Oregon Water Conditions Report December 12, 2016



In the past two weeks, cooler temperatures and an increase in precipitation has been the trend for most of the state. So far this month, precipitation has ranged from 70 percent in the southwest corner of the state to over 130 percent of normal in the southeast. Stream flows are responding accordingly and are expected to continue to rise, especially in Western Oregon.

Mountain snowpack has increased considerably in the past few weeks. Cooler temperatures combined with recent storm events have contributed to a marked increase in snowpack. In the Mt Hood and Sandy Basins, snowpack is now over 150 percent of normal. The lowest values are in the Harney Basin where snowpack is at 93 percent.

The most recent three month outlook from NOAA's Climate Prediction Center indicates an equal chance of above or below normal temperatures between now and March. Precipitation probability is predicted to be above normal for the northern half of the state. Current climate observations indicate a trend toward the increasing likelihood of a mild La Nina potential. For the Pacific Northwest, La Nina conditions bring wetter, cooler conditions.

Statewide average streamflows are a little over 100 percent of normal. Regionally, streamflow conditions east of the Cascades are almost 85 percent of normal. West of the Cascades streams are around 135 percent of normal for this time of year. Recent conditions (as of December 10) are similar – 185 percent for streams west of the Cascades and 85 percent for east. This reflects recent weather events and should continue to increase in the next few days

Reservoir storage levels are still expectedly low but early winter rainfall continues to raise hopes of increased inflows. A majority of reservoirs in the Willamette and Rogue basins, primarily used for flood control, are currently being maintained at typically low levels for this purpose. Reservoirs used for water supply in the eastern regions of Oregon continue to be well below normal even for this time of year. Refer to the graphic on page 10 for a statewide map of storage conditions. For the most recent, site specific reservoir conditions (teacup diagrams) visit the <u>USBR</u> or <u>USACE</u> websites.

There has been no change in drought conditions in the past four weeks. As of December 6, the US Drought Monitor continues to indicate that 56 percent of the state is no longer listed in <u>any</u> drought category. However, 44 percent of the state is still listed in the D0 (abnormally dry) category as well as 23 percent listed as D1 (moderate drought) category. Of note are areas in Baker and Malheur Counties that continue to be listed in the D2 (severe drought) category. Soil moisture models continue to indicate drier than normal conditions within these areas. The effect of recent rainfall on soil moisture is evident in the map on page 7.

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Website: http://www.wrcc.dri.edu/anom/ore_anom.html



Last 14 days

Last 30 days

Temperature - Departure from Average

Website: http://www.wrcc.dri.edu/anom/ore_anom.html



Last 14 days

Last 30 days





January-February-March

Website: <u>http://www.cpc.ncep.noaa.gov/products/predictions/long_range/seasonal.php?lead=1</u>



Website: http://droughtmonitor.unl.edu/Home/StateDroughtMonitor.aspx?OR



U.S. Drought Monitor

December 6, 2016 (Released Thursday, Dec. 8, 2016) Valid 7 a.m. EST

Drought Conditions (Percent Area) None D0-D4 D1-D4 D2-D4 D3-D4 D4 Current 56.44 43.56 23.22 2.63 0.00 0.00 Last Week 11/29/2016 56.44 43.56 23.22 2.63 0.00 0.00 3 Month s Ago 9/6/2016 0.00 100.00 50.21 12.03 0.00 0.00 Start of Calend ar Yea 14.52 85.48 80.45 65.33 39.55 0.00 Start of Water Year 0.00 100.00 50.59 12.30 0.00 0.00 9/27/2016 One Year Ago 12/8/2015 3.31 59.57 0.00 96.69 90.99 88.52

Intensity:



D3 Extrem e D rought D4 Exceptional Drought

D2 Severe Drought The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

Author: Anthony Artusa NOAA/NWS/NCEP/CPC



http://droughtmonitor.unl.edu/

Note: No Change from November 22 2016 report

U.S. Drought Monitor November 22, 2016 Wednesday, Nov. 23, 2016) Valid 7 a.m. EST Oregon Drought Conditions (Per None D0-D4 D1-D4 D2-D4 Current Last Week Start of Calendar Year One Year Ago Intensity: D0 Abnom ally Dry D1 Moderate Drought D2 Severe Drought Author: Richard Heim NCE/NOAA

56.44 43.56 23.22 2.63 0.00 0.00 56.44 43.56 23.22 2.63 0.00 0.00 3 Months Ago 0.00 100.00 50.21 12.03 0.00 0.00 14.52 85.48 80.45 65.33 39.55 0.00 Start of Water Year 927/2016 0.00 100.00 50.59 12.30 0.00 0.00 0.71 99.29 96.01 90.37 60.69 0.00 D3 Extrem e Drought D4 Exceptional Drought The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

ent Area



Website: http://www.hydro.washington.edu/forecast/monitor/curr/conus.mexico/west.vic.sm_qnt.gif



VIC Soil Moisture Percentiles (wrt/ 1916-2004) Western United States - 20161210 Website: http://www.usda.gov/documents/usda-drought-fast-track-designations.pdf



2016 Secretarial Drought Designations - All Drought



November Regional Streamflow Conditions

Streamflow Example - Western Oregon





Streamflow Example – Eastern Oregon

Regional Reservoir Storage Conditions

