

## **Water Supply Availability Committee Meeting – July 10, 2018**

Oregon Office of Emergency Management

In House and Phone Conference – Meeting Notes

### **In-House Attendees**

Ken Stahr- OWRD (chair)  
Kathie Dello- OCCRI  
Nick Yonker- ODF  
Daniel Stoelb- OEM  
Carlos Ortiz-Turner- OWRD  
Carrie Boudreau- USGS

### **Phone Attendees**

Margaret Matter- ODA  
Scott Oviatt- NRCS  
Peter Cooper- USBR  
Andy Bryant- NWS  
Jeff Marti- WA State Drought Coordinator

Presentations – Update on Water Supply Conditions

Scott Oviatt

- Warm and dry conditions essentially since early February, after our early start in November the season ended up with low snowpack accumulation.
- The late season snowfall was not sufficient to overcome the overall snowpack accumulation deficit.
- Statewide peak snowpack was less than 70 percent of normal, with only 30-60 percent in the southern regions of the state.
- Most sites melted out 1-2 weeks earlier than normal and in some cases 3 weeks early. With very warm temperatures in May, especially warm overnight temperatures, snow melt rates were significantly higher than normal. Several higher elevation sites observed 150-250 percent of typical spring melt rates.
- Statewide precipitation at SNOTEL sites is currently at 88 percent of normal. The Mt. Hood area and the Northeastern quadrant of the state have the higher amounts as we've seen throughout the winter. No significant change since last month.
- Percent of average precipitation for May 1<sup>st</sup> thru July 9<sup>th</sup> at individual SNOTEL sites shows several in south central Oregon that experienced 1 or 2 day convective events (thunderstorms). These types of events tend to skew statistics due to the fact that there is little precipitation in these areas during this time of year.

Andy Bryant

- In terms of the water year percent of average, not much has changed in the last month. There has been very little precipitation so far in July.
- Most of the State is has significant water year precipitation deficits. Even more significant were the snowpack deficits.
- For early July precipitation is below average west of the cascades, near average elsewhere in the state, but that is likely to change.
- The US Drought Monitor shows some expansion of moderate drought into western Oregon, not much change for central or eastern Oregon. Of note, D1 is moving north into western Washington.

- Over the next one to two weeks we are in store for some hot weather. Temperatures will likely be 15 degrees above average for most of Oregon.
- The three month outlook calls for an increased likelihood of above average temperatures along with below normal precipitation for most of the state.
- Streamflow forecasts for April –September volumes show values that are significantly below average in southwest Oregon and most of central and eastern Oregon. In northwest Oregon there are a lot of sites indicating normal and above normal forecasts.
- John Day River near Service Creek has been below average all year; the Apr-Sep forecast is for less than 60 percent.
- Umpqua comes in higher in terms of the seasonal average at 73 percent. March and April were average and significantly below average in May-July.
- The forecast for coastal basins came in average or above average. Nehalem near Foss comes in at 109 percent thru the April-September period. April significantly above average, looking at monthly runoff volumes everything from May on is below average.

#### Ken Stahr

- Streamflows have been in steady decline since April. In June, cooler temperatures helped to ease demand and helped to buoy stream flows. A blip of rainfall also helped but as we moved thru the month, statewide statistics ended up at 40 percent of normal.
- Flows in the northeast corner of the state are the highest at about 75 percent of average for June but are dropping rapidly. Flows in the southeast corner of the state have been below normal all spring. Flows in the Klamath at just below 60 percent might have been much lower if not for regulatory activity.
- The Wilson River near Tillamook appears to be setting low flow records when compared to the 1981-2010 period of record. The Donner und Blitzen River is also seeing flow conditions similar to what was observed in 2015.
- Crooked River above Prineville Reservoir is also flirting with almost record low flows. Seeing a small effect from rain event in late June.
- Inflow into Phillips Reservoir is also low but not quite as low as the same time of year in 2015.

#### Carrie Boudreau

- Since last month, streamflows are transitioning to below normal across much of the state.
- Compared to the 2015 regional view the low stream flows are not as widespread.
- John Day at Service Creek is well below the normal range and is on an obvious downward trend. The mean monthly discharge 36 is percent normal.
- In Wheeler County, flows in Bridge Creek near Mitchell are well below normal. Pine Creek is at a normal level however based on a recent (2004-2017) period of record. As previously mentioned, flows in the John Day are also well into the “below normal” range.
- Donner und Blitzen in the Harney Basin is well below normal. The mean monthly discharge for June was about 31 percent of normal.
- Owyhee River is in the lower end of the normal range, flows have been consistently low since April. The precipitation event in June is apparent on the graph. Mean monthly discharge for June is 29 percent of normal.

- Coastal basins are showing lower flows than normal. South Coast downward trend since May, bordering normal too much below normal.
- Umpqua River nr Elkton flows are in the below normal range, June monthly mean discharge 49 percent of normal. Rogue River nr Agnes flows are normal to below normal, 79 percent of average for June.
- Hood River at Tucker Bridge, Deschutes River near Moody are in the below normal range.
- Graph of 7-day average runoff for Oregon is well into the below normal range.

Peter Cooper

- Scoggins Reservoir in the Tualatin basins is currently 86 percent full. Likely to end the season below average.
- Prineville Reservoir is 64 percent full and currently drafting for irrigation. The season started with good carryover from last year. However, reservoir levels are likely to be drawn down below where they started, well into the carryover from last year.
- Ochoco Reservoir is 44 percent full. Started out the season with above average carryover. The reservoir did not fill, ending up well below average for the storage season. Expecting to be below the average at the end of the season and well below where we started last year. Levels are already below where they were at the start of the fill season. If the coming fill season is below normal next year will be very difficult.
- McKay Reservoir in the Umatilla basin is 68 percent full. The reservoir filled this year and has been drafting since late May. Currently below average but above where we were in 2015. Projected to be close to average at the end of the season and close to where we ended last season.
- Southeast Oregon reservoirs are drafting right now due to the very dry conditions. Levels are ranging from 36 percent at Bully Cr up to 66 percent at Unity Res; Beulah is at 37 percent and Warm Springs at 43 percent of capacity.
- Phillips Lake started with above average carryover but did not fill and did not reach average. It is forecast to be well below average at the end of the season. This is similar to what was observed in 2015. Demand started with well below average levels about a month earlier than normal. The storage gain from this season is already gone and now dipping into the carryover from last year. Projected to end up at levels similar to the start of the 2015 season because of the carry over.
- Unity Reservoir in Baker County did fill to capacity. Projected to end up close to average carryover at the end of the season.
- In the Malheur, Warm Springs had well above average carryover to start the season. However did not accumulate much storage over the winter. So far all of the accumulated storage has been released and now using the carryover. The reservoir will be pretty close to empty by the end of the season.
- Beulah started with close to average carryover, still using the storage accrued over the winter. Looking at close to empty at the end of the season with below average carryover heading into next year.
- Bully Creek is similar, empty reservoir at the end of the season and well below average at the start of next season.

- Owyhee is now at the point of dipping into last years' carry over. Ending the season close to average conditions but much at lower levels than we were at the start of last season.
- In the Rogue basin, Emigrant is sitting at 55 percent full, projected to end the season with nearly an empty reservoir; Hyatt is at 31 percent, also projected to end the season with an empty reservoir ; Howard Prairie is at 53 percent, higher than 2015 but well below average, and ending the season well below average.
- We are already using carry over in many places, especially in the eastern and southeastern areas of the state as well as Ochoco and Prineville Reservoirs in central Oregon. We used the amount of storage we gained this winter. It is because of the good carry over from last year that we are currently sitting ok.
- Demand started earlier than normal in some of these places. We started drafting much earlier than normal.

#### Nick Yonker

- High significant fire potential on the east side and southwest areas of the state. We have a solid high pressure ridge on the East side as 1,000 hr fuel moisture levels are consistently dropping with the dry weather. East side and southwest have 1,000 hr fuel moistures at 10-15 percent.
- There may be some dry lightning potential in the very southern part of the state, especially south central and southeast, Friday-Saturday. Not significant lighting but with these conditions it doesn't take much to start a fire.
- The number of acres burned is already twice the amount that we normally see this time of year. We have around 4,000-4,500 acres that burned where normal is about 2,000. The forecast for July-August are for an above normal fire season.

#### Margaret Matter

- Hay and grass field burning has begun much earlier this year. For some people it's earlier than they have seen before.

#### Other

- Wheeler County Commission has declared drought and has submitted the request to the Governor.
- Ken asked Scott about transitioning to soil moisture plots as in years past. Scott replied that he currently doesn't have a soil scientist to review the data so he doesn't feel confident distributing the plots until they have been reviewed.
- Kathie Dello on El Nino update: We are still ENSO neutral. There is a 50 percent chance of transitioning to El Nino in the fall, 65 percent by winter. El Nino tends to tilt toward warmer and drier, but the dryer piece hasn't always played out. Temperatures would be more of a concern for the Pacific Northwest. The dynamic model seems to want to push toward El Nino but the statistical models keep it in the neutral.
- Next WSAC meeting scheduled for Tuesday August 7, 2018.