California Cooperative
Snow Surveys
Bulletin 120-3-95

State of California
The Resources Agency

Department of
Water Resources

Water Conditions in California

Report 3 April 1, 1995

Pete Wilson
Governor
The Resources Agency

Douglas P. Wheeler
Secretary for Resources
State of California

David N.Kennedy
Director
Department of Water Resources

STATE OF CALIFORNIA
Pete Wilson, Governor

THE RESOURCES AGENCY
Douglas P. Wheeler, Secretary for Resources

Department of Water Resources
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COOPERATING AGENCIES

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
Kern Delta Water District
Kings River Conservation District
Lower Tule River Irrigation District
Merced Irrigation District
Nevada Irrigation District
North Kern Water Storage District
Northern California Power Agency
Oakdale Irrigation District
Omochumne-Hartnell Water District
Oroville-Wyandotte Irrigation District
Placer County Water Agency
South San Joaquin Irrigation District
Tri-Dam Project
Tulare Lake Basin Water Storage District
Turlock Irrigation District
Yuba County Water Agency
West Basin Municipal Water District
Private Organizations
J.G. Boswell Company
Kaweah River Association
Kings River Water Association
St. Johns River Association
Tule River Association
State Water Contractors
Municipalities
City of Bakersfield
Water Department
City of Los Angeles
Department of Water and Power
City and County of San Francisco
Hetch Hetchy Water and Power
State Agencies
California Department of Forestry & Fire Protection
California Department of Water Resources
Federal Agencies
U.S. Department of Agriculture
Forest Service(14 National Forests)
Pacific Southwest Forest and Range Experiment Station
Resource Conservation Service
U.S. Department of Commerce
National Weather Service
U.S. Department of Interior
Bureau of Reclamation
Geological Survey, Water Resources
National Park Service(3 National Parks)
U.S. Department of Army
Corps of Engineers
Other Cooperative Programs
Nevada Cooperative Snow Surveys
Oregon Cooperative Snow Surveys

SUMMARY OF WATER CONDITIONS
April 1, 1995

For both January and March, rainfall for the month was triple normal. Some areas were flooded with too much water. But snowpack accumulated at nearly triple the normal increment for March to be the heaviest since 1983 when it was 220 percent. Ample runoff should provide for almost all water needs this year with some storage carryover into next year.

Forecasts of April through July runoff have been increased 50 percent from those one month ago. Water year runoff is also projected to be the highest since 1983.

Snowpack water content is 175 percent of average. It is lightest, but still much above average, on the North Coast and greatest in the Southern Sierra. Last year the April 1 pack was only 50 percent of average.

Precipitation during March was extremely heavy, about 320 percent of average. All areas of the State were wet. Seasonal precipitation since October 1 is about 165 percent of average, up 25 percent from one month ago, and vastly improved from the 60 percent one year ago.

Runoff so far this season is 170 percent of average compared to only 40 percent at this time last year. March runoff was very heavy, three times average for the month. Estimated runoff during March of the 8 major rivers of the Sacramento and San Joaquin regions was about 9.9 million acre-feet, making this the third wettest March of record.

Reservoir storage gained 4.5 million acre-feet during March and is about 110 percent of average statewide. Last year storage stood at 95 percent. Many reservoirs made large flood control releases during the month.

SUMMARY OF WATER CONDITIONS

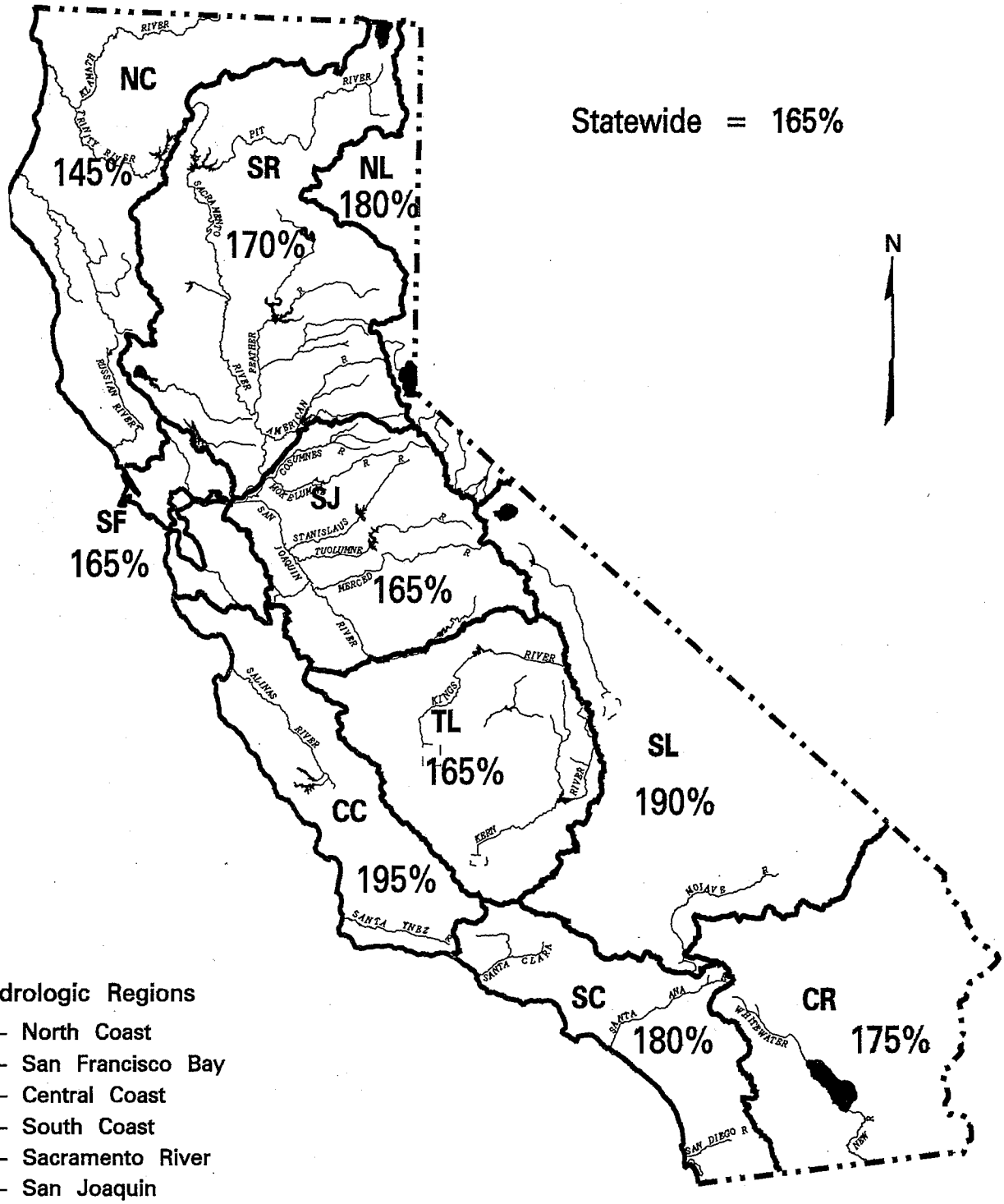
IN PERCENT OF AVERAGE

HYDROGRAPHIC REGION	PRECIPITATION OCTOBER 1 TO DATE	APRIL 1 SNOW WATER CONTENT	APRIL 1 RESERVOIR STORAGE	RUNOFF OCTOBER 1 TO DATE	APR-JULY RUNOFF FORECAST	WATER YEAR RUNOFF FORECAST
NORTH COAST	145	145	110	155	150	155
SAN FRANCISCO BAY	165	--	125	240	--	--
CENTRAL COAST	195	--	110	220	--	--
SOUTH COAST	180	--	140	270	--	--
SACRAMENTO REGION	170	175	105	180	155	165
SAN JOAQUIN REGION	165	180	115	200	180	185
TULARE LAKE REGION	165	185	150	160	180	170
NORTH LAHONTAN	180	150	40	145	170	160
SOUTH LAHONTAN	190	195	95	80	160	150
COLORADO RIVER-DESERT	175	--	--	--	--	--
STATEWIDE	165	175	110	170	165	170

SEASONAL PRECIPITATION

IN PERCENT OF AVERAGE TO DATE

October 1, 1994 through March 31, 1995



Hydrologic Regions

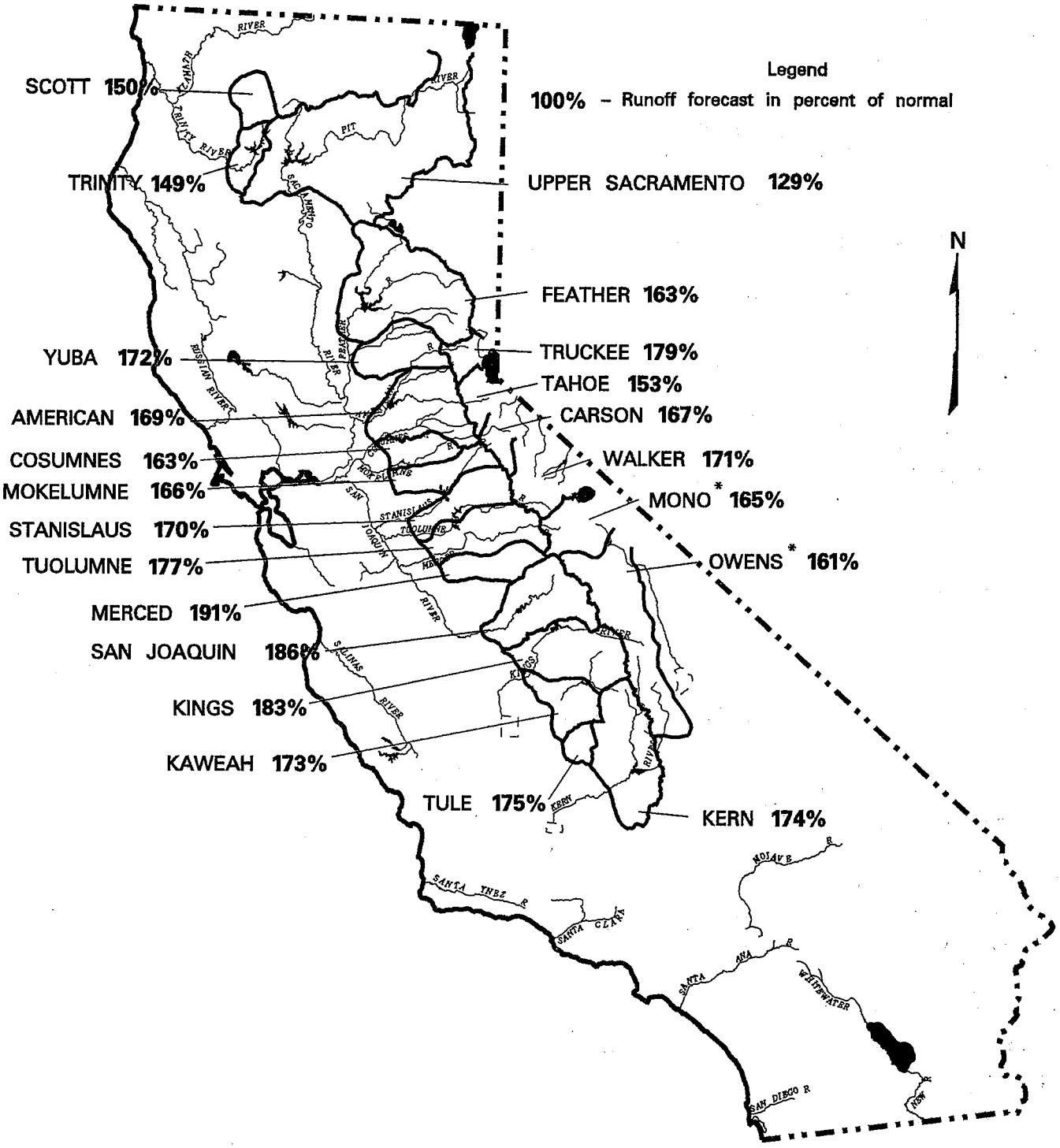
NC – North Coast
SF – San Francisco Bay
CC – Central Coast
SC – South Coast
SR – Sacramento River
SJ – San Joaquin
TL – Tulare Lake
NL – North Lahontan
SL – South Lahontan
CR – Colorado River–Desert

WATER YEAR IS OCTOBER 1 THROUGH SEPTEMBER 30

FORECAST OF APRIL – JULY

UNIMPAIRED SNOWMELT RUNOFF

April 1, 1995



* FORECAST BY DEPARTMENT OF WATER AND POWER, CITY OF LOS ANGELES

APRIL 1, 1995 FORECASTS
APRIL-JULY UNIMPAIRED RUNOFF

HYDROLOGIC REGION and Watershed	Unimpaired Runoff in 1,000 Acre-Feet (1)					
	HISTORICAL			FORECASTS		
	50 Yr Avg (2)	Max of Record	Min of Record	Apr-Jul Forecasts	Pct of Avg	80 % Probability Range (1)
SACRAMENTO RIVER						
Upper Sacramento River						
Sacramento River at Shasta Lake	297	702	39	400	135	
McCloud River at Shasta Lake	411	850	185	540	131	
Pit River at Shasta Lake	1,062	1,796	480	1,300	122	
Total Inflow to Shasta Lake	1,824	3,189	726	2,350	129	2,000 - 3,000
Sacramento River above Bend Bridge, near Red Bluff	2,491	4,674	943	3,200	128	2,800 - 4,200
Feather River						
Feather River at Lake Almanor near Prattville	333	675	120	520	156	
North Fork at Pulga	1,028	2,416	243	1,600	156	
Middle Fork near Clio (3)	86	518	4	130	151	
South Fork at Ponderosa Dam	110	267	13	180	164	
Total Inflow to Oroville Reservoir	1,857	4,676	392	3,030	163	2,700 - 3,750
Yuba River						
North Yuba below Goodyears Bar	286	647	51	480	168	
Inflow to Jackson Mdws and Bowman Reservoirs	112	236	25	190	170	
South Yuba at Langs Crossing	233	481	57	360	155	
Yuba River at Smartville	1,047	2,424	200	1,800	172	1,650 - 2,170
American River						
North Fork at North Fork Dam	262	716	43	440	168	
Middle Fork near Auburn	522	1,406	100	900	172	
Silver Creek Below Camino Diversion Dam	173	386	37	290	168	
Total Inflow to Folsom Reservoir	1,284	3,074	229	2,170	169	1,980 - 2,650
SAN JOAQUIN RIVER						
Cosumnes River at Michigan Bar	129	363	8	210	163	160 - 280
Mokelumne River						
North Fork near West Point (4)	437	829	104	665	152	
Total Inflow to Pardee Reservoir	465	1,065	102	770	166	700 - 900
Stanislaus River						
Middle Fork below Beardsley Dam	334	702	64	570	171	
North Fork Inflow to McKays Point Dam	224	503	34	360	161	
Total Inflow to New Melones Reservoir	713	1,710	116	1,210	170	1,100 - 1,420
Tuolumne River						
Cherry Creek and Eleanor Creek near Hetch Hetchy	322	727	97	530	165	
Tuolumme River near Hetch Hetchy	606	1,392	153	1,010	167	
Total Inflow to New Don Pedro Reservoir	1,200	2,682	301	2,120	177	1,980 - 2,380
Merced River						
Merced River at Pohono Bridge	362	888	80	670	185	
Total Inflow to Lake McClure	617	1,587	123	1,180	191	1,070 - 1,360
San Joaquin River						
San Joaquin River at Mammoth Pool (5)	1,014	2,279	235	1,800	178	
Big Creek below Huntington Lake (5)	95	264	11	175	184	
South Fork near Florence Lake (5)	202	511	58	340	168	
Total Inflow to Millerton Lake	1,228	3,355	262	2,280	186	2,100 - 2,530
TULARE LAKE						
Kings River						
North Fork Kings River near Cliff Camp	239	565	50	440	184	
Total Inflow to Pine Flat Reservoir	1,203	3,114	273	2,200	183	2,040 - 2,420
Kaweah River at Terminus Reservoir	284	814	61	490	173	440 - 550
Tule River at Success Reservoir	63	256	2	110	175	90 - 130
Kern River						
Kern River near Kernville	373	1,203	83	650	174	
Total Inflow to Isabella Reservoir	461	1,657	84	800	174	730 - 890

(1) See inside back cover for definition

(2) All 50 year averages are based on years 1941-1990 unless otherwise noted

(3) 44 year average based on years 1936-79

(4) 36 year average based on years 1936-71

(5) 45 year average based on years 1936-80

APRIL 1, 1995 FORECASTS
WATER YEAR UNIMPAIRED RUNOFF

Unimpaired Runoff in 1,000 Acre-Feet (1)													
HISTORICAL			DISTRIBUTION								FORECASTS		
50 Yr Avg (2)	Max of Record	Min of Record	Oct Thru Jan*	Feb *	Mar *	Apr	May	Jun	Jul	Aug & Sep	Water Year Forecasts	Pct of Avg	80 % Probability Range (1)
856	1,964	165											
1,244	2,353	577											
3,145	5,150	1,484											
5,987	10,796	2,479	2,740	850	2,380	1,030	690	370	260	460	8,780	147	8,350 - 9,550
8,664	17,180	3,294	4,660	1,390	3,670	1,410	930	510	350	640	13,560	157	13,050 - 14,800
780	1,269	366											
2,417	4,400	666											
219	637	24											
291	562	32											
4,617	9,492	994	1,880	610	2,280	1,140	1,100	560	230	240	8,040	174	7,650 - 8,850
564	1,056	102											
181	292	30											
379	565	98											
2,390	4,926	369	1,000	320	990	590	670	430	110	60	4,170	174	4,000 - 4,550
616	1,234	66											
1,070	2,575	144											
318	705	59											
2,736	6,381	349	1,140	300	1,170	710	830	500	130	50	4,830	177	4,630 - 5,350
385	1,253	20	230	60	275	110	75	20	5	5	780	203	730 - 860
626	1,009	197											
748	1,800	129	170	70	250	200	280	240	50	10	1,270	170	1,190 - 1,420
471	929	88											
1,150	2,952	155	290	100	410	310	460	340	100	30	2,040	177	1,920 - 2,270
461	1,147	123											
770	1,661	258											
1,882	4,430	383	480	160	580	460	690	670	300	60	3,400	181	3,250 - 3,670
461	1,020	92											
966	2,859	150	260	70	355	260	410	380	130	35	1,900	197	1,800 - 2,100
1,337	2,964	308											
112	298	14											
248	653	71											
1,776	4,642	362	350	120	490	440	710	750	380	110	3,350	189	3,150 - 3,620
284	607	58											
1,669	4,294	383	280	100	370	380	710	740	370	90	3,040	182	2,850 - 3,280
444	1,402	92	65	30	120	110	180	140	60	25	730	164	680 - 800
145	615	16	30	15	60	50	40	15	5	5	220	152	190 - 250
558	1,577	163											
716	2,309	175	85	45	145	185	280	235	100	65	1,140	159	1,080 - 1,250

* Indicates observed runoff

APRIL 1, 1995 FORECASTS
APRIL-JULY UNIMPAIRED RUNOFF

HYDROLOGIC REGION and Watershed	Unimpaired Runoff in 1,000 Acre-Feet (1)				
	HISTORICAL			FORECASTS	
	50 Yr Avg (2)	Max of Record	Min of Record	Apr-Jul Forecasts	Pct of Avg
NORTH COAST					
Trinity River					
Total Inflow to Lewiston Lake	653	1,593	80	970	149
Scott River					
Near Fort Jones	200	NA	NA	300	150
Klamath River					
Total inflow to Upper Klamath Lake (3)	521	1,151	177	NA	
NORTH LAHONTAN					
Truckee River					
Lake Tahoe to Farad accretions	268	713	58	480	179
Lake Tahoe Rise (assuming gates closed, in feet)	1.5	3.75	0.23	2.3	153
Carson River					
West Fork at Woodfords	54	131	12	90	167
East Fork near Gardnerville	186	407	43	310	167
Walker River					
West Fork near Coleville	148	330	35	240	162
East Fork near Bridgeport	63	209	7	120	190
SOUTH LAHONTAN					
Owens River					
Total tributary flow to Owens River (4)	233	579	96	374	161

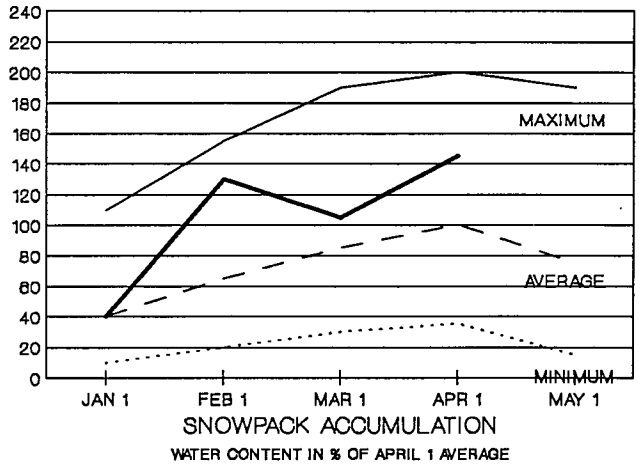
(1) See inside back cover for definition

(2) All 50 year averages are based on years 1941-1990 unless otherwise noted

(3) Forecast by U.S. Natural Resources Conservation Service, Portland Oregon, for April through September. 25 year average

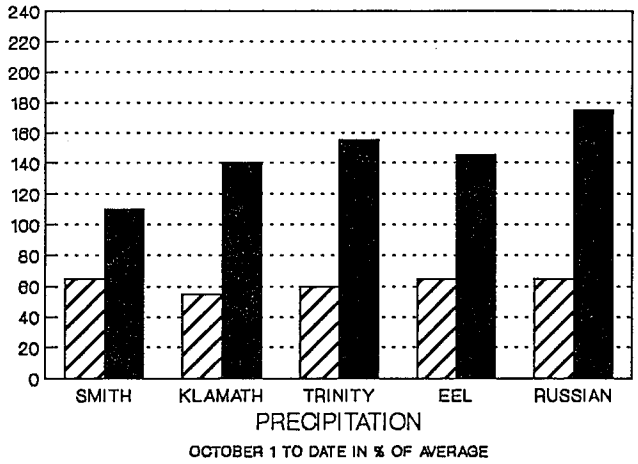
(4) Forecast by Department of Water and Power, City of Los Angeles

NA Not Available

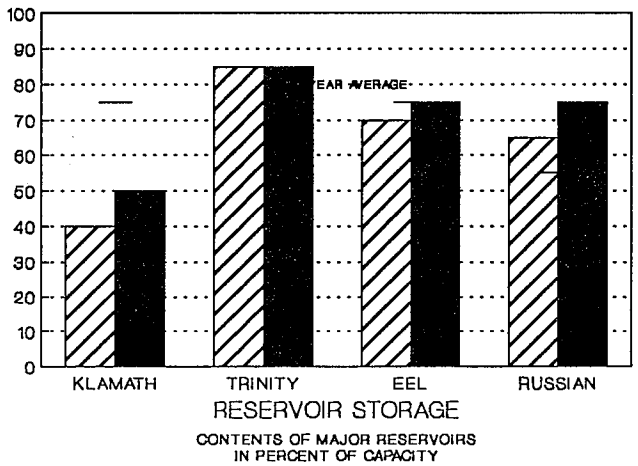


NORTH COAST REGION

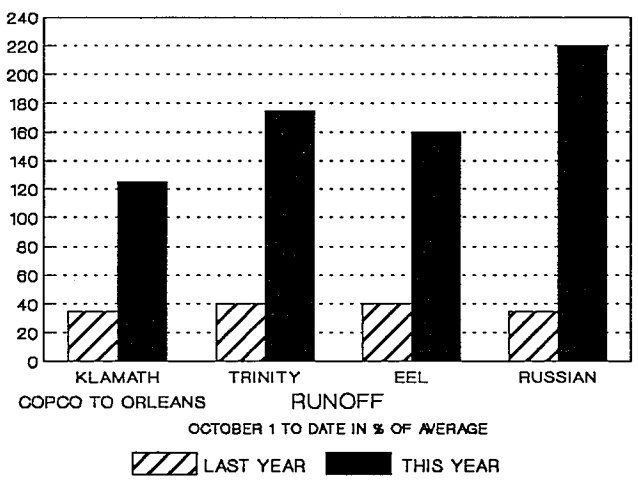
SNOWPACK - First of the month measurements made at 18 snow courses indicate an region wide snow water equivalent of 42.7 inches. This is 145 percent of the seasonal (April 1) average. Last year at this time the pack was holding 15.9 inches of water.



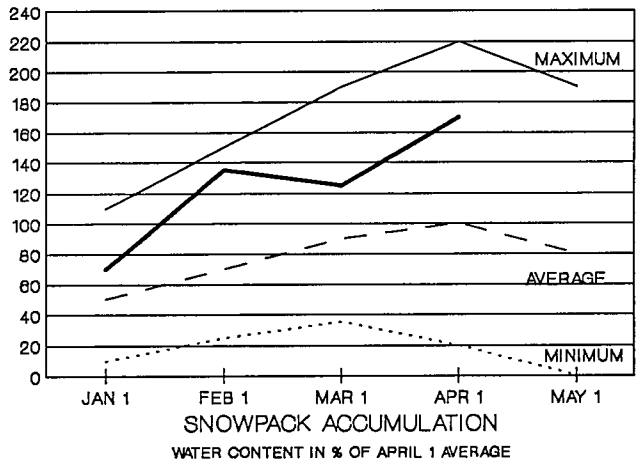
PRECIPITATION - Seasonal precipitation (October 1 through the end of last month) on this region was 145 percent of normal. Precipitation last month was about 295 percent of the monthly average. Seasonal precipitation at this time last year stood at 60 percent of normal.



RESERVOIR STORAGE - First of the month storage in 7 reservoirs was 2.7 million acre-feet which is 110 percent of average. About 85 percent of available capacity was being used. Storage in these reservoirs at this time last year was 100 percent of average.



RUNOFF - Seasonal runoff of streams draining the region totaled 14.9 million acre-feet which is 155 percent of average for this period. Last year, runoff for the same period was 35 percent of average.

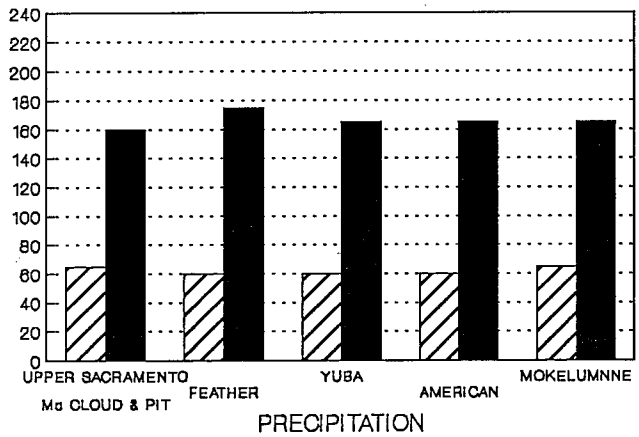


SNOWPACK ACCUMULATION

WATER CONTENT IN % OF APRIL 1 AVERAGE

SACRAMENTO RIVER REGION

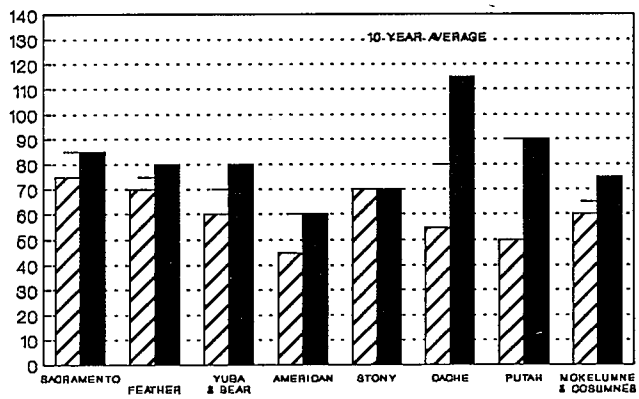
SNOWPACK - First of the month measurements made at 83 snow course indicate a basin-wide snow water equivalent of 49.1 inches. This is 170 percent of the average for this date. Last year at this time, the pack was holding 16.0 inches of water.



PRECIPITATION

OCTOBER 1 TO DATE IN % OF AVERAGE

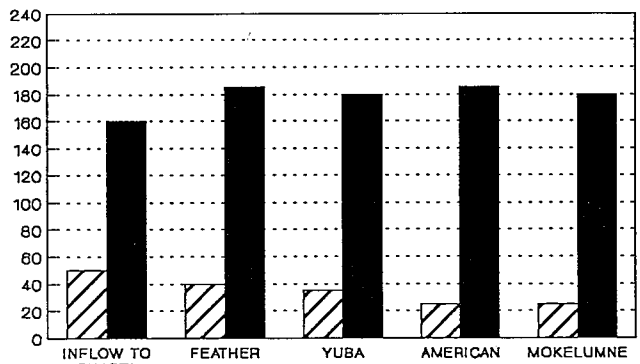
PRECIPITATION - Seasonal precipitation (October 1 through the end of last month) on the Sacramento Basin was 170 percent of normal. Precipitation last month was about 350 percent of the monthly average. Seasonal precipitation at this time last year stood at 65 percent of average.



RESERVOIR STORAGE

CONTENTS OF MAJOR RESERVOIRS IN PERCENT OF CAPACITY

RESERVOIR STORAGE - First of the month storage in 43 reservoirs was 13.1 million acre-feet which is 105 percent of average. About 80 percent of available capacity was being used. Storage in these reservoirs was about 85 percent of average at this time last year.



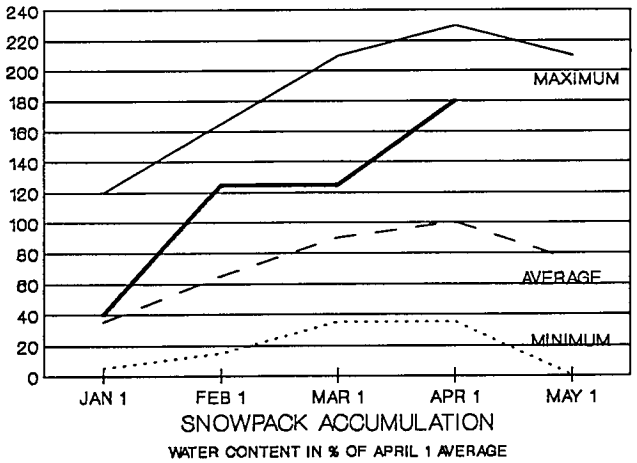
RUNOFF

OCTOBER 1 TO DATE IN % OF AVERAGE

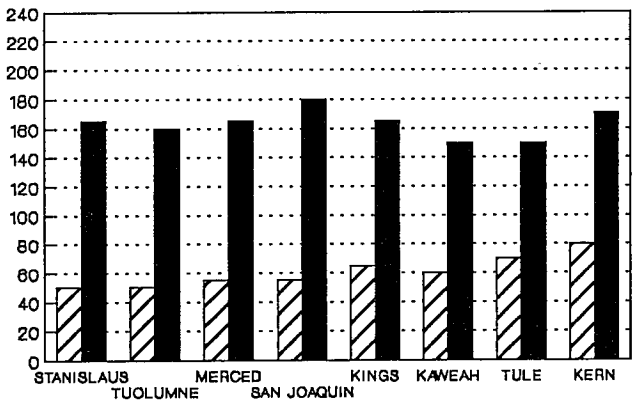
LAST YEAR THIS YEAR

RUNOFF - Seasonal runoff from streams draining into the basin totaled 19.4 million acre-feet which is 180 percent of average for this period. Last year runoff for the same period was 40 percent of average.

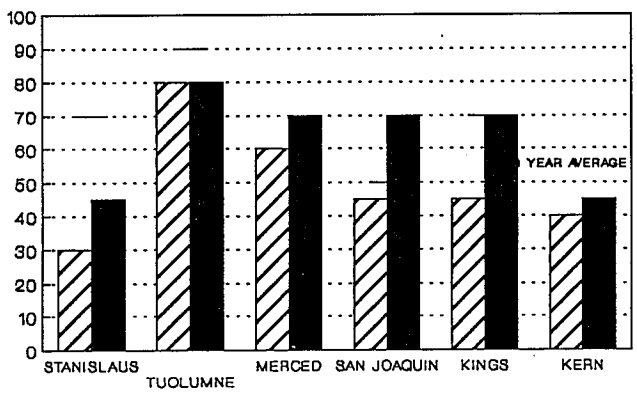
The Sacramento River Region 40-30-30 Water Supply Index is forecasted to be 11.4 million acre-feet assuming median meteorological conditions for the remainder of the year. This classifies the year as "wet" in the Sacramento-San Joaquin Delta according to the State Water Resources Control Board. This time last year, "critical" water supply conditions were forecast.



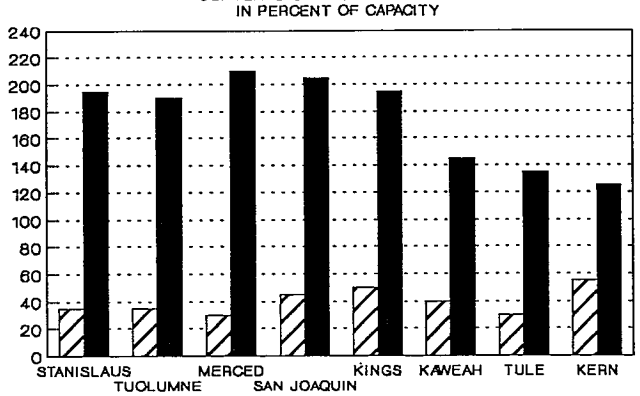
SNOWPACK ACCUMULATION
WATER CONTENT IN % OF APRIL 1 AVERAGE



PRECIPITATION
OCTOBER 1 TO DATE IN % OF AVERAGE



RESERVOIR STORAGE
CONTENTS OF MAJOR RESERVOIRS
IN PERCENT OF CAPACITY



RUNOFF
OCTOBER 1 TO DATE IN % OF AVERAGE

LAST YEAR THIS YEAR

SAN JOAQUIN RIVER AND TULARE LAKE REGIONS

SNOWPACK - First of the month measurements made at 70 San Joaquin Region snow courses indicate a basin wide snow water equivalent of 56.0 inches which is 180 percent of the seasonal (April 1) average. Last year at this time, the pack was holding 16.5 inches of water.

At the same time, 46 Tulare Lake Region snow courses indicated a basin-wide snow water equivalent of 39.3 inches which is 185 percent of the seasonal average. Last year at this time, the Basin was holding 12.2 inches of water.

PRECIPITATION - Seasonal precipitation (October 1 through the end of last month) on the San Joaquin Region was 165 percent of normal. Precipitation last month was 320 percent of the monthly average. Seasonal precipitation at this time last year stood at 55 percent of normal.

Seasonal precipitation on the Tulare Lake Region was 165 percent of normal. Precipitation last month was 305 percent of the monthly average. Seasonal precipitation at this time last year stood at 70 percent of normal.

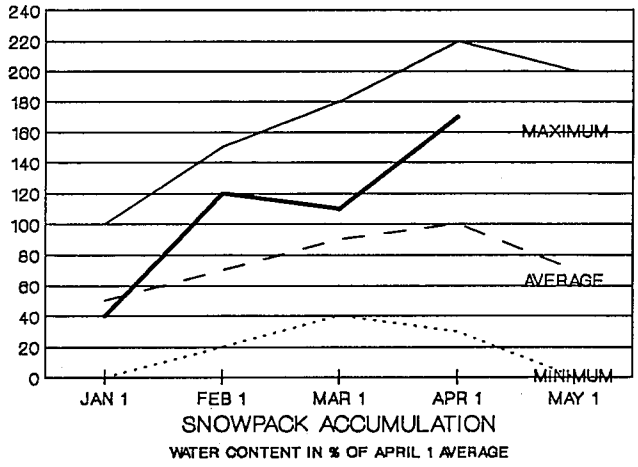
RESERVOIR STORAGE - First of the month storage in 33 San Joaquin Region reservoirs was 8.2 million acre-feet which is 115 percent of average. About 70 percent of available capacity was being used. Storage in these reservoirs at this time last year was 100 percent of average.

First of the month storage in 6 Tulare Lake Basin reservoirs was 1.2 million acre-feet which is 150 percent of average. About 60 percent of available capacity was being used. Storage in these reservoirs at this time last year was 105 percent of average.

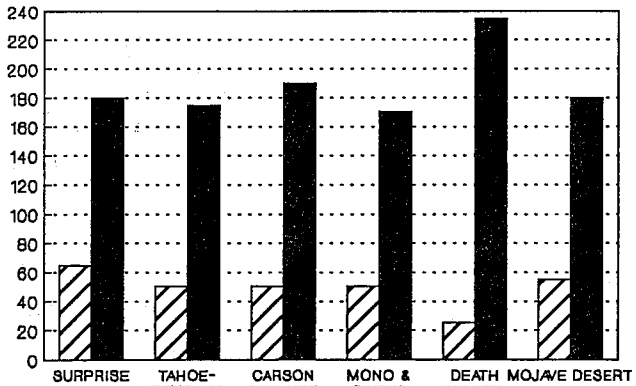
RUNOFF - Seasonal runoff of streams draining into the San Joaquin Basin totaled 4.7 million acre-feet which is 200 percent of average for this period. Last year, runoff for this same period was 35 percent of average.

Seasonal runoff of streams draining into the Tulare Lake Basin totaled 1.4 million acre-feet which is 160 percent of average for this period. Last year, runoff for this same period was 50 percent of average.

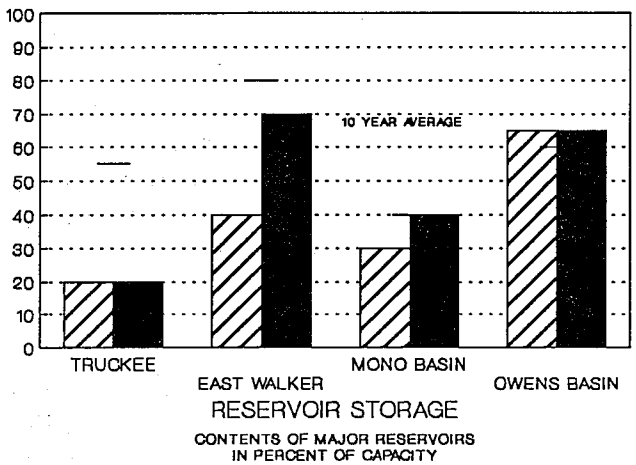
The San Joaquin Basin 60-20-20 Water Supply Index is forecasted to be 5.2 MAF which classifies the year as wet.



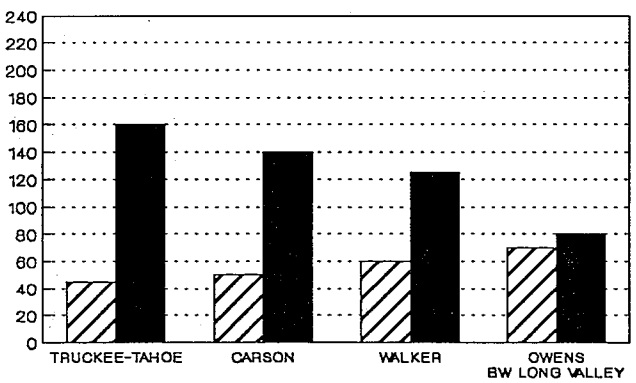
SNOWPACK ACCUMULATION
WATER CONTENT IN % OF APRIL 1 AVERAGE



PRECIPITATION
OCTOBER 1 TO DATE IN % OF AVERAGE



RESERVOIR STORAGE
CONTENTS OF MAJOR RESERVOIRS IN PERCENT OF CAPACITY



RUNOFF
OCTOBER 1 TO DATE IN % OF AVERAGE

LAST YEAR THIS YEAR

NORTH AND SOUTH LAHONTAN REGIONS

SNOWPACK - First of the month measurements made at 22 North Lahontan snow courses indicate an region wide snow water equivalent of 34.8 inches which is 145 percent of the seasonal (April 1) average. Last year at this time, the pack was holding 11.7 inches of water.

At the same time, 24 South Lahontan courses indicated an region-wide snow water equivalent of 44.0 inches which is 195 percent of the average for this date. Last year at this time, the pack was holding 13.3 inches of water.

PRECIPITATION - Seasonal precipitation (October 1 through the end of last month) over the North Lahontan region averaged 180 percent of normal. Precipitation last month was 545 percent of the monthly average. Seasonal precipitation at this time last year stood at 55 percent of normal.

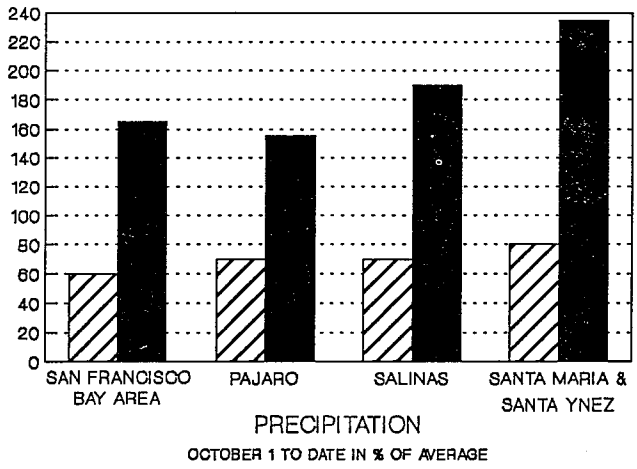
Seasonal precipitation over the South Lahontan region was 190 percent of normal. Last month's precipitation was 345 percent of the monthly average. Seasonal precipitation at this time last year stood at 45 percent of normal.

RESERVOIR STORAGE - First of the month storage in 5 North Lahontan reservoirs was 247 thousand acre-feet which is 40 of average. About 25 percent of available capacity was being used. Storage in these reservoirs at this time last year was 35 percent of average. Lake Tahoe has risen 6 inches above its natural rim.

First of the month storage in 8 South Lahontan reservoirs was 264 thousand acre-feet which is 95 percent of average. About 65 percent of available capacity was being used. Storage in these reservoirs at this time last year was 85 percent of average.

RUNOFF - Seasonal runoff of streams draining the North Lahontan region totaled 400 thousand acre-feet which is 145 percent of average for this period. Last year, runoff for this same period was 50 percent of average.

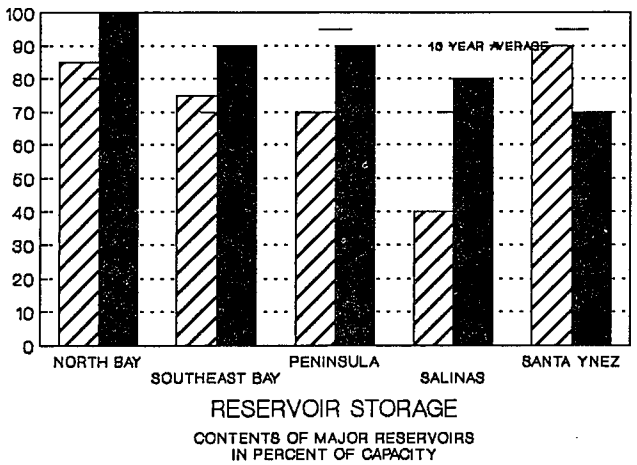
Seasonal runoff of the Owens River below Long Valley in the South Lahontan region totaled 56 thousand acre-feet which is 80 percent of average for this period. Last year, runoff for this same period was 70 percent of average.



SAN FRANCISCO AND CENTRAL COAST REGIONS

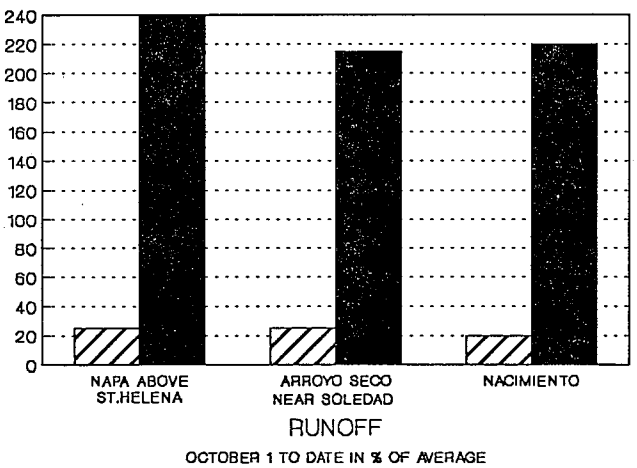
PRECIPITATION - Seasonal precipitation (October 1 through the end of last month) on the San Francisco Bay region was 165 percent of normal. Precipitation last month was 345 percent of the monthly average. Seasonal precipitation at this time last year stood at 60 percent of normal.

Seasonal precipitation on the Central Coast region averaged 195 percent of normal. Precipitation last month was 345 percent of the monthly average. Seasonal precipitation at this time last year stood at 75 percent of normal.



RESERVOIR STORAGE - First of the month storage in 18 major Bay region reservoirs was 643 thousand acre-feet which is about 125 percent of average. About 90 percent of available capacity was being used. Storage in these reservoirs at this time last year was 100 percent of average.

First of the month storage in 6 major Central Coast reservoirs was 740 thousand acre-feet which is 110 percent of average. About 80 percent of available capacity was being used. Storage in these reservoirs at this time last year was 75 percent of average.



RUNOFF - Seasonal runoff of the Napa River in the San Francisco Bay region totaled 149 thousand acre-feet which is 240 percent of average for this period. Last year, runoff for this same period was 25 percent of average.

Seasonal runoff of selected Central Coast streams totaled 615 thousand acre-feet which is 220 percent of average for this period. Last year, runoff for this same period was 25 percent of average.

LAST YEAR THIS YEAR

SOUTH COAST AND COLORADO RIVER REGIONS

PRECIPITATION - Seasonal precipitation (October through the end of last month) on the South Coast was 180 percent of normal. Precipitation last month was 290 percent of the monthly average. Seasonal precipitation at this time last year was 65 percent of normal.

Seasonal precipitation in the Colorado River Region, Desert was 175 percent of normal. Precipitation last month was 115 percent of average. Seasonal precipitation at this time last year was 70 percent of the average.

RUNOFF - Seasonal runoff from selected South Coast streams totaled 115 thousand acre-feet which is 270 percent of average. Last year, runoff for the same period was 70 percent of average.

The April through July inflow to Lake Powell is forecasted to be 8.3 million acre-feet which will be 107 percent of normal.

RESERVOIR STORAGE - March 31 storage in 29 major South Coast Region reservoirs was 1.9 million acre-feet or 140 percent of average. About 95 percent of available capacity was being used. Storage in these reservoirs at this time last year was 120 percent of average.

First of the month combined storage in Lakes Powell, Mead, Mohave and Havasu was about 39.3 million acre-feet which is 107 percent of average. About 73 percent of available capacity was being used. One year ago, these reservoirs were storing 112 percent of average.

UPPER COLORADO RIVER BASIN - The first of the month snowpack, according to the U.S. Natural Resources Conservation Service reports was 110 percent of average and ranges from 95 percent in the Upper Green drainage to 115 percent in the San Juan.

STATE WATER PROJECT

As of April 1, State Water Project (SWP) conservation storage (Lake Oroville plus the State share of San Luis Reservoir) held 3.93 million acre-feet of water. March was a very wet month and storage remained about 250 thousand acre-feet greater than at this same time last year. Approved entitlement deliveries to State water contractors remains at 100 percent of current demand, which is approximately 2.8 million acre-feet.

CENTRAL VALLEY PROJECT

Based on April 1 conditions, Bureau of Reclamation water year forecasts for runoff into CVP reservoirs are: Trinity--186% of average, Shasta--159% of average, American--194% of average, Stanislaus--182% of average, San Joaquin above Friant--197% of average. As of March 31, 1995 CVP storage was 9.0 million acre feet which is an increase of 0.9 million acre feet compared to one year ago, and is approximately 110% of normal for that date.

The Bureau of Reclamation announced updated water allocations for the CVP on February 15, 1995. Agricultural contractors north of the Delta received 100% of their contract supply, and south of the Delta received 75% of their contract supply; M&I contractors received 100% of contract supply use. Wildlife refuges received 75% of level II supplies. Sacramento River water rights settlement contractors and San Joaquin Exchange contractors allocations received 100% of contract supply. Additional allocations to the CVP customers south of the Delta are anticipated in April, due to the exceptional water supply conditions in the Central Valley.

MAJOR WATER DISTRIBUTION PROJECTS

RESERVOIR STORAGE

(AVERAGES BASED ON PERIOD RECORD)

RESERVOIR	CAPACITY 1,000 AF	AVERAGE STORAGE 1,000 AF	STORAGE AS OF MARCH 31 1994 1,000 AF	1995 1,000 AF	PERCENT AVERAGE
STATE WATER PROJECT					
Oroville	3,538	2,817	2624	2774	98
San Luis SWP	1,060	972	1049	1155	119
Lake Del Valle	77	37	29	39	107
Silverwood	73	67	56	67	100
Pyramid Lake	171	159	165	167	105
Castaic Lake	324	283	295	300	106
Perris Reservoir	132	116	116	121	109
CENTRAL VALLEY PROJECT					
Clair Engle Lake	2,448	1,993	2031	2121	106
Shasta Lake	4,552	3,774	3496	3928	104
Whiskeytown	241	213	205	215	101
Folsom	977	636	410	585	92
New Melones	2,420	1,538	742	1009	66
Millerton Lake	520	307	326	475	155
San Luis CVP	980	827	948	880	106
COLORADO RIVER PROJECT					
Lake Mead	26,159	19,651	21291	20443	104
Lake Powell	25,002	14,946	17785	16627	111
Lake Mohave	1,810	1,639	1665	1700	104
Lake Havasu	619	548	577	547	100
EAST BAY MUNICIPAL UTILITY DISTRICT					
Pardee	210	179	185	199	111
Camanche	417	260	258	318	122
East Bay (4 reservoirs)	151	132	129	145	110
CITY & COUNTY OF SAN FRANCISCO					
Hetch Hetchy	360	124	200	147	119
Cherry Lake	268	109	246	181	166
Lake Eleanor	26	10	23	22	217
Peninsula/East Bay (4 reservoirs)	225	175	182	216	123
CITY OF LOS ANGELES(DWP)					
Crowley Lake(Long Valley)	183	131	124	127	97
Grant Lake	48	29	16	21	72
Other Aqueduct Storage(6 reservoirs)	83	77	59	69	90

DEPARTMENT OF WATER RESOURCES - CALIFORNIA DATA EXCHANGE CENTER
TELEMETERED SNOW WATER EQUIVALENTS - APRIL 3, 1995

BASIN NAME / STATION NAME	AGENCY	ELEV FEET	APR 1 AVG	TODAY	INCHES OF WATER EQUIVALENT PERCENT OF APR 1	24 HRS AGO	1 WEEK AGO
TRINITY RIVER							
PETERSON FLAT	USBR	7150	----	28.4	----	28.7	29.6
RED ROCK MOUNTAIN	USBR	6700	39.6	78.5	198%	78.5	79.8
BONANZA KING	USBR	6450	40.5	----	----	----	55.1
SHIMMY LAKE	USBR	6200	40.3	----	----	----	78.4
MIDDLE BOULDER #3	USBR	6200	28.3	29.4	104%	30.7	25.5
HIGHLAND LAKES	USBR	6030	29.9	----	----	----	26.5
SCOTTS MOUNTAIN	USBR	5900	----	31.9	----	31.6	31.2
MUMBO BASIN	USBR	5700	22.4	----	----	----	----
BIG FLAT	USBR	5100	----	27.5	----	27.7	27.6
SACRAMENTO RIVER							
CEDAR PASS	SCS	7100	18.1	28.7	159%	28.6	28.7
BLACKS MOUNTAIN	DWR	7100	----	26.3	----	26.3	26.2
SAND FLAT	USBR	6750	42.4	57.9	136%	----	58.7
MEDICINE LAKE	USBR	6700	----	45.1	----	45.5	----
ADIN MOUNTAIN	SCS	6350	13.6	22.9	168%	22.9	23.1
SNOW MOUNTAIN	USBR	5950	27.0	----	----	----	41.7e
SLATE CREEK	USBR	5600	29.0	51.6	178%	51.8	53.3
STOUTS MEADOW	USBR	5400	36.0	65.3	181%	67.1	66.0
FEATHER RIVER							
KETTLEROCK	DWR	7300	25.5	45.1	177%	45.0	44.8
GRIZZLY	DWR	6900	29.7	49.4	166%	49.6	49.0
PILOT PEAK	DWR	6800	52.6	75.0	143%	76.6	85.7
GOLD LAKE	DWR	6750	36.5	63.7	175%	----	64.3
HUMBUG	DWR	6500	28.0	65.3	233%	65.0	63.1
RATTLESNAKE	DWR	6100	14.0	51.8	370%	51.8	51.5
BUCKS LAKE	DWR	5750	44.7	72.0	161%	----	71.9
FOUR TREES	DWR	5150	20.0	39.4	197%	40.0	40.2
YUBA & AMERICAN RIV							
LAKE LOIS	DWR	8800	----	73.2	----	----	75.1
SCHNEIDERS	SMUD	8750	34.5	74.7	217%	74.9	75.8
CAPLES LAKE COURSE	USBR	7800	30.9	52.6	170%	53.3	52.8
ALPHA	SMUD	7600	35.9	65.3	182%	65.6	66.1
BETA	DWR	7600	----	58.1	----	58.3	58.2
FORNI RIDGE	USBR	7600	37.0	53.1	144%	53.1	52.4
SILVER LAKE	USBR	7100	22.7	46.6	205%	46.8	48.0
CENT SIERRA SNOW LAB	USFS	6950	33.6	61.6	183%	61.8	61.9
HUYSINK	USBR	6600	42.6	55.9	131%	55.9	----
VAN VLECK	SMUD	6700	35.9	----	----	----	----
ROBBS SADDLE	SMUD	5900	21.4	41.1	192%	42.0	----
GREEK STORE	USBR	5600	21.0	43.5	207%	----	43.7
BLUE CANYON	USBR	5280	9.0	4.7	52%	5.1	7.3
ROBBS POWERHOUSE	SMUD	5150	5.2	7.1	137%	8.6	12.3
MOKEL. & STANIS. RIV							
DEADMAN CREEK	USBR	9250	37.2	52.9	142%	52.9	52.0
HIGHLAND MEADOW	USBR	8800	47.9	72.8	152%	72.8	72.1
GIANELLI MEADOW	USBR	8350	55.5	74.6	134%	75.6	78.0e
LOWER RELIEF VALLEY	DWR	8100	41.2	75.6	183%	75.6	76.2
BLUE LAKES	SCS	8000	33.1	56.8	172%	56.7	55.3
MUD LAKE	SMUD	7900	44.9	79.8	178%	80.8	80.7
STANISLAUS MEADOW	USBR	7750	47.5	82.6	174%	82.6	82.3
BLOODS CREEK	USBR	7200	35.5	----	----	----	----
BLACK SPRINGS	USBR	6500	32.0	----	----	----	----
TUOLUMNE & MERCED R.							
DANA MEADOWS	DWR	9800	27.7	----	----	----	----
SLIDE CANYON	DWR	9200	----	70.0	----	68.7	70.0
SNOW FLAT	DWR	8700	44.1	71.0	161%	74.0	73.0
TUOLUMNE MEADOWS	DWR	8600	22.6	33.4	148%	33.4	33.5
HORSE MEADOW	DWR	8400	48.6	74.5	153%	75.1	73.2
OSTRANDER LAKE	DWR	8200	34.8	64.7	186%	64.7	65.4
PARADISE	DWR	7650	----	66.0	----	66.0	66.7
GIN FLAT	DWR	7050	34.2	44.8	131%	45.4	45.1
LOWER KIBBIE	DWR	6600	27.4	36.8	134%	36.8	38.8
SAN JOAQUIN RIVER							
VOLCANIC KNOB	USBR	10100	30.1	43.8	145%	43.8	45.7
AGNEW PASS	USBR	9450	32.3	59.8	185%	59.8	59.2
KAISER POINT	USBR	9200	37.8	----	----	----	----
GREEN MOUNTAIN	USBR	7900	30.8	----	----	54.2	56.6

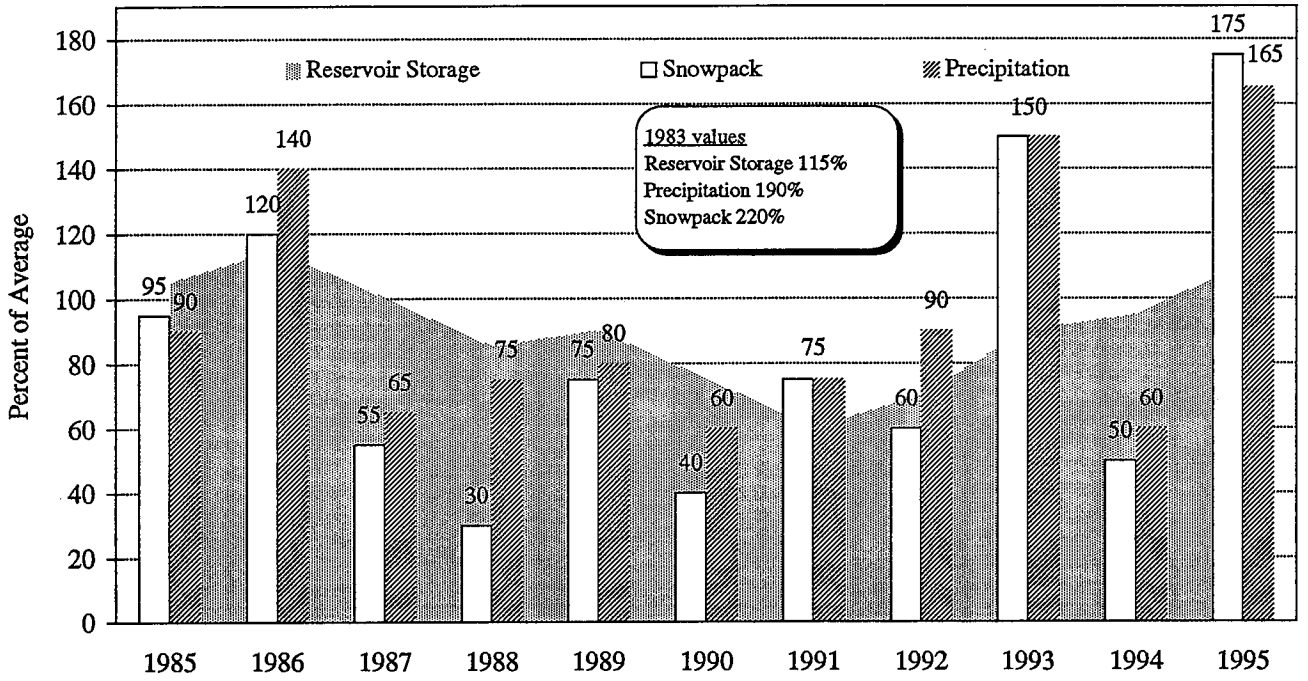
DEPARTMENT OF WATER RESOURCES - CALIFORNIA DATA EXCHANGE CENTER
TELEMETERED SNOW WATER EQUIVALENTS - APRIL 3, 1995

BASIN NAME / STATION NAME	AGENCY	ELEV FEET	APR 1 AVG	TODAY	INCHES OF WATER EQUIVALENT PERCENT OF APR 1	24 HRS AGO	1 WEEK AGO
TAMARACK SUMMIT	USBR	7600	30.5	57.9	190%	57.9	57.7e
CHILKOOT MEADOW	USBR	7150	38.0	----	----	65.6	65.4e
HUNTINGTON LAKE	USBR	7000	20.1	----	----	----	45.1e
GRAVEYARD MEADOW	USBR	6900	18.8	----	----	39.4	40.2e
POISON RIDGE	USBR	6900	28.9	----	----	53.3	53.4
KINGS RIVER							
BISHOP PASS	DWR	11200	----	41.8	----	42.5	----
CHARLOTTE LAKE	DWR	10400	----	45.5	----	45.4	44.6
STATE LAKES	COE	10400	29.0	----	----	----	----
MITCHELL MEADOW	COE	10375	32.9	57.8	176%	57.8	56.9
BLACKCAP BASIN	USBR	10300	34.3	65.4	191%	65.4	63.4
UPPER BURNT CORRAL	DWR	9700	34.6	69.3	200%	69.3	69.3
WEST WOODCHUCK MDW	COE	9100	32.8	----	----	----	63.0e
BIG MEADOWS	DWR	7600	25.9	39.8	154%	40.2	46.3
KAWEAH & TULE RIVERS							
QUAKING ASPEN	DWR	7200	21.0	33.6	160%	34.3	35.9
GIANT FOREST	COE	6400	10.0	14.5	145%	15.0	16.0
KERN RIVER							
UPPER TYNDALL CREEK	COE	11500	27.7	34.3	124%	34.0	----
CRABTREE	DWR	10700	19.8	27.7	140%	27.6	28.1
CHAGOOPA PLATEAU	DWR	10300	21.8	34.0	156%	34.6	34.6
PASCOES	COE	9150	24.9	53.0	213%	53.2	----
TUNNEL	DWR	8950	15.6	26.4	169%	27.1	26.4
WET MEADOW	COE	8900	30.3	6.3	21%	6.3	----
CASA VIEJA MDW	DWR	8400	20.9	28.2	135%	29.5	30.1
BEACH MEADOW	DWR	7650	11.0	12.8	117%	13.2	13.6
SURPRISE VALLEY AREA							
DISMAL SWAMP	SCS	7050	29.2	30.7	105%	31.2	32.3
TRUCKEE RIVER							
MOUNT ROSE SKI AREA SCS	8850	38.5	76.4	198%	76.3	75.9	
INDEPENDENCE LAKE	SCS	8450	41.4	70.0	169%	70.1	69.5
BIG MEADOWS	SCS	8700	25.7	37.1	144%	37.1	37.0
SQUAW VALLEY GOLD C SCS	7800	46.5	103.7	223%	----	103.5	
INDEPENDENCE CAMP	SCS	7000	21.8	36.2	166%	36.4	37.0
INDEPENDENCE CREEK	SCS	6500	12.7	23.3	183%	23.7	24.1
LAKE TAHOE BASIN							
HEAVENLY VALLEY	SCS	8800	28.1	--	--	--	----
HAGANS MEADOW	SCS	8000	16.5	30.7	186%	31.0	31.7
MARLETTE LAKE	SCS	8000	21.1	45.3	215%	45.3	45.3
ECHO PEAK	SCS	7800	39.5	72.4	183%	72.5	71.9
RUBICON NO. 2	SCS	7500	29.1	46.8	161%	46.6	46.0
WARD CREEK NO. 3	SCS	6750	39.4	53.4	136%	53.0	53.7
TAHOE CITY CROSS	SCS	6750	----	24.4	----	24.5	25.4
FALLEN LEAF LAKE	SCS	6300	7.0	3.1	44%	3.5	4.9
CARSON RIVER							
EBBETTS PASS	SCS	8700	38.8	66.3	171%	66.1	65.4
POISON FLAT	SCS	7900	16.2	29.8	184%	29.8	29.8
WALKER RIVER							
VIRGINIA LAKES RIDGE	SCS	9200	20.3	31.7	156%	31.6	31.8
LOBDELL LAKE	SCS	9200	17.3	32.5	188%	32.1	31.9
SONORA PASS BRIDGE	SCS	8750	26.0	45.1	173%	44.9	----
LEAVITT MEADOWS	SCS	7200	8.0	19.0	238%	19.1	19.0
OWENS RIVER/MONO LK.							
GEM PASS	LADWP	10750	31.7	69.3	219%	69.9	68.6
SAWMILL MEADOW	DWR	10300	19.4	23.3	120%	23.3	24.6
COTTONWOOD LAKES	LADWP	10200	11.6	----	----	7.7	8.9
BIG PINE #3	LADWP	9800	17.9	35.3	197%	35.3	34.7
SOUTH LAKE	LADWP	9600	16.0	32.4	202%	32.5	32.6
MAMMOTH PASS (6T)	USBR	9500	42.4	----	----	68.3	68.1e
MAMMOTH PASS (RP)	USBR	----	----	----	----	72.6	----

NORMAL SNOWPACK ACCUMULATION EXPRESSED AS A PERCENT OF APRIL 1ST AVERAGE

AREA	JANUARY	FEBRUARY	MARCH	APRIL	MAY
CENTRAL VALLEY NORTH	45	70	90	100	75
CENTRAL VALLEY SOUTH	45	65	85	100	80
NORTH COAST	40	60	85	100	80

April 1 Statewide Conditions



❄❄❄❄❄ SNOWLINES ❄❄❄❄

FINAL REMINDER The 63nd annual meeting of the Western Snow Conference is being held April 17-20 in Reno, NV. The conference theme is "Improving Resource Management Using Snow Hydrology". The gathering will be at the Nuggett in Sparks, NV just outside Reno. The meeting promises many interesting papers and is a chance to meet people from other states and countries involved in the snow business. Contact Frank Gehrke at (916) 653-8255 or gridley@water.ca.gov if you need more information.

NEW RECORD ESTABLISHED Kent Karge and John Sarrett of Pacific Gas and Electric measured 162.1 inches of water content in over 20 feet of depth at the Lower Lassen Peak snow course. This is a new all-time record for the most snow measured any time, any place for California. The previous record water content for Lower Lassen was 153.6 inches on May 9, 1983.

NEW DELTA WATER QUALITY OBJECTIVES The State Water Resources Control Board has established new water quality objectives for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary and refers to the Bulletin 120 series as the source of the classification. New indices were developed as a measure of water availability and to set water quality objectives according to water year classification. Weighting factors for April through July and antecedent water conditions are included in the formula to account for the relative hydrologic importance.

Definitions for these new measures are on the inside back cover of Bulletin 120.

SNOWPACK - Snow data is a major index of spring and summer runoff from Sierra Nevada watersheds. April 1 data historically reflects the magnitude of the snowpack at or near the maximum seasonal accumulation. Averages are based on April 1 data for the period 1941-1990 (50 years, except for data sites established after 1941).

PRECIPITATION - Averages are based on April 1 data for the period 1941-1990 (50 years, except for data sites established after 1941).

RUNOFF AND FORECASTS - Runoff data and runoff forecasts are shown as unimpaired values. Unimpaired runoff represents the natural water production of a river basin, unaltered by upstream diversions, storage, or by export or import of water to or from other watersheds. Forecast of runoff assumes median conditions subsequent to the date of forecast.

Runoff probability ranges are statistically derived from historical data. The 80 percent probability range is comprised of the 90 percent exceedence level value and the 10 percent exceedence level value. This means that actual runoff should fall within the stated limits eight times out of ten.

Runoff averages for most streams are based on the period 1941-1990. For more details contact California Cooperative Snow Surveys, P.O. Box 942836, Sacramento, CA 94236-0001, (916) 653-8255 or gridley@water.ca.gov.

INDICES OF WATER AVAILABILITY

The Sacramento River Hydrologic Region 40-30-30 Water Supply Index. The *40-30-30* represent the percentage weight given to the three variables in the formula for the index. The first variable is the forecasted unimpaired runoff from April through July (*40 Percent*). The second variable is the forecasted unimpaired runoff from October through March (*30 Percent*). The third variable is the previous year's index with a cap to account for required flood control releases during wet years. The basins used in this computation are those used in the Sacramento River water year unimpaired runoff.

The Sacramento River water year unimpaired runoff is the sum of: Sacramento River above Bend Bridge, Feather River Inflow to Lake Oroville, Yuba River near Smartville and American River Inflow to Folsom Lake.

The San Joaquin River Hydrologic Region 60-20-20 Water Supply Index. In a similar manner, the *60-20-20* represents the percentage weights on April through July runoff, October through March runoff and previous year's index. The San Joaquin River unimpaired runoff is the sum of: Stanislaus River Inflow to New Melones Lake, Tuolumne River Inflow to New Don Pedro Reservoir, Merced River Inflow to Lake McClure and San Joaquin River Inflow to Millerton Lake.

Prior month unimpaired runoff is the sum of the runoff in the eight major rivers used in the two above indices.

On the front cover: Fred Ritchey (l) watches sympathetically while Larry Helsley (r) struggles to extract the snow tube from a very deep snowpack during the 1993 winter in the Trinity River.

Photo by Roland Banderob

State of California –The Resources Agency
DEPARTMENT OF WATER RESOURCES
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First Class