

We've finished the March 15, 2016 Bulletin 120 (B120) forecast update. The forecasts include observed conditions through the morning of March 15, 2016.

The forecasts are posted at:

B120 <http://cdec.water.ca.gov/cgi-progs/iodir?s=b120up>

**Forecast Summary:**

The projected median April-July runoff in the major Sierra river basins ranges from 71 percent on the Kern River to 105 percent on the Mokelumne River. The forecast for all major Sierra river basins was increased compared to the March 8<sup>th</sup> forecast. The increases, however, varied significantly from north to south. The forecasts for the Feather and Yuba rivers increased by more than 15 percent while the forecasts for all rivers south of the Merced River rose 5 percent or less. Regionally, the forecasts for the Sacramento River Region, San Joaquin Region, and Tulare Lake Region are 100, 95, and 81 percent of average, respectively.

**Runoff:**

Through the first 15 days of March, rivers in the Sierra are flowing from near 60 (Kern River) to near 280 (Yuba River) percent of average. All rivers north of the San Joaquin are flowing at a rate greater than 190 percent of average. The rates of March flow for the Inflow to Lake Shasta and the Sacramento River at Bend Bridge in addition to the Feather, Yuba, and American rivers are greater than 240 percent of average.

**Precipitation:**

Precipitation for the 2015-2016 water year accumulated at the following rates of average:

Region/Index	WY accumulated precipitation (%) through March 17, 2016
Northern Sierra 8-Station Index	129 (49.6 inches)
San Joaquin 5-Station Index	114 (35.0 inches)
Tulare Basin 6-Station Index	106 (23.5 inches)

**Snowpack:**

The snowpack as of the morning of March 17, 2016 stands at the following (based on snow sensors):

Region	Snow Water Equivalent (inches)	% of Average (Apr 1)	% of Average (March 17)
Northern	28.5	101	102
Central	26.6	92	95
Southern	20.6	76	79
Statewide	25.3	90	92

**Weather and Climate Outlooks:**

The 6-day weather forecast includes no precipitation through Saturday. During the 3-day period beginning Sunday, however, 1.5 to 2.5 inches are expected over the northern Sierra and less than 0.5 inches for the rest of the range. Freezing levels, currently in the range of 10,000 to 11,000 are expected

to drop significantly to near 5,000 feet in the north and 6,000 feet in the south by the end of the 6-day period.

The NWS Climate Prediction Center (CPC) one-month outlook for April, issued March 17, indicates slightly increased chances of above normal precipitation over the northern 2/3 of the state. For the rest of the state, equal chances of above and below normal precipitation are expected. Temperatures are expected to be above normal over the entire state.

The CPC three-month (April-May-June) outlook, issued March 17, indicates increased chances of above normal precipitation for the entire state except for the far northwestern corner and the southern ¼ where equal chances of above or below normal precipitation are expected. The three month forecast also predicts increased chances of above normal temperatures statewide.

A strong El Niño is present and weakening. Positive equatorial sea surface temperature (SST) anomalies continue across most of the Pacific Ocean. A transition to ENSO-neutral is likely during late Northern Hemisphere spring or early summer 2016, with close to a 50 percent chance for La Nina conditions to develop by the fall.

**Next Update:**

A Bulletin 120 forecast and a Water Supply Index forecast, for conditions as of April 1, will be available April 8. If you have any questions regarding this forecast, please contact a member of the Snow Surveys staff.