



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

Date: **January 15, 2013**

Subject: **January 1, 2013 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 January 1, 2013.

OVERVIEW

Neutral **E**l Niño **S**outhern **O**scillation (ENSO) conditions combined with a cool phase **P**acific **D**ecadal **O**scillation (PDO) thus far this Water Year has resulted in a La Niña-like weather pattern that has favored the Northern Tier States of the West with above normal moisture. A series of weather systems have also moved through Utah's Wasatch and Arizona's Mountains helping to enhance their snowpack thus far. With large uncertainty in the seasonal weather forecast and a high probability for extremes and variability in the weather pattern, there is a lower forecast confidence level this year as compared to recent years. High **S**now **W**ater **E**quivalent (SWE) values today do not guarantee end of season surpluses. For individual state **S**urface **W**ater **S**upply **I**ndex, click [SWSI](#).

SNOWPACK

January opened with the driest regions over the eastern slope of the Continental Divide, Interior West from western Idaho to the Eastern Great Basin, and over much of Alaska (Fig. 1). The wettest regions are found over the Western Slope of the Rockies including Arizona and from the Sierra to the Cascades. Alaska's North Slope and Panhandle also experienced above normal snowpack.

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

In a typical neutral ENSO, the Western States usually experience a wide range of precipitation amounts. Thus far, during the 2013 Water Year, this neutral ENSO dominated the Northern Tier States and extreme Western regions of the West with excessive moisture while Alaska and the much of the Southwest including the Western Great Basin, much of Wyoming, and southern Montana were excessively dry (Fig. 2).

Monthly and seasonal precipitation maps are available from the following locations - <http://www.wcc.nrcs.usda.gov/gis/precip.html> and <http://www.cbrfc.noaa.gov/wsup/westwide/westwide.cgi>.

SPRING AND SUMMER STREAMFLOW FORECASTS

The spring and summer streamflow forecasts as of January 1, 2013 are calling for below normal values much of the Southwest, Platte River Drainage, and Great Basin (Fig. 3). Near average or above flows are expected over the Columbia River Drainage; including the Lower Snake River Drainage. The Missouri River Drainage also is expected to be above its long term average flow.

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

RESERVOIR STORAGE

The Statewide (average) reservoir levels map (Fig. 4) shows a mixed picture across the West. For more details, see the [Tea Cup](#) diagrams available for the [Upper Colorado](#), [Upper Snake](#), and the [Pacific Northwest](#).

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>.

Next update is expected about 10 February.

/s/

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Mountain Snowpack as of January 1, 2013

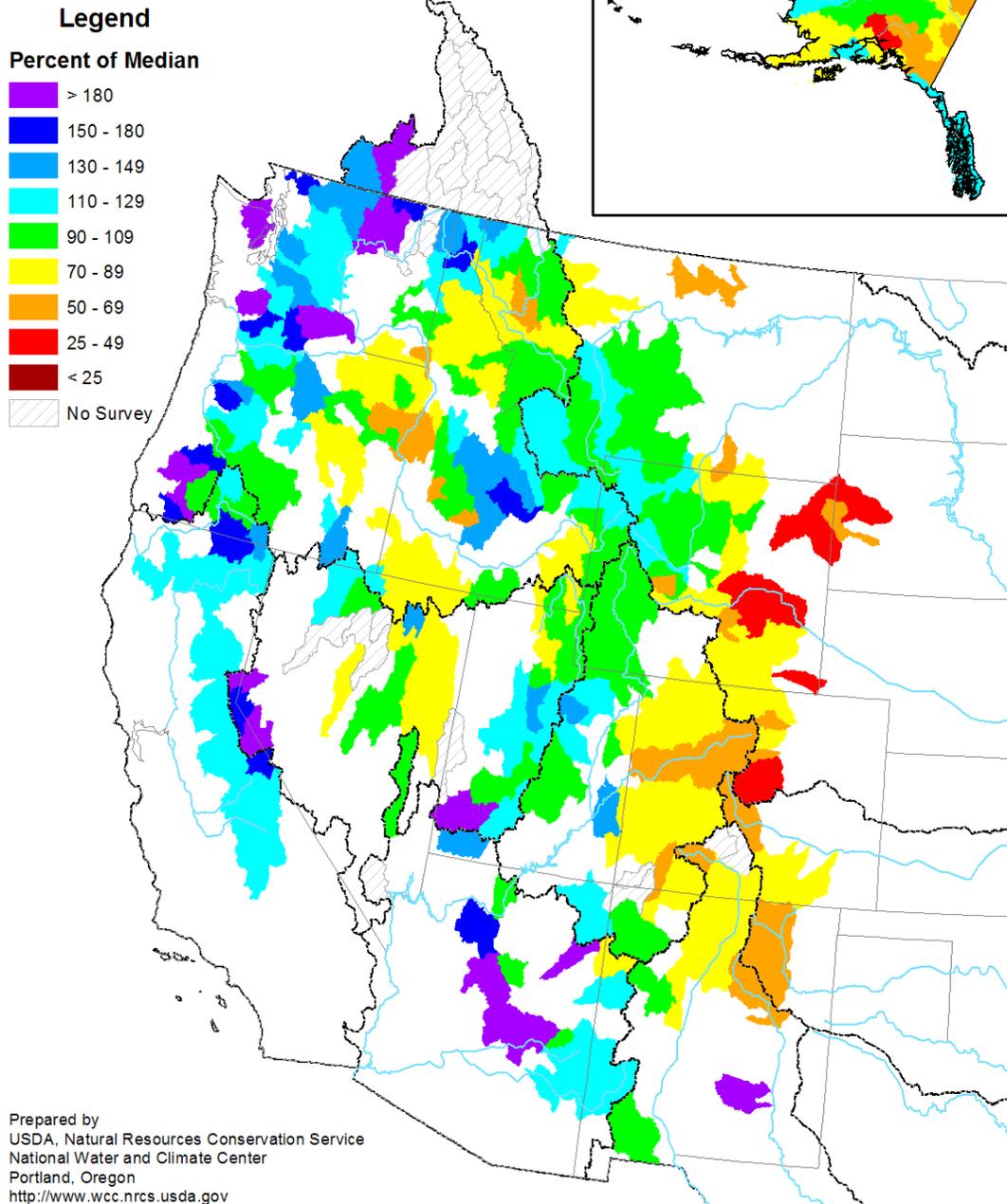


Fig. 1: A rather complex pattern of surplus and deficit snow cover dominated the West. The West Coast States and Western Slopes of the Rockies experienced surpluses while the Great Basin-Western Interior Regions and Eastern Slope of the Rockies had deficits.

Seasonal Precipitation, October 2012 - December 2012

(Averaged by Hydrologic Unit)

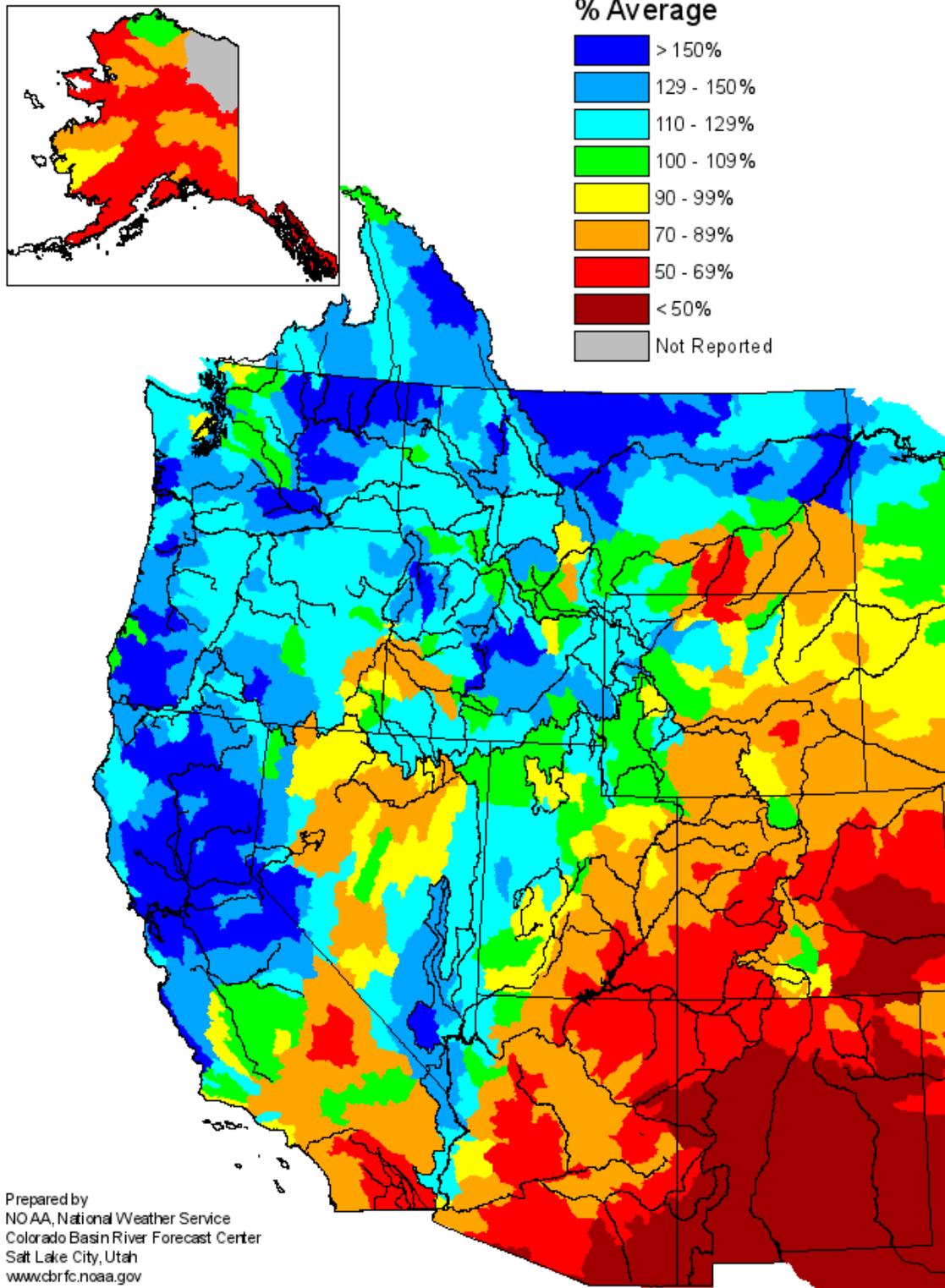


Fig. 2: Percent of normal precipitation for the 2013 Water Year through December has favored the northern and western regions of the West with surplus amounts.

Spring and Summer Streamflow Forecasts as of January 1, 2013

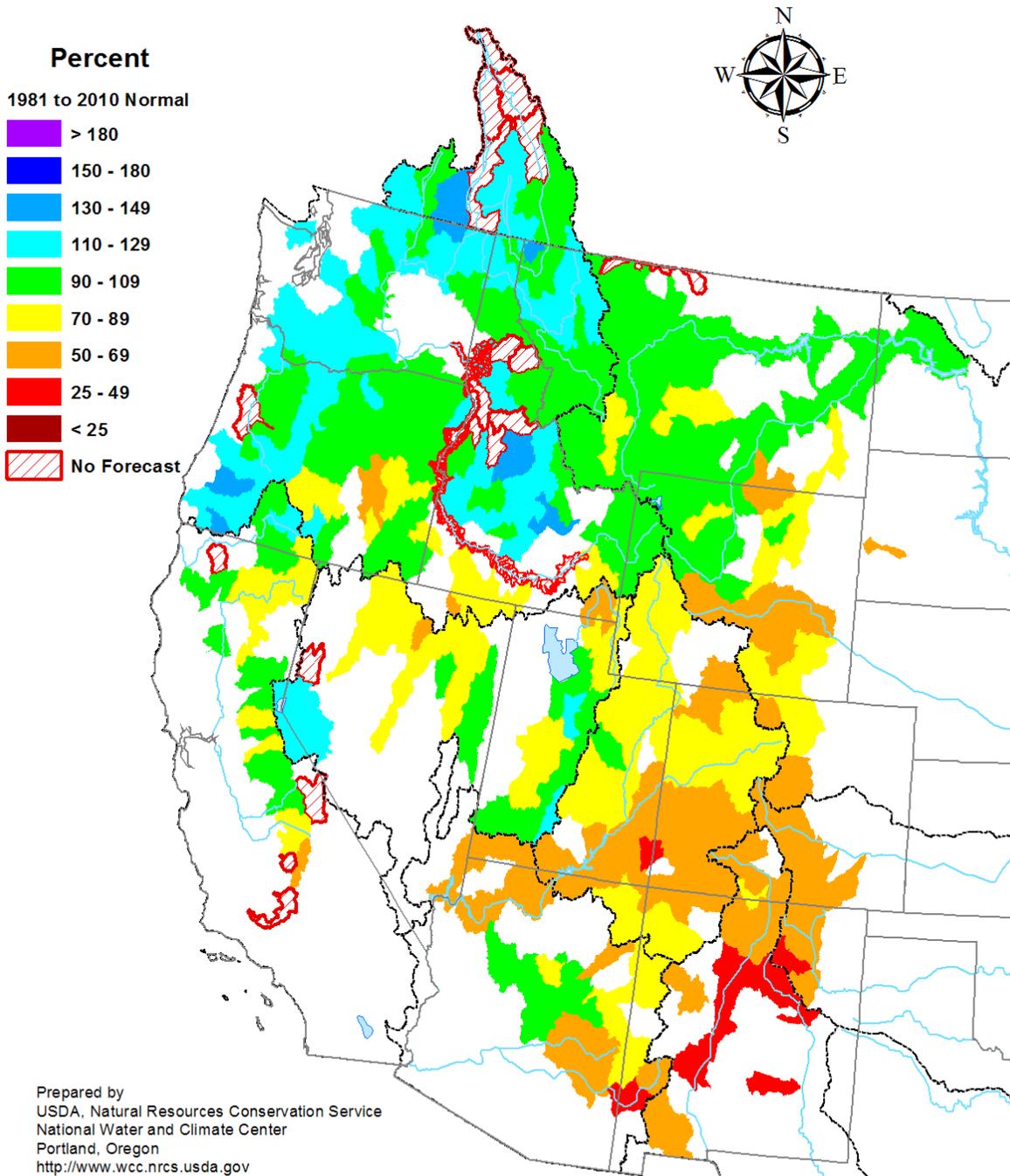
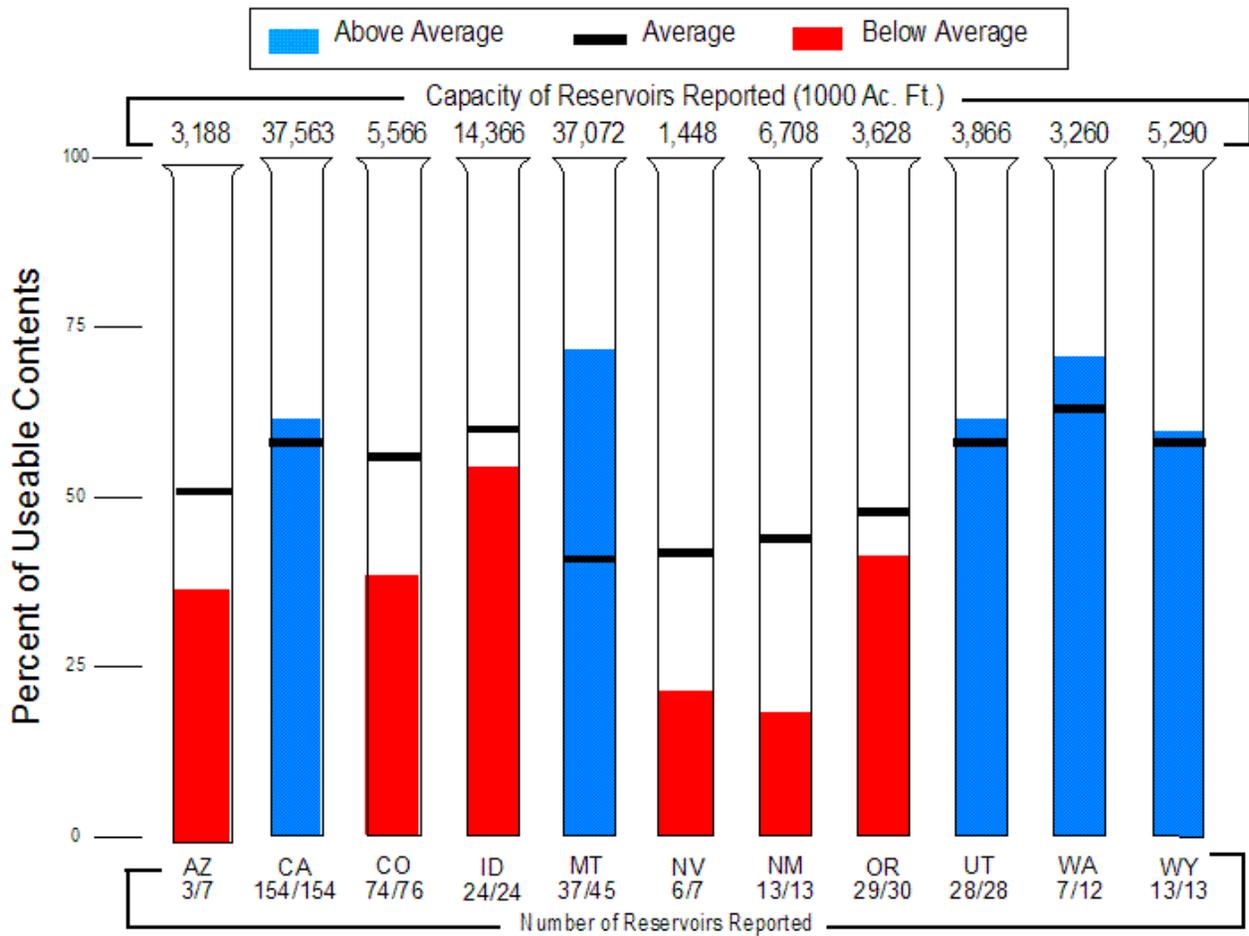


Fig. 3: Seasonal Water Supply Forecasts – as of January 1, 2013 (Alaska not forecast in January). The Pacific Northwest States (ID, OR, and WA) show the greatest expected runoff while much of the 4-Corner States and Wyoming show the least.

Reservoir Storage as of January 1, 2013



Prepared by: USDA, Natural Resources Conservation Service, National Water and Climate Center, Portland, OR
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Fig. 4: About half the state's reservoirs have significant deficits (AZ, CO, NV, and NM). Near average holdings are found in (CA, UT, WA, WY). Significant reserves are found in Montana.