

# Streamflow Conditions in Washington State as of August 7-8, 2019

Presented by Rick Dinicola to the Washington State  
Water Supply Availability Committee  
August 9, 2019

## CHEHALIS RIVER NEAR DOTY, WA



IMPORTANT [Classic Page](#)

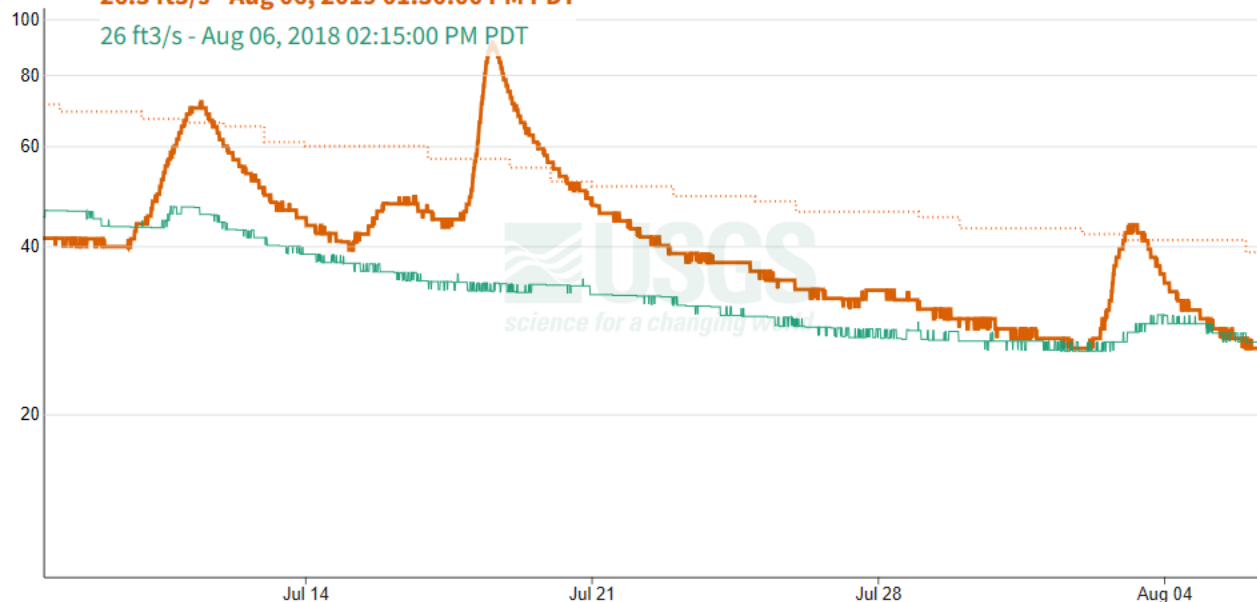
Monitoring location 12020000 is associated with a STREAM in LEWIS COUNTY, WASHINGTON. Current conditions of DISCHARGE, GAGE HEIGHT, PRECIPITATION, and MORE are available. Water data back to 1939 are available online.

7 days  30 days  1 year

### Streamflow, ft<sup>3</sup>/s

26.3 ft<sup>3</sup>/s - Aug 06, 2019 01:30:00 PM PDT

26 ft<sup>3</sup>/s - Aug 06, 2018 02:15:00 PM PDT



Current: — Provisional  
Last year: — Approved  
Median: ···· 1940 - 2019

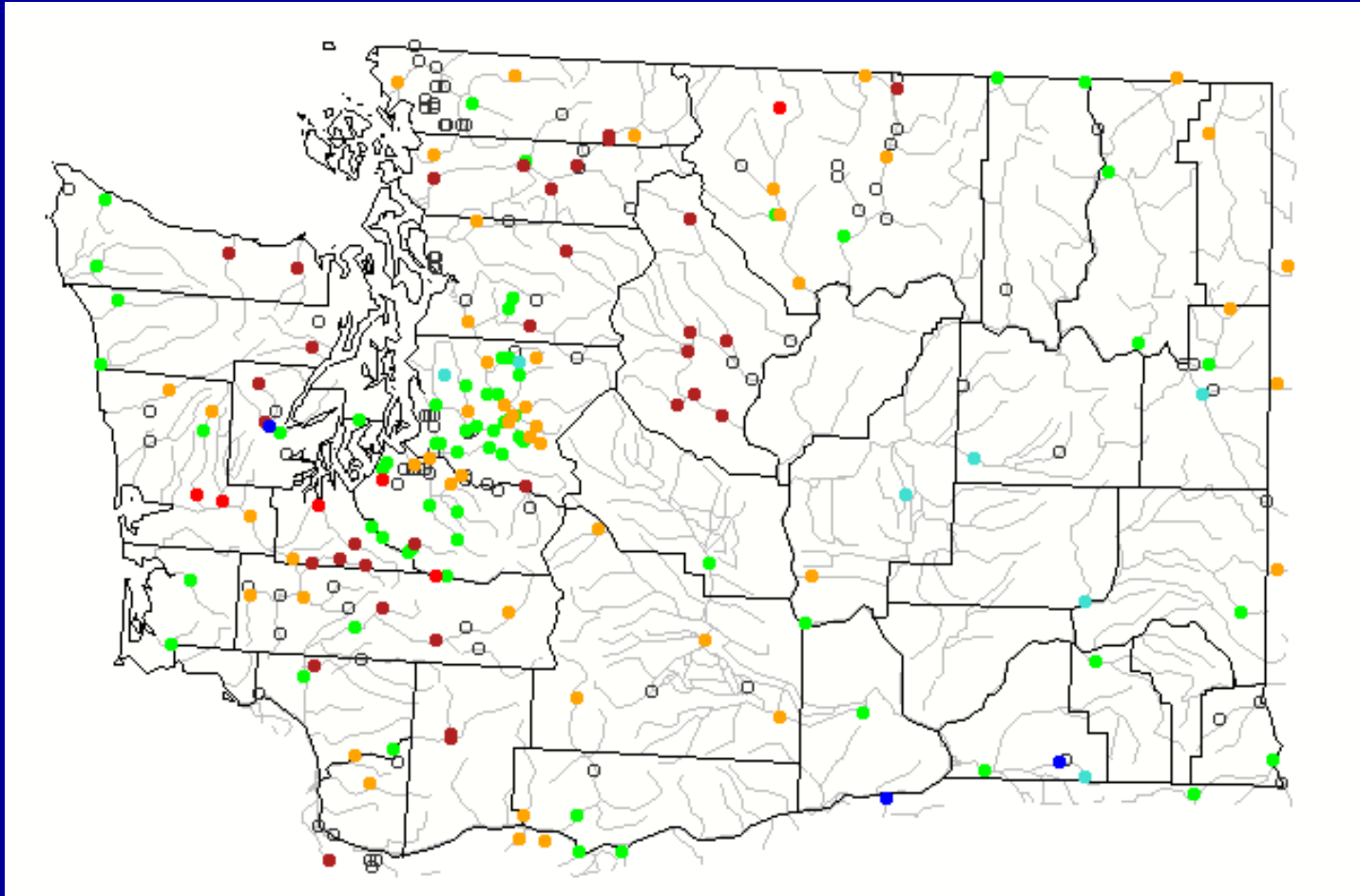
Compare to last year

For August 7<sup>th</sup>:  
Median flow = 40 cfs  
Current flow = 25.4 cfs

Flow at the beginning of July was lower than last year, but this year's summer rains have kept the flow on par with last year's early August flow.

NOTE: This is the beta version of the new station web pages for the USGS

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



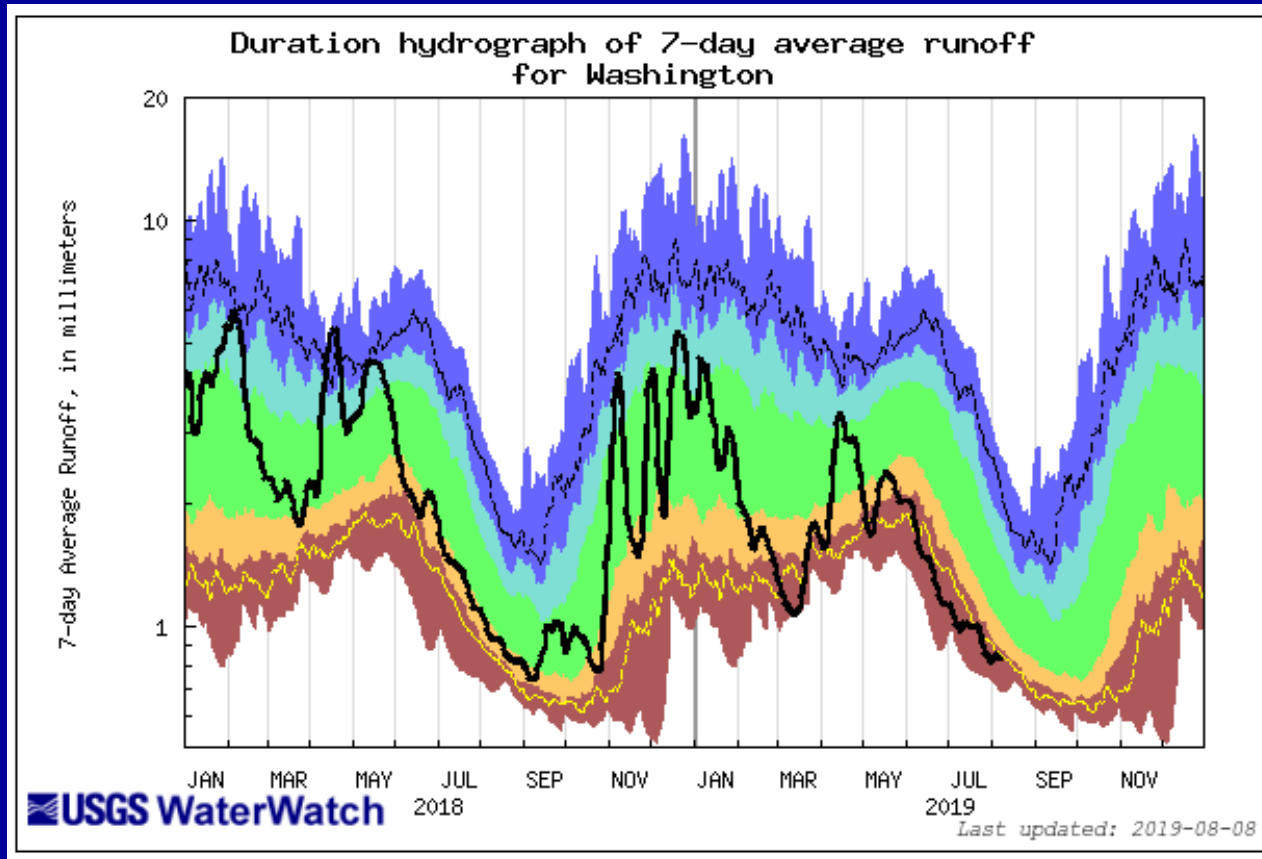
Some improvement on the West side over the June 5<sup>th</sup> map shown last meeting. East flank of Cascades has become relatively drier.

August 7, 2019

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: white;">○</span>
Low	<10	10-24	25-75	76-90	>90	High	Not-ranked
	Much below normal	Below normal	Normal	Above normal	Much above normal		

# Duration Hydrograph, Washington State

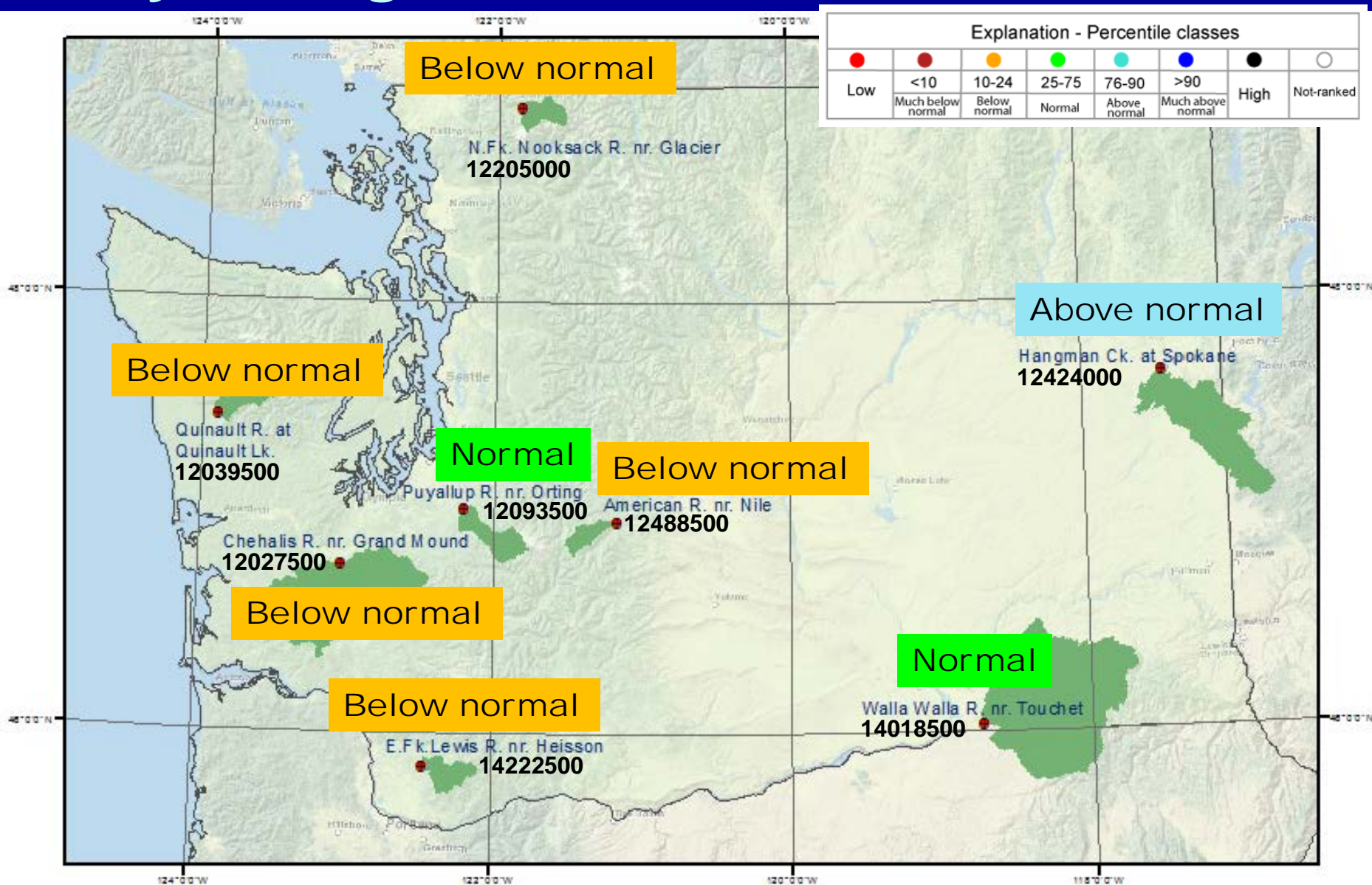
## 7-day Average Streamflow (updated August 8, 2019)



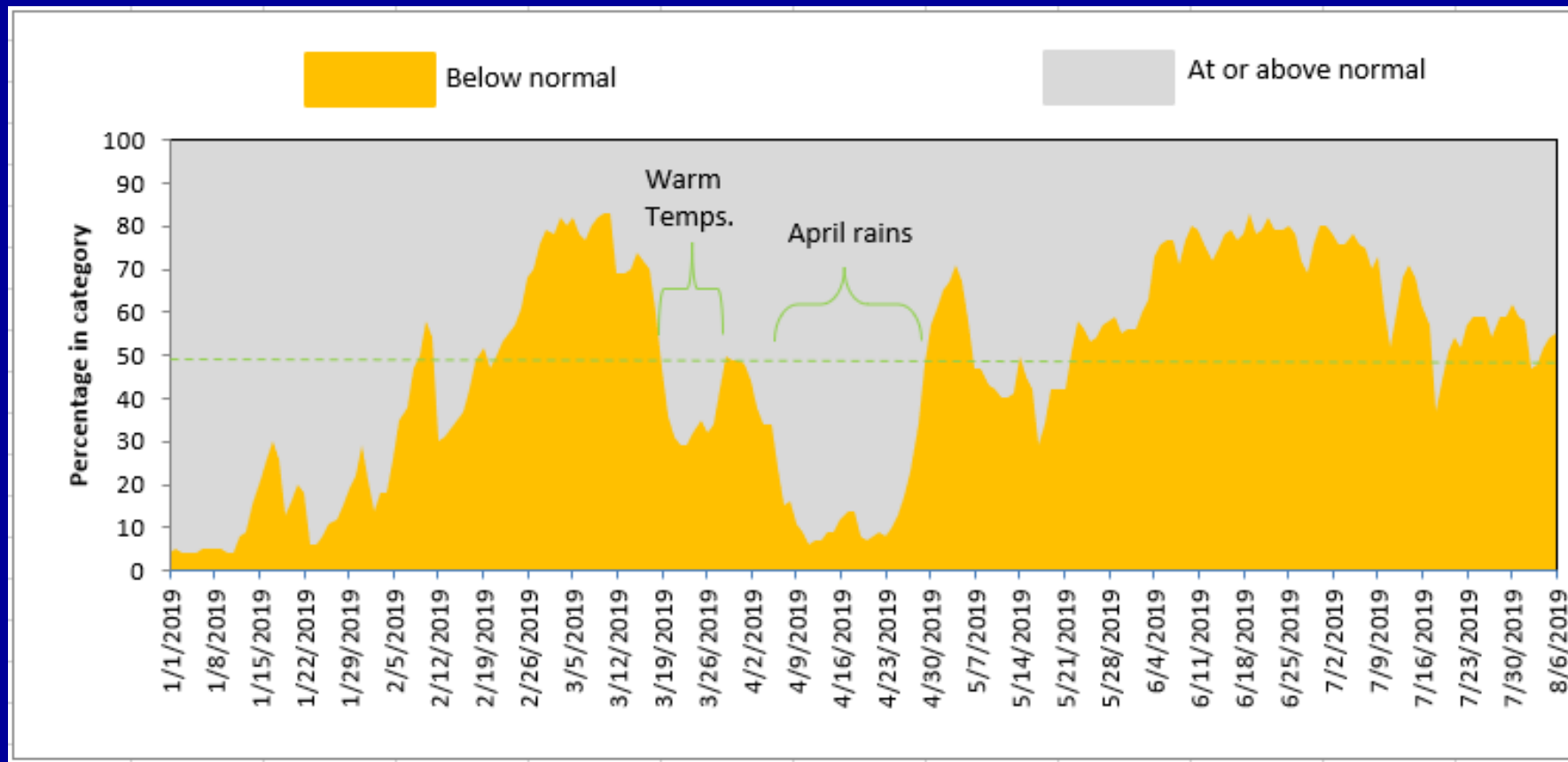
As of August 8, 2019, statewide 7-day average flows are about at the 5% percentile, near the border of Much Below Normal and Below Normal categories.

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 August 7, 2019)



# Daily streamflow in Washington Rivers compared to historical streamflow, January 01, 2019 – August 6, 2019

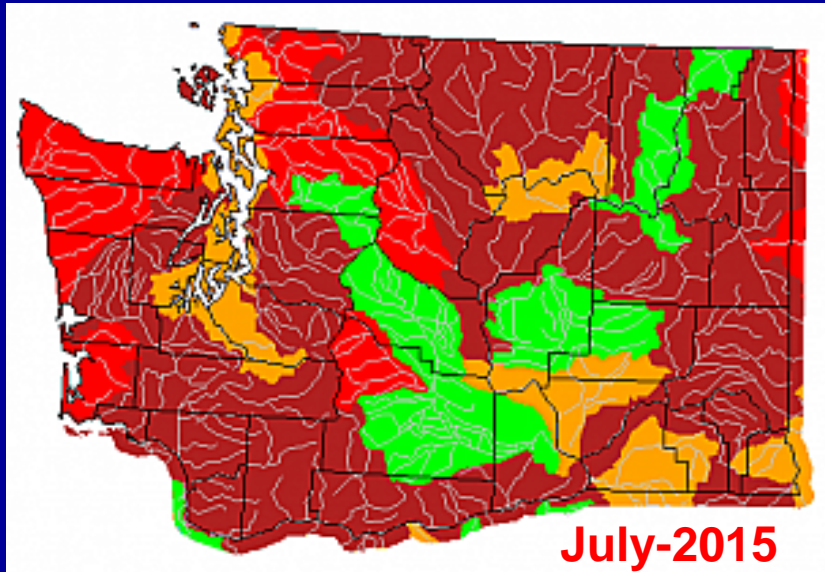


August 6<sup>th</sup> value (55% below normal) is less than the June 4<sup>th</sup> value (73%) that we showed last meeting

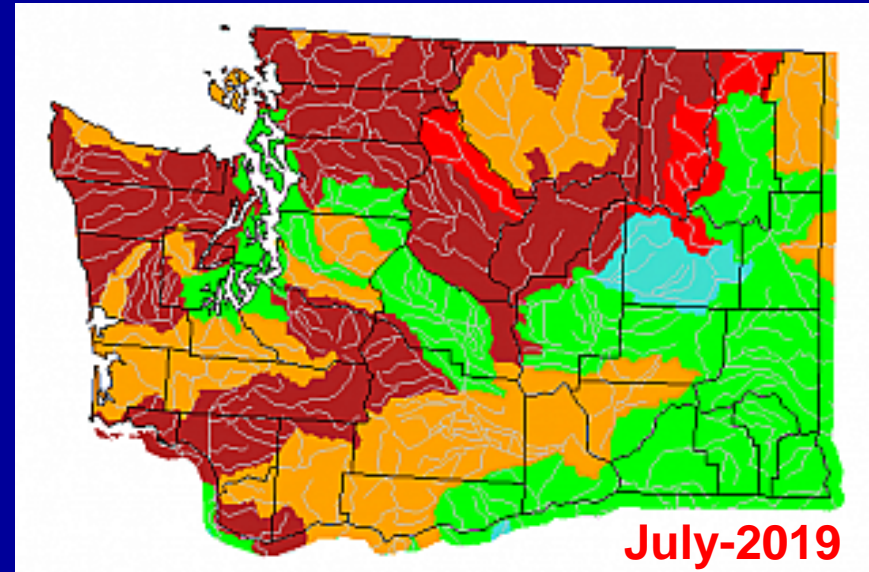
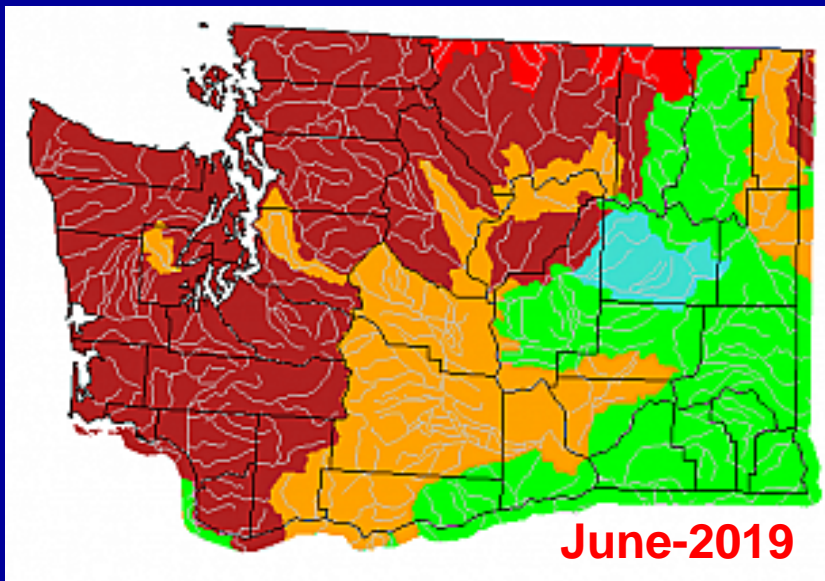


# July 2015 and June and July 2019

## 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

March 1, 2019 to August 8, 2019

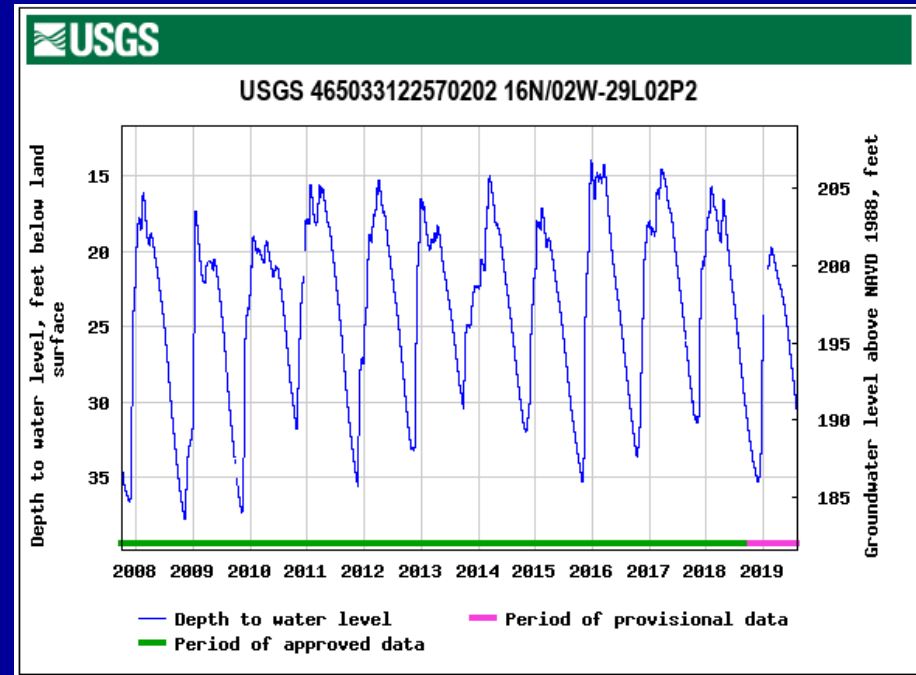
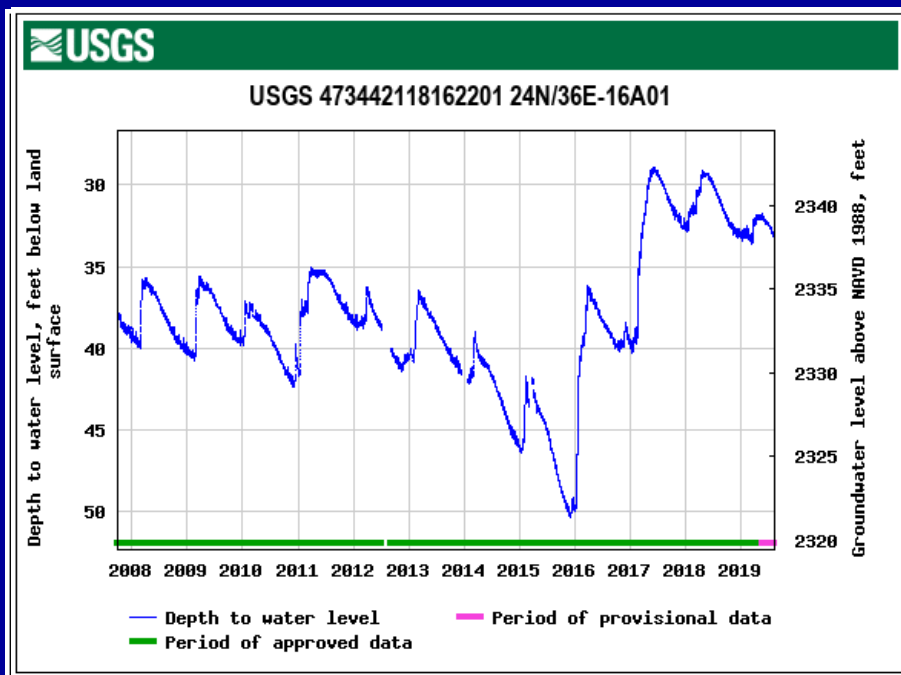
and Oct. 1, 2007 to August 8, 2019

## Davenport well

- 117-ft deep
- Wanapum Basalt

## Scatter Creek well

- 82-ft deep
- Sand and gravel



# Summary

## Streamflow and Groundwater Conditions as of August 7-8, 2019

- ✓ **7-day average streamflow** showed some improvement on the west side over the June 6<sup>th</sup> assessment—mostly in the categories of **Much below normal** to **normal**. East flank of Cascades are showing relatively less flow since June—mostly **Much Below Normal** to **Below Normal**. The Southeast portion of the state was mostly **Normal** to **Above normal** for this time of the year.
- ✓ As of August 6th, daily mean streamflow is at **Normal and Above** at 45 percent of the 152 reporting streamflow sites.
- ✓ **7-day average streamflow at eight index gaging stations:**
  - West side had four **Below Normal**, and one **Normal**
  - East side had a site in each of the categories, **Below Normal**, **Normal** and **Above Normal**.
- ✓ **Groundwater level** in the eastern Washington well showed a gradual drop over the last month, but is still above the long-term normal. The Scatter Creek well levels have been slowly dropping over the last couple of months and it is a bit lower than where it usually is this time of year.