

# Streamflow Conditions in Washington State as of August 5-6, 2020



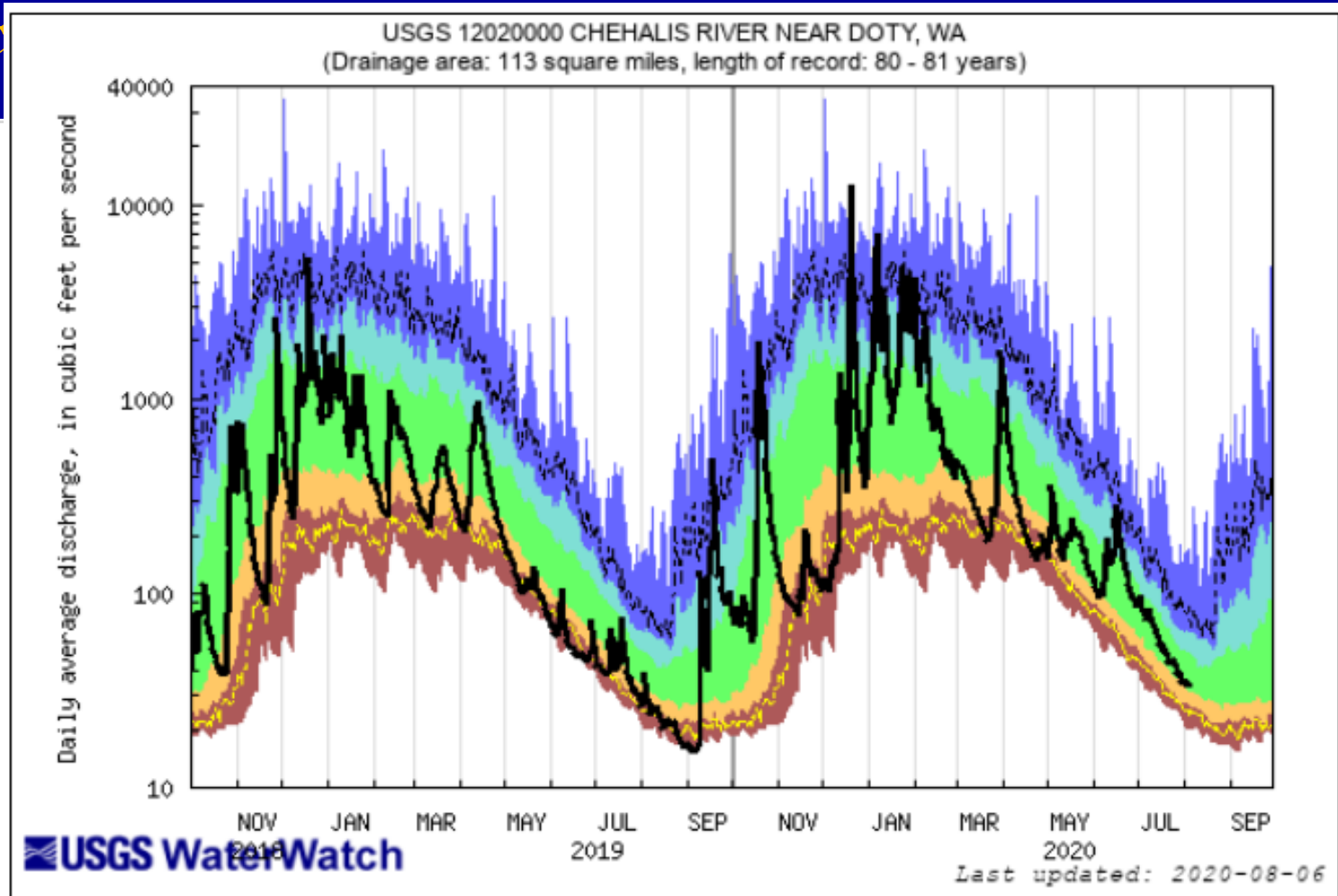
Mark Mastin at the Clarks  
Creek Bridge over the Puyallup  
River near Puyallup, WA.  
Training session on collecting  
suspended sediment samples

**Presented by Mark Mastin to the Washington State  
Water Supply Availability Committee, August 7, 2020**

# Chehalis River near Doty

Upper C

er supply

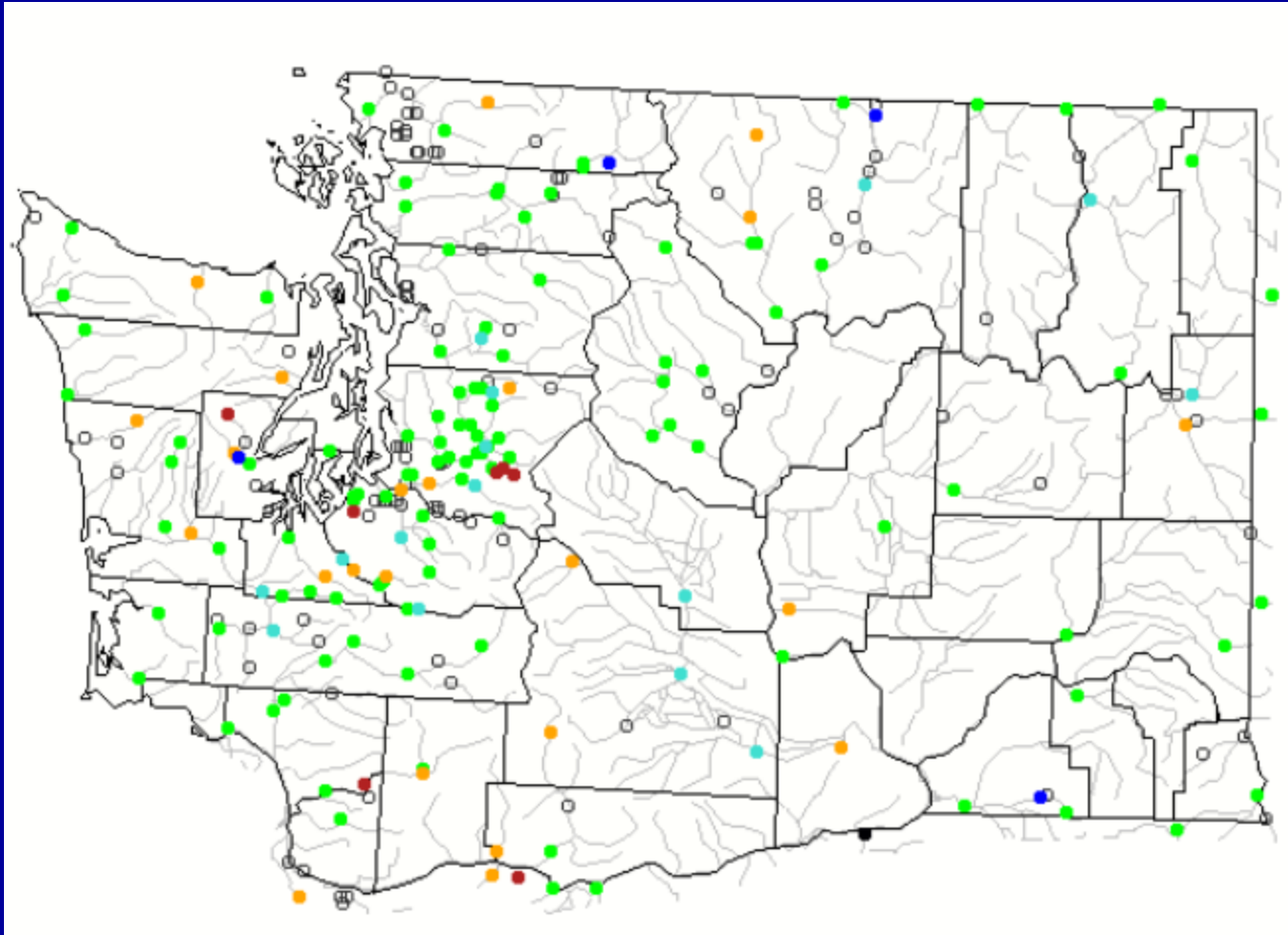


Explanation - Percentile classes						Flow
lowest-10th percentile	5	10-24	25-75	76-90	95	
Much below normal		Below normal	Normal	Above normal	Much above normal	

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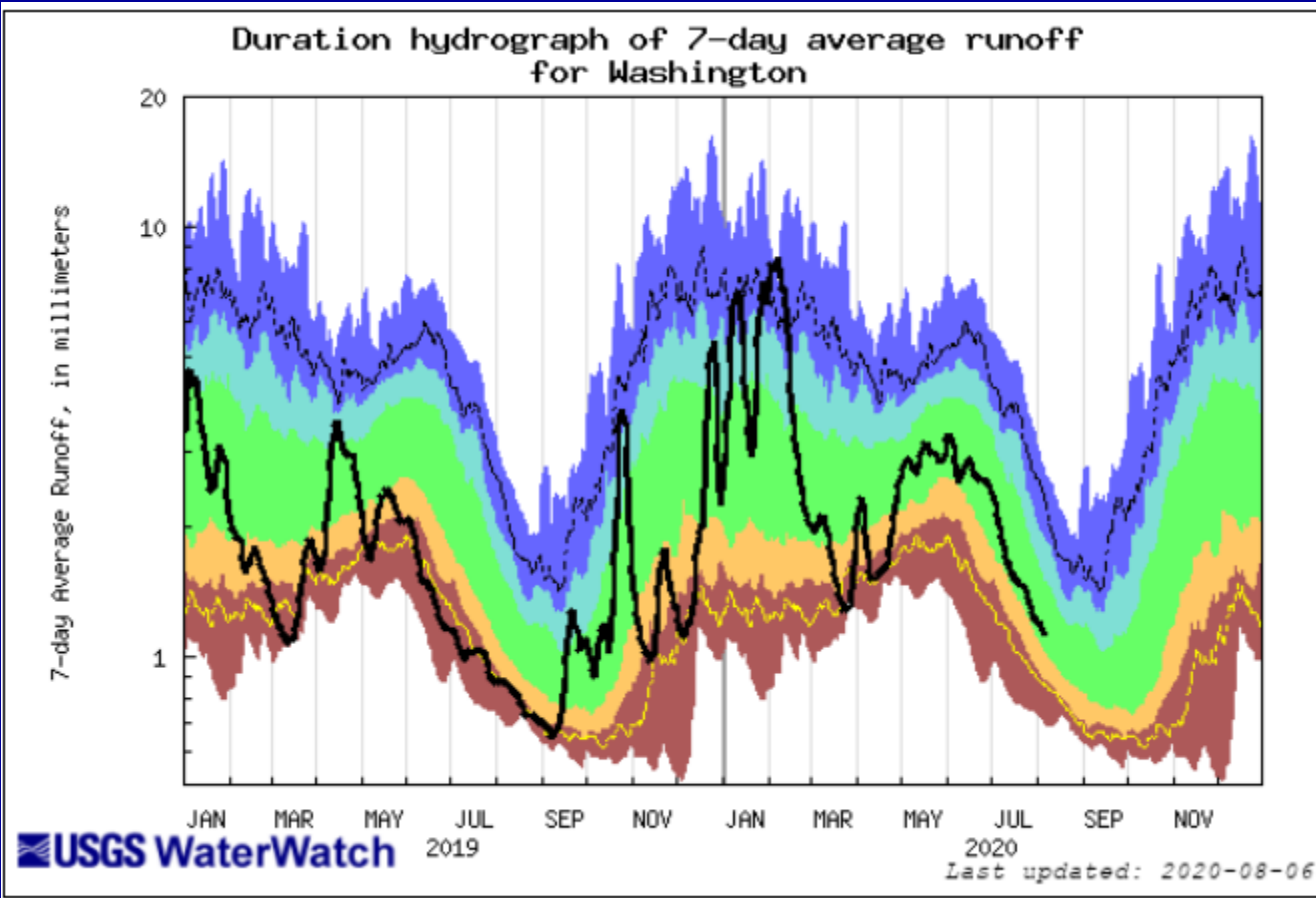
# 7-day Average Streamflow (for day of the year)



Explanation - Percentile classes							
Low	<10 Much below normal	10-24 Below normal	25-75 Normal	76-90 Above normal	>90 Much above normal	High	Not-ranked

# Duration Hydrograph, Washington State

## 7-day Average Streamflow (through August 6, 2020)

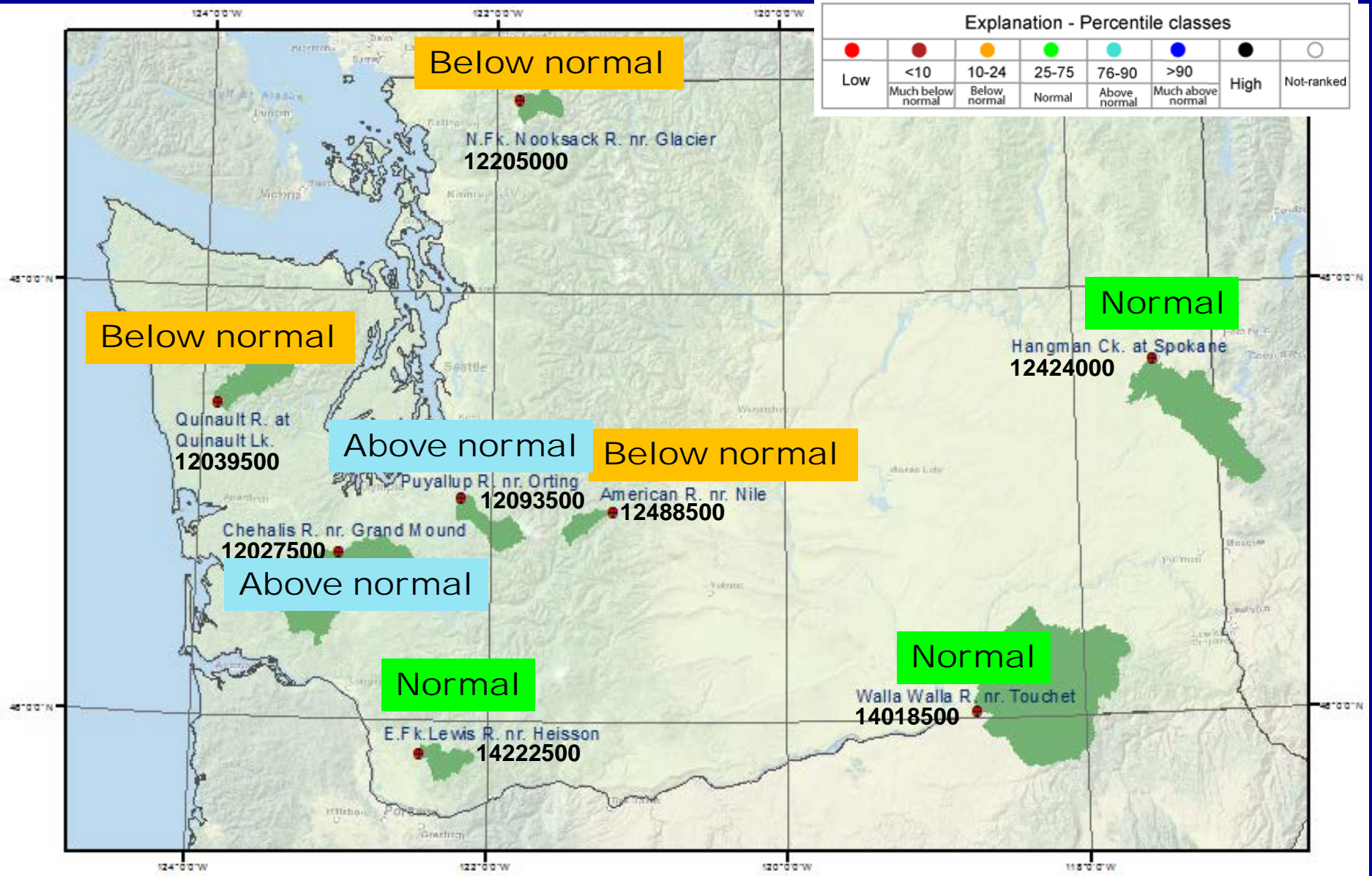


As of August 6, 2020, statewide 7-day average flows are Normal.

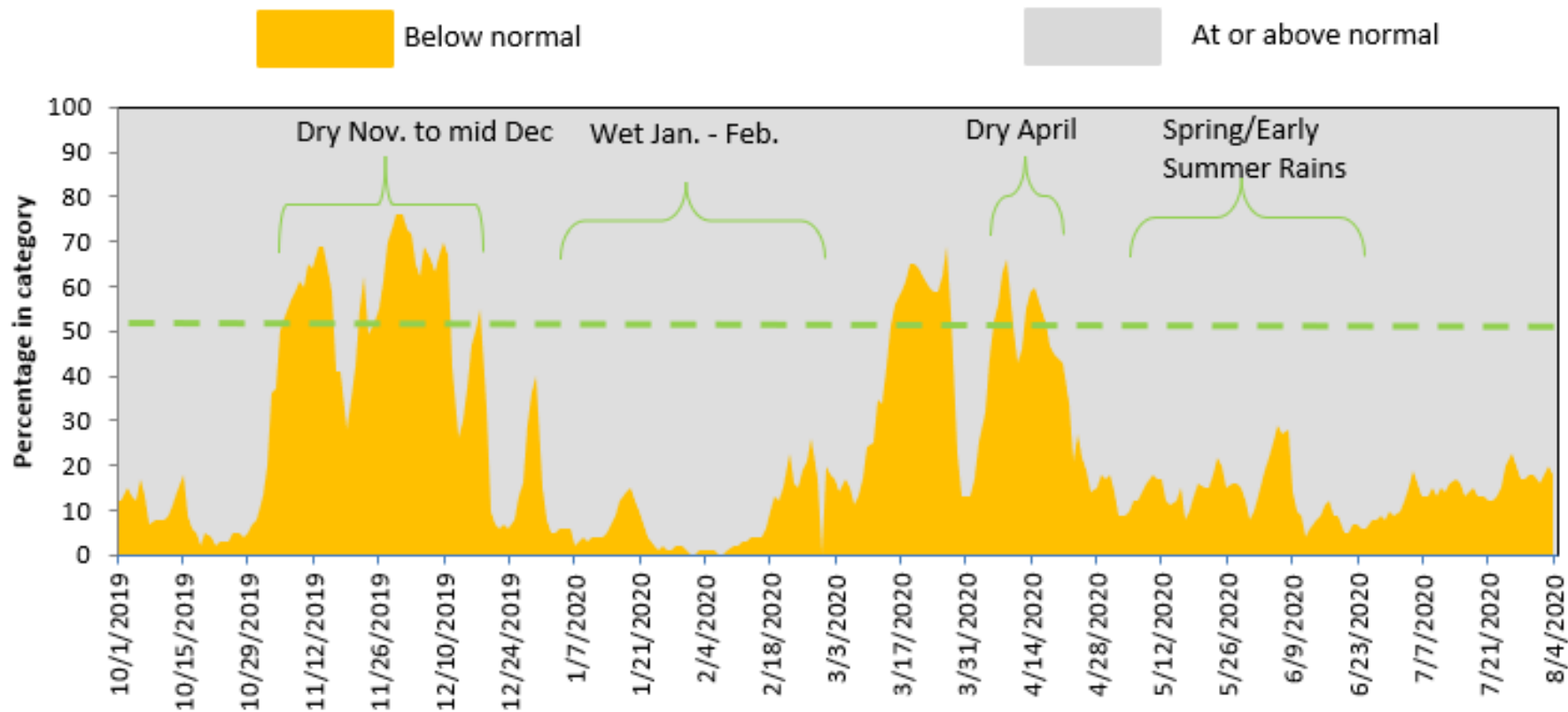
Explanation - Percentile classes						
lowest-10th percentile	5	10-24	25-75	76-90	95	90th percentile -highest
Much below Normal	Below normal	Normal	Above normal	Much above normal		Flow

# Index Gaging Stations, 7-day average streamflow (as of June 17, 2020)

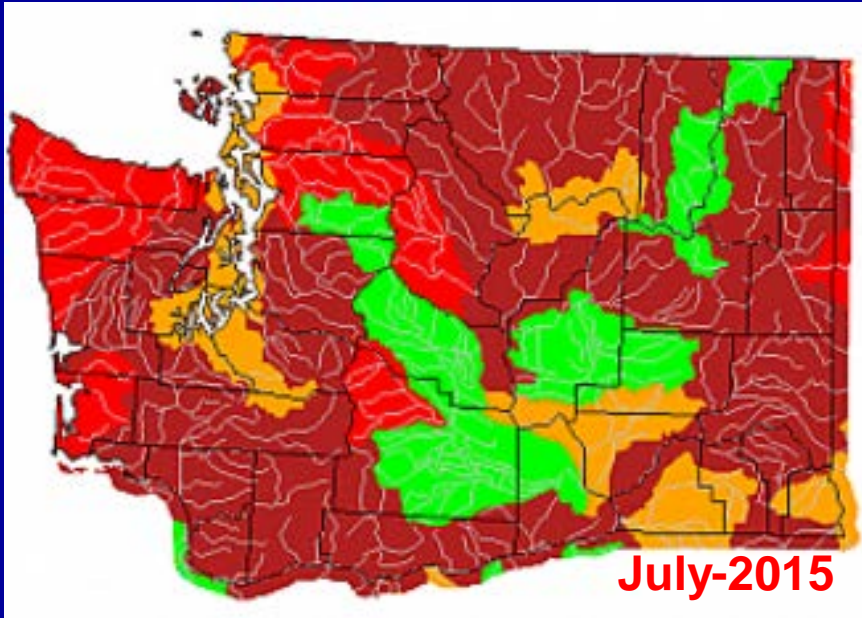
Explanation - Percentile classes							
<span style="color: red;">●</span>	<span style="color: red;">●</span>	<span style="color: orange;">●</span>	<span style="color: green;">●</span>	<span style="color: cyan;">●</span>	<span style="color: blue;">●</span>	<span style="color: black;">●</span>	<span style="color: gray;">○</span>
Low	<10 Much below normal	10-24 Below normal	25-75 Normal	76-90 Above normal	>90 Much above normal	High	Not-ranked



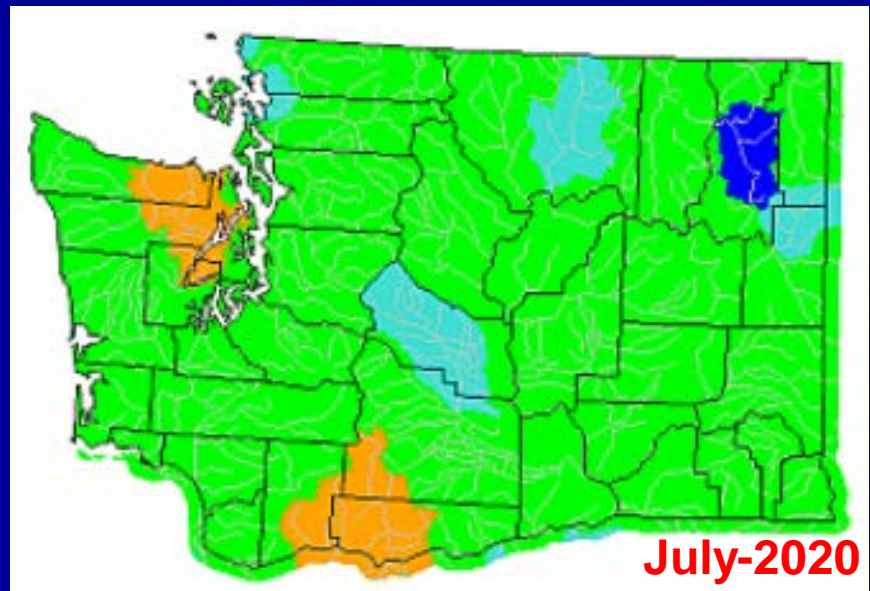
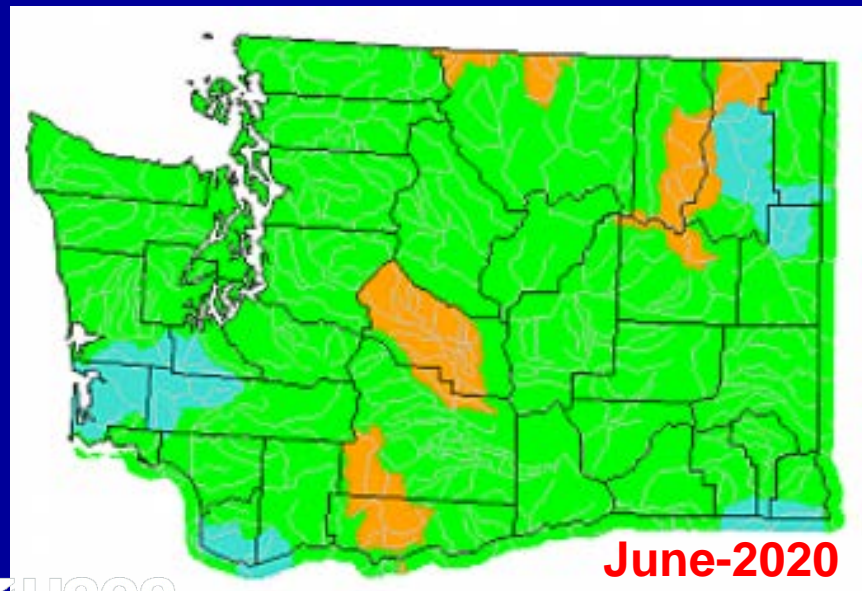
# Daily streamflow in Washington Rivers compared to historical streamflow, Oct. 01, 2019 – August 4, 2020



# July 2015 and June-July 2020 Monthly Streamflow



Explanation - Percentile classes						
Low	<10	10-24	25-75	76-90	>90	High
	Much below normal	Below normal	Normal	Above normal	Much above normal	



# Groundwater Conditions

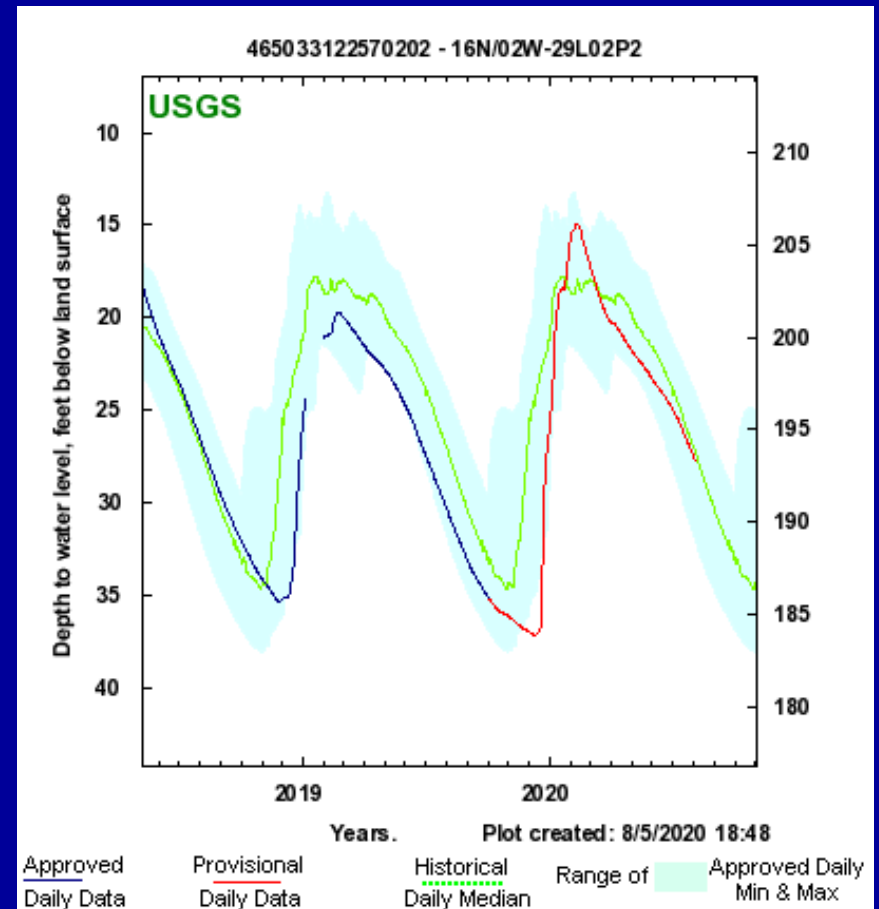
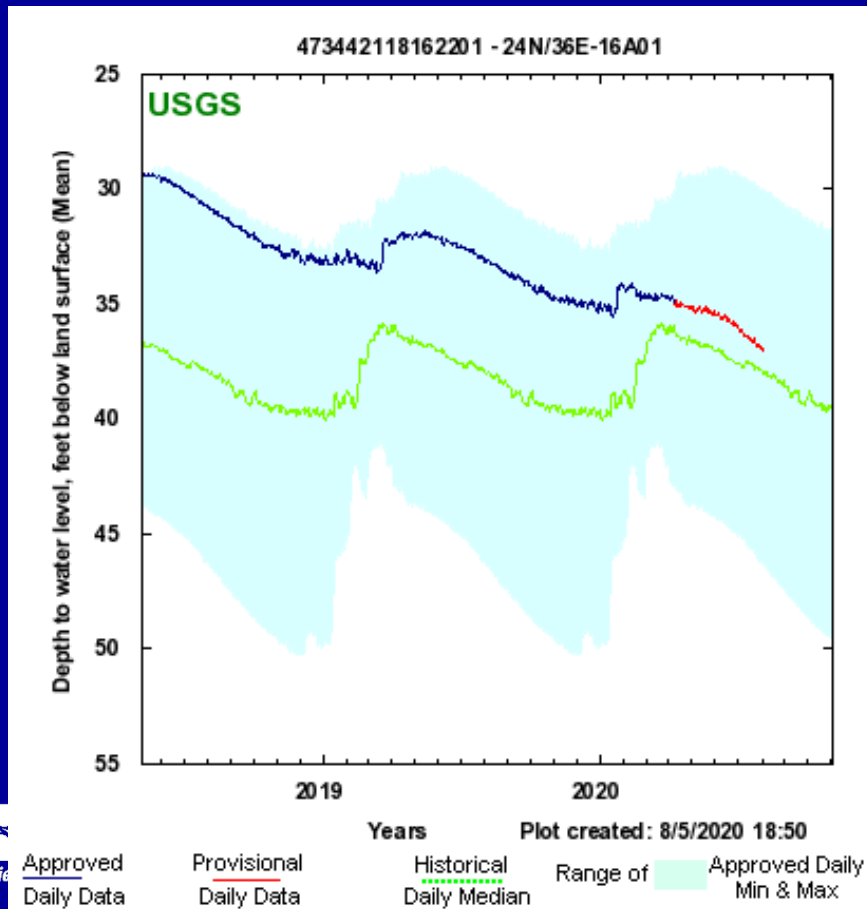
## Groundwater Watch:

### Davenport well

- 117-ft deep
- Wanapum Basalt

### Scatter Creek well

- 82-ft deep
- Sand and gravel





# Summary

## Streamflow and Groundwater Conditions as of August 4-6, 2020

- ✓ Chehalis River near Doty, has a close hydrographic shape compared to the hydrograph of the sum of the East and West Forks of Campbell Creek (Ryderwood's water supply) and should work as an analog basin. Chehalis R. nr. Doty has the advantage of a long-term record of runoff. Chehalis R. nr. Doty is currently in the low end of the Normal range of flows
- ✓ **7-day average streamflow** showed mostly **Normal** throughout the State with equal number of sites above and below the normal category and no apparent spatial pattern.
- ✓ As of August 4, daily mean streamflow is at **Normal and Above** at 82 percent of the 151 reporting streamflow sites—slightly less than the June report.
- ✓ **7-day average streamflow at eight index gaging stations:**
  - West side: two sites are **Above Normal**, one **Normal**, and two **Below Normal** sites
  - East side: two sites are **Normal** and one is **Below Normal**.
- ✓ The index groundwater well levels showed Davenport is still above the long-term average for this time of the year but edging towards the median. The Scatter Creek well improved a bit since June and is at the historical median level for this time of year.