

California Cooperative
Snow Surveys
Bulletin 120, 4-15

State of California
The Natural Resources Agency

Department of
Water Resources

Water Conditions in California

Report 4 May 1, 2015



Edmund G. Brown Jr.
Governor
State of California

John Laird
Secretary for Natural Resources
The Natural Resources Agency

Mark W. Cowin
Director
Department of Water
Resources

CALIFORNIA NATURAL RESOURCES AGENCY
John Laird, Secretary for Natural 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
Placer County Water Agency
Sacramento Municipal Utility District
San Joaquin River Exchange Contractors Water Authority
South Feather Water and Power Agency
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
National Aeronautics and Space Administration
Jet Propulsion Laboratory
Other Cooperative Programs
Nevada Cooperative Snow Surveys
Oregon Cooperative Snow Surveys

Summary of Water Conditions May 1, 2015

The drought continues. April precipitation, while better than the dismal amount in March, was well below average. Forecasted runoff will be the lowest since 1977, our driest water year. Coming on the heels of 3 dry years, major water shortages are expected. The current 4 year volume of runoff on the San Joaquin River system is significantly lower than the drought of the early 1930s and also the more recent drought in the late 1980s. Reservoir storage overall is about 5 percent of average less than last year at this time but about 20 percent over that of 1977 on May 1. Storage is expected to fall at a more rapid pace than normal during the next two months because of the almost total lack of snowpack and associated runoff

Forecasts of statewide median April through July and water year runoff have been decreased some from last month, by 5 percent and 2 percent respectively, with only 20 percent of average expected during the snowmelt season. The predicted April through July volume, if it verifies, will be the lowest in history.

Snowpack- Only a few patches of snow remain in the highest mountain cirques which results in an average of only 2 percent for the date. This tiny residual snowpack is only about half the previous low of 3 percent in 1977 and much less than last year's poor 15 percent pack. Many basins are recording values one tenth that of last year's dismal snow pack.

Precipitation during April was about 60 percent of average for the month and was fairly evenly distributed. Seasonal precipitation was about 70 percent of average and ranged from about 85 percent on the north coast to about 50 percent in Tulare Lake region.

Runoff has been about 55 percent of average so far this year compared to 35 percent last year. April runoff was about one quarter average. Estimated runoff of the 8 major rivers of the Sacramento-San Joaquin River region in April was 0.77 million acre-feet.

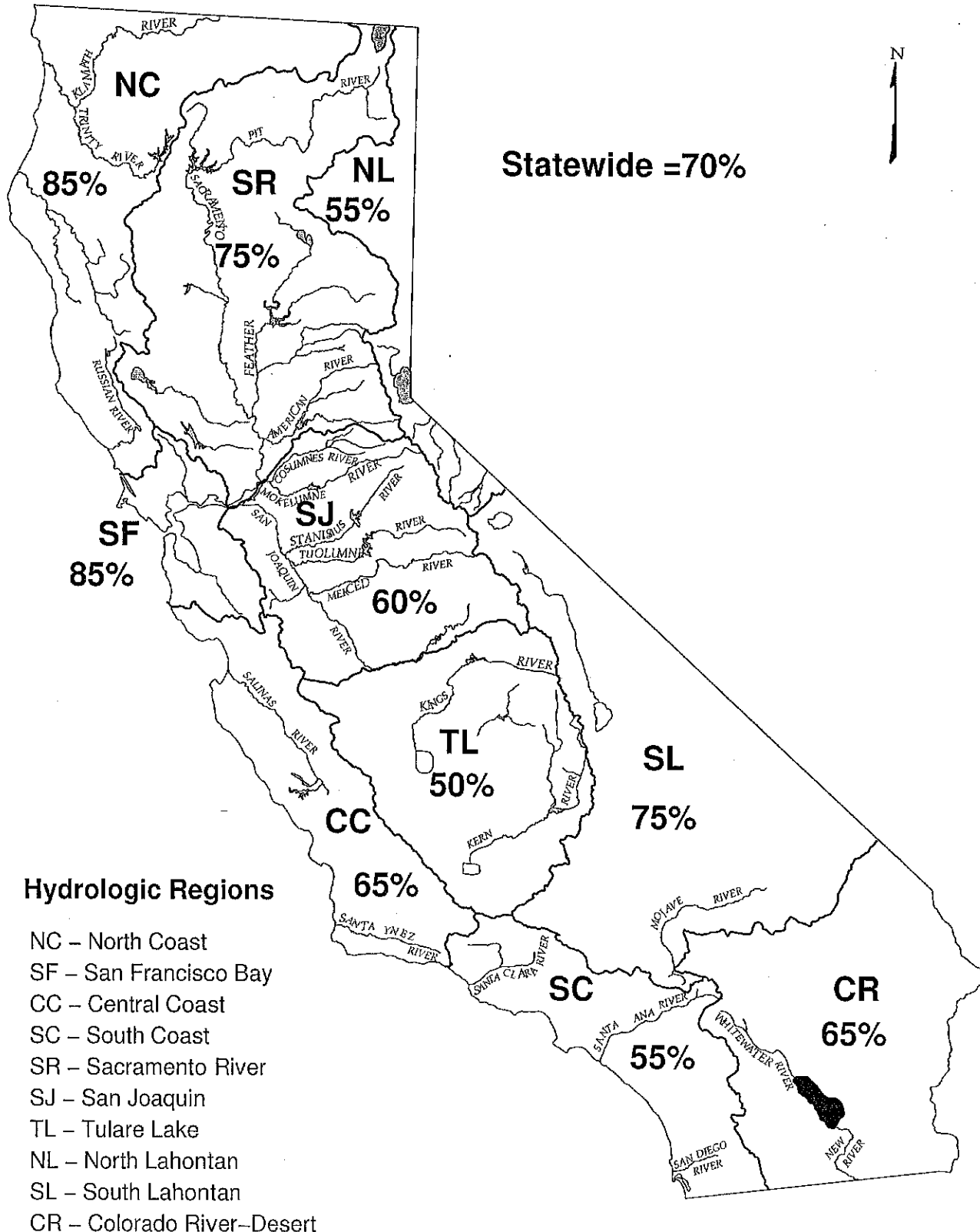
Reservoir storage was about 65 percent of average statewide, about 1.5 million acre-feet less than one year ago. There was a small loss in storage during April; normally there would be a gain of 1 to 1.5 million acre-feet.

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	85	0	60	65	15	60
SAN FRANCISCO BAY	85	--	85	60	--	--
CENTRAL COAST	65	--	30	30	--	--
SOUTH COAST	55	--	55	25	--	--
SACRAMENTO RIVER	75	3	75	55	25	50
SAN JOAQUIN RIVER	60	2	60	30	15	20
TULARE LAKE	50	1	40	25	10	15
NORTH LAHONTAN	55	2	10	45	15	25
SOUTH LAHONTAN	75	0	85	55	25	30
COLORADO RIVER-DESERT	65	--	--	--	--	--
STATEWIDE	70	2	65	55	20	40

DEPARTMENT OF WATER RESOURCES CALIFORNIA COOPERATIVE SNOW SURVEYS SEASONAL PRECIPITATION

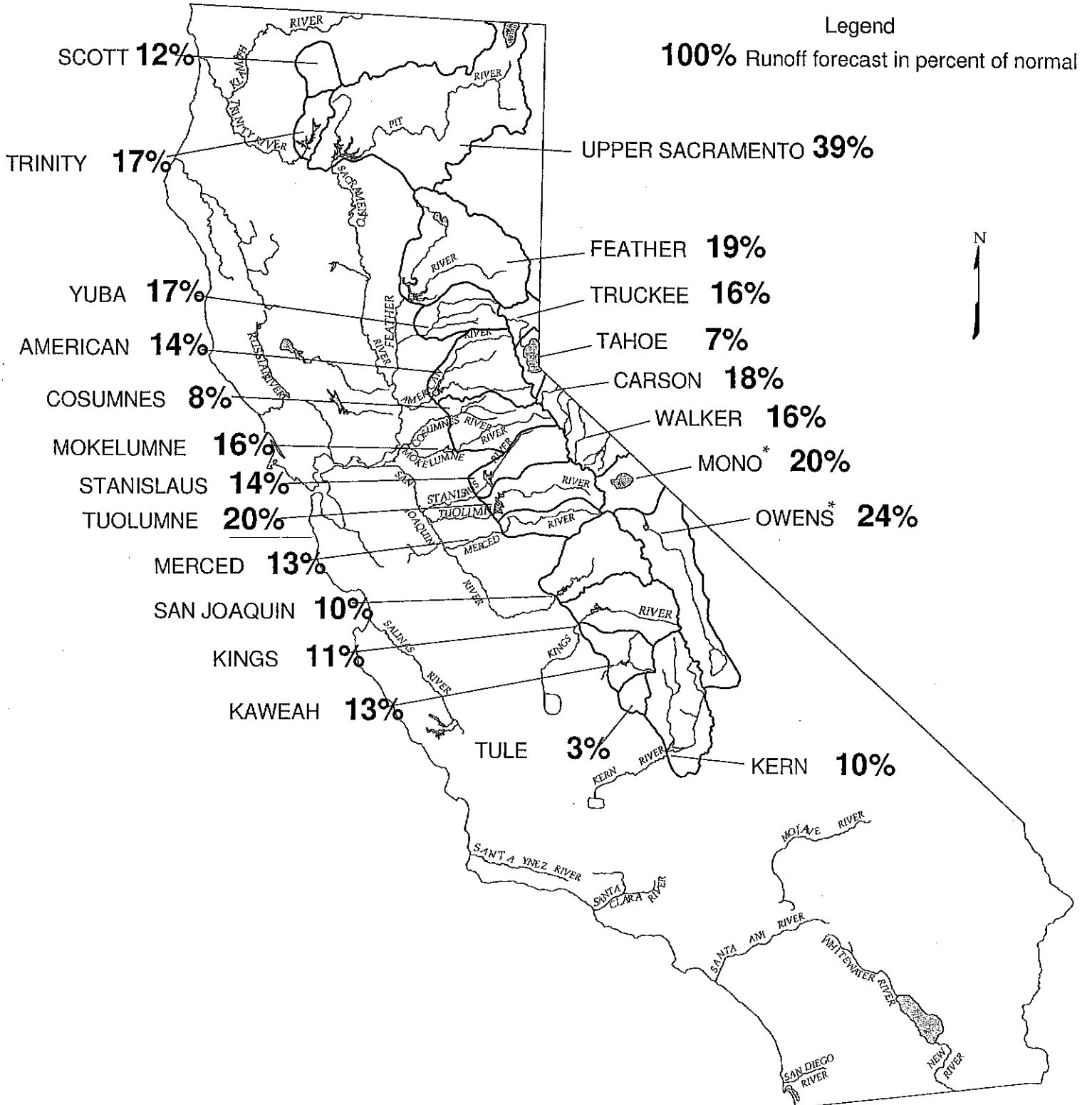
IN PERCENT OF AVERAGE TO DATE
October 1, 2014 through April 30, 2015



WATER YEAR IS OCTOBER 1 THROUGH SEPTEMBER 30

WR-145
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DEPARTMENT OF WATER RESOURCES CALIFORNIA COOPERATIVE SNOW SURVEYS FORECAST OF APRIL - JULY UNIMPAIRED SNOWMELT RUNOFF May 1, 2015



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

**MAY 1, 2015 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)
North Coast						
Trinity River at Lewiston Lake	651	1,593	80	110	17%	85 - 200
SACRAMENTO RIVER						
Upper Sacramento River						
Sacramento River at Delta above Shasta Lake	302	751	39	65	22%	
McCloud River above Shasta Lake	392	850	185	160	41%	
Pit River near Montgomery Creek + Squaw Creek	1,046	2,098	480	460	44%	
Total Inflow to Shasta Lake	1,806	3,525	726	710	39%	600 - 860
Sacramento River above Bend Bridge, near Red Bluff	2,485	5,117	943	970	39%	800 - 1,140
Feather River						
Feather River at Lake Almanor near Prattville (3)	333	675	120	60	18%	
North Fork at Pulga (3)	1,028	2,416	243	210	20%	
Middle Fork near Clio (4)	86	518	4	15	17%	
South Fork at Ponderosa Dam (3)	110	267	13	20	18%	
Feather River at Oroville	1,758	4,676	392	340	19%	270 - 500
Yuba River						
North Yuba below Goodyears Bar	279	647	51	40	14%	
Inflow to Jackson Mdws and Bowman Reservoirs (3)	112	236	25	20	18%	
South Yuba at Langs Crossing (3)	233	481	57	40	17%	
Yuba River near Smartsville plus Deer Creek	996	2,424	200	165	17%	130 - 230
American River						
North Fork at North Fork Dam (3)	262	716	43	30	11%	
Middle Fork near Auburn (3)	522	1,406	100	70	13%	
Silver Creek Below Camino Diversion Dam (3)	173	386	37	30	17%	
American River below Folsom Lake	1,231	3,074	229	175	14%	145 - 250
SAN JOAQUIN RIVER						
Cosumnes River at Michigan Bar	128	446	8	10	8%	7 - 20
Mokelumne River						
North Fork near West Point (5)	437	829	104	70	16%	
Total Inflow to Pardee Reservoir	468	1,076	102	75	16%	60 - 100
Stanislaus River						
Middle Fork below Beardesley Dam (3)	334	702	64	50	15%	
North Fork Inflow to McKays Point Dam (3)	224	503	34	30	13%	
Stanislaus River below Goodwin Reservoir (9)	699	1,710	116	95	14%	70 - 160
Tuolumne River						
Cherry Creek & Eleanor Creek near Hetch Hetchy	315	727	97	70	22%	
Tuolumne River near Hetch Hetchy	604	1,392	153	140	23%	
Tuolumne River below La Grange Reservoir (9)	1,221	2,682	301	240	20%	190 - 300
Merced River						
Merced River at Pohono Bridge	372	888	80	60	16%	
Merced River below Merced Falls (9)	636	1,587	123	85	13%	65 - 140
San Joaquin River						
San Joaquin River at Mammoth Pool (7)	1,026	2,279	235	120	12%	
Big Creek below Huntington Lake (8)	91	264	11	10	11%	
South Fork near Florence Lake (7)	201	511	58	20	10%	
San Joaquin River inflow to Millerton Lake	1,258	3,355	262	130	10%	105 - 210
TULARE LAKE						
Kings River						
North Fork Kings River near Cliff Camp (3)	239	565	50	30	13%	
Kings River below Pine Flat Reservoir	1,236	3,113	274	135	11%	110 - 210
Kaweah River below Terminus Reservoir	290	814	62	38	13%	30 - 55
Tule River below Lake Success	64	259	2	2	3%	1 - 11
Kern River						
Kern River near Kernville	384	1,203	83	40	10%	
Kern River inflow to Lake Isabella	465	1,657	84	45	10%	35 - 90

(1) See inside back cover for definition

(2) All 50 year averages are based on years 1961-2010 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

(7) 50 year average based on years 1953-2002

(8) 50 year average based on years 1946-1995

MAY 1, 2015 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)	
1376	2990	200	418	294	67	56	38	14	2	0	0	889	65%	864	- 985
876	1,965	165													
1,200	2,353	557													
3,082	5,150	1,484													
5,979	10,796	2,479	1,621	720	273	219	180	161	150	140	136	3,600	60%	3,435	- 3,810
8,727	17,180	3,294	2,652	1,068	348	306	265	221	178	155	162	5,355	61%	5,120	- 5,610
780	1,269	366													
2,417	4,400	666													
219	637	24													
291	562	32													
4,523	9,492	994	916	442	157	121	100	60	59	55	50	1,960	43%	1,850	- 2,140
564	1,056	102													
181	292	30													
379	565	98													
2,329	4,926	369	398	204	102	67	75	17	6	0	0	869	37%	835	- 950
616	1,234	66													
1,070	2,575	144													
318	705	59													
2,683	6,382	349	332	242	86	80	80	15	0	0	0	835	31%	805	- 910
385	1,253	20	22	38	9	7	3	0	0	0	0	79	21%	76	- 90
626	1,009	197													
763	1,848	129	43	65	30	30	42	3	0	0	0	213	28%	198	- 245
471	929	88													
1,167	2,952	155	64	92	37	37	47	11	0	0	0	288	25%	263	- 360
461	1,147	123													
770	1,661	258													
1,943	4,631	383	106	114	57	85	120	25	10	0	0	517	27%	467	- 585
461	1,020	92													
1,007	2,787	150	22	25	19	30	39	12	4	0	0	151	15%	131	- 210
1,337	2,964	308													
112	298	14													
248	653	71													
1,831	4,642	362	47	43	34	39	52	26	13	8	3	265	14%	237	- 355
284	607	58													
1,729	4,287	386	49	46	42	46	57	22	10	4	4	280	16%	254	- 365
456	1,402	94	15	17	13	10	20	6	2	1	1	85	19%	76	- 110
147	615	16	4	3	1	1	1	0	0	0	0	10	7%	9	- 20
558	1,577	163													
733	2,318	175	36	15	13	14	13	11	7	6	5	120	16%	106	- 175

(9) 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.

(10) Coordinated Forecast by National Weather Service California-Nevada River Forecast Center and Department of Water Resources, State of California

* Unimpaired runoff in months prior to forecast date are based on measured flows

**MAY 1, 2015 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					
Scott River					
Scott River nr Ft Jones (3)	173	398	22	21	12%
Klamath River					
Total inflow to Upper Klamath Lake (4)	340	618	84	220	65%
<hr/>					
NORTH LAHONTAN					
Truckee River					
Lake Tahoe to Farad accretions	256	713	52	40	16%
Lake Tahoe Rise (assuming gates closed, ft)	1.4	5.4	0.2	0.1	7%
Carson River					
West Fork Carson River at Woodfords	53	135	12	7	13%
East Fork Carson River near Gardnerville	186	407	43	35	19%
Walker River					
West Walker River below Little Walker, near Coleville	155	330	35	30	19%
East Walker River near Bridgeport	63	209	7	5	8%
<hr/>					
SOUTH LAHONTAN					
Owens River					
Total tributary flow to Owens River (5)	235	579	96	56	24%

(1) See inside back cover for definition

(2) All 50 year averages are based on years 1961-2010 unless otherwise noted

(3) Forecast by National Weather Service California-Nevada River Forecast Center. 30 yr average (1981-2010)

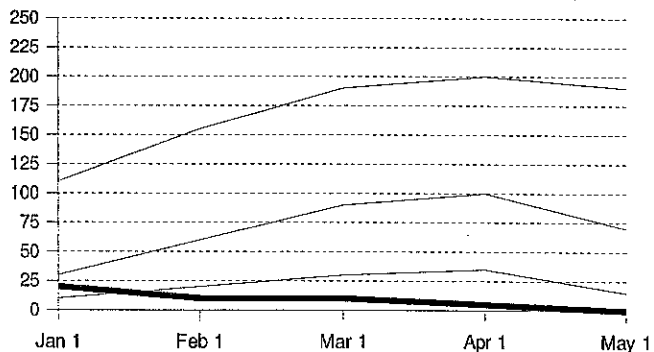
(4) Forecast by U.S. Natural Resources Conservation Service and National Weather Service California-Nevada River Forecast Center, May through September forecast, 30 year average based on years 1981-2010.

(5) Forecast by Department of Water and Power, City of Los Angeles, average based on years 1961-2010

NORTH COAST REGION

Snowpack Accumulation

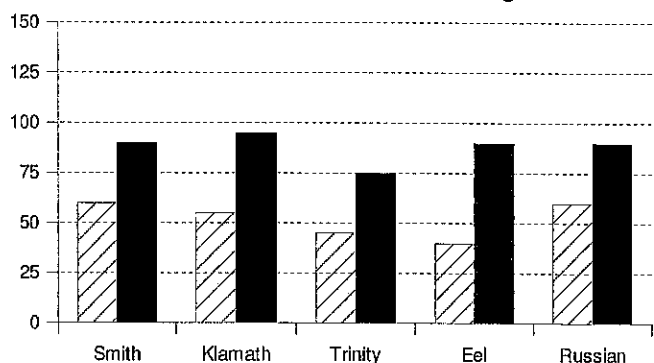
Water Content in % of April 1 Average



SNOWPACK- First of the month measurements made at 9 snow courses indicate an area wide snow water equivalent of less than .1 inch. This is 0 percent of the seasonal April 1 average and 0 percent of the May 1 average. Last year at this time the pack was holding less than 1 inch of water.

Precipitation

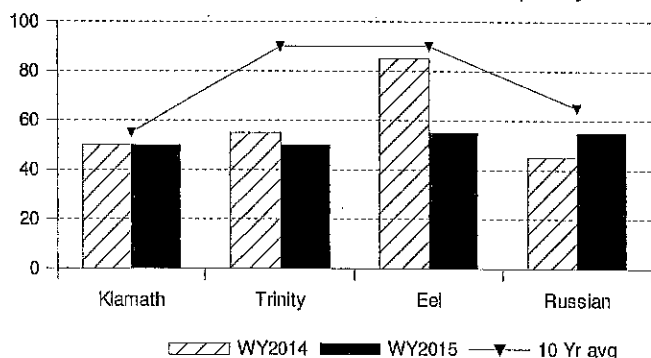
October 1 to date in % of Average



PRECIPITATION - Seasonal precipitation (October 1 through the end of last month) on this area was 85 percent of normal. Precipitation last month was about 70 percent of the monthly average. Seasonal precipitation at this time last year stood at 50 percent of normal.

Reservoir Storage

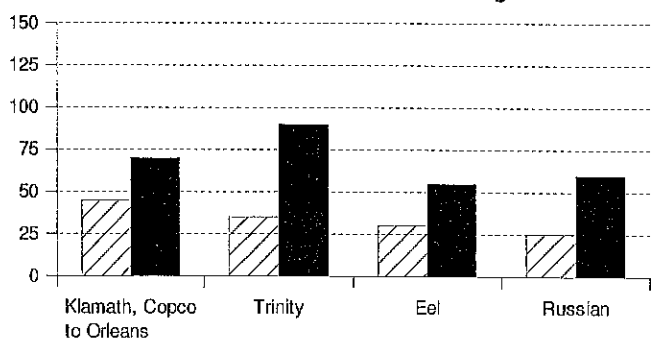
Contents of major reservoirs in % of capacity



RESERVOIR STORAGE- First of the month storage in 6 reservoirs was 1.5 million acre-feet which is 60 percent of average. About 50 percent of available capacity was being used. Storage in these reservoirs at this time last year was 65 percent of average.

Runoff

October 1 to date in % of average

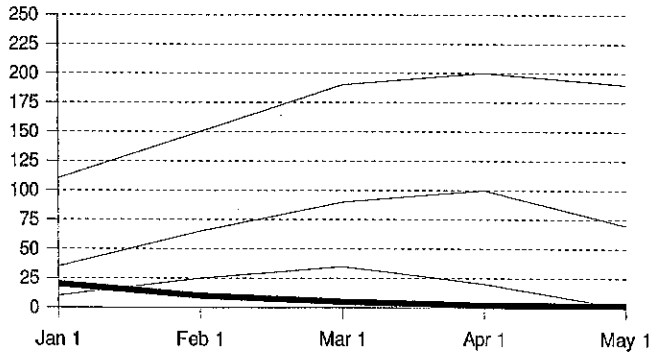


RUNOFF -Seasonal runoff of streams draining the area totaled 6.9 million acre-feet which is 65 percent of the average for this period. Last year, runoff for the same period was 35 percent of average.

SACRAMENTO RIVER REGION

Snowpack Accumulation

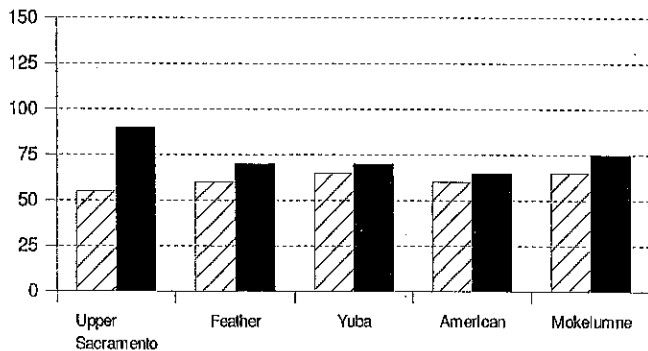
Water Content in % of April 1 Average



SNOWPACK- First of the month measurements made at 66 snow courses indicate an area wide snow water equivalent of 1.2 inches. This is 2 percent of the seasonal April 1 average and 3 percent of the May 1 average. Last year at this time the pack was holding 3.0 inches of water.

Precipitation

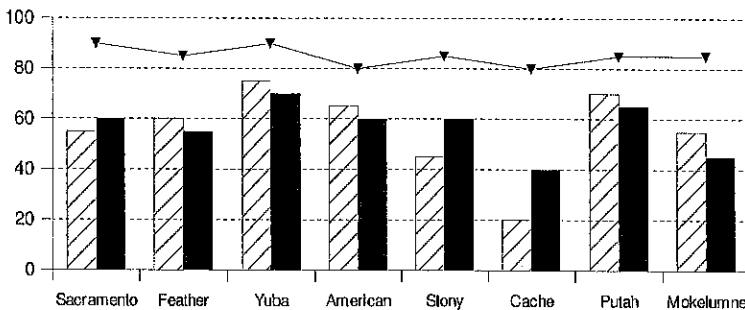
October 1 to date in % of Average



PRECIPITATION - Seasonal precipitation (October 1 through the end of last month) on this area was 75 percent of normal. Precipitation last month was about 70 percent of the monthly average. Seasonal precipitation at this time last year stood at 60 percent of normal.

Reservoir Storage

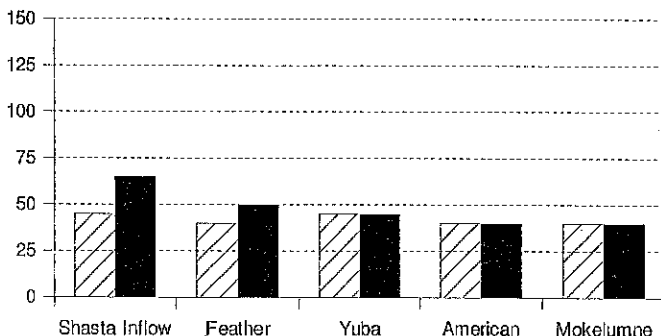
Contents of major reservoirs in % of capacity



RESERVOIR STORAGE- First of the month storage in 43 reservoirs was 9.7 million acre-feet which is 75 percent of average. About 60 percent of available capacity was being used. Storage in these reservoirs at this time last year was 75 percent of average.

Runoff

October 1 to date in % of average



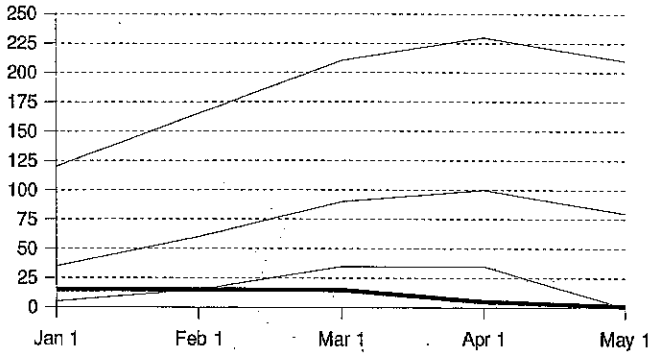
RUNOFF - Seasonal runoff of streams draining the area totaled 7.5 million acre-feet which is 55 percent of average for this period. Last year, runoff for the same period was 40 percent of average.

The **Sacramento Region 40-30-30 Water Supply Index** is forecast to be 4.0 assuming median meteorological conditions for the remainder of the year. This classifies the year as "critical" in the Sacramento Valley according to the State Water Resources Control Board.

SAN JOAQUIN RIVER AND TULARE LAKE REGIONS

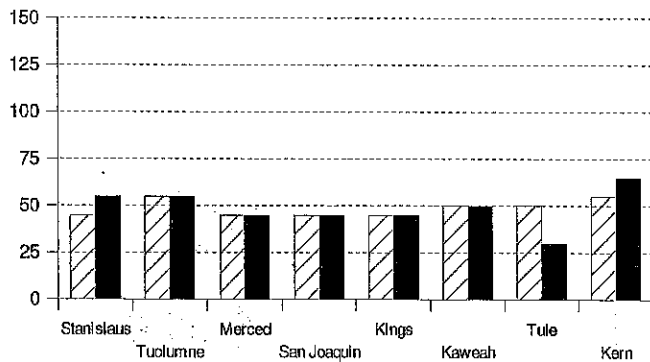
Snowpack Accumulation

Water Content in % of April 1 Average



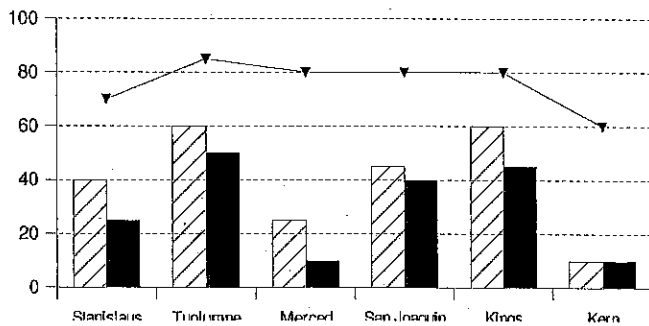
Precipitation

October 1 to date in % of Average



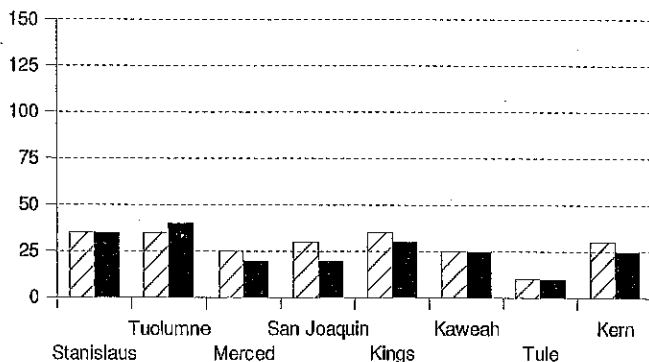
Reservoir Storage

Contents of major reservoirs in % of capacity



Runoff

October 1 to date in % of average



SNOWPACK- First of the month measurements made at 57 **San Joaquin Region** snow courses indicate an area wide snow water equivalent of 0.7 inches. This is 2 percent of the seasonal (April 1) average and 2 percent of the May 1 average. Last year at this time the pack was holding 7.1 inches of water. At the same time 30 **Tulare Lake Region** snow courses indicated a basin-wide snow water equivalent of .2 inches which is 0 percent of the average for April 1 and 1 percent of May 1. Last year at this time the basin was holding 2.9 inches of water.

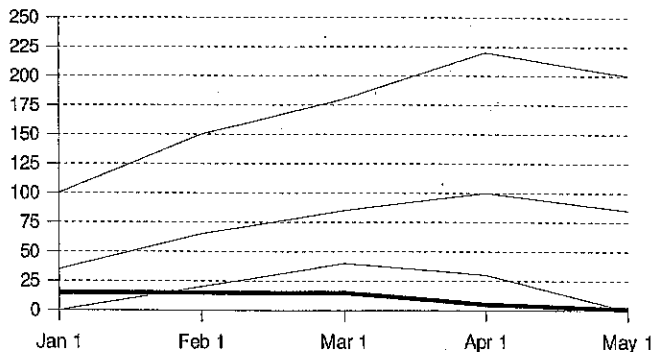
PRECIPITATION - Seasonal precipitation (October 1 through the end of last month) on the **San Joaquin Region** was 60 percent of normal. Precipitation last month was about 75 percent of the monthly average. Seasonal precipitation at this time last year stood at 50 percent of normal. Seasonal precipitation on the **Tulare Lake Region** was 50 percent of normal. Precipitation last month was about 45 percent of the monthly average. Seasonal precipitation at this time last year stood at 50 percent of normal.

RESERVOIR STORAGE- First of the month storage in 34 **San Joaquin Region** reservoirs was 4.5 million acre-feet which is 60 percent of average. About 40 percent of available capacity was being used. Storage in these reservoirs at this time last year was 70 percent of average. First of the month storage in 6 **Tulare Lake Region** reservoirs was 419 thousand acre-feet which is 40 percent of average and about 20 percent of available capacity. Storage in these reservoirs at this time last year was 50 percent of average.

RUNOFF- Seasonal runoff of streams draining the **San Joaquin Region** totaled 1.1 million acre-feet which is 30 percent of average for this period. Last year, runoff for the same period was 35 percent of average. Seasonal runoff of streams draining the **Tulare Lake Basin** totaled 325 thousand acre-feet which is 25 percent of average for this period. Last year runoff for this same period was 30 percent of average. The **San Joaquin Region 60-20-20 Water Supply Index** is forecast to be 0.7 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.

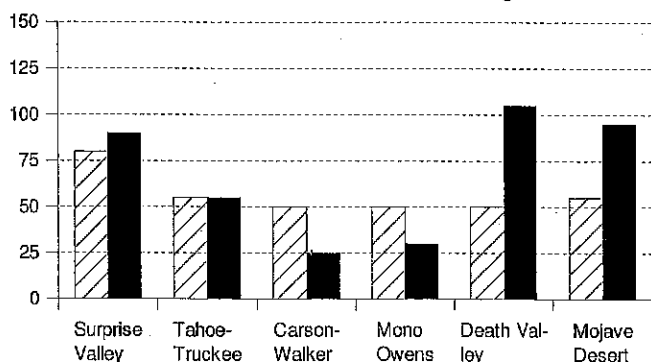
Snowpack Accumulation

Water Content in % of April 1 Average



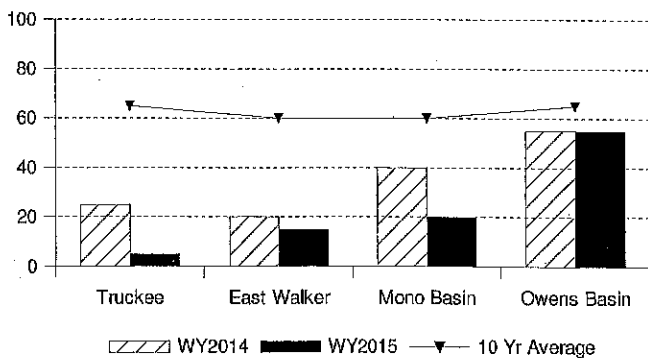
Precipitation

October 1 to date in % of Average



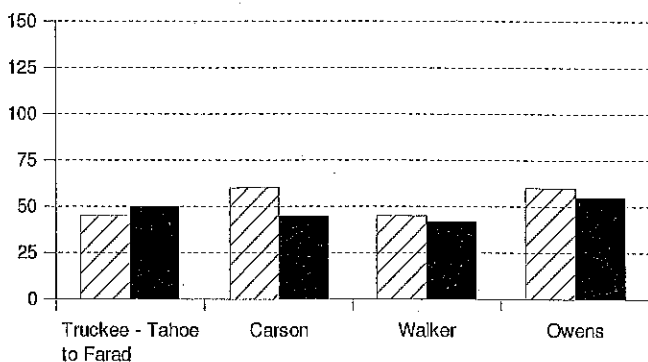
Reservoir Storage

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 4 **North Lahontan Region** snow courses indicate an area wide snow water equivalent of .2 inches. This is 1 percent of the seasonal (April 1) average and 2 percent of the May 1 average. Last year at this time the pack was holding 1.9 inches of water. At the same time 2 **South Lahontan** snow courses indicated a basin-wide snow water equivalent of 0 inches which is 0 percent of the seasonal (April 1) average and 0 percent of the May 1 average. Last year at this time the basin was holding 2.5 inches of water.

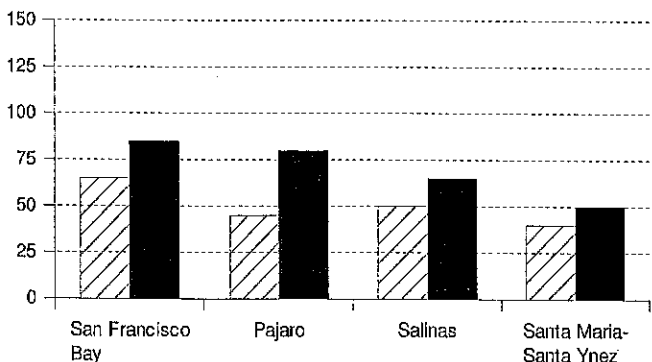
PRECIPITATION - Seasonal precipitation (October 1 through the end of last month) on the **North Lahontan Region** was 55 percent of normal. Precipitation last month was about 60 percent of the monthly average. Seasonal precipitation at this time last year stood at 65 percent of normal. Seasonal precipitation on the **South Lahontan** was 75 percent of normal. Precipitation last month was 20 percent of the monthly average. Seasonal precipitation at this time last year stood at 50 percent of normal.

RESERVOIR STORAGE- First of the month storage in 5 **North Lahontan** reservoirs was 62 thousand acre-feet which is 10 percent of average. About 5 percent of available capacity was being used. Storage in these reservoirs at this time last year was 50 percent of average. Lake Tahoe was .14 feet below its natural rim on May 1. First of the month storage in 8 **South Lahontan** reservoirs was 226 thousand acre-feet which is 85 percent of average and about 55 percent of available capacity. Storage in these reservoirs at this time last year was 95 percent of average.

RUNOFF- Seasonal runoff of streams draining the **North Lahontan Region** totaled 195 thousand acre-feet which is 45 percent of average for this period. Last year, runoff for the same period was 50 percent of average. Seasonal runoff of the Owens River in the **South Lahontan** totaled 44 thousand acre-feet which is 55 percent of average for this period. Last year runoff for this same period was 60 percent of average.

Precipitation

October 1 to date in % of Average

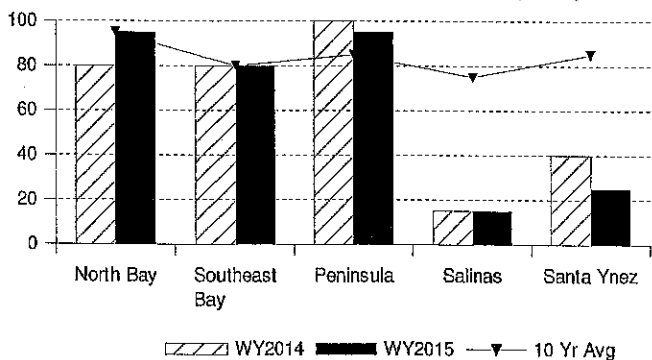


PRECIPITATION - Seasonal precipitation (October 1 through the end of last month) on the **San Francisco Bay Region** was 85 percent of normal. Precipitation last month was about 80 percent of the monthly average. Seasonal precipitation at this time last year stood at 60 percent of normal.

Seasonal precipitation on the **Central Coast Region** was 65 percent of normal. Precipitation last month was about 60 percent of the monthly average. Seasonal precipitation at this time last year stood at 45 percent of normal.

Reservoir Storage

Contents of major reservoirs in % of capacity

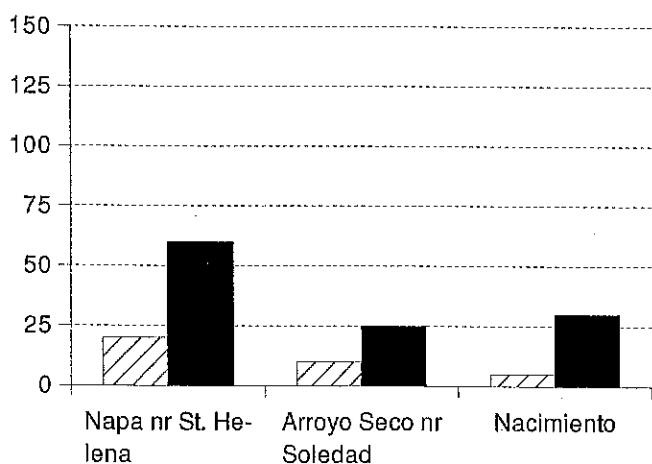


RESERVOIR STORAGE- First of the month storage in 17 **San Francisco Bay Region** reservoirs was 458 thousand acre-feet which is 85 percent of average. About 65 percent of available capacity was being used. Storage in these reservoirs at this time last year was 85 percent of average.

First of the month storage in 6 **Central Coast Region** reservoirs was 196 thousand acre-feet which is 30 percent of average and about 20 percent of available capacity. Storage in these reservoirs at this time last year was 25 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 42 thousand acre-feet which is 60 percent of average for this period. Last year, runoff for the same period was 20 percent of average.

Seasonal runoff of streams draining the **Central Coast Region** totaled 86 thousand acre-feet which is 30 percent of average for this period. Last year runoff for this same period was 5 percent of average.

SOUTH COAST AND COLORADO RIVER REGIONS

PRECIPITATION - October through April (seasonal) precipitation on the **South Coast Region** was 55 percent of normal. April precipitation was less than 20 percent of the monthly average. Seasonal precipitation at this time last year was 40 percent of normal. Seasonal precipitation on the **Colorado River-Desert Region** was 65 percent of normal. Precipitation during April was 50 percent of average. Seasonal precipitation at this time last year stood at 40 percent of average.

RESERVOIR STORAGE - May 1 storage in 29 major **South Coast Region** reservoirs was 872 thousand acre-feet or 55 percent of average. About 40 percent of available capacity was being used. Storage in these reservoirs at this time last year was 75 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 15 percent of average.

COLORADO RIVER

The April July inflow to Lake Powell is forecast to be 3 million acre-feet, which is 42 percent of average. The May 1 snowpack in the Colorado River basin above Lake Powell was 55 percent of average, lowest in the Escalante at 19 percent and highest in the Colorado Plateau at 74 percent. On May 1 combined storage in Lakes Powell, Mead, Mohave and Havasu was about 23.1 million acre-feet or about 60 percent of average. About 45 percent of available capacity was in use. Last year at this time, these reservoirs were storing 60 percent of average.

MAJOR WATER DISTRIBUTION PROJECTS

RESERVOIR STORAGE

(AVERAGES BASED ON 1951-2000 OR PERIOD RECORD)

RESERVOIR	CAPACITY 1,000 AF	AVERAGE STORAGE 1,000 AF	2014 1,000 AF	STORAGE AT END OF April		
				2015 1,000 AF	PERCENT AVERAGE	PERCENT CAPACITY
<i>STATE WATER PROJECT</i>						
Lake Oroville	3,538	2,877	1,877	1,782	62%	50%
San Luis Reservoir (SWP)	1,062	961	387	896	93%	84%
Lake Del Valle	77	39	41	41	104%	53%
Lake Silverwood	78	69	72	71	103%	91%
Pyramid Lake	180	163	165	165	101%	92%
Castaic Lake	325	294	250	100	34%	31%
Perris Lake	131	111	63	51	46%	39%
<i>CENTRAL VALLEY PROJECT</i>						
Trinity Lake	2,448	2,020	1,281	1,184	59%	48%
Lake Shasta	4,552	3,924	2,409	2,662	68%	58%
Whiskeytown Lake	241	233	238	236	101%	98%
Folsom Lake	977	729	547	576	79%	59%
New Melones Reservoir	2,400	1,505	917	491	33%	20%
Millerton Lake	520	366	228	192	53%	37%
San Luis Reservoir (CVP)	971	860	569	377	44%	39%
<i>COLORADO RIVER PROJECT</i>						
Lake Mead	26,159	19,331	11,254	9,931	51%	38%
Lake Powell	24,322	17,499	9,732	10,837	62%	45%
Lake Mohave	1,810	1,670	1,702	1,723	103%	95%
Lake Havasu	648	586	582	582	99%	90%
<i>EAST BAY MUNICIPAL UTILITY DISTRICT</i>						
Pardee Res	210	183	163	179	98%	85%
Camanche Reservoir	417	268	174	103	38%	25%
East Bay (4 res.)	159	135	125	112	83%	70%
<i>CITY AND COUNTY OF SAN FRANCISCO</i>						
Hetch-Hetchy Reservoir	360	175	250	262	150%	73%
Cherry Lake	268	163	241	193	118%	72%
Lake Eleanor	29	16	27	21	135%	75%
South Bay/Peninsula (4 res.)	227	178	136	142	80%	63%
<i>CITY OF LOS ANGELES (D.W.P.)</i>						
Lake Crowley	183	125	107	103	82%	56%
Grant Lake	48	26	23	12	45%	25%
Other Aqueduct Storage (6 res.)	95	75	61	58	77%	61%

TELEMETERED SNOW WATER EQUIVALENTS

May 1, 2015

(AVERAGES BASED ON PERIOD RECORD)

WR-145

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BASIN NAME STATION NAME	ELEV	INCHES OF WATER EQUIVALENT				
		APRIL 1 AVERAGE	PERCENT		24 HRS PREVIOUS	1 WEEK PREVIOUS
			May 1	OF		
TRINITY RIVER						
Peterson Flat	7150'	29.2	0.0	0.0	0.0	0.0
Red Rock Mountain	6700'	39.6	0.0	0.0	0.0	0.0
Bonanza King	6450'	40.5	0.0	0.0	0.0	0.0
Shimmy Lake	6400'	40.3	0.0	0.0	0.0	0.0
Middle Boulder 3	6200'	28.3	0.0	0.0	0.0	0.0
Highland Lakes	6030'	29.9	0.0	0.0	0.0	0.0
Scott Mountain	5900'	16.0	0.0	0.0	0.0	0.0
Mumbo Basin	5650'	22.4	0.0	0.0	0.0	0.0
Big Flat	5100'	15.8	0.0	0.0	0.0	0.0
Crowder Flat	5100'	—	0.0	—	0.0	0.0
SACRAMENTO RIVER						
Cedar Pass	7100'	18.1	0.0	0.0	0.0	0.0
Blacks Mountain	7050'	12.7	—	—	—	—
Sand Flat	6750'	42.4	0.0	0.0	0.0	0.8
Medicine Lake	6700'	32.6	0.0	0.0	0.0	0.0
Adln Mountain	6200'	13.6	0.0	0.0	0.0	0.0
Snow Mountain	5950'	27.0	0.0	0.0	0.0	0.0
Slate Creek	5700'	29.0	0.0	0.0	0.0	0.0
Stouts Meadow	5400'	36.0	0.0	0.0	0.0	0.0
FEATHER RIVER						
Lower Lassen Peak	8250'	—	—	—	—	—
Kettle Rock	7300'	25.5	0.0	0.0	0.0	0.2
Grizzly Ridge	6900'	29.7	0.0	0.0	0.0	0.2
Pilot Peak	6800'	52.6	0.0	0.0	0.0	0.2
Gold Lake	6750'	36.5	0.5	1.3	0.7	4.0
Humbug	6500'	28.0	0.0	0.0	0.0	0.1
Harkness Flat	6200'	28.5	0.0	0.0	0.0	0.0
Rattlesnake	6100'	14.0	0.0	0.0	0.0	0.0
Bucks Lake	5750'	44.7	0.0	0.0	0.0	0.0
Four Trées	5150'	20.0	0.0	0.0	0.0	0.0
EEL RIVER						
Hull Mountain	6461'	—	0.0	—	0.0	0.0
Noel Spring	5100'	—	0.0	—	0.0	0.0
YUBA & AMERICAN RIVERS						
Schneiders	8750'	34.5	8.5	24.6	9.6	10.6
Lake Lois	8600'	39.5	13.9	35.2	14.9	14.3
Carson Pass	8353'	—	0.0	—	0.0	0.0
Caples Lake	8000'	30.9	0.0	0.0	0.0	0.0
Alpha	7600'	35.9	0.0	0.0	0.1	0.3
Forni Ridge	7600'	37.0	0.0	0.1	0.2	0.3
Meadow Lake	7200'	55.5	0.0	0.0	0.0	0.6
Silver Lake	7100'	22.7	0.0	0.0	0.0	0.5
Central Sierra Snow Lab	6900'	33.6	0.0	0.0	0.0	0.0
Van Vleck	6700'	35.9	0.0	0.0	0.0	1.0
Huysink	6600'	42.6	0.0	0.0	0.0	0.0
Robinson Cow Camp	6480'	—	0.0	—	0.0	0.3
Robbs Saddle	5900'	21.4	0.0	0.0	0.1	0.3
Greek Store	5600'	21.0	0.0	0.0	0.0	0.4
Blue Canyon	5280'	9.0	0.0	0.0	0.0	0.3
Robbs Powerhouse	5150'	5.2	0.0	0.0	0.0	0.5
MOKELUMNE & STANISLAUS RIVERS						
Deadman Creek	9250'	37.2	0.2	0.5	0.4	0.8
Highland Meadow	8700'	47.9	—	—	—	—
Gianelli Meadow	8400'	55.5	0.0	0.0	0.0	0.0
Lower Relief Valley	8100'	41.2	0.0	0.0	0.0	0.1
Blue Lakes	8000'	33.1	0.0	0.0	0.1	0.1
Stanislaus Meadow	7750'	47.5	0.0	0.0	0.1	0.1
Bloods Creek	7200'	35.5	0.0	0.0	0.0	0.0
Black Springs	6500'	32.0	0.0	0.0	0.0	0.0
TUOLUMNE & MERCED RIVERS						
Dana Meadows	9800'	27.7	0.1	0.4	0.3	0.4
Slide Canyon	9200'	41.1	—	—	—	—
Tuolumne Meadows	8600'	22.6	0.0	0.0	0.0	0.0
Horse Meadow	8400'	48.6	0.7	1.5	0.8	0.9
Ostrander Lake	8200'	34.8	0.0	0.0	0.0	0.3
Lake Tenaya	8150'	33.1	—	—	—	—
White Wolf	7900'	—	—	—	—	—
Paradise Meadow	7650'	41.3	0.0	0.0	0.0	0.1
Gin Flat	7050'	34.2	0.0	0.0	0.0	0.0
Lower Kibbie Ridge	6700'	27.4	0.6	2.3	0.7	0.6

SAN JOAQUIN RIVER

Volcanic Knob	10050'	30.1	0.6	1.9	0.7	WR-145
Agnew Pass	9450'	32.3	0.3	0.9	0.3	Page 17
Kaiser Point	9200'	37.8	0.0	0.0	0.1	0.0
Green Mountain	7900'	30.8	0.0	0.0	0.0	0.0
Tamarack Summit	7550'	30.5	0.1	0.4	0.2	0.1
Chilkoot Meadow	7150'	38.0	—	—	—	—
Huntington Lake	7000'	20.1	0.0	0.0	0.0	0.0
Graveyard Meadow	6900'	18.8	0.2	1.3	0.2	0.0
Poison Ridge	6900'	28.9	0.0	0.0	0.0	0.0

KINGS RIVER

Bishop Pass	11200'	34.0	0.0	0.0	0.0	0.2
Charlotte Lake	10400'	27.5	—	—	—	—
State Lakes	10300'	29.0	—	—	—	—
Blackcap Basin	10300'	34.3	—	—	—	—
Mitchell Meadow	9900'	32.9	0.5	1.5	0.6	1.4
Upper Burnt Corral	9700'	34.6	1.2	3.4	1.0	1.3
West Woodchuck Meadow	9100'	32.8	0.0	0.0	0.0	0.0
Big Meadows	7600'	25.9	0.0	0.0	0.0	0.0

KAWEAH & TULE RIVERS

Farewell Gap	9500'	34.5	—	—	—	—
Quaking Aspen	7200'	21.0	0.0	0.0	0.0	0.0
Giant Forest	6650'	10.0	—	—	—	—

KERN RIVER

Upper Tyndall Creek	11400'	27.7	0.0	0.0	0.0	0.0
Crabtree Meadow	10700'	19.8	—	—	—	—
Chagoopa Plateau	10300'	21.8	0.0	0.0	0.0	0.1
Pascoes	9150'	24.9	0.0	0.0	0.0	0.0
Wet Meadows	8950'	30.3	0.0	0.0	0.0	0.0
Tunnel Guard Station	8900'	15.6	0.0	0.0	0.0	0.4
Casa Vieja Meadows	8300'	20.9	0.0	0.0	0.0	0.1
Beach Meadows	7650'	11.0	—	—	—	—

TRUCKEE RIVER

Big Meadows	8700'	25.7	0.0	0.0	0.0	0.0
Independence Lake	8450'	41.4	13.6	32.9	14.4	15.1
Squaw Valley	8200'	46.5	0.0	0.0	0.0	0.5
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	0.0

LAKE TAHOE BASIN

Mount Rose Ski Area	8900'	38.5	4.4	11.4	5.5	6.3
Heavenly Valley	8800'	28.1	0.0	0.0	0.0	0.2
Hagens Meadow	8000'	16.5	0.0	0.0	0.0	0.0
Marlette Lake	8000'	21.1	—	—	—	—
Echo Peak 5	7800'	39.5	0.0	0.0	0.0	0.3
Rubicon Peak 2	7500'	29.1	0.2	0.7	0.3	0.0
Tahoe City Cross	6750'	16.0	0.0	0.0	0.0	0.0
Ward Creek 3	6750'	39.4	0.0	0.0	0.0	0.0
Fallen Leaf Lake	6250'	7.0	0.0	0.0	0.0	0.0

CARSON RIVER

Ebbetts Pass	8700'	38.8	0.0	0.0	0.0	0.0
Horse Meadow	8557'	—	0.0	—	0.0	0.0
Monitor Pass	8350'	—	0.0	—	0.0	0.0
Burnside Lake	8129'	—	0.0	—	0.0	0.1
Forestdale Creek	8017'	—	0.0	—	0.0	0.0
Poison Flat	7900'	16.2	0.0	0.0	0.0	0.0
Spratt Creek	6150'	4.5	0.0	0.0	0.0	0.0

WALKER RIVER

Leavitt Lake	9600'	—	21.8	—	23.1	24.3
Summit Meadow	9313'	—	0.0	—	0.0	0.0
Virginia Lakes	9300'	20.3	0.0	0.0	0.3	0.5
Lobdell Lake	9200'	17.3	0.0	0.0	0.0	0.0
Sonora Pass Bridge	8750'	26.0	0.0	0.0	0.1	0.6
Leavitt Meadows	7200'	8.0	0.0	0.0	0.0	0.1

OWENS RIVER/MONO LAKE

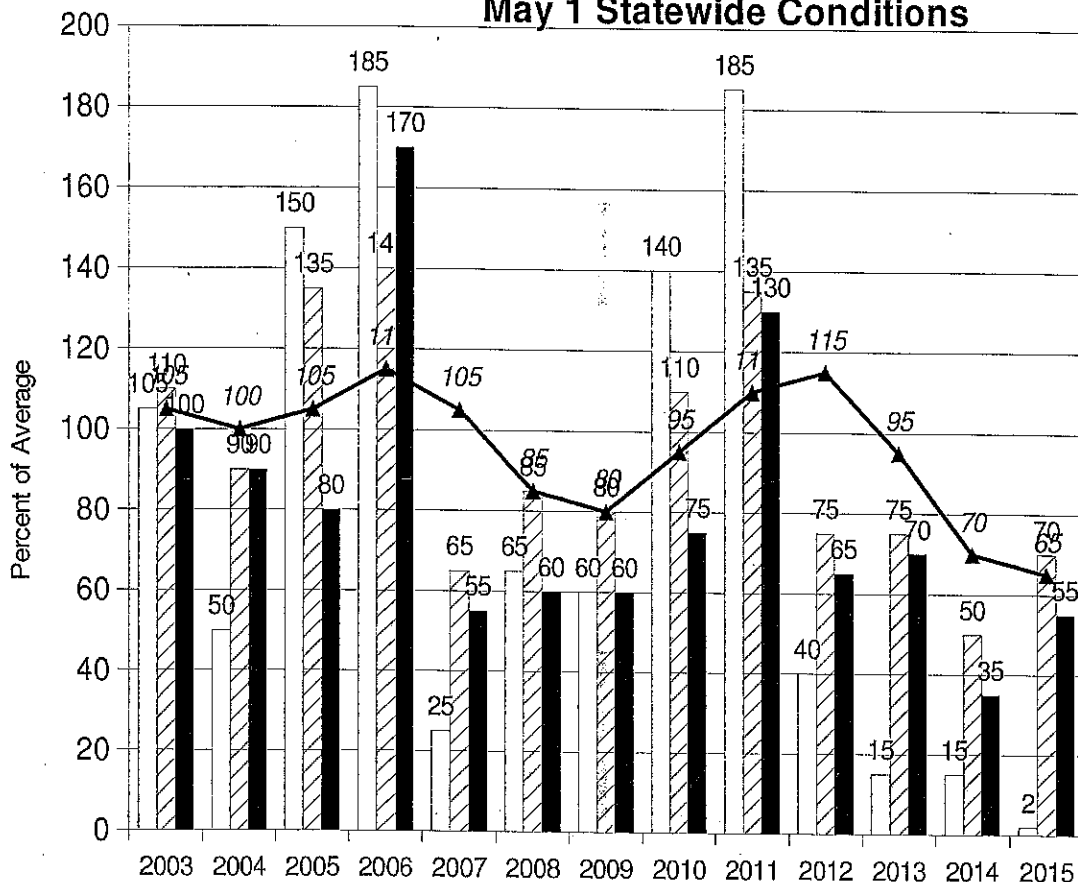
Gem Pass	10750'	31.7	—	—	—	—
Sawmill	10200'	19.4	0.0	0.0	0.0	0.0
Cottonwood Lakes	10150'	11.6	0.0	0.0	0.0	0.0
Big Pine Creek	9800'	17.9	0.0	0.0	0.0	0.0
Rock Creek Lakes	9700'	14.0	0.0	0.0	0.0	0.2
South Lake	9600'	16.0	0.0	0.0	0.0	0.0
Mammoth Pass	9300'	42.4	0.0	0.0	0.1	0.0

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%

DEPARTMENT OF WATER RESOURCES CALIFORNIA COOPERATIVE SNOW SURVEYS

May 1 Statewide Conditions



Snowpack
 Precipitation
 Runoff
 Reservoir Storage

SNOWLINES

Next year's Western Snow Conference will be held at Seattle, WA April 18-21, 2016. For those of you who missed attending this year's meeting in Grass Valley it was a resounding success. For further information contact Frank Gehrke at 916-574-2635 or gridley@water.ca.gov Information is available on the web at <http://www.westernsnowconference.org>.

On this month's cover- is an aerial photograph of the Chagoopa Plateau snow sensor completely bare on April 28, 2015. Photo by Frank Gehrke, DWR

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 for stations are based on the source of the data and varies from a 30 year to a 50 year period.

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 1961-2010.

Reservoir storage averages are based on the period from 1961 (or beginning of operation) to 2010.

For more details contact California Cooperative Snow Surveys, P.O. Box 219000, Sacramento, CA 95821-9000, (916) 574-2983 or daver@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 Natural Resources Agency
DEPARTMENT OF WATER RESOURCES
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