



Oregon

Kate Brown, Governor

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MEMORANDUM

TO: Water Resources Commission

FROM: Alyssa Mucken, IWRS Coordinator *AM*

SUBJECT: Agenda Item K, May 20, 2016
Water Resources Commission Meeting

Update on Water Supply Conditions & Implementation of Drought Executive Order 15-09

I. Introduction

During this agenda item, staff will update the Commission on water supply conditions across the state, as well as share progress made on implementing the Governor's 2015 Drought Executive Order 15-09.

II. Water Supply Conditions

Snowpack and Temperature

Cold and snowy weather in the first half of March bolstered Oregon's mountain snowpack and delayed melting in most areas. Wet conditions, combined with a colder, winter-like pattern in the middle of March caused many snow monitoring sites to reach or surpass their normal snowpack peak for the season.

These cooler conditions were short-lived, however, as temperatures began to warm in late March and above average temperatures continued through the month of April. Data from the Northwest River Forecast Center showed many locations registered temperatures 3-6 degrees above normal during April. Several temperature records were broken in the Willamette Valley and coastal areas for mid-April. For example, downtown Portland reached 90 degrees on April 19, making it the earliest 90-degree day on record.

The average statewide snowpack declined from 103 percent of normal on March 26, down to 57 percent of normal on April 26. Snowpack in the John Day River Basin went from 110 percent to just six percent of normal during this same time period. The Malheur Basin also experienced similar snowmelt, going from 91 percent to just 4 percent of normal.

Precipitation

As of May 3, precipitation for the water year has ranged from near normal east of the Cascades to above-normal on the western side of the Cascades. March was an extremely wet month, with most basins recording precipitation over 130 percent of normal for all but the southeastern corner of the state. April was relatively dry, with most basins reporting precipitation at around 40 to 70 percent of normal.

Streamflows

Streamflows are responding accordingly to the increased runoff from snowmelt. The exception being coastal and rainfall runoff dominant streams, which are flowing at lower than normal rates.

Reservoirs

Reservoir storage across the state benefitted from the wet month of March. Many reservoirs that were well below normal as of March 1 saw significant improvements during the month. As of April 25, the Willamette Project was 74 percent full, Rogue basin reservoirs ranged from 97 percent at Emigrant Lake to 43 percent at Fourmile Lake, and major storage reservoirs in the Crooked River system were full or nearly full. The Deschutes Basin reservoirs—Crescent Lake, Wickiup, and Crane Prairie—were 65 percent, 83 percent, and 80 percent full, respectively. In the Umatilla Basin, McKay Reservoir was at 87 percent and Cold Springs was at 62 percent.

Drought Conditions & Outlook

The U.S. Drought Monitor issued April 21, has 26 percent of Oregon categorized as moderate drought (D1), mostly in eastern Oregon. At this time last year, 82 percent of the state was in the D1 category and southeastern Oregon was experiencing extreme drought conditions. The U.S. Seasonal Drought Outlook released in mid-April shows drought conditions persisting in southeastern Oregon through July.

As of April 1, the NRCS was predicting near-normal or above-normal streamflows this summer for most parts of the state, but cautioned that those predictions hinge on air temperature. Given the early-melt off, due to high temperatures in April, the Department expects that these forecasts may change for some parts of the state. The timing of snowmelt and subsequent runoff will shape the final water supply outlook for streamflows this summer and into the early fall. An updated forecast will be provided at the Commission meeting.

Currently, NOAA's Climate Prediction Center is calling for above-normal temperatures for the next three months.

III. Executive Order 15-09

The Department and its partner agencies have made progress on several items contained in Executive Order 15-09, which directs state agencies to plan for resiliency to drought to meet the challenge that a changing climate brings. Governor Brown issued this directive last July.

Drought Annex Update

Through this executive order, agencies were required to update the incident annex on drought, a component of the state's emergency operations plan. The drought annex was last updated in September 2002. The Department worked with the Office of Emergency Management and other agencies to update this document, which outlines the roles and responsibilities of state agencies during a drought. The drought annex also describes the legal authorities and processes for requesting a drought declaration. Oregon uses two inter-agency groups, the Water Supply Availability Committee and the Drought Readiness Council to evaluate water supply conditions and local requests for drought declarations. The annex was finalized in January 2016 and is currently available on the Department's website and the Office of Emergency Management's website.

The Water Supply Availability Committee met in March and April of this year. During its most recent meeting, members discussed various datasets and records that could be used to develop a decision support tool for evaluating water supply conditions and improving communications with local governments and other partners. Improving communication between state agencies, local governments, and water providers is a priority for the Department and its partner agencies.

The Water Supply Availability Committee and Drought Readiness Council have meetings scheduled for mid-May.

State Agency Water Use

Executive Order 15-09 directed state agencies that own or manage land or facilities to reduce non-essential uses of water at state-owned facilities by an average 15 percent or more by December 31, 2020. Agencies leasing facilities were asked to work with the private building owners to reduce non-essential water consumption at their buildings.

Besides the eight agencies identified by name in the Executive Order, other agencies, boards and commissions were asked to complete an initial Water Conservation and Efficiency Plan and submit it to the Department by October 1, 2015. Seventy-four plans were received, including one from the Governor's Office. Only agencies that own facilities or land had to identify water conservation measures, many of which included building maintenance, irrigation, and landscaping savings. The first report was submitted to the Governor November 1, 2015.

Department staff have held five meetings with facility managers from the larger state agencies, those who are gathering data on building inventories and water usage. The agencies will use the 2014 water year as a baseline to measure water savings and have agreed that water conservation is so important, they will strive to reduce all water use, both essential and non-essential. The next report to the Governor is expected February 1, 2017.

Drought Resiliency & the Integrated Water Resources Strategy

The Executive Order also directed the Department to explore long-term solutions to improve drought resiliency through the 2017 Integrated Water Resources Strategy. During the first IWRS

Policy Advisory Group meeting held on March 30, members and staff initially explored some drought-related concepts and actions. Conversations will continue at subsequent meetings.

IV. Other Drought-Related Initiatives

House Bill 4113 (2016) establishes a task force on drought to research and evaluate tools to prepare and respond to drought. The Governor's Office is required to appoint up to eleven members to the task force. The President of the Senate, Speaker of the House, Senate Minority Leader, and House Minority Leader each appointed one member, which included Senator Arnie Roblan, Representative Ken Helm, Richard Kosesan (Water for Life), and Mary Anne Nash (Oregon Farm Bureau). Recommendations from the Task Force will culminate in a final report to the Legislative Assembly, due November 1, 2016. Work resulting from the task force may also inform efforts underway on the 2017 Update to the Integrated Water Resources Strategy.

V. Conclusion

Although water supply conditions are looking favorable compared to this time last year, state and federal agencies are watching conditions closely. The Department will continue to update the Commission on water supply conditions, as well as ongoing efforts to increase resiliency to drought, such as those highlighted in this report.

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