

Water Supply Availability Committee/Drought Readiness Council Meeting – May 10, 2023

Phone Conference – Meeting Notes

Attendees

Ryan Andrews – OWRD (Chair)	Andy Bryant – NWS
Curtis Peetz – OEM	Matt Warbritton – NRCS
Sean Fleming – NRCS	Peter Cooper – USBR
Stacy McCarter – ODF	Kain Shaffer – USBR
Chantal Wikstrom – OHA	Andy Martin – USACE
Tom Elliott – ODOE	Carrie Boudreau – USGS
Henry Pai – NWRFC	James Johnson – ODA

Presentations – update on water supply conditions

Matt Warbritton

- Snow water equivalent
 - All sites above normal in terms of water year peak SWE (except Summer Rim SNOTEL - impacted by previous fire)
 - SWE profile at Crazyman Flat SNOTEL - shows impact of abnormally warm temperatures on snowpack, led to rapid melting, similar pattern across state likely with incoming heat wave
 - SWE was 186% of normal on 4/15
 - Currently 217% of normal on 5/10
 - High rate of snowmelt across state
 - Number of storms/atmospheric river events have impacted different parts of state at different times
 - Helped contribute to snowpack
 - Below normal temperatures caused most precipitation to fall as snow rather than rain, also helped sustain lower elevation snowpack
- Precipitation
 - Statewide precipitation 97% of normal
 - Some deficits in Mt Hood region and extending into central Cascades
 - April precipitation lacking in southern Cascades and south central OR
- Soil moisture
 - Billie Creek Divide well above normal
 - Quartz Mountain above normal - trended above normal throughout winter
 - Silvies well below normal - started water year near record low, some recovery due to snowmelt
 - Clackamas Lake near normal
 - Snow Mountain significant recovery to well above normal due to snowmelt
 - High Ridge near normal after record lows
 - Mt Howard just below normal - fairly dry throughout winter
 - Schneider Meadows near record low
- Below normal forecasted streamflows in Upper Deschutes - sensitive to antecedent soil moisture

Andy Bryant

- Precipitation
 - Water year precipitation below to well below normal statewide
 - Sherman County persistent dry conditions over recent years and this year
 - Northcentral Oregon has not benefitted from wet, cool conditions in spring
 - Overall spring precipitation brought significant benefit to drought conditions throughout much of state
- Temperatures
 - April temperatures cooler than average statewide
 - February through April temperatures cooler than average
- Drought Monitor reflects improvements over water year, but still more severe conditions in central Oregon
- Outlook
 - Mid-May outlook indicates hot and dry weather
 - Saturday through Monday highs between 85 and 95; outside chance of near 100 degrees in NW OR
 - Likely development of El Nino conditions in late summer and early fall
 - June through August outlook indicates above average temperatures and below average precipitation

Henry Pai

- Observed runoff improved in SE OR
- Still below to well below average in much of Willamette Valley
- April through September forecasts are well above average across state
- Willamette R at Salem forecast improved from 112% to 118%; observed runoff improved 72% to 74% from April to May
- Rogue R nr Raygold forecast improved from 105% to 122%; observed runoff improved 79% to 86%
- Umatilla R nr Umatilla forecast improved from 114% to 143%; observed runoff improved 81% to 83%
- Owyhee R at Owyhee Dam forecast improved from 102% to 199%; observed runoff improved 86% to 137%
- John Day at Service Creek forecast improved from 113% to 179%; observed runoff improved 83% to 122%; flood conditions lately and projected to persist into June
- Forecast was off likely due to challenges with soil conditions
- Sprague R nr Beatty at 173% of mean

Carrie Boudreau

- 28-day average streamflows well above average statewide (some near normal in SW OR)
- 7-day average decrease to near to above average in western OR, eastern OR streams remain well above average
- MF John Day R new record high
- Umatilla R ab Meacham Cr upper end of average
- Deschutes R at Moody above average

- John Day R at McDonald Ferry well above average, approaching record high
- Wilson R nr Tillamook upper end of average
- Siuslaw R nr Mapleton upper end of average
- Chetco R average
- Rogue R at Raygold trending upward but average
- Upper Klamath Lake plateaued recently but upper end of average over past 10 years
- Williamson R bl Sprague R well above average
- Klamath R at Keno upper end of average
- Donner Und Blitzen R well above average
- Owyhee R nr Rome above average

Ryan Andrews

- Six counties with drought declarations
- Lake and Sherman Counties requesting
- April streamflows well above average
 - Exceptions in Deschutes, Jefferson, Baker, Wheeler, and Wallowa Counties (below to well below)
- Streamflows over water year to date below average across most of state
 - SE flows above average
 - Mid and south coast near average
- Flows above to well above average over past 28 days
 - Some record high flows
 - Some reduction in western Oregon between 28-day and 7-day
 - Still record high flows scattered throughout state
- John Day R at McDonald Ferry at record high (80% over WY)
- Buck Cr ab Paulina Marsh hovering in average range (63% over WY)
- Chewaucan R nr Paisley at record high, sharp response to snowmelt (132% over WY)
- John Day R at Service Cr at record high (86% over WY)
- Powder R at Hudspeth Ln sharp response to snowmelt (74% over WY)

Peter Cooper

- Mix of active Flood Risk Management/Refill Management operations at some facilities (Scoggins, Malheur, Unity, Prineville) with other facilities releasing minimums to meet irrigation demands
- Irrigation has been slow to start due to snowmelt and cold temperatures
- Reservoirs filled dramatically during April and early May
- Many facilities near full with most others at least back in or near the historical interquartile "normal" range
- Owyhee not expected to completely fill but could come close, went from near record lows to average in just over a month; flows receding
- Warm Springs Reservoir went from minimum contents over period of record to near full; record high inflows at beginning of May; starting to release soon
- Similar trend at Beulah - managing flows, likely to top off soon
- Bully Creek filled rapidly - drafted to make space for snowmelt
- Unity has been full for a couple weeks

- Phillips likely to continue filling over next few weeks - inflows don't typically peak until end of May, not anticipated to fill but may peak above median
- Crane Prairie + Wickiup + Crescent Lake well below average
- Prineville near full, managing flows
- Hyatt + Howard Prairie + Emigrant - Hyatt about 50% full, system likely to continue gaining for next 10 days, anticipate starting irrigation soon, will take another good year to fully recover
- McKay managing flows over past month, just about full, inflows likely to recede - likely not to draft until mid-June
- Scoggins managing flows recently, full

Andy Martin

- Willamette System significant benefits over April
- System storage increased from 26% to 64%
- 14% gain relative to rule curve
- Three of Big Four pools carried most of increase
- Hills Creek (Middle Fork) increased by 45% relative to full
- Green Peter (S Santiam) increased by 52% relative to full
- Detroit (N Santiam) increased by 64% relative to full
- Many of smaller pools were doing well prior to April; now are near full
- Cottage Grove did not fill because not much snow above
- Snowmelt drove recent inflows
- Summer Operations Forecast for Hills Creek and Detroit improved significantly over past month - reduced range between potential outcomes (interquartile projections); virtually all scenarios produce healthy storage
- Detroit passing inflows - likely high flows throughout May
- Change in flows over past month increased probabilities of meeting instream flow demands on mainstem Willamette - met for April and likely to meet for most of May, June still uncertain
- Close to full pools at Lost Creek, close to full pool at Applegate - raising outflows
- Outlooks for storage and summertime streamflows improved significantly
- Snowmelt not typically big contributing factor in refill or summer flow outlook; rule of thumb is rain driven systems and snowmelt can help around margins, but this year snowmelt provided significant runoff

Stacy McCarter

- Gearing up for normal to late start to fire season
- Sent 22 resources to Alberta and Pennsylvania - asks from NM and California
- Winter snow and precipitation helped for fire season and should help with resource availability for other states

Notes

- Group agrees to forward Lake and Sherman County drought requests to Governor's Office
- Next meeting proposed for June 14th