# **Summary of Water Conditions**

February 1, 2016

At just over the halfway point of the California rainy season, watershed conditions, except for reservoir storage, are the best since 2011 at this time, with seasonal precipitation and snowpack above average so far. Runoff to date is near average too in the north but lagging in the south. Storage is still well below normal, a legacy of the four preceding years of drought. The season started slowly in the fall in northern California, but both December and January have been fruitful months. In contrast to last year, most storms have been cooler which has resulted in the good snowpack. Not all the storms reached the southern end of the Sierra, which is the reason for a smaller pack there. Reservoir storage, by and large, is still depleted and will need to recover more to end the drought.

**Forecasts** of median April through July runoff are expected to be about average at 100 percent based on the relatively good snowpack and normal future weather compared to last year's forecast of 50 percent at this time and an eventual actual runoff of only 22 percent at the end of the season. Water year runoff forecasts are a bit less at 90 percent because of residual dryness from past years.

**Snowpack** water content is good at 115 percent for this date compared to last year's very poor 20 percent. The pack is about 75 percent of the April 1 average, normally the time of maximum accumulation. It ranges from about 140 percent of the February 1 average in the North Coast region to about 80 percent in the South Lahontan region.

**Precipitation** from October through January was about 115 percent of average statewide so far compared to 80 percent last year. Along the coast and on the east side,, the north fared better than the south. But in the Central Valley basins, the early season pattern reversed with more now in the south. January precipitation was well above average at 145 percent for the month, a vast improvement over last year's 20 percent during January.

**Runoff** to date has been 95 percent of average compared to 65 percent last year on this date. Estimated January runoff was 130 percent of average; in 2015 the month produced 25 percent of average. Estimated runoff of the eight major rivers of the Sacramento-San Joaquin River region in January 2016 was 3.6 million acre-feet.

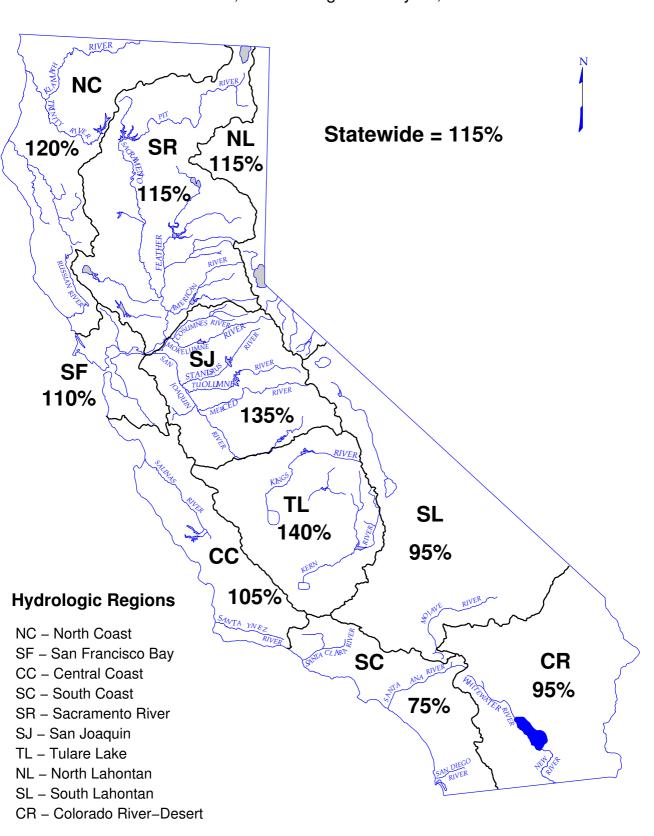
**Reservoir storage** is about 65 percent of average almost the same as reported one year ago. In 1991 total reservoir storage at the end of January was lower at 50 percent.

# SUMMARY OF WATER CONDITIONS IN PERCENT OF AVERAGE

		III LIIOLIII I	J. /\\\\G.	_		
HYDROLOGIC REGION	PRECIPITATION OCTOBER 1 TO DATE	FEBRUARY 1 SNOW WATER CONTENT	FEBRUARY 1 RESERVOIR STORAGE	RUNOFF OCTOBER 1 TO DATE	APR-JULY RUNOFF FORECAST	WATER YEAR RUNOFF FORECAST
NORTH COAST	120	140	50	110	110	100
SAN FRANCISCO BAY	110		100	50		
CENTRAL COAST	105		25	30		
SOUTH COAST	75		75	30		
SACRAMENTO RIVER	115	120	80	85	95	90
SAN JOAQUIN RIVER	135	120	50	80	105	95
TULARE LAKE	140	100	45	55	85	75
NORTH LAHONTAN	115	115	10	70	100	95
SOUTH LAHONTAN	95	80	90	50	90	80
COLORADO RIVER-DESERT	95					
STATEWIDE	115	115	65	95	100	90

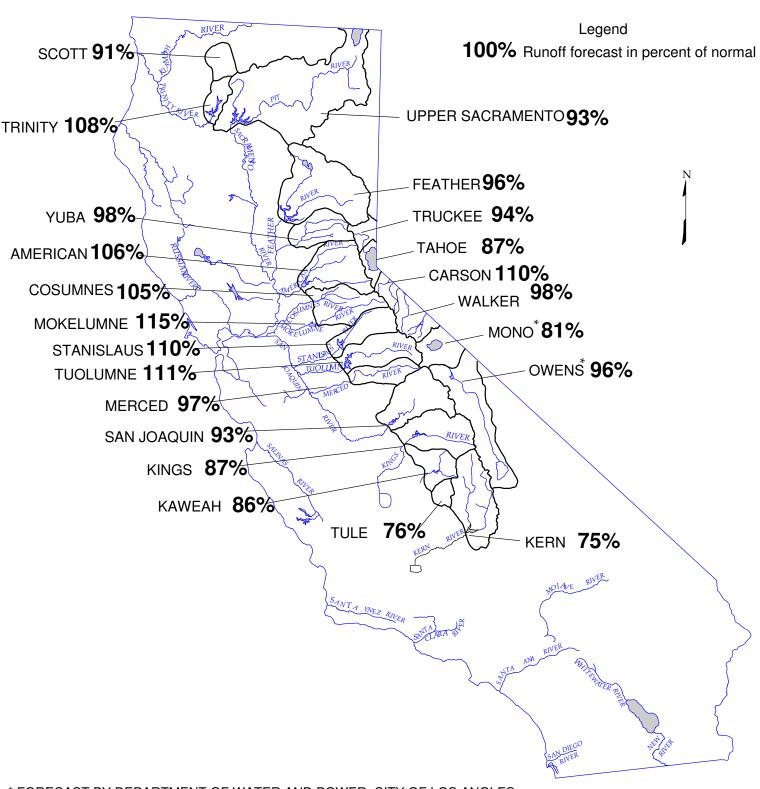
# **SEASONAL PRECIPITATION**

IN PERCENT OF AVERAGE TO DATE
October 1, 2015 through January 31, 2016



# DEPARTMENT OF WATER RESOURCES CALIFORNIA COOPERATIVE SNOW SURVEYS

FORECAST OF APRIL – JULY
UNIMPAIRED SNOWMELT RUNOFF
February 1, 2016



<sup>\*</sup> FORECAST BY DEPARTMENT OF WATER AND POWER, CITY OF LOS ANGLES

## **FEBRUARY 1, 2016 FORECASTS APRIL-JULY UNIMPAIRED RUNOFF**

		Unim	npaired Ru	unoff in 1,000	0 Acre-Fe	et (1)	
HYDROLOGIC REGION	Н	CAST					
and Watershed	50 Yr	Max	Min of	Apr-Jul	Pct	80 °	%
1	Avg	of	Record	Forecasts	of	Proba	bility
	(2)	Record	(11)		Avg	Range	9 (1)
North Coast							
Trinity River at Lewiston Lake	651	1,593	80	700	108%	480 -	1,100
SACRAMENTO RIVER							
Upper Sacramento River		_	_		<b>a</b> = :		
Sacramento River at Delta above Shasta Lake	302	751 850	39 185	260 350	86%		
McCloud River above Shasta Lake Pit River near Montgomery Creek + Squaw Creek	392 1,046	850 2,098	185 480	350 1,010	89% 97%		
Total Inflow to Shasta Lake	1,806	3,525	711	1,680	93%	1,220 -	2,680
Sacramento River above Bend Bridge, near Red Bluff	2,485	5,117	943	2,280	92%	1,580 -	3,950
Feather River		-	-	•	-		
Feather River at Lake Almanor near Prattville (3)	333	675	120	320	96%		
North Fork at Pulga (3)	1,028	2,416	243	990	96%		
Middle Fork near Clio (4) South Fork at Ponderosa Dam (3)	86 110	518 267	4 13	80 105	93% 95%		
Feather River at Oroville	110 1,758	267 4,676	13 378	105 <b>1,690</b>	95% 96%	990 -	3,130
Yuba River	1,100	+,010	510	.,030	JJ /0	550 <b>-</b>	5, 150
North Yuba below Goodyears Bar	279	647	51	270	97%		
Inflow to Jackson Mdws and Bowman Reservoirs (3)	112	236	25	110	98%		
South Yuba at Langs Crossing (3)	233	481	57	230	99%	<b>5</b> 0-	4
Yuba River near Smartsville plus Deer Creek	996	2,424	155	980	98%	580 -	1,670
American River North Fork at North Fork Dam (3)	262	740	40	200	1070/		
Middle Fork near Auburn (3)	262 522	716 1,406	43 100	280 550	107% 105%		
Silver Creek Below Camino Diversion Dam (3)	173	386	37	190	110%		
American River below Folsom Lake	1,231	3,074	185	1,300	106%	750 -	2,320
SAN JOAQUIN RIVER							
Cosumnes River at Michigan Bar	128	446	8	135	105%	65 -	280
Mokelumne River			ŭ			- <del>-</del>	
North Fork near West Point (5)	437	829	104	500	114%		
Total Inflow to Pardee Reservoir	468	1,076	75	540	115%	360 -	830
Stanislaus River		= -	_	<u> -</u>			
Middle Fork below Beardsley Dam (3)	334	702 503	64	370 250	111%		
North Fork Inflow to McKays Point Dam (3) Stanislaus River below Goodwin Reservoir (9)	224 699	503 1,710	34 116	250 <b>770</b>	112% 110%	510 -	1,230
Tuolumne River	บฮฮ	1,710	110	110	11070	310 -	1,230
Cherry Creek & Eleanor Creek near Hetch Hetchy	315	727	97	350	111%		
Tuolumme River near Hetch Hetchy	604	1,392	153	680	113%		
Tuolumne River below La Grange Reservoir (9)	1,221	2,682	301	1,360	111%	900 -	2,120
Merced River					_		
Merced River at Pohono Bridge	372	888	80	370	99%		4 40-
Merced River below Merced Falls (9)	636	1,587	104	620	97%	440 -	1,130
San Joaquin River San Joaquin River at Mammoth Pool (7)	1,026	2,279	235	970	95%		
Big Creek below Huntington Lake (8)	91	2,279 264	235 11	970 85	95% 93%		
South Fork near Florence Lake (7)	201	511	58	190	95%		
San Joaquin River inflow to Millerton Lake	1,258	3,355	193	1,170	93%	790 -	1,990
TULARE LAKE							
Kings River							
North Fork Kings River near Cliff Camp (3)	239	565	50	210	88%		
Kings River below Pine Flat Reservoir	1,236	3,113	208	1,070	87%	700 -	1,900
Kaweah River below Terminus Reservoir	290	814	42	250	86%	150 -	490
Tule River below Lake Success	64	259	1	48	76%	22 -	115
Kern River Kern River near Kernville	384	1,203	83	290	76%		
Kern River near Kernville  Kern River inflow to Lake Isabella	384 465	1,203 1,657	83 57	290 <b>350</b>	76% 75%	200 -	830
	+00	.,557			. 5 /0		

<sup>(1)</sup> 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

<sup>(5) 36</sup> 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

#### **FEBRUARY 1, 2016 FORECASTS** WATER YEAR UNIMPAIRED RUNOFF

	Unimpaired Runoff in 1,000 Acre-Feet (1)														
	HISTORICAL Min of			DISTRIBUTION							FORECAST				
50 Yr	Max of	Min of Record	Oct	Feb	Mos	۸	Max	lue	led	۸~	San	Water Year	Pct of	80 Proba	
Avg (2)	Record	(11)	Thru Jan	гер	Mar	Apr	May	Jun	Jul	Aug	Sep	Year Forecasts	Avg	Proba Range	-
(4)	record	(11)	Jan									1 01000313	Avy	range	(1)
1376	2990	200	300	160	188	250	285	125	40	13	9	1,370	100%	1,030 -	1,985
070	1.065	165													
876 1,200	1,965 2,353	165 557													
3,082	5,150	1,484	4.004	6.10	0=0	0.10	400	0.1-	00-	0	0		0.424	4.00=	7.00-
5,979 8,727	10,796 17,180	2,479 3,294	1,631 2,772	840 1,000	850 1,100	640 880	490 670	315 420	235 310	215 270	214 258	5,430 7,680	91% 88%	4,385 - 6,170 -	7,695 11,275
0,121	17,100	3,294	2,112	1,000	1,100	000	0/0	420	310	210	200	7,000	00%	0,170 -	11,2/5
780	1,269	366													
2,417 219	4,400 637	666 24													
219	562	32													
4,523	9,492	994	1,022	520	600	670	600	280	140	100	83	4,015	89%	2,850 -	6,565
564	1,056	102													
181	292	30													
379	565	98	F00	000	005	200	400	400	40	00	00	0.075	000/	4 440	0.405
2,329	4,926	369	530	230	295	360	400	180	40	20	20	2,075	89%	1,440 -	3,165
616	1,234	66													
1,070	2,575	144													
318 2,683	705 6,382	59 349	581	290	372	450	530	270	50	15	12	2,570	96%	1,825 -	4,135
,	,		-					-		-		,		, -	,
385	1,253	20	69	65	74	70	45	16	4	1	1	345	90%	200 -	645
225	4 005														
626 763	1,009 1,848	197 129	97	60	86	140	230	150	20	4	3	790	104%	550 -	1,170
, 00	.,040	120	31	50	30	1-10	200	100	20	7	5	7.50	137/0	000 -	.,.,
471	929	88													
1,167	2,952	155	159	90	125	210	330	190	40	11	5	1,160	99%	820 -	1,760
•	•								• •		-	-,			,
461	1,147	123													
770 1,943	1,661 4,631	258 383	297	140	178	300	520	430	110	25	10	2.010	103%	1,430 -	2,970
1,040	.,001		201	1-10	.,,	500	020	.00		20	10	2,010	10070	1, 100	_,570
461	1,020	92	100	00	00	150	200	170	40	4.4	_	005	000/	670	1 500
1,007	2,787	150	120	60	89	150	260	170	40	11	5	905	90%	670 -	1,560
1,337	2,964	308													
112	298	14													
248 1,831	653 4,642	71 327	126	80	132	240	440	370	120	40	17	1,565	85%	1,090 -	2,580
	.,	<u> </u>									•••	.,		.,	_,500
284	607	58 350	110	60	100	240	440	240	110	20	46	4 200	900/	040	2 200
1,729 456	4,287 1,402	359 89	110 37	60 20	102 36	210 65	410 105	340 65	110 15	32 4	16 3	1,390 350	80% 77%	940 <i>-</i> 220 <i>-</i>	2,390 660
147	615	10	24	10	17	22	17	7	2	1	0	100	68%	55 -	210
558 733	1,577 2,318	163 130	51	30	42	80	130	100	40	19	13	505	69%	310 -	1,130
133	۷,310	130	JI	30	44	00	130	100	40	13	13	303	03/0	310 -	1,130

<sup>(9)</sup> 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

<sup>(11)</sup> For the tributaries, the period of record over which the minimum values are found does not include years after water year 2011.

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

#### **FEBRUARY 1, 2016 FORECASTS APRIL-JULY UNIMPAIRED RUNOFF**

APRIL-JULT U	IMIIMIL WI	KED KUN	IOFF							
	Apr-Jul Unimpaired Runoff in 1,000 Acre-Feet (1)									
HYDROLOGIC REGION	H	<b>AL</b>	FOREC	AST						
and Watershed	50 Yr	Max	Min	Apr-Jul	Pct					
	Avg	of	of	Forecasts	of					
	(2)	Record	Record		Avg					
NORTH COAST										
Scott River Scott River nr Ft Jones (3)	173	398	22	157	91%					
Scott river in 1 t solles (5)	173	330	22	137	3170					
Klamath River										
Total inflow to Upper Klamath Lake (4)	475	1,150	149	544	115%					
NORTH LAHONTAN										
Truckee River										
Lake Tahoe to Farad accretions	256	713	46	240	94%					
Lake Tahoe Rise (assuming gates closed, ft)	1.4	5.4	0.2	1.2	87%					
Carson River										
West Fork Carson River at Woodfords	53	135	10	55	104%					
East Fork Carson River near Gardnerville	186	407	43	210	113%					
Walker River										
West Walker River below Little Walker, near Coleville	155	330	35	155	100%					
East Walker River near Bridgeport	63	209	7	60	95%					
SOUTH LAHONTAN										
Owens River										
Total tributary flow to Owens River (5)	235	579	84	225	96%					

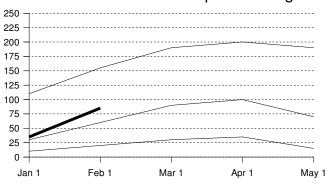
<sup>(1)</sup> See inside back cover for definition
(2) All 50 year averages are based on years 1961-2010 unless otherwise noted

<sup>(3)</sup> 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, April through September forecast, 30 year average based on years 1981-2010.

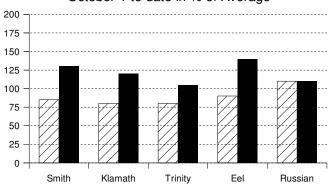
(5) Forecast by Department of Water and Power, City of Los Angeles, average based on years 1961-2010

# Water Content in % of April 1 Average



# Precipitation

#### October 1 to date in % of Average



# area was 120 percent of normal. Precipitation last month was about 145 percent of the monthly average. Seasonal precipitation at this time last year stood at 90 percent of normal.

(October 1 through the end of last month) on this

**PRECIPITATION** - Seasonal precipitation

NORTH COAST REGION

pack was holding 2.8 inch of water.

**SNOWPACK**- First of the month measurements

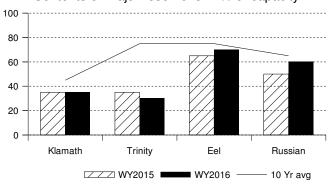
the February 1 average and 85 percent of the

made at 12 snow courses indicate an area wide snow water equivalent of 25.8 inch. This is 140 percent of

seasonal (April 1) average. Last year at this time the

# Reservoir Storage

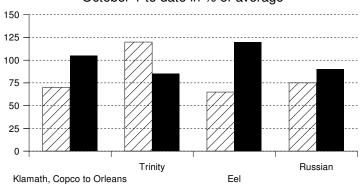
#### Contents of major reservoirs in % of capacity



**RESERVOIR STORAGE**- First of the month storage in 6 reservoirs was 1.1 million acre-feet which is 50 percent of average. About 35 percent of available capacity was being used. Storage in these reservoirs at this time last year was 55 percent of average.

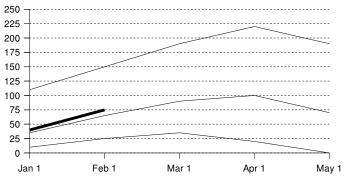
#### Runoff

#### October 1 to date in % of average

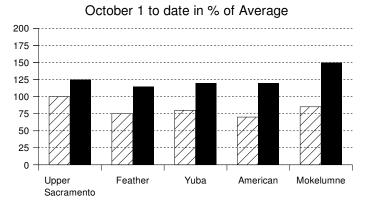


**RUNOFF** -Seasonal runoff of streams draining the area totaled 5.8 million acre-feet which is 110 percent of the average for this period. Last year, runoff for the same period was 70 percent of average.

# Water Content in % of April 1 Average

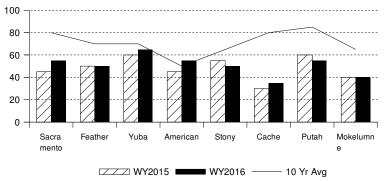


# Precipitation



# Reservoir Storage

#### Contents of major reservoirs in % of capacity



#### Runoff

October 1 to date in % of average

# 150 125 100 50

Shasta Inflow

#### SACRAMENTO RIVER REGION

**SNOWPACK**- First of the month measurements made at 71 snow courses indicate an area wide snow water equivalent of 22 inches. This is 120 percent of the February 1 average and 75 percent of the seasonal (April 1) average. Last year at this time the pack was holding 4.2 inch of water.

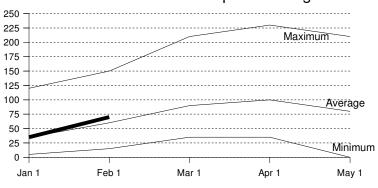
**PRECIPITATION** - Seasonal precipitation (October 1 through the end of last month) on this area was 115 percent of normal. Precipitation last month was 150 percent of the monthly average. Seasonal precipitation at this time last year stood at 85 percent of normal.

> RESERVOIR STORAGE- First of the month storage in 43 reservoirs was 8.6 million acre-feet which is 80 percent of average. About 55 percent of available capacity was being used. Storage in these reservoirs at this time last year was 75 percent of average.

**RUNOFF** - Seasonal runoff of streams draining the area totaled 4.9 million acre-feet which is 85 percent of average for this period. Last year, runoff for the same period was 75 percent of average.

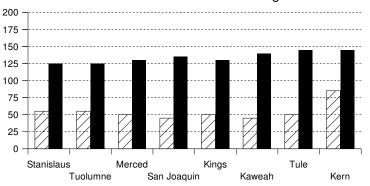
The Sacramento Region 40-30-30 Water Supply **Index** is forecast to be 6.5 assuming median meteorological conditions for the remainder of the year. This classifies the year as "dry" in the Sacramento Valley according to the State Water Resources Control Board.

# Water Content in % of April 1 Average



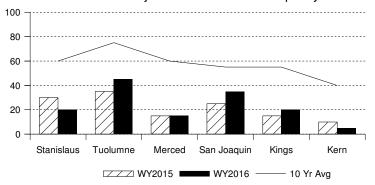
# Precipitation

#### October 1 to date in % of Average



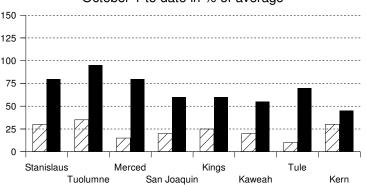
# Reservoir Storage

Contents of major reservoirs in % of capacity



# Runoff

#### October 1 to date in % of average



# SAN JOAQUIN RIVER AND TULARE LAKE REGIONS

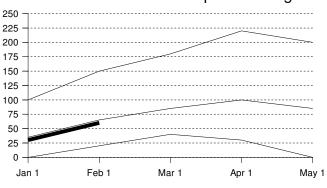
**SNOWPACK**- First of the month measurements made at 66 **San Joaquin River Region** snow courses indicate an area wide snow water equivalent of 23.2 inches. This is 120 percent of the February 1 average and 75 percent of seasonal average. Last year at this time the pack was holding 4.8 inches of water. At the same time 38 **Tulare Lake Region** snow courses indicated a basin-wide snow water equivalent of 14.4 inches which is 100 percent of the average for February 1 and 60 percent of the se asonal average. Last year at this time the basin was holding 3.7 inches of water.

**PRECIPITATION** - Seasonal precipitation (October 1 through the end of last month) on the **San Joaquin Region** was 135 percent of normal. Precipitation last month was 160 percent of the monthly average. Seasonal precipitation at this time last year stood at 60 percent of normal. Seasonal precipitation on the **Tulare Lake Region** was 140 percent of normal. Precipitation last month was about 150 percent of the monthly average. Seasonal precipitation at this time last year stood at 65 percent of normal.

**RESERVOIR STORAGE**- First of the month storage in 34 **San Joaquin Region** reservoirs was 3.6 million acre-feet which is 50 percent of average. About 30 percent of available capacity was being used. Storage in these reservoirs at this time last year was 60 percent of average. First of the month storage in 6 **Tulare Lake Region** reservoirs was 352 thousand acre-feet which is 45 percent of average and about 15 percent of available capacity. Storage in these reservoirs at this time last year was 35 percent of average.

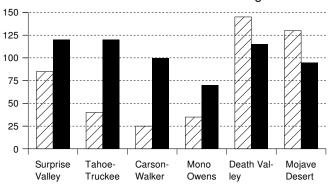
**RUNOFF**- Seasonal runoff of streams draining the San Joaquin Region totaled 865 thousand acre-feet which is 80 percent of average for this period. Last year, runoff for the same period was 25 percent of average. Seasonal runoff of streams draining the Tulare Lake Basin totaled 225 thousand acre-feet which is 55 percent of average for this period. Last year runoff for this same period was 25 percent of average. The San Joaquin Region 60-20-20 Water Supply Index is forecast to be 2.4 assuming 75 percent exceedance meteorological conditions. This classifies the year as "dry" in the San Joaquin Region according to the State Water Resources Control Board.

# Water Content in % of April 1 Average



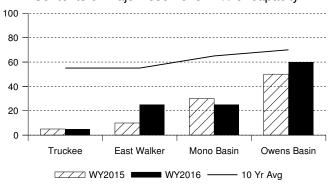
# Precipitation

#### October 1 to date in % of Average



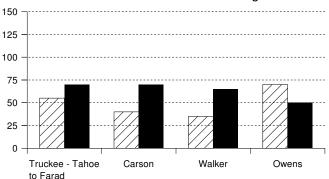
# Reservoir Storage

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 12 North Lahontan snow courses indicate an area wide snow water equivalent of 15 inches. This is 115 percent of the February 1 average and 70 percent of seasonal (April 1) average. Last year at this time the pack was holding 3.1 inches of water. At the same time 17 South Lahontan Region snow courses indicated a basin-wide snow water equivalent of 12.1 inches which is 80 percent of the average for February 1 and 50 percent of the seasonal average. Last year at this time the basin was holding 3.0 inches of water.

PRECIPITATION - Seasonal precipitation (October 1 through the end of last month) on the North Lahontan Region was 115 percent of normal. Precipitation last month was 115 percent of the monthly average. Seasonal precipitation at this time last year stood at 50 percent of normal. Seasonal precipitation on the South Lahontan Region was 95 percent of normal. Precipitation last month was about 100 percent of the monthly average. Seasonal precipitation at this time last year stood at 105 percent of normal.

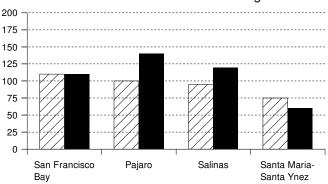
**RESERVOIR STORAGE**- First of the month storage in 5 **North Lahontan** reservoirs was 61 thousand acre-feet which is 10 percent of average. About 5 percent of available capacity was being used. Storage in these reservoirs at this time last year was 15 percent of average. Lake Tahoe was 0.9 feet below its natural rim on February 1. First of the month storage in 8 **South Lahontan** reservoirs was 235 thousand acre-feet which is 90 percent of average and about 55 percent of available capacity. Storage in these reservoirs at this time last year was 85 percent of average.

**RUNOFF**- Seasonal runoff of streams draining the **North Lahontan Region** totaled 102 thousand acrefeet which is 70 percent of average for this period. Last year, runoff for the same period was 45 percent of average.

Seasonal runoff of the Owens River in the **South Lahontan Region** totaled 22 thousand acre-feet which is 50 percent of average for this period. Last year runoff for this same period was 70 percent of average.

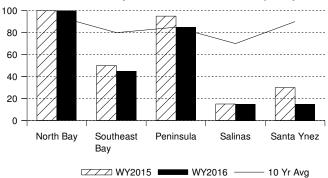
# Precipitation

#### October 1 to date in % of Average



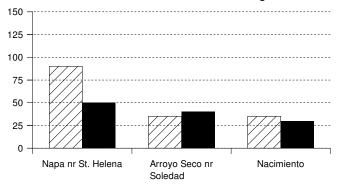
# Reservoir Storage

Contents of major reservoirs in % of capacity



#### Runoff

#### October 1 to date in % of average



# SAN FRANCISCO BAY AND CENTRAL COAST REGIONS

PRECIPITATION - Seasonal precipitation (October 1 through the end of last month) on the San Francisco Bay Region was 110 percent of normal. Precipitation last month was about 155 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 105 percent of normal. Precipitation last month was about 155 percent of the monthly average. Seasonal precipitation at this time last year stood at 90 percent of normal.

**RESERVOIR STORAGE**- First of the month storage in 17 **San Francisco Bay Region** reservoirs was 463 thousand acre-feet which is 100 percent of average. About 65 percent of available capacity was being used. Storage in these reservoirs at this time last year was 95 percent of average. First of the month storage in 6 **Central Coast Region** reservoirs was 140 thousand acre-feet which is 25 percent of average and about 15 percent of available capacity. Storage in these reservoirs at this time last year was 30 percent of average.

**RUNOFF**- Seasonal runoff of the Napa River in the **San Francisco Bay Region** totaled 18 thousand acre-feet which is 50 percent of average for this period. Last year, runoff for the same period was 90 percent of average.

Seasonal runoff of streams draining the **Central Coast Region** totaled 40 thousand acre-feet which is 30 percent of average for this period. Last year runoff for this same period was less than 35 percent of average.

## **SOUTH COAST REGION**

**PRECIPITATION** - October through January (seasonal) precipitation on the **South Coast Region** was 75 percent of normal. January precipitation was 115 percent of the monthly average. Seasonal precipitation at this time last year was 80 percent of normal. Seasonal precipitation on the **Colorado River-Desert Region** was 95 percent of normal. Last year seasonal precipitation on the **Colorado River-Desert Region** was 60 percent of normal. Precipitation in January was 170 percent of average.

**RESERVOIR STORAGE** - February 1 storage in 29 major **South Coast Region** reservoirs was 1 million acre-feet or 75 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. On February 1 combined storage in Lakes Powell, Mead, Mohave and Havasu was about 23.9 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.

**RUNOFF** - Seasonal runoff from selected **South Coast Region** streams is 4.8 thousand acre feet which is 30 percent of average.

#### COLORADO RIVER

The April -July inflow to Lake Powell is forecast to be 6.7 million acre-feet, which is 94 percent of average. The February 1 snowpack in the Colorado River basin above Lake Powell was 110 percent of average, lowest in the Duchesne at 90 percent and highest in the Colorado Plateau at 160 percent.

# MAJOR WATER DISTRIBUTION PROJECTS RESERVOIR STORAGE

(AVERAGES BASED ON 1951-2000 OR PERIOD RECORD)

RESERVOIR	CAPACITY 1,000 AF	AVERAGE STORAGE 1,000 AF	2015 1,000 AF	2016	GE AT END PERCENT AVERAGE	PERCENT
STATE WATER PROJEC		0.047	4 444	4.504	000/	400/
Lake Oroville	3,538	2,317	1,444	1,534	66%	43%
San Luis Reservoir (SWF	•	858	756	504	59%	47%
Lake Del Valle	77	31	35	31	98%	40%
Lake Silverwood	78 400	66	71	66	101%	85%
Pyramid Lake	180	163	168	169	104%	94%
Castaic Lake	325	270	114	111	41%	34%
Perris Lake	131	107	47	47	44%	36%
CENTRAL VALLEY PRO		4 700	074	COF	400/	200/
Trinity Lake Lake Shasta	2,448	1,730	874	695	40% 76%	28% 52%
	4,552 241	3,072 205	2,001 205	2,346 210	102%	52% 87%
Whiskeytown Lake Folsom Lake	977	508	448	529	102%	54%
New Melones Reservoir	2,400	1,423	563	393	28%	16%
Millerton Lake	520	333	186	208	62%	40%
San Luis Reservoir (CVP		743	347	189	25%	19%
COLORADO RIVER PRO	,	743	347	103	2570	1370
Lake Mead	26,159	19,607	10,729	10,318	53%	39%
Lake Powell	24,322	17,588	11,147	11,427	65%	47%
Lake Mohave	1,810	1,677	1,698	1,651	98%	91%
Lake Havasu	648	550	584	554	101%	85%
EAST BAY MUNICIPAL U	00.	10170	3370			
Pardee Res	210	178	166	163	91%	78%
Camanche Reservoir	417	248	132	90	36%	22%
East Bay (4 res.)	159	125	111	122	98%	77%
CITY AND COUNTY OF						
Hetch-Hetchy Reservoir	360	172	233	281	163%	78%
Cherry Lake	268	144	168	94	66%	35%
Lake Eleanor	29	10	10	4	38%	13%
South Bay/Peninsula (4 r	es.) 238	159	134	152	95%	64%
CITY OF LOS ANGELES	S (D.W.P.)					
Lake Crowley	183	123	91	115	93%	62%
Grant Lake	48	28	17	11	39%	23%
Other Aqueduct Storage	(6 res.) 83	75	59	59	79%	71%

# **TELEMETERED SNOW WATER EQUIVALENTS**

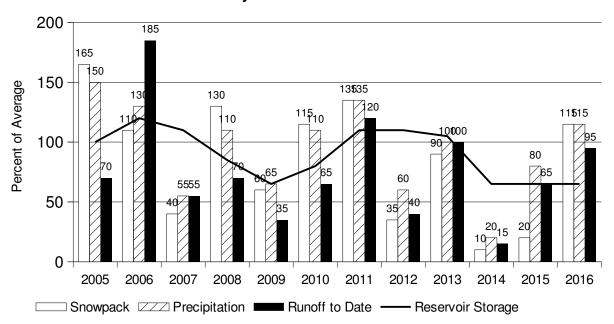
February 1, 2016 (AVERAGES BASED ON PERIOD RECORD)

	(AVE	RAGES BASED ON		D)		
			INCH	IES OF WATE	R EQUIVALENT	
BASIN NAME		APRIL 1		PERCENT 24 HR		
STATION NAME	ELEV	AVERAGE	Feb 1 OF A		PREVIOUS	1 WEEK PREVIOUS
TRINITY RIVER	7450'	20.2	22.4	90.4	22.4	22.0
Peterson Flat	7150'	29.2	23.4 31.1	80.1 78.5	23.4 31.7	22.0 32.4
Red Rock Mountain	6700' 6450'	39.6 40.5	31.7	76.5 78.2	31.7	32.4 30.1
Bonanza King						
Shimmy Lake	6400'	40.3	31.6	78.4	31.6	28.5
Middle Boulder 3	6200' 6030'	28.3 29.9	25.7 31.9	90.8 106.8	25.6 32.2	25.5 31.6
Highland Lakes Scott Mountain	5900'	16.0	31.9	100.0	32.2	31.0
Mumbo Basin	5650'	22.4	_	_	_	_
Big Flat	5100'	15.8	 17.4	110.1	17.3	16.9
Crowder Flat	5100'	——————————————————————————————————————	5.1	110.1	5.1	5.1
SACRAMENTO RIVER	3100	_	5.1	_	3.1	5.1
Cedar Pass	7100'	18.1	19.1	105.5	19.2	16.9
Blacks Mountain	7050'	12.7	12.5	98.3	12.2	11.5
Sand Flat	6750'	42.4	30.5	71.9	30.4	28.3
Medicine Lake	6700'	32.6	23.3	71.4	23.3	21.8
Adin Mountain	6200'	13.6	16.7	122.8	17.0	15.3
Snow Mountain	5950'	27.0	24.6	91.1	24.6	23.6
Slate Creek	5700'	29.0	23.0	79.4	22.8	22.0
Stouts Meadow	5400'	36.0	22.0	61.0	22.1	21.7
FEATHER RIVER						
Lower Lassen Peak	8250'	_	57.5	_	56.9	50.9
Kettle Rock	7300'	25.5	18.7	73.4	18.6	18.7
Grizzly Ridge	6900'	29.7	19.1	64.2	18.7	18.2
Pilot Peak	6800'	52.6	33.8	64.2	33.5	33.7
Gold Lake	6750'	36.5	27.0	74.0	26.5	26.2
Humbug	6500'	28.0	22.0	78.4	21.7	23.0
Harkness Flat	6200'	28.5	22.8	80.1	23.3	23.4
Rattlesnake	6100'	14.0	14.4	102.9	14.4	14.8
Bucks Lake	5750'	44.7	31.5	70.4	31.2	31.3
Four Trees	5150'	20.0	15.5	77.4	15.6	16.9
EEL RIVER						
Hull Mountain	6461'	_	15.0	_	15.8	18.1
Noel Spring	5100'	_	0.0	_	0.0	2.7
YUBA & AMERICAN RIVERS						
Schneiders	8750'	34.5	35.6	103.1	34.8	31.3
Lake Lois	8600'	39.5	_	_	_	_
Carson Pass	8353'	_	23.3	_	22.8	21.3
Caples Lake	8000'	30.9	25.4	82.3	24.1	25.0
Alpha	7600'	35.9	30.5	84.8	30.1	29.5
Forni Ridge	7600'	37.0	33.0	89.2	32.0	28.9
Meadow Lake	7200'	55.5	_	_	_	_
Silver Lake	7100'	22.7	21.7	95.7	21.2	20.2
Central Sierra Snow Lab	6900'	33.6	26.8	79.8	26.3	26.9
Van Vleck	6700'	35.9	28.2	78.5	26.9	27.1
Huysink	6600'	42.6	24.7	58.0	24.6	23.6
Robinson Cow Camp	6480'	_	34.5	_	31.5	33.5
Robbs Saddle	5900'	21.4	14.3	66.9	13.8	14.3
Greek Store	5600'	21.0	16.0	76.0	15.8	_
Blue Canyon	5280'	9.0	8.7	96.4	8.5	9.0
Robbs Powerhouse	5150'	5.2	7.1	135.8	6.8	7.5
MOKELUMNE & STANISLAUS RIVE						
Deadman Creek	9250'	37.2	21.7	58.3	21.1	19.2
Highland Meadow	8700'	47.9	32.4	67.7	31.7	30.0
Gianelli Meadow	8400'	55.5	30.6	55.1	29.8	28.3
Lower Relief Valley	8100'	41.2	_			_
Blue Lakes	8000'	33.1	25.9	78.2	25.4	24.1
Stanislaus Meadow	7750'	47.5	32.9	69.2	33.0	29.6
Bloods Creek	7200'	35.5	24.9	70.1	24.8	24.2
Black Springs	6500'	32.0	22.2	69.4	21.8	21.7
TUOLUMNE & MERCED RIVERS	0000	07.7	40.0	74.0	40.0	470
Dana Meadows	9800'	27.7	19.9	71.8	19.3	17.0
Slide Canyon	9200'	41.1 22.6	25.3	61.6	24.9	22.4
Tuolumne Meadows	8600'			72.0	24.0	- 22.5
Horse Meadow	8400'	48.6	35.9	73.9	34.9	32.5
Ostrander Lake	8200' 8150'	34.8 33.1	24.9	71.7	24.0	22.3
Lake Tenaya White Wolf	8150' 7900'	აა. I	_	_	_	_
Paradise Meadow	7900 7650'	<u> </u>	_	_	_	_
Gin Flat	7650 7050'	41.3 34.2	20.9	61.1	19.8	19.9
Lower Kibbie Ridge	6700°	34.2 27.4	20.9 14.3	52.4	13.7	13.7
Lower Kibble Kluge	0700	21.4	14.3	JZ.4	13.7	13.1

SAN JOAQUIN RIVER						
Volcanic Knob	10050'	30.1	21.4	71.1	19.7	17.3
Agnew Pass	9450'	32.3	15.8	48.9	14.7	12.8
Kaiser Point	9200'	37.8	19.6	51.7	17.9	16.0
Green Mountain	7900'	30.8	19.8	64.3	18.4	17.5
Devil's Postpile	7569'	_	_	_	_	_
Tamarack Summit	7550'	30.5	20.9	68.5	18.5	17.4
Chilkoot Meadow	7150'	38.0	25.0	65.7	23.2	22.3
Huntington Lake	7000'	20.1	16.7	83.0	14.5	14.9
Graveyard Meadow	6900'	18.8	17.2	91.3	16.2	15.7
Poison Ridge	6900'	28.9	17.6	61.0	16.0	16.0
KINGS RIVER Bishop Pass	11200'	34.0	9.8	28.8	8.9	7.3
Charlotte Lake	10400'	27.5	9.0	20.0	0.9	7.5
State Lakes	10300'	29.0	18.0	62.2	16.4	14.2
Blackcap Basin	10300'	34.3	—	—	<del>-</del>	
Mitchell Meadow	9900'	32.9	24.7	75.0	22.2	20.4
Upper Burnt Corral	9700'	34.6	22.7	65.5	21.0	18.8
West Woodchuck Meadow	9100'	32.8	21.0	64.1	19.0	17.1
Big Meadows	7600'	25.9	13.9	53.7	12.0	12.1
KAWEAH & TULE RIVERS						
Farewell Gap	9500'	34.5	_	_	_	_
Quaking Aspen	7200'	21.0	17.3	82.3	14.8	13.7
Giant Forest	6650'	10.0	_	_	_	_
KERN RIVER						
Upper Tyndall Creek	11400'	27.7	10.9	39.4	9.6	7.7
Crabtree Meadow	10700'	19.8	9.7	49.1	8.4	7.2
Chagoopa Plateau	10300'	21.8	17.0	78.0	15.7	13.1 22.4
Pascoes Wet Meadows	9150' 8950'	24.9 30.3	26.1 22.5	104.8 74.3	24.1 20.2	22.4
Tunnel Guard Station	8900'	15.6	10.6	67.9	8.3	6.4
Casa Vieja Meadows	8300'	20.9	14.2	67.9	12.9	11.2
Beach Meadows	7650'	11.0	—	—	—	
SURPRISE VALLEY AREA	. 555					
Dismal Swamp	7050'	29.2	27.0	92.5	26.9	23.5
TRUCKEE RIVER						
Big Meadows	8700'	25.7	18.8	73.2	18.0	15.9
Independence Lake	8450'	41.4	28.3	68.4	27.8	26.0
Squaw Valley	8200'	46.5	29.9	64.3	30.0	25.1
Independence Camp	7000'	21.8	9.3	42.7	8.8	8.5
Independence Creek	6500'	12.7	8.0	63.0	7.6	7.9
Truckee 2	6400'	14.3	12.5	87.4	12.1	12.3
LAKE TAHOE BASIN  Mount Rose Ski Area	8900'	38.5	28.7	74.5	28.0	246
Heavenly Valley	8800'	28.1	24.0	74.5 85.4	23.4	24.6
Hagans Meadow	8000'	16.5	17.9	108.5	17.8	16.5
Marlette Lake	8000,	21.1	18.2	86.3	17.6	16.1
Echo Peak 5	7800'	39.5	37.7	95.4	37.3	34.2
Rubicon Peak 2	7500'	29.1	18.2	62.5	17.3	16.3
Tahoe City Cross	6750'	16.0	11.6	72.5	11.4	11.3
Ward Creek 3	6750'	39.4	27.3	69.3	26.7	26.6
Fallen Leaf Lake	6250'	7.0	4.2	60.0	3.8	4.7
CARSON RIVER						
Ebbetts Pass	8700'	38.8	25.7	66.2	24.8	22.7
Poison Flat	7900'	16.2	14.4	88.9	13.6	12.8
Spratt Creek	6150'	4.5	4.3	95.6	3.4	4.8
WALKER RIVER	0000		07.0		27.4	24.4
Leavitt Lake	9600'	_	37.6	_	37.4	34.4
Summit Meadow	9313'	20.3	16.7	 55.2	15.7	14.6
Virginia Lakes Lobdell Lake	9300' 9200'	17.3	11.2 14.5	83.8	10.7 13.8	9.4 12.6
Sonora Pass Bridge	9200 8750'	26.0	16.5	63.5	16.0	14.8
Leavitt Meadows	7200'	8.0	8.4	105.0	8.0	8.8
OWENS RIVER/MONO LAKE	. 200	5.0	<b>0.</b> 1	. 55.6	0.0	0.0
Gem Pass	10750'	31.7	11.3	35.7	10.8	9.9
Sawmill	10200'	19.4	9.1	47.0	7.2	6.5
Cottonwood Lakes	10150'	11.6	12.9	111.3	10.3	7.6
Big Pine Creek	9800'	17.9	7.1	39.6	5.7	4.8
Rock Creek Lakes	9700'	14.0	17.7	126.3	15.9	13.2
South Lake	9600'	16.0	9.1	56.7	7.9	6.4
Mammoth Pass	9300'	42.4	24.4	57.5	22.8	20.3

NORMAL SNOWPACK ACCUMULATION EXPRESSED AS A PERCENT OF APRIL 1ST AVERAGE AREA FEBRUARY JANUARY MARCH APRIL MAY Central Valley North Central Valley South 70% 65% 100% 75% 80% 90% 45% 100% 45% 85% North Coast 40% 60% 85% 100% 80%

# **February 1 Statewide Conditions**



#### **SNOWLINES**

Registration is now open for the **84th annual Western Snow Conference** to be held in Seattle, Washington, April 18-21, 2016. We expect to have a full agenda of informative and interesting presentations related to snow hydrology, meteorological measurement techniques, and water resource management.

Meeting Information:

http://www.westernsnowconference.org/meetings/2016

Online Registration:

https://www.regonline.com/Register/Checkin.aspx?EventID=1787590

The Conference will begin Monday, April 18th with a short course and panel discussion on "Validation of the Rain/Snow Global Precipitation Measurements (GPM) Satellite Data in the Olympic Mountains". Tuesday and Wednesday will include formal paper and poster presentations on a variety of topics, including climate variability, climate change impacts on snow and runoff, water management, water supply forecasting, and modeling and climatology of snow. Thursday will include a technical tour of the nearby Skagit Valley.

<u>Depicted</u> on this month's cover is a photo of the newest NASA/JPL Airborne Snow Observatory Plane. Currently operational in the Southern Sierra Neveda it provides the very first basin wide estimates of snow depth and albido and using snow densities from ground based observations the most comprehensive picture of total basin snow water equivalent.