FORECAST DISCUSSION FOR APRIL 16, 2103

We've finished the April 16, 2013 Bulletin 120 (B120) forecast update. The forecast includes observed conditions through the morning of April 16, 2013 and is posted at http://cdec.water.ca.gov/cgi-progs/iodir?s=b120up.

Forecast Summary:

Considering the rivers forecasted in the B120 update, the projected median April-July runoff in the major Sierra river basins ranges from 14 percent on the Tule River to 68 percent for the Total Inflow to Shasta Lake. All forecasts have dropped since the April 1 B120 forecast except for the Total Inflow to Shasta Lake and the Sacramento River at Bend, which remained unchanged. The average drop in the forecasts was about 2 percent and the largest drop of about 4 percent was forecast on the Yuba and Mokelumne rivers.

Runoff:

In the Sierra, the daily full natural flows through April 16 were ranging from 21 percent of average on the Tule River to 75 percent of average on the Tuolumne River. The rivers north of the Kaweah were flowing above 55 percent of average while rivers from the Kaweah south were flowing at less than 45 percent of average. Elsewhere, the Trinity River in the Trinity Range is flowing at 96 percent of its monthly average.

Precipitation:

April continues the dry trend since the turn of the year. Through the morning of April 17, 2013, the Northern Sierra 8-Station index had recorded approximately 1.4 inches of precipitation in April. The average April index is 3.9 inches. The seasonal total-to-date is now 41.0 inches, representing 93 percent of average to date and 82 percent of the expected Water Year total of 50 inches.

As of the morning of April 17, 2013, the San Joaquin 5-Station Index showed a gain of 1.9 inches of precipitation in April. The average April index is 3.5 inches. The seasonal total-to-date is 25.1 inches, representing 71 percent of average-to-date and 62 percent of the expected Water Year total of 40.8 inches.

Snowpack:

Regionally, the automated snow sensor data for April 18 is indicating that the Northern Sierra, Central Sierra, and Southern Sierra snow water equivalents are 9 inches, 13 inches, and 5 inches respectively. These SWE values represent 35, 46, and 22 percent of each region's respective April 18 average. Statewide, the snowpack averages 9 inches of water content, which is 33 percent of the April 1 average and 36 percent of the average-to-date.

Weather and Climate Outlook:

The CNRFC 6 Day QPF predicts no precipitation for the period anywhere in the Sierra. Freezing elevations currently range from 9,000-10,500 feet in the Northern Sierra and from 9,500-11,000 feet in the San Joaquin Region and are expected to rise to 12,000-13,500 by Monday.

The 6-10 day forecast (April 24-28) indicates a high assurance of above normal temperatures and for below average precipitation for all of California. The strongest signals for these two parameters are for the northern half of the state.

The NWS Climate Prediction Center's (CPC) 30-day outlook for May, updated April 18, calls for an increased chance of warmer than normal temperatures over all of the Sierra and equal chances of above and below normal precipitation.

The NWS Climate Prediction Center's (CPC) 60-day outlook for May-July, also updated April 18, indicates an increased chance of above normal temperatures for the southern Sierra. The same forecast indicates equal chances of above and below normal precipitation for the Sierra and below normal chances for the northern fifth of the state.

Next Update:

The next Bulletin 120 update for conditions on April 23, 2013 will be available on Thursday, April 25, 2013.

If you have any questions regarding this forecast or need assistance prior to that update, please contact a member of the Snow Surveys staff. We are happy to help.

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