

WATER SUPPLY AVAILABILITY COMMITTEE DROUGHT READINESS COUNCIL MEETING

**Wednesday, May 13, 2020
9 AM–12 PM**

(Meeting conducted via teleconference/videoconference)

* * *

ATTENDANCE

Committee/Council Members Present:

Chair: Ken Stahr (OWRD)
Scott Oviatt (NRCS)
Andy Bryant (NOAA)
Nick Yonker (ODF)
Carrie Boudreau (USGS)

Jon Rocha (USBR)
Mary Karen Scullion (USACE)
Larry O'Neill (OCCRI)
Amy Burke (NOAA)
Danette Faucera (ODFW)

REVIEW/APPROVE APRIL WSAC/DRC MEETING NOTES

Approval of WSAC/DRC Meeting Notes

- NRCS - approved
- USGS - approved
- ODFW - approved
- NWS – approved

News and Announcements:

- No outstanding drought requests
- Coos County: Signing of declaration was delayed but expected to be signed soon

New OEM Leadership: Traci Naile

- Likely stepping in for Matt Marheine, but no official confirmation yet

New FSA Representative: Lee Go

UPDATE ON MONTHLY CONDITIONS AND WATER YEAR SUMMARY

Mountain Precipitation, Snow (Scott Oviatt):

- Rapid melt-off during April
- Statewide SNOTEL precipitation is 77% of normal
 - Considerable change since April 14th (99% of normal snowpack statewide)
- Significant basins to watch (completely melted out): John Day, Malheur, Owyhee
- At this point in the year, the GIS map no longer shows the whole picture
- 0 inches is predominant amount of snow water equivalent (SWE) across the state

- Northern Cascades area still has 33 inches
- Majority of Blue Mountains are melted out completely
- Klamath basin is melted out, except for the west side feeding into the Wood Creek Watershed
- Individual basins:
 - Willamette: Peaked out above normal, but rapid melt out brought it down 2–3 weeks early (as a basin)
 - This time next week (or in two weeks) will be at 0
 - Rogue/Umpqua: Melt out 4 weeks earlier than usual
 - Klamath: Peak was significantly below normal (down 65%)—low stream volumes
 - John Day: Near normal peak, late April storm system, melted out one week early (but steep curve this year)
 - Grande Ronde/Powder/Burnt: Earlier melt out
 - Owyhee/Malheur: Two weeks early
- Precipitation: 77% of average, disparity between different parts of the state
 - Klamath: 65%
 - Umatilla/Grande Ronde: 90%
- 30/60/90-day percent of normal:
 - 30 day: Cascades just below normal; South Cascades well below normal (50% with some 30%)
 - Emigrant [sp.] Springs is exception (98%)
 - 60 day: A little better signal (similar to 30 day)—early April was wetter
 - 90 day: Well below normal across entire state (heights in Blue Mountains—80%, most 50–60%)
- Water supply forecast (May 1st)
 - May–September (statistical model v. probabilistic model)
 - Central quarter of Oregon
 - Upper Deschutes: Very dry
 - Below normal snow pack
 - “Normal” areas: NE Oregon/Umatilla/Grande Ronde
- Streamflow forecast
 - Owyhee/Prineville/Rogue/Klamath/Silvies—pushing irrigation users to 70% exceedance value
 - Based on precipitation and lack of snow

Precipitation, Temperature, Streamflow (Andy Bryant):

- Water year precipitation:
 - Everywhere below average (Deschutes basin and south half of state especially)
 - Exceptions: Blue and Wallowa Mountains
 - Large amounts of rainfall are missing from west of the Cascades (especially the coast) and Central and S. Oregon
- Precipitation for 60 days (% of average): Spring exacerbated dryness in areas that had lack of precipitation in winter (dry winter)—all of S. Oregon/Deschutes
 - Deficits of 8–15 inches, translated into low stream flow
 - In areas dependent on rain v. snowmelt streamflow is lower
- Recent temperatures: Above average statewide (particularly in S. Cascades/SW Oregon)

- Contrast between upper part of basin (Montana, etc.) where temperatures are below average
- Expecting some precipitation in the next 10 days
 - Well above average statewide
 - Most precipitation during next five days
 - Although significant, not enough to make up for deficit through spring. Will help delay demand for irrigation and improve shallow soil moisture
- Ridging drying pattern 8–14, near normal temperatures, below average precipitation for western half of state
- Climate prediction center outlook (June, July, August)
 - Warm and dry—warmer side of warm, drier side of dry than normal during summer months
 - Affects temperatures across the entire Pacific Northwest—likely above average temperatures

Streamflow Forecast (Amy Burke):

- In terms of water year runoff, not much improvement since last month
 - Recent precipitation hasn't made up for deficits
- Natural volume forecast:
 - April–September: Low forecast (except for NE corner). Slight improvement in Central Cascades (E. of Eugene, closer to normal)
 - May will in general have less precipitation and won't make up for lack of winter precipitation
- Percentiles are single digits (4th lowest amount of volume in entire period of record–30 years)
- Uptick in Willamette and Rogue due to precipitation forecast
 - Note: If you want to sort out the 10 day precipitation forecast, click on “ESP 0” option

Climate Updates (Larry O'Neal):

- Drought condition monitoring observer reports (CMOR)
 - Informal reports from various people; tool collects these and puts on map with small questionnaire—checked each week (<https://droughtimpacts.unl.edu/ConditionMonitoringObservations.aspx>)
 - Not well utilized right now
 - Need to direct people to fill out
 - Could alert to situation or clue in that data isn't reflecting the situation on the ground
 - D3 for NW corner: Extreme drought in this region
- Station precipitation rankings (percentiles):
 - Within W. Oregon drought conditions have deteriorated quite a bit
 - Willamette Valley: Under 4/5 percentile in several places
 - WYTD anything under 5 percentile is D3 scenario (currently D2)
- Soil moisture drought indicator (based on GRACE satellite imaging)
 - Very useful, good and timely indicator of conditions

- All the dark red is D4, light red is D3 (much of the state is very dry as far as soil moisture)
 - Deteriorated by one drought category in most areas (especially SE Oregon/S. Oregon, and Willamette Valley (between last week and this week)
 - Umatilla/Morrow counties: Soil moisture has dried out significantly (whole of SE Oregon)
- Vegetation health (based partly on satellite measuring)–month to month change: most places deteriorated in terms of drought categorizations
 - S. Oregon: Focus of drought monitoring
 - D3 expanded upwards to Coos County and Douglas County due to flare up of vegetation health
- Eugene: 50% of average–third or fourth driest water year on record

Streamflow (Ken Stahr):

- 2020 statewide runoff for April: 65% of normal (improvement over March 46%, not normal since January)
- East and west side of Cascades:
 - Slightly higher on west side than east
- Jefferson County: Upper percentile (rapid runoff at these sites)
- NW corner (Seaside): Powerful April event, dropping off
- Center of state (Prineville–one of the permanent sites)
 - Crashing into base flow
 - Flows now are normal for July
- NE corner (Grande Ronde): Uptick in streamflow, snowmelt runoff
- SE corner (Owyhee near Rome): Started out looking good, stopped in April (extent of runoff event), decent amount of volume stored in reservoir
- S./Central: Peaked in May (might be done)
 - Chewaucan trajectory looks worse than in 2015
- S. Umpqua: Looked alright until February
 - Weather related spikes, downward trend
 - Same shapes are repeated throughout basin/area
 - As soon as floods are gone, drop back down rapidly again

USBR Reservoirs (Jonathan Rocha):

- Typically don't fill all reservoirs every year
- Central Oregon/SW Oregon basins (Rogue/Crooked/Deschutes): Down for the year
 - Small amount of rain hasn't produced inflows
 - Doing a lot of water counting in those basins, budgeting for carryover for next year in preparation for another dry year
- Scoggins: Releasing minimums and struggling to fill (currently not full), hopeful rain forecast will help
- Deschutes: Below 10 percentile
 - Inflows haven't spiked as much as hoped
 - Releasing minimum flows for fish
 - Irrigation started early this year (early April for most projects)

- Not keeping up with demand, many projects are drafting
- McKay (Umatilla): Without early February flood in Pendleton, wouldn't be filling this year (barely enough to fill reservoir)
- Owyhee: Well above average carryover (mid-February forecast was positive, chose to generate power)
- New product available
 - Website equates runoff to snowpack (reclamation closely watches this to assist with flood control and ensure refill)
 - https://www.usbr.gov/uc/water/hydrodata/stf/site_map.html
 - Question (Amy Burke): How do you amalgamate?
 - Answer: Average of sites upstream of flow point. Website provides station list of snowpack sites
 - Note: Specific to reclamation and not the same as what OWRD shows for basin

USACE Reservoirs (Mary Karen Scullion):

- Most projects should be full by mid-May
- 10 day forecast—closer to full
 - Blue River
- Close to full:
 - Fall Creek
 - Cottage Grove
 - Dorena [sp.]
- Cougar: Releasing about 1,000 cfs (likely as close to as full as it will be)
- Rogue basin:
 - Lost Creek is full, releasing about 2,500 cfs
 - Applegate isn't doing as well (47% outflow, likely won't get full)
 - Willow Creek (inflows steady, and picking up a little bit, plan is to increase flow)

Wildfire Updates (Nick Yonker):

- 24 hour precipitation amounts are pretty generous for the coast and coast range areas (SW Oregon—above an inch in a few areas)
 - Even east side of state has some moisture
 - Helpful for short term (May), dry side after that
- 7 day forecast: Minimum fire potential through next Tuesday due to cool and/or wet weather
- May: Near normal/below normal fire danger
- June: Forecast drier/warmer than normal
 - Above normal (SW Oregon)
- July: Above normal for most of state (NW and NE exception)
- August: Usually peak of fire season (NE corner excepted)
 - Extended drought is highest correlation for fire season
 - Probably going to see above normal fire season throughout much of the state
- SW District: May 1st—earliest beginning fire season since 1968
- Walker Range area (S./Central): May 15th

- Douglas County: May 15th
- N/Central Oregon: May 15th
 - Question (Ken Stahr): Significance for May 15th? Is this earlier than normal?
 - Answer: Yes, generally. Usually most of these places start June 1st

Surface Water Conditions (Carrie Boudreau):

- Monthly average streamflow statewide was much below normal (last month), moved to below normal/normal (this month)
- 7 day average streamflow (compared to historical record)
 - Still roughly the same (between April and May)
- Hood River at Tucker Bridge: Normal range
- NW Coast–Wilson River near Tillamook:
 - Little bump up earlier this month, but trending down
 - Red dotted line: represents last year
 - Blue dotted line: represents 2015 (most recent drought year)
- Inland (Willamette Valley): 21–23 percentile (below normal range)
- Central Coast (Siuslaw River near Mapleton):
 - End of April/early May went up slightly
 - Receding back down (45 percentile)–normal but trending down
- SW Coast (South Fork Coquille at Powers):
 - Much below normal (7 percentile)–still trending down (might be lower than low in March)
- Chetco River near Brookings: 65 percentile (solidly within normal range)
- Inland (Galesville Reservoir):
 - 2020 is black line, 2018 is dark blue
 - Trending below 2018 line
- Williamson River below Sprague (April to May): Trending below normal 12%
- Upper Klamath Lake (2014 up to 2020–shown in black): About 2 feet below last year, foot below 2015 levels
- Owyhee River near Rome: Normal range
- NE Area (Umatilla River above Meacham Creek): 73% normal range
- Water availability report (compiled each month)
- Duration hydrograph all stations 7 day average for Oregon is on border of below normal/to normal range

OUTLOOK AND DRC DISCUSSION

Review of Outstanding Declaration Requests

- No outstanding drought requests (rumor of Wasco County, Douglas County, Josephine County but nothing filed)

County Emergency Managers

- Would like to move away from ad hoc assemblage of opinions between meetings to a more organized and coordinated system with OEM county managers

- Governor's Office has provided positive feedback on the responsiveness to requests thus far
- Work with OEM to get information to the county level
- A streamlined process is desirable because the volume of requests could increase by midsummer
- Ken will continue to work on outreach, is considering including county emergency managers in meetings but is open to other suggestions from the group
- Should encourage people to file reports in the National Integrated Drought Information System: <https://droughtimpacts.unl.edu/ConditionMonitoringObservations.aspx>
 - Useful tool that is currently being under-utilized

DROUGHT READINESS COUNCIL

Bringing Pertinent Information to Council/Public:

- Expect to see signature on Coos County declaration soon

Current Events/News:

- Tom Elliot:
 - Hoping to schedule a meet and greet with Maya Buchanan
 - Wednesdays may be a better day for meetings (v. Tuesdays)
- Danette: ODFW concerned about low flows across the state in combination with warm temperatures
 - Increase of out of stream uses with drought declarations
 - Rogue basin – releases for temp concerns – disappearing a lot sooner this year
 - Question (Ken Stahr): Does ODFW actively monitor temperatures?
 - Answer: Not currently, would like to in future but it's a matter of resources
 - Can expect more closures (due to temperatures) to protect fish

Suggested Topics for Next DRC Meeting:

- Start thinking of pertinent presentations moving forward
- Previous suggestions:
 - OHA: Presentation on drinking water incident protocol (April), still would be useful and timely
 - OWRD: Evapotranspiration and OpenET Project with Desert Research Institute (May)

Continue Follow-up on US Drought Monitor Coordination

- How are we doing?
 - Positive feedback so far
 - Information is valuable and utilized by many
 - As the state doesn't offer much in way of financial help, a quick secretarial declaration is helpful to a region in D3 status
 - Working on coordinating an event with Holly [last name?]
 - Two workshops open to anyone who is interested
 - Virtual meeting end of July

- Scott will send invite/details out to WSAC/DRC and encourages active participation
- Potential to meet with WSAC?

ANNOUNCEMENTS/NEXT MEETING

- Next meeting June 10th from 9 AM to 12 PM
 - Allows time for snow survey report and compilation of previous month's data

DRAFT