Water Supply Availability Committee/Drought Readiness Council Meeting – February 9, 2022

Phone Conference – Meeting Notes

Attendees

Ryan Andrews – OWRD (Chair)
Bill Martin – OEM
Spencer Sawaske – ODFW
Peter Cooper – USBR
Tim Holschbach – ODF
Salina Hart – USACE
Henry Pai – NWRFC
Curtis Peetz – OMD
Matt Warbritton – NRCS
Scott Oviatt – NRCS
Rachel LovellFord – OWRD
Andy Bryant – NWS
Carrie Boudreau – USGS
Tom Elliott – ODOE
Curtis Peetz – OEM
Larry O'Neill – OCCRI/OCS
Jeff Marti – WDOE

Presentations – update on water supply conditions

Scott Oviatt

- Snow Water Equivalent
  - 1/12 SWE 139% of median
  - 2/9 SWE 104% of median
  - Klamaths and southern Cascades below to well below median
  - Most basins flatlining in terms of SWE accumulation
  - Majority of 1991-2020 medians make values appear higher
  - If comparing to 1981-2010, values would appear much lower (10-15% lower)
  - About 5-6 weeks before peak SWE and typical meltout timing
- SNOTEL precipitation
  - 111% on 1/12
  - 94% on 2/9
  - Owyhee is only basin above median value
- 30-day precip records 1/10-2/8 - many sites along Cascades and in Klamath at lowest or second-lowest on record
- Trending downward in streamflow forecasts; only Owyhee, Willamette, and Rogue at or above 50% exceedance

Andy Bryant

- Information on NWS Portland about where we are in terms of snowpack and precipitation
- PNW precipitation below 50% for all of PNW for first week of Feb
- Temperatures along Cascades above normal for first week of Feb
- Temperature inversions between Valley (low) and Cascades (high)
- Deficit in January precipitation compared to historic rankings (since 1895)
- Temperatures near to well above average in January - especially for high terrain
- National Snow Analysis from Office of Water Prediction - some erosion of snow covered area in low to mid elevations on west slopes of Cascades

- Typically receive precipitation as high as 8 inches in parts of western OR and WA for this 10-day period - however, projected to receive next to nothing over next ten days (below 25% of normal) for all of PNW
- March through May outlook indicates some hint of below average temperatures and above average precipitation in NW OR (slight), most of state in equal chances
- La Nina conditions gradually transitioning back to ENSO neutral
- Temperatures in low to mid 70s projected in Medford area over next week or so

Henry Pai

- Naturalized runoff (account for human impacts) near to above average for NW quadrant, well below for rest of state
- Seasonal volume forecasts (April-September) - west of Cascades projected below normal, east of Cascades below to well below normal; Powder is lone bright spot
- Willamette forecast trending downwards since early January - highlights dry conditions
- 10-day lack of forecast precipitation is noticeable in water supply forecasts - decreases in Rogue, Umatilla and Owyhee
- Willamette was mostly normal until February
- Rogue below normal Nov-Jan
- Umatilla okay but February projected well below
- Snowpack projected to deplete quickly in Owyhee
- March 3 next water supply briefing
- Range in yellow dots based on historical climate forcings coupled with current conditions (soil moisture, precip, etc)

Larry O'Neill

- Some issues with PRISM data all the way back to July and perhaps before
- Increase D0 in NW OR based on trends in streamflow conditions
- SW OR also seeing drying trend in terms of precipitation and streamflows
- Last two water years have been third driest two-year period on record statewide (~14 inches below mean)
- Most of Oregon below to well below normal precipitation over water year - lots below 75%, quite a bit below 50%
- Corrected PRISM January precipitation map (WWDT) shows much drier conditions compared to incorrect data
- Corrected shows most of OR measured well below normal precipitation
- Short term blend (USDM) used to indicate evolving drought conditions to the seasonal and annual timescales - blend indicates SW OR deteriorating fairly rapidly

Carrie Boudreau

- 7-day streamflows below to well below normal for much of OR, some exceptions along Cascades
- 28-day average streamflows somewhat normal but some below to well below normal in west and southern OR
- Nehalem R below normal and trending downward, similar trends in other NW OR rivers
- Siuslaw and Long Tom (Lane County) in well below normal range

- SW OR rivers well below normal - Williamson R pushing record minimum, Bear Cr below record minimum
- NE OR trending towards below normal (N Fk John Day, Meacham Cr)
- SE OR similar to NE
- UKL elevation about second lowest current conditions compared to past 10+ years - a bit above last year

Ryan Andrews

- January streamflows near to above average most of western OR – same for Umatilla and Wallowa Counties
    - Eastern OR well below average
    - SW OR below average
- Streamflows over water year to date near to above average for coastal OR and Willamette Valley
    - Eastern and southern OR well below average
- 28-day streamflows well below average throughout most of OR, some places in central and NE OR below average
    - 7-day streamflows trending downwards – most everywhere significantly below average, some with record lows
- Row River inflow to Dorena Lake well below average, pushing minimum for POR
- S Fk Big Butte Cr in Rogue Basin prolonged periods of new minimum flows for POR
- Sprague R prolonged periods of well below average streamflow
- N Fk Malheur R inflow to Beulah Res shows signs of snowmelt – coincides with meltout from NRCS SWE basin plots
- Scoggins Cr inflow to Henry Hagg Lake receding below minimum flow for POR

Peter Cooper

- Reclamation storage reservoirs continue typical winter fill operations
- No flood risk management operations occurring
- Below average content (except Scoggins)
- Most basins need above to much above normal runoff
- USBR runoff forecasts decreased by around 10-30% due to dry conditions in January
- Most locations now have well below normal runoff forecasts for spring runoff
- Scoggins was more full last month due to flood control operations
- Owyhee contents 10th lowest in 84 years - much less storage carryover compared to last year (200,000 acft less than last year at this time); 20% reduction in forecast from January to February
- Warm Springs third lowest on record (53 years)
- Burnt may fill
- Phillips Lake at lowest in 55 years, unlikely to fill
- Crane Prairie above normal contents
- Wickiup lowest in 40 years
- Prineville lowest in 49 years - large watershed to produce enough to fill (90-100% of average to fill) however forecast only for 60% of normal
- Ochoco second lowest in 39 years

- Rogue system as a whole lowest it has ever been (about 1000 acft less than 2021) - likely need multiple good years to fill reservoirs
- McKay needs about average runoff to fill - forecast near average
- Try to have Scoggins full by May 1 - flood event caused release of water, currently falling behind flood curve

Salina Hart

- Willow Creek started refill on 2/1 - had carryover storage - only project to fill last year
- Lagging behind in Willamette - releasing minimum requirements for BiOp
- Big changes - big delays in refill at Foster, Fall Creek - streamflows will be higher to pass inflow for minimums, then start to capture inflows - idea is to keep reservoirs low to provide fish easier access to outlets (lower pools)
- Change will affect all projects in order to manage flows in mainstem - could contribute to worse conditions this year compared to last
- Mostly below at all projects - some deviation allows to store above rule curve - draft at slower rate if forecast shows drier conditions
- Rogue used nearly all carryover storage - deviation to hold onto some water in Applegate during recent event - drafted below rule curve to store more water
- Perhaps lowest at Lost Creek Reservoir ever - used carryover storage from last year

Discussion

- Public affairs for USBR and USACE - pninfo@usbr.gov
- USACE NWP Public Affairs cenwp-pa@usace.army.mil 503-808-4150
- Contact Salina.N.Hart@usace.army.mil 503-808-4887
- Next meeting proposed March 9th