70,000 cfs, as compared to the 100,000 cfs peak flow in January. In the Santa Maria River basin runoff in the Cuyama River was greater than that in January. Twitchell Reservoir on the Cuyama River filled February 25 and spill occurred for the first time since completion of the reservoir in 1959. Downstream in Santa Maria River at Guadalupe the peak discharge of 27,200 cfs February 25 exceeded that in January, partly as a result of the spill from Twitchell Reservoir.

Fig 18. Photograph showing marina destruction at Ventura by rampaging Santa Clara River, February 25, 1969

Suspended-sediment concentration reached peaks of about 160,000 mg/l January 25 and 140,000 mg/l February 25 in Santa Clara River at Saticoy, and 100,000 mg/l on both January 25 and February 24 in Santa Maria River at Guadalupe. The sediment discharge in Santa Clara River at Saticoy was about 28,500,000 tons January 18-31 and 25,200,000 tons February 20-March 5; while that in Santa Maria River at Guadalupe was 3,100,000 tons January 18-31 and 5,300,000 tons February 20-March 5. Graphs of suspended-sediment concentration and discharge and stream discharge for Santa Clara River at Saticoy and Santa Maria River at Guadalupe are shown in figure 19.

Coastal Basins North of the Santa Maria River

The streams in this hydrographic region drain the Pacific slopes between the Santa Maria River basin on the south and the Pajaro River basin on the north. The Salinas River basin has a drainage area of more than 4,000 square miles and is the principal basin in the region.

Intense precipitation occurred January 18-22 in the southern part of the region, particularly in San Luis Obispo and along the coast. Flooding was especially severe in San Luis Obispo. Local storm runoff and overflows from streams caused extensive damage to streets, roads, and bridges, and to residential and industrial properties. Slides along U.S. Highway 101 north of San Luis Obispo periled motorists. Other major slides occurred on State Highway 1 along the coast. Heavy precipitation January 24-27 caused recurrence of flooding in the coastal areas and San Luis Obispo, and general flooding throughout the region. Damage from erosion and sediment deposition along stream channels was extensive, particularly in the Arroyo Grande and Salinas River basins. Wide expanses of agricultural lands were inundated by Salinas River overflows, as shown in figure 20. Highway and bridge damage or destruction was heavy throughout this region.

The peak discharge of 23,700 cfs January 19 in Arroyo de la Cruz near San Simeon (11-1425) was about 67 percent of the record flow in December 1966, and is indicative of the flood magnitude in the small coastal basins. Magnitudes of the floodflows at miscellaneous sites in the San Luis Obispo area are shown in the summary table of flood stages and discharges presented later in this report. Discharge hydrographs for Arroyo de la Cruz near San Simeon and Salinas River near Bradley (11-1505) are shown in figure 21.

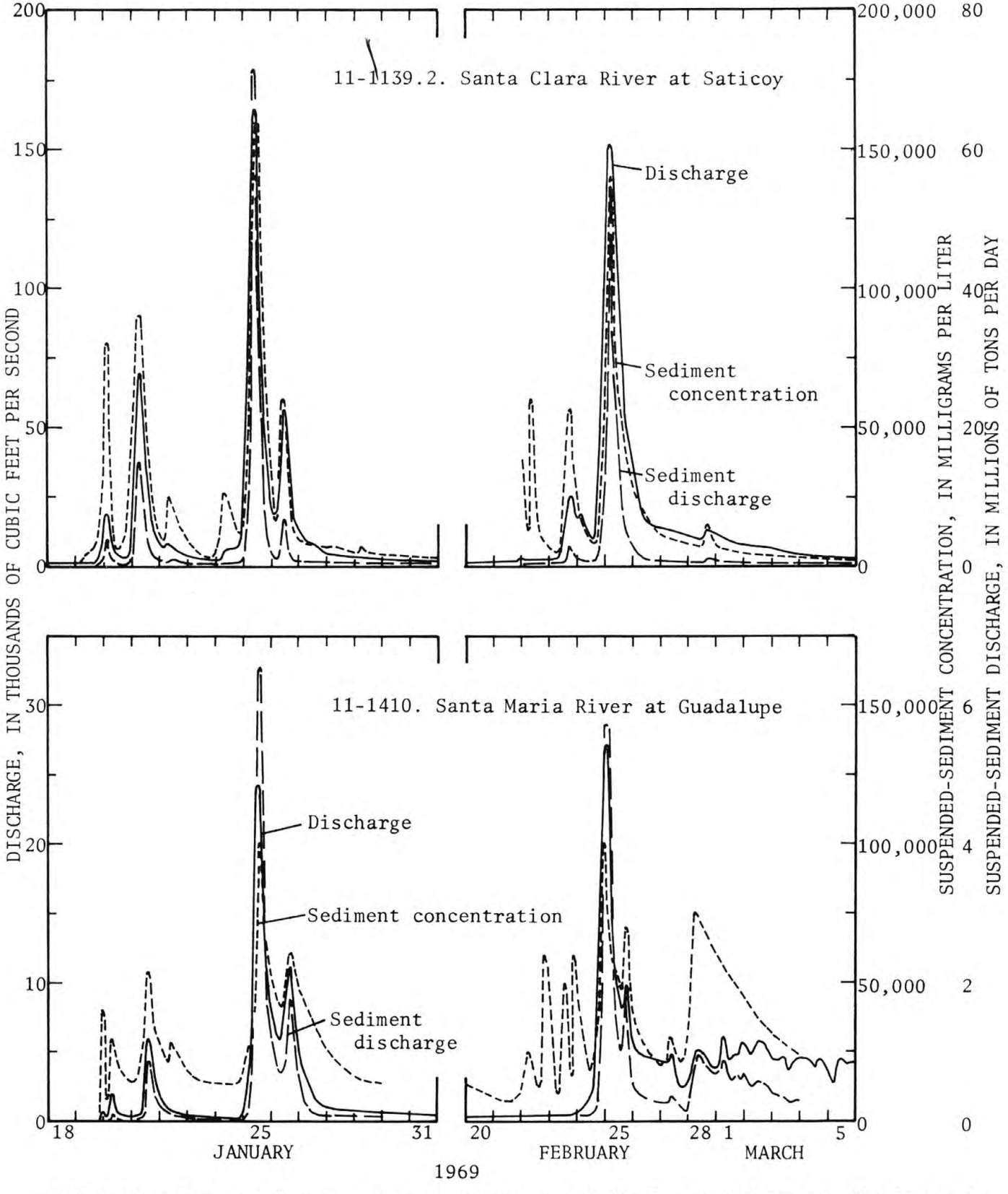

FIGURE 19.--Suspended-sediment concentration and discharge and stream discharge in Santa Clara River at Saticoy and Santa Maria River at Guadalupe, January 18-31 and February 20-March 5, 1969.

FIGURE 20.--Flooding at confluence of Salinas River and Arroyo Seco near Soledad, January 27, 1969. Arroyo Seco at upper right; Soledad sewage settling ponds at left center. Photograph courtesy of U.S. Army Corps of Engineers.

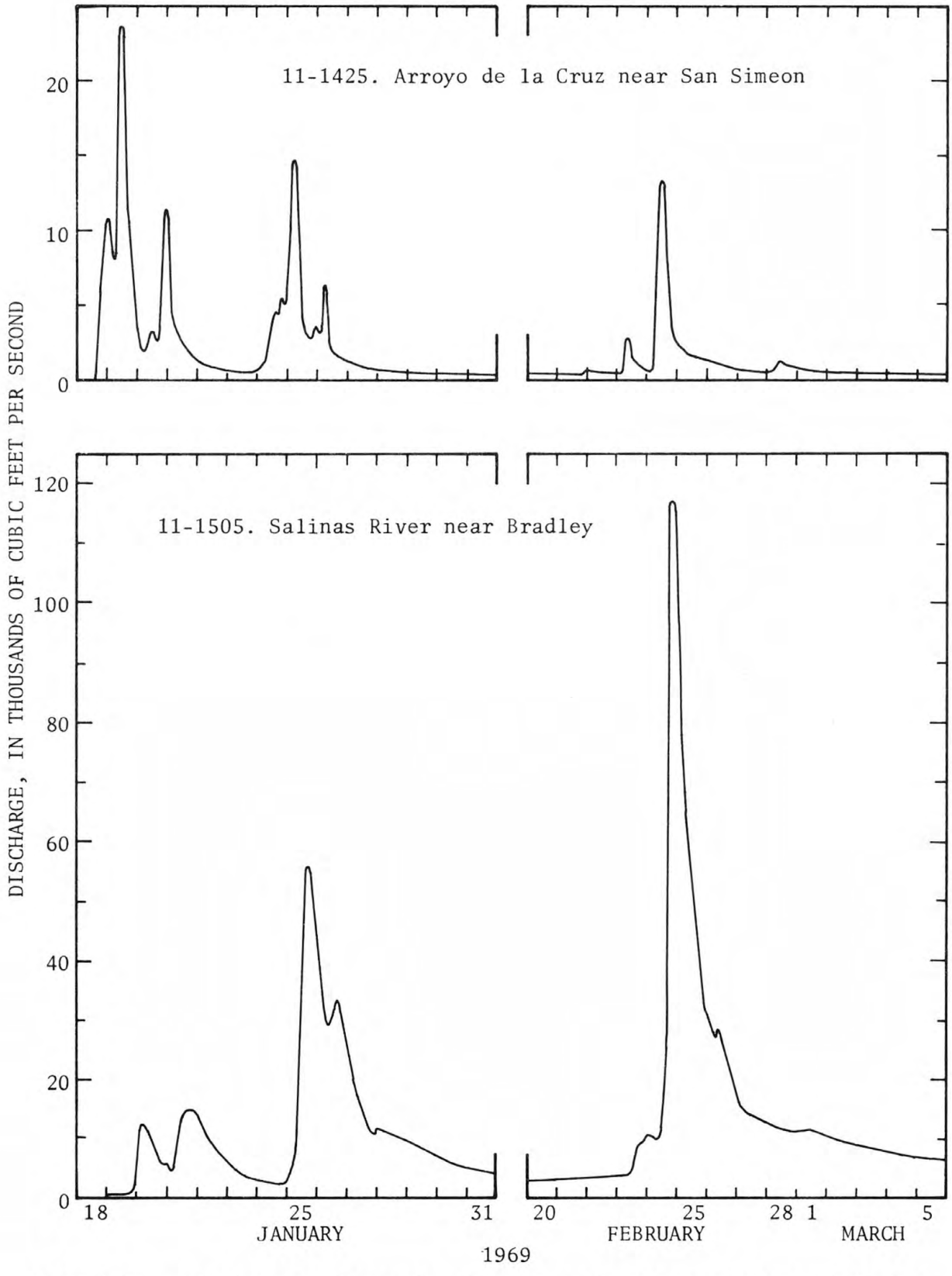

FIGURE 21.--Discharge hydrographs for selected streams in coastal basins north of the Santa Maria River, January 18-31 and February 20-March 5, 1969.

Floodflows in the Salinas River basin in January generally exceeded those in December 1966 but not the long-time maximum flows. January 25 the peak discharge in Salinas River near Pozo (11-1435) was 18,600 cfs, 132 percent of that in 1966. Spill from Salinas Reservoir downstream on January 26 is shown in figure 22. In Salinas River near Spreckels (11-1525) the peak discharge was 73,200 cfs January 27, near the February 1938 record flow of 75,000 cfs.

Heavy precipitation February 22-25 caused a recurrence of flooding in the region, particularly in the Salinas River basin. The peak discharge of 12,400 cfs February 24 in Huerhuero Creek near Creston (11-1476) was nearly 4 times that in January, while in San Lorenzo Creek below Bitterwater Creek, near King City (11-1513), it was 8,850 cfs, less than the 10,500 cfs peak flow January 25 but 2.4 times that in 1966.

An unprecedented peak discharge of 117,000 cfs occurred February 25 in Salinas River near Bradley, 2.3 times that in January. Downstream at the station near Spreckels, the corresponding peak flow was 83,100 cfs February 26, 111 percent of the record flow in 1938. The February floods caused extensive additional damage to highways and bridges, as well as to ranch properties; travel was disrupted and many families were forced to leave their homes. Overbank flooding occurred throughout the length of the Salinas River valley.

Suspended-sediment concentration in the Salinas River near Spreckles during the February flood reached a peak of about 34,000 mg/l February 25. The sediment discharge was about 8,100,000 tons February 20-March 5. The maximum suspended-sediment concentration observed in January was 15,100 mg/l on January 26. Graphs of suspended-sediment concentration and discharge and stream discharge in Salinas River near Spreckles are shown in figure 23.

FIGURE 22.--Spill from Salinas Reservoir on Salinas River near Pozo, January 26, 1969. Reservoir gage on dam near left abutment. Photograph courtesy of U.S. Army Corps of Engineers.

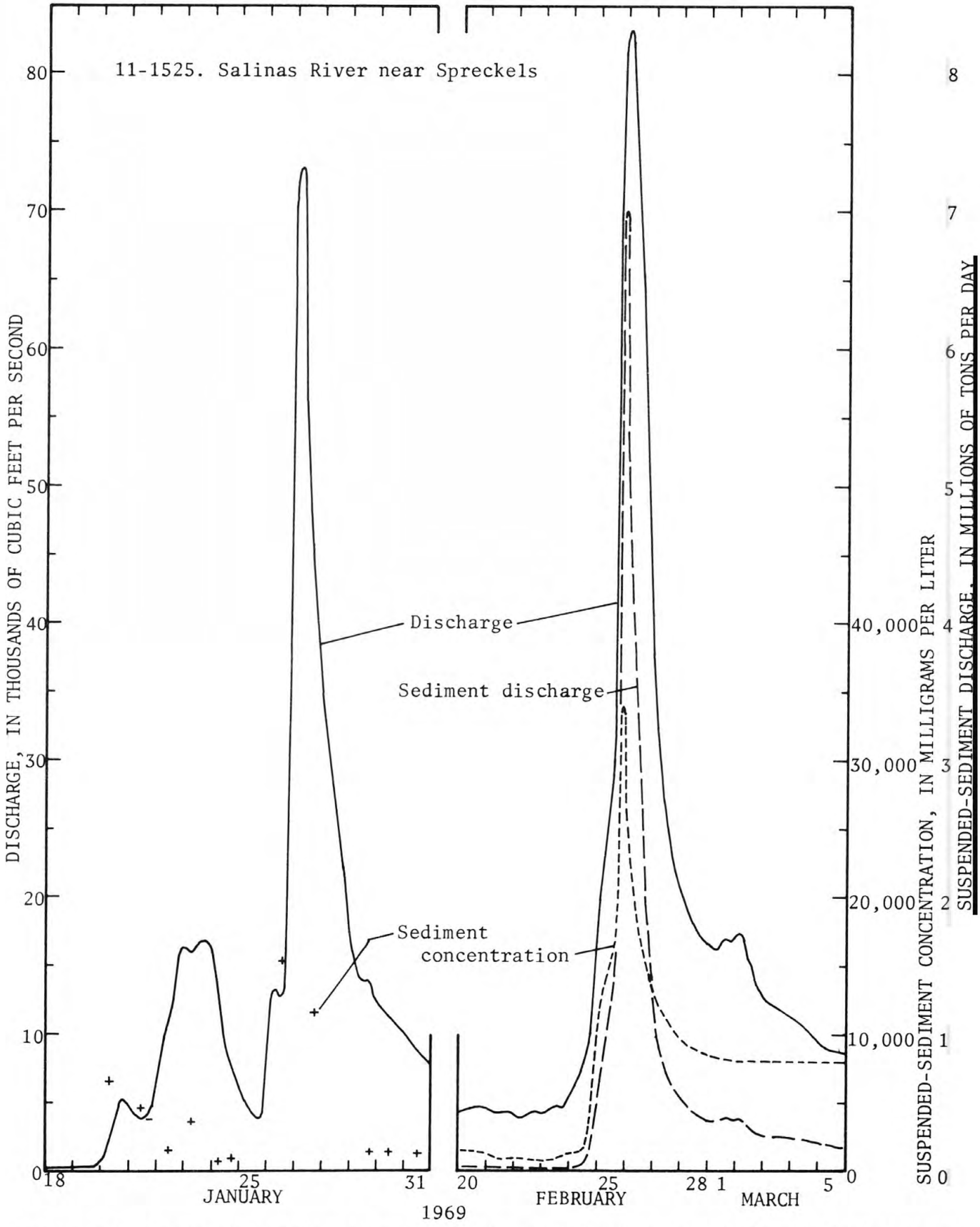

FIGURE 23.--Suspended-sediment concentration and discharge and stream discharge in Salinas River near Spreckels, January 18-31 and February 20-March 5, 1969.

San Joaquin Valley

San Joaquin Valley streams in the area covered by this report include west-side streams in the Buena Vista Lake, Tulare Lake, and San Joaquin River basins south from Orestimba Creek, and the lower basins of east-side streams from the Kern River basin to Mariposa Creek. The Kern, Tule, Kaweah, Kings, and San Joaquin Rivers are the principal streams in the region.

Precipitation during the storms of January 18-22 and 24-27 (figs. 3 and 4) produced heavy rainfall that caused two significant floods. As freezing levels were above the 7,000-foot altitude a major part of each stream basin received rain rather than snow. The first storm generally produced more precipitation, but runoff from the second was more intense and more rapid. No serious flooding occurred directly in the major rivers upstream from main-stem reservoirs, partly as a result of the relatively clear channels left after the extreme floods of December 1966. The reservoirs on the major streams retained all inflow; only small flows were released from Lake Kaweah on the Kaweah River and Lake Success on the Tule River. Floodflows that reached the San Joaquin Valley floor consisted principally of runoff from the foothill areas and the lower parts of the major basins.

Flood damage was heaviest in the valley areas as a result of ponding of overflows from streams, breached canals, and irrigation ditches, and subsequent inundation of agricultural lands and of homes in parts of Fresno and in many smaller communities. More than 500 persons in Cutler, Orosi, Woodlake, Lindsay, Yettem, and Seville, left their homes because of inundation. Many State and county roads were washed out or damaged by mudslides and rockslides; road and culvert damage in the national parks and forests in the region was very heavy. Flooding was extensive also on the west side of the San Joaquin Valley, particularly in the Coalinga area where floodflows in Los Gatos and Warthan Creeks exceeded those that occurred in December 1966.

The peak discharge of 2,420 cfs January 25 in Avenal Creek near Avenal (11-1972.5), on the west side of the San Joaquin Valley, was 1.6 times that in 1966, while the peak flow in Los Gatos Creek above Nunez Canyon, near Coalinga (11-2245) was 3,930 cfs January 26, twice that in 1966 and 1.5 times the record flow in 1958 and 1962.

In east-side basins the flows in Kern River at Kernville (11-1870), Tule River near Springville (11-2032), and Kaweah River at Three Rivers (11-2099), though only one-third of the record flows in 1966, were third or fourth highest of record. Sycamore Creek above Pine Flat Reservoir, near Trimmer (11-2205), however, had a peak discharge of 14,600 cfs January 25, nearly 2.2 times the record flow in December 1955. Discharge hydrographs for Avenal Creek near Avenal and Sycamore Creek above Pine Flat Reservoir, near Trimmer, are shown in figure 24.

During the storm of February 22-25 air temperatures were lower and precipitation occurred as snow at lower altitudes than during the storms in January. However, rain was heavy in the southern part and along the west side of the San Joaquin Valley. Warthan Creek overflows in Coalinga forced about 80 persons out of their homes, and the communities of Coalinga and Avenal were virtually isolated. Extensive flooding occurred in Tulare County, including the Dinuba-Orosi-Cutler-Yettem area that was flooded in January. (See figs. 25 and 26.) Deer Creek, White River, and Poso Creek, further south in Tulare and Kern Counties, caused severe flooding in the Earlimart area. U.S. Highway 99 and other major highways in the region were closed during the flood period owing to inundation or highway damage. Several hundred residents fled from their homes to escape the floods. At Fresno part of the downtown area was inundated by water from canal overflows and breaks.

Poso Creek near Oildale (11-1978) had a peak discharge of 6,600 cfs February 24; this was 2.4 times the peak flow in January and 1.5 times the record flow in 1966. In the northeastern part of the region the peak flow in Chowchilla River at Buchanan damsite, near Raymond, (11-2590) was 13,700 cfs February 24, as compared to 12,900 cfs January 19, but it was only 46 percent of the record flow in December 1955. The February floodflows in most east-side streams were less than those in January.

The peak discharge of 2,600 cfs February 24 in Avenal Creek near Avenal and 4,360 cfs in Los Gatos Creek above Nunez Canyon, near Coalinga, slightly exceeded the peak flows in January and thus represent the maximum flows of record. C. W. Howell, observer at the U.S. Weather Bureau Coalinga 14WNW precipitation station reported about Los Gatos Creek flows that, "At 10 a.m. (on the 24th) the creek crested at a high which the oldtimers say is the highest in their memory."

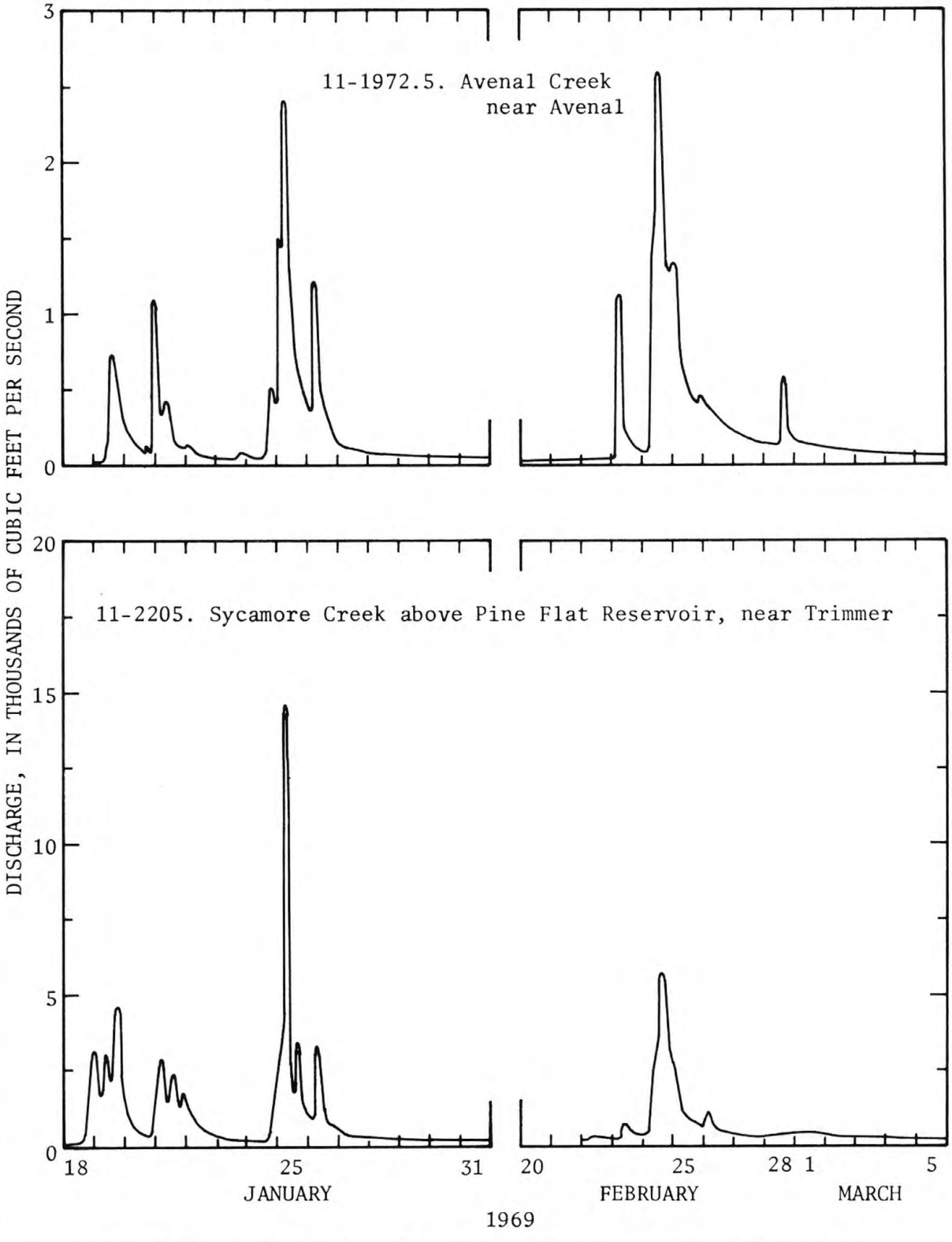

FIGURE 24.--Discharge hydrographs for selected streams in the San Joaquin Valley, January 18-31 and February 20-March 5, 1969.

FIGURE 25.--Flooding in East Orosi and vicinity, Tulare County, February 25, 1969. Photograph courtesy of Visalia Times Delta.

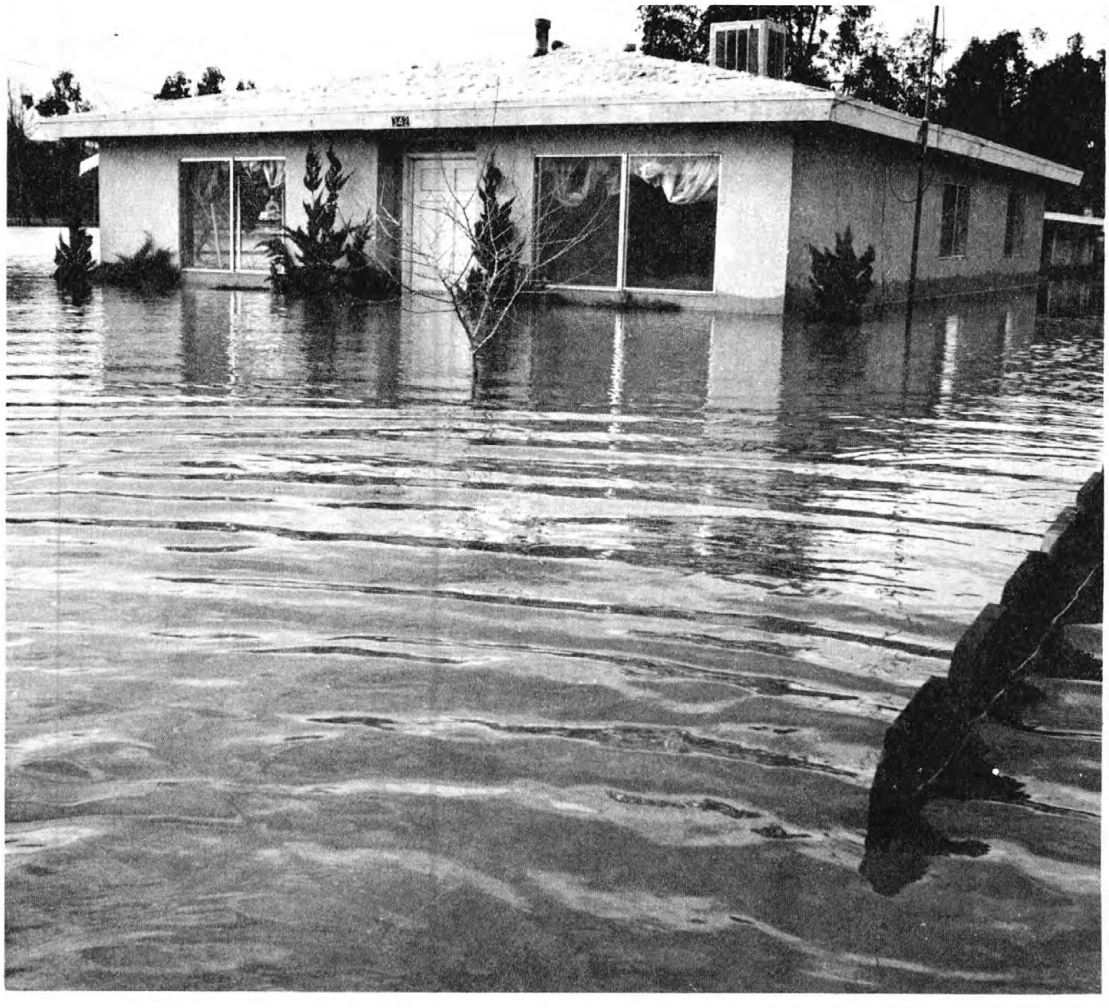

FIGURE 26.--Flooded residence in Woodlake, Tulare County, February 25, 1969. Photograph courtesy of Visalia Times Delta.

STORAGE REGULATION

Reservoir storage substantially reduced the magnitude of the peak floodflows in many streams in the area affected by the floods. The storage was provided by flood-control reservoirs and reservoirs constructed primarily for water-supply and water-conservation purposes. Reduction in peak flows was achieved also through flow regulation by temporary storage in, and controlled release of water from, many small flood-control reservoirs and detention basins. Accurate peak-inflow data for many reservoirs were not available for this report. However, the effectiveness of the reservoirs in reducing the magnitude of peak flows is evident from the volumes of water detained in the reservoirs and the reduced peak discharges downstream from the reservoirs in relation to those in the same streams upstream from the reservoirs.

Data for selected reservoirs in the area affected by the floods are given in table 2, which summarizes information on reservoir contents just prior to the flood period and the peak storage reached after the January and the February floods. In a few reservoirs storage accretion continued throughout the flood period. Additional comments pertaining to storage regulation are summarized in the following paragraphs.

The two principal reservoirs in the hydrographic region south of the Santa Ana River basin--Lake Henshaw and Vail Lake--detained all the inflow, and flows were reduced downstream in the San Luis Rey River and Santa Margarita River basins. The combined 58,490 acre-feet gain in storage January 17 to early March is equivalent to 24 percent of the capacity.

Flows in the Santa Ana River basin are regulated principally by storage in Big Bear Lake in the Santa Ana River headwaters, Lake Hemet and Railroad Canyon Reservoir on San Jacinto River, Prado Reservoir on Santa Ana River, and Santiago Reservoir on Santiago Creek. San Antonio, Carbon Canyon, and Santiago flood-control reservoirs (combined capacity, 31,310 acre-ft) provide additional storage and regulation, and are supplemented by many other local facilities. Prado Reservoir, empty on January 17, detained all the inflow, and reached peak storage of 73,200 acre-feet January 29 and 130,100 acre-feet February 25; only controlled releases were discharged downstream.

Flows in the San Gabriel River basin are regulated by Morris Reservoir, Cogswell, San Gabriel, Santa Fe, and Whittier Narrows flood-control reservoirs, and several small reservoirs (combined capacity, 19,100 acre-ft). Morris Reservoir, with contents at 87 percent of capacity January 17 and 83 percent February 28, provided only temporary flow detention during the floods.

Sepulveda Reservoir on Los Angeles River and Hansen Reservoir on Tujunga Creek, both flood-control reservoirs, with a combined capacity of 50,770 acre-feet, and several smaller flood-control reservoirs, including Pacoima Reservoir on Pacoima Creek and Big Tujunga Reservoir on Tujunga Creek, provide peak-flow regulation in the Los Angeles River basin. Combined storage in Sepulveda and Hansen Reservoirs reached 11,890 acre-feet January 25 and 15,960 acre-feet February 25. The peak discharges downstream from the reservoirs were reduced substantially even though the maximum storage at any one time was only 31 percent of the capacity of the reservoirs.

In coastal basins west of the Los Angeles River reservoirs provide flow regulation in several basins. Lake Piru on Piru Creek provides partial regulation in the Santa Clara River basin. The contents of the reservoir increased 75,810 acre-feet between January 17 and February 25, the reservoir filled, and spill occurred for the first time since storage began in May 1955. In the Ventura River basin Casitas Reservoir on Coyote Creek, a downstream tributary, provides partial regulation through storage of Coyote Creek flows and of flows diverted from the upper Ventura River basin. The reservoir stored all inflow, and the increase in contents January 17 to February 28 was 69,800 acre-feet.

Flow in the Santa Ynez River basin is regulated by Jameson Lake, Gibraltar Reservoir, and Lake Cachuma. All three reservoirs were filled by runoff from the January and February storms, and substantial volumes of water were released during the two flood periods.

Twitchell Reservoir on Cuyama River provides partial regulation of peak flows in the Santa Maria River basin. The reservoir was empty January 17 but was filled by February 25 and spilled for the first time since storage began in February 1959.

In coastal basins north of the Santa Maria River, Lopez Reservoir provides flow regulation in the Arroyo Grande basin. The reservoir stored all inflow during the flood period.

Salinas Reservoir (Lake Margarita) on Salinas River, Nacimiento Reservoir on Nacimiento River, and San Antonio Reservoir on San Antonio River provide substantial flow regulation in the Salinas River basin. Salinas Reservoir was filled by the floods in January and February and spill occurred during each flood. Nacimiento Reservoir contents increased 314,400 acre-feet January 15 to February 26; controlled flow was released from the reservoir commencing January 27. San Antonio Reservoir stored all inflow--188,800 acre-feet January 18 to March 7--and no water was released during the flood period.

TABLE 2.--*Storage of floodflows in selected reservoirs*

[Reservoir capacity: Contents at spillway level, or usable contents. All data from numerous Federal, county, and local public and private agencies operating the facilities]

Reservoir	Stream basin	Reservoir capacity (acre-ft)	Reservoir contents, in acre-feet					
			Date	Contents	Date	Contents	Date	Contents
Coastal basins south of the Santa Ana River			*1969*		*1969*		*1969*	
Lake Henshaw	San Luis Rey River	194,300	Jan. 17	6,180	Feb. 15	21,120	Mar. 4	45,000
Vail Lake	Santa Margarita River	49,370	Jan. 17	11,580			Mar. 10	31,250
Coastal basins from the Santa Ana River to the Los Angeles River								
Big Bear Lake	Santa Ana River	72,200	Jan. 17	42,270	Feb. 15	62,120	Feb. 26	65,570
Lake Hemet	do.	11,880	Jan. 17	6,880	Jan. 25	7,460	Feb. 26	13,540
Railroad Canyon	do.	12,000	Jan. 13	4,990	Jan. 27	8,780	Feb. 26	Spilled
San Antonio flood-control reservoir	do.	9,280	Jan. 12	0	Jan. 25	2,520	Feb. 27	3,820
Prado flood-control reservoir	do.	217,000	Jan. 17	19	Jan. 29	73,200	Feb. 25	130,100
Carbon Canyon flood-control reservoir	do.	7,030	Jan. 17	0	Jan. 25	643	Feb. 26	888
Santiago	do.	25,000	Jan. 20	10,100	Jan. 29	Spilled	Feb. 25	Spilled
Santiago flood-control reservoir	do.	15,000	Jan. 17	45	Jan. 25	1,890	Feb. 25	Spilled
Cogswell	San Gabriel River	10,000	Jan. 17	2,960			Feb. 28	a3,480
San Gabriel	do.	43,640	Jan. 17	2,340			Feb. 28	a19,630
Morris	do.	35,000	Jan. 17	30,540			Feb. 28	a29,140
Santa Fe flood-control reservoir	do.	36,500	Jan. 17	0	Jan. 25	15,350	Mar. 1	13,460
Whittier Narrows flood-control reservoir	do.	36,160	Jan. 17	54	Jan. 25	7,800	Feb. 25	4,010
Sepulveda flood-control reservoir	Los Angeles River	17,300	Jan. 17	0	Jan. 25	2,870	Feb. 25	1,130
Hansen flood-control reservoir	do.	33,260	Jan. 17	987	Jan. 25	9,020	Feb. 25	14,830

Coastal basins west of the Los Angeles River to the Santa Maria River								
Lake Piru	Santa Clara River	101,000	Jan. 17	25,190	Jan. 25	50,320	Feb. 25	Spilled
Casitas	Ventura River	267,000	Jan. 17	116,500	Jan. 26	151,400	Feb. 28	186,300
Jameson Lake	Santa Ynez River	6,600	Jan. 15	4,060	Jan. 25	7,330	Feb. 25	Spilled
Gibraltar	do.	14,800	Jan. 17	5,770	Jan. 25	16,700	Feb. 25	Spilled
Lake Cachuma	do.	204,900	Jan. 17	155,700	Jan. 25	208,000	Feb. 25	Spilled
Twitchell	Santa Maria River	240,000	Jan. 17	0	Jan. 31	87,220	Feb. 25	Spilled
Coastal basins north of the Santa Maria River								
Lopez	Arroyo Grande	52,000	Jan. 21	7,900	Jan. 31	22,910	Feb. 28	41,020
Salinas	Salinas River	26,000	Jan. 18	16,200	Jan. 24	26,500	Feb. 27	27,000
Nacimiento	do.	340,000	Jan. 15	53,320	Jan. 28	301,500	Feb. 26	367,700
San Antonio	do.	350,000	Jan. 18	132,900	Jan. 27	219,400	Mar. 7	321,700
San Joaquin Valley								
Isabella	Kern River	569,700	Jan. 19	125,500	Jan. 27	239,300	Mar. 1	256,700
Lake Success	Tule River	85,400	Jan. 19	11,200	Jan. 29	77,200	Feb. 26	84,200
Lake Kaweah	Kaweah River	149,400	Jan. 18	8,040	Jan. 28	139,900	Feb. 28	117,300
Pine Flat	Kings River	1,001,500	Jan. 18	453,000	Jan. 27	765,200	Mar. 2	870,000
Millerton Lake	San Joaquin River	503,200	Jan. 19	33,500	Jan. 28	471,500	Mar. 1	362,000

a. Contents March 6 in Cogswell Reservoir, 5,960 acre-feet; San Gabriel Reservoir, 25,580 acre-feet; and Morris Reservoir, 31,070 acre-feet.

Reservoirs in the Kern, Tule, Kaweah, Kings, and San Joaquin river basins provide the principal flow regulation in the San Joaquin Valley hydrographic region. Isabella Reservoir on Kern River (11-1905) stored all inflow during the flood period. The peak bihourly inflow to the reservoir was 32,400 cfs January 25 and 5,490 cfs February 25.

Lake Success in the Tule River basin (11-2047) stored all inflow during the flood period; the bihourly inflow reached peaks of 22,500 cfs January 25 and 18,000 cfs February 25. Lake Kaweah on Kaweah River (11-2109), with peak bihourly inflow of 35,100 cfs January 25 and 20,500 cfs February 24, also stored all inflow.

Flow regulation in the Kings River basin is provided by Courtwright Reservoir (capacity, 123,300 acre-ft) and Wishon Reservoir (capacity, 128,600 acre-ft), operated for power purposes, and by Pine Flat Reservoir, used for flood control and conservation storage. Bihourly inflow to Pine Flat Reservoir (11-2210) reached peaks of 70,600 cfs January 25 and 7,120 cfs February 26.

Millerton Lake and numerous upstream reservoirs, with combined capacity of more than 590,000 acre-feet operated principally for power purposes, provide substantial flow regulation in the San Joaquin River basin. Most of the upstream reservoirs are at high altitudes where precipitation in January and February occurred largely as snow, and runoff was low. The contents of Millerton Lake, however, increased 438,000 acre-feet January 19-28.

FLOOD DAMAGE

The floods of January and February 1969 caused heavy and extensive flood damage throughout most of the flood area. Fifty-one deaths were directly attributable to the floods, 39 in January and 12 in February, and many others were indirectly caused by the storms, the resulting floods, and associated events. Damages to highways and bridges, to residential and industrial buildings, and to farmlands and crops were major items in the total monetary loss. Damages to flood-control works, sewage-treatment plants, and other public facilities were severe. Damage to Geological Survey stream-gaging facilities was heavy and included the destruction of 29 gaging stations, 21 in January and 8 in February, and the loss of many gaging cableways.

Preliminary estimates of flood damage, prepared principally by county representatives and compiled by the U.S. Army Corps of Engineers, indicated physical damage in valley and foothill areas to be more than $256 million. These estimates, by counties, are shown in table 3. The estimates for damage in the San Joaquin Valley are based on preliminary field evaluations by the Corps of Engineers. All these estimates are provisional and subject to revision. Field studies of the damage caused by the floods are in progress (April 1969).

TABLE 3.--*Summary of flood damage*

[Preliminary estimates, principally by county representatives, as compiled by the U.S. Army Corps of Engineers]

County	Damage, in thousands of dollars	
	January 1969	February 1969
San Diego	-	1,000
Orange	4,000	25,000
Riverside	12,000	36,000
San Bernardino	22,000	31,000
Los Angeles	15,000	20,000
Ventura	8,000	12,000
Santa Barbara	11,000	2,000
San Luis Obispo	5,500	3,000
Monterey	10,800	4,200
San Benito	-	-
Kern	2,000	2,700
Kings	3,500	4,800
Tulare	4,300	4,700
Fresno	2,900	3,100
Madera	1,800	1,700
Merced	600	1,100
Stanislaus	100	200
Total	103,500	152,500
Total, January and February		256,000

FLOOD-INUNDATION MAPS

The Geological Survey, in its program of documentation of significant flood events, frequently prepares flood-inundation maps for selected areas. These maps, usually published as hydrologic investigations atlases, define areas inundated by specific or record floods or by floods of selected magnitude. The atlases show the extent of flooding delineated on standard topographic quadrangles or on photomosaics prepared for this purpose, and include information on flood distribution, height, magnitude, and frequency. Flood profiles may be shown where appropriate.

Hydrologic investigations atlases have been prepared for four selected areas in southern California in which the effects of the floods of January 1969 were especially significant, and are being processed for publication. These indicate the extent of flooding in parts of stream basins in the vicinity of the selected communities. The atlases and the areas covered are as follows:

1. Flood of January 1969 near Carpinteria, Calif., by F. W. Fenzel and McGlone Price. The area includes the lower basins of Carpinteria, Franklin, and Santa Monica Creeks and adjacent streams in the vicinity of Carpinteria.

2. Flood of January 1969 near Ventura, Calif., by J. A. Singer and McGlone Price. The area includes most of the main stem of Ventura River and San Antonio Creek, and the communities of Ventura, Meiners Oaks, and Ojai.

3. Flood of January 1969 near Azusa and Glendora, Calif., by F. W. Giessner and McGlone Price. The area includes the northern parts of Azusa and Glendora and the adjacent foothill region.

4. Flood of January 1969 near Cucamonga, Calif., by J. A. Singer and McGlone Price. The area includes the foothill parts of the Cucamonga, Deer, Day, and East Etiwanda Creek basins and adjacent streams, and the communities of Cucamonga, Fontana, Mira Loma, Ontario, and Upland.

EFFECT OF THE FLOODS ON GROUND WATER

The contribution to ground water from floodflows represents a substantial part of the long-term hydrologic budget in central and southern California basins. Floodflows constitute a major source of water contributing to ground-water storage. Flows from streams draining the south slopes of the San Gabriel Mountains, for example, are discharged to the extensive alluvial fans constituting the foothill areas. Parts of these flows are collected in improved flood channels for conveyance to major rivers, to the sea, or to ground-water-recharge basins. A large part, however, is conveyed in natural channels and, together with runoff from local precipitation, is available for infiltration and percolation. In the foothill and fan areas percolation is rapid and a large part of the flow normally penetrates into the soils a short distance from the mountain front. The water may then be stored as soil moisture or it may percolate to the ground-water table.

During the January and February floods local storm-water runoff and flows in many streams draining the San Gabriel Mountains exceeded the capacities of the normal receiving channels and extensive overflows occurred. A large part of the water from these overflows was widely dispersed on the fans and was dissipated by infiltration and percolation. Aerial photographs taken after the floods and field inspections during preparation of the hydrologic investigations atlases for the Azusa-Glendora and the Cucamonga areas confirmed this dispersal and subsequent percolation. Only a minor part of the water from channel overflows reached major stream channels downstream as overland flow.

The effect of the water reaching the ground-water table is demonstrated by the water-level changes in the succeeding days, weeks, or months. Water-level rises in a few selected observation wells are shown in figure 27. Data on water levels observed at additional selected wells before the flood period and at indicated subsequent times are listed in table 4.

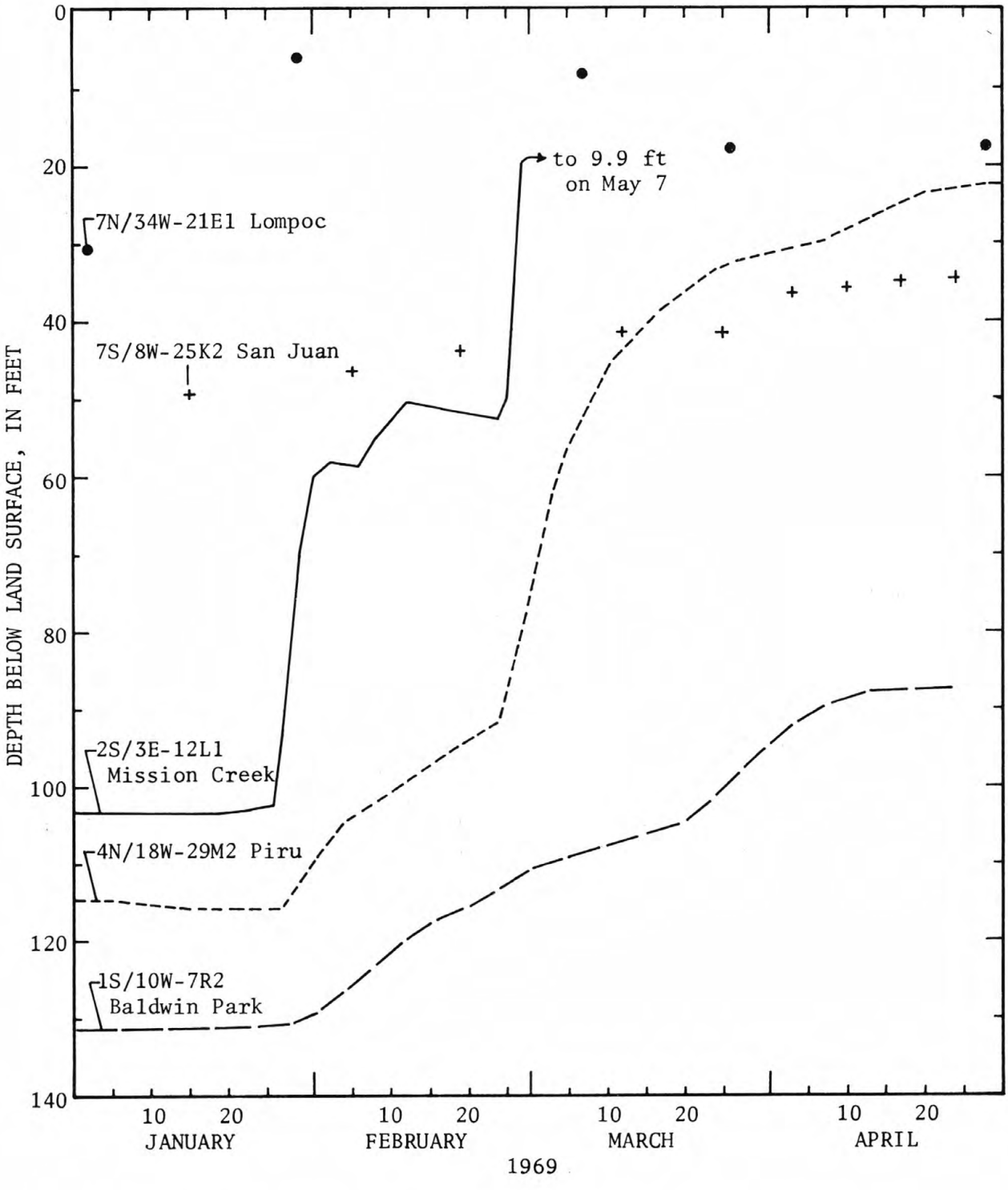

FIGURE 27.--Water-level changes at selected observation wells, January-April 1969.

Data on water-level changes provide some information on the volumes of water withdrawn from or added to ground-water storage. Under shallow water-table conditions accretions usually are rapid and relatively large, as shown by the rise in water level in well 7N/34W-21E1 (fig. 27) at Lompoc in Santa Barbara County. Accretions may be slower and of lesser magnitude in the deeper aquifers because large quantities of water may be in transit or in storage as soil moisture in the unsaturated zone; part of this soil moisture may eventually reach the water table. The rise in water level may be fairly rapid, as shown by the record for well 1S/10W-7R2 (fig. 27) in Baldwin Park, Los Angeles County, or may continue for many months. The rapid and substantial rise shown by the Mission Creek well 2S/3E-12L1 (fig. 27) in Riverside County results from the location of the well adjacent to a normally dry stream channel and the very rapid percolation of floodwater into the subsurface materials. Well 4N/18W-29M2 (fig. 27) at Piru, in the Santa Clara River basin in Ventura County, is located in the vicinity of a percolation basin and shows a similar large and relatively rapid rise. The rise after the January flood reflects recharge from high flows in the Santa Clara River, whereas the accelerated rise after the February flood includes the impact of flow in Piru Creek as a result of spill from Lake Piru.

Water-level changes in many other wells, including most of those in the San Joaquin Valley, however, were about equivalent to the normal seasonal changes. Owing to the relatively short time interval since the floods the water levels in some of these wells may show significant rises at a later time when water in transit as soil moisture reaches the zone of saturation.

The changes in water levels shown by the data in table 4 indicate that substantial parts of the total floodwater quantities in the major basins were retained in subsurface storage.

TABLE 4.--*Water-level changes in selected observation wells following floods of January and February 1969*

[Well: Locations referenced to San Bernardino base line and meridian except those with suffix M denoting Mount Diablo base line and meridian]

Well	Area	County	Altitude of land surface (feet)	Depth to water below land surface, in feet						Overall rise (feet)
				Date	Depth	Date	Depth	Date	Depth	
			The Great Basin							
2S/3E-12L1	Mission Creek	Riverside		1-19-69	103.3	2-12-69	50	5- 9-69	9.9	93.4
3N/4W-12C1	Hesperia 5SE	San Bernardino	2,940	12-31-68	33.9	2- 8-69	30.9	4- 7-69	20.8	13.1
9N/1W-13B1	Barstow	San Bernardino	2,002	10-22-68	63.5			4- 8-69	12.3	51.2
9N/1E-13E2	Barstow 11E	San Bernardino	1,950	1- 1-69	99.1	2- 1-69	99.0	4- 8-69	97.4	1.7
			Coastal basins south of the Santa Ana River							
10S/1W-22Q1	Pauma	San Diego	853	10-31-68	101.3			4- 8-69	61.0	40.3
10S/2W-6F2	Pala	San Diego	280.9	10-31-68	16.2			3-11-69	6.9	9.3
7S/8W-25K2	San Juan	Orange	225	1-15-69	49.3	2-19-69	43.6	4-24-69	34.2	15.1
			Coastal basins from the Santa Ana River to the Los Angeles River							
1S/3W-17C3	Daniels	San Bernardino	1,175.9	1-20-69	196.5	2-17-69	190.5	5-12-69	121.7	74.8
5S/1E-9J2	Hemet	Riverside	1,784.2	1-20-69	107.3	2-17-69	97.8	5- 7-69	69.0	38.3
5S/9W-10G1	Tustin	Orange	180	1-15-69	143.8	2-10-69	139.8	4- 8-69	135.5	8.3
5S/10W-2B2	Santa Ana	Orange	114	1-13-69	72.1	2-17-69	70.5	4- 1-69	69.6	2.5
1S/10W-7R2	Baldwin Park	Los Angeles	387.7	1-19-69	131.2	2-28-69	110.7	4-20-69	87.5	43.7
3S/10W-32P1	Anaheim	Orange	121	1-13-69	73.9	2-10-69	72.7	4- 8-69	70.1	3.8
			Coastal basins west of the Los Angeles River to the Santa Maria River							
4N/18W-29M2	Piru	Ventura	636.7	1-20-69	115.7	2-19-69	94.7	5- 4-69	22.3	93.4
4N/19W-32A2	Fillmore	Ventura	470.0	1-19-69	12.5	1-26-69	6.0	2-25-69	4.0	8.5
3N/21W-12B1	Renteria	Ventura	279.0	1-15-69	9.0	1-25-69	4.0	2-25-69	3.0	6.0
4N/25W-20L4	Carpinteria	Santa Barbara	111	12-27-68	106.4	1-31-69	92.0	3-27-69	72.7	33.7
7N/34W-35F16	Lompoc	Santa Barbara	119.5	1- 2-69	57.2	1-29-69	45.7	3-26-69	38.8	18.4
7N/34W-21E1	Lompoc	Santa Barbara	82.0	1- 2-69	30.5	1-29-69	6.0	3- 7-69	8.1	22.4
8N/24W-8L1	Cuyama Valley	Santa Barbara	3,050	1-19-69	125.5	2- 5-69	121.3	4-25-69	46.6	78.9
			Coastal basins north of the Santa Maria River							
18S/6E-25F1M	Arroyo Seco Cone	Monterey	277	1-24-69	60.4	2-18-69	43.0	4-16-69	34.6	25.8
15S/4E-22L2M	Spence	Monterey		1-24-69	168.6	2-17-69	153.0	3-18-69	150.8	17.8
12S/5E-10R1M	Hollister	San Benito	211.6	1-16-69	88.2	2-13-69	83.6	3- 5-69	62.5	25.7
			San Joaquin Valley							
17S/26E-28DM	Woodlake	Tulare		1-18-69	51.0	2- 3-69	48.6	3- 3-69	41.6	9.4
20S/21E-5E1M	Guernsey	Kings	219.0			2-14-69	188.2	3- 1-69	184.8	

WATER QUALITY AND DISSOLVED-SOLIDS LOAD

Data on the chemical quality of water obtained at a few gaging stations in southern California provide an indication of the dissolved-solids loads transported during the January flood period. The relation between total dissolved-solids concentration and water discharge in the Santa Clara River at Saticoy, for example, is shown in figure 28. The normal dilution or reduction in the concentration of dissolved solids with increase in streamflow is demonstrated by the data January 20-24. The increase in concentration January 25, near the peak of the flood, however, may reflect the influence of overland wash and related factors associated with the extreme runoff and the unprecedented stages that occurred during the flood.

The dissolved-solids load discharged to the Pacific Ocean January 18-31 by the Santa Clara River, as determined at Saticoy near the mouth, was more than 150,000 tons, and was associated with a water discharge of 336,000 acre-feet, or the equivalent of 0.45 ton per acre-foot of water. During the same period the dissolved-solids load transported by the Santa Ana River at Santa Ana was more than 16,000 tons, with water discharge of 49,000 acre-feet, or 0.34 ton per acre-foot. The Prado Reservoir contents of 73,200 acre-feet January 29 probably contained an additional 25,000 tons of dissolved solids.

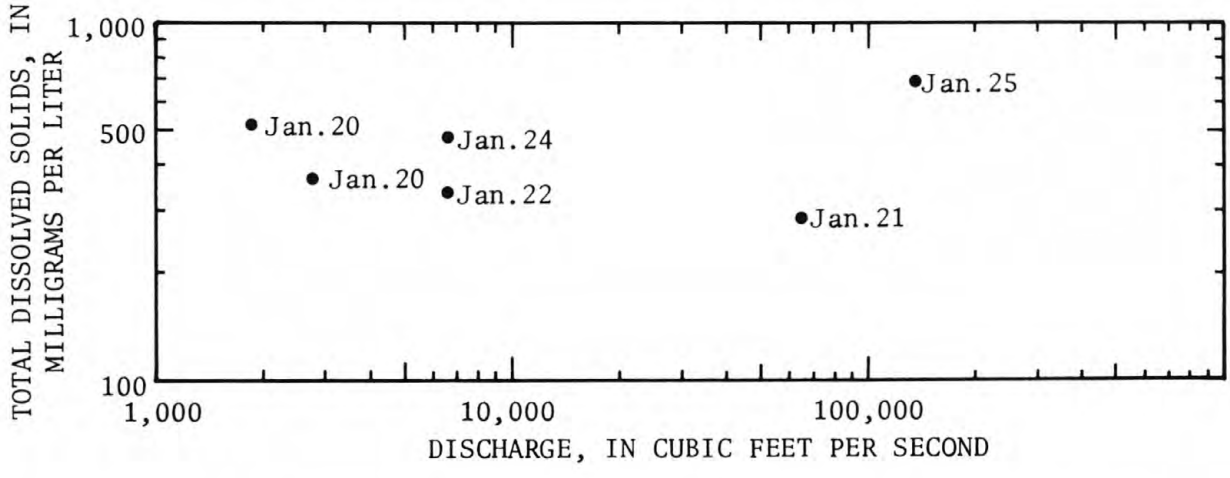

FIGURE 28.--Relation between discharge and total dissolved-solids concentration in Santa Clara River at Saticoy, January 20-25, 1969.

STREAMFLOW AND SEDIMENT DATA

Streamflow and suspended-sediment data in the files of the Geological Survey as of March 31, 1969, are presented in this section of the report. The figures of streamflow and of suspended-sediment concentration and discharge are provisional and subject to later revision. Because of the time limitation for assembly of the data, the areal coverage is not complete.

Detailed data for the flood hydrographs at 59 selected gaging sites, for part or all the periods January 18-31 and February 20-March 5, 1969, are presented in table 5. These sites are shown with identifying station numbers in figure 2. The prefixes "10" and "11" in the station numbers are those used by the Geological Survey to designate the following major drainage regions: Part 10--The Great Basin; Part 11--Pacific slope basins in California. The detailed data include information on stage and discharge at all the gaging sites, and suspended-sediment concentrations and sediment-discharge rates at sediment stations. The daily mean sediment discharge is shown also for many of the sediment stations.

All available data on peak stages, discharges, and estimated recurrence intervals for the sites in the flood-affected area are given in table 6. This table is not complete, as indirect measurements of peak discharge were necessary at many sites, and some computations remained to be completed at the time this report was prepared. The site numbers in tables 5 and 6 are in downstream order and are the same as those used in the Geological Survey annual streamflow reports.

The recurrence interval, or return period, of a flood of a given magnitude is the average interval of time within which the given flood will be exceeded once by the annual maximum discharge. This recurrence interval is inversely related to the chance of a specific flood discharge being exceeded in any one year. Thus, a flood with a 50-year recurrence interval would have 1 chance in 50 of being exceeded in any one year. Recurrence intervals are average figures based on historical data; because the occurrence of floods is erratic, the 50-year flood may not necessarily occur in any given 50-year period, or floods of this magnitude may occur several times during that period. The relation for a flood of any other given recurrence interval is similar.

The recurrence intervals for the maximum discharges reported for the floods of January and February 1969 have been determined from the flood-frequency relations developed by Young and Cruff (1967).[1] Recurrence intervals are not given for regulated streams, for small streams--those with drainage areas less than 10 square miles--or for discharges exceeding that of the 50-year flood. In the latter case, the ratio of the maximum discharge during the floods of January and February 1969 to the 50-year flood discharge is given and footnoted as such.

Maximum observed suspended-sediment concentrations are listed in table 7 for all sites for which this information is available. The time of sampling in relation to the time of the peak flow in the stream is shown to permit evaluation of the representativeness of the data. The table includes information for nearly all the sediment stations operated by the Geological Survey within the report area. The sites are listed in the same numerical and downstream order as that used by the Geological Survey in reports on streamflow and the quality of water in streams.

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[1]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 1, Coastal basins south of the Klamath River basin and Central Valley drainage from the west, and Volume 2, Klamath and Smith River basins and Central Valley drainage from the east: U.S. Geol. Survey Water-Supply Papers 1685, 272 p., and 1686, 308 p.

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*

[Maximum values for the January and February floods are underscored]

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
10-2565. Snow Creek near White Water, Calif.									
Jan. 17, 1969					Jan. 22				
2400		8.9			0200	3.61	228		
Jan. 18					0400	3.50	195		
1200	1.90	7.8			0600	3.41	168		
1800	1.89	7.5			0800	3.35	152		
2200	1.94	8.9			1200	3.21	120		
2400	2.00	11			1600	3.12	102		
Mean		8.5			2000	3.03	87		
Jan. 19					2400	2.93	72		
0200	2.38	27			Mean		138		
0600	2.55	38			Jan. 23				
1000	2.78	56			0600	2.83	60		
1200	2.87	67			1200	2.73	50		
1400	2.85	64			1800	2.66	46		
1600	3.07	96			2000	2.65	44		
1800	3.09	93			2400	2.62	42		
2000	2.97	81			Mean		53		
2200	2.90	71			Jan. 24				
2400	2.99	84			0400	2.61	41		
Mean		61			0600	2.64	43		
Jan. 20					0800	2.87	64		
0600	3.09	100			1000	3.36	125		
0800	3.30	145			1200	3.96	255		
1000	3.63	240			1400	4.10	297		
1200	3.58	225			1600	4.46	405		
1800	3.47	192			1800	5.63	848		
2200	3.54	213			2000	5.50	796		
2400	3.52	207			2200	5.39	752		
Mean		173			2400	5.32	724		
Jan. 21					Mean		375		
0200	3.50	195			Jan. 25				
0400	3.39	162			0200	5.28	708		
0600	3.67	246			0400	5.30	716		
0800	4.58	538			0600	5.47	784		
1000	4.80	620			0800	5.83	1,040		
1100	5.38	852			1000	8.25	4,980		
1200	4.70	980			1100	9.11	13,000		
1400	4.15	760			1200	8.32	9,700		
1600	4.11	744			1400	8.57	8,620		
1800	4.16	764			1600	7.32	5,080		
2000	4.10	740			1800	7.15	4,080		
2200	3.92	668			2000	6.06	1,960		
2400	3.83	632			2200	5.11	766		
Mean		378			2400	4.99	515		
					Mean		3,490		

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day
10-2565. Snow Creek near White Water, Calif.--Continued				
Jan. 26				
0200	4.69	373		
0400	4.50	298		
0600	4.36	249		
0800	4.27	218		
1000	4.20	194		
1200	4.10	165		
1400	4.06	155		
1600	4.07	158		
1800	4.36	249		
2000	4.53	309		
2200	4.39	260		
2400	4.23	173		
Mean		248		
Jan. 27				
0200	4.09	162		
0400	3.97	134		
0600	3.90	118		
0800	3.98	136		
1000	3.94	129		
1200	3.85	107		
1400	3.77	90		
1600	3.67	71		
1800	3.62	62		
2000	3.53	48		
2200	3.49	42		
2400	3.46	38		
Mean		100		
Jan. 28				
0400	3.42	33		
0600	3.40	31		
1200	3.34	23		
1400	3.33	22		
1600	3.58	56		
1800	3.66	69		
2200	3.59	57		
2400	3.52	46		
Mean		40		
Jan. 29				
0200	3.56	52		
0400	3.33	21		
0600	3.42	33		
0800	3.35	25		
1000	3.52	46		
Jan. 29--Continued				
1200	3.30	19		
1400	3.52	46		
1600	3.64	66		
1800	3.61	60		
2000	3.58	56		
2200	3.58	56		
2400	3.57	54		
Mean		44		
Jan. 30				
0200	3.56	52		
0400	3.55	51		
0600	3.54	49		
0800	3.54	49		
1000	3.53	48		
1200	3.51	45		
1400	3.50	43		
1600	3.49	41		
1800	3.47	38		
2000	3.47	38		
2200	3.40	31		
2400	3.46	38		
Mean		44		
Jan. 31				
0200	3.37	27		
0400	3.44	36		
0600	3.32	21		
0800	3.41	32		
1000	3.43	34		
1200	3.54	36		
1400	3.56	38		
1600	3.53	34		
1800	3.61	45		
2000	3.40	19		
2200	3.54	36		
2400	3.63	48		
Mean		33		
Feb. 19				
2400	4.41	13		
Feb. 20				
1200	4.39	12		
2400	4.39	12		
Mean		12		

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
10-2565. Snow Creek near White Water, Calif.--Continued									
Feb. 21					Feb. 26				
1200	4.39		12		0200	6.22		284	
1800	4.38		11		0400	6.16		263	
2400	4.33		8.8		0600	6.03		218	
Mean			11		0800	5.94		188	
Feb. 22					1000	5.94		188	
0600	4.39		12		1200	5.89		173	
1200	4.39		12		1400	5.83		158	
2400	4.38		11		1600	5.80		150	
Mean			11		1800	5.76		140	
Feb. 23					2000	5.74		136	
1200	4.38		11		2200	5.71		129	
2200	4.53		23		2400	5.68		122	
2400	4.89		76		Mean			187	
Mean			15		Feb. 27				
Feb. 24					0200	5.67		120	
0200	4.94		86		0400	5.66		118	
0400	5.14		129		0600	5.64		113	
0600	5.21		145		0800	5.63		111	
0800	5.00		426		1000	5.46		76	
1000	5.42		204		1200	5.45		75	
1200	5.46		218		1400	5.41		67	
1400	5.54		246		1600	5.41		67	
1600	5.82		349		1800	5.42		69	
1800	5.56		252		2400	5.39		64	
2000	5.67		291		Mean			87	
2200	5.62		274		Feb. 28				
2400	5.73		313		0200	5.30		49	
Mean			215		0600	5.35		57	
Feb. 25					1200	4.77		56	
0200	5.64		284		1800	4.79		58	
0400	5.61		274		2000	4.80		60	
0600	5.66		291		2400	4.78		57	
0800	5.76		329		Mean			56	
1000	6.16		510		Mar. 1				
1200	7.87		1,770		0600	4.75		52	
1400	7.17		1,150		1200	4.73		49	
1600	7.20		1,170		1800	4.71		46	
1800	7.60		1,040		2400	4.69		45	
2000	6.91		598		Mean			49	
2200	6.36		337		Mar. 2				
2400	6.28		305		0600	4.67		41	
Mean			672		1200	4.67		41	

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
10-2565. Snow Creek near White Water, Calif.--Continued									
Mar. 2--Continued					Mar. 4				
2400	4.65	38			0600	4.59	32		
Mean		41			1200	4.60	33		
Mar. 3					2400	4.58	31		
0600	4.65	38			Mean		32		
1200	4.62	36			Mar. 5				
2400	4.60	33			1200	4.55	27		
Mean		36			2400	4.55	27		
					Mean		28		
10-2585. Palm Canyon Creek near Palm Springs, Calif.									
Jan. 18, 1969					Jan. 23				
2400		0			1200	1.98	3.2		
Jan. 19					2400	1.94	2.6		
1500		0			Mean		3.5		
1600	2.00	4.8			Jan. 24				
2400	2.01	5.1			0600	1.91	2.4		
Mean		1.8			1200	2.00	4.8		
Jan. 20					1800	2.20	13		
0500	1.99	4.5			2000	2.50	34		
1900	2.10	8.1			2100	2.78	65		
2400	2.04	6.0			2200	3.00	99		
Mean		6.1			2400	2.88	82		
Jan. 21					Mean		19		
0900	2.01	4.5			Jan. 25				
1400	2.20	11			0200	2.75	64		
1800	2.14	7.3			0500	2.70	60		
2300	2.24	11			0700	2.80	77		
2400	2.47	23			0900	2.70	65		
Mean		7.7			1000	2.68	65		
Jan. 22					1100	3.05	133		
0600	2.27	12			1200	4.15	515		
1200	2.16	8.1			1300	4.97	1,000		
1800	2.11	6.3			1400	5.58	1,490		
2400	2.05	5.1			1500	5.10	1,110		
Mean		10			1600	4.65	810		
					1700	4.65	810		
					1800	4.45	690		
					2000	4.05	485		
					2100	3.80	370		
					2200	3.60	290		

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
10-2585. Palm Canyon Creek near Palm Springs, Calif.--Continued									
Jan. 25--Continued					Feb. 19				
2300	3.45	245			2400	1.91	12		
2400	3.31	207			Feb. 20				
Mean		389			1200	1.85	8.9		
Jan. 26					2400	1.82	7.7		
0100	3.20	180			Mean		9.4		
0300	2.97	129			Feb. 21				
0600	2.77	89			1200	1.82	7.7		
0900	2.67	72			2400	1.81	7.3		
1400	2.60	63			Mean		7.6		
2000	2.58	60			Feb. 22				
2300	2.75	82			0300	1.81	7.3		
2400	2.77	84			0900	1.85	8.9		
Mean		86			1200	1.92	12		
Jan. 27					1800	1.88	10		
0200	2.67	68			2400	1.88	10		
0600	2.66	66			Mean		9.5		
1200	2.46	42			Feb. 23				
2400	2.31	27			1200	1.85	8.9		
Mean		48			1800	1.85	8.9		
Jan. 28					2200	1.90	11		
0600	2.30	26			2400	2.08	23		
1200	2.28	24			Mean		10		
1800	2.26	21			Feb. 24				
2400	2.25	20			0100	2.19	32		
Mean		24			0300	2.28	41		
Jan. 29					0600	2.65	90		
0600	2.23	18			1000	2.63	88		
1500	2.20	16			1300	3.07	178		
2400	2.17	14			1800	2.80	119		
Mean		17			2400	2.76	111		
Jan. 30					Mean		104		
0800	2.17	14			Feb. 25				
1200	2.15	14			0400	2.80	119		
2400	2.10	11			0800	2.91	141		
Mean		13			1300	2.85	129		
Jan. 31					1500	3.01	162		
1200	2.05	8.5			1600	3.25	220		
2400	2.00	6.7			1700	3.70	370		
Mean		8.7			1800	3.87	440		

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
10-2585. Palm Canyon Creek near Palm Springs, Calif.--Continued									
Feb. 25--Continued					Mar. 1				
2100	4.05	520			1200	2.28	60		
2200	4.02	510			2400	2.22	53		
2400	3.72	402			Mean		60		
Mean		238			Mar. 2				
Feb. 26					2400	2.13	44		
0300	3.35	281			Mean		48		
0800	3.07	205			Mar. 3				
1500	2.81	145			2400	2.07	39		
2400	2.60	105			Mean		41		
Mean		191			Mar. 4				
Feb. 27					2400	2.03	35		
1200	2.46	84			Mean		37		
2400	2.37	72			Mar. 5				
Mean		86			2400	2.00	32		
Feb. 28					Mean		34		
1200	2.32	65							
1800	2.29	61							
2400	2.32	65							
Mean		66							
10-2605. Deep Creek near Hesperia, Calif.									
Jan. 17, 1969					Jan. 20				
2400	1.67	20			0200	1.91	45		
Jan. 18					0400	2.11	81		
1200	1.64	18			0600	2.23	112		
2400	1.61	16			0800	2.31	137		
Mean		18			1000	2.93	473		
Jan. 19					1200	3.17	672		
0600	1.60	16			1400	3.34	820		
1200	1.61	17			1600	3.43	920		
1800	1.68	21			1800	3.42	910		
2200	1.73	25			2000	3.65	1,150		
2400	1.83	35			2200	3.63	1,130		
Mean		19			2400	4.15	1,860		
					Mean		610		
					Jan. 21				
					0200	4.16	1,880		
					0400	3.92	1,520		
					0600	4.16	1,880		

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
10-2605. Deep Creek near Hesperia, Calif.--Continued									
Jan. 21--Continued					Jan. 25				
0800	6.31	2,110			0200	6.72	7,170		
1000	8.00	10,450			0400	7.62	9,430		
1200	7.32	8,680			0600	8.89	12,700		
1400	5.67	4,860			0800	9.59	14,600		
1600	5.60	4,700			1000	11.56	19,700		
1800	5.51	4,500			1200	12.83	23,000		
2000	5.38	4,220			1400	11.37	19,200		
2200	4.90	3,240			1600	12.05	21,000		
2400	4.52	2,490			1800	10.55	17,000		
Mean----------		4,450			2000	9.05	13,200		
					2200	9.08	13,200		
Jan. 22					2400	8.04	10,500		
					Mean---------		14,700		
0200	4.33	2,150							
0400	4.03	1,680			Jan. 26				
0600	4.01	1,650							
0800	3.75	1,270			0200	8.00	10,400		
1000	3.69	1,200			0400	7.36	8,760		
1200	3.72	1,240			0600	6.92	7,650		
1400	3.47	960			0800	6.53	6,730		
1600	3.34	830			1000	6.07	5,700		
1800	3.23	726			1200	5.67	4,830		
2000	3.14	636			1400	5.65	4,790		
2200	3.05	567			1600	7.03	7,910		
2400	2.98	510			1800	8.07	10,600		
Mean----------		1,200			2000	7.62	9,430		
					2200	6.97	7,770		
Jan. 23					2400	6.31	6,240		
					Mean----------		7,860		
0400	2.86	429							
0800	2.76	363			Jan. 27				
1200	2.68	313							
1600	2.62	280			0200	5.87	5,270		
2000	2.56	248			0400	5.50	4,460		
2400	2.55	243			0600	5.24	3,900		
Mean----------		335			0800	5.02	3,460		
					1000	4.89	3,200		
Jan. 24					1200	4.78	2,980		
					1400	4.71	2,840		
0400	2.51	224			1600	4.31	2,100		
0800	2.47	205			2000	4.04	1,680		
1200	2.49	214			2400	3.86	1,410		
1400	2.51	229			Mean----------		3,230		
1600	2.86	429							
1800	3.05	567			Jan. 28				
2000	3.92	1,530							
2200	5.53	4,570			0600	3.69	1,200		
2400	6.15	5,930			1200	3.56	1,050		
Mean----------		963			1800	3.49	980		
					2400	3.39	880		
					Mean ---------		1,090		

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
10-2605. Deep Creek near Hesperia, Calif.--Continued									
Jan. 29					Feb. 23				
0600	3.31	800			0600	2.32	166		
1200	3.21	708			1000	2.31	162		
1800	3.02	543			1400	2.37	188		
2400	2.96	496			1600	2.43	214		
Mean		671			1800	2.54	269		
Jan. 30					2000	2.69	356		
0600	2.89	443			2200	3.01	526		
1200	2.85	416			2400	3.37	575		
1600	2.84	409			Mean		235		
2000	2.86	423			Feb. 24				
2400	2.82	395			0200	3.68	1,180		
Mean		431			0400	4.28	2,050		
Jan. 31					0600	4.97	3,360		
0600	2.78	375			0800	5.01	3,440		
1200	2.73	344			1000	4.96	3,340		
1800	2.72	338			1200	4.96	3,340		
2400	2.69	319			1400	6.51	6,680		
Mean		354			1600	7.62	9,430		
Feb. 19					1800	7.72	9,690		
2400	2.32	166			2000	8.59	12,000		
Feb. 20					2200	8.23	11,000		
0600	2.30	159			2400	8.63	12,100		
1200	2.29	155			Mean		5,990		
1800	2.32	166			Feb. 25				
2400	2.32	166			0200	9.03	13,100		
Mean		162			0400	9.03	13,100		
Feb. 21					0600	9.70	14,800		
0600	2.32	166			0800	10.11	15,900		
1200	2.30	159			1000	10.49	16,900		
1800	2.29	155			1100	10.75	17,600		
2400	2.31	162			1200	10.25	16,300		
Mean		162			1400	9.82	15,200		
Feb. 22					1600	8.85	12,600		
0600	2.33	170			1800	8.33	11,300		
1200	2.31	162			2000	8.10	10,700		
1600	2.31	162			2200	7.62	9,430		
2000	2.36	183			2400	7.05	7,960		
2400	2.34	175			Mean		13,300		
Mean		169			Feb. 26				
					0200	6.75	7,240		
					0400	6.35	6,330		
					0600	5.99	5,540		
					0800	5.71	4,920		
					1000	5.49	4,440		
					1200	5.34	4,110		

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
10-2605. Deep Creek near Hesperia, Calif.--Continued									
Feb. 26--Continued					Mar. 2				
1400	5.16	3,740			0600	3.37	870		
1600	5.05	3,520			1200	3.33	820		
1800	4.98	3,380			2400	3.33	820		
2000	4.84	3,100			Mean		849		
2200	4.73	2,880			Mar. 3				
2400	4.59	2,600			0600	3.24	753		
Mean		4,530			1000	3.22	735		
Feb. 27					1100	3.32	830		
0400	4.39	2,230			1200	3.27	780		
0800	4.23	1,970			1800	3.24	753		
1200	4.12	1,830			2400	3.21	726		
1600	4.03	1,660			Mean		763		
2000	3.99	1,600			Mar. 4				
2400	3.91	1,480			0600	3.18	708		
Mean		1,880			1200	3.14	672		
Feb. 28					1800	3.11	645		
0600	3.79	1,310			2400	3.08	618		
1200	3.69	1,190			Mean		674		
1800	3.69	1,190			Mar. 5				
2400	3.88	1,440			0600	3.05	609		
Mean		1,280			1200	3.02	584		
Mar. 1					1800	2.99	559		
0600	3.65	1,150			2400	2.97	543		
1200	3.50	990			Mean		583		
1800	3.48	970							
2400	3.42	910							
Mean		1,070							
10-2615. Mojave River at lower narrows, near Victorville, Calif.									
Jan. 17, 1969					Jan. 19				
2400	1.74	42			1200	1.76	45		
Jan. 18					2400	1.74	42		
1400	1.77	46			Mean		44		
2400	1.75	43			Jan. 20				
Mean		44			1200	1.75	43		
					2400	1.78	48		
					Mean		44		

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

10-2615. Mojave River at lower narrows, near Victorville, Calif.--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day
Jan. 21				
0300	1.78	48		
0400	1.82	53		
0500	2.00	88		
0600	2.20	135		
0700	2.45	195		
0800	2.78	326		
0900	3.02	441		
1000	3.06	473		
1100	3.00	425		
1200	2.93	383		
1300	5.00	2,500		
1400	7.00	6,800		
1500	6.35	5,220		
1600	5.27	3,050		
1700	4.43	1,840		
1800	4.00	1,320		
1900	3.72	1,220		
2000	3.78	1,140		
2100	3.86	1,140		
2200	3.64	1,060		
2300	3.70	1,120		
2400	3.60	1,060		
Mean		1,230		
Jan. 22				
0100	3.60	1,060		
0200	3.38	894		
0300	3.25	799		
0400	3.19	759		
0500	3.13	719		
0700	3.02	640		
0900	3.03	656		
1000	3.17	791		
1100	3.60	1,120		
1200	3.75	1,270		
1300	3.38	966		
1400	3.48	1,050		
1500	3.32	934		
1600	3.48	1,070		
1800	3.33	958		
1900	3.28	926		
2100	3.18	854		
2400	2.98	703		
Mean		881		
Jan. 23				
0300	2.75	528		
0600	2.50	360		
1000	2.29	256		
1500	2.11	187		
2400	1.95	132		
Mean		290		
Jan. 24				
1200	1.80	92		
1600	1.75	81		
2400	1.66	62		
Mean		94		
Jan. 25				
0200	1.70	70		
0300	4.30	1,860		
0400	5.00	2,680		
0500	6.10	4,680		
0600	6.75	6,050		
0700	8.15	10,300		
0800	8.55	11,700		
0900	8.86	12,800		
1000	9.00	13,300		
1100	10.00	17,600		
1200	10.95	21,800		
1300	12.60	29,300		
1400	12.78	30,200		
1500	13.50	33,800		
1600	12.91	32,600		
1700	12.50	31,700		
1800	11.80	30,100		
1900	11.40	29,200		
2000	10.50	27,200		
2100	9.50	24,800		
2200	8.20	21,900		
2300	6.78	18,900		
2400	5.53	15,120		
Mean		17,500		
Jan. 26				
0100	5.00	15,000		
0200	4.65	14,300		
0300	4.20	13,400		
0400	3.87	12,700		
0500	3.50	12,000		
0600	3.15	11,300		
0700	2.65	10,300		
0800	2.20	9,480		
0900	1.80	8,760		
1000	1.45	8,160		
1100	1.00	7,400		

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
10-2615. Mojave River at lower narrows, near Victorville, Calif.--Continued									
Jan. 26--Continued					Jan. 29				
1200	0.50	6,650			1200	-0.50	1,280		
2400	-.08	4,900			2400	-.51	880		
Mean		8,480			Mean		1,310		
Jan. 27					Jan. 30				
1200	-.32	3,900			1200	-.52	540		
2400	-.40	3,090			2400	-.53	250		
Mean		3,950			Mean		552		
Jan. 28					Jan. 31				
1200	-.45	2,400			1200	-.53	200		
2400	-.48	1,800			2400	-.54	150		
Mean		2,420			Mean		200		
10-2635. Big Rock Creek near Valyermo, Calif.									
Jan. 18, 1969					Jan. 21--Continued				
2400	1.75	5.4			0800	4.70	1,400		
Jan. 19					1000	4.14	1,010		
0600	1.75	5.4			1200	4.04	954		
1800	1.79	7.5			1400	3.85	840		
2000	1.91	15			1600	3.72	770		
2400	1.95	23			1800	3.57	695		
Mean		8.7			2000	3.51	665		
Jan. 20					2200	3.33	584		
0200	2.08	47			2400	3.22	538		
0600	2.15	68			Mean		861		
1000	2.23	98			Jan. 22				
1400	2.22	108			0200	2.85	390		
1600	2.31	142			0400	2.64	325		
1800	2.60	228			0600	2.57	308		
2000	2.84	300			1400	2.48	285		
2200	2.74	288			2400	2.42	270		
2400	3.03	382			Mean		309		
Mean		144			Jan. 23				
Jan. 21					0800	2.37	258		
0200	3.66	685			1600	2.32	245		
0400	4.19	984			2400	2.27	232		
0600	4.36	1,130			Mean		251		
0700	4.92	1,570							

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
10-2635. Big Rock Creek near Valyermo, Calif.--Continued									
Jan. 24					Jan. 28				
0800	2.24	225			1200		350		
1400	2.24	225			2400		225		
1600	2.34	250			Mean		344		
1800	2.57	308			Jan. 29				
2000	2.54	300			1200	2.08	175		
2200	2.70	340			2400	1.96	145		
2400	3.12	498			Mean		180		
Mean		262			Jan. 30				
Jan. 25					1200	1.87	122		
0200	3.85	840			2400	1.81	108		
0400	4.67	1,380			Mean		124		
0600	4.94	1,580			Jan. 31				
0800	6.64	3,290			1200	1.71	83		
1000	7.70	4,760			1400	1.82	110		
1200	7.06	3,830			2400	1.77	98		
1400	6.79	3,610			Mean		99		
1600	6.13	2,730			Feb. 19				
1800	5.75	2,350			2400	1.32	25		
2000	5.62	2,220			Feb. 20				
2200	4.98	1,610			1200	1.30	23		
2400	3.92	882			2400	1.29	22		
Mean		2,410			Mean		23		
Jan. 26					Feb. 21				
0200	3.98	918			1200	1.27	20		
0400	3.85	840			2400	1.26	19		
0600	4.62	1,340			Mean		20		
0800	4.88	1,530			Feb. 22				
1000	5.07	1,690			1200	1.26	19		
1200	5.75	2,350			2400	1.25	18		
1400	5.85	2,450			Mean		19		
1500	6.17	2,770			Feb. 23				
1600	6.05	2,650			1000	1.24	18		
1800	5.98	2,580			1600	1.27	20		
2000	5.73	2,330			1800	1.84	125		
2200	5.10	1,710							
2400	4.64	1,360							
Mean		1,800							
Jan. 27									
0200	3.96	906							
0600	3.73	775							
1200	3.57	695							
1600	3.23	542							
2000	3.10	490							
2400	3.00	450							
Mean		686							

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
10-2635. Big Rock Creek near Valyermo, Calif.--Continued									
Feb. 23--Continued					Feb. 27				
2400	1.93	148			0200	2.73	349		
Mean		52			0400	2.48	285		
Feb. 24					0800	2.33	248		
0600	1.96	155			1200	2.22	220		
1000	2.08	185			1800	2.20	215		
1400	2.31	242			2400	2.17	208		
1600	2.69	338			Mean		245		
1800	3.00	450			Feb. 28				
2000	3.87	852			1200	2.11	192		
2200	4.23	1,070			2400	2.07	187		
2400	4.69	1,390			Mean		194		
Mean		396			Mar. 1				
Feb. 25					1200	2.02	172		
0200	4.95	1,590			2400	1.97	160		
0400	5.74	2,340			Mean		172		
0600	6.25	2,850			Mar. 2				
0800	5.97	2,570			1200	1.93	150		
1000	5.84	2,440			2400	1.89	140		
1200	5.30	1,900			Mean		150		
1400	4.87	1,530			Mar. 3				
1600	4.52	1,270			1200	1.85	132		
1800	4.24	1,080			2400	1.81	122		
2000	3.93	888			Mean		132		
2200	3.66	740			Mar. 4				
2400	3.62	720			0800	1.79	118		
Mean		1,690			1000	1.84	132		
Feb. 26					2400		130		
0200	3.47	645			Mean		127		
0600	3.35	590			Mar. 5				
1000	3.03	462			1200		125		
1200	2.76	358			2400	1	120		
1400	2.86	394			Mean		125		
1800	2.78	364							
2400	2.60	315							
Mean		461							

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-0410. San Luis Rey River near Bonsall, Calif.									
Jan. 17, 1969					Jan. 25--Continued				
2400	3.75	2.0			0700	5.25	92		
Jan. 18					0800	5.66	145		
					0900	5.79	167		
1200		2.0			1000	5.80	169		
2400		2.5			1200	6.03	203		
Mean		2.1			1300	6.35	260		
Jan. 19					1400	7.00	428		
					1500	8.45	1,140		
1200		5.8			1600	10.40	2,920		
2400		5.8			1700	11.45	4,380		
Mean		5.0			1800	11.86	4,970		
Jan. 20					1900	11.75	4,780		
					2000	11.22	3,860		
1200		2.3			2100	10.85	3,420		
2400		2.0			2200	10.35	2,880		
Mean		3.1			2300	9.43	2,020		
Jan. 21					2400	9.56	2,250		
					Mean		1,390		
1200		2.0			Jan. 26				
2400		2.5							
Mean		2.0			0200	8.82	1,630		
Jan. 22					0300	8.37	1,340		
					0400	7.95	1,070		
1200		5.8			0500	7.65	880		
2400		5.8			0600	7.42	785		
Mean		5.0			0700	7.00	588		
Jan. 23					0800	6.75	485		
					0900	6.45	375		
1200		1.5			1000	6.20	300		
2400		1.2			1100	5.97	242		
Mean		2.5			1200	5.59	167		
Jan. 24					1300	5.17	101		
					1700	4.82	59		
1200		2.0			1800	4.79	56		
2200		2.5			1900	4.87	64		
2400	4.42	20			2000	5.15	98		
Mean		2.7			2100	5.27	115		
Jan. 25					2200	5.47	146		
					2400	5.36	129		
0100	4.49	24			Mean		500		
0300	4.65	34			Jan. 27				
0500	4.73	39							
0600	4.77	42			0100	6.44	372		
					0200	6.70	465		
					0200	6.51	414		
					0300	6.22	336		
					0500	6.00	285		
					0600	5.82	260		
					0700	5.61	225		

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-0410. San Luis Rey River near Bonsall, Calif.--Continued									
Jan. 27--Continued					Feb. 20				
0800	5.39	191			1200		78		
0900	5.14	155			2400		74		
1000	4.90	132			Mean		79		
1200	4.72	105			Feb. 21				
1500	4.61	90			1200		72		
1800	4.58	86			1800		65		
2400	4.56	84			2400	4.60	47		
Mean		167			Mean		68		
Jan. 28					Feb. 22				
1200	4.55	83			0200	4.68	54		
2400	4.54	81			0400	4.74	60		
Mean		83			0600	4.76	62		
Jan. 29					0700	5.00	90		
1200	4.50	75			0800	6.25	342		
2400	4.45	70			1000	6.28	351		
Mean		75			1200	6.00	270		
Jan. 30					1500	5.43	155		
1200	4.40	62			1800	5.08	101		
2400	4.37	59			2100	4.85	72		
Mean		63			2400	4.73	59		
Jan. 31					Mean		143		
1200	4.33	55			Feb. 23				
2400	4.28	50			0300	4.62	48		
Mean		55			1200	4.57	44		
Feb. 17					1800	4.63	49		
2400		43			2000	4.70	56		
Feb. 18					2400	4.72	58		
1200		43			Mean		49		
2400		43			Feb. 24				
Mean		43			0100	4.92	80		
Feb. 19					0200	5.35	141		
1200		75			0300	7.00	637		
2400		85			0500	7.95	1,210		
Mean		70			0600	8.65	1,770		
					0700	9.15	2,270		
					0800	9.35	2,470		
					1000	9.68	2,920		
					1200	10.00	3,420		
					1300	9.73	3,040		
					1400	9.37	2,600		
					1500	9.05	2,270		
					1600	8.89	2,110		

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-0410. San Luis Rey River near Bonsall, Calif.--Continued									
Feb. 24--Continued					Feb. 26				
1800	8.66	1,930			0200	8.45	1,820		
2200	8.29	1,590			0400	7.87	1,300		
2300	8.14	1,470			0600		1,050		
2400	8.25	1,560			1200		675		
Mean----------		1,870			2000		470		
					2400		420		
Feb. 25					Mean----------		897		
0300	8.00	1,400			Feb. 27				
0600	8.25	1,600							
0800	8.42	1,740			0600		370		
0900	8.74	2,110			1200		340		
1000	9.04	2,460			1800		315		
1200	9.30	2,820			2400		295		
1400	9.55	3,140			Mean----------		346		
1500	9.85	3,560							
1600	10.70	5,100			Feb. 28				
1700	11.25	6,200							
1800	11.42	6,640			1200		250		
1900	11.00	5,820			2400		200		
2000	10.90	5,640			Mean----------		249		
2100	10.00	3,960							
2300	9.50	3,140							
2400	9.20	2,700							
Mean----------		3,090							
11-0420. San Luis Rey River at Oceanside, Calif.									
Jan. 17, 1969					Jan. 21				
2400		2.5			1200		3.5		
					2400		3.0		
Jan. 18					Mean----------		3.4		
1200		2.5			Jan. 22				
2400		5.0							
Mean----------		3.1			1200		3.0		
					2400		3.0		
Jan. 19					Mean----------		3.0		
1200		5.0			Jan. 23				
2400		4.0							
Mean----------		4.8			1200		3.0		
					2400		2.5		
Jan. 20					Mean----------		2.9		
1200		4.0							
2400		3.5							
Mean----------		3.9							

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-0420. San Luis Rey River at Oceanside, Calif.--Continued									
Jan. 24					Jan. 28--Continued				
1200		2.5			1800	9.07	59		
2400		5.0			2400	8.92	44		
Mean		3.1			Mean		71		
Jan. 25					Jan. 29				
0800	8.22	5.9			1200	8.88	40		
1200	8.67	25			2400	8.84	37		
1500	9.56	129			Mean		40		
1700	10.57	438			Jan. 30				
1800	11.2	770			1200	8.82	35		
2000	11.85	1,260			2400	8.80	34		
2200	12.55	1,990			Mean		35		
2400	13.2	3,010			Jan. 31				
Mean		491			1200	8.78	32		
Jan. 26					2400	8.76	31		
0200	12.7	2,190			Mean		32		
0400	12.0	1,390			Feb. 19				
0600	11.65	1,090			2400	9.10	62	210	35
0700	11.23	791			Feb. 20				
0900	10.90	600			0600	9.30	88	290	69
1100	10.56	430			0900	9.38	99	460	123
1200	10.40	362			1100	9.42	105	700	198
1400	10.20	282			1500	9.42	105	460	130
1600	10.04	236			1800	9.33	92	380	94
1800	9.95	215			2400	9.20	75	250	51
2100	9.80	180			Mean		90	386	98
2400	9.68	154			Feb. 21				
Mean		738			1200	9.07	59	150	24
Jan. 27					2400	9.00	51	120	17
0200	9.68	154			Mean		61	168	29
0400	9.87	198			Feb. 22				
0600	10.22	302			0700	9.07	59	130	21
0700	10.22	302			1000	9.16	70	160	30
1000	10.07	251			1200	9.39	101	200	55
1200	9.93	212			1500	9.57	131	320	113
1500	9.72	162			1700	9.57	131	600	212
1800	9.56	129			1800	9.65	149	2,900	1,170
2100	9.45	110			2000	9.81	185	2,700	1,350
2400	9.36	96							
Mean		184							
Jan. 28									
0600	9.28	85							
1200	9.16	70							
1400	9.12	65							

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-0420. San Luis Rey River at Oceanside, Calif.--Continued									
Feb. 22--Continued					Feb. 26				
2400	9.63	145	2,300	900	0200		4,950	43,000	575,000
Mean		104	863	358	0400		4,800	38,000	492,000
					0600		4,600	33,000	410,000
Feb. 23					0900		4,200	27,000	306,000
					1200		3,100	21,000	176,000
1000	9.35	110	1,600	475	1400		2,000	18,000	97,000
1800	9.16	83	1,400	314	1600		1,000	15,000	40,000
2400	9.15	82	1,400	310	1800		600	13,000	21,100
Mean		106	1,660	496	2100		400	11,000	11,900
					2400		300	9,600	7,780
Feb. 24					Mean		2,730	23,800	231,000
					Feb. 27				
0100	9.15	84	1,400	318					
0400	9.26	99	1,500	401	1000		200	6,500	3,510
0600	9.60	162	1,600	700	1800		160	5,400	2,330
0700	10.20	346	1,700	1,590	2400		140	5,000	1,890
0800	10.93	704	1,800	3,420	Mean		202	5,460	3,850
0900	11.50	1,110	1,900	5,690					
1000	11.98	1,580	2,100	8,960	Feb. 28				
1200	12.43	2,010	2,900	15,700					
1400	12.90	2,600	6,200	43,500	1200		115	4,600	1,430
1500	13.03	2,700	5,800	42,300	2400		98	4,300	1,140
1700	12.70	2,190	5,400	31,900	Mean		117	4,620	1,470
1900	12.27	1,660	5,200	23,300					
2100	12.07	1,460	5,000	19,700	Mar. 1				
2400	12.09	1,480	5,000	20,000					
Mean		1,280	3,470	15,700	1200		80	4,000	864
					2400		72	3,800	739
Feb. 25					Mean		82	4,020	900
					Mar. 2				
0300	12.09	1,480	5,000	20,000					
0400	12.15	1,540	5,100	21,200	Mean		66	3,600	642
0700	12.10	1,490	5,400	21,700					
1200	12.38	1,790	6,400	30,900	Mar. 3				
1400	12.90	2,490	7,000	47,100					
1700	13.15	2,890	9,200	71,800	Mean		60	3,200	518
1800	13.50	3,490	15,000	141,000					
1900	13.97	4,390	30,000	356,000	Mar. 4				
2000	13.98	4,650	60,000	750,000					
2100	13.68	4,800	58,000	752,000	Mean		58	2,900	454
2300	13.17	4,950	52,000	695,000					
2400	12.79	5,000	48,000	648,000	Mar. 5				
Mean		2,590	16,700	180,000					
					Mean		56	2,700	408

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-0430. Murrieta Creek at Temecula, Calif.									
Jan. 17, 1969					Jan. 24				
2400	0.40	0.9			0900	0.20	0.2		
Jan. 18					1000	.42	1.0		
1200	.40	.9			1300	.40	.9		
2400	.41	1.0			1600	.79	6.8		
Mean		.9			1700	.98	13		
Jan. 19					1900	1.19	22		
1200	.40	.9			2000	1.39	34		
2400	.41	1.0			2400	1.45	37		
Mean		1.0			Mean		9.6		
Jan. 20					Jan. 25				
0800	.48	1.6			0200	1.62	52		
2400	.47	1.5			0400	1.90	84		
Mean		1.3			0500	2.14	123		
Jan. 21					0600	3.30	470		
0600	.66	4.0			0700	3.41	522		
0800	.69	4.5			0800	3.80	724		
0900	1.56	52			0900	4.36	1,080		
1000	1.15	20			1000	5.10	1,590		
1100	.77	6.2			1100	6.60	2,900		
1200	1.55	51			1200	8.10	4,400		
1300	3.35	530			1300	9.57	6,140		
1400	2.90	350			1400	9.82	6,490		
1500	2.55	238			1500	9.94	6,660		
1600	2.25	162			1600	9.70	6,320		
1700	2.05	121			1700	8.84	5,250		
2000	1.86	89			1800	7.96	4,260		
2200	1.69	66			1900	7.09	3,390		
2400	1.18	22			2000	6.96	3,260		
Mean		85			2100	6.39	2,690		
Jan. 22					2200	5.90	2,200		
0100	.97	12			2300	5.00	1,520		
0300	.77	6.2			2400	4.50	1,180		
0800	.61	3.2			Mean		2,530		
1300	.48	1.6			Jan. 26				
2400	.26	.3			0100	4.08	922		
Mean		3.3			0200	3.90	808		
Jan. 23					0400	3.56	615		
2400	.13	.2			0600	3.38	526		
Mean		.2			0800	3.22	458		
					1000	3.25	466		
					1200	3.19	438		
					1400	3.06	382		
					1600	2.94	330		
					1700	3.05	370		
					2000	3.21	438		
					2100	3.64	630		
					2200	3.46	546		

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-0430. Murrieta Creek at Temecula, Calif.--Continued									
Jan. 26--Continued					Feb. 21				
2400	3.17	434			1200	0.80	7.0		
Mean		520			2400	.74	5.5		
Jan. 27					Mean		8.4		
0100	2.97	358			Feb. 22				
0200	2.79	295			0200	1.30	30		
0400	2.51	220			0400	1.77	76		
0600	2.27	165			0500	2.50	225		
0800	2.09	126			0600	3.14	446		
1000	1.94	102			0700	3.16	454		
1200	1.81	82			1000	3.08	422		
1600	1.55	51			1200	2.82	318		
1800	1.43	40			1400	2.50	225		
2400	1.13	20			1600	2.26	165		
Mean		119			1800	2.07	125		
Jan. 28					2000	1.93	100		
0200	1.06	16			2400	1.80	80		
0800	.88	9.4			Mean		206		
1400	.74	5.5			Feb. 23				
2400	.65	3.8			0400	1.60	56		
Mean		8.4			0800	1.49	45		
Jan. 29					1200	1.47	43		
1200	.62	3.3			1500	1.79	79		
2400	.59	2.9			1600	2.26	165		
Mean		3.3			1700	2.64	262		
Jan. 30					1800	3.00	390		
1200	.56	2.5			1900	4.05	910		
2400	.55	2.4			2000	6.10	2,400		
Mean		2.6			2100	7.15	3,450		
Jan. 31					2200	7.50	3,800		
1200	.54	2.2			2300	8.15	4,450		
2400	.52	2.0			2400	8.60	4,960		
Mean		2.2			Mean		799		
Feb. 20					Feb. 24				
2400	1.00	14			0100	9.16	5,640		
					0200	9.47	6,000		
					0400	10.15	6,950		
					0700	9.61	6,190		
					0900	10.14	6,940		
					1100	9.75	6,390		
					1200	9.53	6,080		
					1400	9.25	5,770		
					1500	9.10	5,560		
					1600	8.85	5,260		
					1800	8.50	4,840		
					2000	8.20	4,500		

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11.0430. Murrieta Creek at Temecula, Calif.--Continued									
Feb. 24--Continued					Feb. 26--Continued				
2200	8.20	4,500			2400	2.80	295		
2300	8.50	4,840			Mean----------		1,150		
2400	9.00	5,440			Feb. 27				
Mean----------		5,740			0600	2.45	200		
Feb. 25					1200	2.23	146		
0100	9.48	6,010			1800	2.06	114		
0200	10.00	6,740			2400	1.94	94		
0400	10.26	7,100			Mean----------		164		
0600	9.80	6,460			Feb. 28				
0700	9.55	6,110			1200	1.73	65		
0800	9.70	6,320			2400	1.58	48		
0900	9.53	6,080			Mean----------		68		
1000	9.40	5,900			Mar. 1				
1100	9.50	6,040			1200	1.45	36		
1200	10.00	6,740			2400	1.40	33		
1300	10.50	7,460			Mean----------		38		
1400	11.00	8,260			Mar. 2				
1500	12.34	10,400			1200	1.34	29		
1600	12.10	10,000			2400	1.30	25		
1700	11.70	9,380			Mean----------		29		
1900	10.95	8,180			Mar. 3				
2000	10.42	7,330			1200	1.29	24		
2100	9.85	6,530			2400	1.28	24		
2200	9.34	5,900			Mean----------		24		
2300	8.55	4,900			Mar. 4				
2400	7.80	4,100			1200	1.27	23		
Mean----------		7,050			2400	1.26	22		
Feb. 26					Mean----------		23		
0100	7.05	3,340			Mar. 5				
0200	6.50	2,780			1200	1.25	22		
0300	6.00	2,270			2400	1.24	22		
0400	5.60	1,930			Mean----------		22		
0500	5.20	1,620							
0700	4.80	1,340							
0800	4.50	1,140							
1000	4.70	1,280							
1200	3.90	790							
1400	3.58	615							
1600	3.34	506							
1800	3.18	442							
2000	3.02	378							

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-0460. Santa Margarita River at Ysidora, Calif.									
Jan. 25, 1969					Jan. 27--Continued				
1600		0			2400	10.24	742		
1700	9.00	105			Mean----------		1,480		
1700	11.43	2,010			Jan. 28				
1800	16.05	15,200			0600	10.03	588		
1900	16.26	16,100			1200	9.86	486		
2000	16.05	15,200			1800	9.73	408		
2100	15.85	14,300			2400	9.65	365		
2200	15.60	13,300			Mean----------		509		
2300	15.25	11,900			Jan. 29				
2400	14.97	10,900			0600	9.57	325		
Mean----------		3,850			1200	9.48	281		
Jan. 26					2400	9.29	201		
0100	14.70	9,920			Mean----------		282		
0200	14.40	8,900			Jan. 30				
0300	14.15	8,100			0600	9.22	173		
0400	13.87	7,220			1200	9.17	156		
0500	13.65	6,600			1800	9.12	141		
0600	13.43	5,980			2400	9.09	132		
0700	13.20	5,410			Mean----------		159		
0800	13.03	5,000			Jan. 31				
0900	12.83	4,540			0600	9.07	126		
1000	12.65	4,140			1200	9.05	120		
1100	12.45	3,730			2400	8.98	100		
1200	12.35	3,530			Mean----------		118		
1400	12.09	3,050			Feb. 19				
1600	11.93	2,780			2400	9.71	396	300	321
1800	11.81	2,590			Feb. 20				
2000	11.67	2,360			0900	9.93	528	700	998
2200	11.61	2,270			1600	9.79	444	420	503
2400	11.66	2,350			2400	9.62	350	360	340
Mean----------		4,530			Mean----------		447	481	607
Jan. 27					Feb. 21				
0100	11.67	2,360			0600	9.54	310	340	285
0200	11.54	2,170			1800	9.41	250	310	236
0300	11.51	2,120			2400	9.38	237	300	193
0400	11.39	1,960			Mean----------		283	326	274
0500	11.34	1,890							
0600	11.31	1,840							
0800	11.26	1,780							
1000	11.19	1,700							
1200	11.05	1,530							
1400	10.85	1,300							
1600	10.67	1,120							
1800	10.54	990							
2000	10.42	886							
2200	10.34	822							

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-0460. Santa Margarita River at Ysidora, Calif.--Continued									
Feb. 22					Feb. 25--Continued				
0600	9.44	263	310	220	1600	15.85	19,000	10,000	513,000
1200	9.73	408	350	386	1800	15.89	19,200	10,000	518,000
1800	9.86	486	600	787	1900	15.75	18,500	10,000	500,000
2200	10.27	766	1,000	2,070	2000	15.20	15,800	10,000	427,000
2400	10.28	774	840	1,760	2100	14.80	14,100	9,400	358,000
Mean----------		427	588	672	2200	14.15	11,600	8,600	269,000
Feb. 23					2300	13.43	9,000	8,200	199,000
1200	9.77	432	570	665	2400	13.17	8,160	7,600	167,000
1800	9.67	375	480	486	Mean---------		16,400	10,400	474,000
2100	9.70	390	1,000	1,050	Feb. 26				
2400	10.24	742	2,300	4,610	0100	11.45	3,730	7,200	72,500
Mean----------		521	1,020	1,200	0200	10.55	2,180	6,800	40,000
Feb. 24					0300	9.60	1,050	6,400	18,100
0100	11.49	2,100	3,500	19,800	0400	9.53	980	6,000	15,900
0200	11.97	2,840	5,000	38,300	0600	9.37	846	5,400	12,300
0300	12.74	4,340	8,000	93,700	1200	9.13	654	4,000	7,060
0400	14.04	7,750	20,000	418,000	1800	8.98	558	3,200	4,820
0500	14.94	10,800	19,000	554,000	2400	8.94	534	2,600	3,750
0600	15.63	13,400	18,000	651,000	Mean----------		1,030	4,410	15,400
0800	16.18	15,700	16,000	678,000	Feb. 27				
1000	16.50	17,200	15,000	697,000	Mean----------		514	1,900	2,640
1200	16.85	19,000	14,000	718,000	Feb. 28				
1400	16.72	18,400	13,000	645,000	Mean----------		500	1,200	1,620
2000	16.50	17,200	12,000	557,000	Mar. 1				
2400	16.45	17,100	11,500	531,000	Mean----------		484	960	1,250
Mean----------		14,400	12,900	530,000	Mar. 2				
Feb. 25					Mean----------		439	820	972
0200	16.35	16,500	11,500	512,000	Mar. 3				
0400	16.35	16,500	11,000	490,000	Mean----------		400	760	821
0600	16.40	17,700	11,000	526,000					
0800	16.35	17,200	11,000	511,000					
1000	15.95	17,000	10,500	482,000					
1200	15.42	16,000	10,500	454,000					
1400	15.56	17,500	10,500	496,000					

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-0515. Santa Ana River near Mentone, Calif.									
Jan. 17, 1969					Jan. 21--Continued				
2400	8.85	43			2400	10.93	1,060		
Jan. 18					Mean----------		1,250		
1200	8.84	43			Jan. 22				
1800	8.83	43			0300	10.80	896		
2400	8.86	51			0500	10.76	840		
Mean----------		44			0700	10.95	1,050		
Jan. 19					0900	11.11	2,560		
0400	8.90	51			1000	11.24	1,460		
1300	8.91	57			1200	11.16	1,340		
1600	8.99	74			1300	11.02	1,130		
1800	9.17	87			1500	10.76	820		
2000	8.91	40			1700	10.71	760		
2400	8.50	42			1900	10.63	670		
Mean----------		56			2400	10.49	525		
Jan. 20					Mean----------		1,010		
0100	9.44	56			Jan. 23				
0200	9.50	76			0400	10.36	400		
0300	9.68	142			0900	10.34	372		
0500	9.83	225			1200	10.22	282		
0600	9.96	312			1600	10.14	230		
0800	10.10	440			2400	10.09	210		
1000	10.23	588			Mean----------		314		
1200	10.34	700			Jan. 24				
1400	10.24	615			0600	10.09	215		
1600	10.10	472			0900	10.11	230		
1900	10.03	400			1100	10.23	300		
2000	10.20	525			1200	10.34	379		
2100	10.10	474			1300	10.54	552		
2400	10.07	386			1400	10.60	615		
Mean----------		409			1500	10.79	810		
Jan. 21					1600	10.95	1,000		
0500	9.99	218			1700	11.25	1,440		
0700	10.38	615			1800	11.48	1,890		
0800	10.58	790			1900	11.65	2,250		
0900	10.82	1,040			2100	11.81	2,570		
1000	11.02	1,310			2200	11.92	2,800		
1100	11.62	2,410			2400	12.08	3,240		
1200	11.59	2,320			Mean----------		1,800		
1400	11.48	2,090			Jan. 25				
1600	11.38	1,870			0100	11.93	2,820		
1800	11.37	1,830			0300	11.76	2,470		
2000	11.25	1,570			0400	12.08	3,240		
2200	11.08	1,300			0500	12.35	4,050		

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-0515. Santa Ana River near Mentone, Calif.--Continued									
Jan. 25--Continued					Jan. 27				
0600	12.65	4,950			0300		4,000		
0600	12.50	4,500			1000		2,700		
0700	12.83	5,620			1600		2,000		
0800	12.95	6,100			2400		1,600		
1100	13.50	8,500			Mean----------		2,760		
1200	14.68	15,300			Jan. 28				
1300	13.95	10,800			1200		1,150		
1500	13.60	9,000			2400		840		
1600	13.25	7,300			Mean----------		1,180		
1700	13.05	6,500			Jan. 29				
1800	12.95	6,100			1200		650		
1900	12.50	4,500			2400		520		
2000	12.25	3,750			Mean----------		665		
2100	11.75	2,450			Jan. 30				
2200	11.60	2,150			1200		450		
2400	11.50	1,950			2400		385		
Mean----------		5,720			Mean----------		451		
Jan. 26					Jan. 31				
0800		1,600			1200		350		
1200		1,580			2400		325		
1600		2,000			Mean----------		352		
2000		3,100							
2200		4,500							
2400		5,600							
Mean----------		2,320							
11-0555. Plunge Creek near East Highlands, Calif.									
Jan. 17, 1969					Jan. 19--Continued				
2400	0.45	4.0			2400	0.79	18		
Jan. 18					Mean----------		11		
2000	.46	4.2			Jan. 20				
2400	.52	5.7			0200	.83	23		
Mean----------		4.2			0400	1.12	68		
Jan. 19					0600	1.43	126		
0400	.58	7.5			0700	1.53	205		
1100	.60	8.1			1100	1.58	230		
1500	.66	10			1400	1.45	170		
1700	.77	17			1500	1.36	136		
					1700	1.44	166		
					1900	1.3.	118		

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-0555. Plunge Creek near East Highlands, Calif.--Continued									
Jan. 20--Continued					Jan. 24--Continued				
2100	1.37	132			1700	1.75	320		
2400	1.25	100			1800	2.37	884		
Mean		137			1900	2.20	690		
Jan. 21					2000	2.48	1,020		
0200	1.22	92			2100	2.67	1,300		
0400	1.13	70			2200	2.78	1,470		
0600	1.21	89			2300	2.70	1,340		
0700	1.52	200			2400	2.72	1,370		
0900	1.83	371			Mean		366		
1000	2.24	733			Jan. 25				
1200	1.73	308			0100	2.50	1,050		
1300	1.56	220			0300	2.70	1,260		
1500	1.43	162			0600	2.80	1,340		
1700	1.58	230			0700	3.05	1,590		
1900	1.47	178			0800	3.50	2,080		
2100	1.35	132			0900	3.93	2,860		
2400	1.27	106			1000	3.90	2,780		
Mean		206			1000	5.96	4,610		
Jan. 22					1100	5.05	3,800		
0200	1.22	92			1200	4.35	3,200		
0500	1.27	106			1300	3.50	2,080		
0700	1.43	162			1400	2.95	1,420		
0800	1.64	260			1500	3.20	2,280		
1000	1.80	350			1600	3.50	3,050		
1200	1.93	444			1700	3.20	2,280		
1300	1.71	296			1800	2.60	1,340		
1500	1.55	215			2000	2.70	1,500		
1800	1.35	132			2100	2.43	1,240		
2400	1.28	109			2200	2.23	1,090		
Mean		188			2300	1.90	800		
Jan. 23					2400	1.68	670		
0600	1.18	81			Mean		1,840		
1200	1.10	63			Jan. 26				
1600	1.02	49			0200		460		
2400	1.0	45			0400		315		
Mean		67			0700		240		
Jan. 24					1000		270		
0700	1.06	56			1200		700		
1000	1.18	81			1400		900		
1100	1.03	50			1700		800		
1400	1.10	63			2000		500		
1500	1.27	106			2200		400		
1600	1.40	150			2400		370		
					Mean		510		

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-0555. Plunge Creek near East Highlands, Calif.--Continued									
Jan. 27					Feb. 22				
0400		320			1200	-1.34	106		
1200		240			2400	-1.28	115		
2400		185			Mean		109		
Mean		257			Feb. 23				
Jan. 28					1000	-1.23	123		
1200		150			1200	-1.04	158		
2400		125			1400	-.75	225		
Mean		152			1600	-.39	328		
Jan. 29					1800	-.21	392		
1200		108			2000	-.28	371		
2400		92			2200	-.55	312		
Mean		108			2400	.08	520		
Jan. 30					Mean		225		
1200		82			Feb. 24				
2400		72			0100	.50	700		
Mean		82			0200	1.00	920		
Jan. 31					0300	1.58	1,210		
1200		65			0400	1.95	1,430		
2400		60			0600	1.75	1,310		
Mean		66			0800	1.00	920		
Feb. 19					1000	.50	700		
2400	-1.33	107			1200	.27	608		
Feb. 20					1500	.15	562		
1200	-1.34	106			1700	.48	692		
2200	-1.35	104			1900	1.00	920		
2400	-1.15	143			2000	2.00	1,460		
Mean		107			2200	1.48	1,160		
Feb. 21					2400	1.77	1,320		
0200	-.82	198			Mean		942		
0300	-.72	222			Feb. 25				
0500	-.96	174			0200	2.02	1,470		
0800	-1.21	126			0400	1.76	1,320		
1000	-1.30	112			0600	1.81	1,350		
2400	-1.32	109			0700	2.05	1,490		
Mean		133			0800	2.95	2,080		
					0900	4.60	3,400		
					1000	4.30	3,120		
					1100	3.50	2,480		
					1200	3.05	2,160		
					1300	2.85	2,020		
					1400	2.95	2,080		
					1600	2.70	1,910		
					1700	2.30	1,640		

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-0555. Plunge Creek near East Highlands, Calif.--Continued									
Feb. 25--Continued					Mar. 1				
1800	1.97	1,440			0600	0.05	528		
2100	1.60	1,220			1200		420		
2400	1.10	970			2400		375		
Mean----------		1,720			Mean----------		451		
Feb. 26					Mar. 2				
0200	.80	820			1200		350		
0400	.60	740			2400		325		
1200	.48	692			Mean----------		350		
1800	.41	664			Mar. 3				
2200	.32	628			1200		305		
2400	.20	580			2400		285		
Mean----------		706			Mean----------		305		
Feb. 27					Mar. 4				
0600	.15	562			1200		265		
1200	.10	545			2400		245		
2400	-.02	503			Mean----------		265		
Mean----------		543			Mar. 5				
Feb. 28					1200		230		
0600	-.07	486			2400		215		
1400	-.15	458			Mean----------		230		
1700	.07	534							
2400	.10	545							
Mean----------		500							
11-0558. City Creek near Highland, Calif.									
Jan. 17, 1969					Jan. 19--Continued				
2400	1.72	4.3			1400	1.84	7.6		
Jan. 18					1600	1.88	9.0		
1200	1.71	4.1			1800	1.91	10		
2000	1.72	4.3			2400	1.93	11		
2400	1.77	5.5			Mean----------		7.9		
Mean----------		4.3			Jan. 20				
Jan. 19					0200	2.02	14		
0200	1.80	6.3			0400	2.28	30		
0600	1.82	6.9			0600	2.92	210		
1000	1.81	6.6			0800	3.04	260		
1200	1.82	6.9			1000	3.08	280		
					1200	2.86	175		
					1400	2.67	100		

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-0558. City Creek near Highland, Calif.--Continued									
Jan. 20--Continued					Jan. 24				
1600	2.59	82			0200	2.20	24		
1800	2.62	90			0600	2.23	27		
2000	2.59	82			0800	2.25	29		
2200	2.57	76			1000	2.30	34		
2400	2.51	64			1200	2.37	42		
Mean----------		120			1400	2.42	50		
Jan. 21					1600	2.66	98		
0200	2.43	50			1800	3.46	560		
0400	2.37	40			2000	3.67	720		
0600	2.61	86			2200	4.11	1,030		
0800	3.74	760			2400	4.26	1,160		
1000	4.17	1,080			Mean----------		269		
1200	3.29	440			Jan. 25				
1400	2.99	250			0200	4.17	1,080		
1600	3.28	430			0400	4.27	1,170		
1800	2.93	220			0600	4.24	1,130		
2000	2.79	145			0800	4.99	1,700		
2200	2.71	116			1000	6.87	2,800		
2400	2.60	85			1200	7.90	3,150		
Mean----------		308			1400	7.25	3,000		
Jan. 22					1600	8.83	3,240		
0200	2.58	80			1800	5.85	1,800		
0400	2.66	98			2000	5.79	1,710		
0600	2.94	222			2200	6.27	2,300		
0800	3.40	540			2400	6.35	2,390		
1000	3.54	640			Mean----------		2,070		
1200	3.63	700			Jan. 26				
1400	3.38	430			0200	6.02	2,020		
1600	3.10	320			0400	5.67	1,690		
1800	2.95	225			0600	5.81	1,750		
2000	2.83	165			0800	5.58	1,450		
2200	2.72	120			1000	5.25	1,100		
2400	2.63	90			1200	4.92	790		
Mean----------		302			1400	5.34	1,200		
Jan. 23					1600	5.52	1,400		
0200	2.59	86			1800	5.65	1,550		
0400	2.52	66			2000	5.79	1,710		
0600	2.45	55			2200	5.39	1,250		
0800	2.42	50			2400	5.02	880		
1000	2.38	43			Mean----------		1,460		
1400	2.30	34			Jan. 27				
1800	2.25	29			0200	4.93	800		
2400	2.21	25			0400	4.91	780		
Mean----------		45			0600	4.97	840		

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-0558. City Creek near Highland, Calif.--Continued									
Jan. 27--Continued					Feb. 21				
0800	4.79	680			Mean		71		
1000	4.62	560			Feb. 22				
1200	4.64	570			2400		61		
1400	4.74	640			Mean		64		
1600	4.72	620			Feb. 23				
1800	4.75	650			0600		59		
2000	4.68	590			1200		58		
2200	4.42	430			1600		58		
2400	4.33	385			1800	3.24	60		
Mean		642			2000	4.31	370		
Jan. 28					2200	4.88	740		
0200		350			2400	5.36	1,210		
0400		330			Mean		190		
0800		290			Feb. 24				
1200		260			0200	5.20	1,050		
1600		232			0400	5.51	1,400		
2000		212			0600	5.30	1,750		
2400		197			0800	4.77	680		
Mean		268			1000	4.53	510		
Jan. 29					1200	4.40	415		
0600		176			1400	4.98	840		
1200		160			1600	5.01	880		
1800		146			1800	5.06	920		
2400		136			2000	5.47	1,310		
Mean		162			2200	5.42	1,290		
Jan. 30					2400	5.41	1,280		
0600		126			Mean		1,020		
1200		120			Feb. 25				
1800		114			0200	5.80	1,750		
2400		107			0400	5.67	1,560		
Mean		120			0600	5.57	1,450		
Jan. 31					0800	6.65	1,550		
0600		102			1000	6.17	2,180		
1200		98			1200	7.97	4,450		
1800		94			1400	9.39	7,000		
2400		90			1600	8.23	4,900		
Mean		98			1800	8.28	5,000		
Feb. 20					2000	8.08	4,650		
Mean		82			2200	7.60	3,950		
					2400	6.51	2,550		
					Mean		3,360		

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-0558. City Creek near Highland, Calif.--Continued									
Feb. 26					Feb. 28				
0200	6.67	2,700			0600		1,500		
0400	7.34	3,600			1200		1,320		
0600	6.82	2,950			1800		1,180		
0800	7.04	3,200			2400		1,060		
1000	7.08	3,230			Mean----------		1,340		
1200	7.00	3,110							
1400	6.83	2,960			Mar. 1				
1600	6.81	2,890							
1800	6.76	2,820			Mean----------		886		
2000	6.73	2,790							
2200	6.75	2,800			Mar. 2				
2400	6.78	2,850							
Mean----------		2,900			Mean----------		620		
Feb. 27					Mar. 3				
0600		2,500							
1200		2,200			Mean----------		445		
1800		1,900			Mar. 4				
2400		1,700							
Mean ---------		2,220			Mean----------		330		
					Mar. 5				
					Mean----------		248		
11-0695. San Jacinto River near San Jacinto, Calif.									
Jan. 17, 1969					Jan. 20				
2400	3.15		1.6		0300	3.96		43	
					0600	4.06		54	
Jan. 18					0900	3.98		45	
					1100	4.00		47	
1200	3.13		1.4		1200	4.17		55	
2400	3.13		1.4		1300	4.35		100	
Mean----------			1.4		1500	4.49		128	
					1900	4.56		145	
Jan. 19					2400	4.49		128	
					Mean----------			88	
0300	3.13		1.4						
0600	3.27		3.4		Jan. 21				
0800	3.45		8.1						
0900	3.57		13		0300	4.43		116	
1200	3.70		20		0700	4.32		102	
1300	3.91		38		0900	4.68		198	
1500	4.04		52		1100	5.00		296	
2400	4.00		47		1200	5.55		535	
Mean----------			27		1300	5.66		610	

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-0695. San Jacinto River near San Jacinto, Calif.--Continued									
Jan. 21--Continued					Jan. 25				
1400	5.48	540			0200	7.10	2,040		
1600	5.31	468			0300	7.00	1,960		
1800	5.92	800			0400	7.03	1,990		
1900	6.02	872			0500	6.95	1,910		
2200	5.73	678			0600	7.03	1,990		
2300	5.54	550			0700	6.87	1,830		
2400	5.37	448			0800	6.90	1,860		
Mean		405			0900	7.10	2,060		
					1000	7.75	2,780		
Jan. 22					1100	8.20	3,460		
					1200	8.60	4,160		
0400	4.95	276			1300	10.15	7,410		
0700	4.77	210			1400	8.80	4,680		
1200	4.51	138			1500	8.55	4,140		
1800	4.37	112			1600	8.25	3,680		
2400	4.20	83			1700	7.90	3,110		
Mean		183			1900	8.15	3,390		
					2100	8.25	3,460		
Jan. 23					2200	8.20	3,320		
					2300	7.85	2,780		
0600	4.10	70			2400	7.75	2,610		
1200	4.00	59			Mean		3,060		
1800	3.92	52							
2400	3.90	52			Jan. 26				
Mean		62							
					0200	7.00	1,810		
Jan. 24					0400	6.70	1,480		
					0800	6.20	1,020		
0600	3.90	54			1000	5.95	830		
1000	3.90	57			1200	5.70	666		
1200	4.27	124			1600	5.52	550		
1400	4.80	296			1800	5.60	600		
1500	5.08	424			1900	6.00	836		
1600	5.50	642			2000	6.45	1,150		
1700	6.00	962			2200	7.12	1,700		
1800	6.55	1,400			2300	6.75	1,420		
1900	7.55	2,350			2400	6.37	1,120		
2000	7.90	2,730			Mean		1,130		
2100	8.05	2,970							
2200	7.95	2,860			Jan. 27				
2300	7.77	2,670							
2400	7.50	2,420			0200	5.96	860		
Mean		813			0600	5.56	642		
					1200	5.20	472		
					1800	5.03	414		
					2400	4.85	348		
					Mean		553		

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-0695. San Jacinto River near San Jacinto, Calif.--Continued									
Jan. 28					Feb. 23				
0600	4.71	300			1300	3.80	66		
1200	4.54	237			1800	3.85	73		
1800	4.50	225			2100	3.95	90		
2400	4.41	198			2400	4.05	114		
Mean		259			Mean		73		
Jan. 29					Feb. 24				
0600	4.30	168			0400	4.33	186		
1200	4.20	142			0700	4.48	237		
2400	4.14	128			0900	4.66	316		
Mean		152			1100	5.04	476		
Jan. 30					1300	5.40	672		
					1500	5.61	800		
1200	4.05	110			1700	5.76	902		
2400	4.03	106			1900	5.87	990		
Mean		114			2100	5.91	1,030		
Jan. 31					2400	6.13	1,200		
					Mean		590		
1200	3.96	92			Feb. 25				
2400	3.94	88							
Mean		94			0300	6.34	1,380		
Feb. 19					0400	6.58	1,590		
					0500	6.67	1,680		
2400	3.82	69			0800	6.77	1,800		
Feb. 20					0900	6.74	1,790		
					1200	6.85	1,910		
1300	3.78	63			1400	7.02	2,130		
1900	3.86	75			1500	7.45	2,530		
2400	3.84	72			1600	7.80	2,960		
Mean		68			1700	8.00	3,260		
Feb. 21					1900	8.10	3,420		
					2100	8.30	3,730		
1300	3.81	67			2200	8.50	4,080		
1900	3.84	72			2400	8.25	3,600		
2400	3.84	72			Mean		2,380		
Mean		70			Feb. 26				
Feb. 22									
					0200	8.05	3,250		
0300	3.87	76			0400	7.65	2,780		
0900	3.84	72			0600	7.35	2,310		
1400	3.85	73			0900	7.15	2,060		
2400	3.81	67			1000	6.92	1,780		
Mean		72			1300	6.59	1,500		
					1600	6.39	1,350		
					1900	6.25	1,260		
					2200	6.09	1,160		
					2400	5.96	1,100		
					Mean		1,880		

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-0695. San Jacinto River near San Jacinto, Calif.--Continued									
Feb. 27					Mar. 2				
0600	5.76	997			1200	5.02	388		
1200	5.60	927			2400	4.96	352		
1800	5.50	860			Mean		389		
2400	5.40	830			Mar. 3				
Mean		937			1200	4.91	320		
Feb. 28					2400	4.84	280		
0600	5.29	684			Mean		318		
1400	5.23	620			Mar. 4				
1500	5.30	630			1200	4.79	248		
1800	5.29	600			2400		220		
2200	5.48	678			Mean		251		
2400	5.40	620			Mar. 5				
Mean		670			1200		210		
Mar. 1					2400		200		
0600	5.30	565			Mean		210		
1200	5.19	500							
1800	5.15	464							
2400	5.09	428							
Mean		513							
11-0734.7. Cucamonga Creek near Upland, Calif.									
Jan. 17, 1969					Jan. 20--Continued				
2400	1.70	2.5			1200	2.43	26		
Jan. 18					1400	2.49	26		
1600	1.70	2.5			1600	2.80	74		
2000	1.84	4.8			1800	2.92	99		
2200	1.97	8.4			1900	3.18	161		
2400	1.99	9.2			2200	2.18	119		
Mean		3.5			2400	3.11	145		
Jan. 19					Mean		64		
0800	2.09	13			Jan. 21				
1800	2.36	29			0400	3.32	196		
2400	2.33	26			0600	4.20	510		
Mean		19			0800	4.98	946		
Jan. 20					1000	3.51	253		
0200	2.31	25			1200	3.80	340		
0600	2.60	44			1400	3.59	277		
					1600	3.44	232		
					2000	3.26	180		
					2400	3.22	170		
					Mean		304		

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-0734.7. Cucamonga Creek near Upland, Calif.--Continued									
Jan. 22					Jan. 26--Continued				
0200	3.34	202			1200	7.77	4,100		
0400	3.92	378			1400	4.93	3,600		
0500	4.14	480			1600	7.28	3,370		
0800	4.47	645			1800	4.56	690		
1000	3.88	331			2000	4.91	897		
1400	3.51	244			2200	4.96	932		
1600	3.56	253			2400	4.53	675		
2000	3.24	158			Mean----------		2,040		
2400	3.11	127			Jan. 27				
Mean----------		295			0200	3.89	367		
Jan. 23					0400	4.29	550		
0600	2.92	91			0600	4.06	435		
1400	2.77	66			1200	3.70	304		
1800	2.72	60			1800	3.37	202		
2400	2.64	50			2400	3.34	190		
Mean----------		78			Mean----------		327		
Jan. 24					Jan. 28				
0800	2.63	49			0600	3.26	168		
1200	2.70	60			1200	3.20	152		
1600	3.04	114			1800	3.15	139		
2000	3.51	226			2400	3.07	121		
2400	3.85	340			Mean----------		154		
Mean----------		116			Jan. 29				
Jan. 25					1200	3.01	108		
0200	4.14	465			2400	2.98	102		
0400	4.68	752			Mean----------		110		
0600	6.06	1,840			Jan. 30				
0800	9.36	6,720			0800	2.96	99		
1000	10.92	10,400			1600	2.93	94		
1100	12.44	14,100			2400	2.91	91		
1200	9.87	7,740			Mean----------		96		
1400	10.19	8,520			Jan. 31				
1600	6.71	2,530			1200	2.85	82		
1800	6.24	2,020			2200	2.80	75		
2000	3.92	1,900			Mean----------		82		
2200	6.06	1,840			Feb. 19				
2400	6.50	2,280			2400	2.56	46		
Mean----------		4,050							
Jan. 26									
0200	6.18	1,960							
0400	5.86	1,640							
0800	5.95	1,730							
1000	6.60	2,400							

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-0734.7. Cucamonga Creek near Upland, Calif.--Continued									
Feb. 20					Feb. 25--Continued				
1200	2.53	43			0800	2.34	2,000		
2400	2.51	41			1200	2.55	1,750		
Mean		43			1400	2.29	1,500		
Feb. 21					1600	2.71	1,250		
1200	2.50	40			1800	2.66	1,000		
2400	2.54	44			2000	3.10	750		
Mean		41			2200	3.44	716		
Feb. 22					2400	3.42	705		
0200	2.57	47			Mean		1,410		
1200	2.51	41			Feb. 26				
2400	2.50	40			0600	3.27	630		
Mean		42			1200	3.00	495		
Feb. 23					1800	2.73	370		
0800	2.52	42			2400	2.55	316		
1200	2.62	55			Mean		501		
1400	2.78	78			Feb. 27				
1600	2.98	114			0600	2.47	292		
1800	3.45	232			1200	2.38	265		
1900	4.28	550			1800	2.25	226		
2000	4.08	450			2400	2.20	211		
2200	3.46	232			Mean		262		
2400	3.40	220			Feb. 28				
Mean		134			1200	2.07	175		
Feb. 24					2400	198	154		
0400	3.25	178			Mean		179		
0800	3.45	235			Mar. 1				
1200	3.54	262			1200	1.90	137		
1400	5.45	1,280			2400	1.83	123		
1600	5.65	1,440			Mean		138		
1800	5.38	1,230			Mar. 2				
2000	4.04	430			1200	1.78	114		
2200	5.56	1,380			2400	1.75	108		
2300	5.97	1,790			Mean		115		
2400	5.16	1,110			Mar. 3				
Mean		669			1200	1.72	102		
Feb. 25					2400	1.70	99		
0200	5.76	1,620			Mean		103		
0400	5.14	1,110							
0600	5.25	1,200							
0700	7.51	4,090							

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-0734.7. Cucamonga Creek near Upland, Calif.--Continued									
Mar. 4					Mar. 5				
1200	1.68	96			1200	1.66	93		
2400	1.66	93			2400	1.65	91		
Mean		96			Mean		92		
11-0780. Santa Ana River at Santa Ana, Calif.									
Jan. 18, 1969					Jan. 21				
1700	0.50	0			0400	1.62	420		
2000	.90	25			0500	1.85	576		
2100	1.16	111			0600	2.25	922		
2400	1.32	195			0700	2.50	1,170		
Mean		24			0900	2.25	922		
Jan. 19					1100	2.12	778		
0100	1.42	250			1200	1.98	614		
0400	1.34	215			1300	2.58	1,070		
0600	1.15	120			1500	2.16	598		
0800	1.00	61			1800	2.07	513		
1100	.84	21			2100	1.93	396		
1400	.71	4.7			2400	2.05	457		
1900	.60	.5			Mean		645		
2200	.73	6.4			Jan. 22				
2400	.67	2.4			1200	2.06	450		
Mean		68			2400		450		
Jan. 20					Mean		450		
0100	.98	55			Jan. 23				
0200	1.75	457			1200	2.08	877		
0300	1.58	360			2400	2.06	894		
0400	1.37	240			Mean		877		
0500	1.52	330			Jan. 24				
0600	1.75	478			0700	2.15	1,000		
0700	1.39	260			0800	2.35	1,220		
0900	1.30	215			0900	2.22	1,100		
1200	1.37	250			1000	2.72	1,660		
1300	2.30	940			1200	2.23	1,170		
1400	1.72	478			1300	2.14	1,130		
1500	1.52	366			1500	2.45	1,590		
1700	1.70	478							
1800	1.82	562							
2400	1.76	520							
Mean		397							

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-0780. Santa Ana River at Santa Ana, Calif.--Continued									
Jan. 24--Continued					Jan. 29				
1600	3.00	2,380			1200	2.75	1,210		
1700	2.93	2,260			2400	2.75	1,210		
1800	4.63	5,220			Mean----------		1,210		
1900	3.18	2,600			Jan. 30				
1900	5.15	6,000			1700	2.70	1,150		
2000	3.87	3,600			2400	3.30	2,170		
2200	3.17	2,500			Mean----------		1,320		
2400	3.26	2,600			Jan. 31				
Mean----------		1,870			1200	3.37	2,340		
Jan. 25					2400	3.20	1,930		
0100	3.02	2,150			Mean----------		2,200		
0400	3.15	2,320			Feb. 19				
0700	2.87	1,890			2400	2.90	845		
0900	3.47	2,800			Feb. 20				
1000	3.95	3,560			0300	2.93	890	5,200	12,500
1200	4.20	4,100			0900	2.88	815	4,800	10,600
1300	4.50	4,700			1200	2.82	730	4,600	9,070
1400	4.45	4,600			1700	2.84	756	4,400	8,980
2100	4.18	4,060			2400	2.81	616	4,000	7,730
2400	4.50	4,700			Mean----------		785	4,610	9,850
Mean----------		3,470			Feb. 21				
Jan. 26					1200	2.76	648	3,500	6,120
0600	4.50	4,800			2100	2.73	610	3,200	5,270
0700	5.70	9,200			2300	2.92	920	14,000	34,800
0800	4.85	5,600			2400	3.25	1,320	19,000	67,700
2400	4.50	5,700			Mean----------		687	4,540	9,400
Mean----------		5,550			Feb. 22				
Jan. 27					0300	3.04	1,130	15,000	55,800
1300	4.50	5,700			0400	3.18	1,380	19,000	70,800
1400	4.20	5,760			1000	3.10	1,240	12,000	40,200
1900	4.20	5,760			1300	3.00	1,060	10,000	28,600
2100	3.50	3,350			1800	3.00	1,060	8,000	22,900
2200	3.00	2,220			1900	3.05	1,140	10,000	30,800
2400	2.80	1,580			2400	2.95	971	7,000	18,400
Mean----------		5,180			Mean----------		1,160	12,100	39,300
Jan. 28									
1200	2.75	1,220							
2400	2.75	1,220							
Mean----------		1,310							

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-0780. Santa Ana River at Santa Ana, Calif.--Continued									
Feb. 23					Feb. 25--Continued				
1100	2.94	954	5,200	13,400	1400	6.25	14,700	87,000	3,450,000
1300	3.05	1,180	11,000	35,000	1500	5.65	11,100	78,000	2,340,000
1400	3.27	1,630	16,000	70,400	1600	5.45	10,600	71,000	2,030,000
1600	3.44	2,070	31,000	173,000	1700	5.45	10,000	64,000	1,730,000
1700	4.00	3,710	48,000	481,000	1800	5.25	9,050	59,000	1,440,000
1800	4.17	4,380	70,000	828,000	2000	5.50	10,300	62,000	1,720,000
1900	4.60	6,000	100,000	1,620,000	2200	5.60	10,800	64,000	1,870,000
2000	5.00	7,800	118,000	2,490,000	2400	5.35	9,550	60,000	1,550,000
2100	5.60	10,800	120,000	3,500,000	Mean---------		11,400	77,900	2,680,000
2200	6.15	14,100	110,000	4,190,000					
2300	5.65	11,100	70,000	2,100,000	Feb. 26				
2400	5.60	10,800	50,000	1,460,000					
Mean----------		3,400	34,200	689,000	0200	5.20	8,800	55,000	1,310,000
					0400	4.90	7,300	50,000	986,000
Feb. 24					0600	4.75	6,600	46,000	812,000
					0900	4.65	6,200	42,000	703,000
0100	5.68	11,300	70,000	2,140,000	1100	4.70	6,400	39,000	674,000
0100	6.09	13,700	70,000	2,590,000	1400	4.60	6,000	37,000	600,000
0200	5.55	10,600	60,000	1,720,000	1600	5.05	8,050	67,000	146,000
0300	5.15	8,550	46,000	1,060,000	1800	5.05	8,050	62,000	135,000
0400	4.75	6,600	37,000	659,000	2000	5.35	9,550	68,000	175,000
0500	4.35	5,080	30,000	411,000	2200	5.30	9,300	71,000	178,000
0600	4.45	5,420	33,000	483,000	2400	5.15	8,550	67,000	155,000
0700	4.30	4,900	30,000	397,000	Mean----------		7,640	53,500	1,140,000
0800	3.95	3,570	29,000	280,000					
0900	3.65	2,610	28,000	197,000	Feb. 27				
1100	3.59	2,440	27,000	178,000					
1200	3.65	2,600	33,000	232,000	0400	4.82	7,000		
1300	4.05	3,920	48,000	508,000	0400	5.10	8,450		
1500	4.40	5,250	60,000	850,000	0500	5.00	8,000		
2200	4.50	5,600	43,000	650,000	0600	5.23	9,200		
2200	6.05	13,500	43,000	1,570,000	1000	5.12	8,700		
2300	5.69	11,300	90,000	2,750,000	1000	4.45	5,680		
2400	5.35	9,550	80,000	2,060,000	1300	4.76	6,950		
Mean----------		6,040	46,700	846,000	1500	5.10	8,700		
					1800	5.00	8,250		
Feb. 25					1900	5.08	8,700		
					2200	4.92	7,950		
0100	4.95	7,550	68,000	1,390,000	2300	5.19	9,350		
0200	4.95	7,550	61,000	1,240,000	2400	5.15	9,200		
0300	5.10	8,300	54,000	1,210,000	Mean----------		8,130	32,000	563,000
0400	5.00	7,800	47,000	990,000					
0600	4.95	7,550	38,000	775,000	Feb. 28				
0700	5.50	10,300	70,000	1,950,000					
0800	6.30	15,000	120,000	4,860,000	0100	5.00	8,500		
0900	6.60	17,000	150,000	6,880,000	0200	4.80	7,450		
0900	6.90	19,100	150,000	7,740,000	0300	4.68	7,000		
1000	6.50	16,300	150,000	6,600,000	0500	4.92	8,250		
1100	6.70	17,700	130,000	6,210,000	0700	5.08	9,100		
1200	6.80	18,400	105,000	5,220,000	0700	4.94	8,450		
1300	6.50	16,300	95,000	4,180,000	1000	5.00	8,800		

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-0780. Santa Ana River at Santa Ana, Calif.--Continued									
Feb. 28--Continued					Mar. 3				
1100	4.63	7,000			0300	4.40	6,900		
1400	4.50	6,480			0500	4.78	8,400		
1500	4.92	8,550			0700	4.60	7,900		
1600	5.30	10,500			0900	4.44	7,160		
1900	5.09	9,500			1000	4.66	8,100		
2100	5.00	9,100			1100	4.46	6,720		
2400	4.78	8,050			1300	4.48	7,300		
Mean----------		8,420	32,000	727,000	1400	4.30	6,480		
					1600	4.13	5,800		
Mar. 1					1800	4.40	6,900		
					1900	4.55	7,650		
0300	4.88	8,600			2100	4.35	6,680		
0400	4.69	7,700			2400	4.19	6,040		
0600	4.87	8,650			Mean----------		7,110	32,000	614,000
0700	4.63	7,500							
0800	4.37	6,360			Mar. 4				
0900	4.75	8,150							
1000	5.11	10,000			0100	4.37	6,800		
1200	4.91	9,000			0200	4.17	6,000		
1500	4.75	8,250			0400	4.36	6,760		
1900	4.88	8,900			0600	4.30	6,520		
2100	4.77	8,400			0700	4.11	5,760		
2400	4.72	8,150			0900	4.30	6,520		
Mean----------		8,430	32,000	728,000	1000	4.47	7,300		
					1200	4.52	7,550		
Mar. 2					1300	4.36	6,760		
					1500	4.08	5,600		
0200	4.55	7,350			1600	4.34	6,680		
0400	4.43	6,760			1900	4.25	6,320		
0600	4.58	7,550			2200	4.15	5,920		
0800	4.35	6,480			2400	4.35	6,720		
0800	4.54	7,400			Mean----------		6,470	32,000	559,000
1000	4.65	7,950							
1100	4.82	8,850			Mar. 5				
1300	4.59	7,700							
1500	4.35	6,600			0100	4.50	7,450		
1600	4.57	7,650			0200	4.35	6,720		
1700	4.53	7,500			0400	4.14	5,880		
1900	4.80	8,850			0600	4.33	6,640		
2000	4.53	7,550			0800	4.14	5,880		
2100	4.34	6,640			1000	4.36	6,760		
2300	4.72	8,500			1300	4.16	5,960		
2400	4.62	8,000			1700	4.48	7,350		
Mean----------		7,600	32,000	657,000	1900	4.16	5,960		
					2200	4.44	7,150		
					2400	4.19	6,080		
					Mean----------		6,520	32,000	563,000

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-0870.2. San Gabriel River above Whittier Narrows Dam, Calif.									
Jan. 17, 1969					Jan. 20--Continued				
2400	3.93	11			2400	4.61	258		
Jan. 18					Mean----------		2,990		
1700	3.90	8.0			Jan. 21				
1900	4.10	38			0100	4.57	232		
2000	4.40	140			0200	4.68	314		
2100	4.87	508			0300	5.50	1,600		
2200	5.12	848			0400	6.75	6,900		
2300	5.15	896			0500	6.53	5,650		
2400	5.32	1,190			0600	6.80	7,200		
Mean----------		134			0700	6.85	7,500		
Jan. 19					0700	7.35	10,600		
0100	5.34	1,230			0800	7.00	8,400		
0200	5.25	1,060			0900	6.25	4,250		
0600	4.75	375			1000	5.65	2,000		
0700	4.70	330			1100	5.20	960		
0800	4.83	453			1200	4.89	519		
0900	5.05	730			1300	4.73	357		
1000	5.10	800			1400	4.63	274		
1200	4.70	330			1500	4.85	475		
1400	4.55	220			1600	4.80	420		
1500	4.73	357			1800	4.57	232		
1800	4.51	196			2200	4.34	110		
2100	4.32	101			2400	4.24	74		
2300	4.71	339			Mean----------		2,090		
2400	5.30	1,150			Jan. 22				
Mean----------		490			0100	5.16	896		
Jan. 20					0200	4.95	595		
0100	5.31	1,170			0300	4.90	530		
0200	5.31	1,170			0400	4.70	330		
0300	6.50	5,500			0600	4.60	250		
0400	7.45	11,400			0700	6.21	4,050		
0500	7.12	9,120			0800	5.80	2,500		
0600	6.85	7,500			0900	5.55	1,720		
0700	6.53	5,650			1000	5.10	800		
0800	6.23	4,150			1200	4.75	375		
0900	5.75	2,320			1500	4.48	179		
1000	5.38	1,310			2400	4.40	135		
1200	5.23	1,020			Mean----------		626		
1400	6.09	3,560			Jan. 23				
1500	6.24	4,200			0100	4.72	348		
1600	5.90	2,850			0300	4.65	290		
1700	5.72	2,320			1100	4.61	258		
1800	5.48	1,550			1700	4.55	220		
2000	4.97	621			1900	4.65	290		
2200	4.77	393			2100	4.87	497		

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-0870.2. San Gabriel River above Whittier Narrows Dam, Calif.--Continued									
Jan. 23--Continued					Jan. 25--Continued				
2400	5.25	1,060			2300	8.65	20,800		
Mean----------		339			2400	9.00	24,000		
Jan. 24					Mean---------		24,400		
0200	5.60	1,850			Jan. 26				
0500	6.17	3,880			0100	8.90	23,000		
0700	6.42	5,100			0200	8.74	21,600		
0800	6.55	5,750			0300	8.64	20,700		
0900	6.85	7,500			0400	8.72	21,400		
1000	6.60	6,000			0500	8.85	22,600		
1100	6.40	5,000			0600	8.90	23,000		
1200	6.19	3,960			0700	8.74	21,600		
1400	6.27	4,350			0800	8.89	22,900		
1500	6.45	5,250			0900	8.82	22,300		
1600	7.00	8,400			1000	9.37	27,700		
1700	7.20	9,600			1100	9.32	27,200		
1800	7.05	8,700			1200	9.31	27,100		
1900	7.00	8,400			1300	9.40	28,000		
1900	7.25	9,950			1400	9.70	31,300		
2000	7.00	8,400			1500	9.42	28,200		
2100	6.60	6,000			1600	9.27	26,700		
2200	6.90	7,800			1700	9.17	25,700		
2300	7.50	11,700			1900	9.10	25,000		
2400	7.75	13,400			2100	9.07	24,700		
Mean----------		5,900			2200	9.27	26,700		
Jan. 25					2300	9.00	24,000		
0100	7.90	14,500			2400	8.97	23,700		
0200	8.67	20,900			Mean---------		24,800		
0300	8.82	22,300			Jan. 27				
0400	9.07	24,700			0100	8.54	19,800		
0500	8.37	18,300			0200	8.63	20,600		
0600	8.67	20,900			0300	8.29	17,600		
0700	9.37	27,700			0500	8.10	16,100		
0800	10.07	35,600			0600	8.07	15,900		
0900	10.27	38,000			0700	7.70	13,100		
1000	10.62	42,700			0800	7.49	11,600		
1100	10.77	44,800			0900	7.49	11,600		
1200	10.90	46,600			1000	7.17	9,420		
1300	9.62	30,400			1100	7.65	8,700		
1400	9.17	25,700			1800	7.10	9,000		
1500	8.92	23,200			1900	7.90	14,500		
1600	8.59	20,200			2000	8.04	15,600		
1700	8.10	16,100			2400	8.04	15,600		
1800	7.70	13,100			Mean---------		13,300		
1900	7.75	13,400							
2000	7.93	14,700							
2100	8.18	16,700							
2200	7.90	14,500							

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-0870.2. San Gabriel River above Whittier Narrows Dam, Calif.--Continued									
Jan. 28					Feb. 23				
0100	7.83	14,000			0600	4.85	475		
0400	7.80	13,800			1000	5.17	912		
0500	7.52	11,800			1200	6.22	4,100		
0900	7.35	10,700			1300	6.80	7,200		
1000	7.41	11,100			1400	7.20	9,600		
1100	7.40	11,000			1500	7.16	9,360		
1300	7.55	12,000			1600	6.87	7,620		
1400	8.42	18,700			1800	7.70	13,100		
1500	8.22	17,100			1900	8.00	15,300		
1600	8.30	17,700			2000	7.50	11,700		
1700	8.17	16,700			2100	7.63	12,600		
1800	7.30	10,400			2200	7.22	9,740		
1900	6.60	6,100			2400	6.94	8,020		
2000	5.70	2,180			Mean----------		5,490		
2100	5.25	1,070							
2200	5.00	674			Feb. 24				
2400	4.77	402							
Mean---------		10,700			0100	7.08	8,880		
					0500	6.65	6,300		
Jan. 29					0800	6.45	5,250		
					1100	6.75	6,900		
0200	4.70	339			1300	7.37	10,800		
1900	4.64	290			1500	7.17	9,420		
2400	4.70	339			1700	7.50	11,700		
Mean----------		319			1800	7.30	10,300		
					1900	7.73	13,300		
Jan. 30					2100	7.90	14,500		
					2100	7.45	11,400		
1100	4.66	306			2400	7.45	11,400		
1900	4.41	146			Mean----------		9,060		
2000	4.64	290							
2400	4.77	402			Feb. 25				
Mean----------		290							
					0200	7.77	13,600		
Jan. 31					0400	8.00	15,300		
					0400	8.45	19,000		
1100	4.80	431			0500	9.10	25,000		
1300	4.60	258			0600	9.75	31,800		
1700	4.60	258			0700	9.90	33,600		
1900	4.81	442			0800	9.05	24,500		
2400	4.81	442			0900	8.87	21,700		
Mean----------		384			1100	8.55	19,800		
					1200	9.15	25,500		
Feb. 22					1400	8.75	21,600		
					1600	8.95	23,500		
2400	4.75	375			1800	9.40	28,000		
Mean----------		1,030			2000	9.20	26,000		
					2100	9.40	28,000		
					2200	9.05	24,500		

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-0870.2. San Gabriel River above Whittier Narrows Dam, Calif.--Continued									
Feb. 25--Continued					Feb. 28				
2300	8.70	21,200			0200	7.86	14,200		
2400	8.90	23,000			0300	8.20	16,900		
Mean---------		22,900			0400	7.70	13,100		
Feb. 26					0500	7.91	14,600		
0200	8.60	20,300			0600	8.00	15,300		
0300	8.95	23,500			0700	8.15	16,500		
0400	8.65	20,800			0900	8.20	16,900		
0500	8.90	23,000			1000	8.12	16,300		
0700	8.55	19,800			1100	8.20	16,900		
0900	8.60	20,300			1200	8.17	16,500		
1100	8.95	23,500			1500	8.21	17,000		
1200	8.83	22,400			1700	8.10	16,100		
1300	8.85	22,600			1800	7.60	12,400		
1400	8.90	23,000			1900	7.64	12,700		
1500	8.80	22,100			2000	7.33	10,500		
1600	8.76	21,700			2100	7.16	9,360		
1700	8.53	19,700			2200	7.45	11,400		
2000	8.38	18,300			2300	7.02	8,520		
2100	8.16	16,600			2400	6.81	7,260		
2200	8.40	18,500			Mean---------		14,500		
2300	8.18	16,700			Mar. 1				
2400	8.10	16,100			0100	6.83	7,380		
Mean---------		20,600			0200	6.79	7,140		
Feb. 27					0600	6.84	7,440		
0100	8.15	16,500			1000	6.80	7,200		
0200	7.81	13,900			1200	6.76	6,960		
0300	8.18	16,700			1300	6.72	6,720		
0400	7.79	13,700			1400	6.57	5,850		
0600	7.79	13,700			1600	6.40	5,000		
0700	8.07	15,900			1800	6.43	5,150		
0800	8.08	15,900			1900	6.14	3,760		
0900	8.00	15,300			2100	5.98	3,130		
1100	8.00	15,300			2200	6.64	6,240		
1200	8.07	15,900			2300	6.38	4,900		
1300	8.00	15,300			2400	6.06	3,440		
1400	7.72	13,200			Mean---------		6,130		
1500	7.84	14,100			Mar. 2				
1600	7.79	13,700			0100	5.80	2,460		
1800	8.05	15,700			0200	5.44	1,400		
1900	8.00	15,300			0300	5.22	960		
2000	7.81	13,900			0500	5.18	896		
2100	7.79	13,700			1000	5.19	912		
2200	7.81	13,900			1100	5.14	832		
2300	8.00	15,300			1300	5.14	832		
2400	8.12	16,300			1400	5.21	944		
Mean---------		14,900			1600	5.31	1,130		

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-0870.2. San Gabriel River above Whittier Narrows Dam, Calif.--Continued									
Mar. 2--Continued					Mar. 4				
1900	5.35	1,210			1000	4.86	453		
2000	5.40	1,310			1300	4.79	384		
2400	5.41	1,330			1800	4.78	375		
Mean----------		1,170			1900	4.86	453		
					2400	4.86	453		
Mar. 3					Mean----------		434		
0100	5.41	1,330			Mar. 5				
0900	5.43	1,380							
1000	5.26	1,040			1000	4.85	442		
1100	4.95	556			1200	4.78	375		
1200	4.85	442			1500	4.78	375		
1400	5.06	702			1700	4.85	442		
2000	5.04	674			2000	4.85	442		
2200	4.90	497			2200	4.76	357		
2400	4.87	464			2400	4.75	348		
Mean----------		920			Mean----------		419		
11-0924.5. Los Angeles River at Sepulveda Dam, Calif.									
Jan. 17, 1969					Jan. 19--Continued				
2400	0.23	5.0			1600	1.96	848		
					1800	2.33	1,170		
Jan. 18					1900	3.05	1,880		
					2000	3.66	2,530		
1400	.23	5.0			2100	3.99	2,890		
1700	.60	40			2200	5.37	4,590		
1800	1.77	696			2300	9.04	9,860		
2000	1.63	584			2400	6.60	6,220		
2100	2.01	888			Mean----------		2,090		
2200	2.64	1,470							
2300	2.30	1,140			Jan. 20				
2400	2.72	1,550							
Mean----------		265			0100	4.74	3,790		
					0200	9.16	10,000		
Jan. 19					0200	8.47	9,000		
					0300	6.70	6,360		
0100	3.83	2,710			0400	5.82	5,180		
0200	3.13	1,960			0500	4.50	3,500		
0400	2.56	1,390			0600	3.35	2,180		
0600	3.02	1,850			0700	3.55	2,450		
0700	3.33	2,160			0800	3.23	2,060		
0800	3.52	2,370			0900	2.52	1,350		
0900	2.62	1,450			1000	2.05	920		
1000	2.05	920			1100	1.65	600		
1200	1.64	592			1200	1.42	434		
1300	1.63	584			1400	1.17	262		
1500	1.92	816			1500	1.50	490		

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-0924.5. Los Angeles River at Sepulveda Dam, Calif.--Continued									
Jan. 20--Continued					Jan. 23				
1600	2.45	1,280			0200	0.70	60		
1800	1.83	744			0600	.59	38		
2000	1.61	568			1200	.52	27		
2100	1.59	553			1500	.45	20		
2200	1.43	441			1700	.46	21		
2300	1.70	640			1900	.54	30		
2400	2.55	1,380			2100	.83	94		
Mean----------		2,050			2300	1.10	220		
Jan. 21					2400	1.28	336		
0100	6.58	6,190			Mean----------		58		
0200	4.39	3,370			Jan. 24				
0300	3.64	2,500			0100	2.20	1,050		
0400	7.45	7,480			0200	2.53	1,360		
0400	9.28	10,200			0300	3.75	2,620		
0500	8.68	9,320			0400	5.48	4,730		
0600	9.50	10,600			0400	4.70	3,740		
0600	9.94	11,300			0500	3.29	2,120		
0700	9.78	11,100			0600	3.01	1,840		
0700	9.50	10,600			0700	3.74	2,610		
0900	8.57	9,160			0800	3.35	2,180		
1000	5.97	5,370			0900	4.50	3,500		
1100	3.84	2,720			1000	5.17	4,330		
1200	3.48	2,330			1100	3.38	2,220		
1300	4.17	3,100			1200	3.00	1,830		
1400	3.03	1,860			1300	2.40	1,230		
1500	2.35	1,180			1400	2.85	1,680		
1700	1.67	616			1500	2.58	1,410		
1900	1.40	420			1600	4.50	3,500		
2100	1.15	250			1700	5.83	5,200		
2400	1.00	165			1800	5.20	4,370		
Mean----------		3,830			1900	3.95	2,840		
Jan. 22					2000	3.45	2,300		
0100	1.08	209			2100	3.08	1,910		
0300	1.03	182			2200	3.40	2,240		
0500	1.70	640			2300	3.62	2,480		
0600	1.65	600			2400	4.50	3,500		
0700	1.80	720			2400	5.50	4,760		
0800	2.37	1,200			Mean----------		2,540		
0900	2.00	880			Jan. 25				
1000	1.61	568			0100	7.71	7,860		
1200	1.10	220			0200	7.40	7,400		
1400	.85	100			0300	8.25	8,680		
1600	.80	85			0400	9.30	10,250		
1700	.95	140			0500	10.30	11,800		
1900	.91	120			0600	10.50	12,200		
2300	.68	56			0700	10.70	12,400		
2400	.69	58			0800	11.00	13,000		
Mean----------		312			0900	11.42	13,800		

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-0924.5. Los Angeles River at Sepulveda Dam, Calif.--Continued									
Jan. 25--Continued					Jan. 28--Continued				
1000	10.75	12,500			1400	2.63	1,520		
1100	10.59	12,300			1500	1.65	632		
1200	10.81	12,600			1600	1.20	294		
1300	10.60	12,300			2100	.91	130		
1400	10.15	11,600			2400	.79	88		
1500	9.50	10,600			Mean		231		
1600	8.60	9,200			Jan. 29				
1700	6.00	5,410			1200	.75	78		
1800	4.50	3,500			1600	.78	85		
2000	2.80	1,630			2400	.70	65		
2100	2.40	1,230			Mean		80		
2300	2.18	1,030			Jan. 30				
2400	2.22	1,070			1200	.65	54		
Mean		8,250			2200	.67	58		
Jan. 26					2400	.59	42		
0100	2.40	1,230			Mean		57		
0200	3.19	2,020			Jan. 31				
0300	3.05	1,880			0200	.64	50		
0400	3.15	1,980			1800	.58	38		
0500	3.40	2,240			2400	.59	40		
0600	2.85	1,680			Mean		43		
0700	4.50	3,500			Feb. 20				
0800	5.77	5,110			2400	.42	17		
0900	6.00	5,410			Feb. 21				
1000	7.12	6,980			1600	.42	17		
1100	6.50	6,080			2000	.46	21		
1200	4.78	3,840			2100	.40	16		
1300	5.71	5,030			2300	1.27	329		
1500	4.20	3,140			2400	4.49	3,490		
1600	3.20	2,030			2400	5.59	4,880		
1700	2.70	1,530			Mean		109		
1900	2.25	1,100			Feb. 22				
2100	1.92	816			0100	4.49	3,490		
2300	1.72	656			0200	3.12	1,950		
2400	1.64	592			0300	1.87	776		
Mean		2,670			0600	1.00	165		
Jan. 27					1200	.68	56		
0200	1.45	455			2400	.56	33		
1200	1.34	385			Mean		453		
1800	1.15	262							
2400	.96	160							
Mean		352							
Jan. 28									
1100	.83	120							
1300	.84	125							

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-0924.5. Los Angeles River at Sepulveda Dam, Calif.--Continued									
Feb. 23					Feb. 25--Continued				
0500	0.56	33			1200	3.37	2,210		
0600	3.37	2,210			1400	2.67	1,500		
0700	4.06	2,970			1800	2.03	904		
0800	2.92	1,750			2400	1.64	592		
1000	1.82	736			Mean----------		4,270		
1200	3.02	1,850			Feb. 26				
1300	5.90	5,280			0300	1.50	490		
1400	9.36	10,300			1200	1.25	315		
1500	8.82	9,530			2400	1.24	308		
1700	9.39	10,400			Mean----------		374		
1800	8.92	9,680			Feb. 27				
1900	7.62	7,730			1200	1.23	301		
2000	5.62	4,920			2400	1.22	294		
2100	4.17	3,100			Mean----------		301		
2400	2.44	1,270			Feb. 28				
Mean----------		3,670			1700	1.21	287		
Feb. 24					1800	2.19	1,040		
0300	1.81	728			1900	2.16	1,010		
0500	1.65	600			1900	2.38	1,210		
0700	2.12	978			2100	1.90	800		
0900	1.82	736			2400	.80	85		
1100	3.04	1,870			Mean----------		415		
1200	3.02	1,850			Mar. 1				
1400	2.68	1,510			1200	.78	80		
1600	2.87	1,700			2400	.77	78		
1700	3.52	2,370			Mean----------		81		
1800	6.50	6,080			Mar. 2				
1900	7.42	7,430			1200	.75	72		
2100	5.17	4,330			2400	.74	70		
2200	4.46	3,450			Mean----------		73		
2300	4.17	3,100			Mar. 3				
2300	4.65	3,680			1200	.72	65		
2400	4.10	3,020			2400	.71	62		
Mean----------		2,250			Mean----------		66		
Feb. 25									
0100	5.20	4,370							
0200	8.20	8,600							
0300	9.47	10,500							
0400	9.80	11,100							
0500	10.08	11,500							
0600	9.48	10,600							
0700	9.10	9,950							
0800	8.10	8,450							
0900	6.00	5,410							
1000	4.47	3,460							

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-0924.5. Los Angeles River at Sepulveda Dam, Calif.--Continued									
Mar. 4					Mar. 5				
1200	0.71		62		1200	0.70		60	
2400	.70		60		2400	.70		60	
Mean			62		Mean			60	
11-0980. Arroyo Seco near Pasadena, Calif.									
Jan. 17, 1969					Jan. 21				
2400	0.70		1.5		0200	3.63		578	
Jan. 18					0300	4.12		906	
1300	.70		1.5		0400	4.68		1,410	
1600	.75		2.5		0500	4.46		1,190	
1900	.91		6.6		0500	5.00		1,730	
2100	1.00		9.0		0600	5.25		1,980	
2400	1.10		12		0700	5.00		1,730	
Mean			3.6		0800	4.14		922	
Jan. 19					0900	3.65		590	
0700	1.21		15		1000	3.35		425	
0800	1.28		18		1100	3.17		338	
1200	1.32		19		1200	3.13		322	
1300	1.62		32		1300	3.18		342	
1800	1.51		27		1600	2.93		249	
1900	1.41		23		1800	2.67		172	
2000	1.42		24		2100	2.44		124	
2200	1.65		34		2300	2.35		108	
2400	1.73		38		2400	2.42		120	
Mean			22		Mean			569	
Jan. 20					Jan. 22				
0200	2.32		96		0100	2.59		153	
0300	2.65		153		0200	2.98		264	
0500	2.31		93		0400	3.25		375	
1200	1.90		49		0600	3.25		375	
1400	2.12		70		0900	3.13		322	
1600	2.30		93		1200	2.82		216	
1800	2.79		195		1500	2.65		168	
1800	3.10		298		1800	2.54		143	
2000	2.85		219		2400	2.28		97	
2100	2.72		183		Mean			223	
2200	2.78		204		Jan. 23				
2300	3.00		270		0600	2.15		80	
2400	3.36		430		1200	2.06		70	
Mean			128		1500	2.00		63	
					1800	2.11		75	
					2400	2.03		66	
					Mean			75	

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-0980. Arroyo Seco near Pasadena, Calif.--Continued									
Jan. 24					Jan. 26--Continued				
0400	2.06	70			2400	3.64	584		
0700	2.20	86			Mean----------		2,120		
1300	2.25	93			Jan. 27				
1500	2.44	124			0200	3.58	548		
1600	2.66	170			0300	3.38	440		
1700	2.82	216			0500	3.26	380		
1900	2.92	246			0800	3.35	425		
2100	3.18	342			1000	3.20	350		
2300	3.48	490			1200	3.14	326		
2400	3.74	644			1300	3.24	370		
Mean----------		169			1300	3.11	314		
Jan. 25					1500	3.07	298		
0100	3.93	761			2000	3.00	270		
0200	4.30	1,050			2400	2.98	264		
0300	4.20	970			Mean----------		356		
0300	4.55	1,280			Jan. 28				
0400	5.09	1,820			1200	2.95	255		
0500	5.55	2,280			2400	2.91	243		
0600	5.89	2,660			Mean----------		254		
0700	6.75	3,790			Jan. 29				
0800	7.88	5,450			1200	2.87	231		
0900	7.70	5,160			2400	2.83	219		
1000	8.58	6,760			Mean----------		231		
1100	9.37	8,540			Jan. 30				
1200	7.68	5,130			1200	2.79	207		
1300	7.40	4,700			2400	2.75	195		
1400	6.85	3,930			Mean----------		207		
1500	5.95	2,720			Jan. 31				
1600	5.32	2,050			1200	2.71	183		
1700	5.00	1,730			2400	2.67	172		
1800	4.65	1,380			Mean----------		183		
1900	5.68	2,430			Feb. 19				
2000	5.92	2,690			2400	2.15	108		
2100	6.12	2,920			Feb. 20				
2300	6.27	3,120			1200	2.16	110		
2400	6.30	3,160			2400	2.15	108		
Mean----------		3,210			Mean----------		109		
Jan. 26					Feb. 21				
0300	6.50	3,440			1200	2.12	103		
0500	6.27	3,120			2100	2.11	102		
0600	6.27	3,120			2400	2.43	162		
0700	6.35	3,230			Mean----------		108		
1000	6.18	3,000							
1200	5.70	2,450							
1300	5.50	2,230							
1500	4.73	1,460							
1600	4.50	1,230							
1700	4.08	874							
2100	3.78	668							

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-0980. Arroyo Seco near Pasadena, Calif.--Continued									
Feb. 22					Feb. 25--Continued				
0300	2.25	126			1200	4.50	1,230		
0700	2.19	114			1400	4.21	978		
1800	2.18	111			1600	4.05	850		
2400	2.10	97			1800	3.91	754		
Mean		116			2100	3.71	638		
Feb. 23					2400	3.69	638		
0900	2.18	106			Mean		1,800		
1100	2.40	143			Feb. 26				
1200	2.65	201			0600	3.61	596		
1300	2.91	274			1200	3.37	460		
1400	3.06	334			1800	3.30	425		
1500	3.22	410			2400	3.21	385		
1600	3.74	704			Mean		498		
1800	3.60	620			Feb. 27				
2100	3.30	440			1200	3.09	330		
2200	3.35	455			2400	3.12	342		
2400	3.10	334			Mean		347		
Mean		290			Feb. 28				
Feb. 24					1500	3.07	322		
0300	3.01	298			1800	3.17	365		
0500	3.07	330			2400	3.06	318		
0600	3.25	405			Mean		336		
0800	3.34	450			Mar. 1				
1000	3.14	350			1200	3.00	294		
1200	3.27	415			2400	2.98	290		
1400	3.28	420			Mean		299		
1500	3.65	614			Mar. 2				
1600	3.67	614			1200	2.92	267		
1700	4.00	810			2400	2.90	264		
1800	4.19	962			Mean		272		
1900	4.95	1,680			Mar. 3				
2000	4.50	1,230			1200	2.86	252		
2100	4.21	978			2400	2.82	243		
2200	4.30	1,050			Mean		253		
2200	4.18	954			Mar. 4				
2400	4.65	1,380			1200	2.76	225		
Mean		631			2400	2.72	216		
Feb. 25					Mean		227		
0100	5.79	2,550			Mar. 5				
0300	6.47	3,400			1200	2.67	201		
0400	7.30	4,560			2400	2.62	189		
0500	7.02	4,170			Mean		202		
0600	6.69	3,710							
0700	6.00	2,780							
0900	5.35	2,080							
1000	5.40	2,130							
1100	4.70	1,430							

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-1023. Rio Hondo below Whittier Narrows Dam, Calif.									
Jan. 17, 1969					Jan. 21				
2400	1.35	116			0300	2.21	831		
					0400	2.58	1,280		
Jan. 18					0500	7.08	11,400		
1600	1.35	116			0600	2.23	853		
1900	1.60	275			0700	6.10	8,500		
2000	1.90	515			0800	4.83	5,310		
2000	2.25	875			0900	2.23	853		
2100	1.80	430			1300	2.25	875		
2200	2.01	616			1800	2.20	820		
2400	2.10	710			2400	2.12	732		
Mean----------		222			Mean----------		1,780		
Jan. 19					Jan. 22				
0200	2.12	732			0600	2.15	765		
0400	2.04	647			0700	2.52	1,210		
0700	1.80	430			0800	6.00	8,200		
0900	1.70	350			0800	2.35	990		
1000	1.78	414			0900	2.50	1,180		
1200	1.61	282			1000	2.50	1,180		
1300	1.45	172			1000	2.22	842		
1500	1.57	254			1400	2.21	831		
1800	1.45	172			1800	2.14	754		
2000	1.34	111			2400	2.05	658		
2100	1.56	247			Mean----------		967		
2200	2.0	605							
2400	2.05	658			Jan. 23				
Mean----------		406			0500	1.96	569		
					0700	1.65	312		
Jan. 20					0900	1.42	154		
0200	2.19	809			1300	1.33	106		
0300	1.97	578			1500	1.38	131		
0400	3.78	3,210			2100	1.35	116		
0400	2.21	831			2300	1.75	390		
0500	2.55	1,240			2400	1.85	472		
0500	6.77	10,500			Mean----------		285		
0600	2.20	820							
0700	4.88	5,410			Jan. 24				
0800	4.88	5,410			0300	1.88	498		
0800	4.00	3,650			0400	2.71	1,460		
0900	2.37	1,010			0400	1.94	551		
1100	2.42	1,080			0600	2.05	658		
1200	1.90	515			0700	1.93	542		
1300	1.89	506			0900	2.06	668		
1400	2.00	605			1300	2.03	636		
1500	1.97	578			1300	1.95	560		
1600	4.12	3,890			1600	1.97	578		
1700	2.49	1,170			1900	2.17	787		
1800	2.19	809			2000	4.08	3,810		
1900	2.72	1,480			2400	3.96	3,570		
2000	2.68	1,420			Mean----------		1,200		
2000	2.18	798							
2400	2.15	765							
Mean----------		1,560							

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-1023. Rio Hondo below Whittier Narrows Dam, Calif.--Continued									
Jan. 25					Jan. 27--Continued				
0100	4.10	3,850			0500	7.05	11,400		
0200	6.80	10,600			0600	6.65	10,200		
0300	9.05	18,000			0700	6.30	9,100		
0400	9.50	19,800			0800	5.78	7,600		
0500	10.00	21,800			0900	5.35	6,520		
0600	10.20	22,600			1000	4.63	4,910		
0700	10.20	22,600			1100	4.36	4,370		
0800	11.16	26,400			1200	3.70	3,050		
0900	12.50	32,500			1300	3.13	2,100		
1000	13.82	38,800			1400	3.15	2,120		
1100	8.85	17,300			1500	4.16	3,970		
1100	8.95	17,700			1800	4.30	4,250		
1200	10.10	26,200			2100	4.40	4,450		
1300	10.00	21,800			2200	6.20	8,800		
1400	10.00	21,800			2300	6.66	10,200		
1600	10.48	27,700			2400	6.80	10,600		
1800	10.68	24,500			Mean----------		7,840		
1900	10.61	24,200							
2000	10.76	29,000			Jan. 28				
2000	10.59	24,200			0300	6.80	10,600		
2100	11.00	25,800			0600	6.78	10,500		
2200	11.61	28,300			0800	6.20	8,800		
2300	10.82	25,100			0900	6.00	8,200		
2400	12.93	34,500			1400	6.17	8,710		
Mean----------		23,200			1600	7.40	12,400		
					1700	8.30	15,400		
Jan. 26					1800	8.47	16,000		
0100	12.30	31,500			1900	7.90	14,000		
0200	11.70	28,700			2000	5.00	5,650		
0300	11.60	28,200			2000	2.64	1,370		
0500	11.78	29,100			2100	2.64	1,370		
0800	11.54	28,000			2200	2.64	1,370		
0900	11.64	28,500			2300	2.28	908		
1000	11.41	27,400			2400	2.00	605		
1100	11.20	26,600			Mean----------		8,900		
1200	10.62	24,300							
1300	10.15	22,400			Jan. 29				
1400	10.46	23,600			0100	1.68	335		
1500	11.00	25,800			0200	1.53	226		
1600	10.85	25,200			1100	1.53	226		
1800	10.69	24,600			1100	2.00	605		
1900	10.00	21,800			1300	2.01	605		
2000	9.58	20,100			1300	1.53	226		
2200	9.40	19,400			2400	1.53	226		
2400	9.33	19,100			Mean----------		270		
Mean----------		25,500							
					Jan. 30				
Jan. 27					Mean----------		226		
0200	8.90	17,500							
0300	8.15	14,900			Jan. 31				
0400	7.50	12,700			Mean----------		224		

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-1030. Los Angeles River at Long Beach, Calif.									
Jan. 17, 1969					Jan. 21--Continued				
2400	0.89	43			0400	5.01	11,500		
Jan. 18					0500	8.03	28,900		
1500	.84	38			0600	10.29	46,200		
1700	1.02	61			0700	8.63	33,200		
1800	1.34	126			0800	9.03	36,100		
2000	2.01	814			0900	8.03	28,900		
2200	2.83	2,910			1000	6.03	16,800		
2400	3.32	4,510			1300	4.03	7,140		
Mean----------		537			1500	3.63	5,610		
Jan. 19					1600	3.63	5,610		
0100	3.84	6,390			1800	3.11	3,790		
0300	3.62	5,570			2000	2.80	2,820		
0600	3.15	3,930			2200	2.66	2,400		
0800	3.02	3,500			2400	2.60	2,230		
1000	3.09	3,730			Mean---------		12,000		
1100	3.14	3,900			Jan. 22				
1400	2.52	2,000			0200	2.48	1,890		
1600	2.43	1,750			0400	2.52	2,000		
1700	2.54	2,060			0600	2.85	2,970		
1900	2.65	2,380			0800	3.68	5,790		
2100	2.67	2,430			0900	4.91	11,000		
2200	4.47	8,970			1000	3.43	4,900		
2300	4.57	9,430			1200	3.14	3,900		
2400	6.52	19,500			1700	2.65	2,380		
Mean----------		4,300			1900	2.34	1,520		
Jan. 20					2100	2.09	962		
0100	6.02	16,700			2400	1.97	740		
0300	7.53	25,600			Mean----------		2,980		
0400	10.04	44,100			Jan. 23				
0500	7.93	28,200			0200	1.87	566		
0600	7.35	24,500			1200	1.72	349		
0800	5.83	15,700			2200	1.68	306		
1000	4.53	9,240			2400	1.86	552		
1100	3.63	5,610			Mean----------		417		
1200	3.43	4,900			Jan. 24				
1300	3.38	4,720			0100	2.10	980		
1500	4.73	10,200			0200	2.51	1,970		
1700	3.28	4,370			0400	4.22	7,920		
1800	3.98	6,940			0500	4.02	7,100		
1900	4.78	10,400			0600	4.77	10,400		
2100	3.88	6,540			0800	3.92	6,700		
2200	3.33	4,540			0900	4.57	9,430		
2300	2.85	2,970			1100	4.02	7,100		
2400	2.58	2,170			1200	4.12	7,500		
Mean----------		13,000			1400	3.26	4,300		
Jan. 21					1600	3.21	4,130		
0100	2.43	1,740			1800	5.01	11,500		
0300	4.18	7,760			2000	5.25	12,700		
					2200	5.00	11,500		

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-1030. Los Angeles River at Long Beach, Calif.--Continued									
Jan. 24--Continued					Jan. 27--Continued				
2400	5,25	12,700			1300	4.65	9,800		
Mean----------		7,740			1500	4.00	7,020		
					1800	4.48	9,020		
Jan. 25					2000	3.90	6,620		
0100	7.60	26,000			2100	4.00	7,020		
0200	7.10	22,900			2300	5.20	12,400		
0300	9.50	39,800			2400	5.20	12,400		
0500	10.75	50,000			Mean---------		13,400		
0600	11.60	57,400							
0700	12.50	65,600			Jan. 28				
0800	14.60	86,600			0400	5.28	12,800		
0900	14.45	85,000			0800	5.00	11,500		
1000	15.80	99,500			1200	4.90	11,000		
1000	16.00	102,000			1500	5.50	13,900		
1100	14.99	90,700			1800	6.49	19,300		
1300	12.83	68,700			2000	6.00	16,600		
1400	12.36	64,300			2100	5.00	11,500		
1600	11.88	59,900			2200	3.40	4,790		
1700	11.19	53,800			2400	3.10	3,760		
1800	10.99	52,000			Mean---------		12,400		
1900	10.34	46,600							
2000	9.19	37,400			Jan. 29				
2200	8.74	34,000			0700	2.74	2,640		
2400	8.14	29,700			1100	2.65	2,380		
Mean---------		54,900			1200	2.69	2,490		
					1300	2.62	2,290		
Jan. 26					1400	2.80	2,820		
0300	7.92	28,200			1600	2.55	2,000		
0400	8.01	28,800			1800	2.27	1,340		
0600	8.44	31,800			2400	2.09	961		
0700	7.95	28,400			Mean----------		2,290		
0800	7.10	22,900							
0900	7.95	28,400			Jan. 30				
1000	8.25	30,400			1200	1.95	700		
1200	9.16	37,100			1600	1.66	284		
1300	9.35	38,600			1800	2.10	980		
1400	10.65	49,200			2100	1.75	385		
1500	10.75	50,000			2400	1.67	293		
1600	9.65	41,000			Mean----------		667		
1800	8.70	33,700							
2000	8.11	29,500			Jan. 31				
2200	8.01	28,800			0200	1.67	293		
2400	7.60	26,100			0200	1.86	546		
Mean---------		32,600			2100	1.86	546		
					2400	1.80	450		
Jan. 27					Mean----------		527		
0200	7.46	25,200							
0400	6.65	20,200			Feb. 19				
0600	6.20	17,700			2400	2.90	3,120		
0700	5.75	15,200							
0900	5.45	13,700			Feb. 20				
1100	5.00	11,500			0400	3.16	3,960		
					0600	2.75	2,670		

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-1030. Los Angeles River at Long Beach, Calif.--Continued									
Feb. 20--Continued					Feb. 24				
1000	2.40	1,660			0100	6.50	19,400		
1600	2.12	1,020			0200	6.00	16,600		
1800	2.12	1,020			0300	5.63	14,600		
2000	3.20	4,100			0600	5.20	12,400		
2100	2.50	1,940			0800	5.22	12,500		
2400	2.14	1,060			0900	5.64	14,600		
Mean----------		2,200			1000	5.00	11,500		
					1200	5.00	11,500		
Feb. 21					1300	5.20	12,400		
0300	1.99	772			1500	5.05	11,700		
2100	1.99	772			1600	5.10	11,900		
2200	1.86	546			1700	5.00	11,500		
2400	1.90	610			1800	5.38	13,300		
Mean----------		769			1900	6.00	16,600		
					2000	7.00	22,300		
Feb. 22					2100	8.10	29,400		
0100	4.00	7,000			2200	7.49	25,300		
0200	5.00	11,400			2300	7.45	25,100		
0200	6.50	19,400			2400	7.10	22,900		
0300	6.00	16,600			Mean----------		15,800		
0500	5.00	11,400							
0600	4.40	8,680			Feb. 25				
0800	3.35	4,620			0100	7.10	22,900		
0900	3.05	3,600			0200	6.62	20,100		
1200	2.45	1,800			0300	6.50	19,400		
1500	2.27	1,340			0400	8.00	28,700		
1600	2.47	1,860			0500	10.25	45,800		
1800	1.92	646			0600	12.15	62,300		
1900	1.98	754			0700	12.52	65,700		
2100	1.87	562			0800	12.50	65,600		
2400	1.96	718			0900	12.45	65,100		
Mean----------		4,560			1000	12.20	62,800		
					1100	11.75	58,700		
Feb. 23					1200	10.50	47,900		
0500	1.95	702			1300	9.98	43,600		
0600	2.17	1,130			1400	9.13	36,900		
1000	2.61	2,260			1500	9.15	37,100		
1100	3.35	4,620			1600	8.75	34,000		
1200	3.15	3,930			1700	9.25	37,800		
1300	3.70	5,860			1800	8.57	32,700		
1500	7.80	27,400			1900	8.53	32,400		
1600	8.75	27,000			2100	8.29	30,700		
1700	9.05	36,300			2200	8.60	32,900		
1800	10.39	47,000			2300	8.28	30,700		
1900	10.39	47,000			2400	8.28	30,700		
2000	9.40	39,000			Mean----------		40,500		
2100	8.35	31,200							
2200	7.95	28,400			Feb. 26				
2400	7.15	23,200			0100	7.98	28,600		
Mean----------		15,200			0200	7.97	28,500		
					0300	7.55	25,700		
					0400	7.50	26,700		

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-1030. Los Angeles River at Long Beach, Calif.--Continued									
Feb. 26--Continued					Feb. 28--Continued				
0500	7.07	22,700			1800	5.38	13,300		
0600	7.25	23,800			1900	5.70	15,000		
0900	7.05	22,600			2100	5.35	13,200		
1000	6.88	21,600			2100	6.55	19,700		
1300	6.70	20,500			2300	5.00	11,400		
1400	6.90	21,700			2400	4.85	10,700		
1500	6.95	22,000			Mean		13,100		
1600	6.82	21,200							
1700	6.90	21,700			Mar. 1				
1900	6.16	17,500			0300	3.96	6,850		
2000	6.08	17,000			1200	3.77	6,130		
2100	6.20	17,700			2400	3.75	6,050		
2200	5.90	16,000			Mean		6,580		
2300	5.73	15,100							
2400	5.68	14,900			Mar. 2				
Mean		21,700			0500	3.20	4,100		
					1200	2.65	2,380		
Feb. 27					2400	2.50	1,940		
0100	5.45	13,700			Mean		3,080		
0400	5.22	12,500							
0500	5.37	13,300			Mar. 3				
0700	5.00	11,500			1600	2.52	2,000		
1000	4.85	10,700			2100	2.00	790		
1200	5.00	11,500			2400	2.05	885		
1600	5.35	13,200			Mean		1,710		
1700	5.20	12,400							
1900	5.32	13,000			Mar. 4				
2000	5.24	12,600			1200	2.03	847		
2200	5.47	13,800			2400	2.08	942		
2400	5.38	13,300			Mean		880		
Mean		12,500							
					Mar. 5				
Feb. 28					1600	2.08	942		
0300	5.23	12,600			2100	1.83	498		
0600	5.35	13,200			2400	1.84	514		
1400	5.20	12,400			Mean		841		
11-1055. Malibu Creek at Crater Camp, near Calabasas, Calif.									
Jan. 17, 1969					Jan. 19--Continued				
2400	1.75			3.1	0800	2.25			22
					1000	2.40			34
Jan. 18					1200	2.34			29
2000	1.84			4.5	1500	2.45			38
2400	1.90			5.4	1700	2.70			63
Mean				3.6	1800	3.00			110
					1900	4.00			488
Jan. 19					2000	5.98			1,520
0200	1.94			6.5	2100	7.55			2,500
0400	2.33			28	2200	7.70			2,600

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-1055. Malibu Creek at Crater Camp, near Calabasas, Calif.--Continued									
Jan. 19--Continued					Jan. 22--Continued				
2300	8.50	3,220			1200	4.53	620		
2400	9.60	4,680			1500	4.20	475		
Mean----------		554			1800	3.98	428		
					2100	3.80	381		
Jan. 20					2400	3.67	352		
0100	11.00	7,220			Mean----------		541		
0200	11.20	7,640							
0200	11.00	7,220			Jan. 23				
0300	10.05	5,430			0600	3.45	270		
0400	8.90	3,660			1200	3.31	230		
0500	8.27	3,010			1800	3.20	184		
0600	7.70	2,600			2400	3.17	166		
0700	7.00	2,000			Mean----------		236		
0800	6.40	1,570							
0900	6.00	1,270			Jan. 24				
1100	5.25	893			0100	3.20	169		
1200	4.80	693			0300	3.41	238		
1400	4.40	528			0400	3.74	369		
1600	4.37	528			0500	3.78	385		
1800	4.32	519			0600	4.32	572		
2000	4.21	484			0700	4.55	625		
2200	4.35	559			0800	4.83	702		
2300	4.80	780			1000	5.10	847		
2400	5.98	1,460			1100	5.33	978		
Mean----------		1,920			1200	5.13	883		
					1400	4.85	751		
Jan. 21					1500	4.85	761		
0100	6.45	1,770			1600	5.10	899		
0200	6.65	1,920			1700	5.45	1,100		
0300	7.65	2,560			1800	5.98	1,360		
0400	9.00	3,790			1900	6.50	1,710		
0500	11.70	8,690			2100	6.58	1,820		
0600	12.50	10,400			2200	6.85	2.010		
0700	12.00	9,340			2400	8.75	3,480		
0800	11.00	7,220			Mean----------		1,010		
0900	9.90	5,240							
1000	8.87	3,720			Jan. 25				
1100	8.40	3,120			0100	10.00	5,340		
1200	8.00	2,700			0200	11.50	8,270		
1400	7.00	1,930			0300	12.60	10,700		
1600	6.35	1,410			0400	15.00	12,000		
1800	5.45	962			0400	15.98	17,700		
2000	4.90	707			0500	17.00	20,400		
2400	4.37	493			0600	19.65	28,200		
Mean----------		3,100			0700	20.65	31,300		
					0900	21.41	33,700		
Jan. 22					1000	21.20	33,000		
0200	4.31	488			1100	21.00	32,400		
0500	4.51	598			1200		28,000		
0700	4.76	722			1400		18,000		
0800	4.90	795			1600		11,500		
0900	4.96	826			1800		8,400		

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-1055. Malibu Creek at Crater Camp, near Calabasas, Calif.--Continued									
Jan. 25--Continued					Feb. 21				
2000		5,600			2000	2.65	94		
2200		4,150			2200	2.93	149		
2400		3,400			2400	3.30	239		
Mean		16,400			Mean		105		
Jan. 26					Feb. 22				
0200		2,750			0100	4.10	501		
0400		2,100			0200	3.28	233		
0600		1,900			0300	3.25	225		
0800		1,650			0400	3.88	417		
1000		1,400			0600	3.37	264		
1400		1,100			1200	3.05	179		
1800		880			1800	2.97	161		
2000		780			2400	2.90	147		
2400		650			Mean		218		
Mean		1,460			Feb. 23				
Jan. 27					0200	2.92	147		
0400		560			0400	3.20	207		
1000		520			0600	3.94	424		
1200	4.63	662			0800	3.63	317		
1400	5.05	860			0900	3.56	290		
1500	4.51	609			1000	3.82	364		
1800	3.96	396			1100	4.98	835		
2400	3.76	332			1200	6.70	1,820		
Mean		531			1300	8.05	2,860		
Jan. 28					1400	9.25	4,020		
1200	3.62	290			1500	10.20	5,310		
2400	3.58	278			1600	11.75	7,930		
Mean		298			1700	11.25	7,030		
Jan. 29					1800	10.30	5,460		
1200	3.58	278			1900	9.40	4,200		
2400	3.43	236			2000	8.40	3,180		
Mean		268			2100	7.50	2,420		
Jan. 30					2300	6.40	1,610		
Mean		206			2400	6.08	1,420		
Jan. 31					Mean		2,180		
Mean		153			Feb. 24				
Feb. 19					0200	5.40	1,040		
2400	2.71	96			0300	5.20	935		
Feb. 20					0400	4.93	800		
1200	2.70	96			0600	4.87	771		
2400	2.67	94			0700	4.75	716		
Mean		96			1100	4.73	707		
					1200	4.77	725		
					1400	4.72	703		
					1500	4.97	820		
					1600	5.35	1,010		
					1700	6.50	1,680		
					1800	7.50	2,420		
					2100	7.37	2,320		

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-1055. Malibu Creek at Crater Camp, near Calabasas, Calif.--Continued									
Feb. 24--Continued					Feb. 27				
2300	7.38	2,320			0600	4.33	537		
2400	8.10	2,910			1200	4.21	489		
Mean		1,290			1800	4.13	457		
					2400	4.06	431		
Feb. 25					Mean		498		
0100	8.90	3,630							
0200	10.85	6,340			Feb. 28				
0300	12.90	10,200			1200	3.93	386		
0400	13.70	12,000			1500	4.18	477		
0500	12.80	10,000			1800	4.21	489		
0600	11.20	6,940			2000	4.34	541		
0700	10.00	5,010			2400	4.20	485		
0800	9.40	4,200			Mean		447		
0900	8.60	3,360							
1000	8.00	2,820			Mar. 1				
1100	7.60	2,500			0600	4.03	420		
1300	7.18	2,170			1200	3.90	376		
1500	6.70	1,820			1800	3.82	351		
1600	6.50	1,680			2400	3.77	336		
1800	6.17	1,470			Mean		389		
2000	5.87	1,290							
2100	5.75	1,220			Mar. 2				
2400	5.37	1,020			1200	3.67	302		
Mean		3,670			2400	3.60	281		
					Mean		305		
Feb. 26									
0100	5.27	970			Mar. 3				
0300	5.15	910			1200	3.55	267		
0600	4.97	820			2400	3.48	247		
0900	4.93	800			Mean		266		
1200	4.87	771							
1800	4.67	680			Mar. 4				
2200	4.50	605			0900	3.42	228		
2400	4.46	589			1200	3.39	212		
Mean		766			2400	3.37	197		
					Mean		219		
					Mar. 5				
					Mean		180		

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-1096. Piru Creek above Lake Piru, Calif.									
Jan. 17, 1969					Jan. 22				
2400	1.96	12			0300	4.27	765		
Jan. 18					0600	4.20	730		
1200	1.95	11			0800	4.06	660		
2400	2.05	16			1000	3.90	580		
Mean		12			1200	3.82	548		
Jan. 19					1400	3.84	556		
0300	2.06	18			1700	3.72	508		
0600	2.27	37			2100	3.66	484		
0900	2.46	65			2400	3.57	448		
1200	2.81	137			Mean		608		
1500	3.50	332			Jan. 23				
1800	4.73	918			0600	3.51	424		
2000	6.18	2,030			1200	3.44	399		
2200	5.46	1,470			2100	3.40	385		
2400	5.17	1,280			2400	3.43	396		
Mean		515			Mean		408		
Jan. 20					Jan. 24				
0100	4.94	1,160			0200	3.47	410		
0200	5.62	1,680			0400	3.56	444		
0400	5.87	1,880			0600	3.71	544		
0600	5.58	1,640			0800	3.75	568		
0800	5.22	1,360			1000	3.88	670		
1000	4.95	1,170			1200	3.75	655		
1400	4.65	990			1300	3.73	695		
1800	4.29	775			1500	3.79	775		
2100	4.20	730			1700	3.97	942		
2300	4.77	1,060			1900	4.17	1,120		
2400	5.14	1,290			2100	4.33	1,280		
Mean		1,180			2300	4.45	1,460		
Jan. 21					2400	4.69	1,730		
0100	7.73	3,840			Mean		791		
0200	7.11	3,110			Jan. 25				
0300	8.71	5,320			0200	5.39	2,590		
0400	9.73	7,260			0300	6.13	3,800		
0500	10.62	9,040			0400	7.41	5,020		
0600	10.44	8,680			0500	8.69	8,180		
0800	10.05	7,900			0600	10.52	11,800		
1100	9.64	7,080			0700	11.41	13,800		
1300	9.55	6,900			0800	11.79	14,700		
1400	7.60	3,760			0900	13.9	20,800		
1500	6.40	2,400			1000		18,000		
1600	5.89	1,890			1200		14,000		
1800	5.16	1,310			1400		11,000		
2100	4.85	1,130			1600		9,000		
2400	4.50	900			2000		8,400		
Mean		4,460			2400		8,000		
					Mean		9,810		

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-1096. Piru Creek above Lake Piru, Calif.--Continued									
Jan. 26					Feb. 21--Continued				
0800		7,600			1100	2.80	303		
1000		8,600			1900	2.74	285		
1200		10,500			2200	2.84	315		
1400		8,500			2300	2.97	360		
1800		6,800			2400	2.94	350		
2400		5,800			Mean----------		298		
Mean----------		7,710							
Jan. 27					Feb. 22				
0600		5,200			0400	2.86	322		
1200		2,800			0900	2.83	312		
1800		1,250			1800	2.88	329		
2400		960			2400	2.80	303		
Mean----------		3,160			Mean----------		321		
Jan. 28					Feb. 23				
0600		820			0500	2.86	329		
1200		720			0700	3.00	452		
1800		640			0900		905		
2400		590			1000		972		
Mean----------		739			1100		1,810		
Jan. 29					1200		1,950		
1200		480			1300		2,940		
2400		440			1400		4,050		
Mean----------		496			1500		4,860		
Jan. 30					1600		10,600		
1200		420			1700		6,000		
2400		360			1800		8,600		
Mean----------		410			1900		9,950		
Jan. 31					2000		6,850		
1200		290			2100		5,600		
2400		250			2200		4,600		
Mean----------		298			2400		4,100		
Feb. 19					Mean----------		3,300		
2400	2.80	303			Feb. 24				
Feb. 20					0200		3,800		
1500	2.79	300			0400		3,550		
1700	2.83	312			0500		3,500		
1900	2.75	288			0700		3,650		
2000	2.78	297			0800		3,750		
2400	2.79	300			1200		4,250		
Mean----------		300			1400		4,800		
Feb. 21					1500		5,500		
0400	2.74	285			1600		7,440		
0800	2.78	297			1700		8,420		
0900	2.74	285			1800		9,810		
					1900		12,600		
					2000		14,000		
					2100		18,400		
					2200		20,000		
					2300		22,500		
					2400		27,000		
					Mean----------		7,880		

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-1096. Piru Creek above Lake Piru, Calif.--Continued									
Feb. 25					Feb. 28				
0100		31,000			0800		1,590		
0200	19.10	31,200			1200		1,400		
0300		30,800			1800		2,010		
0400		28,300			2400		1,600		
0600		24,100			Mean----------		1,670		
0700		22,700			Mar. 1				
0800		17,800			1200		1,260		
0900		17,700			2400		1,200		
1000		16,400			Mean----------		1,330		
1100		13,200			Mar. 2				
1200		12,700			1200		1,010		
1400		9,640			2400		1,040		
1600		9,000			Mean----------		1,060		
1700		8,400			Mar. 3				
1800		7,500			1200		920		
2000		6,300			2400		886		
2200		5,500			Mean----------		942		
2400		5,000			Mar. 4				
Mean----------		15,600			1200		839		
Feb. 26					2400		783		
0600		4,100			Mean----------		837		
1200		3,800			Mar. 5				
1700		2,850			1200		697		
2400		2,500			2400		686		
Mean----------		3,600			Mean----------		716		
Feb. 27									
0600		2,250							
0800		2,160							
1200		2,090							
1700		1,940							
2400		1,660							
Mean----------		2,080							
11-1130. Sespe Creek near Fillmore, Calif.									
Jan. 17, 1969					Jan. 19				
2400	2.90	8.2			0100	3.76	92	420	104
Jan. 18					0200	4.70	395	500	533
1400	2.87	7.1			0300	4.84	462	650	811
1800	3.00	12			0400	4.84	462	800	999
2100	3.20	24			0600	5.15	624	1,500	2,530
2400	3.64	73			0800	5.50	876	3,000	7,100
Mean----------		14			1000	5.82	1,120	11,000	33,300
					1200	5.90	1,180	8,000	25,500

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-1130. Sespe Creek near Fillmore, Calif.--Continued									
Jan. 19--Continued					Jan. 22				
1400	6.50	1,880	6,000	30,500	0300	7.78	3,660	3,400	33,600
1500	6.68	2,110	5,000	28,500	0400	7.90	3,940	3,000	31,900
1600	6.65	2,040	10,000	55,100	0600	8.42	5,180	2,400	33,600
1700	8.50	5,750	25,000	388,000	0900	7.69	3,640	1,800	17,700
1800	9.16	7,580	40,000	819,000	1200	7.38	2,960	1,500	12,000
1900	10.35	10,800	30,000	975,000	1600	6.85	2,150	1,200	6,970
2000	10.30	10,700	22,000	636,000	1800	6.68	1,910	1,000	5,160
2100	10.10	10,100	25,000	682,000	2100	6.54	1,720	920	4,270
2200	10.88	12,400	50,000	1,670,000	2400	6.36	1,490	800	3,210
2300	11.25	13,600	46,000	1,690,000	Mean----------		3,010	1,870	17,500
2400	10.90	12,500	40,000	1,350,000					
Mean----------		3,890	14,700	349,000	Jan. 23				
					1200	6.26	1,370	550	2,030
Jan. 20					2400	6.23	1,340	430	1,560
0100	10.20	10,400	35,000	983,000	Mean----------		1,390	582	2,210
0200	9.75	9,050	30,000	733,000					
0300	9.14	7,220	28,000	546,000	Jan. 24				
0500	8.30	4,750	22,000	282,000	0300	6.22	1,320	410	1,460
0700	7.82	3,740	17,000	172,000	0400	6.45	1,600	600	2,590
0900	7.34	2,720	14,000	103,000	0500	6.62	1,840	700	3,480
1000	7.00	2,220	12,000	71,900	0600	6.80	2,080	1,000	5,620
1300	6.49	1,530	8,600	35,500	0700	7.15	2,580	1,500	10,400
1500	6.35	1,360	6,600	24,200	0800	7.35	2,980	2,500	20,100
1800	6.47	1,500	4,600	18,600	0900	7.54	3,380	10,000	91,300
1900	6.65	1,730	4,000	18,700	1000	7.42	3,200	8,000	69,100
2000	6.85	2,010	7,000	38,000	1200	7.31	2,840	4,400	33,700
2100	6.90	2,080	13,000	73,000	1400	7.50	3,300	5,000	44,600
2200	8.00	4,100	25,000	277,000	1800	7.97	4,140	6,200	69,300
2300	9.50	8,300	40,000	896,000	2100	8.35	4,880	8,000	105,000
2400	11.75	15,300	60,000	2,480,000	2300	9.15	7,250	10,000	196,000
Mean----------		4,080	17,400	304,000	2400	9.85	9,350	12,000	303,000
					Mean----------		3,410	4,840	58,100
Jan. 21									
0100	12.10	16,500	54,000	2,410,000	Jan. 25				
0300	15.00	28,000	44,000	3,330,000	0100	10.60	11,600	17,000	532,000
0500	16.35	34,800	35,000	3,290,000	0200	12.00	16,200	21,000	919,000
0600	17.00	38,000	31,000	3,180,000	0300	13.35	21,400	30,000	1,730,000
0800	15.00	28,000	25,000	1,890,000	0400	14.45	25,800	40,000	2,790,000
1000	12.75	19,000	20,000	1,030,000	0500	17.00	38,000	60,000	6,160,000
1100	12.22	16,900	18,000	821,000	0600	18.57	45,000	100,000	12,200,000
1200	12.00	16,200	16,000	700,000	0700	19.05	48,200	90,000	11,700,000
1300	11.24	13,500	15,000	547,000	0800	20.35	56,500	80,000	12,200,000
1400	10.85	12,400	13,000	435,000	0900	20.80	60,000	70,000	11,300,000
1600	10.14	10,200	10,000	275,000	1000	17.70	43,000	60,000	6,970,000
1800	9.55	8,450	8,600	196,000	1100	16.40	38,000	55,000	5,640,000
2000	9.00	6,800	6,800	125,000	1200	15.20	32,500	50,000	4,390,000
2200	8.45	5,150	5,600	77,900	1400	13.45	25,400	40,000	2,740,000
2400	8.10	4,300	4,600	53,400	1500	12.80	23,400	36,000	2,270,000
Mean----------		17,200	21,400	1,280,000	1600	12.67	22,900	32,000	1,980,000
					2000	12.35	21,000	22,000	1,250,000
					2400	12.12	19,300	17,000	886,000
					Mean----------		29,100	41,700	4,040,000

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--**Continued**

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-1130. Sespe Creek near Fillmore, Calif.--Continued									
Jan. 26					Jan. 29--Continued				
0200	12.35	19,400	15,000	786,000	1300	12.45	6,950	1,700	31,900
0400	12.80	19,600	17,000	900,000	1400	12.62	7,760	1,600	33,500
0600	14.00	22,800	22,000	1,250,000	1600	12.46	6,980	1,500	28,300
0800	15.15	25,800	30,000	2,090,000	1700	12.65	7,850	1,400	29,700
0900	15.90	28,000	40,000	3,020,000	1900	12.77	8,210	1,300	28,800
1000	17.30	34,000	35,000	3,220,000	2100	12.65	7,850	1,200	25,400
1100	16.80	30,500	33,000	2,720,000	2400	12.48	7,060	1,000	19,100
1200	16.45	27,800	30,000	2,260,000	Mean----------		6,800	1,930	34,600
1300	16.50	26,400	26,000	1,850,000					
1500	15.90	23,200	22,000	1,380,000	Jan. 30				
1600	15.55	21,400	19,000	1,100,000	0200	12.33	6,590	950	16,900
1700	15.05	18,200	17,000	836,000	0300	12.20	5,900	930	14,800
1900	14.20	14,000	14,000	529,000	0400	12.25	6,050	900	14,700
2000	13.82	12,600	12,000	409,000	0500	12.15	5,750	860	13,400
2200	13.00	9,200	10,000	248,000	0600	12.26	6,080	840	13,800
2400	12.32	6,560	8,000	142,000	0900	11.95	5,150	780	10,800
Mean---------		20,400	20,000	1,270,000	1000	11.83	4,580	740	9,150
					1300	11.75	4,400	700	8,320
Jan. 27					1500	11.65	4,200	660	7,480
0200	12.00	5,300	6,400	91,600	1900	11.64	3,980	600	6,450
0400	11.84	4,600	5,200	64,600	2100	11.56	3,820	580	5,980
0600	11.67	4,240	4,200	48,200	2300	11.36	3,420	560	5,170
0900	11.55	3,800	3,500	35,900	2400	11.46	3,620	550	5,370
1100	11.69	4,280	7,000	81,100	Mean----------		4,850	735	9,990
1200	11.58	3,860	8,400	87,600					
1300	11.71	4,320	9,600	112,000	Jan. 31				
1500	11.86	4,900	11,000	146,000	0200	11.60	3,900	540	5,690
1800	12.01	5,330	13,000	187,000	0300	11.64	3,980	530	5,690
2100	12.05	5,450	11,500	170,000	0400	11.83	4,580	520	6,430
2400	12.11	5,630	10,000	152,000	0500	11.75	4,400	520	6,180
Mean----------		4,840	8,320	113,000	0700	11.74	4,380	500	5,910
					0900	11.65	4,200	500	5,670
Jan. 28					1200	11.54	3,780	480	4,900
0300	12.27	6,410	9,000	155,000	1500	11.44	3,580	480	4,640
0500	12.37	6,710	8,200	162,000	1600	11.46	3,620	480	4,680
0800	12.52	7,460	7,000	141,000	1900	11.37	3,440	480	4,460
1100	12.61	7,730	6,200	129,000	2400	11.32	3,340	480	4,330
1300	12.57	7,610	5,800	119,000	Mean----------		3,830	497	5,270
1500	12.63	7,790	5,200	110,000					
1800	12.74	8,120	4,400	96,500	Feb. 22				
2100	12.68	7,940	3,800	81,500	2400	12.32	1,120		
2400	12.58	7,640	3,300	68,200					
Mean----------		7,390	6,190	120,000	Feb. 23				
					0500	12.39	1,290	3,400	11,800
Jan. 29					0700	12.56	1,610	5,400	23,500
0200	12.47	7,310	3,000	59,200	0900	12.93	2,400	9,000	58,300
0300	12.35	6,650	2,800	50,300	1000	13.51	3,920	12,000	127,000
0500	12.15	5,750	2,600	40,400	1100	13.63	4,580	17,000	210,000
0700	12.03	5,390	2,300	33,500	1200	13.85	5,450	19,000	280,000
0800	12.10	5,600	2,200	33,300	1300	14.36	7,280	19,000	373,000
1100	12.01	5,330	1,900	27,400	1400	14.85	9,050	17,000	415,000
1200	12.17	5,810	1,800	28,200	1500	15.33	10,800	13,000	379,000

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-1130. Sespe Creek near Fillmore, Calif.--Continued									
Feb. 23--Continued					Feb. 26				
1600	14.79	9,470	11,000	281,000	0400	19.45	12,600	6,600	225,000
1700	14.35	8,450	9,300	212,000	0800	18.82	10,900	5,400	159,000
1900	14.34	8,720	9,400	221,000	1200	17.95	8,450	4,300	98,100
2000	14.65	9,950	9,200	247,000	1600	16.70	4,880	3,900	51,400
2200	14.13	8,540	7,200	166,000	2100	16.65	4,880	3,800	50,100
2400	13.60	7,100	6,000	115,000	2400	16.40	4,400	3,500	41,600
Mean----------		5,400	8,780	160,000	Mean----------		8,460	5,010	127,000
Feb. 24					Feb. 27				
0300	13.30	6,350	4,500	77,200	0600	15.90	3,500	2,100	19,800
0500	13.65	7,550	4,600	93,800	1200	15.62	2,950	1,600	12,700
0600	14.00	8,750	4,900	116,000	1800	15.35	2,580	1,400	9,750
0700	14.26	9,620	5,500	143,000	2400	15.20	2,430	1,200	7,870
0800	14.00	8,900	6,200	149,000	Mean----------		3,110	1,860	16,800
0900	14.62	10,800	6,800	198,000					
1000	14.77	11,200	8,400	254,000	Feb. 28				
1100	14.86	11,500	10,000	310,000	1100	14.99	2,210	1,000	5,970
1200	16.0	14,800	12,000	480,000	1300	15.28	2,710	2,000	14,600
1400	18.0	20,800	20,000	1,120,000	1400	15.78	3,860	2,400	25,000
1500	19.0	24,000	26,000	1,680,000	1600	15.59	3,580	2,100	20,300
1600	20.0	27,200	35,000	2,570,000	1700	15.31	3,120	2,000	16,800
1700	21.0	31,000	48,000	4,020,000	2400	15.13	2,790	1,300	9,790
1800	21.5	32,500	54,000	4,740,000	Mean----------		2,720	1,470	11,400
2200	22.6	37,000	62,000	6,190,000					
2200	23.5	40,500	62,000	6,780,000	Mar. 1				
2400	24.3	43,500	60,000	7,050,000	1000	14.70	2,160	900	5,250
Mean----------		19,700	25,300	1,520,000	2400	14.55	2,000	630	3,400
					Mean----------		2,240	883	5,660
Feb. 25									
0200	24.75	44,800	46,000	5,560,000	Mar. 2				
0400	24.95	45,000	31,000	3,770,000	1200	14.33	1,730	540	2,520
0500	24.5	41,500	25,000	2,800,000	2400	14.17	1,560	490	2,060
0600	23.2	34,000	22,000	2,020,000	Mean----------		1,760	546	2,630
0700	22.0	26,800	19,000	1,370,000					
0800	21.0	20,400	15,000	826,000	Mar. 3				
0900	19.7	15,400	12,000	499,000	1200	14.11	1,530	450	1,860
1000	19.4	13,700	10,000	370,000	2400	13.98	1,410	420	1,600
1200	19.6	13,700	9,800	363,000	Mean----------		1,510	453	1,840
1400	20.1	15,100	10,000	408,000					
1800	20.05	13,900	10,000	375,000	Mar. 4				
2100	19.90	13,700	9,600	355,000	Mean----------		1,350		
2400	19.83	13,600	8,500	312,000					
Mean----------		22,600	18,000	1,530,000	Mar. 5				
					Mean----------		1,190		

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-1139.2. Santa Clara River at Saticoy, Calif.									
Jan. 19, 1969					Jan. 22--Continued				
0600		0		0	0800	9.00	7,540	25,000	509,000
1000	3.80	43	5,000	580	1000	8.80	6,800	22,000	404,000
1200	4	57	5,000	770	1200	8.60	6,240	19,000	320,000
1600	6	880	5,500	13,100	1400	8.30	5,400	16,000	233,000
2000	8	4,000	10,000	108,000	1600	8.15	4,980	14,000	188,000
2400	10	10,500	30,000	850,000	1800	7.98	4,500	13,000	158,000
Mean----------		1,700	6,330	91,300	2000	7.84	4,110	11,000	122,000
					2400	7.56	3,490	8,800	82,900
Jan. 20					Mean----------		5,680	14,700	235,000
0100	10.9	15,000	50,000	2,020,000					
0200	11.6	19,400	80,000	4,190,000	Jan. 23				
0300	10.8	14,500	50,000	1,960,000	0400	7.28	2,920	7,000	55,200
0400	10.16	11,300	30,000	915,000	0800	7.09	2,560	5,600	38,700
0500	9.60	9,020	21,000	511,000	1200	6.96	2,340	4,500	28,400
0600	9.00	6,800	16,000	294,000	1600	6.84	2,140	3,600	20,800
0700	8.32	4,900	12,000	159,000	2000	6.78	2,050	2,900	16,100
0900	8.00	4,000	7,200	77,800	2400	6.93	2,290	5,000	30,900
1000	7.90	3,800	5,600	57,500	Mean----------		2,480	5,080	36,100
1300	7.42	2,800	6,000	45,400					
1600	6.85	1,870	9,500	48,000	Jan. 24				
1900	6.80	1,800	15,000	72,900	0200	7.15	2,670	7,000	50,500
2200	7.30	2,580	26,000	181,000	0400	7.34	3,040	11,000	90,300
2300	8.40	5,120	30,000	415,000	0600	7.57	3,510	17,000	161,000
2400	9.00	6,800	35,000	643,000	0800	7.90	4,280	27,000	312,000
Mean----------		5,630	20,500	534,000	0900	8.26	5,290	25,000	357,000
					1000	8.30	5,400	24,000	350,000
Jan. 21					1200	8.40	5,680	21,000	322,000
0100	11.20	16,200	42,000	1,840,000	1400	8.54	6,070	18,000	295,000
0200	12.5	25,000	50,000	3,380,000	1600	8.70	6,240	16,000	270,000
0300	13.5	32,900	58,000	5,150,000	1900	9.05	6,980	15,000	283,000
0400	14.85	43,800	70,000	8,280,000	2100	9.22	7,610	13,000	267,000
0500	16.20	56,900	80,000	12,300,000	2200	9.50	8,650	11,000	257,000
0600	16.85	63,400	90,000	15,400,000	2300	10.00	10,500	14,000	397,000
0700	17.30	67,600	78,000	14,200,000	2400	10.90	15,000	17,000	688,000
0800	17.6	70,000	70,000	13,200,000	Mean----------		5,630	16,000	250,000
0900	17	65,200	62,000	10,900,000					
1000	16	55,800	56,000	8,440,000	Jan. 25				
1100	15	47,000	50,000	6,340,000	0100	11.85	21,000	21,000	1,190,000
1200	14	38,900	45,000	4,730,000	0200	13.50	33,800	28,000	2,560,000
1300	13	32,000	40,000	3,460,000	0300	15.0	47,000	35,000	4,440,000
1400	12	25,800	35,000	2,440,000	0400	16.75	67,000	40,000	7,240,000
1500	11	20,000	31,000	1,670,000	0500	18.25	86,500	53,000	12,400,000
1600	10.5	18,100	28,000	1,370,000	0600	19.60	106,000	68,000	19,500,000
1700	10.10	16,800	26,000	1,180,000	0600	20.20	115,000	68,000	21,100,000
1800	9.90	14,500	23,000	900,000	0700	18.5	90,000	84,000	20,400,000
2100	9.5	11,500	17,000	528,000	0800	20.5	120,000	110,000	35,600,000
2400	9.0	9,020	12,000	292,000	0900	22.4	154,000	140,000	58,200,000
Mean----------		32,100	43,600	4,960,000	1000	22.13	148,000	160,000	63,900,000
					1000	23.07	165,000	160,000	71,300,000
Jan. 22					1100	22.5	157,000	160,000	67,800,000
0200	8.4	6,520	10,000	176,000	1200	19.5	112,000	140,000	42,300,000
0400	8.2	5,680	9,000	138,000	1400	18.0	92,000	110,000	27,300,000
0600	8.5	6,240	17,000	286,000	1600	16.00	69,000	82,000	15,300,000

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-1139.2. Santa Clara River at Saticoy, Calif.--Continued									
Jan. 25--Continued					Jan. 29--Continued				
1800	14.2	51,800	64,000	8,950,000	1800	3.20	2,260	3,700	22,600
2000	11.30	30,400	50,000	4,100,000	2400	3.00	2,000	3,200	17,300
2200	10.87	27,800	39,000	2,930,000	Mean		2,530	4,350	30,100
2400	9.90	22,500	31,000	1,880,000					
Mean		74,300	76,600	20,000,000	Jan. 30				
					0600	2.85	1,860	2,900	14,600
Jan. 26					1200	2.70	1,730	2,600	12,100
0200	9.06	18,300	25,000	1,240,000	1800	2.50	1,550	2,400	10,000
0300	8.98	17,900	22,000	1,060,000	2400	2.35	1,370	2,200	8,140
0500	8.95	17,800	17,000	820,000	Mean		1,710	2,650	12,400
0600	9.35	19,800	22,000	1,180,000					
0700	10.25	24,400	28,000	1,840,000	Jan. 31				
0800	10.85	27,700	38,000	2,830,000	0600	2.25	1,240	2,100	7,030
0900	10.95	28,200	50,000	3,800,000	1200	2.15	1,070	1,900	5,490
1000	12.10	35,700	60,000	5,780,000	2400	2.00	920	1,600	3,970
1100	13.65	47,200	54,000	6,850,000	Mean		1,110	1,910	5,830
1200	14.80	57,200	45,000	6,940,000					
1300	13.70	47,600	37,000	4,750,000	Feb. 19				
1400	12.60	39,200	30,000	3,180,000	2400	2.70	890		
1500	11.50	31,800	25,000	2,150,000					
1600	10.75	27,100	20,000	1,460,000	Feb. 20				
1700	10.35	24,900	17,000	1,140,000	1200	2.69	884	3,400	8,120
1800	9.75	21,800	15,000	883,000	2400	2.60	800	3,300	7,130
1900	9.10	18,500	13,000	648,000	Mean		864	3,400	7,940
2000	8.50	16,000	12,000	518,000					
2200	8.10	14,400	10,000	389,000	Feb. 21				
2400	7.63	12,700	9,500	326,000	1200	2.55	800	3,300	7,130
Mean		25,800	26,400	2,170,000	1800	2.52	812	3,200	7,010
					2200	2.74	1,000	20,000	54,000
Jan. 27					2400	3.20	1,420	50,000	192,000
0200	7.13	11,000	8,600	255,000	Mean		853	7,310	20,700
0400	6.80	9,900	8,100	217,000					
0600	6.58	9,240	7,700	192,000	Feb. 22				
0800	6.26	8,280	7,200	161,000	0100	3.27	1,510	38,000	155,000
1000	5.90	7,260	7,000	137,000	0300	3.09	1,520	23,000	94,400
1200	5.68	6,730	6,800	124,000	0600	3.00	1,530	13,000	53,700
1600	5.32	5,870	6,400	101,000	0800	2.91	1,540	60,000	249,000
2000	4.92	4,960	6,100	81,700	0900	3.21	2,010	46,000	250,000
2400	4.70	4,560	5,800	71,400	1200	2.96	1,960	23,000	122,000
Mean		7,350	7,270	148,000	1400	2.78	1,780	15,000	72,100
					1600	2.85	1,850	10,000	50,000
Jan. 28					1800	2.75	1,760	8,400	39,900
0500	4.45	4,110	5,400	59,900	2400	2.84	1,840	5,800	28,800
0600	4.4	4,020	7,200	78,100	Mean		1,740	21,400	98,600
1200	4.28	3,800	5,600	57,500					
1800	4.07	3,430	4,800	44,400	Feb. 23				
2400	3.85	3,100	4,200	35,200	0600	2.86	1,860	4,800	24,100
Mean		3,770	5,450	56,200	0900	3.16	2,410	4,600	29,900
					1000	3.90	3,800	5,000	51,300
Jan. 29					1100	4.59	5,480	7,000	104,000
0600	3.60	2,780	3,900	29,300	1200	5.40	8,100	10,000	219,000
0700	3.57	2,740	7,000	51,800	1400	6.50	12,000	20,000	648,000
1200	3.40	2,520	4,600	31,300	1500	7.00	16,000	27,000	1,170,000

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-1129.2. Santa Clara River at Saticoy, Calif.--Continued									
Feb. 23--Continued					Feb. 25--Continued				
1700	7.48	20,400	57,000	3,140,000	2200	12.9	44,700	31,000	3,740,000
1800	7.60	21,800	48,000	2,820,000	2400	12.25	39,700	28,000	3,000,000
1900	8.48	25,400	42,000	2,880,000	Mean---		92,300	69,200	20,400,000
2000	8.25	23,200	37,000	2,320,000					
2200	7.65	19,200	30,000	1,560,000	Feb. 26				
2400	7.43	17,300	24,000	1,120,000	0200	11.6	34,900	25,000	2,360,000
Mean---		10,400	19,200	899,000	0400	11.0	30,700	23,000	1,910,000
					0600	9.7	23,200	22,000	1,380,000
Feb. 24					0800	8.6	17,700	20,000	956,000
0200	7.60	17,200	20,000	929,000	1000	8.35	16,600	18,000	807,000
0400	8.03	18,200	17,000	835,000	1200	8.20	15,900	17,000	730,000
0600	7.67	16,800	14,000	635,000	1800	7.87	14,500	15,000	587,000
0900	6.90	13,600	12,000	441,000	2400	7.65	13,600	12,000	441,000
1200	6.30	11,400	10,000	308,000	Mean---		19,900	18,200	1,070,000
1500	5.65	9,450	8,700	222,000					
1600	6.50	12,000	12,000	389,000	Feb. 27				
1700	8.00	17,200	14,000	650,000	1200		11,800	9,500	303,000
1800	9.30	23,200	18,000	1,130,000	2400		10,200	7,700	212,000
1900	10.5	30,000	23,000	1,860,000	Mean---		11,800	9,680	315,000
2000	11.8	38,800	27,000	2,830,000					
2100	13.2	49,600	35,000	4,690,000	Feb. 28				
2200	14.5	61,500	42,000	6,970,000	1300		9,000	6,400	156,000
2300	16.0	66,500	50,000	8,980,000	1600		13,500	15,000	547,000
2400	16.5	83,000	64,000	14,300,000	2400		11,300	6,800	207,000
Mean---		23,500	19,500	1,810,000	Mean---		10,700	10,000	299,000
Feb. 25					Mar. 1				
0100	18.0	102,000	80,000	22,000,000	1200		8,800	5,000	119,000
0200	18.8	112,000	100,000	30,200,000	2400		7,400	4,500	89,900
0300	20.0	130,000	120,000	42,100,000	Mean---		9,080	5,320	134,000
0400	21.0	145,000	140,000	54,800,000					
0500	21.45	152,000	130,000	53,400,000	Mar. 2				
0700	20.75	142,000	100,000	38,300,000	1200		6,300	4,100	69,700
0800	20.05	131,000	90,000	31,800,000	2400		5,500	3,800	56,400
0900	19.5	123,000	83,000	27,600,000	Mean---		6,380	4,120	71,400
1000	19.0	116,000	74,000	23,200,000					
1100	18.5	108,000	68,000	19,800,000	Mar. 3				
1200	17.8	99,200	62,000	16,600,000	Mean---		4,920	3,600	48,000
1300	17.0	89,000	57,000	13,700,000					
1400	16.35	81,200	52,000	11,400,000	Mar. 4				
1500	15.6	72,300	50,000	9,760,000	Mean---		4,000	3,220	34,900
1600	15.0	65,500	45,000	7,960,000					
1700	14.0	56,300	43,000	6,540,000	Mar. 5				
1800	13.55	50,900	40,000	5,500,000	Mean---		3,290	2,920	26,000
2000	13.35	48,600	35,000	4,590,000					
11-1155. Matilija Creek at Matilija Hot Springs, Calif.									
Jan. 17, 1969					Jan. 18				
2400	2.27	3.5			1200	2.27	3.5		
					2100	2.36	5.6		

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-1155. Matilija Creek at Matilija Hot Springs, Calif.--Continued									
Jan. 18--Continued					Jan. 22--Continued				
2400	2.33	5.0			2400	2.63	380		
Mean		4.0			Mean		662		
Jan. 19					Jan. 23				
0600	2.38	6.4			0600	2.43	305		
1400	2.48	9.6			1200	2.26	254		
1600	2.65	18			1800	2.15	224		
1800	2.80	29			2400	2.19	236		
1900	2.67	22			Mean		270		
2400	2.58	19			Jan. 24				
Mean		13			0300	2.32	275		
Jan. 20					0400	2.40	299		
0700	2.52	16			0500	2.59	368		
0800	3.70	215			0600	2.79	448		
1000	3.70	221			0800	2.90	492		
1000	3.85	275			1100	3.07	570		
1300	3.90	290			1400	3.00	535		
1500	3.88	284			1700	3.22	645		
1600	3.70	230			1900	3.55	805		
1900	3.69	227			2100	4.09	1,120		
2000	3.36	140			2200	4.44	1,360		
2100	3.35	138			2400	5.14	1,890		
2200	2.66	31			Mean		651		
2400	2.64	29			Jan. 25				
Mean		145			0100	6.00	2,810		
Jan. 21					0200	7.15	3,800		
0100	2.69	33			0300	8.90	6,030		
0200	9.25	6,280			0400	10.10	8,060		
0300	10.25	8,170			0500	11.00	9,700		
0400	12.00	11,500			0600	13.50	14,500		
0500	11.00	10,600			0700	16.00	19,200		
0600	9.90	8,710			0800	16.5	20,000		
0700	8.80	6,840			0900	15.70	18,700		
0800	7.75	5,130			1000	13.00	13,600		
1000	6.68	3,480			1100	11.00	10,600		
1100	6.35	3,040			1200	10.40	9,700		
1200	5.84	2,390			1300	9.75	8,720		
1400	5.39	1,930			1400	9.00	7,540		
1800	4.66	1,340			1400	7.80	5,570		
2200	4.11	1,020			1500	8.25	6,380		
2400	3.94	940			1600	8.08	5,170		
Mean		3,620			1600	7.25	4,840		
Jan. 22					1700	7.48	5,490		
0200	3.81	880			1900	7.25	4,940		
0600	3.78	880			2100	7.00	4,750		
1000	3.43	725			2200	6.72	4,420		
1200	3.28	665			2400	6.38	3,950		
1600	3.00	525			Mean		8,340		
2000	2.81	448							

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-1155. Matilija Creek at Matilija Hot Springs, Calif.--Continued									
Jan. 26					Feb. 21				
0200	6.18	3,850			2400	1.13	269		
0300	6.00	3,710			Mean----------		279		
0500	6.08	3,850							
0700	6.18	4,020			Feb. 22				
0800	6.36	3,980			1100	1.12	266		
0900	6.85	4,480			1100	1.15	275		
1000	7.37	5,270			1600	1.14	272		
1100	7.70	5,680			1700	1.10	260		
1200	7.33	5,190			2400	1.10	260		
1400	6.87	4,690			Mean----------		266		
1500	6.59	4,370							
1700	6.13	3,760			Feb. 23				
1900	5.78	3,380			1100	1.09	257		
2100	5.50	3,110			1100	.55	116		
2400	5.19	2,800			1700	.55	116		
Mean----------		4,000			1800	1.70	440		
					1900	2.79	1,050		
Jan. 27					2000	2.87	922		
0300	4.94	2,470			2200	2.69	765		
0600	4.62	2,090			2400	2.54	690		
0900	4.33	1,880			Mean----------		362		
1200	4.14	1,800							
1500	3.98	1,650			Feb. 24				
1800	3.78	1,470			0300	2.41	625		
2100	3.57	1,310			0500	2.51	650		
2400	3.42	1,200			0700	2.81	775		
Mean----------		1,830			0800	3.00	850		
					0900	3.37	1,040		
Jan. 28					1000	3.60	1,160		
0600	3.13	1,080			1100	3.95	1,360		
1200	2.90	940			1200	4.80	2,120		
1800	2.68	810			1300	5.50	2,960		
2400	2.51	725			1400	6.30	4,140		
Mean----------		948			1500	7.25	5,860		
					1600	8.75	8,170		
Jan. 29					1700	9.25	8,890		
0600	2.35	695			1800	9.17	8,230		
1200	2.21	630			1800	9.30	8,620		
1800	2.12	585			1900	9.50	8,800		
2400	2.03	540			2000	10.5	10,400		
Mean----------		636			2100	11.2	11,500		
					2200	11.7	12,300		
Jan. 30					2300	12.55	13,800		
Mean----------		495			2400	13.25	15,000		
					Mean----------		4,760		
Jan. 31									
Mean----------		433			Feb. 25				
					0100	11.5	11,700		
Feb. 20					0200	11.0	11,000		
Mean----------		288			0400	10.5	10,200		
					0600	10.0	9,520		
					0800	9.2	8,260		

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-1155. Matilija Creek at Matilija Hot Springs, Calif.--Continued									
Feb. 25--Continued					Feb. 28--Continued				
1000	8.5	7,180			1300	3.20	964		
1200	7.65	5,940			1400	3.38	1,090		
1400	6.85	4,640			1600	3.20	1,000		
1600	6.15	3,640			2000	2.93	856		
1800	5.50	2,720			2400	2.78	790		
2100	4.95	2,080			Mean		837		
2400	4.5	1,670			Mar. 1				
Mean		6,250			1200	2.55	690		
Feb. 26					2400	2.40	625		
0300	5.0	2,220			Mean		699		
0600	4.75	1,990			Mar. 2				
1200	4.35	1,640			1200	2.34	610		
1800	4.00	1,370			2400	2.28	595		
2400	3.70	1,170			Mean		610		
Mean		1,650			Mar. 3				
Feb. 27					1200	2.16	550		
0600	3.45	1,020			2400	2.09	535		
1200	3.29	928			Mean		558		
1800	3.11	832			Mar. 4				
2400	2.97	770			Mean		500		
Mean		938			Mar. 5				
Feb. 28					Mean		448		
0900	2.78	685							
0900	3.16	904							
1100	2.90	775							
11-1195. Carpinteria Creek near Carpinteria, Calif.									
Jan. 18, 1969					Jan. 19--Continued				
2200		0			2400	4.75	293		
2200	2.52	2.6			Mean		263		
2400	2.45	1.6			Jan. 20				
Mean		.2			0200	4.22	173		
Jan. 19					0400	3.80	102		
0200	2.42	1.3			0600	3.60	77		
0400	2.76	8.5			0800	3.45	59		
0600	2.65	5.2			1000	3.36	51		
0900	2.59	4.0			1400	3.15	34		
1300	2.63	4.8			1700	3.10	30		
1500	2.76	8.5			2000	3.17	36		
1600	3.25	34			2100	3.60	76		
1700	4.50	215			2200	5.00	368		
1800	8.00	1,700			2300	6.10	814		
1900	6.90	1,220			2400	5.55	548		
2000	6.10	802			Mean		128		
2100	6.33	974							
2200	6.00	760							
2300	5.10	398							

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-1195. Carpinteria Creek near Carpinteria, Calif.--Continued									
Jan. 21					Jan. 25--Continued				
0100	6.35	950			0500	7.90	1,660		
0200	7.75	1,600			0600	8.82	2,030		
0300	6.90	1,230			0700	10.0	2,550		
0400	6.50	1,040			0800	11.5	3,210		
0600	6.20	880			0900	14.9	4,900		
0700	5.50	560			1000	10	4,340		
0900	4.85	350			1100	8.0	3,900		
1200	4.56	280			1200	4.95	2,370		
1500	4.30	228			1300	4.80	2,280		
1800	4.04	169			1500	4.60	2,160		
2100	3.85	129			1800	4.41	2,050		
2400	3.77	108			2100	4.05	1,800		
Mean		468			2200	3.35	1,280		
Jan. 22					2300	3.15	1,150		
0100	3.78	105			2400	2.75	910		
0200	4.00	132			Mean		2,270		
0400	4.12	147			Jan. 26				
0500	4.31	177			0300	2.50	770		
0600	4.13	137			0500	2.70	880		
1100	3.78	80			0600	3.05	1,090		
1700	3.58	55			0800	2.40	720		
2400	3.39	36			0900	3.00	1,060		
Mean		87			1000	5.00	2,400		
Jan. 23					1100	5.70	2,820		
0600	3.28	26			1200	4.25	1,940		
1200	3.20	20			1300	3.55	1,420		
2400	3.17	18			1400	3.15	1,150		
Mean		23			1600	2.75	910		
Jan. 24					2100	2.15	595		
0500	3.33	25			2400	1.88	472		
0700	3.58	41			Mean		1,040		
0800	3.53	36			Jan. 27				
0900	3.63	44			0400	1.57	348		
1300	3.51	34			0800	1.33	260		
1500	3.67	50			1200	1.16	210		
1700	3.93	86			1600	1.04	180		
1900	4.22	135			2000	.92	152		
2100	5.00	326			2400	.80	127		
2200	5.90	670			Mean		242		
2300	6.45	1,000			Jan. 28				
2400	7.05	1,300			0500	.63	95		
Mean		158			0700	.67	103		
Jan. 25					0800	.63	95		
0100	8.50	1,900			1100	.82	131		
0200	8.90	2,060			1500	.65	99		
0300	8.55	1,920			1800	.59	88		
0400	7.85	1,640			2400	.49	74		
					Mean		101		

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-1195. Carpinteria Creek near Carpinteria, Calif.--Continued									
Jan. 29					Jan. 30				
0600	0.39	61			1600	0.25	45		
1500	.34	55			1700	.50	75		
1600	.80	127			2400	.40	62		
1700	.73	114			Mean		53		
1800	.34	55							
2200	.34	55			Jan. 31				
2400	.27	47			Mean		61		
Mean		64							
11-1245. Santa Cruz Creek near Santa Ynez, Calif.									
Jan. 17, 1969					Jan. 21				
2400	5.05	1.7			0100	8.10	2,600		
					0200	8.50	3,200		
Jan. 18					0300	8.75	3,650		
1200	5.04	1.5			0400	9.35	4,620		
2400	5.12	3.6			0500	9.10	4,320		
Mean		2.1			0600	9.20	4,440		
					0700	8.95	4,140		
Jan. 19					0800	8.50	3,620		
0400	5.13	4.0			0900	8.35	3,460		
0400	5.78	142			1000	8.00	3,000		
0600	5.75	130			1100	7.80	2,700		
0700	5.90	200			1200	7.52	2,250		
0900	6.04	274			1400	7.18	1,710		
1100	5.98	240			1600	6.93	1,340		
1200	6.13	328			1800	6.66	992		
1400	6.22	384			2000	6.42	730		
1500	6.14	334			2200	6.22	548		
1600	6.36	484			2400	6.10	450		
1700	6.55	645			Mean		2,280		
1800	6.95	1,040							
1900	7.81	2,040			Jan. 22				
2200	8.05	2,290			0100	6.08	436		
2300	7.80	2,030			0400	6.19	522		
2400	7.50	1,690			0600	6.25	575		
Mean		694			0800	6.12	466		
					1100	5.92	332		
Jan. 20					1500	5.77	245		
0200	7.07	1,180			2000	5.63	175		
0400	6.68	770			2400	5.52	132		
0600	6.41	528			Mean		335		
0800	6.20	370							
1000	6.06	286			Jan. 23				
1200	5.95	225			0600	5.41	94		
1400	5.86	180			1200	5.35	76		
2000	5.73	122			1800	5.32	68		
2200	5.82	160			2400	5.30	62		
2300	6.50	600			Mean		84		
2400	6.78	870							
Mean		454							

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-1245. Santa Cruz Creek near Santa Ynez, Calif.--Continued									
Jan. 24					Jan. 26--Continued				
0500	5.33	70			0900	9.50	4,800		
0700	5.65	185			1000	9.70	5,040		
0800	6.23	557			1100	9.44	4,730		
0900	6.30	620			1200	9.00	4,200		
1000	6.18	514			1300	8.20	3,280		
1200	6.29	611			1500	7.92	2,880		
1500	6.23	557			1700	7.69	2,520		
1700	6.43	740			2000	7.45	2,140		
1900	6.54	854			2400	7.18	1,710		
2000	6.90	1,300			Mean----------		3,360		
2100	7.20	1,740							
2200	7.45	2,140			Jan. 27				
2300	7.65	2,460			0300	7.05	1,510		
2400	8.00	3,000			0600	6.95	1,370		
Mean----------		742			0900	6.88	1,270		
					1200	6.85	1,230		
Jan. 25					1500	6.80	1,160		
0100	8.50	3,620			1800	6.72	1,060		
0300	8.90	4,080			2100	6.63	956		
0400	9.25	4,500			2400	6.58	909		
0500	9.85	5,220			Mean----------		1,230		
0600	9.95	5,340							
0700	10.30	5,760			Jan. 28				
0800	10.40	5,880			0800	6.48	790		
0900	10.91	6,620			1000	6.52	832		
1000	10.60	6,160			1300	6.49	800		
1100	10.30	5,760			1800	6.44	750		
1200	10.03	5,440			2400	6.35	665		
1200	9.53	4,840			Mean----------		791		
1300	9.63	4,960							
1400	9.35	4,620			Jan. 29				
1600	8.98	4,180			1200	6.25	575		
1800	8.73	3,880			2400	6.16	498		
2000	8.50	3,620			Mean----------		578		
2100	8.25	3,340							
2300	8.15	3,210			Jan. 30				
2400	8.20	3,280			1200	6.07	429		
Mean----------		4,510			2400	5.98	368		
					Mean----------		431		
Jan. 26									
0300	8.50	3,620			Jan. 31				
0500	9.08	4,300			1200	5.91	326		
0600	9.10	4,320			2400	5.81	266		
0700	9.38	4,660			Mean----------		322		
0800	9.25	4,500							
11-1335. Santa Ynez River near Lompoc, Calif.									
Jan. 18, 1969					Jan. 18--Continued				
1000	2.35	0			1900	2.73	14		
1400	2.57	2.0			2000	2.50	1.0		
1700	2.65	6.2			2200	2.33	0		

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-1335. Santa Ynez River near Lompoc, Calif.--Continued									
Jan. 18--Continued					Jan. 21--Continued				
2300	2.52			1.3	1700	6.49			3,680
2400	2.38			0	1900	5.91			2,670
Mean				1.9	2000	5.61			2,250
					2100	5.41			1,970
Jan. 19					2300	5.23			1,720
0300	2.38			0	2400	5.13			1,580
0400	2.66			7.0	Mean				2,250
0600	2.45			.5					
0800	2.60			2.5	Jan. 22				
0900	2.78			20	0200	4.95			1,360
1000	2.68			8.5	0600	4.60			1,050
1300	2.65			6.2	0800	4.43			898
1400	3.95			50	1200	4.24			731
1500	4.32			802	1400	4.22			714
1600	4.14			643	1600	4.25			740
1700	4.49			951	1800	4.17			670
1800	4.58			1,030	2000	4.01			529
1900	4.47			934	2200	3.88			448
2000	4.63			1,070	2400	3.78			388
2100	4.98			1,320	Mean				844
2200	4.80			1,220					
2400	4.20			696	Jan. 23				
Mean				391	0600	3.58			280
					1200	3.50			240
Jan. 20					1700	3.44			210
0200	3.80			400	1900	3.60			290
0300	3.61			295	2400	3.37			178
0500	3.37			178	Mean				265
0700	3.23			129					
0800	3.79			394	Jan. 24				
0900	4.17			669	0100	3.35			170
1000	4.35			828	0200	3.77			382
1200	4.44			907	0300	3.40			190
1400	4.30			784	0400	3.49			235
1600	4.06			573	0500	3.35			170
1800	3.84			424	0600	3.52			250
2000	3.73			358	0800	3.38			182
2300	3.58			280	1000	3.45			215
2400	4.39			863	1200	3.82			412
Mean				494	1400	3.70			340
					1600	3.62			300
Jan. 21					1800	4.00			520
0100	4.93			1,340	2000	4.24			731
0300	4.80			1,220	2200	4.23			722
0400	5.20			1,680	2300	4.50			960
0500	5.10			1,540	2400	5.22			1,710
0700	4.73			1,160	Mean				413
0800	4.94			1,350					
1000	5.45			2,030	Jan. 25				
1100	5.85			2,590	0100	5.55			2,170
1200	6.17			3,110	0200	6.05			2,890
1300	6.45			3,610	0300	6.70			4,060
1500	6.61			3,900					

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-1335. Santa Ynez River near Lompoc, Calif.--Continued									
Jan. 25--Continued					Jan. 28				
0400	7.75	6,250			0600		4,400		
0500	8.12	7,120			1200		3,500		
0600	8.30	7,610			1800		3,000		
0700	9.15	9,950			2400		2,700		
0800	10.30	13,600			Mean----------		3,810		
0900	11.30	17,200							
1000	11.82	19,300			Jan. 29				
1100	12.50	22,000			0600		2,400		
1200	16.00	40,000			1200		2,200		
1300	18.00	52,000			2400		1,950		
1400	21.00	73,000			Mean----------		2,240		
1500	24.20	100,000							
1600	22.88	87,000			Jan. 30				
1700	22.55	86,000			1200		1,750		
1800	22.30	85,000			2400		1,600		
1900	22.00	83,200			Mean----------		1,760		
2100	21.40	80,000							
2300	20.60	75,800			Jan. 31				
2400	19.50	70,900			1200		1,500		
Mean---------		44,600			2400		1,450		
					Mean----------		1,510		
Jan. 26									
0200	17.50	62,500			Feb. 19				
0300	16.60	60,400			2400	6.95	2,200		
0400	15.75	57,200							
0600	14.65	55,200			Feb. 20				
0800	13.5	52,700			1200	6.94	2,180		
0900	13.0	52,000			2400	6.92	1,330		
1000	12.4	49,600			Mean----------		1,970		
1100	11.0	42,400							
1200	10.90	40,600			Feb. 21				
1300	10.85	39,100			1200	6.90	1,140		
1500	10.45	35,500			2400	6.97	1,050		
1700	10.05	32,200			Mean----------		1,160		
1900	10.27	32,400							
2100	10.6	33,000			Feb. 22				
2200	10.35	30,800			0600	7.08	1,210		
2400	9.95	27,800			1200	7.17	1,370		
Mean---------		44,400			1800	7.34	1,740		
					2400	7.55	2,170		
Jan. 27					Mean----------		1,480		
0200	9.70	25,500							
0400	9.58	23,900			Feb. 23				
0600	9.40	22,800			0600	7.85	2,890		
0800	8.25	16,600			1200	8.18	3,840		
0900	7.90	15,000			1800	8.60	5,040		
1100	7.50	13,200			2400	9.00	6,800		
1200	7.30	12,200			Mean----------		4,060		
1400	6.82	10,200							
1800		8,000			Feb. 24				
2400		6,000			0600	9.37	9,160		
Mean---------		14,400			1200	11.0	16,000		

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-1335. Santa Ynez River near Lompoc, Calif.--Continued									
Feb. 24--Continued					Feb. 28				
1800	15.50	43,000			0600	8.46	8,040		
2400	17.80	64,600			1200	8.67	8,610		
Mean		26,000			1800	8.65	8,560		
					2400	8.55	7,740		
Feb. 25					Mean		8,220		
0200	18.15	69,500							
0400	18.22	70,000			Mar. 1				
0600	17.80	67,000			0600	8.40	7,070		
1000	16.00	54,400			1200	8.25	6,470		
1200	15.20	49,300			1800	8.20	6,140		
1800	13.50	39,100			2400	8.22	5,960		
2400	11.70	29,200			Mean		6,630		
Mean		51,200							
					Mar. 2				
Feb. 26					2400	8.65	6,030		
0400	10.60	23,800			Mean		6,000		
0800	9.45	19,200							
1000	8.67	15,900			Mar. 3				
1200	8.62	12,900			1200	8.73	5,590		
2400	8.37	10,600			2400	8.55	4,710		
Mean		16,500			Mean		5,480		
Feb. 27					Mar. 4				
0600	8.27	10,300			1200	8.37	4,190		
1200	8.18	10,000			2400	8.35	4,600		
1800	8.21	8,720			Mean		4,420		
2400	8.30	7,610							
Mean		10,200			Mar. 5				
					Mean		3,000		
11-1379. Huasna River near Arroyo Grande, Calif.									
Jan. 17, 1969					Jan. 19--Continued				
2400		0.3			1800	7.0	2,060		
					2000	6.72	1,700		
Jan. 18					2400	6.33	1,220		
0800	5.26	5.0			Mean		1,950		
1400	5.39	13							
2400	5.49	29			Jan. 20				
Mean		12			0300	6.12	970		
					0600	5.92	952		
Jan. 19					0900	5.73	569		
0600	5.88	156			1200	5.53	401		
1000	5.90	181			1500	5.35	275		
1000	9.00	4,460			1800	5.21	211		
1100	10.48	7,780			2100	5.15	187		
1200	10.0	6,880			2200	5.50	380		
1300	9.0	5,060			2300	5.76	600		
1400	8.5	4,220			2400	6.40	1,260		
1500	8.0	3,550			Mean		581		
1600	7.5	2,740							

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day

11-1379. Huasna River near Arroyo Grande, Calif.--Continued

Jan. 21				
0100	7.84	3,080		
0200	8.70	4,400		
0300	9.00	4,960		
0400	9.77	4,750		
0500	9.00	5,120		
0600	8.08	3,690		
0800	7.80	3,300		
0900	7.48	2,850		
1000	8.17	3,820		
1200	7.85	3,370		
1300	7.35	2,670		
1400	6.95	2,140		
1600	6.58	1,700		
1800	6.19	1,270		
2000	5.90	960		
2400	5.73	800		
Mean----------		2,640		
Jan. 22				
0300	5.66	734		
0600	5.53	624		
0900	5.44	552		
1200	5.38	499		
1800	5.26	408		
2400	5.10	295		
Mean----------		519		
Jan. 23				
0600	4.98	233		
1200	4.90	195		
1600	4.85	172		
2000	4.92	195		
2400	4.99	220		
Mean----------		215		
Jan. 24				
0600	5.03	228		
1100	5.08	256		
1300	5.21	324		
1500	5.38	436		
1700	5.82	797		
1800	6.20	1,190		
1900	6.68	1,730		
2000	7.23	2,420		
2300	7.43	2,730		
2400	8.07	3,650		
Mean----------		857		
Jan. 25				
0100	8.60	4,460		
0200	10.15	7,190		
0300	10.70	8,200		
0400	11.50	9,880		
Jan. 25--Continued				
0500	14.75	17,600		
0600	15.96	21,000		
0700	15.65	20,800		
0800	14.00	17,000		
0900	12.50	13,600		
1000	10.20	9,220		
1100	9.00	7,100		
1200	8.35	6,110		
1300	7.80	5,120		
1400	7.45	4,560		
1600	7.00	4,000		
2000	6.42	3,330		
2400	6.07	2,840		
Mean----------		7,790		
Jan. 26				
0300	5.87	2,560		
0500	5.91	2,610		
0600	6.15	2,950		
0700	8.40	6,200		
0800	10.63	10,400		
0900	9.00	7,100		
1000	8.00	5,540		
1100	7.25	4,400		
1200	6.95	3,930		
1300	6.46	3,380		
1500	6.10	2,880		
1700	5.55	2,140		
1900	5.25	1,720		
2100	5.15	1,440		
2400	5.02	1,300		
Mean----------		3,300		
Jan. 27				
0600	4.83	990		
1200	4.78	842		
2400	4.77	743		
Mean----------		912		
Jan. 28				
0700	4.76	648		
1200	4.91	689		
1800	5.00	680		
2400	4.92	536		
Mean----------		665		
Jan. 29				
1200	4.90	450		
2400	4.86	352		
Mean----------		447		

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-1379. Huasna River near Arroyo Grande, Calif.--Continued									
Jan. 30					Feb. 24--Continued				
1200	4.82	270			1600	10.9	8,600		
2400	4.78	224			1700	12.65	12,600		
Mean		279			1700	13.25	15,200		
Jan. 31					1900	13.00	14,600		
1200	4.70	215			2000	11.05	10,900		
2400	4.69	172			2100	10.40	9,660		
Mean		206			2200	9.40	7,820		
Feb. 19					2300	8.70	6,560		
2400	4.94	215			2400	7.99	5,530		
Feb. 20					Mean		4,580		
1200	4.85	179			Feb. 25				
2400	4.74	144			0200	7.45	4,400		
Mean		179			0400	6.85	3,790		
Feb. 21					0500	6.60	3,440		
1000	4.70	133			0700	6.22	2,910		
1800	4.74	144			0900	5.92	2,490		
2000	4.94	215			1100	5.55	2,020		
2400	4.96	224			1300	5.26	1,750		
Mean		155			1600	5.09	1,490		
Feb. 22					2000	4.93	1,310		
0400	4.88	191			2300	4.90	1,280		
0700	5.05	270			2400	5.20	1,670		
1400	4.91	207			Mean		2,400		
2400	4.87	191			Feb. 26				
Mean		216			0200	5.50	1,960		
Feb. 23					0300	5.53	2,000		
0500	4.87	191			0600	5.21	1,680		
0800	5.20	366			0800	5.01	1,400		
0900	5.52	608			1100	4.85	1,220		
1000	6.05	1,120			1700	4.64	1,100		
1100	6.45	1,560			2400	4.50	1,060		
1200	6.53	1,700			Mean		1,360		
1400	6.27	1,360			Feb. 27				
1600	5.93	990			1200	4.46	1,020		
1900	5.73	797			2400	4.52	1,080		
2400	5.45	560			Mean		1,040		
Mean		733			Feb. 28				
Feb. 24					0500	4.66	1,180		
0600	5.21	387			0700	4.77	1,300		
1000	5.40	520			0900	5.11	1,680		
1200	6.00	1,060			1100	5.55	2,020		
1300	7.00	2,200			1300	6.05	2,670		
1400	8.50	4,320			1500	6.23	2,920		
1500	9.50	6,020			1700	5.90	2,460		
1500	10.4	7,640			1900	5.62	2,100		
					2100	5.44	1,890		
					2400	5.72	2,100		
					Mean		1,880		

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-1379. Huasna River near Arroyo Grande, Calif.--Continued									
Mar. 1					Mar. 3--Continued				
0200	5.82	2,100			2400	5.35	815		
0400	5.63	1,760			Mean		944		
0900	5.47	1,470							
1600	5.65	1,560			Mar. 4				
2400	5.53	1,420			1200	5.33	707		
Mean		1,610			2400	5.31	608		
					Mean		709		
Mar. 2									
1200	5.50	1,280			Mar. 5				
2400	5.40	1,060			0900	5.27	499		
Mean		1,260			1500	5.38	506		
					2400	5.30	450		
Mar. 3					Mean		512		
1200	5.39	950							
11-1385. Sisquoc River near Sisquoc, Calif.									
Jan. 18					Jan. 21--Continued				
2400	3.53	0			1000	9.65	6,210		
					1200	8.15	4,360		
Jan. 19					1400	7.86	4,010		
0200	3.62	1.1			1600	7.19	3,210		
0600	3.68	2.1			1800	6.44	2,440		
1000	3.72	3.0			2000	6.51	2,510		
1200	5.29	510			2200	6.10	2,130		
1400	5.35	650			2400	5.63	1,720		
1600	5.43	878			Mean		3,500		
1800	5.36	1,180							
2000	5.77	1,640			Jan. 22				
2200	7.62	3,720			0200	5.36	1,510		
2400	6.83	2,830			0400	5.36	1,510		
Mean		834			0600	5.42	1,560		
					0800	5.23	1,420		
Jan. 20					1000	5.14	1,360		
0200	6.19	2,210			1200	4.97	1,240		
0400	5.88	1,930			1400	4.90	1,190		
0600	5.44	1,570			1600	4.73	1,070		
0800	4.90	1,190			1800	4.02	994		
1000	4.48	910			2200	4.42	872		
1200	4.27	782			2400	4.38	848		
1400	4.01	626			Mean		1,250		
1600	3.99	614							
1800	3.98	609			Jan. 23				
2400	3.97	604			2400	4.30	800		
Mean		1,140			Mean		800		
Jan. 21					Jan. 24				
0200	3.97	604			1200	4.45	890		
0400	6.55	2,550			1400	4.59	974		
0600	9.19	5,610			1600	4.78	1,110		
0800	9.40	5,860			1800	4.77	1,100		

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-1284. Sisquoc River near Sisquoc, Calif.--Continued									
Jan. 24--Continued					Feb. 20				
2000	5.08	1,320			0400	3.28	609		
2200	6.19	2,210			0800	3.26	598		
2400	7.00	3,000			1200	3.24	587		
Mean		1,140			1600	3.20	565		
					1800	3.21	570		
Jan. 25					2000	3.19	560		
0200	7.84	3,990			2400	3.21	570		
0400	8.32	4,560			Mean		586		
0600	12.83	13,300							
0800	14.55	18,400			Feb. 21				
1000	15.39	21,400			0600	3.19	560		
1200	15.37	21,000			1200	3.16	545		
1400	15.11	20,000			1400	3.19	560		
1600	14.51	18,200			1800	3.16	545		
2000	13.78	16,000			2000	3.21	570		
2400	13.10	14,000			2200	3.23	582		
Mean		14,800			2400	3.34	644		
					Mean		560		
Jan. 26									
1200	11.39	9,700			Feb. 22				
2400	10.26	7,200			0200	3.35	650		
Mean		10,200			0400	3.38	668		
					0800	3.31	626		
Jan. 27					1200	3.26	598		
1200	8.68	5,000			1400	3.22	576		
2400	7.43	3,500			1800	3.20	565		
Mean		5,200			2000	3.22	576		
					2200	3.28	609		
Jan. 28					2400	3.30	620		
1200	6.50	2,500			Mean		612		
2400	5.96	2,000							
Mean		2,620			Feb. 23				
					0200	3.32	632		
Jan. 29					0400	3.27	602		
1200	5.48	1,600			0800	3.30	620		
2400	4.91	1,200			1200	3.77	842		
Mean		1,600			1600	5.28	1,760		
					1800	5.37	1,840		
Jan. 30					2200	4.60	1,330		
1200	4.63	1,000			2400	4.59	1,320		
2400	4.20	800			Mean		687		
Mean		1,000							
					Feb. 24				
Jan. 31					0200	4.42	1,200		
1200	3.85	650			0600	4.14	1,010		
2400	3.56	598			0800	4.17	1,030		
Mean		687			1000	4.23	1,070		
					1200	4.61	1,340		
Feb. 19					1400	5.35	1,820		
2400	3.32	632			1600	6.57	2,770		
					1800	9.51	6,010		

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-1385. Sisquoc River near Sisquoc, Calif.--Continued									
Feb. 24--Continued					Mar. 1				
2000	14.06	16,900			1200	6.50	2,500		
2030	14.36	17,800			2400	6.29	2,300		
2200	13.96	16,600			Mean----------		2,500		
2400	13.74	15,900							
Mean----------		4,960			Mar. 2				
					1200	6.07	2,100		
Feb. 25					2400	5.88	1,930		
1200	12.12	11,500			Mean----------		2,110		
2400	11.10	9,000							
Mean----------		12,000			Mar. 3				
					1200	5.72	1,800		
Feb. 26					2400	5.60	1,700		
1200	10.15	7,000			Mean----------		1,810		
2400	9.85	6,500							
Mean----------		7,380			Mar. 4				
					1200	5.48	1,600		
Feb. 27					2400	5.34	1,500		
1200	8.27	4,500			Mean----------		1,600		
2400	7.60	3,700							
Mean----------		4,800			Mar. 5				
					1200	5.20	1,400		
Feb. 28					2400	5.07	1,300		
1200	7.00	3,000			Mean----------		1,400		
2400	6.70	2,700							
Mean----------		3,100							
11-1410. Santa Maria River at Guadalupe, Calif.									
Jan. 18, 1969					Jan. 20--Continued				
2400		0			2000	3.87	29	15,000	1,170
					2200	3.78	15	15,000	608
Jan. 19					2400	3.79	11	14,000	416
1300		0			Mean----------		389	18,900	25,200
1300	2.94	1.3	14,000	49					
1400		0			Jan. 21				
2300		0			0300	3.70	7.2	14,000	272
2400	5.53	784	40,000	84,700	0400	4.55	211	14,000	7,980
Mean----------		16	1,120	1,760	0500	5.00	500	14,000	18,900
					0600	5.18	744	15,000	30,100
Jan. 20					0700	5.48	1,180	15,000	47,800
0100	5.00	440	25,000	29,700	0800	5.16	968	17,000	44,400
0200	4.40	201	12,000	6,510	0900	5.05	960	19,000	49,200
0300	4.08	127	7,000	2,400	1000	4.83	864	23,000	53,600
0500	3.80	79	15,000	1,180	1100	4.79	912	26,000	64,000
0700	3.53	50	30,000	4,050	1200	6.50	3,400	34,000	312,000
0800	6.40	2,000	27,000	146,000	1300	6.95	4,340	40,000	469,000
0900	6.25	1,890	26,000	49,100	1400	7.35	5,950	54,000	868,000
1000	5.58	1,080	24,000	25,900	1500	6.75	4,500	46,000	559,000
1200	5.15	590	22,000	13,000	1600	6.45	4,140	41,000	458,000
1400	4.68	296	19,000	5,620	1800	6.31	3,820	36,000	371,000
1600	4.40	167	17,000	2,840	2100	6.20	3,400	32,000	294,000
1800	4.13	87	16,000	1,390	2200	6.05	2,700	30,000	219,000

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-1310. Santa Maria River at Guadalupe, Calif.--Continued									
Jan. 21--Continued					Jan. 26--Continued				
2400	5.80	2,000	28,000	151,000	1000	6.40	5,780	43,000	671,000
Mean----------		2,220	27,300	217,000	1100	6.85	7,060	44,000	839,000
					1200	7.05	7,600	44,000	903,000
Jan. 22					1400	7.30	8,520	46,000	1,060,000
0100	5.48	1,480	27,000	108,000	1500	7.67	9,920	48,000	1,290,000
0300	5.17	1,070	25,000	72,200	1600	7.85	10,600	50,000	1,430,000
0600	5.00	840	22,000	49,900	1700	8.05	11,200	60,000	1,810,000
0800	4.99	810	21,000	45,900	1800	7.95	10,600	58,000	1,660,000
0900	4.98	790	28,000	59,700	1900	7.75	9,400	56,000	1,420,000
1000	4.97	760	27,000	55,400	2000	7.36	7,480	54,000	1,090,000
1200	4.96	728	25,000	49,100	2200	7.00	6,100	50,000	824,000
2400	4.50	195	18,000	9,480	2400	6.81	5,230	48,000	678,000
Mean----------		725	23,100	48,100	Mean----------		7,940	46,400	1,000,000
Jan. 23					Jan. 27				
1200	3.83	12	14,800	480	0300	6.55	4,100	45,000	498,000
2400	3.75	8	13,800	298	0600	6.25	3,300	41,000	365,000
Mean----------		57	15,400	2,670	0900	5.97	2,560	38,000	263,000
					1200	5.67	1,960	35,000	185,000
Jan. 24					1500	5.37	1,470	32,000	127,000
1200	3.68	6.6	13,500	241	1800	5.10	1,100	30,000	89,100
2000	3.63	4.3	14,500	168	2400	5.05	960	26,000	67,400
2100	3.60	3.6	14,800	144	Mean----------		2,330	35,800	247,000
2400	4.83	312	15,500	13,100					
Mean----------		25	14,000	1,030	Jan. 28				
					1000	5.00	760	21,000	43,100
Jan. 25					1800	4.78	488	18,000	23,700
0200	5.12	776	17,000	35,600	2400	4.77	375	16,000	16,200
0300	5.30	1,000	19,000	51,300	Mean----------		674	20,500	39,200
0400	5.66	1,570	21,000	89,000					
0500	6.20	2,600	22,000	154,000	Jan. 29				
0600	6.50	3,600	25,000	243,000	1200	4.74	285	14,000	10,800
0700	6.70	4,400	28,000	333,000	2400	4.67	252	13,000	8,850
0800	6.90	5,500	35,000	520,000	Mean----------		299	14,200	11,600
0900	7.00	6,400	40,000	691,000					
1000	7.26	7,840	45,000	953,000	Jan. 30				
1100	7.60	9,600	50,000	1,300,000	1200	4.60	167		
1200	8.00	11,600	65,000	2,040,000	2400	4.60	131		
1300	8.50	14,200	75,000	2,880,000	Mean----------		179		
1400	9.5	24,300	100,000	6,560,000					
1500	9.00	17,900	90,000	4,350,000	Jan. 31				
1600	8.40	14,200	80,000	3,070,000	1200	4.60	68		
1700	8.10	12,600	75,000	2,550,000	2400	4.59	51		
1800	8.30	13,600	70,000	2,570,000	Mean----------		80		
2000	7.48	9,800	62,000	1,640,000					
2200	7.27	8,880	56,000	1,340,000	Feb. 19				
2400	7.15	8,400	52,000	1,180,000	2400	5.20	11		
Mean----------		8,540	50,200	1,540,000					
					Feb. 20				
Jan. 26					0600	5.24	19	12,000	616
0400	7.00	7,800	47,000	990,000	1200	5.24	26	10,000	702
0700	6.75	7,540	44,000	896,000	1800	5.20	31	9,000	753
0900	6.75	6,880	42,000	780,000	2400	5.18	29	8,000	626
					Mean----------		24	10,400	644

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-1410. Santa Maria River at Guadalupe, Calif.--Continued									
Feb. 21					Feb. 25--Continued				
0900	5.14	35	6,800	634	0700	8.43	11,300	60,000	1,830,000
1700	5.16	36	7,800	758	1000	8.48	10,700	56,000	1,620,000
2400	5.13	34	10,000	918	1100	8.25	9,200	54,000	1,340,000
Mean		34	7,810	717	1300	8.55	9,400	50,000	1,270,000
					1700	8.35	7,920	46,000	984,000
Feb. 22					1800	8.78	9,920	70,000	1,870,000
0300	5.13	34	12,000	1,100	2000	8.37	8,480	50,000	1,140,000
0600	5.19	47	25,000	3,170	2200	7.70	6,400	44,000	760,000
0900	5.26	60	21,000	3,400	2400	7.40	5,350	38,000	549,000
1500	5.25	59	12,000	1,910	Mean		11,700	56,100	1,890,000
1900	5.07	48	15,000	1,940					
2000	5.05	46	60,000	7,450	Feb. 26				
2400	5.00	40	46,000	4,970	0600	7.15	5,050	31,000	372,000
Mean		49	23,300	3,040	1200	6.80	4,400	26,000	312,000
					1800	6.60	4,200	22,000	264,000
Feb. 23					2400	6.47	4,140	20,000	120,000
0600	4.98	38	9,500	975	Mean		4,600	27,000	342,000
0700	5.10	66	11,000	1,960					
1000	5.15	91	22,000	5,410	Feb. 27				
1300	5.18	116	50,000	15,700	0900	6.40	4,100	22,000	244,000
1400	5.40	195	45,000	23,700	1000	6.48	4,300	30,000	348,000
1600	5.34	208	30,000	16,800	1200	6.70	4,900	27,000	357,000
2000	5.30	227	15,000	9,190	1300	6.20	3,900	26,000	274,000
2100	5.46	324	60,000	52,500	1500	5.60	2,780	24,000	180,000
2300	5.70	500	50,000	67,500	1900	5.33	2,270	21,000	129,000
2400	5.95	720	46,000	89,400	2400	5.58	2,570	30,000	208,000
Mean		165	26,000	16,300	Mean		3,490	23,600	222,000
Feb. 24					Feb. 28				
0200	5.88	824	40,000	89,000	0300	6.00	3,300	44,000	392,000
0500	5.83	864	33,000	77,000	0600	6.55	4,300	75,000	871,000
0600	5.85	960	30,000	77,800	0800	6.90	5,050	72,000	982,000
0900	5.77	1,070	24,000	69,300	1600	6.75	4,500	66,000	802,000
1000	5.76	1,260	22,000	74,800	2400	6.51	3,920	60,000	635,000
1100	5.81	1,510	20,000	81,500	Mean		4,230	62,200	730,000
1200	5.81	1,750	18,000	85,000					
1500	5.81	2,020	21,000	115,000	Mar. 1				
1800	6.40	3,400	30,000	275,000	0900	7.40	6,100	54,000	889,000
1900	6.85	4,750	35,000	449,000	1300	6.80	4,360	50,000	589,000
2000	7.30	6,700	40,000	724,000	1500	6.95	4,630	49,000	613,000
2100	7.85	9,400	50,000	1,270,000	1700	6.80	4,280	48,000	555,000
2200	8.20	11,600	60,000	1,880,000	1900	7.10	4,960	47,000	629,000
2200	8.20	11,600	100,000	3,130,000	2100	7.00	4,600	46,000	571,000
2300	8.80	15,800	90,000	3,840,000	2400	7.35	5,590	44,000	664,000
2400	9.60	24,200	84,000	2,030,000	Mean		4,920	51,700	684,000
Mean		3,670	35,800	562,000					
					Mar. 2				
Feb. 25					0300	7.32	5,440	42,000	617,000
0100	10.0	27,200	78,000	5,730,000	0800	7.00	4,480	40,000	484,000
0200	9.7	23,000	74,000	4,600,000	1300	7.50	5,860	37,000	586,000
0300	9.20	18,800	70,000	3,550,000	1700	7.50	5,800	35,000	548,000
0400	8.95	16,100	66,000	2,870,000	2400	7.08	4,520	32,000	391,000
0600	8.65	13,400	62,000	2,240,000	Mean		5,280	37,700	538,000

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-1410. Santa Maria River at Guadalupe, Calif.--Continued									
Mar. 3					Mar. 4--Continued				
0800	6.90	4,120	29,000	323,000	2100	7.25	4,580		
1300	7.10	4,480	27,000	327,000	2400	6.90	3,860		
1400	6.50	3,240	27,000	236,000	Mean----------		4,260		
1700	6.60	3,420	26,000	240,000					
1900	7.12	4,240	25,000	286,000	Mar. 5				
2400	7.17	4,520	24,000	293,000	0600	6.30	2,640		
Mean----------		4,140	27,700	310,000	0900	6.75	3,460		
					1000	7.12	4,240		
Mar. 4					1200	7.28	4,540		
0800	7.15	4,460			1600	6.93	3,820		
1300	6.94	3,820			1800	7.02	3,980		
1600	6.77	3,660			2400	7.10	4,120		
1800	7.20	4,500			Mean----------		3,750		
11-1411.5. Arroyo Grande above Phoenix Creek, near Arroyo Grande, Calif.									
Jan. 17, 1969					Jan. 21				
2400	1.86	1.7			0130	4.26	281		
					0400	3.69	170		
Jan. 18					0600	3.54	145		
0900	1.86	1.7	8		0900	3.16	91	14,200	3,490
1600	1.99	6.1			1200	2.99	72	7,820	1,520
2000	2.20	30			1800	2.66	39		
2200	2.24	39			2000	2.57	32		
2400	2.03	8.3			2400	2.63	36		
Mean----------		9.4			Mean----------		101		
Jan. 19					Jan. 22				
0300	2.01	5.3			0600	2.43	22		
0600	2.04	6.9			1200	2.34	16		
0900	2.11	11			2400	2.29	14		
1100	2.07	9.0			Mean----------		19		
1300	2.94	74							
1400	3.60	182			Jan. 23				
1500	4.40	351			1200	2.23	10	2,030	55
1600	3.89	238			2400	2.33	16		
1800	4.04	270			Mean----------		14		
2000	3.36	143							
2400	2.68	56			Jan. 24				
Mean----------		91			1100	2.28	13		
					1400	2.71	43		
Jan. 20					1600	2.97	70	15,600	2,950
0600	2.32	26			1730	3.42	127	14,000	4,800
1200	2.09	12			1800	3.43	128		
1530	2.08	12	1,090	35	2200	3.48	135		
1600	2.07	9.0			2400	3.92	211		
1700	2.08	12	1,120	36	Mean----------		59		
2000	2.13	14							
2200	3.03	81			Jan. 25				
2300	3.40	130			0200	4.65	370		
2400	3.99	230			0400	5.03	471		
Mean----------		35			0530	6.83	1,100		

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-1411.5. Arroyo Grande above Phoenix Creek, near Arroyo Grande, Calif.--Continued									
Jan. 25--Continued					Feb. 23--Continued				
0600	6.35	910			1600	4.09	26	18,500	1,300
0800	5.19	517			2400	4.26	45		
1000	4.56	348			Mean		32		
1200	4.38	308							
1800	3.68	169			Feb. 24				
2400	3.50	138			1000	4.39	63		
Mean		345			1200	4.49	77		
					1400	4.72	119		
Jan. 26					1600	5.82	142		
0400	3.55	146			1700	6.15	552		
0600	4.42	316			1800	5.67	352		
0630	6.02	787			2200	5.27	233		
1000	4.86	425			2400	5.31	245		
1200	4.60	358			Mean		149		
1600	3.90	207							
2400	3.30	110			Feb. 25				
Mean		275			0600	5.12	188		
					1200	5.06	175		
Jan. 27					1800	5.02	165		
Mean		200	13,500	7,290	2400	5.13	168		
					Mean		184		
Jan. 28									
Mean		150	13,000	5,260	Feb. 26				
					2400	4.83	122		
Jan. 29					Mean		140		
Mean		110	7,200	2,140					
					Feb. 27				
Jan. 30					1500	4.60	79	680	145
Mean		85	5,200	1,190	2400	4.55	72		
					Mean		94		
Jan. 31									
Mean		70	2,800	529	Feb. 28				
					0940			41,900	
Feb. 20					Mean		130	26,900	9,440
Mean		19							
					Mar. 1				
Feb. 21					Mean		90	19,300	4,690
Mean		21							
					Mar. 2				
Feb. 22					Mean		60		
2400	4.08	25							
Mean		29			Mar. 3				
					Mean		45	800	97
Feb. 23									
0300	4.06	23			Mar. 4				
0600	4.09	26			Mean		30		
0800	4.20	38	27,200	2,790					
0930	4.35	57	39,300	6,050	Mar. 5				
1200	4.11	28			Mean		25		
1400	4.07	24							

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-1412.8. Lopez Creek near Arroyo Grande, Calif.									
Jan. 17, 1969					Jan. 24				
2400	2.34	5.8	4	0	0500	4.97	145	450	176
					1000	4.93	135	410	149
Jan. 18					1400	5.06	168	610	277
1200	2.35	6.1	6	0	1600	5.22	212	1,130	647
1800	2.46	9.8	20	1	1800	5.77	403	1,660	1,810
2100	3.17	84	1,600	363	2000	5.87	444	1,630	1,950
2300	3.23	95	1,720	441	2200	5.83	427	1,570	1,810
2400	3.18	86	1,720	399	2400	6.63	828	2,000	4,470
Mean		22	317	74	Mean		249	881	823
Jan. 19					Jan. 25				
0600	3.18	86	1,610	374	0300	7.93	1,770	6,800	32,500
0900	3.53	165	1,900	846	0500	8.40	2,120	15,000	85,900
1000	3.45	145	1,850	724	0600	8.90	2,430	24,100	158,000
1200	3.85	258	2,000	1,390	0700	9.26	2,830	15,000	115,000
1400	6.90	1,830	33,000	163,000	0900	8.50	2,020	8,300	45,300
1430	7.92	2,450	29,000	192,000	1200	7.70	1,320	4,100	14,600
1600	6.40	960	22,000	57,000	1500	7.38	1,090	3,000	8,830
1800	5.85	548	17,300	25,600	2400	6.77	705	1,600	3,050
1900	6.25	695	19,500	36,600	Mean		1,430	6,140	32,100
2400	5.66	419	10,300	11,700					
Mean		503	10,100	28,400	Jan. 26				
					0200	6.83	738	1,500	2,990
Jan. 20					0400	6.76	700	1,600	3,020
0600	5.22	258	4,100	2,860	0500	7.20	960	11,000	28,500
1200	4.89	162	840	367	0600	7.96	1,530	8,500	35,100
2000	4.68	113	510	156	0800	7.61	1,250	5,000	16,900
2200	4.83	148	550	220	1200	6.89	774	3,300	6,900
2400	6.77	1,010	2,300	6,270	2400	6.03	367	1,500	1,490
Mean		242	2,810	2,600	Mean		776	3,380	8,730
Jan. 21					Jan. 27				
0100	6.87	1,040	2,080	5,840	0600	5.78	278	1,180	886
0600	5.87	484	1,410	1,840	1100	5.65	236	810	516
1200	5.40	299	970	783	1200	5.71	254	740	507
2100	5.12	184	690	343	2400	5.45	178	540	260
2300	5.25	221	940	561	Mean		252	895	656
2400	5.60	338	1,500	1,370					
Mean		418	1,180	1,670	Jan. 28				
					0600	5.40	165	560	249
Jan. 22					1500	5.43	173	650	304
0030	6.10	548	1,430	2,120	2400	5.32	145	510	200
0300	5.46	288	1,180	918	Mean		166	582	262
1200	5.11	181	710	347					
1800	5.01	155	570	239	Jan. 29				
2400	4.95	140	480	181	1200	5.19	115	350	109
Mean		220	812	558	2400	5.15	106	290	83
					Mean		120	375	125
Jan. 23					Jan. 30				
1000	4.90	128	400	138	0600	5.15	106	280	80
2000	5.00	152	550	226	2400	5.01	80	300	65
2400	4.95	140	500	189	Mean		96	289	75
Mean		138	469	177					
					Jan. 31				
					Mean		65	324	57

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-1425. Arroyo de la Cruz near San Simeon, Calif.									
Jan. 17, 1969					Jan. 24				
2400	2.39	46			0400	3.50	580		
Jan. 18					1000	4.50	1,250		
1000	2.34	40			1400	6.04	2,920		
1400	2.46	55			1600	7.02	4,370		
1600	2.71	92			1800	6.96	4,280		
1800	6.62	2,580			2000	7.58	5,360		
2200	9.16	6,920			2200	7.34	4,930		
2400	10.55	10,700			2400	8.29	6,840		
Mean----------		1,730			Mean----------		2,630		
Jan. 19					Jan. 25				
0200	9.94	10,800			0200	9.49	9,670		
0400	8.90	8,180			0400	9.73	10,300		
0600	8.81	7,980			0615	11.17	14,600		
0800	9.79	10,500			0800	9.31	9,210		
1000	12.05	17,700			1200	7.10	4,500		
1150	13.45	23,700			2000	5.92	2,760		
1400	10.13	11,400			2400	6.45	3,490		
1800	9.72	10,300			Mean----------		6,250		
2400	6.46	3,500			Jan. 26				
Mean----------		11,000			0200	6.41	3,430		
Jan. 20					0400	5.96	2,810		
0600	5.22	1,920			0545	8.11	6,440		
1000	6.00	2,860			0800	6.44	3,480		
1200	6.14	3,060			1200	5.19	1,890		
1800	5.82	2,640			1600	4.64	1,370		
2200	8.85	8,070			2400	4.22	1,030		
2400	10.09	11,300			Mean----------		2,380		
Mean----------		3,810			Jan. 27				
Jan. 21					1200	3.81	756		
0400	7.08	4,470			2400	3.47	565		
2000	4.75	1,460			Mean----------		768		
2400	4.71	1,430			Jan. 28				
Mean----------		3,340			Mean----------		510		
Jan. 22					Jan. 29				
0200	4.71	1,430			Mean----------		340		
1000	4.13	971			Jan. 30				
1800	3.77	732			Mean----------		294		
2400	3.58	624			Jan. 31				
Mean----------		949			Mean----------		216		
Jan. 23					Feb. 19				
1000	3.32	490			2400	2.69	239		
1400	3.25	458							
1800	3.29	476							
2200	3.63	652							
2400	3.56	613							
Mean----------		532							

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-1425. Arroyo de la Cruz near San Simeon, Calif.--Continued									
Feb. 20					Feb. 25--Continued				
1200	2.61	213			1200	4.55	1,290		
2400	2.52	188			1400	4.85	1,560		
Mean		214			2000	4.36	1,140		
					2400	4.27	1,070		
Feb. 21					Mean		1,530		
1600	2.47	174							
1800	2.54	193			Feb. 26				
2145	3.47	565			1200	3.78	738		
2400	3.23	448			2400	3.46	560		
Mean		235			Mean		760		
Feb. 22					Feb. 27				
0145	3.41	535			1200	3.25	458		
0600	3.20	435			2400	3.16	417		
1800	2.86	296			Mean		468		
2400	2.82	282							
Mean		368			Feb. 28				
					0800	3.82	762		
Feb. 23					1000	3.88	798		
0400	2.81	278			1145	4.27	1,070		
0600	3.20	435			1400	4.04	908		
0730	6.02	2,890			1600	4.04	908		
1200	4.30	1,090			2200	3.64	657		
1600	3.79	744			2400	3.66	668		
2400	3.42	540			Mean		717		
Mean		856							
					Mar. 1				
Feb. 24					1200	3.34	500		
0400	3.50	580			2400	3.14	408		
0600	5.98	2,840			Mean		511		
0800	7.19	4,660							
1000	8.74	7,830			Mar. 2				
1200	10.52	12,600			Mean		348		
1215	10.78	13,300							
1400	8.95	8,290			Mar. 3				
2000	6.38	3,390			Mean		272		
2400	5.61	2,390							
Mean		4,620			Mar. 4				
					Mean		226		
Feb. 25									
0115	6.04	2,920			Mar. 5				
0400	5.35	2,080			Mean		193		
0800	4.76	1,470							
11-1432. Carmel River at Robles del Rio, Calif.									
Jan. 17, 1969					Jan. 18--Continued				
2400	2.99	72			2000	3.80	185		
					2200	6.01	840		
Jan. 18					2400	6.95	1,440		
1200	2.98	70			Mean		204		
1800	3.31	113							

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-1432. Carmel River at Robles del Rio, Calif.--Continued									
Jan. 19					Jan. 26				
0400	7.85	2,200			0400	9.95	5,850		
0930	8.64	3,180			0600	10.52	7,400		
1400	7.97	2,320			1200	8.92	3,650		
2400	7.33	1,690			1800	8.39	3,260		
Mean----------		2,250			2400	7.97	2,570		
Jan. 20					Mean----------		4,300		
0800	6.81	1,260			Jan. 27				
1400	6.52	1,060			1200	7.40	2,000		
1600	6.50	1,050			2400	7.17	1,870		
2000	7.16	1,550			Mean----------		2,100		
2400	8.24	2,590			Jan. 28				
Mean----------		1,450			Mean----------		1,530		
Jan. 21					Jan. 29				
0400	7.84	2,100			Mean----------		1,170		
1000	8.98	3,560			Jan. 30				
1400	8.31	2,570			Mean----------		960		
2000	7.59	1,850			Jan. 31				
2400	7.45	1,720			Mean----------		762		
Mean----------		2,370			Feb. 19				
Jan. 22					2400	6.78	1,360		
0600	7.02	1,360			Feb. 20				
1000	6.85	1,230			1200	6.59	1,210		
1200	6.97	1,320			2400	6.44	1,110		
1800	6.64	1,080			Mean----------		1,220		
2400	6.39	945			Feb. 21				
Mean----------		1,250			1600	6.29	1,020		
Jan. 23					2200	6.46	1,120		
0600	6.17	835			2400	6.38	1,070		
1200	6.00	754			Mean----------		1,070		
1800	5.98	746			Feb. 22				
2400	5.83	686			1200	6.21	950		
Mean----------		785			2400	6.12	905		
Jan. 24					Mean----------		955		
1200	5.65	614			Feb. 23				
2000	5.85	694			0200	6.14	940		
2200	6.18	840			0400	6.40	1,080		
2400	7.09	1,420			0730	7.12	1,640		
Mean----------		658			1200	6.71	1,310		
Jan. 25					2400	6.52	1,160		
0600	9.51	4,360			Mean----------		1,250		
1000	9.25	3,960							
1400	8.53	2,880							
1800	8.25	2,510							
2400	8.83	3,340							
Mean----------		3,160							

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-1432. Carmel River at Robles del Rio, Calif.--Continued									
Feb. 24					Feb. 28				
0400	7.20	1,850			0200	7.34	1,840		
0800	8.55	3,500			0800	7.27	1,770		
1200	8.66	3,660			1400	7.83	2,330		
1430	9.05	4,250			1800	7.66	2,160		
2000	8.61	3,590			2400	7.66	2,160		
2400	8.30	3,120			Mean----------		2,000		
Mean----------		3,220			Mar. 1				
Feb. 25					Mean----------		1,970		
2000	7.76	2,360			Mar. 2				
2200	7.94	2,540			Mean----------		1,650		
2400	8.00	2,600			Mar. 3				
Mean----------		2,550			Mean----------		1,470		
Feb. 26					Mar. 4				
0400	7.74	2,340			Mean----------		1,280		
1200	7.54	2,140			Mar. 5				
2400	7.28	1,880			Mean----------		1,110		
Mean----------		2,160							
Feb. 27									
1200	7.13	1,650							
1800	7.06	1,590							
2400	7.22	1,730							
Mean----------		1,660							
11-1450. Salinas River above Pilitas Creek, near Santa Margarita, Calif.									
Jan. 17, 1969					Jan. 20--Continued				
2400	0.47		0.2		2400	4.75	2,280		
Jan. 18					Mean----------		480		
1200	.48		.2		Jan. 21				
2000	.67		2.7		0200	5.54	2,590		
2400	.73		4.8		0400	6.76	3,910		
Mean----------			1.1		0600	7.43	4,580		
Jan. 19					0800	7.60	4,780		
1000	.79		9.7		1200	7.22	4,320		
1200	.95		42		1600	6.85	4,000		
1400	1.87		340		2200	5.89	3,190		
1800	1.61		220		2400	5.83	3,130		
2200	1.29		175		Mean----------		3,950		
2400	1.02		55		Jan. 22				
Mean----------			120		0400	5.70	3,050		
Jan. 20					1200	4.73	2,270		
0600	.88		34		1800	4.03	1,710		
0800	1.43		156		2400	3.51	1,350		
1400	2.09		455		Mean----------		2,300		
2000	2.43		640						
2200	3.27		1,150						

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-1450. Salinas River above Pilitas Creek, near Santa Margarita, Calif.--Continued									
Jan. 23					Jan. 29				
0400	3.30	1,180			1200	2.63	595		
0600	3.00	1,000			2400	2.47	515		
0800	3.11	1,070			Mean		597		
1400	2.90	910							
2400	2.70	790			Jan. 30				
Mean		1,010			1200	2.35	455		
					2400	2.29	425		
Jan. 24					Mean		463		
1000	2.61	736							
1400	2.62	742			Feb. 19				
1800	2.89	904			2400	.78	6.8		
2000	3.29	1,170							
2200	3.89	1,580			Feb. 20				
2400	4.87	2,380			1800	.75	5.5		
Mean		964			2000	1.93	258		
					2400	1.93	258		
Jan. 25					Mean		66		
0200	6.75	3,900							
0400	9.04	6,630			Feb. 21				
0600	12.18	11,400			1200	1.94	262		
0800	14.32	15,400			2400	1.95	267		
1000	14.93	16,700			Mean		262		
1200	13.99	14,800							
1400	12.78	12,500			Feb. 22				
1600	11.99	11,100			1200	1.94	262		
2000	10.39	8,480			1400	1.80	204		
2400	9.25	6,850			1600	1.04	28		
Mean		10,200			1800	.90	14		
					2000	2.24	400		
Jan. 26					2400	2.24	400		
0400	8.72	6,140			Mean		234		
0600	9.82	7,650							
0800	10.07	8,030			Feb. 23				
1000	10.31	8,360			0400	2.25	405		
1400	9.38	7,030			0800	2.43	495		
2000	7.76	4,910			1000	1.64	153		
2400	6.79	3,790			1200	2.24	400		
Mean		6,450			1600	2.91	736		
					2000	3.11	856		
Jan. 27					2400	3.13	868		
0800	5.27	2,380			Mean		566		
1000	4.71	1,930							
1800	3.92	1,350			Feb. 24				
2400	3.54	1,110			0400	3.11	856		
Mean		2,010			0600	3.19	904		
					0800	3.68	1,200		
Jan. 28					1000	5.00	2,160		
0200	3.36	1,010			1200	6.97	3,970		
1200	3.00	790			1400	9.22	6,810		
1400	3.01	796			1600	11.83	10,800		
2400	2.83	695			1800	12.96	12,800		
Mean		826			2000	13.35	13,500		

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-1450. Salinas River above Pilitas Creek, near Santa Margarita, Calif.--Continued									
Feb. 24--Continued					Feb. 28--Continued				
2400	12.13	11,300			1400	3.43	1,050		
Mean----------		6,040			1800	3.69	1,200		
					2000	3.72	1,220		
Feb. 25					2400	3.69	1,200		
0600	9.82	7,650			Mean----------		985		
1000	8.67	6,070							
1400	7.92	5,130			Mar. 1				
2200	6.32	3,320			1200	3.34	994		
2400	6.16	3,160			2400	3.06	826		
Mean----------		6,050			Mean----------		1,000		
Feb. 26					Mar. 2				
0600	5.39	2,470			2400	2.68	620		
1200	4.87	2,060			Mean----------		710		
1800	4.36	1,660							
2400	4.02	1,420			Mar. 3				
Mean----------		2,110			Mean----------		560		
Feb. 27					Mar. 4				
1200	3.39	1,020			2400	2.35	455		
1600	3.28	958			Mean----------		470		
1800	3.18	898							
2200	3.14	874			Mar. 5				
2400	3.05	826			1000	2.31	435		
Mean----------		1,070			1800	1.57	132		
					2000	2.17	365		
Feb. 28					2200	2.30	430		
0200	2.98	778			2400	2.30	430		
0800	3.05	826			Mean----------		355		
11-1470. Jack Creek near Templeton, Calif.									
Jan. 17, 1969					Jan. 19--Continued				
2400	2.23	3.1			1800	7.23	2,110		
					2400	5.48	859		
Jan. 18					Mean----------		2,160		
1200	2.24	3.3							
1600	2.73	16			Jan. 20				
1800	4.32	346			0400	4.93	580		
2000	5.66	969			0800	4.81	520		
2200	5.47	854			1400	5.14	685		
2400	6.52	1,520			1600	5.03	630		
Mean----------		239			1800	5.04	635		
					2000	6.34	1,380		
Jan. 19					2200	8.36	3,340		
0200	6.62	1,600			2400	8.64	3,710		
0400	5.97	1,130			Mean----------		1,030		
0600	5.82	1,050							
1000	6.40	1,420			Jan. 21				
1200	10.08	5,820			0200	7.05	1,960		
1400	9.00	4,210			0400	6.08	1,200		

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-1470. Jack Creek near Templeton, Calif.--Continued									
Jan. 21--Continued					Jan. 27				
0800	5.22	725			1300	3.91	253		
1000	5.28	755			2400	3.65	189		
1400	4.73	484			Mean		265		
2000	4.32	346							
2200	4.48	394			Jan. 28				
2400	4.38	374			1400	3.74	210		
Mean		842			2400	3.55	168		
					Mean		198		
Jan. 22									
0600	4.05	265			Jan. 29				
1200	3.82	205			1200	3.38	132		
2400	3.52	140			2400	3.26	110		
Mean		220			Mean		134		
Jan. 23					Jan. 30				
1200	3.33	104			Mean		103		
1600	3.32	103							
2000	3.46	128			Jan. 31				
2400	3.46	128			Mean		74		
Mean		117							
					Feb. 19				
Jan. 24					2400	3.03	71		
0600	3.49	134							
1000	3.73	185			Feb. 20				
1400	4.38	364			1200	2.97	62		
1800	5.21	720			2400	2.93	56		
2000	5.88	1,080			Mean		63		
2200	6.66	1,630							
2400	7.91	2,800			Feb. 21				
Mean		535			1600	2.89	51		
					1800	2.94	58		
Jan. 25					2000	3.43	142		
0200	9.08	4,320			2400	3.26	110		
0400	9.11	4,360			Mean		68		
0615	10.57	6,740							
0800	8.57	3,610			Feb. 22				
1200	6.38	1,410			0600	3.29	115		
1400	6.36	1,390			2400	3.07	77		
1800	6.03	1,170			Mean		98		
2200	5.67	964							
2400	5.71	986			Feb. 23				
Mean		2,560			0400	3.16	92		
					0600	4.85	590		
Jan. 26					0800	5.90	1,090		
0400	5.69	974			1000	4.92	625		
0600	7.97	2,870			1400	4.26	358		
0800	6.33	1,370			1800	3.98	274		
1200	5.32	826			2400	3.77	218		
1800	4.67	502			Mean		372		
2400	4.32	376							
Mean		914							

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-1470. Jack Creek near Templeton, Calif.--Continued									
Feb. 24					Feb. 27				
0200	3.73	208			1200	3.72	205		
0400	4.35	385			2400	3.66	196		
0600	6.74	1,770			Mean		208		
0800	8.12	3,040							
1200	9.69	5,240			Feb. 28				
1300	11.28	8,160			0200	3.69	198		
1400	9.67	5,200			0800	4.55	450		
1800	7.42	2,290			1000	4.34	382		
2200	6.29	1,340			1200	5.00	665		
2400	6.31	1,360			1600	4.39	397		
Mean		2,620			2000	4.18	334		
					2200	4.33	391		
Feb. 25					2400	4.22	346		
0400	5.66	958			Mean		378		
0800	5.13	730							
1400	4.75	540			Mar. 1				
2000	4.45	415			1200	3.88	245		
2200	4.70	515			2400	3.70	200		
2400	4.75	540			Mean		250		
Mean		703							
					Mar. 2				
Feb. 26					1200	3.58	174		
0400	4.42	406			2400	3.48	153		
1200	4.13	319			Mean		175		
2400	3.89	248							
Mean		335			Mar. 3				
					1200	3.40	136		
					2400	3.31	119		
					Mean		134		
11-1470.7. Santa Rita Creek near Templeton, Calif.									
Jan. 17, 1969					Jan. 19--Continued				
2400	3.10	10	19	1	1300	11.12	6,050	9,700	158,000
					1400	10.60	4,970	8,200	110,000
Jan. 18					1500	9.60	3,280	7,400	66,000
1200	3.70	27	20	2	1600	9.00	2,450	6,700	44,000
1400	3.74	30	100	8	1800	8.86	2,310	5,400	34,000
1600	4.12	59	300	48	2000	8.26	1,710	4,500	21,000
1800	5.56	287	700	540	2200	7.70	1,230	3,900	13,000
2000	6.40	550	1,900	2,800	2400	7.16	900	3,300	8,000
2200	6.90	765	4,000	8,300	Mean		1,790	5,200	30,000
2400	6.98	774	4,000	8,400					
Mean		185	760	140	Jan. 20				
					0400	6.52	598	2,520	4,070
Jan. 19					0600	6.36	534	2,200	3,170
0200	7.32	992	4,700	13,000	0800	6.32	518	1,820	2,550
0600	6.78	711	4,300	8,300	1000	6.16	461	1,690	2,100
1000	7.00	810	4,400	9,600	1200	6.20	475	1,490	1,910
1100	7.50	1,100	5,400	16,000	1600	6.12	447	1,320	1,590
1200	10.00	3,900	7,000	74,000	1800	5.98	404	1,100	1,200

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-1470.7. Santa Rita Creek near Templeton, Calif.--Continued									
Jan. 20--Continued					Jan. 25--Continued				
2000	6.28	503	2,450	3,330	2400	6.62	639	1,450	2,500
2100	7.30	980	3,900	10,300	Mean		1,830	5,140	32,300
2200	8.40	1,850	5,560	27,800					
2300	9.14	2,620	4,400	31,100	Jan. 26				
2400	8.90	2,350	3,600	22,800	0400	6.32	582	1,000	1,570
Mean		710	2,310	5,930	0600	7.80	1,300	3,100	10,900
					1000	6.74	747	1,180	3,590
Jan. 21					1400	6.14	514	1,300	1,800
0200	7.76	1,270	2,340	8,020	1800	5.76	398	980	1,050
0400	7.14	884	1,490	3,560	2400	5.40	302	660	538
0600	6.72	684	890	1,640	Mean		625	1,430	2,950
0800	6.30	510	630	868					
1200	5.98	404	470	513	Jan. 27				
1600	5.60	297	490	393	2400	4.70	164	100	44
2000	5.32	233	380	239	Mean		225	310	188
2200	5.36	241	430	280					
2400	5.60	297	880	706	Jan. 28				
Mean		567	902	2,400	0600	4.66	157	104	44
					0800	4.84	188	112	57
Jan. 22					1200	4.96	211	120	68
0100	5.68	318	1,040	893	1400	4.94	207	121	68
0600	5.26	221	630	376	1600	5.02	223	120	72
1200	5.00	172	430	200	2000	4.80	181	114	56
1800	4.82	143	340	131	2400	4.66	157	108	46
2400	4.68	122	280	92	Mean		185	112	56
Mean		190	520	307					
					Jan. 29				
Jan. 23					2400	4.36	112	37	11
1200	4.46	93	190	48	Mean		131	83	29
1800	4.42	88	180	44					
2400	4.52	101	420	115	Jan. 30				
Mean		101	239	66	0600	4.30	104	23	6
					1200	4.42	121	29	10
Jan. 24					1800	4.30	104	27	8
0600	4.58	108	410	120	2400	4.24	97	25	6
1000	4.66	119	520	167	Mean		108	28	8
1200	4.90	155	810	339					
1600	5.90	380	1,370	521	Jan. 31				
2200	7.20	920	4,600	11,400	2400	4.10	81	20	4
2400	8.26	1,710	5,800	26,800	Mean		86	22	5
Mean		362	1,600	3,230					
					Feb. 20				
Jan. 25					2400	4.00	71	11	2
0200	9.46	3,070	7,400	61,300	Mean		74	18	4
0400	9.48	3,100	7,400	61,900					
0600	9.70	3,430	9,200	85,200	Feb. 21				
0700	10.16	4,170	8,250	92,900	1200	3.98	69	26	5
0800	9.74	3,490	7,200	67,800	1800	4.02	73	30	6
1000	8.20	1,650	5,900	26,300	2200	4.58	144	1,780	692
1200	7.78	1,290	5,230	18,200	2400	4.44	122	790	260
1600	7.56	1,140	3,900	12,000	Mean		82	274	101
2000	7.02	820	2,300	5,090					

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-1370.7. Santa Rita Creek near Templeton, Calif.--Continued									
Feb. 22					Feb. 26--Continued				
2400	4.16	87	70	16	2400	4.78	158	140	60
Mean		106	200	57	Mean		200	200	116
Feb. 23					Feb. 27				
0400	4.20	92	70	17	2400	4.58	129	153	53
0600	5.20	257	700	486	Mean		137	150	55
0800	7.34	1,030	4,000	11,100					
1000	6.10	499	2,170	2,920	Feb. 28				
1200	5.80	410	1,330	1,470	0400	4.64	139	320	120
1800	5.22	262	750	531	0800	5.20	231	2,000	1,250
2400	4.98	215	600	348	1000	5.02	200	1,950	1,050
Mean		337	1,070	1,630	1200	5.70	323	1,940	1,690
					1400	6.00	410	2,250	2,490
Feb. 24					1600	5.50	275	1,250	928
0200	4.90	200	600	324	2000	5.16	223	280	169
0400	5.02	223	2,130	1,280	2400	5.12	217	360	211
0600	5.80	410	4,950	5,480	Mean		230	1,060	778
0800	7.10	914	5,330	13,200					
1000	8.20	1,650	6,250	27,800	Mar. 1				
1200	8.42	1,870	7,000	35,300	2400	4.70	148	140	56
1400	9.92	3,770	9,000	91,600	Mean		179	260	126
1600	8.76	2,210	7,300	43,600					
1800	7.80	1,300	5,800	20,400	Mar. 2				
2200	7.10	914	3,700	9,130	2400	4.50	119	90	29
2400	7.10	914	2,800	6,910	Mean		131	110	39
Mean		1,260	4,880	22,200					
					Mar. 3				
Feb. 25					2400	4.36	101	75	20
0200	6.90	765	2,240	4,630	Mean		106	80	23
0600	6.32	518	1,520	2,130					
1200	5.86	368	980	974	Mar. 4				
1800	5.50	274	640	473	2400	4.20	83	60	13
2200	5.34	250	480	324	Mean		90	70	17
2400	5.52	280	400	302					
Mean		431	1,170	1,710	Mar. 5				
					2400	4.12	75	50	10
Feb. 26					Mean		81	50	11
0600	5.16	215	220	128					
1200	4.98	192	160	83					
11-1388. Nacimiento River near Bryson, Calif.									
Jan. 17, 1969					Jan. 19				
2400	4.05	167			0200	14.03	12,200		
					0600	13.55	11,300		
Jan. 18					0800	15.00	14,200		
0800	4.01	155			1245	18.62	22,600		
1400	4.56	337			2000	12.99	10,300		
1800	7.53	2,380			2400	10.69	6,380		
2000	10.42	5,980			Mean		13,900		
2400	13.98	12,200							
Mean		2,130							

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-1488. Nacimiento River near Bryson, Calif.--Continued									
Jan. 20					Jan. 26				
0400	9.52	4,700			0400	17.35	19,400		
1000	8.94	3,950			0545	20.89	28,500		
1400	9.17	4,240			0800	18.15	21,400		
1800	9.71	4,950			1230	13.05	10,400	1,060	29,800
2000	12.10	8,680			1600	11.08	6,980		
2330	16.22	16,900			2400	9.35	4,480		
2400	15.96	16,300			Mean		12,900		
Mean		6,260							
Jan. 21					Jan. 27				
0400	12.08	8,640			1600	8.08	2,960	208	1,660
0830	16.05	16,500			2400	7.65	2,500		
1200	15.60	15,500			Mean		3,180		
1600	12.61	9,600							
1800	11.31	7,350			Jan. 28				
2200	10.51	6,120			1200	7.45	2,300		
2400	11.29	7,310			1400	7.53	2,380		
Mean		11,000			2400	7.15	2,020		
					Mean		2,110		
Jan. 22									
0600	9.47	4,630			Jan. 29				
1200	8.44	3,350			1000	6.80	1,710	58	268
1800	7.79	2,640			2400	6.50	1,470		
2400	7.30	2,160			Mean		1,520		
Mean		3,830							
					Feb. 19				
Jan. 23					2400	5.90	1,040		
0600	6.93	1,830							
1130	6.60	1,540	71	295	Feb. 20				
1400	6.60	1,540			1200	5.75	940		
2000	6.86	1,760			2400	5.60	850		
2400	7.10	1,980			Mean		938		
Mean		1,770							
					Feb. 21				
Jan. 24					0915	5.50	790	5	11
0300	7.25	2,120			2400	6.10	1,180		
1000	7.06	1,940			Mean		844		
1400	7.56	2,410							
1800	7.86	2,720			Feb. 22				
2200	10.12	5,530			1200	5.72	922		
2400	13.89	12,000			2400	5.61	856		
Mean		2,940			Mean		957		
Jan. 25					Feb. 23				
0200	17.90	20,800			0200	5.61	856		
0400	21.47	30,100			0600	6.92	1,820		
0600	24.60	39,100			0900	9.66	4,880		
0800	22.06	31,800			1150	8.80	3,780	210	2,140
1200	15.73	15,800			1400	8.22	3,110		
1400	15.17	14,600			2000	7.66	2,510		
1800	13.21	10,700	1,190	34,400	2400	7.41	2,260		
2400	15.87	16,100			Mean		2,610		
Mean		19,900							

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-1388. Nacimiento River near Bryson, Calif.--Continued									
Feb. 24					Feb. 28				
0200	7.38	2,230			0600	7.80	2,360		
0400	9.32	4,440			1000	7.89	2,460		
0600	15.33	14,900			1200	8.21	2,810		
0800	20.12	26,400			1600	8.49	3,130		
1000	22.03	31,700			2000	8.13	2,720		
1400	19.04	23,600			2400	7.95	2,520		
1800	15.56	15,200			Mean----------		2,570		
2400	12.56	9,200							
Mean---------		16,300			Mar. 1				
					1200	7.61	2,170		
Feb. 25					2400	7.23	1,800		
0600	10.62	6,030			Mean----------		2,150		
1200	9.57	4,460							
1630	8.93	3,660	419	4,140	Mar. 2				
2400	8.63	3,300			1200	6.99	1,580		
Mean----------		5,080			2400	6.76	1,380		
					Mean----------		1,580		
Feb. 26									
1200	7.95	2,520	134	913	Mar. 3				
2400	7.52	2,080			1030	6.61	1,260	13	44
Mean----------		2,620			2400	6.41	1,100		
					Mean----------		1,240		
Feb. 27									
1800	7.11	1,690			Mar. 4				
2400	7.35	1,910			Mean----------		998		
Mean----------		1,830							
					Mar. 5				
					1700	5.86	716	11	21
					Mean----------		740		
11-1499. San Antonio River near Lockwood, Calif.									
Jan. 17, 1969					Jan. 19--Continued				
2400	1.65	122			1100	6.22	7,540	4,300	87,500
					1200	5.76	6,160	3,600	59,900
Jan. 18					1400	6.00	6,880	3,000	55,700
0600	1.61	113			1500	6.21	7,510	4,400	89,200
1200	1.61	113			1800	5.78	6,220	2,950	49,500
2000	1.74	145			2000	5.40	5,200	2,470	34,700
2100	3.00	820			2400	4.97	4,160	1,910	21,500
2200	4.30	2,400			Mean----------		5,500	2,690	42,700
2300	4.80	3,400							
2400	5.09	4,080			Jan. 20				
Mean----------		464		1,400	0200	4.53	3,280	1,760	15,600
					0400	4.66	3,540	1,650	15,800
Jan. 19					0600	4.35	2,930	1,600	12,700
0200	5.32	4,600	2,500	31,000	1200	4.27	2,780	2,200	16,500
0400	5.35	4,680	1,900	24,000	1400	4.24	2,730	2,650	19,500
0600	5.42	4,980	1,550	20,800	1600	4.43	3,080	2,780	23,100
0800	5.16	4,320	1,400	16,300	1800	4.48	3,180	2,580	22,200
1030	6.00	6,700	4,700	85,000	2000	4.33	2,890	2,500	19,500

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-1499. San Antonio River near Lockwood, Calif.--Continued									
Jan. 20--Continued					Jan. 25--Continued				
2200	5.02	3,940	3,300	35,100	1500	6.36	7,780	8,100	170,000
2400	5.96	5,700	4,600	70,800	1800	6.67	9,060	4,100	100,000
Mean----------		3,250	2,340	21,300	2000	6.02	6,820	3,400	62,600
					2200	6.54	8,540	5,000	115,000
Jan. 21					2400	7.38	11,900	8,800	283,000
0400	5.62	4,850	3,770	49,400	Mean----------		8,050	6,030	144,000
0600	5.62	4,850	3,900	51,100					
0800	5.69	5,020	5,150	69,800	Jan. 26				
1000	6.72	7,660	9,480	196,000	0200	6.58	8,700	3,900	91,600
1200	6.04	5,650	7,400	113,000	0600	7.06	9,740	4,600	121,000
1300	7.03	8,820	9,820	234,000	0800	7.57	11,400	5,900	182,000
1400	6.47	6,910	7,600	142,000	0930	8.05	13,400	12,000	434,000
1800	5.38	4,060	3,650	40,000	1000	8.25	14,000	10,600	401,000
2000	5.14	3,580	2,500	24,200	1200	7.15	8,900	6,200	149,000
2200	5.24	3,780	2,180	22,200	1300	6.93	8,020	7,300	158,000
2400	5.08	3,460	2,100	19,600	1500	6.40	6,070	3,800	62,300
Mean----------		5,250	5,000	79,800	1700	5.94	4,880	5,000	65,900
					2000	5.60	4,080	3,750	41,300
Jan. 22					2400	5.26	3,400	2,950	27,100
0200	5.56	4,220	3,430	39,100	Mean----------		7,870	5,390	130,000
0600	5.20	3,500	1,950	18,400					
1200	4.67	2,420	1,300	8,490	Jan. 27				
1600	4.19	1,740	1,600	7,520	0100	5.51	4,020	2,800	30,400
2400	3.94	1,450	820	3,210	0200	5.17	3,340	2,650	23,900
Mean----------		2,580	1,730	13,700	0400	5.31	3,620	2,450	23,900
					1200	4.67	2,430	2,100	13,800
Jan. 23					1400	4.65	2,400	2,150	13,900
0100	4.08	1,600	750	3,240	1600	4.83	2,700	2,150	15,700
0600	3.94	1,450	450	1,760	2400	4.65	2,400	2,000	13,000
1200	3.82	1,320	300	1,070	Mean----------		2,800	2,250	17,800
1800	3.73	1,230	210	697					
2400	3.87	1,370	200	740	Jan. 28				
Mean----------		1,360	366	1,410	0600	4.48	2,170	1,820	10,700
					1200	4.42	2,080	1,650	9,270
Jan. 24					1800	4.45	2,120	1,520	8,700
0200	4.12	1,650	460	2,050	2400	4.24	1,830	1,410	6,970
0400	4.19	1,740	570	2,680	Mean----------		2,110	1,670	9,660
0800	4.21	1,760	400	1,900					
1400	4.08	1,600	400	1,730	Jan. 29				
2000	4.31	1,900	480	2,460	2400	3.55	1,090	300	883
2200	4.31	1,900	450	2,310	Mean----------		1,310	800	2,830
2400	4.55	2,240	500	3,020					
Mean----------		1,750	440	2,090	Jan. 30				
					2400	3.34	932	160	403
Jan. 25					Mean----------		1,010	237	646
0200	5.95	5,180	1,300	18,200					
0600	7.14	8,860	10,700	256,000	Jan. 31				
0630	7.50	10,700	9,000	260,000	2400	3.04	743	97	195
0800	6.76	7,780	6,600	139,000	Mean----------		836	160	361
1000	7.06	9,340	8,800	222,000					
1200	7.07	9,780	7,500	198,000	Feb. 19				
1300	6.70	8,700	7,200	169,000	2400	2.76	757	75	153

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-1499. San Antonio River near Lockwood, Calif.--Continued									
Feb. 20					Feb. 25--Continued				
2400	2.55	610	40	66	1800	4.38	2,530	1,540	10,500
Mean		694	50	94	2000	4.37	2,510	1,250	8,470
					2400	4.45	2,640	840	5,990
Feb. 21					Mean		3,040	1,740	14,500
2400	2.61	652							
Mean		580		70	Feb. 26				
					0400	4.60	2,840	530	4,060
Feb. 22					0600	4.37	2,450	400	2,650
2400	2.41	526			1200	4.16	2,140	190	1,100
Mean		586		70	1800	4.07	2,010	110	597
					2400	3.94	1,830	100	494
Feb. 23					Mean		2,240	290	1,930
0600	2.43	538	70	102					
0800	2.68	701	200	379	Feb. 27				
1100	3.38	1,290	950	3,310	0600	3.86	1,660		
1200	3.60	1,520	700	2,870	1200	3.83	1,630		
1400	3.32	1,230	450	1,490	1800	3.71	1,490		
1600	3.32	1,230	320	1,060	2200	3.67	1,450		
1800	3.09	1,020	230	633	2400	3.81	1,600		
2400	2.94	892	125	301	Mean		1,600		430
Mean		924	279	875					
					Feb. 28				
Feb. 24					0200	3.88	1,730	140	654
0200	2.97	916	150	371	0800	3.89	1,740	230	1,080
0400	3.07	998	200	539	1400	4.15	2,100	270	1,530
0600	3.33	1,240	1,400	4,690	1800	4.19	2,150	270	1,570
0800	4.70	3,200	3,230	27,900	2200	4.04	1,940	250	1,310
0900	5.45	4,750	4,870	62,500	2400	4.03	1,930	250	1,300
1000	6.33	7,120	3,600	69,200	Mean		1,930	229	1,200
1030	6.59	7,870	3,200	68,000					
1200	6.20	6,700	2,570	46,500	Mar. 1				
1400	6.08	6,340	2,600	44,500	1200	3.88	1,700		
1600	6.10	6,400	2,850	49,200	2400	3.69	1,480		
1800	6.01	6,130	2,550	42,200	Mean		1,680		910
2400	5.20	4,100	2,060	22,800					
Mean		4,330	2,130	30,900	Mar. 2				
					2400	3.40	1,130		
Feb. 25					Mean		1,290		520
0600	4.83	3,360	1,810	16,400					
1000	4.56	2,840	1,720	13,200	Mar. 3				
1300	4.61	2,930	2,400	19,000	2400	3.19	940	140	355
1400	4.62	2,950	2,220	17,700	Mean		1,020	140	386
11-1505. Salinas River near Bradley, Calif.									
Jan. 18, 1969					Jan. 19--Continued				
2400	3.72	31			2000	5.88	1,200		
Mean		33			2400	7.71	3,590		
					Mean		667		
Jan. 19									
0600	3.74	38							
1200	4.34	186							

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-1505. Salinas River near Bradley, Calif.--Continued									
Jan. 20					Jan. 27--Continued				
0400	11.18	12,300			2400	10.27	11,200		
0800	11.05	11,800			Mean		15,500		
1600	9.92	8,400							
2000	8.67	5,480			Jan. 28				
2200	8.57	5,250			Mean		10,700		
2400	8.96	6,030							
Mean		8,770			Jan. 29				
					Mean		8,340		
Jan. 21									
0400	8.39	4,860			Jan. 30				
0800	9.68	7,720			Mean		5,870		
1200	11.29	12,600							
1400	11.68	14,000			Jan. 31				
2400	11.80	14,500			Mean		4,810		
Mean		10,700							
					Feb. 20				
Jan. 22					Mean		2,930		
0600	10.89	11,300							
1200	10.10	8,900			Feb. 21				
1800	9.57	7,430			Mean		3,050		
2400	8.98	6,070							
Mean		9,480			Feb. 22				
					2400	7.25	3,670		
Jan. 23					Mean		3,460		
Mean		3,990							
					Feb. 23				
Jan. 24					0600	7.23	3,630		
Mean		2,500			1000	7.78	4,740		
					1200	7.62	4,410		
Jan. 25					1400	8.38	6,070		
0400	8.01	4,190			1600	9.22	8,120		
0800	9.25	7,160			2000	9.61	9,210		
1000	12.66	17,800			2400	9.96	10,200		
1200	16.46	37,400			Mean		6,770		
1400	18.02	48,700							
1600	18.88	56,200			Feb. 24				
2200	18.07	50,500			0400	10.06	10,500		
2400	17.16	44,100			0800	9.84	9,850		
Mean		30,100			1200	10.21	11,000		
					1400	10.60	12,300		
Jan. 26					1600	13.00	24,200		
0400	15.38	33,700			1800	16.00	50,000		
1000	14.53	29,200			2000	19.00	92,000		
1600	15.25	33,000			2200	20.34	117,000		
2200	14.58	29,500			2400	19.80	109,000		
2400	13.94	26,200			Mean		34,800		
Mean		32,000							
					Feb. 25				
Jan. 27					0200	18.20	88,400		
0600	12.17	18,200			0400	17.30	77,600		
1400	10.93	13,500			0600	16.60	69,600		
2200	10.14	10,800			0800	17.00	74,000		

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-1505. Salinas River near Bradley, Calif.--Continued									
Feb. 25--Continued					Feb. 27--Continued				
1000	16.30	66,300			2400	9.84	12,500		
1400	15.00	53,000			Mean		14,600		
1600	14.90	52,100							
1800	13.82	42,600			Feb. 28				
2200	12.67	33,500			Mean		11,500		
2400	12.45	31,900							
Mean		60,400			Mar. 1				
					Mean		11,600		
Feb. 26									
0600	11.98	28,400			Mar. 2				
0800	11.71	26,600			Mean		9,430		
1000	11.93	28,000							
1400	11.35	24,300			Mar. 3				
1800	10.98	21,800			Mean		8,180		
2000	11.06	21,200							
2400	10.76	18,500			Mar. 4				
Mean		25,400			Mean		7,160		
Feb. 27					Mar. 5				
0600	10.42	14,700			Mean		6,580		
1200	10.20	14,600							
11-1513. San Lorenzo Creek below Bitterwater Creek, near King City, Calif.									
Jan. 17, 1969					Jan. 21				
2400	3.61		1.5		0400	13.39	7,280		
					0800	9.21	2,600		
Jan. 18					1200	10.21	3,510		
1000	3.61		1.5		2400	6.42	770		
2400	3.80		4.5		Mean		3,040		
Mean			2.4						
					Jan. 22				
Jan. 19					0400	6.47	795		
0200	3.79		4.3		0600	6.98	1,000		
0400	5.69		140		1200	5.86	462		
0600	6.17		216		1800	5.42	249		
0800	6.10		212		2400	5.25	179		
1000	5.99		196		Mean		530		
1200	6.58		301						
1400	7.22		485		Jan. 23				
1630	10.84	4,140			1200	5.08	141		
2000	8.27	1,880			2400	5.14	154		
2200	8.52	2,060			Mean		154		
2400	7.76	1,530							
Mean		1,100			Jan. 24				
					0600	5.33	186		
Jan. 20					1200	5.16	147		
0600	6.13		625		1600	5.20	156		
1200	5.40		334		1800	5.74	299		
2000	5.18		266		2000	5.74	299		
2400	5.58		395		2200	5.60	258		
Mean			544						

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-1513. San Lorenzo Creek below Bitterwater Creek, near King City, Calif.--Continued									
Jan. 24--Continued					Feb. 21				
2400	5.99	381			2000	4.96	111		
Mean		203			2400	5.12	141		
Jan. 25					Mean		117		
0200	6.39	605			Feb. 22				
0400	7.56	1,280			0400	5.31	184		
0600	11.18	4,390			2000	5.04	125		
0800	14.66	9,320			2400	5.10	137		
0930	15.30	10,500			Mean		152		
1400	9.54	2,900			Feb. 23				
1600	8.51	2,060			0600	5.27	184		
1800	9.47	2,830			0800	5.63	344		
2000	8.55	2,090			1000	6.69	894		
2400	9.65	2,990			1215	8.59	2,120		
Mean		3,810			1600	6.80	960		
Jan. 26					2400	6.13	625		
0200	8.45	2,010			Mean		760		
0600	8.60	2,120			Feb. 24				
0800	9.09	3,210			0400	6.05	585		
0945	11.34	4,670			0600	6.38	750		
1200	8.91	2,350			0800	8.70	2,200		
1800	6.95	1,010			1000	12.35	5,860		
2400	6.45	785			1200	14.09	8,350		
Mean		2,040			1315	14.38	8,850		
Jan. 27					1400	14.00	8,200		
1200	5.74	455			1600	13.30	7,150		
2400	5.34	315			1800	12.29	5,780		
Mean		502			2000	11.82	5,200		
Jan. 28					2200	10.50	3,800		
Mean		150			2400	9.48	2,840		
Jan. 29					Mean		4,210		
Mean		120			Feb. 25				
Jan. 30					0600	8.66	2,170		
Mean		95			1200	7.05	1,090		
Jan. 31					2000	6.64	880		
Mean		80			2400	6.85	985		
Feb. 19					Mean		1,520		
2400	5.41	201			Feb. 26				
Feb. 20					0600	7.22	1,200		
1200	5.11	139			1200	6.52	780		
2400	5.01	120			2400	6.24	680		
Mean		150			Mean		866		
					Feb. 27				
					2400	5.96	543		
					Mean		612		

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-1513. San Lorenzo Creek below Bitterwater Creek, near King City, Calif.--Continued									
Feb. 28					Mar. 3				
1000	5.96	543			Mean----------		150		
1600	6.95	1,040			Mar. 4				
2400	6.70	910			Mean----------		130		
Mean----------		749			Mar. 5				
Mar. 1					Mean----------		120		
Mean----------		250							
Mar. 2									
Mean----------		180							
11-1517. Salinas River at Soledad, Calif.									
Jan. 18, 1969					Jan. 22--Continued				
2400	8.89	42			1800	17.32	10,100		
Mean----------		42			2145	17.52	10,900		
Jan. 19					2400	17.40	10,800		
0400	8.89	42			Mean----------		8,320		
1000	9.47	182			Jan. 23				
1200	10.44	638			0600	16.83	10,300		
1245	10.58	737			1600	15.40	8,400		
1600	9.88	346			1800	15.41	8,440		
1800	9.79	312			2200	15.07	8,000		
2200	9.97	334			2400	15.00	7,600		
2400	9.64	240			Mean----------		9,250		
Mean----------		269			Jan. 24				
Jan. 20					0600	14.17	6,700		
0200	9.23	115			1000	13.61	5,830		
0400	9.04	70			1200	13.52	5,740		
0600	9.15	94			1400	13.30	5,350		
0800	9.94	382			2000	13.30	5,350		
1000	11.20	1,140			2400	13.00	5,200		
1400	11.70	1,600			Mean----------		6,030		
2000	11.79	1,660			Jan. 25				
2400	12.12	1,950			0200	12.88	4,700		
Mean----------		1,050			0400	12.90	4,760		
Jan. 21					1000	13.68	7,390		
0600	13.60	3,370			1400	13.36	6,430		
1000	15.38	5,290			1600	13.34	6,370		
1400	16.21	6,280			1800	13.97	8,680		
1800	16.63	6,640			2000	15.25	14,700		
2200	16.66	6,730			2200	16.23	20,100		
2400	16.69	6,700			2400	17.13	25,000		
Mean----------		5,100			Mean----------		8,940		
Jan. 22					Jan. 26				
0600	16.46	6,580			0200	17.44	26,700		
1000	16.58	7,090			0400	17.55	27,100		

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-1517. Salinas River at Soledad, Calif.--Continued									
Jan. 26--Continued					Feb. 20				
0600	18.50	33,400			0200	12.25	5,950		
0800	21.67	53,700			1400	11.93	5,140		
1000	23.28	66,000			2000	11.80	4,350		
1045	23.39	67,300			2400	11.81	4,380		
1800	21.15	50,500			Mean----------		5,180		
2400	19.41	39,600							
Mean---------		46,700			Feb. 21				
					Mean----------		3,480		
Jan. 27									
0400	18.84	35,500			Feb. 22				
0600	18.86	35,600			Mean----------		3,800		
1000	19.03	36,700							
1400	18.68	34,500			Feb. 23				
2000	17.17	25,400			Mean----------		4,700		
2400	16.02	20,200							
Mean---------		32,500			Feb. 24				
					Mean----------		6,500		
Jan. 28									
0600	14.91	15,500			Feb. 25				
1200	13.96	11,200			0400	17.45	37,400		
1800	13.66	10,600			0600	18.26	45,100		
2400	14.14	12,100			0800	20.63	67,700		
Mean---------		13,400			1000	22.93	93,000		
					1200	23.22	97,500		
Jan. 29					1600	21.99	86,500		
0200	14.15	12,200			1800	20.94	74,300		
0600	13.95	11,200			2000	20.43	69,600		
1000	13.69	10,800			2400	19.02	57,400		
2400	13.44	10,800			Mean---------		67,400		
Mean---------		11,000							
					Feb. 26				
Jan. 30					0600	17.52	56,300		
0200	13.20	8,600			1000	16.88	41,200		
0400	13.25	8,800			1400	16.24	36,400		
1000	12.99	7,760			1800	15.88	33,100		
1200	12.77	7,210			2200	15.17	28,400		
2000	12.58	6,790			2400	15.10	27,800		
2200	12.72	7,060			Mean---------		42,100		
2400	12.67	6,910							
Mean----------		7,720			Feb. 27				
					0200	15.11	27,900		
Jan. 31					0400	14.81	25,800		
0600	12.50	6,550			1400	14.10	20,400		
1000	12.46	6,430			1600	14.13	20,600		
1200	12.52	6,610			1800	13.83	18,800		
1400	12.39	6,220			2400	13.41	15,800		
1800	12.60	6,700			Mean---------		21,800		
2400	12.44	6,370							
Mean----------		6,560			Feb. 28				
					0600	13.13	13,800		
Feb. 19					1000	13.10	13,700		
2400	12.21	5,830			1600	13.21	14,500		

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-1517. Salinas River at Soledad, Calif.--Continued									
Feb. 28--Continued					Mar. 3--Continued				
2000	12.96	12,800			1000	12.41	8,440		
2400	13.11	13,800			1200	12.51	9,440		
Mean----------		14,000			1600	12.48	9,020		
					1800	12.29	7,760		
Mar. 1					2400	12.47	9,080		
0800	13.18	14,400			Mean----------		9,170		
1000	13.14	13,900							
1200	12.95	12,700			Mar. 4				
1400	13.22	14,600			0200	12.30	7,800		
1600	13.18	14,100			1200	12.25	7,800		
1800	13.28	15,100			1400	11.99	6,220		
2000	13.70	18,000			1800	11.77	5,010		
2200	13.04	13,200			2200	11.86	5,680		
2400	12.99	12,900			2400	11.79	5,320		
Mean----------		14,300			Mean----------		6,820		
Mar. 2					Mar. 5				
0400	12.84	11,400			0200	11.68	4,570		
0600	13.10	13,700			0400	11.72	4,820		
1400	12.91	12,200			0800	11.86	5,680		
2000	12.82	11,300			1200	11.83	5,590		
2400	12.65	10,600			1400	11.79	5,320		
Mean----------		12,100			1600	11.83	5,590		
					1800	11.82	5,560		
Mar. 3					2000	11.91	5,980		
0200	12.57	9,880			2400	11.89	5,920		
0400	12.65	10,600			Mean----------		5,460		
11-1518.7. Arroyo Seco near Greenfield, Calif.									
Jan. 17, 1969					Jan. 19--Continued				
2400	2.06	114			0900				984
					1100	7.90	5,300		
Jan. 18					1200	8.05	5,600		
0800	2.03	106			1400	7.85	5,200		423
1200	2.13	122		1	1500	8.23	5,960		
1345				2	1600				524
1500	2.65	228			2400	6.63	3,200		
1530				21	Mean----------		5,620		
1600	4.00	750							
1640				151	Jan. 20				
1800	7.10	3,900			0600	6.10	2,520		
2000	7.90	5,300			1200	5.73	2,100		
2200	7.78	5,060			1400	5.73	2,100		
2400	8.00	5,500			1700	6.03	2,440		
Mean----------		1,550			1900	7.20	4,050		
					2000	8.20	5,900		
Jan. 19					2200	8.45	6,400		
0200	8.20	5,900			2400	8.00	5,500		
0400	7.95	5,400			Mean----------		3,240		
0700	9.60	8,700							

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-1518.7. Arroyo Seco near Greenfield, Calif.--Continued									
Jan. 21					Jan. 27				
0400	7.23	4,100			1200			113	
0600	8.80	7,100			2400	5.72	2,090		
0800	9.90	9,300			Mean----------		2,870		
1000				1,410					
1030				1,230	Jan. 28				
1200	8.60	6,700			1200			68	
1900	7.23	4,100			2400	5.08	1,480		
2200	7.58	4,660			Mean----------		1,810		
2400	7.42	4,380							
Mean----------		5,780			Jan. 29				
					1400			13	
Jan. 22					2400	4.58	1,110		
1000				138	Mean----------		1,280		
2400	5.32	1,700							
Mean----------		2,700			Jan. 30				
					0900			9	
Jan. 23					2400	4.30	920		
2400	4.74	1,220			Mean----------		1,030		
Mean----------		1,370							
					Jan. 31				
Jan. 24					2400	4.04	775		
1040				24	Mean----------		846		
1200	4.84	1,290							
1400	5.18	1,570		37	Feb. 20				
1600	5.00	1,420		45	0900			5	
1900	4.96	1,390			2400	4.30	920		
2000	5.12	1,520			Mean----------		999		
2200	7.50	4,500							
2400	9.70	7,640			Feb. 21				
Mean----------		1,860			2400	4.20	860		
					Mean----------		904		
Jan. 25									
0400	11.25	13,200			Feb. 22				
0800	10.00	9,500			2400	4.10	800		
0830				1,760	Mean----------		841		
1500	8.05	5,600							
1800				789	Feb. 23				
2000	8.95	7,400			0400	4.70	1,190		
2100	8.90	7,300			0600	5.58	1,950		
2400	9.55	8,600			0900	5.04	1,450	73	
Mean----------		8,490			1200	4.76	1,230		
					1520	4.72	1,200	20	
Jan. 26					2400	4.64	1,150		
0400	11.90	15,200			Mean----------		1,270		
0600	10.50	11,000							
1000				1,280	Feb. 24				
1200	8.55	6,600			0200	5.10	1,500		
1800	7.70	5,040			0300	6.80	3,450		
2400	7.12	3,930			0400	8.20	5,900		
Mean----------		7,850			0600	9.50	8,500		
					0800	8.66	6,820	1,360	
					1200	9.20	7,900		

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-1518.7. Arroyo Seco near Greenfield, Calif.--Continued									
Feb. 24--Continued					Feb. 28				
1800	8.06	5,620			0200	5.70	2,070		
2400	7.36	4,290			0400	6.02	2,420		
Mean----------		5,800			0845			60	
					1000	6.08	2,500		
Feb. 25					1200	6.30	2,760		
1200	6.64	3,220	115		1600			72	
1630			85		1800	6.02	2,420		
1800	6.46	2,970			2400	5.86	2,250		
2400	6.44	2,940			Mean----------		2,420		
Mean----------		3,390							
					Mar. 1				
Feb. 26					1530			29	
1045			55		2400	5.48	1,850		
2400	5.64	2,010			Mean----------		2,120		
Mean----------		2,410							
					Mar. 2				
Feb. 27					2400	5.18	1,570		
1200	5.42	1,790			Mean----------		1,720		
1415			26						
1800	5.44	1,810			Mar. 3				
2100	5.66	2,030			2400	4.88	1,320		
2400	5.66	2,030			Mean----------		1,470		
Mean----------		1,890							
11-1525. Salinas River near Spreckels, Calif.									
Jan. 17					Jan. 21				
2400	5.49	1.3			0800	13.82	3,820		
					1200	13.84	3,840	4,660	48,300
Jan. 18					1800	13.97	4,000	3,950	42,700
1200	5.34	7.3	201	4	2000	14.22	4,380		
2400	5.31	6.2			2400	14.94	5,680		
Mean----------		8.4			Mean----------		4,200		
Jan. 19					Jan. 22				
0200	5.33	6.9			0600	16.02	8,060		
0400	5.55	16			1000	16.80	10,200		
1000	5.50	13	205	7	1400	17.18	11,400	1,510	46,500
1400	5.50	13			2000	18.28	15,300		
2000	5.72	24			2330	18.54	16,400		
2200	6.57	93			2400	18.50	16,200		
2400	8.65	487			Mean----------		11,000		
Mean----------		39							
					Jan. 23				
Jan. 20					0800	18.43	15,900	3,650	157,000
0400	10.66	1,300			1200	18.59	16,600		
0800	12.39	2,410	6,560	42,700	2000	18.64	16,800		
1200	13.67	3,640			2400	18.55	16,400		
2000	14.77	5,340			Mean----------		16,400		
2400	14.56	4,920							
Mean----------		3,370							

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-1525. Salinas River near Spreckels, Calif.--Continued									
Jan. 24					Jan. 29--Continued				
0600	17.88	13,800			2400	12.80	12,300		
0800	17.44	12,300	677	22,500	Mean		14,500		
1200	16.61	9,710							
1800	15.76	7,470	956	19,300	Jan. 30				
2400	15.20	6,240			1200	12.31	11,300	1,300	39,700
Mean		10,500			2400	11.76	10,200		
					Mean		11,400		
Jan. 25									
0800	14.48	4,770			Jan. 31				
1600	13.90	3,900			1200	11.13	8,860	1,260	30,100
2000	14.27	4,460			2400	10.60	7,800		
2200	15.03	5,870			Mean		8,900		
2400	15.77	7,490							
Mean		4,920			Feb. 19				
					2400	8.52	4,290	1,500	17,400
Jan. 26									
0200	16.63	9,760			Feb. 20				
0600	17.68	13,100			0800	8.72	4,600	1,560	19,400
0800	17.78	13,300			1600	8.92	4,920	1,440	19,100
1200	17.49	12,500			2000	8.87	4,840	1,350	17,600
1400	17.61	12,900	15,100	526,000	2400	8.71	4,590	1,230	15,200
1600	17.73	14,300			Mean		4,680	1,460	18,300
1800	18.42	15,900							
2000	20.83	28,000			Feb. 21				
2200	23,49	45,100			0600	8.49	4,240	1,040	11,900
2400	25.35	64,800			1200	8.41	4,120	940	10,500
Mean		18,800			1800	8.46	4,200	980	11,100
					2400	8.40	4,110	970	10,800
Jan. 27					Mean		4,230	1,040	11,600
0200	26.0	72,400							
0400	26.1	73,200			Feb. 22				
0600	25.85	71,700			0200	8.25	3,880	960	10,100
0800	24.85	64,800			1200	8.42	4,140	920	10,300
1000	23.5	55,900			1800	8.51	4,280	920	10,600
1200	22.65	51,000			2400	8.50	4,260	920	10,600
1400	21.7	45,300			Mean		4,110	932	10,400
1600	21.0	42,600	11,700	1,350,000					
2000	20.05	39,000			Feb. 23				
2400	19.3	35,400			0400	8.49	4,240	930	10,600
Mean		53,700			0600	8.72	4,600	940	11,700
					1400	8.85	4,810	1,000	13,000
Jan. 28					1800	8.79	4,720	1,040	13,300
0800	17.95	29,700			2400	9.17	5,330	1,120	16,100
1200	17.35	27,000			Mean		4,660	1,010	12,600
1800	16.3	22,700							
2200	15.43	19,700			Feb. 24				
2400	14.83	17,800			0600	9.63	6,110	1,180	19,500
Mean		26,900			1000	10.12	6,980	1,200	22,600
					1400	10.82	8,340	2,000	45,000
Jan. 29					1800	11.29	9,380	4,000	101,000
0600	13.77	14,900			2000	11.89	10,700	6,000	173,000
1200	13.33	13,900			2200	13.05	13,800	8,400	313,000
1800	13.26	13,700	1,420	52,500					

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-1525. Salinas River near Spreckels, Calif.--Continued									
Feb. 24--Continued					Feb. 27--Continued				
2400	13.93	16,400	10,000	443,000	2400	13.6	20,700	9,800	548,000
Mean		8,390	9,900	88,900	Mean		26,400	11,300	815,000
Feb. 25					Feb. 28				
0400	14.87	19,400	12,600	660,000	1200	12.8	18,000	9,000	437,000
0800	15.99	23,500	14,000	888,000	2400	12.35	16,600	8,500	381,000
1400	17.08	28,900	16,000	1,250,000	Mean		18,300	9,080	450,000
1600	17.71	31,700	18,000	1,540,000					
1800	20.42	44,900	20,000	2,430,000	Mar. 1				
2000	23.93	66,000	24,000	4,280,000	0600	12.2	16,100	8,300	361,000
2200	25.70	76,800	34,000	7,050,000	1600	12.48	17,000	8,200	376,000
2400	26.37	82,000	27,000	5,980,000	2000	12.42	16,800	8,100	367,000
Mean		36,000	17,600	2,060,000	2400	12.49	17,000	8,000	367,000
					Mean		16,600	8,230	370,000
Feb. 26					Mar. 2				
0230	26.51	83,100	23,000	5,160,000	0400	12.66	17,500	8,000	378,000
0400	26.00	79,000	22,000	4,690,000	1200	11.94	15,400	8,000	333,000
0800	24.45	76,300	19,000	3,910,000	1800	11.26	13,600	8,000	294,000
1200	22.87	67,800	17,300	3,170,000	2400	10.93	12,800	8,000	276,000
1600	20.71	57,600	15,700	2,440,000	Mean		15,300	8,000	330,000
2000	19.08	46,800	14,400	1,820,000					
2400	17.41	37,300	13,200	1,330,000	Mar. 3				
Mean		64,800	18,000	3,280,000	Mean		12,000	8,000	259,000
Feb. 27					Mar. 4				
0400	16.08	30,600	12,400	1,020,000	Mean		10,500	8,000	226,000
1200	14.93	25,700	11,200	777,000					
1800	14.0	22,100	10,300	615,000	Mar. 5				
					Mean		8,950	8,000	193,000

Time (hours)	Gage height (ft)	Discharge (cfs)	Time (hours)	Gage height (ft)	Discharge (cfs)
11-1585. San Benito River near Hollister, Calif.					
Jan. 20, 1969			Jan. 22--Continued		
2400	2.75	0.1	1800	5.29	481
			2400	4.78	299
Jan. 21			Mean		996
0200	2.75	.1			
0400	5.17	274	Jan. 23		
1200	4.65	136	0800	4.35	182
1600	4.89	192	1400	4.08	124
1800	6.64	1,050	2400	3.84	86
2200	6.32	842	Mean		163
2400	7.60	1,800			
Mean		421	Jan. 24		
			0400	3.94	100
Jan. 22			0600	4.43	200
0030	7.71	1,880	0800	4.59	242
0200	7.48	1,720	1000	4.56	234
0400	7.36	1,620	1200	4.63	254
0600	7.38	1,600	2000	4.36	184
1200	6.11	855	2400	4.75	290
			Mean		199

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-1585. San Benito River near Hollister, Calif.--Continued									
Jan. 25					Jan. 31				
0200	4.86	293			Mean----------		70		
0600	5.89	606							
1000	6.87	985			Feb. 19				
1200	8.48	2,020			2400	6.79	845		
1400	10.33	3,390							
1800	8.57	2,010			Feb. 20				
2000	8.28	1,770			0400	6.71	805		
2230	11.23	4,110			0800	6.41	660		
2400	10.32	3,300			1200	6.16	549		
Mean----------		1,720			1800	5.91	450		
					2400	5.72	380		
Jan. 26					Mean----------		587		
0200	9.19	2,350							
0400	8.95	2,170			Feb. 21				
0600	8.23	1,670			1200	5.42	280		
0800	7.91	1,410			2400	5.39	271		
1000	10.26	3,170			Mean----------		307		
1100	10.65	3,500							
1200	9.68	2,700			Feb. 22				
1400	8.71	1,930			0200	5.39	271		
1800	7.81	1,340			0600	5.56	325		
2000	7.94	1,380			0800	5.82	416		
2200	8.33	1,630			1000	5.92	454		
2400	8.23	1,530			1600	5.86	431		
Mean----------		2,010			2400	5.63	348		
					Mean----------		379		
Jan. 27									
0600	6.59	632			Feb. 23				
1200	6.02	402			0400	5.63	348		
1800	5.56	251			0600	5.86	431		
2400	5.23	168			1000	6.05	505		
Mean----------		534			1100	6.80	850		
					1200	7.74	1,380		
Jan. 28					1400	8.00	1,540		
0600	5.02	124			2000	7.55	1,270		
1200	4.86	97			2200	7.77	1,400		
1600	5.52	240			2400	8.22	1,690		
1800	5.85	342			Mean----------		959		
2000	6.06	416							
2200	6.34	525			Feb. 24				
2400	6.49	588			0200	8.09	1,600		
Mean----------		234			0400	7.78	1,410		
					0800	8.91	2,180		
Jan. 29					1000	11.87	4,680		
0600	6.09	428			1100	12.60	5,400		
1200	5.83	335			1200	13.61	6,410		
1600	5.74	305			1400	13.10	5,900		
2400	5.37	200			1600	14.32	7,120		
Mean----------		360			1800	15.25	8,050		
					2030	16.10	8,900		
Jan. 30					2200	15.72	8,520		
Mean----------		136			2400	15.60	8,400		
					Mean----------		5,130		

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-1585. San Benito River near Hollister, Calif.--Continued									
Feb. 25					Feb. 28--Continued				
0030	15.69	8,490			1400	7.39	1,170		
0200	15.59	8,390			1600	7.28	1,110		
0400	15.30	8,100			1800	7.41	1,190		
0600	14.58	7,380			2000	8.05	1,580		
0800	13.59	6,390			2130	8.20	1,680		
1000	12.78	5,580			2400	8.09	1,600		
1400	11.60	4,440			Mean----------		1,180		
1800	10.56	3,500							
2000	9.92	2,980			Mar. 1				
2400	9.75	2,840			0400	8.75	2,060		
Mean----------		5,380			0600	8.84	2,130		
					0800	9.15	2,360		
Feb. 26					1130	9.26	2,450		
0200	9.57	2,700			1400	8.97	2,220		
0330	10.24	3,230			2000	8.33	1,770		
0600	9.98	3,000			2400	7.98	1,530		
0800	9.48	2,620			Mean----------		2,020		
1200	9.32	2,500							
1800	8.61	1,970			Mar. 2				
2200	8.28	1,740			0600	7.67	1,340		
2400	8.25	1,720			1000	7.65	1,330		
Mean----------		2,420			1800	7.43	1,200		
					2400	7.29	1,110		
Feb. 27					Mean----------		1,280		
0400	8.02	1,550							
0600	8.02	1,550			Mar. 3				
1000	7.73	1,380			0800	7.13	1,020		
1800	7.45	1,210			1000	7.19	1,050		
2400	7.27	1,100			2400	6.99	945		
Mean----------		1,370			Mean----------		1,020		
Feb. 28					Mar. 4				
0600	7.08	1,050			Mean----------		867		
0800	7.05	975							
1200	7.17	1,040			Mar. 5				
					Mean----------		732		
11-1590. Pajaro River at Chittenden, Calif.									
Jan. 17, 1969					Jan. 19				
2400	1.84	26			0200	5.14	337		
					0400	9.29	1,450		
Jan. 18					0600	12.86	3,340		
1400	1.83	25			0800	14.54	4,530		
1800	1.97	32			1200	16.63	6,430		
2000	3.15	103			1400	17.31	7,170		
2200	5.13	335			1545	17.66	7,590		
2400	4.65	268			1800	17.61	7,530		
Mean----------		68			2000	17.48	7,380		
					2400	16.51	6,310		
					Mean----------		5,110		

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-1590. Pajaro River at Chittenden, Calif.--Continued									
Jan. 20					Jan. 26--Continued				
0600	14.50	4,500			1000	22.39	12,000		
1200	12.38	3,050			1200	22.32	11,900		
1800	10.72	2,130			1600	21.99	11,400		
2000	10.55	2,040			1800	22.18	11,700		
2400	11.25	2,410			2000	21.92	11,600		
Mean----------		3,470			2400	20.81	10,200		
Jan. 21					Mean---------		11,460		
0600	12.09	2,870			Jan. 27				
1200	13.61	3,830			0600	19.27	8,620		
1600	14.54	4,530			1200	17.24	6,540		
2045	14.94	4,850			1800	15.15	4,820		
2400	14.76	4,710			2400	13.53	3,770		
Mean----------		3,780			Mean----------		6,750		
Jan. 22					Jan. 28				
0600	13.95	4,060			0400	13.10	3,480		
1400	12.96	3,400			1200	13.11	3,490		
1600	13.12	3,490			2400	12.47	3,100		
2400	12.47	3,100			Mean----------		3,420		
Mean----------		3,740			Jan. 29				
Jan. 23					0600	12.18	2,930		
0600	11.62	2,610			1000	12.03	2,840		
1000	11.13	2,340			1600	11.49	2,540		
1600	10.41	1,980			2400	10.95	2,240		
2400	10.05	1,800			Mean----------		2,700		
Mean----------		2,380			Jan. 30				
Jan. 24					0600	10.61	2,080		
0600	9.68	1,630			1600	11.33	2,450		
1200	9.38	1,490			2400	10.70	2,120		
1800	9.11	1,370			Mean----------		2,240		
2000	9.10	1,370			Jan. 31				
2200	9.84	1,700			0800	10.15	1,840		
2400	12.22	2,950			1600	9.76	1,660		
Mean----------		1,590			2400	9.42	1,510		
Jan. 25					Mean----------		1,760		
0400	15.09	4,980			Feb. 19				
0800	18.41	8,490			2400	9.38	1,600		
1000	19.41	9,730			Feb. 20				
1200	19.90	10,400			0600	9.46	1,640		
1400	20.18	10,700			1200	9.33	1,580		
1600	20.18	10,700			2400	8.71	1,310		
2000		10,200			Mean----------		1,530		
2200		11,500			Feb. 21				
2400		11,400			1200	8.25	1,130		
Mean----------		8,750			1800	8.09	1,080		
Jan. 26					2400	8.16	1,100		
0400		11,300			Mean----------		1,160		
0800		11,500							

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-1590. Pajaro River at Chittenden, Calif.--Continued									
Feb. 22					Feb. 26--Continued				
0600	8.40	1,190			2400	15.13	5,930		
1200	8.70	1,310			Mean----------		8,110		
1800	8.71	1,310							
2400	8.51	1,230			Feb. 27				
Mean----------		1,240			0800	13.85	4,940		
					1600	12.89	4,170		
Feb. 23					2400	12.15	3,640		
0200	8.45	1,210			Mean----------		4,630		
0400	8.63	1,280							
0800	10.38	2,080			Feb. 28				
1200	11.41	2,630			0600	12.00	3,540		
1600	11.63	2,750			1200	12.46	3,860		
2000	12.30	3,150			1800	13.61	4,750		
2400	12.10	3,030			2400	14.81	5,810		
Mean----------		2,330			Mean----------		4,220		
Feb. 24					Mar. 1				
0400	11.96	2,980			0400	15.40	6,200		
0800	13.36	3,900			1200	15.26	6,060		
1200	15.79	5,990			2400	13.91	4,830		
1600	18.45	9,080			Mean----------		5,770		
1800	19.94	11,000							
2200	21.18	12,700			Mar. 2				
2400	22.17	14,400			1200	12.71	4,040		
Mean----------		7,100			2400	11.86	3,460		
					Mean----------		4,090		
Feb. 25									
0200	23.05	16,000			Mar. 3				
0830	23.92	17,800			1200	11.23	3,140		
1000	23.62	17,200			2400	10.78	2,870		
1600	21.87	13,800			Mean----------		3,150		
2400	19.79	10,800							
Mean----------		14,900			Mar. 4				
					2400	9.90	2,540		
Feb. 26					Mean----------		2,700		
0800	18.01	8,730							
1600	16.57	7,240			Mar. 5				
					2400	9.22	2,200		
					Mean----------		2,370		

11-1905. Isabella Reservoir near Isabella, Calif.
(Average inflow, in cubic feet per second, for bihourly periods ending at indicated time)

Jan. 19, 1969		Jan. 19--Continued	
0300	1,010	1500	3,220
0500	1,920	1700	4,210
0700	2,520	1900	4,230
0900	2,220	2100	6,380
1100	3,130	2300	6,720
1300	2,840		

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-1905. Isabella Reservoir near Isabella, Calif.--Continued									
Jan. 20					Jan. 24--Continued				
0100		7,980			0500		1,790		
0300		5,210			0700		2,140		
0500		4,600			0900		2,140		
0700		4,620			1100		2,840		
0900		3,690			1300		4,230		
1100		4,010			1500		4,940		
1300		3,390			1700		6,350		
1500		2,450			1900		8,480		
1700		2,760			2100		9,930		
2300		2,460			2300		11,100		
Jan. 21					Jan. 25				
0300		2,460			0100		12,900		
0500		2,790			0300		12,600		
0700		4,080			0500		17,800		
0900		4,730			0700		19,100		
1100		4,740			0900		21,500		
1300		4,430			1100		28,500		
1500		5,340			1300		32,400		
1700		6,280			1500		29,700		
1900		6,960			1700		26,900		
2100		6,330			1900		24,700		
2300		5,370			2100		21,000		
Jan. 22					2300		18,700		
0100		3,730			Jan. 26				
0300		7,720			0100		15,400		
0500		3,420			0300		12,500		
0700		2,410			0500		12,100		
0900		7,460			0700		10,100		
1100		3,440			0900		12,200		
1300		3,110			1100		12,700		
1500		4,130			1300		14,800		
1700		2,780			1500		12,800		
1900		2,110			1700		11,200		
2100		3,130			1900		11,200		
2300		2,110			2100		11,200		
Jan. 23					2300		8,260		
0100		1,770			Jan. 27				
0700		1,780			0100		8,280		
0900		2,460			0300		7,870		
1100		2,120			0500		7,020		
1300		1,440			0700		6,180		
1500		1,440			0900		5,760		
1700		1,780			1100		6,200		
1900		2,130			1300		4,910		
2100		2,130			1500		5,790		
2300		1,790			1700		4,480		
Jan. 24					1900		4,060		
0100		2,470			2100		4,500		
0300		2,140			2300		5,370		

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-1905. Isabella Reservoir near Isabella, Calif.--Continued									
Feb. 24					Feb. 27				
0700		1,400			0700		2,330		
1600		1,470							
1800		2,480			Feb. 28				
2000		3,690			0700		2,160		
2200		3,690			1400		2,260		
2400		4,590			1600		2,450		
					1800		2,000		
Feb. 25					2000		2,450		
0200		5,490			2400		3,360		
0400		3,700							
0600		4,600			Mar. 1				
					0700		2,520		
Feb. 26									
0700		2,580							
11-1972.5. Avenal Creek near Avenal, Calif.									
Jan. 18, 1969					Jan. 21--Continued				
2200		0			1600	2.76	172		
2400		.5			2000	2.51	120		
					2200	2.43	106		
Jan. 19					2400	2.42	104		
0300	1.41	4.8			Mean		337		
0400	1.59	12			Jan. 22				
0800	1.51	8.4			0200	2.48	115		
0900	1.72	20			0300	2.48	115		
1000	2.41	103			1300	2.01	46		
1130	2.44	108			2400	1.86	31		
1200	2.76	172			Mean		65		
1400	4.27	735			Jan. 23				
1500	4.21	705			0500	1.81	27		
1900	3.62	443			1700	1.75	22		
2200	3.57	423			1900	1.92	37		
2400	3.22	303			2000	2.23	74		
Mean		263			2200	2.37	96		
Jan. 20					2400	2.21	70		
0200	2.92	213			Mean		37		
0600	2.76	172			Jan. 24				
1100	2.44	108			0200	2.03	48		
1500	2.34	91			0500	1.96	41		
1700	2.44	108			1000	1.92	37		
2100	2.37	96			1200	1.96	41		
2230	2.48	115			1300	2.03	48		
2400	4.98	1,100			1700	2.79	179		
Mean		169			2100	3.82	529		
Jan. 21					2300	3.77	506		
0030	5.02	1,120			2400	3.52	403		
0300	3.62	443			Mean		164		
0500	3.34	340			Jan. 25				
0700	3.62	443			0030	3.57	423		
0900	3.59	431			0300	5.72	1,510		

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-1972.5. Avenal Creek near Avenal, Calif.--Continued									
Jan. 25--Continued					Feb. 23--Continued				
0400	5.50	1,380			2000	2.72	110		
0430	5.49	1,380			2400	2.63	95		
0500	5.95	1,620			Mean		198		
0600	7.28	2,290			Feb. 24				
0700	6.85	2,080			0500	2.60	90		
0730	7.54	2,420			0630	2.70	106		
0900	5.80	1,550			0830	5.33	1,290		
1000	5.38	1,320			0930	5.42	1,340		
1500	4.22	710			1000	6.12	1,710		
1700	4.34	770			1200	6.26	1,780		
2400	3.59	416			1300	7.89	2,600		
Mean		1,080			1400	7.10	2,200		
Jan. 26					1700	6.80	2,050		
0400	3.42	339			1900	5.50	1,380		
0500	3.44	348			2200	5.31	1,280		
0630	5.18	1,210			2400	5.39	1,320		
1000	3.85	532			Mean		1,190		
1300	3.50	375			Feb. 25				
1700	3.29	281			0230	5.36	1,310		
2400	2.98	140			0500	4.40	800		
Mean		426			1200	3.88	546		
Jan. 27					2200	3.56	402		
1600	2.66	100			2400	3.65	442		
2400	2.51	76			Mean		676		
Mean		109			Feb. 26				
Jan. 28					0400	3.64	438		
Mean		75			1000	3.39	326		
Jan. 29					1300	3.29	281		
Mean		60			2400	3.11	214		
Jan. 30					Mean		320		
Mean		48			Feb. 27				
Jan. 31					2400	2.85	138		
Mean		36			Mean		177		
Feb. 20					Feb. 28				
Mean		31			0500	2.84	135		
Feb. 21					1400	2.87	142		
Mean		26			1600	3.57	406		
Feb. 22					1700	3.97	586		
2400	2.03	22			1800	3.29	281		
Mean		24			2000	3.13	220		
Feb. 23					2400	2.97	171		
0630	2.01	21			Mean		195		
0730	5.02	1,120			Mar. 1				
0900	4.00	600			Mean		132		
1100	3.22	253			Mar. 2				
1400	2.98	174			Mean		98		
					Mar. 3				
					Mean		84		

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-1972.5. Avenal Creek near Avenal, Calif.--Continued									
Mar. 4					Mar. 5				
Mean----------		72			Mean----------		64		

11-2047. Lake Success near Success, Calif.
(Average inflow, in cubic feet per second, for bihourly periods ending at indicated time)

Jan. 18, 1969		Jan. 22	
2300	358	0100	3,010
		0300	3,030
Jan. 19		0500	3,680
0100	557	0700	3,300
0300	3,680	0900	2,770
0500	4,950	1100	2,440
0700	6,500	1300	2,300
0900	5,380	1500	2,040
1100	5,170	1700	1,900
1300	5,360	1900	1,810
1500	5,820	2100	1,570
1700	6,750	2300	1,510
1900	11,100		
2100	12,900	Jan. 23	
2300	10,400	0100	2,010
		0300	1,520
Jan. 20		0500	1,160
0100	6,910	0700	1,300
0300	5,390	0900	1,080
0500	4,110	1100	1,160
0700	3,600	1300	1,090
0900	3,090	1500	1,020
1100	2,550	1700	1,020
1300	2,450	1900	943
1500	2,120	2100	943
1700	1,790	2300	943
1900	1,680		
2100	1,740	Jan. 24	
2300	1,510	0100	1,020
		0300	871
Jan. 21		0500	949
0100	1,640	0700	949
0300	1,810	0900	1,170
0500	2,470	1100	1,410
0700	3,320	1300	1,760
0900	4,320	1500	2,120
1100	1,500	1700	2,970
1300	7,600	1900	3,460
1500	3,910	2100	4,270
1700	4,340	2300	6,400
1900	3,880		
2100	3,340	Jan. 25	
2300	2,720	0100	8,660
		0300	5,020
		0500	8,930

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-2047. Lake Success near Success, Calif.--Continued									
Jan. 25--Continued					Jan. 27--Continued				
0700		11,300			2100		2,840		
0900		15,600			2300		2,300		
1100		21,300							
1300		22,500			Feb. 24				
1500		18,300			0600		1,490		
1700		13,200			1500		2,270		
1900		10,400			1600		2,900		
2100		9,560			1800		5,170		
2300		9,920			2000		10,700		
					2200		14,800		
Jan. 26					2400		17,900		
0100		6,150							
0300		5,960			Feb. 25				
0500		5,030			0200		18,000		
0700		4,690			0400		14,200		
0900		4,710			0600		11,700		
1100		7,060			0800		9,250		
1300		10,500			1000		7,930		
1500		9,220			1200		6,150		
1700		7,130			1400		5,190		
1900		6,160			1600		4,510		
2100		5,420			1800		4,940		
2300		4,660			2000		4,240		
					2200		3,810		
Jan. 27					2400		3,810		
0100		4,550							
0300		4,030			Feb. 26				
0500		4,040			0200		3,530		
0700		2,980			0400		3,240		
0900		3,920			0600		3,530		
1100		2,990			0800		3,390		
1300		3,120			1000		2,950		
1500		2,600			1200		3,000		
1700		2,990			1400		2,860		
1900		2,590			1600		2,660		
					2400		2,550		
11-2099. Kaweah River at Three Rivers, Calif.									
Jan. 17, 1969					Jan. 19				
2400	3.44	232			0200	8.53	6,690		
					0330	8.81	7,530		
Jan. 18					0600	8.20	5,700		
0200	3.44	232			0800	8.06	5,280		
0500	3.50	244			1000	8.38	6,240		
1400	3.44	232			1100	9.34	9,290		
1700	3.65	274			1300	9.59	10,300		
1900	4.20	390			1500	10.58	14,600		
2100	5.35	850			1600	10.60	14,700		
2300	7.00	2,840			1800	11.06	16,900		
2400	7.70	4,250			2000	10.30	13,400		
Mean----------		551			2200	9.15	8,820		

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-2099. Kaweah River at Three Rivers, Calif.--Continued									
Jan. 19--Continued					Jan. 25--Continued				
2400	8.47	6,510			0500	11.65	19,800		
Mean----------		9,460			0700	11.94	21,300		
Jan. 20					0800	12.37	23,600		
0300	7.90	4,800			0900	12.36	23,600		
0600	7.48	3,760			0930	12.49	24,200		
1200	6.89	2,660			1000	12.30	23,200		
2200	6.60	2,240			1200	12.17	22,500		
2400	6.73	2,420			1400	11.35	18,400		
Mean----------		3,260			1600	10.85	15,800		
Jan. 21					1900	10.55	14,500		
0200	7.00	2,840			2200	10.16	12,700		
0400	7.75	4,380			2400	9.80	11,100		
0700	8.74	7,320			Mean----------		17,100		
0830	8.67	7,120			Jan. 26				
0930	8.92	7,860			0400	9.23	8,900		
1200	8.52	6,660			0600	8.97	8,010		
1500	8.82	7,560			0900	10.15	12,700		
1630	9.37	9,400			1000	10.64	14,900		
2000	8.70	7,200			1030	10.60	15,100		
2300	8.17	5,610			1200	10.56	14,500		
2400	8.23	5,790			1400	10.06	12,300		
Mean----------		6,440			1600	9.46	9,740		
Jan. 22					2000	8.78	7,440		
0200	8.67	7,110			2400	8.42	6,360		
0600	7.94	4,920			Mean----------		10,100		
1200	7.57	3,940			Jan. 27				
1800	7.08	2,980			0600	8.11	5,430		
2400	6.73	2,420			1200	7.80	4,500		
Mean----------		4,190			1800	7.64	4,100		
Jan. 23					2400	7.43	3,660		
1200	6.28	1,800			Mean----------		4,760		
2400	6.08	1,560			Jan. 28				
Mean----------		1,900			Mean----------		3,150		
Jan. 24					Jan. 29				
0400	6.11	1,590			Mean----------		2,310		
0600	6.24	1,750			Jan. 30				
0900	6.74	2,440			Mean----------		1,890		
1200	7.10	3,020			Jan. 31				
1500	7.04	2,910			Mean----------		1,600		
1700	7.08	2,980			Feb. 20				
1900	7.38	3,560			Mean----------		1,200		
2200	8.55	6,750			Feb. 21				
2400	9.48	9,820			Mean----------		1,170		
Mean----------		3,230							
Jan. 25									
0200	10.15	12,700							
0400	10.65	14,900							

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-2099. Kaweah River at Three Rivers, Calif.--Continued									
Feb. 22					Feb. 26				
Mean----------		1,220			0200	7.20	3,200		
					0400	7.28	3,360		
Feb. 23					1200	6.89	2,660		
2400	5.89	1,330			2400	6.69	2,370		
Mean----------		1,290			Mean----------		2,800		
Feb. 24					Feb. 27				
0600	5.84	1,270			Mean----------		2,100		
0800	5.92	1,360							
1200	6.77	2,480			Feb. 28				
1700	7.52	3,840			Mean----------		2,200		
1800	9.50	9,900							
1930	9.90	11,600			Mar. 1				
2200	9.92	11,600			Mean----------		2,070		
2230	9.97	11,900							
2400	9.50	9,900			Mar. 2				
Mean----------		4,510			Mean----------		1,760		
Feb. 25					Mar. 3				
0400	8.68	7,140			Mean----------		1,740		
0700	8.15	5,550							
1200	7.72	4,300			Mar. 4				
1800	7.58	3,960			Mean----------		1,540		
2400	7.25	3,300							
Mean----------		5,180			Mar. 5				
					Mean----------		1,360		

11-2109. Lake Kaweah near Lemoncove, Calif.
(Average inflow, in cubic feet per second, for bihourly periods ending at indicated time)

Jan. 18, 1969		Jan. 20--Continued	
2300	800	0900	4,450
		1100	4,600
Jan. 19		1300	3,450
0100	3,440	1500	3,240
0300	9,060	1700	2,240
0500	9,760	1900	3,320
0700	8,900	2100	3,010
0900	7,910	2300	3,320
1100	5,540		
1300	10,700	Jan. 21	
1500	14,100	0100	2,350
1700	19,600	0300	3,710
1900	27,500	0500	5,640
2100	19,700	0700	8,830
2300	15,000	0900	9,610
		1100	9,120
Jan. 20		1300	8,920
0100	13,600	1500	9,190
0300	5,380	1700	9,930
0500	4,450	1900	9,720
0700	4,600		

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-2109. Lake Kaweah near Lemoncove, Calif.--Continued									
Jan. 21--Continued					Jan. 25--Continued				
2100		8,920			1500		24,100		
2300		7,250			1700		21,200		
Jan. 22					1900		18,300		
0100		7,830			2100		18,300		
0300		9,340			2300		14,400		
0500		7,990			Jan. 26				
0700		6,220			0100		13,000		
0900		6,700			0300		12,100		
1100		5,040			0500		10,300		
1300		5,070			0700		10,100		
1500		4,260			0900		11,900		
1700		3,890			1100		20,600		
1900		3,760			1300		19,500		
2100		3,600			1500		15,200		
2300		3,260			1700		10,700		
Jan. 23					1900		9,890		
0100		2,910			2100		9,290		
0300		3,060			2300		7,930		
0500		2,590			Jan. 27				
0700		2,520			0100		7,330		
0900		2,280			0300		7,570		
1100		1,280			0500		6,560		
1300		2,140			0700		6,440		
1500		1,590			0900		5,780		
1700		2,460			1100		5,460		
1900		1,750			1300		5,340		
2100		1,990			1500		5,000		
2300		1,910			1700		5,100		
Jan. 24					1900		4,740		
0100		1,830			2100		4,630		
0300		1,760			2300		4,290		
0500		1,840			Feb. 23				
0700		2,000			2400		1,670		
0900		2,490			Feb. 24				
1100		3,130			0700		1,670		
1300		3,460			1330		2,260		
1500		3,240			1445		4,700		
1700		4,060			1600		7,700		
1900		4,080			1800		10,000		
2100		5,480			2000		16,900		
2300		7,910			2200		19,700		
Jan. 25					2400		20,500		
0100		11,800			Feb. 25				
0300		15,200			0200		17,300		
0500		19,400			0400		13,800		
0700		26,200			0600		11,400		
0900		30,800			0800		9,180		
1100		35,100			1000		7,230		
1300		32,900							

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-2109. Lake Kaweah near Lemoncove, Calif.--Continued									
Feb. 25--Continued					Feb. 26				
1200		6,870			0400		4,670		
1400		6,090			0700		4,180		
1600		5,380			0800		4,820		
1800		5,850			1000		3,640		
2000		5,750			1400		3,550		
2200		5,050			1600		3,330		
2400		4,650			2400		3,400		
11-2200. Big Creek above Pine Flat Reservoir, near Trimmer, Calif.									
Jan. 17, 1969					Jan. 22				
2400	2.07	51			0600	5.31	1,410		
Jan. 18					0700	5.34	1,440		
1400	2.03	47			1200	4.90	1,060		
1700	2.25	70			2400	4.35	700		
1900	2.75	143			Mean----------		1,230		
2000	3.66	388			Jan. 23				
2200	5.32	1,420			1200	3.97	508		
2400	6.64	3,210			2400	3.77	428		
Mean----------		324			Mean----------		536		
Jan. 19					Jan. 24				
0130	7.39	4,720			0600	3,96	504		
0600	6.60	3,140			0800	4.20	620		
0900	7.76	5,650			1300	4.01	525		
1100	7.84	5,850			1500	4.01	525		
1200	7.60	5,250			1800	4.09	565		
1400	8.11	6,630			2000	4.10	570		
1700	7.63	5,320			2100	4.14	590		
1900	7.93	6,090			2300	4.72	934		
2200	6.60	3,140			2400	5.26	1,360		
2400	6.10	2,340			Mean----------		577		
Mean----------		4,770			Jan. 25				
Jan. 20					0200	6.32	2,670		
0700	5.06	1,190			0400	7.44	4,850		
1200	4.81	997			0600	9.04	9,760		
2000	4.41	736			0700	8.94	9,360		
2400	5.44	1,540			0800	10.43	16,400		
Mean----------		1,220			1000	8.65	8,320		
Jan. 21					1200	7.40	4,750		
0200	6.50	2,960			1400	6.78	3,460		
0530	7.43	4,820			1600	6.60	3,140		
0900	6.78	3,460			1630	6.94	3,780		
1100	6.70	3,320			1900	6.41	2,820		
1300	7.41	4,780			2200	6.87	3,640		
1430	8.09	6,570			2400	6.37	2,750		
1800	6.32	2,670			Mean----------		5,300		
1900	6.69	3,300			Jan. 26				
2200	6.00	2,200			0300	6.01	2,210		
2400	6.12	2,370			0600	6.21	2,500		
Mean----------		3,670			0700	6.62	3,180		
					0830	8.10	6,600		

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-2200. Big Creek above Pine Flat Reservoir, near Trimmer, Calif.--Continued									
Jan. 26--Continued					Feb. 23				
1100	7.10	4,100			2400	3.74	416		
1500	5.94	2,120			Mean		367		
1900	5.50	1,600			Feb. 24				
2400	5.20	1,310			0200	3.65	385		
Mean		2,720			0400	3.64	382		
Jan. 27					0600	3.83	452		
0400	5.00	1,140			0800	4.50	790		
1400	4.57	832			1000	5.00	1,140		
2400	4.35	700			1200	5.69	1,810		
Mean		934			1400	6.28	2,610		
Jan. 28					1600	6.62	3,180		
Mean		620			1800	6.94	3,780		
Jan. 29					2000	6.45	2,880		
Mean		452			2200	6.01	2,210		
Jan. 30					2400	5.82	1,960		
Mean		388			Mean		1,730		
Jan. 31					Feb. 25				
Mean		334			0600	5.17	1,280		
Feb. 20					1200	4.85	1,020		
Mean		307			2400	4.42	742		
Feb. 21					Mean		1,130		
Mean		307			Feb. 26				
Feb. 22					0400	4.53	808		
Mean		337			0800	4.32	682		
					1200	4.21	625		
					2400	4.06	550		
					Mean		656		
					Feb. 27				
					Mean		480		
					Feb. 28				
					Mean		553		
11-2205. Sycamore Creek above Pine Flat Reservoir, near Trimmer, Calif.									
Jan. 17, 1969					Jan. 19				
2400	1.13	14			0100	6.98	2,730		
Jan. 18					0200	7.22	2,970		
1500	1.13	14			0300	7.10	2,850		
1730	1.20	19			0500	5.95	1,860		
1800	3.50	426			0630	5.54	1,550		
1830	4.75	1,020			0800	6.70	2,480		
2000	5.20	1,310			0830	7.42	3,170		
2100	5.99	1,890			0900	7.34	3,090		
2200	6.35	2,180			0930	7.41	3,160		
2400	7.35	3,100			1200	6.23	2,080		
Mean		474			1400	7.58	3,330		
					1600	7.91	3,720		
					1900	8.61	4,620		
					2100	6.60	2,390		

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day
11-2205. Sycamore Creek above Pine Flat Reservoir, near Trimmer, Calif.--Continued				
Jan. 19--Continued				
2230	5.52	1,530		
2400	5.35	1,420		
Mean----------		2,800		
Jan. 20				
0300	4.38	799		
1200	3.41	403		
2000	2.96	305		
2100	3.20	354		
2200	4.38	799		
2400	4.81	1,060		
Mean----------		597		
Jan. 21				
0100	6.10	1,980		
0500	7.16	2,910		
0600	7.12	2,870		
0800	6.12	2,000		
1000	5.30	1,380		
1200	6.14	2,010		
1400	5.91	1,830		
1530	6.70	2,480		
1800	5.12	1,250		
2000	5.82	1,760		
2200	5.40	1,450		
2400	5.50	1,520		
Mean----------		1,950		
Jan. 22				
0600	4.21	710		
0700	4.52	882		
1200	3.85	540		
2400	2.94	302		
Mean----------		671		
Jan. 23				
1200	2.45	213		
2400	2.23	173		
Mean----------		225		
Jan. 24				
0800	2.71	260		
1300	2.37	199		
1800	2.70	258		
1900	2.63	245		
2130	3.70	485		
2230	4.75	1,020		
2400	5.65	1,620		
Mean----------		330		
Jan. 25				
0100	5.84	1,770		
0500	7.60	3,350		
Jan. 25--Continued				
0600	8.25	4,130		
0700	13.83	14,600		
0800	10.60	9,060		
0900	8.70	6,020		
1100	6.50	2,800		
1300	5.38	1,770		
1400	7.07	3,460		
1500	6.00	2,330		
1530	6.15	2,460		
1800	5.00	1,470		
1830	4.80	1,310		
1930	5.05	1,510		
2030	4.83	1,330		
2100	5.09	1,540		
2400	4.39	1,060		
Mean----------		3,230		
Jan. 26				
0500	4.10	905		
0600	4.24	982		
0700	7.00	3,360		
0900	6.20	2,510		
1100	5.00	1,470		
1600	3.90	795		
2400	3.30	515		
Mean----------		1,200		
Jan. 27				
1000	2.84	367		
1700	2.70	330		
2400	2.50	288		
Mean----------		376		
Jan. 28				
Mean----------		274		
Jan. 29				
Mean----------		218		
Jan. 30				
Mean----------		184		
Jan. 31				
Mean----------		150		
Feb. 19				
Mean----------		281		
Feb. 20				
Mean----------		204		

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-2205. Sycamore Creek above Pine Flat Reservoir, near Trimmer, Calif.--Continued									
Feb. 21					Feb. 25--Continued				
2400	1.95	184			1200	4.04	872		
Mean		197			1900	3.83	756		
					2400	3.46	574		
Feb. 22					Mean		1,220		
0500	2.19	226							
0600	2.39	266			Feb. 26				
0900	2.17	223			0100	3.43	562		
2400	1.98	190			0300	3.78	729		
Mean		212			0400	3.78	729		
					0500	4.36	1,050		
Feb. 23					0800	3.57	622		
0500	1.95	184			1200	3.22	487		
0700	2.05	202			2400	2.86	373		
0900	2.75	342			Mean		557		
1100	3.80	740							
1600	2.77	348			Feb. 27				
1800	2.61	310			1200	2.56	300		
2000	2.72	335			2400	2.41	270		
2200	3.19	476			Mean		311		
2400	2.88	379							
Mean		360			Feb. 28				
					Mean		402		
Feb. 24									
0400	2.57	302			Mar. 1				
0600	2.67	323			Mean		446		
0700	3.53	604							
0800	4.37	1,050			Mar. 2				
1000	5.44	1,830			Mean		278		
1100	6.34	2,640							
1300	7.20	3,640			Mar. 3				
1500	8.51	5,720			Mean		285		
1800	8.28	5,350							
2000	7.58	4,230			Mar. 4				
2200	6.70	3,000			Mean		228		
2400	6.51	2,810							
Mean		2,640			Mar. 5				
					Mean		206		
Feb. 25									
0400	5.78	2,130							
0600	4.90	1,390							

11-2210. Pine Flat Reservoir near Piedra, Calif.
(Average inflow, in cubic feet per second, for bihourly periods ending at indicated time)

Jan. 18, 1969		Jan. 18--Continued	
0300	1,160	1500	1,860
0500	1,160	1700	2,100
0700	928	1900	2,780
0900	928	2100	5,060
1100	1,390	2300	11,300
1300	1,630		

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-2210. Pine Flat Reservoir near Piedra, Calif.--Continued									
Jan. 19					Jan. 23				
0100		16,500			0100		7,050		
0300		19,400			0300		5,440		
0500		17,600			0500		6,260		
0700		17,400			0700		5,450		
0900		20,300			0900		5,460		
1100		25,400			1100		5,740		
1300		33,000			1300		4,380		
1500		40,700			1500		4,930		
1700		40,300			1700		4,930		
1900		39,600			1900		4,660		
2100		30,900			2100		5,200		
2300		23,600			2300		4,930		
Jan. 20					Jan. 24				
0100		15,200			0100		4,650		
0300		14,500			0300		4,930		
0500		12,000			0500		4,380		
0700		10,300			0700		4,930		
0900		9,580			0900		5,480		
1100		9,080			1100		4,940		
1300		9,850			1300		6,310		
1500		5,830			1500		5,780		
1700		8,360			1700		5,500		
1900		6,600			1900		8,250		
2100		7,120			2100		6,880		
2300		8,140			2300		10,500		
Jan. 21					Jan. 25				
0100		10,900			0100		12,700		
0300		16,600			0300		23,800		
0500		30,000			0500		36,000		
0700		29,000			0700		59,700		
0900		26,500			0900		70,600		
1100		25,100			1100		50,800		
1300		24,100			1300		40,500		
1500		27,400			1500		39,000		
1700		26,200			1700		40,300		
1900		20,800			1900		29,800		
2100		19,800			2100		34,600		
2300		17,200			2300		30,900		
Jan. 22					Jan. 26				
0100		15,700			0100		27,800		
0300		15,200			0300		24,400		
0500		12,800			0500		25,900		
0700		11,800			0700		20,700		
0900		10,200			0900		39,700		
1100		10,400			1100		39,300		
1300		8,600			1300		30,500		
1500		8,340			1500		24,900		
1700		8,080			1700		20,800		
1900		7,560			1900		19,000		
2100		7,570			2100		17,000		
2300		6,500			2300		14,900		

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-2210. Pine Flat Reservoir near Piedra, Calif.--Continued									
Jan. 27					Feb. 25				
0100		14,000			2400		5,870		
0300		12,500							
0500		12,200			Feb. 26				
0700		11,900			0200		7,010		
0900		11,300			0700		7,120		
1100		9,620			1000		5,360		
1300		10,000			1400		5,280		
1500		9,520			2400		5,260		
1700		8,770							
1900		9,080			Feb. 27				
2100		8,790			0700		4,240		
2300		8,490			1000		4,350		
					1400		3,980		
Jan. 28					2400		4,220		
0100		7,450							
0300		7,960			Feb. 28				
0500		7,350			0700		3,840		
0700		6,740			1000		3,730		
0900		7,360			1400		4,310		
1100		6,750			1600		6,510		
1300		7,380			2000		5,230		
1500		8,000			2400		5,150		
1700		7,580							
1900		6,850							
2100		6,240							
2300		6,550							
11-2217. Mill Creek near Piedra, Calif.									
Jan. 17, 1969					Jan. 20				
2400	2.75	41			0100	6.23	4,160		
					0200	6.50	4,620		
Jan. 18					0600	5.43	2,880		
1400	2.73	38			1200	4.83	2,060		
1800	3.02	97			2000	4.34	1,520		
2000	3.57	266			2200	4.43	1,620		
2200	5.00	1,250			2400	4.88	2,120		
2400	5.90	2,280			Mean----------		2,500		
Mean----------		258							
					Jan. 21				
Jan. 19					0300	6.30	4,280		
0300	7.41	4,920			0600	6.86	5,280		
0600	6.40	3,040			1200	6.15	4,030		
0900	5.85	2,210			1600	6.81	5,170		
1200	6.90	3,940			1800	6.78	5,120		
1400	9.20	9,700			1900	6.96	5,450		
1500	9.65	10,100			2200	6.37	4,400		
1800	9.08	9,140			2400	6.36	4,380		
2100	8.20	7,830			Mean----------		4,560		
2400	6.60	4,800							
Mean----------		5,690							

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-2217. Mill Creek near Piedra, Calif.--Continued									
Jan. 22					Jan. 29				
0900	4.34	1,520			Mean----------		672		
1300	4.60	1,790			Jan. 30				
2400	3.90	1,080			Mean----------		520		
Mean----------		2,040			Jan. 31				
Jan. 23					Mean----------		434		
1200	3.40	664			Feb. 20				
2400	3.26	568			Mean----------		490		
Mean----------		744			Feb. 21				
Jan. 24					Mean----------		565		
0900	3.24	556			Feb. 22				
1200	3.33	615			Mean----------		535		
1800	3.90	1,620			Feb. 23				
2100	4.16	2,130			2400	3.36	736		
2400	5.25	4,920			Mean----------		800		
Mean----------		1,240			Feb. 24				
Jan. 25					0600	3.31	656		
0200	5.89	6,380			0900	3.55	1,100		
0400	6.42	7,190			1100	4.36	2,650		
0600	8.32	9,450			1300	5.14	4,610		
0730	9.24	10,300			1500	6.62	8,040		
0800	9.22	10,300			1700	7.26	9,120		
1000	8.27	9,400			1900	7.57	9,520		
1200	7.13	8,180			2100	7.50	9,450		
1400	6.50	7,300			2300	7.25	9,200		
1530	7.34	8,470			2400	7.27	9,220		
1700	7.10	8,140			Mean----------		4,710		
1900	6.24	6,940			Feb. 25				
2100	5.59	5,780			0200	6.94	8,880		
2400	4.97	4,140			0500	6.01	7,660		
Mean----------		7,550			0900	4.25	3,590		
Jan. 26					1000	4.25	3,590		
0400	4.56	3,100			1800	4.15	3,290		
0700	4.50	2,960			2400	3.87	2,480		
0930	5.39	5,350			Mean----------		4,740		
1030	5.37	5,290			Feb. 26				
1600	4.57	3,130			0100	3.84	2,400		
2400	4.25	2,420			0600	3.95	2,700		
Mean----------		3,520			1000	3.80	2,300		
Jan. 27					1200	3.62	1,880		
0600	4.00	1,950			2400	3.31	1,260		
1200	3.84	1,670			Mean----------		2,010		
2400	3.52	1,150							
Mean----------		1,700							
Jan. 28									
Mean----------		976							

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-2217. Mill Creek near Piedra, Calif.--Continued									
Feb. 27					Mar. 2				
0100	3.30	1,240			Mean----------		709		
2400	3.07	898			Mar. 3				
Mean----------		1,080			Mean----------		646		
Feb. 28					Mar. 4				
Mean----------		912			Mean----------		586		
Mar. 1					Mar. 5				
Mean----------		1,100			Mean----------		495		
11-2533.1. Cantua Creek near Cantua Creek, Calif.									
Jan. 18, 1969					Jan. 22--Continued				
2400	2.46	36			1300	2.27	26		
Jan. 19					1900	2.14	20		
0300	2.43	34			2400	2.09	17		
0430	2.62	47			Mean----------		33		
0730	2.54	41			Jan. 23				
0900	2.92	83			1530	1.92	11		
1000	2.86	74			1730	2.12	19		
1100	3.00	95			1800	2.80	65		
1230	3.95	425			2100	2.46	36		
1430	3.30	170			2400	2.15	20		
2400	2.72	56			Mean----------		21		
Mean----------		108			Jan. 24				
Jan. 20					0400	2.02	14		
0800	2.32	28			1200	2.06	16		
1200	2.40	32			1400	2.80	65		
1500	2.67	51			1530	2.75	60		
1930	3.00	95			2400	2.72	56		
2100	3.25	155			2400	3.14	125		
2200	3.63	297			Mean----------		36		
2300	4.76	716			Jan. 25				
2400	4.75	712			0100	3.17	132		
Mean----------		106			0200	3.38	198		
Jan. 21					0300	3.60	285		
0100	3.96	429			0400	4.20	520		
0300	3.51	249			0500	5.70	975		
0700	3.79	361			0530	6.04	1,060		
0930	3.78	357			0900	5.38	895		
1400	3.24	152			1000	3.96	446		
1500	3.24	152			1200	3.39	254		
2200	2.67	51			1700	3.21	200		
2400	2.74	58			1900	3.26	215		
Mean----------		228			2000	3.57	310		
Jan. 22					2200	3.30	227		
0100	2.90	80			2400	3.26	215		
0300	2.68	52			Mean----------		407		
0700	2.47	36							

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-2533.1 Cantua Creek near Cantua Creek, Calif.--Continued									
Jan. 26					Feb. 24				
0200	3.28	221			0300	2.25	25		
0400	3.34	239			0400	2.40	34		
0500	4.42	607			0500	3.58	313		
0600	4.53	646			0600	3.80	390		
0730	4.53	646			0700	3.84	404		
0830	3.50	287			0700	3.98	453		
1100	3.11	170			0830	4.00	460		
1500	3.10	167			0900	5.41	988		
1930	3.06	155			0930	5.19	900		
2400	2.85	100			1100	5.81	1,170		
Mean		247			1200	6.07	1,280		
Jan. 27					1300	6.60	1,550		
1200	2.55	47			1400	5.00	840		
2400	2.45	38			1600	4.16	538		
Mean		58			1800	4.23	560		
Jan. 28					1900	3.68	395		
1200	2.32	29			2200	3.33	308		
2400	2.24	24			2400	3.24	287		
Mean		30			Mean		522		
Jan. 29					Feb. 25				
Mean		22			0600	3.12	260		
Jan. 30					1200	2.73	178		
Mean		18			2400	2.36	114		
Jan. 31					Mean		196		
Mean		14			Feb. 26				
Feb. 20					0300	2.40	120		
Mean		20			1200	2.30	104		
Feb. 21					2400	2.02	93		
Mean		18			Mean		106		
Feb. 22					Feb. 27				
2400	2.08	17			1800	1.84	70		
Mean		17			2400	1.87	75		
Feb. 23					Mean		79		
0600	2.08	17			Feb. 28				
0800	2.22	24			0200	1.87	75		
0800	2.64	58			0700	2.10	104		
0900	2.78	83			0800	2.18	115		
1100	2.80	87			0900	2.40	150		
1200	2.53	45			1100	2.31	136		
1400	2.41	35			1330	2.42	154		
2100	2.32	29			1800	2.35	141		
2400	2.28	26			2200	2.13	109		
Mean		35			2400	2.12	107		
					Mean		119		
					Mar. 1				
					Mean		84		

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-2533.1. Cantua Creek near Cantua Creek, Calif.--Continued									
Mar. 2					Mar. 4				
Mean		63			Mean		53		
Mar. 3					Mar. 5				
Mean		59			Mean		51		
11-2590. Chowchilla River at Buchanan damsite, near Raymond, Calif.									
Jan. 17, 1969					Jan. 21--Continued				
2400	3.13	134			1200	10.09	6,220		
Jan. 18					1400	10.53	7,060		
0600	3.08	126			1600	10.78	7,560		
1200	3.07	125			1800	11.19	8,480		
1600	3.18	141			2000	10.41	6,820		
1800	3.29	158			2200	9.47	5,130		
2000	3.55	209			2400	8.81	4,090		
2200	4.37	434			Mean		6,280		
2400	5.24	780			Jan. 22				
Mean		191			0200	8.16	3,210		
Jan. 19					0400	7.69	2,670		
0200	9.21	4,720			0600	7.36	2,320		
0400	10.14	6,310			0800	7.17	2,130		
0600	9.57	5,290			1000	7.21	2,170		
0800	9.84	5,770			1200	7.04	2,010		
1000	11.79	10,100			1600	6.59	1,620		
1200	12.71	12,900			2000	6.19	1,320		
1400	11.86	10,300			2400	5.84	1,090		
1600	10.61	7,220			Mean		2,050		
1800	9.43	5,070			Jan. 23				
2000	8.75	4,010			0600	5.50	910		
2200	8.21	3,270			1200	5.26	790		
2400	7.80	2,790			1800	5.09	710		
Mean		6,400			2400	4.91	634		
Jan. 20					Mean		817		
0400	7.17	2,130			Jan. 24				
0800	6.52	1,570			0600	5.00	670		
1200	6.11	1,270			1200	5.06	697		
1600	5.74	1,030			1600	5.13	728		
1800	5.62	970			1800	5.12	724		
2000	5.61	965			2000	5.17	746		
2200	5.78	1,060			2400	5.44	880		
2400	6.51	1,560			Mean		710		
Mean		1,500			Jan. 25				
Jan. 21					0200	5.97	1,170		
0200	8.32	3,410			0400	6.71	1,720		
0400	9.91	6,000			0600	8.49	3,650		
0600	10.70	7,400			0800	10.55	7,100		
0800	10.78	7,560			1000	11.54	9,350		
					1200	11.96	10,600		

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-2590. Chowchilla River at Buchanan damsite, near Raymond, Calif.--Continued									
Jan. 25--Continued					Jan. 30				
1400	12.36	11,800			0600	5.26	790		
1600	11.56	9,400			1200	5.23	775		
1800	10.10	6,240			1800	5.22	770		
2000	9.22	4,730			2400	5.15	738		
2200	8.60	3,800			Mean----------		777		
2400	8.20	3,260							
Mean----------		5,970			Jan. 31				
					0400	5.10	715		
Jan. 26					0800	5.01	674		
0200	8.01	3,030			1200	4.95	650		
0400	8.03	3,060			1800	4.87	618		
0600	7.92	2,920			2400	4.83	602		
0800	8.23	3,300			Mean----------		659		
1000	8.63	3,840							
1200	9.71	5,540			Feb. 19				
1400	9.61	5,360			2400	6.34	1,430		
1600	8.69	3,930							
1800	8.03	3,060			Feb. 20				
2000	7.61	2,580			0600	6.01	1,200		
2200	7.32	2,280			1200	5.73	1,030		
2400	7.09	2,050			2000	5.60	960		
Mean----------		3,460			2200	5.65	985		
					2400	5.78	1,060		
Jan. 27					Mean----------		1,100		
0200	6.84	1,830							
0600	6.56	1,600			Feb. 21				
1200	6.36	1,440			0600	5.80	1,070		
1600	6.31	1,410			1200	5.58	950		
2000	6.24	1,360			1800	5.41	865		
2400	6.02	1,200			2400	5.36	840		
Mean----------		1,510			Mean----------		955		
Jan. 28					Feb. 22				
0600	5.83	1,090			1200	5.43	875		
0800	5.93	1,150			1800	5.36	840		
1200	6.32	1,410			2400	5.24	780		
1400	6.43	1,490			Mean----------		849		
1600	6.72	1,730							
1800	6.86	1,840			Feb. 23				
2000	6.83	1,820			0400	5.25	785		
2200	6.69	1,700			0600	5.35	835		
2400	6.46	1,520			0800	5.72	1,020		
Mean----------		1,430			1000	6.36	1,440		
					1200	7.08	2,040		
Jan. 29					1400	7.23	2,190		
0400	6.03	1,210			1600	7.33	2,290		
0800	5.77	1,050			1800	7.26	2,220		
1200	5.56	940			2000	7.33	2,290		
1800	5.39	855			2200	7.62	2,590		
2400	5.33	825			2400	8.01	3,030		
Mean----------		1,010			Mean----------		1,200		

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-2590. Chowchilla River at Buchanan damsite, near Raymond, Calif.--Continued									
Feb. 24					Feb. 28				
0200	7.80	2,790			0800	6.39	1,460		
0400	7.50	2,460			1400	6.43	1,490		
0600	7.21	2,170			1600	6.60	1,630		
0800	7.22	2,180			1800	6.83	1,820		
1000	8.44	3,580			2000	7.16	2,120		
1200	9.73	5,570			2400	7.36	2,320		
1400	11.31	8,780			Mean----------		1,630		
1600	12.23	11,400							
1800	12.77	13,100			Mar. 1				
2000	12.92	13,700			0400	7.48	2,440		
2200	12.48	12,100			0800	7.70	2,680		
2400	11.40	9,000			1000	7.94	2,950		
Mean----------		6,990			1200	7.87	2,870		
					1600	7.29	2,250		
Feb. 25					1800	7.10	2,060		
0200	10.36	6,720			2400	7.01	1,980		
0400	9.74	5,590			Mean----------		2,410		
0600	9.35	4,940							
0800	9.03	4,430			Mar. 2				
1000	8.66	3,880			0600	6.67	1,690		
1200	8.38	3,490			1200	6.43	1,490		
1400	8.09	3,130			2000	6.23	1,350		
1600	7.87	2,870			2400	6.33	1,420		
1800	7.82	2,810			Mean----------		1,560		
2000	7.91	2,910							
2200	8.17	3,220			Mar. 3				
2400	8.24	3,310			0400	6.52	1,570		
Mean----------		4,180			0600	6.77	1,770		
					0800	6.78	1,770		
Feb. 26					1000	6.59	1,620		
0200	8.45	3,590			1200	6.48	1,530		
0400	9.10	4,540			1800	6.23	1,350		
0600	9.79	5,680			2400	6.12	1,270		
0800	9.44	5,080			Mean----------		1,490		
1000	8.77	4,040							
1200	8.27	3,340			Mar. 4				
1400	7.92	2,920			0600	6.07	1,240		
1600	7.67	2,650			1200	5.92	1,140		
1800	7.53	2,490			1800	5.78	1,060		
2400	7.44	2,400			2400	5.69	1,000		
Mean----------		3,510			Mean----------		1,140		
Feb. 27					Mar. 5				
0400	7.19	2,150			0400	5.72	1,020		
0800	6.96	1,930			1200	5.60	960		
1200	6.81	1,800			2400	5.45	885		
1800	6.61	1,640			Mean----------		960		
2400	6.49	1,540							
Mean----------		1,860							

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-2745. Orestimba Creek near Newman, Calif.									
Jan. 19, 1969					Jan. 25				
0300		0			0100	5.10	520		
0800	5.80	1,320			0200	5.03	471		
1000	6.10	1,820			0300	6.60	1,990		
1200	6.69	3,020			0400	8.10	4,480		
1400	6.42	2,400			0500	8.40	5,080		
1600	6.02	1,580			0600	8.20	4,680		
1800	5.76	1,170			0700	7.60	3,550		
2000	5.58	932			1000	7.00	2,550		
2400	5.63	992			1300	6.50	1,860		
Mean----------		1,220			1600	6.08	1,380		
					1900	5.77	1,050		
Jan. 20					2400	5.61	899		
0400	5.60	956			Mean----------		2,020		
0800	5.46	810							
1200	5.28	640			Jan. 26				
1600	5.10	524			0200	5.60	890		
2200	4.99	444			0500	5.75	1,030		
2400	5.13	541			0600	6.70	2,120		
Mean----------		689			0700	7.55	3,460		
					0900	6.90	2,400		
Jan. 21					1100	6.47	1,820		
0200	5.37	709			1600	5.95	1,240		
0800	5.29	653			2200	5.56	858		
1000	5.44	762			2400	5.45	770		
1300	5.65	935			Mean----------		1,440		
1800	5.47	786							
2400	5.32	674			Jan. 27				
Mean----------		749			0600	5.17	569		
					1200	4.98	438		
Jan. 22					1800	4.83	348		
0400	5.38	716			2400	4.72	282		
1200	5.08	506			Mean----------		470		
1600	4.93	408							
2400	4.71	276			Jan. 28				
Mean----------		511			0700	4.65	245		
					1200	4.68	260		
Jan. 23					2400	4.63	235		
0600	4.58	211			Mean----------		254		
1200	4.49	171							
1800	4.38	128			Jan. 29				
2400	4.33	110			1100	4.48	167		
Mean----------		176			2400	4.67	155		
					Mean----------		179		
Jan. 24									
0500	4.32	107			Jan. 30				
1200	4.36	121			0900	4.67	155		
2000	4.31	104			1400	5.46	147		
2200	4.36	121			2400	5.42	143		
2300	4.55	198			Mean----------		150		
2400	5.05	485							
Mean----------		124			Jan. 31				
					Mean----------		139		

TABLE 5.--*Flood-hydrograph and suspended-sediment data for selected gaging stations*--Continued

Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment		Time (hours)	Gage height (ft)	Discharge (cfs)	Suspended sediment	
			Concentration (mg/l)	Tons per day				Concentration (mg/l)	Tons per day
11-2745. Orestimba Creek near Newman, Calif.--Continued									
Feb. 20					Feb. 25--Continued				
Mean		134			1500	5.81	1,050		
Feb. 21					2000	5.67	917		
2400	4.84	121			2200	5.72	962		
Mean		122			2400	5.88	1,110		
Feb. 22					Mean		1,060		
0400	4.98	175			Feb. 26				
1100	4.99	180			0200	5.99	1,210		
2400	4.90	143			0800	5.63	882		
Mean		164			1200	5.47	746		
Feb. 23					1800	5.29	590		
0300	4.90	143			2400	5.14	438		
0500	5.06	216			Mean		790		
0600	5.18	282			Feb. 27				
0800	5.09	230			0600	5.03	336		
0900	5.17	276			1200	4.94	265		
1100	5.43	444			2400	4.82	206		
1500	5.31	366			Mean		288		
1800	5.24	318			Feb. 28				
2400	5.22	306			1100	4.93	260		
Mean		293			1400	5.10	390		
Feb. 24					1600	5.56	826		
0300	5.23	312			1800	5.72	953		
0500	5.35	396			2000	5.60	858		
0600	5.65	625			2300	5.80	1,040		
0700	5.83	778			2400	5.74	980		
0800	6.25	1,280			Mean		508		
0900	6.75	1,920			Mar. 1				
1000	7.17	2,540			0600	5.57	834		
1300	6.70	1,860			1200	5.33	632		
1400	6.90	2,130			1800	5.15	444		
1600	7.33	2,810			2400	5.04	336		
1700	7.08	2,460			Mean		642		
1800	6.88	2,190			Mar. 2				
2000	6.61	1,850			0600	4.94	265		
2200	6.38	1,610			1200	4.86	225		
2400	6.27	1,490			2400	4.72	159		
Mean		1,530			Mean		231		
Feb. 25					Mar. 3				
0300	6.03	1,250			1200	4.62	121		
0600	5.86	1,090			2400	4.52	88		
0900	5.73	971			Mean		122		
1200	5.67	917							

TABLE 6.--*Summary of flood stages and discharges*

Maximum floods: Each station listed in this table has two to four entries under maximum floods; the first two pertain to the floods covered by this report; the third pertains to the previous maximum known flood during the period of record; and the fourth pertains to the maximum flood known outside the period of record.

Station number	Stream and place of determination	Drainage area (sq mi)	Period of record	Maximum floods			
				Date	Gage height (ft)	Discharge	
						Cfs	Recurrence interval (years)
PART 10. THE GREAT BASIN							
	Salton Sea basin						
2560	Whitewater River at White Water	57.4	1948-69	Jan. 25, 1969	10.30	16,200	a2.0
				Feb. 25, 1969	12.56	13,500	a1.6
				Nov. 22, 1965	13.60	24,000	a2.9
				Mar. 2, 1938		b42,000	a5.1
2564	San Gorgonio River near White Water	154	1966-69	Jan. 25, 1969	6.0	7,250	16
				Feb. 25, 1969	3.84	1,670	2
				Dec. 6, 1966	3.35	1,130	
				Nov. 23, 1965	6.10	4,500	10
2565	Snow Creek near White Water	10.8	1921-31 1959-69	Jan. 25, 1969	9.11	13,000	a5.8
				Feb. 25, 1969	7.87	1,770	41
				Nov. 22, 1965	12.1	4,200	a1.9
2576	Mission Creek near Desert Hot Springs	35.7	1967-69	Jan. 26, 1969	6.4	1,660	12
				Feb. 25, 1969	3.46	300	2
				July 28, 1968	3.04	545	4
2578	Long Creek near Desert Hot Springs	19.4	1963-69	Jan. 25, 1969	1.10	19	
				Feb. 25, 1969	(c)	8.3	
				Aug. 7, 1963	8.0	9,270	a2.6
2580	Tahquitz Creek near Palm Springs	16.8	1947-69	Jan. 25, 1969	10.32	2,900	46
				Feb. 25, 1969	5.74	530	7
				Nov. 22, 1965	10.34	2,900	46
2581	Palm Canyon Creek tributary near Anza	0.47	1961-69	Jan. 25, 1969	4.92	4.1	
				Feb. 25, 1969	4.64	.5	
				Aug. 30, 1967	6.23	28	
2585	Palm Canyon Creek near Palm Springs	93.3	1930-42 1947-69	Jan. 25, 1969	5.58	1,490	5
				Feb. 25, 1969	4.05	520	2
				Feb. 6, 1937	5.80	3,850	13
2590	Andreas Creek near Palm Springs	8.61	1948-69	Jan. 25, 1969	3.77	280	6
				Feb. 25, 1969	3.30	170	4
				Aug. 31, 1954	7.11	1,960	a1.1
2592	Deep Creek near Palm Desert	30.6	1962-69	Jan. 25, 1969	4.02	430	3
				Feb. 25, 1969	3.59	246	2
				Nov. 23, 1965	5.15	1,300	10

See footnotes at end of table.

TABLE 6.--*Summary of flood stages and discharges*--Continued

Station number	Stream and place of determination	Drainage area (sq mi)	Period of record	Maximum floods			
				Date	Gage height (ft)	Discharge	
						Cfs	Recurrence interval (years)
PART 10. THE GREAT BASIN--Continued							
	Salton Sea basin--Continued						
2593	Whitewater River at Indio	1,073	1966-69	Jan. 26, 1969	14.44	13,000	
				Feb. 25, 1969	11.13	5,250	
				Dec. 7, 1966	11.36	4,960	
				Nov. 22, 1965	15.3	14,100	
	Emerson Lake basin						
2602	Pipes Creek near Yucca Valley	15.1	1958-69	Jan. 25, 1969	2.80	6.0	
				Feb. 25, 1969	3.84	252	
				Dec. 29, 1965	3.52	350	
	Lucerne Lake basin						
2604	Cushenbury Creek near Lucerne Valley	6.36	1957-69	Jan. 25, 1969	3.75	159	
				Feb. 25, 1969	4.98	360	
				Nov. 23, 1965	2.27	180	
				Dec. 29, 1965	d2.92		
	Mojave River basin						
2605	Deep Creek near Hesperia	136	1904-22	Jan. 25, 1969	12.83	23,000	a1.3
			1929-69	Feb. 25, 1969	10.75	17,600	50
				Mar. 2, 1938		46,600	a2.8
2610	West Fork Mojave River near Hesperia	74.6	1904-22	Jan. 25, 1969	12.85	13,200	a1.3
			1929-69	Feb. 25, 1969	17.75	20,000	a1.9
				Mar. 2, 1938		26,100	a2.5
2615	Mojave River at lower narrows, near Victorville	514	1899-1906	Jan. 25, 1969	13.50	33,800	32
			1930-69	Feb. 25, 1969	9.80	34,500	34
				Mar. 2, 1938	20.7	70,600	a1.4
2618	Beacon Creek at Helendale	0.72	1958-69	Jan. 25, 1969	11.60	8.7	
				Feb. 25, 1969	11.28	5.6	
				Aug. 7, 1968	15.84	360	
2625	Mojave River at Barstow	1,290	1930-69	Jan. 25, 1969	6.75	29,000	
				Feb. 25, 1969	6.80	30,000	
				Mar. 3, 1938	8.60	64,300	
2626	Boom Creek near Barstow	0.24	1958-69	Jan. 25, 1969		0	
				Feb. 25, 1969		0	
				Sept. 1, 1960	14.23	125	

See footnotes at end of table.

TABLE 6.--*Summary of flood stages and discharges*--Continued

Station number	Stream and place of determination	Drainage area (sq mi)	Period of record	Maximum floods			
				Date	Gage height (ft)	Discharge	
						Cfs	Recurrence interval (years)
PART 10. THE GREAT BASIN--Continued							
	Mojave River basin--Continued						
2630	Mojave River at Afton	2,120	1929-32 1952-69	Jan. 26, 1969 Feb. 25, 1969 Dec. 31, 1965	10.40 10.0 7.92	18,000 16,400 4,150	
	Antelope Valley						
2635	Big Rock Creek near Valyermo	22.9	1923-69	Jan. 25, 1969 Feb. 25, 1969 Mar. 2, 1938	7.7 6.25	4,760 2,850 8,300	a1.2 34 a2.1
2639	Buckhorn Creek near Valyermo	0.48	1960-69	Jan. 25, 1969 Feb. 25, 1969 Nov. 22, 1965	5.68 4.19 4.73	169 86 120	
2640	Little Rock Creek near Little Rock	49.0	1930-69	Jan. 25, 1969 Feb. 25, 1969 Mar. 2, 1938		6,080 4,520 e17,000	40 28 a2.3
2645.2	Amargosa Creek tributary near Palmdale	0.048	1958-69	Jan. 25, 1969 Feb. 25, 1969 Nov. 22, 1965	11.47 11.95 11.31	11 17 8.2	
2645.3	Pine Creek near Palmdale	0.25	1958-69	Jan. 25, 1969 Feb. 25, 1969 Feb. 10, 1962	14.97 15.33 14.88	60 69 58	
2645.6	Spencer Canyon Creek near Fairmont	3.60	1958-69	Jan. 25, 1969 Feb. 25, 1969 Feb. 11, 1962	10.52 12.80 11.90	66 326 215	
PART 11. PACIFIC SLOPE BASINS IN CALIFORNIA							
	San Dieguito River basin						
0255	Santa Ysabel Creek near Ramona	112	1912-23 1943-69	Jan. 25, 1969 Feb. 25, 1969 Jan. 27, 1916	11.55 9.78 b14.0	6,180 4,280 28,400	9 6 a1.5
0258	Clevenger Creek tributary near Ramona	0.45	1961-69	Jan. 25, 1969 Feb. 25, 1969 Nov. 23, 1965	4.94 4.83 7.10	12 8.6 47	

See footnotes at end of table.

TABLE 6.--*Summary of flood stages and discharges*--Continued

Station number	Stream and place of determination	Drainage area (sq mi)	Period of record	Maximum floods			
				Date	Gage height (ft)	Discharge	
						Cfs	Recurrence interval (years)
PART 11. PACIFIC SLOPE BASINS IN CALIFORNIA--Continued							
	San Dieguito River basin--Continued						
0260	Santa Ysabel Creek near San Pasqual	128	1905-12	Jan. 25, 1969	12.19	7,120	10
			1947-55	Feb. 25, 1969	10.39	4,450	6
			1956-69	Mar. 24, 1906	b6.3	f8,000	12
0270	Guejito Creek near San Pasqual	22.5	1946-69	Jan. 25, 1969	6.10	3,100	21
				Feb. 25, 1969	5.95	1,800	11
				Dec. 6, 1966	6.78	2,920	20
0285	Santa Maria Creek near Ramona	57.6	1912-20	Jan. 25, 1969	4.64	1,250	4
			1946-69	Feb. 25, 1969	4.86	1,410	5
				Jan. 27, 1916	14.1	7,140	32
0298	Lake Hodges tributary near Escondido	0.18	1961-69	Jan. 25, 1969	6.86	20	
				Feb. 25, 1969	6.81	19	
				Dec. 18, 1967	7.14	28	
	San Luis Rey River basin						
0315	Agua Caliente Creek near Warner Springs	19.0	1961-69	Jan. 25, 1969	5.90	490	
				Feb. 25, 1969	6.40	570	
				Dec. 6, 1966	5.18	1,200	
0321	Agua Caliente Creek tributary near Warner Springs	0.050	1961-69	Jan. 25, 1969	5.65	.7	
				Feb. 25, 1969		0	
				Aug. 30, 1967	6.95	13	
0330	West Fork San Luis Rey River near Warner Springs	25.5	1913-15	Jan. 25, 1969	10.12	3,900	19
			1956-69	Feb. 25, 1969	9.50	3,600	17
				Dec. 6, 1966	11.87	4,200	21
0353	Wigham Creek near Lake Henshaw	1.40	1965-69	Jan. 25, 1969	6.32	81	
				Feb. 25, 1969	7.50	142	
				Dec. 6, 1966	7.84	161	
0377	Pauma Creek near Pauma Valley	11.0	1964-69	Jan. 25, 1969	7.26	1,350	
				Feb. 25, 1969	7.41	1,450	
				Dec. 6, 1966	8.60	2,100	
0391	San Luis Rey River tributary near Pala	1.01	1961-69	Jan. 25, 1969	15.81	8.4	
				Feb. 25, 1969	16.09	12	
				Nov. 22, 1965	16.77	25	
0400	San Luis Rey River at Monserate Narrows, near Pala	373	1935-41	Jan. 25, 1969	6.62	2,500	
			1946-69	Feb. 25, 1969	7.26	3,200	
				Dec. 6, 1966	6.70	7,000	
				Feb. 7, 1937	b8.7	(c)	

See footnotes at end of table.

TABLE 6.--*Summary of flood stages and discharges*--Continued

Station number	Stream and place of determination	Drainage area (sq mi)	Period of record	Maximum floods			
				Date	Gage height (ft)	Discharge	
						Cfs	Recurrence interval (years)
PART 11. PACIFIC SLOPE BASINS IN CALIFORNIA--Continued							
	San Luis Rey River basin--Continued						
0404	San Luis Rey River tributary No. 2 near Fallbrook	0.36	1961-69	Jan. 25, 1969	3.09	34	
				Feb. 25, 1969	4.41	62	
				Dec. 6, 1966	3.84	50	
0410	San Luis Rey River near Bonsall	512	1916-18	Jan. 25, 1969	11.86	g4,970	4
			1929-69	Feb. 25, 1969	11.42	g6,640	5
				Mar. 3, 1938	16.04	g18,100	17
				February 1891		128,000	a3.5
0420	San Luis Rey River at Oceanside	557	1912-16	Jan. 25, 1969	13.2	3,010	2
			1929-42	Feb. 25, 1969	12.79	5,000	3
			1946-69	Jan. 27, 1916		95,600	a2.4
	Santa Margarita River basin						
0424	Temecula Creek near Aguanga	131	1957-69	Jan. 25, 1969	10.6	2,550	6
				Feb. 25, 1969	10.6	2,550	6
				Apr. 3, 1958	6.57	3,540	9
0424.3	Coahuila Creek tributary at Anza	4.90	1961-69	Jan. 25, 1969	2.06	91	
				Feb. 25, 1969	1.53	18	
				Aug. 18, 1961		102	
0430	Murrieta Creek at Temecula	222	1924-69	Jan. 25, 1969	9.94	6,660	14
				Feb. 25, 1969	12.34	10,400	25
				Jan. 23, 1943	13.82	17,500	48
0440	Santa Margarita River near Temecula	588	1923-69	Jan. 25, 1969	12.7	7,630	8
				Feb. 25, 1969	15.32	14,600	16
				Feb. 16, 1927	14.6	25,000	34
0445	Santa Margarita River near Fallbrook	644	1924-69	Jan. 25, 1969	12.50	11,800	11
				Feb. 25, 1969	14.18	20,000	21
				Feb. 16, 1927	b15.6	33,100	42
0446	Santa Margarita River tributary near Fallbrook	0.52	1961-69	Jan. 25, 1969	4.95	66	
				Feb. 25, 1969	6.43	109	
				Dec. 6, 1966	4.34	45	
0449	De Luz Creek near Fallbrook	47.5	1957-69	Jan. 25, 1969	11.62	7,800	31
				Feb. 25, 1969	10.65	5,200	17
				Apr. 1, 1958	9.95	2,800	7

See footnotes at end of table.

TABLE 6.--*Summary of flood stages and discharges*--Continued

Station number	Stream and place of determination	Drainage area (sq mi)	Period of record	Maximum floods			
				Date	Gage height (ft)	Discharge	
						Cfs	Recurrence interval (years)
PART 11. PACIFIC SLOPE BASINS IN CALIFORNIA--Continued							
	Santa Margarita River basin--Continued						
0460	Santa Margarita River at Ysidora	739	1923-69	Jan. 25, 1969	16.26	16,100	12
				Feb. 24, 1969	16.85		
				Feb. 25, 1969	15.89	19,200	16
				Feb. 16, 1927	b18.00	33,600	38
	Las Flores Creek basin						
0461	Las Flores Creek near Oceanside	26.6	1951-67	Jan. 25, 1969	4.80	2,050	10
				Feb. 25, 1969	7.25	4,200	30
				Jan. 16, 1952	4.75	960	4
	San Onofre Creek basin						
0462	San Onofre Creek near San Onofre	34.6	1950-67	Jan. 25, 1969	5.70	3,340	19
				Feb. 25, 1969	9.46	7,100	a1.05
				Apr. 1, 1958	5.90	2,680	15
	San Mateo Creek basin						
0463	San Mateo Creek near San Clemente	80.8	1952-67	Jan. 25, 1969	11.12	9,240	29
				Feb. 25, 1969	10.95	8,400	25
				Dec. 6, 1966	10.45	7,300	20
0463.2	San Mateo Creek tributary near San Onofre	0.65	1961-69	Jan. 25, 1969	8.42	268	
				Feb. 25, 1969	8.14	170	
				Feb. 22, 1962	7.20	68	
0463.5	Cristianitos Creek near San Clemente	29.0	1950-67	Jan. 25, 1969	7.54	2,770	16
				Feb. 25, 1969	9.96	4,750	37
				Jan. 16, 1952	8.86	1,800	9
0463.7	San Mateo Creek at San Onofre	132	1946-67	Jan. 25, 1969	7.1	8,400	19
				Feb. 25, 1969	(c)	(c)	
				Dec. 5, 1966	10.42	c10,000	24
	San Juan Creek basin						
0463.9	San Juan Creek tributary near Elsinore	0.39	1961-69	Jan. 25, 1969	10.25	17	
				Feb. 25, 1969		(h)	
				Dec. 6, 1966	10.30	18	
0464.1	San Juan Creek tributary near San Juan Capistrano	0.16	1961-69	Jan. 25, 1969	14.45	29	
				Feb. 25, 1969	11.34	9.4	
				Nov. 22, 1965	13.44	24	

See footnotes at end of table.

TABLE 6.--*Summary of flood stages and discharges*--Continued

Station number	Stream and place of determination	Drainage area (sq mi)	Period of record	Maximum floods			
				Date	Gage height (ft)	Discharge	
						Cfs	Recurrence interval (years)
PART 11. PACIFIC SLOPE BASINS IN CALIFORNIA--Continued							
	San Juan Creek basin--Continued						
0465	San Juan Creek near San Juan Capistrano	106	1928-69	Jan. 25, 1969	4.39	13,000	44
				Feb. 25, 1969	5.6	22,400	a1.6
				Mar. 2, 1938		13,000	44
0467	Live Oak Creek near Modjeska	1.31	1961-69	Jan. 25, 1969	5.42	150	
				Feb. 25, 1969	11.74	590	
				Nov. 22, 1965	4.96	123	
0470	Arroyo Trabuco near San Juan Capistrano	35.7	1930-69	Jan. 25, 1969	5.20	5,970	32
				Feb. 25, 1969		7,000	41
				Feb. 6, 1937		9,240	a1.2
	Aliso Creek basin						
0475	Aliso Creek at El Toro	7.97	1930-69	Jan. 25, 1969		542	
				Feb. 25, 1969		2,500	
				Feb. 6, 1937		1,950	
	Peters Canyon Wash basin						
0485	San Diego Creek near Irvine	40.3	1949-69	Jan. 25, 1969	9.20	4,650	29
				Feb. 25, 1969	11.46	6,700	48
				Jan. 18, 1952	7.70	4,040	24
	Santa Ana River basin						
0488	Forsee Creek near Camp Angelus	2.82	1960-69	Jan. 25, 1969	20.47	320	
				Feb. 25, 1969		(c)	
				Dec. 6, 1966	22.15	390	
0489	Caribou Creek at Big Bear City	7.02	1960-69	Jan. 25, 1969	6.03	350	
				Feb. 25, 1969		(c)	
				Dec. 6, 1966	5.31	195	
0515	Santa Ana River near Mentone	209	1896-1969	Jan. 25, 1969	14.68	15,300	
				Feb. 25, 1969	12.3	10,000	
				Mar. 2, 1938	14.3	52,300	
0540	Mill Creek near Yucaipa	38.1	1919-38	Jan. 25, 1969	16.8	(h)	
			1947-69	Feb. 25, 1969	13.5	(h)	
				Mar. 2, 1938		18,100	a1.5
0543	Mill Creek tributary near Yucaipa	2.04	1961-69	Jan. 25, 1969		(c)	
				Feb. 25, 1969	13.28	199	
				Dec. 6, 1966	11.61	98	

See footnotes at end of table.

TABLE 6.--*Summary of flood stages and discharges*--Continued

Station number	Stream and place of determination	Drainage area (sq mi)	Period of record	Maximum floods			
				Date	Gage height (ft)	Discharge	
						Cfs	Recurrence interval (years)
PART 11. PACIFIC SLOPE BASINS IN CALIFORNIA--Continued							
	Santa Ana River basin--Continued						
0553	Little Mill Creek near Running Springs	1.73	1960-69	Jan. 25, 1969	46.26	620	
				Feb. 25, 1969	43.97	400	
				Nov. 22, 1965	44.66	459	
0555	Plunge Creek near East Highlands	16.9	1919-69	Jan. 25, 1969	5.96	4,610	29
				Feb. 25, 1969	4.60	3,400	19
				Mar. 2, 1938		5,340	35
0558	City Creek near Highland	19.6	1919-69	Jan. 25, 1969	8.83	3,240	15
				Feb. 25, 1969	9.39	7,000	48
				Mar. 2, 1938		6,900	47
0562	Santa Ana River at Waterman Avenue, at San Bernardino	354	1928-37	Jan. 25, 1969	7.28	(c)	
			1954-61	Feb. 25, 1969	7.8	(c)	
			1964-69	Nov. 22, 1965	7.94	17,200	
				Mar. 2, 1938		75,700	
0565	Little San Gorgonio Creek near Beaumont	3.23	1948-69	Jan. 25, 1969	2.53	1,990	
				Feb. 25, 1969	7.53	12,400	
				Aug. 23, 1955	2.18	319	
0570	San Timoteo Creek near Redlands	119	1926-69	Jan. 25, 1969	7.25	4,550	13
				Feb. 25, 1969		(c)	
				Mar. 2, 1938		7,460	24
0575	San Timoteo Creek near Loma Linda	125	1954-69	Jan. 25, 1969	4.4	2,400	7
				Feb. 25, 1969	8.2	15,000	a1.1
				Apr. 1, 1958	b8.74	1,050	4
0585	East Twin Creek near Arrowhead Springs	8.80	1919-69	Jan. 25, 1969	7.45	2,300	
				Feb. 25, 1969	6.52	1,700	
				Mar. 2, 1938		3,360	
0586	Waterman Canyon Creek near Arrowhead Springs	4.65	1911-14	Jan. 25, 1969	5.65	1,240	
			1919-69	Feb. 25, 1969	5.25	980	
				Mar. 2, 1938		2,350	
0590	Warm Creek Floodway near San Bernardino	47.5	1961-69	Jan. 25, 1969	5.52	5,100	
				Feb. 25, 1969	6.75	11,000	
				Dec. 5, 1966	7.25	5,390	
0593	Santa Ana River at E Street, near San Bernardino	528	1939-54	Jan. 25, 1969	13.5	23,000	
			1966-69	Feb. 25, 1969	11.9	28,000	
				Jan. 23, 1943	16.50	(c)	

See footnotes at end of table.

TABLE 6.--*Summary of flood stages and discharges*--Continued

Station number	Stream and place of determination	Drainage area (sq mi)	Period of record	Maximum floods			
				Date	Gage height (ft)	Discharge	
						Cfs	Recurrence interval (years)
PART 11. PACIFIC SLOPE BASINS IN CALIFORNIA--Continued							
	Santa Ana River basin--Continued						
0604	Warm Creek near San Bernardino	15.0	1964-69	Jan. 25, 1969	5.55	2,000	
				Feb. 25, 1969	5.17	1,370	
				Mar. 22, 1964	5.82	732	
0620	Lytle Creek near Fontana	46.3	1898-99	Jan. 25, 1969	15.0	(h)	
			1904-69	Feb. 25, 1969	7.4	(h)	
				Mar. 2, 1938		25,200	a1.9
0630	Cajon Creek near Keenbrook	40.6	1919-69	Jan. 25, 1969		(h)	
				Feb. 25, 1969		(h)	
				Mar. 2, 1938	b26.0	14,500	a2.0
0635	Lone Pine Creek near Keenbrook	15.1	1919-38	Jan. 25, 1969	10.70	2,700	29
			1949-69	Feb. 25, 1969	9.2	2,500	27
				Mar. 2, 1938		6,180	a1.3
0636.8	Devil Canyon Creek near San Bernardino	5.61	1911-14	Jan. 25, 1969	5.40	3,720	
			1919-69	Feb. 25, 1969	4.83	1,800	
				Mar. 2, 1938		3,320	
0650	Lytle Creek at Cotton	172	1957-69	Jan. 25, 1969	11.6	13,000	
				Feb. 25, 1969	(h)	7,500	
				Dec. 29, 1965	12.40	14,800	
0665	Santa Ana River at Riverside Narrows, near Arlington	850	1927-69	Jan. 25, 1969	15.32	e35,000	23
				Feb. 25, 1969	11.65	34,000	22
				Mar. 2, 1938		100,000	a1.8
				Jan. 22, 1862		320,000	a5.7
0670	Dry Creek near Etiwanda	4.59	1927-69	Jan. 25, 1969	9.90	9,500	
				Feb. 25, 1969		(h)	
				Mar. 2, 1938		4,200	
0693	South Fork San Jacinto River tributary near Valle Vista	2.20	1961-69	Jan. 25, 1969	5.14	31	
				Feb. 25, 1969	6.93	51	
				Nov. 22, 1965	5.56	36	
0695	San Jacinto River near San Jacinto	141	1920-67	Jan. 25, 1969	10.15	7,410	14
				Feb. 25, 1969	8.50	4,080	7
				Feb. 16, 1927		45,000	a2.4
0700	Bautista Creek near Hemet	39.4	1947-69	Jan. 25, 1969	4.98	473	3
				Feb. 25, 1969	5.38	650	4
				Apr. 3, 1958	4.65	1,440	9

See footnotes at end of table.

TABLE 6.--*Summary of flood stages and discharges*--Continued

Station number	Stream and place of determination	Drainage area (sq mi)	Period of record	Maximum floods			
				Date	Gage height (ft)	Discharge	
						Cfs	Recurrence interval (years)
PART 11. PACIFIC SLOPE BASINS IN CALIFORNIA--Continued							
	Santa Ana River basin--Continued						
0701.9	Laborde Creek near San Jacinto	7.57	1961-69	Jan. 25, 1969		630	
				Feb. 25, 1969	9.38	1,690	
				Feb. 10, 1963	8.4	1,530	
0703.8	St. Johns Creek near Sage	0.37	1961-69	Jan. 25, 1969	3.50	3.3	
				Feb. 25, 1969	4.08	10	
				Nov. 22, 1965	4.20	12	
0705	San Jacinto River near Elsinore	728	1916-69	Jan. 25, 1969		0	
				Feb. 25, 1969	9.40	6,200	
				Feb. 17, 1927	11.8	16,000	
0713	Temescal Creek tributary near Elsinore	0.36	1961-69	Jan. 25, 1969	4.11	33	
				Feb. 25, 1969	3.67	24	
				Nov. 22, 1965	3.58	23	
0720	Temescal Creek near Corona	164	1927-69	Jan. 25, 1969	10.5	1,700	
				Feb. 25, 1969		(c)	
				Mar. 2, 1938		14,900	
0722	Temescal Creek at Corona	249	1968-69	Jan. 25, 1969	7.91	3,100	
				Feb. 25, 1969	8.17	8,850	
				Mar. 8, 1968	4.27	774	
0730	San Antonio Creek near Claremont	16.5	1917-69	Jan. 25, 1969	11.13	(h)	
				Feb. 25, 1969	6.06	(h)	
				Mar. 2, 1938		21,400	a3.0
0732	San Antonio Creek below San Antonio Dam	26.9	1962-69	Jan. 25, 1969	11.22	g8,420	
				Feb. 28, 1969	8.35	g5,750	
				Dec. 6, 1966		g3,900	
0734.4	Chino Creek near Chino	107	1968-69	Jan. 25, 1969		(d)	
				Feb. 25, 1969		(d)	
				Mar. 8, 1968	9.48	6,800	
0734.7	Cucamonga Creek near Upland	10.1	1927-69	Jan. 25, 1969	12.44	14,100	a2.6
				Feb. 25, 1969	7.51	4,090	33
				Mar. 2, 1938		10,300	a1.9
0734.95	Cucamonga Creek near Mira Loma	75.8	1968-69	Jan. 25, 1969	7.08	9,100	
				Feb. 25, 1969		(h)	
				Mar. 8, 1968	3.28	920	

See footnotes at end of table.

TABLE 6.--*Summary of flood stages and discharges*--Continued

Station number	Stream and place of determination	Drainage area (sq mi)	Period of record	Maximum floods			
				Date	Gage height (ft)	Discharge	
						Cfs	Recurrence interval (years)
PART 11. PACIFIC SLOPE BASINS IN CALIFORNIA--Continued							
	Santa Ana River basin--Continued						
0740	Santa Ana River below Prado Dam	1,485	1930-69	Jan. 26, 1969	5.75	g5,800	
				Feb. 25, 1969	5.74	g5,640	
				Dec. 24, 1940	3.20	g2,260	
				Mar. 2, 1938		100,000	
0757.2	Carbon Creek below Carbon Canyon Dam	19.5	1961-69	Jan. 25, 1969	2.25	g1,320	
				Feb. 25, 1969	2.64	g446	
				Dec. 1, 1965	1.17	g220	
0758	Santiago Creek at Modjeska	12.5	1961-69	Jan. 25, 1969	6.93	2,750	
				Feb. 25, 1969	6.18	6,520	
				Nov. 22, 1965	6.60	1,500	
0759	Black Star Creek near Silverado	4.62	1961-69	Jan. 25, 1969	24.90	960	
				Feb. 25, 1969	28.8	2,340	
				Dec. 6, 1966	24.0	697	
0775	Santiago Creek at Santa Ana	95.0	1928-69	Jan. 25, 1969	4.47	g860	
				Feb. 25, 1969	9.10	g6,600	
				Mar. 2, 1938	8.36	4,400	
0780	Santa Ana River at Santa Ana	1,685	1923-69	Jan. 26, 1969	5.70	g9,200	
				Feb. 25, 1969	6.90	g19,100	
				Mar. 3, 1938	a10.20	46,300	
	San Gabriel River basin						
0805	East Fork San Gabriel River near Camp Bonita	84.6	1932-69	Jan. 25, 1969		22,400	a1.3
				Feb. 25, 1969		40,000	a2.3
				Mar. 2, 1938		46,000	a2.7
0812	North Fork San Gabriel River at Coldbrook Guard Station	6.79	1960-69	Jan. 25, 1969	13.04	(h)	
				Feb. 25, 1969	9.61	(h)	
				Dec. 29, 1965	17.35	2,080	
0820	West Fork San Gabriel River at Camp Rincon	104	1927-69	Jan. 25, 1969		20,000	40
				Feb. 25, 1969		24,000	a1.04
				Mar. 2, 1938		34,000	a1.5
0845	Fish Creek near Duarte	6.36	1916-69	Jan. 25, 1969	10.0	13,000	
				Feb. 25, 1969	8.6	4,650	
				Dec. 29, 1965	6.80	2,250	
0850	San Gabriel River below Santa Fe Dam near Baldwin Park	236	1942-69	Jan. 26, 1969	22.20	g30,900	
				Feb. 25, 1969	21.75	g26,000	
				Nov. 23, 1965	17.14	g11,100	

See footnotes at end of table.

TABLE 6.--*Summary of flood stages and discharges*--Continued

Station number	Stream and place of determination	Drainage area (sq mi)	Period of record	Maximum floods			
				Date	Gage height (ft)	Discharge	
						Cfs	Recurrence interval (years)
PART 11. PACIFIC SLOPE BASINS IN CALIFORNIA--Continued							
	San Gabriel River basin--Continued						
0863	San Dimas Creek below San Dimas Dam	16.3	1951-69	Jan. 25, 1969		g4,280	
				Feb. 25, 1969		g1,770	
				Dec. 6, 1966	4.31	g1,190	
0865	Little Dalton Creek near Glendora	2.72	1938-69	Jan. 25, 1969	10.89	2,600	
				Feb. 25, 1969		(c)	
				Nov. 20, 1961	5.24	1,700	
0869.9	San Jose Creek near El Monte	87.8	1964-69	Jan. 25, 1969		10,100	
				Feb. 25, 1969		9,400	
				Jan. 24, 1967	6.80	10,200	
0870.2	San Gabriel River above Whittier Narrows Dam	353	1955-57	Jan. 25, 1969	10.90	g46,600	
			1963-69	Feb. 25, 1969	9.90	g33,600	
				Jan. 24, 1967	8.25	g17,300	
0875	San Gabriel River at Pico	448	1928-69	Jan. 25, 1969		g11,800	
				Feb. 25, 1969		g11,200	
				Mar. 2, 1938		g22,700	
0880	San Gabriel River at Spring Street, near Los Alamitos	472	1927-51	Jan. 25, 1969		g11,700	
			1952-69	Feb. 25, 1969		g11,100	
				Mar. 2, 1938		g27,000	
0885	Brea Creek below Dam, near Fullerton	21.6	1942-69	Jan. 20, 1969	5.08	g364	
				Feb. 25, 1969	6.30	g970	
				Feb. 29, 1944	6.13	g655	
0890	Brea Creek at Fullerton	23.6	1930-69	Jan. 26, 1969		g580	
				Feb. 25, 1969		g980	
				Mar. 14, 1941	5.45	g3,700	28
0895	Fullerton Creek below Fullerton Dam, near Brea	4.94	1941-69	Jan. 25, 1969	4.32	g313	
				Feb. 25, 1969	3.80	g255	
				Mar. 16, 1943	3.80	g298	
0902	Fullerton Creek at Richman Avenue, at Fullerton	12.1	1959-69	Jan. 25, 1969		g1,100	
				Feb. 24, 1969		g680	
				Nov. 7, 1966	4.71	g719	
0907	Coyote Creek at Los Alamitos	136	1963-69	Jan. 25, 1969		11,200	
				Feb. 25, 1969		9,020	
				Jan. 22, 1967	4.98	6,880	

See footnotes at end of table.

TABLE 6.--*Summary of flood stages and discharges*--Continued

Station number	Stream and place of determination	Drainage area (sq mi)	Period of record	Maximum floods			
				Date	Gage height (ft)	Discharge	
						Cfs	Recurrence interval (years)
PART 11. PACIFIC SLOPE BASINS IN CALIFORNIA--Continued							
	Los Angeles River basin						
0919.5	Limekiln Canyon Wash near Chatsworth	3.41	1959-69	Jan. 25, 1969	9.25	470	
				Feb. 25, 1969	6.75	280	
				Nov. 22, 1965	8.20	380	
0924.5	Los Angeles River at Sepulveda Dam	158	1929-69	Jan. 25, 1969	11.42	g13,800	
				Feb. 25, 1969	10.08	g11,500	
				Dec. 29, 1965	10.98	g13,000	
0930	Pacoima Creek near San Fernando	28.5	1916-69	Jan. 25, 1969		g1,780	
				Feb. 25, 1969		g2,780	
				Mar. 3, 1938		g2,440	
				February 1914		5,400	30
0934.9	North Fork Mill Creek near La Canada	5.79	1959-69	Jan. 25, 1969	17.2	1,280	
				Feb. 25, 1969	6.34	24	
				Dec. 29, 1965	12.21	480	
0940	Tujunga Creek below Mill Creek, near Colby Ranch	64.9	1948-69	Jan. 25, 1969		12,900	a1.02
				Feb. 25, 1969		13,500	a1.1
				Dec. 29, 1965	13.75	6,550	21
				Jan. 23, 1943		i14,800	a1.2
0955	Tujunga Creek near Sunland	106	1916-69	Jan. 25, 1969		g20,600	a1.1
				Feb. 25, 1969		g20,000	a1.05
				Mar. 2, 1938		e g50,000	a2.6
0965	Little Tujunga Creek near San Fernando	21.1	1928-69	Jan. 25, 1969		1,800	6
				Feb. 25, 1969		2,590	10
				Mar. 2, 1938		e8,500	a1.2
0970	Tujunga Creek below Hansen Dam	150	1932-38	Jan. 25, 1969	6.47	g9,190	
			1940-69	Feb. 25, 1969	7.36	g11,700	
				Dec. 22, 1966	4.78	g5,130	
				Mar. 2, 1938		e54,000	
0975	Los Angeles River at Los Angeles	514	1929-69	Jan. 25, 1969		41,800	
				Feb. 25, 1969		34,100	
				Mar. 2, 1938		67,000	
0980	Arroyo Seco near Pasadena	16.0	1910-69	Jan. 25, 1969	9.37	8,540	a1.4
				Feb. 25, 1969	7.30	4,560	32
				Mar. 2, 1938	9.42	8,620	a1.4
0985	Los Angeles River near Downey	599	1928-69	Jan. 25, 1969		58,100	
				Feb. 25, 1969		42,300	
				Mar. 2, 1938		79,700	

See footnotes at end of table.

TABLE 6.--*Summary of flood stages and discharges*--Continued

Station number	Stream and place of determination	Drainage area (sq mi)	Period of record	Maximum floods			
				Date	Gage height (ft)	Discharge	
						Cfs	Recurrence interval (years)
PART 11. PACIFIC SLOPE BASINS IN CALIFORNIA--Continued							
	Los Angeles River basin--Continued						
1000	Santa Anita Creek near Sierra Madre	9.71	1916-69	Jan. 25, 1969	18.44	7,500	
				Feb. 25, 1969	15.1	5,000	
				Mar. 2, 1938		5,200	
1012.5	Rio Hondo above Whittier Narrows Dam	91.2	1956-69	Jan. 25, 1969	7.23	g17,700	
				Feb. 25, 1969	6.00	g12,800	
				Jan. 6, 1959	4.90	g8,150	
1015	Rio Hondo near Montebello	116	1928-69	Jan. 25, 1969		g20,000	
				Feb. 25, 1969		g15,700	
				Mar. 2, 1938	16.69	g28,000	
1022.5	Mission Creek below Whittier Narrows Dam		1955-69	Jan. 25, 1969	1.92	g14	
				Feb. 23, 1969	1.77	g11	
				Jan. 6, 1959		g j18	
1023	Rio Hondo below Whittier Narrows Dam		1966-69	Jan. 25, 1969	13.82	g38,800	
				Feb. 25, 1969	11.22	g31,600	
				Jan. 24, 1967		g19,100	
1025	Rio Hondo near Downey	143	1928-69	Jan. 25, 1969		g45,200	
				Feb. 25, 1969		g33,000	
				Mar. 3, 1938	12.0	24,400	
1030	Los Angeles River at Long Beach	832	1928-69	Jan. 25, 1969	16.0	g102,000	
				Feb. 22, 1969	12.52	g65,700	
				Mar. 2, 1938		99,000	
	Ballona Creek basin						
1035	Ballona Creek near Culver City	89.5	1928-69	Jan. 25, 1969		17,200	
				Feb. 25, 1969		8,050	
				Mar. 2, 1938	b15.4	19,000	
	Topanga Creek basin						
1040	Topanga Creek near Topanga Beach	18.0	1930-38	Jan. 25, 1969		12,200	a2.0
			1939-69	Feb. 25, 1969		3,500	17
				Mar. 2, 1938		7,960	a1.3
	Malibu Creek basin						
1052	Cold Creek tributary near Malibu Beach	0.30	1960-69	Jan. 25, 1969	16.31	60	
				Feb. 25, 1969	16.72	74	
				Dec. 2, 1961	17.30	94	

See footnotes at end of table.

TABLE 6.--*Summary of flood stages and discharges*--Continued

Station number	Stream and place of determination	Drainage area (sq mi)	Period of record	Maximum floods			
				Date	Gage height (ft)	Discharge	
						Cfs	Recurrence interval (years)
PART 11. PACIFIC SLOPE BASINS IN CALIFORNIA--Continued							
	Malibu Creek basin--Continued						
1055	Malibu Creek at Crater Camp, near Calabasas	105	1931-69	Jan. 25, 1969	21.41	33,700	a2.3
				Feb. 25, 1969	13.70	12,000	34
				Dec. 29, 1965	17.27	20,600	a1.4
	Little Sycamore Creek basin						
1057	Little Sycamore Creek near Newbury Park	1.35	1960-69	Jan. 25, 1969	7.89	240	
				Feb. 25, 1969	4.60	75	
				Dec. 29, 1965	10.83	377	
	Calleguas Creek basin						
1070	Honda Barranca near Somis	2.57	1954-69	Jan. 21, 1969	15.34	184	
				Feb. 24, 1969	13.96	76	
				Feb. 19, 1962	b8.21	450	
	Santa Clara River basin						
1077	Soledad Canyon tributary near Acton	4.08	1959-69	Jan. 25, 1969	3.14	3.0	
				Feb. 24, 1969	3.30	5.0	
				Dec. 29, 1965	3.55	7.5	
1082	Santa Clara River tributary near Val Verde	0.65	1959-69	Jan. 25, 1969	8.88	57	
				Feb. 24, 1969	8.63	52	
				Dec. 29, 1965	11.6	190	
1085	Santa Clara River at Los Angeles-Ventura County line	644	1952-69	Jan. 25, 1969	19.01	82,000	a2.3
				Feb. 25, 1969	17.9	76,000	a2.1
				Dec. 29, 1965	11.50	32,000	42
1096	Piru Creek above Lake Piru	372	1955-69	Jan. 25, 1969	13.9	20,800	34
				Feb. 25, 1969	19.10	31,200	a1.2
				Feb. 10, 1962	12.20	12,200	17
1098	Piru Creek below Santa Felicia Dam	425	1955-69	Jan. 25, 1969		0	
				Feb. 25, 1969	15.9	g28,800	
				Aug. 18, 1958	3.66	g544	
				Mar. 2, 1938		b35,000	
1105	Hopper Creek near Piru	23.6	1930-32	Jan. 25, 1969	12.72	8,400	a1.2
			1933-36	Feb. 25, 1969	12.3	4,600	28
			1937-69	Mar. 2, 1938		8,000	a1.2
1115	Sespe Creek near Wheeler Springs	49.5	1948-69	Jan. 25, 1969	13.60	9,700	33
				Feb. 25, 1969	13.10	8,900	30
				Dec. 6, 1966	9.85	3,840	10

See footnotes at end of table.

TABLE 6.--*Summary of flood stages and discharges*--Continued

Station number	Stream and place of determination	Drainage area (sq mi)	Period of record	Maximum floods			
				Date	Gage height (ft)	Discharge	
						Cfs	Recurrence interval (years)
PART 11. PACIFIC SLOPE BASINS IN CALIFORNIA--Continued							
	Santa Clara River basin--Continued						
1130	Sespe Creek near Fillmore	251	1911-13 1927-69	Jan. 25, 1969 Feb. 25, 1969 Mar. 2, 1938	20.80 24.95	60,000 45,000 56,000	a1.8 a1.4 a1.7
1135	Santa Paula Creek near Santa Paula	40.0	1927-69	Jan. 25, 1969 Feb. 25, 1969 Mar. 2, 1938	12.2 15.18 10.56	16,000 21,000 13,500	a1.5 a1.9 a1.2
1139.2	Santa Clara River at Saticoy	1,595	1927-32 1949-69	Jan. 25, 1969 Feb. 25, 1969 Mar. 2, 1938	23.07 21.45	165,000 152,000 120,000	
	Ventura River basin						
1145	Matilija Creek above reservoir, near Matilija Hot Springs	50.7	1948-69	Jan. 25, 1969 Feb. 25, 1969 Jan. 15, 1952	14.25 13.75 12.1	20,000 15,000 8,800	a1.3 48 20
1155	Matilija Creek at Matilija Hot Springs	54.6	1927-69	Jan. 25, 1969 Feb. 25, 1969 Mar. 2, 1938	16.5 13.25	20,000 15,000 15,900	a1.3 48 a1.03
1160	North Fork Matilija Creek at Matilija Hot Springs	15.6	1928-32 1933-69	Jan. 25, 1969 Feb. 25, 1969 Mar. 2, 1938	10.0 11.0	8,440 10,000 5,580	a1.2 a1.4 34
1175	San Antonio Creek at Casitas Springs	51.2	1949-69	Jan. 25, 1969 Feb. 25, 1969 Dec. 6, 1966	14.30 10.7 11.02	16,200 5,800 7,280	a1.5 18 25
1176	Coyote Creek near Oak View	13.2	1958-69	Jan. 25, 1969 Feb. 25, 1969 Nov. 24, 1965	12.0 9.10	8,000 (h) 4,470	a1.4 36
1178	Santa Ana Creek near Oak View	9.11	1958-69	Jan. 25, 1969 Feb. 25, 1969 Nov. 24, 1965 Mar. 2, 1938	10.70 9.53 8.12	4,600 3,600 2,670 b3,780	
1185	Ventura River near Ventura	188	1911-14 1929-69	Jan. 25, 1969 Feb. 25, 1969 Mar. 2, 1938	27.41 21.2 19.2	52,900 40,000 39,200	a2.1 a1.6 a1.6
1187	Casitas Creek tributary near Sea Cliff	0.76	1959-69	Jan. 25, 1969 Feb. 24, 1969 Nov. 24, 1965	23.62 22.43 23.00	195 120 153	

See footnotes at end of table.

TABLE 6.--*Summary of flood stages and discharges*--Continued

Station number	Stream and place of determination	Drainage area (sq mi)	Period of record	Maximum floods			
				Date	Gage height (ft)	Discharge	
						Cfs	Recurrence interval (years)
PART 11. PACIFIC SLOPE BASINS IN CALIFORNIA--Continued							
	Carpinteria Creek basin						
1195	Carpinteria Creek near Carpinteria	13.1	1941-69	Jan. 25, 1969	14.90	4,900	47
				Feb. 25, 1969	5.39	3,600	28
				Dec. 6, 1966	8.60	2,720	18
	Buena Vista Creek basin						
1196.5	Buena Vista Creek near Montecito	0.66		Jan. 25, 1969		2,080	
	San Ysidro Creek basin						
	San Ysidro Creek at Montecito	2.98		Jan. 25, 1969		5,620	
	Atascadero Creek basin						
1200	Atascadero Creek near Goleta	18.8	1941-69	Jan. 25, 1969	13.1	5,500	37
				Feb. 23, 1969	12.48	3,700	20
				Jan. 24, 1967	12.80	5,000	32
	San Jose Creek basin						
1205	San Jose Creek near Goleta	5.51	1941-69	Jan. 25, 1969	10.10	2,000	
				Feb. 25, 1969	5.41	662	
				Apr. 4, 1941	12.74	1,960	
	Gaviota Creek basin						
1205.5	Gaviota Creek near Gaviota	18.8	1966-69	Jan. 25, 1969	6.85	2,100	
				Feb. 25, 1969	7.16	2,340	
				Jan. 24, 1967	8.40	4,000	
	Jalama Creek basin						
1206	Jalama Creek near Lompoc	20.5	1965-69	Jan. 25, 1969	7.67	1,410	
				Feb. 25, 1969	6.78	890	
				Jan. 24, 1967	8.05	1,710	
	Santa Ynez River basin						
1230	Santa Ynez River below Gibraltar Dam, near Santa Barbara	216	1920-69	Jan. 25, 1969	25.8	g54,200	
				Feb. 25, 1969	22.2	g36,800	
				Mar. 2, 1938		g35,500	
1234.8	Los Laureles Canyon tributary near Goleta	0.28	1959-69	Jan. 25, 1969	10.00	135	
				Feb. 24, 1969	7.15	76	
				Jan. 24, 1967	12.48	163	

See footnotes at end of table.

TABLE 6.--*Summary of flood stages and discharges*--Continued

Station number	Stream and place of determination	Drainage area (sq mi)	Period of record	Maximum floods			
				Date	Gage height (ft)	Discharge	
						Cfs	Recurrence interval (years)
PART 11. PACIFIC SLOPE BASINS IN CALIFORNIA--Continued							
	Santa Ynez River basin--Continued						
1235	Santa Ynez River below Los Laureles Canyon, near Santa Barbara	277	1947-69	Jan. 25, 1969	18.88	g67,500	
				Feb. 25, 1969	15.74	g45,000	
				Jan. 15, 1952	15.6	g33,000	
1245	Santa Cruz Creek near Santa Ynez	73.9	1941-69	Jan. 25, 1969	10.91	6,620	14
				Feb. 24, 1969	11.2	6,900	15
				Dec. 6, 1966	10.30	5,800	12
1260	Santa Ynez River near Santa Ynez	422	1928-31	Jan. 25, 1969		g79,000	a2.0
			1932-69	Feb. 25, 1969		g59,600	a1.5
				Mar. 2, 1938	b17.90	43,700	a1.1
1265	Santa Agueda Creek near Santa Ynez	55.8	1940-69	Jan. 25, 1969	5.58	3,900	12
				Feb. 24, 1969	6.71	7,300	28
				Feb. 19, 1958	6.14	5,760	20
1284	Alisal Creek near Solvang	12.2	1954-69	Jan. 25, 1969	8.50	6,700	a1.3
				Feb. 24, 1969	7.19	4,950	50
				Jan. 24, 1967	10.50	4,280	37
1298	Zaca Creek near Buellton	32.8	1963-69	Jan. 25, 1969	7.10	720	
				Feb. 24, 1969	9.24	1,400	
				Dec. 6, 1966	4.70	191	
1315	Santa Ynez River at Cooper's Reef, near Lompoc	708	1954-69	Jan. 25, 1969	22.5	(c)	
				Feb. 25, 1969		(c)	
				Jan. 24, 1967	12.25	f10,200	
1323	El Jaro Creek near Las Cruces	3.50	1959-69	Jan. 25, 1969	b13.68	370	
				Feb. 24, 1969	6.40	320	
				Jan. 24, 1967	14.20	499	
1325	Salsipuedes Creek near Lompoc	47.1	1941-69	Jan. 25, 1969	11.54	5,050	12
				Feb. 24, 1969	8.61	3,160	6
				Mar. 15, 1952	20.8	11,400	a1.1
1335	Santa Ynez River near Lompoc	790	1908-18	Jan. 25, 1969	24.20	100,000	a2.0
			1925-69	Feb. 25, 1969	18.22	70,000	a1.4
				Mar. 3, 1938	29.3	45,000	38
				Jan. 9, 1907		h62,000	a1.2
1350	Santa Ynez River at Pine Canyon, near Lompoc	832	1941-46	Jan. 25, 1969	24.0	(c)	
			1964-69	Feb. 25, 1969		(c)	
				Jan. 23, 1943	a21.0	32,000	

See footnotes at end of table.

TABLE 6.--*Summary of flood stages and discharges*--Continued

Station number	Stream and place of determination	Drainage area (sq mi)	Period of record	Maximum floods			
				Date	Gage height (ft)	Discharge	
						Cfs	Recurrence interval (years)
PART 11. PACIFIC SLOPE BASINS IN CALIFORNIA--Continued							
	San Antonio Creek basin						
1361	San Antonio Creek near Casmalia	135	1955-69	Jan. 25, 1969	8.37	979	2
				Feb. 24, 1969	11.79	2,300	4
				Feb. 19, 1962	9.35	1,300	3
1361.5	San Antonio Creek tributary near Casmalia	0.28	1959-69	Jan. 25, 1969	4.96	1.4	
				Feb. 24, 1969	5.32	5.0	
				Feb. 10, 1962	5.51	8.4	
1364.5	Dry Canyon tributary near Stauffer	0.15	1959-69	Jan. 25, 1969	4.83	14	
				Feb. 24, 1969	5.14	19	
				Feb. 10, 1962	5.30	26	
	Santa Maria River basin						
1366.5	Aliso Creek near New Cuyama	16.1	1959-69	Jan. 25, 1969		(c)	
				Feb. 24, 1969	10.66	552	
				Dec. 6, 1966	6.47	208	
1368	Cuyama River below Buckhorn Canyon, near Santa Maria	884	1903-05	Jan. 25, 1969	13.14	14,200	
			1959-69	Feb. 24, 1969	13.72	17,500	
				Mar. 13, 1905	bf10.0	10,000	
1374	Alamo Creek near Nipomo	83.3	1959-69	Jan. 25, 1969	10.51	9,020	
				Feb. 24, 1969	9.50	7,000	
				Dec. 6, 1966	10.30	8,500	
1379	Huasna River near Arroyo Grande	104	1959-69	Jan. 25, 1969	15.9	21,000	
				Feb. 24, 1969	13.25	15,200	
				Dec. 6, 1966	14.55	14,300	
1381	Cuyama River below Twitchell Dam	1,133	1958-69	Jan. 25, 1969		0	
				Feb. 25, 1969	10.57	6,900	
				Feb. 10, 1962	5.76	f548	
1385	Sisquoc River near Sisquoc	281	1929-33	Jan. 25, 1969	15.39	21,400	27
			1943-69	Feb. 24, 1969	14.06	16,900	19
				Dec. 6, 1966	15.75	23,200	32
				Mar. 2, 1938	b8.1	11,000	10
1390	La Brea Creek near Sisquoc	93.8	1943-69	Jan. 25, 1969	6.43	5,830	11
				Feb. 24, 1969	4.60	4,400	7
				Dec. 6, 1966	8.23	11,200	30
1393	Foxen Creek near Los Alamos	6.77	1959-69	Jan. 25, 1969	2.14	38	
				Feb. 24, 1969	3.07	72	
				Feb. 9, 1962	4.20	116	

See footnotes at end of table.

TABLE 6.--*Summary of flood stages and discharges*--Continued

Station number	Stream and place of determination	Drainage area (sq mi)	Period of record	Maximum floods			
				Date	Gage height (ft)	Discharge	
						Cfs	Recurrence interval (years)
PART 11. PACIFIC SLOPE BASINS IN CALIFORNIA--Continued							
	Santa Maria River basin--Continued						
1393.5	Foxen Creek near Sisquoc	16.8	1965-69	Jan. 25, 1969	3.42	118	
				Feb. 24, 1969	4.91	271	
				Apr. 21, 1967	1.33	5.7	
1394.8	Tepusquet Creek tributary near Sisquoc	2.45	1959-69	Jan. 25, 1969	3.29	50	
				Feb. 24, 1969	3.52	60	
				Feb. 9, 1962	2.94	37	
1395	Tepusquet Creek near Sisquoc	28.7	1943-69	Jan. 25, 1969	5.55	807	3
				Feb. 24, 1969	5.37	758	3
				Dec. 6, 1966	5.48	788	3
1400	Sisquoc River near Garey	472	1940-69	Jan. 25, 1969	13.00	24,500	22
				Feb. 24, 1969	12.14	21,500	17
				Dec. 6, 1966	13.5	22,600	24
1410	Santa Maria River at Guadalupe	1,742	1940-69	Jan. 25, 1969	9.5	g24,300	
				Feb. 25, 1969	10.0	g27,200	
				Jan. 16, 1952	8.18	32,800	12
	Arroyo Grande basin						
1411.5	Arroyo Grande above Phoenix Creek, near Arroyo Grande	13.4	1967-69	Jan. 25, 1969	6.83	1,100	
				Feb. 24, 1969	6.75	552	
				Jan. 15, 1968	2.43	26	
1411.6	Wittenberg Creek near Arroyo Grande	3.18	1967-69	Jan. 19, 1969	7.8	800	
				Feb. 24, 1969	4.62	350	
1412.8	Lopez Creek near Arroyo Grande	21.4	1967-69	Jan. 25, 1969	9.26	2,830	
				Feb. 24, 1969	8.16	1,280	
				Mar. 8, 1968	2.79	32	
1414	Tar Spring Creek near Arroyo Grande	17.8	1967-69	Jan. 25, 1969		1,340	
				Nov. 30, 1967	2.43	4.7	
1415	Arroyo Grande at Arroyo Grande	102	1939-69	Jan. 25, 1969	9.14	g3,600	
				Feb. 24, 1969	9.50	g3,800	
				Dec. 6, 1966	12.88	5,400	9
1416	Los Berros Creek near Nipomo	15.0	1968-69	Jan. 25, 1969	5.43	599	
				Feb. 24, 1969	4.37	376	

See footnotes at end of table.

TABLE 6.--*Summary of flood stages and discharges*--Continued

Station number	Stream and place of determination	Drainage area (sq mi)	Period of record	Maximum floods			
				Date	Gage height (ft)	Discharge	
						Cfs	Recurrence interval (years)
PART 11. PACIFIC SLOPE BASINS IN CALIFORNIA--Continued							
	Pismo Creek basin						
1417	Pismo Creek near Pismo Beach	28.6		Jan. 25, 1969		10,100	
	San Luis Obispo Creek basin						
	San Luis Obispo Creek at U.S. Highway 101 above east city boundary, at San Luis Obispo	11.6		Jan. 26, 1969		4,800	
	Perfumo Creek at San Luis Obispo	13.3		Jan. 25, 1969		2,860	
	San Luis Obispo Creek below Davenport Creek, near San Luis Obispo	65.4		Jan. 25, 1969		25,000	
	Old Creek basin						
1421.5	Cottontail Creek tributary near Cayucos	1.33	1959-69	Jan. 25, 1969 Jan. 24, 1967	20.66 15.36	500 215	
	Santa Rosa Creek basin						
1422	Santa Rosa Creek near Cambria	12.5	1957-69	Jan. 25, 1969 Feb. 24, 1969 Feb. 1, 1960 December 1955	12.20 10.65 10.36 15.2	3,400 2,600 2,520 (c)	13 8 7
	Arroyo de la Cruz basin						
1425	Arroyo de la Cruz near San Simeon	41.2	1950-69	Jan. 19, 1969 Feb. 24, 1969 Dec. 6, 1966	13.45 10.78 15.27	23,700 13,300 35,200	a1.9 a1.1 a2.8
	Redwood Gulch basin						
1426	Redwood Gulch near Jolon	1.31	1960-69	Jan. 25, 1969 Jan. 31, 1963	56.43 55.70	425 372	
	Rat Creek basin						
1428	Rat Creek near Lucia	0.82	1960-69	Jan. 25, 1969 Nov. 17, 1965	51.56 b2.15	16 28	

See footnotes at end of table.

TABLE 6.--*Summary of flood stages and discharges*--Continued

Station number	Stream and place of determination	Drainage area (sq mi)	Period of record	Maximum floods			
				Date	Gage height (ft)	Discharge	
						Cfs	Recurrence interval (years)
PART 11. PACIFIC SLOPE BASINS IN CALIFORNIA--Continued							
	Big Sur River basin						
1430	Big Sur River near Big Sur	46.5	1950-69	Jan. 26, 1969	9.58	3,900	2
				Feb. 24, 1969	7.85	2,400	
				Apr. 2, 1958	11.56	5,680	3
	Carmel River basin						
1430.5	Doud Creek near Carmel	2.75	1960-69	Jan. 26, 1969	51.25	29	
				Feb. 24, 1969	51.64	42	
				Jan. 31, 1963, Apr. 21, 1967	51.24	29	
1431.9	Klondike Canyon near Carmel Valley	2.14	1960-69	Jan. 26, 1969	53.02	48	
				Feb. 24, 1969	50.86	7.6	
				Feb. 9, 1962	50.71	6.1	
1432	Carmel River at Robles del Rio	193	1957-69	Jan. 26, 1969	10.52	7,400	8
				Feb. 24, 1969	9.05	4,250	4
				Apr. 2, 1958	10.50	7,100	7
				Dec. 23, 1955	11.7	6,930	7
1432.5	Carmel River near Carmel	246	1962-69	Jan. 26, 1969	17.34	8,600	
				Feb. 24, 1969	12.96	7,400	
				Dec. 6, 1966	12.26	7,420	
				Jan. 31, 1963	14.72		
	Arroyo del Rey basin						
1433	Arroyo del Rey at Del Rey Oaks	14.3	1966-69	Jan. 26, 1969	4.07	57	
				Feb. 24, 1969	4.14	69	
				Apr. 23, 1967	2.63	31	
	Salinas River basin						
1435	Salinas River near Pozo	74.1	1942-69	Jan. 25, 1969	13.90	18,600	a1.6
				Feb. 24, 1969	12.18	14,000	a1.2
				Dec. 6, 1966	14.23	14,100	a1.2
1440	Toro Creek near Pozo	9.61	1961-69	Jan. 25, 1969	7.4	1,370	
				Feb. 24, 1969	8.3	2,000	
				Dec. 6, 1966	5.11	199	
1450	Salinas River above Pilitas Creek, near Santa Margarita	114	1942-69	Jan. 25, 1969	14.93	g16,700	
				Feb. 24, 1969	13.35	g13,500	
				Dec. 6, 1966	12.45	g11,900	
1452	Rinconada Creek tributary near Pozo	0.35	1959-69	Jan. 19, 1969	54.82	182	
				Nov. 12, 1964	52.35	49	

See footnotes at end of table.

TABLE 6.--*Summary of flood stages and discharges*--Continued

Station number	Stream and place of determination	Drainage area (sq mi)	Period of record	Maximum floods			
				Date	Gage height (ft)	Discharge	
						Cfs	Recurrence interval (years)
PART 11. PACIFIC SLOPE BASINS IN CALIFORNIA--Continued							
	Salinas River basin--Continued						
1470	Jack Creek near Templeton	25.3	1949-69	Jan. 25, 1969	10.57	6,740	24
				Feb. 24, 1969	11.28	8,160	36
				Dec. 6, 1966	9.58	5,070	14
1470.3	Cienega Creek near Templeton	2.51	1967-69	Jan. 26, 1969	59.20	770	
				Feb. 24, 1969	58.59	650	
1470.4	Santa Rita Creek tributary near Templeton	2.95	1967-69	Jan. 19, 1969	10.65	1,290	
				Feb. 24, 1969	8.97	900	
				Feb. 17, 1968	3.89	80	
1470.7	Santa Rita Creek near Templeton	18.2	1961-69	Jan. 19, 1969	11.12	6,050	34
				Feb. 24, 1969	9.92	3,770	16
				Dec. 6, 1966	10.53	3,680	15
1476	Huerhuero Creek near Creston	101	1958-69	Jan. 25, 1969	10.0	3,200	12
				Feb. 24, 1969	13.2	12,400	a1.1
				Dec. 6, 1966	7.51	1,640	6
1476.3	San Marcos Creek tributary near Paso Robles	0.59	1959-69	Jan. 25, 1969	52.45	46	
				Dec. 6, 1966	54.52	135	
1477	Cholame Creek tributary near Cholame	9.26	1958-69	Jan. 25, 1969	11.10	700	
				Feb. 24, 1969	10.40	615	
				Dec. 6, 1966	11.50	750	
1477.5	White Canyon Creek at Cholame	4.80	1958-69	Jan. 25, 1969		107	
				Feb. 24, 1969		444	
				Dec. 6, 1966	5.68	94	
1478	Cholame Creek near Shandon	227	1958-69	Jan. 26, 1969	11.98	5,600	
				Feb. 24, 1969	14.06	6,900	
				Dec. 6, 1966	10.45	6,100	
1485	Estrella River near Estrella	924	1954-69	Jan. 26, 1969	10.9	27,200	32
				Feb. 24, 1969	10.5	28,400	33
				Dec. 6, 1966	9.20	17,600	16
1485.5	Indian Valley Creek tributary near Valleton	0.13	1960-69	Jan. 26, 1969		66	
				Jan. 31, 1963	51.84	13	
1488	Nacimiento River near Bryson	140	1955-69	Jan. 25, 1969	24.60	39,100	a1.6
				Feb. 24, 1969	22.03	31,700	a1.3
				Dec. 23, 1955	24.63	30,300	a1.3

See footnotes at end of table.

TABLE 6.--*Summary of flood stages and discharges*--Continued

Station number	Stream and place of determination	Drainage area (sq mi)	Period of record	Maximum floods			
				Date	Gage height (ft)	Discharge	
						Cfs	Recurrence interval (years)
PART 11. PACIFIC SLOPE BASINS IN CALIFORNIA--Continued							
	Salinas River basin--Continued						
1488.2	Sapaque Creek tributary at Bryson	0.76	1960-69	Jan. 26, 1969		72	
				Jan. 29, 1967	54.40	54	
1494	Nacimiento River below Nacimiento Dam, near Bradley	322	1957-69	Jan. 28, 1969	9.50	g3,800	
				Feb. 25, 1969	10.92	g7,340	
				Apr. 7, 1958	10.28	g5,220	
1496.5	Sulphur Springs Canyon near Jolon	5.16	1960-69	Jan. 26, 1969	8.15	320	
				Feb. 24, 1969	5.90	205	
				Dec. 6, 1966	b59.22	372	
1499	San Antonio River near Lockwood	223	1965-69	Jan. 26, 1969	8.25	14,000	
				Feb. 24, 1969	6.59	7,870	
				Dec. 6, 1966	9.2	11,000	
1505	Salinas River near Bradley	2,536	1948-69	Jan. 25, 1969	18.88	g56,200	
				Feb. 24, 1969	20.34	g117,000	
				Dec. 7, 1966	16.2	g34,000	
1507	Feliz Canyon tributary near San Lucas	3.00	1960-69	Jan. 26, 1969	53.16	61	
				Jan. 24, 1967	52.03	26	
1508	Cow Creek near San Ardo	4.80	1960-69	Jan. 25, 1969		360	
				Feb. 15, 1962	57.13	213	
1509.5	San Lorenzo Creek tributary near Bitterwater	3.24	1960-69	Jan. 26, 1969	50.88	5	
				Feb. 24, 1969		36	
				Jan. 31, 1963	51.80	20	
1513	San Lorenzo Creek below Bitterwater Creek, near King City	233	1958-69	Jan. 25, 1969	15.30	10,500	18
				Feb. 24, 1969	14.38	8,850	15
				Dec. 6, 1966	9.74	3,630	5
1517	Salinas River at Soledad	3,563	1969	Jan. 26, 1969	23.39	g67,300	
				Feb. 25, 1969	23.22	g97,500	
1518.7	Arroyo Seco near Greenfield	113	1961-69	Jan. 26, 1969	11.90	15,200	16
				Feb. 24, 1969	9.50	8,500	6
				Dec. 6, 1966	12.50	15,200	16
1519.5	Sand Creek near Paraiso Springs	14.8	1960-69	Jan. 25, 1969	50.89	62	
				Feb. 24, 1969	50.61	35	
				Jan. 31, 1963		673	

See footnotes at end of table.

TABLE 6.--*Summary of flood stages and discharges*--Continued

Station number	Stream and place of determination	Drainage area (sq mi)	Period of record	Maximum floods			
				Date	Gage height (ft)	Discharge	
						Cfs	Recurrence interval (years)
PART 11. PACIFIC SLOPE BASINS IN CALIFORNIA--Continued							
	Salinas River basin--Continued						
1520	Arroyo Seco near Soledad	244	1901-69	Jan. 26, 1969	15.0	24,000	14
				Feb. 24, 1969	12.0	12,000	5
				Apr. 3, 1958	16.40	28,300	27
1525	Salinas River near Spreckels	4,157	1900-01	Jan. 27, 1969	26.1	g73,200	16
			1929-69	Feb. 26, 1969	26.51	g83,100	23
				Feb. 12, 1938	25.0	75,000	18
				Jan. 16, 1952	26.85		
1525.4	El Toro Creek near Spreckels	31.9	1961-69	Jan. 26, 1969	6.01	627	
				Feb. 24, 1969	5.78	550	
				Apr. 21, 1967	4.56	131	
1527	Moro Cojo Slough tributary near Castroville	0.11	1960-69	Feb. 24, 1969	51.39	13	
				Jan. 31, 1963	51.47	12	
	Pajaro River basin						
1529	Cedar Creek near Bell Station	12.8	1961-69	Jan. 18, 1969	5.13	1,500	11
				Feb. 24, 1969	4.51	1,000	7
				Jan. 31, 1963	6.85	3,490	33
1530	Pacheco Creek near Dunneville	146	1939-69	Jan. 26, 1969	19.85	11,000	
				Feb. 24, 1969	15.72	7,400	
				Dec. 23, 1955	21.0	12,600	
1530.5	Pacheco Creek tributary near Dunneville	0.17	1960-69	Jan. 26, 1969	51.34	8.0	
				Feb. 24, 1969	51.16	6.2	
				Mar. 16, 1967	51.09	5.5	
1537	Pajaro River near Gilroy	399	1959-69	Jan. 26, 1969	14.67	7,000	
				Feb. 25, 1969	12.27	6,600	
				Feb. 1, 1963	13.81	5,320	
1564.5	Willow Creek tributary near San Benito	1.24	1960-69	Jan. 26, 1969	51.08	5	
				Feb. 24, 1969	51.43	40	
				Feb. 9, 1962	51.05	4.7	
1565	San Benito River near Willow Creek School	249	1939-69	Jan. 26, 1969	9.52	3,420	
				Feb. 24, 1969	10.45	6,920	
				Apr. 3, 1958	b8.35	8,210	12
				February 1938	b9.0		
1566.8	Thompson Creek near Paicines	9.67	1960-69	Feb. 24, 1969	53.90	68	
				Apr. 23, 1967	51.92	21	

See footnotes at end of table.

TABLE 6.--*Summary of flood stages and discharges*--Continued

Station number	Stream and place of determination	Drainage area (sq mi)	Period of record	Maximum floods			
				Date	Gage height (ft)	Discharge	
						Cfs	Recurrence interval (years)
PART 11. PACIFIC SLOPE BASINS IN CALIFORNIA--Continued							
	Pajaro River basin--Continued						
1567	Pescadero Creek near Paicines	38.3	1959-69	Jan. 26, 1969	6.24	143	
				Feb. 24, 1969	6.99	341	
				Apr. 23, 1967	5.87	68	
1575	Tres Pinos Creek near Tres Pinos	206	1939-69	Jan. 25, 1969	7.40	1,700	3
				Feb. 24, 1969	9.49	5,520	8
				Apr. 4, 1941	7.75	8,060	13
				February 1938	9.0		
1585	San Benito River near Hollister	586	1949-69	Jan. 25, 1969	11.23	4,110	
				Feb. 24, 1969	16.10	8,900	
				Apr. 3, 1958	16.30	11,600	8
1590	Pajaro River at Chittenden	1,186	1939-69	Jan. 26, 1969	22.39	12,000	4
				Feb. 25, 1969	23.92	17,800	6
				Dec. 24, 1955	32.46	24,000	11
				Apr. 3, 1958	f33.11		
	Buena Vista Lake basin						
1853.5	Kern River near Quaking Aspen Camp	530	1960-69	Jan. 25, 1969	7.64	3,650	
				Dec. 6, 1966	10.89	9,360	
1854	Little Kern River near Quaking Aspen Camp	132	1957-69	Jan. 25, 1969	7.06	2,900	7
				Dec. 6, 1966	12.60	13,100	a1.4
1856	Packsaddle Canyon Creek near Fairview	4.05	1959-69	Jan. 21, 1969	12.65	245	
				Dec. 6, 1966		660	
1870	Kern River at Kernville	1,009	1905-12	Jan. 25, 1969	14.00	26,900	18
			1953-69	Feb. 24, 1969	6.63	2,550	
				Dec. 6, 1966	22.2	74,000	a1.6
1872	Shirley Creek tributary near Alta Sierra	0.27	1960-69	Jan. 25, 1969	12.24	27	
				Dec. 6, 1966	13.70	60	
1895	South Fork Kern River near Onyx	530	1911-14	Jan. 25, 1969	9.00	9,200	24
			1919-42	Feb. 24, 1969	3.65	610	
			1947-69	Dec. 6, 1966	16.9	28,700	a2.0
1905	Isabella Reservoir near Isabella	2,074	1953-67	Jan. 25, 1969		k32,400	
				Feb. 25, 1969		k5,490	

See footnotes at end of table.

TABLE 6.--*Summary of flood stages and discharges*--Continued

Station number	Stream and place of determination	Drainage area (sq mi)	Period of record	Maximum floods			
				Date	Gage height (ft)	Discharge	
						Cfs	Recurrence interval (years)
PART 11. PACIFIC SLOPE BASINS IN CALIFORNIA--Continued							
	Buena Vista Lake basin--Continued						
1910	Kern River below Isabella Dam	2,074	1945-69	Jan. 25, 1969	6.75	g578	
				Feb. 17, 1969	9.00	g1,620	
				Nov. 19, 1950	28.6	39,000	
				June 28, 1958	15.14	f4,870	
	Erskine Creek near Isabella	33.1		Jan. 25, 1969		571	
	Bodfish Creek near Isabella	15.8		Jan. 25, 1969		524	
				Feb. 24, 1969		423	
	Clear Creek near Hobo Hot Springs	48.1		Jan. 25, 1969		914	
1918	Kern River tributary near Miracle Hot Springs	1.21	1959-69	Jan. 25, 1969	8.74	32.5	
				Feb. 25, 1969	8.22	24.0	
				Dec. 6, 1966	13.10	593	
	Sacramento Gulch near Oildale	3.28		Feb. 24, 1969		15.9	
1940.5	Tumbleweed Creek near Oildale	2.40	1958-69	Jan. 25, 1969	0	0	
				Feb. 24, 1969	e1	.4	
				Feb. 13, 1963	4.65	104	
1948	Shale Creek near Fellows	5.86	1958-69	Jan. 25, 1969	7.19	18	
				Feb. 24, 1969	7.61	29	
				Feb. 19, 1962	10.16	118	
1950	Oil Creek near Taft	0.35	1958-69	Jan. 25, 1969	4.28	3.4	
				February 1969		(h)	
				May 28, 1963	4.92	11	
1951.5	Bitterwater Creek near Maricopa	18.5	1961-69	Jan. 25, 1969		e2.5	
				Feb. 24, 1969		76	
				Feb. 9, 1962	14.86	144	
1953	Santiago Creek near Maricopa	34.8	1961-69	Jan. 25, 1969	14.53	213	
				Feb. 24, 1969	15.61	530	
				June 10, 1963	17.45	1,100	
1955	San Emigdio Creek at San Emigdio Ranchhouse	48.8	1959-69	Jan. 25, 1969	12.66	690	
				Feb. 24, 1969	11.10	180	
				Aug. 5, 1961	19.87	6,690	

See footnotes at end of table.

TABLE 6.--*Summary of flood stages and discharges*--Continued

Station number	Stream and place of determination	Drainage area (sq mi)	Period of record	Maximum floods			
				Date	Gage height (ft)	Discharge	
						Cfs	Recurrence interval (years)
PART 11. PACIFIC SLOPE BASINS IN CALIFORNIA--Continued							
	Buena Vista Lake basin--Continued						
1956	Pastoria Creek near Lebec	27.5	1964-69	Jan. 21, 1969	3.01	22	
				Feb. 25, 1969	3.39	109	
				Nov. 7, 1966	1.68	13	
1964	Caliente Creek above Tehachapi Creek, near Caliente	165	1961-69	Jan. 25, 1969	2.87	160	
				Feb. 25, 1969	3.96	717	
				Aug. 8, 1963	7.48	1,410	
1964.2	Tehachapi Creek near Tehachapi	53.2	1962-69	Jan. 25, 1969	.87	44	
				Feb. 25, 1969	1.73	250	
				Aug. 8, 1963	b5.30	1,700	
	Walker Basin Creek near Caliente	118		Feb. 24, 1969		1,250	
	Tulare Lake basin						
1972.5	Avenal Creek near Avenal	57.1	1961-69	Jan. 25, 1969	7.54	2,420	
				Feb. 24, 1969	7.89	2,600	
				Dec. 6, 1966	5.72	1,540	
1973.5	Stoker Canyon Creek near Devils Den	7.51	1958-69	Jan. 25, 1969	9.86	288	
				Feb. 24, 1969	9.20	249	
				Dec. 6, 1966	14.78	517	
	Franciscan Creek near Devils Den	20.8		Feb. 24, 1969		553	
1973.7	Bitterwater Creek near Lost Hills	76.4	1961-69	Jan. 25, 1969	2.50	1,150	
				Feb. 24, 1969	4.90	3,120	
				Dec. 1, 1961	1.86	180	
1978	Poso Creek near Oildale	230	1959-69	Jan. 25, 1969	10.57	3,020	
				Feb. 25, 1969	12.85	6,700	
				Dec. 6, 1966	11.57	4,300	
1980.5	Mon Canyon Creek near Oildale	2.38	1958-69	January 1969		0	
				February 1969		0	
				Apr. 1, 1964	5.08	55.4	
	Rag Gulch near Richgrove	186		Feb. 24, 1969		2,240	
1993	Coho Creek near White River	12.9	1959-69	Jan. 25, 1969	6.24	155	
				Feb. 24, 1969	15.0	564	
				Dec. 6, 1966	7.72	221	

See footnotes at end of table.

TABLE 6.--*Summary of flood stages and discharges*--Continued

Station number	Stream and place of determination	Drainage area (sq mi)	Period of record	Maximum floods			
				Date	Gage height (ft)	Discharge	
						Cfs	Recurrence interval (years)
PART 11. PACIFIC SLOPE BASINS IN CALIFORNIA--Continued							
	Tulare Lake basin--Continued						
	White River near Vestal	120		Feb. 24, 1969		3,930	
2008	Deer Creek near Fountain Springs	67.0		Jan. 25, 1969	8.83	2,510	
				Feb. 24, 1969	9.85	3,340	
				Dec. 6, 1966	12.54	5,330	
2024.5	Winding Creek near Camp Nelson	0.30	1959-69	Jan. 25, 1969	11.46	19	
				Feb. 24, 1969	11.69	24.3	
				Dec. 6, 1966	12.71	48	
2032	Tule River near Springville	225	1957-69	Jan. 25, 1969	11.40	17,000	45
				Feb. 24, 1969	10.13	10,900	18
				Dec. 6, 1966	17.18	49,600	a2.8
2033	Wardlow Creek near Springville	0.46	1968-69	Jan. 19, 1969	10.70	131	
				Feb. 24, 1969	11.05	196	
2045	South Fork Tule River near Success	109	1930-54	Jan. 25, 1969	8.69	5,280	18
			1956-69	Feb. 24, 1969	8.35	4,720	15
				Dec. 6, 1966	12.50	14,300	a1.7
2047	Lake Success near Success	391	1961-69	Jan. 25, 1969		k22,500	
				Feb. 25, 1969		k18,000	
2049	Tule River below Success Dam	393	1953-69	Jan. 29, 1969	8.88	g2,540	
				Feb. 27, 1969	9.44	g3,210	
				Dec. 23, 1955	b21.65	27,000	a1.2
2065	Middle Fork Kaweah River near Potwisha Camp	102	1949-69	Jan. 25, 1969	11.82	6,580	17
				Feb. 24, 1969	7.50	1,270	
				Dec. 23, 1955	b29.0	46,800	a4.2
2080	Marble Fork Kaweah River at Potwisha Camp	51.4	1950-69	Jan. 25, 1969	8.86	2,610	10
				Feb. 24, 1969	4.43	238	
				Dec. 23, 1955	13.4	12,500	a2.0
2085	Middle Fork Kaweah River tributary near Hammond	1.90	1960-69	Jan. 25, 1969	22.06	203	
				Feb. 24, 1969	15.57	108	
				Dec. 6, 1966	30.63	879	
2087.3	East Fork Kaweah River near Three Rivers	85.8	1952-55	Jan. 25, 1969	10.76	4,700	
			1957-69	Feb. 24, 1969	6.81	1,770	
				Dec. 6, 1966	21.0	13,000	

See footnotes at end of table.

TABLE 6.--*Summary of flood stages and discharges*--Continued

Station number	Stream and place of determination	Drainage area (sq mi)	Period of record	Maximum floods			
				Date	Gage height (ft)	Discharge	
						Cfs	Recurrence interval (years)
PART 11. PACIFIC SLOPE BASINS IN CALIFORNIA--Continued							
	Tulare Lake basin--Continued						
2099	Kaweah River at Three Rivers	418	1958-69	Jan. 25, 1969	12.49	24,200	22
				Feb. 24, 1969	9.97	11,900	6
				Dec. 5, 1966	16.69	73,000	a2.0
2101	South Fork Kaweah River at Three Rivers	86.7	1958-69	Jan. 25, 1969	6.73	5,960	25
				Feb. 24, 1969	6.87	6,360	28
				Dec. 6, 1966	9.30	11,600	a1.4
2109	Lake Kaweah near Lemoncove	560	1961-69	Jan. 25, 1969		k35,100	
				Feb. 24, 1969		k20,500	
2109.5	Kaweah River below Terminus Dam	561	1961-69	Jan. 30, 1969	7.89	g4,380	
				Mar. 2, 1969		g j2,520	
				Dec. 8, 1966	8.62	g5,740	
2113	Dry Creek near Lemoncove	80.4	1959-69	Jan. 25, 1969	10.51	5,770	a1.2
				Feb. 24, 1969	10.00	5,120	a1.1
				Dec. 6, 1966	7.30	14,500	a3.0
	Antelope Creek at Woodlake	19.2		Feb. 24, 1969		1,050	
	Yokohl Creek near Lindcove	66.1		Feb. 24, 1969		2,250	
	Lewis Creek near Strathmore	18.3		Feb. 24, 1969		1,560	
2120	Sand Creek near Orange Cove	32	1944-54	Feb. 24, 1969		3,520	a2.1
				Jan. 24, 1952	4.12	446	4
	Wooten Creek near Orange Cove	7.25		Jan. 25, 1969		264	
	Cottonwood Creek at Elderwood	83.4		Feb. 24, 1969		4,670	
2135	Kings River above North Fork, near Trimmer	952	1926-28	Jan. 25, 1969	13.2	30,800	12
			1931-69	Feb. 24, 1969		e3,900	
				Dec. 23, 1955	16.26	59,100	43
2158	Teakettle Creek at site No. 3, near Patterson Mountain	0.86	1957-69	Jan. 25, 1969	2.66	29.5	
				Feb. 24, 1969	.86	1.7	
				Feb. 1, 1963	3.81	99.0	
2165	North Fork Kings River above Dinkey Creek, at Balch Camp	250	1919-30	Jan. 25, 1969	7.43	g7,650	
			1960-69	Feb. 24, 1969	3.39	g1,040	
				Feb. 1, 1963	d13.24	g14,000	

See footnotes at end of table.

TABLE 6.--*Summary of flood stages and discharges*--Continued

Station number	Stream and place of determination	Drainage area (sq mi)	Period of record	Maximum floods			
				Date	Gage height (ft)	Discharge	
						Cfs	Recurrence interval (years)
PART 11. PACIFIC SLOPE BASINS IN CALIFORNIA--Continued							
	Tulare Lake basin--Continued						
2168	Rock Creek at Dinkey Creek	7.60	1960-69	Jan. 25, 1969	6.06	554	
				Feb. 25, 1969	4.00	102	
				Feb. 1, 1963	8.68	2,850	
2184	North Fork Kings River below Dinkey Creek, near Balch Camp	387	1960-69	Jan. 25, 1969	14.31	13,400	
				Feb. 24, 1969	7.47	2,600	
				Feb. 1, 1963	19.20	g27,400	
2185	Kings River below North Fork, near Trimmer	1,342	1951-69	Jan. 25, 1969	16.00	g39,000	
				Feb. 24, 1969	9.32	g10,700	
				Dec. 23, 1955	23.08	85,200	50
2200	Big Creek above Pine Flat Reservoir, near Trimmer	69.9	1953-69	Jan. 25, 1969	10.43	16,400	a2.4
				Feb. 24, 1969	6.94	3,780	15
				Dec. 23, 1955	9.21	10,400	a1.5
2205	Sycamore Creek above Pine Flat Reservoir, near Trimmer	56.1	1953-69	Jan. 25, 1969	13.83	14,600	a3.5
				Feb. 24, 1969	8.51	5,720	a1.4
				Dec. 24, 1955	9.78	6,760	a1.6
2210	Pine Flat Reservoir near Piedra	1,545	1951-69	Jan. 25, 1969		k70,600	
				Feb. 26, 1969		k7,120	
2215	Kings River below Pine Flat Dam	1,545	1953-69	Jan. 31, 1969	5.97	g3,560	
				Mar. 5, 1969		g j4,920	
				July 3, 1967	10.05	g15,400	
	Hughes Creek below Pine Flat Dam, near Piedra	12.1		Jan. 25, 1969		5,810	
2217	Mill Creek near Piedra	120	1938-69	Jan. 25, 1969	9.24	10,300	a1.3
				Feb. 24, 1969	7.57	9,520	a1.2
				Dec. 6, 1966	9.53	11,000	a1.4
	Wahtoke Creek near Centerville	18.3		Jan. 25, 1969		1,760	
2226	Bear Mountain Creek near Squaw Valley	0.14	1959-69	Jan. 19, 1969	7.42	17	
				Feb. 24, 1969	7.08	11	
				Dec. 6, 1966	8.11	32	
	Travers Creek near Reedley	5.48		Jan. 25, 1969		1,130	

See footnotes at end of table.

TABLE 6.--*Summary of flood stages and discharges*--Continued

Station number	Stream and place of determination	Drainage area (sq mi)	Period of record	Maximum floods			
				Date	Gage height (ft)	Discharge	
						Cfs	Recurrence interval (years)
PART 11. PACIFIC SLOPE BASINS IN CALIFORNIA--Continued							
	Tulare Lake basin--Continued						
2245	Los Gatos Creek above Nunez Canyon, near Coalinga	95.8	1945-69	Jan. 26, 1969	10.0	3,930	13
				Feb. 24, 1969	10.34	4,360	15
				Apr. 3, 1958, Feb. 9, 1962		2,560	8
				Dec. 6, 1966	7.61		
2250.5	Warthan Creek tributary No. 1 near Coalinga	0.13	1958-69	Jan. 25, 1969	6.92	29.3	
				Feb. 24, 1969	7.91	51	
				Dec. 6, 1966	7.24	34	
2250.75	Warthan Creek tributary No. 2 near Coalinga	0.012	1958-69	January 1969		0	
				Feb. 24, 1969	14.92	6.5	
				Jan. 24, 1967	14.21	1	
	Warthan Creek near Coalinga	94.4		Feb. 24, 1969		9,350	
	Jacalitos Creek near Coalinga	64.8		Feb. 24, 1969		5,660	
2251	Los Gatos Creek below Jacalitos Creek, near Coalinga	407	1959-69	Jan. 25, 1969	13.10	11,400	
				Feb. 24, 1969	14.27	13,000	
				Dec. 6, 1966	11.59	4,760	
2251.3	Zapato Chino Creek near Avenal	44.5	1961-69	Jan. 25, 1969		1,570	
				Feb. 24, 1969		3,560	
				Feb. 9, 1962	11.05	866	
	Canoas Creek near Coalinga	33.4		Feb. 24, 1969		1,530	
	San Joaquin River basin						
2424	North Fork Willow Creek near Sugar Pine	16.9	1965-69	Jan. 21, 1969	5.24	1,040	
				Feb. 26, 1969	3.49	148	
				Dec. 6, 1966	5.90	1,600	
2440	North Fork Willow Creek near Bass Lake	50.8	1940-69	Jan. 26, 1969	8.18	g1,850	
				Feb. 25, 1969	4.82	g320	
				Feb. 11, 1941	5.85	g847	
2465	Willow Creek at mouth, near Auberry	130	1952-69	Jan. 25, 1969	17.44	g6,160	
				Feb. 24, 1969	14.24	g3,920	
				Dec. 23, 1955	28.5	g15,700	

See footnotes at end of table.

TABLE 6.--*Summary of flood stages and discharges*--Continued

Station number	Stream and place of determination	Drainage area (sq mi)	Period of record	Maximum floods			
				Date	Gage height (ft)	Discharge	
						Cfs	Recurrence interval (years)
PART 11. PACIFIC SLOPE BASINS IN CALIFORNIA--Continued							
	San Joaquin River basin--Continued						
2470	San Joaquin River below Kerckhoff powerhouse, near Prather	1,481	1910-14 1936-37 1942-69	Jan. 26, 1969 Feb. 24, 1969 Dec. 23, 1955	30.46 26.79 51.0	g26,100 g18,200 g92,200	
2472	Big Sandy Creek tributary near Tollhouse	0.46	1959-69	Jan. 25, 1969 Feb. 24, 1969 Dec. 6, 1966	7.40 5.99 5.35	48 33 28	
2510	San Joaquin River below Friant	1,676	1907-69	Jan. 31, 1969 Feb. 24, 1969 Dec. 11, 1937	9.19 10.40 b23.8	g7,340 g9,420 g77,200	
	Redbank Slough near Clovis	4.72		Jan. 25, 1969		395	
	Cottonwood Creek near Trigo	36.7		Feb. 24, 1969		3,270	
	Little Dry Creek near Trigo	32.2		Feb. 24, 1969		3,240	
2533.1	Cantua Creek near Cantua Creek	46.4	1958-69	Jan. 25, 1969 Feb. 24, 1969 Apr. 2, 1958	6.04 6.60 5.34	1,060 1,550 751	
	Salt Creek near Three Rocks	25.6		Feb. 24, 1969		1,020	
	Arroyo Hondo near Cantua Creek	25.8		Feb. 24, 1969		864	
2555	Panoche Creek below Silver Creek, near Panoche	293	1949-53 1958-69	Jan. 25, 1969 Feb. 24, 1969 Jan. 12, 1952 Apr. 2, 1958	7.2 8.42 7.05 7.01	e2,400 5,400 3,160 5,090	4 9 5 8
2555.5	Little Panoche Creek tributary No. 1 near Panoche	0.33	1958-69	Jan. 25, 1969 Feb. 24, 1969 Jan. 19, 1962	5.79 6.35 7.49	8 20.7 58	
2556	Little Panoche Creek tributary No. 2 near Panoche	14.8	1958-69	Feb. 24, 1969 Nov. 21, 1967	4.07 9.61	31.0 113	
2571	Miami Creek near Oakhurst	10.6	1960-69	Jan. 19, 1969 February 1969 Feb. 1, 1963	8.17 9.08	608 (h) 804	

See footnotes at end of table.

TABLE 6.--*Summary of flood stages and discharges*--Continued

Station number	Stream and place of determination	Drainage area (sq mi)	Period of record	Maximum floods			
				Date	Gage height (ft)	Discharge	
						Cfs	Recurrence interval (years)
PART 11. PACIFIC SLOPE BASINS IN CALIFORNIA--Continued							
	San Joaquin River basin--Continued						
2575	Fresno River near Knowles	133	1911-13	Jan. 25, 1969	8.03	6,000	10
			1915-69	Feb. 24, 1969	9.18	8,200	20
				Dec. 23, 1955	11.52	13,300	a1.1
2577	Picayune Creek near Coarsegold	8.17	1960-69	Jan. 25, 1969	11.50	979	
				Feb. 24, 1969	10.74	874	
				Apr. 18, 1967	6.91	393	
2578	Fresno River tributary near Raymond	0.052	1959-69	Jan. 20, 1969	2.96	.9	
				Feb. 24, 1969	3.38	3.2	
				Apr. 19, 1967	3.15	1.8	
2580	Fresno River near Daulton	258	1941-69	Jan. 25, 1969	10.58	11,100	15
				Feb. 24, 1969	12.69	17,300	a1.02
				Dec. 23, 1955	12.64	17,500	a1.03
	Dry Creek near Berenda	44.4		Feb. 24, 1969		963	
	Berenda Creek near Berenda	36.7		Feb. 24, 1969		1,080	
2587	Deep Creek near Oro Loma	6.96	1958-69	Jan. 25, 1969	16.05	7	
				Feb. 24, 1969	15.69	2	
				Nov. 23, 1965		645	
2589	West Fork Chowchilla River near Mariposa	33.6	1957-69	Jan. 25, 1969	8.93	4,200	a1.2
				Feb. 24, 1969	8.05	(h)	
				Apr. 3, 1958	8.67	3,590	50
2589.2	Middle Fork Chowchilla River near Nipinnawasee	13.6	1958-67	Jan. 25, 1969	7.95	906	22
				Feb. 24, 1969	8.72	1,040	29
				Feb. 1, 1963	10.10	1,280	45
2590	Chowchilla River at Buchanan damsite, near Raymond	235	1921-23	Jan. 19, 1969	12.71	12,900	31
			1930-69	Feb. 24, 1969	12.92	13,700	38
				Dec. 23, 1955	16.50	30,000	a2.0
2602.1	Bear Creek tributary near Catheys Valley	1.73	1959-69	Jan. 21, 1969	28.72	820	
				Feb. 24, 1969	23.74	112	
				Jan. 6, 1965	d26.04	162	
2602.25	Burns Creek at Hornitos	26.7	1964-69	Jan. 21, 1969	8.46	3,830	
				February 1969		(h)	
				Jan. 6, 1965	9.30	5,900	
				Feb. 15, 1962	10.66	9,200	

See footnotes at end of table.

TABLE 6.--*Summary of flood stages and discharges*--Continued

Station number	Stream and place of determination	Drainage area (sq mi)	Period of record	Maximum floods			
				Date	Gage height (ft)	Discharge	
						Cfs	Recurrence interval (years)
PART 11. PACIFIC SLOPE BASINS IN CALIFORNIA--Continued							
	San Joaquin River basin--Continued						
2604.8	Mariposa Creek near Catheys Valley	65.7	1958-69	Jan. 21, 1969	11.49	6,700	
				February 1969		(h)	
				Feb. 1, 1963	10.69	5,290	
				Apr. 3, 1958	11.62	7,180	
	Romero Creek near Volta	19.1		Feb. 24, 1969		392	
	Quinto Creek near Volta	29.2		Feb. 24, 1969		411	
2615	San Joaquin River at Fremont Ford Bridge	7,619	1937-69	Jan. 24, 1969	m66.37	g5,120	
				Feb. 26, 1969	m68.06	g8,500	
				Apr. 6, 1958	m67.37	g5,910	
2630.5	Garzas Creek, near Gustine	51.2	1959-69	Jan. 25, 1969	5.88	1,330	6
				Feb. 24, 1969	4.85	800	4
				Feb. 1, 1963	6.22	1,770	10
2745	Orestimba Creek near Newman	134	1932-69	Jan. 25, 1969	8.40	5,080	9
				Feb. 24, 1969	7.33	2,810	5
				Apr. 2, 1958	a6.57	10,200	28

a. Ratio to 50-year flood.
b. Site and (or) datum then in use.
c. Discharge not determined.
d. Affected by backwater.
e. Estimated.
f. Maximum observed.
g. Affected by regulation, storage, and (or) diversion.
h. To be determined.
i. Exceeded by March 1938 flood.
j. Maximum daily discharge.
k. Maximum bihourly inflow.
m. Elevation, in feet.

TABLE 7.--*Summary of maximum observed suspended-sediment concentrations*

[Time from peak: Minus figure indicates hours before peak stream discharge; plus figure indicates hours after peak stream discharge]

Number	Stream and place of determination	Drainage area (sq mi)	Period of record	Maximum observed suspended sediment		
				Date	Concentration (mg/l)	Time from peak (hours)
11-0420	San Luis Rey River at Oceanside	557	1968-69	Feb. 26, 1969	21,100	+12
11-0460	Santa Margarita River at Ysidora	739	1968-69	Feb. 25, 1969	10,100	-2
11-0780	Santa Ana River at Santa Ana	1,685	1967-69	Jan. 24, 1969	7,930	-
				Feb. 26, 1969	72,300	+33
				Mar. 8, 1968	9,780	-
11-1130	Sespe Creek near Fillmore	251	1966-69	Jan. 21, 1969	25,500	+2
				Jan. 25, 1969	26,000	+11
				Feb. 24, 1969	37,700	-10
				Dec. 6, 1966	18,400	-9
11-1139.2.	Santa Clara River at Saticoy	1,595	1967-69	Jan. 25, 1969	75,000	-1
				Feb. 23, 1969	56,600	-2
				Mar. 8, 1968	12,400	+1
11-1185	Ventura River near Ventura	188	1968-69	Jan. 25, 1969	a54,900	
				Feb. 25, 1969	a19,700	
11-1410	Santa Maria River at Guadalupe	1,742	1968-69	Jan. 25, 1969	72,000	-1
				Feb. 25, 1969	60,500	+7
11-1411.5	Arroyo Grande above Phoenix Creek, near Arroyo Grande	13.4	1967-69	Jan. 24, 1969	15,600	-11
				Feb. 28, 1969	41,900	b+89
11-1412.8	Lopez Creek near Arroyo Grande	21.4	1967-69	Jan. 19, 1969	32,400	-1
11-1470.4	Santa Rita Creek tributary near Templeton	2.95	1967-69	Jan. 19, 1969	8,860	
				Feb. 24, 1969	3,340	
11-1470.7	Santa Rita Creek near Templeton	18.2	1967-69	Jan. 26, 1969	1,910	+14
				Feb. 24, 1969	6,150	+4
11-1488	Nacimiento River near Bryson	140	1958-59, 1960-64, 1965-69	Jan. 25, 1969	1,190	+12
				Feb. 25, 1969	419	+30
11-1499	San Antonio River near Lockwood	223	1965-69	Jan. 21, 1969	9,820	c0
				Feb. 24, 1969	3,230	-2
11-1518.7	Arroyo Seco near Greenfield	113	1962-69	Jan. 25, 1969	1,760	d+4
				Feb. 24, 1969	1,360	+2
11-1525	Salinas River near Spreckels	4,157	1966-69	Jan. 26, 1969	15,100	-14
				Feb. 26, 1969	22,100	+1

a. Sampled at site 5 miles downstream at 1430 hours January 25 and 1600 hours February 25; discharge not determined.

b. After principal peak February 24; lower peak February 28. Concentration of 39,300 mg/l observed February 23, 31 hours before peak.

c. At peak of January 21; principal peak January 26.

d. After peak of January 25 (13,200 cfs); 20 hours before principal peak January 26 (15,200 cfs).

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