

Water Supply Availability Committee/Drought Readiness Council Meeting – June 14, 2023

Phone Conference – Meeting Notes

Attendees

Ryan Andrews – OWRD (Chair)

Curtis Peetz – OEM

Larry O’Neill – OCCRI/OSU

Stacy McCarter – ODF

Chantal Wikstrom – OHA

Carrie Boudreau – USGS

Andy Bryant – NWS

Jeff Marti – WAECY

Peter Cooper – USBR

Kain Shaffer – USBR

Tom Elliott – ODOE

Amy Burke – NWRFC

Presentations – update on water supply conditions

Matt Warbritton (email update)

- The SNOTEL sites with remaining snowpack are approaching meltout. After an above-normal snow year, many higher-elevation sites in the Cascades and in the Wallowas have or are melting out at about the normal timing—a testament to the rapid melting we saw starting end of April and throughout May. The distribution of precipitation month-to-date is similar to what we saw in May—well-below normal precipitation across much of the Cascades (more variable in southern Cascades) and in the northern Blues. Parts of central OR and southern OR east of the Cascade crest is well-above normal. Soil moisture is declining to well-below normal at Snow Mountain SNOTEL NW of Burns and is below normal at Clear Lake SNOTEL NW of Warm Springs. Elsewhere at SNOTEL sites, soil moisture is generally near normal.
- Records: So far, several sites in the central and northern Cascades are experiencing the driest month-to-date precipitation on record. Similarly several sites in that region are also experiencing their driest or second driest April 22 – June 12 on record, in addition to several sites in northeastern OR.

Andy Bryant

- Portions of north central and far northeast generally below average water year precipitation
 - Jackson County water year precipitation a little below average
- Past 90 days - lots of impact from wet conditions in spring sustained until early May, especially for central and eastern Oregon
 - Beneficial precip changed picture for reservoir storage
 - Jackson County over past 90 days generally below average
- Past 30 days precipitation well below average western Oregon
 - Convective system bringing beneficial precip SE OR
- May temperatures above average statewide
 - Some periods of hot temperatures in mid and late May
 - March-May temperatures still a little below average across state
- Drought Monitor showing moderate drought in Jackson County
 - Significant population in D1 drought (Medford, Ashland)
- Mid-June outlook

- Precipitation likely below average next 10 days
- 8-14 days outlook
 - Temps below average - considerably cooler temperatures due to trough across PNW
 - Possibly some precipitation
- ENSO status
 - Transitioned from La Nina in early spring to El Nino in May
 - Continue through winter
 - High confidence of at least moderate El Nino conditions through winter
- July through September conditions
 - Summer temperatures likely above average, below average precipitation

Amy Burke

- Current runoff year to date
 - Near to below normal in western Oregon
 - Above average in southeastern Oregon
 - May runoff was great
- Seasonal volume forecast
 - Above to well above average
 - Mostly occurred in May, depiction for June through September would be below average
- Willamette at Salem forecast
 - Predicted below normal flows for April through September until snowmelt started
 - Rose above normal and then started to drop back down towards normal
 - Decrease about 10% since May 1
 - Above normal runoff April, May about average
- Rogue at Raygold
 - Streamflow deficit through March
 - April normal, May above normal
- John Day
 - May runoff well above average
- Owyhee at Owyhee Dam
 - April runoff well above average
- Jackson County runoff variable
 - Ranges from well below average to just below average
- Convective, spotty precipitation events make it difficult to forecast streamflows
 - Can also make it difficult to interpret conditions – interpolating conditions from weather stations to nearby areas

Larry O'Neill

- Diamond Peak north of Jackson County
- Drought Monitor
 - Cutting drought out of Oregon due to rain in SE OR
 - Putting in suggestions for more trimming of moderate and severe drought in central OR

- Add D1 in western OR due to abnormally high evaporative demand due to warm conditions and wind speeds that enhanced evaporation
- Drought improvements over past four weeks in eastern and central OR, some degradation in NE and NW OR
- Many improvements in southern OR since start of water year
- May was one of warmest on record in parts of Oregon
 - Some counties in NW OR warmest on record
 - Warm temperatures over water year as a whole
 - Many others in top 3-5 warmest
 - Included nighttime low temperatures (warm min) and daytime highs (warm max)
- May precipitation top 10 driest in NW OR
 - Eastern OR one of wetter Mays on record, at least on county scale
 - Jackson County below average
- Water year precipitation somewhat below average in western OR and NE OR
 - Statewide about 2 inches below average
- Bit of discrepancy in precipitation analyses
 - PRSM data shows wetter than average conditions in SE OR, compared to AHPS
 - WRCC shows even wetter conditions in SE OR
 - Much drier than normal conditions compared to AHPS and PRSM
- SPEI
 - Water year to date
 - Somewhat drier than average in western OR
 - Wetter than average in east-SE
 - May
 - Drier than average in western and central, some of eastern due to high evap signal
 - Not quite a flash drought but close
- Medford WYTD precipitation
 - 18th driest start to water year since 1912
 - About 5.5 inches below average
 - Driest water year start of current drought cycle which started in fall 2019
- Jackson County
 - 35th driest May since 1895
 - May was about 65% of 1981-2010 average
 - May SPEI showing drier than average, about equivalent to moderate drought
 - Consecutive years of below average conditions
 - 24-month SPEI captures dry signal from current drought cycle - approaches severe drought conditions

Carrie Boudreau

- Gage installed at Lake Abert (10382000)
- 28-day conditions (6/12) average to below average
 - Below average in NW
 - Significant reduction compared to May 8
- 7-day conditions below to well below average in western OR
- John Day R at Service Creek average

- Umatilla R above Meacham Cr nr Gibbon record low
- Wilson R nr Tillamook well below average
- Siuslaw R nr Mapleton approaching below normal
- Chetco R nr Brookings average
- Cow Cr nr Riddle approaching below average
- Elk Cr nr Trail (Jackson County) below average
- Rogue R ab Prospect (Jackson County) approaching below average
- Upper Klamath Lake trending downward, about 1.5 feet above last year
- Williamson R bl Sprague nr Chiloquin average
- Klamath R at Keno average
- Donner Und Blitzen nr Frenchglen above average
- Owyhee R nr Rome above average
- 7-day average runoff statewide is approaching below average

Ryan Andrews

- Eight counties with Executive Orders for drought declarations under ORS 536
 - Jackson County requesting
- May streamflow well above average east of Cascades
 - West side variable, mostly average to below average
 - Min = Clatsop @ 45%
 - Max = Crook @ 342%
- Streamflow over water year to date ranges from below average to well above average
 - Min = Rogue @ 74%
 - Max = Malheur Lake @ 172%
- Streamflow percentiles
 - Northwest OR experiencing below to well below average flows
 - Trending downwards between the 28-day and 7-day flows
 - Several record low flows
 - East side measuring average to above average
- Rogue R bl Prospect (Jackson County)
 - Currently below average, continuing to trend downwards
 - 74% over water year
- Big Butte Cr nr McLeod (Jackson County)
 - Currently average, trending downwards
 - 57% over water year
- Sandy R nr Marmot
 - Currently below average, trending downwards
 - 80% over water year
- Bull Cr nr Wilhoit
 - Currently record low
 - 94% over water year
- Sunshine Cr nr Valsetz
 - Currently well below average, near record low
 - 87% over water year

Peter Cooper

- Majority of facilities are releasing to meet irrigation demands
- Some fill management still occurring in SE OR with rain and near full reservoirs
- Many facilities near full with most others at least back in or near the historical interquartile normal range
 - Some exceptions in Deschutes, Rogue, Scoggins which are below normal range
- Owyhee contents plateaued over last month but contents near average
 - Above normal inflow
- Warm Springs filled very rapidly, was record low contents early April; inflow outpaced demand
 - Similar in Beulah and Bully Creek
- Phillips continuing to fill, above normal inflows
- Crane Prairie + Wickiup + Crescent Lake
 - Low runoff in Deschutes Basin
 - Started with low carryover
 - Poor contents and continuing to draft
 - Not much better than last year
- Prineville great recovery
 - Record inflows in May, quickly receded to little inflow currently
- Hyatt + Howard Prairie + Emigrant better than last year but still below average
 - Will take more than one good year to refill, even with good snowpack
- McKay filled, but started drafting earlier than normal
 - Releases to help flows in Umatilla, started early
- Scoggins starting to draft very early, high ET signal increasing demands

Stacy McCarter

- Staff returning from Alberta and Alaska
- Normal start to fire season, districts likely to start next weeks
- Hat Creek half OR and half WA, ODF supporting
- Indications OR might be challenging

Notes

- Group approves Jackson County drought request
 - Seasonal conditions support request given recent trends and rapid snowpack meltout
 - Lack of reservoir storage, impacting local economy since many users unlikely to get irrigation deliveries
 - Shortened irrigation season at Talent Irrigation District
- Discuss with OEM how to get counties to include more specific information regarding how local economy will be impacted exactly – would benefit their request for drought declaration, especially when conditions alone aren't clearly supportive
 - Also assess potential impacts to drinking water supplies
- Next meeting proposed July 19th