

SUMMARY OF WATER CONDITIONS

MAY 1, 1970

WITH THE PRECIPITATION SEASON ESSENTIALLY OVER, CALIFORNIA'S WATER SUPPLY PROSPECTS FOR 1970 ARE NOW FIRMLY DEFINED FOR ALL MAJOR SOURCES OF SUPPLY. SPRING AND SUMMER WATER SUPPLIES FROM STREAM BASINS OF THE SIERRA AND CASCADE RANGE WILL BE BELOW NORMAL THIS YEAR. HOWEVER, EXCELLENT SURFACE RESERVOIR STORAGE AND GROUND WATER LEVELS WILL COMPENSATE FOR REDUCED INFLOWS DURING THE REMAINDER OF THE YEAR SO THAT NO UNUSUAL WATER SUPPLY DEFICIENCIES ARE ANTICIPATED.

MAY 1 SNOW SURVEYS OBTAINED FROM REPRESENTATIVE COURSES THROUGHOUT THE SNOW ZONE SHOW THE PACK IS AT 80 PERCENT OF AVERAGE FOR THIS DATE. ONLY THE CENTRAL PORTION OF THE SIERRA RECEIVED ENOUGH SNOW TO RETAIN APRIL 1 WATER CONTENT AMOUNTS AT THE HIGHER ELEVATIONS. SEVERAL STORMS DURING APRIL DEPOSITED UP TO TWO FEET OF NEW SNOW. BECAUSE OF BELOW NORMAL TEMPERATURES DURING MOST OF THE MONTH, SNOWMELT WAS RETARDED AND SEVERAL SNOW COURSES IN THE CENTRAL SIERRA ACTUALLY EXPERIENCED A SLIGHT NET INCREASE IN WATER CONTENT DURING THE PERIOD. HOWEVER, THE NEW SNOWFALL AT THE LOWER ELEVATIONS, BELOW ABOUT 7,000 FEET, FELL MOSTLY ON BARE GROUND AND DISSIPATED RAPIDLY.

THE PRECIPITATION PATTERN IS REFLECTED IN BOTH THE SNOW ACCUMULATION AND RUNOFF PATTERNS DURING APRIL. PRECIPITATION DURING THE MONTH WAS DISTRIBUTED ERRATICALLY OVER THE STATE. MOST AREAS RECEIVED LESS THAN 50 PERCENT OF NORMAL. THE VALUES VARIED FROM ZERO IN THE COLORADO DESERT AREA TO A HIGH APPROACHING NORMAL IN THE CENTRAL SIERRA. MOST OF THE CENTRAL VALLEY AND COASTAL AREAS SOUTH OF SAN FRANCISCO RECEIVED ONLY 5 TO 30 PERCENT OF NORMAL.

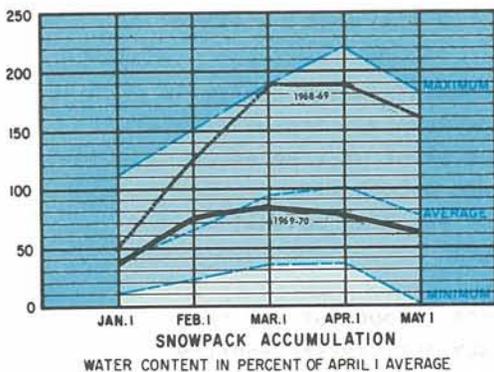
RUNOFF FROM SAN JOAQUIN BASIN AND LAHONTAN AREA STREAMS WAS 60 PERCENT OF NORMAL FOR THE MONTH. THE REMAINDER OF THE STATE RECEIVED 50 PERCENT OF NORMAL RUNOFF OR LESS WITH STREAMS IN THE SAN FRANCISCO BAY AREA DOWN TO ONLY 15 PERCENT.

FORECASTS OF RUNOFF FOR THE APRIL THROUGH JULY PERIOD, PRESENTED IN THE DISCUSSIONS OF HYDROGRAPHIC AREAS WHICH FOLLOW, HAVE ALL BEEN REDUCED SLIGHTLY FROM THOSE REPORTED ONE MONTH AGO. CUTS IN THE RUNOFF FORECASTS WERE MOSTLY IN THE RANGE OF 1 TO 10 PERCENT. WITH ONLY MINOR STORM ACTIVITY NORMALLY OCCURRING AFTER MAY 1, THE FORECASTS PRESENTED ARE NOW CONSIDERED QUITE FIRM. MAJOR SNOWMELT STREAMS ARE FORECASTED TO PRODUCE FROM 70 TO 85 PERCENT OF NORMAL FLOWS FOR THE PERIOD. EXCEPTIONS ARE THE KAWEAH AND TULE RIVERS ON THE LOW SIDE, 55 PERCENT OF NORMAL, AND THE SACRAMENTO RIVER BASIN ABOVE SHASTA LAKE WHICH WILL PRODUCE NORMAL RUNOFF.

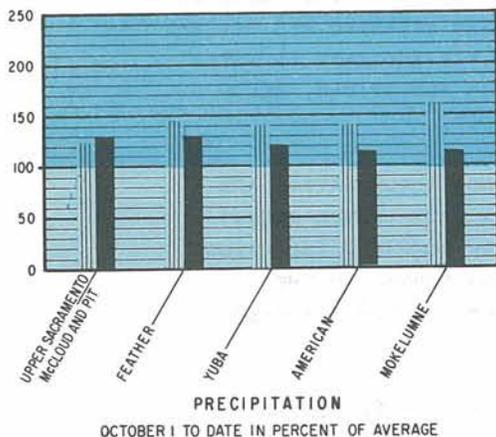
| SUMMARY OF WATER CONDITIONS IN PERCENT OF AVERAGE | | | | | |
|--|---------------------------------------|-----------------------|----------------------|----------------------|------------------------|
| HYDROGRAPHIC AREA | PRECIPITATION OCTOBER 1 TO DATE | SNOW WATER CONTENT | RESERVOIR STORAGE | RUNOFF | |
| | | | | OCTOBER 1 TO DATE | WATER YEAR FORECAST |
| North Coastal | 125 | 75 | 110 | 155 | 145 |
| San Francisco Bay | 110 | -- | 125 | 165 | 165 |
| Central Coastal | 75 | -- | 115 | 80 | 80 |
| South Coastal | 65 | -- | 160 | 75 | 80 |
| Central Valley | | | | | |
| Sacramento Basin | 115 | 80 | 115 | 170 | 145 |
| San Joaquin and Tulare Lake Basins | 90 | 75 | 120 | 120 | 100 |
| Lahontan | 105 | 90 | 150 | 150 | 115 |
| Colorado Desert | 70 | -- | -- | -- | -- |
| ENTIRE STATE | 105 | 80 | 115 | 155 | 130 |

SACRAMENTO RIVER BASIN

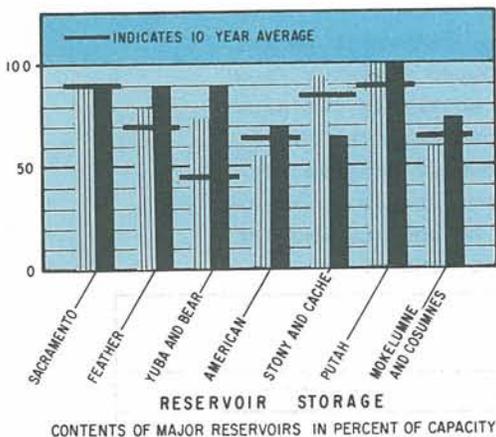
SNOWPACK - MEASUREMENTS OF SNOWPACK WERE OBTAINED AT 66 SNOW COURSES AND 23 AERIAL SNOW DEPTH MARKERS ON OR ABOUT MAY 1. ALSO, READINGS OF WATER CONTENT WERE OBTAINED FROM 11 SNOW SENSORS. THESE MEASUREMENTS INDICATE THAT SNOWPACK WATER CONTENT WAS 80 PERCENT OF AVERAGE, AS COMPARED TO 215 PERCENT ONE YEAR AGO.



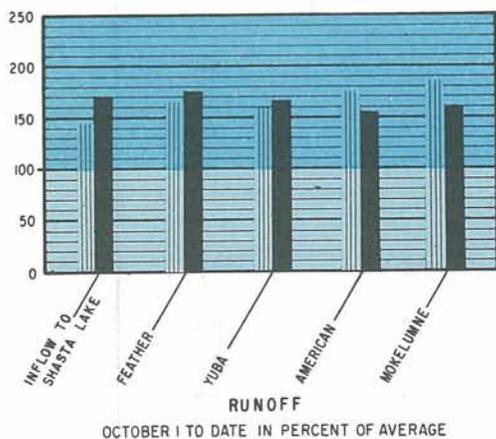
THE MONTH OF APRIL PRODUCED SEVERAL COLD STORMS. SNOW WAS REPORTED DOWN AS LOW AS 2,000-3,000 FEET IN MANY AREAS. A FEW OF THE HIGHER ELEVATION SNOW COURSES INDICATED AN INCREASE IN WATER CONTENT FROM THE APRIL 1 MEASUREMENTS. BY MAY 1, MOST OF THE LOW ELEVATION SNOW HAD MELTED AND 17 COURSES REPORTED NO SNOW. ALTHOUGH MOST COURSES IN THE AREA INDICATED A DECREASE IN WATER CONTENT, THE COLD WEATHER EXTENDED THE MELT PERIOD.



PRECIPITATION - FROM OCTOBER 1, 1969, THROUGH APRIL 30, 1970, PRECIPITATION OVER THE SACRAMENTO VALLEY AREA AVERAGED 115 PERCENT OF NORMAL. SEASONAL PRECIPITATION VALUES VARIED FROM 156 PERCENT OF NORMAL AT REDDING, ON THE VALLEY FLOOR, TO 86 PERCENT AT DOBBINS COLGATE FOREBAY, IN THE YUBA RIVER DRAINAGE. MOUNTAIN SUBDRAINAGE AMOUNTS WERE GENERALLY ABOUT THE SAME IN THE NORTH TO A THIRD LESS IN THE SOUTH THAN LAST YEAR'S VALUES FOR THE CORRESPONDING PERIOD. THE GREATEST OCTOBER-APRIL CATCH IN THE BASIN OF 93.80 INCHES OR 154 PERCENT OF NORMAL WAS REPORTED FROM COBB-VOGEL, IN THE PUTAH CREEK DRAINAGE. APRIL PRECIPITATION WAS LIGHT, AVERAGING ONLY 35 PERCENT OF NORMAL OVER THE ENTIRE AREA. IT VARIED FROM 1.72 INCH AT SIERRAVILLE, IN THE FEATHER RIVER DRAINAGE, TO NO MEASURABLE AMOUNT AT STONY GORGE RESERVOIR, IN THE SACRAMENTO VALLEY WEST SIDE DRAINAGE.



RESERVOIR STORAGE - MAY 1 STORAGE IN THIRTY-FOUR MAJOR SACRAMENTO VALLEY RESERVOIRS IS 13,977,000 ACRE-Feet. THIS AMOUNTS TO 115 PERCENT OF THEIR AVERAGE MAY 1 STORAGE AND 90 PERCENT OF THEIR AGGREGATE CAPACITY. STORAGE IS 1,036,000 ACRE-Feet MORE THAN THAT OF ONE YEAR AGO AND HAS GAINED 393,000 ACRE-Feet DURING THE LAST MONTH. OVER HALF OF THE STORED WATER IS CONTAINED IN THE OROVILLE AND SHASTA RESERVOIRS WHICH ARE STORING 7,106,700 ACRE-Feet OF COMBINED STORAGE ON MAY 1.



RUNOFF - RUNOFF DURING APRIL TOTALED 1,336,000 ACRE-Feet OR 48 PERCENT OF NORMAL FOR STREAMS DRAINING FROM SACRAMENTO VALLEY WATERSHEDS. RUNOFF VARIED FROM 37 PERCENT OF NORMAL FOR THE FEATHER RIVER TO 62 PERCENT OF NORMAL FOR THE SACRAMENTO RIVER, INFLOW TO SHASTA. RUNOFF TO DATE FOR THE WATER YEAR HAS AMOUNTED TO 20,859,000 ACRE-Feet OR 168 PERCENT OF NORMAL FOR THE SEVEN-MONTH PERIOD. RUNOFF DURING APRIL WAS 1,290,000 ACRE-Feet LESS THAN LAST MONTH, REFLECTING THE BELOW NORMAL TEMPERATURES THAT EXISTED AND THE LACK OF THE USUAL SPRING MELT FROM THE MIDELEVATION MOUNTAINS WHICH ARE ALREADY BARE THIS YEAR.

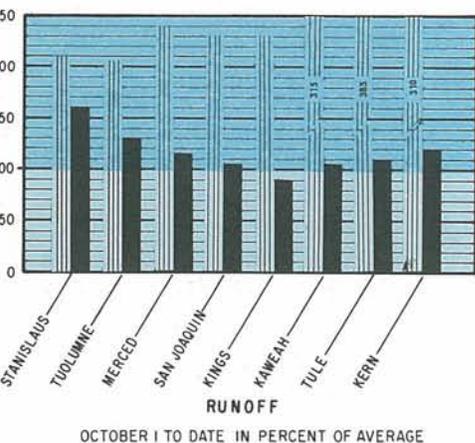
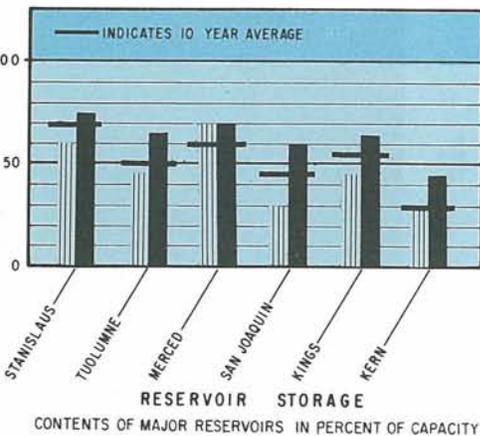
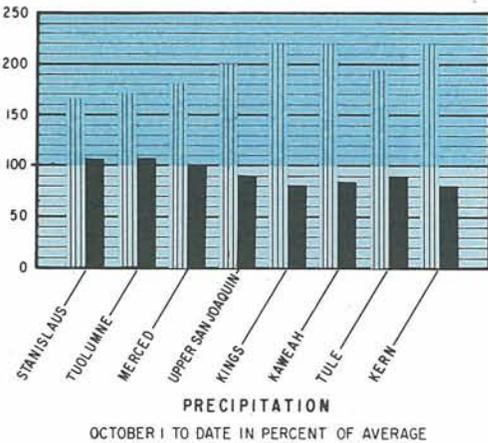
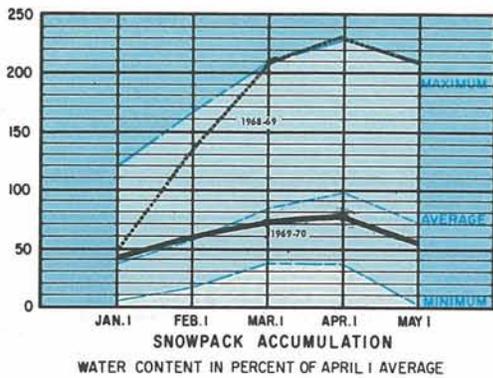
SAN JOAQUIN RIVER AND TULARE LAKE BASINS

SNOWPACK - MEASUREMENTS OF SNOWPACK WERE OBTAINED AT 43 SNOW COURSES AND 52 AERIAL SNOW DEPTH MARKERS ON OR ABOUT MAY 1. ALSO, READINGS OF WATER CONTENT WERE OBTAINED FROM 11 SNOW SENSORS. THESE MEASUREMENTS INDICATE THAT SNOWPACK WATER CONTENT IS 75 PERCENT OF AVERAGE, AS COMPARED TO 280 PERCENT ONE YEAR AGO. SNOWPACK WATER CONTENT RANGES FROM A HIGH OF 85 PERCENT IN THE TUOLUMNE AND MERCED RIVER BASINS TO A LOW OF 45 PERCENT IN THE KERN RIVER BASIN. SEVERAL COLD TYPE STORMS DEPOSITED SNOW SPORADICALLY THROUGHOUT THE AREA DURING THE MONTH OF APRIL. SNOW SURVEYORS REPORTED BELOW ZERO TEMPERATURES DURING THE MAY 1 SURVEY. THE BELOW NORMAL TEMPERATURES RETARDED SNOWMELT THROUGHOUT THE AREA. MANY LOW ELEVATION STATIONS REPORTED NO SNOW.

PRECIPITATION - FROM OCTOBER 1, 1969, THROUGH APRIL 30, 1970, PRECIPITATION AVERAGED 90 PERCENT OF NORMAL OVER THE SAN JOAQUIN RIVER AND TULARE LAKE BASINS. SEASONAL PRECIPITATION VALUES RANGED FROM 118 PERCENT OF NORMAL AT CALAVERAS BIG TREES, IN THE STANISLAUS RIVER DRAINAGE, TO 59 PERCENT AT BAKERSFIELD. SIERRA DRAINAGES HAVE AVERAGED 95 PERCENT OF NORMAL FOR THE PERIOD WHILE THE VALLEY FLOOR HAS RECEIVED 85 PERCENT OF ITS NORMAL AMOUNT. THIS WAS GENERALLY LESS THAN HALF THE SPECTACULAR VALUES RECEIVED FOR THE CORRESPONDING PERIOD ONE YEAR AGO. THE HIGHEST SEASONAL TOTAL IN THE AREA OF 59.31 INCHES WAS REPORTED FROM CALAVERAS BIG TREES. LIGHT APRIL PRECIPITATION AVERAGED 40 PERCENT OF NORMAL OVER THE ENTIRE AREA.

RESERVOIR STORAGE - ON MAY 1, 27 MAJOR RESERVOIRS SERVING THE SAN JOAQUIN VALLEY CONTAINED 3,659,000 ACRE-FEET OR 62 PERCENT OF THEIR COMBINED CAPACITY AND 120 PERCENT OF THE MAY 1 AVERAGE. THIS IS A GAIN OF 54,000 ACRE-FEET DURING THE LAST MONTH AND 811,000 ACRE-FEET MORE THAN WAS IN STORAGE LAST YEAR AT THIS TIME.

RUNOFF - APRIL RUNOFF FROM MAJOR TRIBUTARIES FEEDING THE SAN JOAQUIN RIVER BASIN AMOUNTED TO 531,000 ACRE-FEET OR 61 PERCENT OF NORMAL. THE STREAMS TRIBUTARY TO TULARE LAKE PRODUCED 247,000 ACRE-FEET WHICH IS 62 PERCENT OF NORMAL FOR APRIL. TOTAL RUNOFF FOR THE ENTIRE SAN JOAQUIN VALLEY WAS 4,172,000 ACRE-FEET FOR THE FIRST SEVEN MONTHS OF THE WATER YEAR WHICH AMOUNTS TO 120 PERCENT OF NORMAL FOR THE PERIOD. THE BIGGEST PRODUCER PERCENTAGE-WISE FOR THE WATER YEAR TO DATE IS THE STANISLAUS RIVER, INFLOW TO MELONES, WITH 161 PERCENT OF NORMAL RUNOFF SINCE OCTOBER 1.



FORECASTS OF RUNOFF F

MAY

| DRAINAGE BASIN AND WATERSHED | April Through July in 1,000 Acre-Feet | | | | | |
|---|---------------------------------------|-------------------|-------------------|---------------------|--------------------|---------------------------|
| | HISTORICAL | | | FORECASTS | | |
| | 50-Year Average | Maximum of Record | Minimum of Record | April-July Forecast | Percent of Average | 80% Prob. Range Acre-Feet |
| SACRAMENTO RIVER BASIN | | | | | | |
| Upper Sacramento River | | | | | | |
| Pit River inflow to Shasta Lake | 1,012 | 1,796 | 480 | 1,100 | 109 | -- |
| McCloud River inflow to Shasta Lake | 416 | 850 | 194 | 420 | 101 | -- |
| Sacramento River inflow to Shasta Lake | 281 | 636 | 39 | 220 | 78 | -- |
| Total inflow to Shasta Lake | 1,750 | 3,064 | 726 | 1,750 | 100 | 1,500 to 2,000 |
| Sacramento River near Red Bluff | 2,400 | 4,611 | 943 | 2,400 | 100 | 2,050 to 2,750 |
| Feather River | | | | | | |
| Inflow to Lake Almanor (nr Prattville) | 323 | 675 | 120 | 250 | 77 | -- |
| North Fork at Pulga | 1,016 | 2,416 | 254 | 750 | 74 | -- |
| Middle Fork near Clito | 84 | 518 | 8 | 45 | 54 | -- |
| South Fork at Enterprise | 107 | 267 | 19 | 75 | 70 | -- |
| Total inflow to Oroville Reservoir | 1,861 | 4,676 | 396 | 1,350 | 73 | 1,150 to 1,650 |
| Yuba River | | | | | | |
| North Fork below Goodyears Bar | 288 | 647 | 68 | 210 | 73 | -- |
| Combined inflow to Jackson Mdw. and Bowman Reservoirs | 108 | 236 | 37 | 84 | 78 | -- |
| South Fork at Langs Crossings | 231 | 481 | 74 | 175 | 76 | -- |
| Yuba River at Smartville | 1,090 | 2,424 | 239 | 790 | 72 | 700 to 940 |
| American River | | | | | | |
| North Fork at North Fork Dam | 262 | 716 | 48 | 195 | 74 | -- |
| Middle Fork near Auburn | 550 | 1,406 | 117 | 410 | 74 | -- |
| Silver Creek below Camino Diversion Dam | 179 | 383 | 43 | 140 | 78 | -- |
| Total inflow to Folsom Reservoir | 1,329 | 3,074 | 257 | 980 | 74 | 880 to 1,150 |
| <i>Sacramento River at Sacramento</i> | | | | | | |
| Cosumnes River | | | | | | |
| Cosumnes River at Michigan Bar | 128 | 361 | 12 | 80 | 62 | 60 to 110 |
| Mokelumne River | | | | | | |
| North Fork near West Point | 418 | 829 | 143 | 350 | 84 | -- |
| Total inflow to Pardee Reservoir | 464 | 1,065 | 127 | 390 | 84 | 340 to 440 |
| SAN JOAQUIN RIVER BASIN | | | | | | |
| Stanislaus River | | | | | | |
| Middle Fork at Sand Bar Flat near Avery | 337 | 702 | 83 | 290 | 86 | -- |
| Total inflow to Melones Reservoir | 711 | 1,710 | 167 | 590 | 83 | 530 to 670 |
| Tuolumne River | | | | | | |
| Cherry Creek and Eleanor Creek near Hetch Hetchy | 304 | 560 | 102 | 275 | 90 | -- |
| Tuolumne River near Hetch Hetchy | 592 | 1,392 | 215 | 580 | 98 | -- |
| Total inflow to Don Pedro Reservoir | 1,179 | 2,609 | 385 | 1,030 | 87 | 930 to 1,150 |
| Merced River | | | | | | |
| Merced River at Pohono Bridge | 356 | 888 | 121 | 295 | 83 | -- |
| Total inflow to Exchequer | 599 | 1,491 | 175 | 480 | 80 | 430 to 550 |
| San Joaquin River | | | | | | |
| South Fork near Florence Lake | 187 | 511 | 58 | 170 | 91 | -- |
| Big Creek below Huntington Lake | 86 | 264 | 19 | 75 | 87 | -- |
| San Joaquin River at Mammoth Pool | 949 | 2,218 | 254 | 840 | 89 | -- |
| Total inflow to Millerton Lake | 1,173 | 3,355 | 310 | 990 | 84 | 900 to 1,120 |
| <i>San Joaquin River near Vernalis</i> | | | | | | |
| TULARE LAKE BASIN | | | | | | |
| Kings River | | | | | | |
| North Fork near Cliff Camp | 228 | 478 | 50 | 185 | 81 | -- |
| Total inflow to Pine Flat Reservoir | 1,143 | 3,163 | 280 | 950 | 83 | 850 to 1,050 |
| Kaweah River | | | | | | |
| Total inflow to Terminus Reservoir | 261 | 814 | 69 | 150 | 57 | 130 to 170 |
| Tule River | | | | | | |
| Total inflow to Success Reservoir | 56 | 222 | 2 | 32 | 57 | 26 to 38 |
| Kern River | | | | | | |
| Kern River near Kernville | 336 | 1,200 | 75 | 300 | 89 | -- |
| Total inflow to Isabella Reservoir | 410 | 1,649 | 84 | 350 | 85 | 280 to 420 |

CENTRAL VALLEY STREAMS

0

| Water Year --- October Through September --- in 1,000 Acre-Feet | | | | | | | | | | | | |
|---|-------------------|-------------------|-------------------------|----------|-------|-------|-----|------|------|----------------------|---------------------|--------------------|
| HISTORICAL | | | FORECASTS | | | | | | | | | |
| 50-Year Average | Maximum of Record | Minimum of Record | October Through January | February | March | April | May | June | July | August and September | Water Year Forecast | Percent of Average |
| 2,848 | 4,698 | 1,484 | 1,995 | 490 | 450 | -- | -- | -- | -- | -- | 4,280 | 150 |
| 1,215 | 2,353 | 632 | 755 | 170 | 161 | -- | -- | -- | -- | -- | 1,614 | 133 |
| 761 | 1,767 | 171 | 570 | 115 | 115 | -- | -- | -- | -- | -- | 1,040 | 137 |
| 5,318 | 9,700 | 2,479 | 4,395 | 865 | 816 | 440 | 700 | 400 | 210 | 394 | 8,220 | 155 |
| 7,690 | 15,121 | 3,294 | 6,700 | 1,370 | 1,168 | 560 | 920 | 550 | 370 | 502 | 12,140 | 158 |
| 716 | 1,269 | 396 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 125 | 4,400 | 819 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 197 | 637 | 41 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 253 | 562 | 67 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 4,159 | 9,492 | 1,295 | 3,460 | 650 | 676 | 275 | 615 | 310 | 150 | 134 | 6,270 | 151 |
| 516 | 1,056 | 162 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 86 | 292 | 60 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 335 | 565 | 114 | -- | -- | 290 | 190 | 380 | 180 | 40 | 35 | 3,110 | 140 |
| 2,226 | 4,544 | 603 | 1,720 | 275 | 290 | 190 | 380 | 180 | 40 | 35 | 3,110 | 140 |
| 537 | 1,234 | 110 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 996 | 2,575 | 283 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 291 | 537 | 83 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 2,525 | 5,787 | 543 | 1,690 | 320 | 330 | 210 | 510 | 220 | 40 | 20 | 3,340 | 132 |
| 339 | 876 | 40 | 245 | 60 | 79 | 25 | 30 | 20 | 5 | 1 | 465 | 137 |
| 577 | 1,009 | 197 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 690 | 1,692 | 190 | 325 | 80 | 82 | 75 | 190 | 115 | 10 | 3 | 880 | 128 |
| 452 | 929 | 128 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 1,057 | 2,834 | 261 | 470 | 115 | 131 | 135 | 260 | 150 | 45 | 14 | 1,320 | 125 |
| 420 | 740 | 158 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 726 | 1,661 | 265 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 1,741 | 3,756 | 546 | 580 | 135 | 187 | 160 | 450 | 350 | 70 | 18 | 1,950 | 112 |
| 431 | 1,020 | 145 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 897 | 2,203 | 252 | 230 | 65 | 107 | 90 | 230 | 135 | 25 | 8 | 890 | 99 |
| 225 | 653 | 71 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 99 | 298 | 22 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 1,225 | 2,964 | 361 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 1,617 | 4,368 | 444 | 270 | 85 | 136 | 145 | 370 | 350 | 125 | 49 | 1,530 | 95 |
| 261 | 542 | 58 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 1,530 | 4,243 | 392 | 215 | 60 | 100 | 130 | 340 | 380 | 100 | 45 | 1,370 | 90 |
| 383 | 1,265 | 102 | 85 | 20 | 43 | 41 | 65 | 35 | 10 | 6 | 305 | 80 |
| 124 | 499 | 19 | 50 | 15 | 23 | 12 | 15 | 4 | 1 | -- | 120 | 97 |
| 491 | 1,800 | 147 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 604 | 2,207 | 175 | 155 | 40 | 53 | 60 | 130 | 110 | 50 | 32 | 630 | 104 |

Monthly values are based on historical years of similar magnitude.

NORTH COASTAL AREA

SNOWPACK - MEASUREMENTS OF SNOWPACK WERE OBTAINED AT 9 SNOW COURSES ON OR ABOUT MAY 1. THESE MEASUREMENTS INDICATE THAT SNOWPACK WATER CONTENT IS 75 PERCENT OF AVERAGE, AS COMPARED TO 195 PERCENT ONE YEAR AGO. MANY OF THE LOWER ELEVATION COURSES ARE BARE.

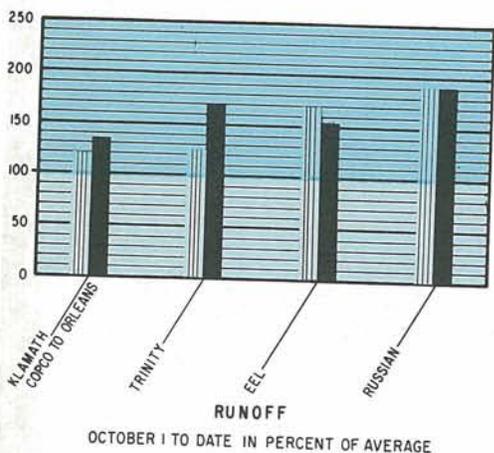
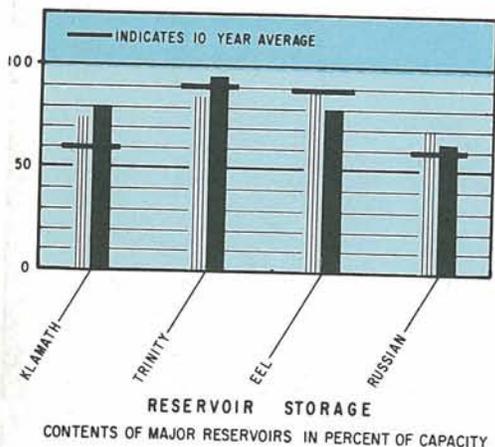
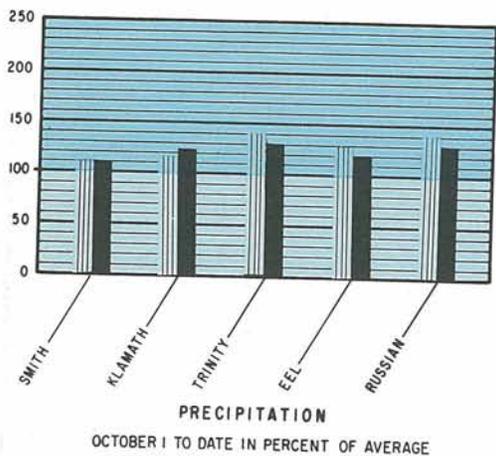
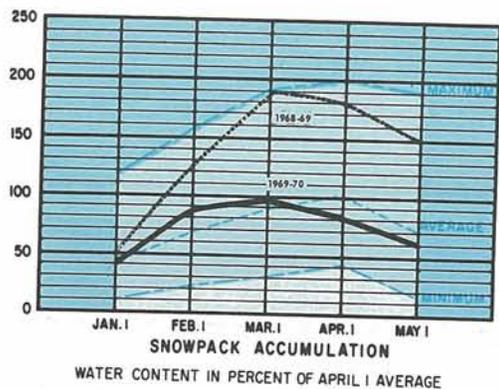
THE OREGON COOPERATIVE SNOW SURVEYS REPORTS THAT SNOWPACK WATER CONTENT IN THE UPPER KLAMATH RIVER BASIN ON MAY 1 WAS 67 PERCENT OF NORMAL AS COMPARED TO 134 PERCENT ONE YEAR AGO.

PRECIPITATION - PRECIPITATION IN THE NORTH COASTAL AREA AVERAGED 125 PERCENT OF NORMAL FOR THE PERIOD OCTOBER 1 THROUGH APRIL 30. IT VARIED FROM 152 PERCENT OF NORMAL AT COFFEE CREEK, IN THE TRINITY RIVER DRAINAGE, TO 84 PERCENT AT BLUE LAKE, IN THE MAD RIVER DRAINAGE. ALL SUBDRAINAGES IN THE AREA WERE ABOVE NORMAL. CATCH AMOUNTS WERE GENERALLY THE SAME TO SLIGHTLY LESS THAN LAST YEAR'S VALUES FOR THIS SAME PERIOD. THE GREATEST STATEWIDE SEASONAL TOTAL OVER THE SEVEN-MONTH PERIOD WAS 113.38 INCHES OR 109 PERCENT OF NORMAL REPORTED AT HONEYDEW 2 WSW, IN THE MATTOLE RIVER DRAINAGE. APRIL PRECIPITATION AVERAGED 40 PERCENT OF NORMAL OVER THE AREA. EXTREMES VARIED FROM 95 PERCENT OF NORMAL AT HONOR CAMP #42, IN THE MAD RIVER DRAINAGE TO A SCANT 4 PERCENT AT HEALDSBURG, IN THE RUSSIAN RIVER DRAINAGE.

RESERVOIR STORAGE - FOUR MAJOR CALIFORNIA RESERVOIRS SERVING THIS AREA WERE STORING 2,538,000 ACRE-FEET ON MAY 1. THIS IS 110 PERCENT OF AVERAGE STORAGE FOR THIS DATE AND ONLY ABOUT 176,000 ACRE-FEET SHORT OF THEIR AGGREGATE CAPACITY. THREE INTERSTATE RESERVOIRS ON THE KLAMATH RIVER SYSTEM, WHICH ALSO CONTRIBUTE TO THE NORTH COASTAL AREA'S WATER SUPPLY, CONTAINED 967,000 ACRE-FEET ON MAY 1. THIS AMOUNTS TO 130 PERCENT OF AVERAGE STORAGE AND IS A GAIN OF 41,000 ACRE-FEET DURING APRIL.

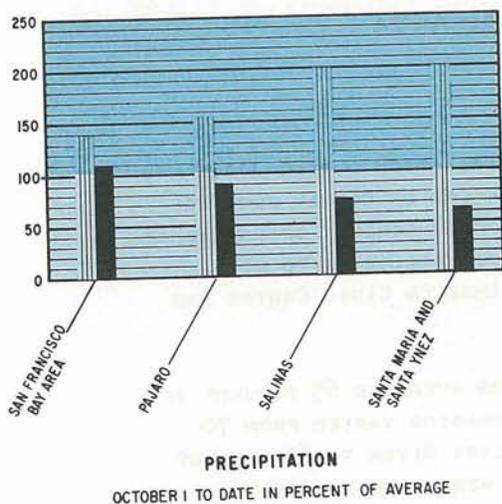
RUNOFF - APRIL RUNOFF FOR THE NORTH COASTAL AREA AMOUNTED TO 642,000 ACRE-FEET OR 38 PERCENT OF NORMAL. RUNOFF RANGED FROM 24 PERCENT OF NORMAL FOR THE RUSSIAN RIVER TO 51 PERCENT FOR THE TRINITY RIVER. WATER YEAR RUNOFF FOR THE FIRST SEVEN MONTHS TOTALED 15,828,000 ACRE-FEET OR 155 PERCENT OF NORMAL.

FORECASTS - CONDITIONS AT THIS TIME INDICATE THAT RUNOFF OF THE NORTH COASTAL AREA DURING THE 1969-70 WATER YEAR WILL BE ABOUT 145 PERCENT OF AVERAGE. THE APRIL-JULY RUNOFF OF THE TRINITY RIVER AT LEWISTON IS FORECASTED TO BE ABOUT 560,000 ACRE-FEET, WHICH IS 94 PERCENT OF THE AVERAGE RUNOFF AT THIS STATION. THE U. S. SOIL CONSERVATION SERVICE, THE OREGON EXPERIMENT STATION, AND THEIR COOPERATORS, FORECAST THAT MAY-SEPTEMBER RUNOFF INTO UPPER KLAMATH LAKE WILL BE ABOUT 312 ACRE-FEET OR 81 PERCENT OF THE 1953-67 AVERAGE.



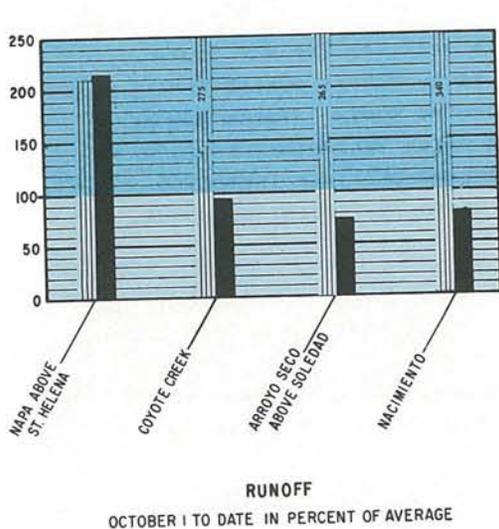
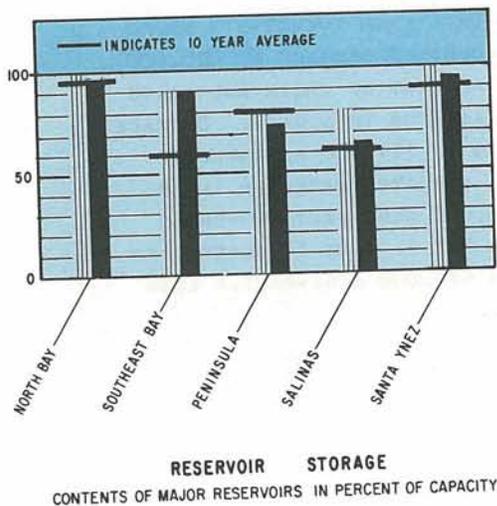
SAN FRANCISCO BAY AND CENTRAL COASTAL AREAS

PRECIPITATION - IN THE SAN FRANCISCO BAY AND CENTRAL COASTAL AREAS, PRECIPITATION AVERAGED 85 PERCENT OF NORMAL FOR THE PERIOD OCTOBER 1 THROUGH APRIL 30. IT VARIED FROM 142 PERCENT OF NORMAL AT ANGIN, IN THE NAPA RIVER DRAINAGE, TO 65 PERCENT AT CACHUMA DAM, IN THE SANTA YNEZ RIVER DRAINAGE. SUBBASIN CATCHES, WITH THE EXCEPTION OF SAN FRANCISCO BAY, ARE WELL BELOW NORMAL. SPECTACULAR DIFFERENCES EXIST IN THE SALINAS AND SANTA MARIA-SANTA YNEZ DRAINAGES WHERE VALUES WERE ABOUT ONE-FOURTH OF LAST YEAR'S AMOUNT. APRIL PRECIPITATION DISFAVORED THIS PORTION OF THE STATE, AVERAGING ONLY 10 PERCENT OF NORMAL. THIS APRIL'S EXTREMES VARIED FROM 35 PERCENT OF NORMAL AT LIVERMORE TO NO MEASURABLE PRECIPITATION AT SANTA BARBARA.



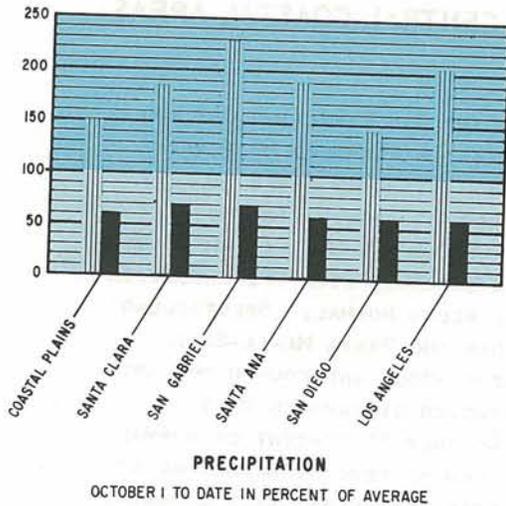
RESERVOIR STORAGE - STORAGE IN 17 MAJOR RESERVOIRS IN THE SAN FRANCISCO BAY AREA WAS 543,000 ACRE-Feet, WHICH AMOUNTS TO 125 PERCENT OF AVERAGE STORAGE FOR MAY 1. THESE RESERVOIRS HAD AN INCREASE IN STORAGE OF 4,000 ACRE-Feet DURING APRIL AND DECREASED 22,000 ACRE-Feet FROM ONE YEAR AGO. SEVEN OF THESE RESERVOIRS CONTAIN WATER SUPPLIES IMPORTED FROM SIERRA WATERSHEDS.

IN THE CENTRAL COASTAL AREA, STORAGE IN SIX MAJOR RESERVOIRS WAS 726,000 ACRE-Feet ON MAY 1, ABOUT 3,000 ACRE-Feet LESS THAN A MONTH AGO AND 101,000 ACRE-Feet LESS THAN WAS IN STORAGE LAST YEAR AT THIS TIME. THE PRESENT STORAGE IS 115 PERCENT OF NORMAL FOR THIS DATE AND THE RESERVOIRS ARE AT 74 PERCENT OF AGGREGATE CAPACITY.



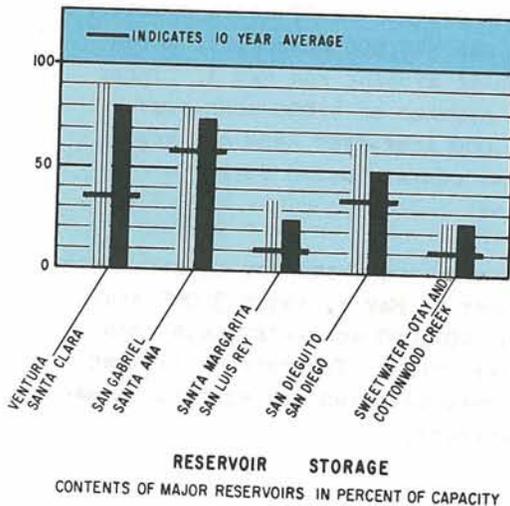
RUNOFF - APRIL RUNOFF IN SAN FRANCISCO BAY AREA STREAMS WAS ONLY 1,400 ACRE-Feet OR 13 PERCENT OF NORMAL. THE CENTRAL COASTAL AREA RUNOFF TOTALED 7,900 ACRE-Feet OR 23 PERCENT OF NORMAL. BOTH AREAS REFLECT THE MEAGER RAINFALL RECEIVED DURING THE MONTH. THE WATER YEAR TO DATE HAS PRODUCED 165 PERCENT OF NORMAL FOR THE SAN FRANCISCO BAY AREA AND ONLY 80 PERCENT OF NORMAL IN THE CENTRAL COASTAL AREA, TOTALING 389,000 ACRE-Feet FOR THE COMBINED AREAS.

SOUTH COASTAL AREA

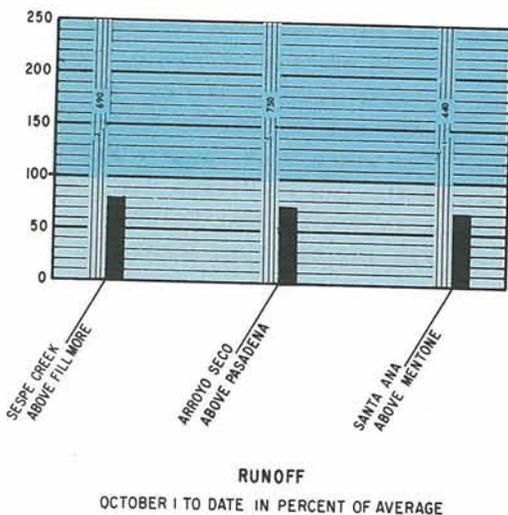


PRECIPITATION - PRECIPITATION DURING APRIL WAS VERY LIGHT, AVERAGING ONLY 15 PERCENT OF NORMAL FOR THE ENTIRE AREA. EXTREMES VARIED FROM 82 PERCENT OF NORMAL AT BARRETT DAM, IN THE TIA JUANA RIVER DRAINAGE, TO NO MEASURABLE PRECIPITATION AT LOS ANGELES CIVIC CENTER AND SEVERAL NEARBY STATIONS.

SEASONAL PRECIPITATION AVERAGED 65 PERCENT OF NORMAL OVER THE ENTIRE AREA. SUBBASINS VARIED FROM 70 PERCENT OF NORMAL IN THE SANTA CLARA RIVER TO 60 PERCENT IN THE SANTA ANA RIVER. AMOUNTS WERE DOWN TO ONE-THIRD OF THE VALUES FOR THE CORRESPONDING PERIOD ONE YEAR AGO. ONLY TWO OF THE PAST SEVEN MONTHS (NOVEMBER AND MARCH) HAVE YIELDED ABOVE NORMAL PRECIPITATION.



RESERVOIR STORAGE - DATA FROM TWENTY-SIX MAJOR RESERVOIRS IN THIS AREA SHOW A COMBINED STORAGE OF 828,000 ACRE-Feet ON MAY 1. THIS IS 56 PERCENT OF THEIR AGGREGATE CAPACITY AND 160 PERCENT OF AVERAGE FOR THIS DATE. STORAGE IS LESS THAN THAT OF ONE YEAR AGO BY 141,000 ACRE-Feet. ELEVEN OF THE RESERVOIRS INCLUDE IMPORTED WATER IN THEIR STORAGE AND THEY ARE STORING 409,000 ACRE-Feet, WHICH IS ABOUT 120 PERCENT OF AVERAGE FOR MAY 1. THE 15 RESERVOIRS STORING ONLY LOCAL WATER CONTAIN 419,000 ACRE-Feet, A LOSS OF 35,000 ACRE-Feet DURING APRIL.



RUNOFF - BASED ON DATA RECEIVED FOR KEY SOUTH COASTAL AREA STREAMS, RUNOFF WAS BELOW NORMAL DURING APRIL, AVERAGING 34 PERCENT OF NORMAL FOR THE MONTH. TOTAL RUNOFF FOR THE FIRST SEVEN MONTHS OF THE WATER YEAR REMAINS BELOW NORMAL FOR THE THREE INDICATOR STREAMS USED, AS INDICATED ON THE GRAPH TO THE LEFT, AMOUNTING TO 75 PERCENT OF NORMAL FOR THE PERIOD.

COLORADO DESERT AREA

SNOWPACK - MAY 1 SNOWPACK IN THE UPPER COLORADO RIVER BASIN, ACCORDING TO THE U. S. SOIL CONSERVATION SERVICE, IS ABOUT 130 PERCENT OF AVERAGE COMPARED TO 90 PERCENT ONE YEAR AGO. SNOWPACK WATER CONTENT RANGES FROM A LOW OF 91-98 IN THE SAN JUAN AND VIRGIN RIVER BASINS TO A HIGH OF 165-170 PERCENT IN THE YAMPA, WHITE, AND UPPER COLORADO RIVER BASINS. THE ENTIRE UPPER COLORADO RIVER BASIN INDICATED SUBSTANTIAL GAINS IN SNOWPACK DURING THE MONTH OF APRIL.

PRECIPITATION - IN THE COLORADO DESERT AREA, PRECIPITATION AVERAGED 70 PERCENT OF NORMAL FOR THE PERIOD OCTOBER 1, 1969, THROUGH APRIL 30, 1970. PRECIPITATION DURING THE PERIOD VARIED FROM 164 PERCENT OF NORMAL AT IMPERIAL TO 30 PERCENT AT TWENTYNINE PALMS. THE 0.75 INCH OF WATER FOR THE SEVEN-MONTH PERIOD AT TWENTYNINE PALMS IS THE SMALLEST REPORTED SEASONAL TOTAL IN THE ENTIRE STATE. APRIL PRECIPITATION WAS NIL IN THE AREA EXCEPT FOR THE 0.02 INCH REPORTED AT NEEDLES.

RESERVOIR STORAGE - THE STORAGE IN LAKE MEAD ON MAY 1 WAS 16,568,000 ACRE- FEET, ABOUT AVERAGE FOR THIS DATE. THERE HAS BEEN A NET INCREASE IN STORAGE OF 1,092,000 ACRE- FEET SINCE ONE YEAR AGO.

LAKE POWELL, UPSTREAM FROM LAKE MEAD, HAD 9,152,000 ACRE- FEET IN STORAGE ON MAY 1. THIS IS 120 PERCENT OF AVERAGE STORAGE FOR THIS DATE AND REFLECTS A NET GAIN IN STORAGE OF 1,103,000 ACRE- FEET DURING THE LAST YEAR.

THE WATER SURFACE ELEVATION OF THE SALTON SEA ON MAY 1, MEASURED FROM DATUM AT FIG TREE JOHNS GAGE, WAS 231.15 FEET BELOW MEAN SEA LEVEL. THIS REPRESENTS A RISE OF 0.05 FOOT DURING APRIL AND A DROP OF 0.15 FOOT FROM THE LEVEL OF ONE YEAR AGO.

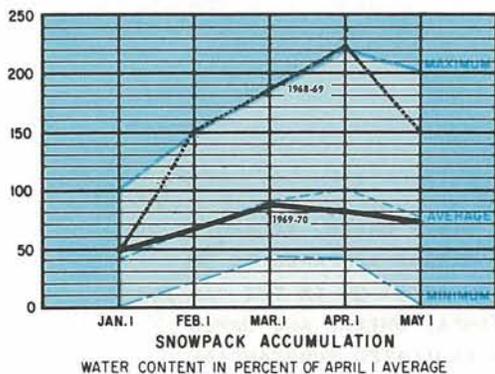
RUNOFF - OCTOBER THROUGH APRIL RUNOFF OF THE COLORADO RIVER, INFLOW TO LAKE POWELL, CORRECTED FOR REGULATION OF UPPER COLORADO RIVER STORAGE PROJECT RESERVOIRS, WAS 3,337,000 ACRE- FEET OR 90 PERCENT OF NORMAL. UNIMPAIRED RUNOFF OF THE COLORADO RIVER DURING APRIL WAS 566,000 ACRE- FEET OR 50 PERCENT OF NORMAL.

FORECAST MAY 1, 1970 - THE U. S. BUREAU OF RECLAMATION, REGION 4, SALT LAKE CITY, UTAH, FORECASTS THAT FLOW IN THE COLORADO RIVER, INFLOW TO LAKE POWELL, DURING APRIL-JULY 1970 WILL BE:

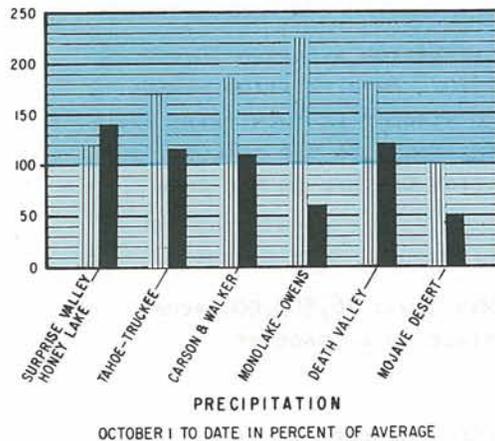
| | |
|-------------------|----------------------|
| MAXIMUM | 9,100,000 ACRE- FEET |
| MEAN | 7,600,000 ACRE- FEET |
| MINIMUM | 6,100,000 ACRE- FEET |

THE HISTORICAL APRIL-JULY INFLOW FROM THE PARIA AND LITTLE COLORADO RIVERS BETWEEN LAKE POWELL AND GRAND CANYON HAS AVERAGED ONLY 51,700 ACRE- FEET. THEREFORE, THE FORECAST FOR APRIL-JULY INFLOW TO LAKE POWELL CAN BE CONSIDERED AS ESSENTIALLY EQUIVALENT TO THE FORECAST FOR FLOW OF THE COLORADO RIVER NEAR GRAND CANYON, ASSUMING NO COLORADO RIVER STORAGE PROJECT RESERVOIRS.

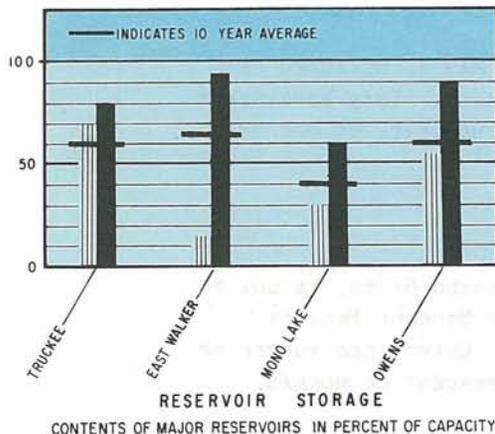
LAHONTAN AREA



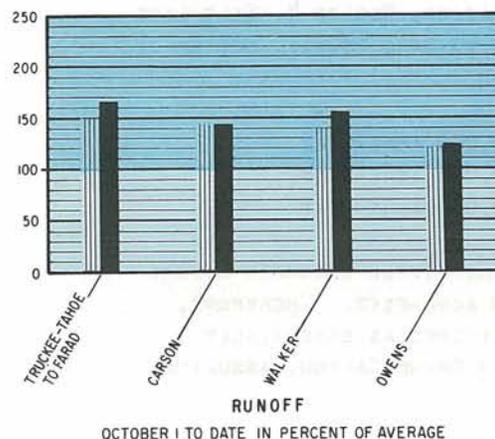
SNOWPACK - MEASUREMENTS OF SNOWPACK WERE OBTAINED AT 12 SNOW COURSES AND 12 AERIAL SNOW DEPTH MARKERS ON OR ABOUT MAY 1. THESE MEASUREMENTS INDICATE THAT SNOWPACK WATER CONTENT WAS 90 PERCENT OF AVERAGE, AS COMPARED TO 270 PERCENT ONE YEAR AGO. IT RANGED FROM A HIGH OF 100 PERCENT IN THE MONO LAKE AND OWENS RIVER BASINS TO A LOW OF 60 PERCENT IN THE SUSAN RIVER BASIN.



PRECIPITATION - OCTOBER THROUGH APRIL PRECIPITATION AVERAGED 105 PERCENT OF NORMAL OVER THE LAHONTAN AREA. SEASONAL AMOUNTS WITH RESPECT TO NORMAL VARIED FROM A LOW OF 42 PERCENT AT BISHOP, IN THE OWENS RIVER DRAINAGE, TO 160 PERCENT AT DOYLE, IN THE HONEY LAKE DRAINAGE. THE SEASONAL TOTAL OF 34.04 INCHES AT TAHOE CITY WAS 118 PERCENT OF NORMAL. SUBDRAINAGES IN THE AREA, WITH THE EXCEPTION OF SURPRISE VALLEY-HONEY LAKE, HAVE VALUES SUBSTANTIALLY LESS THAN THE AMOUNTS FOR THE CORRESPONDING PERIOD ONE YEAR AGO. THE GREATEST DIFFERENCE EXISTS IN THE OWENS RIVER DRAINAGE WHERE ONLY A FOURTH OF LAST SEASON'S VALUE HAS BEEN RECEIVED. APRIL PRECIPITATION FELL FAR SHORT OF NORMAL, AVERAGING ONLY 55 PERCENT OVER THE ENTIRE AREA.



RESERVOIR STORAGE - MAY 1 STORAGE IN SEVEN MAJOR CALIFORNIA RESERVOIRS IN THE LAHONTAN AREA WAS 295,000 ACRE-Feet. AT 85 PERCENT OF CAPACITY THIS AMOUNTS TO 150 PERCENT OF NORMAL STORAGE FOR THIS DATE AND IS 126,000 ACRE-Feet MORE THAN ON MAY 1 OF LAST YEAR. STORAGE IN THREE OTHER MAJOR RESERVOIRS THAT STORE WATER FOR USE IN BOTH NEVADA AND CALIFORNIA WAS 683,000 ACRE-Feet. THIS IS 82 PERCENT OF CAPACITY AND 145 PERCENT OF AVERAGE FOR MAY 1. LAKE TAHOE IS STORING 622,000 ACRE-Feet WHICH IS 150 PERCENT OF AVERAGE. THE WATER SURFACE ELEVATION ON MAY 1, 1970, WAS 6228.10 FEET.



RUNOFF - APRIL RUNOFF IN THE LAHONTAN AREA TOTALLED 100,000 ACRE-Feet OR 61 PERCENT OF NORMAL. ALL STREAMS WERE BELOW AVERAGE, VARYING FROM 47 PERCENT FOR THE TRUCKEE RIVER TO 92 PERCENT FOR THE WEST FORK OF THE CARSON. RUNOFF FOR THE WATER YEAR TO DATE AMOUNTS TO 668,000 ACRE-Feet OR 150 PERCENT OF NORMAL FOR THE SEVEN-MONTH PERIOD. THE LARGEST PRODUCER WAS THE TRUCKEE RIVER WITH 164 PERCENT OF NORMAL FLOWS.

FORECASTS - CONDITIONS OF MAY 1 INDICATE THAT RUNOFF FROM THE LAHONTAN AREA DURING THE 1969-70 WATER YEAR WILL BE ABOUT 115 PERCENT OF AVERAGE. THE DEPARTMENT OF WATER AND POWER OF THE CITY OF LOS ANGELES FORECASTS THE APRIL-JULY RUNOFF FOR THE OWENS RIVER BELOW LONG VALLEY RESERVOIR TO BE ABOUT 42,000 ACRE-Feet, 74 PERCENT OF LONG-TERM MEAN.

LAHONTAN AREA

| FORECASTS AS OF MAY 1, 1970 | | | |
|---|-------------------------|-----------------|--------------------------|
| STREAM AND STATION | APRIL-JULY RUNOFF | | |
| | AVERAGE IN ACRE-FEET | IN ACRE-FEET | IN PERCENT OF AVERAGE |
| Bidwell Creek near Ft. Bidwell | 10,930 | 11,300 | 103 |
| Mill Creek above diversions | 4,860 | 4,600 | 95 |
| Deep Creek above diversions | 3,470 | 3,300 | 95 |
| Eagle Creek at Eagleville | 4,730 | 4,500 | 95 |
| Truckee River, Lake Tahoe to Farad accretion | 262,000 | 200,000 | 76 |
| Lake Tahoe Rise (assuming gates closed) | 1.47 FT. | 1.15 FT. | 78 |
| East Carson River near Gardnerville | 178,000 | 170,000 | 96 |
| West Carson River at Woodfords | 50,000 | 45,000 | 90 |
| East Walker River near Bridgeport | 57,000 | 55,000 | 96 |
| West Walker River near Coleville | 140,000 | 145,000 | 104 |

SNOW LINES



THE MIGHTY COLORADO - CALIFORNIANS HAVE A VITAL INTEREST IN THE COLORADO RIVER BECAUSE IT PROVIDES WATER TO LARGE AREAS OF OUR STATE. IT MAY BE OF INTEREST TO KNOW THAT MANY PEOPLE AND AGENCIES ARE INVOLVED IN FORECASTING THE RUNOFF THAT THE BUREAU OF RECLAMATION PRESENTS FOR PUBLICATION IN THIS REPORT. COOPERATIVE SNOW SURVEYS ARE CONDUCTED BY THE U. S. SOIL CONSERVATION SERVICE IN COLORADO, NEW MEXICO, WYOMING, ARIZONA, AND UTAH. THE NETWORK, ABOUT 50 SNOW COURSES, IS DISTRIBUTED THROUGHOUT THE HEADWATER AREAS OF THE COLORADO AND TRIBUTARY RIVERS. SUPPLEMENTAL INFORMATION ON PRECIPITATION ACCUMULATION IS GATHERED AT ABOUT 60 STATIONS BY THE U. S. WEATHER BUREAU AND ITS COOPERATORS IN THE VARIOUS STATES. UPON RECEIPT OF THESE AND OTHER DATA, THE ENTIRE COLORADO RIVER SYSTEM IS ANALYZED TO DETERMINE THE DEGREE OF UPSTREAM REGULATION THAT WILL OCCUR. SO WHEN YOU SEE FORECASTS OF COLORADO RIVER FLOWS YOU CAN BE SURE THEY HAVE BEEN CAREFULLY PREPARED AND ARE SUPPORTED BY A MASS OF DATA FROM AN ARMY OF SNOW SURVEYORS AND OTHER OBSERVERS. AND THIS SUMMER? THE BUREAU REPORTS MATTER OF FACTLY, "LAKE MEAD IS NOW 70 FEET BELOW THE TOP OF THE RAISED SPILLWAY GATES AT HOOVER DAM. THE LAKE WILL BE HELD LEVEL OR WILL BE ALLOWED TO RISE SLOWLY DURING THE SUMMER. THE LAKE AT PRESENT CONTAINS 16.6 MILLION ACRE-FEET. MEAN INFLOW OF THE COLORADO RIVER INTO UPSTREAM LAKE POWELL DURING APRIL THROUGH JULY OF 1970 WILL BE 7,600,000 ACRE-FEET". THANK YOU -- SNOW SURVEYORS OF THE COLORADO RIVER BASIN STATES -- FROM ALL OF US CALIFORNIANS, FOR A JOB WELL DONE.

COVER

THE HIGH ELEVATION SNOW ZONE IS NOW SLOWLY RELEASING ITS WATER FOR OUR USE DURING THE SUMMER MONTHS AHEAD. HERE IS A TYPICAL MAY SCENE. THIS VIEW IS NEAR BIG BEND IN THE AMERICAN RIVER BASIN.

1. HONTAR AREA

| STRAIN AND TYPE | | WATER IN CONTACT | WATER IN CONTACT |
|------------------|--------|------------------|------------------|
| | | PERCENT | PERCENT |
| 5. Small Canyon | 17.00% | 100% | 100% |
| 6. Creek | 15.00% | 100% | 100% |
| 7. Long Canyon | 15.00% | 100% | 100% |
| 8. Little Canyon | 15.00% | 100% | 100% |
| 9. Canyon | 15.00% | 100% | 100% |
| 10. Canyon | 15.00% | 100% | 100% |
| 11. Canyon | 15.00% | 100% | 100% |
| 12. Canyon | 15.00% | 100% | 100% |
| 13. Canyon | 15.00% | 100% | 100% |
| 14. Canyon | 15.00% | 100% | 100% |
| 15. Canyon | 15.00% | 100% | 100% |
| 16. Canyon | 15.00% | 100% | 100% |
| 17. Canyon | 15.00% | 100% | 100% |
| 18. Canyon | 15.00% | 100% | 100% |
| 19. Canyon | 15.00% | 100% | 100% |
| 20. Canyon | 15.00% | 100% | 100% |

2. HONTAR AREA

The following table shows the results of the water sampling program conducted in the Hontar area during the period from 1968 to 1970. The data is presented in two columns: the first column lists the location of the sampling point, and the second column shows the percentage of water in contact with the rock. The locations listed are Small Canyon, Creek, Long Canyon, Little Canyon, and Canyon. The percentages shown are all 100%.

The data in this table indicates that all of the water sampled in the Hontar area during the period from 1968 to 1970 was in contact with the rock. This is consistent with the geological structure of the area, which is characterized by a series of narrow canyons and creeks that cut through the rock.

CALIFORNIA COOPERATIVE SNOW SURVEYS



STATE OF CALIFORNIA

The Resources Agency

Department of Water Resources

BULLETIN No. 120-70

WATER CONDITIONS IN CALIFORNIA

Report No. 4: Basic Data Supplement



MAY 1, 1970

NORMAN B. LIVERMORE, JR.
Secretary for Resources
The Resources Agency

RONALD REAGAN
Governor
State of California

WILLIAM R. GIANELLI
Director
Department of Water Resources



CALIFORNIA COOPERATIVE SNOW SURVEYS

STATE OF CALIFORNIA

The Resources Agency

Department of Water Resources

BULLETIN No. 120-70

WATER CONDITIONS IN CALIFORNIA

Report No. 4: Basic Data Supplement

MAY 1, 1970

NORMAN B. LIVERMORE, JR.
Secretary for Resources
The Resources Agency

RONALD REAGAN
Governor
State of California

WILLIAM R. GIANELLI
Director
Department of Water Resources

STATE OF CALIFORNIA
The Resources Agency

Department of Water Resources

BULLETIN No. 150-70

WATER CONDITIONS IN CALIFORNIA

Report No. 4: Basic Data Supplement

MAY 1, 1970

WILLIAM R. GAMBEL
Director
Department of Water Resources

RONALD BEAMAN
Secretary
State of California

NORMAN S. LIVERMORE, JR.
Secretary for Resources
The Resources Agency

FOREWORD

REPORTS ENTITLED "WATER CONDITIONS IN CALIFORNIA" ARE PREPARED AS OF THE FIRST OF EACH MONTH, FEBRUARY THROUGH MAY, AND IN THE FALL OF EACH YEAR BY THE DEPARTMENT OF WATER RESOURCES, DIVISION OF RESOURCES DEVELOPMENT, PURSUANT TO SECTION 228, ARTICLE 2, CHAPTER 2.5, DIVISION 1, OF THE WATER CODE WHICH PROVIDES THAT:

"THE DEPARTMENT SHALL GATHER AND CORRELATE INFORMATION AND DATA PERTINENT TO AN ANNUAL FORECAST OF SEASONAL WATER CROP, INCLUDING THE MAKING OF SNOW SURVEYS, EITHER INDEPENDENTLY OR IN COOPERATION WITH ANY PERSON OR ANY COUNTY, STATE, FEDERAL, OR OTHER AGENCY."

THE MAY 1, 1970 REPORT, PUBLISHED EARLIER AS A SEPARATE VOLUME, WAS BASED UPON THE PRECIPITATION, SNOW SURVEY, RESERVOIR STORAGE AND STREAMFLOW DATA PRESENTED IN THIS SUPPLEMENT. DATA PUBLISHED IN THIS SUPPLEMENT ARE PROVISIONAL AND SUBJECT TO REVISION. SNOW COURSE MEASUREMENT DATA FOR THE ENTIRE SEASON WILL BE SUMMARIZED IN THE FALL REPORT TO BE PUBLISHED IN MID-OCTOBER. AT 5-YEAR INTERVALS, ALL SNOW COURSE MEASUREMENTS ARE COMPILED IN SUMMARY FORM AND PUBLISHED IN BULLETIN 129, "SNOW SURVEY MEASUREMENTS".

ALLIED AND SUPPLEMENTARY HYDROLOGIC INFORMATION IS AVAILABLE IN THE BULLETIN 130 SERIES. INFORMATION ON THIS AND OTHER PUBLICATIONS BY THE DEPARTMENT OF WATER RESOURCES MAY BE OBTAINED BY WRITING TO:

STATE OF CALIFORNIA
OFFICE OF PROCUREMENT, DOCUMENTS SECTION
P. O. Box 1612
SACRAMENTO, CALIFORNIA 95807

FOREWORD

REPORTS PREPARED UNDER CONTRACT NO. W-11-57-1001, AND PREPARED AS OF THE
FIRST OF EACH MONTH, FEBRUARY THROUGH MAY, AND IN THE FALL OF EACH YEAR BY THE
DEPARTMENT OF WATER RESOURCES, DIVISION OF RESOURCES DEVELOPMENT, PURSUANT TO
SECTION 220, ARTICLE 2, CHAPTER 2.3, DIVISION 1, OF THE WATER CODE WHICH PROVIDES
THAT:

"THE DEPARTMENT SHALL ATTEMPT TO DEVELOPE INFORMATION AND
DATA PERTAINING TO AN ANIMAL RESORT OR RESORT WATER BODY,
INCLUDING THE MAKING OF SUCH SURVEYS, EITHER INDIVIDUALLY OR IN
COOPERATION WITH THE OWNER OF THE RESORT, THAT SHALL BE
OTHER THAN

THE MAY 1, 1950 SURVEY, SHALL BE TREATED AS A SEPARATE SURVEY AND
BASED UPON THE PRECISION, AND SURVEY TECHNIQUE EMPLOYED AND REPORTED DATA
PRESENTED IN THIS SURVEY. DATA OBTAINED IN THIS SURVEY AND PREVIOUS
AND SUBJECT TO REVIEW. FROM THESE SURVEYS DATA FOR THE ENTIRE YEAR WILL
BE SUBMITTED IN THE FALL REPORT TO BE PRINTED IN NOVEMBER. AT 3-PM
INTERVALS, ALL SURVEY READINGS ARE OBTAINED IN SURVEY FORMS AND
IN BULLETIN 120, "SURVEY SURVEYS".
ALSO AND SUPPLEMENTARY HYDROLOGIC INFORMATION IS AVAILABLE IN THE
BULLETIN 120 SERIES. INFORMATION ON THIS AND OTHER PUBLICATIONS BY THE DEPARTMENT
OF WATER RESOURCES MAY BE OBTAINED BY WRITING THE

STATE OF CALIFORNIA
DEPARTMENT OF WATER RESOURCES, DIVISION OF RESOURCES DEVELOPMENT
P. O. BOX 1472
SACRAMENTO, CALIFORNIA 95833

TABLE OF CONTENTS

| | <u>PAGE</u> |
|--|-------------|
| FOREWORD | III |
| AGENCIES COOPERATING IN THE CALIFORNIA SNOW SURVEY PROGRAM | VI |

LIST OF TABLES

| <u>TABLE NUMBER</u> | | |
|-------------------------|--|----|
| 1. | PRECIPITATION DATA | 1 |
| 2. | SNOW SURVEY MEASUREMENT DATA | 6 |
| 3. | AERIAL SNOW DEPTH MEASUREMENTS | 12 |
| 4. | SUMMARY OF STORAGE IN MAJOR RESERVOIRS | 13 |
| 5. | STORAGE IN MAJOR RESERVOIRS | 13 |
| 6. | RUNOFF DATA | 16 |

LIST OF PLATES

| <u>PLATE NUMBER</u> | | |
|-------------------------|---|----|
| 1. | SNOW DEPTH AT NORDEN | 9 |
| 2. | REPRESENTATIVE SNOW SENSOR DATA | 10 |
| 3. | PROFILE OF SNOW DENSITY | 11 |

COVER

WINTER SURVIVAL CABINS FOR CALIFORNIA'S SNOW SURVEYORS ARE MAINTAINED BY MANY OF THE AGENCIES COOPERATING IN THE SNOW SURVEY PROGRAM. HERE, SUMMER MAINTENANCE WORK IS COMPLETED ON THE DEPARTMENT'S CABIN AT BISHOP PASS.

AGENCIES COOPERATING IN THE CALIFORNIA SNOW SURVEY PROGRAM

TABLE OF CONTENTS

STATE AND FEDERAL AGENCIES

CALIFORNIA DEPARTMENT OF WATER RESOURCES
CALIFORNIA DEPARTMENT OF PARKS AND RECREATION
U. S. DEPARTMENT OF AGRICULTURE - FOREST SERVICE (14 NATIONAL FORESTS); SOIL CONSERVATION SERVICE
U. S. DEPARTMENT OF COMMERCE - WEATHER BUREAU
U. S. DEPARTMENT OF INTERIOR - BUREAU OF RECLAMATION
GEOLOGICAL SURVEY, WATER RESOURCES DIVISION;
NATIONAL PARK SERVICE (3 NATIONAL PARKS)
U. S. DEPARTMENT OF THE ARMY - CORPS OF ENGINEERS

PUBLIC UTILITIES

PACIFIC GAS AND ELECTRIC COMPANY
SIERRA PACIFIC POWER COMPANY
SOUTHERN CALIFORNIA EDISON COMPANY

MUNICIPALITIES

CITY OF LOS ANGELES - DEPARTMENT OF WATER AND POWER
CITY OF PORTERVILLE
CITY AND COUNTY OF SAN FRANCISCO - PUBLIC UTILITIES COMMISSION

PUBLIC AGENCIES

BUENA VISTA WATER STORAGE DISTRICT
CENTRAL CALIFORNIA IRRIGATION DISTRICT
EAST BAY MUNICIPAL UTILITY DISTRICT
FRIANT WATER USERS ASSOCIATION
KAWEAH DELTA WATER CONSERVATION DISTRICT
KAWEAH RIVER ASSOCIATION
KINGS RIVER WATER ASSOCIATION
LOS ANGELES COUNTY FLOOD CONTROL DISTRICT
LOWER TULE RIVER IRRIGATION DISTRICT
MERCED IRRIGATION DISTRICT
MODESTO IRRIGATION DISTRICT
NEVADA IRRIGATION DISTRICT
OAKDALE IRRIGATION DISTRICT
OMOCHUMNE-HARTNELL WATER DISTRICT
PLACER COUNTY WATER AGENCY
PORTERVILLE IRRIGATION DISTRICT
SACRAMENTO MUNICIPAL UTILITY DISTRICT
SAUCELITO IRRIGATION DISTRICT
SOUTH SAN JOAQUIN IRRIGATION DISTRICT
ST. JOHNS RIVER ASSOCIATION
TULE RIVER ASSOCIATION
TURLOCK IRRIGATION DISTRICT
VANDALIA IRRIGATION DISTRICT

PRIVATE ORGANIZATIONS

ATMOSPHERICS INCORPORATED
ATMOSPHERIC WATER RESOURCES RESEARCH
J. G. BOSWELL COMPANY
KERN COUNTY LAND COMPANY
LIBERTY FARMS COMPANY
MT. REBA INCORPORATED
UNION CARBIDE CORPORATION

OTHER COOPERATIVE PROGRAMS

NEVADA COOPERATIVE SNOW SURVEYS
OREGON COOPERATIVE SNOW SURVEYS

TABLE 1
PRECIPITATION DATA

| AREA, DRAINAGE BASIN AND PRECIPITATION STATION | ELEV IN FEET | SOURCE OF DATA (1) | PRECIPITATION (2) | | | | | | |
|--|--------------------|--------------------------|-------------------|-----------------------|--------------------------|----------------------------|------------------------|--------------------------|---------------|
| | | | APRIL 1970 | | | OCT 1, 1969 - APR 30, 1970 | | | AVERAGE |
| | | | AVERAGE | TOTAL FCR MONTH | PERCENT OF AVERAGE | AVERAGE | TOTAL FCR SEASON | PERCENT OF AVERAGE | WATER YEAR |
| NORTH COASTAL AREA | | | | | | | | | |
| SMITH RIVER | | | | | | | | | |
| GASQUET RS | 384 | USWB | 6.66 | - | - | 84.45 | - | - | 93.03 |
| CRESCENT CITY 11E | 360 | DWR | 7.86 | 4.93 | 63 | 91.47 | 102.69 | 112 | 102.53 |
| BROOKINGS, OREGON | 80 | USWB | 5.73 | 4.56 | 80 | 70.79 | 69.45 | 98 | 80.72 |
| CRESCENT CITY 1N | 40 | USWB | 6.13 | 2.98 | 49 | 64.84 | 58.95 | 91 | 74.15 |
| KLAMATH RIVER | | | | | | | | | |
| KLAMATH FALLS 2SSW, OREGON | 4098 | USBR | 0.91 | 0.29 | 32 | 10.85 | 14.14 | 130 | 14.02 |
| TULELAKE | 4035 | USWB | 0.77 | 0.39 | 51 | 7.27 | 10.74 | 148 | 10.43 |
| CALLAHAN RS | 3136 | USWB | 1.41 | 1.14 | 81 | 17.58 | 21.93 | 125 | 19.90 |
| MONTAGUE | 2500 | DWR | 0.80 | 0.16 | 20 | 9.83 | 13.63 | 139 | 12.54 |
| YREKA | 2625 | USWB | 0.95 | 0.21 | 22 | 14.92 | 20.65 | 138 | 17.96 |
| HAPPY CAMP RS | 1090 | USWB | 2.91 | 1.06 | 36 | 50.54 | 66.60 | 152 | 54.95 |
| ORLEANS | 403 | USWB | 3.22 | 1.97 | 61 | 47.00 | 52.65 | 112 | 51.51 |
| ORICK ARCATA REDWOOD CO | 75 | DWR | 4.81 | 3.59 | 75 | 59.86 | 52.45 | 88 | 66.72 |
| TRINITY RIVER | | | | | | | | | |
| COFFEE CREEK RS | 2500 | USWB | 2.53 | 0.50 | 20 | 43.68 | 58.87 | 135 | 52.54 |
| BURNT RANCH 1S | 2150 | USWB | 2.75 | 1.42 | 52 | 38.83 | 45.52 | 117 | 42.08 |
| WEAVERVILLE RS | 2050 | USWB | 2.43 | 0.46 | 19 | 33.34 | 43.31 | 130 | 36.77 |
| BIG BAR KS | 1260 | USWB | 2.68 | 0.67 | 25 | 33.85 | 43.65 | 129 | 36.67 |
| EEL RIVER | | | | | | | | | |
| MAU RIVER RS | 2775 | USWB | 3.85 | 1.55 | 40 | 54.46 | 68.16 | 125 | 58.85 |
| OLD HARRIS | 2225 | DWR | 4.58 | 2.15 | 47 | 66.02 | 71.60 | 108 | 71.02 |
| HONOR CAMP NO 42 | 1875 | DWR | 4.92 | 4.71 | 96 | 68.91 | 65.65 | 95 | 74.93 |
| STANDISH-HICKEY STATE PARK | 850 | USWB | 4.69 | 1.93 | 41 | 69.78 | 75.86 | 109 | 74.48 |
| HONEYDEW 2WSW | 375 | USWB | 7.19 | - | - | 103.56 | - | - | 110.50 |
| UPPER MATTOLE | 255 | USWB | 5.51 | 2.01 | 36 | 74.35 | 78.94 | 106 | 79.62 |
| BLUE LAKE | 105 | DWR | 3.15 | 1.93 | 61 | 43.17 | 36.45 | 84 | 46.99 |
| SCOTIA | 139 | USWB | 3.43 | 1.33 | 39 | 44.91 | 45.79 | 102 | 48.23 |
| FORT BRAGG | 80 | USWB | 2.91 | 0.59 | 20 | 35.46 | 40.38 | 114 | 38.18 |
| EUREKA WB CITY | 43 | USWB | 2.95 | 1.54 | 52 | 34.67 | 36.14 | 104 | 38.36 |
| RUSSIAN RIVER | | | | | | | | | |
| CAZADERO | 1040 | USWB | 5.70 | 0.24 | 4 | 69.09 | 88.09 | 127 | 73.35 |
| PUTTER VALLEY PH | 1014 | PG&E | 2.95 | 0.97 | 33 | 41.16 | 51.93 | 126 | 44.02 |
| UKIAH | 623 | USWB | 2.46 | 1.24 | 50 | 34.28 | 50.44 | 147 | 36.25 |
| BOONVILLE MAINT STATION | 342 | USWB | 2.63 | 0.96 | 37 | 35.15 | 49.76 | 142 | 37.15 |
| SANTA ROSA | 167 | USWB | 2.38 | 0.29 | 12 | 27.38 | 37.89 | 138 | 28.93 |
| FORT COSS | 116 | USWB | 3.16 | 0.50 | 16 | 36.20 | 41.39 | 114 | 38.89 |
| HEALDSBURG | 102 | USWB | 2.92 | 0.12 | 4 | 37.91 | 56.04 | 148 | 39.89 |
| SAN FRANCISCO BAY AREA | | | | | | | | | |
| MCOUNT HAMILTON | 4206 | USWB | 2.27 | 0.75 | 33 | 24.86 | 16.63 | 67 | 26.11 |
| GERBER RANCH | 2140 | USWB | 1.48 | - | - | 17.25 | - | - | 18.03 |
| ANGWIN PAC UNION COLLEGE | 1815 | USWB | 2.82 | 0.41 | 15 | 36.09 | 57.49 | 159 | 37.79 |
| LAGUNITAS LAKE | 785 | MMWD | 3.65 | 0.30 | 8 | 45.85 | 64.21 | 140 | 48.09 |
| LIVERMORE 2SSW | 545 | USWB | 1.15 | 0.40 | 35 | 13.58 | 12.30 | 91 | 14.31 |
| SAN JOSE | 70 | CSJ | 1.09 | 0.21 | 19 | 12.65 | 11.06 | 87 | 13.28 |
| NAPA STATE HOSPITAL | 60 | USWB | 1.79 | 0.08 | 4 | 22.55 | 29.40 | 130 | 23.76 |
| SAN FRANCISCO FDB | 52 | USWB | 1.45 | 0.06 | 4 | 19.44 | 20.19 | 104 | 20.42 |
| REDWOOD CITY | 31 | USWB | 1.35 | 0.40 | 30 | 18.37 | 18.72 | 102 | 19.19 |
| OAKLAND WB AP | 3 | USWB | 1.42 | 0.02 | 1 | 16.96 | 17.83 | 105 | 17.90 |
| CENTRAL COASTAL AREA | | | | | | | | | |
| SALINAS RIVER | | | | | | | | | |
| PRIEST VALLEY | 2300 | USWB | 1.73 | 0.15 | 9 | 19.07 | 14.44 | 76 | 19.83 |
| PASO ROBLES | 700 | USWB | 1.02 | 0.06 | 6 | 12.79 | 8.62 | 67 | 13.41 |
| SAN ARDO | 435 | DWR | 0.53 | - | - | 11.82 | - | - | 12.08 |
| KING CITY | 320 | USWB | 0.89 | 0.07 | 8 | 10.12 | 7.58 | 75 | 10.50 |
| SAN LUIS OBISPO POLY | 300 | USWB | 1.92 | 0.18 | 9 | 20.72 | 15.23 | 74 | 21.43 |
| BIG SUR STATE PARK | 235 | USWB | 3.31 | - | - | 39.23 | - | - | 40.94 |
| SALINAS FAA AP | 75 | USWB | 1.20 | 0.00 | 0 | 13.15 | 8.03 | 61 | 13.88 |
| PT PIEDRAS BLANCAS | 59 | USWB | 1.55 | - | - | 18.36 | - | - | 19.13 |
| PAJARO RIVER | | | | | | | | | |
| HOLLISTER | 285 | USWB | 1.13 | - | - | 12.54 | - | - | 13.16 |
| SANTA CRUZ | 125 | USWB | 2.17 | 0.23 | 11 | 29.14 | 29.62 | 102 | 30.62 |
| WATSONVILLE WATER WORKS | 95 | USWB | 1.60 | 0.14 | 9 | 20.04 | 21.49 | 107 | 20.98 |
| SANTA MARIA AND SANTA YNEZ R | | | | | | | | | |
| CACHUMA DAM | 781 | USBR | 1.23 | 0.10 | 8 | 17.92 | 11.67 | 65 | 18.71 |
| LOS ALAMUS | 565 | USWB | 1.44 | 0.19 | 13 | 14.48 | 9.30 | 64 | 15.05 |
| SANTA MARIA WB AP | 238 | USWB | 1.21 | 0.03 | 2 | 12.55 | 8.20 | 65 | 13.10 |
| SANTA BARBARA | 100 | USWB | 1.56 | 0.00 | 0 | 17.01 | 11.06 | 65 | 17.55 |
| SOUTH COASTAL AREA | | | | | | | | | |
| COASTAL PLAIN | | | | | | | | | |
| LOS ANGELES WB CITY | 312 | USWB | 1.25 | 0.00 | 0 | 14.02 | 7.70 | 55 | 14.55 |
| SANTA ANA FS | 115 | USWB | 1.33 | 0.00 | 0 | 13.52 | 8.66 | 64 | 14.06 |

TABLE 1 - PRECIPITATION DATA (CONTINUED)

| AREA, DRAINAGE BASIN AND PRECIPITATION STATION | ELEV IN FEET | SOURCE OF DATA (1) | PRECIPITATION (2) | | | | | | |
|--|--------------------|--------------------------|-------------------|-----------------------|--------------------------|----------------------------|------------------------|--------------------------|---------------|
| | | | APRIL 1970 | | | OCT 1, 1969 - APR 30, 1970 | | | AVERAGE |
| | | | AVERAGE | TOTAL FOR MONTH | PERCENT OF AVERAGE | AVERAGE | TOTAL FOR SEASON | PERCENT OF AVERAGE | WATER YEAR |
| COASTAL PLAIN (CONTINUED) | | | | | | | | | |
| LOS ANGELES WB AP | 97 | USWB | 1.08 | 0.00 | 0 | 12.07 | 5.50 | 46 | 10.46 |
| LAGUNA BEACH | 56 | USWB | 1.12 | 0.02 | 2 | 11.67 | 7.62 | 65 | 12.28 |
| VENTURA | 45 | USWB | 1.15 | 0.00 | 0 | 13.82 | 9.11 | 66 | 14.17 |
| LONG BEACH | 34 | USWB | 1.04 | 0.00 | 0 | 12.44 | 5.68 | 46 | 12.86 |
| SAN DIEGO WB AP | 19 | USWB | 0.81 | 0.09 | 11 | 9.70 | 6.32 | 65 | 10.18 |
| SANTA CLARA RIVER | | | | | | | | | |
| MINT CANYON - THE OAKS | 2350 | LACFCD | 1.22 | - | - | 12.16 | - | - | 12.83 |
| SAUGUS PP NO 1 | 2105 | USWB | 1.78 | 0.01 | 1 | 17.06 | 10.21 | 60 | 17.92 |
| DRY CANYON RESERVOIR | 1515 | USWB | 1.22 | 0.16 | 13 | 12.09 | 8.80 | 73 | 12.78 |
| SANTA PAULA | 263 | USWB | 1.49 | 0.00 | 0 | 16.78 | 14.06 | 84 | 17.23 |
| LOS ANGELES RIVER | | | | | | | | | |
| HAINES CANYON UPPER | 3450 | LACFCD | 2.67 | 0.06 | 2 | 26.97 | 15.22 | 56 | 28.33 |
| BIG TUJUNGA DAM | 2315 | LACFCD | 2.32 | 0.06 | 3 | 25.36 | 15.99 | 63 | 26.36 |
| ARROYO SECO RS | 1220 | LACFCD | 1.99 | 0.05 | 3 | 21.11 | 12.69 | 60 | 22.12 |
| BURBANK WB AP | 699 | USWB | 1.27 | 0.00 | 0 | 13.97 | 8.81 | 63 | 14.53 |
| SAN GABRIEL RIVER | | | | | | | | | |
| MT WILSON | 5709 | USWB | 3.14 | - | - | 31.40 | - | - | 32.68 |
| SAN DIMAS TANBARK FLAT | 2745 | LACFCD | 2.19 | 1.27 | 58 | 21.31 | 17.18 | 81 | 22.16 |
| HUEGEEES | 2650 | LACFCD | 3.64 | 0.21 | 6 | 36.46 | 21.78 | 60 | 38.04 |
| HENNINGER FLATS | 2550 | LACFCD | 2.61 | - | - | 24.71 | - | - | 26.23 |
| SAN GABRIEL DAM CAMP | 1500 | LACFCD | 2.28 | 0.57 | 25 | 25.13 | 19.77 | 79 | 26.02 |
| SAN DIMAS DAM | | | | | | | | | |
| CLAREMONT POMONA COLLEGE | 1350 | LACFCD | 1.99 | - | - | 20.16 | - | - | 21.27 |
| | 1201 | USWB | 1.62 | 0.00 | 0 | 16.79 | 11.82 | 70 | 17.54 |
| SANTA ANA RIVER | | | | | | | | | |
| BIG BEAR LAKE | 6745 | USWB | 1.94 | 1.91 | 98 | 22.03 | 10.99 | 50 | 24.34 |
| SQUIRREL INN NO 2 | 5680 | USWB | 3.92 | 1.45 | 37 | 38.20 | 19.61 | 51 | 40.37 |
| MT BALDY G S FCB5G | 4275 | USWB | 3.12 | 0.63 | 20 | 30.92 | 23.78 | 77 | 32.44 |
| LYTLE CREEK RS | 2760 | USWB | 2.77 | 0.78 | 28 | 29.50 | 18.32 | 62 | 30.86 |
| ELSINURE | 1285 | USWB | 0.84 | 0.33 | 39 | 10.75 | 7.08 | 66 | 11.40 |
| SAN BERNARDINO CO HOSPITAL | 1125 | USWB | 1.63 | 0.45 | 28 | 16.02 | 9.20 | 57 | 17.04 |
| SAN DIEGO COUNTY | | | | | | | | | |
| CUYAMACA | 4650 | USWB | 3.77 | 2.53 | 67 | 32.89 | 19.84 | 60 | 35.94 |
| JULIAN WYNOLA | 3650 | USWB | 2.64 | 1.24 | 47 | 25.21 | 11.58 | 46 | 28.08 |
| WARNER SPRINGS | 3180 | USWB | 1.35 | 0.69 | 51 | 13.76 | 7.76 | 56 | 15.86 |
| CAMPU | 2630 | USWB | 1.56 | 1.18 | 76 | 14.11 | 9.05 | 64 | 15.62 |
| BARRETT DAM | 1623 | CSD | 1.70 | 1.41 | 83 | 15.75 | 9.75 | 62 | 16.87 |
| EL CAPITAN DAM | 600 | USWB | 1.50 | 0.57 | 38 | 14.23 | 8.68 | 61 | 15.24 |
| CENTRAL VALLEY AREA | | | | | | | | | |
| SACRAMENTO VALLEY FLOOR | | | | | | | | | |
| FRENCH GULCH | 1100 | USWB | 2.99 | 0.70 | 23 | 35.10 | 37.69 | 107 | 38.49 |
| REDDING FS NO 2 | 577 | USWB | 3.12 | 0.18 | 6 | 34.55 | 53.97 | 156 | 38.14 |
| ONO | 980 | USWB | 2.97 | 0.30 | 10 | 32.33 | 43.06 | 133 | 35.36 |
| VOLTA PH | 2200 | PG&E | 3.15 | 0.61 | 19 | 28.57 | 38.47 | 135 | 32.74 |
| HARRISON GULCH RS | 2710 | USWB | 1.92 | 0.43 | 22 | 30.97 | 39.39 | 127 | 34.66 |
| MINERAL | | | | | | | | | |
| RED BLUFF WB AP | 4911 | USWB | 4.15 | 1.94 | 47 | 46.18 | 67.16 | 145 | 51.45 |
| CENTERVILLE PH | 341 | USWB | 1.85 | 0.06 | 3 | 19.66 | 20.56 | 105 | 21.71 |
| PASKENTA RS | 522 | USWB | 3.76 | 0.65 | 17 | 40.15 | 50.68 | 126 | 42.89 |
| ORLAND | 755 | USWB | 1.88 | 0.14 | 7 | 20.43 | 24.73 | 121 | 22.23 |
| | 254 | USWB | 1.62 | 0.14 | 9 | 17.61 | 21.30 | 121 | 19.07 |
| CHICO EXP STATION | | | | | | | | | |
| STONY GORGE RESERVOIR | 205 | USWB | 2.30 | 0.25 | 11 | 23.98 | 29.82 | 124 | 25.92 |
| WILLOWS | 791 | USBR | 1.51 | 0.00 | 0 | 17.68 | 21.72 | 123 | 19.02 |
| ORVILLE BRIDGE | 140 | USWB | 1.42 | 0.14 | 10 | 16.24 | 18.16 | 112 | 17.48 |
| EAST PARK RESERVOIR | 165 | USWB | 2.36 | 0.76 | 32 | 25.81 | 33.16 | 128 | 27.72 |
| | 1205 | USBR | 1.34 | 0.66 | 49 | 17.46 | 23.20 | 133 | 18.71 |
| STONYFORD CUDLEY RANCH | | | | | | | | | |
| GOLUSA ISSW | 3015 | USWB | 3.54 | 0.86 | 24 | 48.20 | 64.38 | 134 | 51.24 |
| MARYSVILLE | 60 | USWB | 1.22 | 0.29 | 24 | 14.53 | 16.89 | 116 | 15.55 |
| LAKEPORT | 60 | USWB | 1.78 | 0.41 | 23 | 19.16 | 17.53 | 91 | 20.41 |
| LEESVILLE KEEGAN RANCH | 1343 | USWB | 2.07 | 0.72 | 35 | 26.93 | 38.88 | 144 | 28.46 |
| | 1330 | USWB | 1.45 | - | - | 21.10 | - | - | 22.16 |
| NICOLAUS NO 2 | | | | | | | | | |
| DUNNIGAN-POWERS RANCH | 47 | USWB | 1.57 | 0.50 | 32 | 16.36 | 17.17 | 105 | 17.40 |
| COBB | 104 | DWR | 1.25 | 0.26 | 21 | 15.40 | 16.20 | 105 | 16.19 |
| ROCKLIN | 2520 | DWR | 4.56 | 0.57 | 12 | 60.76 | 93.80 | 154 | 63.91 |
| CITRUS HEIGHTS | 239 | USWB | 1.99 | 0.19 | 10 | 21.64 | 19.30 | 89 | 22.94 |
| | 138 | DWR | 2.02 | 0.65 | 32 | 21.89 | 20.31 | 93 | 23.22 |
| CAPAY 4W | | | | | | | | | |
| WOODLAND 1WNW | 300 | DWR | 1.49 | 0.00 | 0 | 21.04 | 23.56 | 112 | 22.06 |
| SACRAMENTO WB CITY | 69 | USBR | 1.38 | 0.25 | 18 | 15.81 | 18.93 | 120 | 16.63 |
| DAVIS 2WSW | 25 | USWB | 1.60 | 0.14 | 9 | 16.82 | 17.45 | 104 | 17.77 |
| WINTERS | 60 | USBR | 1.38 | 0.04 | 3 | 15.75 | 16.52 | 105 | 16.57 |
| | 135 | USBR | 1.22 | 0.00 | 0 | 17.24 | 25.33 | 147 | 18.03 |

TABLE 1 - PRECIPITATION DATA (CONTINUED)

| AREA, DRAINAGE BASIN AND PRECIPITATION STATION | ELEV IN FEET | SOURCE OF DATA (1) | PRECIPITATION (2) | | | | | | |
|--|--------------------|--------------------------|-------------------|-----------------------|--------------------------|----------------------------|------------------------|--------------------------|---------------|
| | | | APRIL 1970 | | | OCT 1, 1969 - APR 30, 1970 | | | AVERAGE |
| | | | AVERAGE | TOTAL FOR MONTH | PERCENT OF AVERAGE | AVERAGE | TOTAL FOR SEASON | PERCENT OF AVERAGE | WATER YEAR |
| SAN JOAQUIN VALLEY FLOOR | | | | | | | | | |
| CAMP PARDEE | 658 | USWB | 1.96 | 1.57 | 80 | 19.19 | 21.71 | 113 | 20.50 |
| GALT | 47 | DWR | 1.46 | 0.34 | 23 | 15.47 | 17.63 | 114 | 16.39 |
| WALLACE ISE | 214 | USWB | 1.90 | 1.38 | 73 | 18.53 | 20.18 | 109 | 19.59 |
| RIO VISTA | 22 | USWB | 1.38 | 0.05 | 4 | 15.36 | 16.60 | 108 | 16.14 |
| LODI | 40 | USWB | 1.47 | 0.25 | 17 | 15.26 | 16.21 | 106 | 16.20 |
| ANTIUCH FIBREBOARD MILL | | | | | | | | | |
| STOCKTON FS NO 4 | 11 | USWB | 1.08 | 0.40 | 37 | 12.47 | 11.75 | 94 | 13.17 |
| STOCKTON FS NO 4 | 11 | USWB | 1.27 | 0.50 | 39 | 13.50 | 14.51 | 107 | 14.35 |
| DAKDALE | 155 | DWR | 1.45 | 0.52 | 36 | 13.36 | 13.11 | 98 | 14.20 |
| KNIGHTS FERRY 2SE | 315 | USWB | 2.02 | - | - | 17.07 | - | - | 18.02 |
| TRACY CARBONA | 140 | USWB | 0.79 | 0.16 | 20 | 8.73 | 6.96 | 80 | 9.34 |
| MODESTO | | | | | | | | | |
| DENAIR 3NNE | 137 | USWB | 1.23 | 0.51 | 41 | 11.24 | 10.34 | 92 | 11.98 |
| DENAIR 3NNE | 137 | USWB | 1.26 | 0.60 | 48 | 11.53 | 10.27 | 89 | 12.26 |
| NEWMAN 2NW | 108 | USWB | 1.05 | 0.13 | 12 | 9.92 | 8.58 | 86 | 10.47 |
| MERCED FS NO 2 | 169 | USWB | 1.22 | 0.13 | 11 | 11.43 | 12.45 | 109 | 12.09 |
| LOS BANOS | 125 | USWB | 0.88 | 0.03 | 3 | 8.38 | 7.71 | 92 | 8.85 |
| DELTA RANCH | | | | | | | | | |
| FRIANT GOVERNMENT CAMP | 410 | USWB | 1.16 | - | - | 8.86 | - | - | 9.43 |
| FRIANT GOVERNMENT CAMP | 410 | USWB | 1.36 | 0.17 | 12 | 13.94 | 12.11 | 87 | 14.34 |
| MADERA | 268 | USWB | 1.17 | 0.21 | 18 | 10.05 | 9.54 | 95 | 10.69 |
| MENDOTA DAM | 166 | USWB | 0.80 | 0.26 | 32 | 7.15 | 7.05 | 99 | 7.61 |
| FRESNO WB AP | 331 | USWB | 1.15 | 0.25 | 22 | 10.49 | 9.00 | 86 | 10.96 |
| ORANGE COVE | | | | | | | | | |
| PANOCHE | 431 | USWB | 1.36 | 0.31 | 23 | 12.42 | 9.43 | 76 | 13.01 |
| PANOCHE | 1265 | USWB | 0.81 | 0.07 | 9 | 8.05 | 6.46 | 80 | 8.48 |
| LEMON COVE | 513 | USWB | 1.54 | 0.28 | 18 | 13.01 | 11.32 | 87 | 13.82 |
| VISALIA | 354 | USWB | 1.08 | 0.24 | 22 | 9.48 | 7.89 | 83 | 9.96 |
| HANFORD | 242 | USWB | 0.81 | 0.16 | 20 | 7.64 | 5.77 | 76 | 8.00 |
| LINDSAY | | | | | | | | | |
| COALINGA | 395 | USWB | 1.24 | 0.72 | 58 | 10.78 | 9.32 | 86 | 11.49 |
| COALINGA | 671 | USWB | 0.61 | 0.09 | 15 | 6.87 | 4.66 | 68 | 7.34 |
| PORTERVILLE | 393 | USWB | 1.24 | 0.45 | 36 | 10.34 | 7.41 | 72 | 10.93 |
| ANGIOLA | 205 | USWB | 0.89 | - | - | 7.05 | - | - | 7.46 |
| WASCO | 333 | USWB | 0.86 | 0.20 | 23 | 6.16 | 4.56 | 74 | 6.55 |
| SOUTH BELRIDGE | | | | | | | | | |
| BAKERSFIELD WB AP | 575 | DWR | 0.61 | 0.04 | 7 | 4.77 | 3.22 | 68 | 5.16 |
| BAKERSFIELD WB AP | 494 | USWB | 0.78 | 0.16 | 21 | 5.75 | 3.44 | 60 | 6.16 |
| TEHACHAPI | 3975 | USWB | 0.85 | 0.71 | 84 | 9.60 | 8.12 | 85 | 11.09 |
| TEJON RANCHO | 1425 | USWB | 1.61 | 1.08 | 67 | 11.00 | 9.49 | 86 | 11.90 |
| PATTIWAY | 3868 | USWB | 1.12 | 0.40 | 36 | 9.13 | 6.19 | 68 | 9.79 |
| UPPER SACRAMENTO, PIT, AND MC CLOUD RIVERS | | | | | | | | | |
| JESS VALLEY | 5290 | USWB | 1.72 | 2.25 | 131 | 12.29 | 14.07 | 114 | 17.40 |
| ALTURAS RS | 4365 | USWB | 1.04 | 0.84 | 81 | 9.65 | 11.86 | 123 | 13.10 |
| MOUNT SHASTA WB CITY | 3544 | USWB | 2.90 | 1.15 | 40 | 32.16 | 34.66 | 108 | 36.70 |
| MC CLOUD | 3300 | USWB | 4.00 | 0.33 | 8 | 44.78 | 53.99 | 121 | 50.28 |
| HAT CREEK PH NO 1 | 3015 | PG&E | 1.35 | 0.34 | 25 | 15.08 | 20.18 | 134 | 18.08 |
| DUNSMUIR RS | | | | | | | | | |
| PIT RIVER PH NO 5 | 2420 | USWB | 4.01 | 0.44 | 11 | 51.43 | 66.42 | 129 | 57.83 |
| PIT RIVER PH NO 5 | 1458 | PG&E | 5.73 | 0.39 | 7 | 67.21 | 90.78 | 135 | 75.22 |
| VOLLMERS | 1359 | USWB | 5.30 | 0.45 | 8 | 61.02 | 77.66 | 127 | 66.65 |
| SHASTA DAM | 1076 | USBR | 4.83 | 0.20 | 4 | 53.08 | 68.25 | 129 | 57.83 |
| FEATHER RIVER | | | | | | | | | |
| SIERRAVILLE RS | 4975 | USWB | 1.72 | 1.72 | 100 | 23.05 | 29.90 | 130 | 25.84 |
| VINTON | 4945 | DWR | 0.87 | 0.75 | 86 | 10.68 | 15.45 | 145 | 13.19 |
| PORTOLA | 4838 | USWB | 1.52 | 1.12 | 74 | 18.22 | 22.43 | 123 | 20.81 |
| CANYON DAM | 4555 | USWB | 2.94 | 0.82 | 28 | 35.03 | 45.68 | 130 | 38.61 |
| CHESTER | 4525 | USWB | 2.35 | 0.78 | 33 | 28.80 | 38.08 | 132 | 32.34 |
| BRUSH CREEK RS | | | | | | | | | |
| QUINCY RS | 3560 | USWB | 5.73 | 2.37 | 41 | 66.13 | 86.06 | 130 | 71.04 |
| QUINCY RS | 3409 | USWB | 3.28 | 1.64 | 50 | 36.68 | 50.07 | 136 | 40.17 |
| CARIBOU PH | 2986 | PG&E | 3.21 | 1.04 | 32 | 37.26 | 45.67 | 123 | 40.61 |
| LAKE WILENDOR | 2040 | DWR | 4.70 | 1.23 | 26 | 46.32 | 71.17 | 154 | 49.78 |
| BUCKS CREEK PH (STORRIE) | 1760 | PG&E | 5.43 | 2.05 | 38 | 60.32 | 72.67 | 120 | 65.17 |
| YUBA RIVER | | | | | | | | | |
| SODA SPRINGS 1E | 6885 | USWB | 5.72 | 4.22 | 74 | 60.09 | 59.13 | 98 | 66.08 |
| BOWMAN DAM | 5347 | USWB | 5.33 | 3.78 | 71 | 61.01 | 76.02 | 125 | 67.03 |
| LAKE SPAULDING | 5156 | USWB | 5.75 | 3.90 | 68 | 61.05 | 75.46 | 124 | 66.90 |
| DEER CREEK PH | 3700 | USWB | 5.58 | 2.88 | 52 | 63.03 | 80.31 | 127 | 67.87 |
| DOWNIEVILLE RS | 2895 | USWB | 5.19 | 2.52 | 49 | 56.39 | 68.35 | 121 | 61.45 |
| CAMPTONVILLE RS | | | | | | | | | |
| GRASS VALLEY | 2755 | USWB | 5.08 | 1.72 | 34 | 55.18 | 67.07 | 122 | 59.43 |
| GRASS VALLEY | 2400 | USWB | 4.84 | 0.93 | 19 | 51.46 | 54.40 | 106 | 55.02 |
| NEVADA CITY | 2600 | USWB | 4.62 | 1.34 | 29 | 49.81 | 57.23 | 115 | 53.31 |
| INDIAN ROCK | 2240 | DWR | 5.34 | 1.87 | 35 | 63.12 | 72.09 | 114 | 67.74 |
| DOBBINS COLGATE FOREBAY | 1550 | USWB | 3.50 | 0.82 | 23 | 38.16 | 33.13 | 87 | 41.00 |
| COLGATE PH | | | | | | | | | |
| NORTH SAN JUAN | 585 | PG&E | 3.49 | 0.88 | 25 | 37.13 | 45.51 | 123 | 39.81 |
| NORTH SAN JUAN | 2081 | DWR | 4.18 | 0.86 | 21 | 44.62 | 51.71 | 116 | 47.93 |

TABLE 1 - PRECIPITATION DATA (CONTINUED)

| AREA, DRAINAGE BASIN AND PRECIPITATION STATION | ELEV IN FEET | SOURCE OF DATA (1) | PRECIPITATION (2) | | | | | | |
|--|--------------------|--------------------------|-------------------|-----------------------|--------------------------|----------------------------|------------------------|--------------------------|---------------|
| | | | APRIL 1970 | | | OCT 1, 1969 - APR 30, 1970 | | | AVERAGE |
| | | | AVERAGE | TOTAL FOR MONTH | PERCENT OF AVERAGE | AVERAGE | TOTAL FOR SEASON | PERCENT OF AVERAGE | WATER YEAR |
| CENTRAL VALLEY AREA (CONTINUED) | | | | | | | | | |
| AMERICAN RIVER | | | | | | | | | |
| TWIN LAKES | 7829 | PG&E | 4.08 | 3.80 | 93 | 42.51 | 49.65 | 117 | 48.06 |
| BIG BEND RS | 5739 | USWB | 5.92 | 3.54 | 60 | 63.09 | 78.69 | 125 | 69.13 |
| BLUE CANYON WB AP | 5280 | USWB | 5.04 | 3.40 | 67 | 56.46 | 74.38 | 132 | 61.35 |
| SLY PARK | 3530 | USBR | 4.46 | 1.96 | 44 | 46.47 | 52.39 | 113 | 49.96 |
| PACIFIC HOUSE | 3440 | USWB | 4.07 | 2.60 | 64 | 47.35 | 48.16 | 102 | 51.00 |
| GEURGETOWN RS | 3001 | USWB | 4.40 | 2.00 | 45 | 50.24 | 61.37 | 122 | 53.84 |
| CGLFAX | 2418 | USWB | 4.08 | 1.08 | 26 | 43.94 | 49.00 | 112 | 47.03 |
| PLACERVILLE | 1890 | USWB | 3.54 | 1.23 | 35 | 37.01 | 40.73 | 110 | 39.70 |
| AUBURN | 1297 | USWB | 3.12 | 0.47 | 15 | 32.78 | 37.96 | 116 | 34.89 |
| FULSUM DAM | 350 | USBR | 2.03 | 0.29 | 14 | 22.16 | 21.82 | 98 | 23.58 |
| MOKELUMNE RIVER | | | | | | | | | |
| SALT SPRINGS PH | 3700 | PG&E | 3.87 | 3.83 | 99 | 39.78 | 49.01 | 123 | 43.89 |
| WEST POINT 3 SW | 2365 | USWB | 3.21 | 3.01 | 94 | 34.28 | 38.90 | 113 | 36.78 |
| TIGER CREEK PH | 2355 | PG&E | 4.09 | 2.84 | 69 | 42.44 | 50.78 | 120 | 45.79 |
| FIDDLETOWN LYNCH RANCH | 2140 | USWB | 2.50 | 2.31 | 92 | 31.99 | 37.25 | 116 | 34.20 |
| ELECTRA PH | 715 | PG&E | 2.75 | 2.70 | 98 | 27.83 | 31.88 | 115 | 29.77 |
| STANISLAUS RIVER | | | | | | | | | |
| PINECREST | 5620 | PG&E | 4.05 | 3.81 | 94 | 38.09 | 36.22 | 95 | 42.00 |
| SPRING GAP FUREBAY | 4875 | PG&E | 4.29 | 2.73 | 64 | 38.45 | 42.21 | 110 | 41.61 |
| CALAVERAS BIG TREES | 4696 | USWB | 4.83 | 4.25 | 88 | 50.22 | 59.31 | 118 | 53.90 |
| TUOLUMNE RIVER | | | | | | | | | |
| LAKE ELEANOR | 4662 | USWB | 3.67 | 3.11 | 85 | 39.20 | 42.52 | 108 | 42.66 |
| HETCH HETCHY | 3870 | USWB | 3.14 | 2.55 | 81 | 31.33 | 32.77 | 105 | 35.01 |
| SCNDRA RS | 1749 | USWB | 2.31 | 1.94 | 67 | 29.99 | 32.65 | 109 | 31.95 |
| MERCED RIVER | | | | | | | | | |
| YOSEMITE NP | 3985 | USWB | 3.26 | 1.74 | 53 | 33.66 | 35.18 | 105 | 36.69 |
| DUDLEYS | 3000 | USWB | 3.54 | 0.72 | 20 | 36.22 | 35.62 | 98 | 38.36 |
| MARIPUSA | 2011 | USWB | 2.61 | 0.92 | 35 | 28.46 | 23.01 | 81 | 29.99 |
| EXCHEQUER RESERVOIR | 484 | USWB | 1.84 | 0.65 | 35 | 18.04 | 16.92 | 94 | 19.10 |
| UPPER SAN JOAQUIN RIVER | | | | | | | | | |
| FLORENCE LAKE | 7345 | SCEC | 2.05 | 1.40 | 68 | 19.94 | 17.62 | 88 | 23.66 |
| HUNTINGTON LAKE | 7020 | USWB | 3.03 | 3.76 | 124 | 29.26 | 27.42 | 94 | 32.50 |
| CRANE VALLEY PH | 3440 | PG&E | 3.74 | 1.96 | 52 | 38.02 | 32.75 | 86 | 40.44 |
| NORTH FORK RS | 2630 | USWB | 3.11 | 2.01 | 65 | 31.50 | 27.98 | 89 | 33.54 |
| KINGS RIVER | | | | | | | | | |
| GRANT GROVE | 6580 | USWB | 4.61 | 2.50 | 54 | 42.32 | 31.70 | 75 | 44.25 |
| BALCH PH | 1720 | USWB | 3.02 | 1.54 | 51 | 26.55 | 25.82 | 97 | 28.31 |
| PINE FLAT DAM | 615 | USCE | 1.86 | 0.31 | 17 | 18.45 | 14.07 | 76 | 19.44 |
| KAWEAH RIVER | | | | | | | | | |
| GIANT FOREST | 6412 | USWB | 4.56 | 2.27 | 50 | 40.79 | 33.28 | 82 | 43.80 |
| ASH MOUNTAIN | 1708 | USWB | 3.05 | 1.08 | 35 | 24.44 | 20.89 | 85 | 26.13 |
| THREE RIVERS EDISON PH NO 2 | 950 | USWB | 2.42 | 0.99 | 41 | 19.81 | 16.61 | 84 | 21.06 |
| TULE RIVER | | | | | | | | | |
| TULE RIVER INTAKE | 2450 | SCEC | 2.90 | 1.63 | 56 | 25.99 | 25.59 | 98 | 26.70 |
| KERN RIVER | | | | | | | | | |
| KERN RIVER INTAKE NO 3 | 3650 | USWB | 1.39 | 0.39 | 28 | 16.75 | 12.85 | 77 | 17.72 |
| GLENNVILLE | 3140 | USWB | 2.11 | 1.14 | 54 | 16.67 | 13.42 | 81 | 18.03 |
| KERN RIVER PH NO 3 | 2703 | USWB | 0.78 | 0.34 | 44 | 10.49 | 8.22 | 78 | 11.31 |
| WUFFORD HEIGHTS | 2700 | USWB | 0.76 | 0.25 | 33 | 9.82 | 8.00 | 81 | 10.41 |
| LAHONTAN AREA | | | | | | | | | |
| SURPRISE VALLEY | | | | | | | | | |
| CEDARVILLE | 4670 | USWB | 1.02 | 1.35 | 132 | 9.94 | 14.52 | 146 | 12.80 |
| FORT BIDWELL | 4498 | USWB | 1.05 | 1.17 | 111 | 11.76 | 15.75 | 134 | 14.84 |
| MADLINE PLAINS-HONEY LAKE | | | | | | | | | |
| RAVENDALE JIM MARR RANCH | 5540 | DWR | 0.50 | 0.41 | 82 | 6.26 | 9.50 | 152 | 8.46 |
| SUSANVILLE COURTHOUSE | 4325 | DWR | 1.02 | 0.59 | 58 | 14.79 | 20.00 | 135 | 17.21 |
| DOYLE | 4240 | USWB | 0.60 | 0.22 | 37 | 8.38 | 13.49 | 161 | 10.19 |
| SUSANVILLE AP | 4148 | USWB | 0.81 | 0.40 | 49 | 12.60 | 17.83 | 141 | 14.72 |
| WENDEL 1E | 4040 | DWR | 0.45 | 0.10 | 22 | 6.40 | 7.96 | 124 | 7.87 |
| TRUCKEE AND TAHOE BASIN | | | | | | | | | |
| TAHOE CITY | 6230 | USWB | 2.25 | 1.60 | 71 | 28.80 | 34.04 | 118 | 31.74 |
| TRUCKEE RS | 5995 | USWB | 2.36 | 1.87 | 79 | 28.45 | 32.84 | 115 | 31.59 |
| CARSON RIVER | | | | | | | | | |
| WOODFORDS | 5671 | USWB | 1.47 | 0.56 | 38 | 17.48 | 21.75 | 124 | 21.52 |
| WALKER RIVER | | | | | | | | | |
| BRIDGEPORT | 6470 | USWB | 0.51 | 0.31 | 61 | 7.13 | 6.52 | 91 | 9.17 |
| MONO BASIN | | | | | | | | | |
| GELLERY LAKE | 9600 | USWB | 1.94 | 1.34 | 69 | 20.28 | 20.59 | 102 | 23.99 |
| GEM LAKE | 8970 | USWB | 1.63 | 0.60 | 37 | 18.10 | 12.44 | 69 | 21.17 |
| MONO LAKE | 6450 | USWB | 0.86 | 0.12 | 14 | 14.93 | 8.68 | 58 | 17.05 |

TABLE 1 - PRECIPITATION DATA (CONTINUED)

| AREA, DRAINAGE BASIN AND PRECIPITATION STATION | ELEV IN FEET | SOURCE OF DATA (1) | PRECIPITATION (2) | | | | | | |
|--|--------------------|--------------------------|-------------------|-----------------------|--------------------------|----------------------------|------------------------|--------------------------|--------------------------|
| | | | APRIL 1970 | | | OCT 1, 1969 - APR 30, 1970 | | | AVERAGE WATER YEAR |
| | | | AVERAGE | TOTAL FOR MONTH | PERCENT OF AVERAGE | AVERAGE | TOTAL FOR SEASON | PERCENT OF AVERAGE | |
| LAHUNTAN AREA (CONTINUED) | | | | | | | | | |
| OWENS RIVER | | | | | | | | | |
| WHITE MOUNTAIN NO 2 | 1247 | USWB | 1.20 | 1.08 | 90 | 11.85 | 6.85 | 58 | 14.38 |
| SOUTH LAKE | 9580 | SCEC | 1.56 | 0.72 | 46 | 14.62 | 11.72 | 80 | 17.67 |
| LAKE SABRINA | 9065 | SCEC | 1.43 | 0.50 | 35 | 14.44 | 7.80 | 54 | 17.41 |
| CROOKED CREEK | 6700 | LADWP | 0.65 | 0.23 | 35 | 8.63 | 4.73 | 55 | 10.18 |
| BIG PINES PH NO 3 | 4680 | LADWP | 0.51 | 0.18 | 35 | 7.63 | 3.42 | 45 | 8.44 |
| | | | | | | | | | |
| BISHOP WB AP | 4108 | USWB | 0.43 | 0.45 | 105 | 4.94 | 2.09 | 42 | 5.75 |
| INDEPENDENCE | 3950 | USWB | 0.35 | 0.00 | 0 | 4.33 | 2.99 | 69 | 5.04 |
| LA AQUEDUCT AT INTAKE | 3841 | LADWP | 0.34 | 0.03 | 9 | 4.70 | 2.86 | 61 | 5.35 |
| HAIWEE | 3825 | USWB | 0.48 | 0.01 | 2 | 5.22 | 3.61 | 69 | 6.07 |
| CUTTONWOOD GATES | 3710 | LADWP | 0.48 | 0.00 | 0 | 5.41 | 2.90 | 54 | 6.17 |
| | | | | | | | | | |
| DEATH VALLEY | | | | | | | | | |
| DEATH VALLEY | -194 | USWB | 0.18 | 0.00 | 0 | 1.32 | 1.73 | 131 | 1.80 |
| | | | | | | | | | |
| MOJAVE DESERT | | | | | | | | | |
| BIG PINES CAMP | 6860 | LACFCD | 2.20 | 0.69 | 31 | 23.07 | 16.40 | 71 | 24.92 |
| FAIRMONT | 3060 | USWB | 1.25 | 0.00 | 0 | 14.24 | 7.74 | 54 | 14.99 |
| PALMDALE FAA AP | 2517 | USWB | 0.55 | 0.00 | 0 | 7.78 | 1.76 | 23 | 8.37 |
| INYO KERN | 2440 | USWB | 0.21 | 0.00 | 0 | 3.24 | 2.56 | 79 | 4.15 |
| DAGGETT FAA AP | 1922 | USWB | 0.30 | 0.00 | 0 | 3.53 | 1.03 | 29 | 4.54 |
| BAKER 9NNW | 1045 | USWB | 0.22 | 0.00 | 0 | 2.72 | 1.77 | 65 | 3.84 |
| | | | | | | | | | |
| COLORADO DESERT AREA | | | | | | | | | |
| TWENTYNINE PALMS | 1975 | USWB | 0.04 | 0.00 | 0 | 2.47 | 0.75 | 31 | 3.97 |
| IRON MOUNTAIN | 922 | USWB | 0.14 | 0.00 | 0 | 2.04 | 1.40 | 69 | 2.99 |
| NEEDLES FAA AP | 913 | USWB | 0.27 | 0.02 | 7 | 3.09 | 1.47 | 48 | 4.56 |
| BLYTHE FAA AP | 390 | USWB | 0.20 | 0.00 | 0 | 2.51 | 1.47 | 59 | 3.84 |
| | | | | | | | | | |
| YUMA, ARIZONA, WB AP | 199 | USWB | 0.12 | 0.00 | 0 | 1.39 | 1.38 | 99 | 2.26 |
| IMPERIAL | -64 | USWB | 0.14 | 0.00 | 0 | 1.93 | 3.17 | 164 | 2.72 |
| THERMAL FAA AP | -120 | USWB | 0.08 | 0.00 | 0 | 2.09 | 2.12 | 101 | 2.85 |

(1) USWB - UNITED STATES WEATHER BUREAU. LACFCD - LOS ANGELES COUNTY FLOOD CONTROL DISTRICT. DWR - CALIFORNIA DEPARTMENT OF WATER RESOURCES. PG&E - PACIFIC GAS AND ELECTRIC COMPANY. SCEC - SOUTHERN CALIFORNIA Edison COMPANY. LADWP - LOS ANGELES DEPARTMENT OF WATER AND POWER. MMWD - MARIN MUNICIPAL WATER DISTRICT. CSJ - CITY OF SAN JOSE. USBR - UNITED STATES BUREAU OF RECLAMATION. CSD - CITY OF SAN DIEGO. USCE - UNITED STATES ARMY CORPS OF ENGINEERS.

(2) MONTHLY AND SEASONAL TOTALS IN INCHES. AVERAGES IN INCHES ARE BASED

TABLE 2

SNOW COURSE DATA

| AREA, DRAINAGE BASIN, AND SNOW COURSE (1) | CALIF NUMBER | ELEV IN FEET | DATE OF SURVEY | DEPTH IN INCHES | DENSITY IN PERCENT | WATER CONTENT | | | |
|--|-----------------|--------------------|----------------------|-----------------------|--------------------------|---------------|---------|---------|----------|
| | | | | | | IN INCHES | IN PER- | APRIL 1 | ONE YEAR |
| | | | | | | | CENT OF | AVG (2) | AGO IN |
| | | | | | | APR 1 | AVG. | INCHES | INCHES |
| NORTH COASTAL AREA | | | | | | | | | |
| SCUTT RIVER | | | | | | | | | |
| MIDDLE BOULDER 1 | 5 | 6600 | 5- 4-70 | 47.2 | 54 | 25.6 | 84 | 30.5 | 35.0 |
| MIDDLE BOULDER 3 | 311 | 6200 | 5- 4-70 | 31.8 | 49 | 15.6 | 60 | 26.2 | 32.6 |
| DYNAMITE MEADOW | 298 | 5700 | 5- 4-70 | 15.4 | 48 | 7.4 | 45 | 16.6 | 25.0 |
| SWAMPY JUHN | 285 | 5500 | 4-29-70 | 52.4 | 43 | 22.6 | 61 | 37.2 | 58.2 |
| TRINITY RIVER | | | | | | | | | |
| RED ROCK MOUNTAIN | 10 | 6700 | 5- 4-70 | 61.3 | 55 | 33.5 | 79 | 42.2 | 64.2 |
| BEAR BASIN | 11 | 6500 | 5- 4-70 | 56.8 | 55 | 31.2 | 83 | 37.5 | 56.2 |
| SHIMMY LAKE | 12 | 6200 | 5- 4-70 | 62.2 | 59 | 36.7 | 80 | 46.1 | 76.5 |
| HIGHLAND LAKES | 16 | 6000 | 5- 1-70 | 0.0 | - | 0.0 | 0 | 31.3 | 47.4 |
| BIG FLAT | 17 | 5100 | 5- 4-70 | 0.0 | - | 0.0 | 0 | 14.9 | 22.7 |
| SOUTH COASTAL AREA | | | | | | | | | |
| SNATA ANA RIVER | | | | | | | | | |
| CHRISTMAS TREE HILL | 351 | 8500 | 5- 1-70 | 20.0 | 40 | 8.0 | - | (3) | 45.0 |
| SAN YCA | 352 | 7500 | 5- 1-70 | 0.0 | - | 0.0 | - | (3) | 0.0 |
| CENTRAL VALLEY AREA | | | | | | | | | |
| SACRAMENTO RIVER | | | | | | | | | |
| MCUNT SHASTA | 18 | 7900 | 4-30-70 | 110.0 | 48 | 53.3 | 110 | 48.5 | 77.5 |
| SAND FLAT | 19 | 6800 | 4-30-70 | 81.7 | 49 | 39.9 | 99 | 40.2 | 60.9 |
| SLATE CREEK | 22 | 5600 | 5- 1-70 | 0.0 | - | 0.0 | 0 | 27.1 | 45.4 |
| MCCLOUD RIVER | | | | | | | | | |
| STUUTS MEADOW | 25 | 5400 | 4-27-70 | 17.3 | 42 | 7.2 | 18 | 40.5 | 60.2 |
| PIT RIVER | | | | | | | | | |
| CEDAR PASS | 30 | 7100 | 5- 1-70 | 39.9 | 37 | 14.7 | 88 | 16.7 | 18.5 |
| THOUSAND LAKES | 33 | 6500 | 4-30-70 | 62.8 | 54 | 33.9 | 95 | 35.7 | 51.8 |
| ADIN MOUNTAINS | 35 | 6350 | 4-29-70 | 22.2 | 37 | 8.2 | 62 | 13.2 | 9.6 |
| NEW MANZANITA LAKE | 343 | 5900 | 4-30-70 | 0.0 | - | 0.0 | 0 | 7.7 | 3.2 |
| FEATHER RIVER | | | | | | | | | |
| UPPER LASSEN PEAK | 336 | 8500 | 5- 7-70 | 189.6 | 54 | 101.6 | 131 | 77.4 | 123.2 |
| LOWER LASSEN PEAK | 47 | 8250 | 5- 6-70 | 187.3 | 56 | 105.0 | 139 | 75.4 | 118.2 |
| KETTLE ROCK | 361 | 7300 | 4-30-70 | 39.6 | 42 | 16.6 | - | (3) | 33.1 |
| MOUNT DYER 1 | 48 | 7100 | 4-29-70 | 50.4 | 42 | 21.4 | 88 | 24.3 | 36.0 |
| GRIZZLY | 359 | 6900 | 4-29-70 | 57.4 | 41 | 23.8 | - | (3) | 40.2 |
| EUREKA BOWL | 279 | 6800 | 5- 3-70 | 53.9 | 52 | 27.8 | 66 | 42.0 | 64.1 |
| ROWLAND CREEK | 280 | 6700 | 4-29-70 | 41.0 | 40 | 16.4 | 94 | 17.4 | 26.8 |
| MT HOUGH | 360 | 6700 | 5- 5-70 | 33.0 | 47 | 15.4 | - | (3) | 41.4 |
| EUREKA LAKE | 52 | 6200 | 5- 3-70 | 21.6 | 46 | 10.0 | 31 | 32.0 | 46.3 |
| MOUNT DYER 2 | 290 | 6050 | 4-29-70 | 14.2 | 39 | 5.6 | 35 | 15.8 | 23.2 |
| FRENCHMAN COVE | 353 | 5800 | 5- 1-70 | 0.0 | - | 0.0 | - | (3) | 0.0 |
| ANTELOPE RIDGE | 354 | 5650 | 5- 1-70 | 0.0 | - | 0.0 | - | (3) | 0.0 |
| ABBAY | 355 | 5650 | 5- 4-70 | 0.0 | - | 0.0 | - | (3) | 7.0 |
| LETTERBOX | 49 | 5600 | 4-28-70 | 53.3 | 43 | 23.1 | 49 | 47.0 | 82.2 |
| MOUNT STOVER | 55 | 5600 | 4-29-70 | 22.6 | 38 | 8.7 | 54 | 16.2 | 29.3 |
| BROWNS CAMP | 56 | 5400 | 4-28-70 | 0.0 | - | 0.0 | 0 | 22.3 | 48.4 |
| HASKINS FLAT | 57 | 5200 | 4-28-70 | 6.8 | 19 | 1.3 | 4 | 29.2 | 51.1 |
| CHESTER FLAT | 61 | 4600 | 4-29-70 | 0.0 | - | 0.0 | 0 | 6.8 | 10.5 |
| STONY CREEK | | | | | | | | | |
| ANTHONY PEAK | 62 | 6200 | 4-30-70 | 8.2 | 52 | 4.3 | 15 | 28.9 | 48.7 |
| YUBA RIVER | | | | | | | | | |
| CASTLE CREEK 5 | 65 | 7400 | 4-30-70 | 98.5 | 50 | 49.7 | 98 | 50.9 | 84.6 |
| SAWMILL FLAT | 71 | 7100 | 4-28-70 | 92.9 | 42 | 38.9 | 77 | 50.4 | 81.3 |
| DONNER SUMMIT | 69 | 6900 | 4-28-70 | 53.2 | 41 | 21.7 | 56 | 38.6 | 65.0 |
| YUBA PASS | 74 | 6700 | 5- 5-70 | 7.9 | 49 | 3.9 | 13 | 30.4 | 47.6 |
| FURNACE FLAT | 76 | 6700 | 4-28-70 | 79.8 | 41 | 32.6 | 70 | 46.8 | 79.2 |
| LAKE FORDYCE | 77 | 6500 | 4-28-70 | 53.7 | 44 | 23.4 | 58 | 40.0 | 70.0 |
| CISCO | 80 | 5900 | 4-28-70 | 12.5 | 17 | 2.1 | 8 | 24.8 | 41.6 |
| CHAPMAN CREEK | 372 | 5850 | 5- 5-70 | 0.0 | - | 0.0 | - | (3) | 35.8 |
| GIBSONVILLE | 277 | 5400 | 5- 4-70 | 0.0 | - | 0.0 | 0 | 31.4 | 36.6 |
| LAKE SPAULDING | 85 | 5200 | 4-28-70 | 0.0 | - | 0.0 | 0 | 24.9 | 36.9 |
| AMERICAN RIVER | | | | | | | | | |
| UPPER CARSON PASS | 106 | 8500 | 4-30-70 | 64.6 | 42 | 27.2 | 79 | 34.6 | 63.0 |
| EMIGRANT VALLEY | 297 | 8400 | 5- 1-70 | 92.7 | 48 | 44.1 | 102 | 43.3 | 75.1 |
| LOWER CARSON PASS | 331 | 8400 | 4-30-70 | 78.0 | 45 | 35.0 | 94 | 37.2 | 66.4 |
| CAPLES LAKES | 107 | 8000 | 4-30-70 | 57.7 | 42 | 24.2 | 81 | 30.0 | 53.6 |
| ALPHA | 365 | 7600 | 4-30-70 | 60.8 | 44 | 26.8 | - | (3) | 57.8 |
| LOST CORNER MOUNTAIN | 338 | 7500 | 5- 1-70 | 54.8 | 44 | 24.1 | 74 | 32.4 | 57.7 |
| ECHO SUMMIT | 108 | 7450 | 4-29-70 | 59.7 | 42 | 25.1 | 67 | 37.3 | 59.9 |
| LAKE AUDRAIN | 110 | 7300 | 4-29-70 | 66.5 | 42 | 28.2 | 79 | 35.5 | 60.5 |

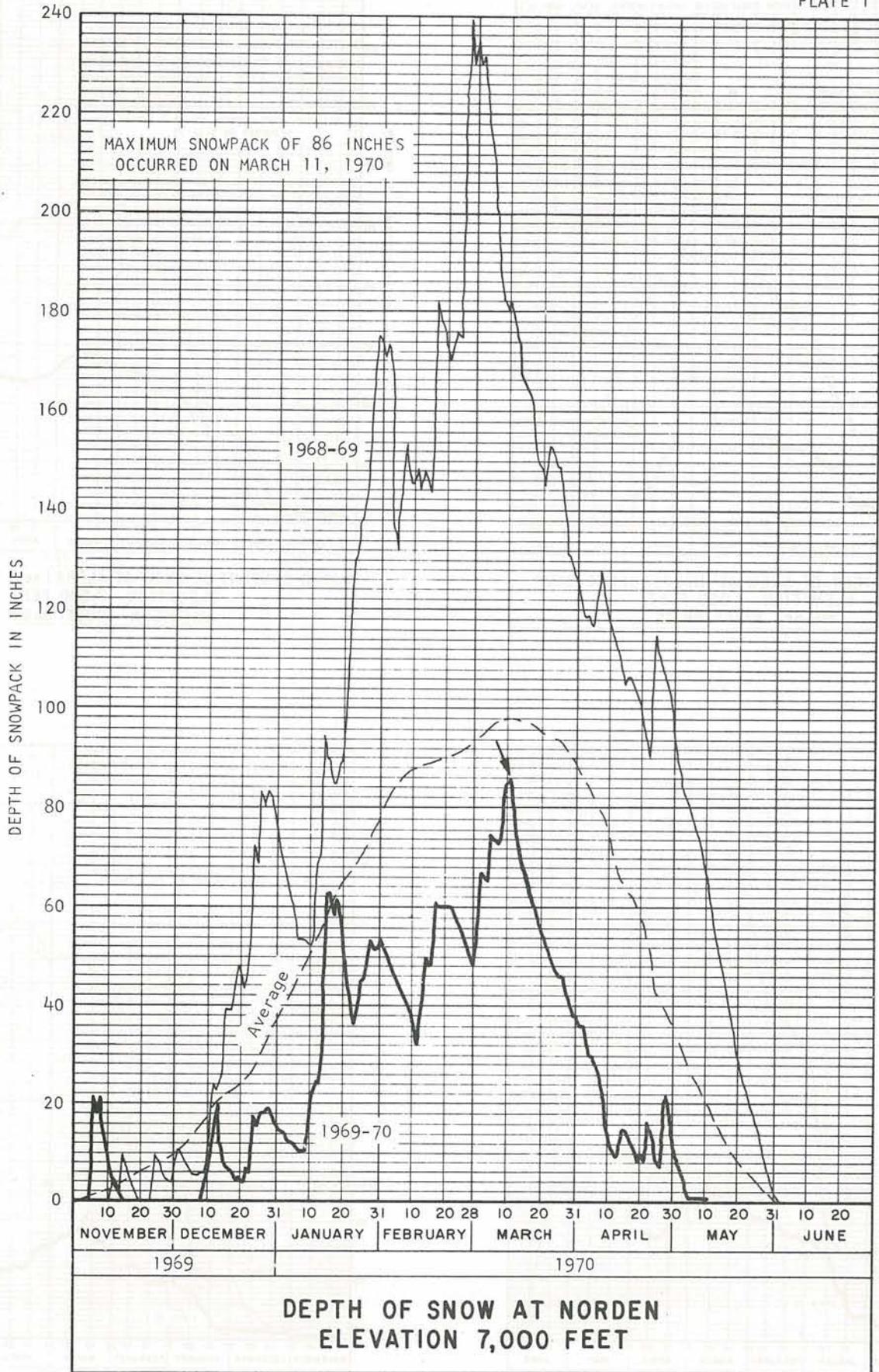
TABLE 2 - SNOW COURSE DATA (CONTINUED)

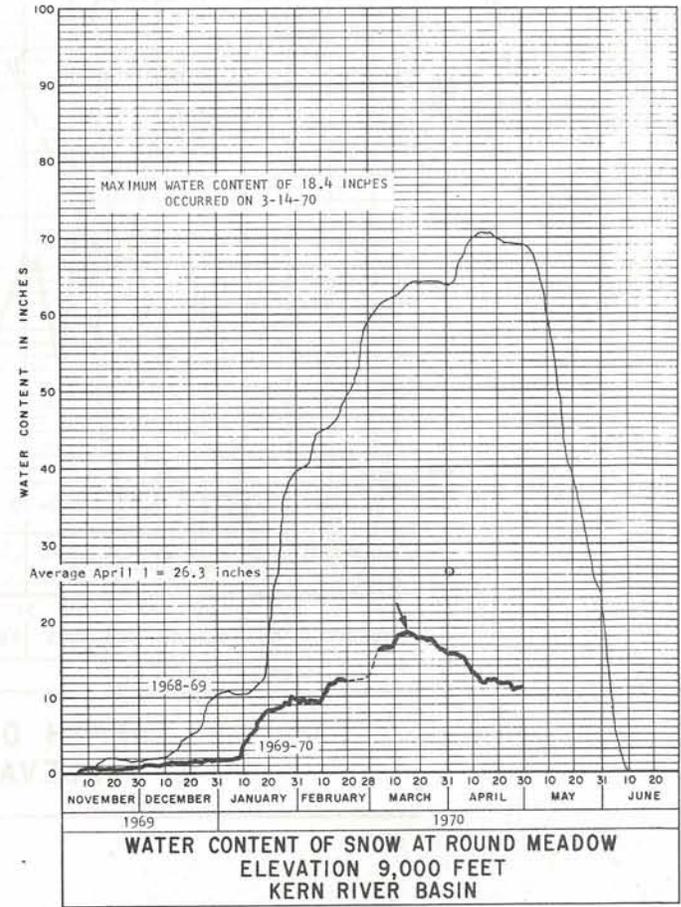
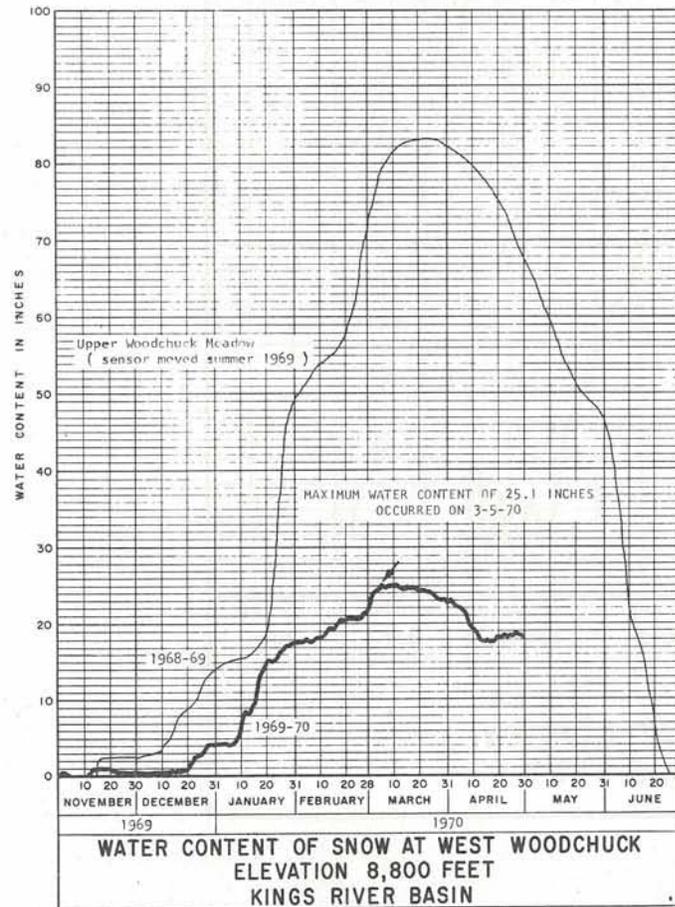
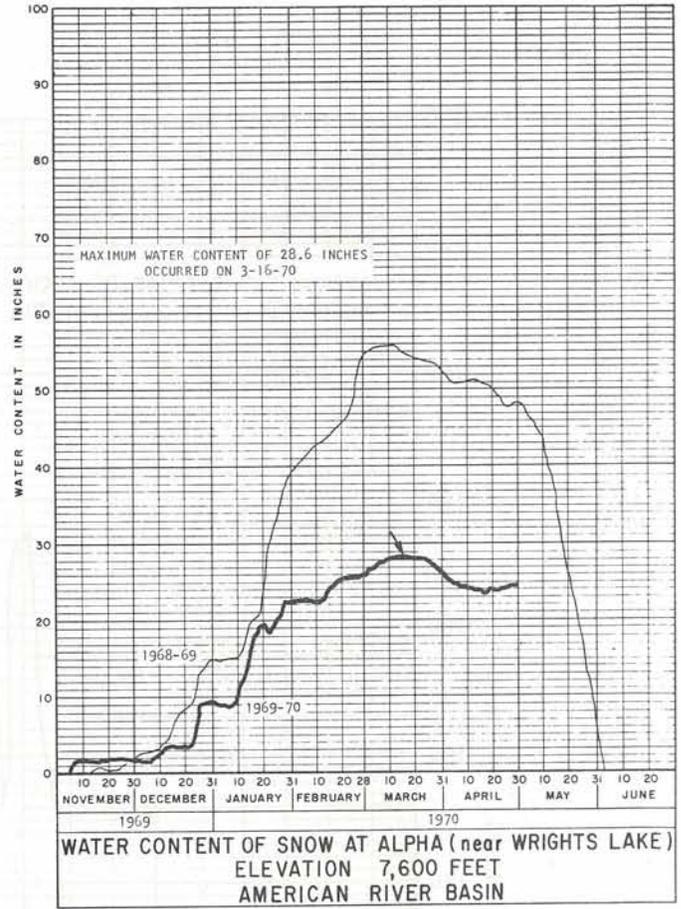
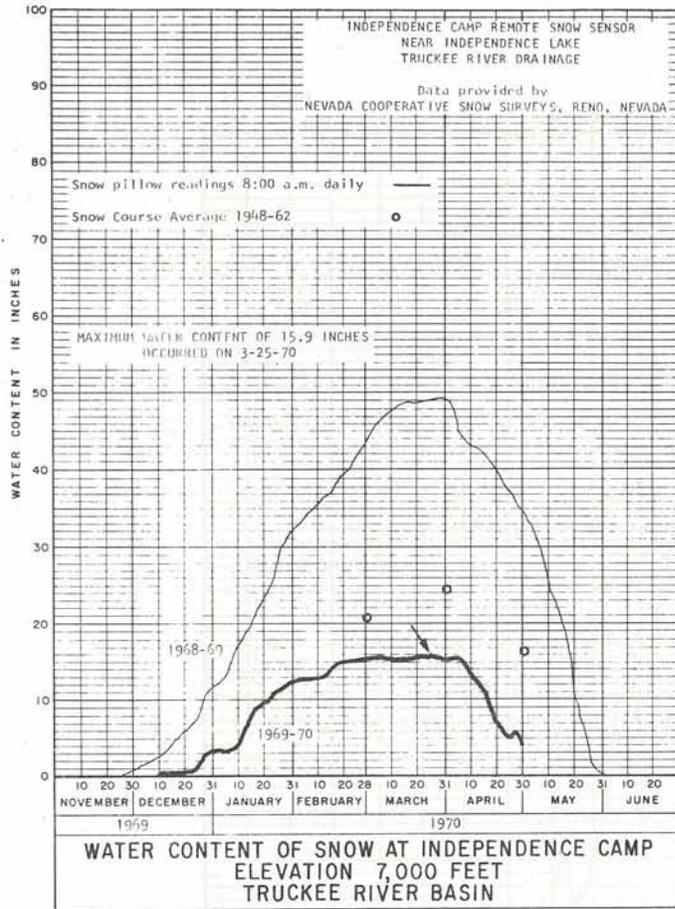
| AREA, DRAINAGE BASIN, AND SNOW COURSE (1) | CALIF NUMBER | ELEV IN FEET | DATE OF SURVEY | DEPTH IN INCHES | DENSITY IN PERCENT | WATER CONTENT | | | |
|--|-----------------|--------------------|----------------------|-----------------------|--------------------------|---------------|---------|---------|----------|
| | | | | | | IN INCHES | IN PER- | APRIL 1 | ONE YEAR |
| | | | | | | | CENT OF | AVG (2) | AGO IN |
| | | | | | | APR 1 AVG. | INCHES | INCHES | |
| AMERICAN RIVER (CONTINUED) | | | | | | | | | |
| DARRINGTON | 111 | 7100 | 4-29-70 | 30.9 | 38 | 11.8 | 39 | 30.6 | 50.5 |
| WRIGHTS LAKE | 316 | 6900 | 5- 1-70 | 54.2 | 49 | 26.4 | 81 | 32.6 | 54.9 |
| PHILLIPS | 113 | 6800 | 4-29-70 | 29.4 | 37 | 10.9 | 38 | 28.7 | 48.3 |
| LYONS CREEK | 320 | 6700 | 5- 1-70 | 47.2 | 46 | 21.8 | 70 | 31.1 | 47.6 |
| HUYSINK | 115 | 6600 | 5- 5-70 | 53.5 | 48 | 25.5 | 56 | 45.9 | 73.6 |
| TAMARACK FLAT | 289 | 6550 | 4-29-70 | 41.6 | 39 | 16.4 | 59 | 27.9 | 49.8 |
| WABENA MEADOWS | 114 | 6300 | 5- 5-70 | 44.7 | 47 | 21.1 | 54 | 39.1 | 67.0 |
| MIRANDA CABIN | 369 | 6200 | 5- 5-70 | 39.6 | 49 | 19.4 | - | (3) | 69.8 |
| UNION CREEK | 120 | 6100 | 4-30-70 | 0.0 | - | 0.0 | 0 | 21.5 | 34.6 |
| DIAMOND CROSSING | 371 | 6050 | 5- 5-70 | 0.0 | - | 0.0 | - | (3) | 36.1 |
| TALBOT CAMP | 122 | 5750 | 5- 5-70 | 0.0 | - | 0.0 | 0 | 18.3 | 33.4 |
| STRAWBERRY | 124 | 5700 | 4-29-70 | 0.0 | - | 0.0 | 0 | 8.5 | 3.5 |
| ROBBS VALLEY | 322 | 5600 | 5- 1-70 | 0.0 | - | 0.0 | 0 | 22.3 | 21.3 |
| ICE HOUSE | 127 | 5300 | 4-30-70 | 0.0 | - | 0.0 | 0 | 13.2 | 5.9 |
| MOKELUMNE RIVER | | | | | | | | | |
| BLUE LAKES | 129 | 8000 | 4-30-70 | 97.7 | 37 | 36.5 | 105 | 34.8 | 60.5 |
| BEAR VALLEY RIDGE 1 | 134 | 6700 | 4-27-70 | 42.3 | 23 | 9.8 | 39 | 25.4 | 36.1 |
| BEAR VALLEY RIDGE 2 | 339 | 6600 | 4-27-70 | 47.3 | 25 | 11.6 | 41 | 28.2 | 39.8 |
| LUMBERYARD | 135 | 6500 | 4-25-70 | 32.6 | 40 | 13.1 | 42 | 31.0 | 48.3 |
| MUL SPRINGS | 362 | 5800 | 4-25-70 | 0.0 | - | 0.0 | - | (3) | 10.7 |
| HAMS STATION | 136 | 5500 | 4-25-70 | 0.0 | - | 0.0 | 0 | 8.2 | 6.4 |
| ANTELOPE SPRINGS | 137 | 4350 | 4-25-70 | 0.0 | - | 0.0 | 0 | 3.2 | 1.2 |
| STANISLAUS RIVER | | | | | | | | | |
| LOWER RELIEF VALLEY | 138 | 8100 | 4-27-70 | 84.5 | 38 | 32.5 | 84 | 38.5 | 74.0 |
| LAKE ALPINE | 141 | 7550 | 4-30-70 | 76.2 | 46 | 34.7 | 85 | 40.6 | 73.3 |
| HERKING CREEK | 142 | 7300 | 4-27-70 | 46.3 | 37 | 17.2 | 62 | 27.8 | 53.4 |
| BIG MEADOW | 146 | 6550 | 4-30-70 | 8.9 | 34 | 3.0 | 11 | 27.8 | 40.2 |
| HELLS KITCHEN | 373 | 6550 | 4-30-70 | 19.9 | 38 | 7.5 | - | (3) | 42.6 |
| NIAGARA FLAT | 145 | 6500 | 4-29-70 | 14.4 | 26 | 3.8 | 19 | 20.4 | 34.6 |
| CUTTAGE SPRING | 147 | 5750 | 4-30-70 | 0.0 | - | 0.0 | 0 | 14.2 | 18.8 |
| DORRINGTON | 149 | 4750 | 4-30-70 | 0.0 | - | 0.0 | 0 | 5.6 | 0.0 |
| TUOLUMNE RIVER | | | | | | | | | |
| PARADISE | 167 | 7700 | 5- 5-70 | 55.8 | 50 | 27.9 | 71 | 39.3 | 70.1 |
| KERRICK CORRAL | 348 | 7000 | 5- 5-70 | 0.0 | - | 0.0 | - | (3) | 41.2 |
| LAKE VERNON | 169 | 6700 | 5- 4-70 | 9.9 | 48 | 4.8 | 20 | 23.9 | 43.9 |
| BEEHIVE MEADOW | 171 | 6500 | 5- 4-70 | 9.8 | 51 | 5.0 | 19 | 26.4 | 42.2 |
| MERCED RIVER | | | | | | | | | |
| SNOW FLAT | 176 | 8700 | 5- 4-70 | 75.4 | 47 | 35.6 | 86 | 41.2 | 87.6 |
| OSTRANDER LAKE | 177 | 8200 | 5- 2-70 | 55.6 | 42 | 23.4 | 71 | 33.0 | 72.7 |
| GIN FLAT | 179 | 7000 | 5- 4-70 | 25.6 | 54 | 13.8 | 41 | 33.8 | 58.4 |
| PEREGOY MEADOWS | 180 | 7000 | 5- 2-70 | 59.3 | 43 | 25.3 | 79 | 32.0 | 60.3 |
| SAN JOAQUIN RIVER | | | | | | | | | |
| AGNEW PASS | 189 | 9450 | | | | | | 30.6 | 62.5 |
| KAISER PASS | 190 | 9100 | | | | | | 37.5 | 76.4 |
| CORA LAKES | 193 | 8400 | 5- 1-70 | 75.6 | 44 | 33.6 | 90 | 38.6 | 67.2 |
| BADGER FLAT | 346 | 8300 | 5- 4-70 | 37.6 | 47 | 17.6 | 56 | 31.2 | (4) |
| NELLIE LAKE | 194 | 8000 | 5- 5-70 | 43.9 | 44 | 19.4 | 53 | 36.4 | 75.5 |
| LAKE THOMAS A EDISON | 324 | 7800 | 5- 1-70 | 0.0 | - | 0.0 | 0 | 14.1 | 32.9 |
| CHILKOOT LAKE | 196 | 7450 | 4-28-70 | 54.8 | 37 | 20.2 | 55 | 36.4 | 73.2 |
| TAMARACK CREEK | 347 | 7250 | 5- 4-70 | 5.2 | 48 | 2.5 | 10 | 24.4 | 48.9 |
| FLORENCE LAKE | 198 | 7200 | 5- 1-70 | 0.0 | - | 0.0 | 0 | 7.4 | (4) |
| CHILKOOT MEADOW | 197 | 7150 | 4-28-70 | 54.8 | 36 | 19.8 | 55 | 35.7 | 73.6 |
| HUNTINGTON LAKE | 199 | 7000 | 5- 5-70 | 5.5 | 47 | 2.6 | 13 | 20.2 | 39.8 |
| CLOVER MEADOW | 200 | 7000 | 4-30-70 | 14.5 | 47 | 6.8 | 29 | 23.1 | 47.8 |
| JACKASS MEADOW | 201 | 6950 | 4-30-70 | 11.2 | 45 | 5.0 | 22 | 23.2 | 45.6 |
| CHIQUITO CREEK | 202 | 6800 | 4-28-70 | 12.5 | 33 | 4.1 | 19 | 21.7 | 44.3 |
| POISON MEADOW | 204 | 6800 | 4-28-70 | 21.2 | 25 | 5.2 | 21 | 24.6 | 42.0 |
| KINGS RIVER | | | | | | | | | |
| BISHOP PASS | 222 | 11200 | 5- 3-70 | 68.3 | 45 | 30.7 | 103 | 29.8 | 74.1 |
| BLACKCAP BASIN | 223 | 10300 | 4-30-70 | 62.2 | 42 | 26.2 | 80 | 32.6 | 68.6 |
| UPPER BURNT CORRAL MDW | 224 | 9700 | 4-30-70 | 64.8 | 47 | 30.6 | 92 | 33.3 | 75.8 |
| ROWELL MEADOW | 226 | 8850 | 5- 2-70 | 32.7 | 49 | 16.1 | 62 | 26.1 | 65.9 |
| LONG MEADOW | 232 | 8500 | 4-30-70 | 36.4 | 45 | 16.2 | 60 | 27.1 | 67.0 |
| DODDSONS MEADOW | 308 | 8050 | 4-30-70 | 24.8 | 50 | 12.3 | 45 | 27.4 | 58.4 |
| BIG MEADOWS | 236 | 7600 | 5- 2-70 | 0.0 | - | 0.0 | 0 | 25.2 | 62.5 |
| HORSE CORRAL MEADOW | 237 | 7600 | 5- 2-70 | 0.0 | - | 0.0 | 0 | 17.0 | 40.8 |
| GRANT GROVE | 240 | 6600 | 4-26-70 | 0.0 | - | 0.0 | 0 | 14.4 | 24.9 |
| KAWEAH RIVER | | | | | | | | | |
| PANTHER MEADOW | 243 | 8600 | 4-26-70 | 51.6 | 46 | 23.5 | 65 | 35.9 | 100.9 |
| GIANT FOREST | 246 | 6400 | 4-26-70 | 0.0 | - | 0.0 | 0 | 16.7 | 42.5 |
| KERN RIVER | | | | | | | | | |
| COTTONWOOD PASS | 251 | 11050 | 5- 4-70 | 15.6 | 45 | 7.0 | 53 | 13.2 | 36.4 |
| BIG WHITNEY MEADOW | 257 | 9750 | 5- 4-70 | 9.4 | 43 | 4.0 | 24 | 16.8 | 39.3 |

TABLE 2 - SNOW COURSE DATA (CONTINUED)

| AREA, DRAINAGE BASIN, AND SNOW COURSE (1) | CALIF NUMBER | ELEV IN FEET | DATE OF SURVEY | DEPTH IN INCHES | DENSITY IN PERCENT | WATER CONTENT | | | |
|--|-----------------|--------------------|----------------------|-----------------------|--------------------------|---------------|---------|---------|----------|
| | | | | | | IN INCHES | IN PER- | APRIL 1 | ONE YEAR |
| | | | | | | | CENT OF | AVG (2) | AGG IN |
| | | | | | | APR 1 | AVG. | INCHES | INCHES |
| KERN RIVER (CONTINUED) | | | | | | | | | |
| ROUND MEADOW | 258 | 9000 | 4-29-70 | 28.5 | 38 | 10.7 | 42 | 25.3 | 66.2 |
| RAMSHAW MEADOWS | 259 | 8700 | 4-30-70 | 0.0 | - | 0.0 | 0 | 11.2 | 28.6 |
| LITTLE WHITNEY MEADOW | 260 | 8500 | 4-30-70 | 0.0 | - | 0.0 | 0 | 13.2 | 31.0 |
| LAHONTAN AREA | | | | | | | | | |
| SUSAN RIVER | | | | | | | | | |
| SILVER LAKE MEADOWS | 45 | 6450 | 4-24-70 | 38.5 | 50 | 19.3 | 70 | 27.6 | 47.0 |
| NCRVELL FLAT | 46 | 5700 | 4-24-70 | 2.2 | 45 | 1.0 | 6 | 15.6 | 19.1 |
| TRUCKEE RIVER | | | | | | | | | |
| INDEPENDENCE LAKE | 86 | 7800 | 4-30-70 | 103.0 | 41 | 41.9 | 104 | 40.3 | 68.0 |
| SQUAW VALLEY 2 | 318 | 7500 | 4-25-70 | 104.0 | 47 | 49.1 | 95 | 51.6 | 82.5 |
| INDEPENDENCE CAMP | 88 | 7000 | 4-30-70 | 22.0 | 40 | 8.8 | 39 | 22.7 | 34.5 |
| INDEPENDENCE CREEK | 91 | 6500 | 4-30-70 | 5.0 | 42 | 2.1 | 16 | 12.9 | 15.9 |
| SAGE HEN CREEK | 90 | 6500 | 4-30-70 | 11.0 | 40 | 4.4 | 25 | 17.9 | 24.8 |
| LAKE TAHOE BASIN | | | | | | | | | |
| HEAVENLY VALLEY | 375 | 8650 | NO SURVEY MADE | | | | | (3) | 45.0 |
| HAGENS MEADOW | 98 | 8000 | 4-29-70 | 23.0 | 39 | 8.9 | 51 | 17.6 | 28.9 |
| MARLETTE LAKE | 332 | 8000 | 4-28-70 | 53.0 | 42 | 22.5 | 100 | 22.5 | 38.7 |
| FRREL BENCH | 100 | 7300 | 4-29-70 | 7.0 | 20 | 1.4 | 12 | 11.3 | 13.6 |
| WARD CREEK | 101 | 7000 | 4-29-70 | 82.0 | 43 | 35.1 | 78 | 45.0 | 68.9 |
| WARD CREEK 3 | 376 | 6750 | 4-29-70 | 77.0 | 40 | 31.1 | - | (3) | 61.3 |
| WALKER RIVER | | | | | | | | | |
| VIRGINIA LAKES | 150 | 9500 | 4-27-70 | 30.0 | 43 | 12.8 | 75 | 17.0 | 34.9 |
| VIRGINIA LAKES RIDGE | 377 | 9200 | 4-27-70 | 36.0 | 34 | 12.4 | - | (3) | 34.4 |
| SUNUKA PASS | 152 | 8800 | 4-28-70 | 48.0 | 38 | 18.1 | 75 | 24.1 | 44.8 |
| MONC LAKE BASIN | | | | | | | | | |
| GEM PASS | 281 | 10400 | 4-28-70 | 69.2 | 42 | 29.2 | 90 | 32.5 | 62.2 |
| GEM LAKE | 282 | 9150 | 4-28-70 | 46.7 | 41 | 19.2 | 61 | 31.3 | 61.4 |
| OWENS RIVER | | | | | | | | | |
| BISHOP LAKE | 284 | 11300 | 5- 2-70 | 57.1 | 41 | 23.4 | 123 | 19.0 | 46.9 |
| SAWMILL | 213 | 10300 | 5- 2-70 | 23.1 | 44 | 10.1 | 57 | 17.7 | 47.0 |
| MAMMOTH PASS | 205 | 9500 | 5- 6-70 | 64.8 | 48 | 31.2 | 75 | 41.9 | 81.6 |
| SOUTH FORK | 215 | 8850 | 5- 2-70 | 0.0 | - | 0.0 | 0 | 4.6 | 20.9 |
| NUCLEAR 1 | 357 | 7800 | 5- 1-70 | 0.0 | - | 0.0 | - | (3) | 0.0 |

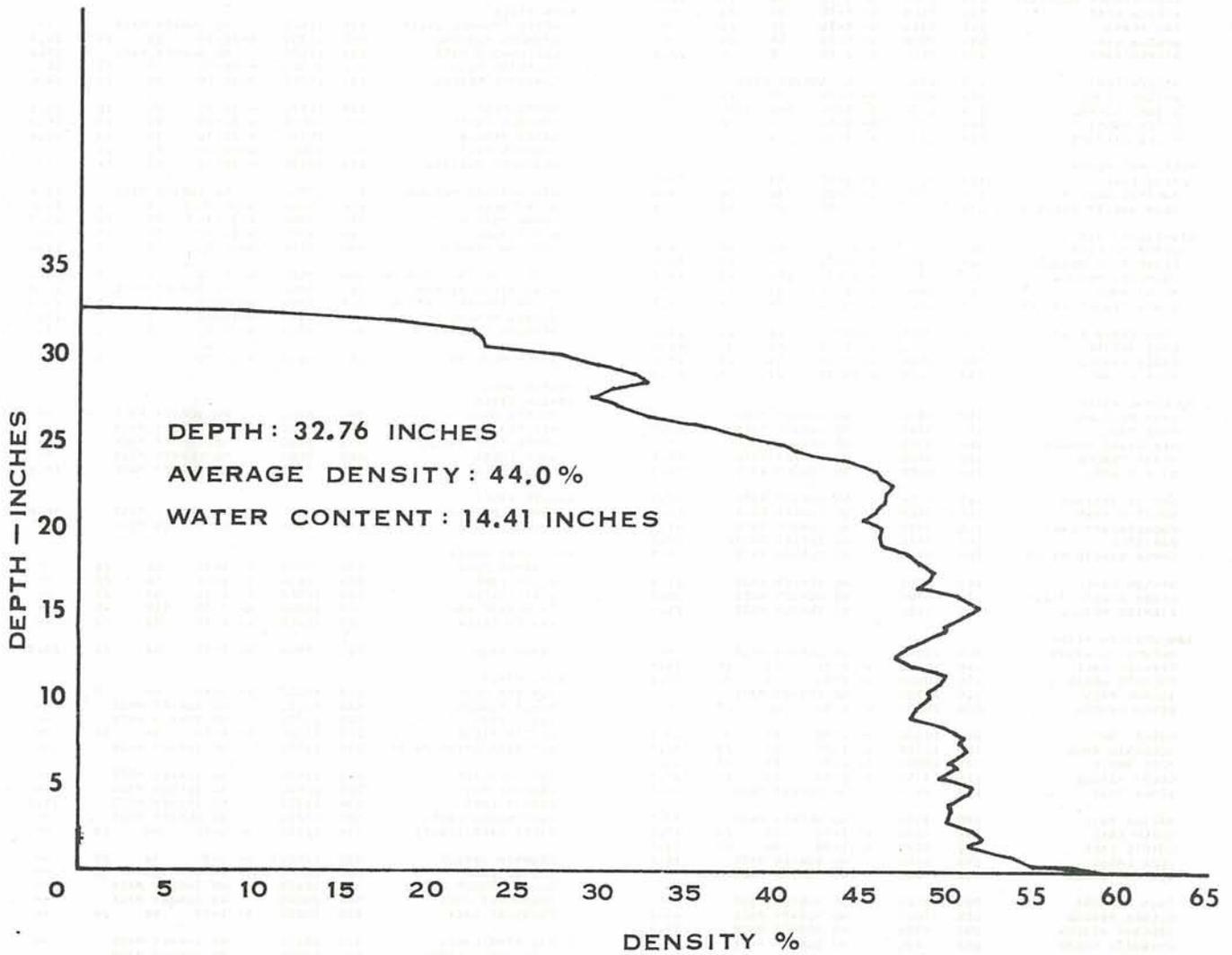
- (1) LATE DATA AND DATA FOR COURSES NOT SCHEDULED FOR MEASUREMENTS WILL BE PUBLISHED IN THE FALL REPORT.
- (2) AVERAGES ARE COMPUTED FOR THE 35-YEAR PERIOD, 1931-1965
- (3) INSUFFICIENT RECORD FOR COMPUTATION OF AVERAGE.
- (4) NO SURVEY MADE.
- (5) DENSITY AND WATER CONTENT ESTIMATED.





PROFILE OF SNOW DENSITY

MAY 1, 1970



DENSITY OBTAINED IN ONE-HALF-INCH INCREMENTS WITH THE PROFILING SNOW GAGE AT THE PACIFIC SOUTHWEST FOREST AND RANGE EXPERIMENT STATION, CENTRAL SIERRA SNOW LAB., SODA SPRINGS, CALIFORNIA, ELEVATION - 6,900'.

TABLE 4
SUMMARY OF STORAGE IN MAJOR RESERVOIRS

| AREA | NUMBER OF RESERVOIRS | TOTAL CAPACITY 1000 AF | AGGREGATE STORAGE AS OF MAY 1 | | | | |
|---------------------|----------------------|---------------------------|-------------------------------------|-----------------|-----------|--------------------|---------------------|
| | | | 10-YEAR AVE 1960-1969 1000 AF | 1969 1000 AF | 1970 | | |
| | | | | | 1000 AF | PERCENT OF AVERAGE | PERCENT OF CAPACITY |
| INTRASTATE | | | | | | | |
| NORTH COASTAL | 4 | 2713.900 | 2357.090 | 2267.980 | 2538.390 | 108 | 94 |
| SAN FRANCISCO BAY | 17 | 620.400 | 435.340 | 564.760 | 542.800 | 125 | 87 |
| CENTRAL COASTAL | 6 | 985.700 | 639.000 | 827.550 | 725.550 | 114 | 74 |
| SOUTH COASTAL | 26 | 1485.600 | 515.510 | 968.670 | 825.300 | 160 | 56 |
| SACRAMENTO VALLEY | 34 | 15945.600 | 12213.670 | 12940.580 | 13976.920 | 114 | 88 |
| SAN JOAQUIN VALLEY | 27 | 5925.400 | 3040.340 | 2847.600 | 3659.120 | 120 | 62 |
| LAHUNTAN | 7 | 348.200 | 199.370 | 168.150 | 294.510 | 148 | 85 |
| SUBTOTAL | 121 | 28024.800 | 19400.310 | 20585.300 | 22562.600 | 116 | 81 |
| INTERSTATE | | | | | | | |
| NORTH COASTAL | 3 | 1205.100 | 730.970 | 930.050 | 966.590 | 132 | 80 |
| LAHUNTAN | 3 | 828.300 | 472.490 | 566.990 | 683.070 | 145 | 82 |
| COLORADO DESERT (1) | 4 | 53533.000 | 26322.240 | 25830.900 | 27923.500 | 106 | 52 |
| SUBTOTAL (1) | 10 | 55566.400 | 27525.690 | 27327.940 | 29573.160 | 107 | 53 |
| TOTAL (1) | 131 | 83591.200 | 46926.000 | 47913.240 | 52135.750 | 111 | 62 |

(1) INCLUDES DATA FOR LAKE MEAD AND LAKE POWELL WHICH REGULATE FLOW OF THE LOWER COLORADO RIVER, THE MAJOR SOURCE OF WATER FOR THE COLORADO DESERT AND SOUTH COASTAL AREAS.

TABLE 5
STORAGE IN MAJOR RESERVOIRS

| AREA AND DRAINAGE BASIN | RESERVOIR | OPERATOR | CAPACITY (1) 1000 AF | STORAGE AS OF MAY 1 | | | |
|-------------------------|--------------------|-----------------------|-------------------------|-----------------------------------|-----------------|----------|-------------|
| | | | | 10-YR AVE 1960-1969 1000 AF | 1969 1000 AF | 1970 | |
| | | | | | | 1000 AF | PERCENT AVE |
| NORTH COASTAL AREA | | | | | | | |
| KLAMATH R | UPPER KLAMATH (2) | USBR | 584.000 | 453.720 | 496.590 | 493.860 | 109 |
| | CLEAR LAKE (2) | USBR | 526.800 | 217.060 | 343.040 | 381.550 | 176 |
| | GERBER (2) | USBR | 94.300 | 60.170 | 90.420 | 91.180 | 152 |
| SHASTA R | DWINNELL | MONTAGUE WCD | 50.000 | 33.390 | 44.300 | 43.880 | 131 |
| TRINITY R | CLAIR ENGLE LAKE | USBR | 2447.700 | 2165.340(6) | 2056.800 | 2340.500 | 107 |
| SOUTH EEL R | LAKE PILLSBURY | PAC GAS AND ELEC CO | 93.700 | 83.430 | 84.200 | 75.07C | 90 |
| RUSSIAN R | LAKE MENDOCINO | US CORPS OF ENGIN | 122.500 | 74.910 | 82.680 | 78.940 | 105 |
| SAN FRANCISCO BAY AREA | | | | | | | |
| NORTH BAY | | | | | | | |
| CONN CR | LAKE HENNESSEY | CITY OF NAPA | 31.000 | 30.130 | 31.000 | 31.000 | 103 |
| NICASIO CR | NICASIO | MARIN MWD | 22.500 | 21.760(6) | 22.430 | 21.600 | 98 |
| LAGUNITAS CR | KENT | MARIN MWD | 16.700 | 15.460 | 15.980 | 15.500 | 100 |
| | ALPINE | MARIN MWD | 8.900 | 7.440 | 8.640 | 7.830 | 105 |
| SOUTH EAST BAY | | | | | | | |
| SAN PABLO CR | SAN PABLO (3) | EAST BAY MUD | 43.200 | 33.990 | 39.490 | 37.700 | 111 |
| SAN LEANDRO CR | U SAN LEANDRO (3) | EAST BAY MUD | 41.400 | 35.500 | 40.290 | 39.060 | 110 |
| | CHABOT(3) | EAST BAY MUD | 12.600 | 9.700 | 10.360 | 10.350 | 107 |
| BEAR CR | BRIONES (3) | EAST BAY MUD | 60.400 | 35.680(6) | 41.460 | 54.400 | 151 |
| SAN ANTONIO CR | SAN ANTONIO | CITY CO SAN FRANCISCO | 50.500 | 36.910(6) | 44.400 | 32.100 | 86 |
| COYOTE CR | | | | | | | |
| | COYOTE | SANTA CLARA VALLEY WC | 24.500 | 12.790 | 23.480 | 23.520 | 184 |
| LOS GATOS CR | | | | | | | |
| | LERDY ANDERSON | SANTA CLARA VALLEY WC | 93.100 | 32.240 | 91.120 | 84.700 | 263 |
| | LEXINGTON | SANTA CLARA VALLEY WC | 21.400 | 10.760 | 20.690 | 18.810 | 175 |
| CALAVERAS CR | | | | | | | |
| | AUSTRIAN | SAN JOSE WATER WORKS | 6.200 | 4.710 | 6.290 | 5.97C | 127 |
| | CALAVERAS (3) | CITY CO SAN FRANCISCO | 100.000 | 76.840 | 97.240 | 96.320 | 125 |
| PENINSULA | | | | | | | |
| SAN ANDREAS CR | SAN ANDREAS | CITY CO SAN FRANCISCO | 18.500 | 17.090 | 17.710 | 15.690 | 92 |
| LAGUNA CR | UPPER AND LOWER | | | | | | |
| SAN MATED CR | CRYSTAL SPRINGS(3) | CITY CO SAN FRANCISCO | 69.500 | 54.240 | 54.180 | 48.250 | 89 |
| CENTRAL COASTAL AREA | | | | | | | |
| SALINAS R | | | | | | | |
| | SANTA MARGARITA LK | SAN LUIS OBISPO CITY | 26.000 | 22.570 | 26.030 | 24.730 | 110 |
| | SAN ANTONIO | MONTEREY CO FCWCD | 350.000 | 208.820(6) | 345.650 | 311.300 | 148 |
| | NACIMIENTO | MONTEREY CO FCWCD | 350.000 | 199.130 | 202.400 | 141.340 | 71 |
| SANTA YNEZ R | | | | | | | |
| | GIBRALTAR | SANTA BARBARA CITY | 14.800 | 11.150 | 13.520 | 9.650 | 87 |
| | CACHUMA | USBR | 204.900 | 181.100 | 204.690 | 201.460 | 111 |
| OLD CR | WHALE ROCK | SAN LUIS OBISPO CITY | 40.000 | 16.190(6) | 35.260 | 37.070 | 228 |

TABLE 5 - STORAGE IN MAJOR RESERVOIRS (CONTINUED)

| AREA AND DRAINAGE BASIN | RESERVOIR | OPERATOR | CAPACITY (1) 1000 AF | STORAGE AS OF MAY 1 | | | |
|--|---------------------|---|----------------------------|-----------------------------------|-----------------|-----------------|-----|
| | | | | 10-YR AVE 1960-1969 1000 AF | 1969 1000 AF | 1970 1000 AF | |
| SOUTH COASTAL AREA | | | | | | | |
| VENTURA-SANTA CLARA RIVERS | | | | | | | |
| CLARA RIVERS | CASITAS | VENTURA R MWD | 254.000 | 94.840(16) | 215.330 | 215.500 | 226 |
| COYOTE CR | LAKE PIRU | UNITED WCD CONS DIST | 101.200 | 35.830 | 101.470 | 70.000 | 195 |
| PIRU CR | MATILIJIA | VENTURA CO FCD | 3.500 | 3.200 | 0.300 | 0.800 | 25 |
| SAN GABRIEL-SANTA ANA RIVERS | | | | | | | |
| SAN GABRIEL R | COGSWELL | LA CO FCD | 10.900 | 3.890 | 9.400 | 3.940 | 101 |
| | SAN GABRIEL | LA CO FCD | 43.800 | 9.380 | 7.380 | 0.000 | 0 |
| BEAR CR | BEAR VALLEY | BEAR V MUT WATER CO | 72.200 | 23.260 | 72.170 | 65.060 | 280 |
| TRIB, CAJALCO CR | LAKE MATHEWS (4) | METROPOLITAN WD | 182.000 | 170.520(16) | 176.750 | 176.590 | 103 |
| SAN JACINTO R | LAKE HEMET | LAKE HEMET WATER CO | 13.400 | 5.080 | 13.540 | 11.180 | 220 |
| | RAILROAD CANYON (3) | TEMESCAL WATER CO | 14.700 | 5.070 | 9.980 | 9.010 | 177 |
| SANTIAGO CR | SANTIAGO (3) | SERRANO AND CARPENTER ID AND IRVINE CO | 25.000 | 12.480 | 25.000 | 16.060 | 129 |
| | VILLA PARK | ORANGE COUNTY FCD | 15.600 | 0.910(16) | 2.100 | 0.250 | 26 |
| SANTA MARGARITA-SAN LUIS REY RIVERS | | | | | | | |
| TEMECULA CR | VAIL | VAIL COMPANY | 49.500 | 7.830 | 32.950 | 30.090 | 384 |
| SAN LUIS REY R | HENSHAW | VISTA ID | 194.300 | 12.850 | 48.970 | 26.780 | 208 |
| SAN DIEGUITO-SAN DIEGO RIVERS | | | | | | | |
| SAN DIEGUITO R | LAKE HODGES (3) | CITY OF SAN DIEGO | 33.600 | 5.260 | 20.480 | 9.400 | 179 |
| SAN YSABEL CR | SUTHERLAND | CITY OF SAN DIEGO | 29.700 | 4.930 | 13.770 | 2.670 | 54 |
| SAN VICENTE CR | SAN VICENTE (3) | CITY OF SAN DIEGO | 90.200 | 66.040 | 78.260 | 65.680 | 99 |
| SAN DIEGO R | EL CAPITAN (3) | CITY OF SAN DIEGO | 112.800 | 20.110 | 60.980 | 56.540 | 281 |
| BOULDER CR | CUYAMACA | HELIX ID | 11.800 | 1.620 | 6.940 | 1.010 | 62 |
| QUAIL CANYON CR | LAKE JENNINGS (3) | HELIX ID | 9.800 | 5.780(16) | 7.140 | 8.200 | 141 |
| CHAPPAREL CANYON | MURRAY (3) | CITY OF SAN DIEGO | 5.700 | 3.930 | 2.970 | 3.090 | 79 |
| SWEETWATER-OTAY RIVERS - COTTONWOOD CR | | | | | | | |
| SWEETWATER R | LAKE LUVELAND | CALIF WATER AND TEL C | 25.400 | 2.770 | 15.030 | 15.890 | 572 |
| | SWEETWATER MAIN (3) | CALIF WATER AND TEL C | 27.700 | 3.450 | 3.790 | 2.640 | 76 |
| OTAY R | LOWER OTAY (3) | CITY OF SAN DIEGO | 56.500 | 6.500 | 18.200 | 18.080 | 278 |
| COTTONWOOD CR | MORENA | CITY OF SAN DIEGO | 50.200 | 1.260 | 5.140 | 4.640 | 368 |
| | BARRETT | CITY OF SAN DIEGO | 44.800 | 3.000 | 14.730 | 6.030 | 200 |
| SOLEDAK VALLEY | | | | | | | |
| BIG SURR CR | MIRAMAR (3) | CITY OF SAN DIEGO | 7.300 | 5.560(16) | 5.900 | 6.170 | 110 |
| CENTRAL VALLEY AREA | | | | | | | |
| SACRAMENTO R | | | | | | | |
| | SHASTA | USBR | 4500.000 | 4143.240 | 4393.700 | 4100.100 | 99 |
| | WHISKEYTOWN | USBR | 241.100 | 223.520(16) | 225.600 | 238.300 | 106 |
| FEATHER R | | | | | | | |
| | LAKE ALMANOR | PAC GAS AND ELEC CO | 1035.500 | 761.860(16) | 742.000 | 936.500 | 122 |
| | BUTT VALLEY | PAC GAS AND ELEC CO | 49.900 | 44.500 | 46.200 | 46.120 | 104 |
| | BUCKS STORAGE | PAC GAS AND ELEC CO | 101.700 | 67.370 | 48.680 | 83.770 | 124 |
| | FRENCHMAN | DWR - STATE OF CALIF | 51.000 | 50.300(16) | 57.860 | 56.130 | 111 |
| | LAKE DAVIS | DWR - STATE OF CALIF | 83.000 | 77.480(16) | 90.100 | 81.260 | 104 |
| | LITTLE GRASS VALLEY | OROVILLE WYANDOTTE ID | 93.000 | 83.340(16) | 76.300 | 83.200 | 99 |
| | SLY CREEK | OROVILLE WYANDOTTE ID | 65.000 | 51.310(16) | 21.700 | 58.640 | 113 |
| | LAKE OROVILLE | DWR - STATE OF CALIF | 3484.000 | 2356.500(16) | 3013.600 | 3006.600 | 127 |
| YUBA R | | | | | | | |
| | NEW BULLARDS BAR | YUBA CO WATER AGENCY | 930.000 | 229.000(16) | 229.000 | 935.640 | 408 |
| | JACKSON MEADOWS | NEVADA ID | 68.700 | 45.140(16) | 36.010 | 64.840 | 143 |
| | BOWMAN LAKE | NEVADA ID | 69.800 | 45.840 | 48.120 | 53.830 | 117 |
| | SPAULDING SYSTEM | PAC GAS AND ELEC CO | 137.400 | 94.800 | 58.590 | 76.020 | 80 |
| | SCOTT FLAT | NEVADA ID | 48.500 | 36.670 | 48.550 | 47.320 | 129 |
| BEAR R | | | | | | | |
| | ROLLINS | NEVADA ID | 66.000 | 65.670(16) | 65.990 | 65.990 | 99 |
| | CAMP FAR WEST | SO SUTTER WATER DIST | 104.400 | 100.330(16) | 106.500 | 103.800 | 102 |
| AMERICAN R | | | | | | | |
| | FRENCH MEADOWS | PLACER CO WATER AGENC | 133.700 | 96.760(16) | 57.340 | 92.390 | 94 |
| | LOWER HELL HOLE | PLACER CO WATER AGENC | 208.400 | 126.180(16) | 110.980 | 163.890 | 129 |
| | LOUN LAKE | SACRAMENTO MUD | 76.500 | 31.780(16) | 25.960 | 8.000 | 24 |
| | TWIN LAKES | PAC GAS AND ELEC CO | 21.600 | 9.340 | 5.370 | 10.000 | 107 |
| | UNION VALLEY | SACRAMENTO MUD | 271.000 | 176.190(16) | 141.860 | 233.260 | 131 |
| | ICE HOUSE | SACRAMENTO MUD | 46.000 | 26.570(16) | 15.550 | 40.620 | 152 |
| | FOLSOM | USBR | 1010.300 | 722.660 | 581.000 | 703.300 | 97 |
| STONY CR | | | | | | | |
| | EAST PARK | USBR | 50.900 | 49.670 | 51.130 | 49.000 | 99 |
| | STONY GORGE | USBR | 50.000 | 47.580 | 51.270 | 47.300 | 99 |
| | BLACK BUTTE | US CORPS OF ENGIN | 160.000 | 118.670(16) | 135.460 | 76.090 | 63 |
| CACHE CR | CLEAR LAKE | CLEAR LAKE WATER CO | 314.000 | 290.790 | 315.200 | 293.000 | 101 |
| PUTAH CR | BERRYESSA | USBR | 1602.300 | 1470.580 | 1612.300 | 1586.500 | 108 |
| COSUMNES R | | | | | | | |
| | JENKINSON LAKE | USBR | 41.000 | 38.540 | 41.120 | 41.150 | 107 |

TABLE 5 - STORAGE IN MAJOR RESERVOIRS (CONTINUED)

| AREA AND DRAINAGE BASIN | RESERVOIR | OPERATOR | CAPACITY (1) | STORAGE AS OF MAY 1 | | | | PER-CENT AVE |
|---------------------------------|-------------------|-----------------------|--------------|---------------------|-----------|-----------|------|--------------|
| | | | | 10-YR AVE 1960-1969 | 1969 | 1970 | | |
| | | | 1000 AF | 1000 AF | 1000 AF | 1000 AF | | |
| CENTRAL VALLEY AREA (CONTINUED) | | | | | | | | |
| MOKELUMNE R | LOWER BEAR | PAC GAS AND ELEC CO | 48.500 | 28.670 | 18.850 | 35.430 | 124 | |
| | SALT SPRINGS | PAC GAS AND ELEC CO | 140.900 | 67.960 | 68.810 | 89.120 | 131 | |
| | PARDEE | EAST BAY MUD | 210.000 | 177.390 | 157.860 | 191.040 | 108 | |
| | CAMANACHE | EAST BAY MUD | 431.500 | 257.290(6) | 242.030 | 278.780 | 107 | |
| | | | | | | | | |
| CALAVERAS R | NEW HOGAN | US CORPS OF ENGIN | 325.000 | 206.160(6) | 198.920 | 173.810 | 83 | |
| STANISLAUS R | RELIEF | PAC GAS AND ELEC CO | 15.600 | 8.620 | 3.180 | 9.600 | 111 | |
| | LUNNELLS | OAKDALE-SO SAN JOAQ I | 64.700 | 39.480 | 33.900 | 22.800 | 58 | |
| | HARTLEY LAKE | OAKDALE-SO SAN JOAQ I | 98.300 | 68.970 | 78.830 | 70.940 | 103 | |
| | STRAWBERRY | PAC GAS AND ELEC CO | 18.300 | 15.090 | 13.800 | 17.100 | 113 | |
| | MELONES | PAC GAS AND ELEC CO | 112.600 | 88.620 | 83.780 | 102.270 | 115 | |
| | TULLUOH | OAKDALE-SO SAN JOAQ I | 68.200 | 52.360 | 18.870 | 65.970 | 126 | |
| TULLUMNE R | HETCH HETCHY | CITY CO SAN FRANCISCO | 360.400 | 134.710 | 124.380 | 222.040 | 165 | |
| | CHERRY LAKE | CITY CO SAN FRANCISCO | 268.200 | 110.720 | 98.380 | 178.370 | 161 | |
| | LAKE ELEANOR | CITY CO SAN FRANCISCO | 26.100 | 10.970 | 9.020 | 21.590 | 197 | |
| | DUN PEDRO | TURLOCK AND MODESTO I | 290.400 | 177.710 | 171.030 | 180.900 | 102 | |
| | TURLOCK LAKE | TURLOCK ID | 49.000 | 36.260 | 36.400 | 41.360 | 114 | |
| | MODESTO | MODESTO ID | 27.000 | 20.340 | 17.600 | 25.400 | 125 | |
| | | | | | | | | |
| MERCED R | LAKE MCCLURE | MERCED ID | 1026.000 | 604.930(6) | 696.100 | 700.300 | 115 | |
| SAN JOAQUIN R | FLORENCE LAKE | SO CALIF EDISON CO | 64.600 | 1.170 | 1.490 | 0.450 | 38 | |
| | THOMAS A EDISON | SU CALIF EDISON CO | 125.200 | 33.320 | 13.230 | 34.520 | 104 | |
| | MAMMOTH POOL | SU CALIF EDISON CO | 122.700 | 44.810 | 122.550 | 4.650 | 10 | |
| | HUNTINGTON LAKE | SO CALIF EDISON CO | 89.800 | 37.640 | 27.920 | 55.030 | 146 | |
| | SHAVER LAKE | SO CALIF EDISON CO | 135.400 | 37.000 | 14.380 | 56.200 | 152 | |
| | CRANE VALLEY | PAC GAS AND ELEC CO | 45.400 | 35.110 | 37.390 | 41.870 | 119 | |
| | MILLERTON LAKE | USBR | 520.600 | 331.640 | 137.600 | 443.000 | 134 | |
| KINGS R | COURTRIGHT | PAC GAS AND ELEC CO | 129.900 | 51.240 | 10.470 | 3.650 | 7 | |
| | WISHON | PAC GAS AND ELEC CO | 128.600 | 46.180 | 10.310 | 27.080 | 59 | |
| | PINE FLAT | US CORPS OF ENGIN | 1013.400 | 589.500 | 581.200 | 814.180 | 138 | |
| KERN R | ISABELLA | US CORPS OF ENGIN | 570.000 | 164.100 | 172.700 | 262.870 | 160 | |
| | KAWeah R | US CORPS OF ENGIN | 150.000 | 48.940(6) | 68.810 | 45.070 | 91 | |
| | TULE R | US CORPS OF ENGIN | 80.000 | 44.610(6) | 65.340 | 38.100 | 84 | |
| LAHONTAN AREA | | | | | | | | |
| TRUCKEE R | LAKE TAHCE (2,7) | TRUCKEE-CARSON ID | 744.600 | 416.660 | 534.600 | 621.600 | 149 | |
| | BUCA (2) | WASHUE CO WCC | 41.200 | 27.710 | 26.950 | 20.470 | 74 | |
| EAST WALKER R | BRIDGEPORT (2) | WALKER RIVER ID | 42.500 | 28.100 | 5.440 | 41.000 | 146 | |
| MONO LAKE BASIN | SADDLEBAG LAKE | SO CALIF EDISON CO | 11.100 | 1.870 | 1.610 | 2.650 | 141 | |
| | GEM LAKE | SO CALIF EDISON CO | 17.600 | 3.310 | 1.140 | 1.200 | 36 | |
| | GRANT LAKE | CITY OF LOS ANGELES | 47.500 | 26.100 | 17.100 | 40.380 | 155 | |
| OWENS R | SOUTH LAKE | SU CALIF EDISON CO | 13.400 | 2.030 | 0.660 | 4.380 | 215 | |
| | LAKE CROWLEY | CITY OF LOS ANGELES | 183.500 | 125.580 | 110.650 | 179.590 | 143 | |
| | TINEMAHA | CITY OF LOS ANGELES | 16.600 | 0.420 | 3.600 | 10.540 | 2504 | |
| | HAIWEE (SOUTH) | CITY OF LOS ANGELES | 58.500 | 40.020 | 33.390 | 55.770 | 139 | |
| COLORADO DESERT AREA | | | | | | | | |
| COLORADO R | LAKE POWELL (2,7) | USBR | 25002.000 | 7568.600(6) | 8049.000 | 9152.000 | 120 | |
| | LAKE MEAD (2,7) | USBR | 26102.000 | 16473.700 | 15476.000 | 16568.000 | 101 | |
| | LAKE MOJAVE (2,7) | USBR | 1810.000 | 1694.780 | 1710.500 | 1612.100 | 95 | |
| | LAKE HAVASU (2,7) | USBR | 619.000 | 585.150 | 595.400 | 591.400 | 101 | |

- (1) TOTAL CAPACITY TO THE NEAREST HUNDRED ACRE FEET.
- (2) INTERSTATE RESERVOIR USED JOINTLY BY CALIFORNIA AND ADJACENT STATES.
- (3) INCLUDES FOREIGN WATER.
- (4) STORES ONLY IMPORTED COLORADO RIVER WATER.
- (5) NEW RESERVOIR--AVERAGE CONSIDERED EQUAL TO CURRENT STORAGE.
- (6) LESS THAN 10-YEAR AVERAGE.
- (7) DATA BASED ON ACTIVE OR USABLE CAPACITY TABLES.

TABLE 6
RUNOFF DATA

| AREA, STREAM, AND STATION (1) | APRIL 1970 | | | | OCTOBER 1, 1969 - APRIL 30, 1970 | | | |
|--|-----------------------------|--------------------|------------------|---------------------|----------------------------------|--------------------|-------------------|---------------------|
| | MEASURED FLOW 1000 AF | UNIMPAIRED RUNOFF | | | MEASURED FLOW 1000 AF | UNIMPAIRED RUNOFF | | |
| | | 50-YEAR AVE (2) | MONTHLY TOTAL | PER- CENT AVE | | 50-YEAR AVE (2) | SEASONAL TOTAL | PER- CENT AVE |
| NORTH COASTAL AREA | | | | | | | | |
| KLAMATH, CUPCO TO ORLEANS (6) | 282.200 | 629.800 | 294.700 | 47 | 4921.400 | 3175.900 | 4271.600 | 135 |
| SALMON AT SUMESKAR | 78.300 | 179.700 | 78.300 | 44 | 1414.300 | 827.200 | 1414.300 | 171 |
| TRINITY AT LEWISTON | 8.900 | 214.400 | 109.700 | 51 | 181.300 | 763.300 | 1278.600 | 168 |
| EFL AT SCOTIA | 125.600 | 570.600 | 141.300 | 25 | 7349.300 | 4793.200 | 7492.800 | 156 |
| RUSSIAN AT HEALDSBURG | 22.300 | 75.100 | 17.800 | 24 | 1468.600 | 721.400 | 1370.400 | 190 |
| SAN FRANCISCO BAY AREA | | | | | | | | |
| NAPA NEAR ST HELENA | 1.390 | 6.100 | 1.390 | 23 | 123.940 | 57.010 | 123.940 | 217 |
| CUYUTI CREEK NEAR MADRONE | 2.220 | 5.400 | 0.080 | 1 | 23.320 | 41.350 | 38.550 | 93 |
| CENTRAL COASTAL AREA | | | | | | | | |
| ARKLYO SECO NEAR SOLEDAD | 5.520 | 14.950 | 5.520 | 37 | 82.590 | 99.180 | 82.590 | 83 |
| NACIMIENTO BLOW NACIMIENTO DAM, NEAR BRADLEY | 1.900 | 19.510 | 2.410 | 12 | 51.880 | 181.910 | 144.020 | 79 |
| SOUTH COASTAL AREA | | | | | | | | |
| SUSPE CREEK NEAR FILLMURE | 3.000(3) | 9.790 | 3.000 | 31 | 51.980(3) | 66.570 | 51.980 | 78 |
| ARKLYO SECO NEAR PASADENA | 0.280 | 0.790 | 0.280 | 35 | 3.580 | 4.730 | 3.580 | 76 |
| SANTA ANA NEAR MENTONE | 3.530(4) | 9.210 | 3.530 | 38 | 29.290(4) | 42.230 | 29.300 | 69 |
| SACRAMENTO VALLEY AREA | | | | | | | | |
| INFLW TO SHASTA (7) | 439.600 | 712.600 | 439.600 | 62 | 6515.100 | 3882.000 | 6515.100 | 168 |
| SACRAMENTO ABOVE BEND BRIDGE (8) | 563.200 | 1001.000 | 558.900 | 56 | 9743.900 | 5795.500 | 9797.400 | 169 |
| FEATHER, INFLW TO DROVILLE | 131.500 | 742.500 | 273.000 | 37 | 4491.600 | 2853.300 | 5059.300 | 177 |
| YUBA AT SMARTVILLE (5) | 59.700 | 395.800 | 173.300 | 44 | 1604.000 | 1487.800 | 2457.900 | 165 |
| AMERICAN, INFLW TO FOLSOM | 107.900 | 472.100 | 212.300 | 45 | 2706.700 | 1640.100 | 2552.900 | 156 |
| COSUMNES AT MICHIGAN BAR | 27.010 | 67.500 | 27.280 | 40 | 489.930 | 276.480 | 412.800 | 149 |
| MOKELUMNE, INFLW TO PARDEE | 63.700 | 129.100 | 75.400 | 58 | 545.600 | 349.600 | 562.800 | 161 |
| SAN JOAQUIN VALLEY AREA | | | | | | | | |
| STANISLAUS, INFLW TO MELONES | 1.800 | 199.000 | 134.500 | 68 | 607.600 | 527.000 | 850.400 | 161 |
| TUOLUMNE, INFLW TO DUN PEDRO | 160.300 | 283.400 | 162.200 | 57 | 997.100 | 819.700 | 1064.700 | 130 |
| MERCED, INFLW TO EXCHEQUER | 93.100 | 147.700 | 88.400 | 60 | 531.800 | 433.400 | 490.900 | 113 |
| SAN JOAQUIN, INFLW TO MILLERTON | 3.700 | 237.000 | 146.100 | 62 | 57.300 | 620.200 | 636.800 | 103 |
| KINGS, INFLW TO PINE FLAT | 114.100 | 215.400 | 130.400 | 61 | 519.800 | 545.300 | 504.200 | 92 |
| KAWFAH, INFLW TO TERMINUS | 10.370 | 63.880 | 40.850 | 64 | 226.400 | 176.710 | 189.060 | 107 |
| TULE, INFLW TO SUCCESS | 4.830 | 23.700 | 11.750 | 50 | 103.290 | 90.700 | 99.250 | 109 |
| KERN NEAR BAKERSFIELD | 67.200 | 93.200 | 63.600 | 68 | 321.300 | 277.300 | 336.400 | 121 |
| LAHUNTAN AREA | | | | | | | | |
| TRUCKEE, TAHUE TO FARAD (6) | 29.640 | 79.890 | 37.770 | 47 | 218.270 | 181.930 | 298.230 | 164 |
| WEST FORK CARSON AT WOODFORDS | 10.820 | 11.720 | 10.820 | 92 | 38.500 | 26.290 | 38.500 | 146 |
| EAST FORK CARSON NEAR GARDNERVILLE | 24.130 | 35.050 | 24.130 | 69 | 124.500 | 87.220 | 124.500 | 143 |
| WEST WALKER BELOW LITTLE WALKER, NEAR COLEVILLE | 11.370 | 16.950 | 11.370 | 67 | 48.680 | 40.190 | 48.680 | 121 |
| EAST WALKER NEAR BRIDGEPORT | 7.210 | 8.990 | 6.610 | 74 | 41.630 | 41.190 | 63.530 | 154 |
| OWENS BELOW LONG VALLEY DAM | 22.200 | 11.980 | 9.480 | 79 | 134.130 | 75.010 | 94.250 | 126 |
| COLORADO DESERT AREA | | | | | | | | |
| COLORADO, INFLW TO LAKE PUWELL | 553.000 | 1135.400 | 566.000 | 50 | 4373.000 | 3706.400 | 3337.000 | 90 |

- (1) RESERVOIR INFLW DATA ARE BASED ON OBSERVED FLOWS AT STATIONS DOWN-STREAM FROM LISTED FACILITY.
- (2) COMPUTED FOR 50 YEAR PERIOD, 1915-16 THROUGH 1964-65.
- (3) INCLUDES FILLMURE IRRIGATION COMPANY CANAL.
- (4) INCLUDES SOUTHERN CALIFORNIA EDISON COMPANY CANAL.
- (5) INCLUDES DEER CREEK.
- (6) ACCRETIONS BETWEEN STATIONS.
- (7) COMPUTED FROM OPERATING RECORDS-- UNADJUSTED FOR UPSTREAM REGULATION.
- (8) UNIMPAIRED FLOWS COMPATIBLE TO THOSE AT DISCONTINUED STATION NEAR READ BLUFF.

