

**California Cooperative
Snow Surveys**

Bulletin No. 120-80



State of California
The Resources Agency

Department of
Water Resources



Water Conditions in California

Report No. 4 May 1, 1980

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Secretary for Resources
The Resources Agency

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Governor
State of California

Ronald B. Robie
Director
Department of Water Resources

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WATER CONDITIONS INDEXES

SNOWPACK - APRIL 1 SNOW DATA ARE MAJOR INDEXES OF SPRING AND SUMMER RUNOFF FROM SIERRA WATERSHEDS AND HISTORICALLY REFLECT THE MAGNITUDE OF THE SNOWPACK AT NEAR MAXIMUM SEASONAL ACCUMULATION. AVERAGES ARE BASED ON THE PERIOD, 1931-1975 (45 YEARS).

PRECIPITATION - AVERAGES ARE BASED ON THE PERIOD, 1931-1975 (45 YEARS).

RUNOFF AND FORECASTS - RUNOFF DATA AND RUNOFF FORECASTS SHOWN ARE UNIMPAIRED VALUES. UNIMPAIRED RUNOFF IS WHAT WOULD OCCUR UNDER NATURAL CONDITIONS, UNALTERED BY UPSTREAM DIVERSIONS, STORAGE, OR BY EXPORT OR IMPORT OF WATER TO OR FROM OTHER WATERSHEDS. UNIMPAIRED RUNOFF REPRESENTS THE NATURAL WATER PRODUCTION OF A RIVER BASIN. FORECASTS OF RUNOFF ASSUME NORMAL PRECIPITATION TO FOLLOW. RUNOFF PROBABILITY RANGES ARE STATISTICALLY DERIVED FROM HISTORICAL DATA; 80 PERCENT PROBABILITY MEANS THAT ACTUAL RUNOFF WILL FALL WITHIN THE STATED LIMITS EIGHT TIMES OUT OF TEN. AVERAGES ARE BASED ON THE PERIOD, 1926-1975 (50 YEARS).

S. I. METRIC CONVERSION FACTORS PERTINENT TO DATA APPEARING IN THIS REPORT ARE: 1 ACRE-FOOT = 1.2335 CUBIC DEKAMETRES
1 INCH = 25.4 MILLIMETRES OR 2.54 CENTIMETRES, 1 FOOT = .305 METRES, 1 MILE = 1.6093 KILOMETRES.

AGENCIES COOPERATING IN THE CALIFORNIA SNOW SURVEYS PROGRAM

PUBLIC AGENCIES

BUENA VISTA WATER STORAGE DISTRICT
CENTRAL CALIFORNIA IRRIGATION DISTRICT
EAST BAY MUNICIPAL UTILITY DISTRICT
FRIANT WATER USERS ASSOCIATION
KAWEAH DELTA WATER CONSERVATION DISTRICT
KAWEAH RIVER ASSOCIATION
KERN DELTA WATER DISTRICT
KINGS RIVER CONSERVATION DISTRICT
KINGS RIVER WATER ASSOCIATION
LOS ANGELES COUNTY FLOOD CONTROL DISTRICT
LOWER TULE RIVER IRRIGATION DISTRICT
MERCED IRRIGATION DISTRICT
MODESTO IRRIGATION DISTRICT
NEVADA IRRIGATION DISTRICT
NORTH KERN WATER STORAGE DISTRICT
OAKDALE IRRIGATION DISTRICT
OMOCHUMNE-HARTWELL WATER DISTRICT
OROVILLE-WYANDOTTE IRRIGATION DISTRICT
PLACER COUNTY WATER AGENCY
SACRAMENTO MUNICIPAL UTILITY DISTRICT
ST. JOHNS RIVER ASSOCIATION
TULARE LAKE BASIN WATER STORAGE DISTRICT
TRI-DAM PROJECT

PUBLIC AGENCIES (CONTINUED)

TULE RIVER ASSOCIATION
TURLOCK IRRIGATION DISTRICT
YUBA COUNTY WATER AGENCY

PRIVATE ORGANIZATIONS

J. G. BOSWELL COMPANY
UNION CARBIDE CORPORATION

PUBLIC UTILITIES

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

MUNICIPALITIES

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

STATE AND FEDERAL AGENCIES

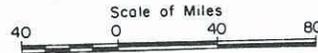
CALIFORNIA DEPARTMENT OF FORESTRY
CALIFORNIA DEPARTMENT OF WATER RESOURCES
CALIFORNIA DEPARTMENT OF PARKS AND RECREATION
U. S. DEPARTMENT OF AGRICULTURE FOREST SERVICE (14 NATIONAL FORESTS)
PACIFIC SOUTHWEST FOREST AND RANGE EXPERIMENT STATION
SOIL CONSERVATION SERVICE
U. S. DEPARTMENT OF COMMERCE NATIONAL WEATHER SERVICE
U. S. DEPARTMENT OF THE INTERIOR WATER AND POWER RESOURCES SERVICE GEOLOGICAL SURVEY, WATER RESOURCES DIVISION
NATIONAL PARK SERVICE (3 NATIONAL PARKS)
U. S. DEPARTMENT OF THE ARMY CORPS OF ENGINEERS

OTHER COOPERATIVE PROGRAMS

NEVADA COOPERATIVE SNOW SURVEYS
OREGON COOPERATIVE SNOW SURVEYS

NORTH
COASTAL

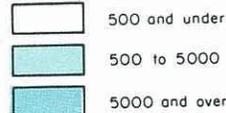
SEASONAL PRECIPITATION OCTOBER 1, 1979 - APRIL 30, 1980



LEGEND

—100— PRECIPITATION IN PERCENT OF NORMAL

ELEVATION IN FEET



— Hydrographic Area Boundary

SAN
FRANCISCO
BAY

CENTRAL
COASTAL

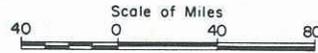


SOUTH
COASTAL

COLORADO
DESERT

**NORTH
COASTAL**

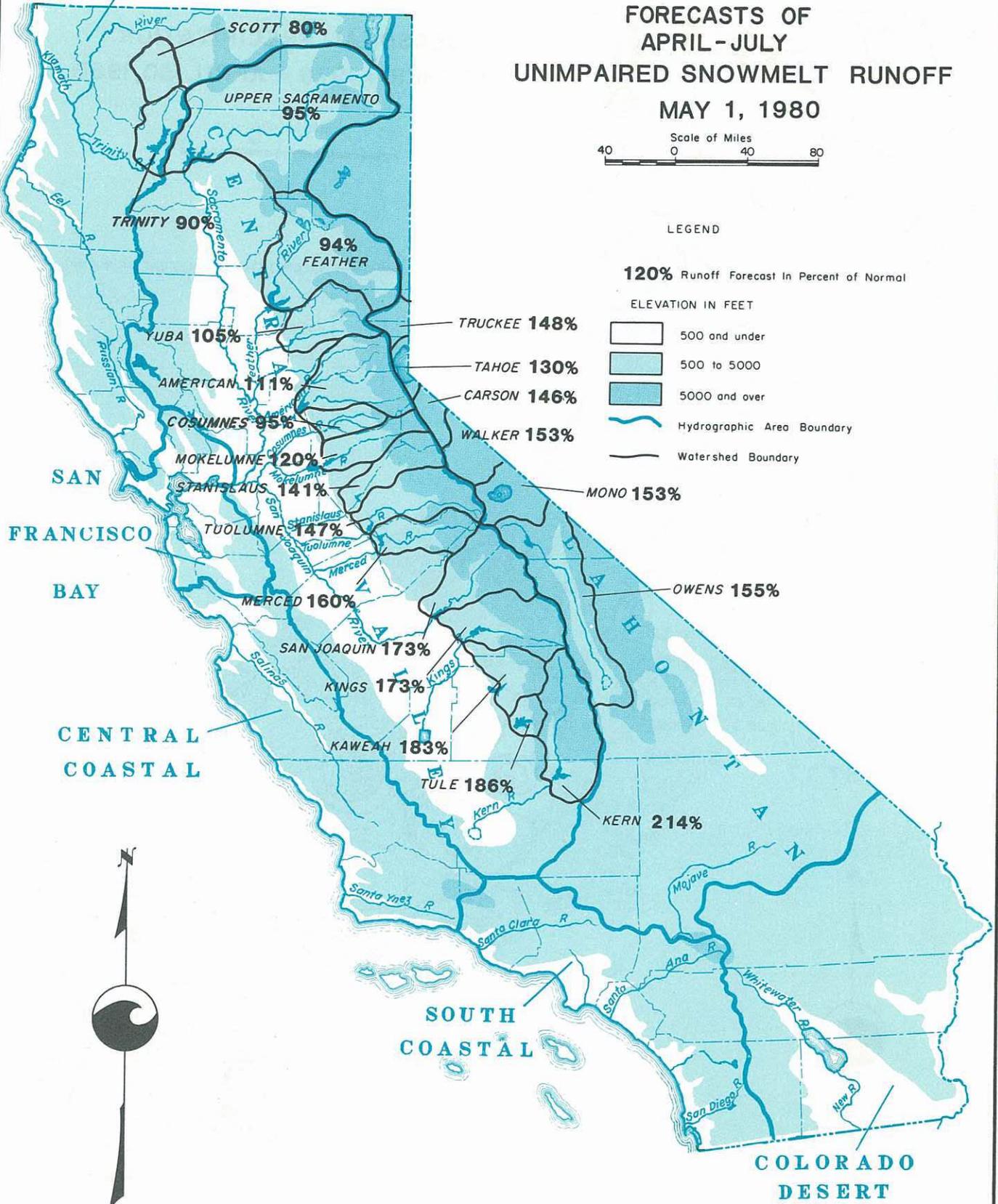
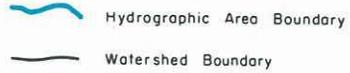
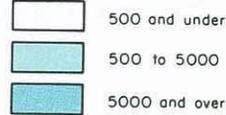
**FORECASTS OF
APRIL-JULY
UNIMPAIRED SNOWMELT RUNOFF
MAY 1, 1980**



LEGEND

120% Runoff Forecast In Percent of Normal

ELEVATION IN FEET



SUMMARY OF WATER CONDITIONS

MAY 1, 1980

CALIFORNIA'S WATER SUPPLY FOR THE REMAINDER OF 1980 IS NOW WELL DEFINED AND WILL BE AMPLE IN ALL AREAS. WITH THE HEAVY PART OF THE PRECIPITATION SEASON ESSENTIALLY OVER, THE RUNOFF FORECASTS SHOULD NOT BE SIGNIFICANTLY INFLUENCED BY FUTURE WEATHER.

FORECASTS OF THE VOLUME OF SNOWMELT RUNOFF, APRIL THROUGH JULY, ARE LESS THAN THOSE PRESENTED ONE MONTH AGO, IN MOST CASES BY ABOUT 3 TO 9 PERCENT. FORECASTS FOR CENTRAL VALLEY STREAMS NOW RANGE FROM 91 PERCENT OF AVERAGE FOR THE TRINITY AND SACRAMENTO RIVERS TO 214 PERCENT OF AVERAGE FOR THE KERN RIVER. EAST SIDE SIERRA STREAMS WILL ALL PRODUCE ABOUT ONE-AND-ONE-HALF TIMES AVERAGE RUNOFF DURING THE APRIL THROUGH JULY PERIOD.

SNOWPACK DATA FROM MAY 1 SNOW SURVEYS SHOW THAT THE SNOWPACK WATER CONTENT IS AVERAGE IN THE SACRAMENTO VALLEY AND 165 PERCENT OF AVERAGE IN SAN JOAQUIN VALLEY WATERSHEDS. THE NORTH COAST RECEIVED BELOW NORMAL SNOWFALL THIS SEASON, NOW AT 75 PERCENT OF AVERAGE, WHILE THE LAHONTAN AREA IS RETAINING 170 PERCENT OF AVERAGE SNOW WATER ON MAY 1. PEAK SNOW ACCUMULATION OCCURRED DURING THE FIRST WEEK OF APRIL AND MELT-RATE PROJECTIONS, BASED ON AUTOMATIC SNOW SENSOR DATA, INDICATE THE PACK WILL CONTRIBUTE THE HEAVIEST AMOUNTS TO RUNOFF IN THE NEXT THREE WEEKS. IF NORMAL TEMPERATURES PREVAIL, MOST SNOWMELT STREAMS ARE EXPECTED TO PEAK BY THE END OF MAY. BECAUSE OF PERSISTENTLY WARM WEATHER, THE LOWER ELEVATION SNOWPACK WAS MEAGER THIS SEASON, LIMITING THE HEAVY SNOWPACK TO THE HIGHER ELEVATIONS. SATELLITE IMAGERY SHOWS THIS YEAR'S EFFECTIVE SNOW LINE TO BE ABOUT 10 PERCENT HIGHER IN ELEVATION THAN IN 1978, A COMPARABLE SNOWPACK YEAR.

PRECIPITATION WAS ERRATIC DURING APRIL. IN THE CENTRAL VALLEY, MONTHLY TOTALS WERE BELOW NORMAL EXCEPT IN THE EXTREME NORTHERN AND SOUTHERN ENDS OF THE VALLEY. COASTAL AREAS RECEIVED ABOVE NORMAL PRECIPITATION, EXCEPT IN SOUTHERN CALIFORNIA. APRIL PRECIPITATION WAS ABOVE AVERAGE ON THE EAST SIDE, FROM LAKE TAHOE SOUTH, REACHING THREE TIMES NORMAL AMOUNTS AT SOME POINTS IN THE OWENS VALLEY. FOR THE WATER YEAR TO DATE, PRECIPITATION HAS BEEN WELL ABOVE NORMAL THROUGHOUT THE STATE.

RUNOFF DURING APRIL WAS ABOUT 20 PERCENT BELOW NORMAL IN SACRAMENTO VALLEY TRIBUTARIES, BUT REACHED 135 PERCENT OF NORMAL IN SAN JOAQUIN VALLEY AND EAST SIDE SIERRA STREAMS AS THE HEAVIER SNOWPACK THERE BEGAN CONTRIBUTING SUSTAINED MELT WATER EARLY IN THE MONTH. APRIL RUNOFF IN COASTAL AREAS WAS BELOW NORMAL EXCEPT FOR THE SOUTH COAST. WATER YEAR RUNOFF SINCE OCTOBER 1 HAS BEEN ABOVE AVERAGE THROUGHOUT CALIFORNIA. IN THE CENTRAL VALLEY TOTAL RUNOFF FOR THE SEVEN-MONTH PERIOD HAS BEEN 32.3 MILLION CUBIC DEKAMETRES (26.2 MILLION ACRE-Feet).

RESERVOIR STORAGE IS AVERAGE OR ABOVE AVERAGE IN ALL AREAS. STORAGE IN SACRAMENTO VALLEY RESERVOIRS TOTALS 17.6 MILLION DAM³ (14.3 MILLION AC-FT), AND SAN JOAQUIN VALLEY RESERVOIR STORAGE AMOUNTS TO 8.9 MILLION DAM³ (7.3 MILLION AC-FT). FEDERAL COLORADO RIVER STORAGE PROJECT RESERVOIRS ARE STORING 128 PERCENT OF AVERAGE MAY 1 SUPPLIES.

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	APR-JULY FORECAST	WATER YEAR FORECAST
NORTH COAST	115	75	110	120	90	120
SAN FRANCISCO BAY	125	--	120	155	--	155
CENTRAL COASTAL	125	--	125	205	--	200
SOUTH COASTAL	185	--	145	275	--	250
SACRAMENTO VALLEY	125	100	110	140	105	145
SAN JOAQUIN VALLEY	145	165	120	200	175	200
LAHONTAN	150	170	100	145	150	135
COLORADO DESERT	200	--	--	--	--	--
STATEWIDE	135	135	115	140	110	155

SACRAMENTO RIVER BASIN

SNOWPACK - MEASUREMENTS OF SNOWPACK OBTAINED AT 83 SNOW COURSES AND 6 AUTOMATIC SNOW SENSORS ON OR ABOUT MAY 1 INDICATED A BASIN AVERAGE WATER EQUIVALENT OF 683 MM (26.9 INCHES), OR 98 PERCENT OF THE MAY 1 AVERAGE. THIS COMPARES WITH A MAY 1 WATER EQUIVALENT OF 95 PERCENT OF AVERAGE ON THIS DATE LAST YEAR.

THIS YEAR'S SNOWPACK ACCUMULATION PATTERN WAS INCONSISTENT THROUGHOUT THE SACRAMENTO VALLEY BASINS, RANGING FROM A LOW OF 203 MM (8.0 INCHES) IN THE PIT RIVER BASIN TO A HIGH OF 909 MM (35.8 INCHES) IN THE SACRAMENTO AND YUBA RIVER BASINS.

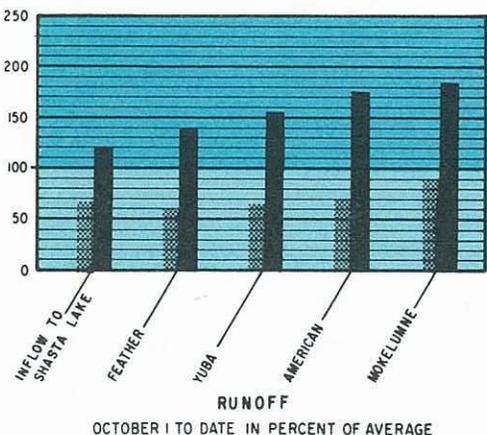
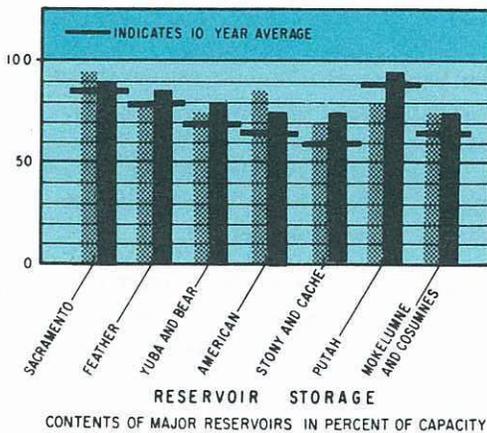
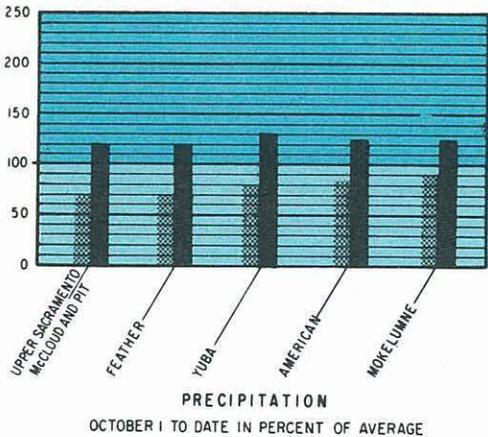
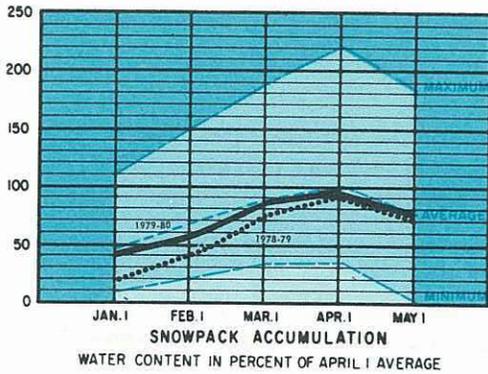
PRESENT DENSITY OF THE SNOWPACK VARIES CONSIDERABLY, WITH MOST MEASUREMENTS IN THE 45-50 PERCENT RANGE. ALL MEASUREMENTS SHOW A DECREASE SINCE APRIL 1 VERIFYING THAT THE SNOWPACK IS WELL INTO THE MELT REGIME.

PRECIPITATION - FROM OCTOBER 1, 1979, THROUGH APRIL 30, 1980, PRECIPITATION OVER THE SACRAMENTO VALLEY AREA HAS AVERAGED 125 PERCENT OF NORMAL. OF THE PAST SEVEN MONTHS, OCTOBER, DECEMBER, JANUARY, AND FEBRUARY, YIELDED ABOVE NORMAL PRECIPITATION OVER THE MOUNTAIN SUBDRAINAGES AND VALLEY FLOOR. VALUES VARIED FROM 2 340 MM (92.12 INCHES) OR 148 PERCENT AT LAKE SPAULDING TO 720 MM (28.36 INCHES) OR 116 PERCENT AT CHICO. APRIL PRECIPITATION AVERAGED A MODERATE 80 PERCENT OF NORMAL. IT VARIED FROM 123 MM (4.83 INCHES) OR 107 PERCENT AT SHASTA DAM TO 9 MM (0.37 INCH) OR 34 PERCENT AT WILLIAMS. THE DRIEST MONTH OF THE SEASON WAS REPORTED FROM JESS VALLEY WITH 10 MM (0.41 INCH) OR 23 PERCENT OF NORMAL.

RESERVOIR STORAGE - MAY 1 STORAGE IN 47 MAJOR RESERVOIRS IN THE SACRAMENTO VALLEY WAS ABOUT 17.6 MILLION CUBIC DEKAMETRES (14.3 MILLION ACRE-Feet), OR 109 PERCENT OF AVERAGE STORAGE FOR MAY 1 AND ABOUT 85 PERCENT OF AVAILABLE CAPACITY. THIS IS ABOUT THE SAME AMOUNT OF STORAGE RECORDED FOR MAY 1 FOR THE PAST TWO YEARS. ONLY ABOUT 5 PERCENT OF THE RESERVOIRS IN THIS AREA WERE UNDER 95 PERCENT OF AVERAGE MAY 1 STORAGE.

RUNOFF - APRIL RUNOFF OF TRIBUTARIES TO THE SACRAMENTO VALLEY AMOUNTED TO 2.8 MILLION CUBIC DEKAMETRES (2.3 MILLION ACRE-Feet) OR ABOUT 82 PERCENT OF NORMAL, COMPARED TO 86 PERCENT OF NORMAL LAST YEAR. FOR THE WATER YEAR PERIOD, OCTOBER 1 THROUGH APRIL 30, TOTAL RUNOFF TO THE SACRAMENTO VALLEY AMOUNTED TO 23.3 MILLION DAM³ (18.9 MILLION AC-FT) OR 138 PERCENT OF NORMAL. ONE YEAR AGO, THE WATER YEAR RUNOFF WAS 10.9 MILLION DAM³ (8.8 MILLION AC-FT) OR 68 PERCENT OF NORMAL.

THE SACRAMENTO FOUR RIVER INDEX BASINS UNIMPAIRED RUNOFF FORECAST IS 28.2 MILLION DAM³ (22.9 MILLION AC-FT) ASSUMING MEDIAN PRECIPITATION FOR THE REMAINDER OF THE WATER YEAR. THIS CLASSIFIES THE YEAR AS "WET" IN THE DELTA ACCORDING TO STATE WATER RESOURCES CONTROL BOARD DECISION 1485.



MAY 1, 1979

MAY 1, 1980

SAN JOAQUIN RIVER AND TULARE LAKE BASINS

SNOWPACK - MEASUREMENTS OF SNOWPACK OBTAINED AT 63 SNOW COURSES, 28 AERIAL MARKERS, AND 5 AUTOMATIC SNOW SENSORS ON OR ABOUT MAY 1 INDICATED A BASIN AVERAGE WATER CONTENT OF 942 MM (37.1 INCHES) OR 165 PERCENT OF THE MAY 1 AVERAGE.

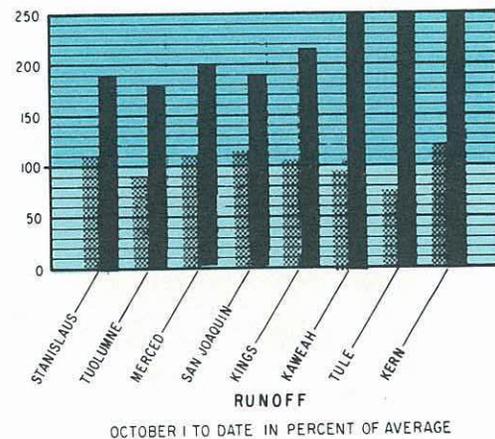
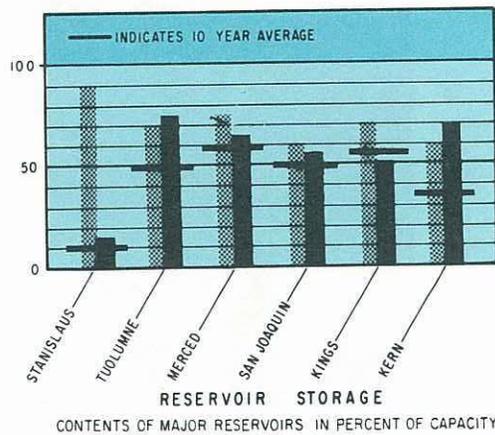
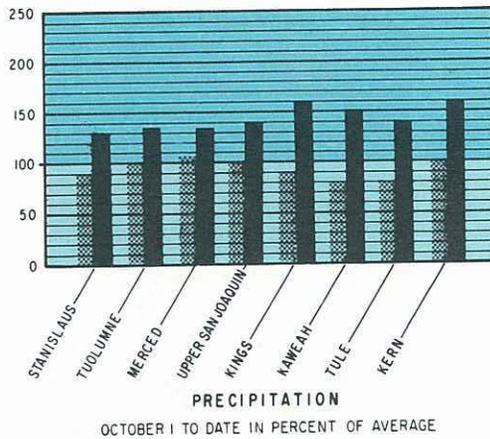
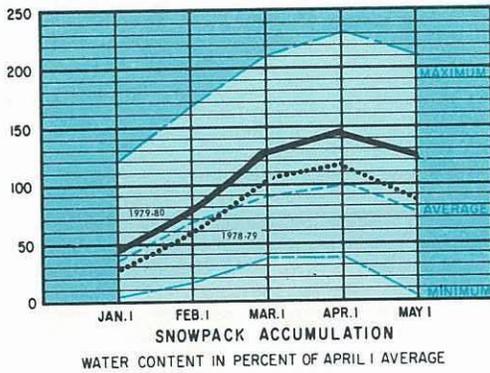
PRESENT SNOWPACK DENSITY RANGED FROM 43 TO 56 PERCENT, WITH THE BASIN BARREN OF SNOW BELOW THE 2 010 METRE (6,600-FOOT) ELEVATION. WATER EQUIVALENT RANGED FROM A LOW OF 51 MM (2.0 INCHES) IN THE TULE RIVER BASIN TO A HIGH OF 1 166 MM (45.9 INCHES) IN THE MERCED RIVER BASIN.

SNOWCOVERED AREA ON MAY 1 FOR THE FIVE SOUTHERN SIERRA BASINS, SAN JOAQUIN THROUGH KERN, TOTALED ABOUT 7 460 SQUARE KILOMETRES (2,880 SQUARE MILES), OR ABOUT 110 PERCENT OF THE AVERAGE FOR THE EIGHT YEARS 1973-1980. THE AVERAGE EFFECTIVE SNOW LINE WAS ABOUT 2 225 METRES (7,300 FEET), ABOUT 10 PERCENT HIGHER THAN IN 1978, A COMPARABLE SNOWPACK YEAR.

PRECIPITATION - FROM OCTOBER 1, 1979, THROUGH APRIL 30, 1980, PRECIPITATION AVERAGED 145 PERCENT OF NORMAL OVER THE SAN JOAQUIN RIVER AND TULARE LAKE BASINS. BOTH THE SIERRA DRAINAGES AS WELL AS THE VALLEY FLOOR ARE WELL ABOVE NORMAL. CATCH VALUES OVER THE MOUNTAIN DRAINAGES ARE GENERALLY ONE AND ONE-FOURTH TO TWO TIMES MORE THAN THE AMOUNTS RECEIVED FOR THE CORRESPONDING PERIOD ONE YEAR AGO. STATIONS WITH SUBSTANTIAL SEASON TOTALS ARE: CALAVERAS BIG TREES 1 798 MM (70.78 INCHES) OR 140 PERCENT; YOSEMITE 1 313 MM (51.70 INCHES) OR 153 PERCENT; BALCH P.H. 1 032 MM (40.63 INCHES) OR 151 PERCENT; AND KERN RIVER P.H. No. 3 507 MM (19.95 INCHES) OR 184 PERCENT. LIGHT APRIL PRECIPITATION AVERAGED ONLY 65 PERCENT OVER THE AREA.

RESERVOIR STORAGE - MAY 1 STORAGE IN 31 MAJOR RESERVOIRS SERVING THE SAN JOAQUIN VALLEY WAS ABOUT 8.9 MILLION CUBIC DEKAMETRES (7.25 MILLION ACRE-Feet) OR 122 PERCENT OF THE MAY 1 AVERAGE AND 60 PERCENT OF AVAILABLE CAPACITY. ONE YEAR AGO THE MAY 1 STORAGE WAS 131 PERCENT OF AVERAGE. THE COMBINED MAY 1 STORAGE IN HETCH HETCHY, CHERRY LAKE, AND LAKE ELEANOR, OPERATED BY THE CITY OF SAN FRANCISCO, WAS 535 000 DAM³ (434,000 AC-FT) OR 188 PERCENT OF AVERAGE MAY 1 STORAGE AND ABOUT 66 PERCENT OF AVAILABLE STORAGE. COMPARED TO ONE YEAR AGO, THIS IS AN INCREASE IN STORAGE OF 199 000 DAM³ (161,000 AC-FT).

RUNOFF - APRIL RUNOFF OF TRIBUTARIES TO THE SAN JOAQUIN VALLEY AMOUNTED TO 2.1 MILLION CUBIC DEKAMETRES (1.7 MILLION ACRE-Feet) OR ABOUT 134 PERCENT OF AVERAGE FOR THE MONTH, COMPARED TO 96 PERCENT ONE YEAR AGO. FOR THE WATER YEAR PERIOD, OCTOBER THROUGH APRIL, TOTAL RUNOFF TO THE SAN JOAQUIN VALLEY AMOUNTED TO 9.0 MILLION DAM³ (7.3 MILLION AC-FT) OR 202 PERCENT OF NORMAL, COMPARED TO 4.7 MILLION DAM³ (3.8 MILLION AC-FT) OR 104 PERCENT OF NORMAL ONE YEAR AGO. APRIL RUNOFF FOR THE TULARE LAKE BASIN WAS 830 000 DAM³ (673,000 AC-FT) OR 172 PERCENT OF NORMAL, COMPARED TO 102 PERCENT ONE YEAR AGO. WATER YEAR TO DATE TOTALED 3.2 MILLION DAM³ (2.6 MILLION AC-FT) OR 235 PERCENT OF NORMAL, COMPARED TO 107 PERCENT LAST YEAR.



MAY 1, 1979

MAY 1, 1980

FORECASTS OF APRIL - JULY AND FOR CENTRAL V AS MAY

DRAINAGE BASIN AND WATERSHED	April through July Unimpaired Runoff in 1,000 Acre-feet (1)					
	HISTORICAL			FORECASTS		
	50-Year Average	Maximum of Record	Minimum of Record	April-July Forecast	Percent of Average	80% Prob. Range
SACRAMENTO RIVER BASIN						
Upper Sacramento River						
Sacramento River unimpaired flow at Shasta Lake	285	636	39	260	91	--
McCloud River unimpaired flow at Shasta Lake	420	850	184	400	95	--
Pit River unimpaired flow at Shasta Lake	1,013	1,796	480	1,000	99	--
Total unimpaired flow at Shasta Lake	1,777	3,064	726	1,700	96	1,470 to 1,990
Sacramento River above Bend Bridge, near Red Bluff	2,422	4,611	943	2,300	95	1,950 to 2,750
Feather River						
Unimpaired flow at Lake Almanor (near Prattville)	326	675	120	310	95	--
North Fork at Pulga	1,025	2,416	243	975	95	--
Middle Fork near Clio	86	518	4	80	93	--
South Fork at Ponderosa Dam	106	267	13	100	94	--
Total unimpaired flow at Oroville Reservoir	1,862	4,676	365	1,750	94	1,530 to 2,050
Yuba River						
North Yuba below Goodyears Bar	287	647	51	300	105	--
Combined unimpaired flow at Jackson Mdws. and Bowman Reservoirs	111	236	36	115	104	--
South Yuba at Langs Crossings	232	481	62	240	103	--
Yuba River at Smartville	1,081	2,424	196	1,130	105	1,050 to 1,280
American River						
North Fork at North Fork Dam	261	716	43	290	111	--
Middle Fork near Auburn	543	1,407	100	610	112	--
Silver Creek below Camino Diversion Dam	179	383	38	200	112	--
Total unimpaired flow at Folsom Reservoir	1,321	3,074	229	1,460	111	1,360 to 1,620
Sacramento River at Sacramento						
Cosumnes River						
Cosumnes River at Michigan Bar	132	361	10	125	95	105 to 155
Mokelumne River						
North Fork near West Point	415	829	104	500	120	--
Total unimpaired flow at Pardee Reservoir	466	1,065	106	560	120	520 to 620
SAN JOAQUIN RIVER BASIN						
Stanislaus River						
Middle Fork below Beardsley Dam	338	702	63	475	141	--
Total unimpaired flow at Melones Reservoir	717	1,710	119	1,010	141	950 to 1,110
Tuolumne River						
Cherry Creek and Eleanor Creek near Hetch Hetchy	304	572	88	440	145	--
Tuolumne River near Hetch Hetchy	599	1,392	179	870	145	--
Total unimpaired flow at Dan Pedro Reservoir	1,236	2,682	275	1,755	147	1,655 to 1,885
Merced River						
Merced River at Pohono Bridge	358	888	80	560	156	--
Total unimpaired flow at Exchequer Reservoir	608	1,491	118	970	160	925 to 1,035
San Joaquin River						
San Joaquin River at Mammoth Pool	966	2,279	235	1,620	168	--
Big Creek below Huntington Lake	90	264	19	155	172	--
South Fork near Florence Lake	187	511	58	310	166	--
Total unimpaired flow at Millerton Lake	1,193	3,355	261	2,060	173	1,930 to 2,220
San Joaquin River near Vernalis						
TULARE LAKE BASIN						
Kings River						
North Fork near Cliff Camp	230	565	50	400	174	--
Total unimpaired flow at Pine Flat Reservoir	1,157	3,114	273	2,000	173	1,900 to 2,100
Kaweah River						
Total unimpaired flow at Terminus Reservoir	270	814	61	495	183	475 to 515
Tule River						
Total unimpaired flow at Success Reservoir	59	224	2	110	186	105 to 115
Kern River						
Kern River near Kernville	353	1,258	83	750	212	--
Total unimpaired flow at Isabella Reservoir	420	1,657	84	900	214	870 to 940

(1) See page 2 for definition of unimpaired runoff and 80 percent probability range.

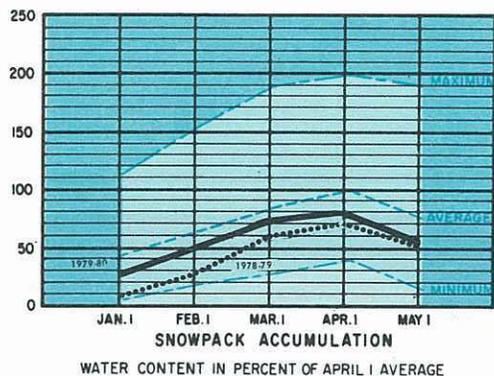
WATER YEAR UNIMPAIRED RUNOFF VALLEY STREAMS OF 1980

Water Year Unimpaired Runoff -- October through September -- in 1,000 Acre-feet (1)												
HISTORICAL			*	*	*	*	DISTRIBUTION				FORECASTS	
50-Year Average	Maximum of Record	Minimum of Record	October through January	February	March	April	May	June	July	August and September	Water Year Forecast	Percent of Average
Values in parentheses indicate the 80 percent probability range for water year forecasts												
785	1,792	162	--	--	--	--	--	--	--	--	--	--
1,230	2,353	577	--	--	--	--	--	--	--	--	--	--
2,895	5,314	1,484	--	--	--	--	--	--	--	--	--	--
5,482	10,796	2,479	2,198	1,402	885	568	535	340	255	415	6,600 (6,315 to 6,960)	120
7,948	15,916	3,294	3,342	2,262	1,520	783	755	455	305	510	9,930 (9,500 to 10,480)	125
727	1,269	368	--	--	--	--	--	--	--	--	--	--
2,283	4,400	669	--	--	--	--	--	--	--	--	--	--
209	637	24	--	--	--	--	--	--	--	--	--	--
260	562	32	--	--	--	--	--	--	--	--	--	--
4,287	9,492	968	1,907	1,157	648	575	680	330	165	190	5,650 (5,405 to 5,985)	132
529	1,056	102	--	--	--	--	--	--	--	--	--	--
169	292	40	--	--	--	--	--	--	--	--	--	--
343	565	114	--	--	--	--	--	--	--	--	--	--
2,274	4,544	339	1,184	599	316	336	480	255	60	45	3,275 (3,190 to 3,430)	144
554	1,234	66	--	--	--	--	--	--	--	--	--	--
1,014	2,575	144	--	--	--	--	--	--	--	--	--	--
300	537	60	--	--	--	--	--	--	--	--	--	--
2,573	5,787	339	1,366	764	415	466	575	340	80	35	4,040 (3,940 to 4,205)	157
351	876	23	209	170	91	46	55	20	5	5	600 (580 to 620)	171
586	1,009	124	--	--	--	--	--	--	--	--	--	--
705	1,692	134	297	163	97	127	235	175	25	10	1,130 (1,090 to 1,190)	160
457	929	88	--	--	--	--	--	--	--	--	--	--
1,085	2,834	161	406	296	141	215	410	300	85	25	1,880 (1,820 to 1,980)	173
428	765	122	--	--	--	--	--	--	--	--	--	--
740	1,661	209	--	--	--	--	--	--	--	--	--	--
1,854	3,852	339	628	380	216	295	600	610	250	60	3,040 (2,935 to 3,175)	164
439	1,020	92	--	--	--	--	--	--	--	--	--	--
920	2,188	128	305	258	156	172	345	340	115	30	1,720 (1,675 to 1,785)	187
225	653	308	--	--	--	--	--	--	--	--	--	--
105	298	22	--	--	--	--	--	--	--	--	--	--
1,255	2,964	71	--	--	--	--	--	--	--	--	--	--
1,659	4,368	362	413	282	216	315	630	750	365	140	3,110 (2,970 to 3,280)	187
265	607	58	--	--	--	--	--	--	--	--	--	--
1,549	4,203	383	391	269	190	329	640	680	350	130	2,980 (2,870 to 3,090)	192
403	1,270	92	164	130	93	96	185	150	65	25	910 (890 to 930)	226
133	504	16	84	73	53	37	50	20	5	5	325 (320 to 330)	244
521	1,686	163	--	--	--	--	--	--	--	--	--	--
627	2,227	175	194	159	131	204	295	280	120	90	1,475 (1,440 to 1,520)	235

* Unimpaired runoff to date.

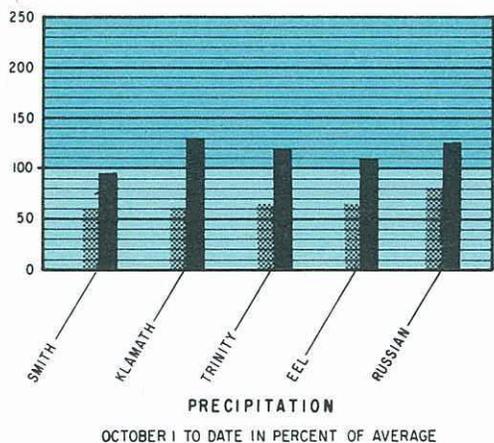
Monthly distributions of runoff forecasts are estimated values based on comparisons with previous historic water years.
S.I. Metric Conversion 1,000 acre-feet = 1,2335 cubic dekametres.

NORTH COASTAL AREA

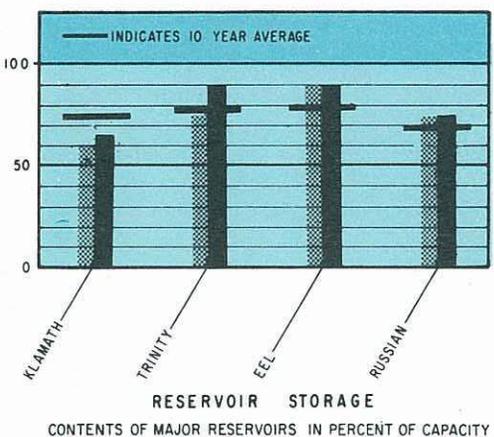


SNOWPACK - MEASUREMENTS OF SNOWPACK OBTAINED AT 10 SNOW COURSES ON OR ABOUT MAY 1 INDICATED A BASIN AVERAGE WATER EQUIVALENT OF 510 MM (20.3 INCHES) WHICH IS 73 PERCENT OF THE MAY 1 AVERAGE. THIS COMPARES WITH 65 PERCENT OF AVERAGE ON THIS DATE LAST YEAR.

THE OREGON COOPERATIVE SNOW SURVEYS, THROUGH THE U. S. SOIL CONSERVATION SERVICE IN PORTLAND, OREGON, REPORTS THAT SNOWPACK WATER CONTENT IN THE UPPER KLAMATH RIVER BASIN ON MAY 1 WAS 39 PERCENT OF AVERAGE, AS COMPARED WITH 56 AND 57 PERCENT OF AVERAGE IN 1979 AND 1978, RESPECTIVELY.

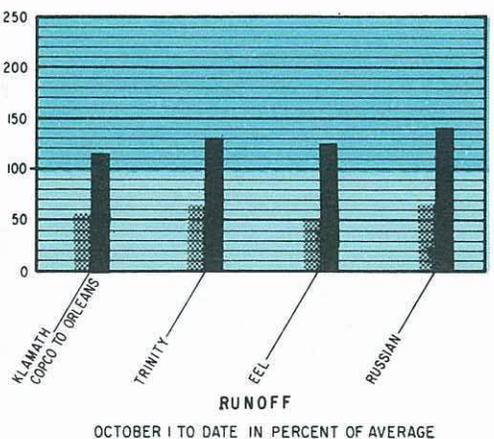


PRECIPITATION - PRECIPITATION IN THE NORTH COASTAL AREA AVERAGED 115 PERCENT OF NORMAL FOR THE PERIOD OCTOBER 1, 1979, THROUGH APRIL 30, 1980. SUBDRAINAGE CATCH VALUES ARE ALMOST DOUBLE THOSE FOR THE CORRESPONDING PERIOD ONE YEAR AGO. EXTREMES VARIED FROM 312 MM (12.29 INCHES) OR 163 PERCENT AT TULELAKE TO 738 MM (29.06 INCHES) OR 82 PERCENT AT EUREKA. THE WETTEST SPOT IN THE STATE WAS HONEYDEW 1SW, IN THE MATTOLE DRAINAGE, RECEIVING A SEVEN-MONTH ACCUMULATION OF 2 418 MM (95.19 INCHES) OR 92 PERCENT. MODERATE APRIL PRECIPITATION AVERAGED 115 PERCENT OVER THE AREA. HOWEVER, BIG BAR R.S., IN THE TRINITY DRAINAGE, RECORDED ITS DRIEST MONTH OF THE SEASON WITH 57 MM (2.23 INCHES) OR 92 PERCENT.



RESERVOIR STORAGE - STORAGE ON MAY 1 IN SIX MAJOR RESERVOIRS OF THE NORTH COASTAL AREA WAS 3.1 MILLION CUBIC DEKAMETRES (2.5 MILLION ACRE-Feet) OR 110 PERCENT OF NORMAL AND 89 PERCENT OF AVAILABLE CAPACITY. STORAGES IN ALL RESERVOIRS WERE ABOVE THE MAY 1 AVERAGE. CLAIR ENGLE LAKE, THE LARGEST OF THE SIX RESERVOIRS, WAS STORING 2.7 MILLION DAM³ (2.2 MILLION AC-FT) OR 110 PERCENT OF THE MAY 1 AVERAGE, AN INCREASE IN STORAGE COMPARED TO ONE YEAR AGO OF 416 000 DAM³ (337,000 AC-FT).

STORAGE ON MAY 1 IN INTERSTATE RESERVOIRS ON THE KLAMATH RIVER WAS ABOUT 997 000 DAM³ (808,000 AC-FT) OR ABOUT 92 PERCENT OF NORMAL AND 67 PERCENT OF AVAILABLE CAPACITY.

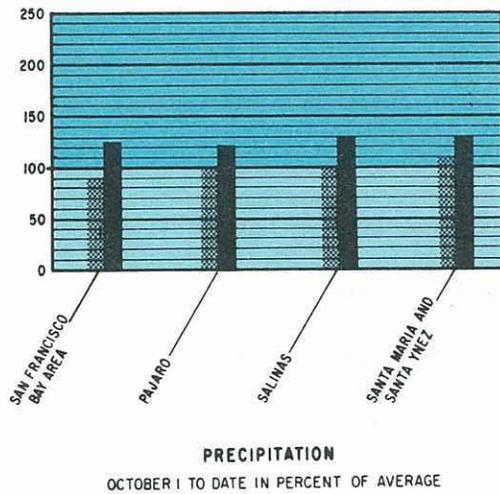


RUNOFF - APRIL RUNOFF FROM SELECTED NORTH COASTAL STREAMS TOTALED 1.7 MILLION CUBIC DEKAMETRES (1.4 MILLION ACRE-Feet) OR ABOUT 84 PERCENT OF NORMAL. ONE YEAR AGO THE THE APRIL RUNOFF WAS 1.2 MILLION DAM³ (987,000 AC-FT) OR ABOUT 60 PERCENT OF NORMAL. FOR THE WATER YEAR TO DATE, OCTOBER THROUGH APRIL, TOTAL RUNOFF AMOUNTED TO 17.5 MILLION DAM³ (14.2 MILLION AC-FT) OR 122 PERCENT OF NORMAL, COMPARED TO 7.3 MILLION DAM³ (5.9 MILLION AC-FT) OR 55 PERCENT OF NORMAL ONE YEAR AGO.

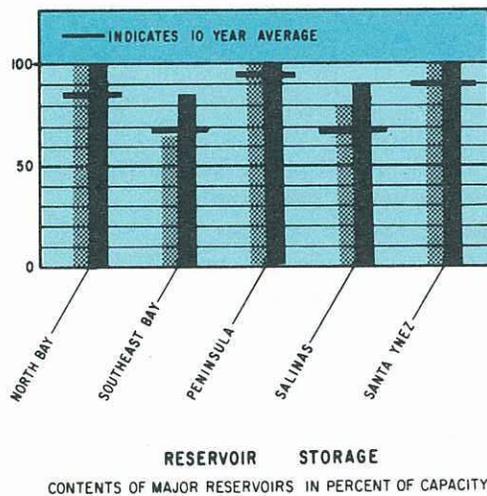
FORECASTS - CONDITIONS ON MAY 1 INDICATE THAT RUNOFF OF THE NORTH COASTAL AREA DURING THE 1979-80 WATER YEAR WILL BE ABOUT 120 PERCENT OF AVERAGE. THE APRIL-JULY RUNOFF OF THE TRINITY RIVER AT LEWISTON IS FORECASTED TO BE 691 000 CUBIC DEKAMETRES (560,000 ACRE-Feet) OR 91 PERCENT OF AVERAGE. THE SCOTT RIVER NEAR FORT JONES IS EXPECTED TO BE ABOUT 197 000 DAM³ (160,000 AC-FT) OR 80 PERCENT OF AVERAGE. THE U. S. SOIL CONSERVATION SERVICE, PORTLAND, OREGON, FORECASTS THAT THE MAY-SEPTEMBER RUNOFF AT UPPER KLAMATH LAKE WILL BE ABOUT 287 000 DAM³ (233,000 AC-FT) OR 68 PERCENT OF AVERAGE.

MAY 1, 1979 MAY 1, 1980

SAN FRANCISCO BAY AND CENTRAL COASTAL AREAS

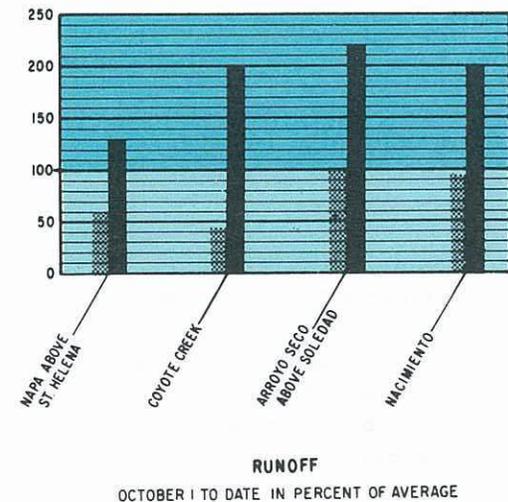


PRECIPITATION - IN THE SAN FRANCISCO BAY AND CENTRAL COASTAL AREAS, PRECIPITATION AVERAGED 125 PERCENT OF NORMAL FOR THE PERIOD OCTOBER 1, 1979, THROUGH APRIL 30, 1980. IT VARIED FROM 991 MM (39.02 INCHES) OR 146 PERCENT AT JUNCAL DAM TO 469 MM (18.45 INCHES) OR 95 PERCENT AT SAN FRANCISCO. ALL SUBDRAINAGE CATCHES ARE SLIGHTLY MORE THAN LAST YEAR'S VALUES. APRIL PRECIPITATION AVERAGED 90 PERCENT OF NORMAL OVER THE AREAS. IT RANGED FROM 48 MM (1.89 INCHES) OR 170 PERCENT AT SAN JOSE TO 13 MM (0.51 INCH) OR 27 PERCENT AT SAN LUIS OBISPO.



RESERVOIR STORAGE - STORAGE ON MAY 1 IN 17 MAJOR RESERVOIRS IN THE SAN FRANCISCO BAY AREA WAS 735 000 CUBIC DEKAMETRES (596,000 ACRE-Feet) OR ABOUT 118 PERCENT OF MAY 1 AVERAGE AND ABOUT 87 PERCENT OF AVAILABLE CAPACITY. ONE YEAR AGO TOTAL STORAGE WAS 633 000 DAM³ (513,000 AC-FT) OR ABOUT 101 PERCENT OF AVERAGE AND ABOUT 75 PERCENT OF AVAILABLE CAPACITY. NOW THAT MAINTENANCE WORK HAS BEEN COMPLETED, MAY 1 STORAGE IN SAN PABLO RESERVOIR ON SAN PABLO CREEK HAS INCREASED TO 18 000 DAM³ (14,600 AC-FT), OR 48 PERCENT OF NORMAL. CONSTRUCTION OF A SPILLWAY HAS REDUCED MAY 1 STORAGE IN CHABOT RESERVOIR ON SAN LEANDRO CREEK TO 58 PERCENT OF NORMAL.

IN THE CENTRAL COASTAL AREA, STORAGE IN SIX MAJOR RESERVOIRS WAS 1.13 MILLION DAM³ (919,000 AC-FT) OR 127 PERCENT OF AVERAGE AND 94 PERCENT OF AVAILABLE CAPACITY. ALL SIX RESERVOIRS WERE OVER 100 PERCENT OF MAY 1 AVERAGE, AND ARE STORING ABOUT 3 PERCENT MORE THAN ONE YEAR AGO.



RUNOFF - APRIL RUNOFF IN SELECTED SAN FRANCISCO BAY AREA STREAMS WAS 7 000 CUBIC DEKAMETRES (5,700 ACRE-Feet) OR 48 PERCENT OF NORMAL, COMPARED TO 38 PERCENT ONE YEAR AGO. FOR THE WATER YEAR TO DATE, OCTOBER THROUGH APRIL, TOTAL RUN-OFF AMOUNTED TO 214 000 DAM³ (174,000 AC-FT) OR 155 PERCENT OF NORMAL, COMPARED TO 53 PERCENT ONE YEAR AGO AND 58 PERCENT OF NORMAL TWO YEARS AGO.

SELECTED CENTRAL COASTAL AREA STREAMS DURING APRIL PRODUCED 30 100 DAM³ (24,400 AC-FT) OR 68 PERCENT OF NORMAL, COMPARED TO 92 PERCENT OF NORMAL ONE YEAR AGO. FOR THE WATER YEAR TO DATE, OCTOBER THROUGH APRIL, TOTAL RUNOFF WAS 796 000 DAM³ (645,000 AC-FT) OR 207 PERCENT OF NORMAL, COMPARED TO 96 PERCENT ONE YEAR AGO, AND 267 PERCENT TWO YEARS AGO.

MAY 1, 1979

MAY 1, 1980

SOUTH COASTAL AND COLORADO DESERT AREAS

PRECIPITATION - IN THE SOUTH COASTAL AREA, PRECIPITATION AVERAGED 185 PERCENT OF NORMAL FOR THE PERIOD OCTOBER 1, 1979, THROUGH APRIL 30, 1980. ONLY NOVEMBER, DECEMBER, AND APRIL WERE SUBNORMAL. THE OTHER FOUR MONTHS WERE SO WET THAT IT BECAME QUITE A PROBLEM WHEN MOST OF IT FELL AS RAIN. SAMPLES OF IMPRESSIVE SEVEN-MONTH ACCUMULATIONS MEASURED ARE: MT. WILSON 1 738 MM (68.43 INCHES) OR 218 PERCENT, LYTLE CREEK R.S. 1 821 MM (71.68 INCHES) OR 218 PERCENT, AND CUYAMACA 1 735 MM (68.29 INCHES) OR 212 PERCENT. LIGHT APRIL PRECIPITATION AVERAGED 60 PERCENT OVER THE AREA.

PRECIPITATION IN THE COLORADO DESERT AREA DURING OCTOBER THROUGH APRIL AVERAGED 200 PERCENT OF NORMAL. IT VARIED FROM 110 MM (4.33 INCHES) OR 236 PERCENT AT IMPERIAL, TO 70 MM (2.77 INCHES) OR 122 PERCENT AT BLYTHE. APRIL PRECIPITATION AVERAGED 165 PERCENT OVER THIS AREA.

RESERVOIR STORAGE - STORAGE ON MAY 1 IN 28 MAJOR RESERVOIRS IN THE SOUTH COASTAL AREA WAS ABOUT 2.33 MILLION CUBIC DEKAMETRES (1.89 MILLION ACRE-Feet) OR 144 PERCENT OF NORMAL AND ABOUT 89 PERCENT OF AVAILABLE CAPACITY. THIS WAS ABOUT SEVEN PERCENT MORE STORAGE THAN ONE YEAR AGO. ON MAY 1, LAKE MATHEWS, OPERATED BY THE METROPOLITAN WATER DISTRICT, WAS STORING 104 PERCENT OF AVERAGE AND 85 PERCENT OF CAPACITY.

RUNOFF - RUNOFF DURING APRIL IN SELECTED STREAMS OF THE SOUTH COASTAL AREA WAS 24 300 CUBIC DEKAMETRES (19,700 ACRE-Feet) OR 100 PERCENT OF NORMAL, COMPARED TO 254 PERCENT ONE YEAR AGO AND 345 PERCENT OF NORMAL TWO YEARS AGO. RUNOFF FOR THE WATER YEAR PERIOD OCTOBER THROUGH APRIL WAS 411 000 DAM³ (333,000 AC-FT) OR 274 PERCENT OF NORMAL, COMPARED TO 152 PERCENT ONE YEAR AGO AND 417 PERCENT TWO YEARS AGO.

MAJOR WATER DISTRIBUTION PROJECTS

COLORADO RIVER - MAY 1 SNOWPACK IN THE UPPER COLORADO RIVER BASIN, ACCORDING TO THE U. S. SOIL CONSERVATION SERVICE, WAS APPROXIMATELY 134 PERCENT OF AVERAGE FOR THE AREA, AND RANGED FROM A LOW OF 79 PERCENT IN THE GREEN RIVER ABOVE FLAMING GORGE TO A HIGH OF 179 PERCENT ON THE SAN JUAN WATERSHED IN COLORADO.

THE U. S. WATER AND POWER RESOURCES SERVICE, SALT LAKE CITY, UTAH, FORECASTS THE FLOW IN THE COLORADO RIVER, INFLOW TO LAKE POWELL, DURING APRIL-JULY 1980, TO BE ABOUT 13.3 MILLION CUBIC DEKAMETRES (10.8 MILLION ACRE-Feet), OR 142 PERCENT OF AVERAGE.

STORAGE IN LAKE MEAD ON MAY 1 WAS 28.6 MILLION CUBIC DEKAMETRES (23.2 MILLION ACRE-Feet) OR 120 PERCENT OF AVERAGE, AND ABOUT 370 000 DAM³ (300,000 AC-FT) OF STORAGE MORE THAN ONE YEAR AGO. LAKE POWELL STORAGE ON MAY 1 WAS 26.6 MILLION DAM³ (21.6 MILLION AC-FT) OR 142 PERCENT OF AVERAGE AND ABOUT 20 PERCENT ABOVE LAST YEAR'S STORAGE. COMBINED STORAGE ON MAY 1 IN FOUR INTERSTATE RESERVOIRS ON THE COLORADO RIVER, LAKE MEAD, LAKE POWELL, LAKE MOHAVE, AND LAKE HAVASU, WAS 57.9 MILLION DAM³ (46.9 MILLION AC-FT) OR 128 PERCENT OF AVERAGE AND ABOUT 88 PERCENT OF AVAILABLE CAPACITY. THIS COMPARES TO 121 PERCENT OF AVERAGE STORAGE AND 79 PERCENT OF AVAILABLE CAPACITY ONE YEAR AGO.

MAJOR WATER DISTRIBUTION PROJECTS

CENTRAL VALLEY PROJECT - MAY 1 RUNOFF FORECASTS INDICATE THAT ALL CVP RIVER BASINS WILL HAVE NORMAL FLOWS THIS YEAR, AND THE WATER AND POWER RESOURCES SERVICE REPORTS THAT FOLSOM, MILLERTON, AND CLAIR ENGLE LAKE SHOULD FILL. ALL CONTRACTUAL WATER AND POWER DELIVERIES WILL BE MET. THE WATER SUPPLY FORECASTS FROM MILLERTON LAKE INDICATE A FULL CLASS I SUPPLY AND A 100 PERCENT OF A FULL CLASS II SUPPLY WILL BE AVAILABLE THIS YEAR.

STORAGE IN MAJOR CENTRAL VALLEY PROJECT RESERVOIRS

RESERVOIR	CAPACITY 1,000 AF	AVERAGE STORAGE ^{1/} 1,000 AF	STORAGE AS OF MAY 1		
			1979 1,000 AF	1980 1,000 AF	PERCENT AVERAGE
CLAIR ENGLE LAKE	2,448.0	2,013.8	1,872.5	2,209.8	110
SHASTA LAKE	4,552.0	3,915.2	4,264.0	4,153.8	106
WHISKEYTOWN	241.1	234.1	235.6	235.3	101
FOLSOM	1,010.3	738.1	958.7	723.6	98
MILLERTON LAKE	520.6	364.9	449.6	267.8	73
SAN LUIS CVP ^{1/}	970.9 ^{1/}	913.9	964.0 ^{2/}	943.6	103

STATE WATER PROJECT - BASED ON THE CURRENT FORECASTS OF WATER SUPPLY, THERE WILL BE NO DEFICIENCIES THIS YEAR IN THE STATE WATER PROJECT SYSTEM.

STORAGE IN STATE WATER PROJECT RESERVOIRS

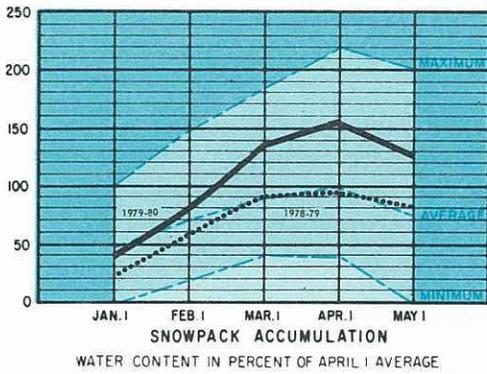
RESERVOIR	CAPACITY 1,000 AF	AVERAGE STORAGE ^{1/} 1,000 AF	STORAGE AS OF MAY 1		
			1979 1,000 AF	1980 1,000 AF	PERCENT AVERAGE
OROVILLE	3,537.6	2,998.2	3,294.4	3,174.7	106
SAN LUIS SWP ^{1/}	1,067.9 ^{1/}	990.1	1,063.7 ^{2/}	1,022.1	103
LAKE DEL VALLE	77.1	38.0	38.9	40.0	105
SILVERWOOD LAKE	78.0	62.9	71.1	67.3	106
PYRAMID LAKE	171.2	167.6	168.2	160.3	95
CASTAIC LAKE	323.7	243.3	318.4	317.9	130
PERRIS RESERVOIR	131.5	103.1	124.5	121.5	117

^{1/} JOINT FEDERAL-STATE RESERVOIR, WITH APPROXIMATELY 52 PERCENT OF CAPACITY (1,067,900 AF) ALLOCATED TO SWP, AND APPROXIMATELY 48 PERCENT (970,900 AF) ALLOCATED TO CVP.

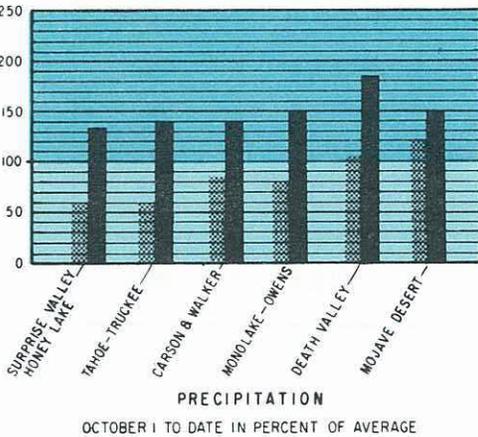
^{2/} AMOUNT IN STORAGE FOR CVP OR FOR SWP.

LAHONTAN AREA

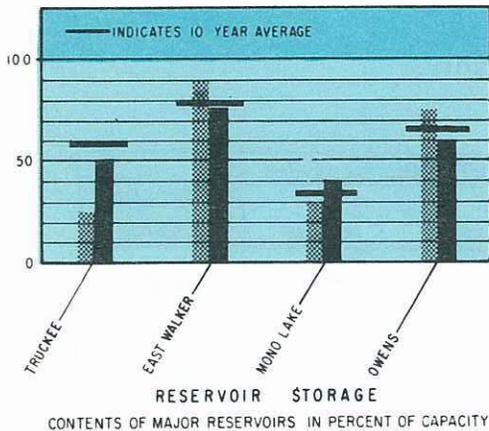
SNOWPACK - MEASUREMENTS OF SNOWPACK FOR THE LAHONTAN AREA, OBTAINED AT 33 SNOW COURSES AND 6 AERIAL MARKERS ON OR ABOUT MAY 1, INDICATED A BASIN WATER EQUIVALENT OF 843 MM (33.2 INCHES), OR 167 PERCENT OF THE MAY 1 AVERAGE. THIS COMPARES WITH 110 PERCENT OF AVERAGE ON THIS DATE LAST YEAR.



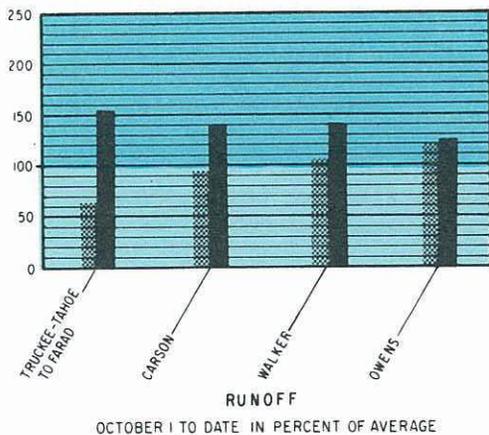
PRECIPITATION - OCTOBER 1, 1979 THROUGH APRIL 30, 1980, PRECIPITATION AVERAGED 150 PERCENT OF NORMAL OVER THE LAHONTAN AREA. SUBDRAINAGE VALUES ARE ALL SUBSTANTIALLY MORE THAN THOSE AMOUNTS FOR THE CORRESPONDING PERIOD ONE YEAR AGO. SAMPLES OF SEASONAL ACCUMULATIONS ARE: FORT BIDWELL 447 MM (17.59 INCHES) OR 146 PERCENT; TAHOE CITY 1 105 MM (43.50 INCHES) OR 151 PERCENT; BRIDGEPORT 248 MM (9.78 INCHES) OR 135 PERCENT; AND INDEPENDENCE 209 MM (8.22 INCHES) OR 183 PERCENT. APRIL PRECIPITATION AVERAGED 145 PERCENT OVER THE AREA.



RESERVOIR STORAGE - MAY 1 STORAGE IN EIGHT MAJOR RESERVOIRS IN THE LAHONTAN AREA WAS 317 000 CUBIC DEKAMETRES (257,000 ACRE-Feet) OR ABOUT 98 PERCENT OF THE MAY 1 AVERAGE AND 60 PERCENT OF THE AVAILABLE CAPACITY. STORAGE IN FIVE INTERSTATE RESERVOIRS, WHICH INCLUDES WATER FOR USE IN BOTH CALIFORNIA AND NEVADA, WAS 704 000 DAM³ (571,000 AC-FT) OR 90 PERCENT OF AVERAGE AND 53 PERCENT OF AVAILABLE CAPACITY. ONE YEAR AGO STORAGE IN THESE RESERVOIRS WAS 385 000 DAM³ (312,000 AC-FT) OR 46 PERCENT OF NORMAL AND 29 PERCENT OF AVAILABLE CAPACITY. ON MAY 1 THE SURFACE ELEVATION OF LAKE TAHOE WAS 1897.68 METRES (6225.98 FEET), REPRESENTING A USABLE STORAGE OF 447 000 DAM³ (362,400 AC-FT), OR 82 PERCENT OF THE AVERAGE MAY 1 STORAGE. ONE YEAR AGO THE ELEVATION OF THE TAHOE LAKE WAS 1897.18 METRES (6224.34 FT), OR 34 PERCENT OF THE MAY 1 AVERAGE.



RUNOFF - APRIL RUNOFF IN SELECTED STREAMS OF THE LAHONTAN AREA TOTALED 269 000 CUBIC DEKAMETRES (218,000 ACRE-Feet) OR 138 PERCENT OF AVERAGE, COMPARED TO 73 PERCENT ONE YEAR AGO AND 105 PERCENT TWO YEARS AGO. RUNOFF FOR THE WATER YEAR TO DATE, OCTOBER THROUGH APRIL, WAS 828 000 DAM³ (671,000 AC-FT) OR 145 PERCENT OF NORMAL, COMPARED TO 91 PERCENT OF NORMAL ONE YEAR AGO.



FORECASTS - CONDITIONS ON MAY 1 INDICATE THAT RUNOFF FROM THE LAHONTAN AREA DURING THE 1979-80 WATER YEAR WILL BE ABOUT 135 PERCENT OF AVERAGE, COMPARED TO 95 PERCENT OF AVERAGE ONE YEAR AGO. THE DEPARTMENT OF WATER AND POWER OF THE CITY OF LOS ANGELES FORECASTS THE APRIL-JULY RUNOFF FOR THE OWENS RIVER AT LONG VALLEY RESERVOIR TO BE ABOUT 154 000 CUBIC DEKAMETRES (125,000 ACRE-Feet) OR 149 PERCENT OF AVERAGE, COMPARED TO 98 PERCENT OF AVERAGE ONE YEAR AGO.

MAY 1, 1979 MAY 1, 1980

LAHONTAN AREA AND GOOSE LAKE FORECASTS AS OF MAY 1, 1980			
STREAM AND STATION	APRIL-JULY RUNOFF		
	AVERAGE IN ACRE-FEET	IN ACRE-FEET	IN PERCENT OF AVERAGE
Bidwell Creek near Ft. Bidwell	12,000	23,000	192
Mill Creek above diversions	4,100	7,800	190
Deep Creek above diversions	3,600	7,000	194
Eagle Creek at Eagleville	4,300	8,300	193
Truckee River, Lake Tahoe to Farad accretion	264,000	390,000	148
Lake Tahoe Rise (assuming gates closed)	1.42 ft.	1.85 ft.	130
East Carson River near Gardnerville	181,000	260,000	144
West Carson River at Woodfords	51,000	75,000	147
East Walker River near Bridgeport	60,000	95,000	158
West Walker River near Coleville	143,000	210,000	147
Goose Lake Tributaries			
New Pine Creek below Schroeders	7,350	8,500	116
Cottonwood Creek below Larkin Garden Ditch	2,450	2,900	118
Lassen Creek near Willow Ranch	7,540	8,800	117
Davis Creek above Diversion No. 4	6,250	7,400	118

SNOW LINES



SUMMER SNOW COURSE VISITS -- No data is collected, but bare ground conditions provide an opportunity to check what is under those wintertime sample points. We request that snow surveyors try to visit their courses to remove encroaching brush or tree seedlings to a 20-foot width. Also, trim branches from large course-side and end-point trees to maintain a clear view down the snow course, and check the sample points for debris or down-wood. If an end-point sign or tree is down, let us know. Although we try to visit all 317 snow courses periodically, only the known problem courses are actually scheduled for summer visits due to workload and travel limitations.

IN MEMORIAM

DR. JAMES L. SMITH, Project Leader of snow management research for the Pacific Southwest Forest and Range Experiment Station, passed away on May 7, 1980. One of the foremost leaders in snow hydrology research, Jim contributed outstanding support to the California Cooperative Snow Surveys Program, receiving the program's first "Snowflake Award" in 1973.

FRONT COVER - Spring comes to the High Sierra. Here, near Siberian Outpost in the Kern River Basin, the wind-packed snow above timberline reaches threshold density and begins releasing its winter-stored water. (Photo by Doug Powell.)

BACK COVER - The snow course, located just below the Sierra Club's "Horse Camp" on Mt. Shasta, was set up in 1930 after Mr. Oberman (Lodge caretaker) began his independent snow measurements here in the late 1920's. Starting in 1973 the snow water equivalent is also measured by an automatic snow sensor. (Early photo by Fred Paget.)

