STATE OF CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
DIVISION OF WATER RESOURCES

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# SNOW SURVEY BULLETIN

# CALIFORNIA COOPERATIVE SNOW SURVEYS

April, 1947

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# CALIFORNIA COOPERATIVE SNOW SURVEYS

## MONTHLY BULLETIN OF SNOW SURVEY AND PRECIPITATION DATA

April 10, 1947

This is the third snow survey bulletin issued this winter by the Division of Water Resources.

It contains the results of all snow measurements made at the first of April and also all available precipitation data.

The Division of Water Resources acts as coordinator of this work. The cooperating organizations are listed on the last page of this report.

CONDITIONS AS OF APRIL 1st.

California's snowpack is a small one.

However with careful conservation of the run-off there should be a water supply sufficient for most of the reasonable uses of agriculture, power and industry.

With average weather during April, it is estimated that the snow-melt run-off from the Sierra watersheds will average 54% of normal.

By way of comparison the run-off from the Sierra snowpack during the three dry years of 1931, 1934 and 1939 averaged 26%, 27% and 44% of normal respectively.

This summer, in the Sacramento and San Joaquin Valleys, irrigation water will need to be used conservatively, with wastage reduced to the minimum. Gravity irrigation water will in some cases need to be augmented more than usual with pumped water from underground sources.

From the run-off indicated for the Kings, Kaweah and Kern Rivers no excess water will find its way into Tulare Lake. On the contrary some localized irrigation shortages may develop in marginal areas watered by the Kings and Kern.

In the reservoirs of the Sierra, stored water is above average. In 27 reservoirs with a total capacity of 7 million acre feet, five million acre feet are already in storage. With normal operation most of these reservoirs, - with the exception of Shasta, the largest - should fill or almost fill before the snow-melt is ended.

In this bulletin, Table 1, on Page 4, gives a summary by watersheds, of the snowpack on the ground and the precipitation to date, in terms of percentage of normal.

In Tables 2 and 3 forecasts of run-off are listed, based upon snow surveys and all other available data. Table 2 indicates the probable snow-melt run-off, while Table 3 lists the run-off expected during the entire twelve months' season.

Table 4, lists the main reservoirs of the Sierra and tabulates the amount of water stored in each on April 1st.

Tables 5 and 6 list in detail the results of the individual snow surveys and the precipitation data from each of the mountain and foothill stations.

TABLE 1 on page 4 shows how this winter's precipitation has been spread over the mountains of the state. Also tabulated for each watershed is the snowpack as measured by the recent snow surveys.

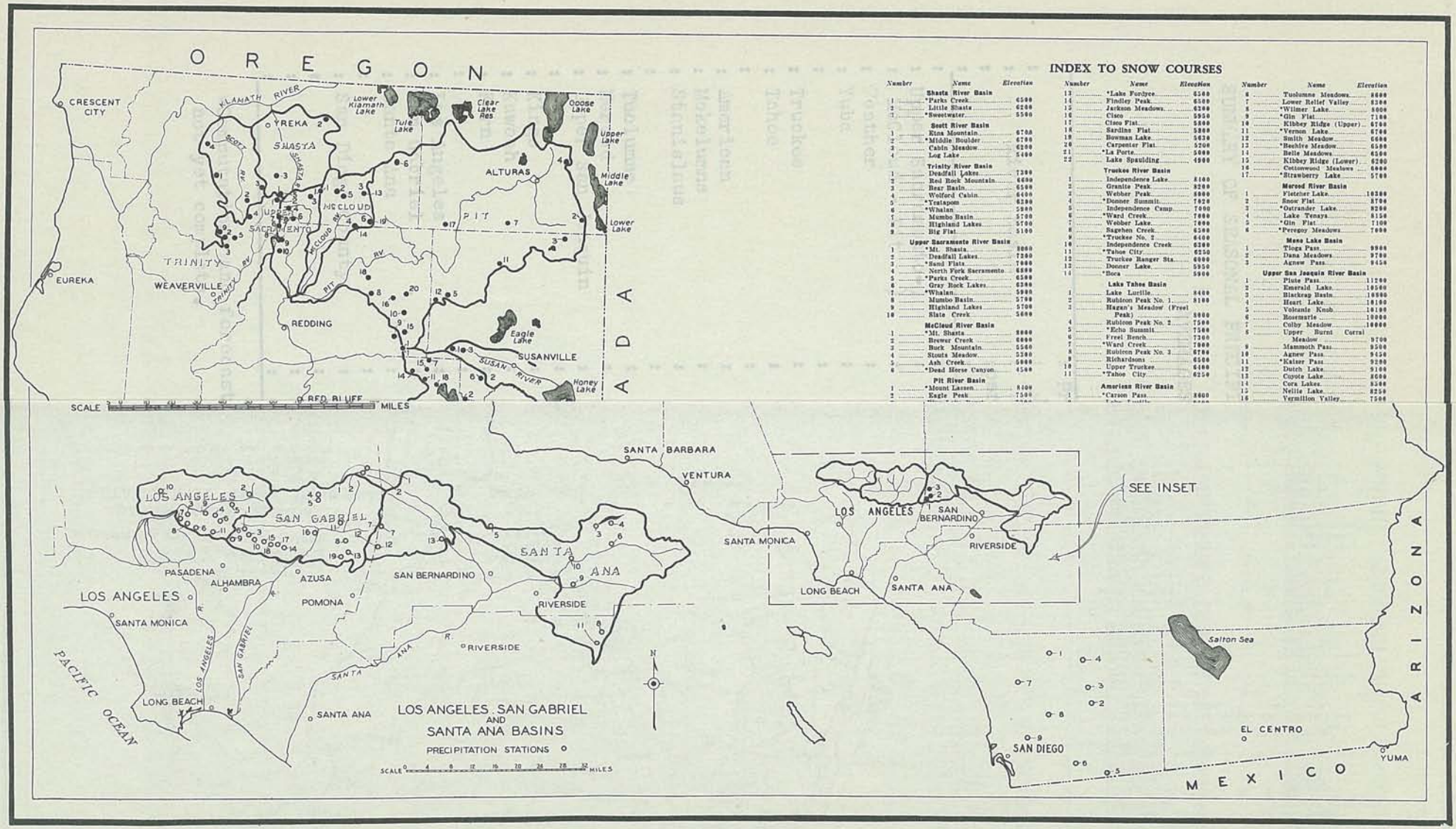
In all watersheds north of the Tehachapi Range, precipitation this season has been below normal; ranging between 70% and 90%. South of the Tehachapi, in the Southern California watersheds, precipitation to date averages from 100% to 105% of normal. A large portion of this however occurred last Fall during November and December. Since January there has been a deficit of precipitation in Southern California.

TABLE 2 on page 5 tabulates the forecasts of run-off of the Sierra streams during the four months' melting period, April 1st to July 31st. The figures of column three, with the exception of the flow to Shasta Reservoir, and the Kaweah and Kern Rivers, represent unimpaired flow such as would occur with no storage on the stream, and no diversions or additions. For the three exceptions mentioned, there are some diversions for irrigation above the measuring station which are not taken into account and the figures in column three of the table are based upon the impaired flow as measured at the station.

TABLE 3 on page 6 lists, in percentage of the 50 year mean, the estimates of the total seasonal runoff expected for each stream, as based upon all available run-off, precipitation, and snow survey data. For purposes of comparison the actual streamflow percentages for the past two years and for the year 1939 are also listed. These seasonal, 12 month, streamflow forecasts of Table 3 should not be confused with the forecasts of Table 2 which are for the four months' snow melting period April through July.

On the second page of the appendix at the end of this report will be found a tabulation of the snow-melt run-off from the various watersheds of the Sierra, comparing this year's anticipated flows with those that occurred during the dry years of 1931, 1934 and 1939.

All of the forecasts contained herein are predicated upon the prevalence of normal weather conditions during the period of run-off. Abnormal storms or severe drought during this period will increase or decrease the run-off accordingly.




## INDEX TO SNOW COURSES

| Number | Name | Elevation |
|---|---|---|
| | **Shasta River Basin** | |
| 1 | *Parks Creek | 6500 |
| 2 | Little Shasta | 6200 |
| 3 | *Sweetwater | 5500 |
| | **Scott River Basin** | |
| 1 | Etna Mountain | 6700 |
| 2 | *Middle Boulder | 6700 |
| 3 | Cabin Meadow | 6200 |
| 4 | Log Lake | 5400 |
| | **Trinity River Basin** | |
| 1 | Deadfall Lakes | 7300 |
| 2 | Red Rock Mountain | 6600 |
| 3 | Bear Basin | 6500 |
| 4 | Wolford Cabin | 6400 |
| 5 | *Yeatspom | 6200 |
| 6 | *Whalan | 5900 |
| 7 | Mumbo Basin | 5700 |
| 8 | Highland Lakes | 5700 |
| 9 | Big Flat | 5100 |
| | **Upper Sacramento River Basin** | |
| 1 | *Mt. Shasta | 8000 |
| 2 | Deadfall Lakes | 7200 |
| 3 | *Sand Flats | 7000 |
| 4 | North Fork Sacramento | 6800 |
| 5 | *Parks Creek | 6500 |
| 6 | Gray Rock Lakes | 6300 |
| 7 | *Whalan | 5900 |
| 8 | Mumbo Basin | 5700 |
| 9 | Highland Lakes | 5700 |
| 10 | Slate Creek | 5600 |
| | **McCloud River Basin** | |
| 1 | *Mt. Shasta | 8000 |
| 2 | Brewer Creek | 6800 |
| 3 | Buck Mountain | 6560 |
| 4 | Stouts Meadow | 5300 |
| 5 | Ash Creek | 5000 |
| 6 | *Dead Horse Canyon | 4500 |
| | **Pit River Basin** | |
| 1 | *Mount Lassen | 8100 |
| 2 | Eagle Peak | 7500 |
| 13 | *Lake Fordyce | 6500 |
| 14 | Findley Peak | 6500 |
| 15 | Jackson Meadows | 6300 |
| 16 | Cisco | 5950 |
| 17 | Cisco Flat | 5800 |
| 18 | Sardine Flat | 5800 |
| 19 | Bowman Lake | 5630 |
| 20 | Carpenter Flat | 5200 |
| 21 | *La Porte | 5000 |
| 22 | Lake Spaulding | 4900 |
| | **Truckee River Basin** | |
| 1 | Independence Lake | 8100 |
| 2 | Granite Peak | 8200 |
| 3 | Webber Peak | 8000 |
| 4 | *Donner Summit | 7620 |
| 5 | Independence Camp | 7400 |
| 6 | *Ward Creek | 7000 |
| 7 | Webber Lake | 7000 |
| 8 | Sagehen Creek | 6300 |
| 9 | *Truckee No. 2 | 6400 |
| 10 | Independence Creek | 6300 |
| 11 | *Tahoe City | 6250 |
| 12 | Truckee Ranger Sta. | 6000 |
| 13 | Donner Lake | 5950 |
| 14 | *Boca | 5900 |
| | **Lake Tahoe Basin** | |
| 1 | Lake Lucille | 8400 |
| 2 | Rubicon Peak No. 1 | 8100 |
| 3 | Hagan's Meadow (Freel Peak) | 8000 |
| 4 | Rubicon Peak No. 2 | 7500 |
| 5 | *Echo Summit | 7560 |
| 6 | Freel Bench | 7300 |
| 7 | *Ward Creek | 7000 |
| 8 | Rubicon Peak No. 3 | 6700 |
| 9 | Richardsons | 6500 |
| 10 | Upper Truckee | 6400 |
| 11 | *Tahoe City | 6250 |
| | **Amerisna River Basin** | |
| 1 | *Carson Pass | 8600 |
| 6 | Tuolumne Meadows | 8600 |
| 7 | Lower Relief Valley | 8300 |
| 8 | *Wilmer Lake | 8000 |
| 9 | *Gin Flat | 7100 |
| 10 | Kibbey Ridge (Upper) | 6700 |
| 11 | *Vernon Lake | 6700 |
| 12 | Smith Meadow | 6600 |
| 13 | *Bashire Meadow | 6500 |
| 14 | Belle Meadows | 6500 |
| 15 | Kibbey Ridge (Lower) | 6200 |
| 16 | Cottonwood Meadows | 6000 |
| 17 | *Strawberry Lake | 5700 |
| | **Merced River Basin** | |
| 1 | Fletcher Lake | 10300 |
| 2 | Snow Flat | 8700 |
| 3 | *Ostrander Lake | 8200 |
| 4 | Lake Tenaya | 8150 |
| 5 | *Gin Flat | 7100 |
| 6 | *Peregoy Meadows | 7000 |
| | **Mono Lake Basin** | |
| 1 | Tioga Pass | 9900 |
| 2 | Dana Meadows | 9700 |
| 3 | Agnew Pass | 9450 |
| | **Upper San Joaquin River Basin** | |
| 1 | Piute Pass | 11200 |
| 2 | Emerald Lake | 10500 |
| 3 | Blackrap Basin | 10500 |
| 4 | Heart Lake | 10100 |
| 5 | Volcanic Knob | 10100 |
| 6 | Rosemarie | 10000 |
| 7 | Colby Meadow | 10000 |
| 8 | Upper Burnt Corral Meadow | 9700 |
| 9 | Mammoth Pass | 9500 |
| 10 | Agnew Pass | 9450 |
| 11 | *Kaiser Pass | 9200 |
| 12 | Dutch Lake | 9100 |
| 13 | Coyote Lake | 8600 |
| 14 | Cora Lakes | 8300 |
| 15 | Nellie Lake | 8250 |
| 16 | Vermilion Valley | 7500 |

TABLE 2

STREAM FLOW FORECASTS - APRIL 1, 1947

| Drainage Area or Stream Gaging Station | Stream Flow April 1 - July 31, Inc.[1] | | |
|---|---|---|---|
| | 57 - Year Normal 1890-1946 Acre Feet | 1947 Forecast in per cent of Normal | Estimated 1947 flow April-July Acre Feet |
| South Fork Pit River near Likely | 40,000 | 55% | 22,000 |
| Sacramento River at Shasta Dam [2] | 1,900,000 | 66% | 1,250,000 |
| Feather River near Oroville | 2,253,000 | 49% | 1,100,000 |
| Bowman Area-Middle Yuba and Canyon Creek | 101,000 | 69% | 70,000 |
| South Fork of Yuba River at Langs Crossing | 245,000 | 65% | 160,000 |
| Yuba River at Smartsville | 1,222,000 | 53% | 650,000 |
| North Fork American River at Colfax | 312,000 | 45% | 140,000 |
| Middle Fork of American near East Auburn | 689,000 | 44% | 300,000 |
| American River at Fairoaks | 1,552,000 | 48% | 750,000 |
| North Fork Mokelumne River near West Point | 468,000 | 64% | 300,000 |
| Mokelumne River near Mokelumne Hill | 541,000 | 60% | 325,000 |
| M.Fk. Stanislaus at Sand Bar Flat nr.Avery | 390,000 | 59% | 230,000 |
| Stanislaus River below Melones Power House | 841,000 | 59% | 500,000 |
| Tuolumne River near Hetch Hetchy | 683,000 | 61% | 420,000 |
| Tuolumne River at La Grange | 1,368,000 | 56% | 770,000 |
| Merced River at Pohono Bridge | 421,000 | 55% | 230,000 |
| Merced River at Exchequer | 720,000 | 53% | 380,000 |
| Big Creek at Huntington Lake | 110,000 | 50% | 55,000 |
| S. Fk. San Joaquin River at Florence Lake | 217,000 | 67% | 145,000 |
| San Joaquin River above mouth of Big Creek | 1,187,000 | 57% | 675,000 |
| San Joaquin River at Friant | 1,394,000 | 57% | 800,000 |
| N. Fk.Kings River below Rancheria Creek | 327,000 | 49% | 160,000 |
| Kings River at Piedra | 1,369,000 | 54% | 740,000 |
| Kaweah River near Three Rivers [2] | 303,000 | 50% | 150,000 |
| Kern River near Bakersfield [2] | 472,000 | 37% | 175,000 |

[1] Full natural flow. That is the flow as measured in the stream with corrections applied for upstream regulation and diversions. The unimpaired flow.

[2] Net flow at station after upstream irrigation use.

TABLE 3

SEASONAL STREAM FLOW[1] IN PER CENT OF NORMAL
For the 12 Months Period
Beginning October 1st and Ending September 30th of Following Year

| River | Station | 50-year Mean (1889-1939) Acre Feet | Seasonal Stream Flow[1] in Per Cent of 50-Year Mean (1889-1939) | | | |
|---|---|---|---|---|---|---|
| | | | Actual | | | Estimated |
| | | | 1938-39 | 1944-45 | 1945-46 | 1946-47 |
| Sacramento | Red Bluff | 8,747,000 | 50% | 76% | 92% | 56% |
| Feather | Oroville | 4,853,000 | 39% | 77% | 85% | 56% |
| Yuba | Smartsville | 2,490,000 | 36% | 88% | 96% | 56% |
| American | Fairoaks | 2,879,000 | 36% | 88% | 100% | 52% |
| Sacramento | Sacramento | * | 43% | 79% | 92% | 55% |
| Mokelumne | Mokelumne Hill | 802,000 | 43% | 97% | 93% | 59% |
| Stanislaus | Melones | 1,273,000 | 41% | 100% | 93% | 58% |
| Tuolumne | La Grange | 1,985,000 | 46% | 106% | 95% | 60% |
| Merced | Exchequer | 1,069,000 | 45% | 103% | 88% | 57% |
| San Joaquin | Friant | 1,914,000 | 49% | 112% | 91% | 64% |
| San Joaquin | Vernalis | * | 46% | 106% | 92% | 60% |
| Combined Sacramento and San Joaquin Rivers | | * | 43% | 86% | 92% | 56% |
| Kings | Piedra | 1,818,000 | 54% | 114% | 89% | 62% |
| Kaweah | Three Rivers[2] | 433,000 | 57% | 127% | 82% | 62% |
| Kern | Bakersfield[2] | 694,000 | 72% | 126% | 99% | 53% |

[1] Full natural flow. That is the flow as measured in the stream with corrections applied for upstream regulation and diversions. The unimpaired flow.

* The actual 50-year mean in acre feet not computed. The annual percentage is obtained by comparing the total of the major tributary streams with the total of the 50-year means for the same streams.

[2] For the Kaweah and Kern Rivers there are some unmeasured diversions for irrigation above the measuring station. For these two rivers the figures in the above table are based upon the impaired flow as measured at the station.

TABLE 4

WATER STORED IN SIERRA NEVADA RESERVOIRS, APRIL 1, 1947.

| WATERSHED | RESERVOIR | TOTAL CAPACITY Acre Feet | WATER IN STORAGE April 1st, 1947 Acre Feet |
|---|---|---|---|
| Sacramento | Shasta | 3,714,000 | 2,884,000 |
| Feather | Mountain Meadows | 24,000 | 24,000 |
| | Lake Almanor | 649,800 | 542,000 |
| | Bucks Storage | 103,000 | 88,100 |
| | Butt Valley | 50,000 | 39,000 |
| Yuba | Bullards Bar | 10,800 | 10,800 |
| | Bowman Lake | 68,000 | 16,700 |
| | French Lake | 12,000 | 1,500 |
| | Spaulding System | 130,000 | 77,400 |
| | Narrows | 45,000 | 45,000 |
| Bear | Combie | 9,000 | 4,700 |
| American | Twin Lakes | 21,300 | 7,900 |
| | Silver Lake | 8,900 | 2,200 |
| Mokelumne | Salt Springs | 130,000 | 19,100 |
| | Pardee | 210,000 | 164,000 |
| Stanislaus | Relief | 15,100 | 3,400 |
| | Strawberry | 17,900 | 6,800 |
| | Melones | 112,500 | 113,200 |
| Tuolumne | Lake Eleanor | 27,800 | 24,200 |
| | Hetch Hetchy | 360,000 | 67,500 |
| | Don Pedro | 289,000 | 240,700 |
| Merced | Lake McClure | 281,000 | 207,000 |
| San Joaquin | Crane Valley | 50,000 | 35,900 |
| | Florence Lake | 64,400 | 300 |
| | Huntington Lake | 88,800 | 36,100 |
| | Shaver Lake | 135,300 | 9,500 |
| | Millerton Lake | 436,500 | 358,100 |
| TOTAL FOR 27 RESERVOIRS | | 7,064,100 | 5,029,100 |

PROGRESS REPORT OF SNOW SURVEY AND PRECIPITATION DATA
TO APRIL 1, 1947
TABLE 5 - SNOW SURVEY DATA FOR ALL COURSES

| 1 DRAINAGE BASINS and SNOW COURSES | ELEVATION in FEET | DATE of SURVEY | DEPTH of SNOW: Inches | DENSITY Per Cent | WATER CONTENT Inches | 2 Normal water content for entire Season (to April 1st): Inches | Percentage of: total normal seasonal water content: on ground at date of survey this year | CORRESPONDING WATER CONTENT AT SAME TIME: Last year 1946 Inches | 1939 Inches |
|---|---|---|---|---|---|---|---|---|---|
| SCOTT RIVER | | | | | | | | | |
| Etna Mountain | 6700 | Survey not received | | | | New Course 1946 | | 55.2 | - |
| Middle Boulder | 6700 | 4-1-47 | 56.5 | 41.1% | 23.2 | New Course 1946 | | 33.6 | - |
| Cabin Meadow | 6400 | Survey not received | | | | New Course 1946 | | NSM | - |
| Wolford Cabin | 6400 | Survey not received | | | | New Course 1946 | | NSM | - |
| SHASTA RIVER | | | | | | | | | |
| Parks Creek | 6500 | 3-31-47 | 76.4 | 38.9% | 29.7 | 33.4 | 89% | 42.8 | 24.8 |
| Little Shasta | 6200 | 3-31-47 | 33.2 | 35.9% | 11.9 | New Course 1946 | | 24.6 | - |
| Sweetwater | 5500 | 3-31-47 | 20.8 | 29.3% | 6.1 | 14.2 | 43% | 22.1 | 10.5 |
| UPPER SACRAMENTO RIVER | | | | | | | | | |
| Mount Shasta | 8000 | 3-30-47 | 97.4 | 38.3% | 37.2 | 60.2 | 62% | 53.4 | 23.3 |
| Deadfall Lakes | 7300 | 4-1-47 | 67.8 | 41.6% | 28.2 | New Course 1946 | | 35.9 | - |
| Sand Flats | 7000 | 3-30-47 | 82.0 | 35.9% | 29.4 | New Course 1945 | | 53.2 | - |
| North Fork Sacramento | 6800 | 4-1-47 | 40.3 | 33.2% | 13.4 | 25.5 | 53% | 25.4 | 9.9 |
| Parks Creek | 6500 | 3-31-47 | 76.4 | 38.9% | 29.7 | 33.4 | 89% | 42.8 | 24.8 |
| Gray Rock Lakes | 6300 | 3-31-47 | 69.9 | 39.7% | 27.8 | New Course 1941 | | 48.7 | - |
| Whalan Station | 5900 | 4-1-47 | 18.8 | 35.6% | 6.7 | 20.7 | 32% | NSM | 7.2 |
| Mumbo Basin | 5700 | 3-28-47 | 32.7 | 38.8% | 12.7 | New Course 1946 | | NSM | - |
| Highland Lakes | 5700 | 3-26-47 | 38.4 | 38.8% | 14.9 | New Course 1946 | | NSM | - |
| Slate Creek | 5600 | 3-27-47 | 13.9 | 42.7% | 5.9 | New Course 1945 | | 42.8 | - |
| McCLOUD RIVER | | | | | | | | | |
| Mount Shasta | 8000 | 3-30-47 | 97.4 | 38.3% | 37.2 | 60.2 | 62% | 53.4 | 23.3 |
| Brewer Creek | 6000 | 4-4-47 | 61.5 | 40.2% | 24.7 | New Course 1945 | | 41.6 | - |
| Buck Mountain | 5560 | 4-1-47 | 32.4 | 42.7% | 13.8 | - | - | 40.7 | 11.4 |
| Stouts Meadow | 5300 | 3-31-47 | 53.7 | 42.6% | 22.9 | New Course 1945 | | 52.0 | - |
| Ash Creek | 5000 | 4-1-47 | 16.1 | 36.5% | 5.9 | New Course 1945 | | 29.2 | - |
| Dead Horse Canyon | 4500 | 4-1-47 | No Snow on Course | | | New Course 1945 | | 16.1 | - |

1 Data for courses common to more than one basin are listed under each basin.
2 Normals in this column have been determined by comparing recorded snow survey data with long-time stream flow records. Where a "crest" snow course is common to two basins the normal computed by comparison with stream flow is one basin may differ from that similarly computed for the other. Until such time as the true normal can be determined from an actual long-time record of snow surveys, it is required that different normals be used for such a course according to the basin in which it is grouped.

N.S.M. - No survey made.

TABLE 5 - SNOW SURVEY DATA FOR ALL COURSES - APRIL, 1947 - (Continued)

| 1 DRAINAGE BASINS and SNOW COURSES | ELEVATION in FEET | DATE of SURVEY | DEPTH of SNOW Inches | DENSITY Per Cent | WATER CONTENT Inches | 2 Normal Water Content for entire season (to April 1st) Inches | Percentage of Total normal seasonal water content on ground at date of survey this year | CORRECPONDING WATER CONTENT AT SAME TIME Last year 1946 Inches | 1939 Inches |
|---|---|---|---|---|---|---|---|---|---|
| PIT RIVER | | | | | | | | | |
| Mount Lassen | 8400 | 4-7-47 | 148.8 | 46.5% | 69.2 | 102.5 | 67% | 85.5 | 44.8 |
| Eagle Peak | 7500 | 4-2-47 | 22.2 | 28.8% | 6.4 | 19.6 | 33% | 21.2 | 10.4 |
| Blue Lake Ranch | 7300 | 4-1-47 | 17.5 | 30.4% | 5.3 | New Course 1940 | | 16.2 | - |
| Cedar Pass | 7200 | 3-31-47 | 26.0 | 39.6% | 10.3 | 21.8 | 47% | 22.9 | 10.5 |
| Blacks Mountain | 6650 | 4-1-47 | No Snow on Course | | | New Course 1945 | | 9.4 | - |
| Medicine Lake | 6520 | 3-27-47 | 62.5 | 35.7% | 22.3 | New Course 1940 | | 41.0 | - |
| Adin Mountain | 6500 | 3-31-47 | 13.4 | 32.8% | 4.4 | 15.9 | 28% | 16.2 | 8.1 |
| Thousand Lakes | 6500 | 3-31-47 | 55.0 | 38.0% | 20.9 | New Course 1946 | | 46.9 | - |
| Snow Mountain | 6200 | 3-31-47 | 27.2 | 45.7% | 12.4 | 43.2 | 29% | 31.4 | 26.4 |
| Manzanita Lake | 6000 | Snow Survey not made | | | | New Course 1936 | | NSM | Patches |
| McElroy Pass | 5800 | 4-1-47 | No Snow on Course | | | New Course 1939 | | 2.4 | 0 |
| Willow Creek Summit | 5600 | 4-1-47 | No Snow on Course | | | New Course 1945 | | 2.6 | - |
| Halls Flat | 5600 | 4-1-47 | No Snow on Course | | | New Course 1945 | | 2.6 | - |
| Stouts Meadow | 5300 | 3-31-47 | 53.7 | 42.6% | 22.9 | New Course 1945 | | 52.0 | - |
| Ashpan Butte | 5200 | Report not received | | | | New Course 1940 | | 7.0 | - |
| Burney Springs | 4800 | Report not received | | | | New Course 1945 | | 0 | - |
| Widow Valley Summit | 4700 | 4-1-47 | No Snow on Course | | | New Course 1945 | | 3.8 | - |
| Hatchet Mountain | 4700 | Report not received | | | | New Course 1940 | | 9.1 | - |
| Dead Horse Canyon | 4500 | 4-1-47 | No Snow on Course | | | New Course 1945 | | 16.1 | - |
| TRINITY RIVER | | | | | | | | | |
| Seven Up | 7400 | 3-31-47 | 101.2 | 42.7% | 43.2 | New Course 1947 | | - | - |
| Deadfall Lakes | 7300 | 4-1-47 | 67.8 | 41.6% | 28.2 | New Course 1946 | | 35.9 | - |
| Red Rock Mountain | 6600 | 3-30-47 | 68.4 | 40.3% | 27.5 | New Course 1946 | | 50.6 | - |
| Bear Basin | 6500 | 3-31-47 | 64.2 | 41.7% | 26.8 | New Course 1947 | | - | - |
| Wolford Cabin | 6400 | Report not received | | | | New Course 1947 | | - | - |
| Shimmy Lake | 6400 | 4-1-47 | 73.9 | 45.3% | 33.5 | New Course 1947 | | - | - |
| Whalan Station | 5900 | 4-1-47 | 18.8 | 35.6% | 6.7 | 20.7 | 32% | NSM | - |
| Highland Lakes | 5700 | 3-26-47 | 38.4 | 38.8% | 14.9 | New Course 1947 | | - | - |
| Mumbo Basin | 5700 | 3-28-47 | 32.7 | 38.8% | 12.7 | New Course 1947 | | - | - |
| Big Flat | 5100 | 3-28-47 | 5.1 | 36.3% | 1.8 | New Course 1946 | | 23.7 | - |
| STONY CREEK | | | | | | | | | |
| Anthony Peak | 6200 | 4-1-47 | 29.3 | 42.5% | 12.4 | New Course 1944 | | 33.6 | - |
| Plaskett Meadows | 6000 | 4-3-47 | 21.2 | 48.7% | 10.4 | New Course 1944 | | 21.7 | - |

1 & 2 - See footnotes first page of this table.

TABLE 5 - SNOW SURVEY DATA FOR ALL COURSES - APRIL, 1947 -(Continued)

| 1 DRAINAGE BASINS and SNOW COURSES | ELEVATION in Feet | DATE of SURVEY | DEPTH of SNOW Inches | DENSITY Per Cent | WATER CONTENT Inches | 2 Normal Water content for entire season (to April 1st) Inches | Percentage of total normal seasonal water content on ground at date of survey this year | CORRESPONDING WATER CONTENT AT SAME TIME Last year 1946 Inches | 1939 Inches |
|---|---|---|---|---|---|---|---|---|---|
| FEATHER RIVER | | | | | | | | | |
| Mount Lassen | 8400 | 4-7-47 | 148.8 | 46.5% | 69.2 | 102.5 | 67% | 85.5 | 44.8 |
| Mount Dyer | 7400 | Report not received | | | | 26.6 | | 28.3 | 11.5 |
| Church Meadows | 6700 | 3-31-47 | 50.3 | 42.8% | 21.6 | 45.2 | 48% | 41.7 | 21.7 |
| Yuba Pass | 6700 | 4-1-47 | 54.1 | 42.8% | 23.1 | 42.8 | 54% | 41.5 | 19.0 |
| Letterbox | 6500 | 4-3-47 | 53.2 | 36.4% | 19.4 | 39.1 | 49% | 59.5 | - |
| Lake Nokopen(Silver Lake) | 6500 | 3-31-47 | 47.2 | 29.1% | 13.7 | 30.3 | 45% | 31.9 | - |
| Fredonia Pass | 6400 | 3-25-47 | Patches of Snow | | | 10.5 | - | 9.2 | 5.2 |
| Harkness Flat | 6400 | 4-2-47 | 29.9 | 38.5% | 11.5 | 28.4 | 41% | 35.0 | 16.4 |
| Eureka Lake | 6300 | 4-2-47 | 35.9 | 14.8 | 14.8 | 38.6 | 38% | 37.2 | 20.2 |
| Three Lakes | 6100 | 4-1-47 | 56.2 | 38.7% | 21.7 | 40.1 | 54% | 36.5 | 23.6 |
| Mill Creek Flat | 5800 | 4-3-47 | 65.5 | 37.7% | 24.7 | 43.1 | 57% | 39.6 | 30.5 |
| Mount Stover | 5500 | 4-3-47 | 14.8 | 26.4% | 3.9 | 17.6 | 22% | 19.2 | 6.2 |
| Browns Camp | 5400 | Report not received | | | | 22.3 | | 21.1 | 8.2 |
| Haskins Flat | 5300 | Report not received | | | | 34.9 | | 30.4 | 22.0 |
| Feather River Meadows | 5000 | Report not received | | | | 24.3 | | 28.5 | 15.0 |
| Warner Creek | 5000 | 3-27-47 | Snow Course Flooded | | | 17.3 | - | 19.8 | 11.2 |
| Humbug Summit | 5000 | 3-28-47 | 4.0 | 39.3% | 1.6 | 14.3 | 11% | 9.5 | 3.8 |
| La Porte | 5000 | Report not received | | | | 30.6 | | 22.7 | 17.5 |
| Chester Flat | 4600 | 4-3-47 | Patches of Snow | | | 9.1 | - | Patches | Patches |
| SUSAN RIVER | | | | | | | | | |
| Lake Nokopen(Silver Lake) | 6500 | 3-31-47 | 47.2 | 29.1% | 13.7 | 30.3 | 45% | 31.9 | - |
| Fredonia Pass | 6400 | 3-25-47 | Patches of Snow | | | 10.5 | - | 9.2 | 5.2 |
| Norvell Flat | 5700 | 3-31-47 | Patches of Snow | | | 16.8 | - | 17.0 | |
| YUBA RIVER | | | | | | | | | |
| Webber Peak | 8000 | 3-31-47 | 86.7 | 39.4% | 34.2 | 44.5 | 77% | 45.8 | 28.8 |
| Castle Creek #5 | 7370 | 4-2-47 | 94.1 | 43.0% | 40.4 | New Course 1947 | | | - |
| Meadow Lake | 7200 | 3-27-47 | 94.5 | 41.5% | 39.2 | 56.4 | 69% | 66.3 | 35.8 |
| Red Mountain | 7200 | 3-28-47 | 76.4 | 39.0% | 29.8 | 50.5 | 59% | 58.6 | 29.4 |
| English Mountain | 7100 | 3-28-47 | 67.0 | 42.2% | 28.3 | 44.7 | 63% | 50.6 | 31.0 |
| Donner Summit | 7020 | 3-31-47 | 71.4 | 40.8% | 29.1 | 41.5 | 70% | 47.2 | 25.3 |
| Lake Sterling | 7000 | 3-28-47 | 97.1 | 41.3% | 40.1 | 56.5 | 71% | 62.5 | 34.3 |
| Sawmill Flat | 7000 | 3-28-47 | 81.6 | 38.2% | 31.2 | 53.3 | 58% | 58.9 | 31.6 |
| Haypress Valley | 6800 | 4-6-47 | 66.6 | 41.9% | 27.9 | 42.2 | 66% | 29.1 | 20.4 |

1 & 2 - See footnotes first page of this table. N.S.M. - No survey made.

TABLE 5 - SNOW SURVEY DATA FOR ALL COURSES - APRIL, 1947 - (Continued)

| 1 DRAINAGE BASIN and SNOW COURSES | ELEVATION in Feet | DATE of SURVEY | DEPTH of SNOW Inches | DENSITY Per Cent | WATER CONTENT Inches | 2 Normal Water content for entire season (to April 1st) Inches | Percentage of total normal seasonal water content on ground at date of survey this year | CORRESPONDING WATER CONTENT AT SAME TIME Last year: 1946 Inches | 1939 Inches |
|---|---|---|---|---|---|---|---|---|---|
| YUBA RIVER (Cont.) | | | | | | | | | |
| Soda Springs | 6750 | 3-31-47 | 55.5 | 41.6% | 23.1 | 38.6 | 60% | 41.4 | 21.4 |
| Yuba Pass | 6700 | 4-1-47 | 54.1 | 42.8% | 23.1 | 42.8 | 54% | 41.5 | 19.0 |
| Church Meadows | 6700 | 3-31-47 | 50.3 | 42.8% | 21.6 | 45.2 | 48% | 41.7 | 21.7 |
| Furnace Flat | 6600 | 3-26-47 | 65.0 | 44.0% | 28.6 | 49.3 | 58% | 58.0 | 30.2 |
| Lake Fordyce | 6500 | 3-27-47 | 47.2 | 43.9% | 20.7 | 42.2 | 49% | 49.0 | 27.8 |
| Findley Peak | 6500 | 3-29-47 | 17.6 | 41.7% | 7.3 | 30.8 | 24% | 32.1 | 28.2 |
| Jackson Meadows | 6300 | 3-29-47 | 34.5 | 46.0% | 15.8 | 30.7 | 51% | 34.3 | 24.6 |
| Cisco | 5950 | 3-31-47 | 3.3 | 29.5% | 1.0 | 25.5 | 4% | 32.3 | 14.8 |
| Cisco Flat | 5800 | 3-31-47 | Patches of Snow only | | | 22.8 | - | 26.8 | 17.1 |
| Sardine Flat | 5800 | 3-31-47 | No Snow on Course | | | 18.9 | - | 25.4 | 9.2 |
| Bowman Lake | 5630 | 3-28-47 | 4.3 | 42.2% | 1.8 | 21.6 | 8% | 25.7 | 17.6 |
| La Porte | 5000 | Report not received | | | | 30.2 | - | 22.7 | 17.5 |
| Carpenter Flat | 4900 | 4-1-47 | No Snow on Course | | | New Course 1946 | | 16.2 | - |
| Lake Spaulding | 4900 | 4-1-47 | Patches of Snow only | | | 25.5 | - | 29.5 | 20.4 |
| TRUCKEE RIVER | | | | | | | | | |
| Mount Rose (In Nevada) | 10000 | 4-1-47 | 69.9 | 41.3% | 28.9 | 41.0 | 71% | NSM | 22.4 |
| Big Meadow(In Nevada) | 8800 | 4-2-47 | 38.7 | 42.4% | 16.4 | 29.8 | 55% | 25.0 | 15.3 |
| Independence Lake | 8400 | 3-30-47 | 85.3 | 37.2% | 31.7 | 49.3 | 64% | NSM | 23.0 |
| Webber Peak | 8000 | 3-31-47 | 86.7 | 39.4% | 34.2 | 56.9 | 60% | 45.8 | 28.8 |
| Donner Summit | 7020 | 3-31-47 | 71.4 | 40.8% | 29.1 | 47.8 | 61% | 47.2 | 25.3 |
| Independence Camp | 7000 | 3-29-47 | 31.3 | 40.6% | 12.7 | 24.5 | 52% | NSM | - |
| Ward Creek | 7000 | 4-3-47 | 99.8 | 37.9% | 37.8 | 53.0 | 71% | NSM | 28.5 |
| Webber Lake | 6800 | 3-31-47 | 67.3 | 37.6% | 25.3 | 38.1 | 66% | 39.7 | 23.8 |
| Independence Creek | 6500 | 3-29-47 | 9.9 | 44.5% | 4.7 | 16.0 | 29% | NSM | 4.4 |
| Sage Hen Creek | 6500 | 3-27-47 | 23.6 | 41.1% | 9.7 | 20.9 | 46% | NSM | 7.9 |
| Truckee #2 | 6400 | 3-27-47 | 17.3 | 39.3% | 6.8 | 18.0 | 38% | 19.2 | 6.1 |
| Tahoe City | 6250 | 4-1-47 | No Snow on Course | | | 15.9 | - | 12.9 | 5.6 |
| Truckee Ranger Station | 6000 | 4-1-47 | No Snow on Course | | | New Course 1945 | | 11.9 | - |
| Donner Lake | 5950 | 3-27-47 | 19.9 | 44.2% | 8.8 | New Course 1944 | | 28.3 | - |
| Boca | 5900 | 3-27-47 | No Snow on Course | | | 9.0 | - | 4.7 | Patches |

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TABLE 5 - SNOW SURVEY DATA FOR ALL COURSES - APRIL, 1947 - (Continued)

| 1 DRAINAGE BASINS and SNOW COURSES | ELEVATION in Feet | DATE of SURVEY | DEPTH of SNOW Inches | DENSITY Per Cent | WATER CONTENT Inches | 2 Normal water content for entire season (to April 1st) Inches | Percentage of total normal seasonal water content on ground at date of survey this year | CORRESPONDING WATER CONTENT AT SAME TIME | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Last year 1946 Inches | 1939 Inches |
| LAKE TAHOE | | | | | | | | | |
| Mount Rose (In Nevada) | 10000 | 4-1-47 | 69.9 | 41.3% | 28.9 | 39.7 | 73% | NSM | 22.4 |
| Lake Lucille | 8400 | 3-29-47 | 119.6 | 41.2% | 49.3 | 62.9 | 78% | NSM | 38.6 |
| Rubicon Peak #1 | 8100 | 3-29-47 | 114.7 | 36.4% | 41.8 | 49.1 | 85% | 50.2 | 33.1 |
| Marlette Lake | 8000 | 4-2-47 | 49.3 | 41.5% | 20.5 | 26.3 | 78% | NSM | 10.5 |
| Hagans Mds.(Freel Peak) | 8000 | 3-31-47 | 36.4 | 37.4% | 13.6 | 20.8 | 65% | NSM | - |
| Rubicon Peak #2 | 7500 | 3-29-47 | 60.8 | 42.6% | 25.9 | 35.2 | 74% | 38.3 | 22.7 |
| Echo Summit | 7500 | 4-1-47 | 69.6 | 43.3% | 30.1 | New Course 1940 | | 50.9 | - |
| Daggetts Pass (In Nevada) | 7350 | 3-28-47 | 22.6 | 33.6% | 7.6 | 14.3 | 53% | NSM | - |
| Freel Bench | 7300 | 3-31-47 | 10.7 | 43.0% | 4.6 | 13.2 | 34% | NSM | - |
| Ward Creek | 7000 | 4-3-47 | 99.8 | 37.9% | 37.8 | 52.3 | 72% | NSM | 28.5 |
| Rubicon Peak #3 | 6700 | 3-29-47 | 38.8 | 33.8% | 13.1 | 22.3 | 59% | 28.3 | 15.1 |
| Glenbrook (In Nevada)#2 | 6700 | 3-28-47 | 30.1 | 33.2% | 10.0 | 20.0 | 50% | NSM | - |
| Richardsons #2 | 6500 | 3-30-47 | 22.1 | 32.6% | 7.2 | - | - | NSM | 4.6 |
| Upper Truckee | 6400 | 3-31-47 | 1.5 | 40.0% | 0.6 | 11.0 | 6% | NSM | - |
| Little Valley (In Nevada) | 6300 | 3-31-47 | 1.2 | 25.0% | .3 | - | - | 9.3 | - |
| Tahoe City | 6250 | 4-1-47 | No Snow on Course | | | 15.9 | - | 12.9 | 5.6 |
| AMERICAN RIVER | | | | | | | | | |
| Carson Pass | 8600 | 3-27-47 | 67.8 | 45.0% | 30.5 | 45.0 | 68% | 33.9 | 23.8 |
| Lake Lucille | 8400 | 3-29-47 | 119.6 | 41.2% | 49.3 | 63.4 | 78% | NSM | 38.6 |
| Rubicon Peak #1 | 8100 | 3-29-47 | 114.7 | 36.4% | 41.8 | 50.9 | 82% | 50.2 | 33.1 |
| Tragedy Springs | 7900 | 4-2-47 | 83.3 | 40.4% | 33.7 | 47.6 | 71% | NSM | - |
| Twin Lakes | 7900 | 3-26-47 | 56.0 | 39.8% | 22.3 | 32.3 | 69% | 30.4 | 14.7 |
| Echo Summit | 7500 | 4-1-47 | 69.6 | 43.3% | 30.1 | 40.6 | 74% | 50.9 | - |
| Lake Audrain | 7300 | 3-30-47 | 73.0 | 39.2% | 28.7 | 40.1 | 72% | 44.7 | - |
| Silver Lake | 7300 | 4-1-47 | 31.2 | 38.3% | 11.9 | 27.4 | 43% | 21.3 | 11.7 |
| Darrington | 7100 | 3-31-47 | 59.4 | 42.5% | 25.3 | 36.7 | 69% | 39.1 | - |
| Donner Summit | 7020 | 3-31-47 | 71.4 | 40.8% | 29.1 | 47.8 | 61% | 47.2 | 25.3 |
| Ward Creek | 7000 | 4-3-47 | 99.8 | 37.9% | 37.8 | 51.2 | 74% | NSM | 28.5 |
| Lyons Creek | 7000 | 3-31-47 | 61.5 | 33.2% | 20.5 | 35.5 | 58% | 43.8 | 19.4 |
| Phillips | 6800 | 3-31-47 | 48.3 | 40.9% | 19.8 | 31.3 | 63% | 36.4 | - |
| Soda Springs | 6750 | 3-31-47 | 55.5 | 41.6% | 23.1 | 45.8 | 50% | 41.4 | 21.4 |
| Wabena Meadows | 6700 | 4-2-47 | 60.6 | 42.5% | 25.7 | 44.7 | 57% | 44.0 | 24.2 |
| Tamarack Flat | 6600 | 3-31-47 | 54.7 | 36.5% | 19.9 | 32.8 | 61% | 37.9 | 18.2 |
| Huysink | 6600 | 3-31-47 | 72.7 | 39.7% | 28.9 | 53.7 | 54% | 61.5 | 32.7 |
| Camp Sacramento | 6500 | Snow Course destroyed by skiing development. | | | | | - | - | - |

1 & 2 - See footnotes first page of this table. N.S.M.- No survey made.

TABLE 5 - SNOW SURVEY DATA FOR ALL COURSES - APRIL, 1947 - (Continued)

| 1 DRAINAGE BASINS and SNOW COURSES | ELEVATION in Feet | DATE of SURVEY | DEPTH of SNOW: Inches | DENSITY Per Cent | WATER CONTENT Inches | 2 Normal water content for entire season (to April 1st) Inches | Percentage of total normal seasonal water content on ground at date of survey this year | CORRESPONDING WATER CONTENT AT SAME TIME: Last year 1946 Inches | 1939 Inches |
|---|---|---|---|---|---|---|---|---|---|
| AMERICAN RIVER (Cont.) | | | | | | | | | |
| South Loon Lake | 6500 | 3-30-47 | 46.1 | 35.4% | 16.2 | 39.0 | 42% | 42.8 | - |
| Loon Lake | 6400 | 3-30-47 | 33.3 | 36.0% | 12.0 | 32.5 | 37% | 34.6 | 16.4 |
| Gopher Flat | 6200 | 4-3-47 | 53.5 | 35.1% | 18.8 | New Course 1944 | | 42.1 | - |
| Onion Creek | 6100 | 4-1-47 | 12.9 | 40.9% | 5.3 | 27.0 | 20% | 26.6 | 9.5 |
| Deadman Flat | 6100 | 4-2-47 | 40.3 | 41.6% | 16.8 | 39.5 | 43% | 41.2 | 19.7 |
| Talbot Camp | 6000 | 4-3-47 | 15.9 | 18.0% | 2.9 | 21.5 | 14% | 24.1 | - |
| Cisco | 5950 | 3-31-47 | 3.3 | 29.5% | 1.0 | 29.6 | 3% | 32.3 | 14.8 |
| Six Mile Valley | 5700 | 4-1-47 | Patches of Snow only | | | 25.9 | - | 31.1 | 17.8 |
| Strawberry | 5700 | 3-31-47 | No Snow on Course | | | 13.0 | - | 15.4 | - |
| Long Meadow | 5600 | 3-30-47 | Snow Course Flooded | | | 22.4 | - | 21.3 | 9.7 |
| Orellis (Robs Valley) | 5600 | 3-31-47 | 15.3 | 38.9% | 6.0 | 31.3 | 19% | 32.0 | 20.0 |
| Ice House | 5300 | 3-27-47 | No Snow on Course | | | 19.9 | - | 21.2 | 10.6 |
| Carpenter Flat | 4900 | 4-1-47 | No Snow on Course | | | New Course 1946 | | 16.2 | - |
| CARSON RIVER | | | | | | | | | |
| Carson Pass | 8600 | 3-27-47 | 67.8 | 45.0% | 30.5 | 48.0 | 63% | 33.9 | 23.8 |
| Blue Lakes | 8000 | 4-1-47 | 74.3 | 39.5% | 29.4 | 48.1 | 61% | 40.1 | 22.3 |
| CONSUMNES RIVER | | | | | | | | | |
| Corral Flat | 7300 | 4-1-47 | 77.7 | 40.1% | 31.1 | 48.5 | 64% | 38.6 | 27.2 |
| Lumberyard | 6600 | 4-1-47 | 32.0 | 42.6% | 13.6 | 40.9 | 33% | 32.2 | 21.2 |
| Hams Station | 5600 | 4-1-47 | No Snow on Course | | | - | - | 5.3 | 0 |
| MOKELUMNE RIVER | | | | | | | | | |
| Carson Pass | 8600 | 3-27-47 | 67.8 | 45.0% | 30.5 | 40.7 | 75% | 33.9 | 23.8 |
| Blue Lakes | 8000 | 4-1-47 | 74.3 | 39.5% | 29.4 | 40.6 | 72% | 40.1 | 22.3 |
| Twin Lakes | 7900 | 3-26-47 | 56.0 | 39.8% | 22.3 | 36.8 | 61% | 30.4 | - |
| Tragedy Springs | 7900 | 4-2-47 | 83.3 | 40.4% | 33.7 | 47.0 | 72% | NSM | NSM |
| Wheeler Lake | 7800 | 3-29-47 | 93.4 | 48.6% | 45.4 | 65.1 | 70% | 60.7 | 31.6 |
| Pacific Valley | 7500 | 3-31-47 | 72.6 | 41.9% | 30.5 | 39.1 | 78% | 41.8 | 21.7 |
| Lake Alpine | 7500 | 3-28-47 | 69.7 | 42.3% | 29.5 | 43.5 | 68% | 47.8 | 22.5 |
| Silver Lake | 7300 | 4-1-47 | 31.2 | 38.3% | 11.9 | 24.9 | 48% | 21.3 | 11.7 |
| Corral Flat | 7300 | 4-1-47 | 77.7 | 40.1% | 31.1 | 48.5 | 64% | 38.6 | 27.2 |
| Bear Valley Ridge | 6700 | 3-25-47 | 36.6 | 39.6% | 14.5 | 29.1 | 50% | 29.7 | 20.4 |
| Lumberyard | 6600 | 4-1-47 | 32.0 | 42.6% | 13.6 | 40.9 | 33% | 32.2 | 21.2 |
| Big Meadow | 6500 | 4-2-47 | 28.7 | 48.3% | 13.9 | 29.0 | 48% | 36.2 | - |

1 & 2 - See footnotes first page of this table. N.S.M. - No Survey Made.

TABLE 5 - SNOW SURVEY DATA FOR ALL COURSES - APRIL, 1947 - (Continued)

| 1 DRAINAGE BASINS and SNOW COURSES | ELEVATION in Feet | DATE of SURVEY | DEPTH of SNOW Inches | DENSITY Per Cent | WATER CONTENT Inches | 2 Normal Water content for entire season (to April 1st) Inches | Percentage of total normal seasonal water content on ground at date of survey this year | CORRESPONDING WATER CONTENT AT SAME TIME Last year 1946 Inches | 1939 Inches |
|---|---|---|---|---|---|---|---|---|---|
| MOKELUMNE RIVER (Cont.) | | | | | | | | | |
| Cottage Spring | 5700 | 4-2-47 | No Snow on Course | | | 14.8 | - | 15.0 | Patches |
| Hams Station | 5600 | 4-1-47 | No Snow on Course | | | - | - | 5.3 | 0 |
| Dorrington | 4800 | 4-2-47 | No Snow on Course | | | - | - | 3.6 | 0 |
| Antelope Springs | 4350 | 4-1-47 | No Snow on Course | | | - | - | 3.0 | Patches |
| STANISLAUS RIVER | | | | | | | | | |
| Sonora Pass | 8800 | 3-31-47 | 50.2 | 35.7% | 17.9 | 28.2 | 63% | 28.4 | 15.1 |
| Lower Relief Valley | 8300 | 4-1-47 | 70.7 | 44.8% | 31.7 | 45.8 | 69% | 44.7 | 21.6 |
| Soda Creek Flat | 7900 | 3-30-47 | 46.6 | 34.4% | 16.0 | 25.1 | 64% | 27.1 | 11.5 |
| Eagle Meadows | 7500 | 3-27-47 | 43.5 | 37.5% | 16.3 | 29.0 | 56% | 27.2 | 16.8 |
| Lake Alpine | 7500 | 3-28-47 | 69.7 | 42.3% | 29.5 | 44.0 | 67% | 48.0 | 22.5 |
| Pacific Valley | 7500 | 3-31-47 | 72.6 | 41.9% | 30.5 | 39.6 | 77% | 41.8 | 21.7 |
| Herring Creek | 7400 | 3-27-47 | 48.0 | 37.5% | 18.0 | 31.9 | 56% | 29.3 | 18.9 |
| Relief Dam | 7300 | 3-29-47 | 37.1 | 40.1% | 14.9 | 25.1 | 59% | 18.9 | 11.5 |
| Spicers | 6600 | 4-1-47 | 35.8 | 49.5% | 17.7 | 30.2 | 59% | NSM | 17.7 |
| Niagara Flat | 6500 | 3-26-47 | 22.0 | 42.6% | 9.4 | 24.5 | 38% | 23.1 | 13.1 |
| Big Meadow | 6500 | 4-2-47 | 28.7 | 48.3% | 13.9 | 29.6 | 47% | 36.2 | - |
| Strawberry Lake | 5700 | 4-1-47 | No Snow on Course | | | 11.3 | - | 5.7 | 0 |
| Cottage Spring | 5700 | 4-2-47 | No Snow on Course | | | 14.1 | - | 15.0 | Patches |
| Dorrington | 4800 | 4-2-47 | No Snow on Course | | | - | - | 3.6 | 0 |
| WALKER RIVER | | | | | | | | | |
| Virginia Lakes | 9500 | 3-28-47 | 37.7 | 42.2% | 15.9 | New Course 1947 | | - | - |
| Center Mountain | 9400 | 3-26-47 | 73.7 | 41.9% | 30.9 | 45.7 | 68% | 23.0 | NSM |
| Sonora Pass | 8800 | 3-31-47 | 50.2 | 35.7% | 17.9 | 31.0 | 58% | 28.4 | 15.1 |
| Buckeye Forks | 8500 | 3-26-47 | 42.2 | 38.2% | 16.1 | 26.0 | 62% | 21.0 | NSM |
| Willow Flat | 8250 | 4-1-47 | 21.0 | 37.1% | 7.8 | 17.5 | 45% | 14.0 | 11.2 |
| Buckeye Roughs | 7900 | 3-27-47 | 40.6 | 36.9% | 15.0 | 25.9 | 58% | 18.6 | NSM |
| Leavitt Meadows | 7200 | 3-31-47 | 2.4 | 58.3% | 1.4 | 16.0 | 9% | 7.6 | 5.5 |
| TUOLUMNE RIVER | | | | | | | | | |
| Fletcher Lake | 10000 | 3-25-47 | 68.9 | 36.5% | 25.2 | 38.4 | 66% | NSM | 18.0 |
| Tioga Pass | 9900 | 3-26-47 | 51.4 | 37.8% | 19.4 | 30.9 | 63% | 32.1 | 12.4 |
| Dana Meadows | 9700 | 3-25-47 | 60.7 | 39.3% | 23.9 | 33.8 | 71% | 29.8 | 18.0 |
| Center Mountain | 9400 | 3-26-47 | 73.7 | 41.9% | 30.9 | 42.0 | 74% | NSM | NSM |
| Summit Meadow | 9300 | 4-1-47 | 86.5 | 41.5% | 35.9 | New Course 1947 | | - | - |
| Grace Meadows | 8800 | 4-1-47 | 74.0 | 41.4% | 30.6 | New Course 1947 | | - | - |

1 & 2 - See footnotes first page of this table. N.S.M. - No Survey Made.

TABLE 5 - SNOW SURVEY DATA FOR ALL COURSES - APRIL, 1947 - (Continued)

| 1 DRAINAGE BASINS and SNOW COURSES | ELEVATION in Feet | DATE of SURVEY | DEPTH of SNOW Inches | DENSITY Per Cent | WATER CONTENT Inches | 2 Normal Water content for entire Season (to April 1st) Inches | Percentage of total normal seasonal water content on ground at date of survey this year | CORRESPONDING WATER CONTENT AT SAME TIME Last Year 1946 Inches | 1939 Inches |
|---|---|---|---|---|---|---|---|---|---|
| UPPER SAN JOAQUIN RIVER(Cont.) | | | | | | | | | |
| Agnew Pass | 9450 | 4-1-47 | 57.3 | 40.8% | 23.4 | 36.8 | 64% | 30.9 | 17.0 |
| Kaiser Pass | 9200 | 4-7-47 | 74.6 | 43.8% | 32.7 | 45.4 | 72% | 39.7 | 23.5 |
| Dutch Lake | 9100 | 3-29-47 | 58.1 | 35.1% | 20.4 | 32.0 | 64% | 28.5 | 16.8 |
| Coyote Lake | 8600 | 3-25-47 | 59.2 | 39.5% | 23.4 | New Course 1946 | | 24.4 | - |
| Cora Lakes | 8500 | 3-26-47 | 57.8 | 39.5% | 22.8 | 45.3 | 50% | NSM | 18.3 |
| Nellie Lake | 8250 | 3-24-47 | 63.5 | 41.3% | 26.2 | New Course 1943 | | 27.6 | - |
| Vermilion Valley | 7500 | 3-30-47 | 15.9 | 39.0% | 6.2 | 15.4 | 40% | 16.1 | - |
| Chilkoot Lake | 7450 | 3-27-47 | 52.4 | 39.7% | 20.8 | 45.5 | 46% | 37.6 | 21.2 |
| Chilkoot Meadow | 7250 | 3-27-47 | 42.0 | 44.6% | 18.7 | 44.4 | 42% | 34.3 | 20.7 |
| Florence Lake | 7200 | 4-1-47 | Patches of Snow | | - | 9.6 | - | Patches | 0 |
| Huntington Lake | 7000 | 3-24-47 | 19.9 | 42.7% | 8.5 | 26.2 | 32% | 19.5 | 13.0 |
| Clover Meadow | 7000 | 3-27-47 | 26.7 | 38.1% | 10.2 | 29.4 | 35% | 23.1 | 12.2 |
| Jackass Meadows | 7000 | 3-27-47 | 17.0 | 41.7% | 7.1 | 27.7 | 26% | 20.5 | 10.3 |
| Chiquito Creek | 6800 | 3-25-47 | 19.8 | 37.1% | 7.4 | 26.1 | 28% | 19.4 | 12.7 |
| Beasore Meadow | 6800 | 3-27-47 | 32.9 | 43.8% | 14.4 | 34.3 | 42% | 26.4 | 19.5 |
| Poison Meadow | 6500 | 3-27-47 | 8.0 | 42.5% | 3.4 | New Course 1944 | | 21.7 | - |
| KINGS RIVER | | | | | | | | | |
| Bishop Pass | 11400 | 3-28-47 | 74.4 | 36.7% | 27.3 | 33.7 | 81% | 39.3 | 23.5 |
| Blackcap Basin | 10800 | 3-28-47 | 69.6 | 37.6% | 26.2 | 40.1 | 65% | 38.2 | 20.2 |
| Upper Burnt Corral | 9700 | 3-30-47 | 73.2 | 41.5% | 30.4 | 39.6 | 77% | 41.2 | 19.4 |
| Beard Meadow | 9300 | 3-29-47 | 70.0 | 39.7% | 27.8 | 37.2 | 75% | 29.2 | 18.6 |
| Rowell Meadow | 9200 | 4-1-47 | 45.3 | 42.3% | 19.1 | 34.7 | 55% | 21.8 | 14.4 |
| Woodchuck Meadow | 9100 | 3-27-47 | 55.1 | 40.3% | 22.3 | 36.9 | 60% | 23.2 | 19.3 |
| Swamp Meadow | 9000 | 4-1-47 | 65.2 | 42.5% | 27.7 | 42.9 | 65% | 37.2 | 22.2 |
| Round Corral | 9000 | 3-26-47 | 63.6 | 41.5% | 26.4 | 38.3 | 69% | 29.0 | 19.8 |
| Junction Meadows | 8500 | 3-25-47 | 27.2 | 32.3% | 8.8 | 24.4 | 36% | *15.6 | 8.9 |
| Helm Meadow | 8500 | 4-1-47 | 40.8 | 38.5% | 15.8 | 31.6 | 50% | 24.7 | 14.8 |
| Long Meadow | 8500 | 3-30-47 | 48.0 | 42.1% | 20.2 | 33.9 | 60% | 28.0 | 13.4 |
| Statum Meadow | 8300 | 3-26-47 | 46.4 | 42.2% | 19.8 | 37.4 | 53% | 25.0 | 18.7 |
| Post Corral Meadow | 8200 | 3-30-47 | 43.6 | 38.8% | 17.0 | 31.9 | 53% | 27.2 | 13.0 |
| Sand Meadow | 8050 | 3-31-47 | 44.7 | 40.4% | 18.1 | 33.6 | 54% | 30.1 | 15.4 |
| Big Meadows | 7660 | 4-2-47 | 30.5 | 47.8% | 14.6 | 32.4 | 45% | *22.4 | 13.2 |
| Horse Corral Meadow | 7600 | 4-1-47 | 14.5 | 44.0% | 6.4 | 23.3 | 28% | *14.2 | 9.7 |
| Bear Ridge | 7400 | 4-2-47 | 27.6 | 45.6% | 12.6 | 31.0 | 41% | 25.4 | 20.6 |
| Fred Meadows | 7200 | 4-2-47 | 7.0 | 48.5% | 3.4 | 26.6 | 13% | 17.6 | 12.4 |
| Grant Grove | 6660 | 3-31-47 | No Snow on Course | | | 15.7 | - | 11.2 | 7.3 |
| Cliff Camp | 6300 | 3-25-47 | No Snow on Course | | | 16.7 | - | 7.5 | 7.3 |
| Dinkey Sand Flat | 5500 | 4-1-47 | No Snow on Course | | | 16.3 | - | 14.8 | 11.0 |

1 & 2 - See footnotes first page of this table [illegible] and values.

TABLE 5 - SNOW SURVEY DATA FOR ALL COURSES - APRIL, 1947 - (Continued)

| 1 DRAINAGE BASINS And SNOW COURSES | ELEVATION in Feet | DATE of SURVEY | DEPTH of SNOW Inches | DENSITY Per Cent | WATER CONTENT Inches | 2 Normal Water content for entire season (to April 1st) Inches | Percentage of total normal seasonal water content on ground at date of survey this year | CORRESPONDING WATER CONTENT AT SAME TIME Last year: 1946 Inches | 1939 Inches |
|---|---|---|---|---|---|---|---|---|---|
| KAWEAH RIVER | | | | | | | | | |
| Panther Meadow | 8650 | 3-31-47 | 68.7 | 29.4% | 20.2 | 39.7 | 51% | 38.4 | 24.7 |
| Hockett Meadow | 8600 | 3-25-47 | 49.4 | 41.3% | 20.4 | 35.3 | 58% | 25.1 | 20.3 |
| Quinn Ranger Station | 8000 | 3-26-47 | 29.2 | 42.3% | 12.3 | 24.7 | 50% | 19.1 | 14.5 |
| Big Meadows | 7660 | 4-2-47 | 30.5 | 47.8% | 14.6 | 31.9 | 46% | 22.4 | 13.2 |
| Giant Forest | 6360 | 3-31-47 | No Snow on Course | | - | 18.8 | - | 13.9 | 13.0 |
| TULE RIVER | | | | | | | | | |
| Quaking Aspen | 7000 | 3-31-47 | Patches of Snow | | - | - | - | 12.0 | 10.9 |
| Old Enterprise Mill | 6600 | 3-31-47 | No Snow on Course | | - | - | - | 16.6 | 18.4 |
| DEER CREEK | | | | | | | | | |
| Dead Horse Meadow | 7200 | Report not received | | | - | - | - | 9.9 | 16.0 |
| KERN RIVER | | | | | | | | | |
| Round Meadow | 9000 | 4-4-47 | 50.8 | 35.7% | 18.1 | 27.5 | 66% | 20.9 | 25.0 |
| Ramshaw Meadows | 8800 | 3-31-47 | 21.2 | 35.1% | 7.4 | 13.7 | 54% | 9.3 | 10.3 |
| Little Whitney Meadows | 8500 | 3-29-47 | 16.4 | 40.5% | 6.7 | 15.5 | 43% | 10.9 | 8.6 |
| Bonita Meadows | 8400 | 4-2-47 | No Snow on Course | | - | 16.0 | - | 8.8 | 15.3 |
| Casa Vieja Meadows | 8400 | 3-31-47 | 30.3 | 40.4% | 12.2 | 21.3 | 57% | 17.8 | 17.0 |
| Monache Meadows | 8000 | 3-31-47 | Course Flooded - Slush | | | 10.5 | - | Patches | 5.9 |
| Quinn Ranger Station | 8000 | 3-26-47 | 29.2 | 42.3% | 12.3 | 21.0 | 59% | 19.1 | 14.5 |
| Beach Meadows | 7800 | 4-1-47 | No Snow on Course | | - | 12.5 | - | 6.1 | 9.8 |
| Burnt Corral Meadow | 6200 | 3-28-47 | No Snow on Course | | - | 8.9 | - | Patches | 3.4 |
| Lloyd Meadows | 5600 | 3-27-47 | No Snow on Course | | - | 6.5 | - | Patches | 0 |
| OWENS RIVER | | | | | | | | | |
| BISHOP CREEK | | | | | | | | | |
| Bishop Pass | 11400 | 3-28-47 | 74.4 | 36.7% | 27.3 | 32.9 | 83% | 39.3 | 23.5 |
| Piute Pass | 11200 | 3-25-47 | 76.9 | 36.9% | 28.4 | 35.1 | 81% | 34.6 | 22.4 |
| East Piute Pass | 10800 | 3-24-47 | 31.7 | 32.3% | 10.2 | 18.1 | 56% | 17.2 | 10.1 |
| Sawmill | 10200 | 3-28-47 | 45.8 | 30.7% | 14.1 | 20.6 | 69% | 19.3 | 12.2 |
| North Lake | 9500 | 3-24-47 | 18.6 | 28.4% | 5.3 | 10.2 | 52% | 6.1 | 5.1 |
| South Fork | 9000 | 3-27-47 | No Snow on Course | | - | 8.6 | - | 3.7 | 0 |
| Bishop Park | 8500 | 3-24-47 | No Snow on Course | | - | 4.6 | - | Patches | 0 |
| COTTONWOOD CREEK | | | | | | | | | |
| Cottonwood #2 | 11100 | 4-1-47 | 27.0 | 36.7% | 9.9 | 17.3 | 57% | 12.6 | 11.4 |
| Cottonwood #1 | 10600 | 4-1-47 | 24.3 | 42.0% | 10.2 | 14.9 | 68% | 8.9 | 11.4 |

1 & 2 - See footnotes first page of this table.

TABLE 5 - SNOW SURVEY DATA FOR ALL COURSES - APRIL, 1947 - (Continued)

| 1 DRAINAGE BASINS and SNOW COURSES | ELEVATION in Feet | DATE of SURVEY | DEPTH of SNOW Inches | DENSITY Per Cent | WATER CONTENT Inches | 2 Normal Water Content for entire season (to April 1st) Inches | Percentage of total normal seasonal water content on ground at date of survey this year | CORRESPONDING WATER CONTENT AT SAME TIME Last Year: 1946 Inches | 1939 Inches |
|---|---|---|---|---|---|---|---|---|---|
| BIG PINE CREEK | | | | | | | | | |
| Big Pine Creek #1 | 10000 | 4-1-47 | 54.2 | 39.4% | 21.3 | 25.7 | 83% | - | 14.0 |
| Big Pine Creek #3 | 9800 | 4-1-47 | 31.5 | 40.9% | 12.9 | 15.4 | 84% | - | 7.8 |
| Big Pine Creek #2 | 9700 | 4-1-47 | 37.8 | 38.9% | 14.7 | 16.1 | 91% | - | 9.2 |
| SOUTHERN CALIFORNIA | | | | | | | | | |
| SANTA ANA RIVER | | | | | | | | | |
| San Antonio #2 | 8400 | 4-1-47 | 20.9 | 51.9% | 10.8 | - | - | 18.8 | - |
| Ice House #3 | 8000 | 3-31-47 | 42.8 | 51.7% | 22.2 | - | - | 19.8 | 21.5 |
| Ice House #2 | 7660 | 3-31-47 | 13.1 | 50.1% | 6.6 | - | - | 15.5 | 13.5 |

1 & 2 - See footnotes first page of this table.

PROGRESS REPORT OF SNOW SURVEY AND PRECIPITATION DATA
TO APRIL 1, 1947
TABLE 6 - PRECIPITATION DATA

| 1 BASIN AND PRECIPITATION STATION | ELEVATION In FEET | PRECIPITATION DURING MARCH 1947 (Inches) | PRECIPITATION FROM JULY 1, 1946 to APRIL 1, 1947 | | | 2 Normal Seasonal Precipitation (July to June) Inches | SNOW ON GROUND ON APRIL 1st (Inches) | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | 4 Total (Inches) | 2 Normal (Inches) | In Per cent of Normal | | This Year | 3 Previous Maximum | 3 Previous Minimum |
| UPPER SACRAMENTO - PIT AND McCLOUD RIVERS | | | | | | | | | |
| Jess Valley | 5400 | 1.54 | 8.56 | 11.80 | 73% | 15.70 | 0 | 8-1936 (18) | 0 |
| Alturas | 4460 | .83 | 6.39 | 9.24 | 69% | 12.11 | 0 | 5-1917 (24) | 0 |
| Bieber | 4200 | 1.91 | 10.05 | 13.24 | 76% | 16.05 | 0 | 6-1936 (18) | 0 |
| Mount Shasta | 3555 | 5.74 | 25.40 | 29.60 | 86% | 34.93 | 0 | 14-1925 (34) | 0 |
| Hat Creek | 3400 | 1.40 | 10.77 | 14.78 | 73% | 18.03 | 0 | - | 0 |
| Fall River Mills | 3340 | 2.10 | 12.60 | 15.79 | 80% | 19.02 | 0 | - | 0 |
| McCloud | 3270 | 9.24 | 33.09 | 42.59 | 78% | 49.78 | 0 | 21-1937 (34) | 0 |
| FEATHER RIVER | | | | | | | | | |
| Bucks Storage Dam | 5100 | 13.14 | 44.31 | 62.40 | 71% | 71.58 | 8 | 154-1938(16) | 0-1934 |
| Sierraville | 5000 | 3.78 | 19.14 | 22.28 | 86% | 25.67 | - | 24-1922(34) | 0 |
| Mineral | 4935 | 9.27 | 36.74 | 44.75 | 82% | 52.02 | - | 98-1939(20) | T-1934 |
| Portola | 4832 | Report not received | | 15.61 | | 18.14 | | 26-1922(33) | 0 |
| Inskip | 4808 | Report not received | | 66.44 | | 76.48 | | 121-1922(33) | 0 |
| Prattville | 4600 | 8.13 | 25.75 | 32.41 | 80% | 37.29 | 0 | 56-1938(16) | 0 |
| Canyon Dam | 4570 | 8.38 | 26.84 | 32.96 | 81% | 38.37 | 0 | 59-1922(34) | 0 |
| Chester | 4550 | 5.14 | 17.95 | 27.30 | 66% | 31.85 | 0 | 56-1922(34) | 0 |
| Veramont | 3500 | 5.00 | 23.16 | 30.01 | 77% | 34.34 | - | - | 0 |
| Quincy | 3409 | 7.10 | 28.32 | 34.68 | 82% | 40.36 | - | - | 0 |
| West Branch | 3216 | Report not received | | 63.15 | | 72.81 | | 24-1937(34) | 0 |
| Caribou | 3000 | 8.21 | 23.65 | 35.86 | 66% | 41.41 | 0 | - | 0 |
| Lake Wilenor | 2000 | 9.48 | 32.06 | 47.46 | 68% | 55.54 | 0 | - | |
| Storrie | 1760 | 13.36 | 41.12 | 57.05 | 72% | 65.33 | 0 | - | 0 |
| Las Plumas | 506 | 9.65 | 31.91 | 43.94 | 73% | 49.89 | 0 | - | 0 |

1 Certain of the stations are not actually in the basin shown, but are closely adjacent. Stations common to more than one basin are listed under each basin.

2 These are computed 57-year normals for the period 1890-1946 inclusive. Where the periods of record are less than 57 years, the normals have been computed by comparison with the records of stations for which the actual 57-year data are complete. This gives all normals based upon the same period of years and comparable.

3 The periods covered by published records of snow on the ground differ considerably for the various stations, and long-time records are available for only a few stations. In these columns the numeral in parentheses indicates the number of years record upon which the data are based. The year of zero minimum is only shown when zero did not occur in more than one year in the period of record.

4 R.N.C. Record not complete.

TABLE 6 - PRECIPITATION DATA - TO APRIL 1, 1947 -(Continued)

| 1 BASIN AND PRECIPITATION STATION | ELEVATION IN FEET | PRECIPITATION DURING MARCH 1947 (Inches) | PRECIPITATION FROM JULY 1, 1946 to APRIL 1, 1947 | | | 2 Normal Seasonal Precipitation (July to June) Inches | SNOW ON GROUND ON APRIL 1st (Inches) | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | 4 Total (Inches) | 2 Normal (Inches) | In per cent of Normal | | This Year | 3 Previous Maximum | 3 Previous Minimum |
| YUBA RIVER | | | | | | | | | |
| Soda Springs | 6871 | 9.80 | 36.41 | 41.36 | 88% | 47.48 | 65* | *262-1907(41) | * T-1934 |
| Bowman Dam | 5346 | 15.88 | 49.74 | 60.19 | 83% | 70.27 | - | 64-1937(22) | 0 |
| Lake Spaulding | 4600 | 12.20 | 45.01 | 57.58 | 78% | 67.74 | 0 | 113-1922(34) | 0 |
| Deer Creek | 3700 | 13.63 | 44.77 | 59.69 | 75% | 69.06 | 0 | 40-1922(32) | 0 |
| Downieville | 3150 | Report not received | | 55.33 | - | 64.92 | - | 7-1936(34) | 0 |
| Nevada City | 2570 | 9.18 | 31.33 | 43.96 | 71% | 50.73 | 0 | T-1936(30) | 0 |
| Dobbins (Near) | 1650 | 10.01 | 19.35 | 36.39 | 53% | 42.08 | 0 | - | 0 |
| TRUCKEE & TAHOE BASINS | | | | | | | | | |
| Twin Lakes | 7970 | 8.16 | 35.14 | 39.21 | 90% | 45.85 | 54 | 128-1938(26) | 16-1934 |
| Soda Springs | 6871 | 9.80 | 36.41 | 41.36 | 88% | 47.48 | 65* | *262-1907(41) | * T-1934 |
| Tahoe | 6230 | 5.02 | 22.86 | 28.53 | 80% | 32.64 | 3.5 | 72-1922(32) | T-1934 |
| Truckee | 6200 | 5.79 | 23.69 | 23.48 | 101% | 26.41 | 1. | 46-1938(13) | 0 |
| AMERICAN RIVER | | | | | | | | | |
| Twin Lakes | 7970 | 8.16 | 35.14 | 39.21 | 90% | 45.85 | 54 | 128-1938(26) | 16-1934 |
| Soda Springs | 6871 | 9.80 | 36.41 | 41.36 | 88% | 47.48 | 65* | *262-1907(40) | * T-1934 |
| Colfax | 2420 | 8.57 | 28.92 | 41.55 | 69% | 48.06 | 0 | - | 0 |
| Placerville | 1924 | 7.52 | 28.27 | 35.45 | 77% | 40.82 | 0 | - | 0 |
| CARSON RIVER | | | | | | | | | |
| Blue Lakes | 8040 | 7.82 | 32.21 | 42.93 | 75% | 50.16 | 77 | - | - |
| Twin Lakes | 7970 | 8.16 | 35.14 | 39.21 | 90% | 45.85 | 54 | 128-1938(26) | 16-1934 |
| MOKELUMNE RIVER | | | | | | | | | |
| Blue Lakes | 8040 | 7.82 | 32.21 | 42.93 | 75% | 50.16 | 77 | - | - |
| Twin Lakes | 7970 | 8.16 | 35.14 | 39.21 | 90% | 45.85 | 54 | 128-1938(26) | 16-1934 |
| Salt Springs Reservoir | 3660 | 7.25 | 30.46 | 37.66 | 81% | 44.71 | 0 | - | 0 |
| Tiger Creek | 2400 | 7.17 | 28.98 | 39.55 | 73% | 46.02 | 0 | - | 0 |
| West Point | 2326 | Report not received | | 34.52 | - | 40.18 | - | - | 0 |
| Electra | 699 | 4.88 | 19.06 | 27.54 | 69% | 31.63 | 0 | - | 0 |
| STANISLAUS RIVER | | | | | | | | | |
| Strawberry Lake | 5620 | 6.49 | 31.98 | 33.00 | 97% | 39.38 | 0 | 66-1938(17) | 0 |
| Calaveras Big Trees | 4700 | 10.08 | 39.43 | 45.52 | 87% | 53.45 | 0 | 54-1937(18) | 0 |

1, 2, 3, 4 - See footnotes first page of this table.

* Data for Norden or Summit where daily snow depths reported by Southern Pacific Company are read. U.S.W.B. station was moved a short distance from Norden to Soda Springs in April, 1931.

TABLE 6 - PRECIPITATION DATA - TO APRIL 1, 1947 - (Continued)

| 1 BASIN AND PRECIPITATION STATION | ELEVATION In FEET | PRECIPITATION DURING MARCH 1947 (Inches) | PRECIPITATION FROM JULY 1, 1946 to APRIL 1, 1947 | | | 2 Normal Seasonal Precipitation (July to June) Inches | SNOW ON GROUND ON APRIL 1st (Inches) | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | 4 Total (Inches) | 2 Normal (Inches) | In Per cent of Normal | | This Year | 3 Previous Maximum | 3 Previous Minimum |
| WALKER RIVER | | | | | | | | | |
| Bridgeport | 6473 | .75 | 9.39 | 9.15 | 102% | 10.74 | 0 | - | 0 |
| TUOLUMNE RIVER | | | | | | | | | |
| Strawberry Lake | | Report not received | | 33.00 | | 39.38 | | 66-1938(17) | 0 |
| Lake Eleanor | 4650 | 5.68 | 31.65 | 38.17 | 83% | 44.79 | | - | 0 |
| Hetch Hetchy | 3530 | 4.31 | 23.79 | 29.84 | 80% | 35.81 | | 5-1936(31) | 0 |
| Groveland | 2828 | 5.21 | 22.08 | 33.66 | 66% | 38.36 | 0 | - | 0 |
| Sonora | 1825 | 6.23 | 24.26 | 29.03 | 84% | 33.34 | 0 | - | 0 |
| MERCED RIVER | | | | | | | | | |
| Yosemite | 3960 | 3.85 | 25.91 | 31.21 | 83% | 36.56 | 0 | 8-1925(34) | 0 |
| Dudley's | 3000 | 4.76 | 22.92 | - | | - | 0 | - | 0 |
| Mariposa | 1932 | 3.00 | 19.74 | 27.44 | 72% | 30.82 | 0 | - | 0 |
| Merced Falls | 351 | 2.23 | 12.25 | 14.17 | 87% | 16.17 | 0 | - | |
| MONO BASIN | | | | | | | | | |
| Ellery Lake | 9600 | 2.54 | 17.31 | 26.38 | 66% | 32.17 | 58 | 120-1938(23) | 13-1926 |
| Gem Lake | 9120 | .62 | 17.62 | 23.28 | 76% | 27.41 | 18 | 152-1938(23) | 9-1928 |
| UPPER SAN JOAQUIN | | | | | | | | | |
| Huntington Lake | 7000 | 2.69 | 24.16 | 27.35 | 88% | 32.60 | 17 | 80-1938(32) | 0 |
| Big Creek | 4900 | 2.37 | 24.95 | 27.62 | 91% | 33.14 | 0 | 14-1925(31) | 0 |
| Crane Valley | 3500 | 3.41 | 27.60 | 37.09 | 74% | 42.59 | 0 | - | 0 |
| North Fork | 3000 | 3.27 | 25.73 | 30.73 | 84% | 35.20 | 0 | - | 0 |
| Auberry | 2050 | 1.80 | 19.45 | 23.53 | 83% | 26.77 | 0 | - | 0 |
| OWENS BASIN | | | | | | | | | |
| South Lake | 9620 | 2.02 | 16.75 | 15.33 | 110% | 17.75 | 27 | 103-1938(23) | 0 |
| Lake Sebrina | 9100 | 1.43 | 16.32 | 15.60 | 105% | 17.87 | 13 | 89-1938(23) | 0 |
| Lake Mary | 9000 | Report not received | | | - | - | - | - | 0 |
| Birch Creek | 8000 | 1.06 | 14.29 | 12.59 | 113% | 14.40 | 1 | - | 0 |
| Intake #2 Bishop Creek | 8000 | .50 | 10.83 | 10.76 | 101% | 12.71 | 0 | 25-1938(15) | 0 |
| Crooked Creek | 6700 | .50 | 10.07 | 8.76 | 115% | 10.03 | 0 | - | 0 |
| Big Pines Power House #3 | 5400 | .18 | 7.27 | 7.63 | 95% | 8.28 | 0 | - | 0 |
| Independence | 3957 | Report not received | | 4.24 | - | 4.70 | - | - | 0 |
| L.A. Aqueduct at Intake | 3800 | .01 | 6.29 | 4.03 | 156% | 4.43 | 0 | - | 0 |
| Cottonwood Gates | 3600 | Trace | 7.37 | 4.81 | 153% | 5.27 | 0 | - | 0 |

1, 2, 3, 4 - See footnotes first page of this table.

TABLE 6 - PRECIPITATION DATA - TO APRIL 1st, 1947 - (Continued)

| 1 BASIN AND PRECIPITATION STATION | ELEVATION In FEET | PRECIPITATION DURING MARCH 1947 (Inches) | PRECIPITATION FROM JULY 1, 1946 to APRIL 1, 1947 | | | 2 Normal seasonal precipitation (July to June) (Inches) | SNOW ON GROUND ON APRIL 1st (Inches) | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | 4 Total (Inches) | 2 Normal (Inches) | In per cent of Normal | | This Year | 3 Previous Maximum | 3 Previous Minimum |
| KINGS RIVER | | | | | | | | | |
| Grant Grove | 6775 | Report not received | | 35.21 | - | 42.64 | - | 87-1936(23) | 0-1928 |
| Cliff Camp | 6150 | 3.18 | 28.54 | 34.42 | 83% | 40.34 | 0 | - | 0 |
| Balch Camp | 1300 | 2.49 | 23.91 | 24.35 | 98% | 29.11 | 0 | - | 0 |
| Piedra | 500 | 1.01 | 11.71 | 16.33 | 72% | 18.59 | 0 | - | 0 |
| KAWEAH RIVER | | | | | | | | | |
| Grant Grove | 6775 | Report not received | | 35.21 | - | 42.64 | - | 87-1936(23) | 0-1928 |
| Giant Forest | 6360 | 3.92 | 34.41 | 37.21 | 92% | 44.42 | - | 76-1936(26) | 0 |
| Ash Mountain | 1600 | 2.32 | 20.03 | 22.08 | 91% | 26.61 | 0 | - | 0 |
| Three Rivers | 870 | 1.79 | 15.95 | 17.61 | 91% | 20.87 | 0 | - | 0 |
| KERN RIVER | | | | | | | | | |
| Springville (Near) | 4050 | 3.18 | 24.85 | 31.02 | 80% | 36.76 | 0 | 10-1925(34) | 0 |
| Kern River #3 Intake | 3640 | .65 | 10.11 | 15.86 | 64% | 17.65 | 0 | - | 0 |
| Glennville | 3300 | Report not received | | 17.66 | - | 21.20 | | 4-1925(30) | 0 |
| Kernville | 2600 | .41 | 5.71 | 9.55 | 60% | 10.50 | 0 | - | 0 |
| LOS ANGELES RIVER | | | | | | | | | |
| Opids Camp | 4480 | 2.43 | 41.85 | 36.42 | 115% | 41.25 | 0 | - | 0 |
| Loomis Ranch | 4050 | 1.72 | 21.75 | 18.88 | 115% | 21.07 | 0 | - | 0 |
| Sleepy Hollow Ranch | 2950 | 1.46 | - | 28.98 | - | 32.43 | 0 | - | 0 |
| La Crescenta | 2069 | 1.93 | 23.18 | 24.96 | 93% | 28.33 | 0 | - | 0 |
| Big Tujunga Dam | 2050 | 1.62 | 24.30 | 27.46 | 88% | 30.77 | 0 | - | 0 |
| Little Tujunga | 1700 | 1.31 | 18.54 | 19.25 | 96% | 21.61 | 0 | - | 0 |
| Arroyo Seco Ranger Station | 1530 | 1.77 | 23.47 | 24.17 | 97% | 26.89 | 0 | - | 0 |
| SAN GABRIEL RIVER | | | | | | | | | |
| Table Mountain Observ. | 7500 | 1.41 | 13.89 | 13.03 | 107% | 14.49 | 0 | - | 0 |
| Mt. Wilson | 5850 | 1.93 | 42.22 | 30.09 | 140% | 33.68 | 0 | - | 0 |
| Crystal Lake - East | 5740 | 2.82 | 38.99 | 37.60 | 104% | 41.02 | 0 | - | 0 |
| Opids Camp | 4480 | 2.43 | 41.85 | 36.42 | 115% | 41.25 | 0 | - | 0 |
| Camp Baldy | 4300 | 2.34 | 32.15 | 30.29 | 106% | 34.51 | 0 | - | 0 |
| Henninger Flats | 2650 | 1.90 | 27.31 | 26.31 | 104% | 29.61 | 0 | - | 0 |
| Honor Camp #4 | 2518 | 1.82 | 24.67 | - | - | - | 0 | - | 0 |
| Mouth San Antonio Canyon | 2500 | 1.53 | 20.95 | 24.45 | 118% | 27.57 | 0 | - | 0 |
| San Dimas Guard Station | 2400 | 1.72 | 22.22 | 23.13 | 96% | 25.34 | 0 | - | 0 |
| Sawpit Canyon | 2000 | 1.92 | 29.12 | 28.21 | 103% | 31.88 | 0 | - | 0 |

1, 2, 3, 4 - See footnotes first page of this table.

TABLE 6 - PRECIPITATION DATA - TO APRIL 1st, 1947 - (Continued)

| 1 BASIN AND PRECIPITATION STATION | ELEVATION In FEET | PRECIPITATION DURING MARCH 1947 (Inches) | PRECIPITATION FROM JULY 1, 1946 to APRIL 1, 1947 | | | 2 Normal seasonal precipitation (July to June) (Inches) | SNOW ON GROUND ON APRIL 1st (Inches) | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | 4 Total (Inches) | 2 Normal (Inches) | In Per cent of Normal | | This Year | 3 Previous Maximum | 3 Previous Minimum |
| SAN GABRIEL RIVER (Cont.) | | | | | | | | | |
| San Gabriel Dam #1 Camp | 1600 | 1.41 | 28.16 | 29.05 | 97% | 31.35 | 0 | - | 0 |
| Monrovia Falls | 1450 | 1.93 | 26.67 | 28.22 | 95% | 31.30 | 0 | - | 0 |
| Big Santa Anita Dam | 1400 | 1.58 | 23.10 | 23.54 | 98% | 26.38 | 0 | - | 0 |
| San Dimas Dam | 1350 | 1.77 | 20.35 | 22.28 | 91% | 24.28 | 0 | - | 0 |
| SANTA ANA RIVER | | | | | | | | | |
| Table Mountain | 7500 | 1.41 | 13.89 | 13.03 | 107% | 14.49 | 0 | - | 0 |
| Big Bear Lake Dam | 6800 | 1.36 | 36.35 | 32.97 | 110% | 36.88 | 0 | - | 0 |
| Running Springs | 6230 | 1.71 | 36.13 | 38.12 | 95% | 43.05 | 0 | - | 0 |
| Seven Oaks | 5000 | 1.00 | 22.61 | 24.94 | 110% | 28.18 | 0 | - | 0 |
| Camp Baldy | 4300 | 2.34 | 32.15 | 30.29 | 106% | 34.51 | 0 | - | 0 |
| Beaumont (Near) | 3045 | 1.05 | 19.33 | 19.66 | 98% | 22.09 | 0 | - | 0 |
| Mill Creek #2 | 2950 | 1.53 | 14.44 | 19.74 | 73% | 23.42 | 0 | - | 0 |
| Santa Ana River | 2850 | 1.00 | 20.61 | 23.53 | 88% | 27.42 | 0 | - | 0 |
| Beaumont | 2558 | .92 | 20.31 | 16.69 | 121% | 19.29 | 0 | - | 0 |
| Mouth San Antonio Canyon | 2500 | 1.53 | 28.95 | 24.45 | 118% | 27.57 | 0 | - | 0 |
| Lytle Creek | 2250 | 2.37 | 28.87 | 31.20 | 93% | 35.39 | 0 | - | 0 |
| SAN DIEGO COUNTY | | | | | | | | | |
| PACIFIC SLOPE BASINS | | | | | | | | | |
| Cuyamaca | 4680 | 2.31 | 29.92 | 34.22 | 87% | 39.52 | 0 | - | 0 |
| Warner Springs | 3170 | 1.65 | 14.40 | 16.02 | 90% | 17.95 | 0 | - | 0 |
| Campo | 3000 | .42 | 8.88 | 17.06 | 52% | 19.36 | 0 | - | 0 |
| Barrett Dam | 1750 | .56 | 9.26 | 16.86 | 55% | 19.26 | 0 | - | 0 |
| Escondido | 750 | 2.83 | 12.74 | 14.69 | 87% | 16.63 | 0 | - | 0 |
| El Capitan Dam | 610 | 1.21 | 9.79 | 15.26 | 64% | 18.37 | 0 | - | 0 |
| El Cajon | 560 | .71 | 6.50 | 12.61 | 52% | 14.33 | 0 | - | 0 |

1, 2, 3, 4 - See footnotes first page of this table.

# A P P E N D I X

The sheet following contains the results of several snow surveys which were made or received too late to be included in the regular March bulletin.

APPENDIX

RESULTS OF SNOW SURVEYS MADE IN MARCH

AND REPORTED AFTER MARCH 10, 1947

| 1 DRAINAGE BASINS and SNOW COURSES | ELEVATION in FEET | DATE of SURVEY | DEPTH of SNOW Inches | DENSITY Per Cent | WATER CONTENT Inches | 2 Normal Water content for entire season (to April 1st) Inches | Percentage of total normal seasonal water content on ground at date of survey this year |
|---|---|---|---|---|---|---|---|
| UPPER SACRAMENTO RIVER | | | | | | | |
| Mount Shasta | 8000 | 3-16-47 | 89.0 | 38.0% | 33.9 | 60.2 | 56% |
| Sand Flats | 7000 | 3-16-47 | 78.7 | 38.0% | 29.9 | New Course 1945 | |
| PIT RIVER | | | | | | | |
| Thousand Lakes | 6500 | 3-5-47 | 55.6 | 30.8% | 17.1 | New Course 1946 | |
| YUBA RIVER | | | | | | | |
| Castle Creek #5 | 7370 | 3-12-47 | 108.3 | 37.7% | 40.9 | New Course 1946 | |
| La Porte | 5000 | 3-5-47 | 21.2 | 19.2% | 4.1 | 30.2 | 14% |
| MOKELUMNE RIVER | | | | | | | |
| Bear Valley Ridge | 6700 | 3-12-47 | 46.3 | 32.8% | 15.2 | 29.1 | 52% |
| MERCED | | | | | | | |
| Ostrander Lake | 8200 | 3-14-47 | 72.0 | 37.5% | 26.9 | 37.9 | 71% |
| Peregoy Meadows | 7000 | 3-15-47 | 52.5 | 33.8% | 17.7 | 32.7 | 54% |
| UPPER SAN JOAQUIN RIVER | | | | | | | |
| Kaiser Pass | 9200 | 3-13-47 | 77.9 | 39.0% | 30.0 | 45.4 | 66% |
| Huntington Lake | 7000 | 3-13-47 | 32.6 | 41.1% | 13.4 | 26.2 | 51% |
| Chilkoot Lake | 7450 | 3-18-47 | 56.7 | 40.9% | 23.2 | 45.5 | 51% |

1 & 2 See footnotes page 8

COMPARISON TABLE.

A recapitulation of the run-off expected from the snowpack this year, as compared with the corresponding flows in the low years of 1939, 1934 and 1931. (Quantity of flow is expressed in Thousands of Acre Feet)

| Watershed and Station | Flow between April 1st and July 30th | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | [1] Normal [2] T.A.F. | Forecast 1947: T.A.F. | % Norm. | Actual 1939: T.A.F. | % Norm. | Actual 1934: T.A.F. | % Norm. | Actual 1931: T.A.F. | % Norm. |
| Sacramento at Shasta Dam | 1,900 | 1,250 | 66% | 1,071 | 56% | 984 | 52% | 823 | 43% |
| Feather at Oroville | 2,253 | 1,100 | 49% | 765 | 34% | 614 | 27% | 526 | 23% |
| Yuba at Smartsville | 1,222 | 650 | 53% | 450 | 37% | 311 | 25% | 280 | 23% |
| American at Fairoaks | 1,552 | 750 | 48% | 573 | 37% | 362 | 23% | 364 | 23% |
| Mokelumne at Mokelumne Hill | 541 | 325 | 60% | 220 | 41% | 141 | 26% | 148 | 27% |
| Stanislaus at Melones Dam | 841 | 500 | 59% | 347 | 41% | 219 | 26% | 215 | 26% |
| Tuolumne at La Grange | 1,368 | 770 | 56% | 515 | 38% | 444 | 32% | 421 | 31% |
| Merced at Exchequer | 720 | 380 | 53% | 294 | 41% | 189 | 26% | 189 | 26% |
| San Joaquin at Friant | 1,394 | 800 | 57% | 603 | 43% | 412 | 29% | 352 | 25% |
| Kings at Piedra | 1,369 | 740 | 54% | 656 | 48% | 407 | 30% | 355 | 26% |
| Kaweah at Three Rivers | 303 | 150 | 50% | 159 | 52% | 69 | 23% | 79 | 26% |
| Kern at Bakersfield | 472 | 175 | 37% | 268 | 57% | 116 | 25% | 98 | 21% |

[1] Normal based on 50 year record 1889-1939

[2] T.A.F. = Thousands of Acre Feet

# CALIFORNIA COOPERATIVE SNOW SURVEYS

## Agencies Cooperating in Collection of Data as to Snow

### Governmental Agencies

**State**

- California State Department of Public Works
  - Division of Water Resources
- Nevada Cooperative Snow Surveys
- Oregon Cooperative Snow Surveys

**Federal**

- Department of Agriculture
  - Bureau of Entomology & Plant Quarantine
  - Forest Service (11 National Forests)
  - Soil Conservation Service
- Department of Commerce
  - Weather Bureau
- Department of the Interior
  - Bureau of Reclamation
  - National Park Service (4 National Parks)
- War Department
  - Corps of Engineers

**Public Utilities**

- California Electric Power Company
- Pacific Gas and Electric Company
- Southern California Edison Company, Ltd.
- The California Oregon Power Company

**Municipalities**

- City of Los Angeles
  - Department of Water and Power
- City of San Francisco
  - Public Utilities Commission

**Organized Public Agencies**

- Los Angeles County Flood Control District
- East Bay Municipal Utility District
- Tulare Lake Basin Water Storage District
- Buena Vista Water Storage District
- Kings River Water Association
- Nevada Irrigation District
- Turlock Irrigation District
- Modesto Irrigation District
- Merced Irrigation District

**Private Corporations**

- Kern County Land Company
- The San Joaquin Canal Company

## Agencies through which Precipitation Data are Received

- State Division of Water Resources
- U. S. Weather Bureau
- Los Angeles County Flood Control District
- City of Los Angeles
- California Electric Power Company
- Pacific Gas and Electric Company
- Southern California Edison Company, Ltd.