

December 1, 2011 Water Supply Forecasting Discussion

Welcome to the 2012 Water Year season of water supply forecasting!! The California Department of Water Resources Snow Surveys Section has produced the first water supply forecast of the season.

Forecast Summary:

A Water Year 2012 Water Supply Index (WSI) forecast for conditions as of December 1, 2011 is posted at <http://cdec.water.ca.gov/cgi-progs/iodir/WSI.2012>. The accretions forecast will be sent at a later time. This WSI forecast is based on the precipitation and flows through November 2011 and can be summarized as follows:

Sacramento River Unimpaired Runoff Water Year Forecast (50 percent exceedence)	15.6 MAF (85 percent of average)
Sacramento Valley Index (SVI) (50 percent exceedence)	8.0 (Above normal)
San Joaquin Valley Index (SJI) (75 percent exceedence)	2.4 (Dry)

Runoff:

Unimpaired flows, for the first two months of the Water Year, have occurred at rates of 77 percent, 101 percent, and 175 percent of average for the Sacramento River basin, the San Joaquin River basin, and the Tulare Lake basin, respectively. During October and November, the Stanislaus, San Joaquin, Kings, Kaweah, Tule, and Kern rivers flowed at a rate over 100 percent of average. The Kings and Kern (at Lake Isabella) rivers flowed at a rate greater than 180 percent of average.

Precipitation:

Following the conclusion of the first two months of the water year, precipitation in the Sacramento River Region is at 76 percent of average, the San Joaquin River region is at 74 percent of average, and the Tulare Lake region is at 122 percent of average. Statewide, cumulative water year precipitation through November is 88 percent of average.

The Northern Sierra 8-Station Precipitation Index gained 3.9 inches in October (130 percent of average) and 2.6 inches in November (41 percent of average). The San Joaquin 5-Station Index gained 2.5 inches in October (125 percent of average) and 1.5 inches in November (32 percent of average).

Snowpack:

While snow has fallen throughout the Trinity and Sierra mountains this fall, not a whole lot is currently registering on the network of snow sensors. As of this morning, the statewide average snow water content is 2 inches which represents 35 percent of average for the date and 7 percent of the April 1 average.

Weather and Climate Outlooks:

The latest weather forecasts indicate no precipitation throughout the state over the next 6 days except for southern California on Monday, when up to 0.7 inches is expected. Freezing levels will be between 7,000 and 8,000 feet throughout the state today and slowly dropping by 1,000 to 2,000 feet throughout the six-day period.

The NWS Climate Prediction Center three-month (December-January-February) forecast, posted November 17, suggests below normal temperatures over the entire state. For precipitation, this outlook suggests an increased chance of above normal precipitation over the northern third of the state and below normal precipitation over the southeastern corner of the state. The one-month outlook for December, valid November 30, indicates equal chances of above and below normal precipitation as well as below normal temperatures over the entire state.

Next Update:

The next WSI should be available on January 10, 2012. If you have any questions regarding this forecast, please contact a member of the Snow Surveys staff.

Important Links:

Full Natural Flow Data:

Daily FNF

http://cdec.water.ca.gov/cgi-progs/snowsurvey_ro/FNF

Monthly FNF

http://cdec.water.ca.gov/cgi-progs/snowsurvey_ro/FNFSUM

Seasonal FNF

http://cdec.water.ca.gov/cgi-progs/snowsurvey_ro/FLOWOUT

Precipitation Data:

Latest Northern Sierra 8-Station Precipitation Index

<http://cdec.water.ca.gov/cgi-progs/queryDaily?s=8SI&d=today>

Latest San Joaquin 5-Station Precipitation Index

<http://cdec.water.ca.gov/cgi-progs/queryDaily?s=5SI&d=today>

Snow Data:

Latest Snow Sensor Report

<http://cdec.water.ca.gov/cgi-progs/snow/PAGE6>

Latest Statewide Summary of Snow Water Equivalents

<http://cdec.water.ca.gov/cgi-progs/snow/DLYSWEQ>

Extended Regional Forecasts:

California Nevada River Forecast Center 6 Day QPF and Snow Level Forecast

<http://www.cnrfc.noaa.gov/awipsProducts/RNOHD6RSA.php>

Climate Prediction Center One-Month Outlook Forecasts

<http://www.cpc.noaa.gov/products/predictions/30day/>

Climate Prediction Center Three-Month Outlook Forecasts

http://www.cpc.noaa.gov/products/predictions/long_range/seasonal.php?lead=1

U.S. Seasonal Drought Outlook

http://www.cpc.ncep.noaa.gov/products/expert_assessment/seasonal_drought.html

Weather Forecast Office California Service Area-Products

<http://www.cnrfc.noaa.gov/forecasts.php>