

State of California
The Resources Agency

Department of
Water Resources

Water Conditions in California

Report 4 May 1, 2001



Gray Davis
Governor
State of California

Mary D. Nichols
Secretary for Resources
The Resources Agency

Thomas M. Hannigan
Director
Department of Water Resources

STATE OF CALIFORNIA

Gray Davis, Governor

THE RESOURCES AGENCY

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COOPERATING AGENCIES

Public Agencies

Buena Vista Water Storage District
East Bay Municipal Utility District
Eldorado Irrigation 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
Modesto 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
Sacramento Municipal Utility District
San Joaquin Exchange Contractors Water Association
South San Joaquin Irrigation District
Tri-Dam Project
Truckee River Basin Water Commission
Tulare Lake Basin Water Storage District
Turlock Irrigation District
Yuba County Water Agency
Private Organizations
J.G. Boswell Company
Kaweah and St. Johns River Association
Kings River Water 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

University of California
Central Sierra Snow Laboratory
Scripps Institution of Oceanography
California Department of Forestry & Fire Protection
California Department of Water Resources

Public Utilities

Pacific Gas and Electric Company
Southern California Edison Company

Federal Agencies

U.S. Department of Agriculture
Forest Service(14 National Forests)
Natural 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

May 1, 2001

Hopes for a wet April and a substantially improved water supply faded as the last week of the month turned dry. Two stormy periods in April did increase central and southern Sierra forecasts but overall statewide precipitation during April was just below average. Snowmelt runoff forecasts are slightly better than those of a month ago, but remain much below average. Reservoir storage is about average for the date, which helps to ensure sufficient water supplies for most local agency users; conditions remain very dry in the northeast and major federal and State water project contractors face large deficits.

Forecasts of April through July runoff have been raised slightly to about 60 percent of average. Water year forecasts remain at about 55 percent statewide compared to actual runoff of 95 percent last year.

Snowpack water content is about 65 percent of average for the date and 50 percent of the April 1 average level. Last year on May 1 the snowpack was 75 percent of average. The two storm periods were cool, adding snow, and delaying substantial snowmelt until the last week of April.

Precipitation during April was about 95 percent of average statewide, driest in the northwestern and southeastern regions of the State, and, as noted earlier, above average in the central and southern Sierra and some Central and South Coastal areas. Seasonal precipitation since October 1 remains at 75 percent of average; last year it was 95 percent at this time.

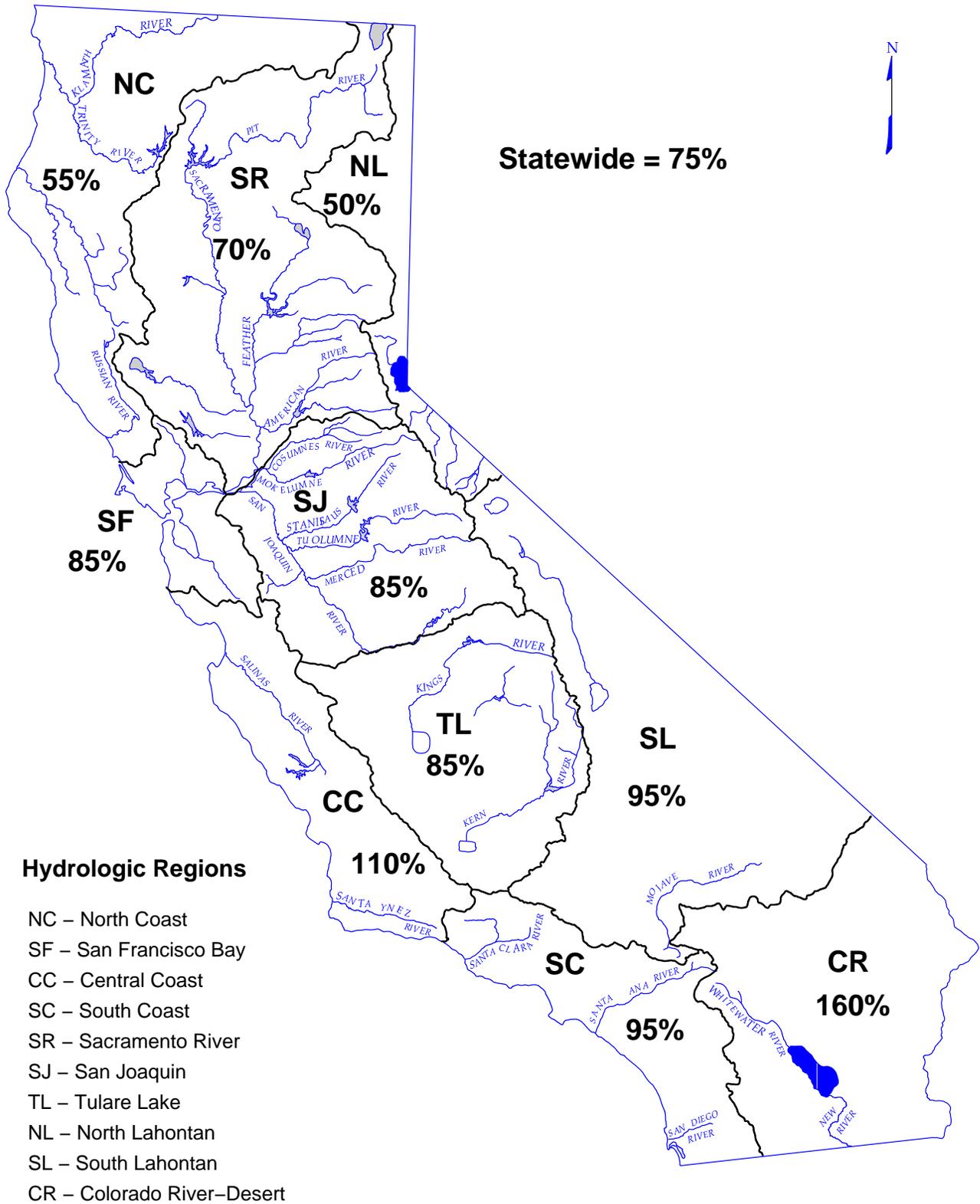
Runoff so far this season is 45 percent of average, much less than the 100 percent reported last year on May 1. April runoff was 55 percent of the monthly average. Estimated runoff of the eight major rivers of the Sacramento and San Joaquin River regions was 2.0 million acre-feet during April. The May estimate of the Sacramento River Index at the 90% exceedence level is 9.4 MAF. The May estimate of the San Joaquin Region 60-20-20 Index at the 75% exceedence level is 2.3.

Reservoir storage increased during April at a slightly below average pace and is just over average for this date overall. Last year storage stood at 115 percent. Few of the major foothill reservoirs of the Central Valley region are expected to fill this year.

SUMMARY OF WATER CONDITIONS IN PERCENT OF AVERAGE

HYDROLOGIC REGION	PRECIPITATION OCTOBER 1 TO DATE	MAY 1 SNOW WATER CONTENT	MAY 1 RESERVOIR STORAGE	RUNOFF OCTOBER 1 TO DATE	APR-JULY RUNOFF FORECAST	WATER YEAR RUNOFF FORECAST
NORTH COAST	55	80	100	35	60	50
SAN FRANCISCO BAY	85	--	105	45	--	--
CENTRAL COAST	110	--	135	70	--	--
SOUTH COAST	95	--	105	35	--	--
SACRAMENTO RIVER	70	45	95	55	55	55
SAN JOAQUIN RIVER	85	75	115	55	70	60
TULARE LAKE	85	65	110	60	65	60
NORTH LAHONTAN	50	35	110	55	45	45
SOUTH LAHONTAN	105	75	115	70	80	75
COLORADO RIVER- DESERT	160	--	--	--	--	--
STATEWIDE	75	65	100	45	60	55

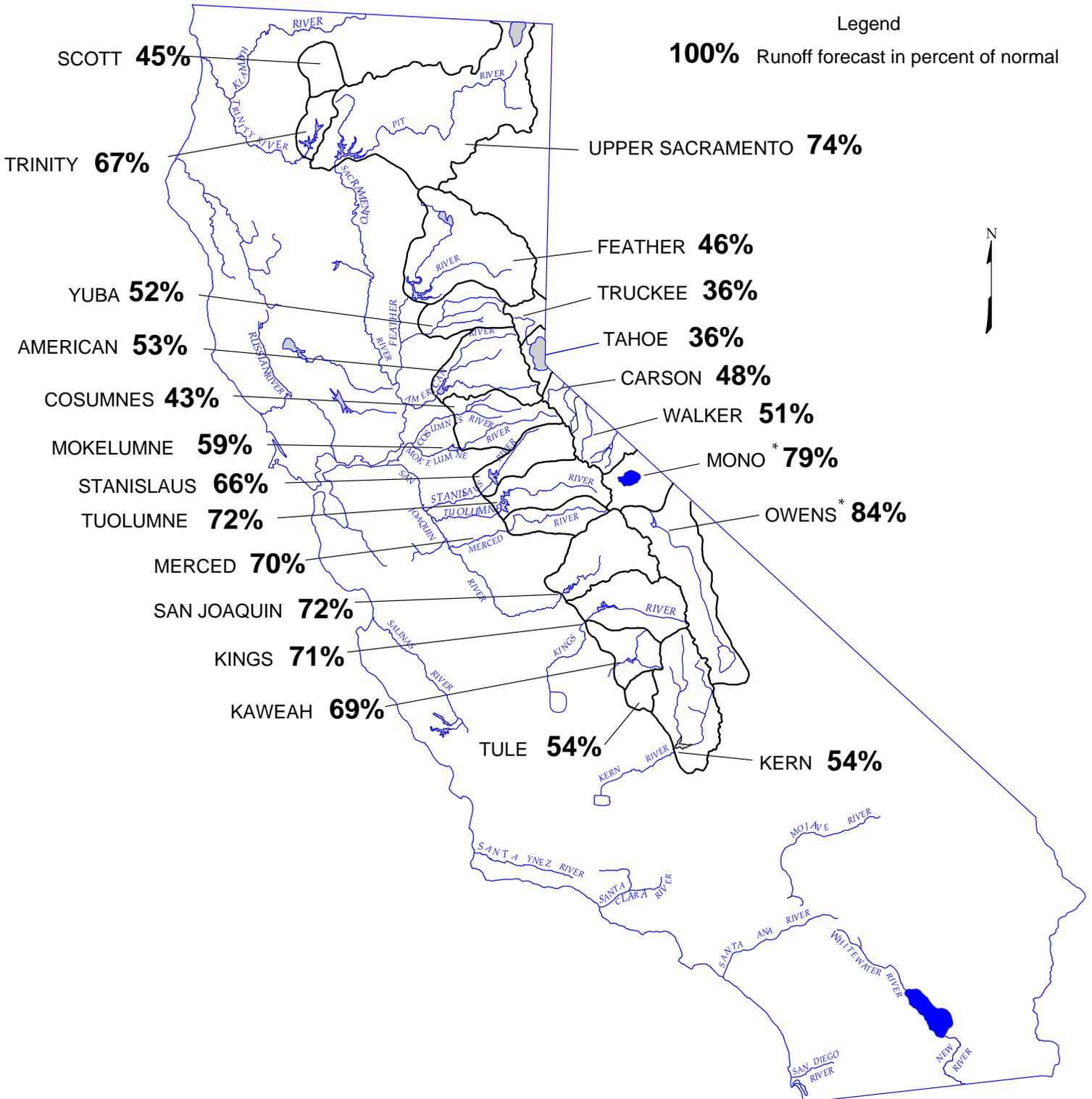
SEASONAL PRECIPITATION
 IN PERCENT OF AVERAGE TO DATE
 October 1, 1999 through April 30, 2001



WATER YEAR IS OCTOBER 1 THROUGH SEPTEMBER 30

FORECAST OF APRIL – JULY UNIMPAIRED SNOWMELT RUNOFF

May 1, 2001



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

MAY 1, 2001 FORECASTS
APRIL-JULY UNIMPAIRED RUNOFF

HYDROLOGIC REGION and Watershed	Unimpaired Runoff in 1,000 Acre-Feet (1)					
	HISTORICAL			FORECAST		
	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 (3)	297	702	39	210	71%	
McCloud River at Shasta Lake	392	850	185	290	74%	
Pit River at Shasta Lake	1,056	2,203	480	740	70%	
Total Inflow to Shasta Lake	1,801	3,525	726	1,330	74%	1,170 - 1,630
Sacramento River above Bend Bridge, near Red Bluff	2,451	5,075	943	1,640	67%	1,420 - 2,080
Feather River						
Feather River at Lake Almanor near Prattville (3)	333	675	120	180	54%	
North Fork at Pulga (3)	1,028	2,416	243	480	47%	
Middle Fork near Clio (4)	86	518	4	35	41%	
South Fork at Ponderosa Dam (3)	110	267	13	40	36%	
Total Inflow to Oroville Reservoir	1,831	4,676	392	840	46%	680 - 1,140
Yuba River						
North Yuba below Goodyears Bar (3)	286	647	51	150	52%	
Inflow to Jackson Mdws and Bowman Reservoirs (3)	112	236	25	55	49%	
South Yuba at Langs Crossing (3)	233	481	57	110	47%	
Yuba River at Smartville	1,029	2,424	200	540	52%	450 - 680
American River						
North Fork at North Fork Dam (3)	262	716	43	140	53%	
Middle Fork near Auburn (3)	522	1,406	100	270	52%	
Silver Creek Below Camino Diversion Dam (3)	173	386	37	80	46%	
Total Inflow to Folsom Reservoir	1,261	3,074	229	670	53%	540 - 840
SAN JOAQUIN RIVER						
Cosumnes River at Michigan Bar	128	363	8	55	43%	35 - 85
Mokelumne River						
North Fork near West Point (5)	437	829	104	250	57%	
Total Inflow to Pardee Reservoir	459	1,065	102	270	59%	230 - 340
Stanislaus River						
Middle Fork below Beardsley Dam (3)	334	702	64	210	63%	
North Fork Inflow to McKays Point Dam (3)	224	503	34	150	67%	
Total Inflow to New Melones Reservoir	699	1,710	116	460	66%	390 - 570
Tuolumne River						
Cherry Creek & Eleanor Creek near Hetch Hetchy (3)	322	727	97	230	71%	
Tuolumne River near Hetch Hetchy (3)	606	1,392	153	430	71%	
Total Inflow to Don Pedro Reservoir	1,184	2,682	301	850	72%	750 - 1,010
Merced River						
Merced River at Pohono Bridge (3)	362	888	80	260	72%	
Total Inflow to Lake McClure	611	1,587	123	430	70%	380 - 510
San Joaquin River						
San Joaquin River at Mammoth Pool (6)	1,014	2,279	235	720	71%	
Big Creek below Huntington Lake (6)	95	264	11	60	63%	
South Fork near Florence Lake (6)	202	511	58	130	64%	
Total Inflow to Millerton Lake	1,212	3,355	262	870	72%	770 - 1,020
TULARE LAKE						
Kings River						
North Fork Kings River near Cliff Camp (3)	239	565	50	160	67%	
Total Inflow to Pine Flat Reservoir	1,183	3,114	273	840	71%	730 - 960
Kaweah River at Terminus Reservoir	276	814	61	190	69%	160 - 230
Tule River at Success Reservoir	59	259	2	32	54%	24 - 48
Kern River						
Kern River near Kernville (3)	373	1,203	83	200	54%	
Total Inflow to Isabella Reservoir	442	1,657	84	240	54%	210 - 300

(1) See inside back cover for definition

(2) All 50 year averages are based on years 1946-1995 unless otherwise not

(3) 50 year average based on years 1941-9

(4) 44 year average based on years 1936-79

(5) 36 year average based on years 1936-7

(6) 45 year average based on years 1936-8

MAY 1, 2001 FORECASTS
WATER YEAR UNIMPAIRED RUNOFF

HISTORICAL			Unimpaired Runoff in 1,000 Acre-Feet (1)								FORECAST			
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												
1,184	2,353	577												
3,078	5,647	1,484												
5,896	10,796	2,479	1,210	555	650	420	390	290	230	425	4,170	71%	3,960 -	4,530
8,518	17,180	3,294	1,645	920	1,050	565	480	325	270	485	5,740	67%	5,460 -	6,280
780	1,269	366												
2,417	4,400	666												
219	637	24												
291	562	32												
4,526	9,492	994	495	220	400	335	280	130	95	135	2,090	46%	1,910 -	2,420
564	1,056	102												
181	292	30												
379	565	98												
2,337	4,926	369	165	95	205	190	230	90	30	35	1,040	45%	940 -	1,190
616	1,234	66												
1,070	2,575	144												
318	705	59												
2,674	6,381	349	180	105	230	265	285	105	15	15	1,200	45%	1,060 -	1,380
378	1,253	20	19	21	31	32	18	4	1	1	127	34%	105 -	160
626	1,009	197												
736	1,800	129	35	15	60	85	140	40	5	0	380	52%	330 -	460
471	929	88												
1,131	2,952	155	65	35	110	135	210	95	20	10	680	60%	600 -	800
461	1,147	123												
770	1,661	258												
1,857	4,430	383	90	60	175	230	380	200	40	15	1,190	64%	1,090 -	1,360
461	1,020	92												
952	2,859	150	40	30	90	105	205	100	20	10	600	63%	540 -	690
1,337	2,964	308												
112	298	14												
248	653	71												
1,753	4,642	362	80	40	125	190	370	230	80	45	1,160	66%	1,050 -	1,320
284	607	58												
1,647	4,294	383	70	35	100	180	375	210	75	25	1,070	65%	950 -	1,200
431	1,402	92	25	13	32	52	95	37	6	5	265	61%	230 -	310
135	615	16	12	7	10	14	13	4	1	1	62	46%	50 -	80
558	1,577	163												
694	2,309	175	50	20	35	55	95	65	25	25	370	53%	330 -	440

* Unimpaired runoff in prior months based on measured flow:

**MAY 1, 2001 FORECASTS
APRIL-JULY UNIMPAIRED RUNOFF**

HYDROLOGIC REGION and Watershed	Unimpaired Runoff in 1,000 Acre-Feet (1)				
	HISTORICAL			FORECAST	
	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	642	1,593	80	430	67%
Scott River Near Fort Jones	200	n/a	n/a	90	45%
Klamath River Total inflow to Upper Klamath Lake (3)	509	758	280	205	40%
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NORTH LAHONTAN					
Truckee River Lake Tahoe to Farad accretions	264	713	58	95	36%
Lake Tahoe Rise (assuming gates closed, in feet)	1.4	3.6	0.2	0.5	36%
Carson River West Fork at Woodfords	54	135	12	24	44%
East Fork near Gardnerville	183	407	43	90	49%
Walker River West Fork near Coleville	143	330	35	80	56%
East Fork near Bridgeport	61	209	7	24	39%
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SOUTH LAHONTAN					
Owens River Total tributary flow to Owens River (4)	226	579	96	189	84%

(1) See inside back cover for definition

(2) All 50 year averages are based on years 1946-1995 unless otherwise not

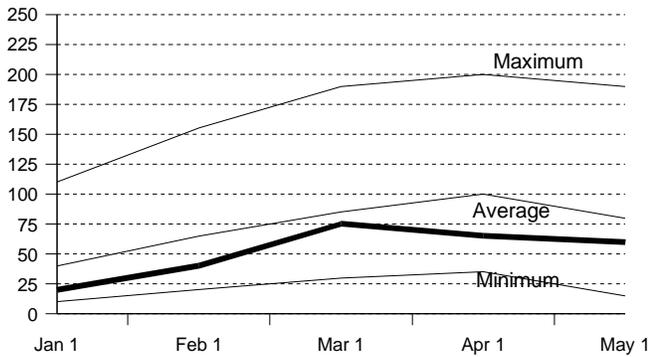
(3) Forecast by U.S. Natural Resources Conservation Service and National Weather Service California-Nevada River Forecast Center
April through September forecast, 30 year average based on years 1961-199

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

NORTH COAST REGION

Snowpack Accumulation

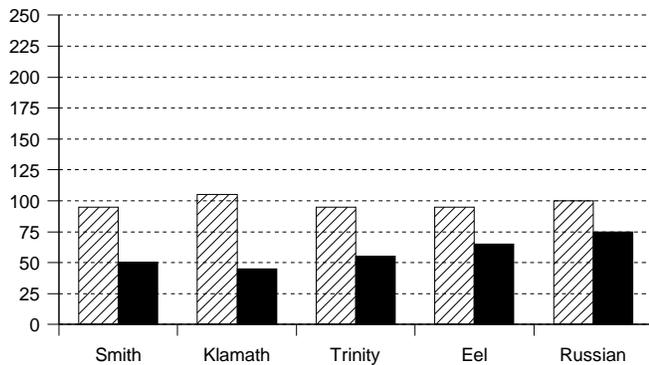
Water Content in % of April 1 Average



SNOWPACK– First of the month measurements made at 10 snow courses indicate an area wide snow water equivalent of 20.8 inches. This is 60 percent of the seasonal April 1 average and 80% of the May 1 average. Last year at this time the pack was holding 35.2 inches of water.

Precipitation

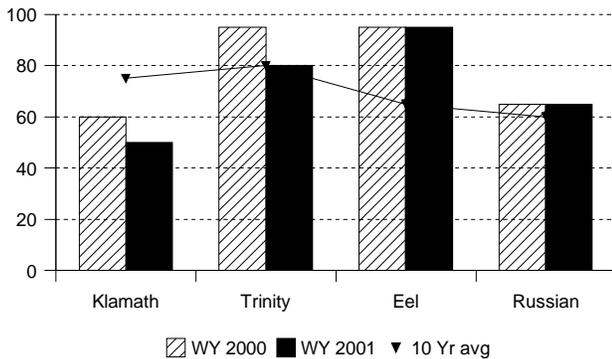
October 1 to date in % of Average



PRECIPITATION – Seasonal precipitation (October 1 through the end of last month) on this area was 55 percent of normal. Precipitation last month was about 70 percent of the monthly average. Seasonal precipitation at this time last year stood at 100 percent of normal.

Reservoir Storage

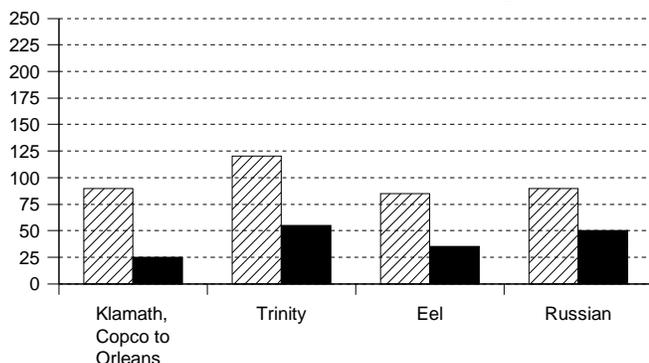
Contents of major reservoirs in % of capacity



RESERVOIR STORAGE– First of the month storage in 7 reservoirs was 2.5 million acre–feet which is 100 percent of average. About 80 percent of available capacity was being used. Storage in these reservoirs at this time last year was 115 percent of average.

Runoff

October 1 to date in % of average

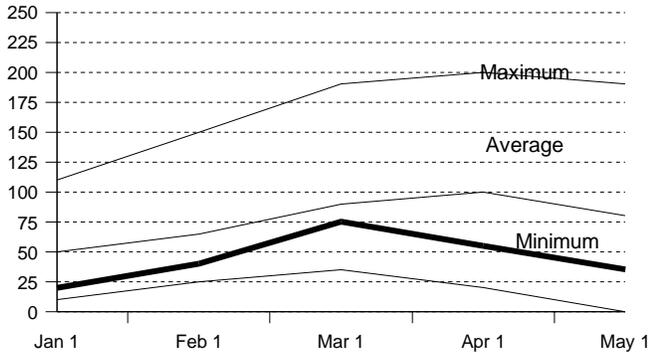


RUNOFF –Seasonal runoff of streams draining the area totaled 3.6 million acre–feet which is 35 percent of the average for this period. Last year, runoff for the same period was 90 percent of average.

SACRAMENTO RIVER REGION

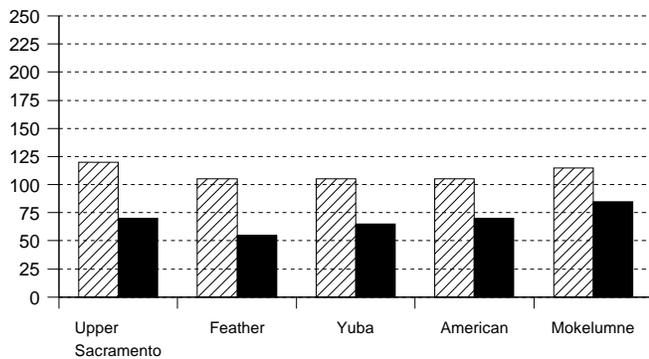
Snowpack Accumulation

Water Content in % of April 1 Average



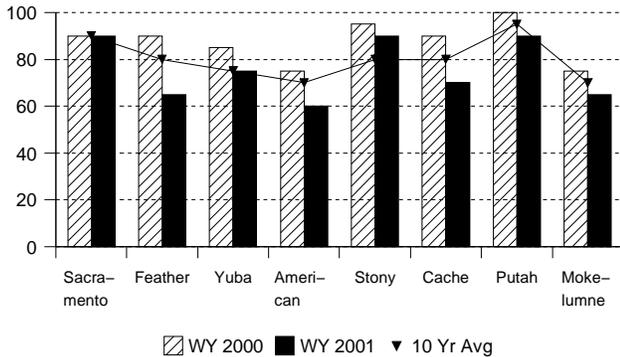
Precipitation

October 1 to date in % of Average



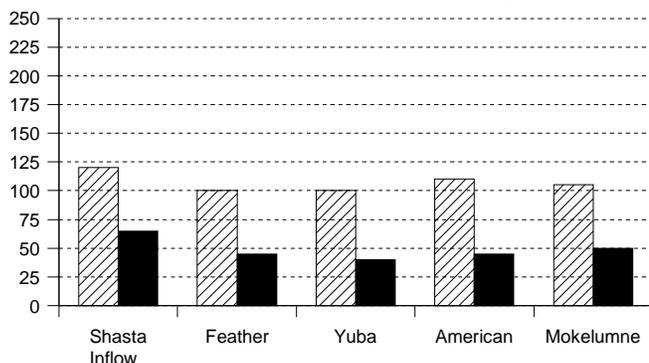
Reservoir Storage

Contents of major reservoirs in % of capacity



Runoff

October 1 to date in % of average



SNOWPACK– First of the month measurements made at 50 snow courses indicate an area wide snow water equivalent of 12.4 inches. This is 35 percent of the seasonal April 1 average and 45 percent of the May 1 average. Last year at this time the pack was holding 16.7 inches of water.

PRECIPITATION – Seasonal precipitation (October 1 through the end of last month) on this area was 70 percent of normal. Precipitation last month was about 90 percent of the monthly average. Seasonal precipitation at this time last year stood at 110 percent of normal.

RESERVOIR STORAGE– First of the month storage in 43 reservoirs was 12.1 million acre–feet which is 95 percent of average. About 75 percent of available capacity was being used. Storage in these reservoirs at this time last year was 110 percent of average.

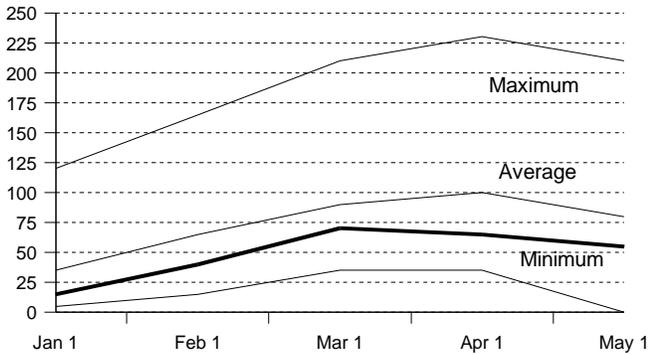
RUNOFF – Seasonal runoff of streams draining the area totaled 7.1 million acre–feet which is 55 percent of average for this period. Last year, runoff for the same period was 110 percent of average.

The **Sacramento Region 40–30–30 Water Supply Index** is forecast to be 5.9 assuming median meteorological conditions for the remainder of the year. This classifies the year as "dry" in the Sacramento Valley according to the State Water Resources Control Board.

SAN JOAQUIN RIVER AND TULARE LAKE REGIONS

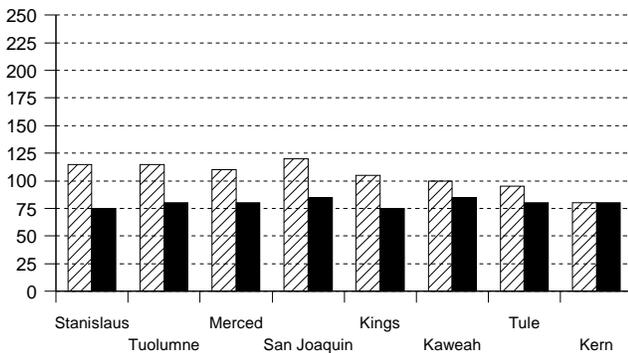
Snowpack Accumulation

Water Content in % of April 1 Average



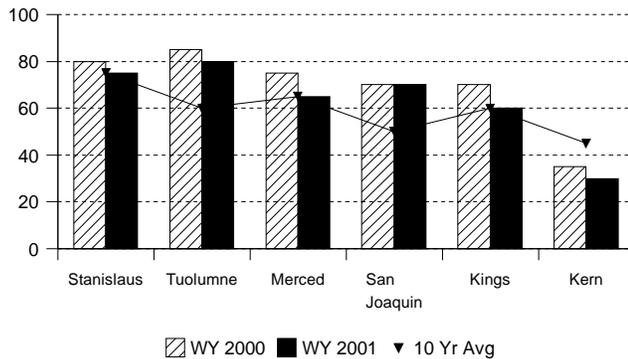
Precipitation

October 1 to date in % of Average



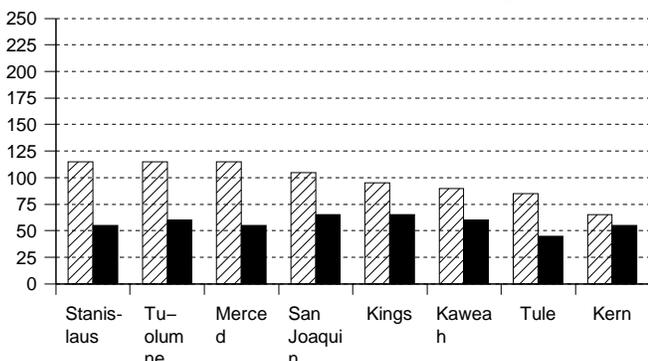
Reservoir Storage

Contents of major reservoirs in % of capacity



Runoff

October 1 to date in % of average



SNOWPACK– First of the month measurements made at 42 **San Joaquin Region** snow courses indicate an area wide snow water equivalent of 21.2 inches. This is 60 percent of the seasonal (April 1) average and 75 percent of the May 1 average. Last year at this time the pack was holding 21.9 inches of water.

At the same time 22 **Tulare Lake Region** snow courses indicated a basin-wide snow water equivalent of 10.9 inches which is 50 percent of the average for April 1 and 65 percent of May 1. Last year at this time the basin was holding 15.8 inches of water.

PRECIPITATION – Seasonal precipitation (October 1 through the end of last month) on the **San Joaquin Region** was 85 percent of normal. Precipitation last month was about 130 percent of the monthly average. Seasonal precipitation at this time last year stood at 115 percent of normal. Seasonal precipitation on the **Tulare Lake Region** was 85 percent of normal. Precipitation last month was about 175 percent of the monthly average. Seasonal precipitation at this time last year stood at 95 percent of normal.

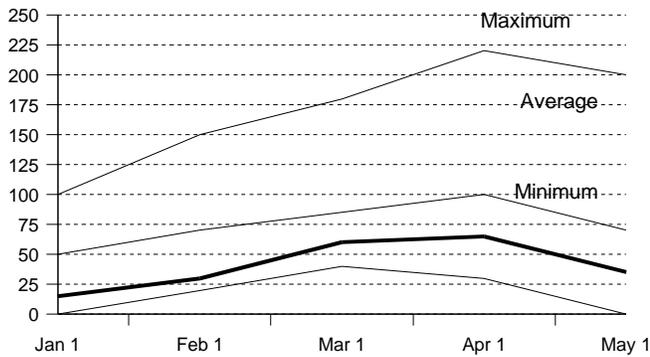
RESERVOIR STORAGE– First of the month storage in 34 **San Joaquin Region** reservoirs was 8.6 million acre-feet which is 115 percent of average. About 75 percent of available capacity was being used. Storage in these reservoirs at this time last year was 125 percent of average. First of the month storage in 6 **Tulare Lake Region** reservoirs was 1.1 million acre-feet which is 110 percent of average and about 50 percent of available capacity. Storage in these reservoirs at this time last year was 125 percent of average.

RUNOFF– Seasonal runoff of streams draining the **San Joaquin Region** totaled 1.9 million acre-feet which is 55 percent of average for this period. Last year, runoff for the same period was 110 percent of average. Seasonal runoff of streams draining the **Tulare Lake Basin** totaled 716 thousand acre-feet which is 60 percent of average for this period. Last year runoff for this same period was 85 percent of average.

The **San Joaquin Region 60–20–20 Water Supply Index** is forecast to be 2.4 assuming median meteorological conditions. This classifies the year as "dry" in the San Joaquin River Region according to the State Water Resources Control Board.

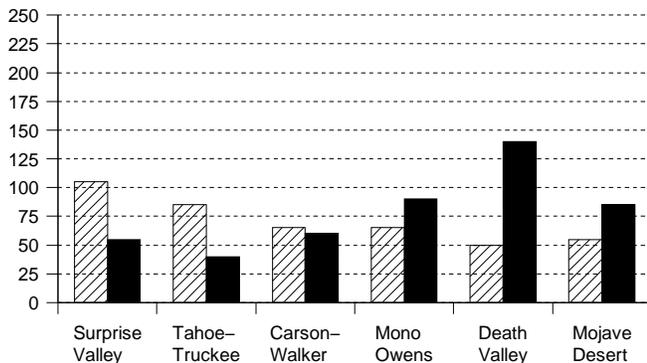
Snowpack Accumulation

Water Content in % of April 1 Average



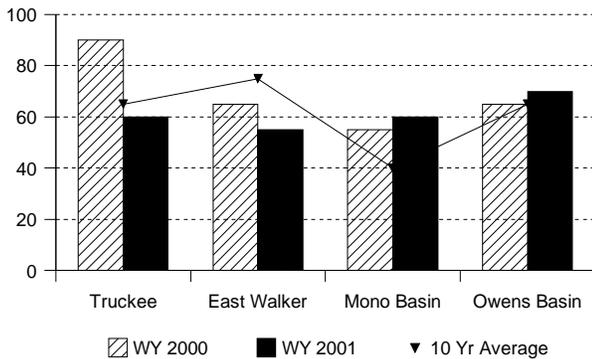
Precipitation

October 1 to date in % of Average



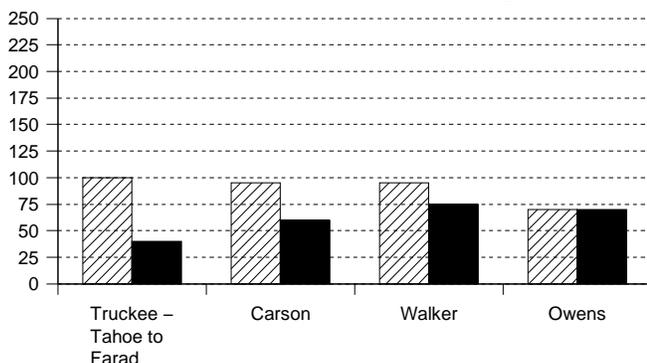
Reservoir Storage

Contents of major reservoirs in % of capacity



Runoff

October 1 to date in % of average



NORTH AND SOUTH LAHONTAN REGIONS

SNOWPACK— First of the month measurements made at 4 **North Lahontan Region** snow courses indicate an area wide snow water equivalent of 8.0 inches. This is 30 percent of the seasonal (April 1) average and 35 percent of the May 1 average. Last year at this time the pack was holding 15.5 inches of water. At the same time 2 **South Lahontan** snow courses indicated a basin-wide snow water equivalent of 11.7 inches which is 60 percent of the seasonal (April 1) average and 75 percent of the May 1 average. Last year at this time the basin was holding 7.8 inches of water.

PRECIPITATION — Seasonal precipitation (October 1 through the end of last month) on the **North Lahontan Region** was 50 percent of normal. Precipitation last month was about 130 percent of the monthly average. Seasonal precipitation at this time last year stood at 85 percent of normal. Seasonal precipitation on the **South Lahontan** was 105 percent of normal. Precipitation last month was about 75 percent of the monthly average. Seasonal precipitation at this time last year stood at 55 percent of normal.

RESERVOIR STORAGE— First of the month storage in 5 **North Lahontan** reservoirs was 640 thousand acre-feet which is 110 percent of average. About 60 percent of available capacity was being used. Storage in these reservoirs at this time last year was 165 percent of average. Lake Tahoe was 3.3 feet above its natural rim on May 1. First of the month storage in 8 **South Lahontan** reservoirs was 296 thousand acre-feet which is 115 percent of average and about 75 percent of available capacity. Storage in these reservoirs at this time last year was 105 percent of average.

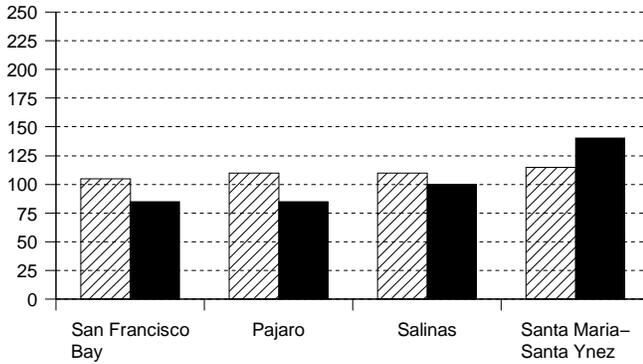
RUNOFF— Seasonal runoff of streams draining the **North Lahontan Region** totaled 224 thousand acre-feet which is 55 percent of average for this period. Last year, runoff for the same period was 95 percent of average.

Seasonal runoff of the Owens River in the **South Lahontan** totaled 54 thousand acre-feet which is 70 percent of average for this period. Last year runoff for this same period was 70 percent of average.

SAN FRANCISCO BAY AND CENTRAL COAST REGIONS

Precipitation

October 1 to date in % of Average

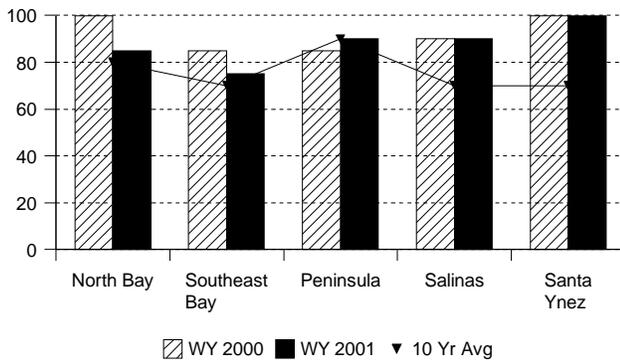


PRECIPITATION – Seasonal precipitation (October 1 through the end of last month) on the **San Francisco Bay Region** was 85 percent of normal. Precipitation last month was about 75 percent of the monthly average. Seasonal precipitation at this time last year stood at 110 percent of normal.

Seasonal precipitation on the **Central Coast Region** was 110 percent of normal. Precipitation last month was about 95 percent of the monthly average. Seasonal precipitation at this time last year stood at 115 percent of normal.

Reservoir Storage

Contents of major reservoirs in % of capacity

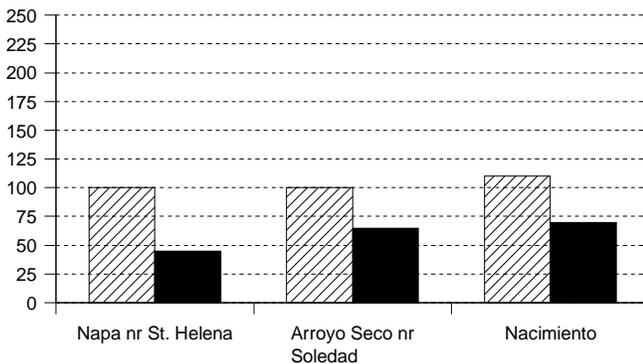


RESERVOIR STORAGE– First of the month storage in 18 **San Francisco Bay Region** reservoirs was 542 thousand acre–feet which is 105 percent of average. About 80 percent of available capacity was being used. Storage in these reservoirs at this time last year was 115 percent of average.

First of the month storage in 6 **Central Coast Region** reservoirs was 900 thousand acre–feet which is 135 percent of average and about 95 percent of available capacity. Storage in these reservoirs at this time last year was 135 percent of average.

Runoff

October 1 to date in % of average



RUNOFF– Seasonal runoff of the Napa River in the **San Francisco Bay Region** totaled 30 thousand acre–feet which is 45 percent of average for this period. Last year, runoff for the same period was 100 percent of average.

Seasonal runoff of streams draining the **Central Coast Region** totaled 214 thousand acre–feet which is 70 percent of average for this period. Last year runoff for this same period was 105 percent of average.

SOUTH COAST AND COLORADO RIVER REGIONS

PRECIPITATION – October through April (seasonal) precipitation on the **South Coast Region** was 95 percent of normal. April precipitation was 110 percent of the monthly average. Seasonal precipitation at this time last year was 70 percent of normal. Seasonal precipitation on the **Colorado River–Desert Region** was 160 percent of normal. Precipitation during April was 5 percent of average. Seasonal precipitation at this time last year stood at 20 percent of average.

RESERVOIR STORAGE – May 1 storage in 29 major **South Coast Region** reservoirs was 1.4 million acre–feet or 105 percent of average. About 70 percent of available capacity was being used. Storage in these reservoirs at this time last year was 110 percent of average. On May 1 combined storage in Lakes Powell, Mead, Mohave and Havasu was about 43 million acre–feet or about 107 percent of average. About 80 percent of available capacity was in use. Last year at this time, these reservoirs were storing 118 percent of average.

RUNOFF – Seasonal runoff from selected **South Coast Region** streams totaled 17 thousand acre–feet which is 35 percent of average. Seasonal runoff from these streams last year was 20 percent of average.

COLORADO RIVER

The April –July inflow to Lake Powell is forecast to be 5.6 million acre–feet, which is 72 percent of average. The May 1 snowpack in the Colorado River basin above Lake Powell was 78 percent of average, highest in the San Juan at 120 percent and lowest in the Green at 49 percent.

CENTRAL VALLEY PROJECT

As of April 30, 2001 CVP storage was 9.5 million acre–feet which is a decrease of 0.6 million acre feet compared to one year ago, and is approximately 112% of normal for that date.

The Bureau of Reclamation announced updated water allocations for the CVP contractors on April 16, 2001. Based on a conservative water supply forecast prepared from information available April 1, 2001, and a water year inflow into Shasta Reservoir of 3.7 million acre– feet, CVP water allocations were: Agricultural contractors North of Delta 60% and South of Delta 40%; Urban contractors North of Delta 85% and South of Delta 75%; Sacramento River water rights and San Joaquin Exchange Contractors 100%; Wildlife Refuges 100%; Friant Contractors will be 85 percent of Class 1 and 0 (zero) percent of Class 2. Updated allocations will be announced in mid–May. The forecast of CVP operations is available on the Mid–Pacific Region’s website at www.mp.usbr.gov.

STATE WATER PROJECT

Total storage in the major SWP reservoirs was about 3.78 MAF on April 30, 2001, compared with 4.7 MAF at this time in 2000. On April 30 storage at Lake Oroville was about 2.19 MAF as compared to about 3.1 MAF last year.

The State’s share of San Luis Reservoir storage at the end of April was 985 TAF, as compared to about 969 TAF at this time last year. The CVP share of San Luis Reservoir filled on January 28, 2001.

The combined storage of SWP’s southern reservoirs was about 604 TAF on April 30 as compared to 659 TAF at this time last year.

SWP water deliveries through April 2001 were about 531 TAF. This is a combination of project, transfer, and exchange waters. This was about 376 TAF less than the same period in 2000.

Due to the dry conditions in March the 2001 allocation for most long–term SWP contractors remained at 30% (1.33 MAF).

**MAJOR WATER DISTRIBUTION PROJECTS
RESERVOIR STORAGE**

(AVERAGES BASED ON 1946-95 OR PERIOD RECORD)

RESERVOIR	CAPACITY 1,000 AF	AVERAGE STORAGE 1,000 AF	2000 1,000 AF	STORAGE AT END OF April		
				2001 1,000 AF	PERCENT AVERAGE	PERCENT CAPACITY
<i>STATE WATER PROJECT</i>						
Lake Oroville	3,538	2,929	3,108	2,188	75%	62%
San Luis Reservoir (SWP)	1,062	981	969	985	100%	93%
Lake Del Valle	77	39	40	38	97%	49%
Lake Silverwood	73	68	71	70	102%	95%
Pyramid Lake	171	163	162	164	101%	96%
Castaic Lake	324	281	313	258	92%	80%
Perris Lake	131	117	113	112	96%	85%
<i>CENTRAL VALLEY PROJECT</i>						
Clair Engle Lake	2,448	2,018	2,319	1,963	97%	80%
Lake Shasta	4,552	4,009	4,153	4,020	100%	88%
Whiskeytown Lake	241	231	237	236	102%	98%
Folsom Lake	977	730	697	668	91%	68%
New Melones Reservoir	2,420	1,414	1,996	1,876	133%	78%
Millerton Lake	520	338	516	450	133%	87%
San Luis Reservoir (CVP)	971	879	907	926	105%	95%
<i>COLORADO RIVER PROJECT</i>						
Lake Mead	26,159	19,700	24,213	21,603	110%	83%
Lake Powell	25,002	17,875	20,674	18,821	105%	75%
Lake Mohave	1,810	1,635	1,697	1,734	106%	96%
Lake Havasu	619	592	576	594	100%	96%
<i>EAST BAY MUNICIPAL UTILITY DISTRICT</i>						
Pardee Reservoir	198	181	190	194	107%	98%
Camanche Reservoir	417	259	292	270	105%	65%
East Bay (4 res.)	151	132	135	136	103%	90%
<i>CITY AND COUNTY OF SAN FRANCISCO</i>						
Hetch-Hetchy Reservoir	360	151	203	217	144%	60%
Cherry Lake	268	138	225	183	132%	68%
Lake Eleanor	26	13	25	17	128%	66%
Souty Bay/Peninsula (4 res.)	225	176	205	194	110%	86%
<i>CITY OF LOS ANGELES (D.W.P.)</i>						
Lake Crowley	183	124	130	146	117%	80%
Grant Lake	48	23	37	38	163%	79%
Other Aqueduct Storage (6 res.)	95	75	68	64	85%	67%

TELEMETERED SNOW WATER EQUIVALENTS

May 1, 2001

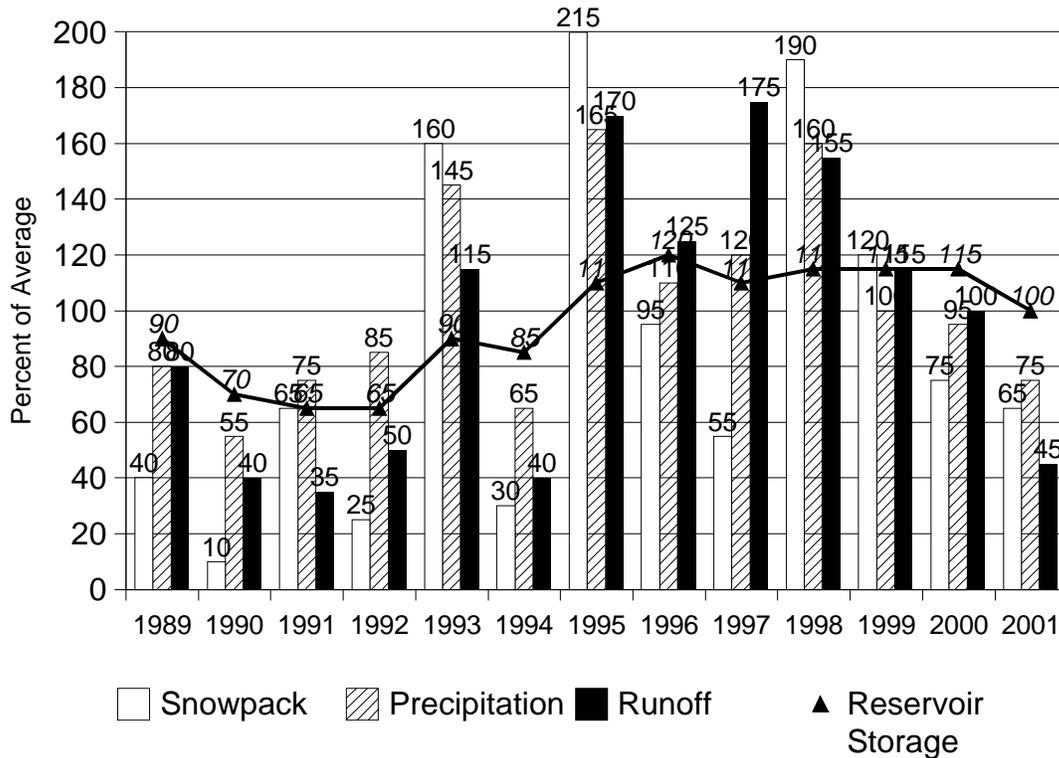
(AVERAGES BASED ON PERIOD RECORD)

BASIN NAME	ELEV	APRIL 1 AVERAGE	INCHES OF WATER EQUIVALENT			
			PERCENT May 1 OF AVERAGE	24 HRS PREVIOUS	1 WEEK PREVIOUS	
TRINITY RIVER						
Peterson Flat	7150'	29.2	7.1	24.4	9.0	15.9
Red Rock Mountain	6700'	39.6	—	—	—	—
Bonanza King	6450'	40.5	21.5	53.0	22.7	27.2
Shimmy Lake	6400'	40.3	—	—	—	—
Middle Boulder 3	6200'	28.3	14.6	51.4	15.9	19.8
Highland Lakes	6030'	29.9	9.2	30.9	10.8	24.0
Scott Mountain	5900'	16.0	7.8	48.7	8.8	15.6
Mumbo Basin	5650'	22.4	4.2	18.8	5.6	11.6
Big Flat	5100'	15.8	2.5	15.7	3.6	8.8
SACRAMENTO RIVER						
Cedar Pass	7100'	18.1	12.1	66.9	12.1	12.3
Blacks Mountain	7050'	12.7	0.0	0.0	0.0	3.6
Sand Flat	6750'	42.4	20.3	47.8	21.2	26.3
Medicine Lake	6700'	32.6	11.0	33.7	11.6	15.6
Adin Mountain	6200'	13.6	0.0	0.0	0.0	3.8
Snow Mountain	5950'	27.0	4.1	15.1	5.9	14.0
Slate Creek	5700'	29.0	25.8	89.0	26.4	35.3
Stouts Meadow	5400'	36.0	15.6	43.3	16.6	21.7
FEATHER RIVER						
Kettle Rock	7300'	25.5	1.3	5.2	3.0	9.5
Grizzly Ridge	6900'	29.7	4.2	14.1	6.0	11.8
Pilot Peak	6800'	52.6	8.9	16.9	10.9	18.6
Gold Lake	6750'	36.5	24.0	65.8	25.0	28.9
Humbug	6500'	28.0	23.8	84.9	25.9	31.7
Rattlesnake	6100'	14.0	0.0	0.0	0.0	5.9
Bucks Lake	5750'	44.7	30.2	67.7	31.7	39.4
Four Trees	5150'	20.0	6.8	34.2	9.0	19.3
EEL RIVER						
Noel Spring	5100'	—	0.0	—	0.0	0.0
YUBA & AMERICAN RIVERS						
Lake Lois	8600'	39.5	20.9	52.9	21.6	22.9
Schneiders	8750'	34.5	22.8	66.2	24.0	28.5
Caples Lake	8000'	30.9	11.8	38.1	12.7	16.8
Alpha	7600'	35.9	13.8	38.5	15.1	21.1
Forni Ridge	7600'	37.0	18.4	49.6	19.3	23.4
Meadow Lake	7200'	55.5	29.7	53.5	30.0	34.5
Silver Lake	7100'	22.7	0.7	3.2	2.5	8.8
Central Sierra Snow Lab	6900'	33.6	5.5	16.4	7.0	14.3
Huysink	6600'	42.6	19.7	46.2	21.0	24.0
Van Vleck	6700'	35.9	14.5	40.5	15.4	20.7
Robbs Saddle	5900'	21.4	8.0	37.4	9.2	14.8
Greek Store	5600'	21.0	12.0	57.1	13.2	19.6
Blue Canyon	5280'	9.0	—	—	—	—
Robbs Powerhouse	5150'	5.2	0.0	0.0	0.0	0.4
MOKELUMNE & STANISLAUS RIVERS						
Deadman Creek	9250'	37.2	17.3	46.5	17.8	20.0
Highland Meadow	8700'	47.9	26.1	54.6	26.6	27.0
Gianelli Meadow	8400'	55.5	28.6	51.5	29.2	32.0
Lower Relief Valley	8100'	41.2	21.4	51.9	22.0	26.0
Blue Lakes	8000'	33.1	19.8	59.8	20.3	22.5
Mud Lake	7900'	44.9	32.8	73.1	33.8	37.4
Stanislaus Meadow	7750'	47.5	22.2	46.7	23.4	28.7
Bloods Creek	7200'	35.5	12.8	36.2	14.0	19.1
Black Springs	6500'	32.0	19.1	59.6	20.0	24.2
TUOLUMNE & MERCED RIVERS						
Dana Meadows	9800'	27.7	11.8	42.5	12.4	16.3
Slide Canyon	9200'	41.1	24.9	60.6	25.5	29.5
Lake Tenaya	8150'	33.1	16.1	48.6	17.4	22.0
Tuolumne Meadows	8600'	22.6	5.9	26.0	6.7	10.9
Horse Meadow	8400'	48.6	23.6	48.5	24.9	27.5
Ostrander Lake	8200'	34.8	22.2	63.8	22.9	26.1
Paradise Meadow	7650'	41.3	—	—	—	—
Gin Flat	7050'	34.2	19.4	56.8	20.6	25.1
Lower Kibbie Ridge	6700'	27.4	5.8	21.0	7.7	12.3

BASIN NAME	ELEV	APRIL 1 AVERAGE	INCHES OF WATER EQUIVALENT			
			PERCENT May 1 OF AVERAGE	24 HRS PREVIOUS	1 WEEK PREVIOUS	
SAN JOAQUIN RIVER						
Volcanic Knob	10050'	30.1	15.7	52.1	17.0	19.6
Agnew Pass	9450'	32.3	8.2	25.5	11.0	14.1
Kaiser Point	9200'	37.8	11.1	29.3	12.3	16.2
Green Mountain	7900'	30.8	7.3	23.8	8.3	14.0
Tamarack Summit	7550'	30.5	13.4	44.1	14.8	20.8
Chilkoot Meadow	7150'	38.0	29.2	76.7	30.6	35.6
Huntington Lake	7000'	20.1	8.8	43.6	9.8	15.4
Graveyard Meadow	6900'	18.8	10.1	53.6	11.2	16.1
Poison Ridge	6900'	28.9	16.6	57.3	18.2	26.0
KINGS RIVER						
Bishop Pass	11200'	34.0	22.6	66.5	23.3	25.9
Charlotte Lake	10400'	27.5	13.0	47.3	13.8	16.8
State Lakes	10300'	29.0	12.1	41.7	12.9	16.1
Mitchell Meadow	9900'	32.9	26.6	80.9	26.8	27.3
Blackcap Basin	10300'	34.3	24.2	70.5	24.2	24.8
Upper Burnt Corral	9700'	34.6	26.0	75.1	26.0	26.6
West Woodchuck Meadow	9100'	32.8	12.2	37.2	13.3	17.6
Big Meadows	7600'	25.9	18.2	70.4	19.2	22.7
KAWEAH & TULE RIVERS						
Farewell Gap	9500'	34.5	27.0	78.3	27.7	32.5
Quaking Aspen	7200'	21.0	2.2	10.3	3.7	8.9
Giant Forest	6650'	10.0	0.0	0.0	0.8	7.8
KERN RIVER						
Upper Tyndall Creek	11400'	27.7	14.1	50.9	14.5	16.9
Crabtree Meadow	10700'	19.8	8.7	43.9	9.2	11.2
Chagoopa Plateau	10300'	21.8	10.2	46.9	10.9	14.2
Pascoes	9150'	24.9	14.0	56.2	15.2	18.4
Tunnel Guard Station	8900'	15.6	0.0	0.0	0.0	0.0
Wet Meadows	8950'	30.3	9.3	30.7	10.7	14.5
Casa Vieja Meadows	8300'	20.9	6.6	31.5	7.2	11.2
Beach Meadows	7650'	11.0	0.0	0.0	0.0	1.7
SURPRISE VALLEY AREA						
Dismal Swamp	7050'	29.2	15.4	52.7	16.2	20.4
TRUCKEE RIVER						
Mount Rose Ski Area	8900'	38.5	15.6	40.5	16.0	19.2
Independence Lake	8450'	41.4	23.8	57.5	24.1	25.7
Big Meadows	8700'	25.7	0.5	1.9	1.6	6.4
Squaw Valley	8200'	46.5	21.0	45.2	23.1	28.8
Independence Camp	7000'	21.8	0.0	0.0	0.0	4.2
Independence Creek	6500'	12.7	0.0	0.0	0.0	2.2
Truckee 2	6400'	14.3	0.0	0.0	0.0	3.0
LAKE TAHOE BASIN						
Heavenly Valley	8800'	28.1	5.4	19.2	7.2	11.7
Hagans Meadow	8000'	16.5	0.0	0.0	0.0	2.4
Marlette Lake	8000'	21.1	5.1	24.2	6.1	9.9
Echo Peak 5	7800'	39.5	10.2	25.8	11.8	18.7
Rubicon Peak 2	7500'	29.1	11.2	38.5	12.2	15.9
Tahoe City Cross	6750'	16.0	0.0	0.0	0.0	0.0
Ward Creek 3	6750'	39.4	12.5	31.7	14.0	20.8
Fallen Leaf Lake	6250'	7.0	0.0	0.0	0.0	0.0
CARSON RIVER						
Ebbetts Pass	8700'	38.8	19.8	51.0	21.6	25.7
Poison Flat	7900'	16.2	11.0	67.9	12.7	17.2
Monitor Pass	8350'	—	1.2	—	2.5	8.3
Spratt Creek	6150'	4.5	0.0	0.0	0.0	0.0
WALKER RIVER						
Leavitt Lake	9600'	—	42.2	—	42.2	43.7
Virginia Lakes	9300'	20.3	10.6	52.2	11.2	12.8
Loddell Lake	9200'	17.3	3.8	22.0	4.8	8.9
Sonora Pass Bridge	8750'	26.0	16.0	61.5	16.9	20.2
Leavitt Meadows	7200'	8.0	0.0	0.0	0.0	0.6
OWENS RIVER/MONO LAKE						
Gem Pass	10750'	31.7	20.1	63.3	20.7	24.7
Sawmill	10200'	19.4	8.2	42.0	8.8	10.1
Cottonwood Lakes	10150'	11.6	12.4	106.9	12.9	15.3
Big Pine Creek	9800'	17.9	9.7	54.1	10.3	12.9
South Lake	9600'	16.0	8.9	55.9	9.5	12.8
Mammoth Pass	9300'	42.4	25.8	60.8	26.5	28.9
Rock Creek Lakes	10000'	14.0	0.0	0.0	0.0	4.1

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%	

May 1 Statewide Conditions



SNOWLINES

Next year's annual meeting of the Western Snow Conference will be hosted by the South Continental Region. It will be held May 20–23, 2002 at Silver Creek Resort, a scenic 90 minute drive from Denver, CO. It is a little later this coming year and right before Memorial Day weekend. Mark your calendars now for this enlightening and informative meeting. For further information regarding the Western Snow Conference contact Frank Gehrke at 916–574–2635 or gridley@water.ca.gov Information is available on the web at <http://snobear.colorado.edu/WSC/WSC.html>. Also appearing at this web site are last meeting's papers as they become available.

Depicted on this months cover; is the Navy Search and Rescue helicopter based at Lemoore Naval Air Station following a deep snow landing. (Photo by Dave Hart)

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 1946-1995 (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 1946-1995. For more details contact California Cooperative Snow Surveys, P.O. Box 942836, Sacramento, CA 94236-0001, (916) 574-2635 or gridley@water.ca.gov.

INDICES OF WATER AVAILABILITY

The Sacramento River Hydrologic Region 40-30-30 Water Supply Index. The values 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 values 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.

Runoff of the eight major rivers of the Sacramento and San Joaquin Regions is the sum of the runoff in the eight major rivers used in the two above indices.

State of California – The Resources Agency
DEPARTMENT OF WATER RESOURCES
P.O. Box 942836
Sacramento, CA 94236-0001

First Class

