



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

Date: February 10, 2010

Subject: February 1, 2010 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 February 1, 2010.

OVERVIEW

The typical El Niño pattern of moisture is dominating the West with above normal snowpack over the Southwest and below normal snowpack over the Northwest (Fig.1). Alaska's Panhandle saw near normal snowpack while much of the state experienced deficits. Since last month, snowpack has increased across much of the West although many locations over the Northern Tier States increased from exceptionally low snowpack (Fig. 2).

For the 2010 Water Year that began on 1 October 2009, precipitation percent of normal totals reflects a typical El Niño pattern with a wetter Southern Tier States and a drier Northern Tier States (Fig. 3).

As of February 1, 2010 the spring and summer streamflow forecasts are calling for well below normal values across all but the Southwest Mountains of southern Utah, Arizona and New Mexico (Fig. 4). During the past month, the spring and summer streamflow forecasts have increased significantly over the Southern Tier States (Fig. 5). Significant decrease forecast flows are noted over the Northern Tier States.

The Western States show a lot of state to state variability in reservoir levels with Nevada at the lower range and Wyoming at the higher range.

SNOWPACK

On February 1, 2010, western snowpack is below the long-term average over much of the Northern and Central Rockies, Cascades, Intermountain West, and much of Alaska as shown in Fig. 1. Above normal values are noted over the Sierra, Northern Great Basin, and especially over the 4-Corner States. While increases from last month look impressive (Fig. 2), the >30% blue depictions over much of the northern regions of the West reflect significantly less increases that occurred than over the Southwest. A map containing a daily update of the westwide snowpack may be obtained from the following URL - <http://www.wcc.nrcs.usda.gov/gis/snow.html>.

SEASONAL PRECIPITATION

Preliminary seasonal precipitation is above normal, >130% of average, throughout the higher elevations of northwestern Washington, southern California, southern half of Nevada, southern

Utah, much of Arizona, and the Western High Plains as shown in Fig. 3. Precipitation is well below normal, <70% of average across much of the Interior West.

Monthly and seasonal precipitation maps are available from the following location -

<http://www.wcc.nrcs.usda.gov/gis/precip.html> and

<http://www.cbrfc.noaa.gov/wsups/westwide/westwide.cgi>

http://www.hprcc.unl.edu/maps/current/index.php?action=update_product&product=PNorm

SPRING AND SUMMER STREAMFLOW FORECASTS

Abundant snowfall during February has resulted in streamflow forecasts (>130% across the 4-Corners region. Forecasts (<70%) are noted much of the remainder of the West as shown in Fig 4. Forecast improvement since February is most notable over the Southwest while the Upper Columbia River drainage forecast deteriorated the worst (Fig. 5).

Specific state streamflow summaries can be obtained from the Internet location -

<http://www.wcc.nrcs.usda.gov/cgibin/bor.pl>

RESERVOIR STORAGE

As of February 1, 2010, reservoir storage by state is shown in Fig. 5. About a third of the West has reservoir levels near average, and two third below average. As of 10 Feb, California and Arizona data is unavailable but will be updated soon.

<http://www.wcc.nrcs.usda.gov/cgibin/resvgrph2.pl?area=west&year=2010&month=02>.

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/ NOLLER HERBERT

Director, Conservation Engineering Division

Mountain Snowpack as of February 1, 2010

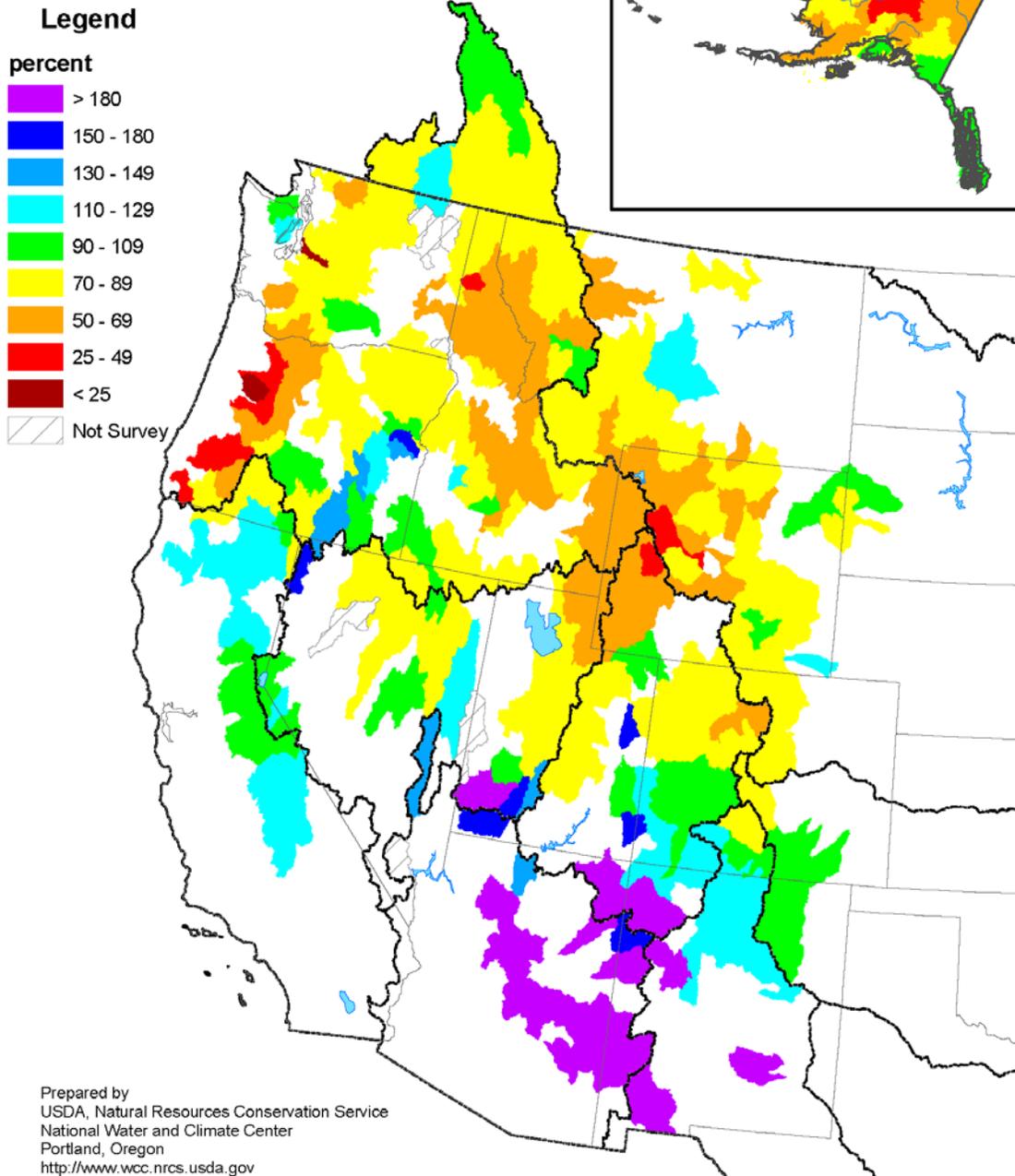


Fig. 1. Mountain Snowpack, February 1, 2010

<ftp://ftp.wcc.nrcs.usda.gov/support/water/westwide/snowpack/wy2010/snow1002.gif>

2010 Mountain Snowpack Change between January 1 and February 1

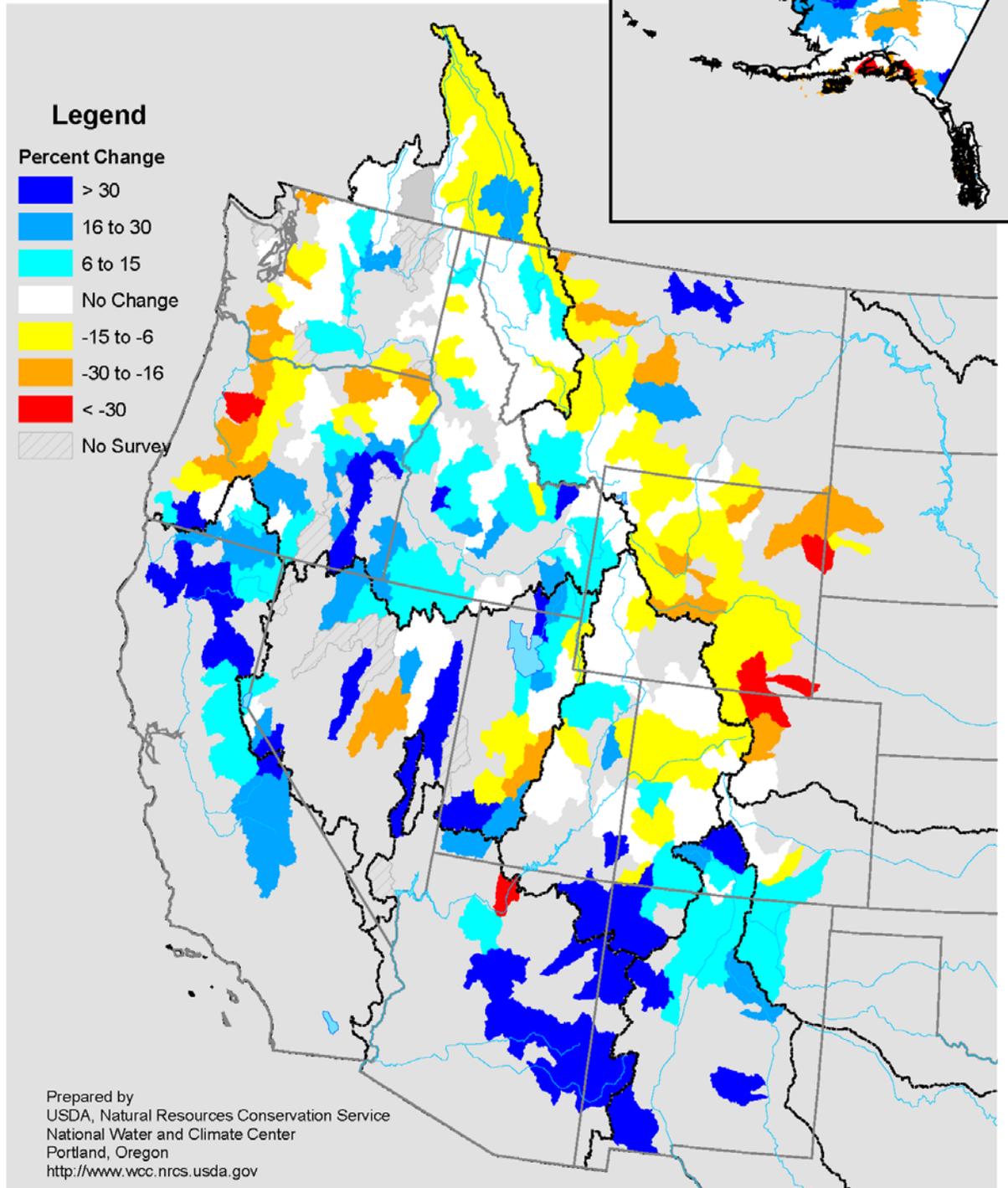


Fig. 2. Mountain Snowpack Difference between, January 1 to February 1, 2010
<http://ftp.wcc.nrcs.usda.gov/support/water/westwide/snowpack/wy2010/difsnow1002.gif>

Seasonal Precipitation, October 2009 - January 2010

(Averaged by Hydrologic Unit)

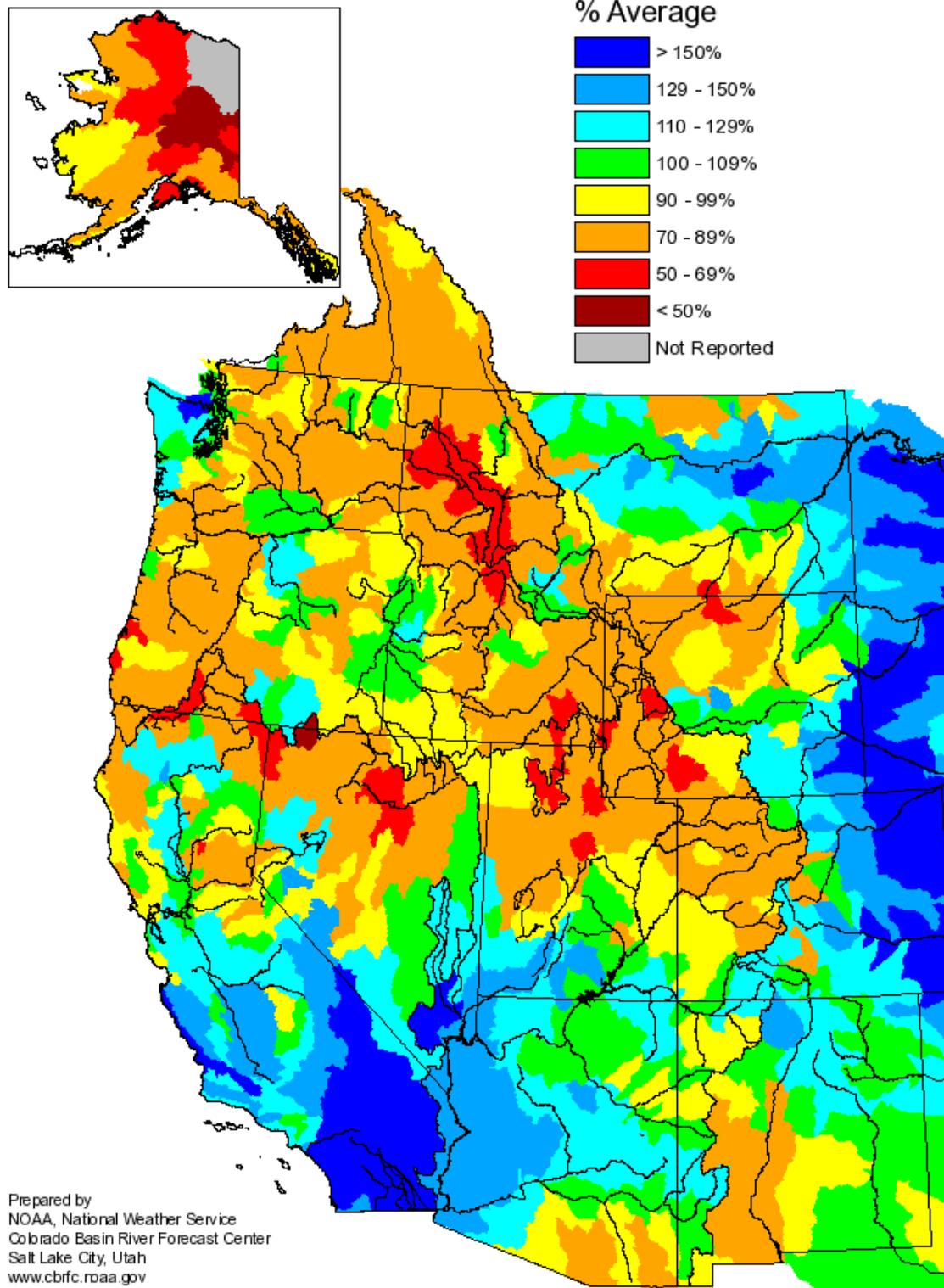
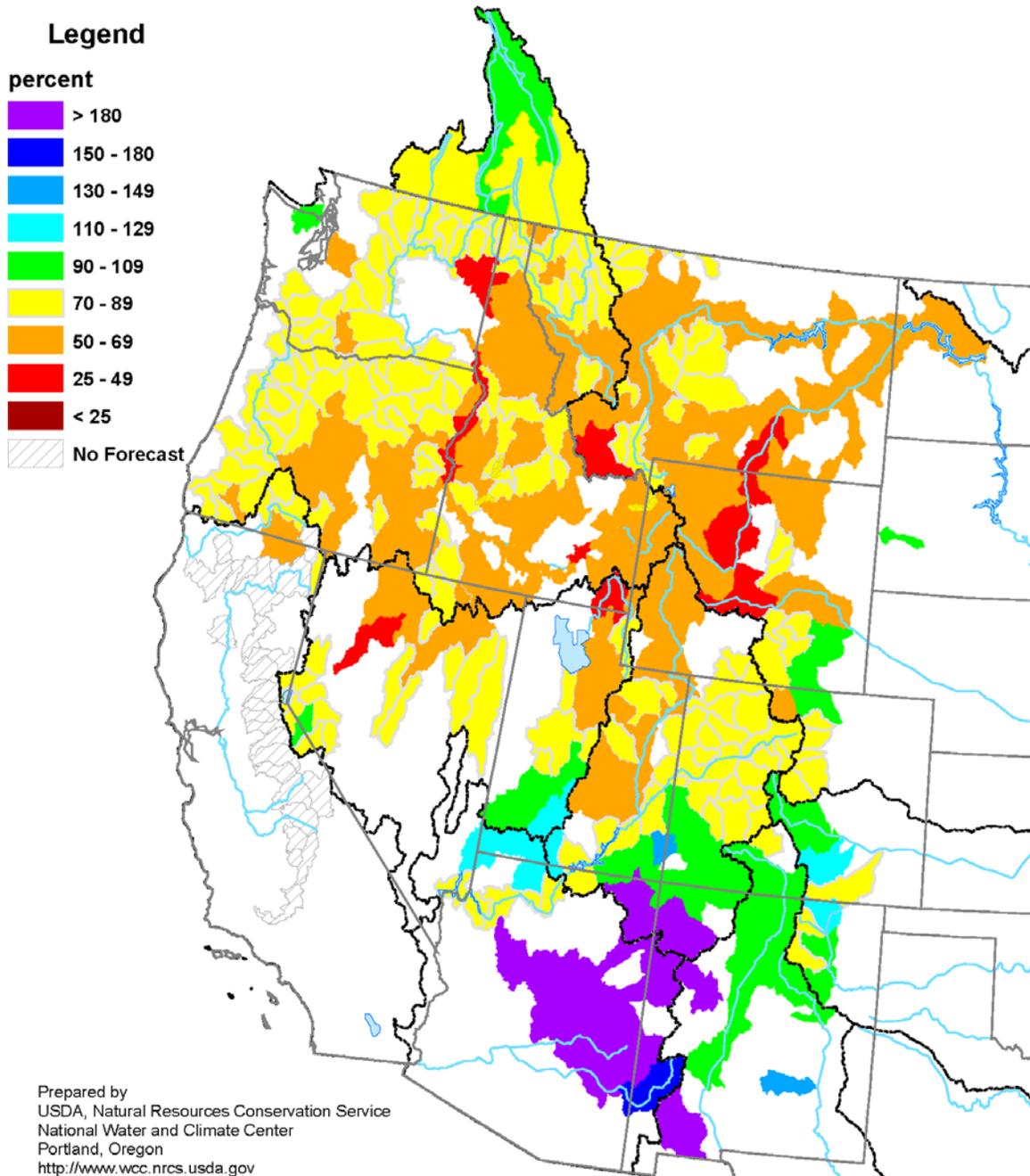


Fig. 3. Seasonal Precipitation, October 2009 to January 2010

Ref: <http://www.cbrfc.noaa.gov/wsuf/westwide/precip/westS201001.png>

Spring and Summer Streamflow Forecasts as of February 1, 2010



**Fig. 4. Seasonal Water Supply Forecasts - February 1, 2010
(Alaska not forecast in February).**

Ref: <http://ftp.wcc.nrcs.usda.gov/support/water/westwide/streamflow/wy2010/strm1002.gif>

Change in Spring and Summer Streamflow Forecasts from January 1 to February 1, 2010

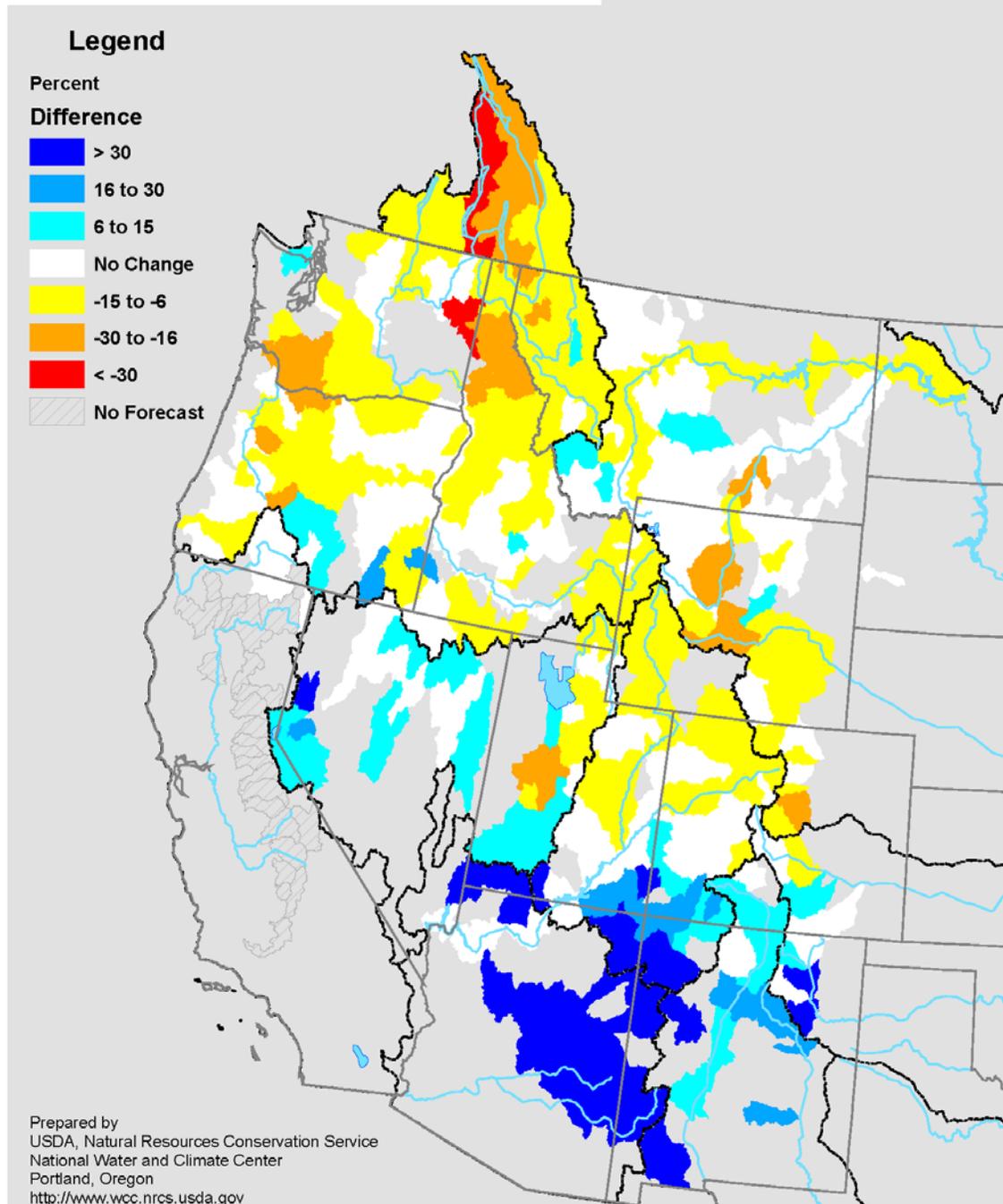
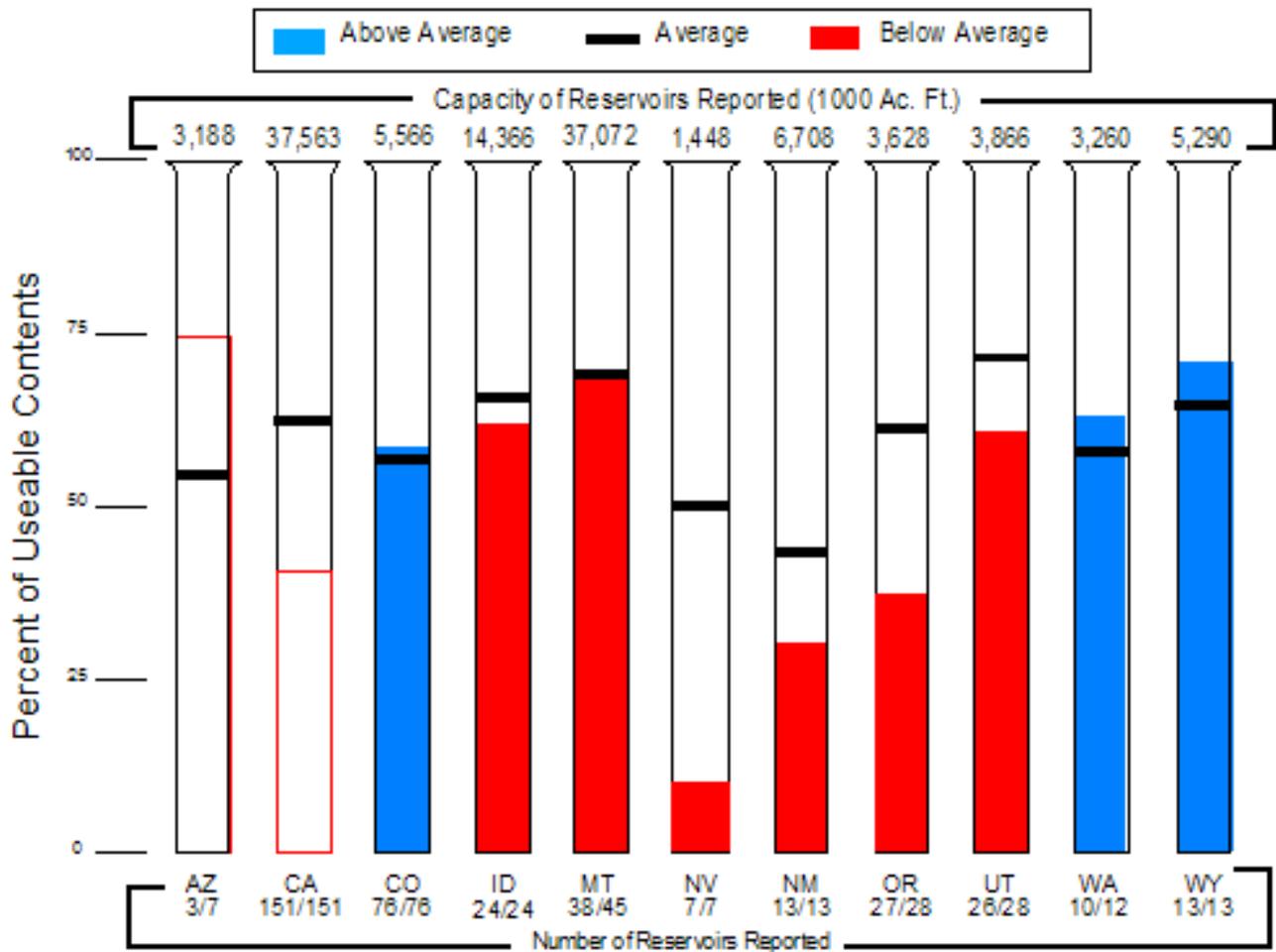


Fig. 5. Change in streamflow forecast between January 1 and February 1, 2010.
Note: California will be available later.

Ref: <http://ftp.wcc.nrcs.usda.gov/support/water/westwide/streamflow/wy2010/difstrm1002.gif>

Reservoir Storage as of February 1, 2010



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

Fig. 6. Reservoir Storage - February 1, 2010. California and Arizona data not available as of 10 Feb.

Ref: <http://www.wcc.nrcs.usda.gov/cgibin/resvgrph2.pl?area=west&year=2010&month=02>