

Project Operations Update

State Water Resource Control Board

February 16, 2016

DROUGHT PREPAREDNESS & RESPONSE



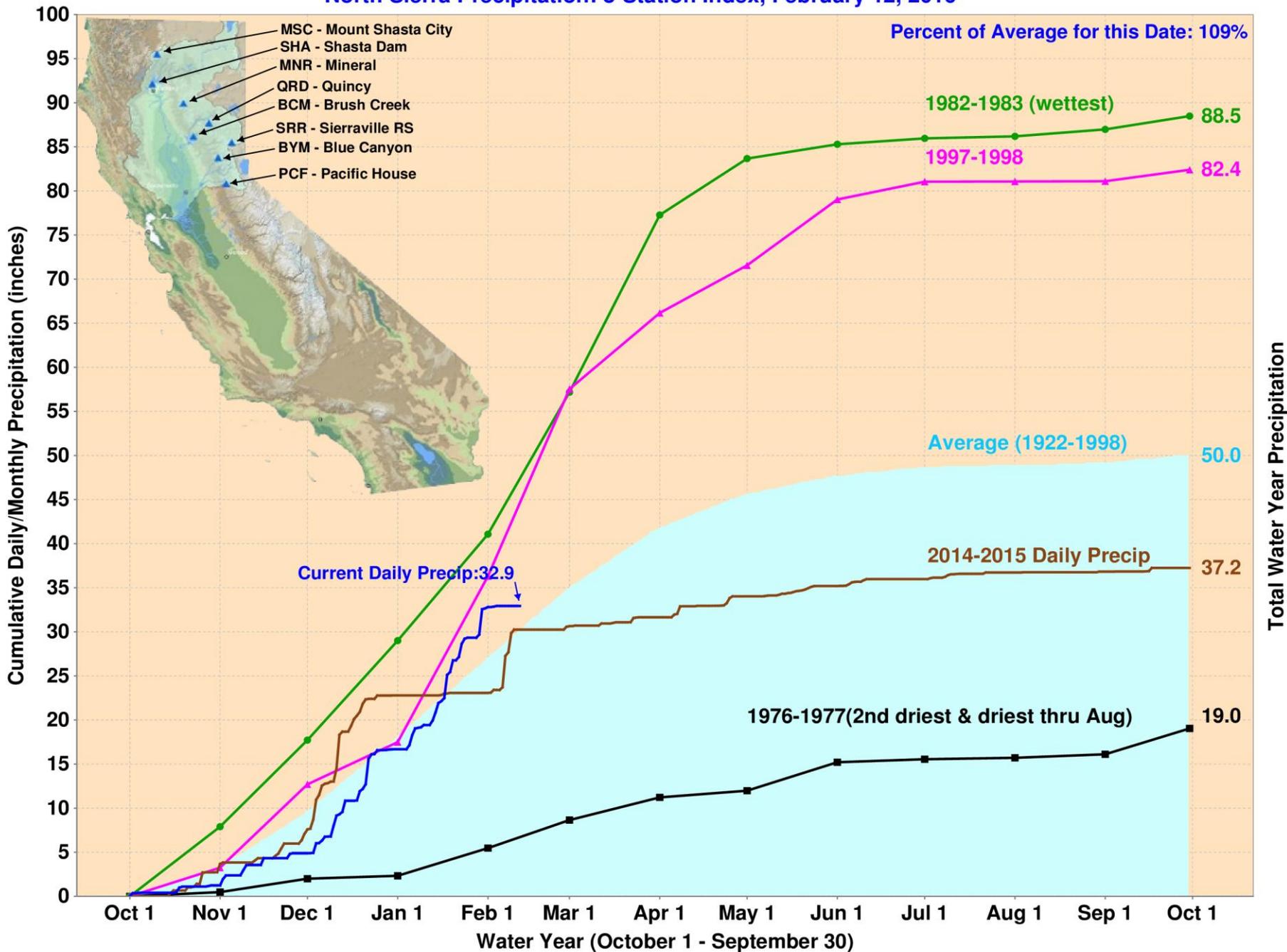
PUBLIC SAFETY

ENVIRONMENTAL STEWARDSHIP

ECONOMIC STABILITY

Overview of Current Hydrology

North Sierra Precipitation: 8-Station Index, February 12, 2016



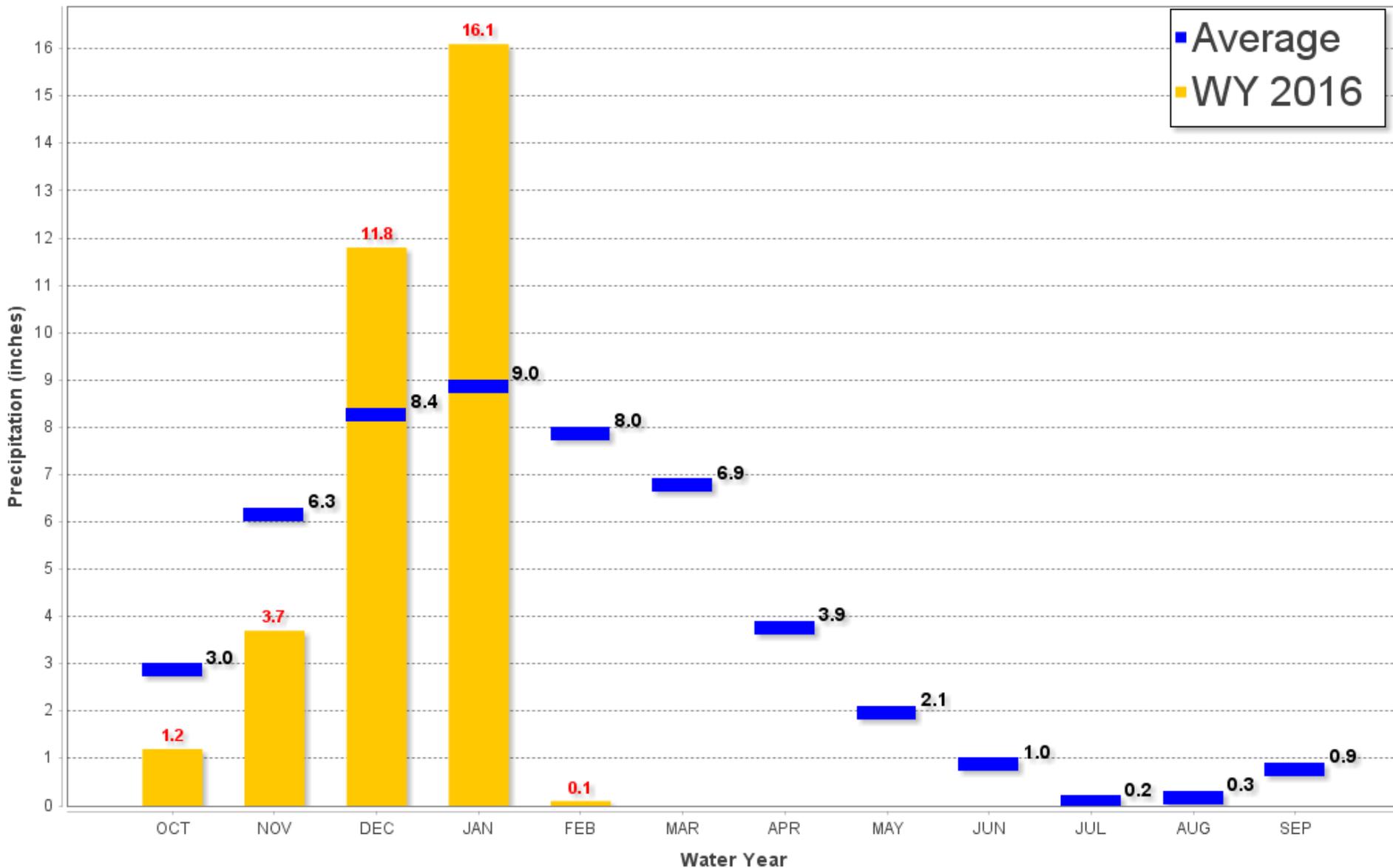


Northern Sierra 8-Station

Precipitation Index for Water Year 2016 - Updated on February 12, 2016 08:45 AM

Note: Monthly totals may not add up to seasonal total because of rounding

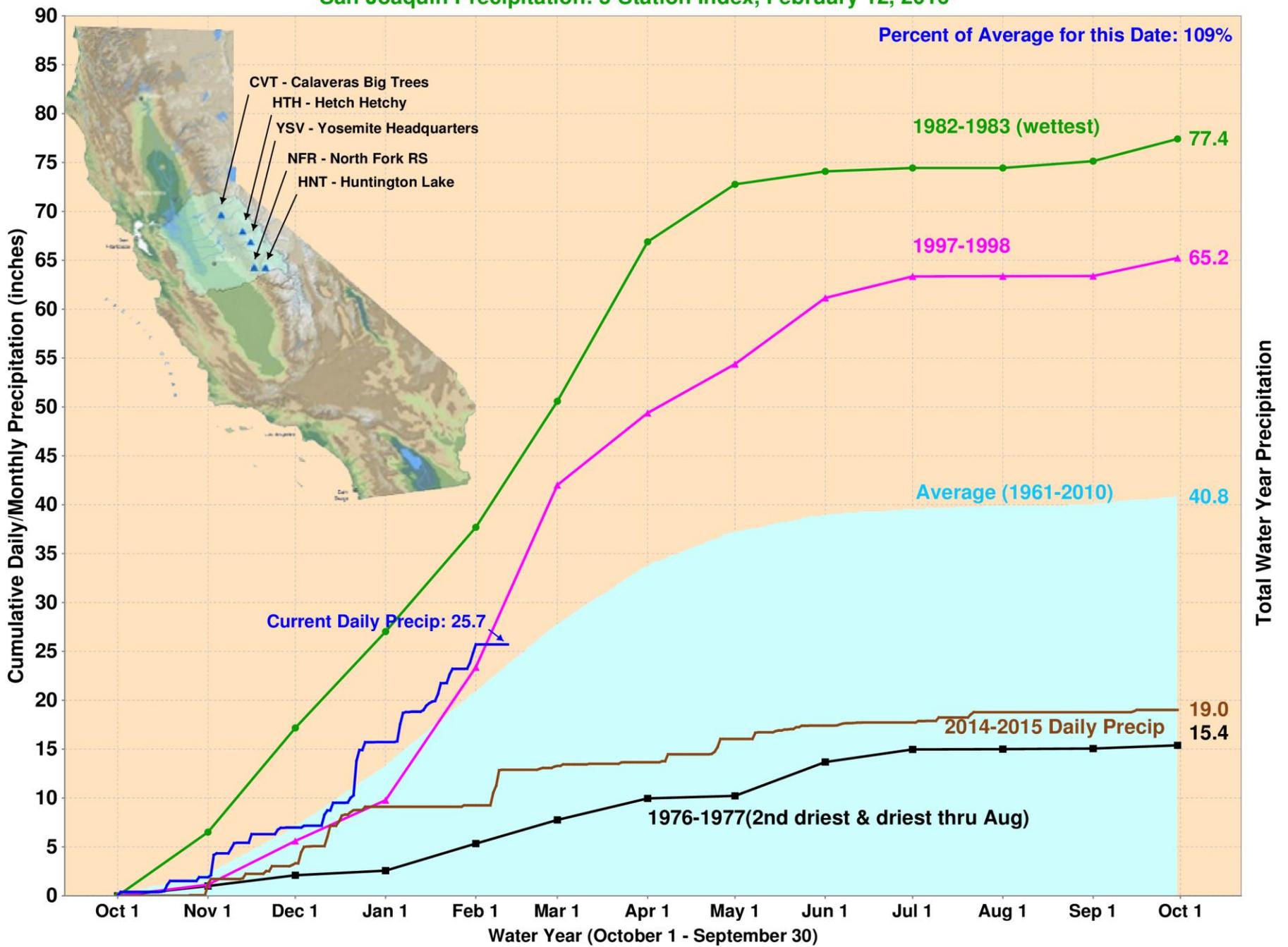
Water Year Monthly totals are calculated based on Daily precipitation data from 12am to 12am PST



San Joaquin Precipitation: 5-Station Index, February 12, 2016

Percent of Average for this Date: 109%

- CVT - Calaveras Big Trees
- HTH - Hetch Hetchy
- YSV - Yosemite Headquarters
- NFR - North Fork RS
- HNT - Huntington Lake



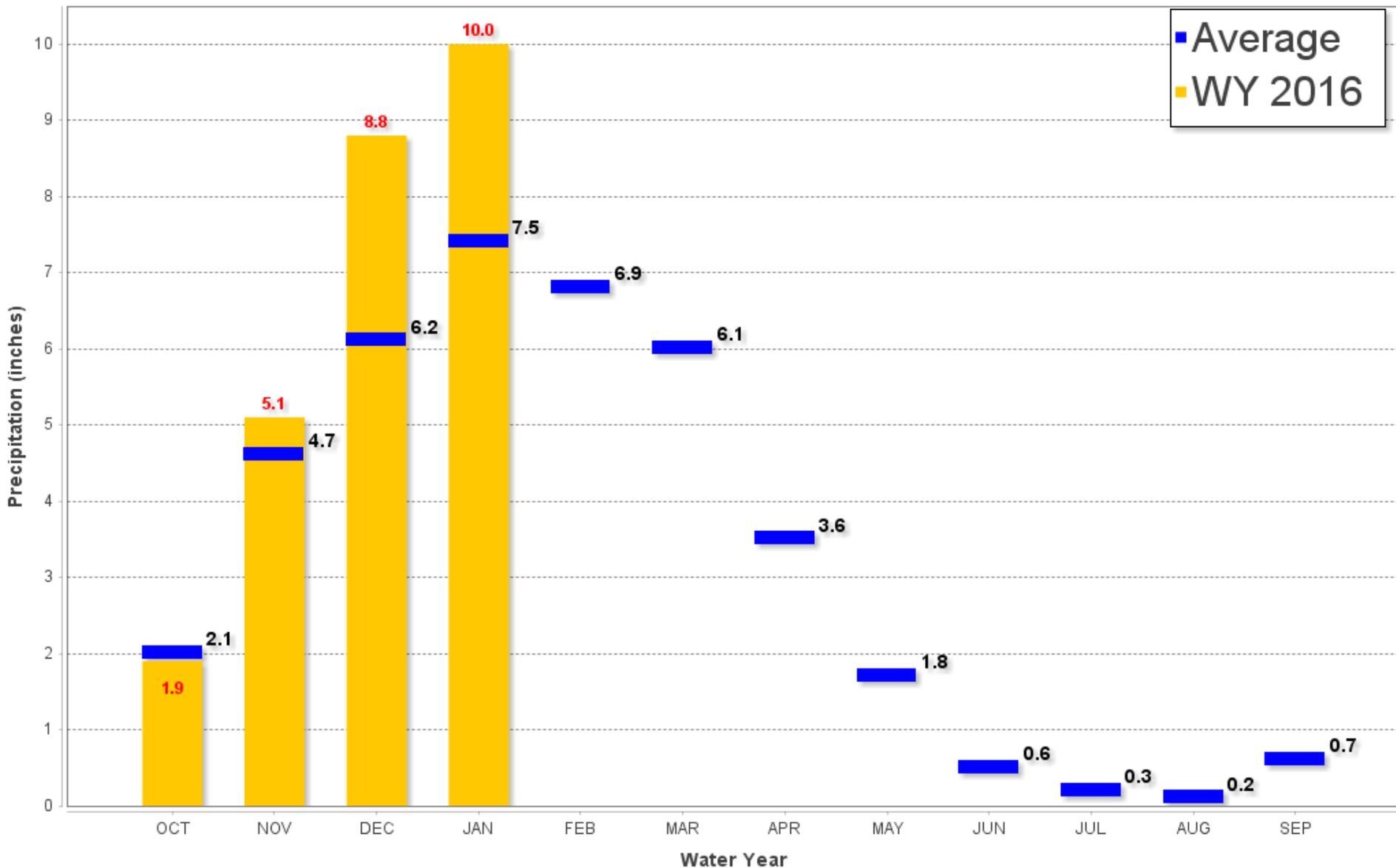


San Joaquin 5-Station

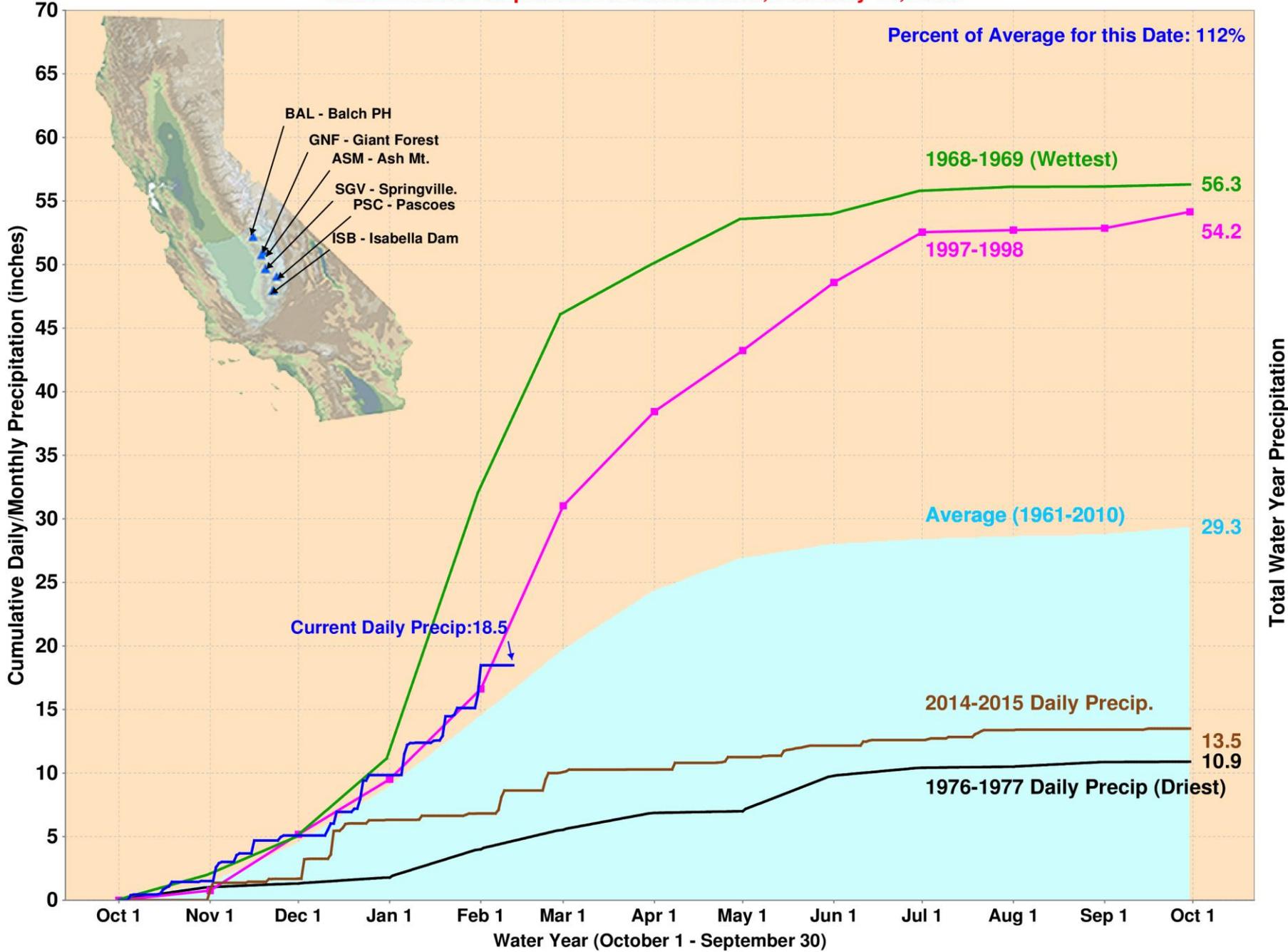
Precipitation Index for Water Year 2016 - Updated on February 12, 2016 08:45 AM

Note: Monthly totals may not add up to seasonal total because of rounding

Water Year Monthly totals are calculated based on Daily precipitation data from 12am to 12am PST



Tulare Basin Precipitation: 6-Station Index, February 12, 2016



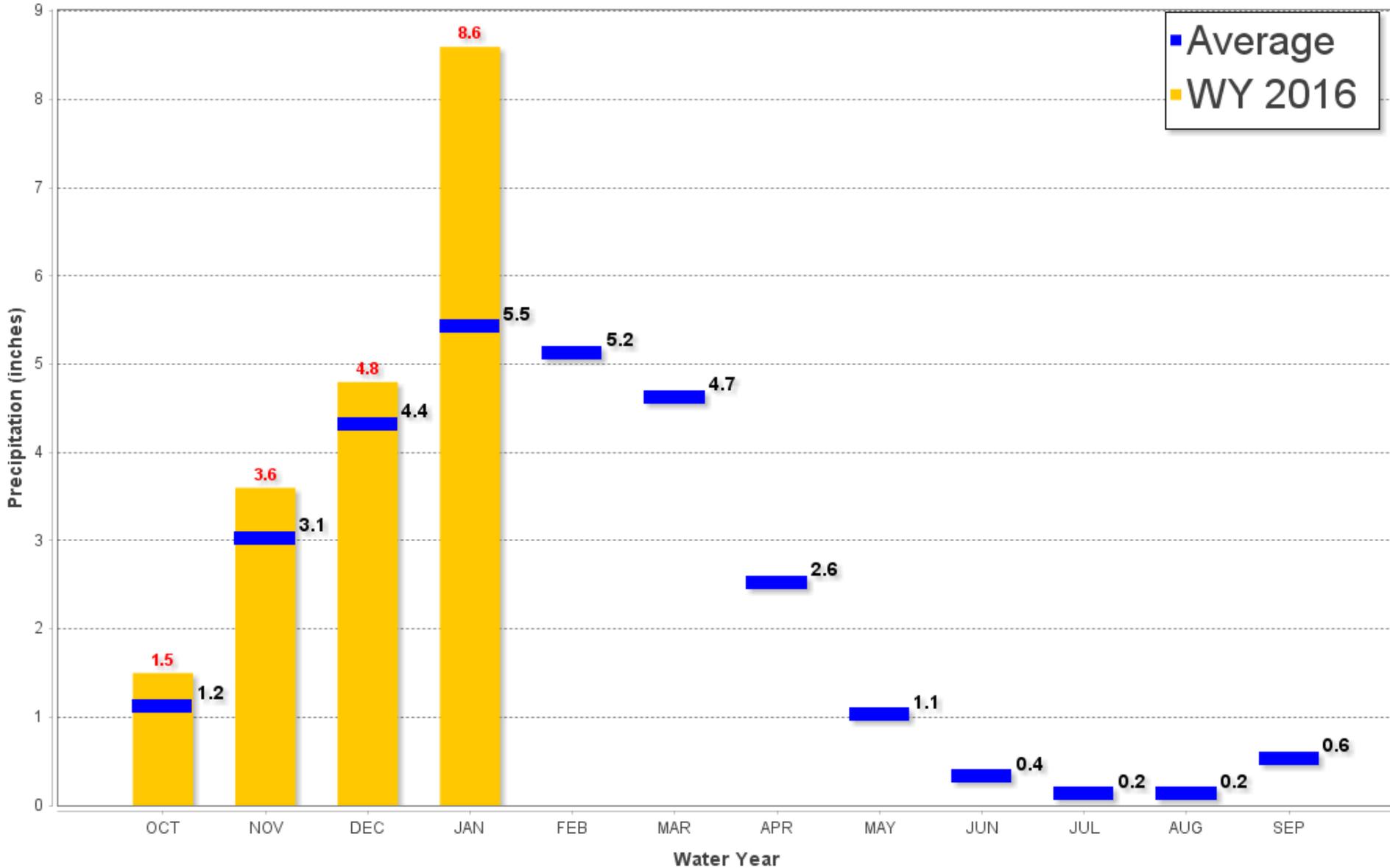


Tulare Basin 6-Station

Precipitation Index for Water Year 2016 - Updated on February 12, 2016 08:45 AM

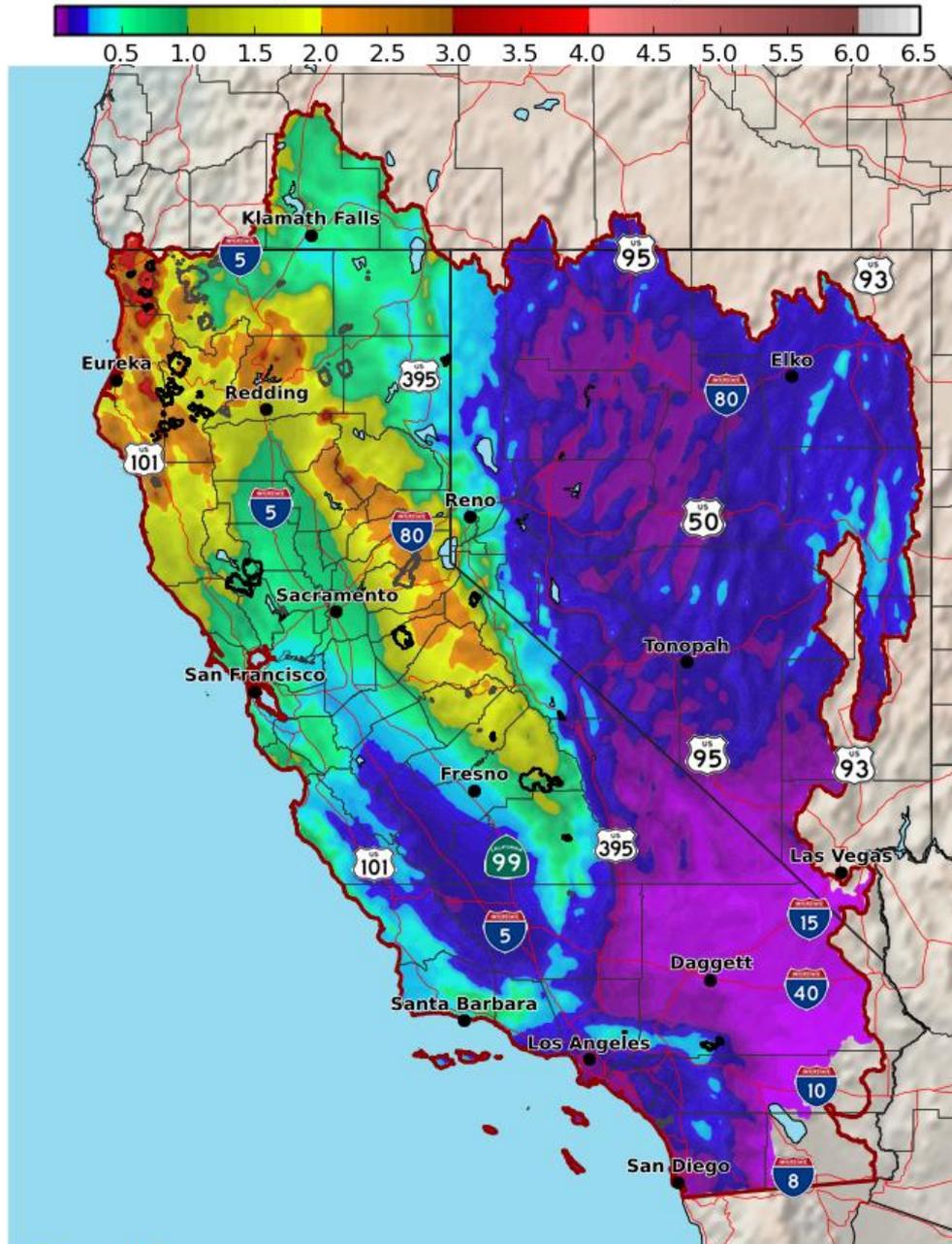
Note: Monthly totals may not add up to seasonal total because of rounding

Water Year Monthly totals are calculated based on Daily precipitation data from 12am to 12am PST



6-Day Forecast Precipitation (Inches)

Valid: Mon Feb 15, 2016 at 04 AM PST to Sun Feb 21, 2016 at 04 AM PST



National Weather Service
CNRFC - Sacramento, CA

Created: 02/15/2016 08:31 AM PST

Follow Us:



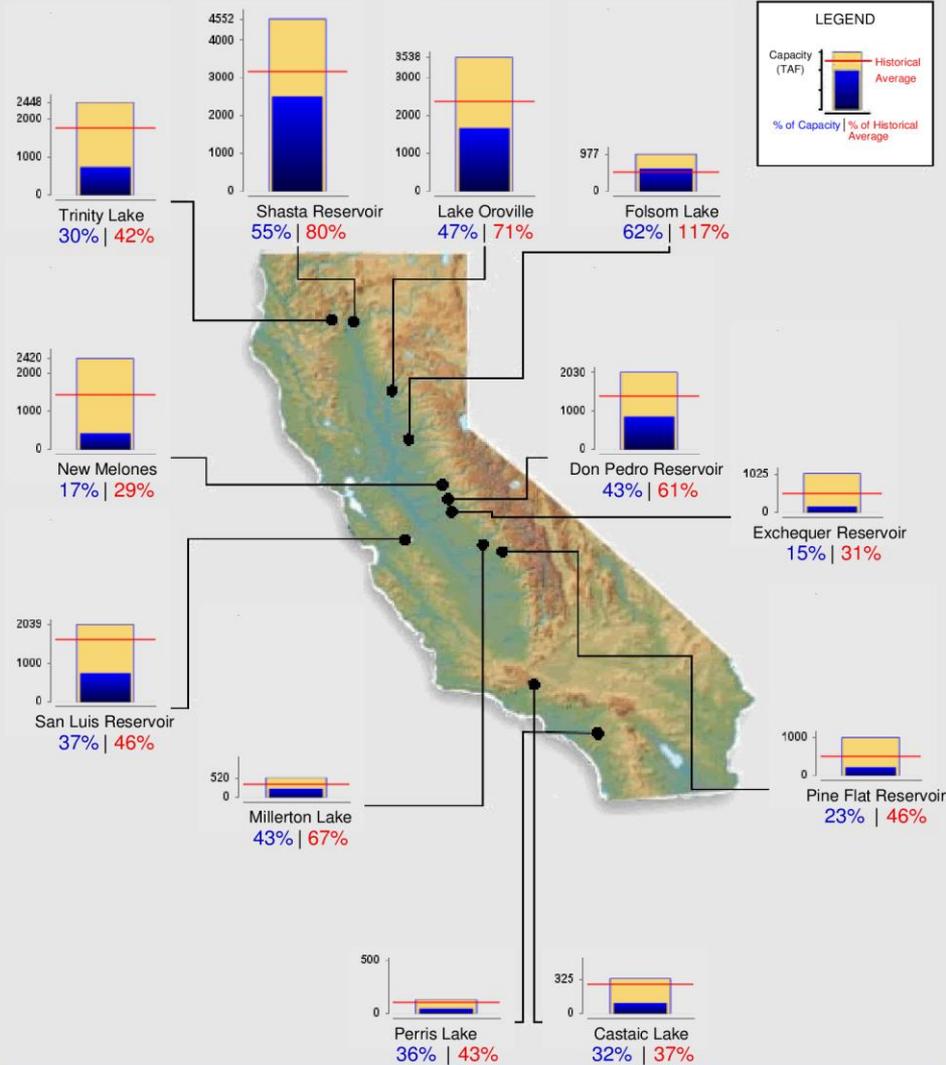
www.cnrfc.noaa.gov



Reservoir Conditions

Ending At Midnight - February 11, 2016

CURRENT RESERVOIR CONDITIONS



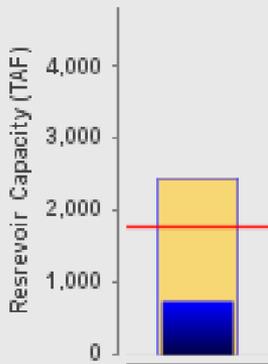


Reservoir Conditions - Trinity Lake



Trinity Lake Conditions

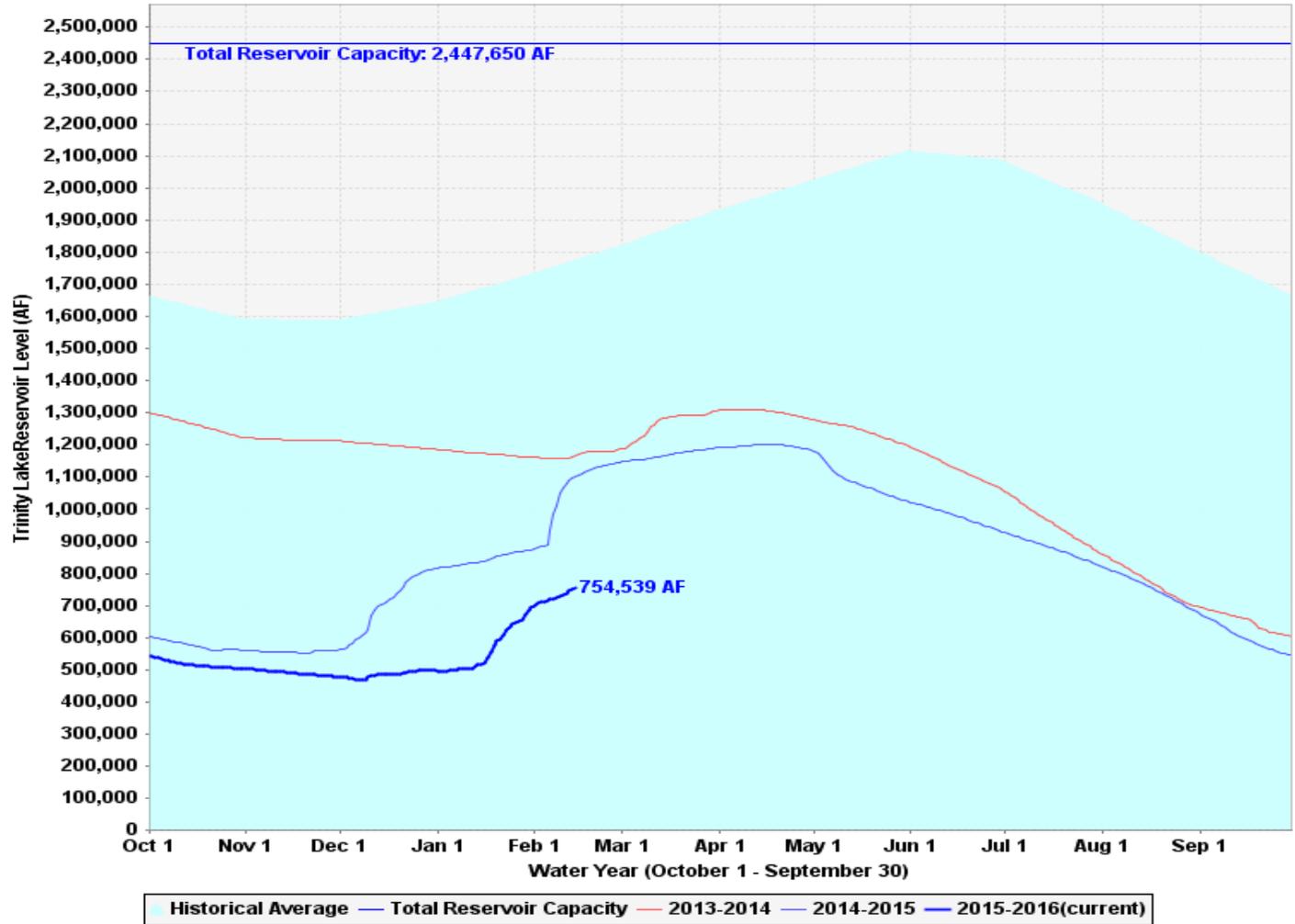
(as of Midnight - February 11, 2016)



Current Level: 740,013 AF

30% (Total Capacity) | 42% (Historical Avg.)

Trinity Lake Storage Levels



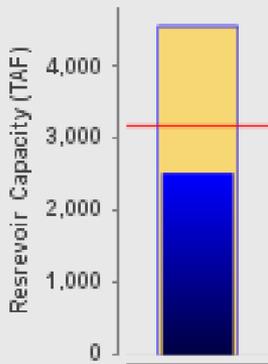


Reservoir Conditions - Shasta Reservoir



Lake Shasta Conditions

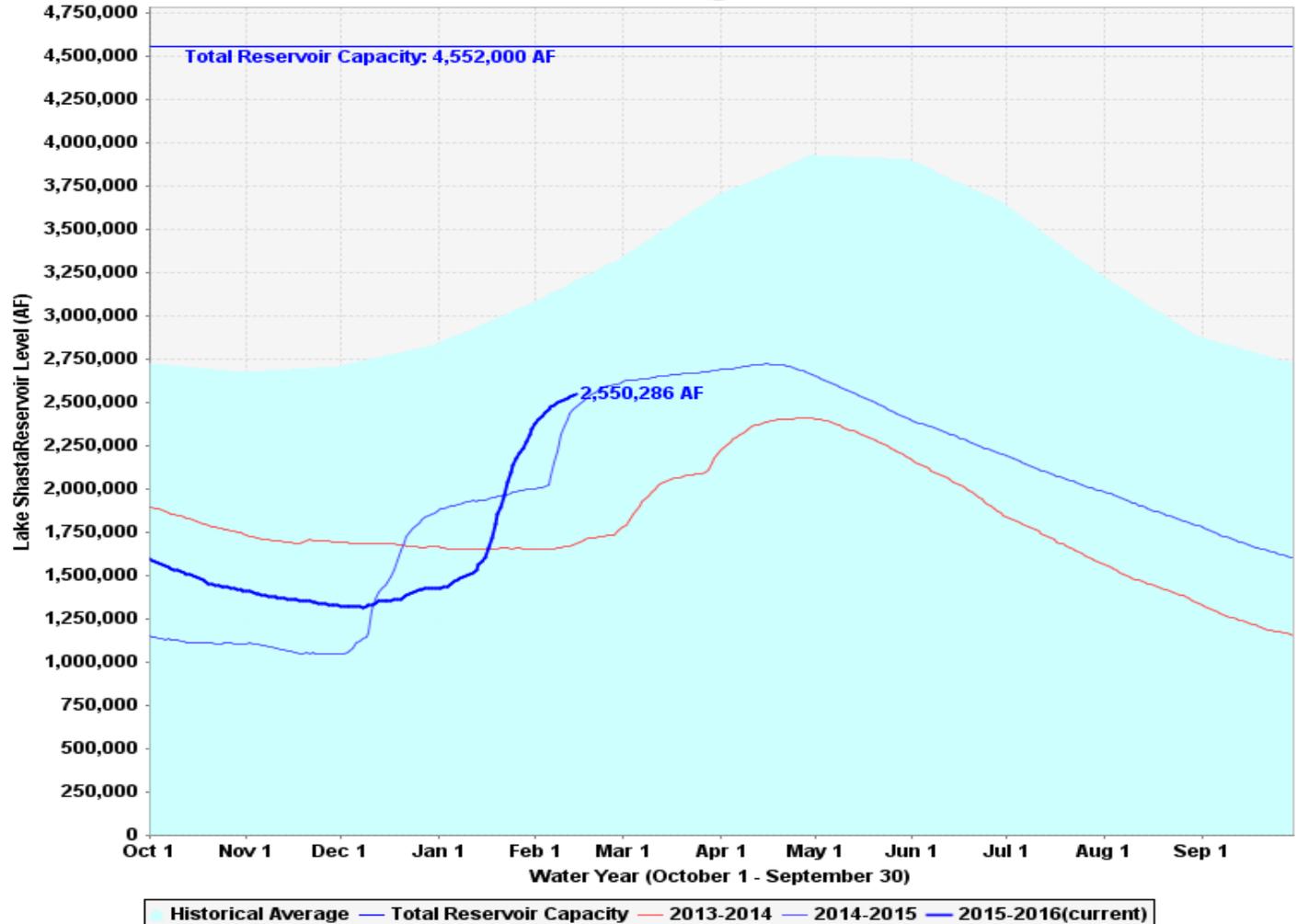
(as of Midnight - February 11, 2016)



Current Level: 2,521,766 AF

55% (Total Capacity) | 80% (Historical Avg.)

Lake Shasta Storage Levels



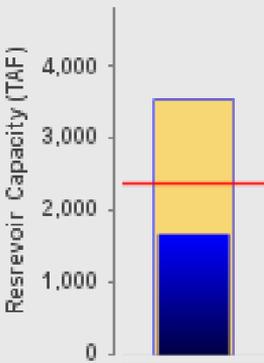


Reservoir Conditions - Lake Oroville



Lake Oroville Conditions

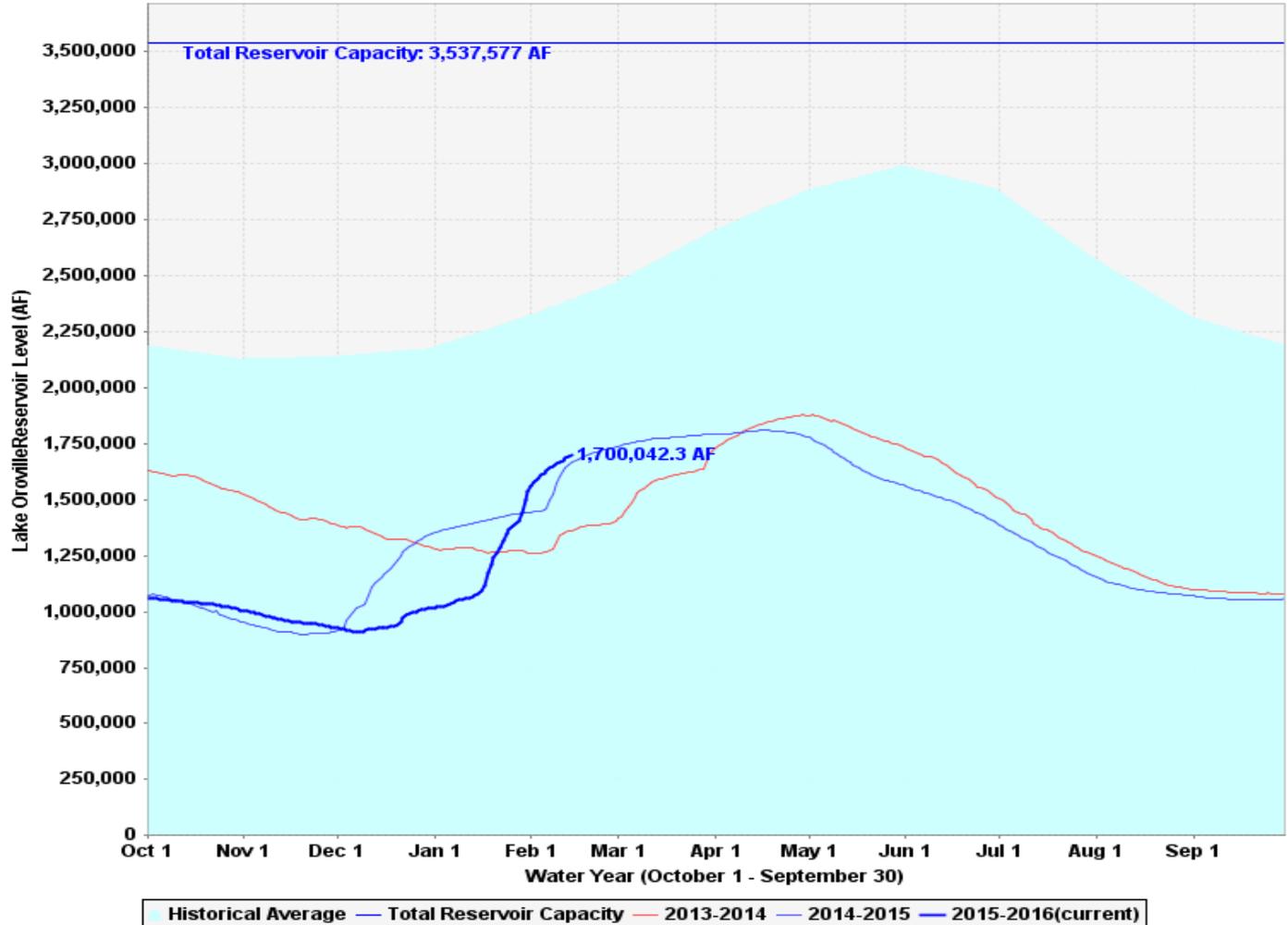
(as of Midnight - February 11, 2016)



Current Level: 1,675,870.5 AF

47% (Total Capacity) | 71% (Historical Avg.)

Lake Oroville Storage Levels



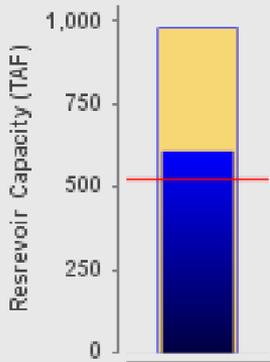


Reservoir Conditions - Folsom Lake



Folsom Lake Conditions

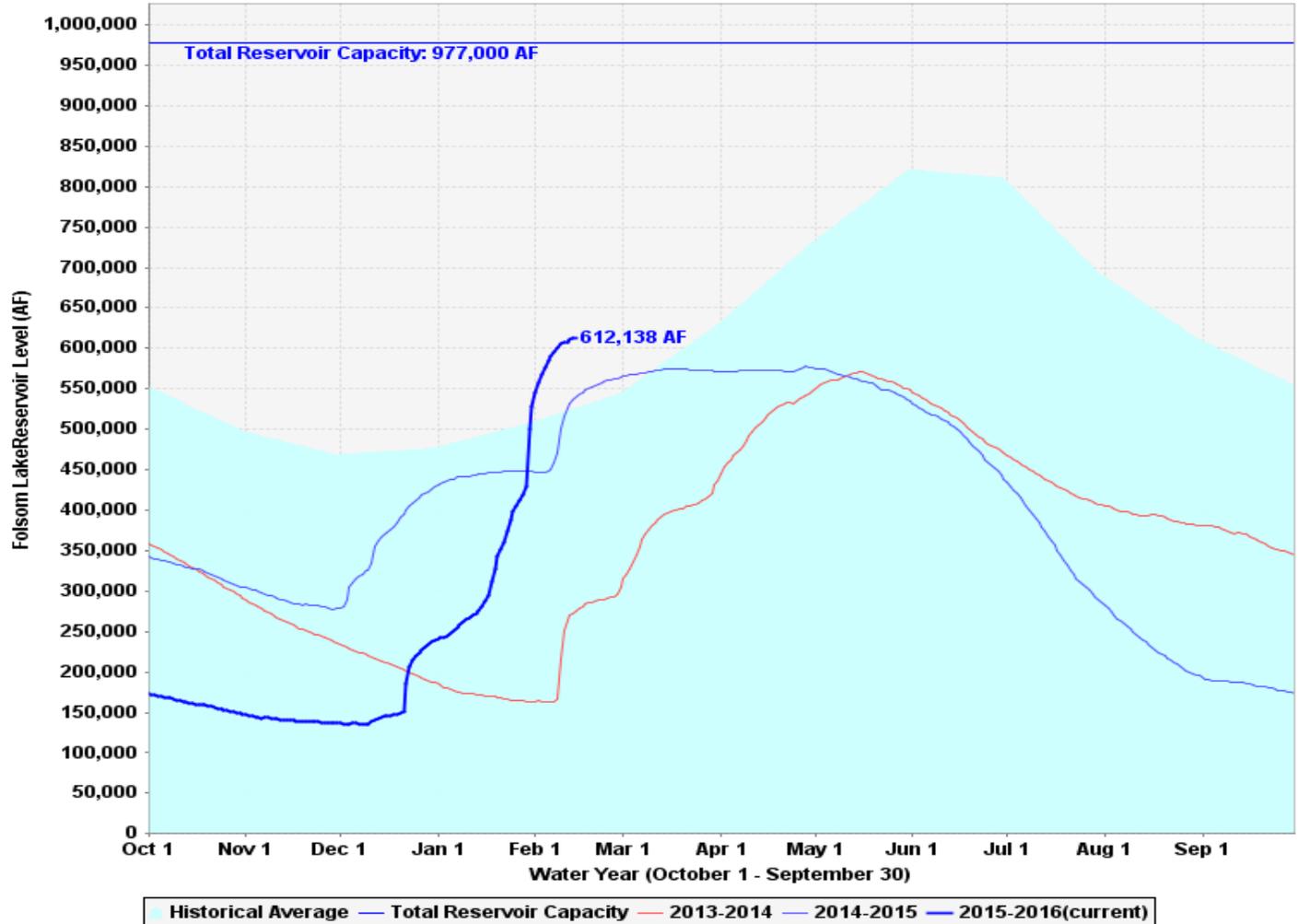
(as of Midnight - February 11, 2016)



Current Level: 608,312 AF

62% | 117%
 (Total Capacity) | (Historical Avg.)

Folsom Lake Storage Levels



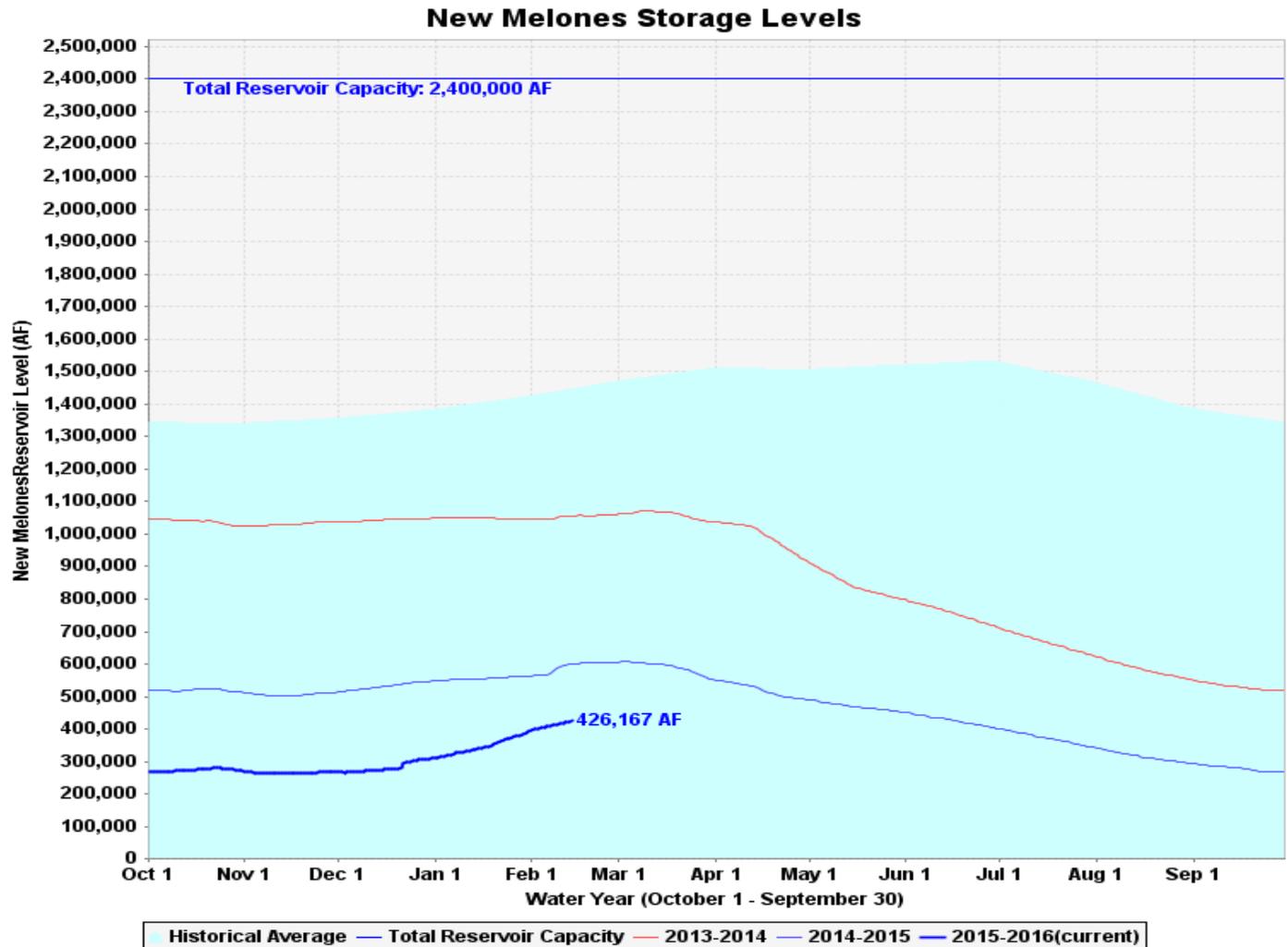
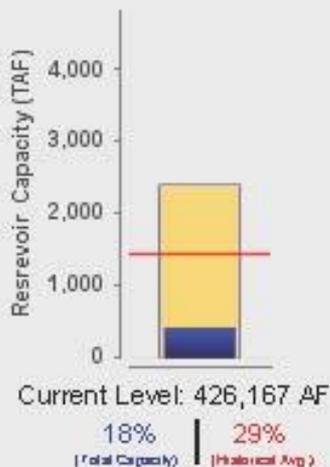


Reservoir Conditions - New Melones



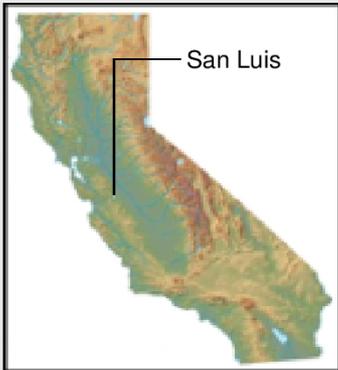
New Melones Conditions

(as of Midnight - February 14, 2016)

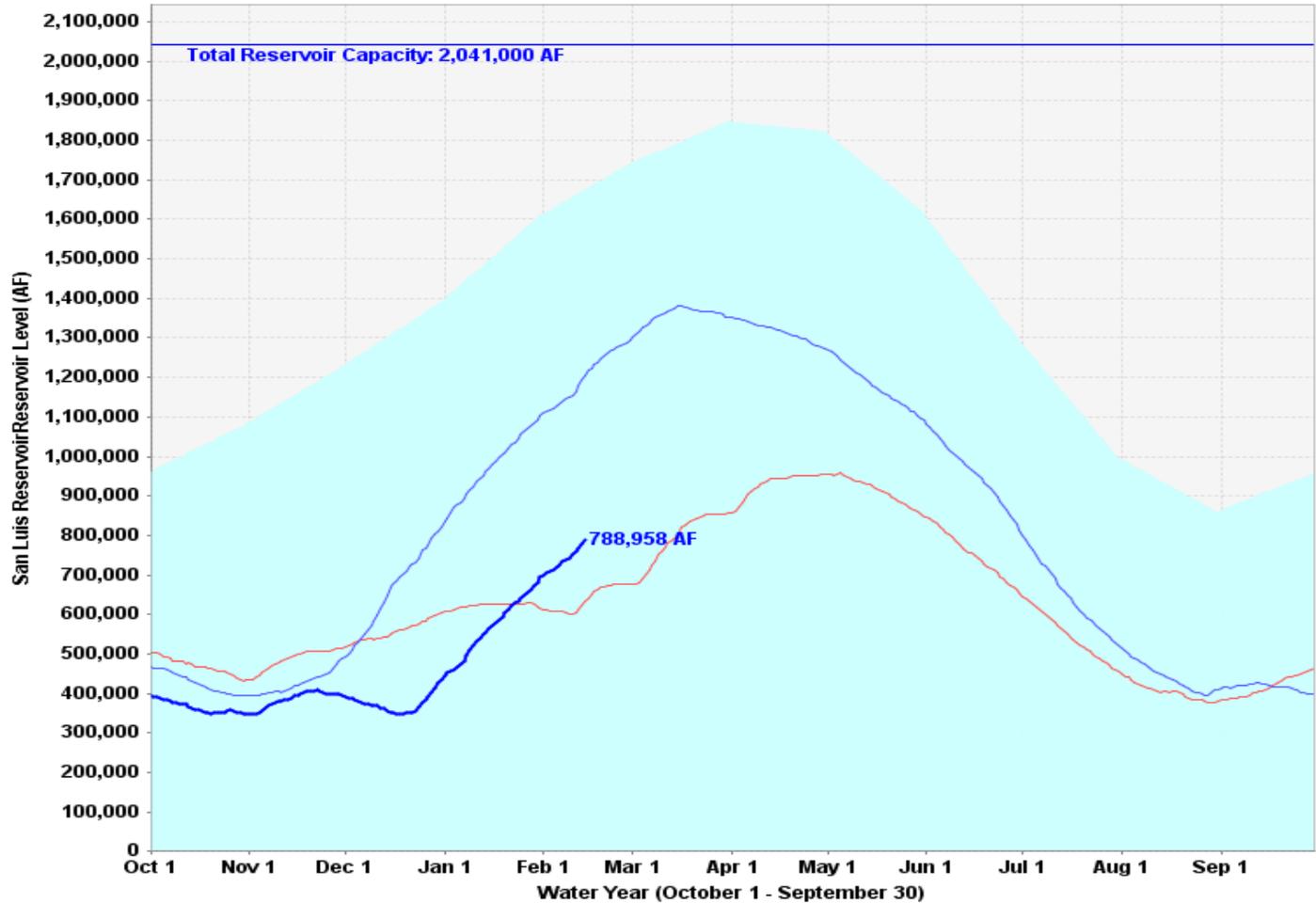




Reservoir Conditions - San Luis

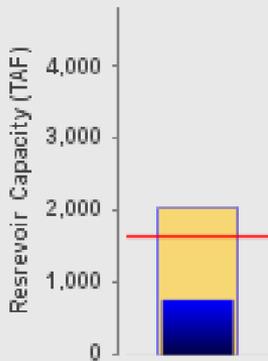


San Luis Reservoir Storage Levels



San Luis Conditions

(as of Midnight - February 11, 2016)



Current Level: 760,130 AF

37% (Total Capacity) | 46% (Historical Avg.)

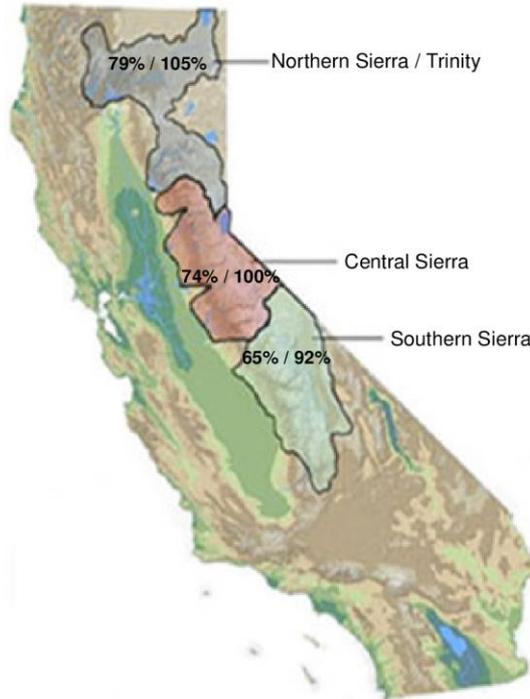
Historical Average — Total Reservoir Capacity — 2013-2014 — 2014-2015 — 2015-2016(current)



Statewide Summary of Snow Water Content

Current Regional Snowpack from Automated Snow Sensors

% of April 1 Average / % of Normal for This Date



NORTH	
Data as of February 12, 2016	
Number of Stations Reporting	29
Average snow water equivalent (Inches)	22.8
Percent of April 1 Average (%)	79
Percent of normal for this date (%)	105

CENTRAL	
Data as of February 12, 2016	
Number of Stations Reporting	40
Average snow water equivalent (Inches)	21.4
Percent of April 1 Average (%)	74
Percent of normal for this date (%)	100

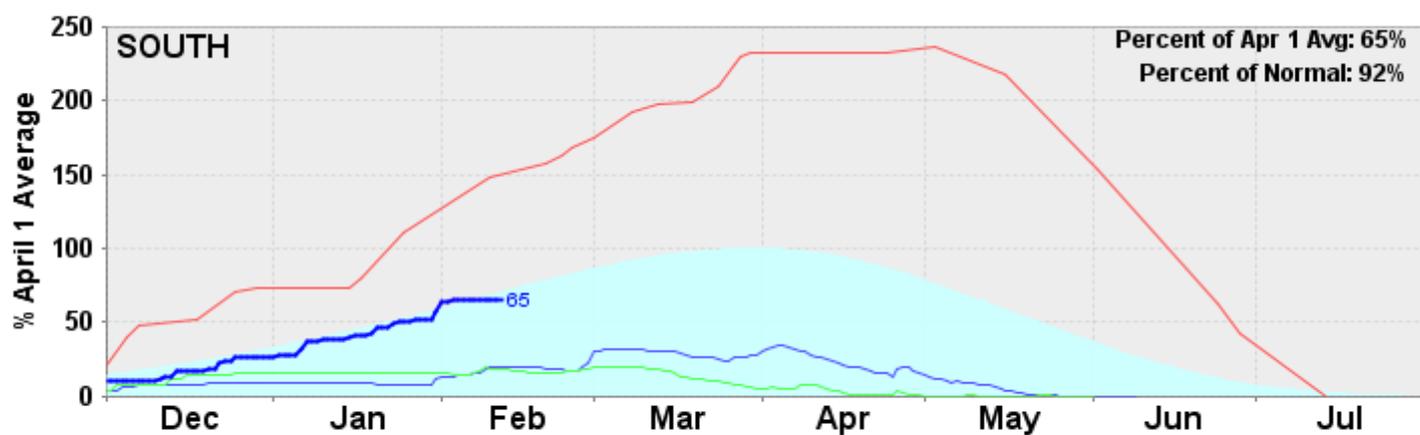
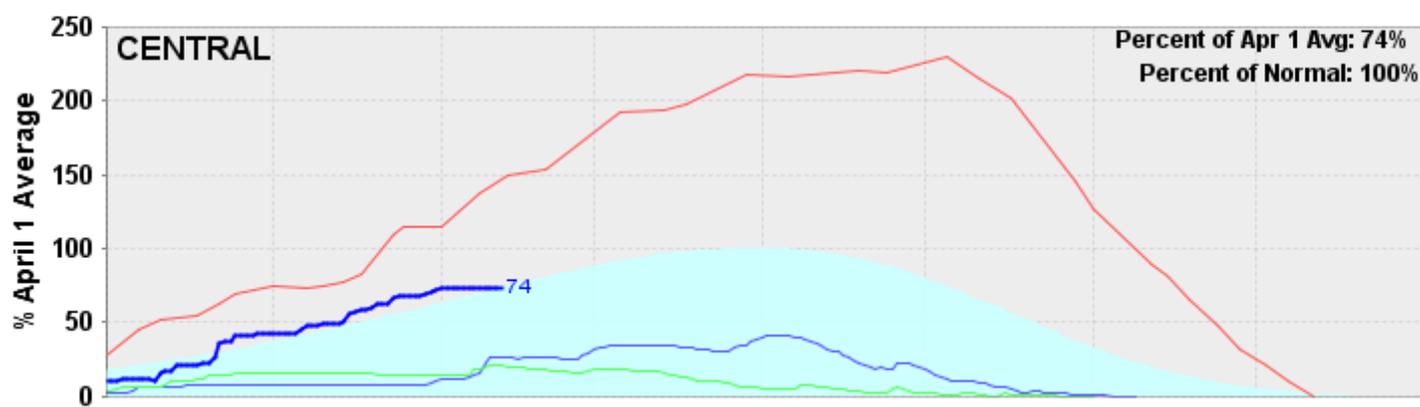
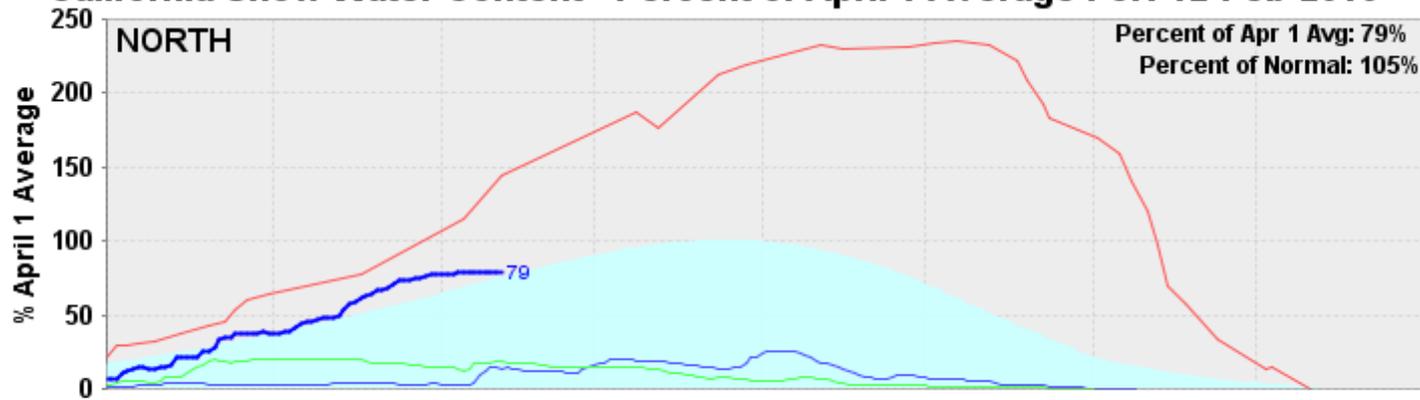
SOUTH	
Data as of February 12, 2016	
Number of Stations Reporting	31
Average snow water equivalent (Inches)	16.8
Percent of April 1 Average (%)	65
Percent of normal for this date (%)	92

STATE	
Data as of February 12, 2016	
Number of Stations Reporting	100
Average snow water equivalent (Inches)	20.4
Percent of April 1 Average (%)	73
Percent of normal for this date (%)	100

Statewide Average: 73% / 100%

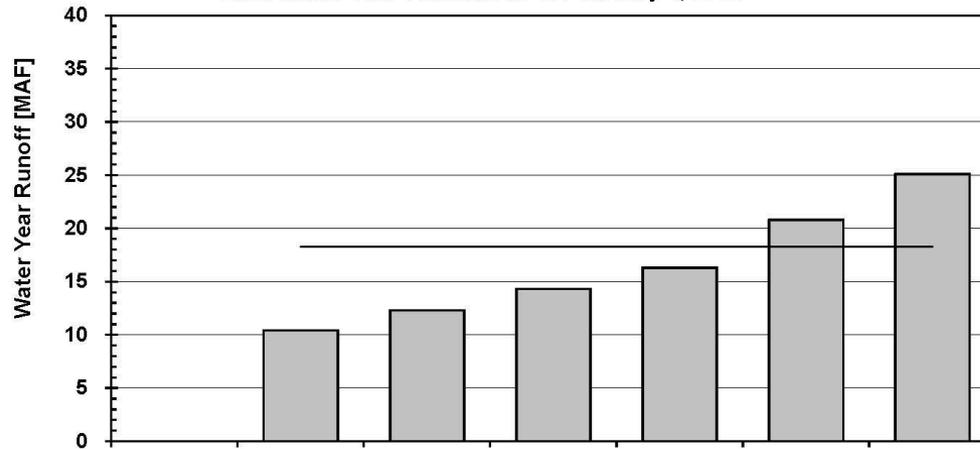
Data as of February 12, 2016

California Snow Water Content - Percent of April 1 Average For: 12-Feb-2016



■ Average
 — 1982-1983 (max)
 — 2013-2014
 — 2014-2015
 — 2015-2016 (current)

**SACRAMENTO RIVER
UNIMPAIRED RUNOFF
2016 Water Year Forecast as of February 1, 2016**



Date of Forecast	Probability of Exceedance					
	99%	90%	75%	50%	25%	10%
Average	18.3	18.3	18.3	18.3	18.3	18.3
December 1, 2015	3.9 (21%)	6.5 (36%)	8.9 (49%)	12.8 (70%)	17.5 (96%)	22.5 (123%)
January 1, 2016	6.9 (38%)	9.1 (50%)	11.3 (62%)	14.4 (79%)	18.4 (101%)	22.8 (125%)
February 1, 2016	10.4 (57%)	12.3 (67%)	14.3 (78%)	16.3 (89%)	20.8 (114%)	25.1 (138%)

Water Year Runoff in million acre feet & (percent of average)

Sacramento River Runoff is the sum of unimpaired flow in million acre-feet at:

- Sacramento River above Bend Bridge
- Feather River at Oroville (aka inflow to Lake Oroville)
- Yuba River near Smartville
- American River below Folsom Lake

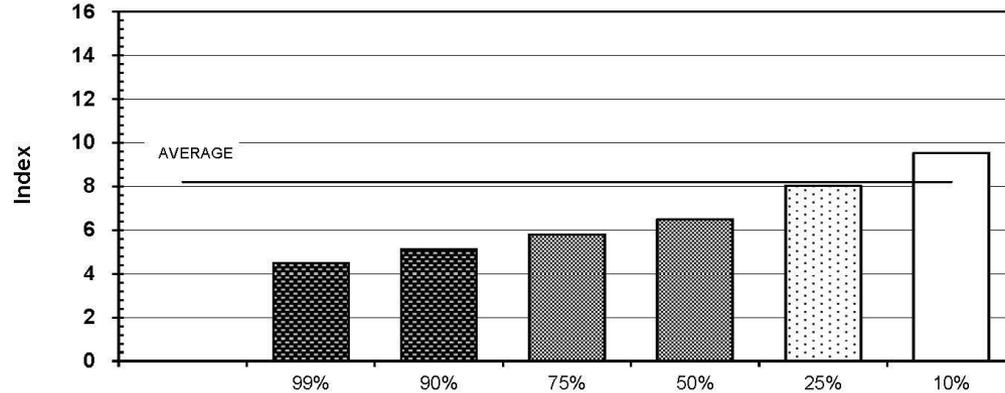
Water Year Runoff through end of last month:

2016 (current year) = 4.9 MAF 87% of avg.
 2015 (last year) = 4.3 MAF 76% of avg.

Previous Water Year Total Runoff:

2015 = 9.3 MAF 51% of avg.
 1977 (Min) = 5.1 MAF 28% of avg.
 1983 (Max) = 37.7 MAF 206% of avg.
 1961-2010 average = 18.3 MAF

**SACRAMENTO VALLEY
WATER YEAR TYPE INDEX (40-30-30)
2016 Water Year Forecast as of February 1, 2016**



Date of Forecast	Probability of Exceedance					
	99%	90%	75%	50%	25%	10%
December 1, 2015	2.4	3.3	4.0	5.3	6.8	8.5
January 1, 2016	3.4	4.1	4.8	5.8	7.2	8.6
February 1, 2016	4.5	5.1	5.8	6.5	8.0	9.5

Water Year Index based on flow in million acre feet

$$\text{Index} = 0.4 * \text{Current Apr-Jul Runoff}^{(1)} + 0.3 * \text{Current Oct-Mar Runoff}^{(1)} + 0.3 * \text{Previous Year's Index}^{(2)}$$

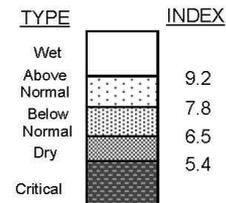
Notes:

- (1) Runoff is the sum of unimpaired flow in million acre-feet at:
 Sacramento River above Bend Bridge
 Feather River at Oroville (aka inflow to Lake Oroville)
 Yuba River near Smartville
 American River below Folsom Lake
- (2) Maximum 10.0 for previous year index term

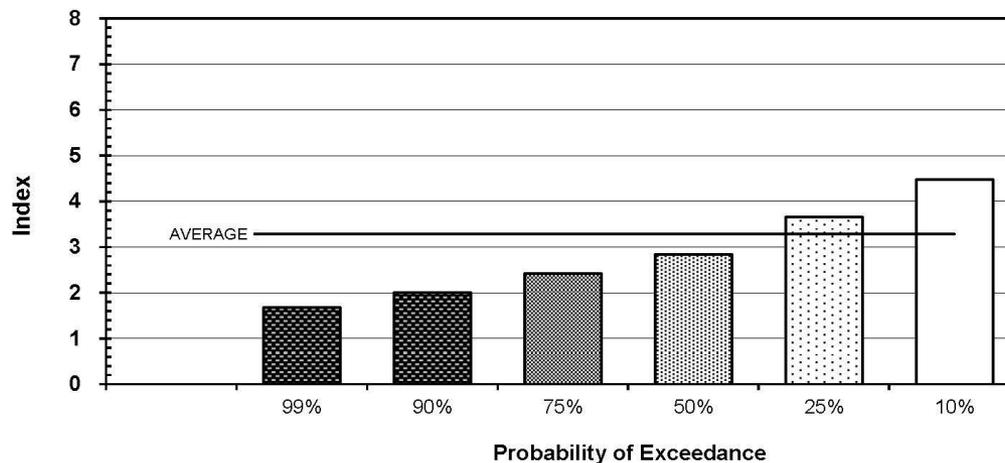
Previous Water Year Indices:

2015 =	4.0	49% of avg.
1977 (Min) =	3.1	38% of avg.
1983 (Max) =	15.3	186% of avg.
1961-2010 average =	8.2	

Year Classification



**SAN JOAQUIN VALLEY
WATER YEAR TYPE INDEX (60-20-20)
2016 Water Year Forecast as of February 1, 2016**



Date of Forecast	99%	90%	75%	50%	25%	10%
December 1, 2015	0.6	1.1	1.5	2.2	3.0	4.0
January 1, 2016	1.0	1.4	1.9	2.4	3.1	3.9
February 1, 2016	1.7	2.0	2.4	2.8	3.7	4.5

Water Year Index based on flow in million acre feet

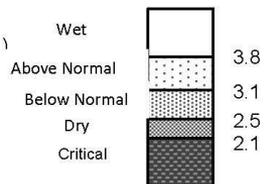
$$\text{Index} = 0.6 * \text{Current Apr-Jul Runoff}^{(1)} + 0.2 * \text{Current Oct-Mar Runoff}^{(1)} + 0.2 * \text{Previous Year's Index}^{(2)}$$

Year Classification
TYPE INDEX

Notes:

- (1) Runoff is the sum of unimpaired flow in million acre-feet at:
 Stanislaus River below Goodwin Reservoir (aka inflow to New Melones Res)
 Tuolumne River below La Grange (aka inflow to New Don Pedro Reservoir)
 Merced River below Merced Falls (aka inflow to Lake McClure)
 San Joaquin River inflow to Millerton Lake

(2) Maximum 4.5 for previous year index term



Previous Water Year Indices:

2015 =	0.8	25% of avg.
2015 (Min) =	0.8	25% of avg.
1983 (Max) =	7.2	219% of avg.
1961-2010 average =	3.3	

Lake Shasta End of April Storage Potential for Meeting Compliance Point Target of 56° F (Apr-Sep)

