Oregon Water Conditions Report February 6, 2017



January storms brought significant snow and ice accumulations to many low elevation areas along with near record cold temperatures. These storms had widespread effects, including impacting travel, closing interstate highways, collapsing roofs, and interrupting businesses and schools for a record number of days. Eastern Oregon was particularly hard hit with large economic losses due to heavy snow loads collapsing onion storage facilities. On the bright side, the additional snow accumulation will likely aide in boosting reservoir storage.

Mountain snowpack is 126 percent of normal. Statewide water year precipitation is almost 120 percent of normal. Based on the current mountain conditions, streamflow forecasts are calling for near average to above average summer streamflows during the water supply season throughout the state. Snow measuring sites in the Grande Ronde, Powder, Burnt, and Imnaha basins have a 98 percent of normal snowpack, the lowest in the state. Northeastern Oregon stands out a bit in that snowpack in the Wallowa Mountains is lagging behind while the rest of the region has above normal snow. The Owyhee and Malheur basins have the highest snowpack in the state at 151 percent of normal including an unusual amount of snow in lower elevations.

The February 2017 water supply outlook report will likely be published tomorrow morning, and will be available at the following link: https://www.wcc.nrcs.usda.gov/ftpref/states/or/watersupply/2017/WSOR 2017 Feb.pdf

The NRCS Snow Survey also publishes weekly condition reports on three areas affected by wildfire in eastern Oregon. Because the burned soils can't absorb as much water, these areas experience a higher risk for flash flooding. The reports can be accessed here: https://www.nrcs.usda.gov/wps/portal/nrcs/detailfull/or/snow/?cid=nrcseprd854607

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 April. Precipitation probability is predicted to be above normal in the northeastern corner of the state and equal chances for the rest of the state during the same period.

Statewide average streamflows for January were 100 percent of normal. Regionally, streamflow conditions east and west of the Cascades were both equal at 100 percent of normal for this time of year. Recent conditions (as of February 4) continue to reflect the widespread effect of ice on flows east of the Cascades, where flows appear to be in excess of 140 percent. It should be noted that many of the streams in eastern Oregon are experiencing the effect of ice and are difficult to represent in real time. Recent rain events west of the Cascades have increased flows to over 180 percent (and rising).

Good snowpack conditions continue to buoy hopes of adequate reservoir 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. While there has been gradual increase in storage levels, reservoirs used for water supply in the eastern regions of Oregon continue to be below normal for this time of year. In central and southwest Oregon, reservoir levels are encouraging. Refer to the graphic on page 11 for a statewide map of storage conditions for the end of January. For the most recent, site specific reservoir conditions (teacup diagrams) visit the <u>USBR</u> or <u>USACE</u> websites.

There has no change in drought conditions in the past two weeks. The US Drought Monitor continues to indicate that 82 percent of the state is no longer listed in <u>any</u> drought category. 18 percent of the state is listed in the D0 (abnormally dry) category, and 3 percent is listed as D1 (moderate drought) category.

Data & Products:

Snowpack - Percent of Normal3Precipitation (mountain) - Percent of Normal4Temperature - (1 Month) Departure from Normal5Precipitation - (1 Month) Percent of Normal6Three Month Temperature and Precipitation Outlook7U.S. Drought Monitor for Oregon8Soil Moisture - Percentile9January Regional Streamflow Conditions10Streamflow Example - Western Oregon (Mid Coast)10Streamflow Example – Central Oregon (Deschutes)11January Regional Reservoir Storage Conditions11

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Snowpack - Percent of Normal



Compared to this time last year -





Compared to this time last year -



Website: http://www.wrcc.dri.edu/wwdt/index.php?folder=mdn1

PRISM > Temperature Anomaly 1 Month > Oregon



Oregon - Mean Temperature

Website: http://www.wrcc.dri.edu/wwdt/index.php?folder=pon1

PRISM > Precipitation Anomaly 1 Month > Oregon



Oregon - Precipitation

February-March-April

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



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

U.S. Drought Monitor Oregon

January 31, 2017 (Released Thursday, Feb. 2, 2017) Valid 7 a.m. EST



Drought Conditions (Percent Area)										
-	None	D0-D4	D1-D4	D2-D4	D3-D4	D4				
Current	82.27	17.73	2.98	0.00	0.00	0.00				
Last Week 1/24/2017	82.27	17.73	2.98	0.00	0.00	0.00				
3 Month s Ago 11/1/2016	56.44	43.56	27.07	2.63	0.00	0.00				
Start of Calendar Year 1/3/2017	65.31	34.69	5.29	0.00	0.00	0.00				
Start of Water Year 9/27/2016	0.00	100.00	50.59	12.30	0.00	0.00				
One Year Ago 2/22/2016	14.58	85.42	74.56	40.97	4.38	0.00				



D3 Extrem e Drought D4 Exceptional Drought

D1 Moderate Drought

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

Author:

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http://droughtmonitor.unl.edu/

Note: Change from January 3, 2017 report

U.S. Drought Monitor Oregon



Valid / a.m. EST										
	Drought Conditions (Percent Area)									
	None	D0-D4	D1-D4	D2-D4	D3-D4					
Current	65.31	34.69	5.29	0.00	0.00	0.00				
Last Week 12/27/2/016	65.31	34.69	5.29	0.00	0.00	0.00				
3 Month s Ago 104/2016	0.00	100.00	50.28	12.30	0.00	0.00				
Start of Calendar Year 13/2017	65.31	34.69	5.29	0.00	0.00	0.00				
Start of Water Year 9/27/2016	0.00	100.00	50.59	12.30	0.00	0.00				
One Year Ago 1/5/2016	14.52	85.48	76.99	44.33	6.35	0.00				
Intensity:										
D0 Abnom ally Dry D3 Extrem e Drought										
D1 Moders	ate Drou	ght	D	1 E xce pti	onal Dro	ught				
D2 Severe	Drought									
The Drought Mor Local conditions . for forecast state.	nitor foc may vai ments.	uses on y. See a	broad-s iccomps	icale co. anying te	nditions. ext sumr	nary				
Author: David Miskus NOAA/NWS/I	: NCEP.	/CPC								
USDA	-1	inder al hog T topice	G	6						

January 3, 2017 (Released Thursday, Jan. 5, 2017)

http://droughtmonitor.unl.edu/

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







January Regional Streamflow Conditions

Streamflow Example - Western Oregon (Mid Coast)



Streamflow Example – Central Oregon (Deschutes)



January Regional Reservoir Storage Conditions

