Water Supply Availability Committee/Drought Readiness Council Meeting – July 13, 2022

Phone Conference – Meeting Notes

Attendees

Ryan Andrews – OWRD (Chair)

Curtis Peetz – OEM

Troy Lindquist – NWS (Boise)

Carrie Boudreau – USGS

Jon Rocha – USBR

Kain Shaffer – USBR

Cole Hendrickson – DEQ

Henry Pai – NWRFC

Annette Liebe – OWRD

Chantal Wikstrom – OHA Spencer Higginson – NWS (Medford)

Larry O'Neill – OCCRI/OCS Tom Elliott – DOE

Presentations – update on water supply conditions Scott Oviatt

- Precipitation
 - o SNOTEL precipitation 103% statewide (7/11)
 - Not much precipitation during summer so not much change in terms of average/median
 - o Not much anticipated changes between now and end of water year fairly static
 - Since start of WY2020, some sites with lowest and second lowest precipitation value - Klamath, Deschutes basins, eastern OR
- Soil moisture
 - Soil water content accounts for range of soil moisture (ranges from 2 40 inches) and relates to full saturation
 - Holland Meadows (2011 2022; McKenzie River Basin) improved compared to last year, above median value but trending downwards
 - High Ridge (2004 2022; Blue Mountains) above median value and better than last year
 - Silver Creek (2004 2022; Northern Klamath Basin) below median value; last year set new record lows
 - o Silvies (1997 2022; Steens Mountain) similar to last year, below median value

Henry Pai (on behalf of NWS)

- Precipitation
 - Water year precipitation below average outside of NW and parts of NE OR
 - Western and northern OR average to well above average over past 90 days, central and eastern mostly within one inch of average
 - Well above normal precipitation in terms of percentiles for May and June, some areas received record rainfall
- Temperature
 - May temperatures below to well below average, June near average statewide
 - Mid-July outlook shows little to no precipitation over next 10 days, elevated temperatures in eastern OR

 August-October forecast (from 6/16) projects above average temperatures and near average precipitation statewide

Henry Pai

- Average to above average observed runoff in NW and some of NE OR; drops off significantly in SW and central, southern OR
- Seasonal volume forecasts (April-September) well above average for most of western OR (some exceptions near Medford); NE OR average to above average but rest of eastern OR well below average
 - Many streams in Willamette Valley, NW OR in top 10 rankings for seasonal volume since 1949
- Natural Volume Monthly
 - Willamette at Salem well below average February through April, but well above average for May and June
 - o Rogue at Raygold had significant deficit between October through April, May and June a little above average; July forecast slightly below average
 - o Umatilla near Umatilla similar to Willamette
 - Owyhee missed wet May and June, no month above average

Larry O'Neill

- Exceptionally wet spring helped stave off drought
 - Most parts of Oregon saw some sort of improvement on Drought Monitor; reduced D3-D4 to about 35%
 - o Historically wet conditions April through June in much of northern OR
 - o Last spring (2021) one of driest statewide on record
- Extremely dry January-February 2022 throughout Pacific Northwest
- No obvious historical relationship between ENSO phase and springtime precipitation in Oregon
 - Spring 2021 had ENSO neutral conditions following fall/winter with moderate La Nina
- Since October 2019, Bend down 12.4" of rain (gets about 10.6" annually) missing out whole year of rain
- Evaporative Demand Drought Index suggests exceptionally low (potential) evaporation over the spring driven by cooler than normal temperatures and lower than normal solar insolation
 - Lower evaporation, coupled with high precipitation, has helped improve hydrological drought conditions (precipitation went further in meeting water supply needs)
- 12-month SPEI shows improvements in NW and NE OR

Carrie Boudreau

- 7-day range average to well above average most of state, some exception in southern and far eastern OR, similar to last month
- 28-day averages similar to 7-day
- Northeast
 - o Meacham Creek at Gibbon currently above average, trending downwards

- o Grande Ronde at Troy about average and trending downwards
- Northwest
 - Nehalem River near Foss about average
 - o Siletz River at Siletz just above average
- Southwest
 - Chetco River near Brookings well above average
 - o Cow Creek above Galesville Reservoir lower end of average
 - o Klamath Lake above 2021 due to curtailment but still well below average
- Southeast
 - Donne Und Blitzen near Frenchglen average
 - Owyhee River nr Rome approaching below average
- Statewide 7-day average runoff upper end of average

Ryan Andrews

- Drought declarations
 - o No change; 17 counties with ORS 503 declarations
- June streamflow well above average in western and northern OR
 - o Central and southern OR range well below average to average
- Water year streamflow variable
 - o NW basins range average to above average
 - Similar in Umatilla, Powder and Grande Ronde
 - o Elsewhere flows range below to well below average
- Streamflow percentiles
 - o 28-day flows range average to record high throughout much of state
 - Exceptions in southern OR (Klamath, Rogue, Goose and Summer Lakes)
 - 7-day flows show trend downward, but still range average to record high
 - Same exceptions with few additional gages
- Hydrographs
 - Butte Cr (Wheeler County) improved from lengthy stretch record low flows
 October through April
 - o Cottonwood Cr (Lake County) lower end of average
 - John Day at McDonald Ferry (Sherman County) still measuring well above average after poor start to water year

Jon Rocha

- Irrigation underway at all projects
- Rogue started very late around 7/5
- Water supply allotments heavily reduced (Owyhee at 50%, Malheur 30 to 60%)
- High potential for early end to irrigation season (August for Malheur, Powder; September for Rogue, Owyhee, Deschutes, Crooked)
- High potential for extremely low carryover for most projects
- Reservoirs delivering for irrigation and drafting, so lower contents and/or % of average compared to last month
- McKay and Scoggins didn't start delivering until early July due to conditions and high natural streamflows

- Bully Creek potentially out of water early September, irrigation districts plan to use up water this year
- Phillips Lake likely run out by mid-August
- Wickiup empty by late August; irrigation district emptied reservoir last three years
- Prineville trying to save some water for ecological flows over winter, likely not empty but very low carryover
- Howard Prairie and Hyatt drafted beginning May, deliver water to Emigrant Lake which began early July and last maybe until early September
- Expecting good carryover at McKay
- Scoggins didn't start delivering until late June

Ryan Andrews (on behalf of USACE)

- Willamette is reducing flows and our goal will be to manage for tributary flows and main stem flows per the 2008 BiOp
 - The only noticeable injunction operations are at Cougar (McKenzie) and Lookout Point (Middle Fork)
- Cougar delayed refill until 27 May and has been releasing minimum flows for downstream fish passage and the ability to still do temperature management
- Lookout Point is drafting to get down to elevation 900 ft to be able to use a low-level outlet which will be able to provide cooler water for temperature management
- Rogue is working closely with ODFW for releases and the reservoirs are drafting as inflows have receded
- Willow Creek is full and will start drafting as irrigation demands pick up

Discussion

Next meeting August 17