

Water Supply Availability Committee/Drought Readiness Council Meeting – March 15, 2023

Phone Conference – Meeting Notes

Attendees

Ryan Andrews – OWRD (Chair)

Curtis Peetz – OEM

Spencer Sawaske – ODFW

Henry Pai – NWRFC

Chantal Wikstrom – OHA

Tom Elliott – ODOE

Stacy McCarter – ODF

Andy Bryant – NWS

Matt Warbritton – NRCS

Peter Cooper – USBR

Kain Shaffer – USBR

Leah Benschung – USACE

Steve Parrett – ODEQ

Harrison Lee - WAECY

Presentations – update on water supply conditions

Matt Warbritton

- Recent atmospheric river event impacted Oregon and Washington coast, but main impact was in California
- Moisture stream shifting further south, minimal impacts in OR
- SWE
 - 108% on 2/15
 - Most basins near to above normal
 - 125% on 3/15
 - SE basins bumped up due to storms over weekend, well above normal
 - All basins above normal
 - SWE percentile rankings
 - Jan 1 - Feb 1 wasn't great at individual sites
 - Mar 1 - Mar 14 has improved significantly at nearly all sites
- Snowpack profiles
 - Willamette and northern basins have exceeded normal peak
 - Central/eastern OR at or exceeded normal peak, some noise
 - Southern basins all well above normal peak
- SNOTEL precipitation
 - Precipitation deficits persist in Willamette and northern Oregon Cascades
 - Some recent improvements elsewhere
 - Statewide 90% of normal
 - Month to date (3/1-3/14) precip well above average except Hood-Sandy-Lower Deschutes
 - Water year to date precipitation along Cascades well below 50th percentile
- SWE vs WY precipitation indicate Snow/Dry across most months
- Soil moisture
 - Below average across much of state
 - Some sites approaching record low
 - Billie Creek at record low
 - Quartz Mountain near normal; somewhat above average since end of December

- Silvies well below average
- High Ridge well above average, but recent increase due to storms
- Snow Mountain near record low all water year
- Clackamas Lake very near record lows
- Mt Howard well below average all water year
- Schneider Meadows well below average all water year
- Streamflow forecasts
 - Most forecasts near normal across state
 - Deschutes basin below normal
 - Middle Snake and Powder basins below average
 - Lake County above normal

Andy Bryant

- Comparing WYTD precip between 2/14 and 3/14
 - Some improvements in SE OR (Harney)
 - Linn and Lane also improved somewhat
- Precip over past 60 days shows significant deficits in north central OR
- February temperatures below average statewide
- Northwest or northerly flow during storm events brought colder temperatures
- 10-day forecast
 - Some precipitation in southwest part of state
 - Below average for northern half of state
- 8-14 day outlook
 - Below average temperatures and slightly above average precipitation
 - Not likely to see significant snowmelt above 3000 feet over next month
- ENSO transitioned to neutral conditions
 - No longer in La Nina
 - Likely to continue through summer
 - Still potential for El Nino to develop in fall and winter
 - Spring confidence for upcoming fall and winter is low - remain cautious above projections for next winter
- Seasonal outlook
 - March through May
 - Equal chances for both temperature and precipitation
 - June through August
 - Above average temperatures and below average precipitation statewide

Henry Pai

- Observed precipitation generation at NWRFC
 - Lean on multi-radar multi-sensor (MRMS) grids
 - QPE challenges - process is weakest when poor or no radar coverage and low station density
 - SE Oregon 3 gages during winter - limited stations + poor MRMS grids + limited interpolation
- Observed runoff to date (3/14)
 - Well below average statewide

- April through September forecasts
 - Near to above average in western and NE OR
 - Biggest improvements since last month in SW OR
 - Klamath slightly above average
 - Improvements due to snowpack
 - Willamette at Salem below average forecast (90%)
 - Well below average runoff due to snowpack
 - Rogue nr Raygold at 88% forecast
 - Runoff similar to Willamette
 - Umatilla R nr Umatilla at 84% forecast
 - Owyhee R at Owyhee Dam at 108% forecast
 - Regulation impacts accounted for in natural forecasts through reservoir operations in major projects that have data availability

Ryan Andrews

- Crook and Jefferson have executive orders for state drought declarations
 - Grant and Deschutes forwarded to Governor's Office
- 28-day streamflow percentiles below to well below average outside of coastal OR
 - Some improvement over 7-day period west of Cascades
 - Several record low flows scattered throughout state (Klamath, central, and NE)
- February streamflow well below average statewide (max = Deschutes @ 74%; min = Wheeler @ 11%)
- Water year streamflow well below average statewide (max = South Coast @ 81%; min = John Day @ 40%)
- Hydrographs
 - Breitenbush R well below average, some response to recent storm event
 - Long Tom R trending upwards over past 30 days
 - Williamson R below Sprague well below average with some recent response to precip/snowmelt
 - No flow at Williamson near Klamath Agency (Kirk Reef)
 - Williamson below Sheep Cr setting period of record minimum nearly all water year (59% wytd)
 - John Day R at McDonald Ferry well below average all water year (37% wytd)
 - S Fk McKenzie well below average with some recent increase (61% wytd)
 - S Fk Walla Walla currently well below average (84% wytd)
 - W Fk Hood trending downwards since early Jan (64% wytd)

Peter Cooper

- Reservoirs releasing winter minimums to continue filling
- Potential delay in irrigation start due to cold temperatures
 - Startup on horizon
 - No flood risk management operations currently but likely at Scoggins in coming days
- Inflows have started to respond with recent wet conditions
- Much below normal storage content in most locations (exception in Scoggins and Unity) due to low carryover, low baseflows, and delayed runoff

- March forecasts generally saw around 5-15% of average reduction compared to February forecasts due to dry February conditions and were below average at all facilities
 - March has been really wet so far so could see rebound in April forecasts
- Refill is unlikely at many facilities, but could be possible at some locations with wet spring conditions
- Approaching record low contents at Owyhee
 - Some increase due to recent snowmelt runoff
 - Forecast drop in 30% between February and March
- Beulah approaching record low contents
- Unity started with good carryover, but low inflows reduced expectations
- Phillips at record low content and low inflows
- Low storage in Crane Prairie + Wickiup + Crescent Lake at 10th percentile
- Prineville well below minimum record
- Ochoco similar to 2022
- Rogue somewhat better than last year due to December/January atmospheric river events
 - Will take multiple good years to refill
- McKay low inflows reduced from above to below normal storage content, chance to fill
- Scoggins actively managing along flood control rule curve - aim to fill around May 1

Leah Benschling

- May have hard time filling in most cases - Blue River probably fill
- Need wet conditions to try and fill
- Operating to BiOp and Injection minimum flows
- Delayed refill at Fall Creek, Cougar, and Foster
- Starting at beginning of August drawdown reservoirs and increase minimum flows

Stacy McCarter

- Monitoring switch from La Nina to El Nino

Discussion

- Next meeting proposed for April 12