

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
Erik Rau – OEM	Jon Rocha – USBR
Marc Stewart – USGS	Kari Salas – OHA
Nick Yonker – ODF	

Presentations – update on water supply conditions

Scott Oviatt

- Little Meadows SNOTEL site in South Santiam temporarily lost cell phone telemetry
- SWE measured 80% of normal statewide as of January 13th
 - Down from 89% of normal statewide on January 9th due to rain-on-snow events
 - Approximate 10-20% loss of SWE in Willamette and Hood-Sandy-Lower Deschutes basins
 - Loss in eastern basins less due to minimal rainfall
 - Loss reflected in snowpack graphs
- Statewide precipitation measured 95% of normal as of January 13th
 - Up from 90% of normal on January 9th
 - Precipitation in southern basins lagging behind (< 80% of average)
 - Major concerns in terms of SNOTEL water year percentile over past 440 days (~15 months)
 - Many sites in Klamath and Lake County-Goose Lake basins experiencing lowest or near lowest
- Streamflow forecasts projected below normal

Andy Bryant

- Recent atmospheric river event predicted well overall by NWS
 - Lower accuracy when predicting intensity of events in certain areas
 - Meso-scale squall line of precipitation effected NW OR and western Washington
 - Previously high snowpack impacted by warm weather and precipitation
 - Snow line receded to approximately 8,000-10,000 feet during event
 - Several rivers reached flood stage
- Some improvement in WY precipitation over past month in SW OR, but further west of irrigation districts
 - Little change elsewhere
 - Precipitation over past 30 days reflects atmospheric river event in NW OR
- Temperatures in December were markedly above average in high elevations
 - Northern half of state distinctly above average relative to southern OR
- Early January one of wettest on record
 - Significant pattern change to drier weather forecasted for 10-day

- La Nina advisory projected to influence Pacific NW climate for January through March
 - Below average temperatures and above average precipitation
 - Trend shifts northward later in spring (March through May)

NWRFC on behalf of Andy Bryant

- Seasonal water supply forecast reflects concerns for SW OR and other locations in central and eastern OR
 - Many of these locations forecasted for 30-75% of normal
- Major deficits in WY precipitation and snowpack, as well as last season's carryover storage
 - Persistent drought concerns
 - Single event in future not likely to make up deficit
- Trend for early forecasts shows decreasing volumes to be expected

Larry O'Neill

- Utah/Arizona experiencing some of driest water years on record
 - Precipitation deficits can also be seen in eastern and SW OR (majorly in Klamath County)
- Streamflow and groundwater correlate best with standardized precipitation index (SPI) at 6-month and 12-month intervals
 - Precipitation index of -2 equates to D4 classification of US Drought Monitor
- Warm temperatures increase evaporative demands
- Rains in western OR relieved some hydrological drought
- Weird signal on GRACE shallow groundwater drought in south-central OR showing increased wetness (likely disregard)

Marc Stewart

- Recent 7-day streamflow averages highlight stresses in eastern OR
 - Williamson @ Klamath Agency measuring 0 cfs due to locked up snowpack
 - Gage is good indicator for irrigation season – watch in February/March
- Gages in eastern OR and western ID in severe hydrologic drought

Ryan Andrews

- Statewide streamflow measured 68% of average for the month of December
 - Down from 72% of average for month of November
- Counties in NW OR and NE OR measured near normal
 - Counties in central and southern OR faring less so with many below 75% for December
 - Max = 161% in Union County; Min = 24% in Crook County (Lake County = 25%)

Jon Rocha

- Eastern OR filling at rate less than average
- Good carryover in eastern OR, but slowly deteriorating due to lack of inflow/precipitation

- Bowman Reservoir has minimum flows downstream
 - 50 cfs at lower end of range depending on inflows and reservoir contents

Discussion

- Fifth Oregon Climate Assessment
 - blogs.oregonstate.edu/occri/oregon-climate-assessments
 - How future climate models might impact Oregon
 - Increased prevalence of rain-on-snow
- NWS installed rain gage at Mount Hagan within Holiday Farm Fire burned area
- Stream gages also installed on Little North Santiam and Gate Creek in Beachie Creek burned areas
- New county emergency managers in Wheeler, Grant, and Harney Counties
- Next meeting proposed for February 11th, 2021