

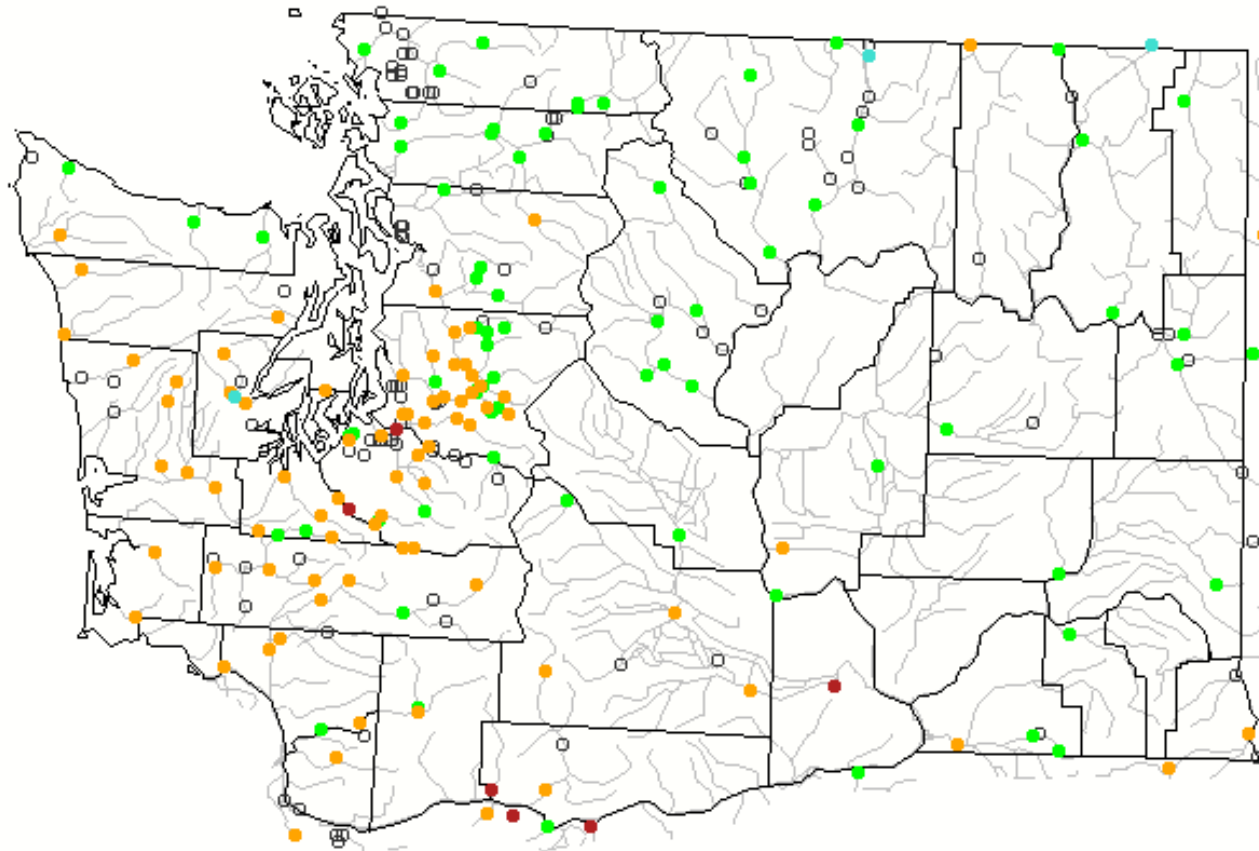
Streamflow Conditions in Washington State as of December 7-9, 2020

**Presented
to
The Washington State
Water Supply Availability Committee
on
December 11, 2020**

**by
Dan Restivo,
Acting Surface Water Specialist**

7-day Average Streamflow

Tuesday, December 08, 2020

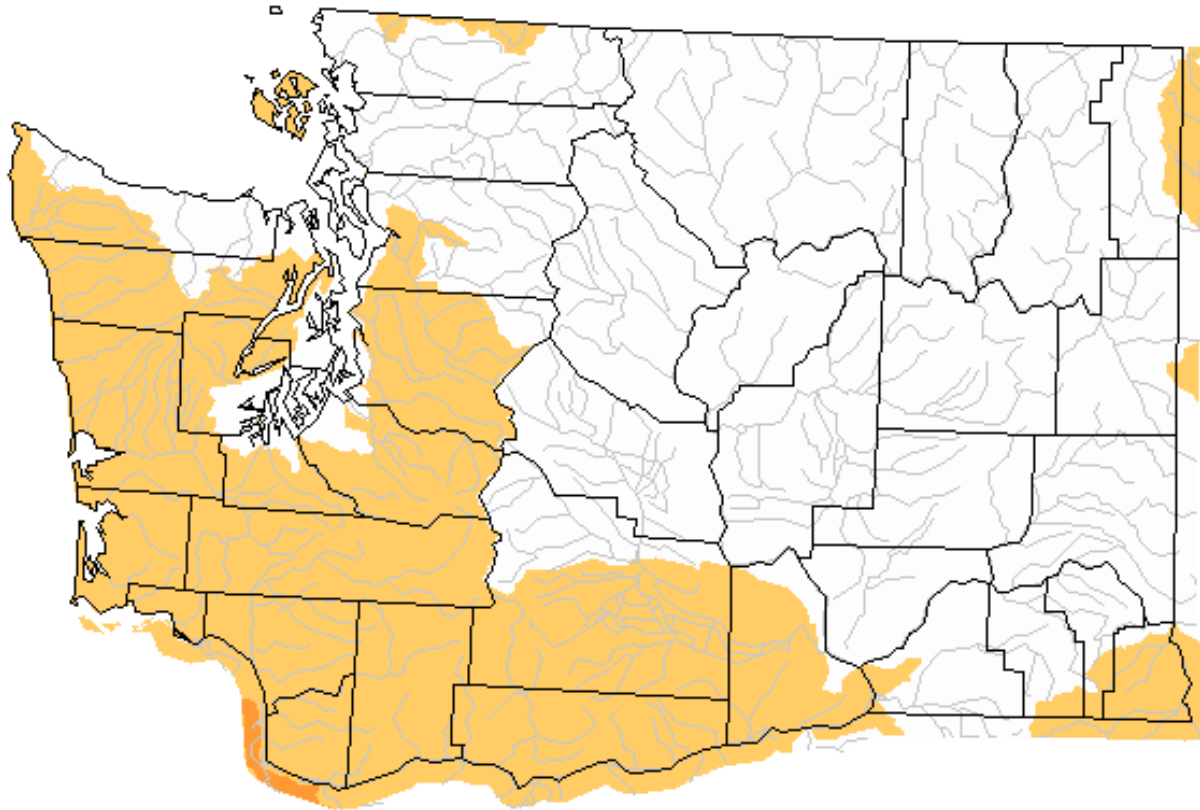


Explanation - Percentile classes

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

Below Normal 7-day Average Streamflow

Tuesday, December 08, 2020

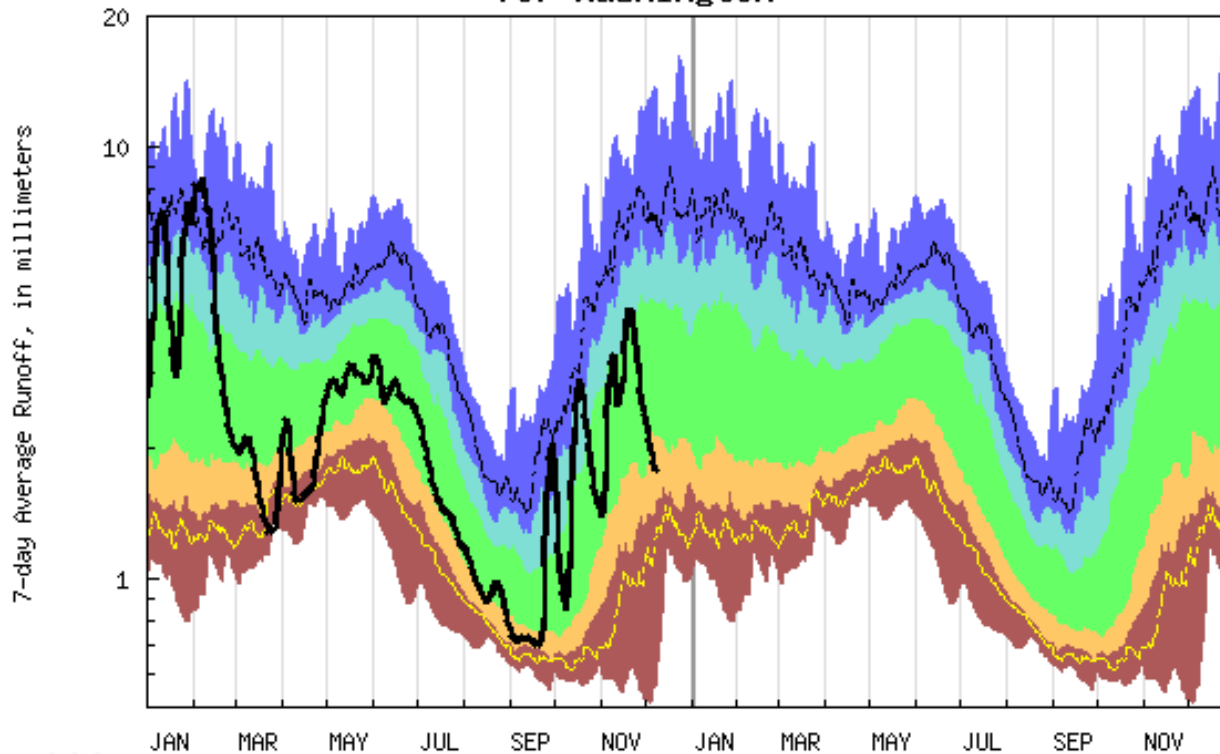


Explanation - Percentile classes			
Low	<=5	6-9	10-24
Extreme hydrologic drought	Severe hydrologic drought	Moderate hydrologic drought	Below normal

Duration Hydrograph, Washington State

7-day Average Streamflow (as of December 9, 2020)

Duration hydrograph of 7-day average runoff for Washington



USGS WaterWatch

2020

2021

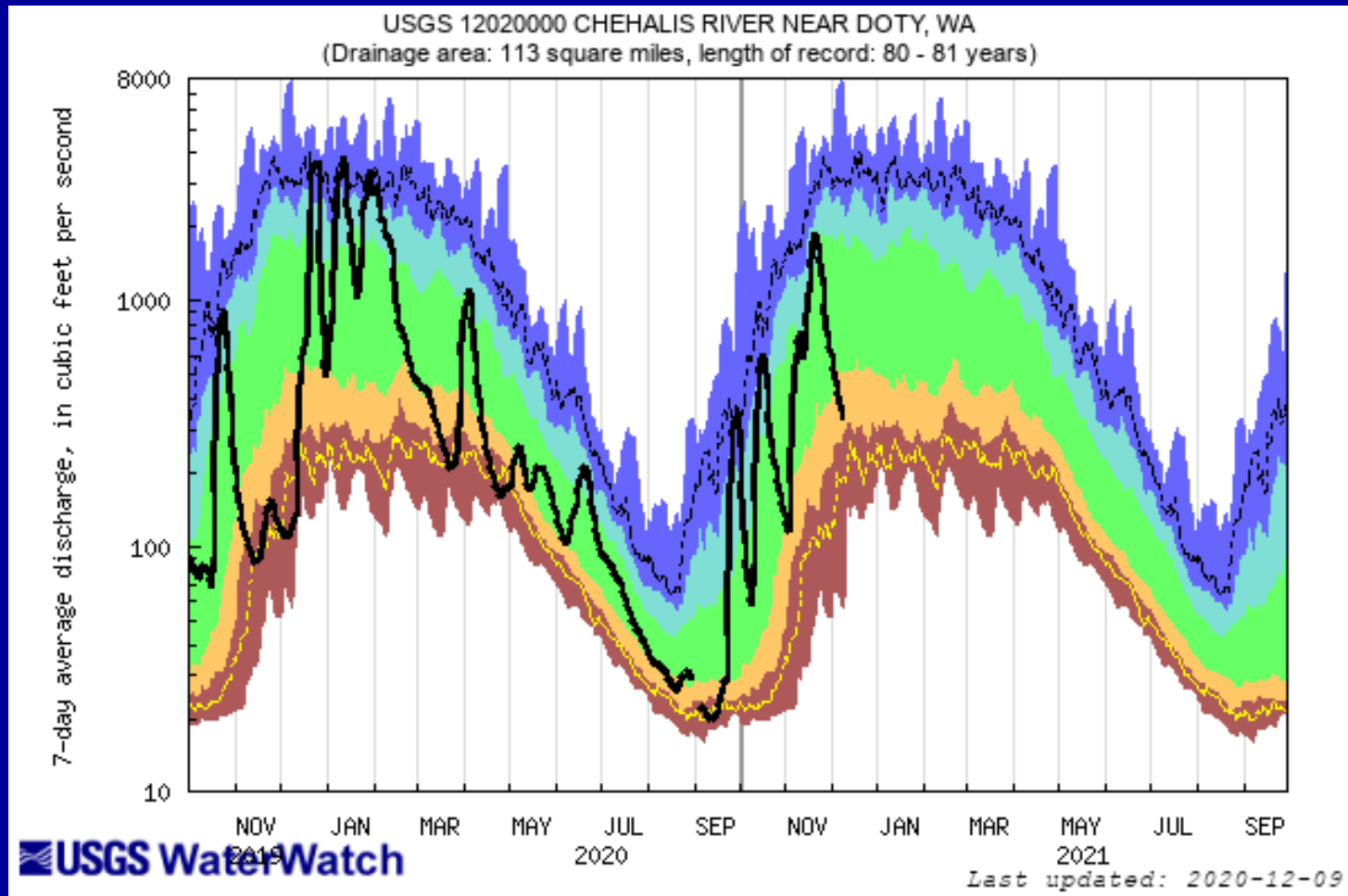
Last updated: 2020-12-09

As of December 9, 2020, statewide 7-day average flows are between the 10th and 24th percentile, which is below normal.

Explanation - Percentile classes

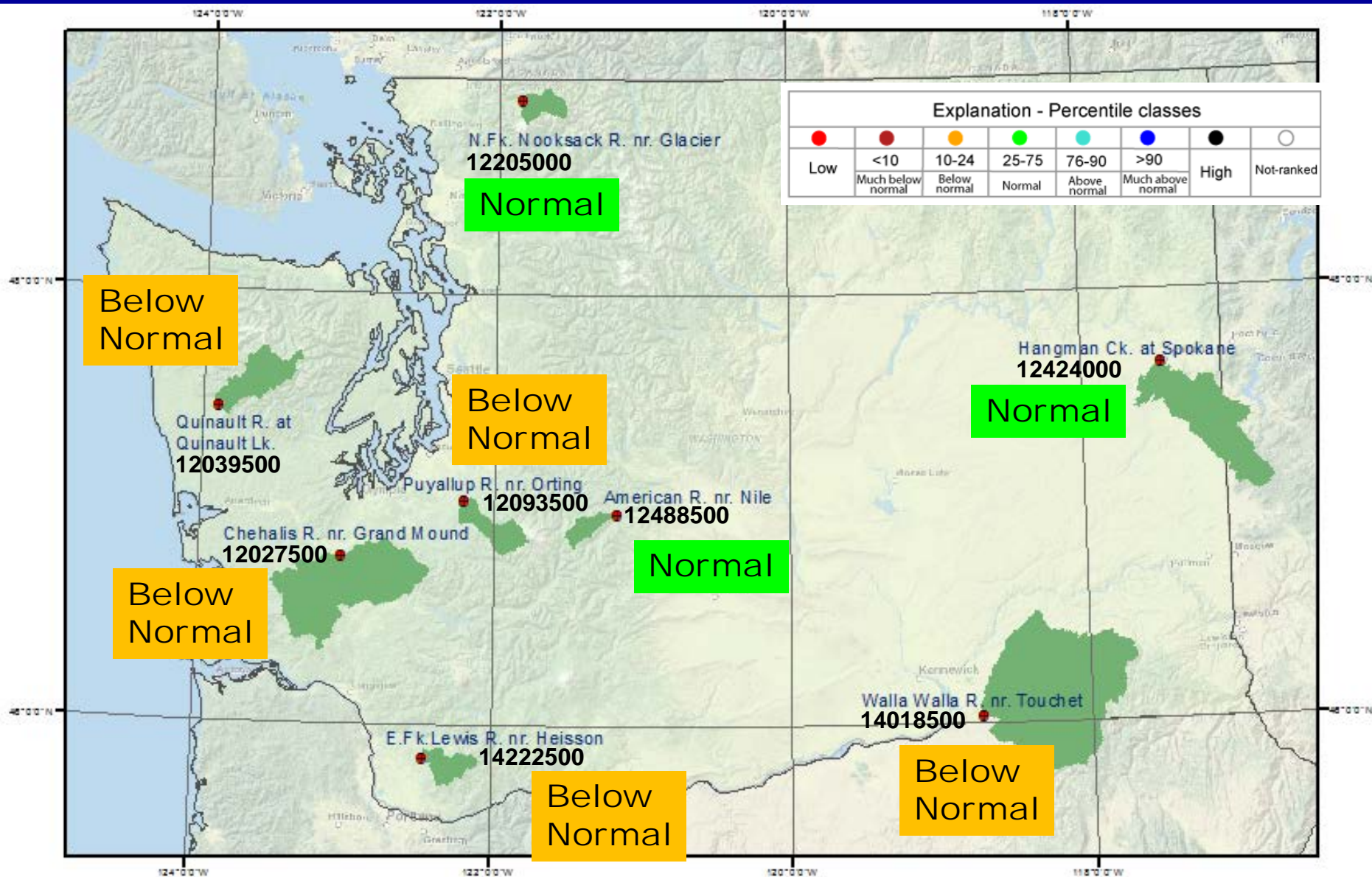
lowest-10th percentile	5	10-24	25-75	76-90	95	90th percentile-highest
Much below Normal	Below normal	Normal	Above normal	Much above normal		Flow

Chehalis River near Doty

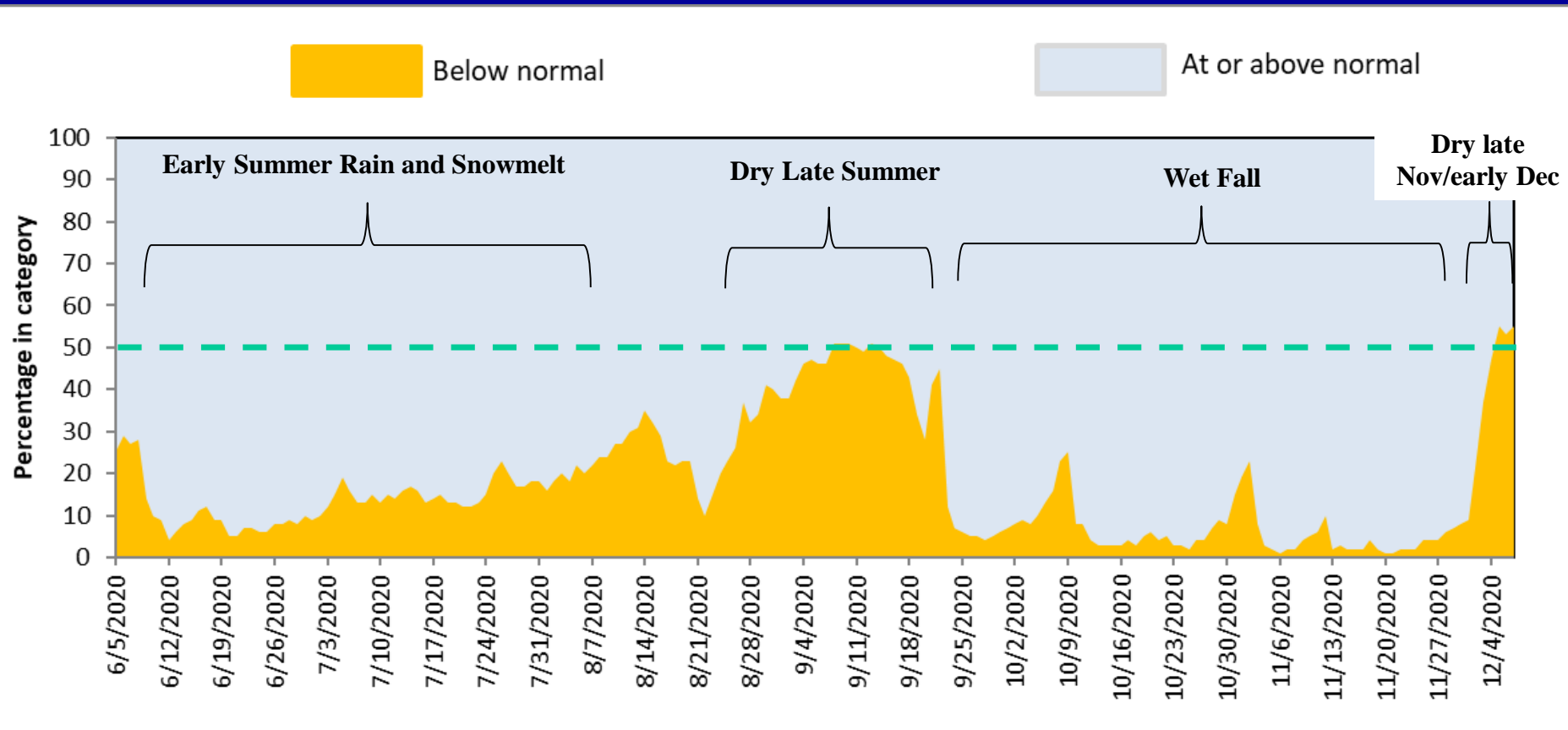


Explanation - Percentile classes						
lowest-10th percentile	5	10-24	25-75	76-90	95	90th percentile -highest
Much below Normal	Below normal	Normal	Above normal	Much above normal		Flow

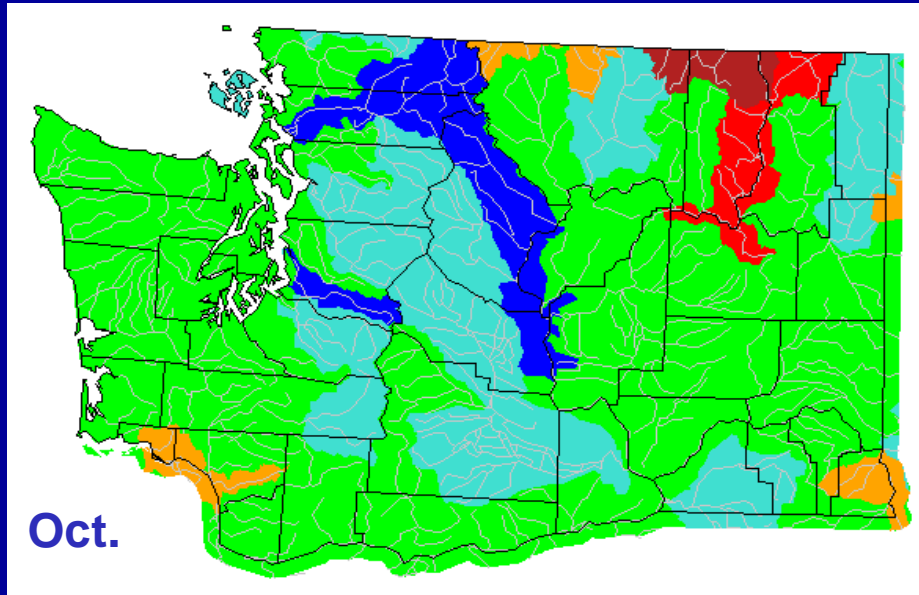
Index Gaging Stations, 7-day average streamflow (as of December 8, 2020)



Daily streamflow in Washington Rivers compared to historical streamflow on that date, June 5 – Dec. 7, 2020

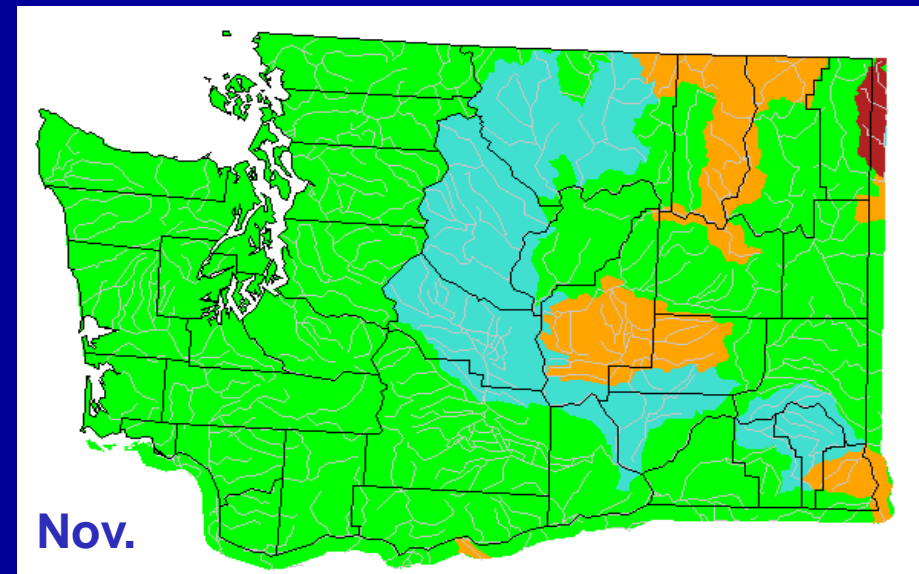


Average Oct. and Nov. 2020 Streamflow



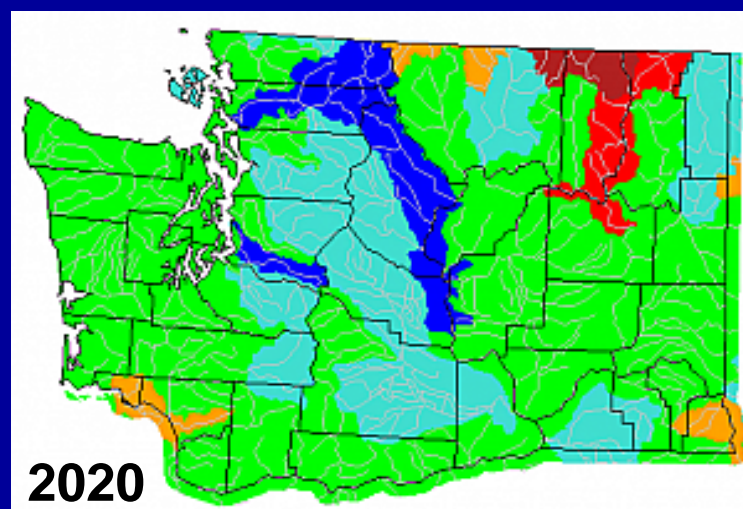
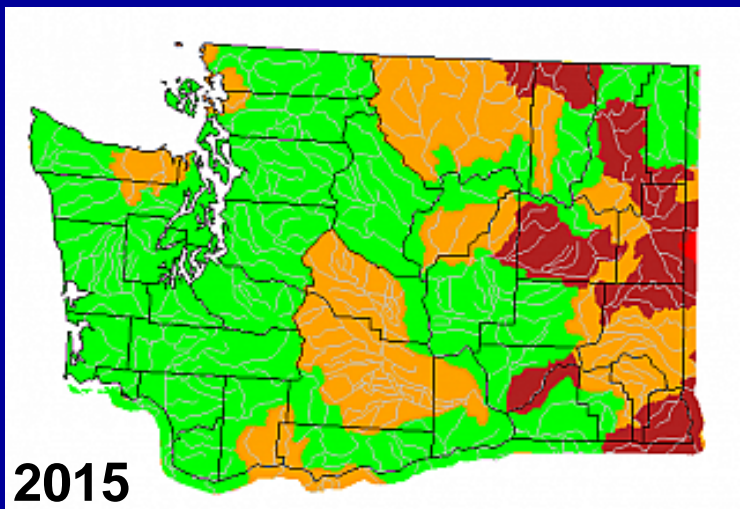
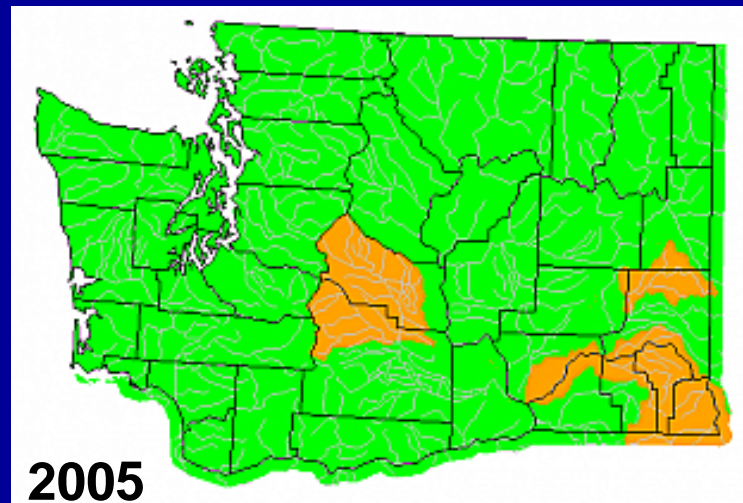
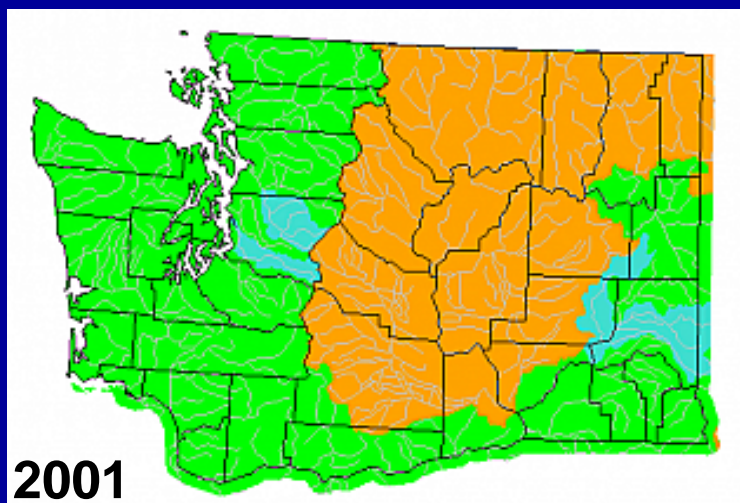
Explanation - Percentile classes

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



Average Oct. 2001, '05, '15 & '20 Streamflow

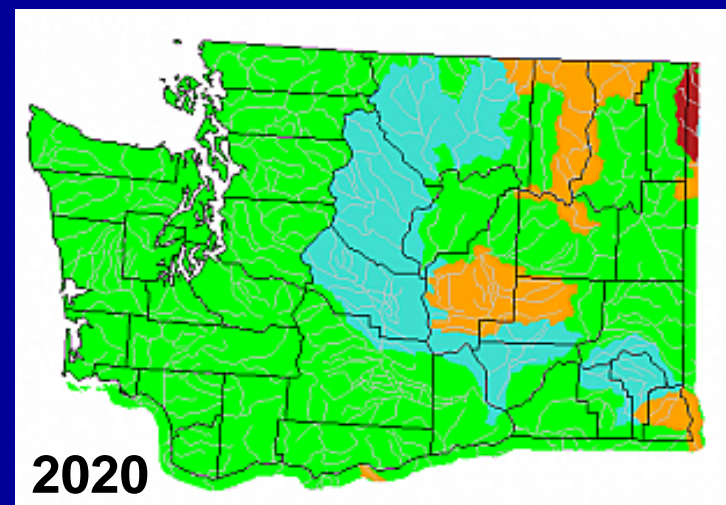
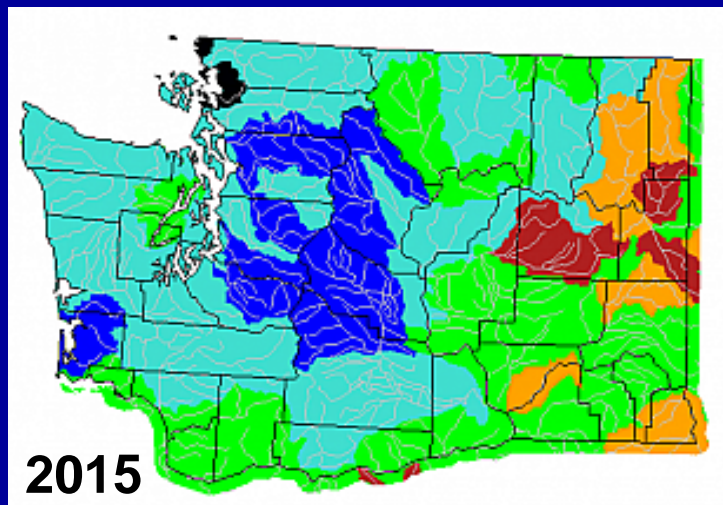
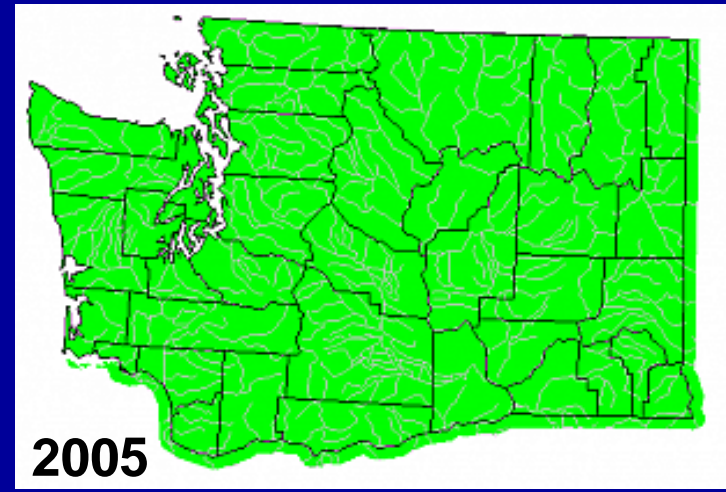
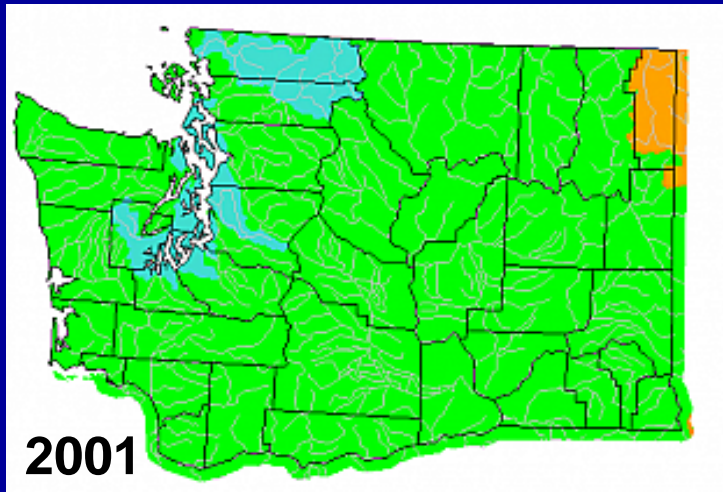
(2001, '05 & '15 were years of statewide drought in Washington)



Explanation - Percentile classes

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

Average Nov. 2001, '05, '15 & '20 Streamflow (2001, '05 & '15 were years of statewide drought in Washington)



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 as of Dec. 8, 2020

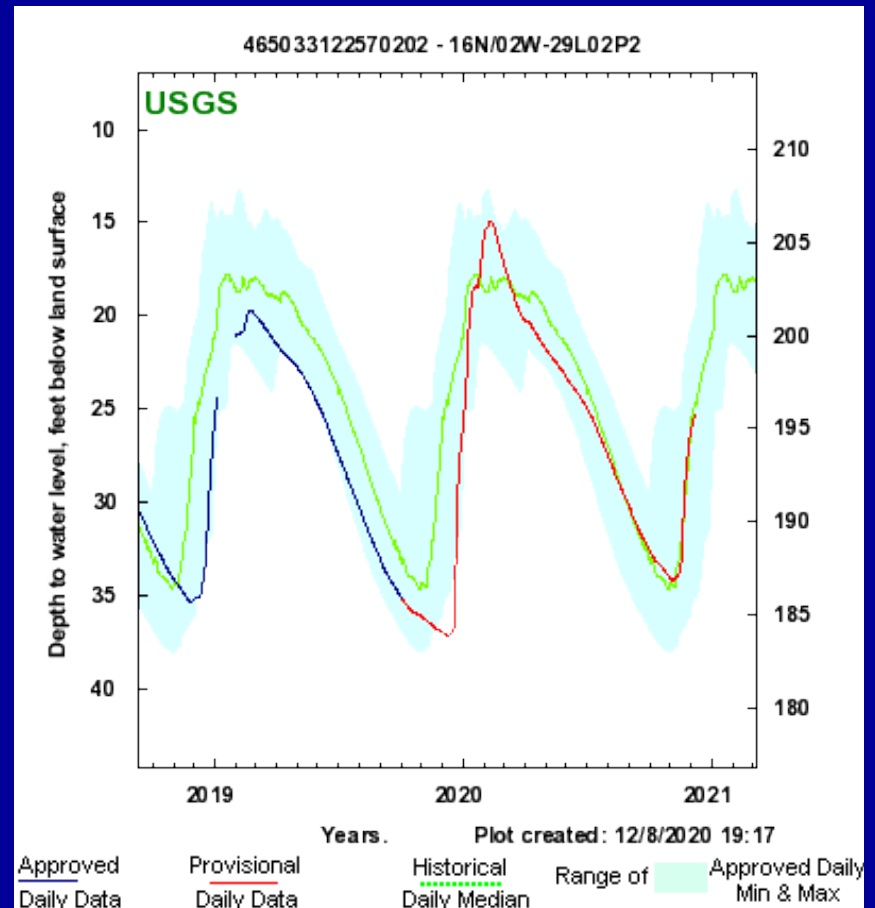
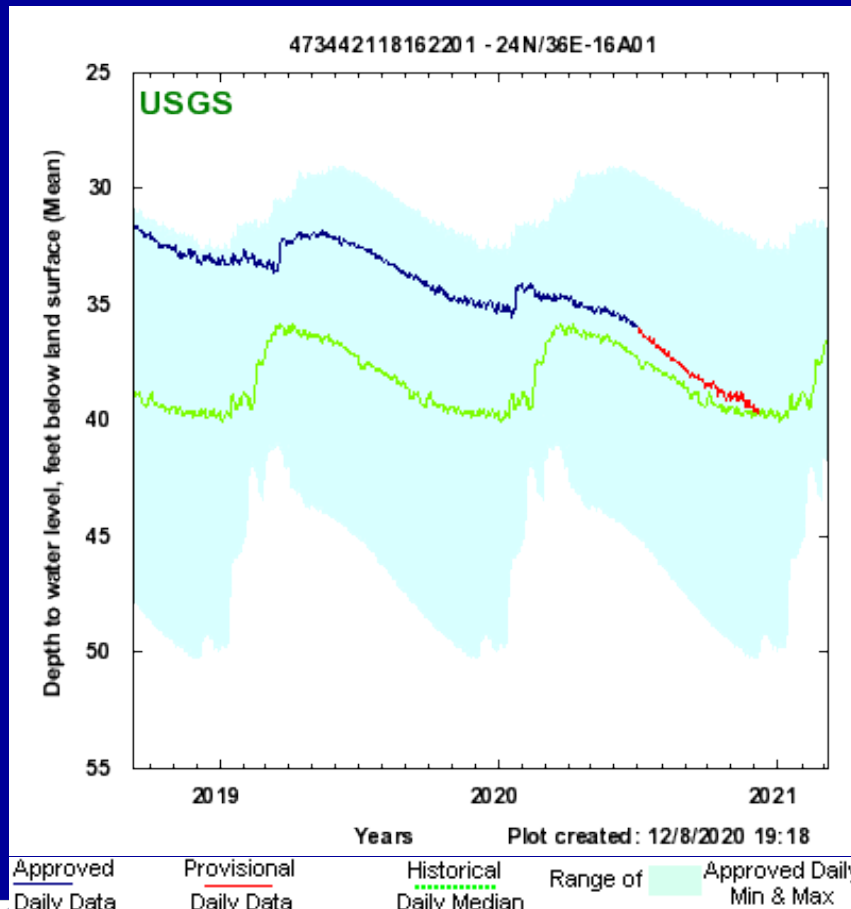
Groundwater Watch:

Davenport well (east)

- 117-ft deep
- Wanapum Basalt

Scatter Creek well (west)

- 82-ft deep
- Sand and gravel



Summary

Streamflow Conditions as of December 7-9, 2020

- ✓ Chehalis River near Doty, which serves to inform on Ryderwood's water supply, is below normal (comparable to last year in early December).
- ✓ 7-day average streamflow statewide is Below Normal (between the 10th and 24th percentile), though this is recent. Most of water year 2021 has been Normal.
- ✓ Daily mean streamflow is Below Normal at 55% of stations (Dec. 7, 2020)
- ✓ 7-day average streamflow at eight index gaging stations:
 - West side: Four sites are Below Normal, and one site is Normal.
 - East side: Two sites are Normal, and one is Below Normal.
 - South and Southwest WA most affected by recent dry period.
- ✓ The index groundwater well levels showed both the Davenport (east) and Scatter Creek (west) wells are right at the historical daily median for this time of the year.