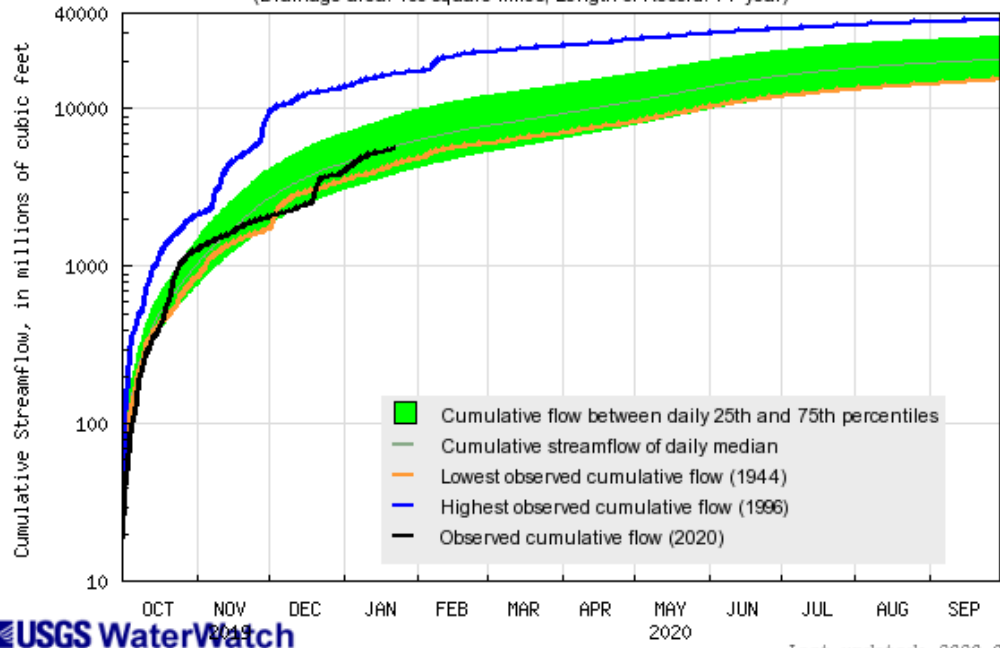


Streamflow Conditions in Washington State as of January 23, 2020

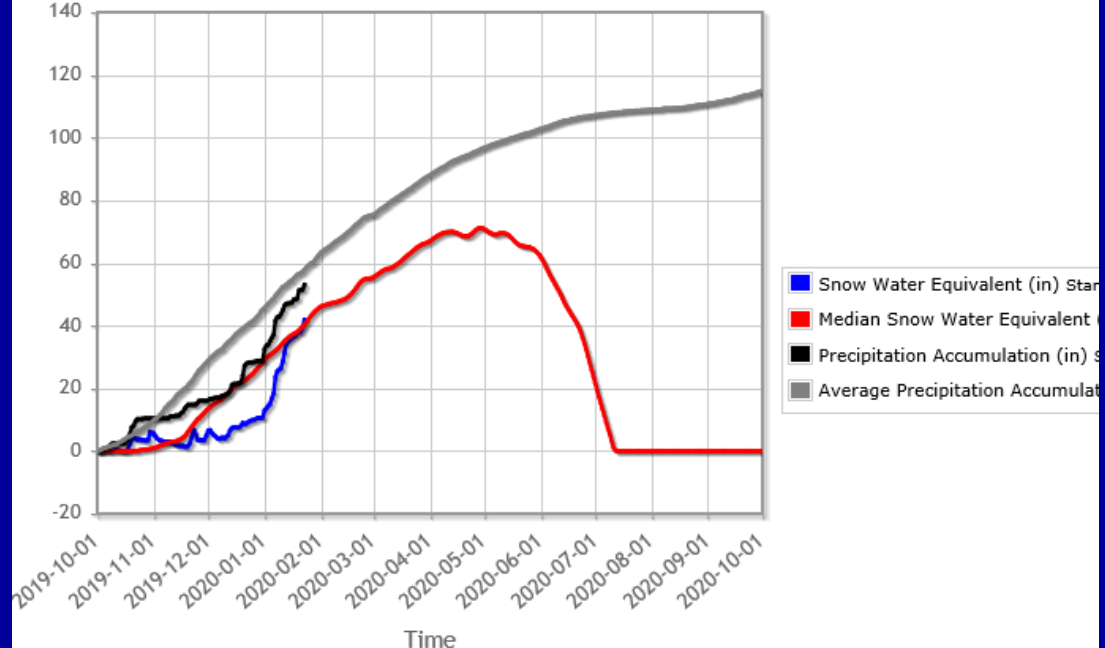
**Presented by Mark Mastin to the
Washington State
Water Supply Availability Committee
January 24, 2020**

USGS 12082500 NISQUALLY RIVER NEAR NATIONAL, WA
 (Drainage area: 133 square miles, Length of Record: 77 year)

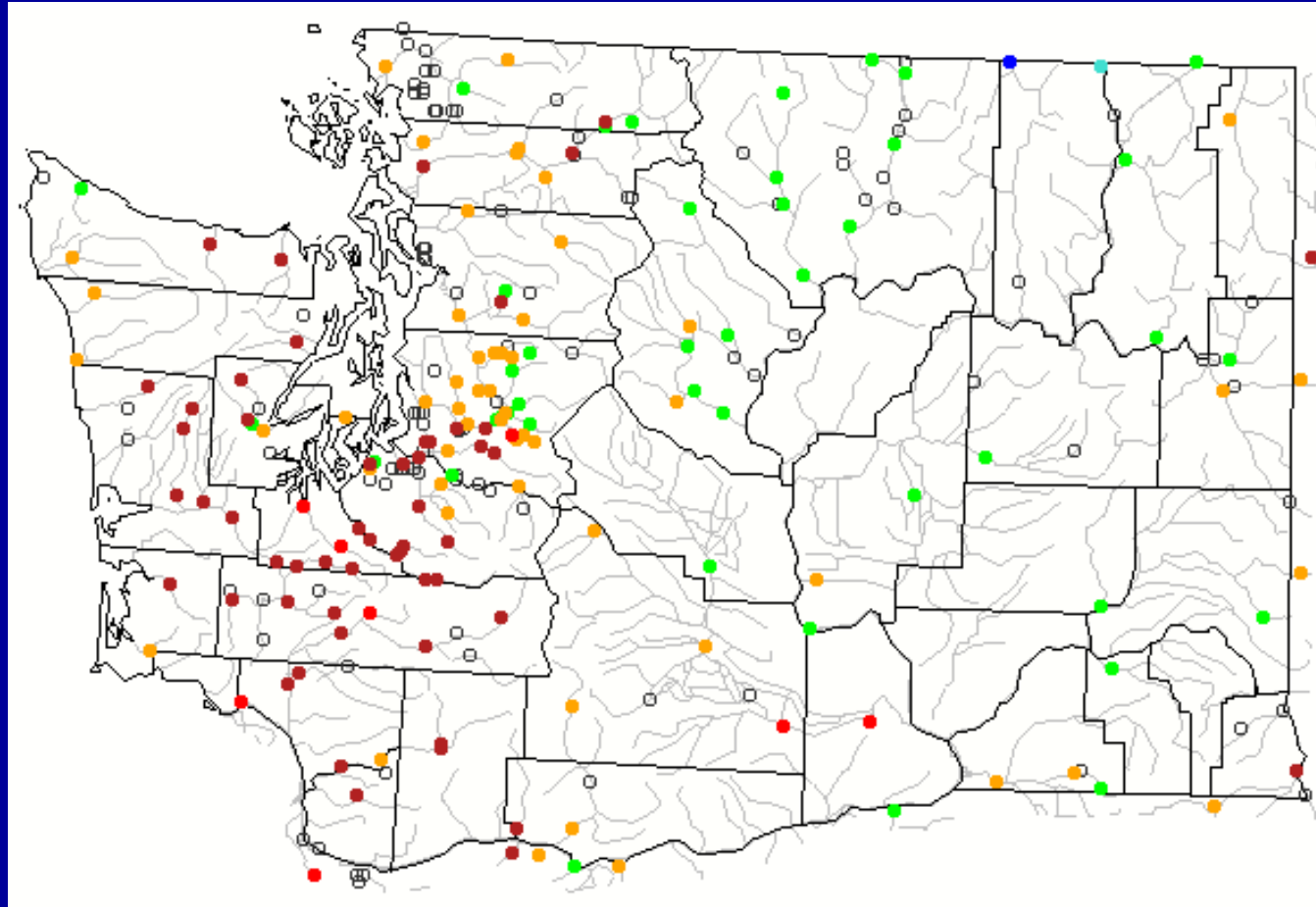


USGS WaterWatch









Paradise (679) Washington SNOTEL Site - 5130 ft
 Reporting Frequency: Daily; Date Range: 2019-10-01 to 2020-09-30



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

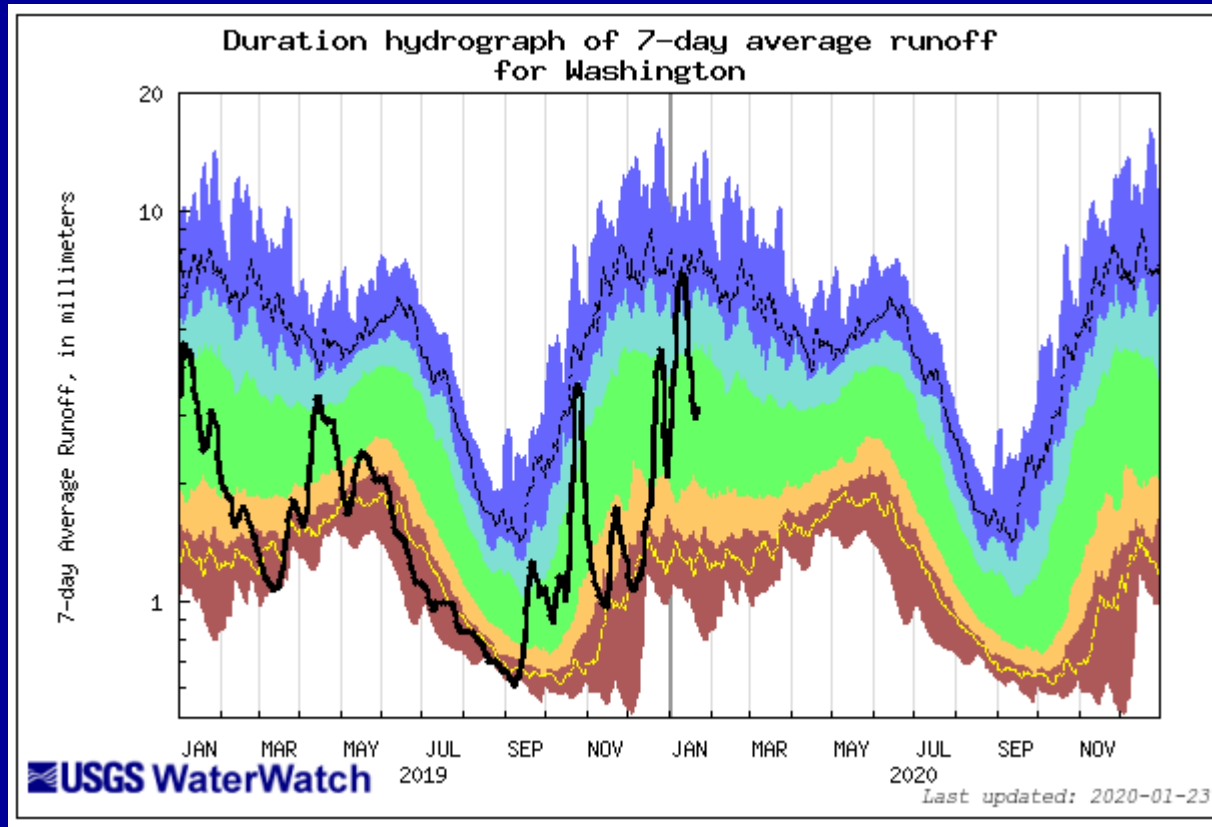


December 12, 2019
January 23, 2020

Explanation - Percentile classes							
							
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 (through December 11, 2019)

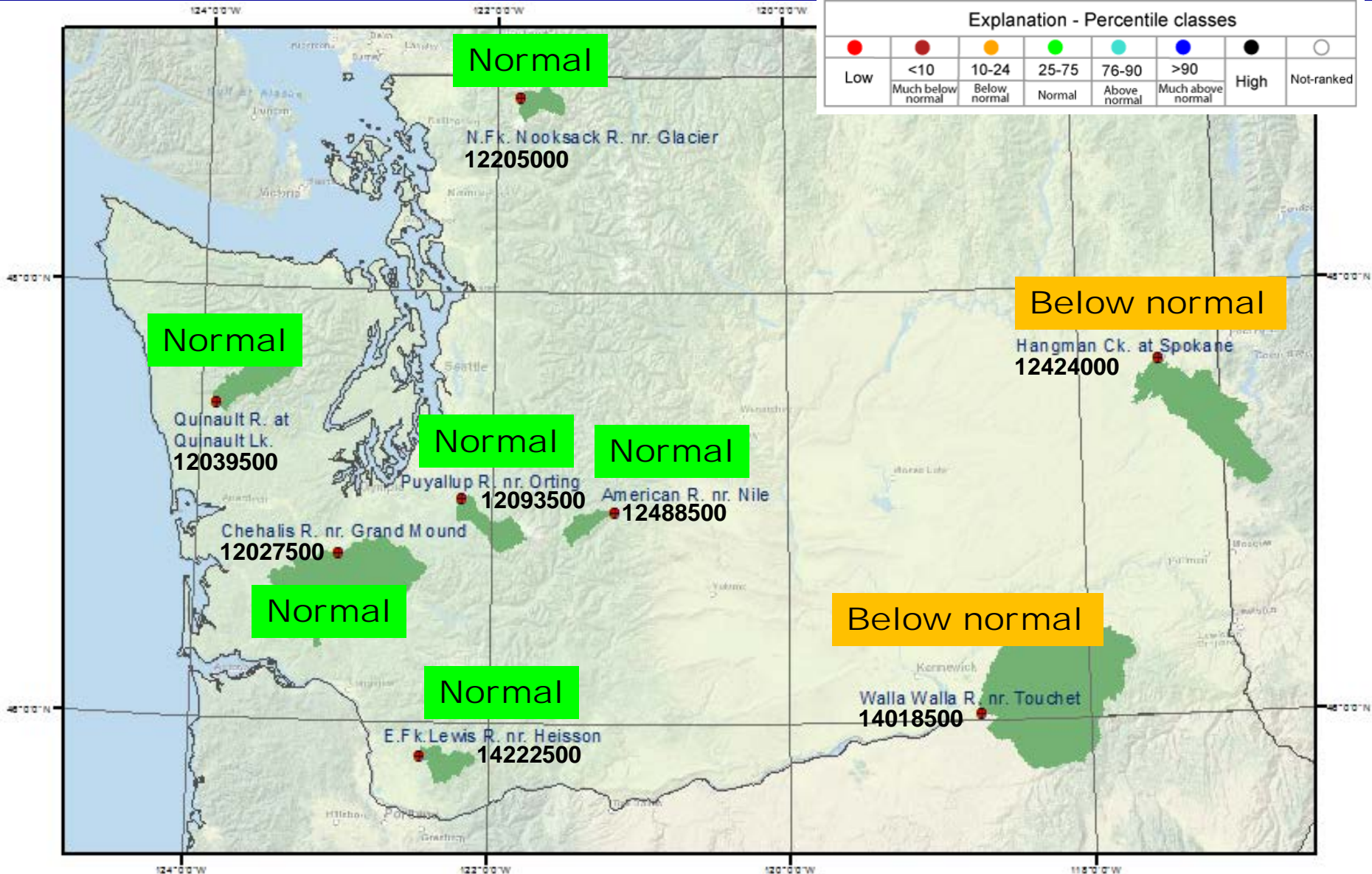


As of January 23, 2020, statewide 7-day average flows are normal

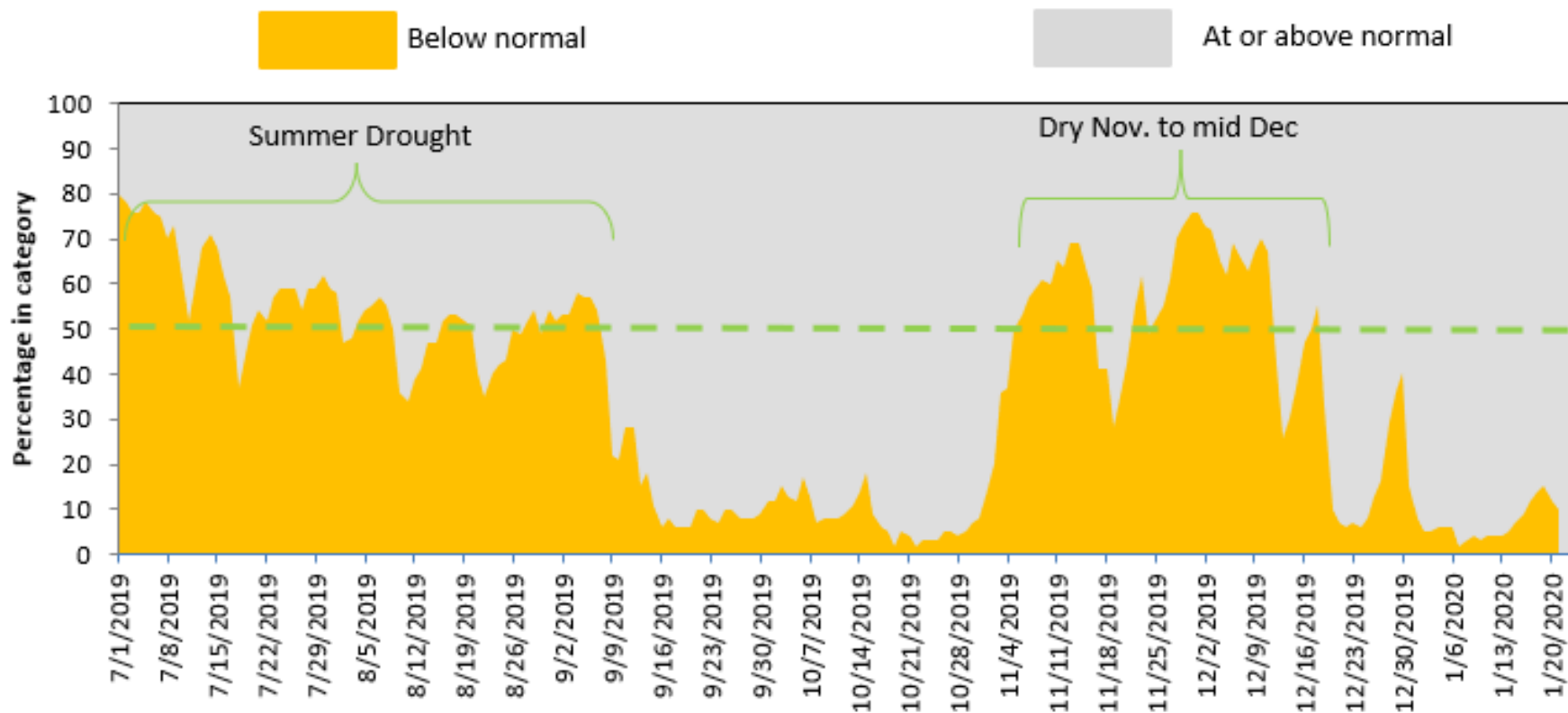
Explanation - Percentile classes						
lowest-10th percentile	5	10-24	25-75	76-90	95	90th percentile -highest
Much below Normal	Below normal	Normal	Above normal	Much above normal		Flow

Index Gaging Stations, 7-day average streamflow (as of January 22, 2020)

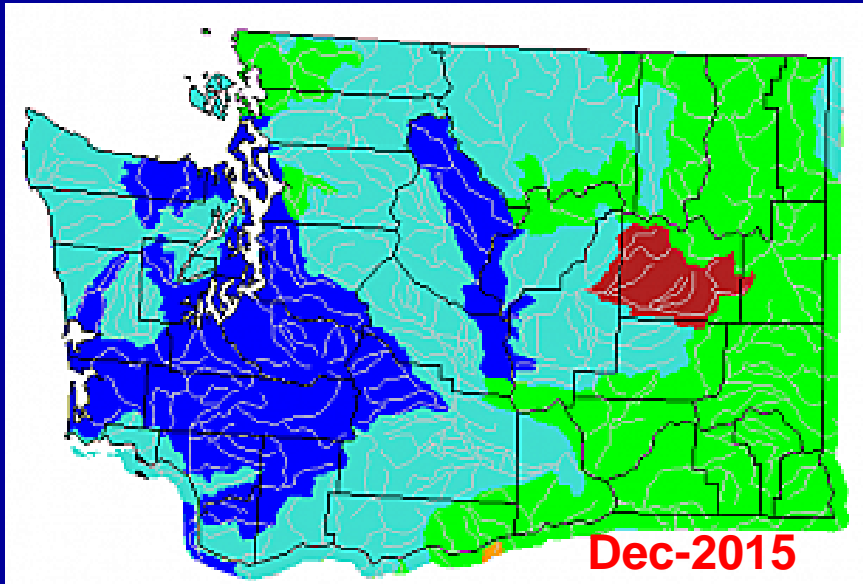
Explanation - Percentile classes							
●	●	●	●	●	●	●	○
Low	<10 Much below normal	10-24 Below normal	25-75 Normal	76-90 Above normal	>90 Much above normal	High	Not-ranked



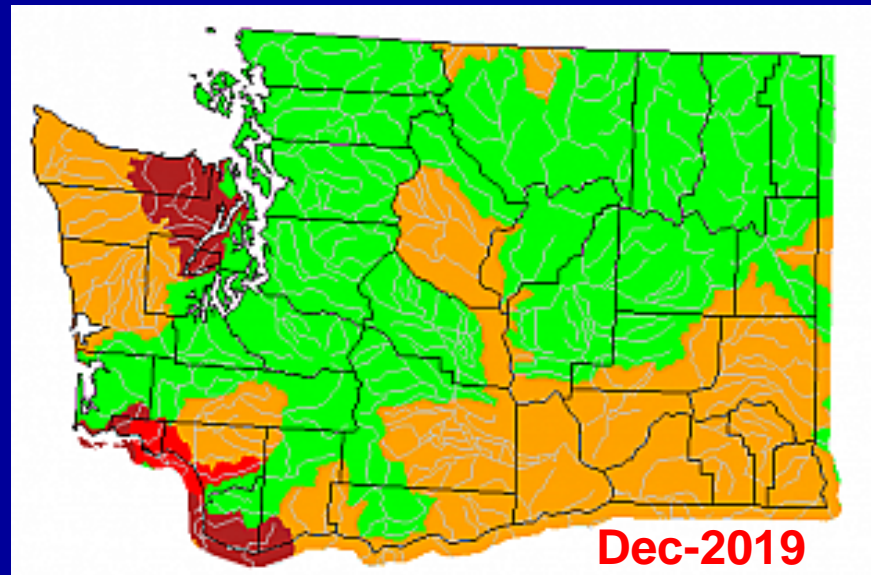
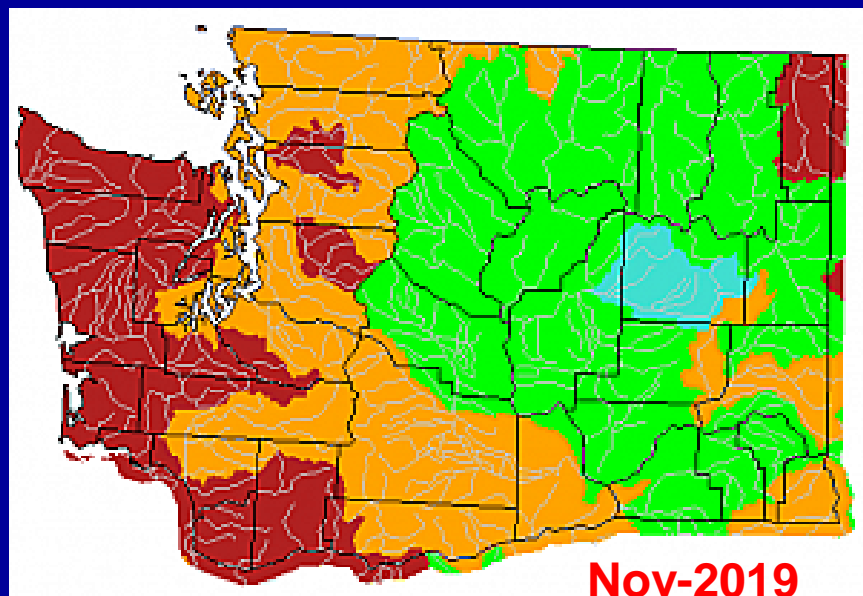
Daily streamflow in Washington Rivers compared to historical streamflow, July 01, 2019 – Jan. 22, 2020



December 2015 and November-December 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

January 1, 2020 to January 23, 2020

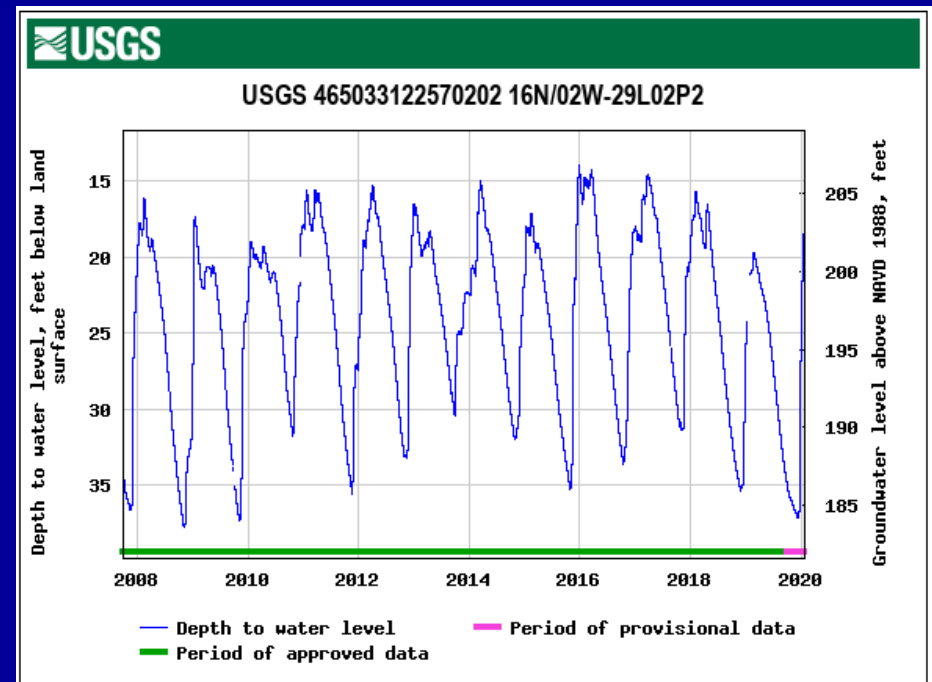
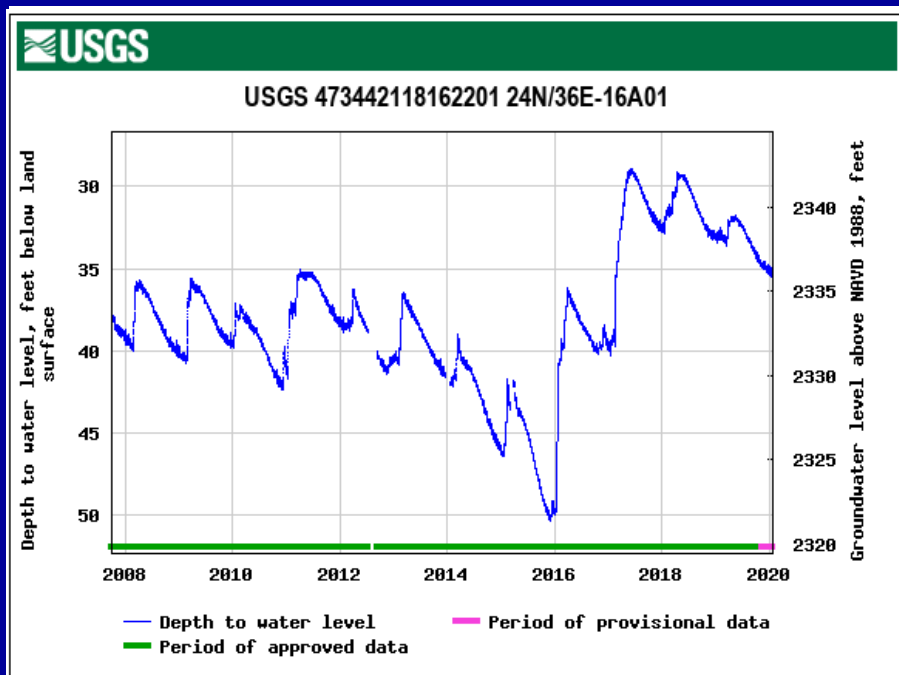
and Oct. 1, 2007 to January 23, 2020

Davenport well

- 117-ft deep
- Wanapum Basalt

Scatter Creek well

- 82-ft deep
- Sand and gravel



Summary

Streamflow and Groundwater Conditions as of January 22-23, 2020

- ✓ **7-day average streamflow** showed mostly **Normal** conditions throughout the State with some **Below Normal** conditions in the south-central and south-eastern parts of the State.
- ✓ As of January 21, daily mean streamflow is at **Normal and Above** at only 90 percent of the 147 reporting streamflow sites (In December it was 32 percent).
- ✓ **7-day average streamflow at eight index gaging stations:**
 - West side: all five sites are **Normal**
 - East side: American R. that drains the Cascade Mts. is **Normal** and the other two sites are **Below Normal**.
- ✓ **Groundwater level** in the eastern Washington well showed an up and down pattern over the last month, but is still above the long-term normal. The Scatter Creek well levels showed a large response to the rains this month and the water levels have mostly recover from a near-record low this water year.