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BULLETIN No. 69-68

CALIFORNIA HIGH WATER
1967-1968

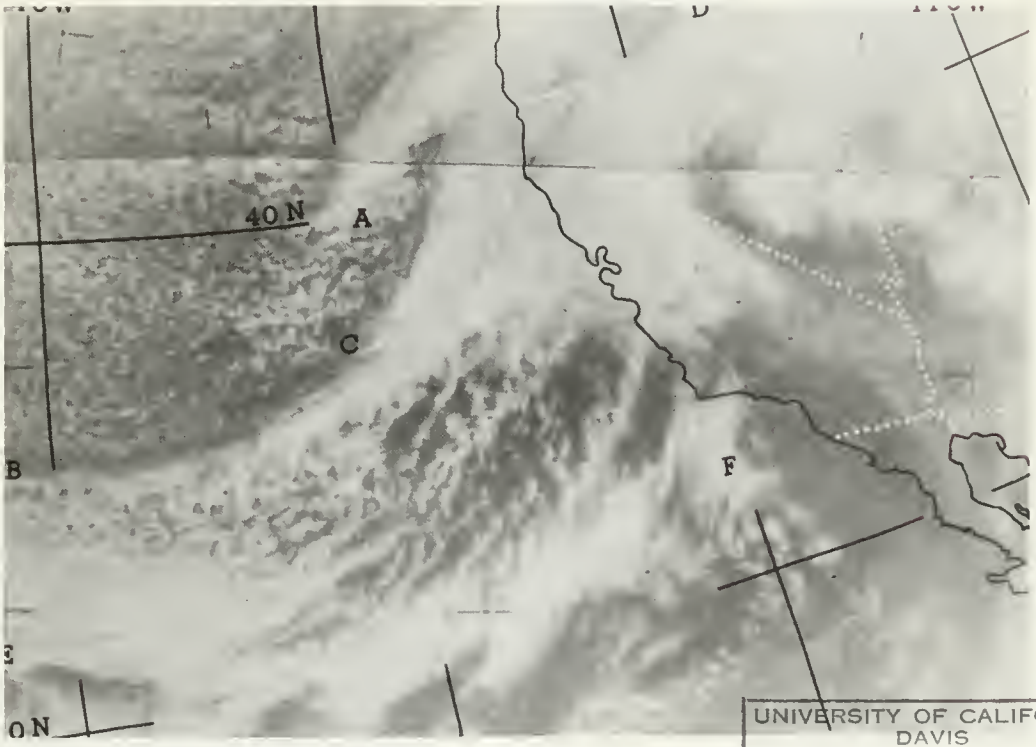

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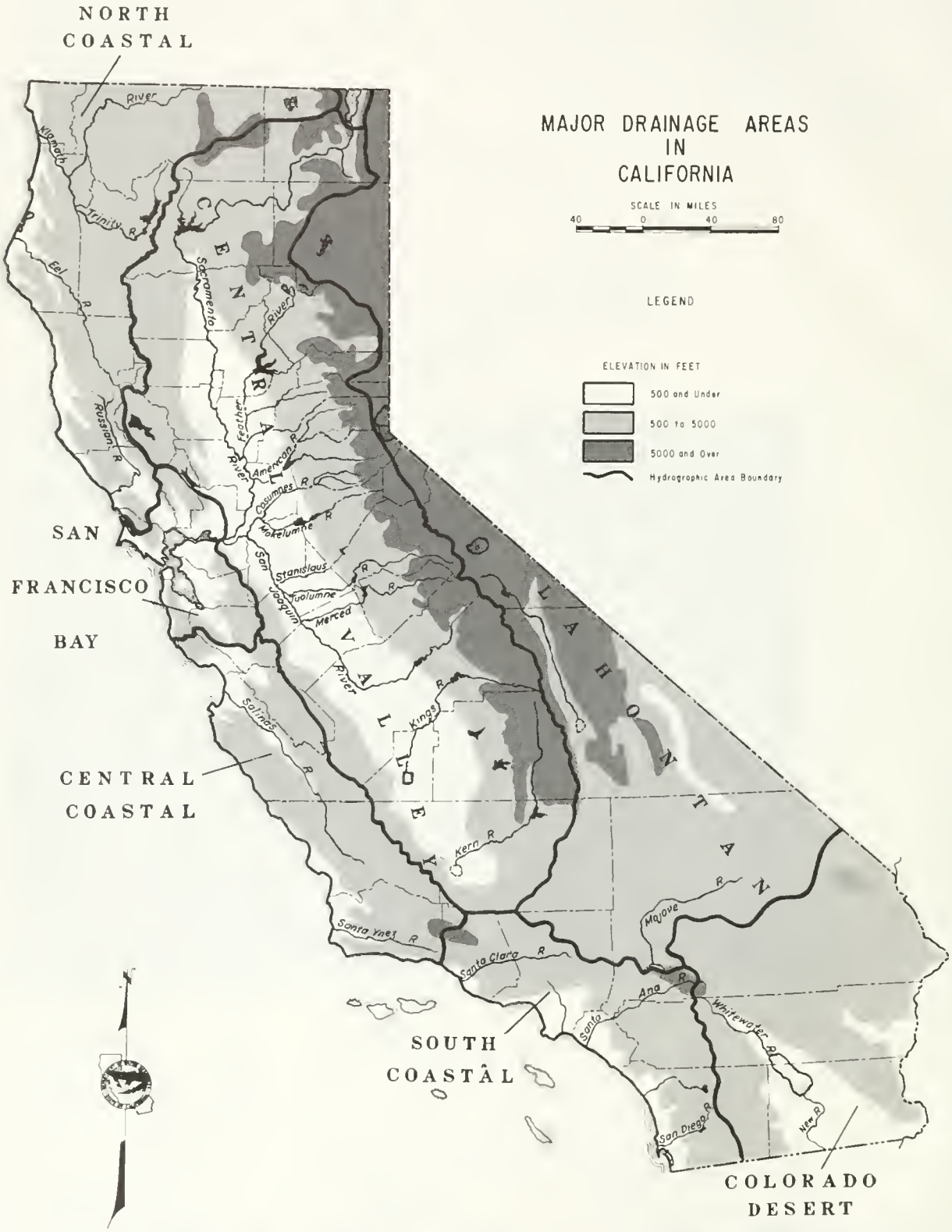
PLATE I


MAJOR DRAINAGE AREAS IN CALIFORNIA
SCALE IN MILES
40 0 40 80
LEGEND
ELEVATION IN FEET
500 and Under
500 to 5000
5000 and Over
Hydrographic Area Boundary
NORTH COASTAL
SAN FRANCISCO BAY
CENTRAL COASTAL
SOUTH COASTAL
COLORADO DESERT
CENTRAL VALLEY
LOS ANGELES
MOJAVE
Klamath River
Trinity R
Eel R
Russian R
Sacramento River
Feather River
American R
Cosumnes R
Mokelumne R
San Joaquin River
Stanislaus R
Tuolumne R
Merced R
Kings R
Kern R
Salinas R
Santa Ynez R
Santa Clara R
Santa Ana R
Mojave R
Whitewater R
San Diego R
New R

State of California
The Resources Agency
DEPARTMENT OF WATER RESOURCES

RONALD REAGAN, Governor
NORMAN B. LIVERMORE, JR., Secretary for Resources, The Resources Agency
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FOREWORD

Bulletin No. 69-68, the sixth of an annual series, describes, in one report, the general weather patterns preceding and during storm periods of the 1967-68 water year, precipitation characteristics, and the resulting runoff; and presents information on flooded areas and damages. In addition, tabulations of precipitation comparisons, peak streamflows and stages, reservoir operations, and streamflow hydrographs are also included.

Data for this Bulletin were supplied by the U. S. Weather Bureau, U. S. Geological Survey, U. S. Army Corps of Engineers, U. S. Bureau of Reclamation, and many other agencies, both public and private. Their cooperation is greatly acknowledged.

William R. Gianelli

William R. Gianelli, Director
Department of Water Resources
The Resources Agency
State of California
June 30, 1969

ABSTRACT

Statewide seasonal precipitation, October 1, 1967, through January 31, 1968, averaged 75 percent of normal. Streamflow ranged from less than 20 percent of normal in the Central Coastal area to 80 percent of normal in the North Coastal, the Sacramento Valley, and the Lahonton areas. / In the South Coastal Hydrographic area, October precipitation was nil, but November precipitation was unusually heavy as six times the normal amounts occurred. Los Angeles logged its second wettest November of record, only 1.01 inch short of the spectacular 1965 November maximum. Flooding occurred over widespread areas in Southern California when city storm drains were unable to carry the resultant runoff. / Flooding recurred in the area during March when precipitation was again above average. Flood damage during the March storm was considerably less than the damage that occurred in November. However, numerous traffic injuries and deaths were attributed to the March storm. / The North Coastal and Sacramento Valley areas were limited to two above-normal precipitation months. January storms produced monthly precipitation totals of 150 percent of normal. Runoff from the January storms caused significant rises in the Van Duzen and Eel Rivers. Flooding occurred in the Eel River delta area and also in the low lands of the Van Duzen River Basin. Total flood damage in the North Coastal area was relatively light. / During the 1967-68 water year, Oroville Dam, one of the largest features of the State Water Project, was completed and began storing water.

COVER PHOTO

A useful tool in meteorological analysis, which has become available in the last eight years, has been photographs of cloud systems taken from satellites. This picture was taken by the ESSA-VI satellite at 1830 Greenwich Mean Time on January 29, 1968. At this time the storm center was offshore west of Eureka at the 140° meridian. The cloudiness seen in the picture is associated with the storm which brought up to ten inches of rain in the North Coast over a period of nine days. (The picture was provided by Mr. David M. Ludlum of WEATHERWISE and is from the National Environmental Satellite Center, ESSA.)

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PLATE 2

HOURLY PRECIPITATION STATIONS

1. Cuyama Ranch
2. Santa Maria WB AP
3. Cuyama Ranger Station
4. Point Arguello
5. Cachuma Dam
6. Santa Barbara
7. Sanberg
8. Wheeler Springs 2 SSW
9. Lechuza Point Station FC
10. San Fernando PH 3
11. Tujunga Mill Creek FC
12. Los Angeles WB AP
13. Mt. Wilson FC
14. Opids Camp
15. San Gabriel Dam
16. San Dimas Tanbark Flat
17. Spadra Pacific FC
18. Santiago Dam
19. Silverado Ranger Station
20. Laguna Beach 2
21. Riverside Exp. Station
22. Santa Ana River PH 3
23. Beaumont
24. San Jacinto Ranger Station
25. Winchester
26. Idyllwild Ranger Station
27. Fallbrook
28. Palomar Mt. Observatory
29. Lake Wohlford
30. Warner Springs
31. Julian Wynola
32. San Diego WB AP
33. Lower Otay Reservoir
34. Morena Dam

SOUTH COASTAL AREA
PRECIPITATION STATION LOCATION
AND
NOVEMBER 1967 STORM ISOHYETAL MAP

THE WEATHER OF WATER YEAR 1967-68

The water year 1967-68 had a few storms which produced significant runoff, but in comparison with the previous water year there were no large, flood producing storms. The storms described in this report consist of five, three of which affected the northern part of the State, and two affected the southern part of the State.

Storm of November 18 to 22, 1967

A vigorous cold front moved into Southern California on November 19. Following the front a low-pressure center lingered offshore from the coast for the next three days. The center was located west of Santa Barbara on the 20th and then moved southward to a point near San Diego by the 22nd.

This low-pressure center on the surface weather map was supported aloft by a closed, cut-off low which brought a steady southwest flow of moist air over the Southern California area. The air mass involved was unstable, and therefore much of the precipitation fell as thundershowers. Many areas experienced brief, high-intensity precipitation.

New records were set for hourly precipitation amounts and for 3-day totals in Los Angeles, and for 24-hour totals at Long Beach.

Plate 2 is an isohyetal map of the South Coastal area for the November storm. Table 1 shows precipitation amounts during the November storm at selected stations in Southern California.

Table 1: Selected Precipitation Amounts in Southern California

Station	Daily Precipitation--Inches				Total
	November 1967				
	19	20	21	22	
Los Angeles (Civic Center)	3.61	1.38	2.97	0	7.96
Mt. Wilson	4.81	2.53	2.99	.41	10.74
Opids Camp	7.86	2.10	3.51	.48	13.45
San Diego	.61	.34	1.22	.67	2.84
Long Beach	.78	.64	4.06	.04	5.52
Oxnard	.96	.55	1.35	1.06	3.92
Pasadena	3.67	1.57	2.22	.18	7.64
Escondido	2.45	.35	.79	.58	4.17

LEGEND

12 ● HOURLY PRECIPITATION STATION

DRAINAGE BASIN BOUNDARY

ISOHYETS OF RAINFALL IN INCHES FOR THE PERIOD JAN 7 - 17, 1968

NORTH COASTAL AREA
PRECIPITATION STATION LOCATION
AND
JANUARY 1968 STORM ISOHYETAL MAP

Storm of January 7 to 17, 1968

Between January 7 and 17, a series of weather fronts moved through the North Coastal area. There were two periods of precipitation, one centered on the 9th and 10th and the other on the 13th through the 15th. The series was essentially a warm type, except during the 9th and 10th, when the Mt. Shasta office of the U. S. Weather Bureau reported 23.5 and 6.0 inches of snow respectively. High pressure following the weather front of January 10 brought a two-day break in the precipitation sequence on January 11 and 12. A vigorous front on January 13 brought a second surge of precipitation, which resulted in North Coast streams experiencing second and higher peaks.

Plate 3 is an isohyetal map of the North Coastal area for the January 7 to 17 storm.

Storm of January 25 to February 4, 1968

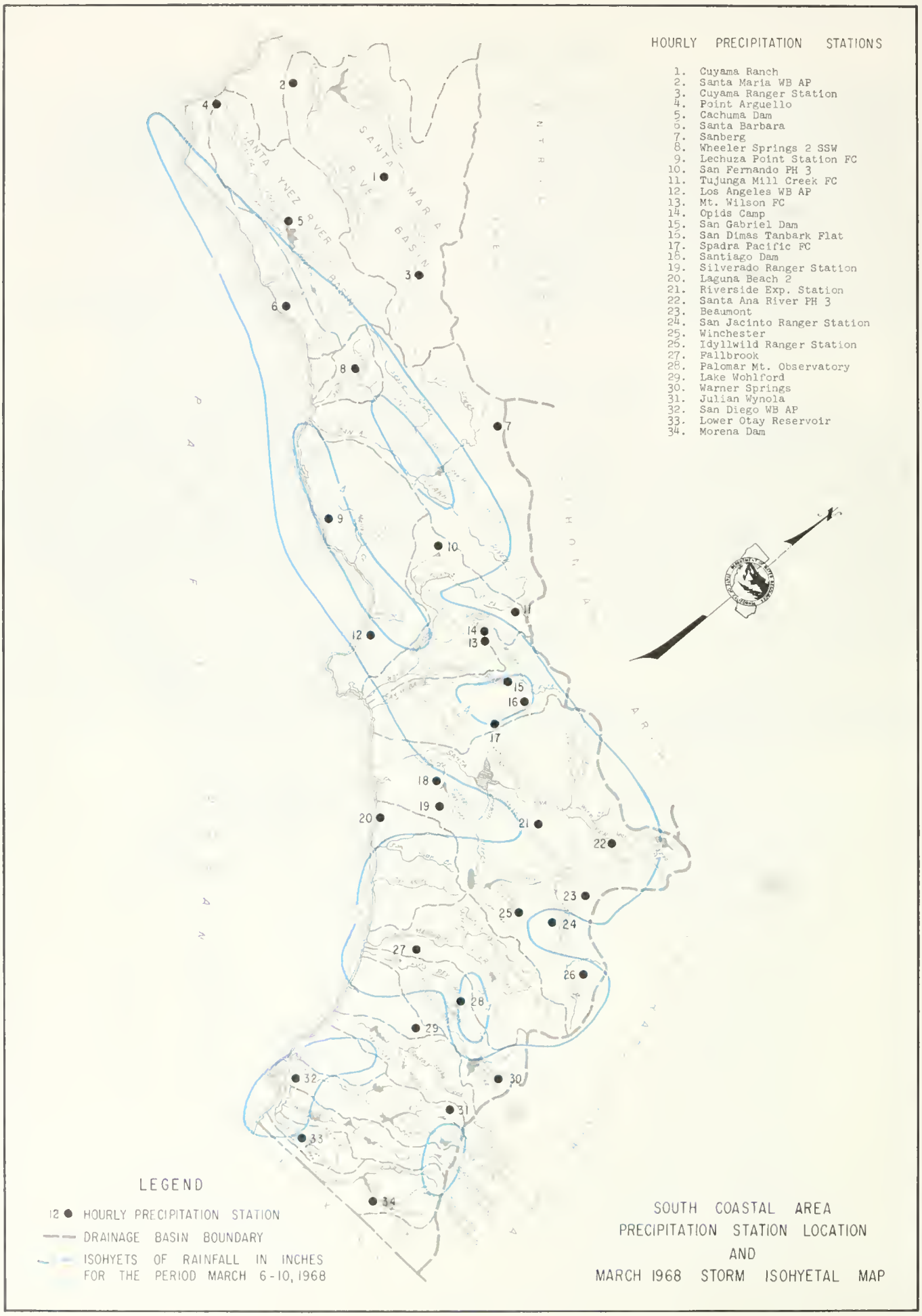
The mean upper level flow pattern during the last seven days of January consisted of a low-latitude trough of low pressure off the Southern California coast and a ridge of high pressure over the western Gulf of Alaska. This pattern brought storms over California from the northwest. A cold front moved down the State on the 25th. A complex low pressure area formed on the front in the Great Basin, which sustained an onshore flow of moist air.

Another low developed off the coast of Washington on the 28th, and this center also brought additional precipitation to northern and central areas of the State. On January 31, there was a temporary respite as a migratory high pressure cell moved over the central section of the State. During the first four days of February, two frontal systems brought a continuation of precipitation.

This storm period had a low snow level. This is illustrated in Table 2, which is a tabulation of data from the U. S. Weather Bureau Office, Mt. Shasta, elevation 3,544 feet.

Table 2: Snowfall and Temperature--Mt. Shasta

Date	Snowfall in inches	Max. Temp. Degrees F	Min. Temp. Degrees F.
Jan. 26	0.7	35	18
Jan. 27	4.4	35	8
Jan. 28	22.3	28	8
Jan. 29	14.6	30	27
Jan. 30	2.0	36	26
Jan. 31	0.5	33	25
Feb. 1	1.1	43	27
Feb. 2	1.4	38	32



SOUTH COASTAL AREA
PRECIPITATION STATION LOCATION
AND
MARCH 1968 STORM ISOHYETAL MAP

Storm of February 12 to 25, 1968

The month of February was warm in California. This resulted from the dominance of a ridge of high pressure over the West. However, one break in this pattern occurred at midmonth when the ridge retrograded to the northwest and atmospheric pressure lowered over the entire West Coast. During the 12th - 25th period, a series of six fronts moved over the northern part of the State. Some of these systems took a more northerly track through Washington-Oregon, but the associated fronts brought precipitation to both the North Coast and the Sacramento Valley.

Although the precipitation totals were not excessive, there were 9 to 10 days of rain, and the snow level was higher than in the period January 25 to February 4. Mt. Shasta reported no new snow during February 12 to 25, and the maximum and minimum temperatures were above 32° F.

Storm of March 2 to 15, 1968

A brief storm occurred in Southern California on March 7 to 8. A wave developed on a cold front on March 7 west of Santa Maria. The deepening of this low-pressure center and movement through the Southern California area brought rainfall which set new records for 24-hour amounts at some stations. Twenty-four hour amounts at many stations exceeded three inches, and some stations four inches.

Plate 4 is an isohyetal map of the South Coastal area for the March storm. Table 3 shows precipitation data for selected stations for the 1967-68 winter season.

Table 3: Precipitation Data from Selected Stations

Area & Precipitation Station	Elev. in Feet	Oct. 1, 1967-Apr. 30, 1968			Average Water Year - Inches
		Season Total Inches	Average Inches	Percent of Average	
North Coastal Area					
Orleans	403	36.63	47.00	78	51.51
Covelo	1,385	33.29	37.04	90	39.53
San Francisco Bay Area					
San Jose	70	13.84	12.65	109	13.28
San Francisco FOB	52	14.20	19.44	73	20.42
Central Coastal Area					
Paso Robles	700	7.91	12.79	62	13.41
Santa Barbara	100	13.44	17.01	79	17.55
South Coastal Area					
Ventura	45	12.62	13.82	91	14.17
Los Angeles WB	312	15.43	14.02	110	14.55
Central Valley Area					
Red Bluff WB	341	15.42	19.66	78	21.71
Sacramento WB	25	10.58	16.82	63	17.77
Lodi	40	10.98	15.62	72	16.20
Fresno WB	331	7.00	10.49	67	10.96
Lahontan					
Cedarville	4,670	7.72	9.94	78	12.80
Bishop WB	4,108	.96	4.94	19	5.75
Colorado Desert Area					
Twenty-nine Palms	1,975	2.11	2.47	85	3.97
Imperial	-64	2.91	1.93	151	2.72

Table 4. Precipitation Comparison for Six Storms North Coastal and Sacramento Valley Basins **

Station	One Day						Two Days						Three Days						Four Days					
	Dec. 1955	Oct. 1962	Jan-Feb 1963	Dec. 1964	Jan. 1967	Jan. 1968	Dec. 1955	Oct. 1962	Jan-Feb 1963	Dec. 1964	Jan. 1967	Jan. 1968	Dec. 1955	Oct. 1962	Jan-Feb 1963	Dec. 1964	Jan. 1967	Jan. 1968	Dec. 1955	Oct. 1962	Jan-Feb 1963	Dec. 1964	Jan. 1967	Jan. 1968
North Coast																								
Alderpoint	5.06	3.83	3.70	5.86	2.27	2.11	6.90	6.30	6.40	10.35	4.20	4.11	7.76	8.45	7.68	13.60	4.46	4.96	9.51	10.95	8.16	14.70	5.20	5.42
Cummings	7.00	4.03	5.08	11.20	4.06	3.28	11.00	7.64	7.65	18.04	6.74	5.08	12.20	11.01	9.83	22.70	7.61	6.12	15.90	13.28	10.59	25.44	8.57	6.96
Gasquet RS	7.29	3.82	2.47	6.35	3.81	4.34	10.19	6.32	4.43	10.39	5.77	5.89	11.39	8.20	5.10	13.90	6.56	7.06	14.02	9.29	7.06	17.1	7.78	7.41
Mad River RS	4.04	2.94	4.03	7.87	2.08	3.45	7.55	6.67	6.93	14.77	3.65	5.75	9.77	.23	--	--	4.67	6.4	12.44	10.96	--	21.07 (7 days)	5.54	.42
Orleans	4.59	3.23	1.92	7.31	2.34	2.04	.55	4.29	3.52	11.07	4.55	3.01	7.54	6.15	5.09	13.83	5.50	3.96	9.46	7.83	5.50	14.50	6.44	4.42
Scotia	5.39	1.93	1.86	5.13	1.62	1.94	7.19	3.76	2.99	7.35	2.66	3.00	8.62	5.01	4.46	9.10	2.94	4.37	11.52	6.49	4.99	9.68	3.70	4.40
Cloverdale 3 SSE	7.25	8.37	3.30	3.97	4.63	2.11	9.08	11.30	6.33	7.82	6.24	2.72	9.75	11.77	9.07	10.19	7.34	3.20	14.30	11.82	9.26	11.27	7.64	3.41
Guernevville	7.68	5.30	3.03	3.70	6.91	3.49	9.81	7.58	5.89	6.45	9.32	3.34	10.18	8.40	8.71	7.57	10.55	3.90	14.64	6.82	8.81	8.68	10.55	3.92
Healdsburg	3.73	4.89	5.03	4.28	4.31	2.60	6.65	8.34	9.27	8.35	8.21	2.48	7.66	9.64	10.75	9.50	8.25	3.16	9.38	10.52	11.19	[illegible]	.28	3.18
Saint Helena	5.76	5.58	4.03	4.02	6.83	3.02	7.99	9.08	8.16	7.60	9.68	3.41	9.08	10.64	9.45	9.14	9.30	3.57	12.58	11.29	9.87	9.49	9.90	3.[illegible]
Sacramento Valley																								
Red Bluff WB AP	0.96	1.92	1.23	1.58	1.77	1.37	1.79	4.16	2.41	1.39	3.11	1.[illegible]	2.45	3.42	3.46	1.95	3.13	1.93	2.73	3.51	3.49	2.42	3.19	1.[illegible]
Shasta Dam	8.24	3.54	2.14	11.64	3.32	1.16	12.28	6.22	5.21	15.22	4.94	1.74	16.23	7.59	7.27	18.80	5.09	2.21	22.15	10.27	[illegible]	21.35	6.24	2.38
Paskenta RS	2.42	2.15	2.65	3.04	1.93	1.12	4.48	3.37	3.80	4.41	2.83	1.[illegible]	4.43	3.64	3.85	4.85	2.97	2.36	5.23	4.08	3.5[illegible]	5.10	3.97	2.38
Sacramento WB	2.41	3.62	1.70	1.79	2.87	.75	[illegible]	5.30	3.09	2.92	4.09	.32	4.11	6.69	3.60	3.38	4.09	.89	5.16	6.85	3.65	3.72	4.23	.0[illegible]
Marysville	2.27	4.24	2.03	3.74	1.72	1.1	4.10	7.29	3.38	1.10	3.12	1.25	4.31	9.26	3.58	1.37	3.5[illegible]	1.25	5.45	9.31	3.49	1.63	3.59	1.26
Brush Creek	8.68	11.40	4.99	9.41	9.25	3.03	11.93	18.75	9.78	14.56	12.40	3.98	13.64	23.70	12.55	18.76	13.20	4.21	16.08	25.00	12.95	20.78	13.20	4.[illegible]
Blue Canyon WB AP	7.44	7.37	8.70	9.32	6.27	1.94	[illegible]36	13.81	13.96	15.24	10.25	3.74	18.55	19.55	16.01	19.79	10.36	3.80	20.66	22.02	17.38	22.93	10.47	3.80

Table 5. Precipitation Comparison for Six Storms: San Joaquin, Central Coast and Southern California ***

Station	One Day						Two Days						Three Days						Four Days					
	Mar. 1938	Nov. 1946	Jan. 1952	Nov. 1965	Dec. 1966	Jan. 1968	Mar. 1938	Nov. 1946	Jan. 1952	Nov. 1965	Dec. 1966	Jan. 1968	Mar. 1938	Nov. 1946	Jan. 1952	Nov. 1965	Dec. 1966	Jan. 1968	Mar. 1938	Nov. 1946	Jan. 1952	Nov. 1965	Dec.* 1966	Jan. 1968
San Joaquin Basin																								
Fresno WB	2.05	0.64	1.74	0.57	.99	.62	2.84	.83	1.81	.86	1.95	.75	3.03	.83	1.81	1.32	2.47	.86	3.05	1.33	1.81	1.86	2.47	.96
Yosemite NP	3.23	2.58	1.90	2.52	4.05	.96	4.54	5.13	3.62	3.74	7.22	1.33	5.74	5.13	3.63	4.48	7.61	1.33	5.95	5.13	3.66	5.72	6.48	1.33
Springville	2.96	4.15	1.27	0.77	8.46	1.30	4.96	4.71	2.39	1.54	13.29	1.50	6.39	4.71	2.49	2.01	17.39	1.50	7.56	7.25	2.91	2.47	17.41	1.50
Central Coast																								
Los Gatos	1.89	3.13	4.82	1.02	1.49	.01	3.11	3.52	6.66	1.93	1.94	.01	3.27	3.52	7.23	2.47	2.31	.01	3.32	4.40	9.19	3.04	3.11	.01
Salinas FAA	1.85	0	1.30	1.23	1.58	.04	1.30	0	1.50	1.41	2.72	.04	1.52	0	1.79	1.41	2.72	.04	1.65	0	2.00	2.34	2.32	.04
Paso Robles FAA	1.25	2.45	1.02	1.85	3.07	.36	2.48	2.51	1.30	2.42	4.97	.71	3.15	2.51	1.53	2.89	5.64	.91	3.26	2.36	2.04	3.30	7.44	.99
South Coastal Basins																								
Santa Maria WB	1.93	1.08	1.20	1.88	1.04	.48	2.25	1.30	2.21	2.18	1.79	.72	2.51	1.41	2.23	2.24	1.81	1.11	2.53	1.54	3.07	2.52	1.[illegible]	1.25
Cuyamaca	7.65	2.95	2.72	2.60	6.04	1.25	10.14	3.72	5.09	10.69	11.79	1.30	11.08	4.05	5.66	10.99	14.56	1.65	13.54	4.45	5.77	11.90	17.15	2.33
Riverside Fire Station #3	--	1.29	1.68	1.46	2.08	.64	--	1.79	2.06	2.76	2.30	1.21	--	1.94	2.94	2.36	3.60	1.44	--	1.94	3.06	3.40	4.40	1.45
La Mesa	2.[illegible]	1.21	1.60	2.09	2.72	.94	2.76	1.66	2.67	3.28	3.02	1.61	4.06	1.82	2.67	3.28	4.02	1.[illegible]	4.34	1.85	2.88	3.63	4.32	2.47
Los Angeles AP	2.38	2.[illegible]7	1.61	2.12	1.49	5.60	6.36	3.85	2.56	2.81	1.78	6.13	6.74	4.96	3.69	3.12	1.99	6.95	6.74	5.53	4.89	3.55	3.36	6.26
Santa Barbara	3.59	2.15	1.69	3.49	2.42	1.22	5.82	2.33	6.74	4.05	2.74	1.67	6.58	2.33	6.94	4.76	3.21	2.37	6.58	3.28	8.72	5.0	3.21	4.10
Oxnard	3.30	4.22	3.22	2.51	1.86	1.35	4.96	5.58	4.16	3.39	1.88	2.41	4.96	6.18	6.30	4.76	1.88	2.96	4.96	6.25	7.24	5.22	2.[illegible]2	3.92
San Diego WB	1.66	.98	1.29	1.53	1.34	1.22	2.27	1.15	1.78	2.18	2.07	1.39	2.80	1.20	2.29	2.72	2.47	2.23	2.89	1.24	2.29	2.86	2.90	2.84

The underlined value is the maximum value for the six storms listed.

*This storm includes rain on January 1, 1966 at some precipitation stations.

**Dates of Storm Periods Used:

Dec. 15-31, 1968
Oct. 9-14, 1962
Jan. 29-Feb. 2, 1963
Dec. 18-30, 1964
Jan. 19-31, 1967
Jan. 7-17, 1968

***Dates of Storm Periods Used:

Mar. 1-15, 1938
Nov. 8-24, 1946
Jan. 12-19, 1952
Nov. 14-26, 1965
Dec. 1-[illegible], 1966
Nov. 18-25, 1967

RAINFALL-RUNOFF

Dry conditions existed over most of the State during the 1967-68 water year. Precipitation was below normal in each of the major hydrographic areas; the statewide total was 75 percent of normal. The North Coastal area and Sacramento Valley each had relatively high 85 percent of normal amounts. The Central Coastal area and San Joaquin Valley were the driest, with only 60 and 65 percent of normal, respectively. Precipitation totals in the South Coastal area were 80 percent of normal, while the Colorado Desert area was the only area with a near normal precipitation total. Table 4 and Table 5 show precipitation comparisons for selected storms.

Streamflow runoff in the major hydrographic areas was also 75 percent of normal, ranging from less than 20 percent in the Central Coastal area to 80 percent of normal in the North Coastal, the Sacramento Valley and the Lahonton areas. Runoff in both the San Francisco Bay and South Coastal areas was 50 percent of normal, and in the San Joaquin Valley 55 percent.

Monthly streamflows in the coastal streams south of San Francisco Bay were below normal each month since December, while several major San Joaquin Valley streams had below-normal flows every month of the water year. In these areas, 1968 was the driest water year since 1961.

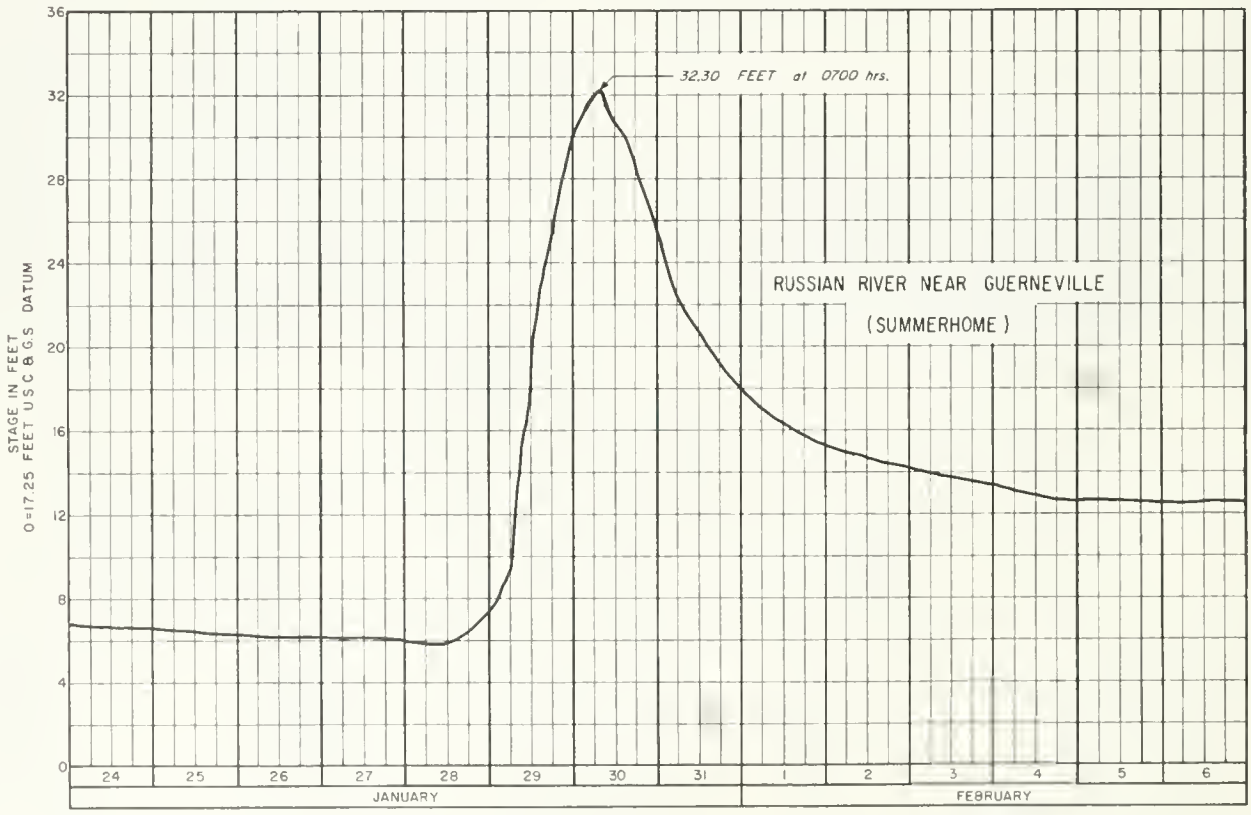
In the preceding water year, 1966-67, the aggregate carryover storage in the State's major reservoirs was more than 16,600,000 acre-feet, the greatest of record. On October 1, 1968, these reservoirs contained 13,378,400 acre-feet, which is 50 percent of their total capacity. While this is 3,000,000 acre-feet less than the record storage of one year ago, it still is 90 percent of the average carryover storage for the last ten years.

The impact of this dry year was tempered by the record carryover storage and relatively high ground-water levels of one year ago. As a result, there were no critical shortages of water in areas normally dependent upon stored supplies. Table 6 is a summary of storage in the major reservoirs, and compares the 1967 and the 1968 carryover storage.

Although basin-wide precipitation totals were below normal, periods of intense rainfall were sufficient to produce sharp rises in two streams in the North Coastal area and to overtax storm drain facilities in the Southern California area. Flooding, though relatively minor, occurred in January, when the Van Duzen and Eel Rivers overflowed their banks and inundated low lying lands. In Southern California, mudslides occurred along with flooding, when storm drains became choked and were unable to carry the rainfall-runoff during storms in November and again in March.

Table 6: Summary of Storage in Major Reservoirs

Area	Number of Reservoirs Reporting	Total Capacity (Acre-Feet)	Water in Storage (Acre-Feet)	
			October 1, 1967	October 1, 1968
North Coastal	4	2,713,900	2,097,440	1,495,420
San Francisco Bay	17	620,400	423,820	307,100
Central Coastal	6	985,700	599,080	389,040
South Coastal	26	1,485,600	566,560	410,070
Sacramento Valley	32	14,911,200	8,807,250	8,660,660
San Joaquin Valley	27	5,925,400	3,745,170	1,878,260
Lahontan	7	348,200	300,260	237,890



HYDROGRAPHS OF RUSSIAN RIVER

North Coastal Hydrographic Area

In the North Coastal Basins, three consecutive months, October, November and December, averaged only 75 percent of normal precipitation. January was the only winter month in which significantly above-normal precipitation occurred. The amount varied from 150 percent of normal in the Trinity drainage to normal in the Klamath River drainage.

Streamflows during January were slightly above normal and ranged from 81 percent for the Klamath River to 117 percent of normal for the Eel River Basin.

Sharp rises in all North Coastal streams occurred immediately following the January storms. The Eel River and its tributary, the Van Duzen River, caused minor flooding; the Russian River crested slightly below flood stage. All other North Coastal streams crested well below flood stage.

Russian River Basin

During high flows in the Russian River, controlled releases to the East Fork of the Russian River from Lake Mendocino (Coyote Dam) were held to 10 cfs. Downstream at Hopland, the Russian River reached a peak stage of 12.62 feet on January 29. Farther downstream at Guerneville (Summerhome), the Russian River crested at 32.3 feet, which is danger level but below flood stage. Plate 5 presents a hydrograph of the Russian River near Hopland and near Guerneville (Summerhome).

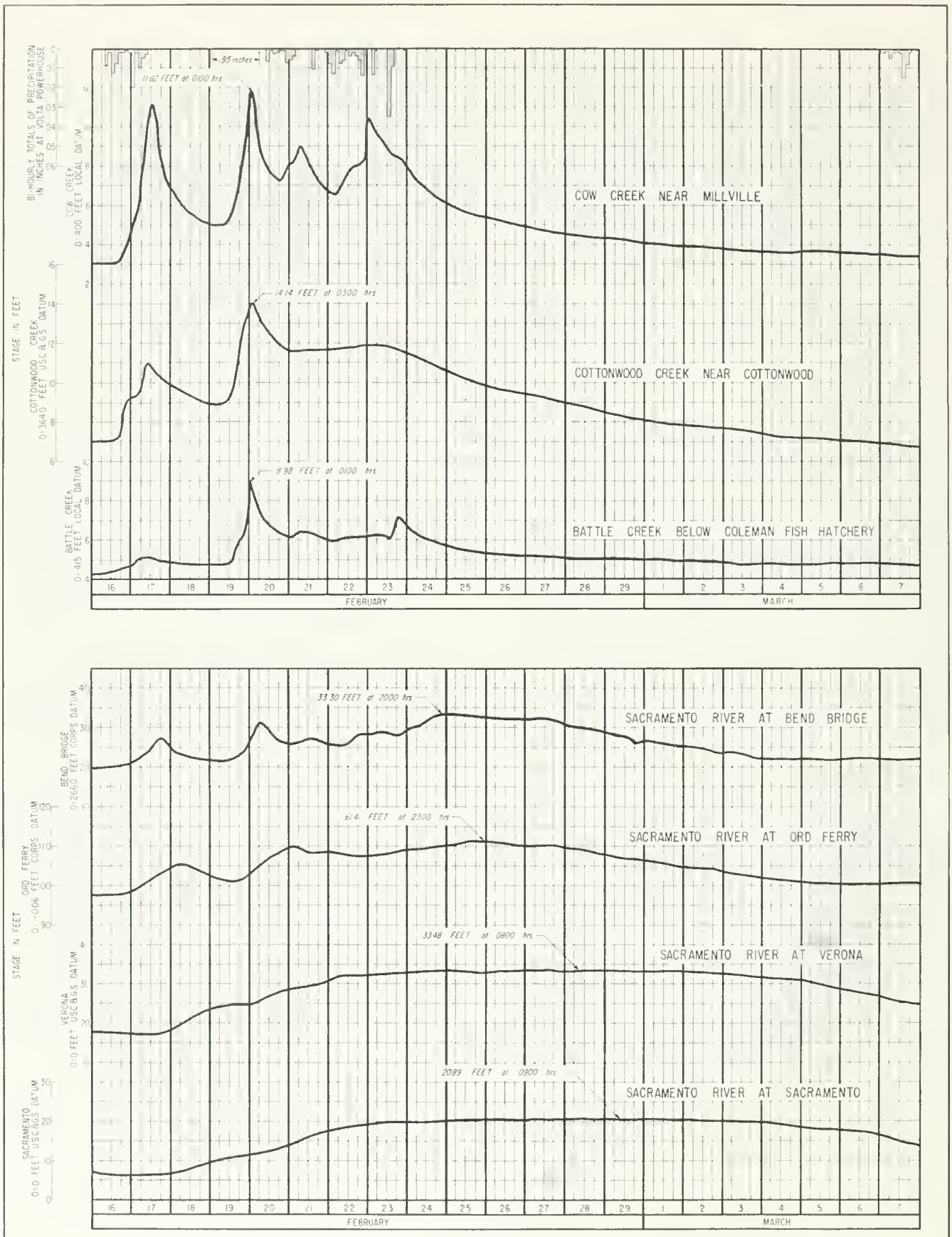
Eel River Basin

Light rain began falling over the basin on January 7 and intensified on the 8th and 9th. The storm slackened on the 10th and 11th, when only showers were reported. The second storm system, beginning on January 13 and continuing through the 17th, recorded higher precipitation amounts and greater intensities. At the Garberville precipitation station, 10.52 inches of rain fell during the two storm periods; at Miranda Spengler Ranch, 10.26 inches were reported.

On January 15, the Eel River at Scotia reached a peak flow of 138,000 cfs. Downstream at Fernbridge, a peak stage near 18 feet was reached, causing minor flooding of the delta lowlands. Livestock were moved to high ground, but, other than an inconvenience, no serious flood damage occurred.

The Van Duzen River also crested on January 15, when it reached a peak stage of 15.86 feet at Bridgeville with a flow of 20,700 cfs.

In 1967, residents of Starvation Flat, a small community near the confluence of the Van Duzen River and Yager Creek, constructed levees to protect the community from flooding. The levees consisted of old car bodies covered with river aggregate. On January 14, the rapidly rising Van Duzen River eroded a small break-through in one of the levees, causing it to fail. Some minor flooding occurred in the community, but no serious damage was reported.



HYDROGRAPHS OF SACRAMENTO RIVER SYSTEM

Central Valley Hydrographic Area

The February 13 to 24 storm produced the only significant runoff in the Central Valley area during the entire water year. During the February storm, above-normal precipitation centered around Mount Lassen and along the eastern slopes of the Coast Range Mountains. Total runoff in Sacramento Valley Basins was 140 percent of normal. No flooding occurred in the Central Valley area during the moderately high streamflows; however, overflow did occur into the Sacramento River bypass system.

Sacramento River Basin

Runoff from the storm of February 13 to 24 in the drainage area above Shasta Dam produced a peak bihourly inflow to the reservoir of 54,000 cfs on February 21.

On February 23, because of encroachment on flood control space in the reservoir, the releases from the Shasta Dam complex to the Sacramento River were increased in various increments until a discharge of 50,000 cfs was reached on February 24. The high rate of discharge was maintained until February 27, when the releases were gradually reduced to 25,000 cfs. The hydrographs of inflow and releases for Shasta Lake are shown in Plate 7.

The releases from the Shasta Dam complex, combined with downstream tributary peak flows of 13,600 cfs from Cow Creek, 19,400 cfs from Cottonwood Creek and 4,500 cfs from Battle Creek, were sufficient to produce a stage of 33.3 feet in the Sacramento River at Bend Bridge on February 20. As the crest moved downstream into the Sacramento River Flood Control Project, a peak of 111.41 feet was reached at Ord Ferry. This is almost one foot above the levee patrol stage, but is 10.3 feet below the February 1940 record peak stage of 121.7 feet. Plate 6 shows stages of Cow Creek, Cottonwood Creek, Battle Creek, and the Sacramento River at various points.

On February 24, the Sacramento River at Moulton weir reached the weir crest elevation of 76.8 feet and began spilling into the Butte Basin Bypass. The overflow reached a peak stage of 78.7 feet on February 26 and continued until February 29.

On February 18 and 19, overflow into the Butte Basin occurred at Colusa weir (crest elevation 61.8 feet) for a 15-hour period. Overflow began again on February 20 and continued for thirteen days, reaching a peak stage of 65.96 feet on February 27.

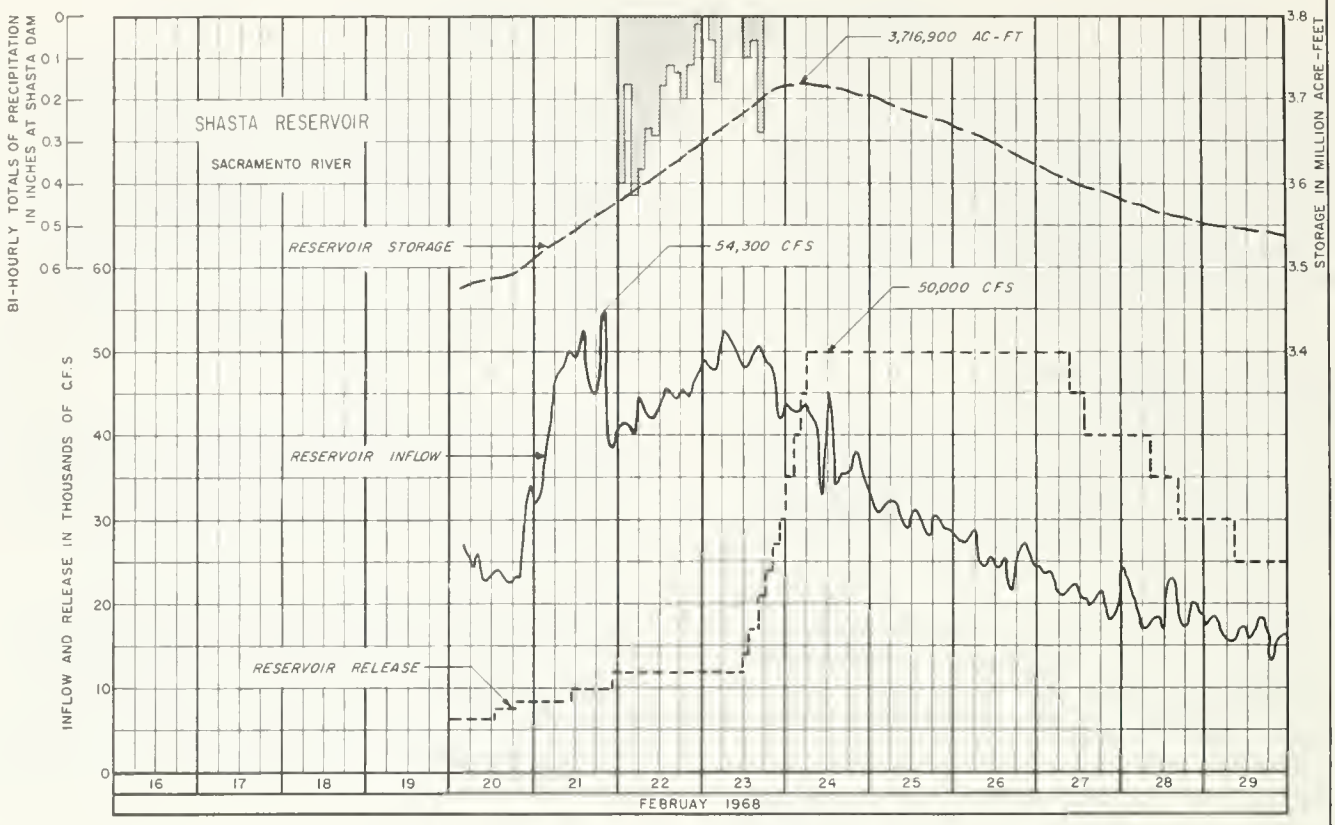
Overflow into the bypass system began at Tisdale weir on February 18 and continued for 17 days. A peak stage of 48.4 feet occurred on February 27 which is three feet above the weir crest but well below the record peak stage of 53.35 feet of March 1940.

On the Feather River, Oroville Dam impounded nearly 411,000 acre-feet of water during the period of February 16 to 25. A peak bihourly inflow to the reservoir of near 40,600 cfs occurred on February 21.

With a one-day exception, the mean daily releases to the Feather River from the Oroville complex were held below 1,000 cfs. The hydrographs of inflow and releases for Lake Oroville are shown in Plate 7.

On February 13, the release from Thermalito Afterbay was increased in order to both lower the Afterbay water elevation and correct a seepage problem. This resulted in a mean daily flow of 3,900 cfs to the river.

The seasonal peak stage of the Feather River at Yuba City was 50.13 feet on



HYDROGRAPHS OF SHASTA AND OROVILLE RESERVOIRS

February 21. By comparison, the record peak stage at Yuba City is 82.42 feet, which occurred December 24, 1955. The seasonal peak stage of the Feather River at Nicolaus was a moderate 36.77 feet and a flow of 34,100 cfs. This flow, although relatively small, did contribute to overflow into the Yolo Bypass at Fremont weir.

Overflow occurred at Fremont weir from February 22 to March 4. During this eleven-day period, a maximum stage of 35.3 feet, 1.8 feet above the weir crest, was reached on February 27.

The Sacramento River at the I Street bridge in Sacramento, reached a peak stage of 20.89 feet on February 29. This is well below the river stage required by the operational criteria to open the Sacramento weir gates. The Sacramento river flows were discharged into the Sacramento-San Joaquin delta without incident.

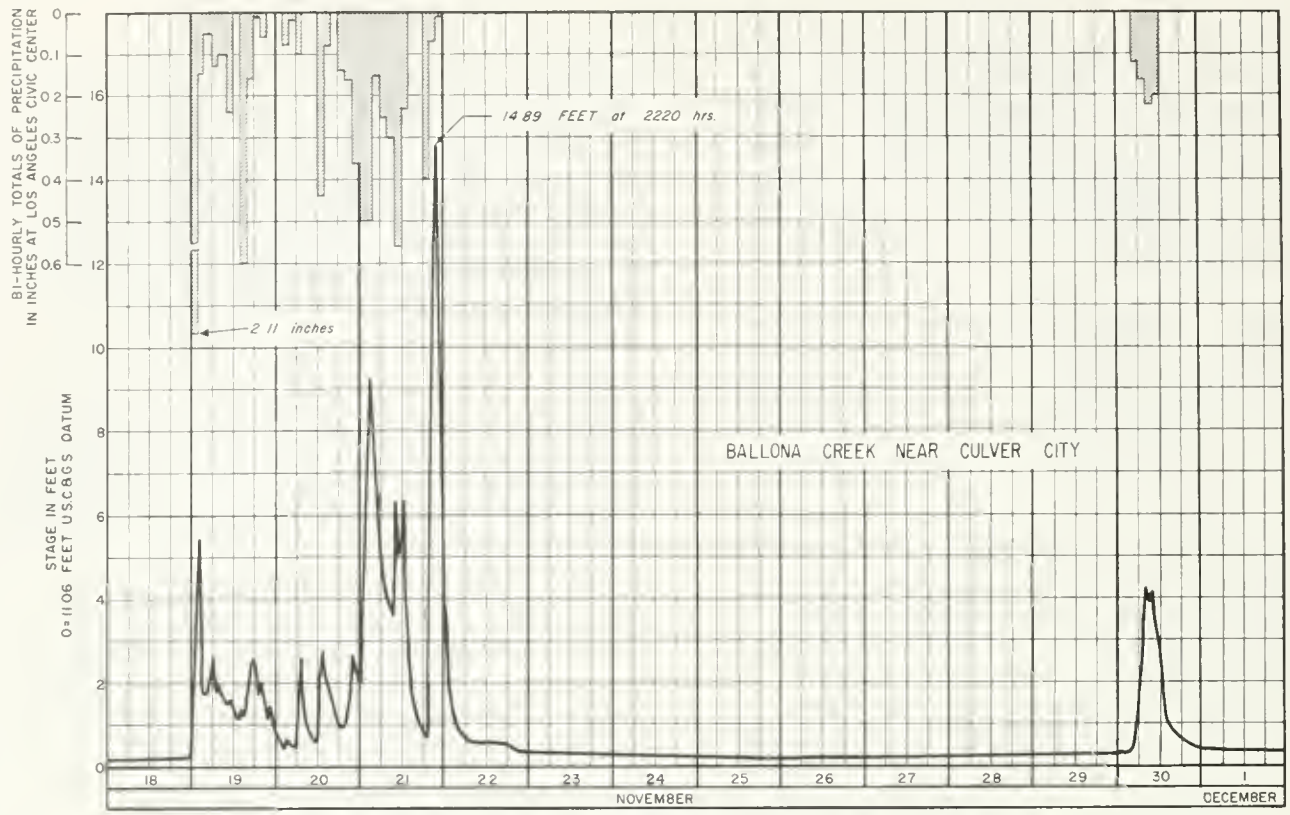
During February 4 to 9, the flows from Cache Creek caused minor inundation of the Yolo Bypass. The overflow at Fremont weir that began on February 22 combined with water from Cache Creek, and again the Yolo Bypass was inundated. This resulted in a maximum stage of 14.5 feet in the Yolo Bypass at Lisbon on February 28.

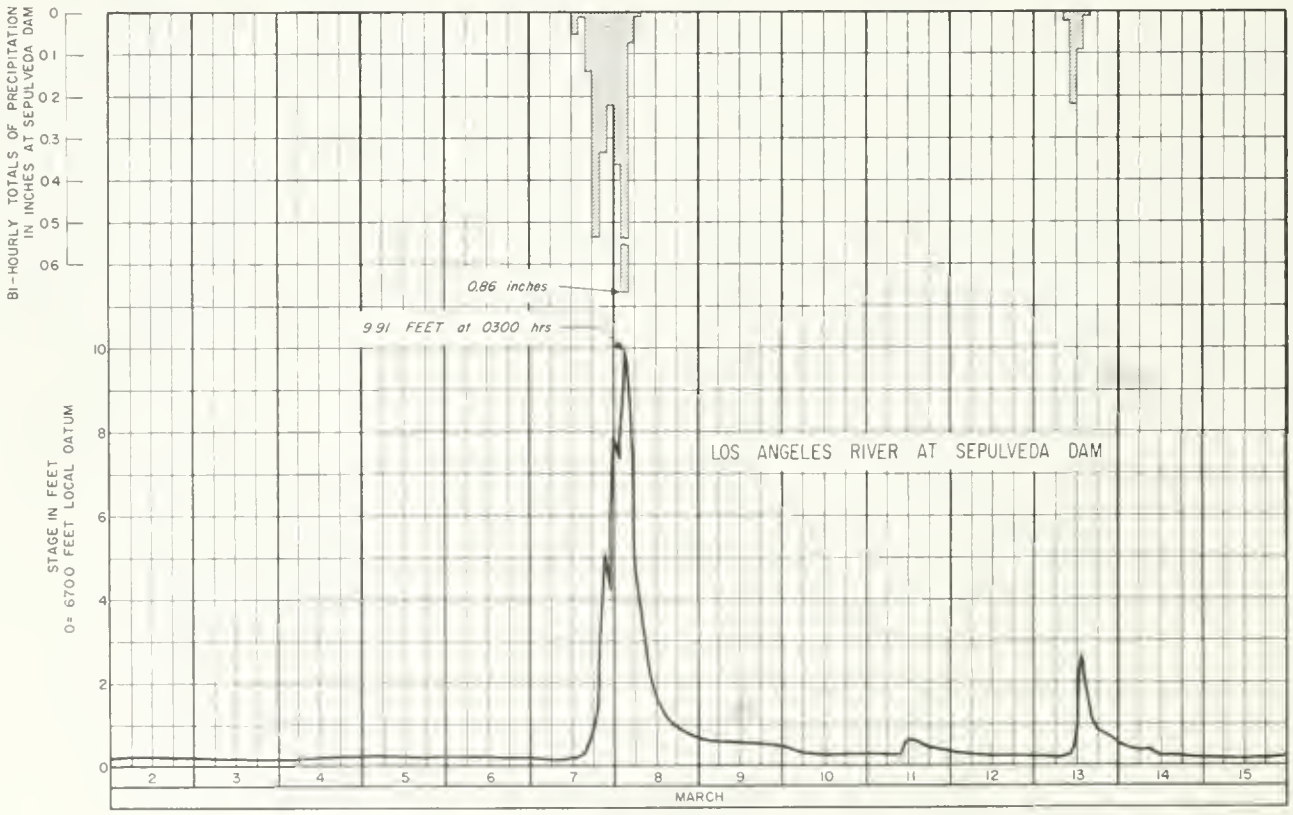
Inundation of the Yolo Bypass continued until March 8, when the overflow diminished and was contained within the low-flow channel. Plate 10 shows the record of inundation of the Yolo Bypass (1914-1968).

Plate 9 shows stages of Cache Creek near Lower Lake and above Rumsey and also shows Sacramento River at Fremont weir, and the Yolo Bypass near Lisbon. Table 7 shows the periods of overflow at Sacramento River Project weirs.

Table 7: Sacramento River Flood Control Project Weir Overflow Data

Weirs	Weir Crest in feet	Overflow Dates From	To	Peak Stage	Date Time
Moulton	76.8	1105 hrs 2/24	0545 hrs 2/29	78.36	1300 hrs 2/26
Colusa	61.8	1815 1/15	1730 1/17	64.94	1330 1/16
		1830 1/30	2130 1/31	63.72	0600 1/31
		1745 2/18	0845 2/19	62.36	0015 2/19
		1740 2/20	1945 3/3	66.12	1400 2/26
Tisdale	45.5	2200 1/15	1730 1/18	47.88	0030 1/17
		2200 1/30	1930 2/1	47.55	1300 1/31
		0215 2/4	0515 2/5	46.37	1345 2/4
		1630 2/18	2230 3/5	48.40	0100 2/27
		0330 3/18	2000 3/18	45.93	1100 3/18
Fremont	33.5	0145 2/22	1430 3/4	35.33	0700 2/28





HYDROGRAPHS OF BALLONA CREEK AND LOS ANGELES RIVER

South Coastal Hydrographic Area

In the South Coastal area, October precipitation was nil, but near record amounts were recorded in November. The city of Los Angeles logged its wettest November of record with 8.67 of rain, just 1.01 inch short of the 1965 November maximum. Long Beach had its second wettest November since 1946, and San Diego had the third wettest since 1950.

Heavy rains during November 18 through 21 resulted in flooding and mud slides over widespread areas.

Wind, rain, and lightning swept the South Coastal area again in March. Precipitation for the month averaged 110 percent of normal over the area. Oxnard, in the Santa Clara River drainage, received 4.60 inches of rain within 24 hours, establishing a new intensity record for the month. Los Angeles City had the heaviest 24-hour precipitation for March since 1943, and Long Beach had the greatest since 1958.

San Diego, Los Angeles and Ventura Counties

Thunderstorms broke over all of Southern California on November 19. The storm continued for four days, causing widespread damage from mud slides and flooding.

In San Diego County flooding was widespread. Hundreds of streets and scores of homes were flooded in Otay, Bonita, Chula Vista, Hillcrest, Nestor and Imperial Beach. Water flowed ten inches deep over Interstate 5 at Las Pulgas. Pavement in San Diego was torn up by the eroding force. Recently burned mountain slopes were deeply eroded and the cinders and mud collected in El Capitan Reservoir and Lake Hodges.

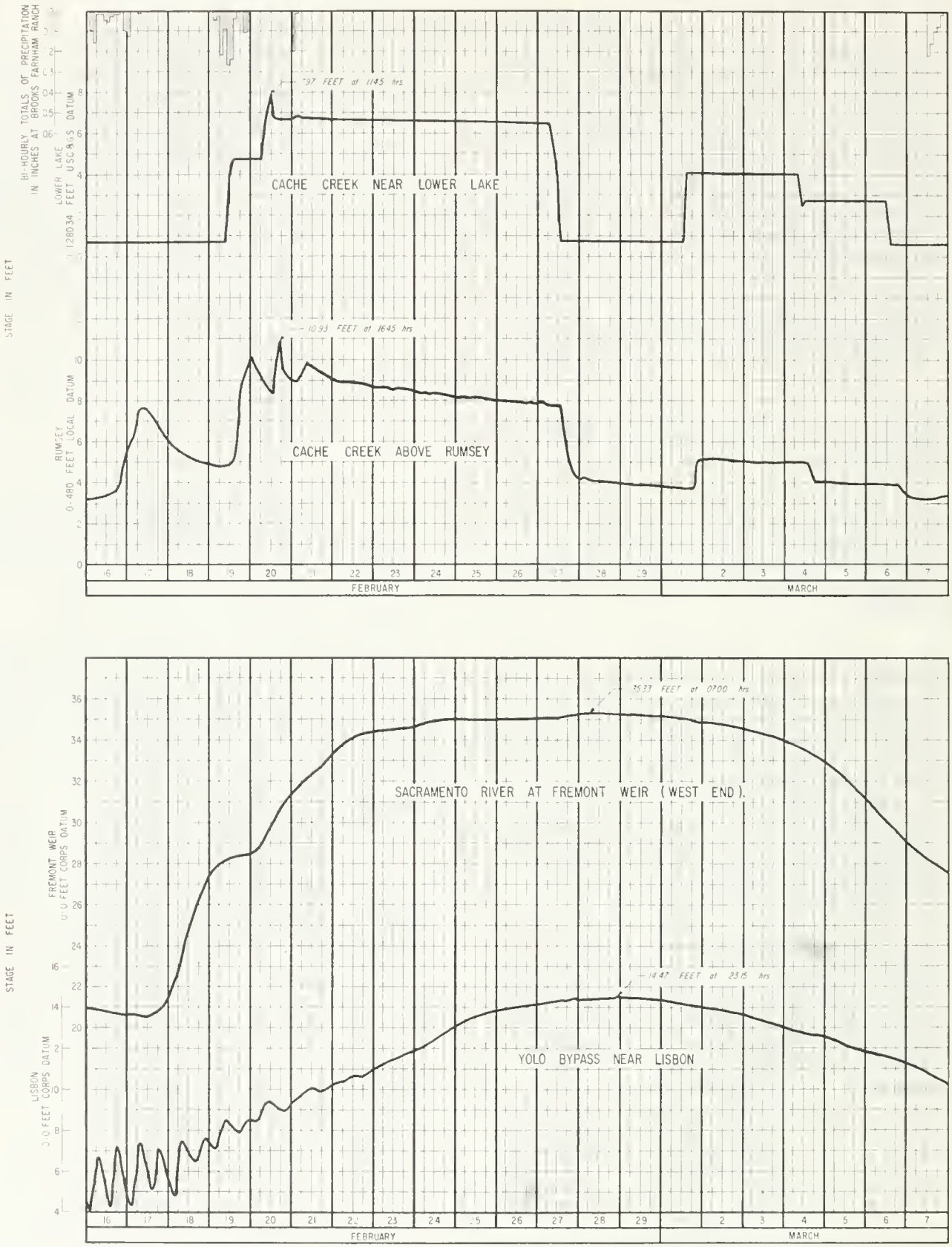
The San Fernando Valley, Thousand Oaks, Simi, and Eagle Rock areas of Los Angeles and Ventura Counties were particularly hard hit. The intense downpour caused mud slides that closed several major highways and pushed homes off their foundations. In Thousand Oaks and Simi, over 150 families were forced to evacuate their homes. Flash floods swept into Ventura homes and businesses as almost two inches of rain fell in a little more than an hour. Severe street flooding occurred in the Baldwin Hills area. However, this flooding dissipated rapidly when the rainfall intensity decreased, and traffic soon returned to normal.

Ballona Creek, in the Baldwin Hills area, had a record peak flow of 32,500 cfs. The rapid rise of the stream is illustrated in Plate 8.

Ventura County officials requested Governor Reagan to declare the County a disaster area. The flood damage, however, was not great enough to qualify the County under the State Emergency Flood Relief laws, and no disaster declaration was issued.

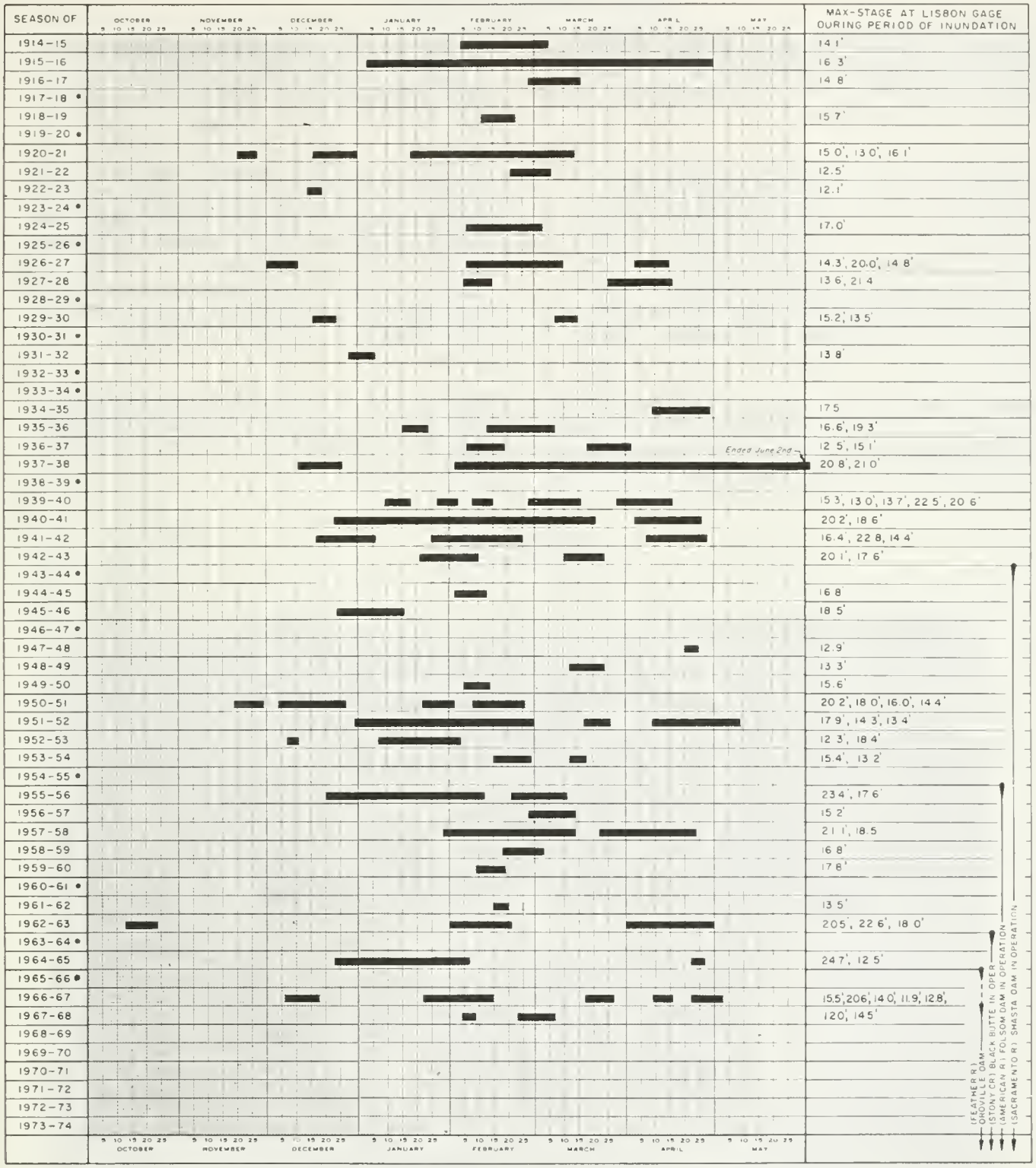
The March storm hit Southern California with heavy amounts of rain in a short period of time. This type of storm occurs frequently in the South Coastal area. Streams, creeks, washes and drainage ditches filled to near overflow, but receded almost as rapidly as the storm diminished. Rainfall was particularly intense in the Los Angeles River drainage basin. The river came within a foot of a record high stage and within 1,750 cfs of the record flow of December 1965. Plate 8 presents a hydrograph of the Los Angeles River at Sepulveda Dam.

Damage caused by the March storm was relatively minor. Stream channels were seriously eroded and mud slides recurred, causing the deposition of large amounts of debris in downstream areas. Local flooding occurred as storm drains became choked and overflowed.



HYDROGRAPHS OF CACHE CREEK AND YOLO BYPASS SYSTEMS

PERIOD OF RECORD OF INUNDATION OF THE YOLO BYPASS



NOTE

Data compiled from records of D.W.R. stream gaging station "Yolo Bypass near Lisbon."

Datum: O=U.S.E.D. Datum

Period of Record: 1914 to Present

Assumed overflow of Bypass at stage above 11.5' on the Lisbon gage

LEGEND

Designates period of inundation of Bypass

• Designates season Bypass not inundated

DEPARTMENT OF WATER RESOURCES

FLOOD CONTROL MAINTENANCE SECTION

REV. 7-1-60

Flood Control Facilities

During the 1967-68 water year, Oroville Dam, located near the city of Oroville on the Feather River, was completed and began storing water.

The Oroville Dam complex is one of the largest features of the State Water Project. It includes Oroville Dam, Lake Oroville, and powerplants; Thermalito Diversion Dam and reservoir; the Fish Barrier Dam and Hatchery; and the offstream features of the Thermalito Power Canal, Thermalito Forebay, Powerplant, and Afterbay.

Lake Oroville will be operated for flood control, power generation, conservation, recreation, and as a supply of water for irrigation and municipal uses.

In the winter season from October 15 to April 1, 375,000 to 750,000 acre-feet of space must be made available for flood control storage.

The Oroville Dam complex was officially dedicated on May 4, 1968 when Governor Ronald Reagan unveiled a bronze plaque honoring former State Engineers Edward Hyatt and A. D. Edmonston, the two men who developed the concepts of Oroville Dam and the southward delivery of surplus water.

At the end of the first operational water year, Oroville Dam had impounded nearly 1,680,000 acre-feet of Feather River water.

OROVILLE DAM

Table 8

Peak Flows and Stages
(Preliminary Data, Subject to Revision)

Stream and Station	Drainage Area in Sq. Mi.	Period of Record	Source of Record (s)	Previous Maximum of Record			1967-68 Water Year		
				Date	Stage in ft.	Dischg. in cfs	Date	Stage in ft.	Dischg. in cfs
North Coastal Area									
Smith River near Crescent City	609[r]	1931-	USGS	12/22/64	48.5	228,000	1/15/68	27.03	67,700
Shasta River near Yreka	793[r]	1933-41 1944-	USGS	12/22/64	12.92	21,500[c]	2/23/68	4.69	705
Scott River near Fort Jones	653[r]	1941-	USGS	12/22/64	25.0	54,600	2/23/68	15.24	12,800
Klamath River near Seiad Valley	6,980	1912-25 1951-	USGS	12/22/64	33.75	165,000[c]	2/23/68	13.30	23,800
Salmon River at Somesbar	746	*1911-	USGS	12/22/64	43.4[h]	133,000	2/23/68	15.80	32,100
Klamath River at Orleans	8,480	1927-	USGS	12/22/64	76.5[h]	307,000[c]	2/23/68	25.38	109,000
Trinity River above Coffee Creek, near Trinity Center	149	1957-	USGS	12/22/64	12.30	20,800	2/23/68	6.68	3,650
Trinity River at Lewiston	728[r]	1911-	USGS	12/22/55	27.3[h]	71,600	11/25/67	3.39	270
North Fork Trinity River at Helena	151	1911-13 1957	USGS DWR	12/22/64	27.93[h]	35,800	2/22/68	18.12	10,260
Trinity River near Burnt Ranch	1,439[r]	1931-40 1956	USGS	12/22/55	43.2[h]	172,000	2/23/68	15.64	20,100[c]
New River at Denny	173	1927-28 1959-	USGS	12/22/64	38.7[h]	60,000[e]	2/23/68	17.36	8,600
Hayfork Creek near Hyampom	378[r]	1956-	USGS	12/22/64	19.14	28,800	2/20/68	12.20	9,300
South Fork Trinity River near Salyer	898[r]	1911-13 1950-	USGS	12/22/64	47.6	95,400	DISCONTINUED 9/30/67		
Willow Creek near Willow Creek	43.3	1959-	USGS	12/22/64	25.3[h]	17,000[e]	2/22/68	6.73	1,650
Trinity River at Hoopa	2,847[r]	*1911-	USGS	12/22/64	40.3	231,000[c]	2/23/68	32.36	51,300[c]
Klamath River near Klamath	12,100	*1910-	USGS	12/23/64	55.3	557,000[c]	2/23/68	27.88	206,000[c]
Redwood Creek at Orick	278	1911-13	USGS	12/22/64	24.0	50,500	1/15/68	12.97	14,900
Little River at Crannel	44.3	1955-	USGS	1/ 4/66	11.12	8,300	1/15/68	6.42	2,970

Table 8 (Continued)

Stream and Station	Drainage Area in Sq. Mi.	Period of Record	Source of Record (a)	Previous Maximum of Record			1967-68 Water Year		
				Date	Stage in ft.	Dischg. in cfs	Date	Stage in ft.	Dischg. in cfs
North Coastal Area (Continued)									
Mad River near Forest Glen	143	1953-	USGS	12/22/55	24.5	39,200	2/21/68	7.79	4,060[c]
Mad River near Arcata	484	1910-13 1950-	USGS	12/22/55	27.30[b]	77,800	1/15/68	14.28	15,800
Elk River near Falk	44.2	1957-	USGS	12/22/64	28.09	3,430	DISCONTINUED 9/30/67		
Eel River below Scott Dam, near Potter Valley	290	1922-	USGS	12/22/64	24.24[h]	56,300[h]	2/20/68	13.76	11,000[c]
Eel River at Van Aradale Dam, near Potter Valley	349	*1909-	USGS	12/22/64	33.9[h]	64,100[c]	2/20/68	15.99	10,500[c]
Outlet Creek near Longvale	161[r]	1956-	USGS	12/22/64	30.6[h]	77,900	2/19/68	11.40	9,420
Black Butte River near Covelo	162	*1951-	USGS	12/22/64	26.4[h]	29,000	2/19/68	21.32	11,600
M. F. Eel River below Black Butte River near Covelo	367	1951-	USGS	12/22/64	31.7[h]	133,000	DISCONTINUED 9/30/67		
Eel River below Dos Rios	1,484	1911-13 1951-	USGS	12/22/64	62.5[h]	460,000[c]	DISCONTINUED		
North Fork Eel River near Mina	250	1953-	USGS	12/22/64	34.5[h]	133,000	1/10/68	13.77	8,040
Eel River at Fort Seward	2,079	1955-	USGS	12/22/64	87.2[h]	561,000[c]	1/15/68	30.24	79,100[c]
South Fork Eel R. nr. Branscomb	43.9	1946-	USGS	12/22/55	16.20	20,100	1/15/68	6.02	2,190
Tenmile Creek near Laytonville	50.3	1957-	USGS	12/22/55	22.9[h]	16,300	1/29/68	8.79	2,260
South Fork Eel River near Miranda	537	1939-	USGS	12/22/64	46.0[h]	199,000	1/15/68	18.39	35,300
Bull Creek near Weott	28.1	1960-	USGS	12/22/64	20.6[h]	6,520	1/14/68	10.71	2,710
Eel River at Scotia	3,113	*1910-	USGS	12/23/64	72.0[h]	752,000[c]	1/15/68	32.36	138,000
South Fork Van Duzen River nr. Bridgeville	36.2	*1951-	USGS	12/22/64	18.70	13,600	DISCONTINUED 9/30/68		
Van Duzen River near Bridgeville	216	1950-	USGS	12/22/64	22.6	48,700	1/15/68	15.86	20,700

Table 8 (Continued)

Stream and Station	Drainage Area in Sq. Mi.	Period of Record	Source of Record	Previous Maximum of Record			1967-68 Water Year		
				Date	Stage in ft.	Dischg. in cfs	Date	Stage in ft.	Dischg. in cfs
North Coastal Area (Continued)									
Mattole River near Petrolia	240	*1911-	USGS	12/22/55	29.60	90,400	1/15/68	17.70	33,700
Noyo River near Fort Bragg	106	1951-	USGS	12/22/64	26.30	24,000	2/20/68	12.76	3,380
Rancheria Creek near Boonville	65.6	1959-	USGS	12/22/64	20.52	20,000	1/14/68	11.28	3,140
Navarro River near Navarro	303	1950-	USGS	12/22/55	40.60	64,500	1/14/68	19.[illegible]0	11,200
South Fork Gualala River near Annapolis	161	1950-	USGS	12/22/55	24.57	55,000	1/10/68	13.44	15,200
Russian River near Ukiah	99.7	*1911-	USGS	12/21/55	21.0	18,900	1/14/68	8.30	4,960
East Fork Russian River near Calpella	93.0	1941-	USGS	12/22/64	20.21	18,700[c]	1/14/68	15.76	5,880[c]
Russian River near Hopland	362	1939-	USGS	12/22/55	27.00	45,000	1/14/68	14.47	10,900[c]
Feliz Creek near Hopland	31.1	1958-	USGS	12/22/64	14.10	6,080	DISCONTINUED		
Russian River near Cloverdale	502	1951-	USGS	12/22/64	31.60	55,200[c]	1/14/68	15.[illegible]6	11,[illegible]00[c]
Big Sulphur Creek near Cloverdale	82.3	1957-	USGS	12/22/55	22.2[h]	20,000	1/29/68	12.10	9,160
Russian River near Healdsburg	793	1939-	USGS	12/23/64	27.00	71,300[c]	1/29/68	15.01	25,000[c]
Dry Creek near Cloverdale	87.8	1941-	USGS	12/22/64	18.09	18,100	1/29/68	6.71	4,080
Dry Creek near Geyserville	162	1959-	USGS	1/31/63	17.50	32,400	1/29/68	10.60	8,560
Santa Rosa Creek near Santa Rosa	12.5	1959-	USGS	2/ 8/60	13.35	3,200	1/10/68	8.93	1,040
Russian River near Guerneville (Summerhome)	1,340	*1939-	USGS	12/23/64	49.6	93,400[c]	1/30/68	32.30	40,800
Austin Creek near Cazadero	63.1	1959-	USGS	2/13/62	20.6[j]	15,100	DISCONTINUED		
San Francisco Bay Area									
Walker Creek near Tomales	37.1	1959-	USGS	1/ 5/66	22.23	5,420	1/29/68	19.47	4,160
Corte Madera Creek at Ross	18.1	1951-	USGS	12/22/55	17.45	3,620	1/29/68	12.69	1,700[c]

Table 8 (Continued)

Stream and Station	Drainage Area in Sq. Mi.	Period of Record (a)	Source of Record (a)	Previous Maximum of Record			1967-68 Water Year		
				Date	Stage in ft.	Dischg in cfs	Date	Stage in ft.	Dischg. in cfs
San Francisco Bay Area									
Novato Creek near Novato	17.5	1946-	USGS	1/20/64	8.74	1,330	1/29/68	6.10	1,110[c]
Sonoma Creek near Aqua Caliente	62.2	1955-	USGS	12/22/55	17.10	8,880	1/29/68	11.5[e]	5,500[e]
Napa River near St. Helena	81.4[r]	*1929-	USGS	12/22/55	16.17	12,600	1/29/68	9.85	4,970
Dry Creek near Napa	17.4	1951-	USGS	2/24/58	8.11	3,460	DISCONTINUED		
Napa River near Napa	218	*1929-	USGS	1/31/63	27.59	16,900	1/29/68	16.65	8,620[c]
Redwood Creek near Napa	9.81	1958-	USGS	1/ 5/65	10.44	1,450	1/29/68	8.98	1,140
San Ramon Creek at San Ramon	5.89	1952-	USGS	10/13/62	16.98	1,600	1/30/68	3.25	151
San Ramon Creek at Walnut Creek	50.8	1952-	USGS	1/31/63	14.40	7,980	1/30/68	5.71	1,040
Walnut Creek at Walnut Creek	79.2	1952-	USGS	4/ 2/58	20.2	12,200	1/30/68	5.46	1,970[c]
San Lorenzo Creek at Hayward	37.5	*1939-	USGS	10/13/62	19.73[h]	7,460	1/30/68	6.99	273[c]
Arroyo Mocho near Pleasanton	143	1962-	USGS	2/ 1/63	8.60	1,760	1/30/68	3.10	550[e]
Arroyo Valle near Livermore	147	*1912-	USGS	12/23/55	13.93[h]	18,200	1/31/68	3.70	252[c]
Arroyo Valle at Pleasanton	171	1957-	USGS	3/ 2/48	25.36	11,300	1/31/68	8.16	320[c]
Alameda Creek near Niles	633	1891-	USGS	12/23/55	14.9	29,000[c]	1/30/68	6.23	2,260[c]
Patterson Creek at Union City	-	1958-	USGS	2/ 1/63	20.4[h]	10,500[c]	1/30/68	9.08	2,110[c]
Alameda Creek at Union City	653	1958-	USGS	2/ 1/63	19.25[h]	1,770[c]	1/30/68	9.63	16[c]
Coyote Creek near Madrone	196	*1902-	USGS	3/ 7/11	-	25,000	REGULATED	NO PEAKS	
Upper Penitencia Creek at San Jose	21.5	1961-	USGS	1/21/67	6.24	1,500[c]	1/30/68	4.53	298[c]
Alamitos Creek near New Almaden	31.9	1958-	USGS	4/ 2/58	9.67	4,300[c]	1/30/68	4.20	1,060[c]
Los Gatos Creek at Los Gatos	38.6	*1929-	USGS	2/27/40	14.71[b]	7,110	1/30/68	5.15	204[c]

Table 8 (Continued)

Stream and Station	Drainage Area in Sq. Mi.	Period of Record	Source of Record (a)	Previous Maximum of Record			1967-68 Water Year		
				Date	Stage in ft.	Dischg. in cfs	Date	Stage in ft.	Dischg. in cfs
San Francisco Bay Area (Continued)									
Guadalupe River at San Jose	146	1929-	USGS	4/ 2/58	16.55	9,150[c]	1/30/68	9.28	5,170[c]
Saratoga Creek at Saratoga	9.22	1933-	USGS	12/22/55	6.40	2,730	1/30/68	4.48	598[c]
Matadero Creek at Palo Alto	7.24	1952-	USGS	12/22/55	9.60[b]	854	1/30/68	3.45	443
San Francisquito Creek at Stanford University	37.5	*1930-	USGS	12/22/55	13.60	5,560	1/30/68	4.60	1,130[c]
Redwood Creek at Redwood City	1.82	1959-	USGS	1/31/63	9.36	644	1/30/68	4.88	177
Pescadero Creek near Pescadero	45.9	1951-	USGS	12/23/55	21.27	9,420	1/30/68	11.65	2,740
Central Coastal Area									
San Lorenzo River at Big Trees	111	1936-	USGS	12/23/55	22.55	30,400	1/30/68	12.85	8,340
Branciforte Creek at Santa Cruz	17.3	1940-43 1952-	USGS	12/22/55	22.04	8,100	1/30/68	8.68	984
Soquel Creek at Soquel	40.2	1951-	USGS	12/23/55	22.33	15,800	1/30/68	9.07	2,190
Llagas Creek near Morgan Hill	19.6	1951-	USGS	4/ 2/58	8.45	3,190[c]	3/20/68	1.67	43[c]
Bodfish Creek near Gilroy	7.40	1959-	USGS	1/31/63	8.25	1,240	2/20/68	4.14	121
Tres Pinos Creek near Tres Pinos	206	1939-	USGS	4/ 4/41	7.75	8,060	12/ 3/67	4.50	476
San Benito River near Hollister	586	1949-	USGS	4/ 3/58	16.30	11,600	12/ 1/67	3.94	39[c]
Pajaro River at Chittenden	1,186	1939-	USGS	12/24/55	32.46	24,000[c]	1/31/68	4.13	217[c]
Corralitos Creek near Corralitos	10.6	1957-	USGS	4/ 2/58	7.55	1,970	1/30/68	--	110[e]
Corralitos Creek at Freedom	27.8	1956-	USGS	12/22/55	15.6[h]	3,620	1/30/68	4.98	393
Salinas River near Pozo	74.1	1942-	USGS	12/ 6/66	14.23	14,200	3/ 8/68	4.27	252
Salinas River above Philitas Creek near Santa Margarita	114	1942-	USGS	12/ 6/66	12.45	11,000[c**]	REGULATED	NO PEAKS	

Table 8 (Continued)

Stream and Station	Drainage Area in Sq. Mi.	Period of Record	Source of Record (a)	Previous Maximum of Record			1967-68 Water Year		
				Date	Stage in ft.	Dischg. in cfs	Date	Stage in ft.	Dischg. in cfs
Central Coastal Area (Continued)									
Jack Creek near Templeton	25.3	1949-	USGS	12/ 6/66	9.58	5,100	3/13/68	3.78	196
Estrella River near Estrella	924[r]	1954-	USGS	12/ 6/66	10.2	17,600	11/30/67	2.23	39
Nacimiento River near Bryson	140	1955-	USGS	12/23/55	24.63	30,300	2/17/68	6.23	1,270
Salinas River near Bradley	2,536[r]	1948-	USGS	12/ 7/66	16.24	34,200[c]	5/ 2/68	5.05	621[c]
Arroyo Seco near Soledad	244	1901-	USGS	4/ 3/58	16.40	28,300	1/31/68	8.30	748
Salinas River near Spreckels	4,157[r]	*1900-	USGS	2/12/38 1/16/52	25.0 26.85	75,000[c] -	12/10/67	6.39	135[c]
Big Sur River near Big Sur	46.5	1950-	USGS	4/ 2/58	11.56	5,680	1/29/68	6.25	1,210
Arroyo de la Cruz near San Simeon	41.4	1950-	USGS	12/ 6/66	15.27	34,100	1/ 9/68	4.80	811
Santa Rosa Creek near Cambria	12.5	1957-	USGS	2/ 1/60 12/ ?/55	10.36 15.2[h]	2,520 -	3/11/68	4.11	178
Sisquoc River near Garey	472	1940-	USGS	12/ 6/66	13.5	22,600	3/ 8/68	7.47	2,280
Santa Maria River at Guadalupe	1,742	1940-	USGS	1/16/52	8.18[b]	32,800	3/ 8/68	4.80	300
Santa Ynez River below Gibraltar Dam, near Santa Barbara	216	1920-	USGS	3/ 2/38	-	35,500[c]	4/ 2/68	8.12	3338
Santa Cruz Creek near Santa Ynez	73.9	1941-	USGS	12/ 6/66	10.30	5,750	3/ 8/68	6.32	456
San Jose Creek near Goleta	5.51	1941-	USGS	4/ 4/41	-	1,960	3/ 8/68	3.25	155
Atascadero Creek near Goleta	18.8[r]	1941-	USGS	11/16/65	12.78	4,600	3/ 7/68	9.32	460
Carpinteria Creek near Carpinteria	13.1	1941-	USGS	12/ 6/66	8.60	2,720	3/ 8/68	3.99	118
South Coastal Area									
Matilija Creek at Matilija Hot Springs	54.6	1927-	USGS	3/ 2/38	-	15,900	10/10/67	3.65	266[c]
Ventura River near Meinera Oaka	76.4	1959-	USGS	12/29/65	*	7,910[c]	10/10/67	1.96	101[c]
Coyote Creek near Oak View	13.2	1958-	USGS	12/ 6/66	9.08	5,010	3/ 8/68	5.04	426

Table 8 (Continued)

Stream and Station	Drainage Area in Sq. Mi.	Period of Record	Source of Record (a)	Previous Maximum of Record			1967-68 Water Year		
				Date	Stage in ft.	Dischg. in cfs	Date	Stage in ft.	Dischg. in cfs
South Coastal Area (Continued)									
Ventura River near Ventura	188	1911-14 1929-	USGS	3/ 2/38	19.2	39,200	3/ 8/68	11.61	665[c]
Santa Clara River at Los Angeles-Ventura County Line	644	1952-	USGS	12/29/65	11.50	34,100	11/21/67	6.22	3,480
Piru Creek above Lake Piru	372	1955-	USGS	2/10/62 3/ 2/38	12.20 -	12,200 35,000[b]	11/20/67	4.47	840
Sespe Creek near Fillmore	251	1911-13 1927	USGS	3/ 2/38	-	56,000	11/21/67	6.70	1,940
Santa Paula Creek near Santa Paula	40.0	1927-	USGS	3/ 2/38	10.56	13,500	11/21/67	3.97	345
Malibu Creek at Crater Camp near Calabasas	105	1931-	USGS	12/29/65	-	20,600	3/ 8/68	9.31	3,830
Ballona Creek near Culver City	89.5[r]	1928-	USGS	3/ 2/38	15.4	19,000	11/21/67	14.89	32,490**
Los Angeles River at Sepulveda Dam	158	1929-	USGS	12/29/65	10.90	13,000[c]	3/ 8/68	9.91	11,300[c]
Los Angeles River at Los Angeles	514	1929-	USGS	3/ 2/38	-	67,000[c]	3/ 8/68	9.83	30,870[c]
Rio Hondo near Downey	143	1928-	USGS	3/ 2/38	12.0	24,400[c]	12/18/67	4.76	5,880[c]
Santa Ana River near Mentone	209[r]	1896-	USGS	3/ 2/38	14.3	52,300	3/ 8/68	10.08	288
San Gabriel River below Santa Fe Dam near Baldwin Park	236[r]	1942-	USGS	11/23/67	17.14	11,100[c]	1/29/67	10.44	30[c]
Santa Ana River at Waterman Ave. at San Bernardino	332[r]	1954-	USGS	3/ 2/38	-	75,700	3/ 8/68	3.53	871
Mill Creek near Yucaipa	38.1	1919-38 1947-	USGS	3/ 2/38	-	18,100	11/19/67	8.28	324
Lytle Creek near Fontana	46.3	1918-	USGS	3/ 2/38	-	25,200	11/19/67	5.96	336
Cajon Creek near Keenbrook	40.6	1919-	USGS	3/ 2/38	19.3	14,500	11/19/67	5.08	469
Santa Ana River at Riverside Narrows near Arlington	851[r]	1927-	USGS	3/ 2/38	-	100,000	3/ 8/68	7.14	3,300[e]

Table 8 (Continued)

Stream and Station	Drainage Area in Sq. Mi.	Period of Record	Source of Record (a)	Previous Maximum of Record			1967-68 Water Year		
				Date	Stage in ft.	Dischg. in cfs	Date	Stage in ft.	Dischg. in cfs
South Coastal Area (Continued)									
San Jacinto River near San Jacinto	141	1920-	USGS	2/16/27	-	45,000	3/ 8/68	7.14	3,300[e]
Santiago Creek at Modjeska	12.5	1961-	USGS	11/22/65	6.60	1,500	3/ 8/68	4.24	130
Santiago Creek at Santa Ana	95.0	1928-	USGS	3/ 2/38	8.36	4,400[c]	3/ 8/68	3.03	226
San Juan Creek near San Juan Capistrano	106	1928-	USGS	3/ 2/38	-	13,000	3/ 8/68	3.13	366
San Mateo Creek near San Clemente	80.8	1952-	USGS	12/ 6/66	10.45	7,300	DISCONTINUED 9/30/67		
San Mateo Creek at San Onofre	132	1946-	USGS	12/ 6/67	7.80	6,950	DISCONTINUED 9/30/67		
Santa Margarita River near Temecula	588	1923-	USGS	2/16/27	14.6	25,000	3/ 8/68	2.52	48[c]
Santa Margarita River at Ysidora	739	1923-	USGS	2/16/27	18.00[b]	33,600	REGULATED	NO PEAKS	
San Luis Rey River at Monserate Narrows, near Pala	373	1935-41 1946-	USGS	12/ 6/66	6.70	7,000	3/ 8/68	2.47	72[c]
San Luis Rey River near Bonsall	512	1916-18 1929-	USGS	3/ 2/38 2/1891	12.60[b] -	18,100[c] 128,100	3/ 8/68	640	485[c]
Santa Ysabel Creek near Ramona	112	1912-23 1943-	USGS	1/27/16	14.0[b]	28,400	3/ 8/68	3.03	79[c]
Santa Ysabel Creek near San Pasqual	128	*1905-	USGS	3/24/06	6.3[b,m]	8,000	3/ 8/68	2.04	59[c]
San Diego River near Santee	377	1912-	USGS	1/27/16	25.1[b]	70,200	12/18/67	5.24	626[c]
Sweetwater River near Descanso	45.5	1905-27 1956-	USGS	2/16/27	13.2[b,h]	11,200	12/19/67	4.15	39
Tijuana River near Dulzura	481	1936	USGS	2/ 7/37	8.5	4,700[c]	3/ 8/67	5.83	2,130[c]
Central Valley Area									
Sacramento River at Delta	425[r]	1944-	USGS USBR	12/22/64	20.10	38,800	2/21/68	10.50	9,080
N. F. Pit River near Alturas	203[r]	1929-32 1957-	USGS	10/14/62	11.07	2,530	DISCONTINUED		
Pit River near Bieber	2,475	*1904-	USGS	3/19/07	16.7	33,800	2/23/68	9.13	7,100
Pit River below Pit No. 4 Dam	4,647[r]	1922-	USGS	12/12/37	17.90	30,200	2/23/68	13.10	12,200

Table 8 (Continued)

Stream and Station	Drainage Area in Sq. Mi.	Period of Record	Source of Record (a)	Previous Maximum of Record			1967-68 Water Year		
				Date	Stage in ft.	Dischg. in cfs	Date	Stage in ft.	Dischg. in cfs
Central Valley Area (Continued)									
Squaw Creek above Shasta Lake	64.0[r]	1944-	USGS USBR	12/21/55	21.90	17,800	DISCONTINUED		
McCloud River above Shasta Lake	604[r]	1945-	USGS USBR	12/22/55	28.20	45,200	2/21/68	14.91	4,790
Sacramento River at Keswick	6,486[r]	1938-	USGS DWR	2/23/40	47.2[b]	186,000	2/24/68	27.46	53,300
Clear Creek at French Gulch	115	1950-	USGS	12/22/64	13.70	7,500	2/23/68	8.26	2,190
Clear Creek near Igo	228	1940-	USGS	12/21/55	13.75	24,500	2/22/68	5.09	1,430
Cow Creek near Millville	425	1949-	USGS	12/27/51	21.55	45,200	2/20/68	11.82	13,600
Cottonwood Creek near Cottonwood	922	1940-	USGS	12/22/64	19.64	56,500	2/20/68	14.14	19,400
Battle Creek below Coleman Fish Hatchery near Cottonwood	358	1961-	USGS	12/11/37	15.8[h,b]	35,000	1/14/68	9.90	6,200
Sacramento River at Bend Bridge	--	1960-	DWR	12/ /64	55.0[e]	--	2/24/68	33.30	67,250
Paynes Creek near Red Bluff	92.7	1949-	USGS	12/ 1/61	11.33	10,600	Unknown	9.00	5,490
Red Bank Creek near Red Bluff	93.5	1959-	DWR USBR	1/ 5/65	10.21	12,200	1/29/68	7.81	3,611
Antelope Creek near Red Bluff	123	1940-	USGS USCE	2/22/56	12.43	11,500	1/14/68	10.78	4,950
Elder Creek near Paskenta	92.9[r]	1948-	USGS	2/24/58	13.90	11,700	2/19/68	6.20	2,500
Elder Creek at Gerber	136	1949-	USBR USGS	1/ 5/65	14.90	14,100	1/29/68	8.16	2,430
Mill Creek near Los Molinos	131	*1909-	USGS	12/11/37	23.4[h]	23,000	1/14/68	7.94	4,400
Thomes Creek at Paskenta	194	1920-	DWR USGS	12/22/64	15.32	37,800	2/19/68	9.64	9,420
Deer Creek near Vina	208	*1911-	USGS DWR	12/10/37	19.2[h]	23,800	1/10/68	7.86	4,310
Sacramento River at Vina Bridge	-	1945-	DWR USBR	12/23/64	90.92	162,000[c]	2/25/68	81.59	73,000
Sacramento River at Hamilton City	-	1945-	DWR USBR	12/11/37	150.7	350,000	2/25/68	40.56	67,000
Big Chico Creek near Chico	72.5	1930-	USGS	1/ 5/65	15.36	9,580	1/15/68	6.63	1,900

Table 8 (Continued)

Stream and Station	Drainage Area in Sq. Mi	Period of Record	Source of Record (a)	Previous Maximum of Record			1967-68 Water Year		
				Date	Stage in ft.	Dischg. in cfs	Date	Stage in ft.	Dischg in cfs
Central Valley Area (Continued)									
Stony Creek near Fruto	599	1901-12 1960-	USGS	12/23/64	15.49	40,200[c]	2/19/68	11.62	14,000[c]
Stony Creek near Hamilton City	777	1940-	USGS	2/25/58	18.31	39,900[c]	2/22/68	12.08	9,170
Sacramento River at Ord Ferry	-	*1921-	DWR	2/28/40	121.7	370,000	2/25/68	111.41	72,100
Sacramento River at Butte City	-	*1921-	DWR USGS	2/ 7/42	96.87	170,000	2/26/68	89.38	69,500
Moulton Weir Spill to Butte Basin	-	*1935-	DWR	2/20/58 2/26/58	83.66 83.66	36,000[d] 36,000[d]	2/26/68	78.7	4,150
Colusa Weir Spill to Butte Basin	-	*1935-	DWR	2/ 8/42	70.40	86,000[d]	2/27/68	65.96	33,850
Sacramento River at Colusa	-	1940-	DWR USGS	2/ 8/42	69.20	49,000[c]	2/26/68	64.50	39,100
Colusa Basin Drain at Highway 20	-	1924-	DWR	2/21/58	51.93	25,400[e]	2/ 3/68	49.20	3,880
Butte Creek near Chico	147	1930-	USGS	12/22/64	14.12	21,200	2/21/68	5.06	3,090
Butte Slough to Sutter Bypass at Mawson Bridge	-	*1934-	DWR	3/ 1/40	68.9	210,000	DISCONTINUED		
Butte Slough near Meridian	--	1968	DWR				2/27/68	54.97	32,160
Sutter Bypass at Long Bridge	-	1914-	DWR	3/ 1/40	57.7	210,000	2/27/68	48.00	--
Tisdale Weir Spill to Sutter Bypass	-	1940-	DWR	3/ 1/40	53.35	25,700[d]	2/27/68	48.4	12,300
Sacramento River below Wilkins Slough	-	1938-	USGS	2/27/58	51.41	28,900[c]	2/27/68	48.37	28,400
Sacramento River at Knights Landing	-	1940-	DWR USGS	12/ 3/60 12/ 8/42	30.31 41.83[k]	30,000[c] -	2/28/68	37.27	28,100
Middle Fork Feather River near Clio	686	1925-	USGS	2/ 1/63	16.19	14,500	2/22/68	11.06	4,100
Middle Fork Feather River near Merrimac	1,062[r]	1951-	USGS	12/22/64	26.5[h]	86,200	2/21/68	12.43	10,300
North Fork Feather River near Prattville	493	*1905-	USGS	3/19/07	16.2[b]	10,000	4/ 2/68	3.49	164[c]
Butte Creek below Almanor-Butte Creek Tunnel, near Prattville	68.8	1936-	USGS	12/23/64	5.87	3,830	2/23/68	2.04	447
Indian Creek near Crescent Mills	739	*1906-	USGS	3/19/07	20.2[b,m]	25,000	2/24/68	9.00	4,720

Table 8 (Continued)

Stream and Station	Drainage Area in Sq. Mi.	Period of Record	Source of Record (a)	Previous Maximum of Record			1967-68 Water Year		
				Date	Stage in ft.	Dischg. in cfs	Date	Stage in ft.	Dischg. in cfs
Central Valley Area (Continued)									
Spanish Creek above Blackhawk Creek, at Keddie	184	1933-	USGS	12/22/64	13.53	15,400	2/21/68	6.62	3,340
North Fork Feather River at Pulga	1,953	*1910-	USGS	12/22/64	35.80	73,000[c,g]	2/21/68	16.20	12,000[c]
West Branch Feather River near Paradise	113	1957-	USGS DWR	12/22/64	26.2	25,500	2/21/68	11.75	5,200
Feather River at Oroville	3,626[r]	1901-	USGS DWR	3/19/07	39.3[b,m]	230,000	10/ 3/67	3.70	6,450[c]
Feather River near Gridley	-	*1929-	DWR q	12/23/55	102.25	-	2/13/68	27.24	5,440[c]
South Honcut Creek near Bangor	30.6[r]	1950-	USGS	12/26/64	19.25	17,000	2/19/68	7.55	1,780
Feather River at Yuba City	-	1944-	DWR	12/24/55	82.42	-	2/21/68	50.13	15,500[c]
Middle Yuba River above Oregon Creek	162	1940-	USGS	1/31/63	18.55	31,600[c]	2/20/68	8.08	3,950[c]
Oregon Creek near North San Juan	34.4	1911-	USGS	12/22/64	12.88	10,300	2/20/68	7.29	1,560
North Yuba River below Goodyears Bar	250	*1930-	USGS	2/ 1/63	23.8[h]	40,000	2/21/68	9.74	5,540
North Yuba River below Bullards Bar Dam	487	1940-	USGS	12/22/64	40.45	91,600[c]	2/21/68	19.31	14,400[c]
South Yuba River near Cisco	51.8	1942-	USGS	1/31/63	20.6[h]	18,400	2/23/68	6.35	1,420
South Yuba River at Jones Bar, near Grass Valley	310	1940-48 1959-	USGS	12/22/64	25.0	53,600[c]	2/20/68	10.75	4,470[c]
Yuba River at Englebright Dam	1,109[r]	1941-	USGS PG&E	12/22/64	546.0[n]	171,700[c,f]	2/21/68	532.42	20,800[c,f]
Deer Creek near Smartville	84.6	1935-	USGS	10/13/62	13.77	11,600[c]	2/19/68	9.23	4,590[c]
Yuba River near Marysville	1,340	*1940-	USGS	12/23/64	90.15	180,000[c]	2/20/68	68.69	21,200
Bear River near Auburn	140	1940-	USGS	12/22/55	16.56[b]	19,700	DISCONTINUED 9/30/67		
Bear River near Wheatland	292	1928-	USGS	12/22/55	19.30[b]	33,000	2/20/68	7.33	5,300[c]
Feather River at Nicolaus	5,923[r]	1943-	USGS DWR	12/23/55	51.60	357,000[c]	2/22/68	36.77	34,100

Table 8 (Continued)

Stream and Station	Drainage Area in Sq. Mi.	Period of Record	Sources of Record (a)	Previous Maximum of Record			1967-68 Water Year		
				Date	Stage in ft.	Dischg. in cfs	Date	Stage in ft.	Dischg. in cfs.
Central Valley Area (Continued)									
Fremont Weir (West End) Spill to Yolo Bypass	-	*1935-	DWR	12/23/55	39.72	293,800[d]	2/28/68	35.33	--
Sacramento River at Verona	-	1929-	USGS DWR	3/ 1/40	41.20	79,200[c]	2/28/68	33.48	58,600
Sacramento Weir Spill to Yolo Bypass, near Sacramento	-	*1939-	USGS DWR	3/26/28 12/23/55	31.83 33.01	118,000[d] -	No Flow Over Weir		
North Fork American River at North Fork Dam	343	1941-	USGS	12/23/64	11.87	65,400[c]	2/20/68	5.18	11,300[c]
Rubicon River near Foresthill	311	1958-	USGS	12/23/64	74[p,h]	-	2/20/68	9.58	1,930
Middle Fork American River near Foresthill	534	1958-	USGS	12/23/64	69[p,h]	-	2/20/68	10.95	8,800
Middle Fork American River near Auburn	613	1911-	USGS	12/23/64	60.4[h]	250,000[n]	2/20/68	13.84	8,060
South Fork American River near Camino	501	1922-	USGS PG&E	12/23/55	32.6[h]	49,800[c]	2/21/68	9.27	1,700[c]
South Fork American River near Lotus	673	1951-	USGS	12/23/55	21.37	71,800[c]	2/21/68	8.34	4,280[c]
American River at Fair Oaks	1,888[r]	1904-	USGS	11/21/50	31.85[b]	180,000	2/24/68	4.19	8,320[c]
Sacramento River at Sacramento	23,530	*1879-	USGS DWR USWB	11/21/50	30.14[b]	104,000[c]	2/29/68	20.89	67,100
Sacramento River at Walnut Grove	-	1929-	DWR	11/21/50	13.0[b]	-	2/27/68	8.07	--
Adobe Creek near Kelseyville	6.39	1954-	USGS	12/22/64	9.11	1,500	1/29/68	8.24	1,120
Kelsey Creek near Kelseyville	37.2	1946-	USGS	12/21/55	12.80	8,800	1/29/68	12.12	6,420
Cache Creek near Lower Lake	528	1944-	USGS	2/24/58	9.40	8,000[c]	2/ 1/68	8.16	5,220[c]
North Fork Cache Creek near Lower Lake	198	1930-	USGS	12/11/37	13.98[h]	20,300	1/29/68	8.30	6,640
Cache Creek above Rumsey	-	1959-	DWR	1/ 5/65	21.4	59,000[c]	1/29/68	15.38	22,700[c]
Cache Creek near Capay	1,042[r]	1942-	USGS	2/24/58	20.90	51,600[c]	1/30/68	14.66	17,500
Cache Creek at Yolo	1,138[r]	1903-	USGS	2/25/58	33.11[b]	41,400[c,g]	1/30/68	24.25	16,800
Yolo Bypass near Woodland	-	1939-	USGS DWR	2/ 8/42	32.00	272,000	2/28/68	24.26	19,600

Table 8 (Continued)

Stream and Station	Drainage Area in Sq. Mi.	Period of Record	Source of Record (a)	Previous Maximum of Record			1967-68 Water Year		
				Date	Stage in ft.	Dischg. in cfs.	Date	Stage in ft.	Dischg. in cfs
Central Valley Area (Continued)									
Dry Creek near Middletown	8.41	1959-	USGS	2/ 8/60	9.90	3,470	1/10/68	8.40	1,840
Putah Creek near near Winters	5.74[r]	1930-	USGS DWR	2/27/40	30.5	81,000	3/17/68	9.23	1,180
Yolo Bypass near Lisbon	-	1914-	DWR	12/25/64	24.68	350,000[e]	2/28/68	14.47	--
Sacramento River at Rio Vista	-	1906-	USCE DWR	12/25/55	10.2[b]	-	11/30/67	7.65	--
North Fork Cosumnes River near El Dorado	205	1911-41 1948	USGS	12/23/55	14.8	15,800[c]	2/20/68	6.27	1,380[c]
Middle Fork Cosumnes River near Somerset	107	1957-	USGS	2/ 1/63	16.20	11,800	2/20/68	7.56	930
South Fork Cosumnes River near River Pines	64.3	1957-	USGS	2/ 1/63	10.90	5,540	2/20/68	3.18	502
Cosumnes River at Michigan Bar	536[r]	1907-	USGS DWR	12/23/55	14.59	42,000	2/20/68	6.56	4,220
Cosumnes River at McConnel	724	1941-	USGS USBR DWR	12/23/55	46.26	54,000	2/20/68	39.57	4,947
Cole Creek near Salt Springs Dam	20.4	1927-42 1943-	USGS	12/23/64	10.21	6,140	2/20/68	5.55	1,290
South Fork Mokelumne River near West Point	75.1[r]	1933-	USGS	12/23/55	14.8[b,h]	6,920	2/20/68	4.73	430
Mokelumne River near Mokelumne Hill	544[r]	(1901-	USGS	12/ 3/50	18.5	33,700[c]	2/20/68	5.44	2,410[c]
Mokelumne River at Woodbridge	661[r]	1924-	USGS	11/22/50	29.58	27,000[c]	10/31/67	15.05	2,170[c]
Mokelumne River near Thornton (Benson's Ferry)	2,045	1959-	DWR	12/24/55	18.00[b]	-	2/22/68	7.40	--
Bear Creek near Lockeford	47.6[r]	1930-	USGS	4/ 3/58	15.13	2,930	1/31/68	13.09	1,090
South Fork Calaveras River near San Andreas	118	1950-	USGS	12/23/55	10.29	17,600	1/30/68	4.75	1,460
Cosgrove Creek at Valley Springs	21.1[r]	1929-	USGS	12/23/55	8.96	3,240	1/30/68	5.21	705
Calaveras River at Bellota	-	1958-	DWR	4/ 2/58	19.3	1,570[c]	DISCONTINUED 9-30-67		
Dry Creek near Galt	329	1926-33 1944-	USGS USBR DWR	4/ 3/58	15.28	24,000	1/31/68	13.17	2,520

Table 8 (Continued)

Stream and Station	Drainage Area in Sq. Mi.	Period of Record	Source of Record (a)	Previous Maximum of Record			1967-68 Water Year		
				Date	Stage in ft.	Dischg. in cfs.	Date	Stage in ft.	Dischg. in cfs
Central Valley Area (Continued)									
Mormon Slough at Bellota	-	1948-	DWR	4/ 2/58	20.65	15,400[c]	2/22/68	7.46	1,830[c,e]
Calaveras River near Stockton	-	1958-	DWR	1/22/67	10.27	680[c]	2/23-24/68	5.25	133[c]
Stockton Diverting Canal at Stockton	-	1944-	DWR	4/ 4/58[e]	17.18[e]	11,400[e]	2/22/68	8.12[e]	2,500[e]
Duck Creek near Stockton	-	1950-	DWR	1/30/67	5.85	640	3/ 8/68	4.91	368
South Fork Stanislaus River near Long Barn	66.9[r]	1937-	USGS	11/21/50	9.3	4,900[c]	5/29/68	3.98	473
Stanislaus River below Melones Powerhouse, near Sonora	905[r]	1931-	USGS	12/23/55	29.0[h]	62,800[c]	Temporarily Discontinued because of Construction		
Stanislaus River at Orange Blossom Bridge	-	1940-	DWR	11/21/50	30.05	52,000[c]	4/ 1/68	5.74	1,833[c]
Stanislaus River at Ripon	1,075	1940-	USGS DWR	12/24/55	63.25	62,500[c]	4/ 2/68	43.69	1,530
South Fork Tuolumne River near Oakland Recreation Camp	87.0[r]	1923-	USGS	12/23/55	10.9[h]	11,900	2/20/68	3.83	339
Middle Tuolumne River at Oakland Recreation Camp	73.5[r]	1916-	USGS	12/23/55	11.05[h]	4,920	5/ 2/68	3.48	213
Tuolumne River at Modesto	1,884	*1878-	USGS DWR	12/ 9/50	69.19	57,000[c]	2/23/68	45.10	3,430
Orestimba Creek near Newman	134[r]	1932-	USGS DWR	4/ 2/58	6.57[b]	10,200	NO FLOW		
Merced River at Pohono Bridge, near Yosemite	321	1916-	USGS	12/23/55	21.52[h]	23,400	4/30/68	6.13	2,020
South Fork Merced River near El Portal	241[r]	1950-	USGS	12/23/55	18.70	46,500	4/29/68	7.85	1,080
Merced River near Briceburg	691	1965-	USGS	---	---	---	4/30/68	7.73	3,330
Merced River near Stevinson	1,273[r]	1940-	USGS USBR DWR	12/ 5/50	73.79	13,600[c]	2/10/68	62.25	1,400
Chowchilla River at Buchanan Dam Site, near Raymond	235[r]	1921-23 1930-	USGS DWR	12/23/55	16.50	30,000	2/18/68	3.91	298
Fresno River near Knowles	133[r]	1911-13 1915-	USGS	12/23/55	11.52	13,300	2/20/68	2.12	245

Table 8 (Continued)

Stream and Station	Drainage Area in Sq. M.	Period of Record	Source of Record (a)	Previous Maximum of Record			1967-68 Water Year		
				Date	Stage in ft.	Dischg. in cfs	Date	Stage in ft.	Dischg. in cfs
Central Valley Area (Continued)									
Fresno River near Daulton	258[r]	1941-	USGS USBR	12/23/55	12.64	17,500	2/21/68	2.86	273
Willow Creek at Mouth near Auberry	130	1952-	USGS	12/23/55	28.5[h]	15,700[c,r]	2/20/68	7.13	251
San Joaquin River below Kerchoff Powerhouse, near Prather	1,480	*1910-	USGS	12/23/55	51.0[h]	92,200[c]	2/23/68	16.13	4,310[c]
San Joaquin River below Friant	1,675	*1907-	USGS	12/11/37	23.80[b]	77,200[c]	4/28/68	2.74	220
San Joaquin River near Mendota	4,310	1939-	USBR	6/ 1/52	-	8,840[c]	4/23/68	4.20	345[c]
Eastside Bypass near El Nido	-	1964-	DWR	1/ 2/66	11.55	1,560	3/ 2/68	8.47	271
San Joaquin River at Fremont Ford Bridge	7,619[r]	1937-	USGS USBR DWR	4/ 6/58	74.91	5,910[c]	3/19/68	57.15	474
San Joaquin River near Newman	9,524[r]	1912-	USGS DWR	3/ 7/38	65.81	33,000[c,g]	2/10/68	42.41	1,660
San Joaquin River near Vernalis	13,540[r]	*1922-	USGS	12/ 9/50	32.81	79,000[c]	2/24/68	15.25	4,240
Kings River below North Fork	1,342	1951-	USGS	12/23/55	23.08	85,200	5/29/68	7.57	5,900
Kaweah River at Three Rivers	418	1958-	USGS DWR	12/ 5/66	19.0	73,000	5/29/68	6.05	1,520
Tule River near Springville	225	1957-	USGS	12/ 6/66	19.7	49,600	3/ 8/68	4.02	386
Tule River below Success Dam	393	1953-	USGS	12/23/55	21.65[b]	27,000	6/28/68	5.74	432[c]
Kern River at Kernville	1,009[r]	1905-12 1953-	USGS	12/ 6/66	22.2	74,000	5/29/68	6.42	2,060
Northern Lahontan Area									
Willow Creek near Susanville	92.5	1950-	USGS	2/ 1/63	5.59	816	2/22/68	4.61	408
Susan River at Susanville	192	*1900-	USGS	12/22/64	7.30	5,100	2/23/68	4.70	820
Little Truckee River above Boca Reservoir near Boca	146	1903-10 1939-	USGS	2/ 1/63	9.00	13,300	2/23/68	2.39	727
Truckee River at Farad	932	1899-	USGS	11/21/50	14.5[h]	17,500	2/23/68	5.05	2,060
East Fork Carson River below Markleeville Creek near Markleeville	276[r]	1960-	USGS	1/31/63	8.21	15,100	5/21/68	2.48	1,460

Table 8 (Continued)

Stream and Station	Drainage Area in Sq. Mi.	Period of Record	Source of Record (a)	Previous Maximum of Record			1967-68 Water Year		
				Date	Stage in ft.	Dischg. in cfs.	Date	Stage in ft.	Dischg. in cfs
Northern Lahontan Area (Continued)									
West Fork Carson River at Woodfords	65.6	*1900-	USGS	2/ 1/63	9.00	4,890	5/21/68	2.66	309
West Walker River below Little Walker River near Coleville	180[r]	1938-	USGS	11/20/50	8.10	6,220	5/29/68	4.02	1,200
East Walker River near Bridgeport	359[r]	1921-	USGS	6/19/63	4.64	1,390	2/21-24/68	1.67	255
Southern Lahontan Area									
Mojave River at Lower Narrows near Victorville	530	1899-06	USGS	3/ 2/38	18.7	70,600[c]	11/21/67	2.10	97[c]
Mojave River at Barstow	-	1930-	USGS	3/ 3/38	8.60	64,300[c]	No Peak		
Mojave River at Afton	-	1929-32 1952	USGS	12/31/65	7.92	4,150	11/22/67	6.88	32

LEGEND

(a) USWB - United States Weather Bureau
USCE - United States Corps of Engineers
USGS - United States Geological Survey
USBR - United States Bureau of Reclamation
DWR - Department of Water Resources
PG&E - Pacific Gas and Electric Company
b - Site and/or datum then in use
c - Affected by storage and/or diversion
d - Discharge over weir
e - Estimated
f - Includes flow through powerhouse
g - Includes flow bypassing station
h - From flood marks
j - Crest stage gage
k - Discharge not determined; affected by backwater
m - Maximum observed
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