Water Supply Availability Committee/Drought Readiness Council Meeting – April 12, 2023

Phone Conference – Meeting Notes

Attendees

Ryan Andrews – OWRD (Chair) Curtis Peetz – OEM Spencer Sawaske – ODFW Paul Long – FSA Chantal Wikstrom – OHA Tom Elliott – ODOE Andy Bryant – NWS Matt Warbritton – NRCS Peter Cooper – USBR Kain Shaffer – USBR Leah Bensching – USACE Carrie Boudreau – USGS

Presentations – update on water supply conditions

Matt Warbritton

- Bomb cyclone impacted mostly California some impacts in parts of Oregon
- Numerous categorized atmospheric river events for west coast
- Received quite a bit of additional snowpack in March due to atmospheric rivers
- SWE measuring 186% of normal (4/15)
 - Later into normal melt season, percentages start to increase but is relative to median or normal value, not because of accumulation
 - Past typical peak date
 - Several sites with record or near record SWE peak
 - Ochoco
 - Gold Center in Blue Mountains
 - Holland Meadows in Cascades
 - Crowder Flat in Klamath
 - In March, accumulated SWE set several records across state
 - Close to half SNOTEL sites and snow-courses received record March snowpack
 - Umatilla, John Day, Harney, Owyhee, Malheur and Grande Ronde indicating snowmelt
 - Willamette, Rogue-Umpqua, Klamath seeing increasing snowpack
- Snowpack sustained throughout winter at lower and mid-elevation sites is due to below normal temperatures
- SNOTEL precipitation 96% statewide
 - Persistent deficit in central and northern Cascades
 - Improvements more noticeable in John Day and SW OR
 - March precipitation above to well above average statewide
 - April precip through 4/11 well above average statewide
 - Water year precipitation deficits in central and northern Cascades in terms of percentiles
- Soil moisture
 - Silvies storms haven't had impact on conditions approaching period of record low
 - Quartz Mountain in Klamath period of record high

- Billie Creek Divide in southern Cascades period of record high
- High Ridge showing some response from March storms but still near record low set record low much of March
- Snow Mountain in central OR setting record low
- Clackamas Lake well above average
- Schneider Meadows in NE well below average, near record low
- Mt Howard in Wallowas some response to recent precipitation
- Streamflow forecasts
 - Increased recently
 - Most predicting near to well above normal for April through September
- Meltout indicated by trends over couple days but also snow density (about 40% but really closer to 50% is stronger indicator)

Andy Bryant

- Water year precip below average statewide
 - Some improvement since mid-March
- Precipitation over past 60 days shows beneficial precipitation through much of western and SE Oregon
- Temperatures below average in March statewide
 - Below average in parts of southern Oregon for January-March
- Combination of below average temperatures and near to above average precipitation over past month and a half
- Some improvements in drought monitor
 - Removal of D4 from central OR
 - Significant improvements in western OR
 - Trimming of each category
- Mid-April outlook continued cool and wet conditions
 - 10-day QPF
 - Above average precipitation expected western OR
 - Well below average precipitation east of Cascades
 - 8-14 day CPC
 - Below average temperatures and above average precipitation statewide
- ENSO status and prediction
 - Some potential to transition to El Nino next winter
 - Very different La Nina outcomes across western US over past several years
 - Difficult to project what this change might mean
- CPC seasonal outlook
 - April through June
 - Near average temperatures much of state
 - Below average SE
 - Below average precipitation for western two-thirds of state
 - July through September
 - Temperatures projected above average statewide
 - Near average precipitation
- Water supply forecasts
 - Observed runoff October through mid-April well below average statewide

- April through September forecasts much improved
 - Well above average throughout state
 - Silvies in northern Harney County still projecting well below average
 - Donner Und Blitzen above average
- Slight increase over past month in Willamette R at Salem
 - April through September forecast at 112%
 - Observed water year runoff at 72%
- Increase in Rogue R at Raygold
 - Forecast at 105%
 - WY at 79%
- Large increase in Umatilla R near Umatilla
 - Big range of uncertainty for May and June
 - Forecast at 114%
 - WY at 84%
- Owyhee R at Owyhee Dam reduction in forecast and water year runoff
 - Near to slightly below spring snowmelt runoff
- Silvies R nr Burns
 - Below average forecast

Carrie Boudreau

- 28-day average flows average to above average western OR
 - Significant improvement since last month
- 7-day average flows above to well above average western OR
- John Day R at Service Creek above average
- Umatilla R above Meacham Creek above average
- Wilson R nr Tillamook well above average
- Siuslaw R nr Mapleton above average
- Chetco R nr Brookings well above average
- Rogue R at Raygold lower end of average
- Upper Klamath Lake still increasing about a foot above past two years
- Williamson R bl Sprague lower end of average
- Klamath R at Keno lower end of average
- Donner Und Blitzen R nr Frenchglen well above average
- Owyhee R nr Rome above average

Ryan Andrews

- Four counties with Executive Orders for drought declarations under ORS 536
 - Harney County requesting
 - Wasco County forwarded to Governor's Office
- March streamflows well below average outside of handful of western counties
 - $\circ \quad Min = Wheeler @ 8\%$
 - $\circ \quad Max = Curry @ 143\%$
- Water year streamflow still well below average statewide
 - $\circ \quad \text{Min} = \text{John Day} @ 42\%$
 - $\circ \quad Max = South Coast @ 91\%$

- Streamflow percentiles show average to above average conditions in western Oregon
 - Parts of central and eastern Oregon measuring well below average with some record low flows
 - Flows increased quite a bit between 28-day and 7-day in western Oregon; one record high flow in Portland metro
 - Central and eastern still lagging behind
- Silvies R nr Burns trending upwards but well below average over water year (30%)
- Donner Und Blitzen also trending upwards but below average over water year (75%)
- Lostine R nr Lostine trending upwards but was receding since early January after storm event; well below average over water year (56%)
- John Day R at McDonald Ferry also trending upwards but was at period of record low mid-March; well below average over water year (42%)
- Powder R at Hudspeth Lane trending upwards but very low water year streamflow (29%)

Peter Cooper

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- Response in streamflows in SE and central OR
 - Bully Creek upstream of reservoir about 2000 cfs on 4/11
- Mix of active flood risk management operations at some facilities
 - Scoggins, Bully Creek, McKay
- Some facilities continuing to release minimum flows to continue filling
 - Irrigation startup delayed due to cold/wet conditions
 - Will begin to startup in next week or two
- Large increases in April 1 forecasts due to delayed runoff and wet March conditions
- Inflows rapidly increased over past week with hot temperatures and precipitation
- Below normal content at many locations still, but quickly catching up
- Refill potential has increased at many facilities
- Storage contents much improved in Owyhee, Malheur, Crooked, Rogue, Umatilla basins over past month
 - Should continue as meltout occurs
- Owyhee basin
 - Runoff forecast for April through June significantly improved since March
 - Forecasting 659 kaf (not enough to fill but approach normal interquartile range)
 - Likely to see high inflows over coming weeks due to areal coverage of snowpack
- Malheur basin
 - Warm Springs inflow set period of record maximum 4/10
 - Forecasting 115 kaf
 - Beulah similar story
 - Likely need to increase outflow to manage fill over next week
 - Bully Creek full
 - Passing inflow
- Burnt River basin
 - Flooding impacts downstream of Unity
 - Phillips saw increase in inflow
 - Not anticipating fill potentially reach normal range
- Deschutes basin
 - Flow leaving Wickiup to meet ESA targets

- Crooked
 - Big increase in flows 4/11
 - Low elevation snowmelt increasing runoff
 - Forecasting 122 kaf
 - May fill contracted space (85 kaf)
 - Potential for Prineville to fill perhaps some flood risk management later in April
 - Ochoco unlikely to fill unless wet conditions continue may approach normal range
- Rogue basin
 - Hyatt and Howard Prairie unlikely to fill
 - Emigrant potential to fill
- Umatilla
 - McKay approaching full
 - Releasing 150 cfs
- Tualatin
 - Scoggins set daily record inflow 4/11
 - Actively management holding close to full

Leah Bensching

- Willamette 41% full, 38% below rule curve
 - Fall Creek, Cougar, Foster on delayed refill likely to begin refill next month or two
 - Below average precipitation, above average snowpack
 - Hills Creek being used to fill Lookout Point, will start refilling next few weeks

Notes

- Forward Harney County request to Governor's Office
- Next meeting May 10th