



Natural Resources Conservation Service
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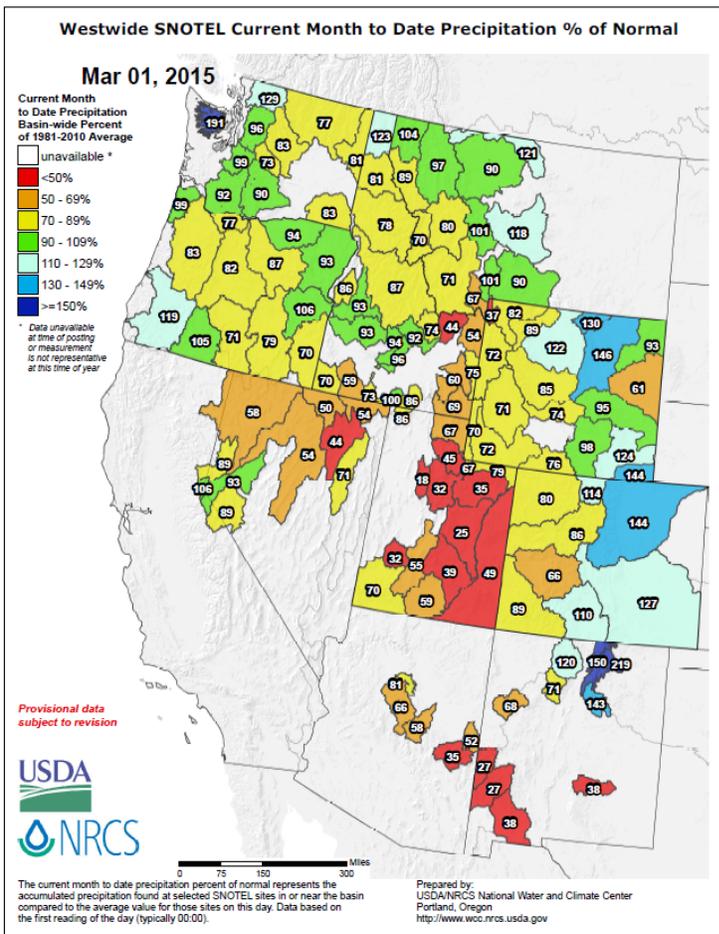
Western Snowpack and Water Supply Conditions March 2015

Overview

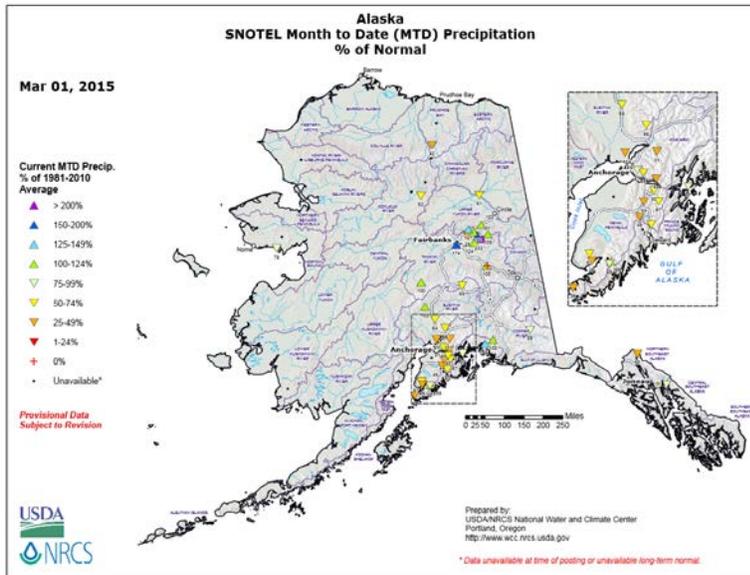
This report summarizes snow course and Snow Telemetry (SNOTEL) network data, streamflow forecasts, and reservoir storage data collected and analyzed by the [National Water and Climate Center](#).

Precipitation during February was near to somewhat below normal in northern areas and central Alaska, whereas it was generally quite dry in southern areas and coastal Alaska. Thus far in the water year (beginning October 1, 2014), precipitation has been near or somewhat above normal in the northern and eastern parts of the West and coastal Alaska, with southwestern areas and interior Alaska being fairly dry. **Snowpack** shows sharp contrasts between the low levels in southwestern and far western areas and near to above normal levels along the Rocky Mountains and in interior Alaska. **Streamflow forecasts** are generally below normal, except along the Rocky Mountains and in northern Alaska, where the outlook is near normal. **Reservoir storage** is currently below normal in the Southwest and near to above normal elsewhere.

February Precipitation

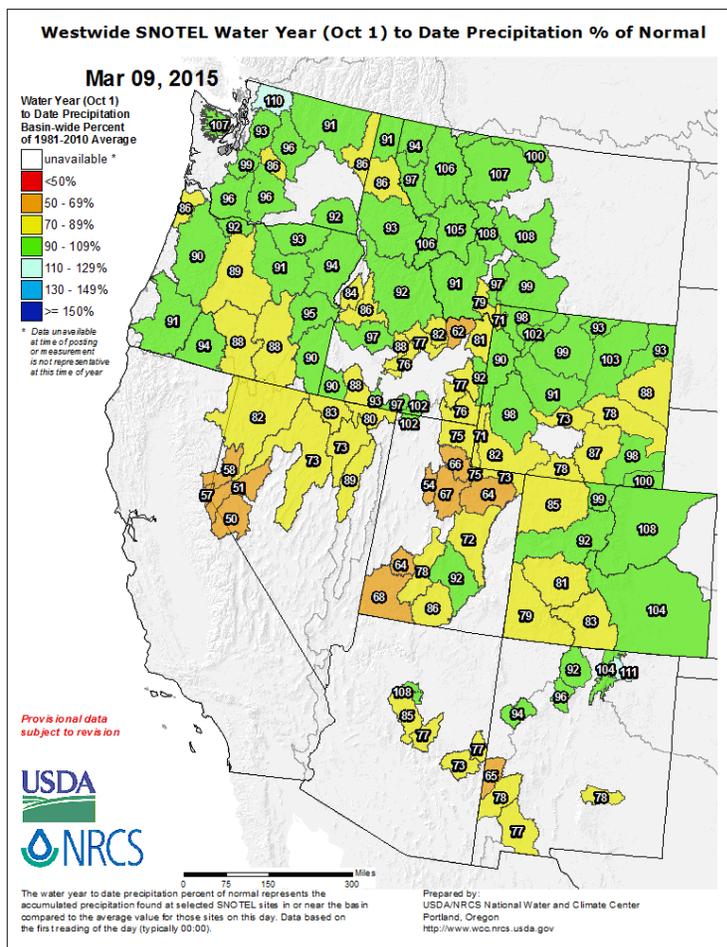


[Precipitation during February](#) was generally near to somewhat below normal in the northern half of the West, whereas there was a mixture of above and below normal areas in the southern half of the region.



[Precipitation in Alaska during February](#) was below normal in the southern and far northern parts of the state and above normal in the central Interior.

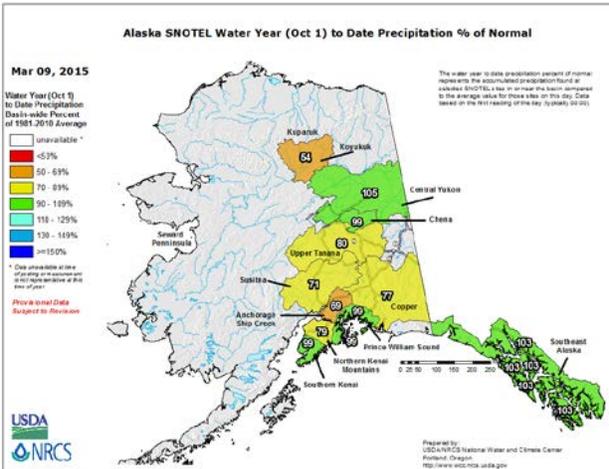
Water Year-To-Date Precipitation



[Precipitation for the 2015 water year-to-date](#) has been near normal over much of the West. Although individual months have been dry or wet, when considered as a water year total, these variations are smoothed out.

Exceptions to this pattern, however, are in the Great Basin and the Southwest, where it has been moderately to extremely dry.

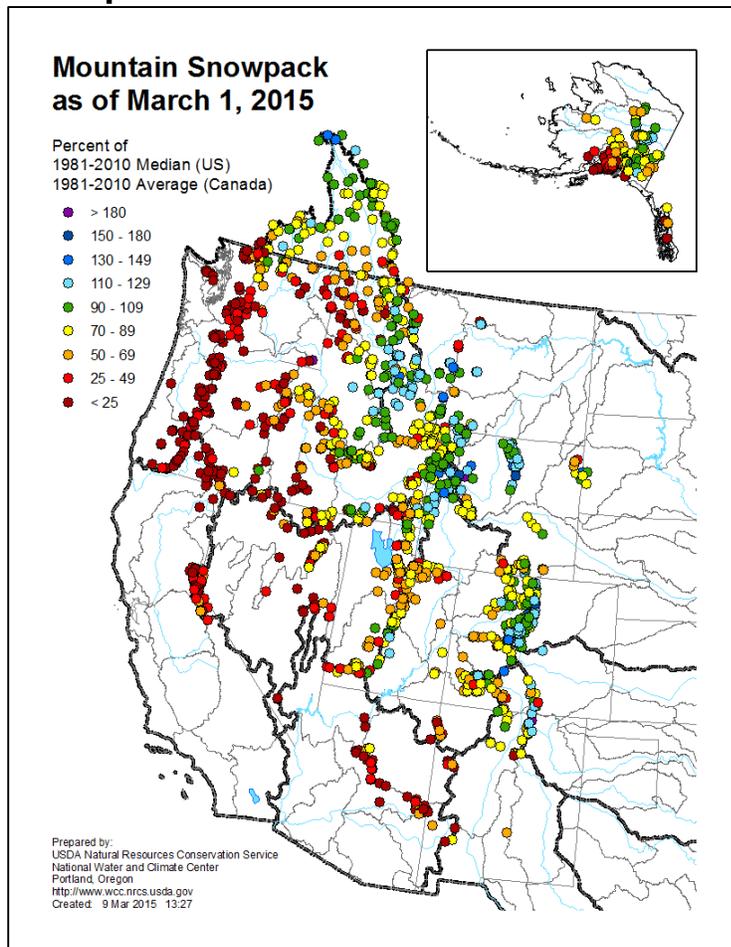
The water year-to-date precipitation is typically reflected in similar patterns in snowpack. This year, however, there is a big difference between these two in Washington and Oregon. While precipitation has been near normal, snowpack is at record low levels. This is due to unusually warm fall and winter temperatures, causing the precipitation to fall as rain rather than snow.



[Precipitation in Alaska for the 2015 water year-to-date](#) has been below normal in most of the Interior and near normal in the south coastal and Panhandle areas.

Maps containing monthly and daily updates of SNOTEL precipitation are available at: <http://www.wcc.nrcs.usda.gov/gis/precip.html>

Snowpack



[Snowpack at SNOTEL sites and snow courses as of March 1](#) in the western U.S. and the Columbia Basin in Canada shows some distinct regional contrasts. These regional patterns are similar to last month, with a mixture of increases and decreases.

Western parts of the region saw no snowpack improvement and remain extremely low. Arizona also continues to have well below normal snowpack, while snowpack in Utah and southern Idaho has declined in terms of percent of normal. Otherwise, near normal snowpack is found along the Rocky Mountains, from Colorado north into British Columbia.

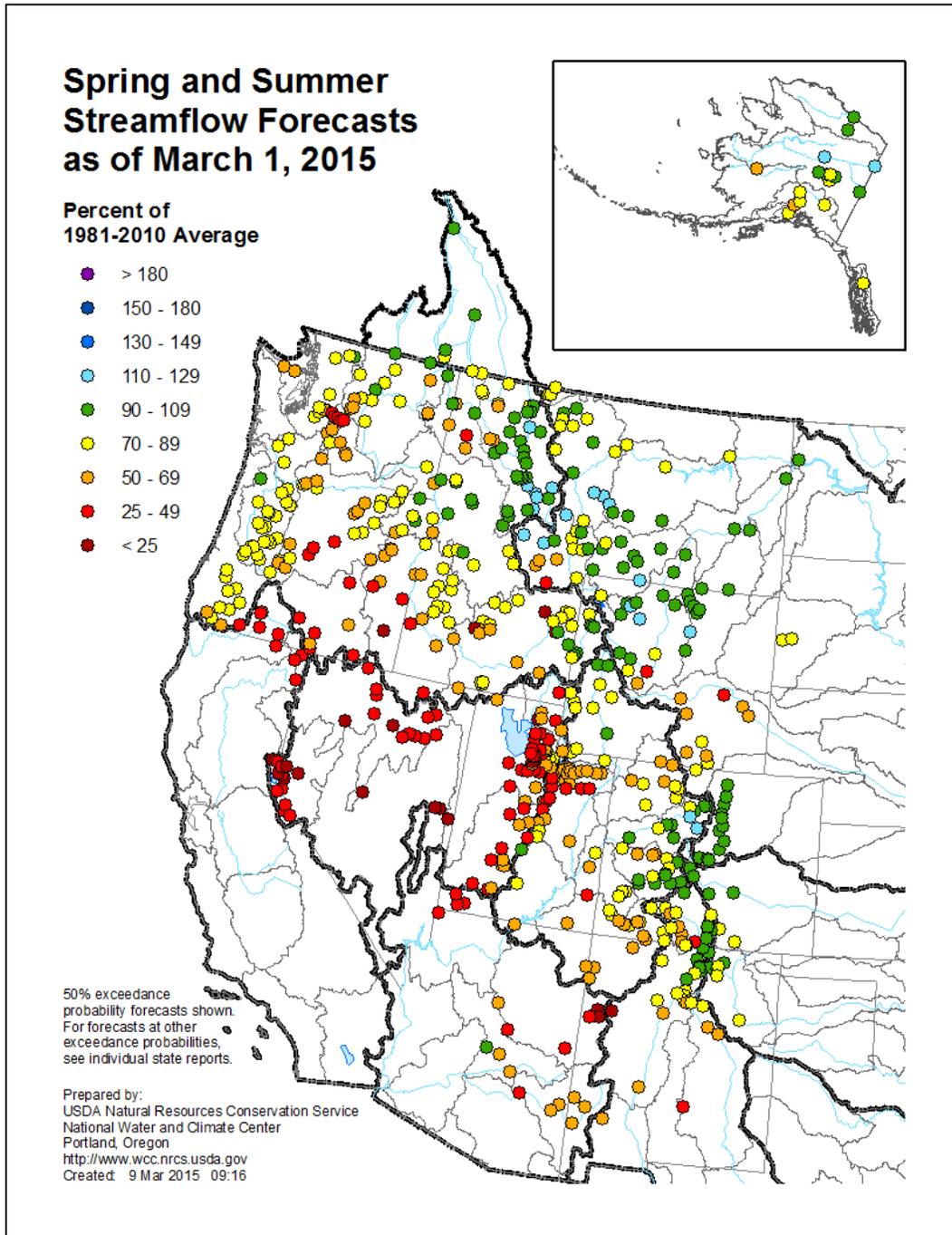
It should be noted that a major storm during the first few days of March struck areas of Utah, Colorado, Arizona, and New Mexico, significantly improving the snowpack situation since the map here was produced.

Snowpack in Alaska is generally below normal in coastal areas and near normal in the Interior.

Maps with daily updates of the snowpack (SNOTEL data only) for the entire West, as well as for individual states, are available at: <http://www.wcc.nrcs.usda.gov/gis/snow.html>

Streamflow Forecasts

[Streamflow forecasts](#) are moderately to extremely below normal for most of the West. The only areas of near normal forecasts are the Rocky Mountains, extending from central Colorado northwest into British Columbia, and in central and northern Alaska. In western Washington and Oregon, despite snowpack being at record lows, most forecasts are only moderately below normal in terms of percent, but these are actually at the very low end of the historical range of streamflow.



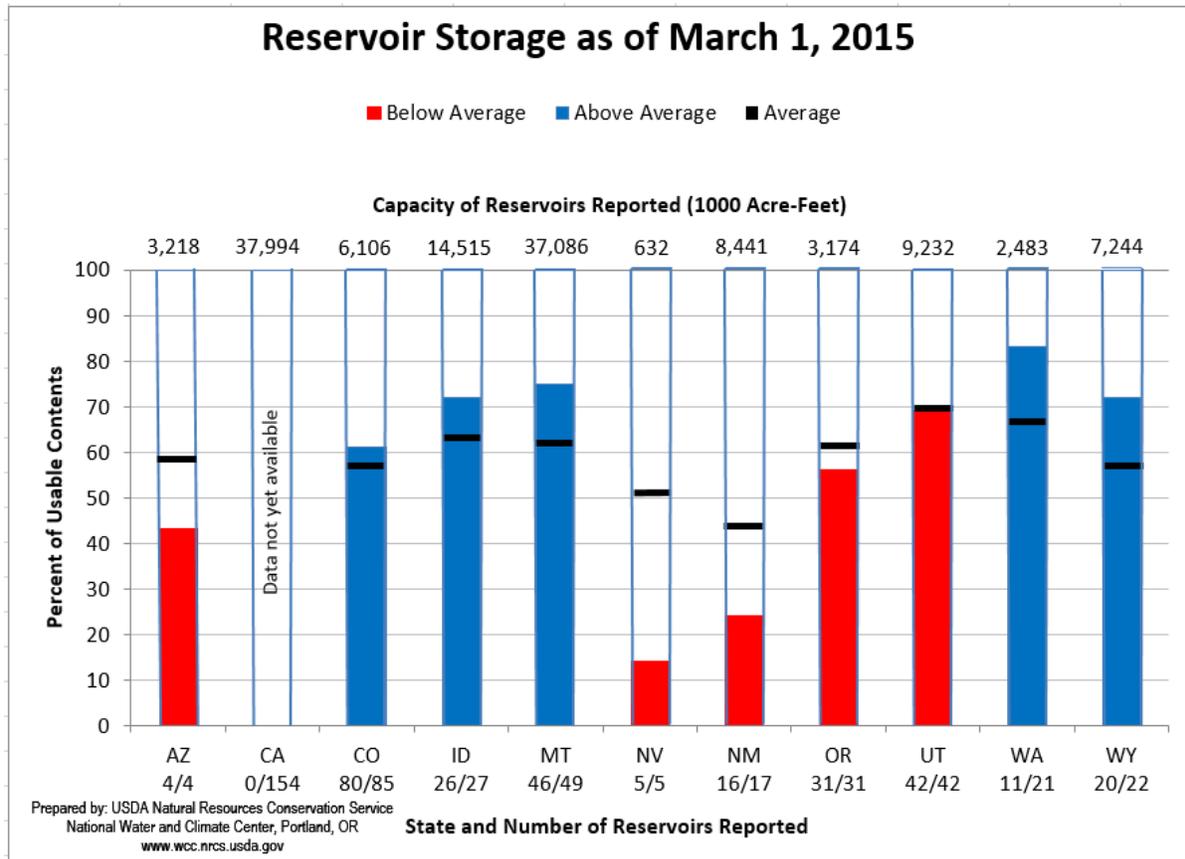
Trends in streamflow forecasts in basins for which daily water supply forecast models are available can be followed at: http://www.wcc.nrcs.usda.gov/wsf/daily_forecasts.html

Reservoir Storage

[Reservoir levels](#) are well below average in the Southwest, while they are near to above average elsewhere in the West.

Further data and charts are available at: <http://www.wcc.nrcs.usda.gov/wsf/wsf-reservoir.html>

Data for California are summarized at: <http://cdec.water.ca.gov/cgi-progs/reservoirs/STORSUM>



State Reports

Click a state name to view the full report

Alaska: Most coastal or low lying snowpacks diminished during February to near or new record lows, while mid-month rains slightly increased the water content of Interior snowpacks without any significant change in snow depth. The only significant snowfall in February occurred on parts of the Seward Peninsula and northern Kotzebue Sound. The central Yukon Valley registered some above normal snowpack, and the upper Porcupine River valley in the Yukon Territory experienced record high snowpacks.

Arizona: Recent storms have mostly benefitted the Verde River Basin, which is now forecast at near normal streamflow for the spring. The storms produced a total of about four inches of precipitation over this basin, saturating the soils, and resulting in significant early runoff in the Verde and its tributaries.

California: Some precipitation was received during the month of February, mostly in the form of rainfall, while the existing snowpack continued to dwindle due to warm temperatures. Fortunately though, water

levels in the major storage reservoirs showed a slight increase due to runoff from the storms and the low water demand during this time of the year.

Colorado: Two weeks of wet weather through the end of February and beginning of March have provided a significant increase in snowpack throughout Colorado and an even greater boost to those southern Colorado basins that are still ailing after several consecutive years of below normal snowpack. Despite substantial accumulations statewide, snowpack has not quite returned to normal at 87% on March 1.

Idaho: Warm February temperatures and rain combined to take its toll on Idaho's snowpack. Snowpacks across southern Idaho increased from west to east ranging from only 28% in the west to 115% in the east. The snowpack also increases going north but drops to half of normal in the Panhandle Region.

Montana: Snowpack percentages dropped for the second month in a row due to above average temperatures, lack of significant snowfall, and rain-on-snow events.

Nevada: Snowpack is at record low levels at 32 stations. Summarizing over basins, five -- Lake Tahoe, Lower Humboldt, Upper Humboldt, Eastern Nevada, and Owyhee -- have record low snow. Unless Nevada has a "miracle March" as in 1991, the drought's effect will continue to worsen.

New Mexico: Snowpack is well below average as the end of the main snow accumulation season in the mountains approaches. The prospects for a decent spring snowmelt runoff across New Mexico continue to hinge on the future storm track.

Oregon: Oregon's mountains have received near normal precipitation since the water year began on October 1, but the snowpack is well below normal as of March 1. Warm temperatures during the majority of this year's storms resulted in more rain than snow in the mountains. As of March 1, 45% of Oregon's long-term snow monitoring sites are at the lowest levels on record, and 68 out of 153 snow monitoring sites across the state are snow-free, which is highly unusual for March 1. There is a high likelihood that Oregon's streams and rivers will have below normal flows this summer given the current state of the snowpack.

Utah: February was long, hot, and dry. Water supply conditions have declined, and with only one month left in the snow accumulation season, Utah is not likely to see substantive improvement.

Washington: Essentially no measureable snow accumulated throughout the month of February until the very last days of the month when areas above 4000 feet elevation received a light dusting. More than 27% of the SNOTEL and snow course network sites set new all-time record low or near record low snow water equivalent for March 1. Total precipitation was near normal for the month, however temperatures were 4-10 degrees above normal.

Wyoming: Snowmelt runoff projections indicate that statewide, approximately 90% of average spring and summer streamflow is expected.

For More Information

The USDA-NRCS National Water and Climate Center website provides the latest available snowpack and water supply information. Please visit us at: <http://www.wcc.nrcs.usda.gov>