Forecast Summary:
A Water Year 2017 Water Supply Index (WSI) forecast for conditions as of December 1, 2016 is posted at http://cdec.water.ca.gov/cgi-progs/iodir_ss/wsi . The accretions forecast will be sent at a later time. The WSI forecast is based on the precipitation and runoff (full natural flow) through November 2016 and can be summarized as follows:

Sacramento River Unimpaired Runoff Water Year Forecast (50 percent exceedance)	**20.5 MAF (115 percent of average)**
Sacramento Valley Index (SVI) (50 percent exceedance)	**8.6 (Above Normal)**
San Joaquin Valley Index (SJI) (75 percent exceedance)	**2.3 (Dry)**

Runoff:
Unimpaired flows for the 2016-2017 water year have run at the following rates of average:

Region	October-November Runoff (%)	November Runoff (%)
Sacramento Valley Index (4 rivers)	147	125
San Joaquin Valley Index (6 rivers)	226	126
Tulare Lake Basin (4 rivers)	62	55

Precipitation:
Precipitation for the 2016-2017 water year accumulated at the following rates of average:

Region	WY accumulated precipitation (%) through November 30, 2016
Sacramento River Valley	185
San Joaquin River Valley	172
Tulare Lake Basin	81
Statewide	153
Regional Precipitation Indices	
Northern Sierra 8-Station Index	193 (18.0 inches)
San Joaquin 5-Station Index	135 (9.2 inches)
Tulare Basin 6-Station Index	81 (3.5 inches)

Snowpack:
The snowpack as of the morning of December 8, 2016 stands at the following (based on snow sensors):

Region	Snow Water Equivalent (inches)	% of Average (Apr 1)	% of Average (Dec 8)
Northern	4.4	16	78
Central	3.1	11	52
Southern	2.2	9	51
Statewide	3.2	12	59

Weather and Climate Outlooks:

The 6-day weather forecast indicates productive storm systems into the weekend with a break Sunday and Monday. Another round of precipitation is possible starting next Tuesday. The North Coast is expected to receive up to 4 inches of precipitation by the end of the period with today and tomorrow being the wettest. The Northern Sierra Nevada region is expected to receive 4 to 5 inches of precipitation by Saturday, then 1 inch of precipitation possible beginning next Tuesday. The Central Sierra Nevada is expected to receive 1-3 inches of precipitation through Saturday. Another round of light precipitation is possible beginning next Tuesday.
The freezing levels for the North Coast and Upper Sacramento River region will generally range between 5,000 to 8,000 feet throughout the forecast period with some localized areas seeing freezing elevations drop as low as 3,500 feet by Monday. For the Central Sierra, Feather, Yuba, and American River watersheds the freezing elevations will range between 7,000 to 9,000 feet during the first wave of precipitation with slight cooling as the storm wave passes Sunday and Monday. The freezing levels for the San Joaquin River region will remain over 9,000 feet to as high as 11,000 feet throughout the forecast period.

The NWS Climate Prediction Center (CPC) one-month outlook for December, valid November 30, indicates equal chances of above or below normal temperatures for the entire state with the exception of the far north, and Mojave and Owens Valley where below normal temperatures are favored. The same outlook predicts above normal precipitation for the far north and equal chances of above or below normal precipitation elsewhere.

The CPC three-month (December-January-February) outlook, posted November 17, indicates increased chances of above normal temperatures for the entire state. Precipitation is forecasted below normal south of Monterrey Bay and Yosemite National Park Regions. Otherwise equal chances of above or below normal precipitation is forecasted for the state.

La Niña conditions are present. Equatorial sea surface temperatures (SST) are below average in the central and east-central Pacific Ocean. La Niña is slightly favored to persist (~55% chance) through winter 2016-17.

Next Update:
The next WSI forecast for conditions as of January 1, 2017 will be available on January 10, 2017. If you have any questions regarding this forecast, please contact a member of the Snow Surveys staff.