Water Supply Availability Committee/Drought Readiness Council Meeting – December 10, 2020

Phone Conference – Meeting Notes

Attendees

Ken Stahr – OWRD (Chair)
Ryan Andrews – OWRD
Carrie Boudreau – USGS
Nick Yonker – ODF
Andy Bryant – NWS
Aaron Borisenko – DEQ
Sonya McCormick – OEM
Erik Rau – OEM
Danette Faucera – ODFW
Jon Rocha - USBR
Henry Pai – NWRFC
Marc Stewart – USGS
Lee Go – FSA
Daniel Stoelb – OEM
Larry O'Neill – OCS
Scott Oviatt – NRCS
Roxy Nayar – DEQ
Spencer Sawaske – ODFW
Mary Karen Scullion – USACE

Presentations – update on water supply conditions

Scott Oviatt

- Diamond Lake SNOTEL site significantly impacted due to burned trees increasing exposure to sunlight; data may be impacted
- SNOTEL SWE Interactive map replacing static maps
    - Presents as % median rather than % normal or average
    - SNOTEL precipitation will remain as % normal
- SNOTEL SWE is variable throughout the state
    - Malheur basin measuring highest at 139% of median, with several other basins measuring above the median SWE (Harney = 124%; John Day = 123%; Upper Deschutes-Crooked = 118%; Willamette = 106%)
    - Owyhee basin measuring lowest at 56% of median
- Site-specific SWE observations are highly variable statewide and along the Cascade Crest
    - Sites in central Oregon measuring above the median SWE
    - SW Oregon measuring well below median SWE
    - Variance between sites in close proximity could potentially be explained by the low amounts of snow typically measured at such sites
        - Sites with low snowpack typically show greater response to any snow contributions in terms of % median
- SNOTEL precipitation measuring below normal statewide
    - Umatilla-Walla Walla-Willow basin measuring highest at 99% of normal
        - Owyhee basin (54%) and Lake County-Goose Lake basin (55%) measuring lowest
    - All other basins measuring below 90% normal precipitation with trends decreasing moving southward
    - Site-specific observations show clear trend in decreasing precipitation moving southward
- Last 30-days precipitation deteriorating slightly since October

- NRCS currently developing datasets for new periods of record – expected to be updated by October 1, 2021

Andy Bryant

- WY 2021 precipitation measuring below normal for much of Oregon
    - With exception of small portions of central and NE Oregon, much of state measuring below 90% of normal precipitation
    - Some areas of southern OR measuring below 50% of normal precipitation
    - In terms of departure from average, western OR is experiencing significant deficits of anywhere from 4 to 12 inches on average
    - Trends are very similar for the past 30 days, although a portion of central OR received a surplus of precipitation compared to average
- November temperatures improved slightly from the well above average temperatures experienced in October throughout the state
    - Some areas of the coast experienced cooler than normal temperatures
    - Much of the state had temperatures near or just above normal for the month of November
- The US Drought Monitor showed improvements in coverage from D3 to D2 in eastern OR, however much of the state is classified in some form of drought conditions
- Ongoing La Nina conditions are driving predictions for the near-term and seasonal outlooks
    - Expect increased precipitation over next 10-14 days throughout much of the state
    - Precipitation and temperatures are showing increased probabilities of above normal conditions
    - Three-month outlooks (DEC-FEB) favor above normal precipitation for the northern half of the state, while projecting equal chances of above/below normal precipitation for the southern half
    - Temperatures are expected to be below normal for much of western OR, while equal chances of above/below normal temperatures are expected for much of the rest of the state
        - SE OR projected to experience above normal temperatures

Henry Pai

- Much of western OR experiencing deficits in WY 2021 runoff
    - Trend worsens from north to south
    - Eastern OR and Klamath basin faring similarly
- WY runoff predictions for % natural streamflow (accounting for human factors) projects near normal flows for much of the northern half of the state
    - SW OR projected to receive below normal streamflows
- Last half of November received lack of precipitation in Willamette @ Salem
    - SW OR conditions indicative of less precipitation and drier soils
    - Trends are similar in eastern OR where soil states are lacking progress

Marc Stewart

- Some gages being impacted by ice effects
- USGS re-evaluating NSIP sites to re-rate gages with new metrics/indicators
    - Each state to identify at least one gage per climate region/division

- Are there any OWRD gages that could potentially be used as drought indicators?

Ken Stahr

- Streamflows experiencing below normal conditions over past 7 days throughout the state
  - Sites measuring well below normal both east and west of Cascades
- Site-specific hydrographs show decreasing trends towards below normal conditions

Jon Rocha

- Reservoir conditions indicative of carryover from WY 2020
  - Owyhee (131%), Malheur (112%), Burnt (126%), and Umatilla (125%) systems all measuring above normal in terms of % full
  - Powder (24%), Deschutes (58%), Crooked (57%), and Rogue (11%) systems measuring well below normal in terms of % full
    - Rogue system has flatlined and projections are poor
      - Most reservoirs are well below required storage space for flood control
    - Tualatin (87%) also measuring below normal but to a lesser degree

Nick Yonker

- Fire season over – low fire danger

Discussion

- OEM working on system for tracking and displaying drought declarations
- Next meeting proposed for January 14th, 2021