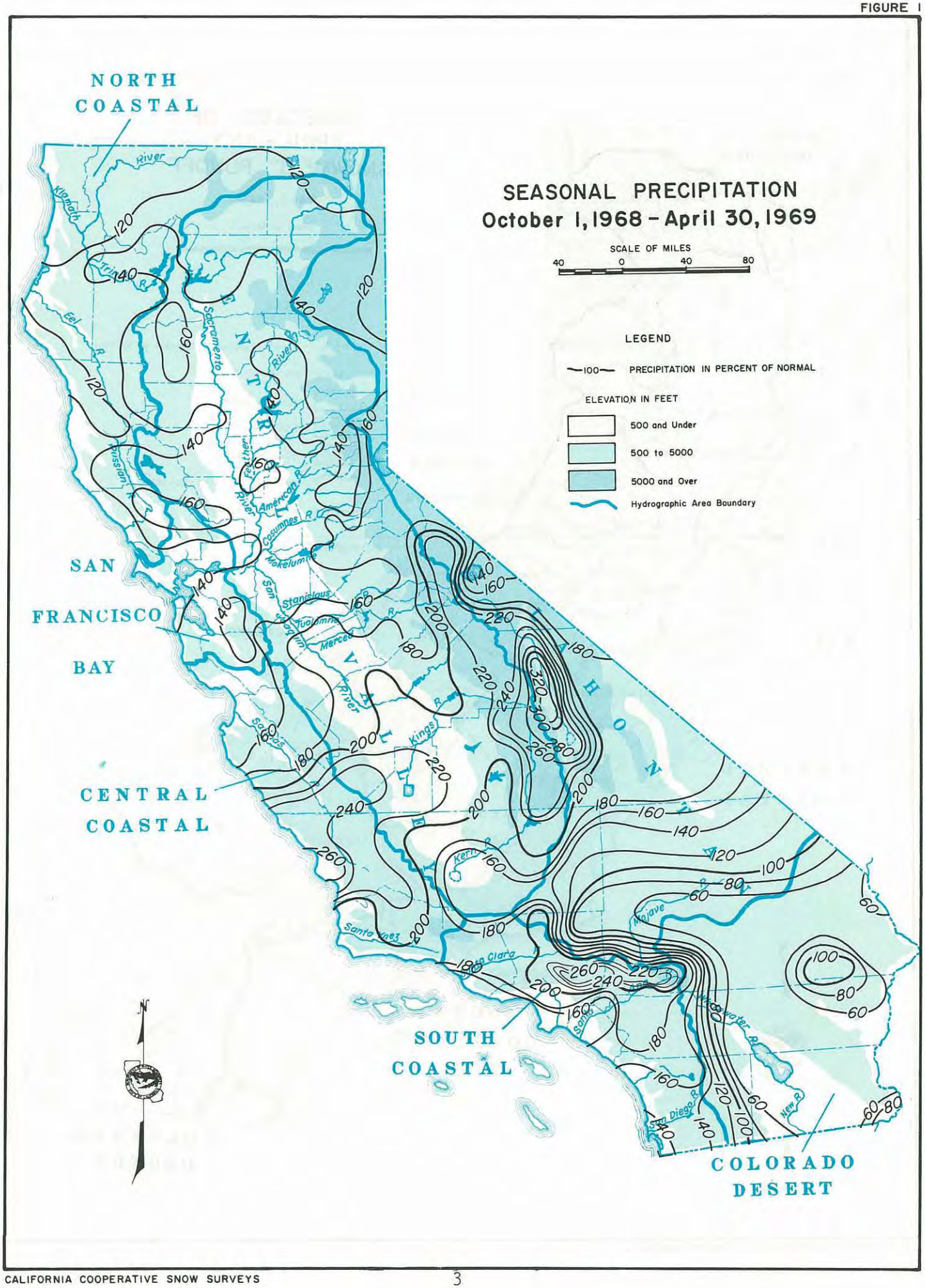
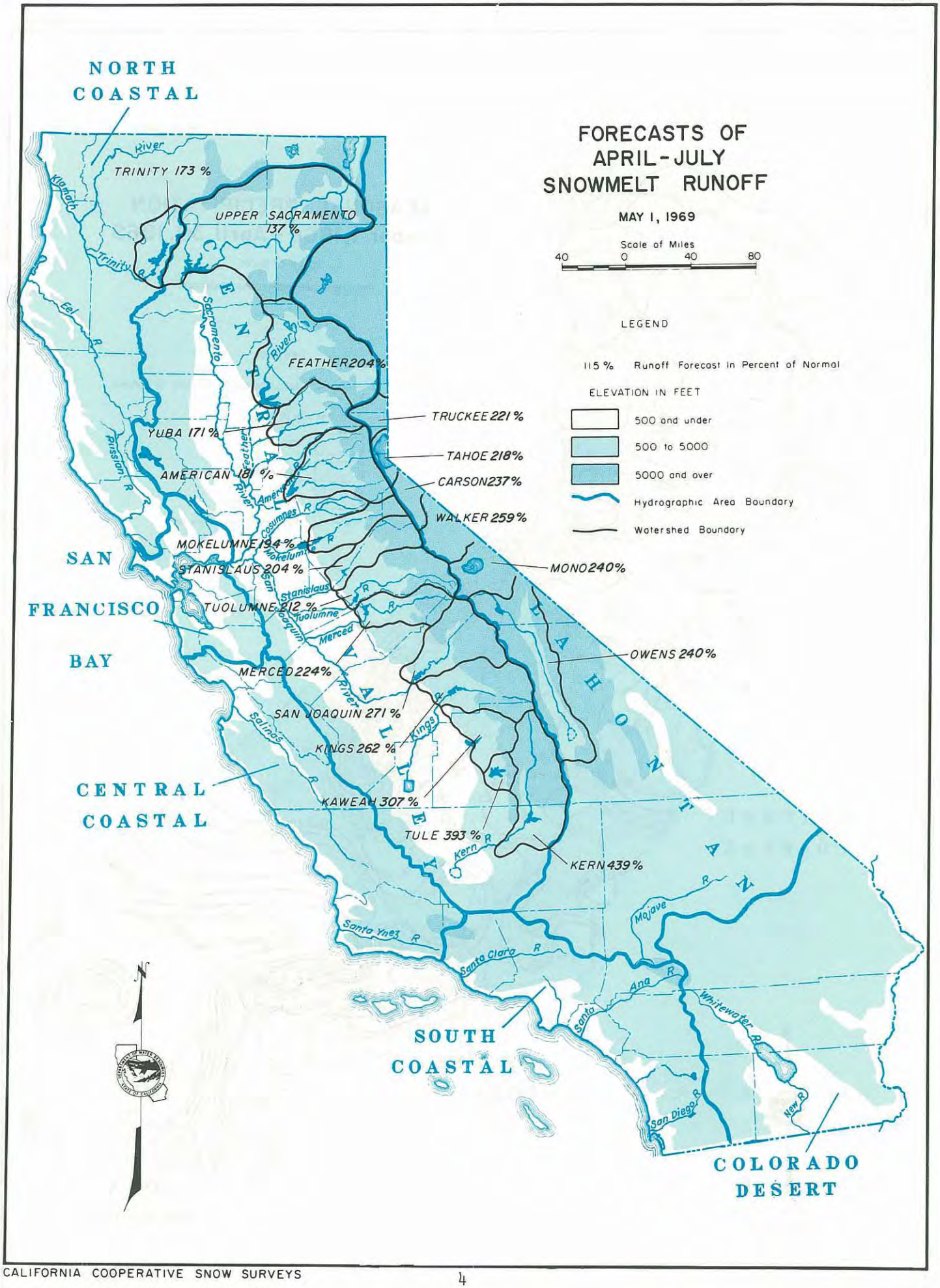
FIGURE 1


SEASONAL PRECIPITATION
October 1, 1968 - April 30, 1969
SCALE OF MILES
40 0 40 80
LEGEND
100 PRECIPITATION IN PERCENT OF NORMAL
ELEVATION IN FEET
500 and Under
500 to 5000
5000 and Over
Hydrographic Area Boundary
NORTH COASTAL
SAN FRANCISCO BAY
CENTRAL COASTAL
SOUTH COASTAL
COLORADO DESERT
CENTRAL VALLEY
LAHONTAN
Klamath River
Trinity R
Eel R
Russian R
Sacramento River
Feather River
American R
Cosumnes R
Mokelumne R
San Joaquin River
Stanislaus
Tuolumne
Merced
Kings R
Kern R
Santa Ynez
Santa Clara
Mojave R
Santa Ana
Whitewater R
San Diego R
New R


FORECASTS OF
APRIL-JULY
SNOWMELT RUNOFF
MAY 1, 1969
Scale of Miles
40 0 40 80
LEGEND
115 % Runoff Forecast in Percent of Normal
ELEVATION IN FEET
500 and under
500 to 5000
5000 and over
Hydrographic Area Boundary
Watershed Boundary
NORTH COASTAL
SAN FRANCISCO BAY
CENTRAL COASTAL
SOUTH COASTAL
COLORADO DESERT
TRINITY 173 %
UPPER SACRAMENTO 137 %
FEATHER 204 %
YUBA 171 %
AMERICAN 181 %
MOKELUMNE 194 %
STANISLAUS 204 %
TUOLUMNE 212 %
MERCED 224 %
SAN JOAQUIN 271 %
KINGS 262 %
KAWEAH 307 %
TULE 393 %
KERN 439 %
TRUCKEE 221 %
TAHOE 218 %
CARSON 237 %
WALKER 259 %
MONO 240 %
OWENS 240 %
Klamath River
Trinity R
Eel R
Russian R
Sacramento River
Feather River
American R
Cosumnes R
Mokelumne R
San Joaquin River
Stanislaus R
Tuolumne R
Merced R
Kings R
Kern R
Salinas R
Santa Ynez R
Santa Clara R
Santa Ana R
Mojave R
Whitewater R
San Diego R
New R
CENTRAL VALLEY
LAHONTAN

SUMMARY OF WATER CONDITIONS
MAY 1, 1969

CALIFORNIA'S RECORD SNOWPACK, ALTHOUGH SHOWING A GENERAL LOSS DURING APRIL, HAS A TOTAL WATER CONTENT GREATER THAN HAS EVER BEEN RECORDED BEFORE ON MAY 1. SEVERAL HIGH ELEVATION SNOW COURSES SHOW AN INCREASE IN WATER CONTENT THAT AGAIN SET NEW ALL TIME RECORDS. THE SNOW BELOW 6,000 FEET IS MELTING RAPIDLY. WITH THE ADVENT OF WARMER WEATHER RUNOFF WILL INCREASE, PROBABLY REACHING PEAK FLOWS BETWEEN THE LATTER PART OF MAY AND MID-JUNE AS MORE SUSTAINED SNOWMELT RELEASES BEGIN FROM THE HIGHER ELEVATIONS.

WITH APRIL PRECIPITATION NEAR OR ABOVE NORMAL, EXCEPT FOR THE LAHONTAN AND SOUTHERN CALIFORNIA AREAS, NO SIGNIFICANT CHANGES HAVE BEEN MADE IN THE FORECASTS OF SNOWMELT RUNOFF FOR THE PERIOD THROUGH JULY 31.

UTILIZATION OF EXCESS WATER IN THE SAN JOAQUIN VALLEY IS CONTINUING IN ORDER TO PREVENT EXCESSIVE LOWLAND FLOODING. GROUND WATER RECHARGE, MAXIMUM DISPERSAL FOR IRRIGATION USE, AND PUMPING INTO THE CALIFORNIA AQUEDUCT FOR USE IN OTHER SERVICE AREAS ARE POSITIVE STEPS THAT HAVE BEEN TAKEN. IN BUENA VISTA LAKE 6,200 ACRES ARE NOW UNDER ABOUT 30,000 ACRE-FEET OF WATER. IN TULARE LAKE, 79,000 ACRES ARE FLOODED AND STORAGE HERE IS ABOUT 750,000 ACRE-FEET. THIS STORAGE IS INCREASING BECAUSE OF CONTINUING INFLOW WHICH CURRENTLY IS ABOUT 5,000 ACRE-FEET PER DAY. AN ESTIMATED NEAR HALF A MILLION ACRE-FEET WILL STILL HAVE TO BE ACCOMMODATED IN THE SOUTHERN SAN JOAQUIN VALLEY IN THE NEXT FEW MONTHS, AS SNOWMELT WATER CONTINUES TO FEED INTO THE SYSTEM. AS THE WEATHER WARMS AND RESERVOIR INFLOWS ON THESE SIERRA STREAMS EXCEED RELEASE CRITERIA, FLOOD RESERVATION SPACE WILL BE USED FURTHER IN ORDER TO MINIMIZE DOWNSTREAM FLOODING OR DAMAGE TO CHANNELS.

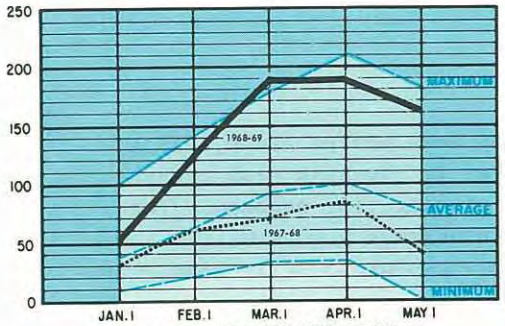
IN OTHER AREAS OF CALIFORNIA NO MAJOR WATER DISPOSAL PROBLEMS SHOULD DEVELOP. ADEQUATE FLOOD SPACE IN RESERVOIRS IS BEING RETAINED AND, WITH CAREFUL OPERATION DURING THE SNOWMELT PERIOD, MAXIMUM AMOUNTS OF CARRYOVER STORAGE WILL BE AVAILABLE IN MANY RESERVOIRS AS A HEDGE AGAINST THE POSSIBILITY OF BELOW NORMAL RUNOFF NEXT YEAR.

DETAILED RUNOFF FORECASTS AND THE VARIOUS FACTORS AFFECTING WATER SUPPLY ARE DISCUSSED UNDER THE RESPECTIVE HYDROGRAPHIC AREAS.

SUMMARY OF WATER CONDITIONS
IN PERCENT OF AVERAGE

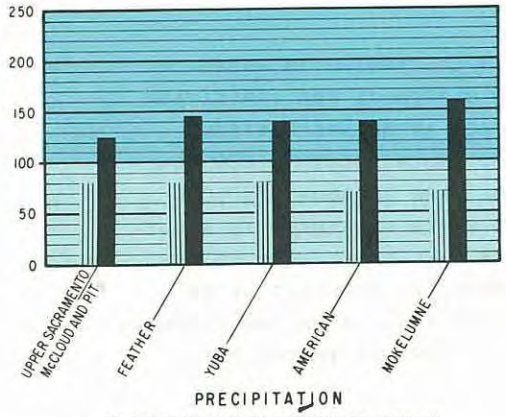
HYDROGRAPHIC AREA	PRECIPITATION OCTOBER 1 TO DATE	SNOW WATER CONTENT	RESERVOIR STORAGE	RUNOFF	
				OCTOBER 1 TO DATE	WATER YEAR FORECAST
North Coastal	125	195	95	150	140
San Francisco Bay	140	--	135	235	230
Central Coastal	185	--	145	315	300
South Coastal	190	--	210	600	520
Central Valley					
Sacramento Basin	145	215	115	165	165
San Joaquin and Tulare Lake Basins	185	280	95	240	260
Lahontan	170	270	80	145	205
Colorado Desert	55	--	--	--	--
ENTIRE STATE	155	245	110	170	185

SACRAMENTO RIVER BASIN



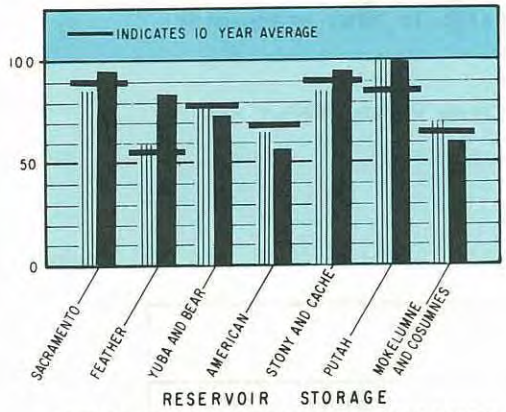
SNOWPACK ACCUMULATION
WATER CONTENT IN PERCENT OF APRIL I AVERAGE

SNOWPACK - MEASUREMENTS OF SNOWPACK WERE OBTAINED AT 68 SNOW COURSES AND 10 AERIAL SNOW DEPTH MARKERS ON OR ABOUT MAY 1. THESE MEASUREMENTS INDICATE THAT SNOWPACK WATER CONTENT WAS 215 PERCENT OF AVERAGE AS COMPARED TO 50 PERCENT ONE YEAR AGO. THE WATER CONTENT RANGES FROM A HIGH OF 220 PERCENT IN THE YUBA RIVER BASIN TO A LOW OF 150 PERCENT IN THE PIT RIVER BASIN. MOST SNOW COURSES BELOW 5,500 FEET ELEVATION REPORTED ALL SNOW HAD MELTED.



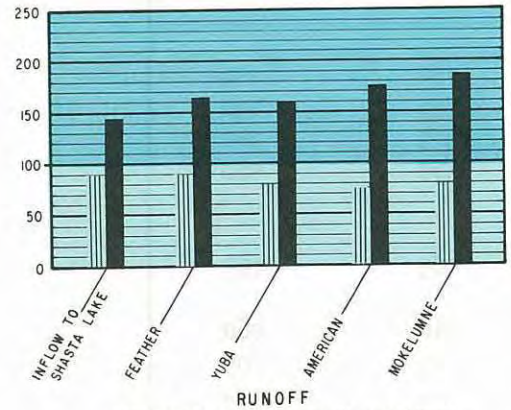
PRECIPITATION
OCTOBER I TO DATE IN PERCENT OF AVERAGE

PRECIPITATION - FROM OCTOBER 1, 1968, THROUGH APRIL 30, 1969, PRECIPITATION OVER THE SACRAMENTO VALLEY AREA AVERAGED 145 PERCENT OF NORMAL. SEASONAL PRECIPITATION VALUES VARIED FROM 183 PERCENT OF NORMAL AT NICOLAUS, ON THE VALLEY FLOOR, TO 108 PERCENT AT ALTURAS, ON THE PIT RIVER DRAINAGE. MOUNTAIN SUBDRAINAGE AMOUNTS WERE GENERALLY ONE AND A THIRD MORE IN THE NORTH TO TWO AND A THIRD MORE IN THE SOUTH THAN LAST YEAR'S VALUES FOR THE CORRESPONDING PERIOD. THE GREATEST OCTOBER-APRIL CATCH IN THE BASIN OF 99.48 INCHES OR 158 PERCENT OF NORMAL WAS REPORTED FROM DEER CREEK POWER-HOUSE, IN THE YUBA RIVER DRAINAGE. APRIL PRECIPITATION AVERAGED NORMAL OVER THE ENTIRE AREA. IT VARIED FROM 184 PERCENT OF NORMAL AT FIDDLETOWN LYNCH RANCH, IN THE COSUMNES RIVER DRAINAGE, TO 40 PERCENT AT STONY GORGE RESERVOIR, IN THE SACRAMENTO VALLEY WEST SIDE DRAINAGE.



RESERVOIR STORAGE
CONTENTS OF MAJOR RESERVOIRS IN PERCENT OF CAPACITY

RESERVOIR STORAGE - MAY 1 STORAGE IN THIRTY-THREE MAJOR SACRAMENTO VALLEY RESERVOIRS WAS 12,712,000 ACRE-FEET, AN INCREASE OF 1,288,000 ACRE-FEET DURING APRIL. THIS AMOUNTS TO 115 PERCENT OF AVERAGE FOR THIS DATE. OROVILLE RESERVOIR, NOW FILLING FOR THE FIRST TIME, IS STORING 3,014,000 ACRE-FEET WITH 524,000 ACRE-FEET OF SPACE REMAINING. NO STORAGE ENCROACHMENT ON FLOOD CONTROL SPACE IS OCCURRING IN ANY OF THE FLOOD CONTROL RESERVOIRS IN THIS AREA.

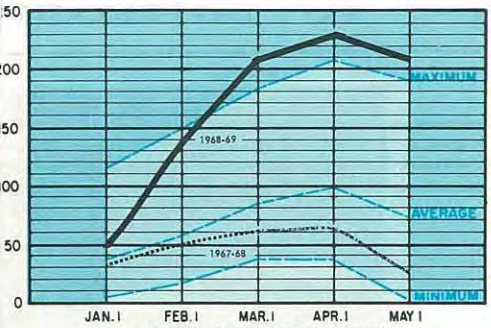


RUNOFF
OCTOBER I TO DATE IN PERCENT OF AVERAGE

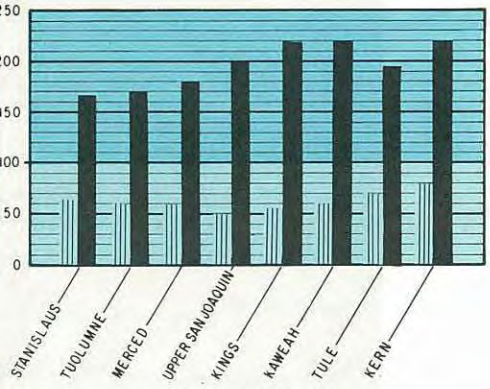
RUNOFF - APRIL RUNOFF WAS WELL ABOVE NORMAL IN ALL SACRAMENTO VALLEY WATERSHEDS, WITH FLOWS IN MAJOR STREAMS GENERALLY RANGING BETWEEN 135 AND 160 PERCENT OF NORMAL. TOTAL RUNOFF IN THESE WATERSHEDS WAS 150 PERCENT OF NORMAL FOR THE MONTH WHICH REDUCED THE SEASON-TO-DATE TOTAL WITH RESPECT TO NORMAL TO 165 PERCENT.

MAY 1, 1968 ═══ MAY 1, 1969 ▬

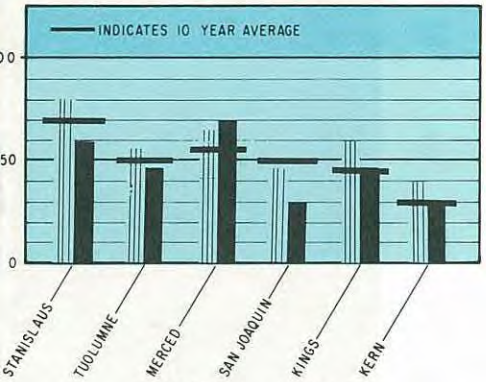
SAN JOAQUIN RIVER AND TULARE LAKE BASINS



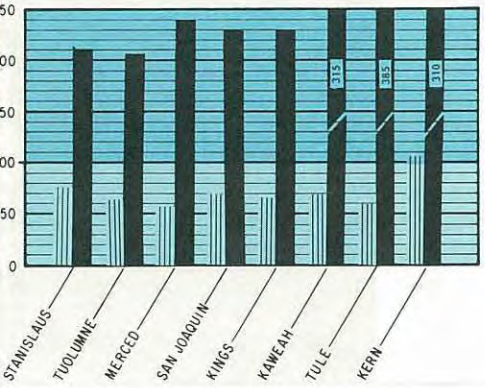
SNOWPACK ACCUMULATION
WATER CONTENT IN PERCENT OF APRIL I AVERAGE



PRECIPITATION
OCTOBER I TO DATE IN PERCENT OF AVERAGE



RESERVOIR STORAGE
CONTENTS OF MAJOR RESERVOIRS IN PERCENT OF CAPACITY



RUNOFF
OCTOBER I TO DATE IN PERCENT OF AVERAGE

MAY 1, 1968 MAY 1, 1969

SNOWPACK - MEASUREMENTS OF SNOWPACK WERE OBTAINED AT 103 SNOW COURSES AND 38 AERIAL SNOW DEPTH MARKERS ON OR ABOUT MAY 1. THESE MEASUREMENTS INDICATE THAT SNOWPACK WATER CONTENT IS 280 PERCENT OF AVERAGE AS COMPARED TO 30 PERCENT ONE YEAR AGO. SNOWPACK WATER CONTENT RANGES FROM A HIGH OF 355 PERCENT IN THE KAWEAH RIVER BASIN TO A LOW OF 170 PERCENT IN THE TULE RIVER BASIN. EIGHT LONG-TERM SNOW COURSES IN THIS AREA HAVE EXCEEDED THEIR PREVIOUS MAXIMUM WATER CONTENTS. PANTHER MEADOW SNOW COURSE, IN THE KAWEAH RIVER BASIN, HAD A SNOW DEPTH OF 195.6 INCHES AND A WATER CONTENT OF 100.9 INCHES WHICH IS 375 PERCENT OF AVERAGE.

PRECIPITATION - FROM OCTOBER 1, 1968, THROUGH APRIL 30, 1969, PRECIPITATION AVERAGED 190 PERCENT OF NORMAL OVER THE SAN JOAQUIN AREA. SEASONAL PRECIPITATION VALUES RANGED FROM 257 PERCENT OF NORMAL AT GIANT FOREST, IN THE KAWEAH RIVER DRAINAGE, TO 143 PERCENT AT TEJON RANCHO, ON THE TULARE LAKE VALLEY FLOOR DRAINAGE. SIERRA BASINS HAVE AVERAGED 195 PERCENT OF NORMAL FOR THE PERIOD WHILE THE VALLEY FLOOR HAS RECEIVED 185 PERCENT OF ITS NORMAL AMOUNT. THIS WAS GENERALLY TWO AND ONE-HALF TO A SPECTACULAR FOUR TIMES THE VALUES RECEIVED FOR THE CORRESPONDING PERIOD ONE YEAR AGO. THE COLOSSAL SEASONAL ACCUMULATION AT GIANT FOREST TOTALS 104.66 INCHES, THE GREATEST OF RECORD. APRIL PRECIPITATION AVERAGED 110 PERCENT OF NORMAL OVER THE ENTIRE AREA.

RESERVOIR STORAGE - ON MAY 1, 27 MAJOR RESERVOIRS SERVING THE SAN JOAQUIN VALLEY CONTAINED 2,848,000 ACRE-FEET, AN INCREASE OF 302,000 ACRE-FEET DURING APRIL. THIS STORAGE IS ABOUT 95 PERCENT OF AVERAGE FOR THIS DATE. CONTINUED HIGH SNOWMELT INFLOW HAS MADE ENCROACHMENT ON FLOOD CONTROL SPACE NECESSARY IN SEVERAL OF THESE RESERVOIRS. RESTRICTED RELEASES WILL BE CONTINUED IN ORDER TO MINIMIZE FLOOD CONTROL PROBLEMS DOWNSTREAM.

RUNOFF - RUNOFF DURING THE PAST MONTH IN MAJOR WATERSHEDS OF THE SAN JOAQUIN AND TULARE LAKE BASINS WAS 175 PERCENT AND 255 PERCENT OF NORMAL, RESPECTIVELY. IN THE COMBINED AREAS, TOTAL APRIL RUNOFF WAS 200 PERCENT OF NORMAL. AGGREGATE RUNOFF SINCE OCTOBER 1 IN THE COMBINED AREAS IS NOW ABOUT 240 PERCENT OF NORMAL.

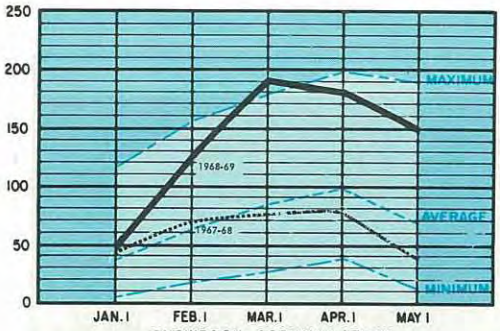
DRAINAGE BASIN AND WATERSHED	April Through July in 1,000 Acre-Feet					
				FORECASTS		
	50-Year Average	Maximum of Record	Minimum of Record	April-July Forecast	Percent of Average	80% Prob. Range Acre-Feet
SACRAMENTO RIVER BASIN						
Upper Sacramento River						
Pit River inflow to Shasta Lake	1,012	1,796	480	1,350	133	--
McCloud River inflow to Shasta Lake	416	850	194	500	120	--
Sacramento River inflow to Shasta Lake	281	636	39	450	160	--
Total inflow to Shasta Lake	1,750	3,064	726	2,400	137	2,200 to 2,700
Sacramento River near Red Bluff	2,400	4,611	943	3,100	129	2,850 to 3,500
Feather River						
Inflow to Lake Almanor (nr Prattville)	323	675	120	580	180	--
North Fork at Pulga	1,016	2,416	254	2,000	197	--
Middle Fork near Clio	84	518	8	240	286	--
South Fork at Enterprise	107	267	19	215	201	--
Total inflow to Oroville Reservoir	1,861	4,676	396	3,800	204	3,600 to 4,100
Yuba River						
North Fork below Goodyears Bar	288	647	68	475	165	--
Combined inflow to Jackson Mdw. and Bowman Reservoirs	108	236	37	185	171	--
South Fork at Langs Crossings	231	481	74	380	165	--
Yuba River at Smartville	1,090	2,424	239	1,860	171	1,750 to 2,000
American River						
North Fork at North Fork Dam	262	716	48	480	183	--
Middle Fork near Auburn	550	1,406	117	1,000	182	--
Silver Creek below Camino Diversion Dam	179	383	43	325	182	--
Total inflow to Folsom Reservoir	1,329	3,074	257	2,400	181	2,300 to 2,550
Sacramento River at Sacramento						
Cosumnes River						
Cosumnes River at Michigan Bar	128	361	12	270	211	230 to 300
Mokelumne River						
North Fork near West Point	418	829	143	810	194	--
Total inflow to Pardee Reservoir	464	1,065	127	900	194	850 to 960
SAN JOAQUIN RIVER BASIN						
Stanislaus River						
Middle Fork at Sand Bar Flat near Avery	337	702	83	620	184	--
Total inflow to Melones Reservoir	711	1,710	167	1,450	204	1,370 to 1,550
Tuolumne River						
Cherry Creek and Eleanor Creek near Hetch Hetchy	304	560	102	620	204	--
Tuolumne River near Hetch Hetchy	592	1,392	215	1,200	203	--
Total inflow to Don Pedro Reservoir	1,179	2,609	385	2,500	212	2,400 to 2,620
Merced River						
Merced River at Pohono Bridge	356	888	121	720	202	--
Total inflow to Exchequer	599	1,491	175	1,340	224	1,290 to 1,420
San Joaquin River						
South Fork near Florence Lake	187	511	58	400	214	--
Big Creek below Huntington Lake	86	264	19	210	244	--
San Joaquin River at Mammoth Pool	949	2,218	254	2,400	253	--
Total inflow to Millerton Lake	1,173	3,355	310	3,180	271	3,080 to 3,300
San Joaquin River near Vernalis						
TULARE LAKE BASIN						
Kings River						
North Fork near Cliff Camp	228	478	50	620	272	--
Total inflow to Pine Flat Reservoir	1,143	2,959	280	3,000	262	2,900 to 3,100
Kaweah River						
Total inflow to Terminus Reservoir	261	814	69	800	307	750 to 850
Tule River						
Total inflow to Success Reservoir	56	169	2	220	393	200 to 240
Kern River						
Kern River near Kernville	336	952	75	1,450	432	--
Total inflow to Isabella Reservoir	410	1,086	84	1,800	439	1,700 to 1,900

F FOR CENTRAL VALLEY STREAMS

Water Year --- October Through September --- in 1,000 Acre-Feet

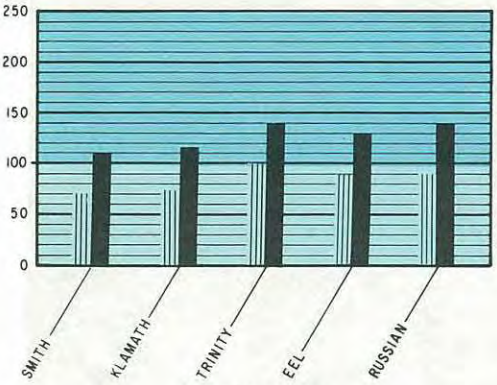
50-Year Average	Maximum of Record	Minimum of Record	October Through January	February	March	April	FORECASTS May	June	July	August and September	Water Year Forecast	Percent of Average
2,848	4,698	1,484	1,185	411	465	650	--	--	--	--	3,720	131
1,215	2,353	632	463	174	137	206	--	--	--	--	1,400	115
761	1,767	171	256	152	128	204	--	--	--	--	1,020	134
5,318	9,700	2,479	2,489	1,229	871	1,090	720	360	230	482	7,470	140
7,690	15,121	3,294	4,204	2,211	1,360	1,480	--	--	--	--	11,400	148
716	1,269	396	--	--	--	--	--	--	--	--	--	--
125	4,400	819	--	--	--	--	--	--	--	--	--	--
197	637	41	--	--	--	--	--	--	--	--	--	--
253	562	67	--	--	--	--	--	--	--	--	--	--
4,159	9,492	1,295	2,216	723	601	1,200	1,550	750	300	240	7,580	182
516	1,056	162	--	--	--	--	--	--	--	--	--	--
86	292	60	--	--	--	--	--	--	--	--	--	--
335	565	114	--	--	--	--	--	--	--	--	--	--
2,226	4,544	603	1,204	354	276	510	790	420	140	75	3,770	169
537	1,234	110	--	--	--	--	--	--	--	--	--	--
996	2,575	283	--	--	--	--	--	--	--	--	--	--
291	537	83	--	--	--	--	--	--	--	--	--	--
2,525	5,787	543	1,328	500	360	650	1,000	600	150	52	4,640	184
												165
339	876	40	258	126	85	120	100	40	10	1	740	218
577	1,009	197	--	--	--	--	--	--	--	--	--	--
690	1,692	190	256	96	88	210	380	250	60	20	1,360	197
452	929	128	--	--	--	--	--	--	--	--	--	--
1,057	2,834	261	434	184	154	330	590	400	130	38	2,260	214
420	740	158	--	--	--	--	--	--	--	--	--	--
726	1,661	265	--	--	--	--	--	--	--	--	--	--
1,741	3,756	546	748	267	220	450	790	810	450	135	3,870	222
431	1,020	145	--	--	--	--	--	--	--	--	--	--
897	2,126	252	408	216	164	270	460	450	160	43	2,170	242
225	653	71	--	--	--	--	--	--	--	--	--	--
99	298	22	--	--	--	--	--	--	--	--	--	--
1,225	2,964	361	--	--	--	--	--	--	--	--	--	--
1,617	4,368	444	504	234	227	460	970	1,100	650	175	4,320	267
												240
261	542	58	--	--	--	--	--	--	--	--	--	--
1,530	3,857	392	482	201	184	400	930	1,050	620	173	4,040	264
383	1,105	102	207	108	97	150	260	290	100	38	1,250	326
124	364	19	109	86	71	85	75	50	10	10	495	399
491	1,388	147	--	--	--	--	--	--	--	--	--	--
604	1,393	175	202	93	128	335	480	550	435	177	2,400	397

NORTH COASTAL AREA



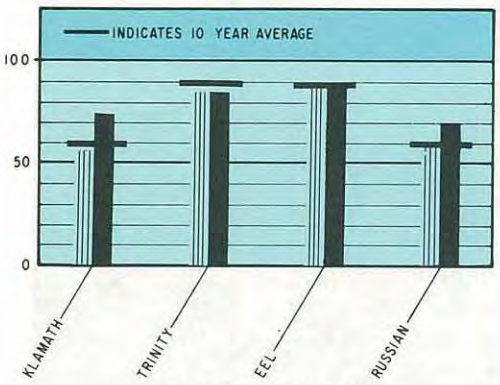
SNOWPACK ACCUMULATION

WATER CONTENT IN PERCENT OF APRIL I AVERAGE



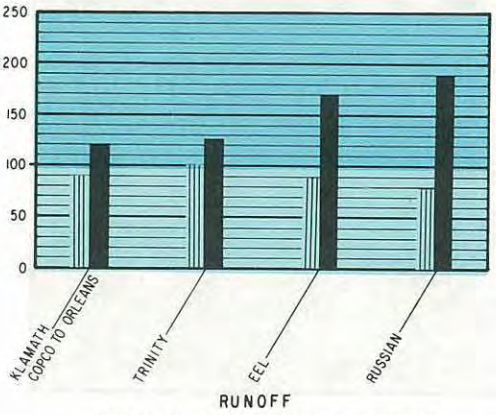
PRECIPITATION

OCTOBER I TO DATE IN PERCENT OF AVERAGE



RESERVOIR STORAGE

CONTENTS OF MAJOR RESERVOIRS IN PERCENT OF CAPACITY



RUNOFF

OCTOBER I TO DATE IN PERCENT OF AVERAGE

MAY 1, 1968 MAY 1, 1969

SNOWPACK - MEASUREMENTS OF SNOWPACK WERE OBTAINED AT NINE SNOW COURSES ON OR ABOUT MAY 1. THESE MEASUREMENTS INDICATE THAT SNOWPACK WATER CONTENT IS 195 PERCENT OF AVERAGE AS COMPARED TO 55 PERCENT ONE YEAR AGO. THE WATER CONTENT RANGES FROM A HIGH OF 205 PERCENT IN THE TRINITY RIVER BASIN TO A LOW OF 180 PERCENT IN THE SCOTT RIVER BASIN. SHIMMY LAKE, IN THE TRINITY RIVER BASIN, HAD A DEPTH OF 128.5 INCHES WITH A WATER CONTENT OF 76.5 INCHES WHICH IS 220 PERCENT OF AVERAGE.

THE OREGON COOPERATIVE SNOW SURVEYS REPORTS THAT SNOWPACK WATER CONTENT IN THE UPPER KLAMATH RIVER BASIN ON MAY 1 WAS 134 PERCENT OF NORMAL AS COMPARED TO 39 PERCENT ONE YEAR AGO.

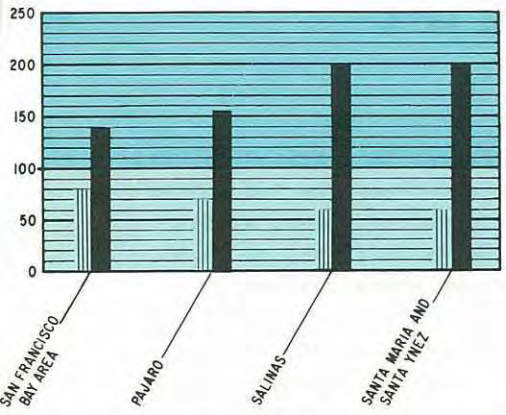
PRECIPITATION - PRECIPITATION IN THE NORTH COASTAL AREA AVERAGED 125 PERCENT OF NORMAL FOR THE PERIOD OCTOBER 1 THROUGH APRIL 30. IT VARIED FROM 162 PERCENT OF NORMAL AT HEALDSBURG, IN THE RUSSIAN RIVER DRAINAGE, TO 105 PERCENT AT GASQUET RANGER STATION, IN THE SMITH RIVER DRAINAGE. ALL SUBDRAINAGES IN THE AREA WERE ABOVE NORMAL. CATCH AMOUNTS WERE GENERALLY ONE AND A HALF TIMES GREATER THAN LAST YEAR'S VALUES FOR THIS SAME PERIOD. THE GREATEST STATEWIDE SEASONAL TOTAL OVER THE SEVEN-MONTH PERIOD WAS 121.36 INCHES OR 117 PERCENT OF NORMAL, REPORTED AT HONEYDEW 2WSW IN THE MATTOLE RIVER. APRIL PRECIPITATION AVERAGED 95 PERCENT OF NORMAL OVER THE AREA. EXTREMES VARIED FROM 136 PERCENT OF NORMAL AT SANTA ROSA, IN THE RUSSIAN RIVER DRAINAGE, TO 41 PERCENT AT BIG BAR RANGER STATION, IN THE TRINITY RIVER DRAINAGE.

RESERVOIR STORAGE - FOUR MAJOR INTRASTATE RESERVOIRS SERVING THIS AREA WERE STORING 2,268,000 ACRE-FEET ON MAY 1, A GAIN OF 355,000 ACRE-FEET DURING APRIL. STORAGE IS NOW 84 PERCENT OF CAPACITY AND 96 PERCENT OF AVERAGE FOR THIS DATE. THREE INTERSTATE RESERVOIRS IN THE KLAMATH RIVER DRAINAGE, WHICH CONTRIBUTE TO THE NORTH COASTAL AREA'S WATER SUPPLY, CONTAINED 930,000 ACRE-FEET. THIS IS 130 PERCENT OF AVERAGE FOR MAY 1, 75 PERCENT OF COMBINED CAPACITY, AND A GAIN OF 192,000 ACRE-FEET IN THE LAST MONTH.

RUNOFF - APRIL RUNOFF IN MAJOR NORTH COASTAL STREAMS RANGED BETWEEN 60 PERCENT OF NORMAL IN THE RUSSIAN RIVER BASIN AND 165 PERCENT OF NORMAL IN THE TRINITY RIVER BASIN. OCTOBER THROUGH APRIL RUNOFF WAS ABOUT 150 PERCENT OF NORMAL.

FORECASTS - CONDITIONS AT THIS TIME INDICATE THAT RUNOFF OF THE NORTH COASTAL AREA DURING THE 1968-69 WATER YEAR WILL BE ABOUT 140 PERCENT OF AVERAGE. THE APRIL-JULY RUNOFF OF THE TRINITY RIVER AT LEWISTON IS FORECASTED TO BE ABOUT 1,030,000 ACRE-FEET, WHICH IS 173 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 420,000 ACRE-FEET, OR ABOUT 109 PERCENT OF AVERAGE.

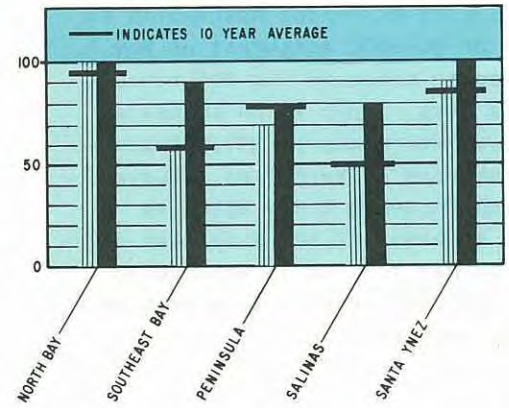
SAN FRANCISCO BAY AND CENTRAL COASTAL AREAS



PRECIPITATION

OCTOBER 1 TO DATE IN PERCENT OF AVERAGE

PRECIPITATION - IN THE SAN FRANCISCO BAY AND CENTRAL COASTAL AREAS, PRECIPITATION AVERAGED 175 PERCENT OF NORMAL FOR THE PERIOD OCTOBER 1 THROUGH APRIL 30. IT VARIED FROM 263 PERCENT OF NORMAL AT SAN LUIS OBISPO, IN THE SANTA MARIA RIVER DRAINAGE, TO 106 PERCENT AT MOUNT HAMILTON, IN THE ALAMEDA CREEK DRAINAGE. SUBBASIN CATCHES IN THE SAN FRANCISCO BAY AND PAJARO RIVER ARE TWICE THEIR VALUES FOR THE CORRESPONDING PERIOD LAST YEAR. SPECTACULAR DIFFERENCES EXIST IN THE SALINAS AND SANTA MARIA-SANTA YNEZ SUBBASINS WHERE VALUES ARE ABOUT FOUR TIMES GREATER THAN LAST YEAR'S AMOUNT. APRIL PRECIPITATION FAVORED THIS PORTION OF THE STATE, AVERAGING 140 PERCENT OF NORMAL. THIS APRIL'S EXTREMES VARIED FROM 198 PERCENT OF NORMAL AT PASO ROBLES, IN THE SALINAS RIVER DRAINAGE, TO 84 PERCENT AT MOUNT HAMILTON.

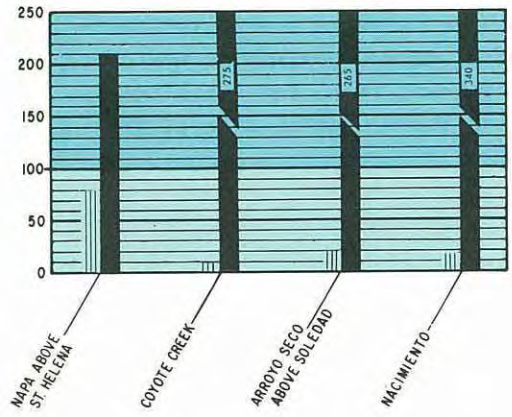


RESERVOIR STORAGE

CONTENTS OF MAJOR RESERVOIRS IN PERCENT OF CAPACITY

RESERVOIR STORAGE - STORAGE IN 17 MAJOR RESERVOIRS IN THE SAN FRANCISCO BAY AREA WAS 565,000 ACRE-FEET ON MAY 1. THIS IS 91 PERCENT OF CAPACITY AND 135 PERCENT OF THEIR MAY 1 AVERAGE STORAGE. OF THE 17 RESERVOIRS, 14 HAVE REMAINED AT OR NEAR MAXIMUM CAPACITY THROUGH APRIL. SEVEN OF THE RESERVOIRS CONTAIN WATER SUPPLIES IMPORTED FROM SIERRA WATERSHEDS.

IN THE CENTRAL COASTAL AREA STORAGE IN SIX MAJOR RESERVOIRS WAS 828,000 ACRE-FEET ON MAY 1, A DEPLETION OF ABOUT 21,000 ACRE-FEET DURING APRIL. STORAGE IS NOW 84 PERCENT OF TOTAL CAPACITY AND 146 PERCENT OF AVERAGE STORAGE FOR THIS DATE. TOTAL STORAGE IN THESE RESERVOIRS HAS GAINED 257,000 ACRE-FEET SINCE LAST YEAR AT THIS TIME.



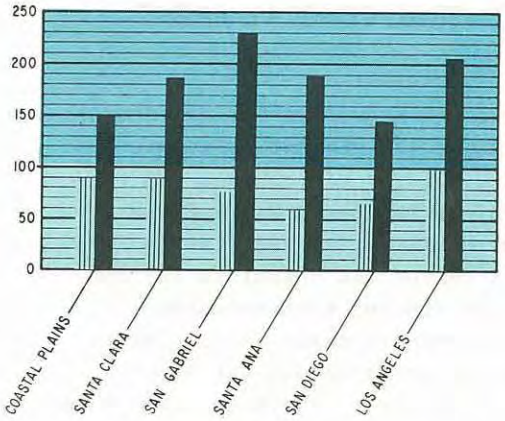
RUNOFF

OCTOBER 1 TO DATE IN PERCENT OF AVERAGE

RUNOFF - APRIL RUNOFF WITH RESPECT TO NORMAL WAS LOWER IN THE SAN FRANCISCO BAY AREA THAN IN ANY OF THE OTHER MAJOR HYDROGRAPHIC AREAS OF THE STATE, AMOUNTING TO ONLY ABOUT 65 PERCENT OF NORMAL. MAJOR CENTRAL COASTAL STREAMS EXPERIENCED ABOUT 125 PERCENT OF APRIL NORMAL. AGGREGATE RUNOFF SINCE OCTOBER 1 FOR THE COMBINED AREAS WAS REDUCED TO ABOUT 290 PERCENT OF NORMAL.

MAY 1, 1968 ═══ MAY 1, 1969 ▬

SOUTH COASTAL AREA

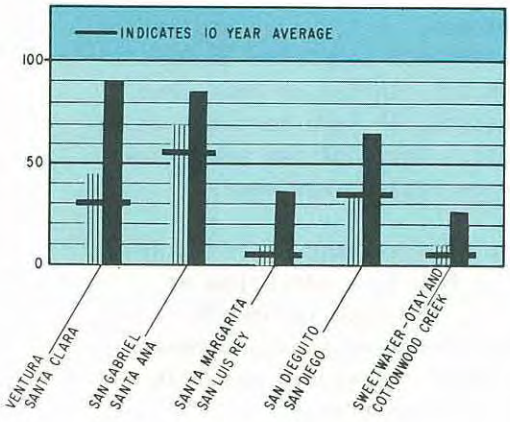


PRECIPITATION

OCTOBER 1 TO DATE IN PERCENT OF AVERAGE

PRECIPITATION - PRECIPITATION DURING APRIL WAS LIGHT, AVERAGING ONLY 55 PERCENT OF NORMAL FOR THE ENTIRE AREA. EXTREMES VARIED FROM 82 PERCENT OF NORMAL AT BIG TUJUNGA DAM, IN THE LOS ANGELES RIVER DRAINAGE, TO ONLY 6 PERCENT AT CAMPO, IN THE TIA JUANA RIVER DRAINAGE.

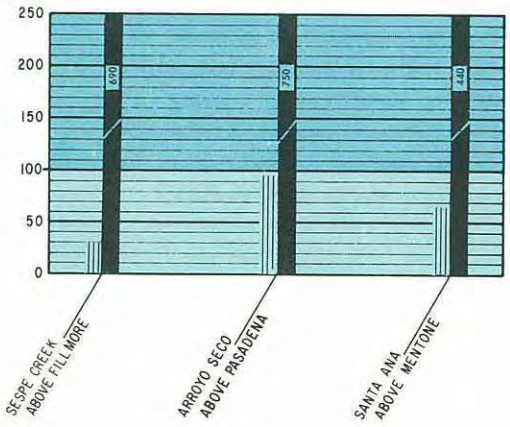
SEASONAL PRECIPITATION AVERAGED 190 PERCENT OF NORMAL OVER THE ENTIRE AREA. SUBBASINS VARIED FROM 230 PERCENT OF NORMAL IN THE SAN GABRIEL RIVER TO 145 PERCENT IN THE SAN DIEGO AREA. AMOUNTS WERE TWO TO THREE TIMES THE VALUES FOR THE CORRESPONDING PERIOD ONE YEAR AGO. ONLY TWO OF THE PAST SEVEN MONTHS (JANUARY AND FEBRUARY) HAVE YIELDED ABOVE NORMAL PRECIPITATION.



RESERVOIR STORAGE

CONTENTS OF MAJOR RESERVOIRS IN PERCENT OF CAPACITY

RESERVOIR STORAGE - TWENTY-SIX MAJOR RESERVOIRS IN THIS AREA HAD A COMBINED STORAGE OF 969,000 ACRE-FEET ON MAY 1. THIS IS 65 PERCENT OF THEIR AGGREGATE CAPACITY AND 209 PERCENT OF THEIR AVERAGE STORAGE FOR THIS DATE. THIS IS AN INCREASE OF 17,000 ACRE-FEET DURING THE LAST MONTH AND IS 397,000 ACRE-FEET MORE THAN WAS IN STORAGE LAST YEAR AT THIS TIME. ELEVEN OF THE RESERVOIRS INCLUDE IMPORTED COLORADO RIVER WATER IN THEIR STORAGE. THESE ELEVEN ARE STORING 409,500 ACRE-FEET OR 138 PERCENT OF AVERAGE STORAGE FOR MAY 1. THE 15 RESERVOIRS STORING ONLY LOCAL WATER CONTAIN 560,000 ACRE-FEET, A GAIN OF 295,000 ACRE-FEET SINCE LAST YEAR AT THIS TIME.



RUNOFF

OCTOBER 1 TO DATE IN PERCENT OF AVERAGE

RUNOFF - AGGREGATE RUNOFF IN THREE KEY SOUTH COASTAL AREA STREAMS WAS OVER 200 PERCENT OF NORMAL DURING THE MONTH OF APRIL. BASED ON DATA FOR THESE STREAMS, IT IS ESTIMATED THAT TOTAL RUNOFF SINCE OCTOBER 1 IN THE SOUTH COASTAL AREA IS OVER 650 PERCENT OF THE LONG-TERM MEAN.

MAY 1, 1968 ═══ MAY 1, 1969 ▬

COLORADO DESERT AREA

SNOWPACK - SNOW CONDITIONS IN THE COLORADO RIVER BASIN, ACCORDING TO THE U. S. SOIL CONSERVATION SERVICE, ARE ABOUT 90 PERCENT OF AVERAGE FOR MAY 1. DRY CONDITIONS AND ABOVE NORMAL TEMPERATURES HAVE BROUGHT ABOUT A RAPID DEPLETION OF THE LOW AND MIDELEVATION SNOWPACK OVER MOST OF THE BASIN. SNOWPACK WATER CONTENT RANGES FROM 75 PERCENT OF AVERAGE IN THE HEADWATERS OF THE GREEN AND UPPER COLORADO BASINS TO 470 PERCENT OF AVERAGE IN THE VIRGIN RIVER BASIN IN UTAH.

PRECIPITATION - IN THE COLORADO DESERT AREA, PRECIPITATION AVERAGED 55 PERCENT OF NORMAL FOR THE PERIOD OCTOBER 1, 1968, THROUGH APRIL 30, 1969. PRECIPITATION DURING THE PERIOD VARIED FROM 180 PERCENT OF NORMAL AT IRON MOUNTAIN TO 39 PERCENT AT THERMAL AIRPORT. THE 0.81 INCH OF WATER FOR THE SEVEN-MONTH PERIOD AT THERMAL IS THE SMALLEST REPORTED SEASONAL TOTAL IN THE ENTIRE STATE. APRIL PRECIPITATION WAS NIL IN THE AREA.

RESERVOIR STORAGE - THE STORAGE IN LAKE MEAD ON MAY 1 WAS 15,476,000 ACRE-FEET. THIS IS 60 PERCENT OF CAPACITY AND 91 PERCENT OF AVERAGE STORAGE FOR THIS DATE. STORAGE HAS BEEN INCREASED BY 90,000 ACRE-FEET DURING APRIL. THERE IS 696,000 ACRE-FEET MORE IN STORAGE THAN THERE WAS ONE YEAR AGO.

LAKE POWELL, UPSTREAM FROM LAKE MEAD, HAD 8,049,000 ACRE-FEET IN STORAGE ON MAY 1. THIS IS 108 PERCENT OF AVERAGE STORAGE FOR THIS DATE AND REPRESENTS A NET GAIN OF 657,000 ACRE-FEET DURING APRIL.

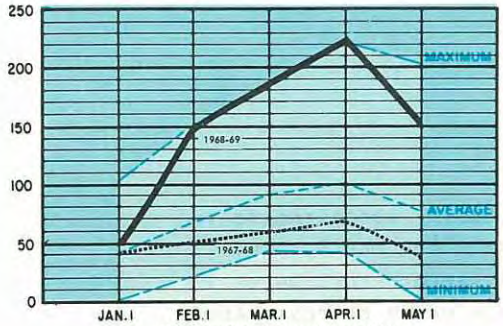
RUNOFF - OCTOBER THROUGH APRIL RUNOFF OF THE COLORADO RIVER, INFLOW TO LAKE POWELL, CORRECTED FOR REGULATION OF UPPER COLORADO RIVER STORAGE PROJECT RESERVOIRS, WAS 4,241,000 ACRE-FEET OR 114 PERCENT OF NORMAL FOR THE PERIOD. APRIL RUNOFF WAS 1,737,000 ACRE-FEET OR 153 PERCENT OF NORMAL FOR THE MONTH.

FORECASTS MAY 1, 1969 - 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 1969, WILL BE:

MAXIMUM	10,000,000 ACRE-FEET
MEAN	8,500,000 ACRE-FEET
MINIMUM	7,000,000 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.

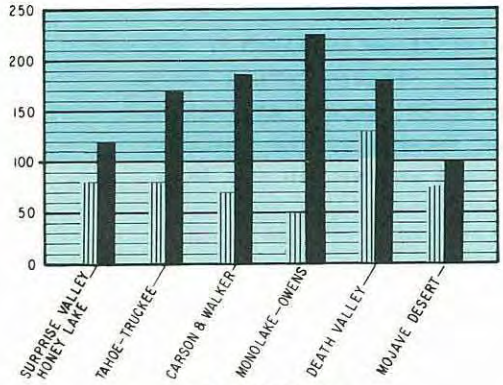
LAHONTAN AREA



SNOWPACK ACCUMULATION

WATER CONTENT IN PERCENT OF APRIL I AVERAGE

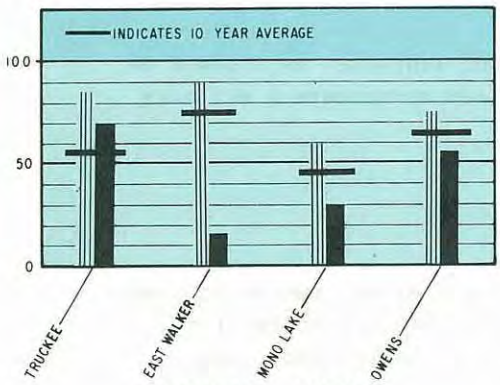
SNOWPACK - MEASUREMENTS OF SNOWPACK WERE OBTAINED AT 39 SNOW COURSES ON OR ABOUT MAY 1. THESE MEASUREMENTS INDICATE THAT SNOWPACK WATER CONTENT WAS 270 PERCENT OF AVERAGE AS COMPARED TO 50 PERCENT ONE YEAR AGO. IT RANGED FROM A HIGH OF 350 PERCENT IN THE OWENS RIVER BASIN TO A LOW OF 205 PERCENT IN THE LAKE TAHOE AND TRUCKEE RIVER BASINS. IN THE OWENS RIVER BASIN, EAST PIUTE PASS SNOW COURSE HAD A WATER CONTENT OF 470 PERCENT OF AVERAGE AND MAMMOTH SNOW COURSE HAD A WATER CONTENT OF 320 PERCENT OF AVERAGE. THESE TWO SNOW COURSES HAVE EXCEEDED THEIR PREVIOUS MAXIMUM WATER CONTENT.



PRECIPITATION

OCTOBER I TO DATE IN PERCENT OF AVERAGE

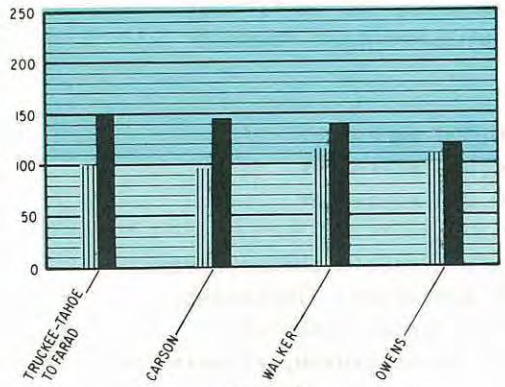
PRECIPITATION - OCTOBER THROUGH APRIL PRECIPITATION AVERAGED 170 PERCENT OF NORMAL OVER THE LAHONTAN AREA. SEASONAL AMOUNTS WITH RESPECT TO NORMAL VARIED FROM A LOW OF 11 PERCENT AT WENDEL 1 EAST, IN THE HONEY LAKE DRAINAGE, TO 352 PERCENT AT INDEPENDENCE, IN THE OWENS RIVER DRAINAGE. THE SEASONAL TOTAL OF 15.22 INCHES AT INDEPENDENCE WAS THEIR SECOND WETTEST OF RECORD SINCE 1868. ALL SUBDRAINAGES IN THE AREA ARE WELL ABOVE NORMAL. VALUES ARE ONE AND A HALF TO FOUR AND A HALF TIMES THE AMOUNTS FOR THE CORRESPONDING PERIOD ONE YEAR AGO. APRIL PRECIPITATION FELL FAR SHORT OF NORMAL, AVERAGING 75 PERCENT OVER THE ENTIRE AREA.



RESERVOIR STORAGE

CONTENTS OF MAJOR RESERVOIRS IN PERCENT OF CAPACITY

RESERVOIR STORAGE - STORAGE IN SEVEN MAJOR CALIFORNIA RESERVOIRS IN THIS AREA WAS 168,150 ACRE-FEET ON MAY 1, A DECREASE OF 27,850 ACRE-FEET DURING APRIL. THIS IS 48 PERCENT OF THEIR COMBINED CAPACITY, REPRESENTS 80 PERCENT OF AVERAGE STORAGE FOR THIS DATE, AND IS 88,000 ACRE-FEET LESS THAN WAS IN STORAGE ONE YEAR AGO. THREE OTHER RESERVOIRS IN THIS AREA STORE WATER FOR USE IN BOTH NEVADA AND CALIFORNIA. STORAGE IN THESE THREE RESERVOIRS WAS 567,000 ACRE-FEET OR 68 PERCENT OF COMBINED CAPACITY AND 118 PERCENT OF AVERAGE FOR MAY 1. THE WATER SURFACE ELEVATION OF LAKE TAHOE ON MAY 1, 1969 WAS 6227.39 FEET, A DROP OF 0.10 FOOT DURING APRIL.



RUNOFF

OCTOBER I TO DATE IN PERCENT OF AVERAGE

RUNOFF - UNIMPAIRED STREAMFLOW DURING THE PAST MONTH IN KEY LAHONTAN AREA STREAMS RANGED BETWEEN 130 PERCENT OF NORMAL FOR THE WEST FORK CARSON RIVER AT WOODFORDS AND 470 PERCENT OF NORMAL FOR THE EAST WALKER RIVER NEAR BRIDGEPORT. TOTAL APRIL RUNOFF IN THESE STREAMS WAS 200 PERCENT OF NORMAL WHICH BOOSTED THE SEASONAL TOTAL SINCE OCTOBER 1, 1968, TO NEARLY 150 PERCENT OF NORMAL.

FORECASTS - CONDITIONS OF MAY 1 INDICATE THAT RUNOFF FROM THE LAHONTAN AREA DURING THE 1968-69 WATER YEAR WILL BE ABOUT 205 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 146,000 ACRE-FEET, 230 PERCENT OF LONG-TERM MEAN.

MAY 1, 1968 MAY 1, 1969

LAHONTAN AREA

FORECASTS AS OF MAY 1, 1969			
	APRIL-JULY RUNOFF		
STREAM AND STATION	AVERAGE IN ACRE-FEET	IN ACRE-FEET	IN PERCENT OF AVERAGE
Bidwell Creek near Ft. Bidwell	10,930	18,000	165
Mill Creek above diversions	4,860	6,300	130
Deep Creek above diversions	3,470	5,000	144
Eagle Creek at Eagleville	4,730	6,500	137
Truckee River, Lake Tahoe to Farad accretion	262,000	580,000	221
Lake Tahoe Rise (assuming gates closed)	1.47 FT.	3.20 FT.	218
East Carson River near Gardnerville	178,000	420,000	236
West Carson River at Woodfords	50,000	120,000	240
East Walker River near Bridgeport	57,000	200,000	351
West Walker River near Coleville	140,000	310,000	221

SNOW LINES

SNOW SURVEYORS' FORUM - ALL SNOW SURVEYORS ARE LOADED WITH SEEMINGLY CREDIBLE TALES OF THEIR SUPERIOR ABILITY, SKILL, AND TECHNIQUE IN A VARIETY OF SNOW ASSOCIATED ACTIVITIES. EVERY GATHERING OF SNOW SURVEYORS IS PUNCTUATED WITH A STACCATO OF LOQUACIOUS EXCHANGES THAT WOULD MAKE THE EXPLORERS CLUB SOUND LIKE A SUNDAY AFTERNOON TEA. THE EDITOR OF THE SNOW SURVEYORS' FORUM, A PUBLICATION OF THE WESTERN SNOW CONFERENCE DEDICATED TO THE FIELD MAN, LISTENS WITH FRUSTRATION TO THIS WEALTH OF MATERIAL, BUT RETURNS HOME CLUTCHING AN EMPTY BRIEFCASE. SO WE'RE ASKING ALL OF YOU SNOW SURVEYORS TO JOT DOWN SOME OF YOUR STORIES, SNOW SURVEY TIPS, POEMS, NEWS ITEMS, JOKES, ETC. AND HELP PUT TOGETHER A SNOW SURVEYORS' FORUM THAT WILL BE THE BEST EVER. PICTURES AND CARTOONS CAN CERTAINLY BE INCLUDED. DO IT NOW - AND MAIL YOUR MATERIAL TO:

ROBERT W. MILLER, EDITOR
SNOW SURVEYORS' FORUM
5124 POMEGRANATE AVENUE
SACRAMENTO, CALIFORNIA 95823

SUMMER FIELD ACTIVITIES - NORMALLY WE BEGIN PLANNING SUMMER WORK SCHEDULES RIGHT AFTER THE MAY REPORT IS COMPLETED. THIS YEAR, THE NEED FOR AN EXTENSION OF THE SNOW SURVEY SEASON MAY KEEP SOME SNOW SURVEYORS BUSY SAMPLING KEY COURSES WELL INTO JUNE. AND HIGH COUNTRY MAINTENANCE WORK WILL BE DELAYED UNTIL THE MASSIVE SNOWPACK HAS FINALLY DISSIPATED AND THE PEAK RUNOFF PERIOD IS OVER. EVENTUALLY, THE FIELD CREWS WILL COMMENCE NOT ONLY THE ROUTINE SNOW COURSE AND CABIN MAINTENANCE BUT ALSO THE REPAIRS TO CABINS, AERIAL MARKERS, ETC. THAT HAVE BEEN "PUSHED OUT OF SHAPE" BY THE HEAVY SNOWPACK AND ITS RESULTING SUBSIDENCE FORCES, CREEP, OR AVALANCHES. WE WOULD APPRECIATE BEING NOTIFIED OF ANY SNOW SURVEY FACILITIES THAT WILL REQUIRE ATTENTION THIS SUMMER SO WE MAY PLACE PRIORITIES ON THE JOBS. ALSO, BECAUSE OF THE MAGNITUDE OF THIS YEAR'S WORK, WE REQUEST YOUR COOPERATION WHERE POSSIBLE IN CLEARING AND BRUSHING SNOW COURSES, STRAIGHTENING AERIAL MARKERS, AND DOING MINOR CABIN MAINTENANCE.

COVER

HERE IN THE YUBA RIVER WATERSHED THE WINTER SNOWPACK BEGINS TO MELT, REPLENISHING THE STREAMS THAT HAVE NOW OPENED FOR THE SUMMER. ALL STREAMS IN THE SIERRA WILL RUN HIGHER AND LONGER THAN NORMAL THIS YEAR.

CALIFORNIA COOPERATIVE SNOW SURVEYS

STATE OF CALIFORNIA

The Resources Agency

Department of Water Resources

BULLETIN No. 120-69

WATER CONDITIONS IN CALIFORNIA

REPORT No. 4: Basic Data Supplement

MAY 1, 1969

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

RONALD REAGAN
Governor
State of California

WILLIAM R. GIANELLI
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Department of Water Resources

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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, 1969 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

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COVER

A SNOW SURVEY CREW IS TRANSFERRING EQUIPMENT FROM THEIR TRUCK TO THE SNO-CAT WHICH WILL BE USED ON THE OVERSNOW PART OF THEIR JOURNEY TO A DISTANT SNOW COURSE. THIS METHOD OF TRAVEL IS FREQUENTLY USED ON SNOW SURVEY TRIPS WHEN THE TERRAIN AND SNOW CONDITIONS PERMIT.

AGENCIES COOPERATING IN THE CALIFORNIA SNOW SURVEY PROGRAM

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
- 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
- SAUSALITO 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
- TAHOE PARADISE COLLEGE
- UNION CARBIDE CORPORATION

OTHER COOPERATIVE PROGRAMS

- NEVADA COOPERATIVE SNOW SURVEYS
- OREGON COOPERATIVE SNOW SURVEYS

TABLE 1

PRECIPITATION DATA

AREA, DRAINAGE BASIN, AND PRECIPITATION STATION	ELEVATION IN FEET	SOURCE OF DATA (1)	PRECIPITATION						
			APRIL 1969			OCTOBER 1, 1968 - APRIL 30, 1969			AVERAGE WATER YEAR (2) (INCHES)
			AVERAGE (2) (INCHES)	TOTAL FOR MONTH (INCHES)	IN PER-CENT OF AVERAGE	AVERAGE (2) (INCHES)	TOTAL FOR SEASON (INCHES)	IN PER-CENT OF AVERAGE	
NORTH COASTAL AREA									
SMITH RIVER									
ELK VALLEY	1711	USWB	4.59	4.21	92	74.29	72.97	98	81.12
GASQUET RS	384	USWB	6.66	5.88	88	84.45	88.79	105	93.03
CRESCENT CITY 11E	360	DWR	7.86	6.75	86	91.47	103.17	113	102.53
BROOKINGS, OREGON	80	USWB	5.73	5.87	102	70.79	76.88	109	80.72
CRESCENT CITY 1N	40	USWB	6.13	5.04	82	64.84	69.31	107	74.15
KLAMATH RIVER									
TULELAKE INSPECTION STATION	4408	DWR	1.26	1.42	113	10.75	13.73	128	15.30
KLAMATH FALLS 2SSW, OREGON	4098	USBR	.91	.45	49	10.85	10.87	100	14.02
TULELAKE	4035	USWB	.77	.59	77	7.27	8.97	123	10.43
CALLAHAN RS	3136	USWB	1.41	1.43	101	17.58	21.80	124	19.90
MONTAGUE	2500	DWR	.80	1.18	147	9.83	11.74	119	12.54
YREKA	2625	USWB	.95	1.09	115	14.92	17.24	116	17.96
HAPPY CAMP RS	1090	USWB	2.91	1.40	48	50.54	53.56	106	54.95
ORLEANS	403	USWB	3.22	2.99	93	47.00	53.34	113	51.51
ORICK ARCATA REDWOOD CO	75	DWR	4.81	5.11	106	59.86	63.47	106	66.72
TRINITY RIVER									
COFFEE CREEK RS	2500	USWB	2.53	2.30	91	43.68	66.07	151	52.54
BURNT RANCH 1S	2150	USWB	2.75	3.08	112	38.83	55.17	142	42.08
WEAVERVILLE RS	2050	USWB	2.43	1.30	53	33.34	41.12	123	36.77
BIG BAR RS	1260	USWB	2.68	1.09	41	33.85	46.55	138	36.67
EEL RIVER									
MAD RIVER RS	2775	USWB	3.85	4.37	114	54.46	-	-	58.85
OLD HARRIS	2225	DWR	4.58	5.25	115	66.02	83.91	127	71.02
HONOR CAMP NO 42	1875	DWR	4.92	5.45	111	68.91	80.18	116	74.93
COVELO	1385	USWB	2.29	2.28	100	37.04	51.07	138	39.53
STANDISH-HICKEY STATE PARK	850	USWB	4.69	4.36	93	69.78	80.22	115	74.48
HONEYDEW 2WSW	375	USWB	7.19	6.34	88	103.56	121.36	117	110.50
UPPER MATTOLE	255	USWB	5.51	5.49	100	74.35	89.01	120	79.62
BLUE LAKE	105	DWR	3.15	3.93	125	43.17	50.73	118	46.99
SCOTIA	139	USWB	3.43	3.78	110	44.91	61.81	138	48.23
FORT BRAGG	80	USWB	2.91	3.23	111	35.46	49.24	139	38.18
EUREKA WB CITY	43	USWB	2.95	3.22	109	34.67	43.39	125	38.36

TABLE I - PRECIPITATION DATA (Continued)

AREA, DRAINAGE BASIN, AND PRECIPITATION STATION	ELEVATION IN FEET	SOURCE OF DATA (1)	PRECIPITATION						
			APRIL 1969			OCTOBER 1, 1968 - APRIL 30, 1969			AVERAGE WATER YEAR (2) (INCHES)
			AVERAGE (2) (INCHES)	TOTAL FOR MONTH (INCHES)	IN PER-CENT OF AVERAGE	AVERAGE (2) (INCHES)	TOTAL FOR SEASON (INCHES)	IN PER-CENT OF AVERAGE	
NORTH COASTAL AREA (CONTINUED)									
RUSSIAN RIVER									
CAZADERO	1040	USWB	5.70	4.89	86	69.09	95.02	138	73.35
POTTER VALLEY PH	1014	PG+E	2.95	3.16	107	41.16	47.32	115	44.02
UKIAH	623	USWB	2.46	2.82	115	34.28	49.74	145	36.25
BOONVILLE MAINT STATION	342	USWB	2.63	2.81	107	35.15	53.52	152	37.15
SANTA ROSA	167	USWB	2.38	3.23	136	27.38	40.68	149	28.93
FORT ROSS	116	USWB	3.16	2.94	93	36.20	45.90	127	38.89
HEALDSBURG	102	USWB	2.92	3.13	107	37.91	61.36	162	39.89
SAN FRANCISCO BAY AREA									
MOUNT HAMILTON	4206	USWB	2.27	1.90	84	24.86	26.44	106	26.11
GERBER RANCH	2140	USWB	1.48	1.51	102	17.25	28.19	163	18.03
ANGWIN PAC UNION COLLEGE	1815	USWB	2.82	3.53	125	36.09	57.82	160	37.79
LAGUNITAS LAKE	785	MMWD	3.65	3.32	91	45.85	58.80	128	48.09
LIVERMORE 2SSW	545	USWB	1.15	.76	66	13.58	18.30	135	14.31
SAN JOSE	70	CSJ	1.09	1.70	156	12.65	19.13	151	13.28
NAPA STATE HOSPITAL	60	USWB	1.79	1.59	89	22.55	27.89	124	23.76
SAN FRANCISCO FOB	52	USWB	1.45	1.74	120	19.44	24.95	128	20.42
REDWOOD CITY	31	USWB	1.35	1.79	133	18.37	28.57	156	19.19
OAKLAND WB AP	3	USWB	1.42	1.82	128	16.96	24.18	143	17.90
CENTRAL COASTAL AREA									
SALINAS RIVER									
PRIEST VALLEY	2300	USWB	1.73	3.37	195	19.07	38.83	204	19.83
PASO ROBLES	700	USWB	1.02	1.68	165	12.79	29.97	234	13.41
SAN ARDO	435	DWR	.53	-	-	11.82	-	-	12.08
KING CITY	320	USWB	.89	1.12	126	10.12	18.04	178	10.50
SAN LUIS OBISPO POLY	300	USWB	1.92	3.72	194	20.72	54.49	263	21.43
BIG SUR STATE PARK	235	USWB	3.31	3.90	118	39.23	60.91	155	40.94
SALINAS FAA AP	75	USWB	1.20	1.76	147	13.15	20.35	155	13.88
PT PIEDRAS BLANCAS	59	USWB	1.55	2.88	186	18.36	45.43	247	19.13
PAJARO RIVER									
HOLLISTER	285	USWB	1.13	1.31	116	12.54	19.39	155	13.16
SANTA CRUZ	125	USWB	2.17	2.87	132	29.14	44.74	154	30.62
WATSONVILLE WATER WORKS	95	USWB	1.60	2.29	143	20.04	31.77	159	20.98

TABLE I - PRECIPITATION DATA (Continued)

AREA, DRAINAGE BASIN, AND PRECIPITATION STATION	ELEVATION IN FEET	SOURCE OF DATA (1)	PRECIPITATION						
			APRIL 1969			OCTOBER 1, 1968 - APRIL 30, 1969			AVERAGE WATER YEAR (2) (INCHES)
			AVERAGE (2) (INCHES)	TOTAL FOR MONTH (INCHES)	IN PER-CENT OF AVERAGE	AVERAGE (2) (INCHES)	TOTAL FOR SEASON (INCHES)	IN PER-CENT OF AVERAGE	
CENTRAL COASTAL AREA (CONTINUED)									
SANTA MARIA AND SANTA YNEZ RIVERS									
CACHUMA DAM	781	USBR	1.23	2.40	195	17.92	39.24	219	18.71
LOS ALAMOS	565	USWB	1.44	1.90	132	14.48	27.01	187	15.05
SANTA MARIA WB AP	238	USWB	1.21	1.74	144	12.55	21.12	168	13.10
SANTA BARBARA	100	USWB	1.56	1.92	123	17.01	30.31	178	17.55
SOUTH COASTAL AREA									
COASTAL PLAIN									
LOS ANGELES WB CITY	312	USWB	1.25	.63	50	14.02	27.29	195	14.55
SANTA ANA FS	115	USWB	1.33	.71	53	13.52	20.76	154	14.06
LOS ANGELES WB AP	97	USWB	1.08	.38	35	12.07	16.14	134	10.46
LAGUNA BEACH	56	USWB	1.12	.80	71	11.67	20.84	179	12.28
VENTURA	45	USWB	1.15	-	-	13.82	-	-	14.17
LONG BEACH	34	USWB	1.04	-	-	12.44	-	-	12.86
SAN DIEGO WB AP	19	USWB	.81	.21	26	9.70	11.59	119	10.18
SANTA CLARA RIVER									
MINT CANYON - THE OAKS	2350	LACFCD	1.22	1.20	98	12.16	25.55	210	12.83
SAUGUS PP NO 1	2105	USWB	1.78	.67	38	17.06	32.15	188	17.92
DRY CANYON RESERVOIR	1515	USWB	1.22	.68	56	12.09	21.60	179	12.78
SANTA PAULA	263	USWB	1.49	.99	66	16.78	31.72	189	17.23
LOS ANGELES RIVER									
LOOMIS RANCH - ALDER CR	4300	LACFCD	1.52	-	-	16.95	-	-	18.18
HAINES CANYON UPPER	3450	LACFCD	2.67	1.72	64	26.97	51.15	190	28.33
BIG TUJUNGA DAM	2315	LACFCD	2.32	1.90	82	25.36	60.45	238	26.36
ARROYO SECO RS	1220	LACFCD	1.99	1.26	63	21.11	45.71	217	22.12
BURBANK WB AP	699	USWB	1.27	.66	52	13.97	26.50	190	14.53
SAN GABRIEL RIVER									
MT WILSON	5709	USWB	3.14	1.83	58	31.40	-	-	32.68
SAN DIMAS TANBARK FLAT	2745	LACFCD	2.19	1.70	78	21.31	61.90	290	22.16
HOEGEES	2650	LACFCD	3.64	2.34	64	36.46	90.13	247	38.04
HENNINGER FLATS	2550	LACFCD	2.61	1.62	62	24.71	54.61	221	26.23
SAN GABRIEL DAM CAMP	1500	LACFCD	2.28	1.60	70	25.13	66.00	263	26.02
SAN DIMAS DAM	1350	LACFCD	1.99	1.27	64	20.16	45.40	225	21.27
CLAREMONT POMONA COLLEGE	1201	USWB	1.62	.89	55	16.79	25.67	153	17.54

TABLE I - PRECIPITATION DATA (Continued)

AREA, DRAINAGE BASIN, AND PRECIPITATION STATION	ELEVATION IN FEET	SOURCE OF DATA (1)	PRECIPITATION						
			APRIL 1969			OCTOBER 1, 1968 - APRIL 30, 1969			AVERAGE WATER YEAR (2) (INCHES)
			AVERAGE (2) (INCHES)	TOTAL FOR MONTH (INCHES)	IN PER-CENT OF AVERAGE	AVERAGE (2) (INCHES)	TOTAL FOR SEASON (INCHES)	IN PER-CENT OF AVERAGE	
SOUTH COASTAL AREA (CONTINUED)									
SANTA ANA RIVER									
BIG BEAR LAKE	6745	USWB	1.94	1.39	72	22.03	54.61	248	24.34
SQUIRREL INN NO 2	5680	USWB	3.92	2.15	55	38.20	82.10	215	40.37
MT BALDY G S FC85G	4275	USWB	3.12	2.45	79	30.92	82.43	267	32.44
LYTLE CREEK RS	2760	USWB	2.77	1.43	52	29.50	76.97	261	30.86
ELSINORE	1285	USWB	.84	.44	52	10.75	22.07	205	11.40
SAN BERNARDINO CO HOSPITAL	1125	USWB	1.63	1.08	66	16.02	30.17	188	17.04
SAN DIEGO COUNTY									
CUYAMACA	4650	USWB	3.77	1.02	27	32.89	45.52	138	35.94
JULIAN WYNOLA	3650	USWB	2.64	.63	24	25.21	32.09	127	28.08
WARNER SPRINGS	3180	USWB	1.35	.53	39	13.76	22.80	166	15.86
CAMPO	2630	USWB	1.56	.10	6	14.11	18.46	131	15.62
BARRETT DAM	1623	CSD	1.70	.31	18	15.75	23.16	147	16.87
EL CAPITAN DAM	600	USWB	1.50	.33	22	14.23	20.36	143	15.24
CENTRAL VALLEY AREA									
SACRAMENTO VALLEY FLOOR									
FRENCH GULCH	1100	USWB	2.99	2.11	71	35.10	46.16	132	38.49
REDDING FS NO 2	577	USWB	2.97	1.35	45	32.33	42.50	131	35.36
ONO	980	USWB	3.15	5.24	166	28.57	49.07	172	32.74
VOLTA PH	2200	PG+E	3.12	2.64	85	34.55	48.89	142	38.14
HARRISON GULCH RS	2710	USWB	1.92	1.17	61	30.97	43.79	141	34.66
HUNTER DISTRICT - GRAVES	770	USWB	2.06	.93	45	20.64	33.92	164	23.22
MINERAL	4911	USWB	4.15	4.32	104	46.18	70.31	152	51.45
RED BLUFF WB AP	341	USWB	1.85	1.04	56	19.66	29.24	149	21.71
CENTERVILLE PH	522	USWB	3.76	3.82	102	40.15	58.30	145	42.89
PASKENTA RS	755	USWB	1.88	1.38	73	20.43	33.05	162	22.23
ORLAND	254	USWB	1.62	1.11	69	17.61	25.77	146	19.07
CHICO EXP STATION	205	USWB	2.30	2.62	114	23.98	36.57	153	25.92
STONY GORGE RESERVOIR	791	USBR	1.51	.61	40	17.68	26.34	149	19.02
WILLOWS	140	USWB	1.42	.59	42	16.24	22.01	136	17.48
OROVILLE BRIDGE	165	USWB	2.36	2.85	121	25.81	36.79	143	27.72

TABLE I - PRECIPITATION DATA (Continued)

AREA, DRAINAGE BASIN, AND PRECIPITATION STATION	ELEVATION IN FEET	SOURCE OF DATA (1)	PRECIPITATION						
			APRIL 1969			OCTOBER 1, 1968 - APRIL 30, 1969			AVERAGE WATER YEAR (2) (INCHES)
			AVERAGE (2) (INCHES)	TOTAL FOR MONTH (INCHES)	IN PER-CENT OF AVERAGE	AVERAGE (2) (INCHES)	TOTAL FOR SEASON (INCHES)	IN PER-CENT OF AVERAGE	
NORTH COASTAL AREA									
SACRAMENTO VALLEY FLOOR (CONTINUED)									
EAST PARK RESERVOIR	1205	USBR	1.34	.57	43	17.46	25.83	148	18.71
STONYFORD COOLEY RANCH	3015	USWB	3.54	3.98	112	48.20	64.57	134	51.24
COLUSA 1SSW	60	USWB	1.22	.66	54	14.53	21.81	150	15.55
MARYSVILLE	60	USWB	1.78	1.65	93	19.16	28.70	150	20.41
LAKEPORT	1343	USWB	2.07	1.99	96	26.93	38.26	142	28.46
LEESVILLE KEEGAN RANCH	1330	USWB	1.45	-	-	21.10	-	-	22.16
NICOLAUS NO 2	47	USWB	1.57	1.76	112	16.36	29.89	183	17.40
DUNNIGAN-POWERS RANCH	104	DWR	1.25	1.13	90	15.40	22.71	147	16.19
COBB	2520	DWR	4.56	5.68	125	60.76	95.33	157	63.91
ROCKLIN	239	USWB	1.99	2.38	120	21.64	34.25	158	22.94
CITRUS HEIGHTS	138	DWR	2.02	2.45	121	21.89	32.46	148	23.22
CAPAY 4W	300	DWR	1.49	1.32	89	21.04	32.06	152	22.06
WOODLAND 1WNW	69	USBR	1.38	1.43	104	15.81	24.84	157	16.63
SACRAMENTO WB CITY	25	USWB	1.60	1.32	83	16.82	25.27	150	17.77
DAVIS 2WSW	60	USBR	1.38	.93	67	15.75	23.85	151	16.57
WINTERS	135	USBR	1.22	1.33	109	17.24	29.28	170	18.03
ARBUCKLE 5SSW	360	DWR	1.26	-	-	15.20	-	-	15.96
SAN JOAQUIN VALLEY FLOOR									
CAMP PARDEE	658	USWB	1.96	2.98	152	19.19	30.75	160	20.50
GALT	47	DWR	1.46	1.28	88	15.47	23.90	154	16.39
WALLACE 1SE	214	USWB	1.90	2.66	140	18.53	27.61	149	19.59
RIO VISTA	22	USWB	1.38	1.28	93	15.36	18.88	123	16.14
LODI	40	USWB	1.47	1.44	98	15.26	22.74	149	16.20
BRENTWOOD	85	DWR	.98	-	-	11.97	-	-	12.59
ANTIOCH FIBREBOARD MILL	28	USWB	1.08	1.04	96	12.47	19.16	154	13.17
STOCKTON FS NO 4	11	USWB	1.27	.89	70	13.50	19.90	147	14.35
OAKDALE	155	DWR	1.45	1.48	102	13.36	22.26	167	14.20
KNIGHTS FERRY 2SE	315	USWB	2.02	-	-	17.07	-	-	18.02
TRACY CARBONA	140	USWB	.79	.73	92	8.73	12.96	148	9.34
MODESTO	91	USWB	1.23	1.44	117	11.24	18.43	164	11.98
DENAIR 3NNE	137	USWB	1.26	1.43	113	11.53	21.76	189	12.26

TABLE I - PRECIPITATION DATA (Continued)

AREA, DRAINAGE BASIN, AND PRECIPITATION STATION	ELEVATION IN FEET	SOURCE OF DATA (1)	PRECIPITATION						
			APRIL 1969			OCTOBER 1, 1968 - APRIL 30, 1969			AVERAGE WATER YEAR (2) (INCHES)
			AVERAGE (2) (INCHES)	TOTAL FOR MONTH (INCHES)	IN PER-CENT OF AVERAGE	AVERAGE (2) (INCHES)	TOTAL FOR SEASON (INCHES)	IN PER-CENT OF AVERAGE	
SAN JOAQUIN VALLEY FLOOR (CONTINUED)									
NEWMAN 2NW	108	USWB	1.05	1.16	110	9.92	18.19	183	10.47
MERCED FS NO 2	169	USWB	1.22	2.08	170	11.43	21.77	190	12.09
LOS BANOS	125	USWB	.88	.77	87	8.38	14.04	168	8.85
DELTA RANCH	90	DWR	1.16	1.13	97	8.86	16.84	190	9.43
FRIANT GOVERNMENT CAMP	410	USWB	1.36	2.34	172	13.94	25.65	184	14.34
MADERA	268	USWB	1.17	1.76	150	10.05	20.82	207	10.69
MENDOTA DAM	166	USWB	.80	1.07	134	7.15	13.40	187	7.61
FRESNO WB AP	331	USWB	1.15	1.64	143	10.49	22.06	210	10.96
ORANGE COVE	431	USWB	1.36	1.97	145	12.42	26.31	212	13.01
PANOCHE	1265	USWB	.81	.75	93	8.05	13.88	172	8.48
LEMON COVE	513	USWB	1.54	2.43	158	13.01	26.76	206	13.82
VISALIA	354	USWB	1.08	1.08	100	9.48	19.29	203	9.96
HANFORD	242	USWB	.81	.85	105	7.64	16.82	220	8.00
LINDSAY	395	USWB	1.24	2.37	191	10.78	22.46	208	11.49
COALINGA	671	USWB	.61	.80	131	6.87	16.83	245	7.34
PORTERVILLE	393	USWB	1.24	1.50	121	10.34	21.22	205	10.93
ANGIOLA	205	USWB	.89	.71	80	7.05	15.56	221	7.46
WASCO	333	USWB	.86	.78	91	6.16	11.75	191	6.55
SOUTH BELRIDGE	575	DWR	.61	.36	59	4.77	9.25	194	5.16
BAKERSFIELD WB AP	494	USWB	.78	1.13	145	5.75	8.82	153	6.16
SAN EMIGDIO RANCH	1450	DWR	1.11	-	-	7.87	-	-	8.48
TEHACHAPI	3975	USWB	.85	1.16	136	9.60	17.54	183	11.09
TEJON RANCHO	1425	USWB	1.61	1.69	105	11.00	15.78	143	11.90
PATTIWAY	3868	USWB	1.12	2.31	206	9.13	15.42	169	9.79
UPPER SACRAMENTO, PIT, AND MCCLOUD RIVERS									
JESS VALLEY	5290	USWB	1.72	1.98	115	12.29	14.81	121	17.40
ALTURAS RS	4365	USWB	1.04	1.11	107	9.65	10.38	108	13.10
BIEBER - CARY	4125	DWR	1.47	-	-	14.51	-	-	17.71
MOUNT SHASTA WB CITY	3544	USWB	2.90	3.28	113	32.16	40.35	125	36.70
MCCLOUD	3300	USWB	4.00	3.79	95	44.78	58.78	131	50.28
HAT CREEK PH NO 1	3015	PG+E	1.35	1.15	85	15.08	21.64	144	18.08

TABLE I - PRECIPITATION DATA (Continued)

AREA, DRAINAGE BASIN, AND PRECIPITATION STATION	ELEVATION IN FEET	SOURCE OF DATA (1)	PRECIPITATION						
			APRIL 1969			OCTOBER 1, 1968 - APRIL 30, 1969			AVERAGE WATER YEAR (2) (INCHES)
			AVERAGE (2) (INCHES)	TOTAL FOR MONTH (INCHES)	IN PER-CENT OF AVERAGE	AVERAGE (2) (INCHES)	TOTAL FOR SEASON (INCHES)	IN PER-CENT OF AVERAGE	
UPPER SACRAMENTO PIT AND MCCLOUD RIVERS (CONTINUED)									
DUNSMUIR RS	2420	USWB	4.01	3.62	90	51.43	65.20	127	57.83
PIT RIVER PH NO 5	1458	PG+E	5.73	5.79	101	67.21	85.51	127	75.22
VOLLMERS	1359	USWB	5.30	4.49	85	61.02	70.26	115	66.65
SHASTA DAM	1076	USBR	4.83	4.70	97	53.08	77.30	146	57.83
FEATHER RIVER									
BUCKS STORAGE RESERVOIR	5200	PG+E	5.43	-	-	63.97	-	-	69.54
SIERRAVILLE RS	4975	USWB	1.72	1.76	102	23.05	35.46	154	25.84
VINTON	4945	DWR	.87	.63	72	10.68	15.11	141	13.19
PORTOLA	4838	USWB	1.52	1.31	86	18.22	28.67	157	20.81
CANYON DAM	4555	USWB	2.94	2.78	95	35.03	50.50	144	38.61
CHESTER	4525	USWB	2.35	1.93	82	28.80	43.12	150	32.34
BRUSH CREEK RS	3560	USWB	5.73	5.50	96	66.13	88.05	133	71.04
QUINCY RS	3409	USWB	3.28	3.31	101	36.68	52.18	142	40.17
CARIBOU PH	2986	PG+E	3.21	2.98	93	37.26	51.11	137	40.61
LAKE WILENOR	2040	DWR	4.70	4.59	97	46.32	76.67	166	49.78
BUCKS CREEK PH (STORRIE)	1760	PG+E	5.43	5.10	94	60.32	82.49	137	65.17
YUBA RIVER									
SODA SPRINGS 1E	6885	USWB	5.72	3.80	66	60.09	65.22	109	66.08
BOWMAN DAM	5347	USWB	5.33	4.80	90	61.01	82.72	136	67.03
LAKE SPAULDING	5156	USWB	5.75	5.23	91	61.05	88.81	145	66.90
DEER CREEK PH	3700	USWB	5.58	6.15	110	63.03	99.49	158	67.87
DOWNIEVILLE RS	2895	USWB	5.19	5.37	103	56.39	84.27	149	61.45
CAMPTONVILLE RS	2755	USWB	5.08	4.48	88	55.18	71.19	129	59.43
GRASS VALLEY	2400	USWB	4.84	4.93	102	51.46	70.44	137	55.02
NEVADA CITY	2600	USWB	4.62	5.16	112	49.81	77.70	156	53.31
INDIAN ROCK	2240	DWR	5.34	5.28	99	63.12	84.98	135	67.74
DOBBINS COLGATE FOREBAY	1550	USWB	3.50	3.49	100	38.16	52.05	136	41.00
COLGATE PH	585	PG+E	3.49	3.39	97	37.13	51.98	140	39.81
NORTH SAN JUAN	2081	DWR	4.13	3.90	93	44.62	60.69	136	47.93

TABLE I - PRECIPITATION DATA (Continued)

AREA, DRAINAGE BASIN, AND PRECIPITATION STATION	ELEVATION IN FEET	SOURCE OF DATA (1)	PRECIPITATION						
			APRIL 1969			OCTOBER 1, 1968 - APRIL 30, 1969			AVERAGE WATER YEAR (2) (INCHES)
			AVERAGE (2) (INCHES)	TOTAL FOR MONTH (INCHES)	IN PER-CENT OF AVERAGE	AVERAGE (2) (INCHES)	TOTAL FOR SEASON (INCHES)	IN PER-CENT OF AVERAGE	
CENTRAL VALLEY AREA (CONTINUED)									
AMERICAN RIVER									
TWIN LAKES	7829	PG+E	4.08	5.21	128	42.51	67.24	158	48.06
BIG BEND RS	5739	USWB	5.92	5.17	87	63.09	88.34	140	69.13
BLUE CANYON WB AP	5280	USWB	5.04	5.09	101	56.46	89.00	158	61.35
DRUM FOREBAY	4640	PG+E	5.26	4.68	89	56.45	62.29	110	61.50
SLY PARK	3530	USBR	4.46	4.64	104	46.47	59.37	128	49.96
PACIFIC HOUSE	3440	USWB	4.07	5.07	125	47.35	62.91	133	51.00
GEORGETOWN RS	3001	USWB	4.40	5.18	118	50.24	72.21	144	53.84
COLFAX	2418	USWB	4.08	5.04	124	43.94	68.85	157	47.03
PLACERVILLE	1890	USWB	3.54	4.43	125	37.01	49.80	135	39.70
AUBURN	1297	USWB	3.12	3.67	118	32.78	48.25	147	34.89
FOLSOM DAM	350	USBR	2.03	2.45	121	22.16	34.59	156	23.58
MOKELUMNE RIVER									
SALT SPRINGS PH	3700	PG+E	3.87	4.44	115	39.78	64.16	161	43.89
WEST POINT 3 SW	2365	USWB	3.21	-	-	34.28	-	-	36.78
TIGER CREEK PH	2355	PG+E	4.09	4.53	111	42.44	62.59	147	45.79
FIDDLETOWN LYNCH RANCH	2140	USWB	2.50	4.60	184	31.99	52.77	165	34.20
ELECTRA PH	715	PG+E	2.75	3.54	129	27.83	39.17	141	29.77
STANISLAUS RIVER									
PINECREST	5620	PG+E	4.05	4.13	102	38.09	65.92	173	42.00
SPRING GAP FOREBAY	4875	PG+E	4.29	4.81	112	38.45	59.14	154	41.61
CALAVERAS BIG TREES	4696	USWB	4.83	5.48	113	50.22	84.40	168	53.90
TUOLUMNE RIVER									
LAKE ELEANOR	4662	USWB	3.67	3.80	104	39.20	56.21	143	42.66
HETCH HETCHY	3870	USWB	3.14	4.42	141	31.33	53.16	170	35.01
SONORA RS	1749	USWB	2.91	3.12	107	29.99	46.62	155	31.95
MERCED RIVER									
YOSEMITE NP	3985	USWB	3.26	3.76	115	33.66	62.42	185	36.69
DUDLEYS	3000	USWB	3.54	4.32	122	36.22	58.36	161	38.36
MARIPOSA	2011	USWB	2.61	3.49	134	28.46	51.42	181	29.99
EXCHEQUER RESERVOIR	484	USWB	1.84	3.26	177	18.04	32.06	178	19.10

TABLE 1

PRECIPITATION DATA

AREA, DRAINAGE BASIN, AND PRECIPITATION STATION	ELEVATION IN FEET	SOURCE OF DATA (1)	PRECIPITATION						
			APRIL 1969			OCTOBER 1, 1968 - APRIL 30, 1969			AVERAGE WATER YEAR (2) (INCHES)
			AVERAGE (2) (INCHES)	TOTAL FOR MONTH (INCHES)	IN PER-CENT OF AVERAGE	AVERAGE (2) (INCHES)	TOTAL FOR SEASON (INCHES)	IN PER-CENT OF AVERAGE	
CENTRAL VALLEY AREA (CONTINUED)									
UPPER SAN JOAQUIN RIVER									
FLORENCE LAKE	7345	SCEC	2.05	2.31	113	19.94	44.59	224	23.00
HUNTINGTON LAKE	7020	USWB	3.03	3.88	128	29.26	59.92	205	32.50
CRANE VALLEY PH	3440	PG+E	3.74	4.46	119	38.02	66.95	176	40.44
NORTH FORK RS	2630	USWB	3.11	4.45	143	31.50	58.91	187	33.54
AUBERRY 1 NNE	2006	USWB	2.39	4.12	172	23.63	44.22	187	25.03
KINGS RIVER									
GRANT GROVE	6580	USWB	4.61	4.53	98	42.32	85.09	201	44.25
BALCH PH	1720	USWB	3.02	3.70	123	26.55	58.24	219	28.31
PINE FLAT DAM	615	USCE	1.86	2.07	111	18.45	34.41	187	19.44
KAWEAH RIVER									
GIANT FOREST	6412	USWB	4.56	4.17	91	40.79	104.66	257	43.80
ASH MOUNTAIN	1708	USWB	3.05	4.44	146	24.44	49.21	201	26.13
THREE RIVERS EDISON PH NO 2	950	USWB	2.42	2.96	122	19.81	42.31	214	21.06
TULE RIVER									
TULE RIVER INTAKE	2450	SCEC	2.90	3.78	130	25.99	50.77	195	26.70
KERN RIVER									
KERN RIVER INTAKE NO 3	3650	USWB	1.39	1.31	94	16.75	37.17	222	17.72
GLENNVILLE	3140	USWB	2.11	2.17	103	16.67	31.86	191	18.03
KERN RIVER PH NO 3	2703	USWB	.78	1.06	136	10.49	25.29	241	11.31
WOFFORD HEIGHTS	2700	USWB	.76	.83	109	9.82	21.16	215	10.41
LAHONTAN AREA									
SURPRISE VALLEY									
CEDARVILLE	4670	USWB	1.02	1.00	98	9.94	11.68	118	12.80
FORT BIDWELL	4498	USWB	1.05	1.12	107	11.76	13.68	116	14.84
MADELINE PLAINS-HONEY LAKE									
RAVENDALE JIM MARR RANCH	5540	DWR	.50	.62	124	6.26	8.71	139	8.46
SUSANVILLE COURTHOUSE	4325	DWR	1.02	.97	95	14.79	19.95	135	17.21
DOYLE	4240	USWB	.60	.30	50	8.38	12.82	153	10.19
SUSANVILLE AP	4148	USWB	.81	.54	67	12.60	16.84	134	14.72
WENDEL 1E	4040	DWR	.45	.21	47	6.40	7.13	111	7.87

TABLE I - PRECIPITATION DATA (Continued)

AREA, DRAINAGE BASIN, AND PRECIPITATION STATION	ELEVATION IN FEET	SOURCE OF DATA (1)	PRECIPITATION						
			APRIL 1969			OCTOBER 1, 1968 - APRIL 30, 1969			AVERAGE WATER YEAR (2) (INCHES)
			AVERAGE (2) (INCHES)	TOTAL FOR MONTH (INCHES)	IN PER-CENT OF AVERAGE	AVERAGE (2) (INCHES)	TOTAL FOR SEASON (INCHES)	IN PER-CENT OF AVERAGE	
LAHONTAN AREA (CONTINUED)									
TRUCKEE AND TAHOE BASIN									
TAHOE CITY	6230	USWB	2.25	1.56	69	28.80	49.86	173	31.74
TRUCKEE RS	5995	USWB	2.36	1.92	81	28.45	45.40	160	31.59
CARSON RIVER									
WOODFORDS	5671	USWB	1.47	1.26	86	17.48	29.67	170	21.52
WALKER RIVER									
BRIDGEPORT	6470	USWB	.51	.42	82	7.13	18.25	256	9.17
MONO BASIN									
ELLERY LAKE	9600	USWB	1.94	1.02	53	20.28	30.02	148	23.99
GEM LAKE	8970	USWB	1.63	1.10	67	18.10	30.77	170	21.17
MONO LAKE	6450	USWB	.86	.54	63	14.93	17.42	117	17.05
OWENS RIVER									
WHITE MOUNTAIN NO 2	1247	USWB	1.20	1.24	103	11.85	19.10	161	14.38
SOUTH LAKE	9580	SCEC	1.56	.80	51	14.62	33.95	232	17.67
LAKE SABRINA	9065	SCEC	1.43	.52	36	14.44	21.74	151	17.41
CROOKED CREEK	6700	LADWP	.65	.33	51	8.63	20.17	234	10.18
BIG PINES PH NO 3	4680	LADWP	.51	.44	86	7.63	26.50	347	8.44
BISHOP WB AP	4108	USWB	.43	.11	26	4.94	13.29	269	5.75
INDEPENDENCE	3950	USWB	.35	.07	20	4.33	15.38	355	5.04
LA AQUEDUCT AT INTAKE	3841	LADWP	.34	.06	18	4.70	15.90	338	5.35
HAIWEE	3825	USWB	.48	.16	33	5.22	11.50	220	6.07
COTTONWOOD GATES	3710	LADWP	.48	.11	23	5.41	15.37	284	6.17
DEATH VALLEY									
DEATH VALLEY	-194	USWB	.18	0.00	0	1.32	2.47	187	1.80
MOJAVE DESERT									
BIG PINES CAMP	6860	LACFCD	2.20	1.77	80	23.07	53.15	230	24.92
FAIRMONT	3060	USWB	1.25	.42	34	14.24	31.98	225	14.99
PALMDALE FAA AP	2517	USWB	.55	.25	45	7.78	5.45	70	8.37
INYOKERN	2440	USWB	.21	0.00	0	3.24	4.58	141	4.15
DAGGETT FAA AP	1922	USWB	.30	.07	23	3.53	2.02	57	4.54
BAKER 9NNW	1045	USWB	.22	0.00	0	2.72	3.75	138	3.84

TABLE I - PRECIPITATION DATA (Continued)

AREA, DRAINAGE BASIN, AND PRECIPITATION STATION	ELEVATION IN FEET	SOURCE OF DATA (1)	PRECIPITATION						
			APRIL 1969			OCTOBER 1, 1968 - APRIL 30, 1969			AVERAGE WATER YEAR (2) (INCHES)
			AVERAGE (2) (INCHES)	TOTAL FOR MONTH (INCHES)	IN PER-CENT OF AVERAGE	AVERAGE (2) (INCHES)	TOTAL FOR SEASON (INCHES)	IN PER-CENT OF AVERAGE	
COLORADO DESERT AREA									
TWENTYNINE PALMS	1975	USWB	.04	0.00	0	2.47	1.31	53	3.97
IRON MOUNTAIN	922	USWB	.14	0.00	0	2.04	3.68	180	2.99
NEEDLES FAA AP	913	USWB	.27	-	-	3.09	-	-	4.56
BLYTHE FAA AP	390	USWB	.20	0.00	0	2.51	1.48	59	3.84
YUMA, ARIZONA, WB AP	199	USWB	.12	.08	67	1.39	1.41	101	2.26
IMPERIAL	-64	USWB	.14	0.00	0	1.93	1.06	55	2.72
THERMAL FAA AP	-120	USWB	.08	0.00	0	2.09	.81	39	2.85

(1) USWB - UNITED STATES WEATHER BUREAU. LACFCD - LOS ANGELES COUNTY FLOOD CONTROL DISTRICT. DWR - STATE OF 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) BASED UPON THE 35-YEAR PERIOD 1930-31 THROUGH 1964-65. WHEN THE PERIOD OF RECORD IS LESS THAN 35 YEARS, THE AVERAGE HAS BEEN COMPUTED BY COMPARISON WITH STATIONS HAVING COMPLETE RECORDS. AVERAGES ARE THEREFORE BASED UPON THE SAME PERIOD AND ARE COMPARABLE.

TABLE 2

SNOW COURSE DATA

AREA, DRAINAGE BASIN, AND SNOW COURSE (1)	CALIF NUMBER	ELEVATION IN FEET	DATE OF SURVEY	DEPTH IN INCHES	DENSITY IN IN PERCENT	WATER CONTENT IN INCHES	WATER CONTENT IN PERCENT OF APRIL 1 AVERAGE	WATER CONTENT APRIL 1 AVERAGE IN INCHES (2)	WATER CONTENT ONE YEAR AGO IN INCHES
NORTH COASTAL AREA									
SHASTA RIVER									
PARKS CREEK	1	6700		NO SURVEY MADE				34.0	32.5
LITTLE SHASTA	2	6200		NO SURVEY MADE				20.0	12.5
SWEETWATER	3	5850		NO SURVEY MADE				13.9	9.0
SCOTT RIVER									
MIDDLE BOULDER 1	5	6600	5 -1-69	68.2	51	35.0	115	30.5	18.7
MIDDLE BOULDER 3	311	6200	5 -1-69	63.0	52	32.6	124	26.2	16.7
ETNA MOUNTAIN	4	5900		NO SURVEY MADE				34.0	22.6
MARBLE VALLEY	278	5900		NO SURVEY MADE				46.0	33.6
DYNAMITE MEADOW	298	5700	5 -1-69	50.0	50	25.0	151	16.6	12.5
SWAMPY JOHN	285	5500	4-28-69	115.6	50	58.2	156	37.2	29.8
TRINITY RIVER									
DEADFALL LAKES	9	7200		NO SURVEY MADE				31.6	24.6
RED ROCK MOUNTAIN	10	6700	4-28-69	114.5	56	64.2	152	42.2	38.4
BEAR BASIN	11	6500	4-28-69	103.6	54	56.2	150	37.5	29.5
SHIMMY LAKE	12	6200	4-28-69	128.5	60	76.5	166	46.1	41.3
WOLFORD CABIN	13	6400		NO SURVEY MADE				33.7	25.3
HIGHLAND LAKES	16	6000	4-30-69	92.1	51	47.4	151	31.3	23.8
MUMBO BASIN	15	5700		NO SURVEY MADE				24.9	17.6
WHALAN	14	5400		NO SURVEY MADE				19.5	17.8
BIG FLAT	17	5100	4-28-69	43.4	52	22.7	152	14.9	14.4
EEL RIVER									
PLASKETT MEADOWS	63	6000		NO SURVEY MADE				19.0	13.5
SOUTH COASTAL AREA									
PIRU CREEK									
MOUNT PINOS	310	8600		NO SURVEY MADE				5.6	2.9
SANTA ANA RIVER									
UPPER THUNDER MOUNTAIN	300	8500		NO SURVEY MADE				13.4	15.5
CHRISTMAS TREE HILL	351	8500	4-28-69	88.0	51	45.0	-	(3)	11.6
LOWER THUNDER MOUNTAIN	301	7500		NO SURVEY MADE				4.5	2.7
SAN YCA	352	7500	4-28-69	0.0	-	0.0	-	(3)	0.0

TABLE 2 - SNOW COURSE DATA (Continued)

AREA, DRAINAGE BASIN, AND SNOW COURSE (1)	CALIF NUMBER	ELEVATION IN FEET	DATE OF SURVEY	DEPTH IN INCHES	DENSITY IN IN PERCENT	WATER CONTENT IN INCHES	WATER CONTENT IN PERCENT OF APRIL 1 AVERAGE	WATER CONTENT APRIL 1 AVERAGE IN INCHES (2)	WATER CONTENT ONE YEAR AGO IN INCHES
SANTA ANA RIVER (CONTINUED)									
MANKER FLAT	302	6500		NO SURVEY MADE				1.3	0.0
ICE HOUSE 4	303	5800		NO SURVEY MADE				(3)	0.0
SAN GABRIEL RIVER									
DEER FLATS	356	6800		NO SURVEY MADE				(3)	0.0
SAN JACINTO RIVER									
CINCO POSES	293	7500		NO SURVEY MADE				3.4	2.6
MARION MOUNTAIN	294	6700		NO SURVEY MADE				2.1	0.0
THOMAS MOUNTAIN	295	6600		NO SURVEY MADE				1.4	0.0
COTTONWOOD CREEK									
LITTLE LAGUNA MEADOW	274	5500		NO SURVEY MADE				1.7	(4)
CENTRAL VALLEY AREA									
SACRAMENTO RIVER									
MOUNT SHASTA	18	7900	5 -1-69	143.8	54	77.5	160	48.5	38.6
NORTH FORK SACRAMENTO	20	6900		NO SURVEY MADE				22.6	19.0
SAND FLAT	19	6800	5 -1-69	110.4	55	60.9	151	40.2	33.0
GRAY ROCK LAKES	21	6200		NO SURVEY MADE				43.1	40.0
SLATE CREEK	22	5600	4-30-69	87.3	52	45.4	168	27.1	22.0
MCCLOUD RIVER									
BREWER CREEK	23	6250		NO SURVEY MADE				34.4	26.4
BUCK MOUNTAIN	24	5550		NO SURVEY MADE				26.4	23.8
STOUTS MEADOW	25	5400	5 -2-69	109.7	55	60.2	149	40.5	40.5
ASH CREEK	26	5000		NO SURVEY MADE				20.9	12.1
DEAD HORSE CANYON	27	4500		NO SURVEY MADE				12.8	14.2
PIT RIVER									
BLUE LAKE RANCH	28	7300		NO SURVEY MADE				9.9	5.5
EAGLE PEAK	29	7200		NO SURVEY MADE				15.6	8.1
CEDAR PASS	30	7100	4-29-69	42.4	44	18.5	111	16.7	12.2
BLACKS MOUNTAIN	31	6700		NO SURVEY MADE				8.3	8.3
MEDICINE LAKE	32	6700		NO SURVEY MADE				31.1	24.0
THOUSAND LAKES	33	6500	4-29-69	101.9	51	51.8	145	35.7	31.0
ADIN MOUNTAINS	35	6350	5 -5-69	22.9	42	9.6	73	13.2	12.3
NEW MANZANITA LAKE	343	5900	5 -1-69	6.4	50	3.2	42	7.7	1.8

TABLE 2 - SNOW COURSE DATA (Continued)

AREA, DRAINAGE BASIN, AND SNOW COURSE (1)	CALIF NUMBER	ELEVATION IN FEET	DATE OF SURVEY	DEPTH IN INCHES	DENSITY IN IN PERCENT	WATER CONTENT IN INCHES	WATER CONTENT IN PERCENT OF APRIL 1 AVERAGE	WATER CONTENT APRIL 1 AVERAGE IN INCHES (2)	WATER CONTENT ONE YEAR AGO IN INCHES
PIT RIVER (CONTINUED)									
MCELROY PASS	37	5300		NO SURVEY MADE				2.1	0.0
BURNEY SPRINGS	41	4700		NO SURVEY MADE				2.4	0.0
FEATHER RIVER									
UPPER LASSEN PEAK	336	8500	5 -1-69	233.0	53	123.2	159	77.4	73.6
LOWER LASSEN PEAK	47	8250	5 -2-69	233.3	51	118.2	157	75.4	76.4
KETTLE ROCK	361	7300	5 -1-69	62.6	53	33.1	-	(3)	17.8
MOUNT DYER 1	48	7100	4-25-69	81.1	44	36.0	148	24.3	20.8
GRIZZLY	359	6900	4-30-69	79.1	51	40.2	-	(3)	24.4
EUREKA BOWL	279	6800	5 -2-69	118.0	54	64.1	153	42.0	34.4
CHURCH MEADOWS	75	6700		NO SURVEY MADE				31.3	23.2
ROWLAND CREEK	280	6700	4-28-69	56.5	47	26.8	154	17.4	14.0
MT HOUGH	360	6700	4-25-69	81.9	51	41.4	-	(3)	26.0
THREE LAKES	53	6250		NO SURVEY MADE				38.0	35.1
HARKNESS FLAT	51	6200		NO SURVEY MADE				28.3	24.5
EUREKA LAKE	52	6200	5 -2-69	89.0	52	46.3	145	32.0	26.6
MOUNT DYER 2	290	6050	4-25-69	54.5	43	23.2	147	15.8	12.7
FRENCHMAN COVE	353	5800	4-28-69	0.0	-	0.0	-	(3)	0.0
MILL CREEK FLAT	54	5900		NO SURVEY MADE				38.3	37.9
FREDONYER PASS 1	50	5750		NO SURVEY MADE				8.8	0.0
ANTELOPE RIDGE	354	5650	4-30-69	0.0	-	0.0	-	(3)	0.0
ABBEY	355	5650	4-30-69	14.6	48	7.0	-	(3)	7.0
LETTERBOX	49	5600	4-25-69	158.8	52	82.2	175	47.0	49.6
MOUNT STOVER	55	5600	4-25-69	65.7	45	29.3	181	16.2	17.1
BROWNS CAMP	56	5400	4-25-69	100.0	48	48.4	217	22.3	25.8
FEATHER RIVER MEADOWS	58	5400		NO SURVEY MADE				22.6	24.8
HASKINS FLAT	57	5200	4-25-69	101.2	50	51.1	175	29.2	31.2
WARNER CREEK	59	5100		NO SURVEY MADE				15.9	10.8
HUMBUG SUMMIT	60	4850		NO SURVEY MADE				11.6	5.8
CHESTER FLAT	61	4600	4-25-69	22.4	47	10.5	154	6.8	7.0
STONY CREEK									
ANTHONY PEAK	62	6200	5 -1-69	91.0	54	48.7	169	28.9	29.1
YUBA RIVER									
CASTLE CREEK 5	65	7400	5 -1-69	144.1	59	84.6	166	50.9	42.7

TABLE 2 - SNOW COURSE DATA (Continued)

AREA, DRAINAGE BASIN, AND SNOW COURSE (1)	CALIF NUMBER	ELEVATION IN FEET	DATE OF SURVEY	DEPTH IN INCHES	DENSITY IN IN PERCENT	WATER CONTENT IN INCHES	WATER CONTENT IN PERCENT OF APRIL 1 AVERAGE	WATER CONTENT APRIL 1 AVERAGE IN INCHES (2)	WATER CONTENT ONE YEAR AGO IN INCHES
YUBA RIVER (CONTINUED)									
MEADOW LAKE	66	7200		NO SURVEY MADE				54.9	47.9
RED MOUNTAIN	67	7200		NO SURVEY MADE				48.4	40.8
ENGLISH MOUNTAIN	68	7100		NO SURVEY MADE				44.2	35.6
LAKE STERLING	70	7100		NO SURVEY MADE				53.3	42.6
SAWMILL FLAT	71	7100	4-28-69	153.7	53	81.3	161	50.4	41.1
DONNER SUMMIT	69	6900	4-28-69	121.8	53	65.0	168	38.6	30.9
HAYPRESS VALLEY	72	6800		NO SURVEY MADE				35.2	30.8
YUBA PASS	74	6700	4-30-69	86.8	55	47.6	157	30.4	23.3
FURNACE FLAT	76	6700	4-28-69	136.2	58	79.2	169	46.8	43.2
LAKE FORDYCE	77	6500	4-28-69	122.9	57	70.0	175	40.0	34.7
FINDLEY PEAK	78	6500		NO SURVEY MADE				28.5	24.2
CISCO	80	5900	4-28-69	82.0	51	41.6	168	24.8	23.6
CHAPMAN CREEK	372	5850	4-30-69	65.9	54	35.8	-	(3)	22.2
SARDINE FLAT	82	5800		NO SURVEY MADE				17.3	15.2
BOWMAN LAKE	83	5650		NO SURVEY MADE				20.6	19.6
GIBSONVILLE	277	5400	5 -1-69	73.8	50	36.6	117	31.4	25.8
LAKE SPAULDING	85	5200	4-28-69	74.2	50	36.9	148	24.9	28.9
AMERICAN RIVER									
UPPER CARSON PASS	106	8500	4-25-69	124.5	51	63.0	182	34.6	28.5
EMIGRANT VALLEY	297	8400	4-25-69	153.9	49	75.1	173	43.3	31.6
LOWER CARSON PASS	331	8400	4-25-69	130.0	51	66.4	178	37.2	29.2
TWIN LAKES	107	8000	4-25-69	111.1	48	53.6	179	30.0	22.0
ALPHA	365	7600	4-30-69	104.8	55	57.8	-	(3)	23.3
LOST CORNER MOUNTAIN	338	7500	5 -3-69	108.1	53	57.7	178	32.4	26.6
ECHO SUMMIT	108	7450	4-28-69	110.3	54	59.9	161	37.3	22.5
LAKE AUDRAIN	110	7300	4-28-69	117.0	52	60.5	170	35.5	23.7
SILVER LAKE	109	7100		NO SURVEY MADE				22.8	13.8
DARRINGTON	111	7100	4-28-69	95.5	53	50.5	165	30.6	17.9
WRIGHTS LAKE	316	6900	5 -3-69	101.8	54	54.9	168	32.6	21.8
PHILLIPS	113	6800	4-28-69	90.0	54	48.3	168	28.7	19.0
LYONS CREEK	320	6700	5 -3-69	89.5	53	47.6	153	31.1	22.2
HUYSINK	115	6600	4-29-69	131.4	56	73.6	160	45.9	36.4
TAMARACK FLAT	289	6550	4-28-69	96.1	52	49.8	178	27.9	20.9

TABLE 2 - SNOW COURSE DATA (Continued)

AREA, DRAINAGE BASIN, AND SNOW COURSE (1)	CALIF NUMBER	ELEVATION IN FEET	DATE OF SURVEY	DEPTH IN INCHES	DENSITY IN IN PERCENT	WATER CONTENT IN INCHES	WATER CONTENT IN PERCENT OF APRIL 1 AVERAGE	WATER CONTENT APRIL 1 AVERAGE IN INCHES (2)	WATER CONTENT ONE YEAR AGO IN INCHES
AMERICAN RIVER (CONTINUED)									
WABENA MEADOWS	114	6300	4-28-69	128.1	52	67.0	171	39.1	38.0
MIRANDA CABIN	369	6200	4-28-69	117.2	60	69.8	-	(3)	36.6
ONION CREEK	120	6100	4-30-69	61.5	56	34.6	161	21.5	12.7
DIAMOND CROSSING	371	6050	4-28-69	69.1	52	36.1	-	(3)	15.1
TALBOT CAMP	122	5750	4-28-69	65.2	51	33.4	183	18.3	16.8
SIXMILE VALLEY	123	5750		NO SURVEY MADE				22.8	21.7
STRAWBERRY	124	5700	4-28-69	7.2	49	3.5	41	8.5	0.0
ROBBS VALLEY (ORELLI)	322	5600	5 -3-69	41.1	52	21.3	96	22.3	16.4
ICE HOUSE	127	5300	4-30-69	11.8	50	5.9	45	13.2	4.0
CARPENTER FLAT	128	5300		NO SURVEY MADE				18.4	13.7
MOKELUMNE RIVER									
TRAGEDY CREEK	364	8150		NO SURVEY MADE				(3)	31.1
BLUE LAKES	129	8000	4-28-69	123.8	49	60.5	174	34.8	25.1
TRAGEDY SPRINGS	130	7900		NO SURVEY MADE				43.3	31.1
WHEELER LAKE	131	7800	5 -1-69	164.5	56	91.9	178	51.6	38.3
PACIFIC VALLEY	132	7500	5 -1-69	114.3	57	64.9	179	36.2	26.9
CORRAL FLAT	133	7200		NO SURVEY MADE				38.8	27.5
PODESTA	363	7200		NO SURVEY MADE				(3)	32.0
BEAR VALLEY RIDGE 1	134	6700	4-28-69	69.7	52	36.1	142	25.4	14.6
BEAR VALLEY RIDGE 2	339	6600	4-28-69	85.1	47	39.8	141	28.2	21.3
LUMBERYARD	135	6500	4-25-69	97.3	50	48.3	156	31.0	20.7
MUD SPRINGS	362	5800	4-25-69	23.2	46	10.7	-	(3)	0.0
HAMS STATION	136	5500	4-25-69	12.9	50	6.4	78	8.2	0.0
ANTELOPE SPRINGS	137	4350	4-25-69	3.0	40	1.2	38	3.2	0.0
STANISLAUS RIVER									
DEADMAN CREEK	345	9250	4-29-69	123.0	47	58.2	173	33.6	25.8
CLARK FORK MEADOW	344	8900	4-29-69	130.5	50	65.8	178	36.9	28.5
HIGHLAND MEADOW	323	8800	5 -1-69	147.1	54	79.5	165	48.1	34.9
LOWER RELIEF VALLEY	138	8100	4-25-69	144.5	51	74.0	192	38.5	29.7
SODA CREEK FLAT	139	7800	4-29-69	101.2	50	51.0	237	21.5	16.7
LAKE ALPINE	141	7550	4-30-69	134.3	55	73.3	181	40.6	27.3
EAGLE MEADOW	140	7500	4-29-69	85.2	49	41.8	176	23.8	18.8
HERRING CREEK	142	7300	4-25-69	111.7	48	53.4	192	27.8	19.7

TABLE 2 - SNOW COURSE DATA (Continued)

AREA, DRAINAGE BASIN, AND SNOW COURSE (1)	CALIF NUMBER	ELEVATION IN FEET	DATE OF SURVEY	DEPTH IN INCHES	DENSITY IN IN PERCENT	WATER CONTENT IN INCHES	WATER CONTENT IN PERCENT OF APRIL 1 AVERAGE	WATER CONTENT APRIL 1 AVERAGE IN INCHES (2)	WATER CONTENT ONE YEAR AGO IN INCHES
STANISLAUS RIVER (CONTINUED)									
RELIEF DAM	143	7250	4-29-69	77.1	47	36.0	186	19.4	15.7
SPICERS	144	6600	5 -1-69	84.6	56	47.7	188	28.0	23.8
BIG MEADOW	146	6550	4-30-69	76.0	53	40.2	145	27.8	11.3
HELLS KITCHEN	373	6550	4-30-69	78.6	54	42.6	-	(3)	12.6
NIAGARA FLAT	145	6500	4-25-69	77.1	45	34.6	170	20.4	13.5
COTTAGE SPRING	147	5750	4-30-69	37.3	50	18.8	132	14.2	6.8
DORRINGTON	149	4750	4-30-69	0.0	-	0.0	0	5.6	0.0
TUOLUMNE RIVER									
DANA MEADOWS	157	9850	4-30-69	106.9	49	52.9	181	29.3	19.7
RAFFERTY MEADOWS	158	9400	4-30-69	114.2	45	50.9	169	30.2	20.6
BOND PASS	159	9300	4-29-69	162.6	50	81.9	193	42.4	30.2
NEW GRACE MEADOW	368	8900	4-29-69	149.0	54	79.8	-	(3)	36.3
TUOLUMNE MEADOWS	161	8600	4-30-69	81.9	56	45.5	208	21.9	13.9
HORSE MEADOW	162	8400	4-29-69	155.9	55	86.3	191	45.2	38.9
WILMER LAKE	163	8000	4-29-69	151.0	53	79.7	188	42.3	31.4
SACHSE SPRINGS	165	7900	4-30-69	139.0	53	73.2	196	37.3	29.6
SPOTTED FAWN	164	7800	4-30-69	161.9	53	86.2	190	45.3	35.2
HUCKLEBERRY LAKE	166	7800	4-30-69	151.4	53	79.7	194	41.1	32.4
PARADISE	167	7700	4-29-69	120.8	58	70.1	178	39.3	29.0
KERRICK CORRAL	348	7000	4-28-69	76.2	54	41.2	-	(3)	13.6
UPPER KIBBIE RIDGE	168	6700	4-30-69	67.5	51	34.1	175	19.5	12.4
VERNON LAKE	169	6700	4-29-69	88.9	49	43.9	184	23.9	17.6
LOWER KIBBIE RIDGE	173	6700	4-30-69	90.8	52	47.5	181	26.2	19.5
BEEHIVE MEADOW	171	6500	4-29-69	86.8	49	42.2	160	26.4	16.5
BELL MEADOW	172	6500	4-28-69	52.2	50	26.0	146	17.8	7.3
MERCED RIVER									
SNOW FLAT	176	8700	5 -1-69	146.1	60	87.6	213	41.2	33.0
OSTRANDER LAKE	177	8200	5 -5-69	132.5	55	72.7	220	33.0	20.8
LAKE TENAYA	178	8150	5 -1-69	121.5	54	65.8	199	33.0	20.7
GIN FLAT	179	7000	5 -1-69	110.3	53	58.4	173	33.8	20.9
PEREGOY MEADOWS	180	7000	5 -5-69	125.4	48	60.3	188	32.0	21.4
SAN JOAQUIN RIVER									
MONO PASS	182	11450	4-29-69	140.0	48	66.8	204	32.8	18.2

TABLE 2 - SNOW COURSE DATA (Continued)

AREA, DRAINAGE BASIN, AND SNOW COURSE (1)	CALIF NUMBER	ELEVATION IN FEET	DATE OF SURVEY	DEPTH IN INCHES	DENSITY IN IN PERCENT	WATER CONTENT IN INCHES	WATER CONTENT IN PERCENT OF APRIL 1 AVERAGE	WATER CONTENT APRIL 1 AVERAGE IN INCHES (2)	WATER CONTENT ONE YEAR AGO IN INCHES
SAN JOAQUIN RIVER (CONTINUED)									
PIUTE PASS	183	11300	4-27-69	158.5	51	80.9	237	34.2	28.8
EMERALD LAKE	184	10600	4-29-69	148.7	49	73.3	214	34.4	20.0
PIONEER BASIN	276	10400	4-29-69	136.0	51	69.1	186	37.2	19.2
HEART LAKE	185	10100	0-30-69	110.9	52	57.7	210	27.5	19.8
VOLCANIC KNOB	186	10100	4-29-69	120.4	52	62.7	204	30.7	17.9
ROSE MARIE	187	10000	4-29-69	111.0	55	61.1	211	29.0	15.4
COLBY MEADOW	188	9700	4-29-69	86.3	56	48.6	223	21.6	11.5
AGNEW PASS	189	9450	4-29-69	117.4	53	62.5	204	30.6	19.1
KAISER PASS	190	9100	5 -1-69	145.0	53	76.4	204	37.3	24.0
DUTCH LAKE	191	9100	4-30-69	107.6	54	58.8	219	27.3	14.5
COYOTE LAKE	192	8850	4-29-69	129.7	52	68.0	215	31.7	17.5
CORA LAKES	193	8400	5-1-69	129.0	65	83.7	217	38.6	21.8
BADGER FLAT	346	8300		NO SURVEY MADE				31.2	18.0
NELLIE LAKE	194	8000	5 -2-69	133.9	58	79.5	207	36.4	21.1
LAKE THOMAS A EDISON	324	7800	4-29-69	62.2	53	32.9	233	14.1	2.8
CHILKOOT LAKE	196	7450	4-29-69	142.2	51	73.2	201	36.4	18.8
TAMARACK CREEK	347	7250	5-30-69	89.5	55	48.9	200	24.4	11.5
FLORENCE LAKE	198	7200		NO SURVEY MADE				7.4	0.0
CHILKOOT MEADOW	197	7150	4-29-69	133.0	55	73.6	208	35.7	22.6
HUNTINGTON LAKE	199	7000	4-28-69	74.1	54	39.8	197	20.2	7.0
CLOVER MEADOW	200	7000	4-30-69	91.3	52	47.8	207	23.1	14.8
JACKASS MEADOW	201	6950	4-30-69	84.5	54	45.6	197	23.2	13.1
CHIQUITO CREEK	202	6800	4-29-69	84.8	52	44.3	204	21.7	11.2
POISON MEADOW	204	6800	4-29-69	80.7	52	42.0	171	24.6	13.2
KINGS RIVER									
BISHOP PASS	222	11200	4-27-69	153.8	51	78.0	262	29.8	21.8
CHARLOTTE RIDGE	299	10700		NO SURVEY MADE				29.4	19.5
BULLFROG LAKE	307	10650		NO SURVEY MADE				27.8	19.5
BLACKCAP BASIN	223	10300	4-28-69	142.8	48	68.6	210	32.4	20.4
BEARD MEADOW	225	9800	4-28-69	142.4	52	74.0	239	30.9	20.4
UPPER BURNT CORRAL MEADOW	224	9700	4-28-69	150.6	50	75.8	228	33.3	22.6
VIDETTE MEADOW	309	9500		NO SURVEY MADE				18.6	14.1
UPPER WOODCHUCK MEADOW	341	9100	4-29-69	118.0	56	66.2	216	30.7	19.8

TABLE 2 - SNOW COURSE DATA (Continued)

AREA, DRAINAGE BASIN, AND SNOW COURSE (1)	CALIF NUMBER	ELEVATION IN FEET	DATE OF SURVEY	DEPTH IN INCHES	DENSITY IN IN PERCENT	WATER CONTENT IN INCHES	WATER CONTENT IN PERCENT OF APRIL 1 AVERAGE	WATER CONTENT APRIL 1 AVERAGE IN INCHES (2)	WATER CONTENT ONE YEAR AGO IN INCHES
KINGS RIVER (CONTINUED)									
SWAMP MEADOW	228	9000	4-29-69	146.0	50	73.1	206	35.4	22.5
ROUND CORRAL	229	9000	4-29-69	156.8	47	74.0	226	32.8	21.2
ROWELL MEADOW	226	8850	5 -3-69	119.8	55	65.9	252	26.1	16.5
WOODCHUCK MEADOW	227	8800	4-29-69	138.9	52	71.6	243	29.5	17.9
LONG MEADOW	232	8500	4-28-69	120.0	56	67.0	247	27.1	15.8
STATUM MEADOW	233	8300	4-29-69	122.1	59	71.6	238	30.1	18.5
HELMS MEADOW	230	8250	4-29-69	108.3	55	59.2	245	24.2	12.3
POST CORRAL MEADOW	234	8200	4-28-69	120.6	53	64.4	260	24.8	12.4
DODSONS MEADOW	308	8050	4-28-69	110.1	53	58.4	213	27.4	15.1
GRANT GROVE	240	6600	4-27-69	48.7	51	24.9	173	14.4	3.2
BIG MEADOWS	236	7600	5 -3-69	104.1	60	62.5	248	25.2	11.1
HORSE CORRAL MEADOW	237	7600	5 -3-69	70.0	58	40.8	240	17.0	6.2
FRED MEADOW	239	6950	5 -1-69	83.5	52	43.6	207	21.1	5.8
KAWEAH RIVER									
FAREWELL GAP	292	9000	4-26-69	182.4	49	88.9	280	31.7	23.2
PANTHER MEADOW	243	8600	4-26-69	195.8	52	100.9	281	35.9	23.8
HOCKETT MEADOWS	244	8500	4-26-69	121.1	55	66.5	229	29.1	19.7
MINERAL KING	245	8000	4-26-69	108.2	53	57.6	300	19.2	16.3
GIANT FOREST	246	6400	4-27-69	78.0	54	42.5	254	16.7	11.4
TULE RIVER									
QUAKING ASPEN	247	7000	5 -2-69	36.9	52	19.1	144	13.3	4.2
OLD ENTERPRISE MILL	248	6600	5 -1-69	56.6	52	29.2	173	16.9	8.5
DEER CREEK									
DEAD HORSE MEADOW	249	7300	4-29-69	51.5	47	24.3	191	12.7	6.0
KERN RIVER									
BIGHORN PLATEAU	250	11350	5 -5-69	107.7	50	53.7	237	22.7	14.1
COTTONWOOD PASS	251	11050	5 -2-69	75.1	48	36.4	274	13.2	8.9
SIBERIAN PASS	252	10900	5 -3-69	88.1	50	44.4	247	18.0	12.6
CRABTREE MEADOW	253	10700	5 -4-69	85.9	49	42.2	222	19.0	12.3
GUYOT FLAT	254	10650	5 -4-69	92.1	50	46.0	228	20.2	14.0
TYNDALL CREEK	255	10650	5 -5-69	91.3	50	45.9	251	18.3	11.6
SANDY MEADOWS	275	10650	5 -5-69	77.0	49	37.4	203	18.4	11.8

TABLE 2 - SNOW COURSE DATA (Continued)

AREA, DRAINAGE BASIN, AND SNOW COURSE (1)	CALIF NUMBER	ELEVATION IN FEET	DATE OF SURVEY	DEPTH IN INCHES	DENSITY IN IN PERCENT	WATER CONTENT IN INCHES	WATER CONTENT IN PERCENT OF APRIL 1 AVERAGE	WATER CONTENT APRIL 1 AVERAGE IN INCHES (2)	WATER CONTENT ONE YEAR AGO IN INCHES
KERN RIVER (CONTINUED)									
BIG WHITNEY MEADOW	257	9750	5 -2-69	74.0	53	39.3	234	16.8	12.6
ROCK CREEK	256	9600	5 -3-69	69.9	53	37.0	218	17.0	11.1
ROUND MEADOW	258	9000	4-24-69	115.2	57	66.2	262	25.3	17.8
RAMSHAW MEADOWS	259	8700	5 -1-69	54.1	53	28.6	255	11.2	7.6
LITTLE WHITNEY MEADOW	260	8500	5 -1-69	60.7	51	31.0	235	13.2	5.7
CASA VIEJA MEADOWS	262	8400	4-27-69	96.1	57	54.4	289	18.8	12.9
QUINN RANGER STATION	264	8350	4-26-69	93.0	54	50.2	252	19.9	9.3
BONITA MEADOWS	261	8300	4-25-69	76.4	58	44.5	325	13.7	8.6
MONACHE MEADOWS	263	8000	4-29-69	34.8	64	22.1	295	7.5	2.4
BEACH MEADOWS	265	7650	4-26-69	45.7	46	21.2	228	9.3	4.1
LAHONTAN AREA									
SURPRISE VALLEY									
BARBER CREEK	313	6500		NO SURVEY MADE				11.6	7.0
HAYS CANYON (NEVADA)	349	6400		NO SURVEY MADE				1.8	0.0
49 MOUNTAIN (NEVADA)	350	6000		NO SURVEY MADE				2.6	0.0
RESERVATION CREEK	314	5900		NO SURVEY MADE				11.8	4.2
SUSAN RIVER									
SILVER LAKE MEADOWS	45	6450	4-30-69	75.4	62	47.0	170	27.6	26.7
NORVELL FLAT	46	5700	4-30-69	33.5	57	19.1	122	15.6	12.7
TRUCKEE RIVER									
MOUNT ROSE (NEVADA)	334	9000		NO SURVEY MADE				32.8	23.5
INDEPENDENCE LAKE	86	8450	5 -1-69	140.0	49	68.0	169	40.3	35.8
WEBBER PEAK	64	7800		NO SURVEY MADE				43.8	37.6
SQUAW VALLEY 2	318	7500	5 -1-69	154.5	53	82.5	160	51.6	40.4
INDEPENDENCE CAMP	88	7000	5 -1-69	69.0	50	34.5	152	22.7	20.2
WEBBER LAKE	89	7000		NO SURVEY MADE				31.7	25.4
SAGE HEN CREEK	90	6500	5 -1-69	53.0	47	24.8	139	17.9	17.1
INDEPENDENCE CREEK	91	6500	5 -1-69	36.0	44	15.9	123	12.9	10.9
TRUCKEE 2	92	6400		NO SURVEY MADE				16.2	14.6
DONNER PARK 2	342	6000		NO SURVEY MADE				17.3	17.2
BOCA 2	95	5900		NO SURVEY MADE				4.8	.4
LAKE TAHOE BASIN									
HEAVENLY VALLEY	375	8850	5 -1-69	85.0	53	45.0	-	(3)	(4)

TABLE 2 - SNOW COURSE DATA (Continued)

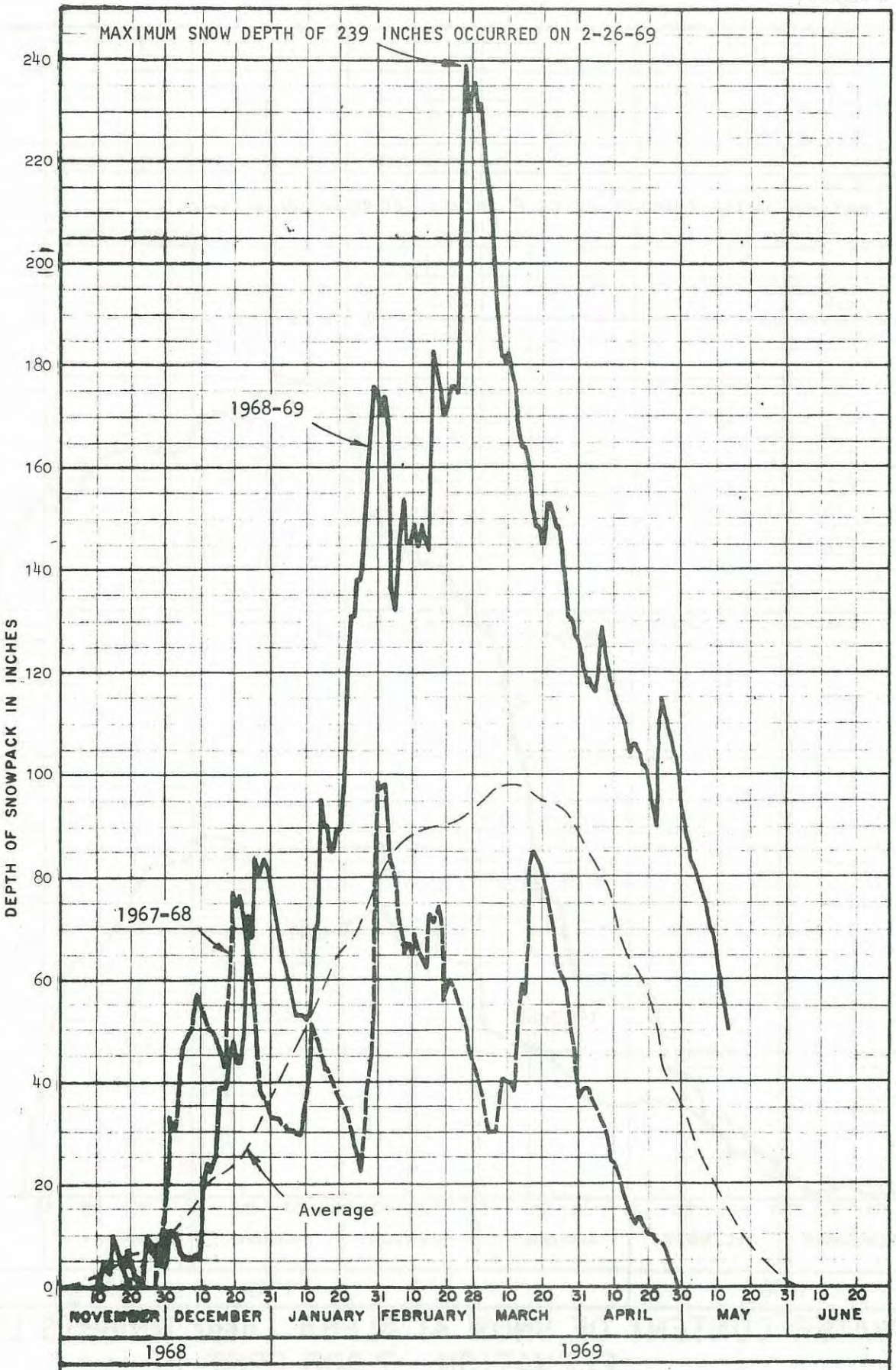
AREA, DRAINAGE BASIN, AND SNOW COURSE (1)	CALIF NUMBER	ELEVATION IN FEET	DATE OF SURVEY	DEPTH IN INCHES	DENSITY IN IN PERCENT	WATER CONTENT IN INCHES	WATER CONTENT IN PERCENT OF APRIL 1 AVERAGE	WATER CONTENT APRIL 1 AVERAGE IN INCHES (2)	WATER CONTENT ONE YEAR AGO IN INCHES
LAKE TAHOE BASIN (CONTINUED)									
LAKE LUCILLE	96	8200		NO SURVEY MADE				58.4	45.3
RUBICON PEAK 1	97	8100		NO SURVEY MADE				48.8	41.8
MAGAWS MEADOW	98	8000	4-29-69	51.0	53	28.9	153	17.6	12.6
MARLETTE LAKE (NEVADA)	332	8000	4-30-69	72.0	54	38.7	172	22.5	19.7
RUBICON PEAK 2	99	7500		NO SURVEY MADE				30.5	26.6
DAGGETTS PASS (NEVADA)	337	7350		NO SURVEY MADE				11.7	7.0
FREEL BENCH	100	7300	4-29-69	28.0	49	13.6	120	11.3	6.9
WARD CREEK	101	7000	4-30-69	127.0	54	68.9	153	45.0	32.4
GLENBROOK 2	333	6900		NO SURVEY MADE				12.9	9.0
WARD CREEK 3	376	6750	4-30-69	112.0	55	61.3	-	(3)	(4)
RICHARDSONS 2	103	6500		NO SURVEY MADE				18.7	15.6
UPPER TRUCKEE	104	6400		NO SURVEY MADE				7.5	5.9
TAHOE CITY	105	6250		NO SURVEY MADE				11.0	7.0
WALKER RIVER									
VIRGINIA LAKES	150	9500	4-28-69	66.0	53	34.9	205	17.0	10.6
VIRGINIA LAKES RIDGE	377	9200	4-28-69	72.0	48	34.4	-	(3)	(4)
CENTER MOUNTAIN	151	9400		NO SURVEY MADE				35.4	27.3
SONORA PASS	152	8800	4-29-69	85.0	53	44.8	186	24.1	17.8
BUCKEYE FORKS	153	8500		NO SURVEY MADE				19.2	15.6
WILLOW FLAT	154	8250		NO SURVEY MADE				10.3	6.0
BUCKEYE ROUGHS	155	7900		NO SURVEY MADE				20.4	12.6
LEAVITT MEADOW	156	7200		NO SURVEY MADE				7.5	2.2
MONO LAKE BASIN									
GEM PASS	281	10400	4-29-69	125.8	49	62.2	191	32.5	20.1
TIOGA PASS	181	9800	4-30-69	94.8	50	47.8	185	25.8	16.4
SADDLEBAG LAKE	287	9750		NO SURVEY MADE				33.2	21.1
ELLERY LAKE (RHINEDOLLAR)	286	9600	4-30-69	100.5	53	53.7	178	30.1	19.0
GEM LAKE	282	9150	4-29-69	111.7	55	61.4	196	31.3	17.8
OWENS RIVER									
BISHOP LAKE	284	11300	4-26-69	101.1	46	46.9	247	19.0	9.8
COTTONWOOD LAKES 2	220	11100	4-30-69	80.6	48	38.5	308	12.5	9.2
EAST PIUTE PASS	212	10800	4-26-69	78.4	52	40.7	345	11.8	5.9
COTTONWOOD LAKES 1	221	10600	4-30-69	66.4	53	35.3	307	11.5	9.2

TABLE 2 - SNOW COURSE DATA (Continued)

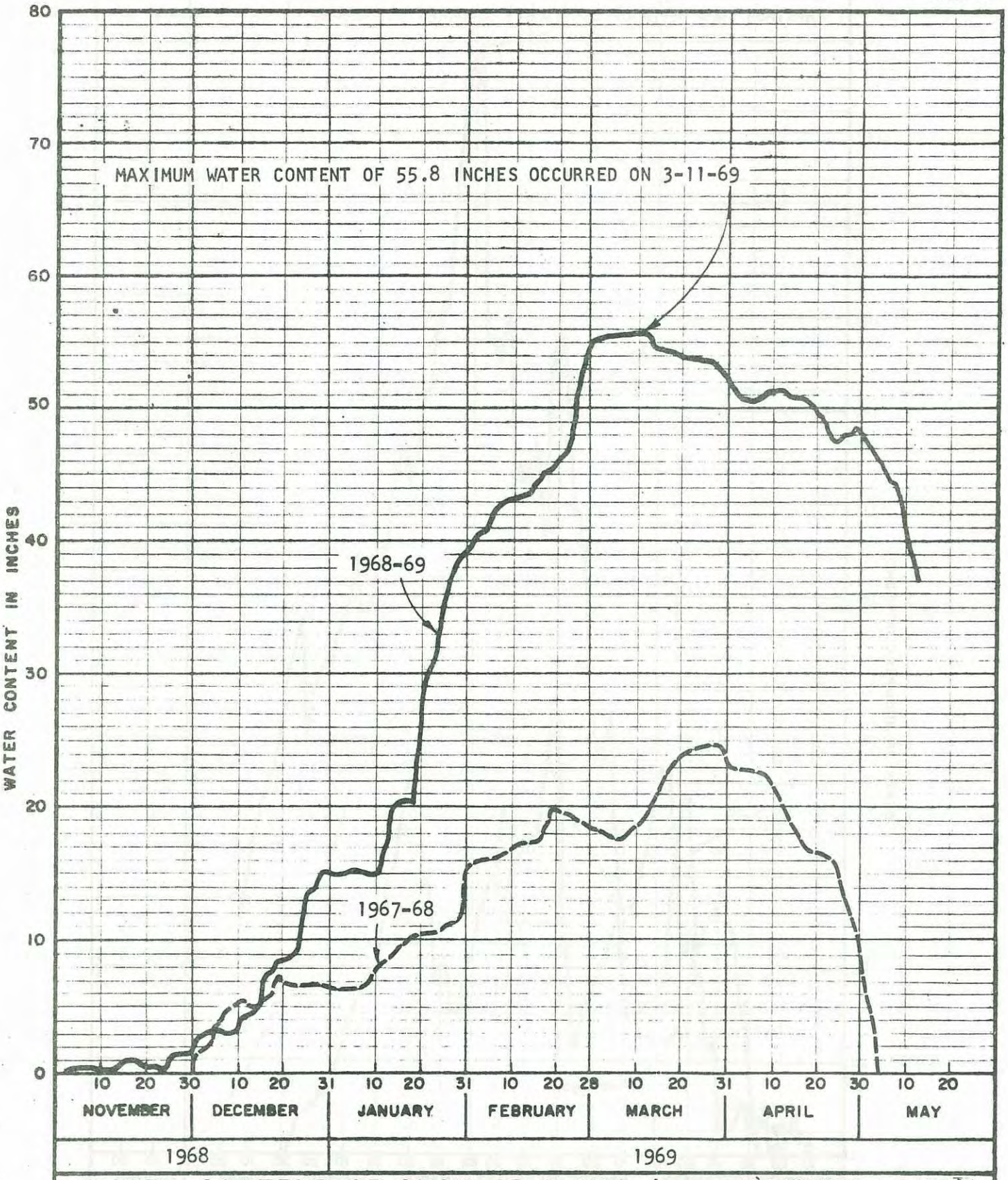
AREA, DRAINAGE BASIN, AND SNOW COURSE (1)	CALIF NUMBER	ELEVATION IN FEET	DATE OF SURVEY	DEPTH IN INCHES	DENSITY IN IN PERCENT	WATER CONTENT IN INCHES	WATER CONTENT IN PERCENT OF APRIL 1 AVERAGE	WATER CONTENT APRIL 1 AVERAGE IN INCHES (2)	WATER CONTENT ONE YEAR AGO IN INCHES
OWENS RIVER (CONTINUED)									
SAWMILL	213	10300	4-26-69	90.0	52	47.0	268	17.7	10.6
ROCK CREEK 3	209	10000	4-30-69	0.0	-	0.0	0	14.2	6.2
BIG PINE CREEK 1	217	10000	4-30-69	122.5	47	57.4	291	22.9	17.9
BIG PINE CREEK 3	218	9800	4-30-69	109.2	50	55.1	349	15.8	9.2
BIG PINE CREEK 2	219	9700	4-30-69	85.6	50	43.1	264	16.3	7.6
MAMMOTH PASS	205	9500	4-29-69	163.6	50	81.6	195	41.9	26.5
NUCLEAR 2	358	9500	4-28-69	104.4	57	59.2	-	(3)	0.0
NORTH LAKE	214	9300	4-27-69	55.0	54	29.9	344	8.7	1.8
ROCK CREEK 2	210	9050	4-30-69	46.2	51	23.4	292	9.3	6.2
MINARETS 2	206	9000	4-29-69	121.2	50	60.3	200	30.2	18.8
SOUTH FORK	215	8850	4-26-69	41.0	51	20.9	454	4.6	0.0
ROCK CREEK 1	211	8700	4-30-69	41.0	51	20.9	263	7.9	1.2
BISHOP PARK	216	8400	4-27-69	28.3	55	19.7	383	4.1	0.0
MAMMOTH	208	8300	4-29-69	89.4	53	47.4	239	19.8	13.7
MINARETS 3	367	8200	4-29-69	84.2	52	44.0	-	(3)	12.5
NUCLEAR 1	357	7800	5 -1-69	0.0	-	0.0		(3)	0.0
MOJAVE DESERT									
ISLIP 3	305	7600		NO SURVEY MADE				14.2	9.3
ISLIP 4	306	7550		NO SURVEY MADE				14.8	14.3
ISLIP 2	304	7400		NO SURVEY MADE				10.8	1.6
BLUE RIDGE	340	7200		NO SURVEY MADE				2.4	0.0
BUCKHORN	271	7100		NO SURVEY MADE				5.1	0.0
CEDAR SPRINGS	272	6500		NO SURVEY MADE				4.3	0.0
SQUAW CAMP	273	5800		NO SURVEY MADE				(3)	0.0
COLORADO DESERT AREA									
WHITEWATER RIVER									
TAHQUITZ VALLEY	296	7800		NO SURVEY MADE				8.1	(4)

(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.

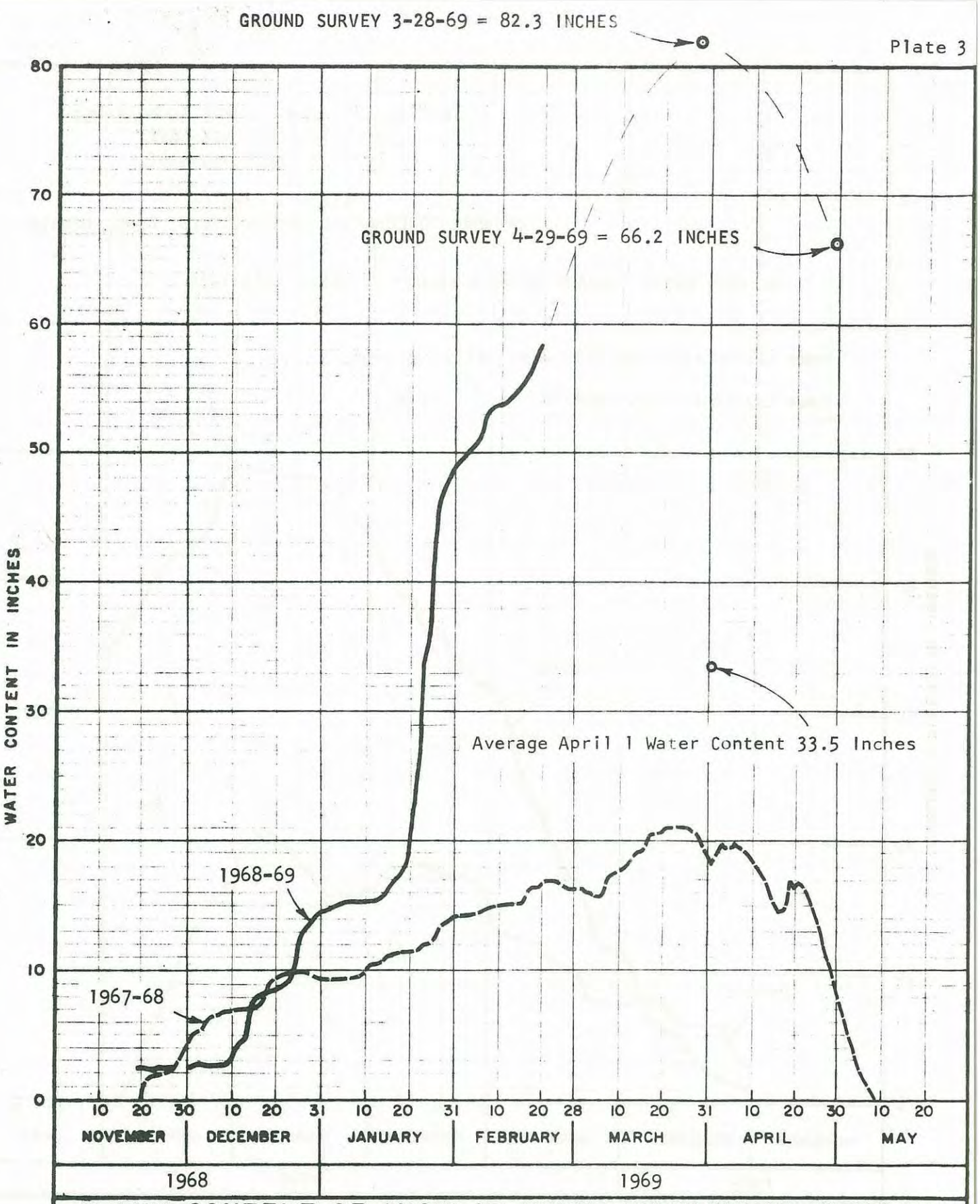
Plate 1



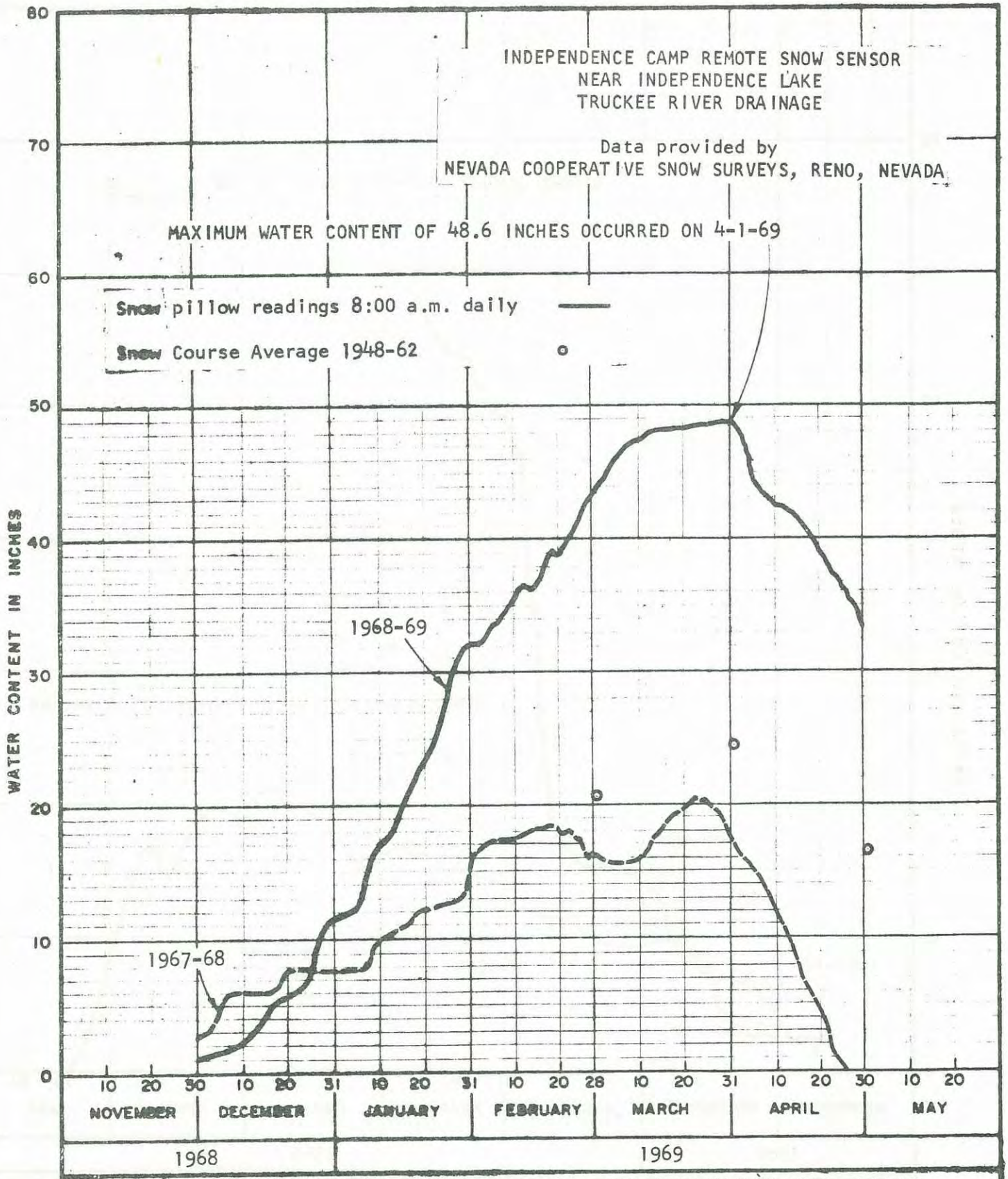
DEPTH OF SNOW AT NORDEN
ELEVATION 7,000 FEET



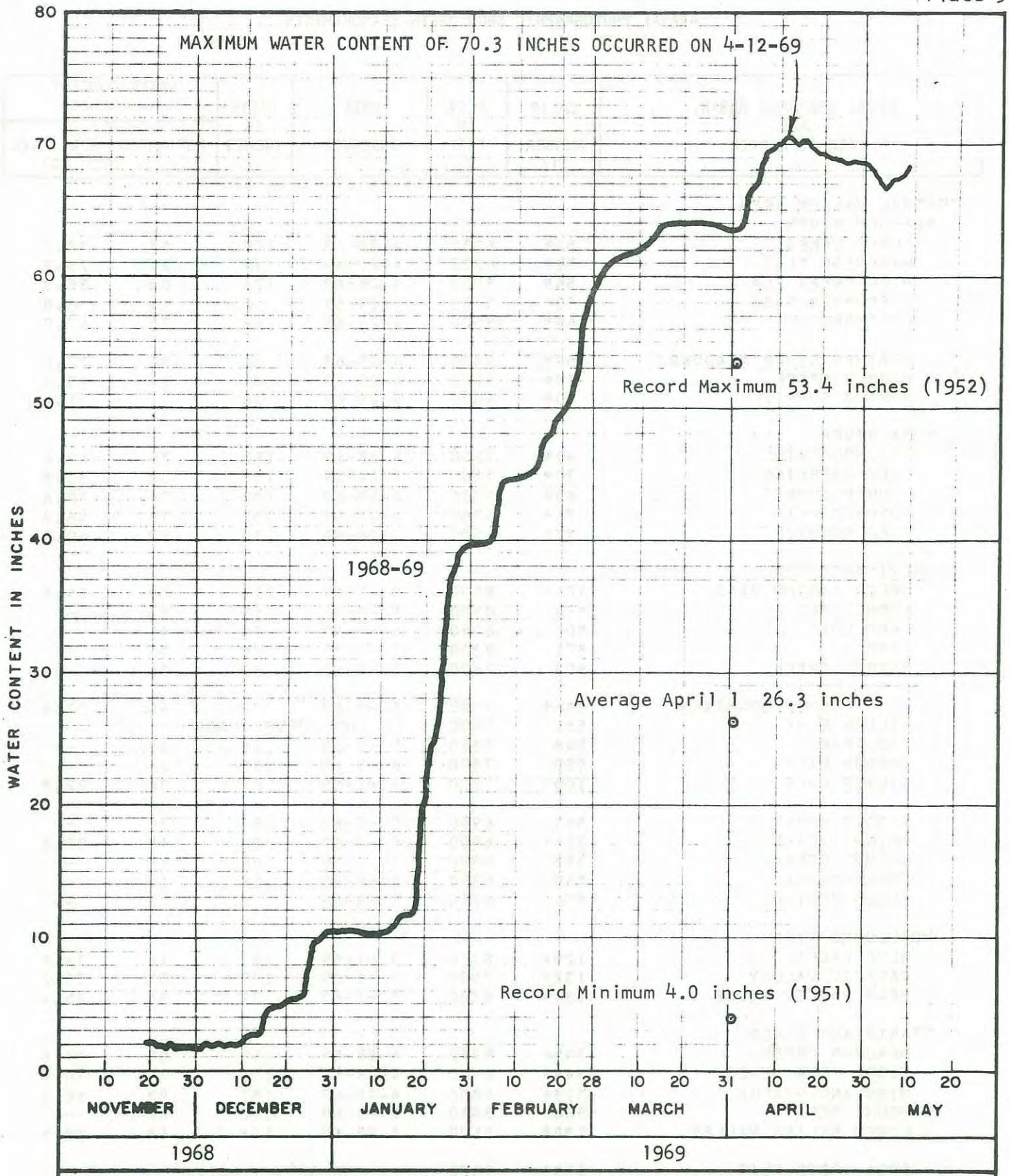
WATER CONTENT OF SNOW AT ALPHA (near WRIGHTS LAKE)
ELEVATION 7,600 FEET
AMERICAN RIVER BASIN



WATER CONTENT OF SNOW AT UPPER WOODCHUCK MEADOW
ELEVATION 9,100 FEET
KINGS RIVER BASIN



WATER CONTENT OF SNOW AT INDEPENDENCE CAMP
ELEVATION 7,000 FEET
TRUCKEE RIVER BASIN



WATER CONTENT OF SNOW AT ROUND MEADOW
ELEVATION 9,000 FEET
KERN RIVER BASIN

TABLE 3

AERIAL PHOTOGRAPHIC SNOW DEPTH MEASUREMENTS

AREA, DRAINAGE BASIN, AND AERIAL MARKER	CALIF NUMBER (1)	ELEV IN FEET	DATE OBSERVED	DEPTH IN INCHES	WATER CONTENT IN INCHES	
					ESTIMATED	APR 1 AVE (2)
CENTRAL VALLEY AREA						
FEATHER RIVER						
THREE LAKES	53*	6250	4-25-69	108	55	38.0
HARKNESS FLAT	51*	6200	4-25-69	72	37	28.3
MILL CREEK FLAT	54*	5900	4-25-69	126	65	38.3
FREDONYER PASS 1	50*	5750	4-25-69	6	3	8.8
LETTERBOX	49*	5600	4-25-69	144	75	47.0
FEATHER RIVER MEADOWS	58*	5400	4-25-69	60	30	22.6
WARNER CREEK	59*	5100	4-25-69	48	25	15.9
HUMBUG SUMMIT	60*	4850	4-25-69	24	11	11.6
YUBA RIVER						
RED MOUNTAIN	67*	7200	4-28-69	150	75	48.4
LAKE STERLING	70*	7100	4-28-69	156	78	53.3
DONNER SUMMIT	69*	6900	4-28-69	132	70	38.6
FURNACE FLAT	76*	6700	4-28-69	132	73	46.8
LAKE FORDYCE	77*	6500	4-28-69	126	69	40.0
AMERICAN RIVER						
UPPER CARSON PASS	106*	8500	5 -1-69	113	58	34.6
LYONS LAKE	552	8500	5 -9-69	155	85	--
LAKE LOIS	502	8250	5 -9-69	74	41	--
LAKE 3	501	8200	5 -9-69	166	91	--
PHIPPS CREEK	503	7600	5 -9-69	62	34	--
LOST CORNER MOUNTAIN	338*	7500	5 -9-69	72	40	32.4
WILLOW FLAT	551	7400	NO SURVEY MADE			
TWO PEAKS	548	7350	5 -9-69	76	42	--
SHADOW LAKE	550	7300	5 -9-69	117	64	--
SILVER LAKE	109*	7100	5 -1-69	66	36	22.8
NIGGER FLAT	555	6950	5 -9-69	54	30	--
WRIGHTS LAKE	316*	6900	5 -9-69	82	45	32.6
QUINNS CORRAL	553	6800	5 -9-69	84	46	--
UPPER BASSI	549	6350	5 -9-69	26	14	--
HELLS DELIGHT	554	5750	5 -9-69	0	0	--
MOKELUMNE RIVER						
BLUE LAKES	129*	8000	5 -1-69	127	64	34.8
PACIFIC VALLEY	132*	7500	5 -1-69	103	57	36.2
BEAR VALLEY RIDGE 1	134*	6700	5 -1-69	72	36	25.4
STANISLAUS RIVER						
DEADMAN CREEK	345*	9250	4-28-69	144	68	33.6
CLARK FORK MEADOW	344*	8900	4-28-69	156	78	36.9
HIGHLAND MEADOW	323*	8800	4-28-69	152	82	48.1
MOUNT REBA	566	8480	5 -1-69	160	86	--
LOWER RELIEF VALLEY	138*	8100	4-28-69	114	58	38.5
SODA CREEK FLAT	139*	7800	NO SURVEY MADE			
LAKE ALPINE	141*	7550	5 -1-69	124	68	40.6
EAGLE MEADOW	140*	7500	4-28-69	94	47	23.8
RELIEF DAM	143*	7250	4-23-69	72	34	19.4
TUOLUMNE RIVER						
DANA MEADOWS	157*	9850	NO SURVEY MADE			

TABLE 3 - AERIAL PHOTOGRAPHIC SNOW DEPTH MEASUREMENTS (Continued)

AREA, DRAINAGE BASIN, AND AERIAL MARKER	CALIF NUMBER (1)	ELEV IN FEET	DATE OBSERVED	DEPTH IN INCHES	WATER CONTENT IN INCHES ESTIMATED	WATER CONTENT IN INCHES APR 1 AVE (2)
SAN JOAQUIN RIVER						
HUMPHREYS BASIN	509	11600	NO SURVEY MADE			
EMERALD LAKE	184*	10600	NO SURVEY MADE			
PIONEER BASIN	276*	10400	NO SURVEY MADE			
ISLAND PASS	504	10300	NO SURVEY MADE			
BENCH CANYON	506	10200	NO SURVEY MADE			
HEART LAKE	185*	10100	NO SURVEY MADE			
VOLCANIC KNOB	186*	10100	NO SURVEY MADE			
ROSE MARIE	187*	10000	NO SURVEY MADE			
COLBY MEADOW	188*	9700	NO SURVEY MADE			
MAMMOTH PASS	205*	9500	NO SURVEY MADE			
AGNEW PASS	189*	9450	NO SURVEY MADE			
KAISER PASS	190*	9100	NO SURVEY MADE			
DUTCH LAKE	191*	9100	NO SURVEY MADE			
COYOTE LAKE	192*	8850	NO SURVEY MADE			
CORA LAKES	193*	8400	NO SURVEY MADE			
STRING MEADOW	508	8400	NO SURVEY MADE			
TWIN MEADOWS	505	8400	NO SURVEY MADE			
CLOVER MEADOW	200*	7000	NO SURVEY MADE			
JACKASS MEADOW	201*	6950	NO SURVEY MADE			
CHIQUITO CREEK	202*	6800	NO SURVEY MADE			
KINGS RIVER						
BISHOP PASS	222*	11200	NO SURVEY MADE			
TABOOSE PASS	536	11000	4-16-69	144	67	--
CARDINAL LAKE	513	10900	NO SURVEY MADE			
CHARLOTTE RIDGE	299*	10700	NO SURVEY MADE			
BENCH LAKE	510	10600	NO SURVEY MADE			
STATE LAKES	545	10350	4-29-69	108	51	--
BLACKCAP BASIN	223*	10300	NO SURVEY MADE			
GRANITE BASIN	546	10000	4-29-69	150	73	--
MITCHELL MEADOW	511	9900	4-29-69	159	78	--
RATTLESNAKE CREEK BASIN	515	9900	4-29-69	174	85	--
BEARD MEADOW	225*	9800	NO SURVEY MADE			
UPPER BURNT CORRAL MEADOW	224*	9700	NO SURVEY MADE			
SCENIC MEADOW	512	9650	4-29-69	126	63	--
UPPER WOODCHUCK MEADOW	341*	9100	4-29-69	147	73	30.7
SWAMP MEADOW	228*	9000	4-29-69	144	72	35.4
ROUND CORRAL	229*	9000	4-29-69	150	71	32.8
ROWELL MEADOW	226*	8850	4-29-69	132	73	26.1
WOODCHUCK MEADOW	227*	8800	4-29-69	138	71	29.5
LONG MEADOW	232*	8500	NO SURVEY MADE			
STATUM MEADOW	233*	8300	4-29-69	126	69	30.1
HELMS MEADOW	230*	8250	4-29-69	108	59	24.2
DODSONS MEADOW	308*	8050	4-29-69	102	54	27.4
HORSE CORRAL MEADOW	237*	7600	4-29-69	78	43	17.0
FRED MEADOW	239*	6950	4-29-69	84	43	21.1
KERN RIVER						
UPPER TYNDALL CREEK	516	11400	4-29-69	156	75	--
BIGHORN PLATEAU	250*	11350	4-29-69	114	55	22.7

TABLE 3 - AERIAL PHOTOGRAPHIC SNOW DEPTH MEASUREMENTS (Continued)

AREA, DRAINAGE BASIN, AND AERIAL MARKER	CALIF NUMBER (1)	ELEV IN FEET	DATE OBSERVED	DEPTH IN INCHES	WATER CONTENT IN INCHES ESTIMATED	WATER CONTENT IN INCHES APR 1 AVE (2)
KERN RIVER (CONTINUED)						
SIBERIAN PASS	252*	10900	4-29-69	90	43	18.0
TYNDALL CREEK	255*	10600	4-29-69	102	49	18.3
SHOTGUN PASS	517	10400	4-29-69	123	59	--
CHAGOOPA PLATEAU	514	10300	4-29-69	90	43	--
ROUND MEADOW	258*	9000	4-29-69	108	59	25.3
WET MEADOW	518	8950	4-29-69	102	54	--
RAMSHAW MEADOW	259*	8700	4-29-69	54	28	11.2
LITTLE WHITNEY MEADOW	260*	8500	4-29-69	48	24	13.2
CASA VIEJA MEADOWS	262*	8400	4-29-69	90	49	18.8
QUINN RANGER STATION	264*	8350	4-29-69	90	49	19.9
BONITA MEADOWS	261*	8300	4-29-69	66	36	13.7
MONACHE MEADOWS	263*	8000	4-29-69	36	20	7.5
BEACH MEADOWS	265*	7650	4-29-69	36	17	9.3
LAHONTAN AREA						
CARSON RIVER						
EBBETS PASS	562	8700	NO SURVEY MADE			
WET MEADOWS LAKE	561	8100	NO SURVEY MADE			
UPPER FISH VALLEY	563	8100	NO SURVEY MADE			
WOLF CREEK	560	8080	NO SURVEY MADE			
POISON FLAT	330*	7700	NO SURVEY MADE			
WALKER RIVER						
CENTER MOUNTIAN	151*	9400	NO SURVEY MADE			
LOBDELL LAKE	564	9200	NO SURVEY MADE			
MONO LAKE BASIN						
DONAHUE PASS	522	10800	NO SURVEY MADE			
ALGER LAKE	521	10600	NO SURVEY MADE			
SLATE CREEK	520	10300	NO SURVEY MADE			
SADDLEBAG LAKE	519	10200	NO SURVEY MADE			
WARREN CREEK	523	10200	NO SURVEY MADE			
TIOGA PASS	181*	9800	NO SURVEY MADE			
OWENS RIVER						
SCHOBER PASS	525	12300	NO SURVEY MADE			
MOUNT MORGAN	533	12000	4-16-69	114	53	--
PIUTE PASS	565	11700	NO SURVEY MADE			
COYOTE RIDGE	527	11500	NO SURVEY MADE			
BIG PINE CREEK BASIN	534	11500	4-16-69	156	75	--
KEARSARGE PASS	539	11500	NO SURVEY MADE			
LAKE DOROTHY	531	11400	4-16-69	132	62	--
SAWMILL PASS	537	11400	4-16-69	156	72	--
BISHOP LAKE	284*	11300	NO SURVEY MADE			
HUNGRY PACKER LAKE	526	11300	NO SURVEY MADE			
COTTONWOOD LAKES	541	11200	4-16-69	120	54	--
PIUTE LAKE (EAST)	524	11000	NO SURVEY MADE			
DRUNKEN SAILOR	530	11000	NO SURVEY MADE			
GEORGE LAKE	529	10600	NO SURVEY MADE			
GOLDEN TROUT CABIN	542	10600	4-16-69	72	35	--
SHEPHERDS PASS	540	10500	4-16-69	168	77	--

TABLE 3 - AERIAL PHOTOGRAPHIC SNOW DEPTH MEASUREMENTS (Continued)

AREA, DRAINAGE BASIN, AND AERIAL MARKER	CALIF NUMBER (1)	ELEV IN FEET	DATE OBSERVED	DEPTH IN INCHES	WATER CONTENT IN INCHES	
					ESTIMATED	APR 1 AVE (2)
OWENS RIVER (CONTINUED)						
TREASURE LAKE	528	10200	NO SURVEY MADE			
BIG PINE LAKES	535	10100	4-16-69	102	48	--
ROCK CREEK LAKES	532	10000	4-16-69	78	37	--
HORSESHOE MEADOWS	543	10000	4-16-69	78	37	--
MAMMOTH PASS	205*	9500	NO SURVEY MADE			
ONION VALLEY	538	9000	4-16-69	54	27	--

(1) THE CALIFORNIA NUMBER IS ASSIGNED FOR IDENTIFICATION ONLY. A NUMBER LESS THAN 500 INDICATES THE AERIAL MARKER IS LOCATED WITHIN 1000 FEET OF THE SNOW COURSE HAVING THE SAME NAME AND NUMBER.

(2) AVERAGE APRIL 1 WATER CONTENT FOR THE PERIOD, 1931-1965, IS THE AVERAGE FOR THE ASSOCIATED SNOW COURSE.

* AERIAL MARKER LOCATED ON OR NEAR SNOW COURSE WITH SAME NAME AND NUMBER.

TABLE 4

SUMMARY OF STORAGE IN MAJOR RESERVOIRS

Area	Number of Reservoirs Reported	Total Capacity (Acre-Feet)	Water in Storage (Acre-Feet)			May 1, 1969 Storage	
			May 1, 1968	April 1, 1969	May 1, 1969	Percent of 10-Year Average	Percent of Capacity
INTRASTATE							
North Coastal	4	2,713,900	2,298,900	1,913,160	2,267,930	96	84
San Francisco Bay	17	620,400	417,090	561,320	564,760	135	91
Central Coastal	6	985,700	571,210	848,610	827,550	146	84
South Coastal	26	1,485,600	571,630	952,110	968,670	209	65
Sacramento Valley	33	15,015,600	11,357,450	11,394,290	12,711,650	113	85
San Joaquin Valley	27	5,925,400	3,327,550	2,540,950	2,847,560	93	48
Lahontan	7	348,200	256,040	196,290	168,150	80	48
Subtotal	120	27,094,800	18,799,870	18,406,730	20,356,270	111	75
INTERSTATE							
North Coastal	3	1,205,100	659,200	738,340	930,050	130	77
Lahontan	3	828,300	714,000	551,520	566,990	118	68
Colorado Desert	4	53,533,000	24,527,000	24,984,000	25,830,900	97	48
Subtotal	10	55,566,400	25,900,200	26,273,860	27,327,940	98	49
TOTAL 1/	130	82,661,200	44,700,070	44,680,590	47,684,210	103	58

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-YEAR AVERAGE 1959-1968 (1000 AF)	1968 (1000 AF)	1969 (1000 AF)	1969 IN % OF AVG
NORTH COASTAL AREA							
KLAMATH RIVER	UPPER KLAMATH (2)	US BUREAU OF RECLAMATION	584.000	447.780	381.180	496.590	111
	CLEAR LAKE (2)	US BUREAU OF RECLAMATION	526.800	211.740	221.330	343.040	162
	GERBER (2)	US BUREAU OF RECLAMATION	94.300	56.220	56.690	90.420	161
SHASTA RIVER	DWINNELL	MONTAGUE WATER CONS DIST	50.000	32.460	31.550	44.300	136
TRINITY RIVER	CLAIR ENGLE LAKE	US BUREAU OF RECLAMATION	2447.700	2180.800(6)	2104.800	2056.750	94
SOUTH EEL RIVER	LAKE PILLSBURY	PAC GAS AND ELECTRIC CO	93.700	84.200	82.310	84.200	100
RUSSIAN RIVER	LAKE MENDOCINO	US CORPS OF ENGINEERS	122.500	73.920	80.240	82.680	112
SAN FRANCISCO BAY AREA							
NORTH BAY							
CONN CREEK	LAKE HENNESSEY	CITY OF NAPA	31.000	30.090	30.600	31.000	103
NICASIO CREEK	NICASIO	MARIN MUNICIPAL WTR DIST	22.500	21.860(6)	22.100	22.590	104
LAGUNITAS CREEK	KENT	MARIN MUNICIPAL WTR DIST	16.700	15.370	15.700	15.980	104
	ALPINE	MARIN MUNICIPAL WTR DIST	8.900	7.040	8.050	8.840	125
SOUTH EAST BAY							
SAN PABLO CREEK	SAN PABLO (3)	EAST BAY MUN UTILITY DIST	43.200	33.330	36.120	39.490	118
SAN LEANDRO CREEK	UPPER SAN LEANDRO (3)	EAST BAY MUN UTILITY DIST	41.400	33.980	32.470	40.890	129
	CHABOT(3)	EAST BAY MUN UTIL DIST	12.600	9.750	10.320	10.360	106
BEAR CREEK	BRIONES (3)	EAST BAY MUN UTIL DIST	60.400	33.760(6)	29.450	41.460	123
SAN ANTONIO CREEK	SAN ANTONIO	CITY AND CO SAN FRANCISCO	50.500	33.160(6)	36.930	44.400	134
COYOTE CREEK	COYOTE	SANTA CLARA VALLEY WCD	24.500	12.830	12.480	23.480	183
	LEROY ANDERSON	SANTA CLARA VALLEY WCD	93.100	29.610	49.750	91.120	308
LOS GATOS CREEK	LEXINGTON	SANTA CLARA VALLEY WCD	21.400	9.400	7.280	20.690	220
	AUSTRIAN	SAN JOSE WATER WORKS	6.200	4.610	5.160	6.290	136
CALAVERAS CREEK	CALAVERAS (3)	CITY AND CO SAN FRANCISCO	100.000	73.980	61.060	97.240	131
PENINSULA							
SAN ANDREAS CREEK	SAN ANDREAS	CITY AND CO SAN FRANCISCO	18.500	16.610	16.270	17.710	107
LAGUNA CREEK	UPPER CRYSTAL SPGS)						
SAN MATEO CREEK	LOWER CRYSTAL SPGS)(3)	CITY AND CO SAN FRANCISCO	69.500	53.720	43.350	54.180	101
CENTRAL COASTAL AREA							
SALINAS RIVER	SANTA MARGARITA LAKE	SAN LUIS OBISPO CO FCWCD	26.000	22.150	21.800	26.030	118
	SAN ANTONIO	MONTEREY COUNTY FCWCD	350.000	140.410(6)	144.620	345.650	246
	NACIMIENTO	MONTEREY COUNTY FCWCD	350.000	199.790	186.680	202.400	101
SANTA YNEZ RIVER	GIBRALTAR	SANTA BARBARA CITY	14.800	11.250	13.460	13.520	120
	CACHUMA	US BUREAU OF RECLAMATION	204.900	180.810	185.850	204.690	113
OLD CREEK	WHALE ROCK	CITY OF SAN LUIS OBISPO	40.000	13.470(6)	18.800	35.260	262

TABLE 5 - STORAGE IN MAJOR RESERVOIRS (Continued)

AREA AND DRAINAGE BASIN	RESERVOIR	OPERATOR	CAPACITY (1) (1000 AF)	STORAGE AS OF MAY 1: 10-YEAR AVERAGE 1959-1968 (1000 AF)	1968 (1000 AF)	1969 (1000 AF)	1969 IN % OF AVG
SOUTH COASTAL AREA							
VENTURA-SANTA CLARA RIVERS							
COYOTE CREEK	CASITAS	VENTURA R MUN WATER DIST	254.000	77.630(6)	131.390	215.330	277
PIRU CREEK	LAKE PIRU	UNITED WATER CONS DIST	101.200	27.130	36.330	101.470	374
MATILIJA CREEK	MATILIJA	VENTURA COUNTY FCD	3.500	3.870	1.680	.300	8
SAN GABRIEL-SANTA ANA RIVERS							
SAN GABRIEL RIVER	COGSWELL	LA CO FLOOD CONTROL DIST	10.900	3.100	4.260	9.400	303
	SAN GABRIEL	LA CO FLOOD CONTROL DIST	43.800	9.070	10.430	7.380	81
BEAR CREEK	BEAR VALLEY	BEAR VALLEY MUT WATER CO	72.200	18.340	46.050	72.170	394
TRIBUTARY, CAJALCO CR	LAKE MATHEWS (4)	METROPOLITAN WATER DIST	182.000	169.630(6)	171.930	176.750	104
SAN JACINTO RIVER	LAKE HEMET	LAKE HEMET WATER CO	13.400	4.480	7.920	13.540	302
	RAILROAD CANYON (3)	TEMESCAL WATER CO	14.700	4.180	4.620	9.980	239
SANTIAGO CREEK	SANTIAGO (3)	SERRANO AND CARPENTER ID AND IRVINE COMPANY	25.000	11.210	16.000	25.000	223
	VILLA PARK	ORANGE COUNTY FCD	15.600	.680(6)	1.200	2.100	309
SANTA MARGARITA-SAN LUIS REY RIVERS							
TEMECULA CREEK	VAIL	VAIL COMPANY	49.500	5.160	13.120	32.950	639
SAN LUIS REY RIVER	HENSHAW	VISTA ID	194.300	9.470	6.990	48.970	517
SAN DIEGUITO-SAN DIEGO RIVERS							
SAN DIEGUITO RIVER	LAKE HODGES (3)	CITY OF SAN DIEGO	33.600	3.510	1.740	20.480	583
SAN YSABEL CREEK	SUTHERLAND	CITY OF SAN DIEGO	29.700	4.240	2.270	13.770	325
SAN VICENTE CREEK	SAN VICENTE (3)	CITY OF SAN DIEGO	90.200	64.710	67.140	78.260	121
SAN DIEGO RIVER	EL CAPITAN (3)	CITY OF SAN DIEGO	112.800	17.550	19.430	60.980	347
BOULDER CREEK	CUYAMACA	HELIX ID	11.800	.950	.640	6.940	731
QUAIL CANYON CREEK	LAKE JENNINGS (3)	HELIX ID	9.800	5.550(6)	6.510	7.140	129
CHAPPAREL CANYON	MURRAY (3)	CITY OF SAN DIEGO	5.700	4.100	3.170	2.970	72
SWEETWATER-OTAY RIVERS AND COTTONWOOD CREEK							
SWEETWATER RIVER	LAKE LOVELAND	CALIFORNIA WATER AND TEL CO	25.400	1.350	1.300	15.030	1113
	SWEETWATER MAIN (3)	CALIFORNIA WATER AND TEL CO	27.700	3.860	3.300	3.790	98
OTAY RIVER	LOWER OTAY (3)	CITY OF SAN DIEGO	56.500	5.620	5.810	18.200	324
COTTONWOOD CREEK	MORENA	CITY OF SAN DIEGO	50.200	.860	1.370	5.140	598
	BARRETT	CITY OF SAN DIEGO	44.800	1.660	.850	14.730	887
SOLEDAD VALLEY							
BIG SURR CREEK	MIRAMAR (3)	CITY OF SAN DIEGO	7.300	5.510(6)	6.180	5.900	107

TABLE 5 - STORAGE IN MAJOR RESERVOIRS (Continued)

AREA AND DRAINAGE BASIN	RESERVOIR	OPERATOR	CAPACITY (1) (1000 AF)	STORAGE AS OF MAY 1: 10-YEAR AVERAGE 1959-1968 (1000 AF)	1968 (1000 AF)	1969 (1000 AF)	1969 IN % OF AVG
CENTRAL VALLEY AREA							
SACRAMENTO RIVER	SHASTA	US BUREAU OF RECLAMATION	4500.000	4098.700	3889.300	4393.700	107
	WHISKEYTOWN	US BUREAU OF RECLAMATION	241.100	223.100(6)	202.900	225.800	101
FEATHER RIVER	LAKE ALMANOR	PAC GAS AND ELECTRIC CO	1035.500	765.200(6)	855.800	742.820	97
	BUTT VALLEY	PAC GAS AND ELECTRIC CO	49.900	44.430	49.050	46.200	104
	BUCKS STORAGE	PAC GAS AND ELECTRIC CO	101.700	69.250	68.110	48.680	70
	FRENCHMAN	DEPT OF WATER RESOURCES	91.000	49.040(6)	54.490	57.860	118
	LAKE DAVIS	DWR, STATE OF CALIFORNIA	83.000	64.860(6)	64.860	90.100	139
	LITTLE GRASS VALLEY	OROVILLE WYANDOTTE ID	93.000	84.920(6)	86.500	76.300	90
	SLY CREEK	OROVILLE WYANDOTTE ID	65.000	55.540(6)	48.300	21.700	39
	OROVILLE RESERVOIR	DWR, STATE OF CALIFORNIA	3484.000	1699.400(6)	1699.400	3013.600	177
YUBA RIVER	JACKSON MEADOWS	NEVADA ID	68.700	48.430(6)	58.600	36.010	76
	BOWMAN LAKE	NEVADA ID	69.800	44.140	40.000	48.120	109
	SPAULDING SYSTEM	PAC GAS AND ELECTRIC CO	137.400	108.510	81.340	58.590	58
	SCOTT FLAT	NEVADA ID	48.500	34.870	47.750	48.550	140
BEAR RIVER	ROLLINS	NEVADA ID	66.000	65.590(6)	64.400	65.990	101
	CAMP FAR WEST	SOUTH SUTTER WATER DIST	104.400	99.100(6)	96.300	106.500	107
AMERICAN RIVER	FRENCH MEADOWS	PLACER CO WATER AGENCY	133.700	106.620(6)	114.010	57.340	54
	LOWER HELL HOLE	PLACER CO WATER AGENCY	208.400	131.250(6)	139.130	110.980	85
	LOON LAKE	SACRAMENTO MUN UTIL DIST	76.500	33.240(6)	49.150	25.960	78
	TWIN LAKES	PAC GAS AND ELECTRIC CO	21.600	9.660	7.600	5.370	56
	UNION VALLEY	SACRAMENTO MUN UTIL DIST	271.000	183.050(6)	224.710	141.860	77
	ICE HOUSE	SACRAMENTO MUN UTIL DIST	46.000	27.940(6)	30.220	15.550	56
	FOLSOM	US BUREAU OF RECLAMATION	1010.300	741.100	684.300	581.000	78
STONY CREEK	EAST PARK	US BUREAU OF RECLAMATION	50.900	49.650	50.990	51.130	103
	STONY GORGE	US BUREAU OF RECLAMATION	50.000	47.390	44.750	51.270	108
	BLACK BUTTE	US CORPS OF ENGINEERS	160.000	114.470(6)	77.260	135.460	118
CACHE CREEK	CLEAR LAKE	CLEAR LAKE WATER CO	314.000	288.270	298.240	315.200	109
PUTAH CREEK	BERRYESSA	US BUREAU OF RECLAMATION	1602.300	1410.500	1596.100	1612.340	114
COSUMNES RIVER	JENKINSON LAKE	US BUREAU OF RECLAMATION	41.000	38.550	41.080	41.120	107

TABLE 5 - STORAGE IN MAJOR RESERVOIRS (Continued)

AREA AND DRAINAGE BASIN	RESERVOIR	OPERATOR	CAPACITY (1) (1000 AF)	STORAGE AS OF MAY 1 10-YEAR AVERAGE 1959-1968 (1000 AF)	1968 (1000 AF)	1969 (1000 AF)	1969 IN % OF AVG
CENTRAL VALLEY AREA (CONTINUED)							
MOKELUMNE RIVER	LOWER BEAR	PAC GAS AND ELECTRIC CO	48.500	29.930	28.660	18.850	63
	SALT SPRINGS	PAC GAS AND ELECTRIC CO	140.900	69.430	64.060	68.810	99
	PARDEE	EAST BAY MUN UTIL DIST	210.000	179.780	203.200	157.860	88
	CAMANCHE	EAST BAY MUN UTIL DIST	431.500	261.110(6)	296.890	242.030	93
CALAVERAS RIVER	NEW HOGAN	US CORPS OF ENGINEERS	325.000	207.970(6)	199.250	198.920	96
STANISLAUS RIVER	RELIEF	PAC GAS AND ELECTRIC CO	15.600	9.280	9.840	3.180	34
	DONNELLS	OAKDALE-SO SAN JOAQUIN ID	64.700	42.100	48.720	38.900	91
	HARTLEY LAKE	OAKDALE-SO SAN JOAQUIN ID	98.300	66.500	60.770	78.830	119
	STRAWBERRY	PAC GAS AND ELECTRIC CO	18.300	15.500	15.830	13.800	89
	MELONES	PAC GAS AND ELECTRIC CO	112.600	84.570	110.210	83.780	99
	TULLOCH	OAKDALE-SO SAN JOAQUIN ID	68.200	55.680	64.490	18.870	34
TUOLUMNE RIVER	HETCH HETCHY	CITY CO OF SAN FRANCISCO	360.400	140.940	132.870	124.350	88
	CHERRY LAKE	CITY CO OF SAN FRANCISCO	268.200	110.570	104.260	98.388	89
	LAKE ELEANOR	CITY CO OF SAN FRANCISCO	26.100	11.380	22.170	9.020	79
	DON PEDRO	TURLOCK AND MODESTO ID	290.400	179.610	183.150	171.030	95
	TURLOCK LAKE (OWEN)	TURLOCK ID	49.000	36.850	27.820	36.400	99
	MODESTO	MODESTO ID	27.000	21.060	17.800	17.600	84
MERCED RIVER	LAKE MCCLURE	MERCED ID	1026.000	574.500(6)	656.200	696.070	121
SAN JOAQUIN RIVER	FLORENCE LAKE	SOUTHERN CALIF EDISON CO	64.600	1.180	1.730	1.490	126
	THOMAS A EDISON	SOUTHERN CALIF EDISON CO	125.200	39.050	62.040	13.230	34
	MAMMOTH POOL	SOUTHERN CALIF EDISON CO	122.700	36.170(6)	18.160	122.550	339
	HUNTINGTON LAKE	SOUTHERN CALIF EDISON CO	89.800	40.110	63.860	27.920	70
	SHAVER LAKE	SOUTHERN CALIF EDISON CO	135.400	38.110	34.100	14.380	38
	CRANE VALLEY (BASS LK)	PAC GAS AND ELECTRIC CO	45.400	35.210	33.330	37.390	106
	MILLERTON LAKE	US BUREAU OF RECLAMATION	520.600	357.020	279.700	137.600	39
KINGS RIVER	COURTRIGHT	PAC GAS AND ELECTRIC CO	129.900	55.770(6)	67.600	10.490	19
	WISHON	PAC GAS AND ELECTRIC CO	128.600	53.160	47.600	10.310	19
	PINE FLAT	US CORPS OF ENGINEERS	1013.400	600.200	670.000	581.190	97
KERN RIVER	ISABELLA	US CORPS OF ENGINEERS	570.000	166.670	223.580	172.700	104
KAWEAH	TERMINUS	US CORPS OF ENGINEERS	150.000	45.630(6)	43.900	68.810	151
TULE	SUCCESS	US CORPS OF ENGINEERS	80.000	41.150(6)	39.470	65.340	159

TABLE 5 - STORAGE IN MAJOR RESERVOIRS (Continued)

AREA AND DRAINAGE BASIN	RESERVOIR	OPERATOR	CAPACITY (1) (1000 AF)	STORAGE AS OF MAY 1			
				10-YEAR AVERAGE 1959-1968 (1000 AF)	1968 (1000 AF)	1969 (1000 AF)	1969 IN % OF AVG
LAHONTAN AREA							
TRUCKEE RIVER	LAKE TAHOE (2,7)	TRUCKEE-CARSON ID	744.600	421.400	648.700	534.600	127
	BOCA (2)	WASHOE CO WATER CONS DIST	41.200	26.480	27.840	26.950	102
EAST WALKER RIVER	BRIDGEPORT (2)	WALKER RIVER ID	42.500	31.420	37.460	5.440	17
MONO LAKE BASIN	SADDLEBAG LAKE	SOUTHERN CALIF EDISON CO	11.100	2.030	3.610	1.610	79
	GEM LAKE	SOUTHERN CALIF EDISON CO	17.600	3.690	3.380	1.140	31
	GRANT LAKE	CITY OF LOS ANGELES	47.500	28.930	39.760	17.100	59
OWENS RIVER	SOUTH LAKE (HILLSIDE)	SOUTHERN CALIF EDISON CO	13.400	2.230	5.160	.660	30
	LAKE CROWLEY	CITY OF LOS ANGELES	183.500	130.340	151.690	110.650	85
	TINEMAHA	CITY OF LOS ANGELES	16.600	.060	.130	3.600	6000
	HAIWEE (SOUTH)	CITY OF LOS ANGELES	58.500	42.070	52.310	33.390	79
COLORADO DESERT AREA							
COLORADO RIVER	LAKE POWELL (2,7)	US BUREAU OF RECLAMATION	25002.000	7449.000(6)	7459.000	8049.000	108
	LAKE MEAD (2,7)	US BUREAU OF RECLAMATION	26102.000	16949.000	14780.000	15476.000	91
	LAKE MOJAVE (2,7)	US BUREAU OF RECLAMATION	1810.000	1688.900	1694.000	1710.500	101
	LAKE HAVASU (2,7)	US BUREAU OF RECLAMATION	619.000	586.150	594.000	595.400	102

(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)	SOURCE OF DATA (2)	APRIL 1969				OCTOBER 1, 1968 - APRIL 30, 1969			
		MEASURED FLOW (1000 AF)	UNIMPAIRED RUNOFF			MEASURED FLOW (1000 AF)	UNIMPAIRED RUNOFF		
			50-YEAR AVERAGE (3) (1000 AF)	TOTAL FOR MONTH (1000 AF)	IN % OF AVG		50-YEAR AVERAGE (3) (1000 AF)	TOTAL FOR SEASON (1000 AF)	IN % OF AVG
NORTH COASTAL AREA									
KLAMATH, COPCO TO ORLEANS (7)	USGS	815.900	629.800	848.000	135	3658.300	3175.900	3791.300	119
SALMON AT SOMESBAR	USGS	238.600	179.700	238.600	133	1062.900	827.200	1062.900	128
TRINITY AT LEWISTON	USBR	8.900	214.400	351.000	164	72.100	763.300	964.900	126
EEL AT SCOTIA	USGS	448.800	570.600	485.200	85	8076.800	4793.200	8243.600	172
RUSSIAN AT HEALDSBURG	USGS	53.900	75.100	45.600	61	1469.600	721.400	1366.200	189
SAN FRANCISCO BAY AREA									
NAPA NEAR ST HELENA	USGS	3.090	6.100	3.090	51	118.560	57.010	118.560	208
COYOTE CREEK NEAR MADRONE	USGS	.680	5.400	4.330	80	34.180	41.350	113.290	274
CENTRAL COASTAL AREA									
ARROYO SECO NEAR SOLEDAD	USGS	16.100	14.950	16.100	108	264.300	99.180	264.300	268
NACIMIENTO BELOW NACIMIENTO DAM, NEAR BRADLEY	USGS	66.700	19.510	27.600	141	464.500	182.910	824.810	338
SOUTH COASTAL AREA									
SESPE CREEK NEAR FILLMORE	USGS	15.310(4)	9.790	15.310	156	458.880(4)	66.570	458.880	689
ARROYO SECO NEAR PASADENA	USGS	1.990	.790	1.990	252	35.280	4.730	35.280	746
SANTA ANA NEAR MENTONE	USGS	22.000(5)	9.210	28.090	305	---	42.230	184.160E	436
SACRAMENTO VALLEY AREA									
INFLOW TO SHASTA (8)	USBR	1090.300	712.600	1090.300	153	5678.300	3882.000	5678.300	146
SACRAMENTO ABOVE BEND BRIDGE (9)	USGS	704.200	1001.000	1480.500	148	7620.700	5795.500	9255.800	160
FEATHER, INFLOW TO OROVILLE	USGS/DWR	849.200	742.500	1194.800	161	2968.800	2853.300	4735.200	166
YUBA AT SMARTVILLE (6)	USGS/PGE	339.000	395.800	510.100	129	1771.900	1487.800	2345.100	158
AMERICAN, INFLOW TO FOLSOM	USBR/PGE	476.100	472.100	651.700	138	3015.300	1640.100	2840.200	173
COSUMNES AT MICHIGAN BAR	USGS	117.000	67.500	116.890	173	568.060	276.480	585.990	212
MOKELUMNE, INFLOW TO PARDEE	EBMUD	151.400	129.100	208.600	162	637.800	349.600	648.500	185
SAN JOAQUIN VALLEY AREA									
STANISLAUS, INFLOW TO MELONES	PGE	161.900	199.000	334.300	168	921.700	527.000	1106.300	210
TUOLUMNE, INFLOW TO DON PEDRO	TID/CCSF	360.400	283.400	450.000	159	1516.400	819.700	1687.100	206
MERCED, INFLOW TO EXCHEQUER	USGS	211.700	147.700	267.200	181	705.100	433.400	1054.400	243
SAN JOAQUIN, INFLOW TO MILLERTON	USBR	259.600	237.000	464.300	196	1203.100	620.200	1429.000	230

TABLE 6 - RUNOFF DATA (Continued)

AREA, STREAM, AND STATION (1)	SOURCE OF DATA (2)	APRIL 1969				OCTOBER 1, 1968 - APRIL 30, 1969			
		MEASURED FLOW (1000 AF)	UNIMPAIRED RUNOFF			MEASURED FLOW (1000 AF)	UNIMPAIRED RUNOFF		
			50-YEAR AVERAGE (3) (1000 AF)	TOTAL FOR MONTH (1000 AF)	IN % OF AVG		50-YEAR AVERAGE (3) (1000 AF)	TOTAL FOR SEASON (1000 AF)	IN % OF AVG
SAN JOAQUIN VALLEY AREA (CONTINUED)									
KINGS, INFLOW TO PINE FLAT	USCE	467.400	215.400	398.400	185	1051.000	545.300	1265.500	232
KAWEAH, INFLOW TO TERMINUS	USCE	161.450	63.880	148.000	232	511.060	176.710	560.070	317
TULE, INFLOW TO SUCCESS	USCE	76.870	23.700	82.700	349	293.130	90.700	348.080	384
KERN NEAR BAKERSFIELD	KCLC	378.800	93.200	378.300	406	817.200	277.300	875.900	316
LAHONTAN AREA									
TRUCKEE, TAHOE TO FARAD (7)	USGS	122.970	79.890	148.760	186	276.280	181.930	279.770	154
WEST FORK CARSON AT WOODFORDS	USGS	15.170	11.720	15.170	129	28.100	26.290	28.100	107
EAST FORK CARSON NEAR GARDNERVILLE	USGS	69.020	35.050	69.020	197	138.690	87.220	138.690	159
WEST WALKER BELOW LITTLE WALKER, NEAR COLEVILLE	USGS	23.110	16.950	23.110	136	47.290	40.190	47.290	118
EAST WALKER NEAR BRIDGEPORT	USGS	40.810	8.990	42.590	474	79.350	41.190	77.590	188
OWENS BELOW LONG VALLEY DAM	LADWP	42.460	11.980	29.670	248	139.620	75.010	89.080	119
COLORADO DESERT AREA									
COLORADO, INFLOW TO LAKE POWELL	USBR	907.000	1135.400	1737.000	153	4624.000	3706.400	4241.000	114

(1) RESERVOIR INFLOW DATA ARE BASED ON OBSERVED FLOWS AT STATIONS DOWNSTREAM FROM LISTED FACILITY.
(2) USGS - U S GEOLOGICAL SURVEY, USBR - US BUREAU OF RECLAMATION, USCE - U S CORPS OF ENGINEERS, PGE - PACIFIC GAS AND ELECTRIC CO, EBMUD - EAST BAY MUNICIPAL UTILITY DIST, TID - TURLOCK IRRIGATION DIST, CCSF - CITY AND COUNTY OF SAN FRANCISCO, LADWP - LOS ANGELES DEPARTMENT OF WATER AND POWER, KCLC - KERN COUNTY LAND CO.
(3) COMPUTED FOR 50 YEAR PERIOD, 1915-16 THROUGH 1964-65.
(4) INCLUDES FILLMORE IRRIGATION COMPANY CANAL.
(5) INCLUDES SOUTHERN CALIFORNIA EDISON COMPANY CANAL.
(6) INCLUDES DEER CREEK.
(7) ACCRETIONS BETWEEN STATIONS.
(8) COMPUTED FROM OPERATING RECORDS-- UNADJUSTED FOR UPSTREAM REGULATION.
(9) UNIMPAIRED FLOWS COMPATIBLE TO THOSE AT DISCONTINUED STATION NEAR READ BLUFF.