



Oregon
Kate Brown, Governor

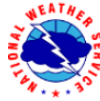
Water Resources Department
725 Summer St NE, Suite A
Salem, OR 97301
(503) 986-0900
Fax (503) 986-0904

Drought Readiness Council

Oregon Emergency Management's Anderson Readiness Center
3225 State St., Salem, OR 97301

September 15, 2016 Meeting Materials

- September 15, 2016 Memo from Water Supply Availability Committee
- August 11, 2016 Meeting Notes for Approval
- One-pager from Dept. of Environmental Quality



Memo

To: Drought Readiness Council
From: Water Supply Availability Committee
Date: September 15, 2016
Subject: Update on Water Supply Conditions

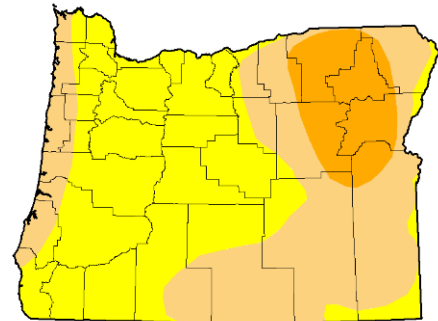
Oregon's Water Supply Availability Committee (WSAC) held its regular monthly meeting on September 13, 2016. Water supply conditions across the state continue to be lower than average since last month's meeting, due to a return to normal temperatures and dry August conditions. Outlook and supply forecasts show continuing warm and dry conditions in the coming months.

Some key highlights:

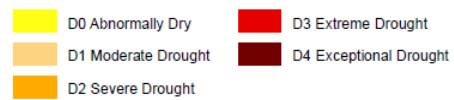
- **Precipitation was below normal in most areas of the state during the month of August.** The northwest corner and north central parts of the state received average amounts of precipitation, with below average conditions for this time of the year in the rest of the state. Climate models are now indicating the likelihood of ENSO-Neutral conditions for later in 2016. For the Northwest, this means that there's an equal likelihood of above average or below average precipitation in coming months.
- **Above average temperatures are expected to continue through September.** Temperatures in August were average in central Oregon and 1 to 3 degrees above normal in western Oregon and parts of northern Malheur County. The National Oceanic and Atmospheric Administration's Climate Prediction Center continues to predict increased odds of warmer than normal conditions for the rest of the summer and early fall.
- **Streamflows continue to fare better overall in 2016 than in 2015.** Statewide average streamflows for August were at 65 percent of normal. This was better than 50 percent of normal seen last year at this time. Flows continued a typical downward trend throughout the month after the brief respite brought about by July's cooler temperatures and precipitation. The Hood, Klamath and Mid Coast Basins, all above 80 percent of normal, are faring the best. The most stressed basins are the Umatilla, John Day, Powder, Malheur River, and Malheur Lake Basins. Refer to Attachment 1 for a statewide summary of streamflow in addition to hydrographs of the Umatilla, John Day and Powder Rivers. See Attachment 2 for a bar graph displaying streamflow conditions in all of Oregon's basins. Attachment 3 is a map illustrating the same information.
- **Those with reservoir storage continue to do relatively well.** Reservoir storage levels were strong at the start of the irrigation season, as water managers were able to benefit from springtime run-off. Irrigation systems and rivers fed by reservoirs continue to be in better shape than those that are not. However, all reservoirs are now being drawn down,

supplying irrigation and municipal water, as well as instream flows for fisheries. By the end of the summer, most reservoirs will be depleted, as they were in 2015. Federal agencies have begun meeting to design their reservoir operations for the fall. Through rigorous management Owyhee Reservoir, a two-year reservoir, expects to have some carry-over water for next year.

- **The Drought Monitor shows 100 percent of the state abnormally dry.** As of September 6, the entire state is in the D0 category (abnormally dry). The North Coast, Mid Coast and Eastern Oregon regions, representing approximately 50 percent of the state, are also listed in the D1 category (moderate drought). Further, 12 percent of the state, including portions of Umatilla, Baker, Grant, and Union Counties are now listed in the D2 category (severe drought). Soil moisture models continue to indicate drier than normal conditions within these areas.

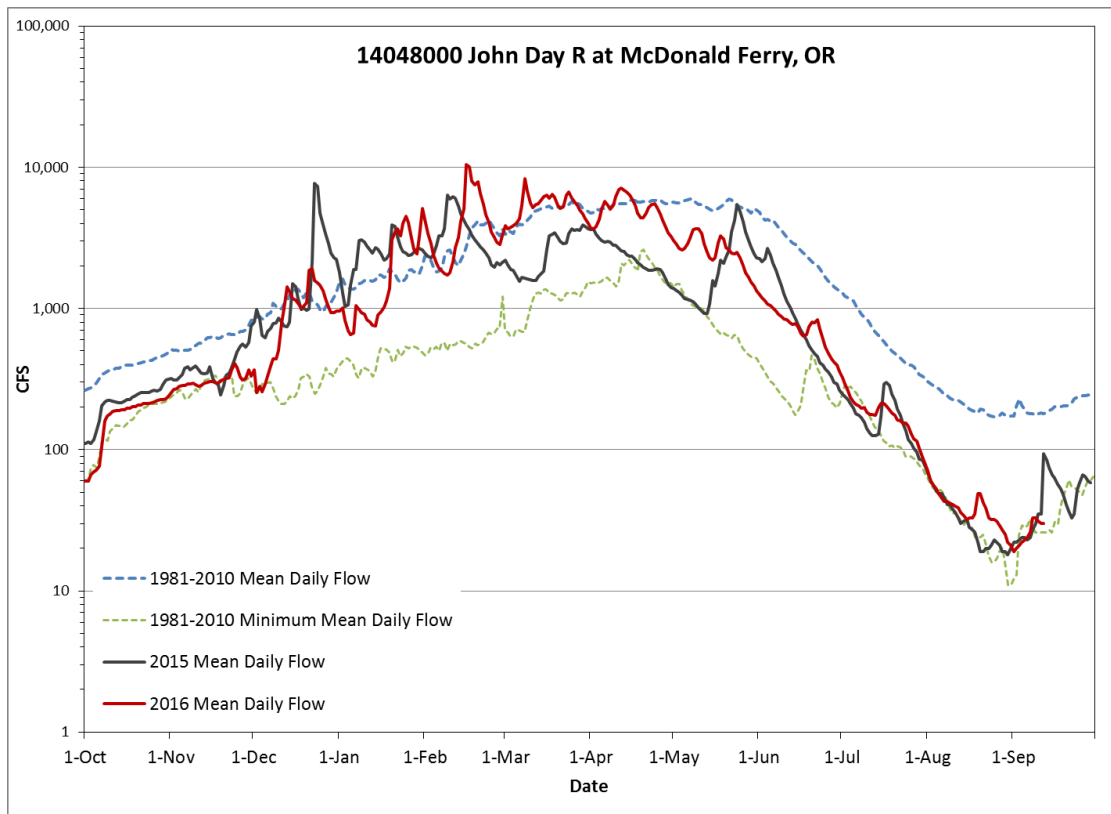
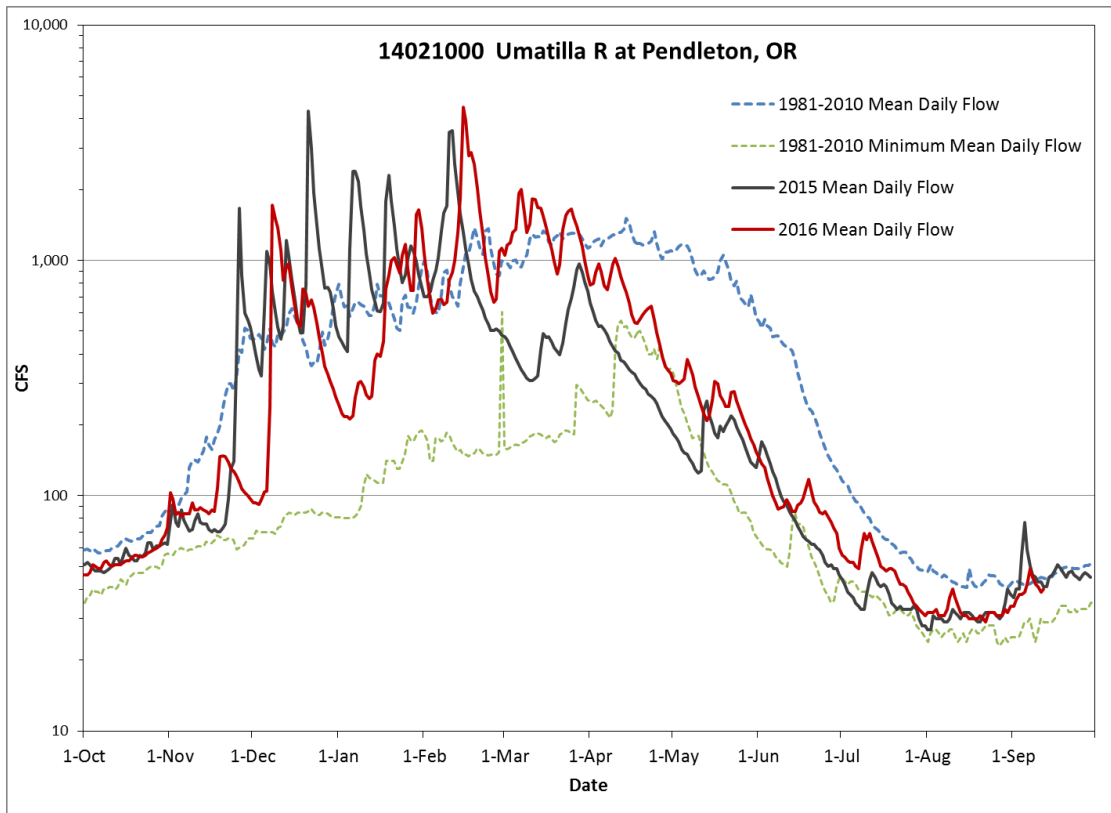


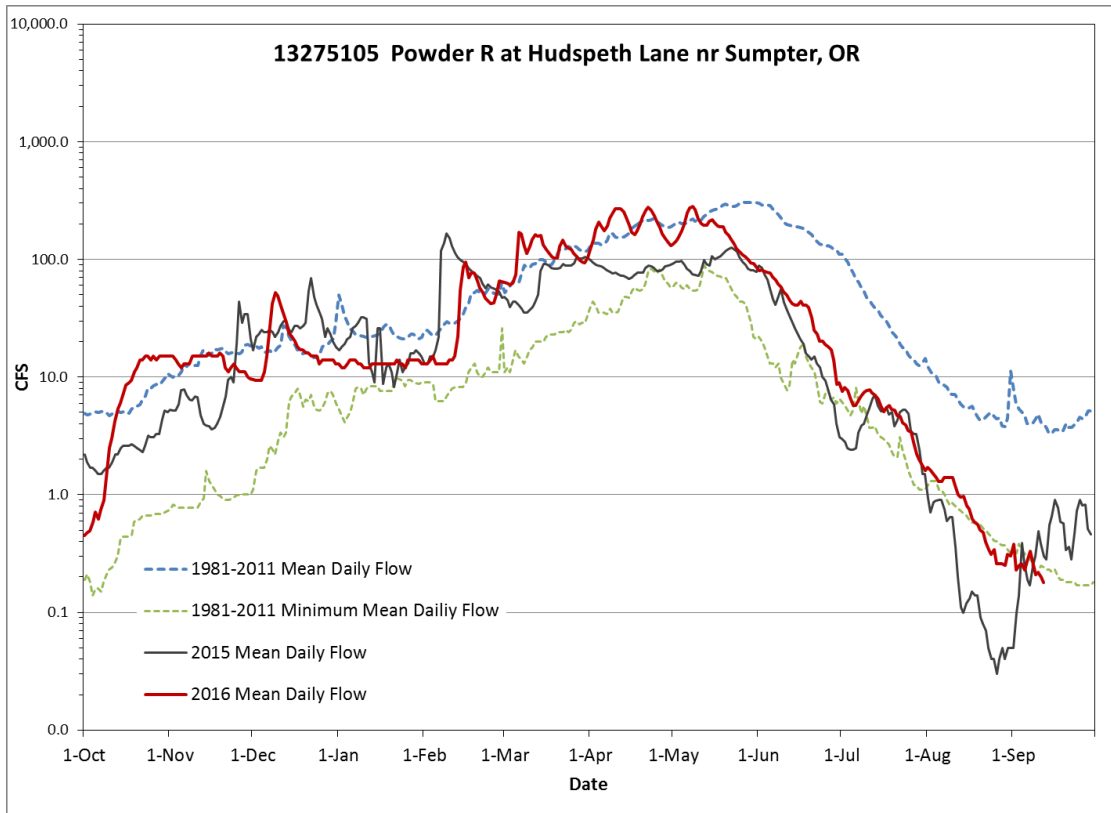
Intensity:



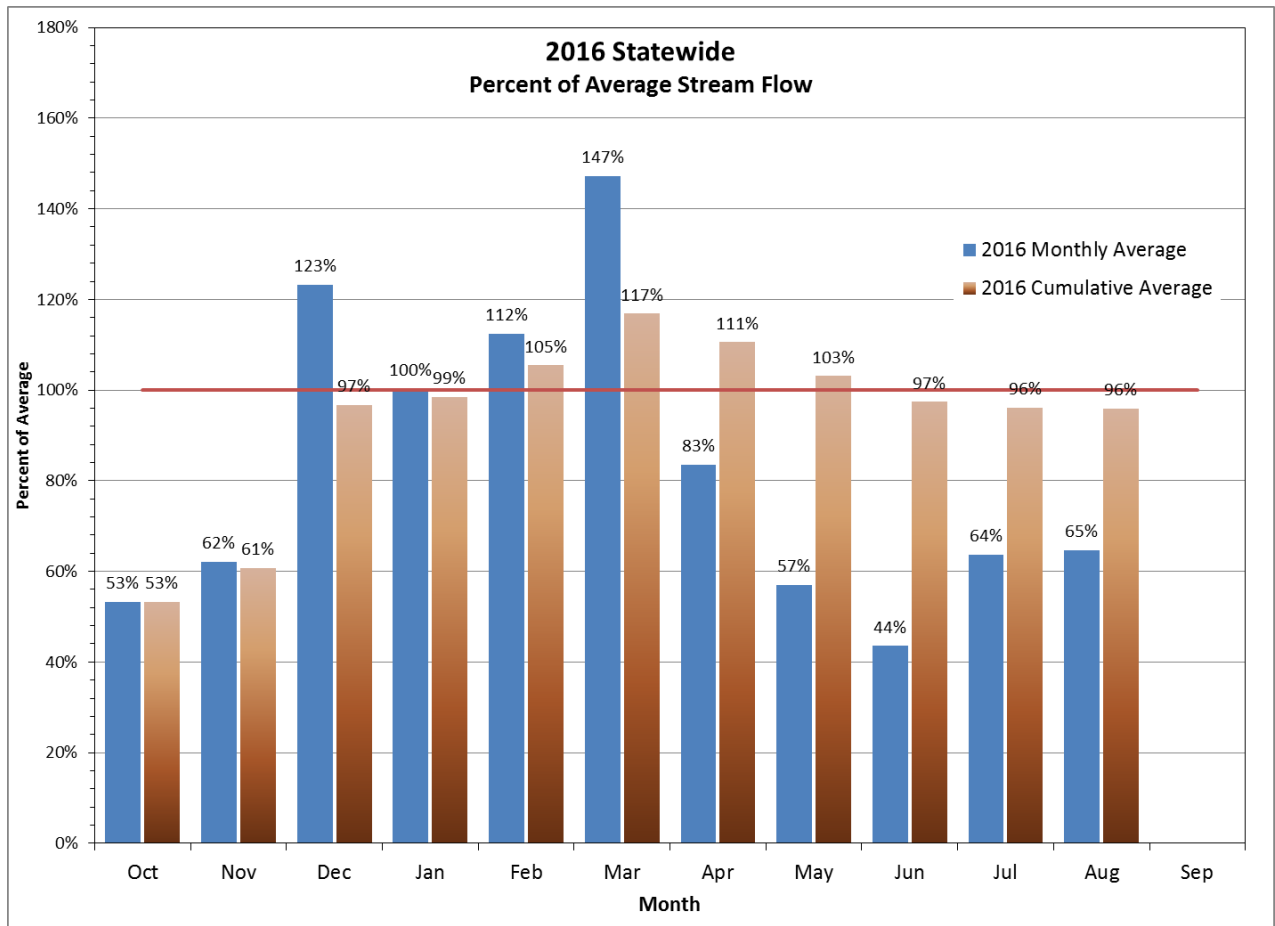
- **Fire potential is currently near normal-to-above normal for most of Oregon.** Compared to last year, there have been far fewer acres burned from wildfire in 2016. Much of this is due to fewer than normal lightning events. Rainfall and cooler temperatures in July also temporarily improved the fire outlook. However, due to lack of precipitation and a return to average temperatures in August, most areas in the state have returned to normal or above normal fire conditions. The National Interagency Fire Center's (NIFC) monthly outlook indicates mostly normal fire potential through August and September. The Oregon Department of Forestry would like to remind everyone that fire season remains in effect with conditions still dry and susceptible to fire starts. Backyard debris burning and dispersed campfires remain prohibited throughout much of the state. Check with your local ODF office for restrictions in your area or visit [ODF's fire restrictions web page](#) for more information.

Attachment 1: Streamflow Conditions

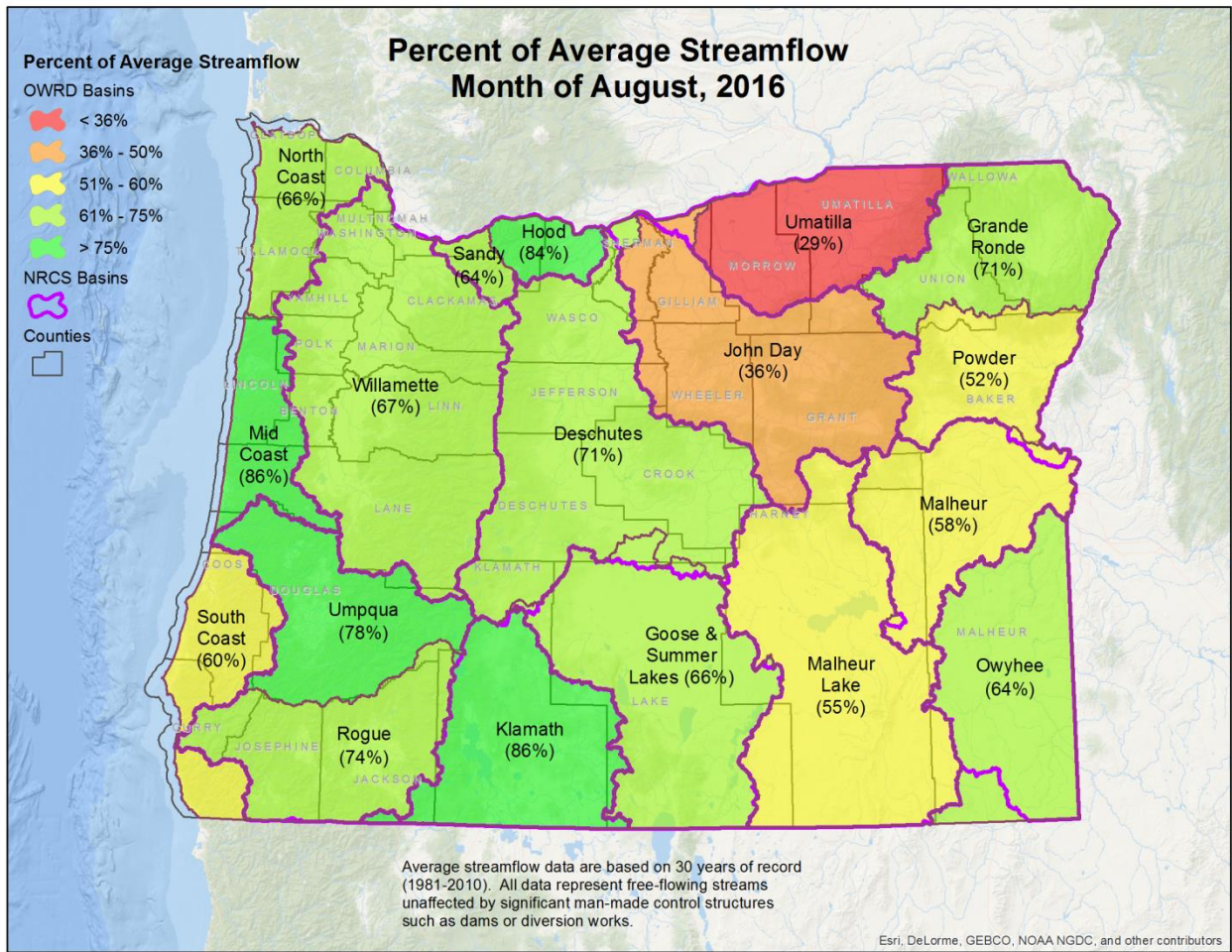




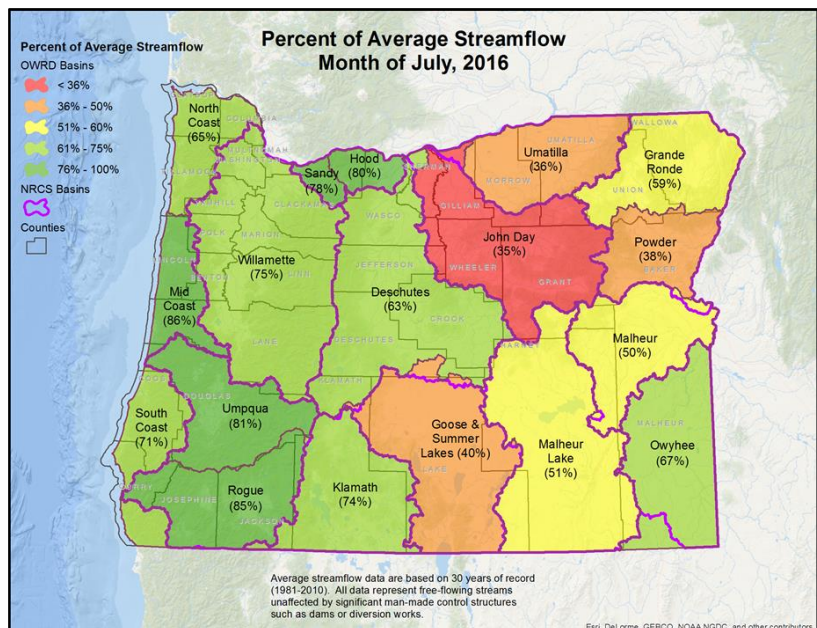
Attachment 2: Bar Graph — Percent of Average Streamflow



Attachment 3: Map — Percent of Average Streamflow



Compared to this time last month...





Oregon's Drought Readiness Council August 11, 2016 Meeting Notes



DRAFT – Needs Council Approval

Attendees:

Brenda Bateman, WRD. Council Co-Chair
Kathie Dello, OCCRI
Tom Elliott, DOE (by phone)
Bruce Gilles, DEQ (by phone)
Jim Johnson, ODA
Angie Lane, OEM

Smita Mehta, DEQ (by phone)
Erik Rau, OEM
Kari Salis, OHA (by phone)
Anna Pakenham Stevenson, ODFW (by phone)
Nick Yonker, ODF

Welcome and Introductions:

Participants around the table and on the phone introduced themselves.

Agenda Review:

Added updates from Oregon Communities, updates from the Drought Task Force, and discussion of NOAA Atlas 14 to the agenda.

Approval of July Notes:

None. Very thorough, thank you!

Update on Water Conditions:

The Council reviewed the August 11, 2016 memo provided by the Water Supply Availability Committee (see meeting materials). WSAC member Nick Yonker led the discussion, with Kathie Dello assisting:

- It was a cooler, wetter July than usual. Expect a return to hot and dry for August across the state.
- Conditions have returned to hot and dry from Baker to Umatilla; the Drought Monitor went to D2 (extreme drought) for that geographic area this morning.
- These conditions are an indicator of increased fire potential, but have little bearing on agricultural crops...folks are winding down their season and generally have the water they need by drawing on storage.
- Fire conditions overall are much improved, compared to the past three years.
- Another change in the Drought Monitor: D1 designation now stretches further north up the coast.

Products of the Council:

1. Process request for drought declaration from Baker County.

Discussion Points.

- No one is pressing hard for a drought declaration at this time.
- Other east-side basins are bringing irrigation season to a close. Those with two-year reservoirs (i.e., Owyhee) are trying to ensure some carry-over water for next year.
- County emergency managers have turned their attention to fire-fighting; drought declarations don't provide any additional tools for firefighting.
- Council members continue to recommend no drought declaration for Baker County.
- Governor's Office will make the final call regarding drought declaration.
- The Council will send a formal "acknowledgement of receipt" for the county's request; that wasn't done last month.

2. Updates on Ten-Mile Lake.

The Governor's Office has received correspondence from homeowners seeking assistance with regard to declining lake levels. Some of the homes are only accessible by boat, and low lake levels have made boat access impossible. Tools of the Drought Council are not a good fit here, as there are a number of challenges related to low water levels and the community is still in the process of charting a path forward. Governor's Office / Regional Solutions is participating in conversations with community leaders. Stand by for more information.

3. Updates on Detroit Lake.

Similarly, low levels at Detroit Lake are impeding boating and other recreation as Labor Day approaches. This system is managed and operated by the US Army Corps of Engineers, which has held meetings with the community already this summer. WRD northwest region staff members are monitoring the discussions.

4. OCCRI Discussion, featuring Kathie Dello.

- a. OCCRI was established in 2007 by the Oregon legislature to coordinate climate change activities across the state. State and federal funding pay for the center director, state climatologist, and one administrative assistant. Other funding and technical partners include NOAA's CIRC program and NOAA/NIDAS' drought program.
- b. In the coming months, an inter-state team from Oregon, Washington, Idaho, Montana, and Colorado will be working on a Drought Early Warning System (DEWS), to improve metrics and monitoring around the concept of drought. Representatives from the five states will meet in Boise in late September for face-to-face work around this.
- c. Kathie will plan to report back on this meeting during our October Council meeting.
- d. Kathie, please put all the Council members on the DEWS listserv, so that we can get monthly newsletters with water conditions and work updates.
- e. Discussion:
 - Q. Where's the forecasting part of this work? A. That's the crux of what we're hoping to develop, but also the most difficult because some of the data points and scientific methods are not really in place yet. It's part of the long-term work plan.

We'll feature DEQ next month. If other agencies have drought-related programs they would like to share, let the co-chairs know.

5. NOAA Atlas 14.

Brenda Bateman briefed the group on the latest status of "NOAA Atlas 14." This is a state-by-state effort that provides high confidence estimates of rainfall intensity and duration, and should be able to tell us if precipitation intensities have increased (if so, likely climate change related).

Civil Engineers and hydrologists use probabilistic estimates of rainfall intensities for particular durations and locations for the design and rehabilitation of a wide range of structures, including bridges and culverts, storm water drainage systems, and also spillways and conduits for dams. In 1953 the National Weather Service (NWS) began publishing rainfall-intensity-frequency-duration values or precipitation frequency estimates (Weather Bureau Technical Paper 24, 1953). These values have become de-facto national standards by inclusion or reference in design and planning standards of a wide variety of agencies at Federal, state, and local levels. The current standards date from the 1960/70s. They are being updated based on a variety of improvements including: use of significantly longer data records, advancements in statistical analysis, and the ability to evaluate great amounts of data.

Atlas 14 has been completed for 45 out of 50 States, with just OR, WA, ID, WY and MT remaining to be completed. A quick poll of Council members shows that folks believe that updating these efforts in Oregon would yield beneficial information and they would be interested in seeing this move forward. Members

promised to give this more thought. Brenda will follow up with an email, requesting how agencies might use this information more specifically. We may put together a one-pager with the results, so that it can be shared with natural resources cabinet and other potential funders / supporters.

6. ORS 401 Templates.

- a. The group continued to look at templates that the Governor could use to declare water-related emergencies under ORS 401. This is the first time the state has developed an emergency declaration template for a single hazard. (Usually, we use a generic template and modify it to fit the emergency.) This new approach provides more guidance for county emergency managers and commissions. OEM will continue to revise and share text. The goal is to have a new set of templates posted and available as a resource during spring 2017.
- b. Discussion:
 - Use “or” not “and” in the list of impacts. Let folks pick and choose, or add their own. Not all conditions have to be in effect in order to qualify as an emergency.
 - OEM and its partners hold regular workshops for emergency managers. Fit the ORS 536 and ORS 401 templates into the curriculum.

7. Updates from the Drought Task Force.

- a. The Drought Task Force has met twice. These are public meetings.
- b. Their key objective is to look at drought tools that currently exist and determine whether they are adequate or whether more or better tools are necessary.
- c. The group is chaired by Sen. Roblan and Rep. Helm, and seems to be focused on both short-term drought tools (e.g., access to data and use of water during drought) and long-term drought tools (e.g., water conservation, water re-use, and water storage projects). They have begun to draft a report to the Legislature, which they’ll fill in as they go. The report is due in November.

Next Meeting is Tuesday Sept. 15, from 10:00 to noon at OEM.

Due to a scheduling conflict, the October meeting will likely be moved to a Wednesday...Oct. 12.

Which DEQ staff positions/contact info should be on the list of agency contacts that will be given out to counties when a drought emergency is declared?

Permitted Facilities

For concerns about particular permitted facilities, the primary point of contact for counties should be the Regional Water Quality Permit Manager who can forward questions on to regional permitting staff.

Eastern Region: Don Butcher, 541-278-4603

Northwest Region: Tiffany Yelton-Bram, 503-229-5219

Western Region: Ranei Nomura, 503-378-5081

Water Quality Data

Contact local [Basin Coordinators](#) for water quality data. Basin coordinators can also help local groups work with DEQ to develop monitoring plans and support monitoring efforts with training, equipment, and supplies.

Fire Impacts

In past years, the Drought Council has promoted the need for extra precautions and observations in the drinking water supply watersheds (including coastal public water systems) due to the very dry conditions and risks. DEQ drinking water protection staff can assist at the local level and work with communities to share source area maps and information about their risks to wildfire. If fire occurs within a public water supply watershed, DEQ can provide assistance to the community to obtain emergency funds for watershed stabilization and restoration.

What other info might be helpful for counties?

We should promote our funding programs that could support long-term drought resiliency projects that have water quality components:

[CWSRF](#), [DWSRF](#), the [Oregon Drinking Water Protection Program at DEQ](#) and [CWA 319](#).

DEQ can also provide assistance in developing integrated water resource plans to increase resilience for public water systems relying on watersheds affected by drought.

What other items should be included in the drought “toolbox” that is unlocked when the governor issues a drought declaration?

Additionally, DEQ’s existing drought tools include an Internal Management Directive for the Use of Enforcement Discretion for Water-Quality Standards Violations during the 2015 Drought, and communications and outreach to NPDES permit holders in counties with declared droughts that includes specific voluntary actions to take during a drought.