



Oregon's Drought Readiness Council January 18, 2018 Meeting Notes



Attendees:

Brenda Bateman, Oregon Water Resources Department, Drought Readiness Council (DRC) Co-Chair
Ken Stahr, Oregon Water Resources Department, Water Supply Availability Committee (WSAC) Chair
Andy Bryant, National Weather Service Portland
Clinton Rockey, National Weather Service Meteorology and Climate
Jordan Beamer, Oregon Water Resources Department

By Phone:

Wade Peerman, Oregon Department of Environmental Quality
Kathie Dello, Oregon Climate Change Institute
Anna P. Stevenson, Oregon Department of Fish and Wildlife
Nick Yonder, Oregon Department of Forestry
Kari Salis, Oregon Health Authority
Tom Elliot, Oregon Department of Energy
Eric Rau, Oregon Office of Emergency Management

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1. Welcome and Introductions

Brenda Bateman chaired the meeting, welcoming everyone. Participants introduced themselves.

2. Agenda Check

No additions proposed.

3. Approval of November and December 2017 Meeting Notes

No changes proposed.

4. Water Conditions

Ken Stahr presented a summary of current water year conditions from the Water Supply Availability Committee to the Drought Readiness Council. See materials packet. Highlights and recap include:

Snowpack statewide is averaging 39 percent of normal for this time of year. Streamflow and snowpack are looking more dire than this time in 2015 (drought year). During the second half of January, we could still catch up. Precipitation for December was lower than normal with temperatures higher than normal in the Cascades. Oregon hovers in the equal chances zone for three-month precipitation and temperature.

Reservoir Storage Summary. Water levels in reservoirs are average to above average. Most reservoir operators are relatively happy with supplies as they stand right now. Owyhee is at 65 percent right now and could carry through this season, even without further precipitation.

The Water Supply Availability Committee is pretty conservative about calling something a drought, but it's time to start talking about it. Snowpack and streamflow may get closer to normal but are unlikely to achieve normal this year.

5. Meteorological Terminology

See meeting materials for PowerPoint slides.

Looking at conditions around the equator in the Pacific Ocean:

- El Niño = warmer water, which translates to evaporation and storm activity in Central America. We see milder weather in Oregon.
- With La Niña, the warm water shifts west-ward and further from the U.S. The jet stream shifts northward to Canada, building snow pack.
- El Niño Southern Oscillation (ENSO) refers to the cycle and range of conditions in tropical Pacific Ocean, related to sea surface temperatures. Look for deviation from average.
+ 0.5 degrees Celsius = El Niño,
- 0.5 degrees Celsius = La Niña.
Anything in between is neutral.
- Madden-Julian Oscillation (MJO). This takes a look as a sub-seasonal scale, (1-2 month cycle) in the tropics. Tends to enhance convection and atmospheric moisture during late fall and early spring. Puts moisture into the atmosphere and these feed atmospheric rivers. Drives storm events. Range could be anywhere from Southern California up to British Columbia. Climate scientists have their favorite models; this is one of them.
- The Blob, from 2015. Referencing sea surface temps in the North Pacific. Doesn't have the same kind of interaction with the atmosphere that you see in the South Pacific. There's evidence that it has lingered in the ecosystem. In 2016, it really kept the clouds away and affected conditions on the coast. Strongest effects seem to be during summer and early fall.
- Bombogenesis. Storm central pressure deepens quickly over 24 hours. Also known as nor'easter. Gets its energy from difference in temps between two fronts. Warm front leads a cold front. One of the strongest drops in barometric pressure (54ml bars) over 24 hours.
- Atmospheric Rivers. (aka "pineapple express"). Most major storm events and floods during the winter season in the Pacific Northwest involve an atmospheric river component. A warm, moist air mass, akin to a firehose pointed at west coast. Difficult to predict where the AR will have the most impact—such as large debris flows on Mt Hood and major rain on snow flood events (December 1964, February 1997, November 2006, December 2007). California has dedicated \$4M to AR research.

6. Roundtable

- Kathie – transitioning off NIDIS group. OSU graduate student and an OCCRI colleague will be taking her place. Will set up a meeting with new staff.
- AgriMet – The Council penned a memo to document funding situation for AgriMet program. Letter sent to department directors but we are still waiting on a response.
- HABs – There is a draft MOU on HABs ready to go to department directors.
- Anna – Instream Water Rights (ISWRs). ODFW is working on solidifying values for ISWR applications in the North and Mid Coast administrative basins. Applications should be submitted within the next few weeks.
- The 2017 Integrated Water Resources Strategy was adopted by the Water Resources Commission in December. A draft of the text is online, but final formatted pdf hasn't been posted or printed yet.
- OEM and WRD plan a conference call with county emergency managers on February 20 to describe the drought declaration process and manage expectations for 2018.

7. Next Meeting

Participants discussed potential February dates; final date to be determined.

8. Adjourned at Noon