



Natural Resources Conservation Service  
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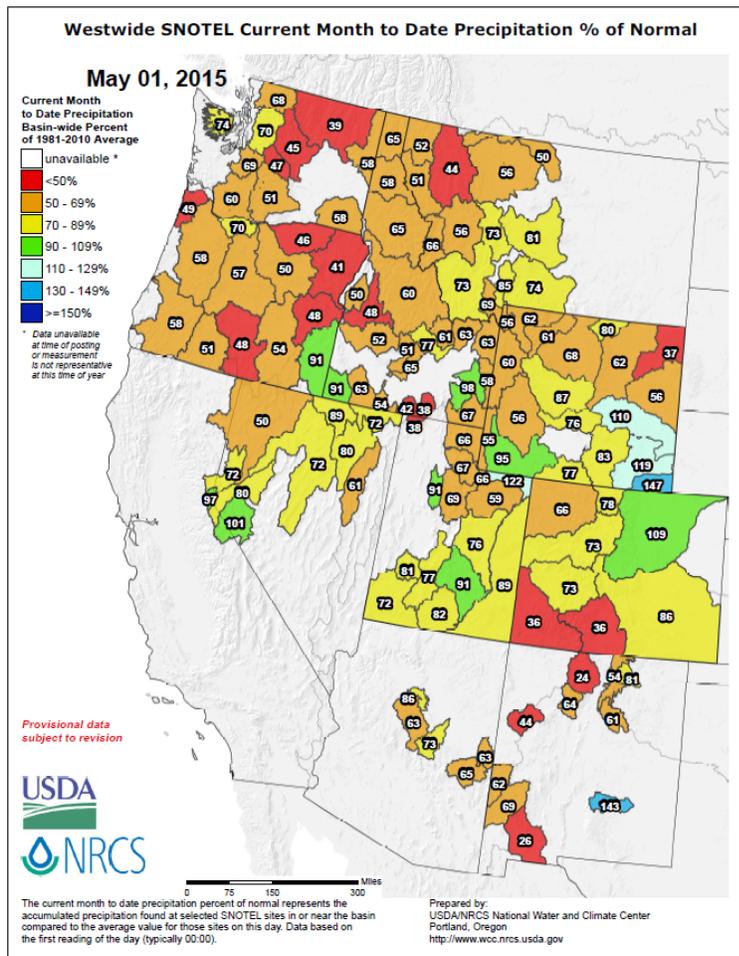
# Western Snowpack and Water Supply Conditions May 2015

## Overview

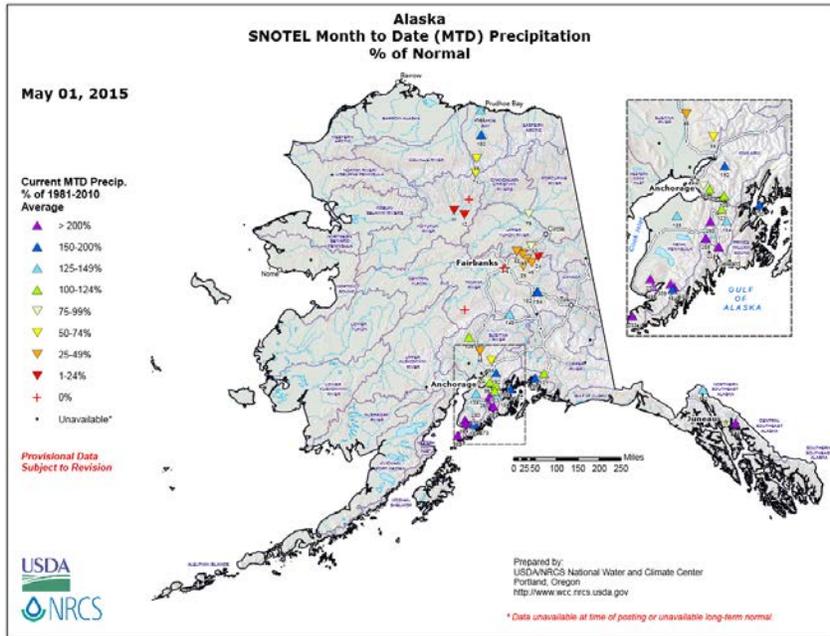
This report summarizes snow course and Snow Telemetry (SNOTEL) network data, streamflow forecasts, and reservoir storage data collected and analyzed by the [National Water and Climate Center](#).

**Precipitation** during April, like March, was well below normal throughout almost the entire West, with the exception of a few scattered areas plus coastal Alaska. Precipitation thus far in the water year (beginning October 1, 2014) is now below normal over most of the West except for some northern areas and coastal Alaska. **Snowpack** has declined significantly since last month throughout the West, with most areas now having little or no snow left. Only high-elevation areas in the Rocky Mountains and Interior Alaska retain somewhat near normal snowpack. **Streamflow forecasts** have dropped since last month due to a dry April and continued early snowmelt, with most regions now expecting below normal streamflow. **Reservoir storage** is currently below normal in the Southwest, Nevada, and Oregon, with near to above normal storage elsewhere.

## April Precipitation

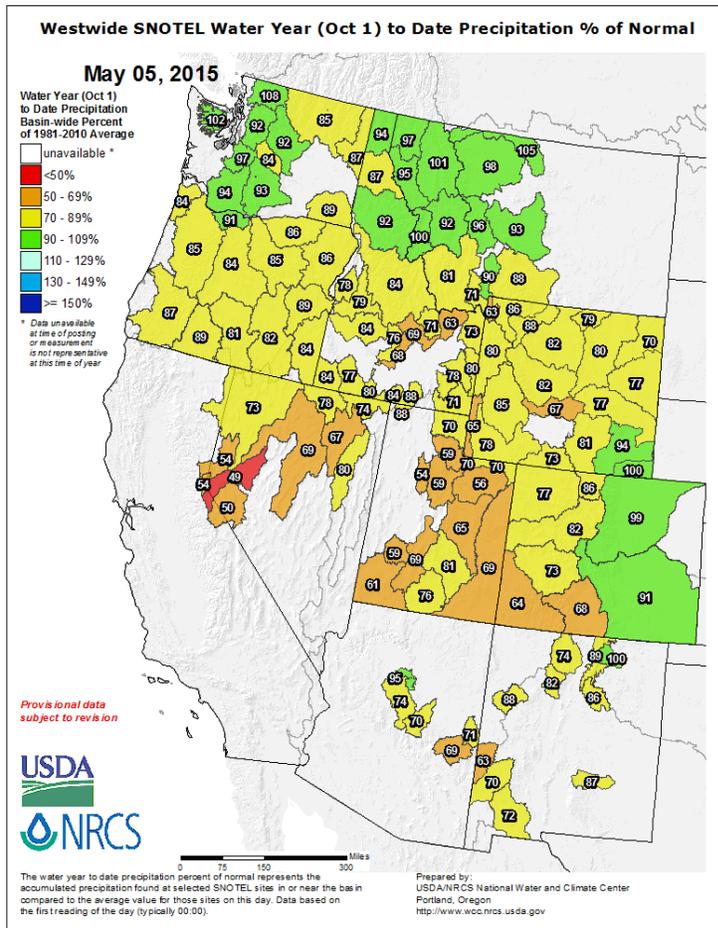


[Precipitation during April](#) was well below normal throughout the entire West, with only a few scattered exceptions to this overall picture, most notably the Front Range in northern Colorado and southeastern Wyoming.

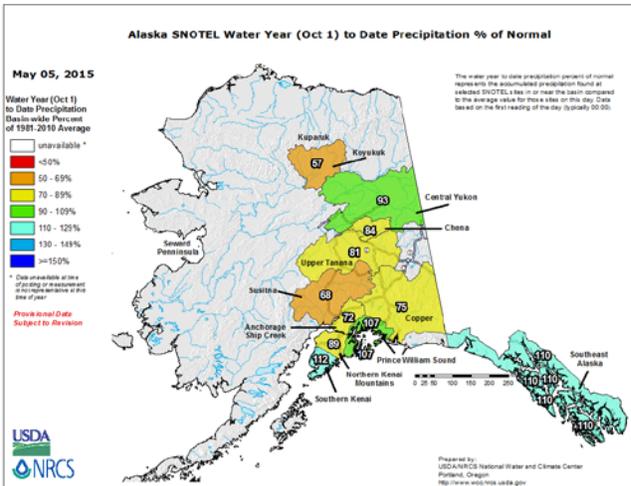


[Precipitation in Alaska during April](#) showed a stark contrast between the Interior, where it was quite dry, and the Southcentral and Panhandle regions, where it was significantly above normal.

## Water Year-To-Date Precipitation



[Precipitation for the 2015 water year-to-date](#) is below normal over most of the West except for some northern areas and the east side of the Rockies in Colorado and southeastern Wyoming. The dry April has had a significant effect on this picture, bringing even more area into the below normal categories in addition to the effect of the dry March.

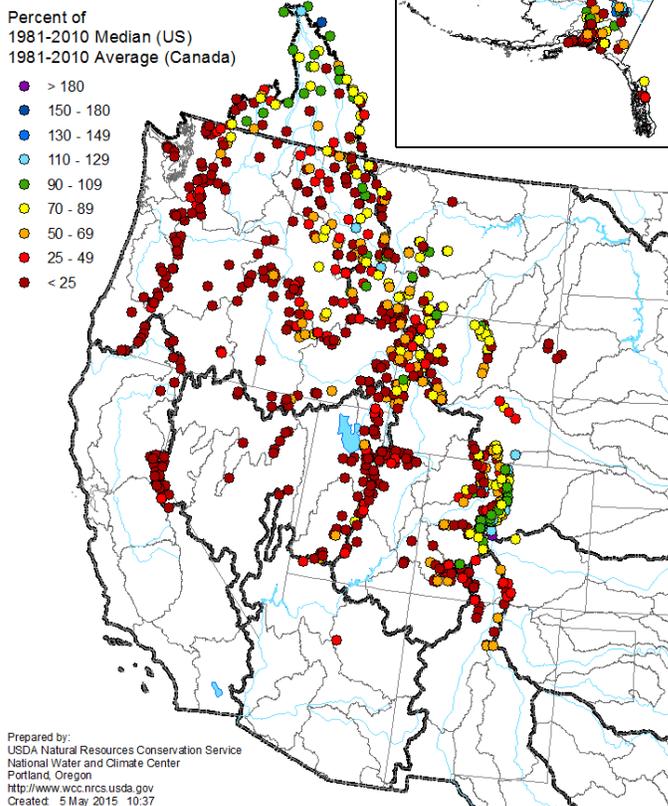


[Precipitation in Alaska for the 2015 water year-to-date](#) retains a similar pattern as last month, with more exaggerated contrasts among areas due to the April precipitation. The Interior remains below normal while the south coastal and Panhandle areas are now above normal.

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

## Snowpack

### Mountain Snowpack as of May 1, 2015



[Snowpack at SNOTEL sites and snow courses as of May 1](#) in the western U.S. and the Columbia Basin in Canada has again declined significantly since last month.

Snowmelt began early this year throughout the West and has continued during the past month. This has led to significant snowpack losses during April.

Snowpack is gone or nearly so in most the West. Only areas of high elevation in the Rockies – in Colorado, Wyoming, Montana, and British Columbia – retain snowpack in the near normal or only somewhat below normal categories.

Snowpack in Alaska is now below normal throughout the state, with the exception of a few sites in the Interior, which are still near or above normal.

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](#) for the remainder of the snowmelt season (May onwards) are well below normal for most of the West. Only a few areas in the Rocky Mountains of northern Colorado, western Montana, and British Columbia plus Interior Alaska are near normal. Most forecasts have again dropped significantly in terms of percent of average since last month. This is due to the dry March and April as well as an early start to snowmelt. For most areas, much of the snowmelt and resulting streamflow has already occurred, leaving little left to come from now on into the summer. Only in the four areas mentioned above is this picture different, where near normal or only somewhat below normal snowmelt-generated streamflow is expected.

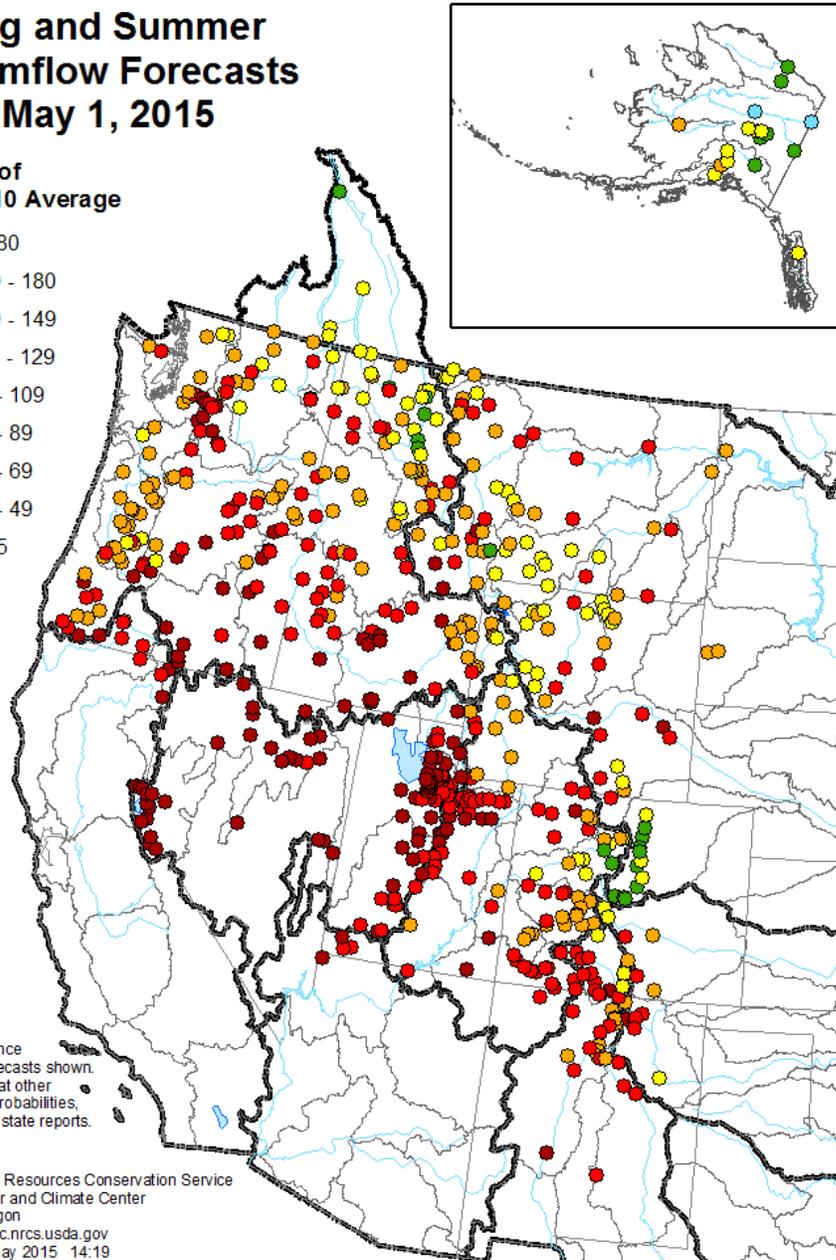
### Spring and Summer Streamflow Forecasts as of May 1, 2015

Percent of 1981-2010 Average

- > 180
- 150 - 180
- 130 - 149
- 110 - 129
- 90 - 109
- 70 - 89
- 50 - 69
- 25 - 49
- < 25

50% exceedance probability forecasts shown. For forecasts at other exceedance probabilities, see individual state reports.

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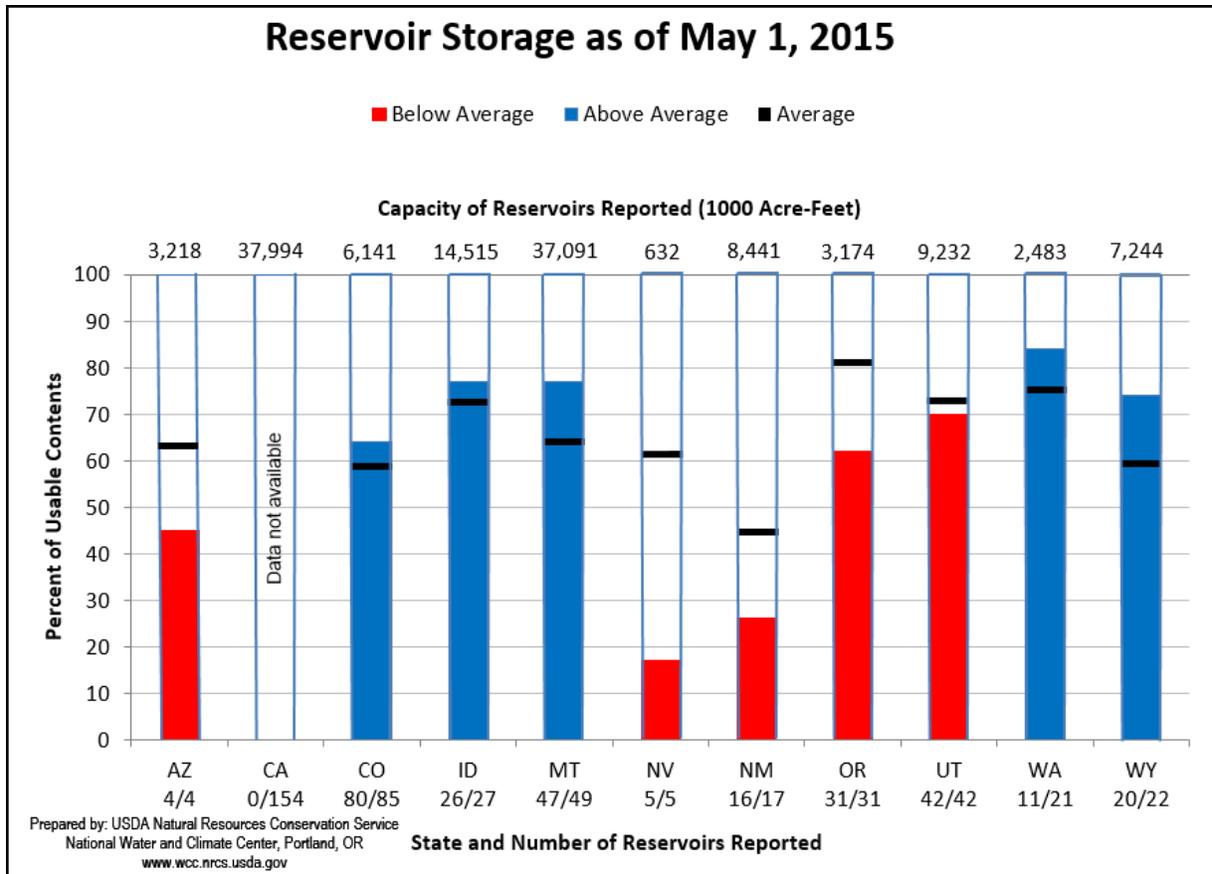
Trends in streamflow forecasts in basins for which daily water supply forecast models are available can be followed at: [http://www.wcc.nrcs.usda.gov/wsf/daily\\_forecasts.html](http://www.wcc.nrcs.usda.gov/wsf/daily_forecasts.html)

## Reservoir Storage

[Reservoir storage levels](#) are well below average in the Southwest, Nevada, and Oregon, 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:** Snowpack across Alaska remains generally below normal with many low lying areas having melted out. Patches of near normal snowpack exist in parts of northeast Alaska and in the Arctic.

**Arizona:** Warm and dry conditions have persisted, with spring runoff into the state's reservoirs occurring at well below median volumes.

**California:** Several small storms moved through California during April and the first part of May, delivering small amounts of snow to the mountains and rain to the valleys and coastal areas. Although the recent precipitation was very welcome and needed, it was not enough to change drought-related trends.

**Colorado:** Snowpack peaked one month earlier than usual and at about 75% of the normal peak snowpack, which does not bode well for an ample snowmelt runoff season. Reservoir storage is better in the northern half of the state while the struggles continue in the southern half. A notable exception to this general picture is the South Platte River basin, which has seen snowpack peak very close to normal and several weeks late, with year-to-date precipitation tracking very close to normal all year long.

**Idaho:**

**Montana:** After a disappointing winter, water users in Montana should prepare for early and below average snowmelt runoff in streams this spring and summer.

**Nevada:** Record low snow is producing record low streamflow this spring and summer in northern Nevada. Without additional precipitation, stored irrigation water in most reservoirs will run out by the end of May. In southern Nevada, Lake Mead reached its lowest water level since May 1937 when the reservoir was filling for the first time after Hoover Dam was constructed.

**New Mexico:** Most basins received little rainfall and no significant snow. The weather that did impact New Mexico brought with it high winds and blowing dust, which only continued to impact the already low snowpack values.

**Oregon:** Much of the winter's precipitation fell as rain rather than as snow, causing sixty percent of the long-term snowpack monitoring sites to set new records for the lowest and earliest peak snowpack in over 30 years. Due to the warm mountain temperatures, one third of snow monitoring sites in the state did not receive enough snow to build a lasting snowpack at all this year. The current snowpack deficit means that the mountains are missing several feet of water, normally frozen in the high elevation snowpack, that usually serves as a natural reservoir to feed streams and rivers throughout the summer. Because of the record low snowpack, water users depending on streamflow without access to reservoir storage should expect water shortages this summer.

**Utah:** With 80% to 100% of this year's snowpack now melted, Utah watersheds have produced a scant 5% to 10% of normal April-July streamflow. The remainder of this runoff season will likely produce similar flows, possibly less.

**Washington:**

**Wyoming:**

## **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>