

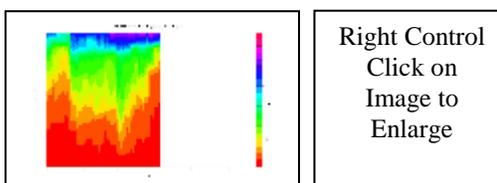


Natural Resources Conservation Service
P.O. Box 2890
Washington, D.C. 20013

Date: **April 11, 2012**

Subject: **April 1, 2012 Western Snowpack Conditions and Water Supply Forecasts**

The following information is provided for your use in describing western climate and water supply conditions as of April 1, 2012. For Water Year 2012 (WY-12) monthly precipitation (snow) maps by state, click this [link](#). For day to day SNOTEL percentiles for regions over the Colorado Basin for the WY-12 from the CBRFC (NOAA), click this [link](#). For example:



[OVERVIEW](#)

A weakening “La Niña” resulted in abundant moisture over the Pacific Northwest, Sierra, and parts of the Montana Rockies (Fig. A). This helped to increase snow water-equivalent for the Cascades and Sierra by up to 30 percent (Fig. 2) although the Sierra was never able to recover to normal values by the end of March (Fig. 1). Despite a relatively dry March (e.g., driest March for Colorado and second driest for Wyoming), Alaska’s earlier season snowfall has helped it to maintain mostly above normal to normal totals thus far this Water Year (Fig. 3). Streamflow forecasts show above normal flows over the Pacific Northwest and Northern Rockies (Fig. 4) and have increased over the Sierra by 30 percent but not in a meaningful way while decreasing elsewhere (over the Kenai Peninsula of Alaska) (Fig. 5). Reservoir data will be updated soon but are expected to resemble March’s values.

[SNOWPACK](#)

Mountain [snowpack](#) on April 1, 2012 shows a typical La Niña precipitation pattern of wetter conditions to the north and drier to the south over the Western States. However, Alaska’s Interior abundant moisture has been unexpected during this La Niña and cool phase of the Pacific Decadal Oscillation (Fig. 1). Mountain snowpack difference between March 1 to April 1, 2012 shows that La Niña’s only surprise was the unexpected moisture that fell on the Sierra. The drying trend over the Central and Southern Rockies, including the Southwest Mountains conformed to average late winter La Niña conditions as noted in Fig. 2.

[SEASONAL PRECIPITATION](#)

[Seasonal precipitation](#) from October 1, 2011 to March 31, 2012 shows normal to above normal moisture over the Cascades, Northern Rockies, and Lower Rio Grande River Basins. Drier conditions with respect to the long-term average dominated elsewhere. General, this winter’s La Niña precipitation pattern has verified nicely (Fig. 3).

SPRING AND SUMMER STREAMFLOW FORECASTS

Seasonal water supply forecasts on April 1, 2012 shows normal to surplus flows expected over the Cascades, Upper Columbia River Basin and below flows south of a line from southern Oregon to central Wyoming. Above normal flows dominate much of Alaska (Fig. 4). Change in streamflow forecast between March 1 and April 1, 2012 show increases over the Pacific Northwest (OR, WA, ID) and Montana Rockies. Decreases dominated from Wyoming to New Mexico. There was also some increase over the southeastern Interior of Alaska and decreases over the Kenai Peninsula. California data will be available soon (Fig. 5).

State Basin Outlook Reports can be accessed at: <http://www.wcc.nrcs.usda.gov/cqibin/bor.pl>.

RESERVOIR STORAGE

Reservoir Storage on April 1, 2012 shows similar values to March 1, 2012. The two Southwestern States (AZ, NM) have the greatest deficits while UT and WY have the greatest surpluses.

FOR MORE INFORMATION

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

/s/

Micheal L. Golden

Acting Deputy Chief, Soil Survey and Resource Assessment

Monthly Precipitation for March 2012

(Averaged by Hydrologic Unit)

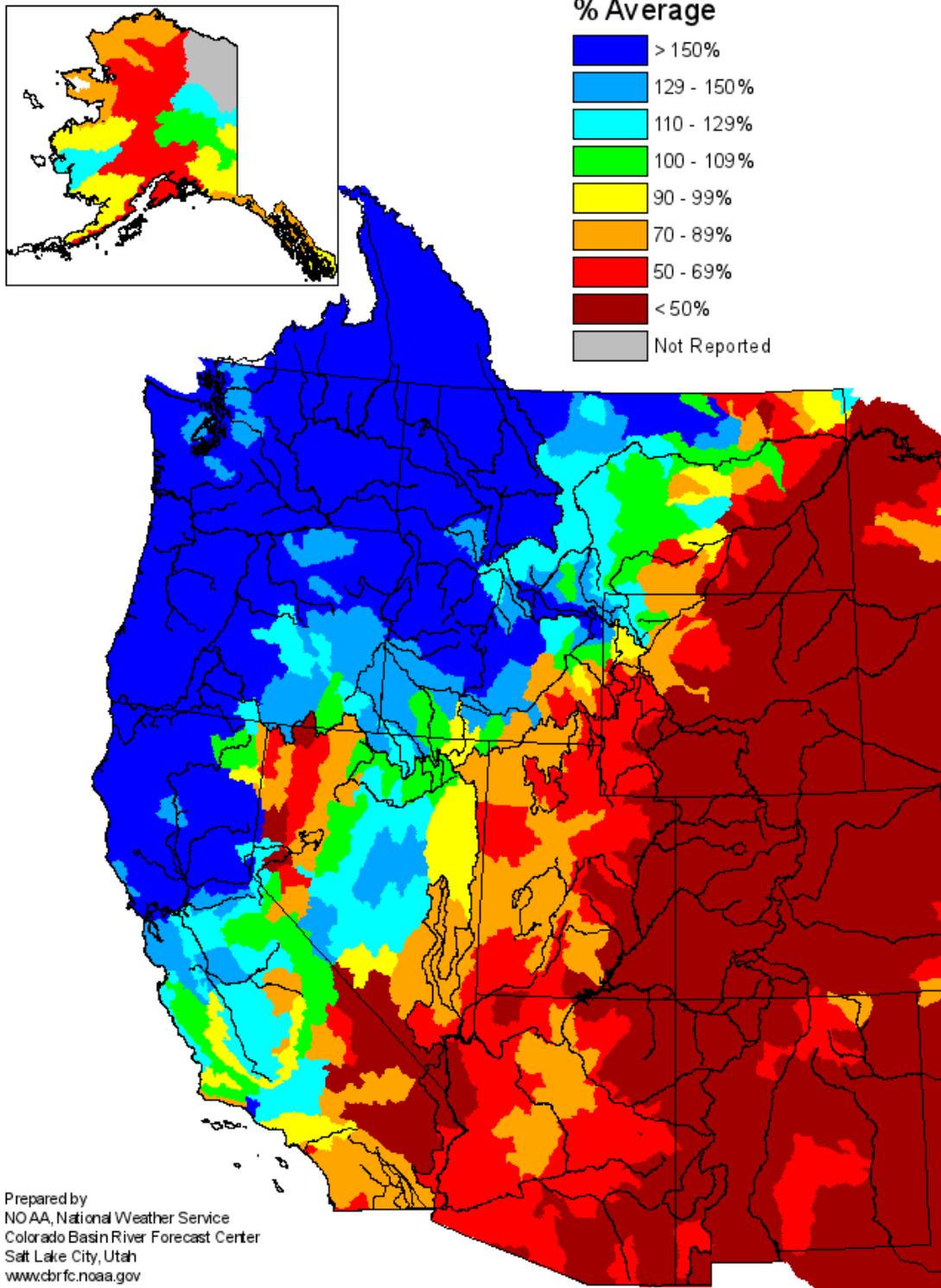


Figure A. [March 2012](#) precipitation map shows abundant moisture falling over the northwest region of the West while drier and much warmer conditions dominated elsewhere. Alaska experienced much drier conditions (except over the east-central Interior and Southwest regions).

Mountain Snowpack as of April 1, 2012

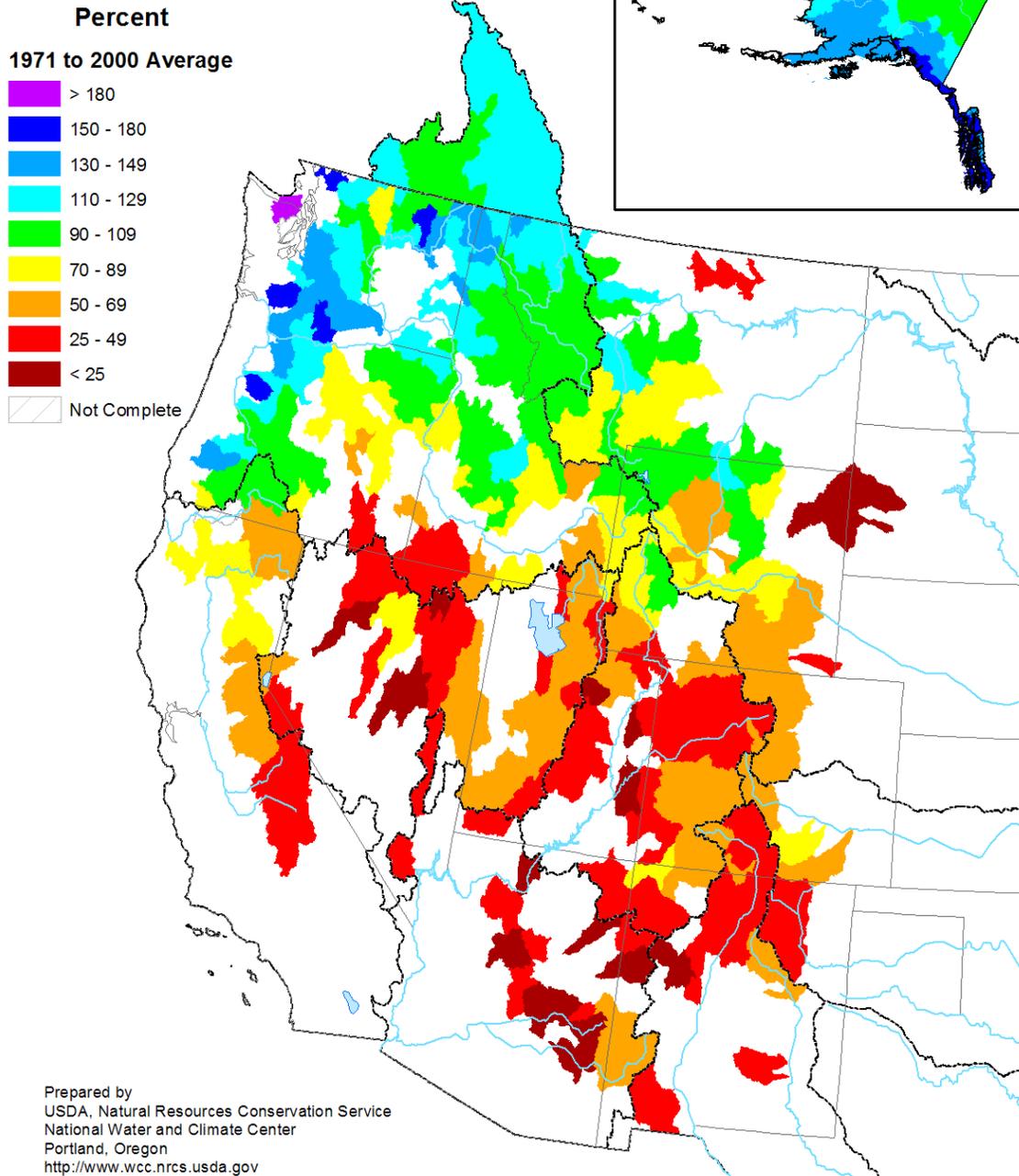


Figure 1. Mountain [Snowpack](#) on April 1, 2012 shows a typical La Niña precipitation pattern of wetter conditions to the north and drier to the south over the Western States. However, Alaska's Interior abundant moisture has been unexpected during this La Niña and cool Pacific Decadal Oscillation phase.

Mountain Snowpack Change between March 1 and April 1

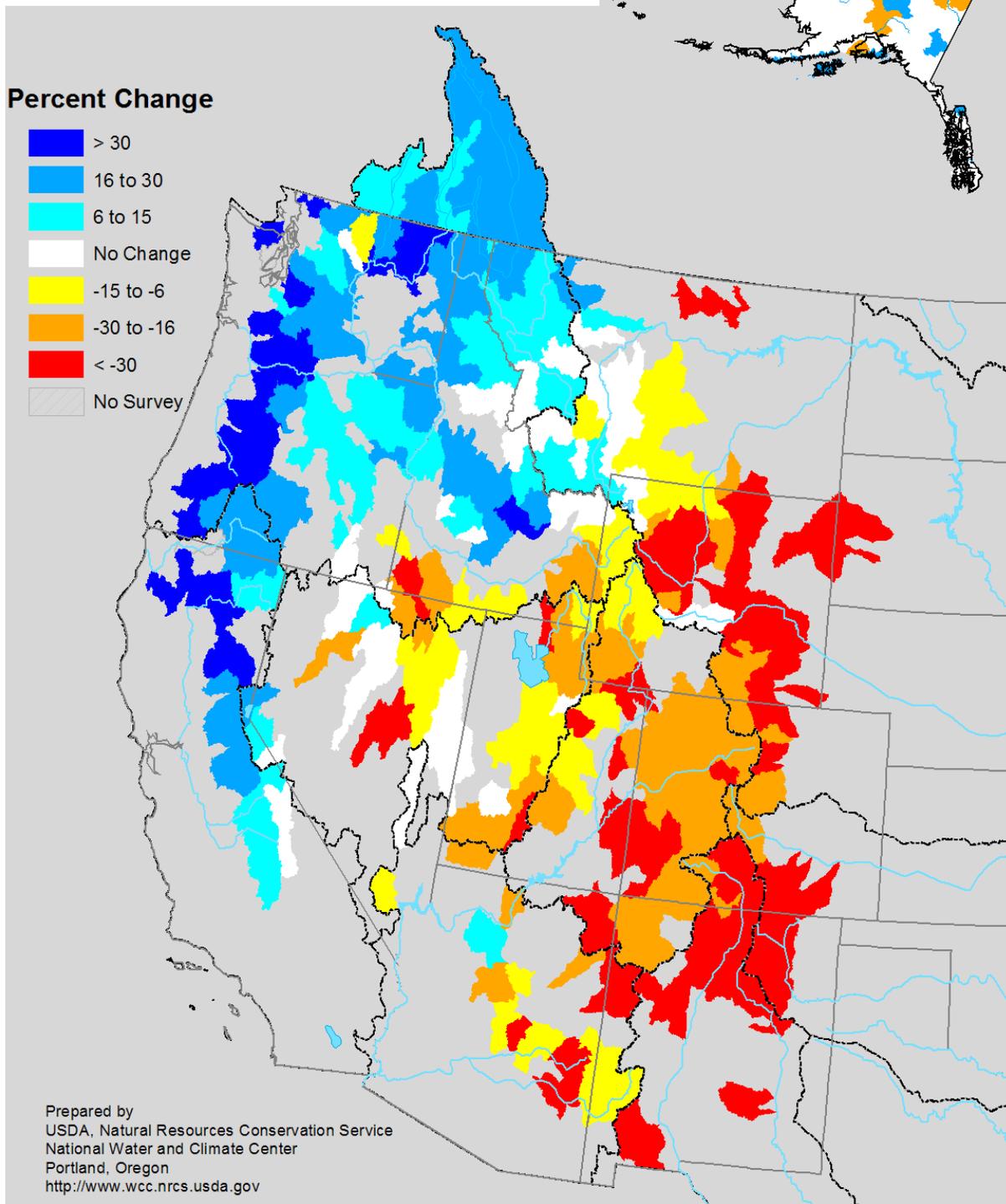


Fig. 2. Mountain Snowpack **Difference** between, March 1 to April 1, 2012 shows that La Niña's only surprise was the unexpected moisture that fell on the Sierra. The drying trend over the Central and Southern Rockies, including the Southwest Mountains conformed to average late winter La Niñas.

Seasonal Precipitation, October 2011 - March 2012

(Averaged by Hydrologic Unit)

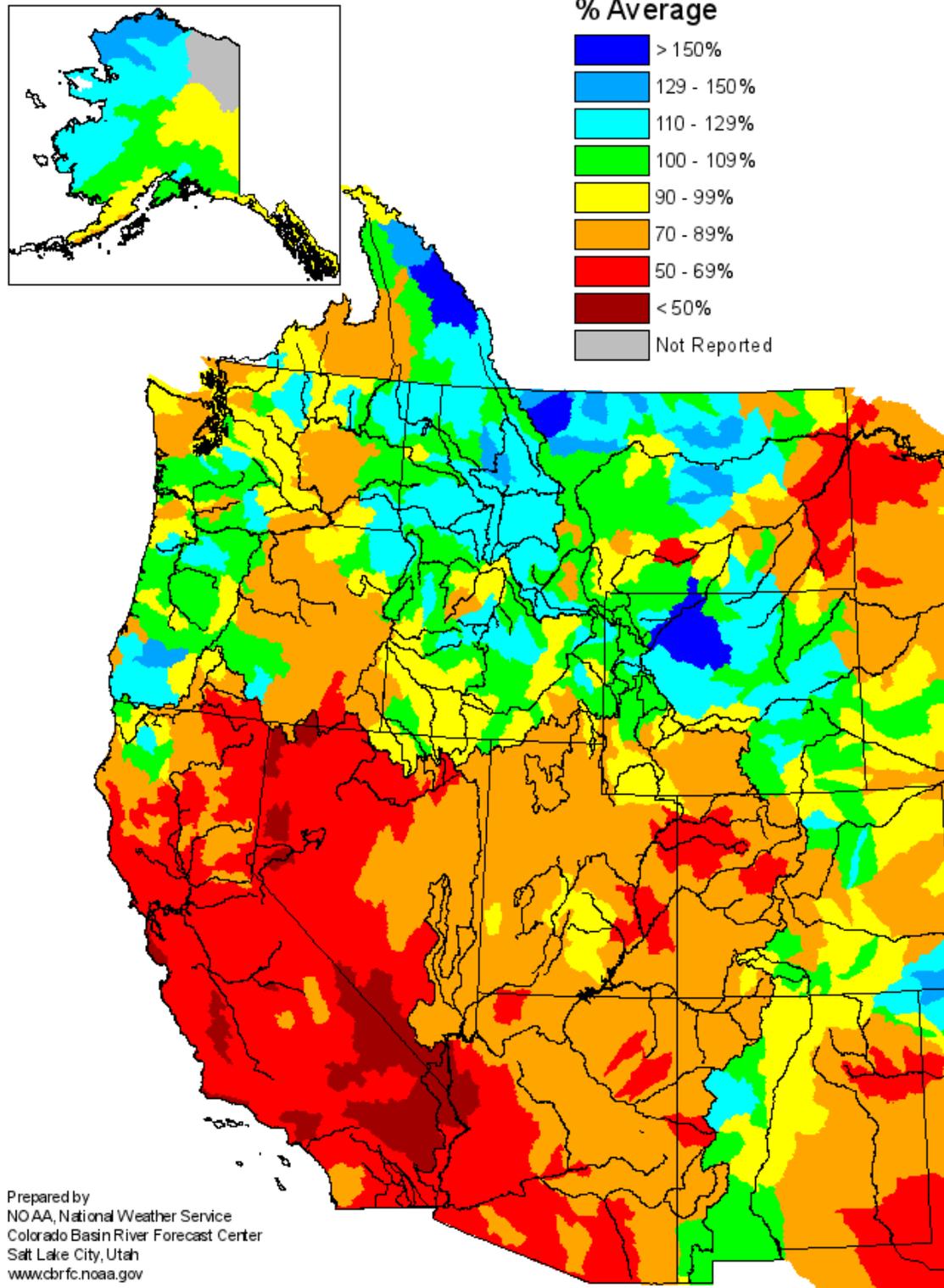


Figure 3. Seasonal Precipitation, October 1, 2011 to March 2012 shows normal to above normal moisture over the Cascades, Northern Rockies, and Lower Rio Grande River Basins. Drier conditions with respect to the long-term average dominate elsewhere. General, this winter's La Niña precipitation pattern has verified nicely.

Spring and Summer Streamflow Forecasts as of April 1, 2012

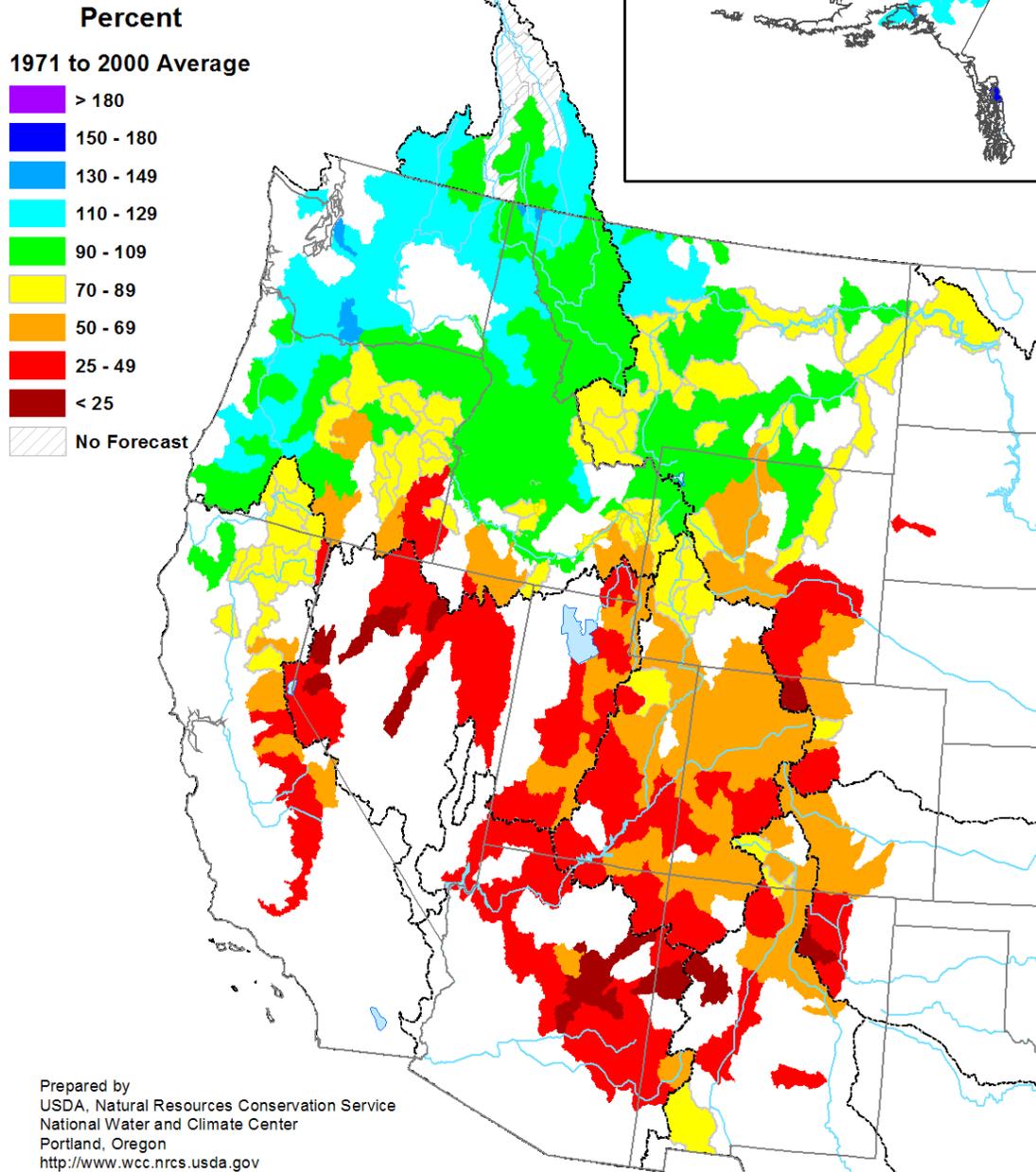


Figure 4. [Seasonal Water Supply Forecasts](#) on April 1, 2012 shows normal to surplus forecasts over the Cascades, Upper Columbia River Basin and below flows south of a line from southern Oregon to central Wyoming. Above normal flows dominate much of Alaska.

Change in Spring and Summer Streamflow Forecasts from March 1 to April 1, 2012

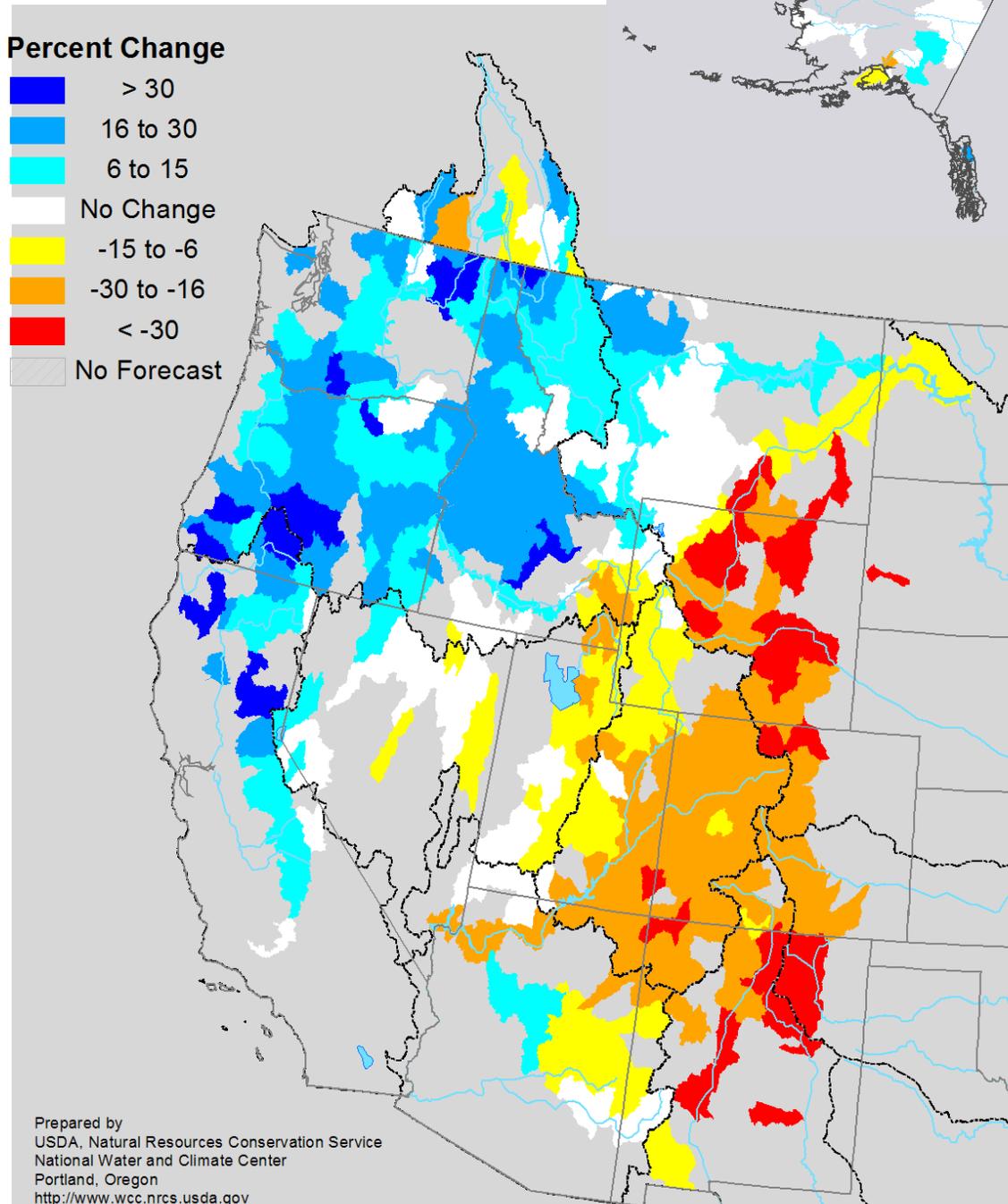
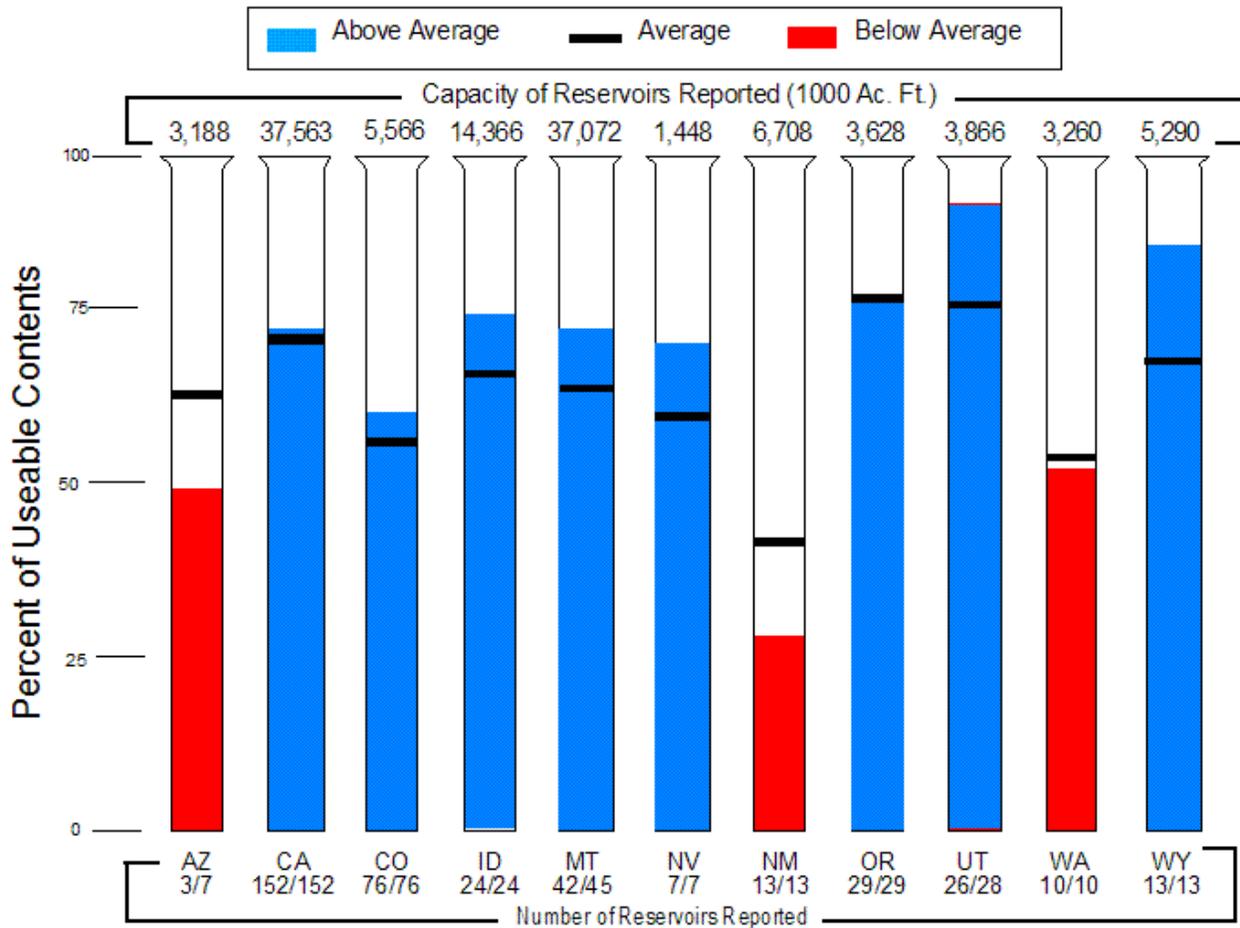


Fig. 5. Change in streamflow forecast between March 1 and April 1, 2012 shows increases over the Pacific Northwest (OR, WA, ID) and Montana Rockies. Decreases dominated from Wyoming to New Mexico. There was also some increase over the southeastern Interior of Alaska and decreases over the Kenai Peninsula. California data also shows improvements but remain well under the long term average over the Sierra.

Reservoir Storage as of April 1, 2012



Prepared by: USDA, Natural Resources Conservation Service, National Water and Climate Center, Portland, OR
<http://www.wcc.nrcs.usda.gov>

Figure 6. **Reservoir Storage** on April 1, 2012 shows similar values to March 1, 2012. The two Southwestern States (AZ, NM) have the greatest deficits while UT and WY have the greatest surpluses.