



## Water Supply Availability Committee April 13, 2016 Meeting Notes

**DRAFT**

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### ATTENDEES

Alyssa Mucken, OWRD  
Andy Bryant, NWS  
Bob Harmon, OWRD  
Kathie Dello, OCCRI  
Ken Smith, OWRD  
Ken Stahr, OWRD

Marc Stewart, USGS  
Margaret Matter, ODA  
Mary Karen Scullion, USACE  
Nick Yonker, ODF  
Scott Oviatt, NRCS  
Terrence Conlon, USGS (via phone)

### WELCOME, INTRODUCTIONS, AND AGENDA REVIEW

Ken Stahr welcomed everyone and made some announcements:

- Reclamation was not able to make it to today's meeting.
- There are several ongoing efforts related to drought, including:
  - The updated [Drought Annex](#) has been posted to the Department's website.
  - HB4113 was passed during the 2016 Legislative Session, establishing a Drought Task to examine Oregon's existing drought response tools. The Governor's Office is currently soliciting applications for potential task force members. OWRD will be providing staff support for this effort. A final report with recommendations is due this Fall.
  - OWRD is bringing on an intern this Spring, OSU student Rianne BeCraft, to help summarize 2015 conditions, associated impacts, and response actions. If this committee has key data or messages to share, please send along to Rianne. This summary information will form the background narrative to the state's 2017 Integrated Water Resources Strategy.

### UPDATE ON WATER SUPPLY CONDITIONS

Scott Oviatt, NRCS Update:

- February 1 Snow Water Equivalent (SWE) showed good snow deposition and accumulation, with the exception of the Sandy and Willamette.
- By April 12, we are seeing the results of warming. With warmer temperatures, we have lost significant snowpack. The southeastern part of the state hasn't seen any big storms.
- The state will see snow melt out early again this year. The positive note is, in most locations, snowpack peaked above the median level, with the exception of the Willamette basin.
- For precipitation, most locations are above normal. Recall, December was record level of rain and snow.
- SWSI for February 1 shows average surface water supply across the state. April 1 SWSI shows a slight change with the north and mid-coast reflecting above average supply. Upper Klamath Lake is not reflected in the SWSI calculations because of how much it's controlled. Although SWSI has been around for some time, it has some issues.

- Most folks key off the April – September forecast. We are now seeing earlier runoff; maybe the forecast on seasonal runoff needs to include March.

Andy Bryant, National Weather Service Update:

- Temperature departure data for March and first two weeks of April show it's been exceptionally warm across Oregon.
- Standardized Precipitation Index (SPI), it was developed for objectively evaluating below normal precipitation for drought.
- Water Supply Forecasts –forecasts have dropped since the earlier released forecasts. For example, the Williamson River forecast has dropped dramatically since the March forecast (snowpack is gone).
- What we have seen since mid-March has declined, the range of uncertainty has also declined.
- It was be interesting to see a March through September time period, just to see what it looks like.

Mary Karen Scullion, Willamette Basin Reservoir Update:

- The Corps reservoirs are operating under good refill conditions. Cougar is empty, due to emergency maintenance reasons, but will likely reach 50 percent full before the release season. Detroit is likely to fill as well; currently at 78 percent full. The Willamette Project reservoirs will be used to augment mainstem flows. The Corps will draw heavily upon the Middle Fork projects for augmentation. Hills Creek and Lookout Point will have some spillway gate maintenance later this year.

Ken Stahr & Marc Stewart, Streamflow & Storage Update:

- Cumulative streamflow across the state, on average, is positive.
- Stark contrast between March 2015 and March 2016 streamflows.
- Mean daily flows in the Chewaucan River aren't dropping like they did last year at this time.
- Owyhee River near Rome is a key data point–the NWRFC receive calls from rafters often.
- Umatilla River at Pendleton – McKay Reservoir may not fill. The gage is showing some severe declines.
- Little Deschutes River is holding up well.
- Crooked River gage above Prineville Reservoir – reservoir will fill.
- Nehalem River & Miami River – already down to low flow of record.
- Valley streams look okay right now.

Kathie Dello, U.S. Drought Monitor Update:

- Kathie displayed the U.S. Drought Monitor, noting changes in Northeastern Oregon. Over half of the state is abnormally dry, all east of the Cascades.

Nick Yonker, Fire Update:

- Compared to the last two years, at this point, we are expecting a near normal fire season.
- Fuel moisture data doesn't start up until May 1.

**WORKSESSION: REPORTING OUTPUT AND COMMUNICATION FROM WATER SUPPLY AVAILABILITY COMMITTEE**

The WSAC discussed how to develop a decision tool that could better communicate drought and water supply conditions to the public, state agency partners, and local governments. The tool would be GIS based, where data layers could be toggled on/off. The tool should have some predictive capacity, not merely just a snapshot of current conditions.

Committee members felt that developing such a comprehensive tool wouldn't be something developed in a few months, it may take a year or more. NOAA might be interested in providing some funds to help develop this. Members thought it would be best, at this point, to test the concept through a simplified spreadsheet approach.

The group began discussions on weighting certain data parameters and recognized that certain data are more meaningful at specific times of the year.

The group also discussed ways to display various data points in a simplified way, something similar to a Consumer Reports style (i.e., full circles/half circles). Any type of report out from this group should include a narrative, some type of story line that shares key messages.

#### Boundaries:

- The NRCS uses its own basin boundaries, and it would be difficult to transition to OWRD basins.
- Start first at a larger geographic scale, with a longer-term goal to display county-based information.
- OWRD will start with the NRCS snowpack basins as a starting point.

#### Data:

- Demand information. Consider overlaying OWRD's water availability basins to see existing stressors within the system.
- Soil moisture
- SWE
- Precipitation and temperature = the main ingredients. PRISM data is a good source for this. Vetted product. NRCS uses it for conservation-related planning. It can be pulled directly into ArcMap.
- SPEI. Kathie can obtain this.
- Streamflow. OWRD houses all of the data, and it's spatially located. The varying period of record creates a problem. NRCS already has the USGS data in its database. At this point, the tool will just have to use the NRCS streamflow data to start with.
- Streamflow forecasts
- Reservoir storage. Should this be included, since operations may not reflect conditions?
- Don't stop at the state line. Umatilla (Washington), Klamath (California), and Owyhee (Idaho). Some data we can stretch across boundaries.

#### Other Thoughts:

- Develop a drought glossary of common terms (e.g., water year, SWSI, SPI, definitions of drought, etc.).
- Can this tool be predictive, rather than just a snapshot?

#### **NEXT MEETING**

- May 16, 2016 at the Oregon Department of Forestry (Salem Office).