

California Cooperative
Snow Surveys
Bulletin 120-4-07

State of California
The Resources Agency

Department of
Water Resources

Water Conditions in California

Report 4 May 1, 2007



Arnold Schwarzenegger
Governor
State of California

Mike Chrisman
Secretary for Resources
The Resources Agency

Lester A. Snow
Director
Department of Water Resources

STATE OF CALIFORNIA
Arnold Schwarzenegger, Governor

THE RESOURCES AGENCY
Mike Chrisman, Secretary for Resources

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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 River Exchange Contractors Water Authority
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 Project 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, 2007

April was disappointing due to lower than average precipitation in the Sacramento, San Joaquin, and Tulare Lake basins. All major rivers of the state registered less than 65 percent of normal April runoff and the Water Year-to-date statewide average dropped to near 55 percent of normal. At least 13 major rivers measured less than 50 percent of normal April flows. Consequently, most water users will be using carryover surface or ground water storage to meet water demands this year. Reservoir storage is at or above average, benefiting from last year's heavy runoff.

Forecasts of April through July runoff are 45 percent of average, ranging from 50 percent in the North Coast region to 35 percent in the Tulare Lake region. Water year forecasts are slightly higher at 50 percent.

Snowpack water content on May 1 is only 25 percent of average for the date and 20 percent of the April 1 average, which is the normal date of maximum accumulation. This is a loss of 15 percentage points during April. Last year the snowpack on May 1 was 185 percent of average.

Precipitation from October through April was about 60 percent of average compared to 135 percent one year ago. The range is from 30 percent in the dry South Lahontan region to 85 percent in the North Coast region. April statewide precipitation was 75 percent of average.

Runoff has been about 55 percent of average so far this season compared to 175 percent last year. Runoff during April was 50 percent of average. Estimated runoff of the 8 major rivers of the Sacramento and San Joaquin River regions was 1.7 million acre-feet during April.

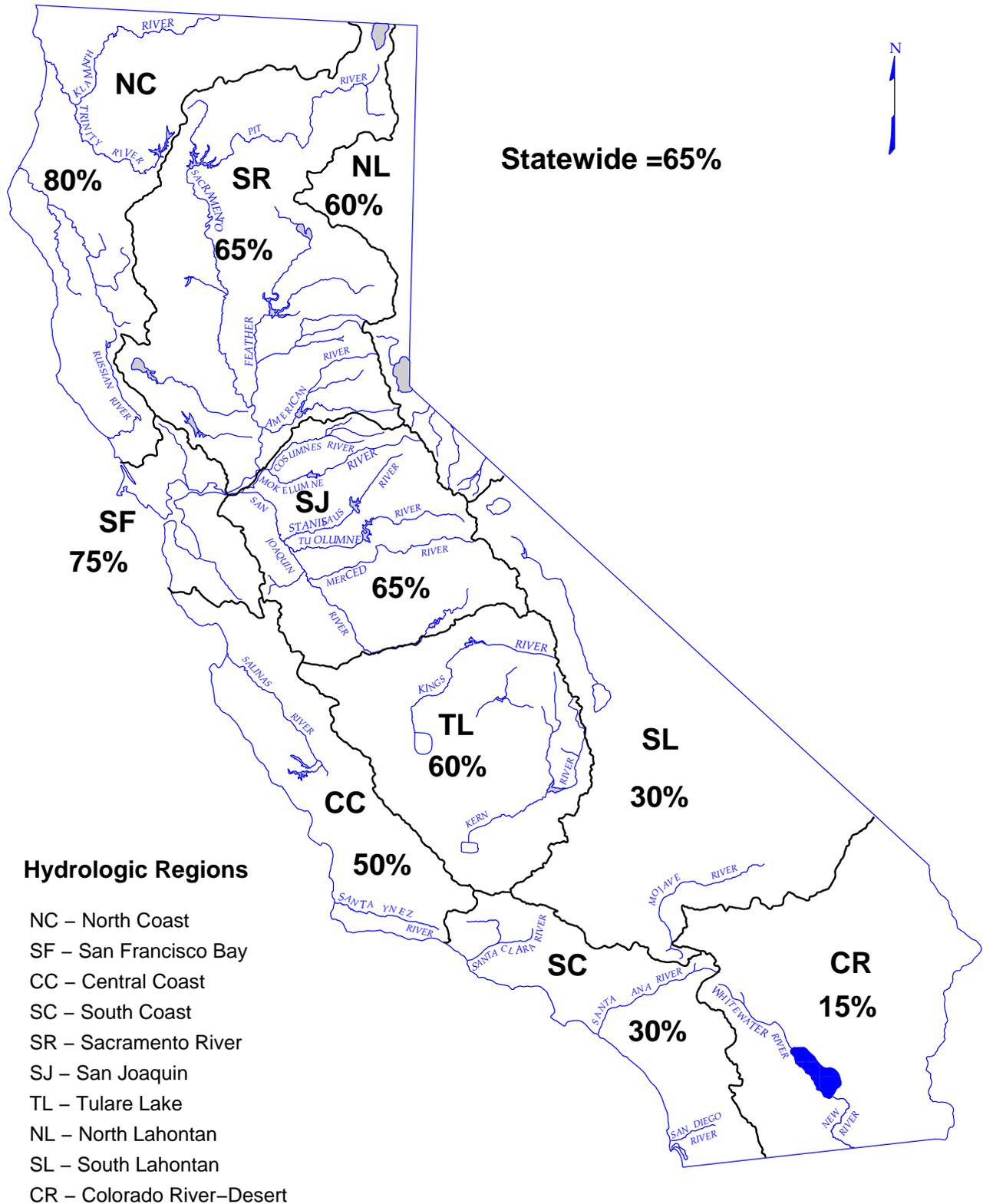
Reservoir storage remains above average for May 1 at 105 percent of average compared to 115 percent last year. About 85 percent of total capacity was being used on May 1.

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	80	30	100	60	50	55
SAN FRANCISCO BAY	75	--	90	30	--	--
CENTRAL COAST	50	--	105	10	--	--
SOUTH COAST	30	--	85	20	--	--
SACRAMENTO RIVER	65	30	105	55	45	55
SAN JOAQUIN RIVER	65	30	110	55	40	45
TULARE LAKE	60	20	105	50	35	40
NORTH LAHONTAN	60	25	130	70	40	50
SOUTH LAHONTAN	30	5	115	95	50	55
COLORADO RIVER-DESERT	15	--	--	--	--	--
STATEWIDE	65	25	105	55	45	50

**DEPARTMENT OF WATER RESOURCES
CALIFORNIA COOPERATIVE SNOW SURVEYS
SEASONAL PRECIPITATION**

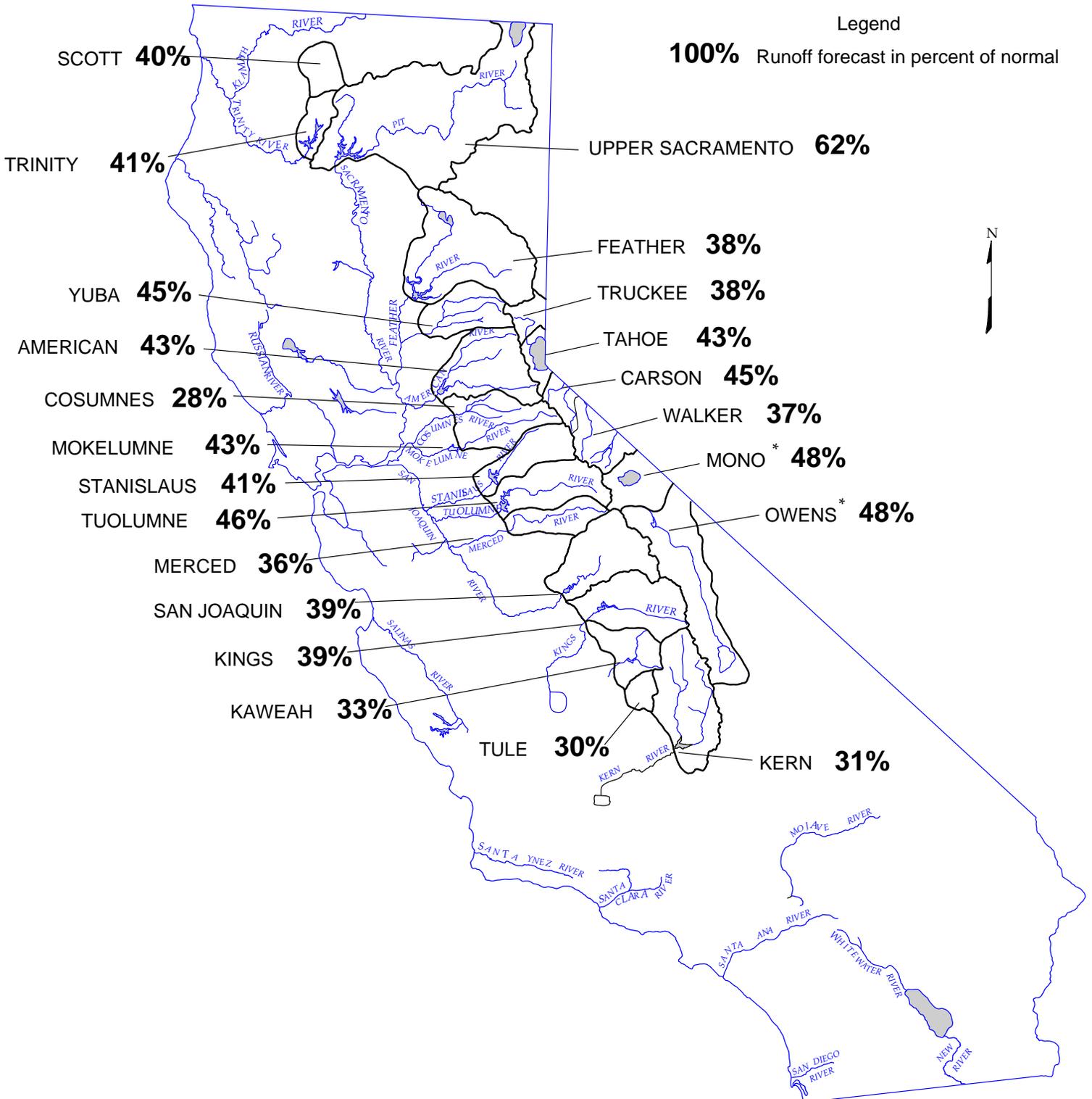
IN PERCENT OF AVERAGE TO DATE
October 1, 2006 through April 30, 2007



WATER YEAR IS OCTOBER 1 THROUGH SEPTEMBER 30

**DEPARTMENT OF WATER RESOURCES
CALIFORNIA COOPERATIVE SNOW SURVEYS
FORECAST OF APRIL – JULY
UNIMPAIRED SNOWMELT RUNOFF**

May 1, 2007



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

**MAY 1, 2007 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 Delta above Shasta Lake	298	711	39	140	47%	
McCloud River above Shasta Lake	392	850	185	260	66%	
Pit River near Montgomery Creek + Squaw Creek	1,066	2,098	480	690	65%	
Total Inflow to Shasta Lake	1,819	3,525	726	1,120	62%	900 - 1,420
Sacramento River above Bend Bridge, near Red Bluff	2,494	5,075	943	1,430	57%	1,180 - 1,820
Feather River						
Feather River at Lake Almanor near Prattville (3)	333	675	120	150	45%	
North Fork at Pulga (3)	1,028	2,416	243	390	38%	
Middle Fork near Clio (4)	86	518	4	35	41%	
South Fork at Ponderosa Dam (3)	110	267	13	40	36%	
Feather River at Oroville	1,782	4,676	392	670	38%	570 - 920
Yuba River						
North Yuba below Goodyears Bar (3)	286	647	51	120	42%	
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 near Smartville plus Deer Creek	1,006	2,424	200	450	45%	360 - 580
American River						
North Fork at North Fork Dam (3)	262	716	43	110	42%	
Middle Fork near Auburn (3)	522	1,406	100	220	42%	
Silver Creek Below Camino Diversion Dam (3)	173	386	37	70	40%	
American River below Folsom Lake	1,240	3,074	229	530	43%	430 - 670
SAN JOAQUIN RIVER						
Cosumnes River at Michigan Bar	126	363	8	35	28%	20 - 65
Mokelumne River						
North Fork near West Point (5)	437	829	104	190	43%	
Total Inflow to Pardee Reservoir	461	1,065	102	200	43%	160 - 270
Stanislaus River						
Middle Fork below Beardsley Dam (3)	334	702	64	130	39%	
North Fork Inflow to McKays Point Dam (3)	224	503	34	80	36%	
Stanislaus River below Goodwin Reservoir (7)	702	1,710	116	290	41%	230 - 400
Tuolumne River						
Cherry Creek & Eleanor Creek near Hetch Hetchy (3)	322	727	97	150	47%	
Tuolumne River near Hetch Hetchy (3)	606	1,392	153	290	48%	
Tuolumne River below La Grange Reservoir (7)	1,220	2,682	301	560	46%	440 - 710
Merced River						
Merced River at Pohono Bridge (3)	362	888	80	140	39%	
Merced River below Merced Falls (7)	632	1,587	123	230	36%	180 - 320
San Joaquin River						
San Joaquin River at Mammoth Pool (6)	1,014	2,279	235	410	40%	
Big Creek below Huntington Lake (6)	95	264	11	30	32%	
South Fork near Florence Lake (6)	202	511	58	90	45%	
San Joaquin River inflow to Millerton Lake	1,254	3,355	262	490	39%	390 - 640
TULARE LAKE						
Kings River						
North Fork Kings River near Cliff Camp (3)	239	565	50	90	38%	
Kings River below Pine Flat Reservoir	1,224	3,113	274	480	39%	380 - 580
Kaweah River below Terminus Reservoir	286	814	62	95	33%	75 - 135
Tule River below Lake Success	64	259	2	19	30%	14 - 32
Kern River						
Kern River near Kernville (3)	373	1,203	83	120	32%	
Kern River inflow to Lake Isabella	461	1,657	84	145	31%	115 - 200

(1) See inside back cover for definition

(2) All 50 year averages are based on years 1956-2005 unless otherwise noted

(3) 50 year average based on years 1941-90

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

(5) 36 year average based on years 1936-72

(6) 45 year average based on years 1936-81

MAY 1, 2007 FORECASTS
WATER YEAR UNIMPAIRED RUNOFF

Unimpaired Runoff in 1,000 Acre-Feet (1)													
HISTORICAL			DISTRIBUTION								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)
887	1,965	165											
1,217	2,353	557											
3,159	5,150	1,484											
6,107	10,796	2,479	1,330	610	545	345	340	235	200	340	3,945	65%	3,645 - 4,325
8,907	17,180	3,294	1,880	910	675	440	430	315	245	385	5,280	59%	4,965 - 5,865
780	1,269	366											
2,417	4,400	666											
219	637	24											
291	562	32											
4,620	9,492	994	685	460	435	310	180	105	80	125	2,380	52%	2,235 - 2,705
564	1,056	102											
181	292	30											
379	565	98											
2,373	4,926	369	265	250	240	205	175	55	20	20	1,230	52%	1,125 - 1,380
616	1,234	66											
1,070	2,575	144											
318	705	59											
2,719	6,382	349	210	260	285	250	200	65	15	4	1,289	47%	1,180 - 1,445
390	1,253	20	25	35	39	21	11	3	1	0	135	35%	110 - 150
626	1,009	197											
755	1,800	129	55	45	80	85	90	20	5	3	383	51%	340 - 460
471	929	88											
1,171	2,952	155	85	80	110	125	130	30	5	5	570	49%	500 - 690
461	1,147	123											
770	1,661	258											
1,951	4,631	383	85	95	145	175	250	115	20	10	895	46%	770 - 1,070
461	1,020	92											
1,007	2,787	150	40	40	60	90	100	35	10	2	377	37%	320 - 470
1,337	2,964	308											
112	298	14											
248	653	71											
1,836	4,642	362	85	45	100	135	205	115	35	20	740	40%	630 - 920
284	607	58											
1,721	4,287	386	85	35	95	145	200	110	25	20	715	42%	640 - 870
454	1,402	94	23	12	28	37	38	16	4	3	161	35%	140 - 210
148	615	16	11	6	9	8	7	3	1	0	45	30%	45 - 65
558	1,577	163											
730	2,318	175	75	20	35	35	55	40	15	20	295	40%	260 - 360

* Unimpaired runoff in prior months based on measured flows

(7) Forecast point names based on USGS gage names. Stanislaus below Goodwin also known as inflow to New Melones, Tuolumne River below La Grange also known as inflow to Don Pedro, Merced River below Merced Falls also known as inflow to McClure.

**MAY 1, 2007 FORECASTS
APRIL-JULY UNIMPAIRED RUNOFF**

HYDROLOGIC REGION and Watershed	Apr-Jul 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 Trinity River at Lewiston Lake (3)	654	1,593	80	270	41%
Scott River Scott River near Fort Jones (6)	200	400	30	80	40%
Klamath River Total inflow to Upper Klamath Lake (4)	515	939	149	355	69%

NORTH LAHONTAN

Truckee River Lake Tahoe to Farad accretions	261	713	52	100	38%
Lake Tahoe Rise (assuming gates closed, ft),(6)	1.4	5.4	0.2	0.6	43%
Carson River West Fork Carson River at Woodfords	54	135	12	24	44%
East Fork Carson River near Gardnerville	187	407	43	85	45%
Walker River West Walker River below Little Walker, near Coleville	154	330	35	64	42%
East Walker River near Bridgeport	64	209	7	17	27%

SOUTH LAHONTAN

Owens River Total tributary flow to Owens River (5)	235	579	96	114	48%
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**MAY 1, 2007 FORECASTS
WATER YEAR UNIMPAIRED RUNOFF**

HYDROLOGIC REGION and Watershed	Water Year Unimpaired Runoff in 1,000 Acre-Feet (1)					
	HISTORICAL			FORECAST		
	50 Yr Avg (2)	Max of Record	Min of Record	Water Year Forecasts	Pct of Avg	80 % Probability Range (1)

NORTH COAST

Trinity River Trinity River at Lewiston Lake (3)	1,398	2,990	200	780	56%	725 - 935
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(1) See inside back cover for definition

(2) All 50 year averages are based on years 1956-2005 unless otherwise noted

(3) Forecast by DWR and the National Weather Service California-Nevada River Forecast Center.

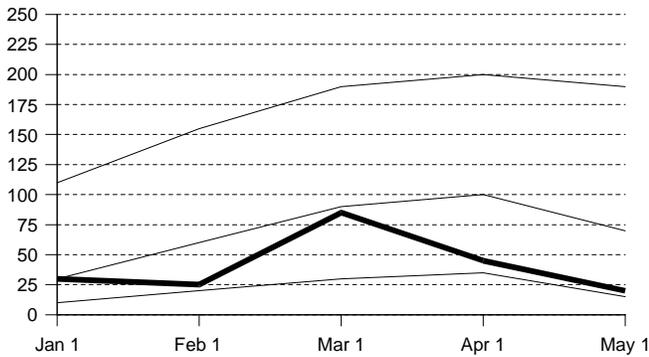
(4) Forecast by U.S. Natural Resources Conservation Service and National Weather Service California-Nevada River Forecast Center, April through September forecast, 30 year average based on years 1971-2000.

(5) Forecast by Department of Water and Power, City of Los Angeles, average based on years 1951-2000.

(6) 50 Yr Avg is for 1951-2000

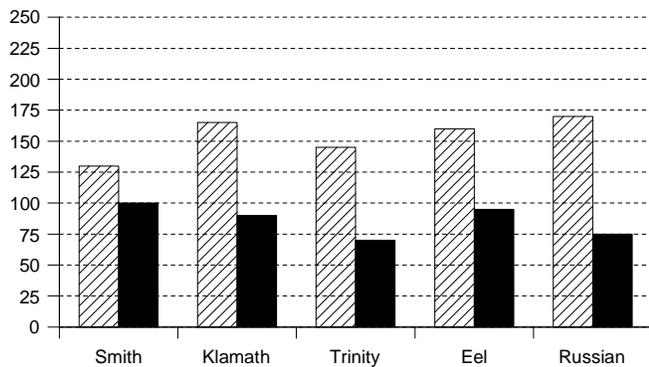
Snowpack Accumulation

Water Content in % of April 1 Average



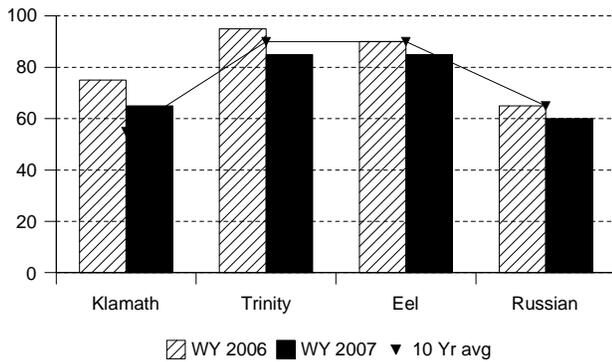
Precipitation

October 1 to date in % of Average



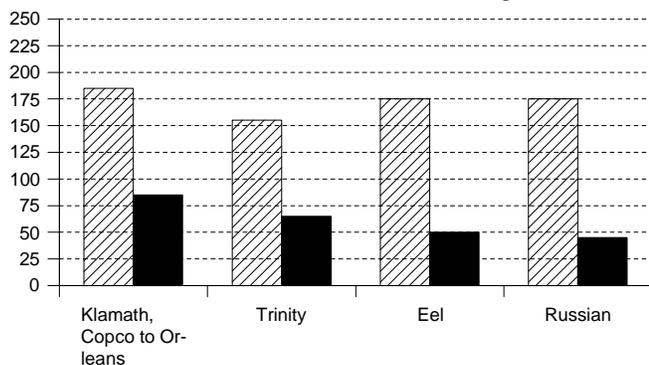
Reservoir Storage

Contents of major reservoirs in % of capacity



Runoff

October 1 to date in % of average



NORTH COAST REGION

SNOWPACK- First of the month measurements made at 10 snow courses indicate an area wide snow water equivalent of 8.1 inches. This is 20 percent of the seasonal April 1 average and 30 percent of the May 1 average. Last year at this time the pack was holding 55 inches of water.

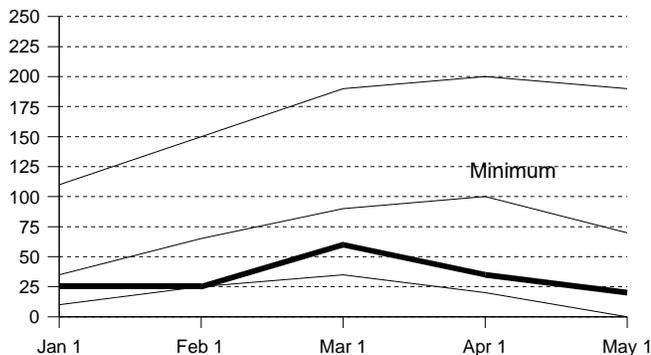
PRECIPITATION - Seasonal precipitation (October 1 through the end of last month) on this area was 80 percent of normal. Precipitation last month was about 95 percent of the monthly average. Seasonal precipitation at this time last year stood at 155 percent of normal.

RESERVOIR STORAGE- First of the month storage in 6 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- Seasonal runoff of streams draining the area totaled 6.9 million acre-feet which is 60 percent of the average for this period. Last year, runoff for the same period was 175 percent of average.

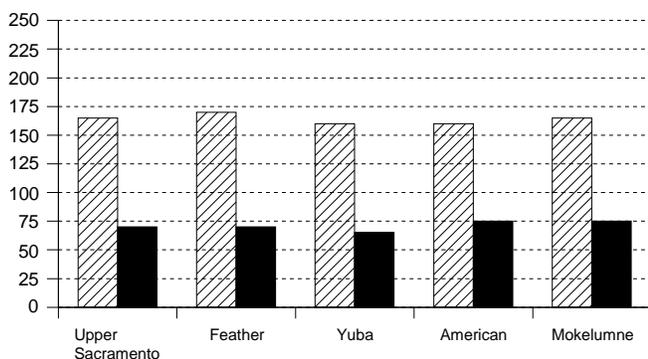
Snowpack Accumulation

Water Content in % of April 1 Average



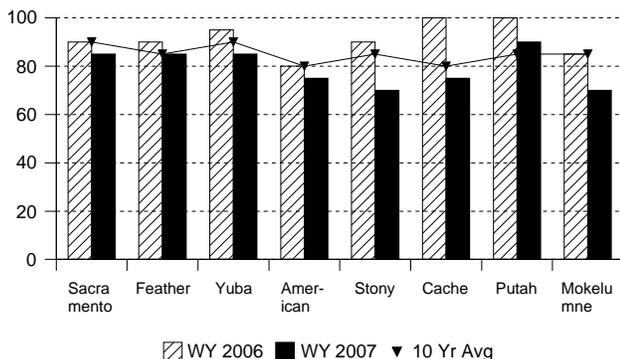
Precipitation

October 1 to date in % of Average



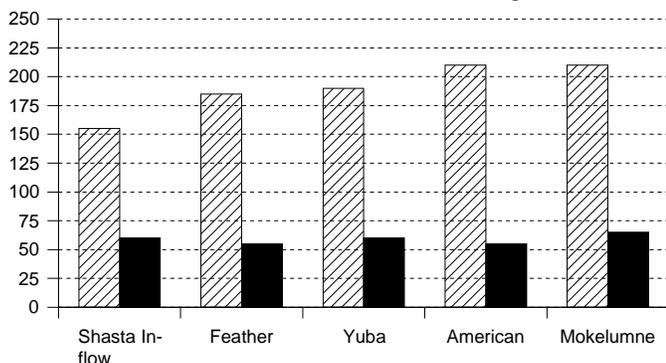
Reservoir Storage

Contents of major reservoirs in % of capacity



Runoff

October 1 to date in % of average



SACRAMENTO RIVER REGION

SNOWPACK- First of the month measurements made at 69 snow courses indicate an area wide snow water equivalent of 8.4 inches. This is 20 percent of the seasonal April 1 average and 30 percent of the May 1 average. Last year at this time the pack was holding 41.7 inches of water.

PRECIPITATION - Seasonal precipitation (October 1 through the end of last month) on this area was 65 percent of normal. Precipitation last month was about 80 percent of the monthly average. Seasonal precipitation at this time last year stood at 160 percent of normal.

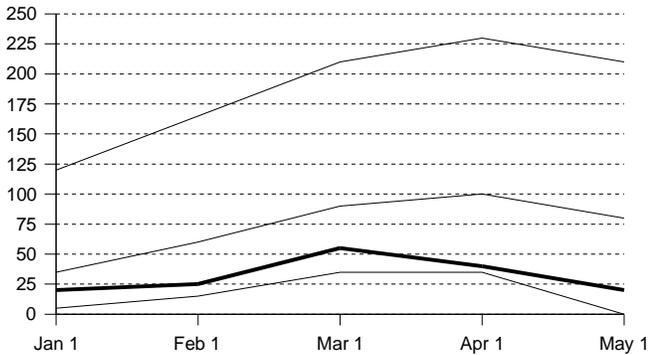
RESERVOIR STORAGE- First of the month storage in 43 reservoirs was 13.5 million acre-feet which is 105 percent of average. About 85 percent of available capacity was being used. Storage in these reservoirs at this time last year was 110 percent of average.

RUNOFF - Seasonal runoff of streams draining the area totaled 7.8 million acre-feet which is 55 percent of average for this period. Last year, runoff for the same period was 180 percent of average.

The **Sacramento Region 40-30-30 Water Supply Index** is forecast to be 6.2 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.

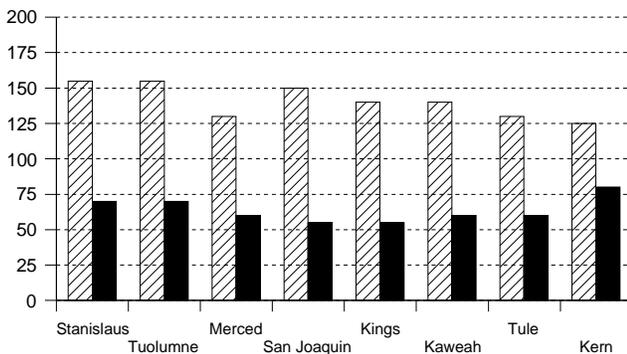
Snowpack Accumulation

Water Content in % of April 1 Average



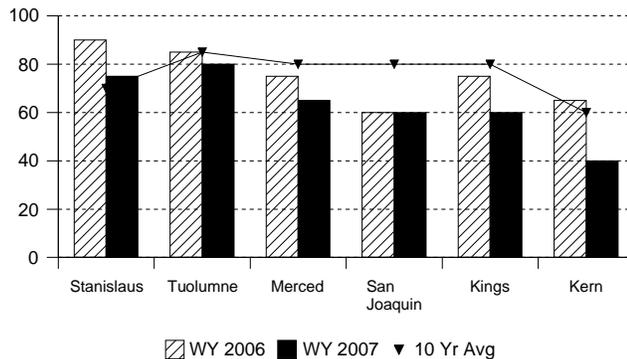
Precipitation

October 1 to date in % of Average



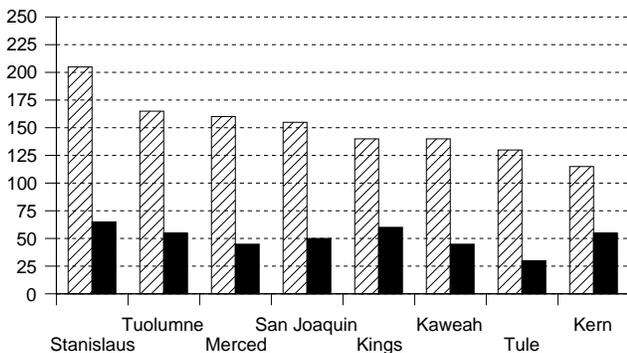
Reservoir Storage

Contents of major reservoirs in % of capacity



Runoff

October 1 to date in % of average



SAN JOAQUIN RIVER AND TULARE LAKE REGIONS

SNOWPACK- First of the month measurements made at 51 **San Joaquin Region** snow courses indicate an area wide snow water equivalent of 10.0 inches. This is 25 percent of the seasonal (April 1) average and 30 percent of the May 1 average. Last year at this time the pack was holding 51.4 inches of water. At the same time 31 **Tulare Lake Region** snow courses indicated a basin-wide snow water equivalent of 4.6 inches which is 15 percent of the average for April 1 and 20 percent of May 1. Last year at this time the basin was holding 34.9 inches of water.

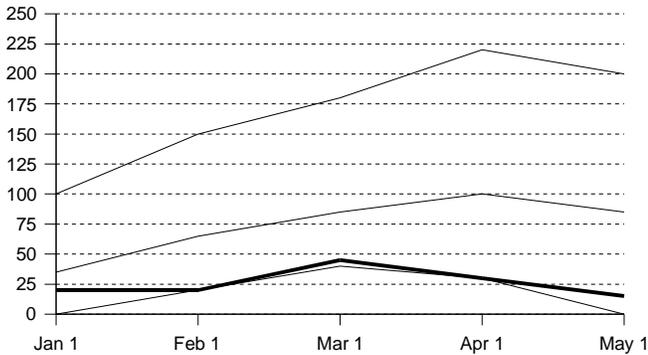
PRECIPITATION - Seasonal precipitation (October 1 through the end of last month) on the **San Joaquin Region** was 65 percent of normal. Precipitation last month was about 65 percent of the monthly average. Seasonal precipitation at this time last year stood at 145 percent of normal. Seasonal precipitation on the **Tulare Lake Region** was 60 percent of normal. Precipitation last month was about 70 percent of the monthly average. Seasonal precipitation at this time last year stood at 130 percent of normal.

RESERVOIR STORAGE- First of the month storage in 34 **San Joaquin Region** reservoirs was 8.4 million acre-feet which is 110 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 105 percent of average and about 55 percent of available capacity. Storage in these reservoirs at this time last year was 145 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 180 percent of average. Seasonal runoff of streams draining the **Tulare Lake Basin** totaled 668 thousand acre-feet which is 50 percent of average for this period. Last year runoff for this same period was 135 percent of average. The **San Joaquin Region 60-20-20 Water Supply Index** is forecast to be 1.9 assuming 75 percent of median meteorological conditions. This classifies the year as "critical" in the San Joaquin River Region according to the State Water Resources Control Board.

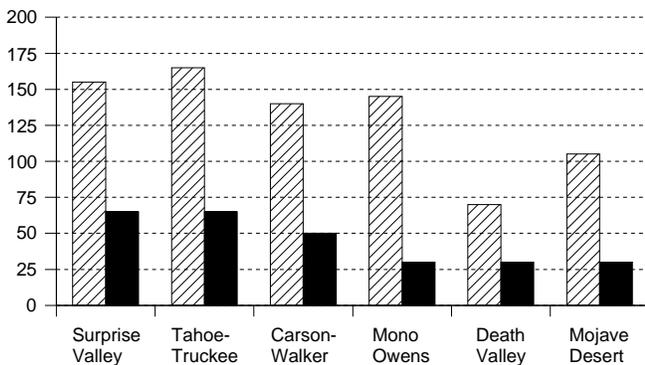
Snowpack Accumulation

Water Content in % of April 1 Average



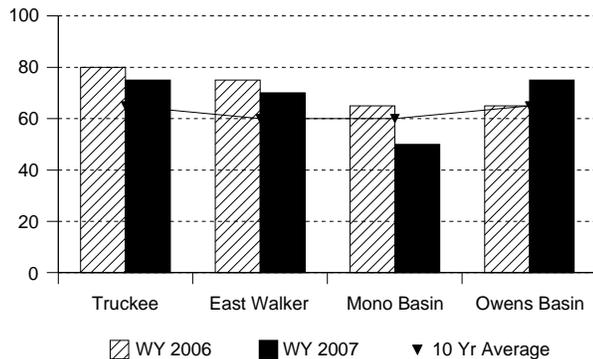
Precipitation

October 1 to date in % of Average



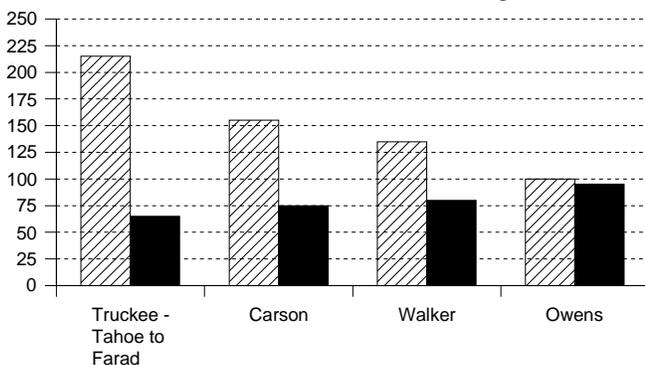
Reservoir Storage

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 5 **North Lahontan Region** snow courses indicate an area wide snow water equivalent of 5.9 inches. This is 20 percent of the seasonal (April 1) average and 25 percent of the May 1 average. Last year at this time the pack was holding 35.2 inches of water. At the same time 2 **South Lahontan** snow courses indicated a basin-wide snow water equivalent of .8 inches which is 5 percent of the seasonal (April 1) average and 5 percent of the May 1 average. Last year at this time the basin was holding 20.1 inches of water.

PRECIPITATION - Seasonal precipitation (October 1 through the end of last month) on the **North Lahontan Region** was 60 percent of normal. Precipitation last month was about 110 percent of the monthly average. Seasonal precipitation at this time last year stood at 155 percent of normal. Seasonal precipitation on the **South Lahontan** was 30 percent of normal. Precipitation last month was about 60 percent of the monthly average. Seasonal precipitation at this time last year stood at 105 percent of normal.

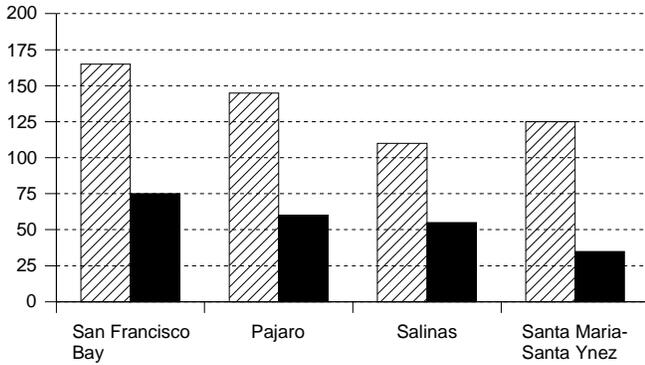
RESERVOIR STORAGE- First of the month storage in 5 **North Lahontan** reservoirs was 778 thousand acre-feet which is 130 percent of average. About 75 percent of available capacity was being used. Storage in these reservoirs at this time last year was 135 percent of average. Lake Tahoe was 4.5 feet above its natural rim on May 1. First of the month storage in 8 **South Lahontan** reservoirs was 298 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 110 percent of average.

RUNOFF- Seasonal runoff of streams draining the **North Lahontan Region** totaled 300 thousand acre-feet which is 70 percent of average for this period. Last year, runoff for the same period was 180 percent of average. Seasonal runoff of the Owens River in the **South Lahontan** totaled 74 thousand acre-feet which is 95 percent of average for this period. Last year runoff for this same period was 100 percent of average.

SAN FRANCISCO BAY AND CENTRAL COAST REGIONS

Precipitation

October 1 to date in % of Average

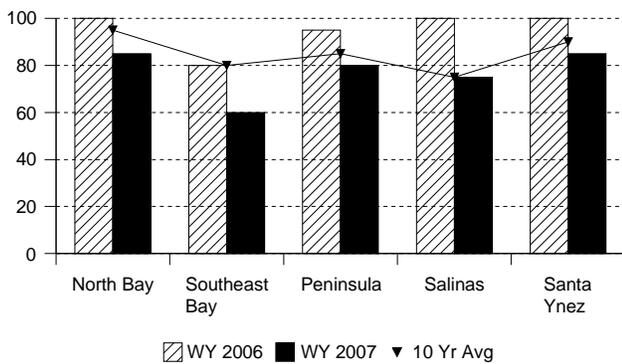


PRECIPITATION - Seasonal precipitation (October 1 through the end of last month) on the **San Francisco Bay Region** was 75 percent of normal. Precipitation last month was about 80 percent of the monthly average. Seasonal precipitation at this time last year stood at 165 percent of normal.

Seasonal precipitation on the **Central Coast Region** was 50 percent of normal. Precipitation last month was about 55 percent of the monthly average. Seasonal precipitation at this time last year stood at 125 percent of normal.

Reservoir Storage

Contents of major reservoirs in % of capacity

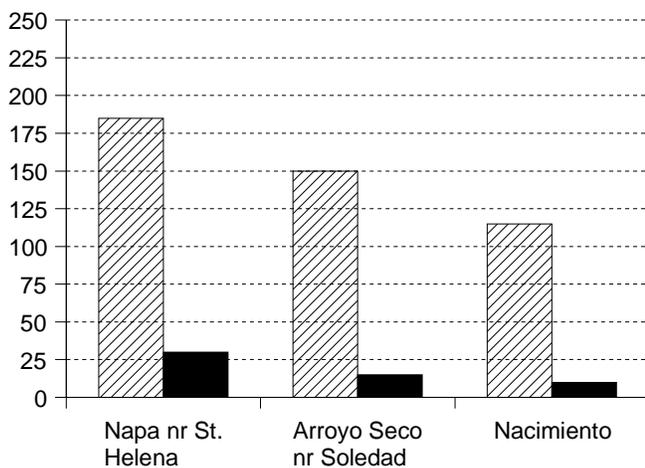


RESERVOIR STORAGE- First of the month storage in 14 **San Francisco Bay Region** reservoirs was 362 thousand acre-feet which is 90 percent of average. About 65 percent of available capacity was being used. Storage in these reservoirs at this time last year was 115 percent of average.

First of the month storage in 6 **Central Coast Region** reservoirs was 738 thousand acre-feet which is 105 percent of average and about 75 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 21 thousand acre-feet which is 30 percent of average for this period. Last year, runoff for the same period was 185 percent of average.

Seasonal runoff of streams draining the **Central Coast Region** totaled 38 thousand acre-feet which is 10 percent of average for this period. Last year runoff for this same period was 130 percent of average.

SOUTH COAST AND COLORADO RIVER REGIONS

PRECIPITATION - October through April (seasonal) precipitation on the **South Coast Region** was 30 percent of normal. April precipitation was 45 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 45 percent of normal. Precipitation during April was 85 percent of average. Seasonal precipitation at this time last year stood at 45 percent of average.

RESERVOIR STORAGE - May 1 storage in 29 major **South Coast Region** reservoirs was 1.3 million acre-feet or 85 percent of average. About 65 percent of available capacity was being used. Storage in these reservoirs at this time last year was 105 percent of average.

On May 1 combined storage in Lakes Powell, Mead, Mohave and Havasu was about 27.5 million acre-feet or about 67 percent of average. About 53 percent of available capacity was in use. Last year at this time, these reservoirs were storing 67 percent of average.

RUNOFF - Seasonal runoff from selected **South Coast Region** streams totaled 10 thousand acre-feet which is 20 percent of average. Seasonal runoff from these streams last year was 110 percent of average.

COLORADO RIVER

The April July inflow to Lake Powell is forecast to be 4 million acre-feet, which is 50 percent of average. The May 1 snowpack in the Colorado River basin above Lake Powell was 50 percent of average, highest in the Upper Colorado River at 75 percent and lowest in the Duschene at 35 percent.

STATE WATER PROJECT

On April 30, total storage in major SWP reservoirs was about 4.57MAF, compared with about 4.82 MAF at this time in 2006. End of month storage at Lake Oroville was about 3.08 MAF as compared to 3.14 MAF last year. The State's share of San Luis Reservoir storage was about 878 TAF, as compared with 1.06 MAF at this time last year. The combined storage in our southern reservoirs was about 608 TAF, compared with about 624 TAF at this time last year.

Due to significantly drier than average conditions in the Sacramento Valley, the Department's SWP allocation remained unchanged at 60% (2.47 MAF).

CENTRAL VALLEY PROJECT

As of May 1, 2007, CVP storage was 9.3 million acre-feet, which is a decrease of 1.0 million acre-feet compared to one year ago and is approximately 98% of normal for that date.

The Bureau of Reclamation announced updated water year 2007 supply allocations for the CVP contractors on March 16, 2007. Based on a conservative water supply forecast prepared from information available April 1, 2007, and a water year inflow into Shasta Reservoir of 3.9 million acre-feet, CVP water supplies were: Agricultural contractors North of Delta 100% and South of Delta 50%; Urban contractors North of Delta 100% and South of Delta 75%; Sacramento River water rights and San Joaquin Exchange Contractors 100%; Wildlife Refuges 100%; Eastside Division contractors (Stanislaus River) projected to be 45,000 acre-feet; Friant Division contractors 50% of Class 1 and 0% for 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 <http://www.usbr.gov/mp>.

**MAJOR WATER DISTRIBUTION PROJECTS
RESERVOIR STORAGE**

(AVERAGES BASED ON 1956-2005 OR PERIOD RECORD)

RESERVOIR	CAPACITY 1,000 AF	AVERAGE STORAGE 1,000 AF	2006 1,000 AF	STORAGE AT END OF April		
				2007 1,000 AF	PERCENT AVERAGE	PERCENT CAPACITY
<i>STATE WATER PROJECT</i>						
Lake Oroville	3,538	2,939	3,137	3,078	105%	87%
San Luis Reservoir (SWP)	1,062	979	1,059	878	90%	83%
Lake Del Valle	77	39	41	38	98%	49%
Lake Silverwood	73	69	69	73	106%	100%
Pyramid Lake	171	163	167	167	102%	97%
Castaic Lake	325	287	317	297	103%	91%
Perris Lake	132	118	71	71	60%	54%
<i>CENTRAL VALLEY PROJECT</i>						
Trinity Lake	2,448	2,049	2,338	2,066	101%	84%
Lake Shasta	4,552	3,974	4,057	3,901	98%	86%
Whiskeytown Lake	241	232	238	238	103%	99%
Folsom Lake	977	730	766	740	101%	76%
New Melones Reservoir	2,420	1,482	2,208	1,909	129%	79%
Millerton Lake	520	365	328	295	81%	57%
San Luis Reservoir (CVP)	971	882	965	688	78%	71%
<i>COLORADO RIVER PROJECT</i>						
Lake Mead	26,159	20,061	14,966	0	0%	0%
Lake Powell	24,322	18,335	11,093	0	0%	0%
Lake Mohave	1,810	1,671	1,666	0	0%	0%
Lake Havasu	619	587	558	0	0%	0%
<i>EAST BAY MUNICIPAL UTILITY DISTRICT</i>						
Pardee Res	198	182	198	183	101%	92%
Camanche Reservoir	417	266	355	289	108%	69%
East Bay (4 res.)	147	136	133	123	90%	83%
<i>CITY AND COUNTY OF SAN FRANCISCO</i>						
Hetch-Hetchy Reservoir	360	166	198	299	180%	83%
Cherry Lake	268	152	213	257	169%	96%
Lake Eleanor	26	15	26	22	145%	84%
South Bay/Peninsula (4 res.)	225	180	185	147	82%	66%
<i>CITY OF LOS ANGELES (D.W.P.)</i>						
Lake Crowley	183	125	137	148	119%	81%
Grant Lake	48	26	44	35	134%	72%
Other Aqueduct Storage (6 res.)	95	75	45	58	77%	61%

TELEMETERED SNOW WATER EQUIVALENTS

May 1, 2007

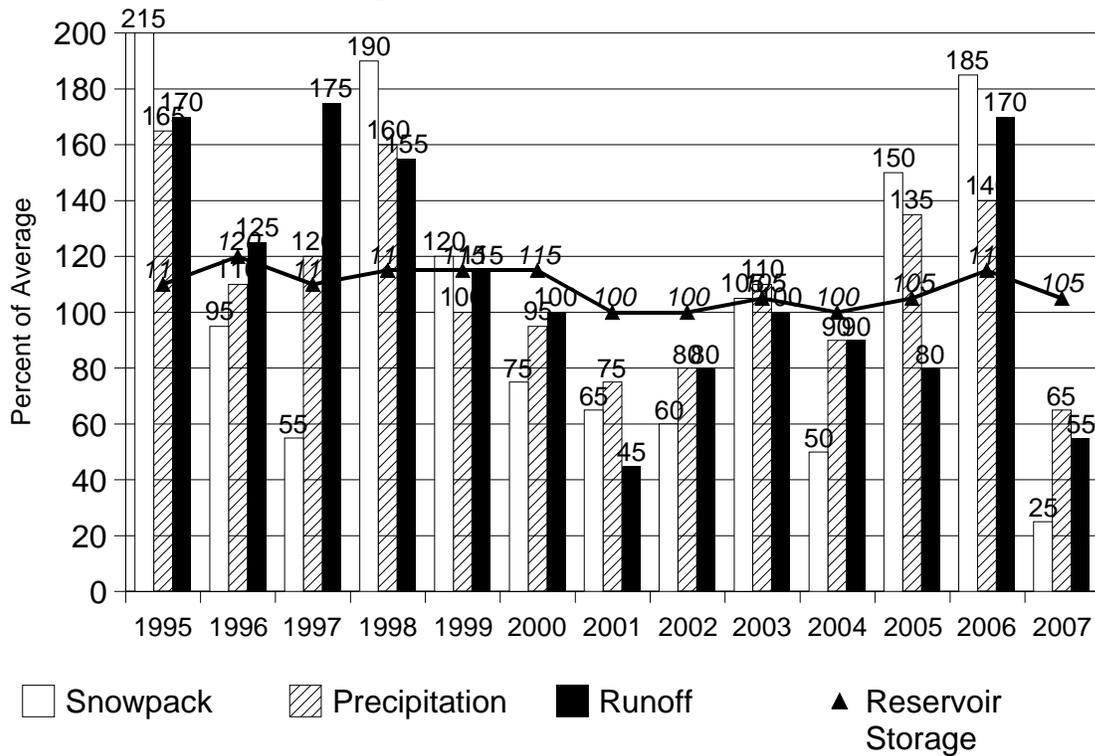
(AVERAGES BASED ON PERIOD RECORD)

BASIN NAME	STATION NAME	ELEV	INCHES OF WATER EQUIVALENT			
			APRIL 1 AVERAGE	PERCENT May 1 OF AVERAGE	24 HRS PREVIOUS	1 WEEK PREVIOUS
TRINITY RIVER						
	Peterson Flat	7150'	29.2	0.0	0.0	4.9
	Red Rock Mountain	6700'	39.6	12.1	13.1	17.0
	Bonanza King	6450'	40.5	—	—	—
	Shimmy Lake	6400'	40.3	14.7	15.9	20.7
	Middle Boulder 3	6200'	28.3	0.0	0.0	4.7
	Highland Lakes	6030'	29.9	0.0	0.0	1.3
	Scott Mountain	5900'	16.0	0.0	0.0	0.0
	Mumbo Basin	5650'	22.4	0.0	0.0	0.0
	Big Flat	5100'	15.8	1.0	1.6	7.4
	Crowder Flat	5100'	—	0.0	0.0	0.0
SACRAMENTO RIVER						
	Cedar Pass	7100'	18.1	3.4	4.6	8.8
	Blacks Mountain	7050'	12.7	0.0	0.0	1.7
	Sand Flat	6750'	42.4	7.3	9.6	16.9
	Medicine Lake	6700'	32.6	9.5	11.0	16.6
	Adin Mountain	6200'	13.6	0.0	0.0	0.0
	Snow Mountain	5950'	27.0	0.0	0.0	2.0
	Slate Creek	5700'	29.0	0.0	0.0	2.2
	Stouts Meadow	5400'	36.0	0.0	0.0	5.7
FEATHER RIVER						
	Kettle Rock	7300'	25.5	1.8	3.3	9.2
	Grizzly Ridge	6900'	29.7	2.3	4.2	10.0
	Pilot Peak	6800'	52.6	0.0	0.0	2.5
	Gold Lake	6750'	36.5	23.2	24.0	27.8
	Humbug	6500'	28.0	9.7	10.8	16.7
	Harkness Flat	6200'	28.5	0.0	0.0	2.0
	Rattlesnake	6100'	14.0	0.0	0.0	1.1
	Bucks Lake	5750'	44.7	11.0	12.7	18.0
	Four Trees	5150'	20.0	0.0	0.0	2.1
EEL RIVER						
	Noel Spring	5100'	—	0.0	0.0	0.0
YUBA & AMERICAN RIVERS						
	Lake Lois	8600'	39.5	—	—	—
	Schneiders	8750'	34.5	21.7	22.6	26.1
	Carson Pass	8353'	—	11.7	12.6	16.6
	Caples Lake	8000'	30.9	5.3	6.6	10.2
	Alpha	7600'	35.9	8.7	10.0	16.3
	Meadow Lake	7200'	55.5	27.0	27.9	32.8
	Silver Lake	7100'	22.7	0.0	0.0	2.5
	Central Sierra Snow Lab	6900'	33.6	4.1	5.5	13.0
	Huysink	6600'	42.6	10.7	11.8	15.6
	Van Vleck	6700'	35.9	10.1	11.3	17.4
	Robbs Saddle	5900'	21.4	0.0	0.0	2.4
	Greek Store	5600'	21.0	0.0	0.0	3.6
	Blue Canyon	5280'	9.0	—	—	—
	Robbs Powerhouse	5150'	5.2	0.0	0.0	1.1
MOKELUMNE & STANISLAUS RIVERS						
	Deadman Creek	9250'	37.2	12.4	13.4	—
	Highland Meadow	8700'	47.9	22.9	23.5	25.0
	Gianelli Meadow	8400'	55.5	17.1	17.9	20.9
	Lower Relief Valley	8100'	41.2	9.7	10.5	14.3
	Blue Lakes	8000'	33.1	9.5	10.0	12.2
	Mud Lake	7900'	44.9	27.8	28.8	33.3
	Stanislaus Meadow	7750'	47.5	9.7	10.7	15.8
	Bloods Creek	7200'	35.5	6.5	7.9	13.6
	Black Springs	6500'	32.0	6.6	7.6	11.1
TUOLUMNE & MERCED RIVERS						
	Tioga Pass Entrance	9945'	—	—	—	—
	Dana Meadows	9800'	27.7	12.8	14.7	19.0
	Slide Canyon	9200'	41.1	17.4	18.3	21.2
	Lake Tenaya	8150'	33.1	8.2	9.5	13.3
	Tuolumne Meadows	8600'	22.6	0.0	0.0	0.0
	Horse Meadow	8400'	48.6	23.9	25.4	29.8
	Ostrander Lake	8200'	34.8	3.6	4.8	9.6
	Paradise Meadow	7650'	41.3	13.4	14.5	19.5
	Gin Flat	7050'	34.2	1.7	2.9	7.2
	Lower Kibbie Ridge	6700'	27.4	0.0	0.0	2.3

SAN JOAQUIN RIVER							
Volcanic Knob	10050'	30.1	9.2	30.4	9.8	11.1	
Agnew Pass	9450'	32.3	6.7	20.7	9.0	10.5	
Kaiser Point	9200'	37.8	1.7	4.6	1.8	2.5	
Green Mountain	7900'	30.8	0.0	0.0	0.0	1.6	
Tamarack Summit	7550'	30.5	0.0	0.0	0.0	0.7	
Chilkoot Meadow	7150'	38.0	4.3	11.3	5.8	12.0	
Huntington Lake	7000'	20.1	0.0	0.0	0.0	5.0	
Graveyard Meadow	6900'	18.8	0.0	0.0	0.0	0.8	
Poison Ridge	6900'	28.9	0.0	0.0	0.0	0.6	
KINGS RIVER							
Bishop Pass	11200'	34.0	15.1	44.4	15.6	17.6	
Charlotte Lake	10400'	27.5	10.5	38.0	10.7	12.9	
State Lakes	10300'	29.0	—	—	—	—	
Mitchell Meadow	9900'	32.9	13.8	41.9	14.8	17.5	
Blackcap Basin	10300'	34.3	18.1	52.9	18.3	21.0	
Upper Burnt Corral	9700'	34.6	9.3	26.8	10.7	13.2	
West Woodchuck Meadow	9100'	32.8	0.0	0.0	0.0	2.1	
Big Meadows	7600'	25.9	—	—	—	—	
KAWEAH & TULE RIVERS							
Farewell Gap	9500'	34.5	10.7	30.9	11.6	16.2	
Quaking Aspen	7200'	21.0	0.0	0.0	0.0	1.0	
Giant Forest	6650'	10.0	0.0	0.0	0.0	1.2	
KERN RIVER							
Upper Tyndall Creek	11400'	27.7	7.6	27.4	8.3	9.7	
Crabtree Meadow	10700'	19.8	—	—	—	—	
Chagoopa Plateau	10300'	21.8	1.5	7.0	1.7	5.6	
Pascoes	9150'	24.9	0.9	3.6	1.5	6.5	
Tunnel Guard Station	8900'	15.6	0.0	0.0	0.0	0.4	
Wet Meadows	8950'	30.3	0.0	0.0	0.0	0.6	
Casa Vieja Meadows	8300'	20.9	0.0	0.0	0.0	1.0	
Beach Meadows	7650'	11.0	0.0	0.0	0.0	0.0	
SURPRISE VALLEY AREA							
Dismal Swamp	7050'	29.2	14.2	48.6	15.1	19.8	
TRUCKEE RIVER							
Mount Rose Ski Area	8900'	38.5	13.1	34.0	13.3	18.0	
Independence Lake	8450'	41.4	28.9	69.8	29.2	30.3	
Big Meadows	8700'	25.7	0.0	0.0	0.0	8.0	
Squaw Valley	8200'	46.5	23.0	49.5	24.3	29.8	
Independence Camp	7000'	21.8	0.0	0.0	0.0	0.0	
Independence Creek	6500'	12.7	0.0	0.0	0.0	0.0	
Truckee 2	6400'	14.3	0.0	0.0	0.0	0.5	
LAKE TAHOE BASIN							
Heavenly Valley	8800'	28.1	3.3	11.7	4.4	8.9	
Hagans Meadow	8000'	16.5	0.0	0.0	0.0	0.0	
Marlette Lake	8000'	21.1	0.0	0.0	0.0	4.0	
Echo Peak 5	7800'	39.5	4.4	11.1	5.8	13.8	
Rubicon Peak 2	7500'	29.1	5.7	19.6	6.7	10.4	
Tahoe City Cross	6750'	16.0	0.0	0.0	0.0	0.0	
Ward Creek 3	6750'	39.4	7.2	18.3	8.5	15.4	
Fallen Leaf Lake	6250'	7.0	0.0	0.0	0.0	0.0	
CARSON RIVER							
Ebbetts Pass	8700'	38.8	7.2	18.6	8.2	12.2	
Horse Meadow	8557'	—	0.5	—	1.0	5.2	
Burnside Lake	8129'	—	0.0	—	1.1	6.9	
Forestdale Creek	8017'	—	15.1	—	15.5	19.1	
Poison Flat	7900'	16.2	0.0	0.0	0.0	0.0	
Monitor Pass	8350'	—	0.0	—	0.0	0.0	
Spratt Creek	6150'	4.5	0.0	0.0	0.0	0.0	
WALKER RIVER							
Leavitt Lake	9600'	—	33.5	—	34.5	36.0	
Summit Meadow	9313'	—	—	—	—	—	
Virginia Lakes	9300'	20.3	4.8	23.6	5.4	7.9	
Lobdell Lake	9200'	17.3	0.0	0.0	0.0	0.0	
Sonora Pass Bridge	8750'	26.0	7.8	30.0	8.4	11.4	
Leavitt Meadows	7200'	8.0	0.0	0.0	0.0	0.0	
OWENS RIVER/MONO LAKE							
Gem Pass	10750'	31.7	13.6	42.8	14.2	14.5	
Sawmill	10200'	19.4	1.8	9.1	2.5	4.4	
Cottonwood Lakes	10150'	11.6	1.5	12.9	1.8	5.0	
Big Pine Creek	9800'	17.9	0.0	0.0	0.0	0.0	
South Lake	9600'	16.0	0.0	0.0	0.0	2.5	
Mammoth Pass	9300'	42.4	13.2	31.1	14.3	16.6	
Rock Creek Lakes	10000'	14.0	0.0	0.0	0.0	0.0	

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

The 75th anniversary meeting of the Western Snow Conference in Kona, Hawaii was a rousing success. For those of you who could not convince your agency of the appropriateness of a snow meeting in Hawaii, next year's meeting will be held in Oregon. As always further information is available at <http://www.westernsnowconference.org> or by contacting Frank Gehrke at 916-574-2635.

Shown on this month's cover is the installation of a weather station on the summit of Mt Warren. Special wind speed and direction sensors were fabricated to withstand the extreme conditions encountered at this location. These high elevation sites, 12,327 feet, provide valuable data regarding wind and temperature.

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 1951-2000 (50 years, except for data sites established after 1951).

PRECIPITATION -Averages are based on data for the period 1951-2000 (50 years, except for data sites established after 1951).

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 1956-2005.

Reservoir storage averages are based on the period from 1956 (or beginning of operation) to 2005.

For more details contact California Cooperative Snow Surveys, P.O. Box 219000, Sacramento, CA 95821-9000, (916) 574-2635 or gridley@water.ca.gov.

INDICES OF WATER AVAILABILITY

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 Sacramento Valley Water Year Hydrologic Classification (40-30-30 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 San Joaquin Valley Water Year Hydrologic Classification (60-20-20 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
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First Class

