

Water Resources Department

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MEMORANDUM

TO: Water Resources Commission

FROM: Ken Stahr, Hydrographics Section Manager

Brenda Bateman, Technical Services Division Administrator

SUBJECT: Agenda Item G, May 29, 2014

Water Resources Commission Meeting

Water Supply Update

I. Introduction

Oregon is encountering its second consecutive year of conditions that are much drier than normal.

Conditions in March and April were wetter than normal and overall conditions in the northern part of the state have improved. However, snowpack and precipitation in the southern half of the state are still well below normal.

Summer streamflow forecasts for 2014 range from normal in the northeast corner of the state to less than 20 percent of normal in parts of southern Oregon. Several snow survey sites have set new records for low snowpack. Reservoir supplies in the central and northern part of the state are close to average, but many reservoirs are extremely low in southeast Oregon.

This informational report provides a summary of conditions statewide and an update on the Governor's drought declarations.

II. Water Supply Conditions

Current Conditions Summary (NRCS Oregon Basin Outlook Report - May 1, 2014)

Snowpack

Even though there was significant snow accumulation during a late April snowstorm, over the last two months, more snow melted than was gained.

Only three sites in the Wallowa Mountains reached their normal peak. The mountains throughout the rest of the state experienced 80 percent or less of the normal peak snowpack amounts. The lowest snowpack in the state was observed in southern Oregon where snowpack reached only 10 to 50 percent of the normal seasonal peak amounts.

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Some areas in southern Oregon melted up to a month earlier than normal, while other locations did not receive sufficient snow to accumulate a snowpack this winter.

Precipitation

After a wetter than normal March, most of the state received near average precipitation for April. Northern Oregon received between 100-125 percent of average monthly amounts, while southern Oregon ranged from 60-95 percent of average April amounts.

Reservoirs

Many of the state's reservoirs have reached capacities that approach normal for this time of year. The lowest reservoir storage levels are in southern Oregon, where reservoirs are storing well below average amounts of water for this time of year. Areas in central and northern Oregon have reservoirs that are storing near average to above average amounts.

Streamflow

While summer streamflow conditions are expected to be well below average across the southern half of Oregon this year, the highest streamflow forecasts are for Oregon's northernmost rivers and the Willamette basin, where streams are expected to experience 90-110 percent of average volumes from May through September. Rivers in the Klamath, Harney and Lake Counties are forecasted to have 15-60 percent of average flows for the same period.

Drought Summary

The latest (April 22) US Drought Monitor update shows the southern half of Oregon in severe drought status. In addition, the southern portion of Klamath County is in extreme drought. Areas of the state that depend on snowmelt for a significant part of their water supply should prepare to conserve water this summer unless a significant improvement in snowpack conditions occurs soon. Water users can monitor current drought conditions at the Drought Monitor

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

Seasonal Water Supply Outlook for Oregon

According to the National Weather Service seasonal drought outlook, following a slow start to the wet season across the Pacific Northwest, March became much wetter due to an increase in onshore flow. Portland tied 1957 for the second wettest March dating back to 1938. The wetter pattern resulted in a significant increase in snowpack across the northern Cascades and drought reduction across Washington. Drought coverage and intensity remained nearly steady across the Great Basin. Although the upper-level pattern favors near to above-median precipitation during the remainder of April, no widespread drought improvement is predicted for the Pacific Northwest and Great Basin. Based on a drier climatology, drought persistence is most likely for these areas.

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III. Drought Discussion

2014 Water Availability Committee and Drought Council

As of May 1, Crook, Grant, Jackson, Harney, Klamath, Lake, Malheur and Wheeler counties have declared drought emergencies in their counties and requested a drought declaration by the Governor.

The Water Availability Committee and Drought Council have been meeting monthly to evaluate statewide conditions, as well as county requests for drought declarations from the Governor. As a result, the Governor issued Executive Order 14-01 declaring a state of drought emergency in Harney, Klamath, Lake, and Malheur Counties, Executive Order 14-02, declaring a state of drought emergency in Crook County, and Executive Order 14-04 declaring a drought emergency in Jackson County.

At the April meeting, The Water Availability Committee members agreed that conditions in Grant and Wheeler Counties were drier than normal but decided to wait until meeting again in May to reach a decision on whether conditions warranted a drought recommendation. At the May meeting, the Committee and Council decided that the counties are in drought status and recommended a state declaration. In addition, it was determined that drought conditions exist in Josephine County.

Many counties in Oregon are drier than normal; therefore, the Water Availability Committee and Drought Council will continue to monitor conditions to determine whether further drought declarations are warranted. The Committee and Council will meet again in early June to assess conditions.

Attachment 1: US Drought Monitor for Oregon

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U.S. Drought Monitor Oregon

May 6, 2014

(Released Thursday, May. 8, 2014)
Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Сиптепт	5.22	94.78	82.72	51.67	9.31	0.00
Last Week 429/2014	5.17	94.83	83.01	51.73	9.31	0.00
3 Months Ago 2/4/2014	0.00	100.00	100.00	76.51	1.60	0.00
Start of Calendar Year 12/3/1/2/013	0.19	99.81	62.59	24.96	1.30	0.00
Start of Water Year 104/2013	37.69	62.31	39.79	25.26	1.30	0.00
One Year Ago 577/2013	8.39	91.61	29.17	0.88	0.00	0.00

Intensity:

D0 Abnormally Dry

D1 Moderate Drought

D2 Severe Drought

The Drought Monitor focuses on broad-scale conditions.

Local conditions may vary. See accompanying text summary for forecast statements.

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