

Water Supply Availability Committee/Drought Readiness Council Meeting – January 14, 2021

Phone Conference – Meeting Notes

Attendees

Ryan Andrews – OWRD (Acting Chair)	Scott Oviatt – NRCS
Andy Bryant – NWS	Larry O’Neill – OCS
Spencer Sawaske – ODFW	Daniel Stoelb – OEM
Jon Rocha – USBR	Carrie Boudreau – USGS
Mary Karen Scullion – USACE	Roxy Nayar – DEQ
Jim Johnson – ODA	Kari Salas – OHA
Anders Carlson – OGI	

Presentations – update on water supply conditions

Scott Oviatt

- Statewide SNOTEL snowpack measuring 109% of long-term median as of March 11th
 - Up from 77% statewide on February 11th
 - Basins in NE OR faring better; measuring above normal
 - Southern basins continue to measure below normal snowpack
 - Max = 135% in Umatilla-Walla Walla-Willow; min = 77% in Owyhee
 - Conditions compared to long-term fluctuate rapidly due to low-elevation sites subject to sun and warm temperatures, causing rapid meltout
 - Trending downward and possibly melt out sooner than normal
 - Timing of meltout in some basins is of interest as we approach typical meltout timing
- Statewide SNOTEL precipitation measuring 95% of long-term average as of March 11th
 - Up from 87% of average as of February 10th
 - Trends similar to snowpack with negative trend moving from north to south
 - Max = 110% in Umatilla-Walla Walla-Willow; min = 66% in Lake County-Goose Lake
 - Some stations in southern OR around Klamath/Lake Counties measuring lowest or near lowest precipitation rank over the entire period of record
 - Concerns about whether normal or above normal precipitation can alleviate hydrologic drought conditions
- Streamflow forecast volumes vary depending on location throughout state
 - Forecasts project above average probability of 50% exceedance flows for much of NE OR
 - Conditions projected near normal for many locations along Cascades and in western OR; however, some locations in far SW OR projected just below normal
 - Conditions worsen in southern OR where streamflow forecasts project below normal conditions from April through September

Larry O’Neill

- Snowpack improvements starting to trickle into USDM
- Some western states are experiencing top 5 driest years on record

- Conditions are impacting Oregon's drought recovery
- Concerns about long-term hydrological drought near John Day basin
- D3 conditions localized to Jefferson, Crook, and northern Deschutes Counties
- SPEI 2-year interval is good indicator of hydrological drought
- Might be worth considering D4 classification in Klamath and Lake Counties
 - Agricultural drought impacts
 - Classification not taken lightly
 - Only once before has designation been made in Oregon USDM history

Andy Bryant

- Precipitation measuring below average for much of state over the water year to date
 - Exceptions in NW and NE OR measuring near or just above normal
- Surplus of precipitation in mountain and coastal regions over past 30 days
 - Some areas receiving as much as 10-15 inches
 - Much of rest of state received below normal precipitation over the same period
- Temperatures were below normal statewide throughout February
 - February was first month of water year with temperatures below normal
- Mid-late March (10-day) outlook indicates possibility of below normal precipitation throughout Oregon
 - Alternatively, 6-14 day outlook indicates increased likelihood of above normal precipitation and above normal temperatures for much of the state
- Three-month outlook (March through May) shows equal chances of above/below normal precipitation and temperatures statewide
 - Longer-term outlook of June through August indicates high likelihood of above normal temperatures statewide, with below normal precipitation projected for much of northern two-thirds of Oregon

Henry Pai (on behalf of Andy Bryant)

- Snowpack has yet to translate to runoff
 - Hopeful for spring
- Little change in Willamette forecasts even with wet February
 - Similar for Rogue
 - Both have downward trends forecasting less streamflow runoff
- Forecasts still dependent on spring conditions
 - Little change in forecasts and this point
 - Certainty to improve around May when snowpack typically translates to streamflow

Carrie Boudreau

- 28-day streamflows are variable throughout the state
 - Many streams west of Cascades measuring normal to above normal
 - Streams in eastern Oregon measuring well below normal, with exception of some in NE corner
- Streamflow conditions vary throughout state
 - Deschutes Basin
 - Deschutes R near Madras measured below normal for much of water year

- Shitike Cr at Peters Pasture hovering in normal range
- Southern Oregon
 - Elk Cr near Trail hovering in normal range
 - E Fk Ashland Cr measured below to well below normal for much of water year
 - Williamson R below Sprague R hovering near minimum for period of record
 - Wood R near Klamath Agency measuring below minimum flows for period of record
- Upper Klamath Lake elevation measuring nearly a foot below last year's elevation at this time of year
- Several streams scattered throughout Oregon are classified as experiencing some form of hydrologic drought according to USGS metrics
 - Located in SW, central, and eastern OR

Ryan Andrews

- Water year streamflows vary by county throughout the state
 - Many counties west of Cascades measuring normal to above normal streamflows
 - Douglas, Josephine, and Jackson Counties lag behind below normal
 - Majority of counties in eastern Oregon measuring below to well below normal streamflows
 - Klamath, Crook, Wheeler, Lake, and Sherman are measuring below 50% of normal
- Streamflows for the month of February differed between western and eastern OR
 - Most counties west of Cascades measured at least 120% of normal, with exception of Jackson County (80%)
 - Many counties east of Cascades measured below 50% streamflow
 - Min = Lake County at 18%
- Recent 7-day average thru March 9th indicates below normal streamflows throughout much of state
- Cumulative streamflow through February indicates near normal conditions in western OR
 - Eastern OR continues to lag behind at approximately 60% through February
- Many western basins hovered near normal or have upward trend in streamflow over the water year to date
 - With exception of Hood Basin, most central basins measure below normal and have downward trend
 - Similar conditions in basins in eastern OR

Jon Rocha

- With warm temperatures and snowmelt, Owyhee could possibly transition to irrigation at end of March
- Tualatin slowing refill
- Good chance of filling McKay in Umatilla
 - Performing flood control operations
- Concerns of low reservoir contents in Powder and Rogue basins, both measuring 11% of normal storage contents

- Powder = 27% full
 - Rogue = 17% full
- Malheur Basin has good chance to meet irrigation demands of 50,000 ac-ft
- Bully Creek Reservoir has a couple options to fill
 - Inflows from snowpack
 - Feed canal useful if irrigation starts earlier
- Howard Prairie and Hyatt Reservoirs have trans-basin diversions to fill
 - Highly likely not enough water to meet demands
 - Expecting shortages
 - Need help with drought declarations
 - Starting to move water lower in system to Emigrant Lake

Mary Karen Scullion

- Projects slow to refill
- Maintaining minimum flows

Discussion

- Presentation from Anders Carlson of Oregon Glaciers Institute reviewing findings of 2019/2020 monitoring of Oregon's glaciers
 - Also described future monitoring plans
- Concurrence with potential Klamath County declaration, however official declaration request has not been received as of yet
 - Conditions were discussed at length and conditions warrant drought declaration
- Next meeting proposed April 14th