



Water Supply Conditions Update Columbia Policy Advisory Group

Jeff Marti

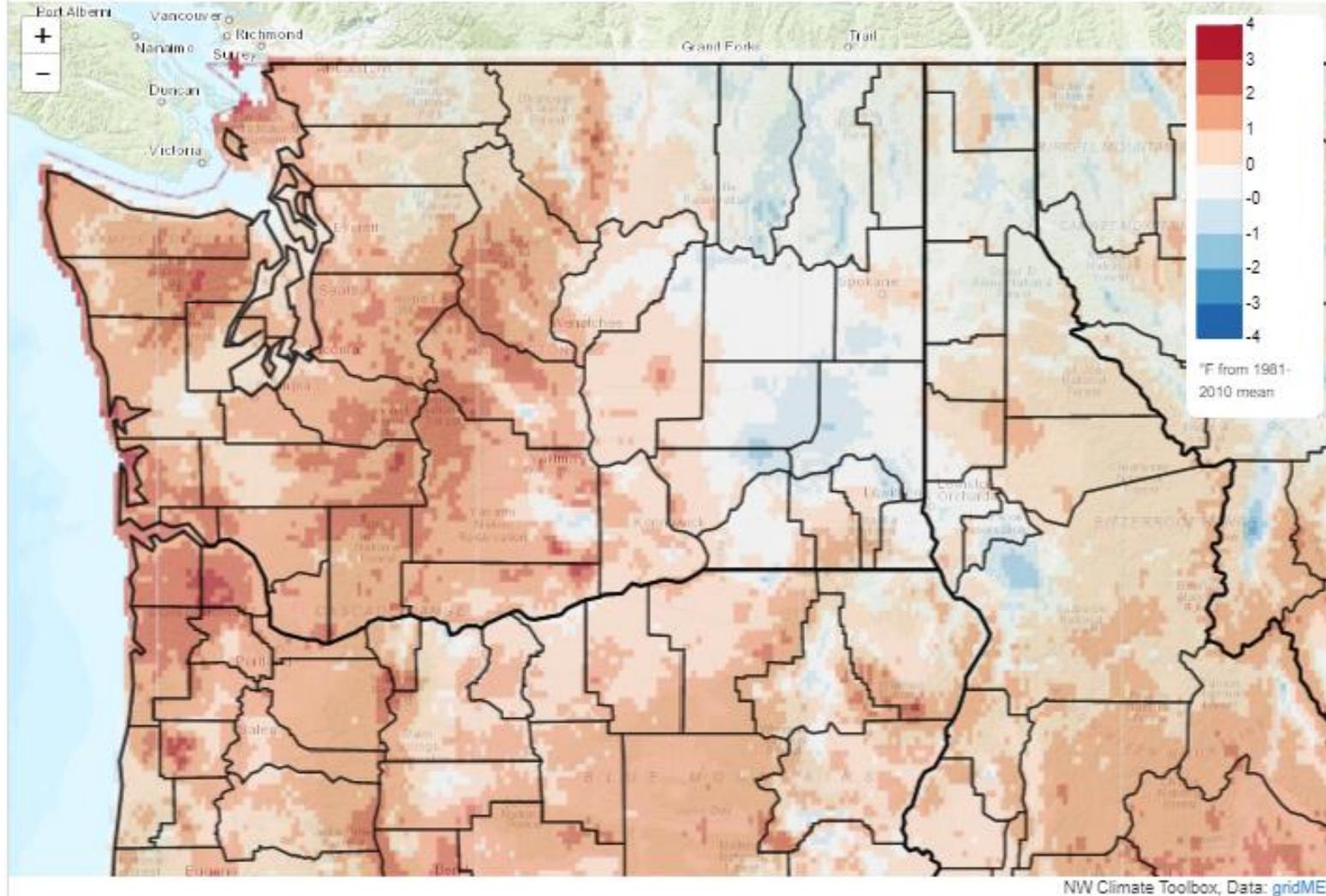
Washington Department of Ecology

June 03, 2020



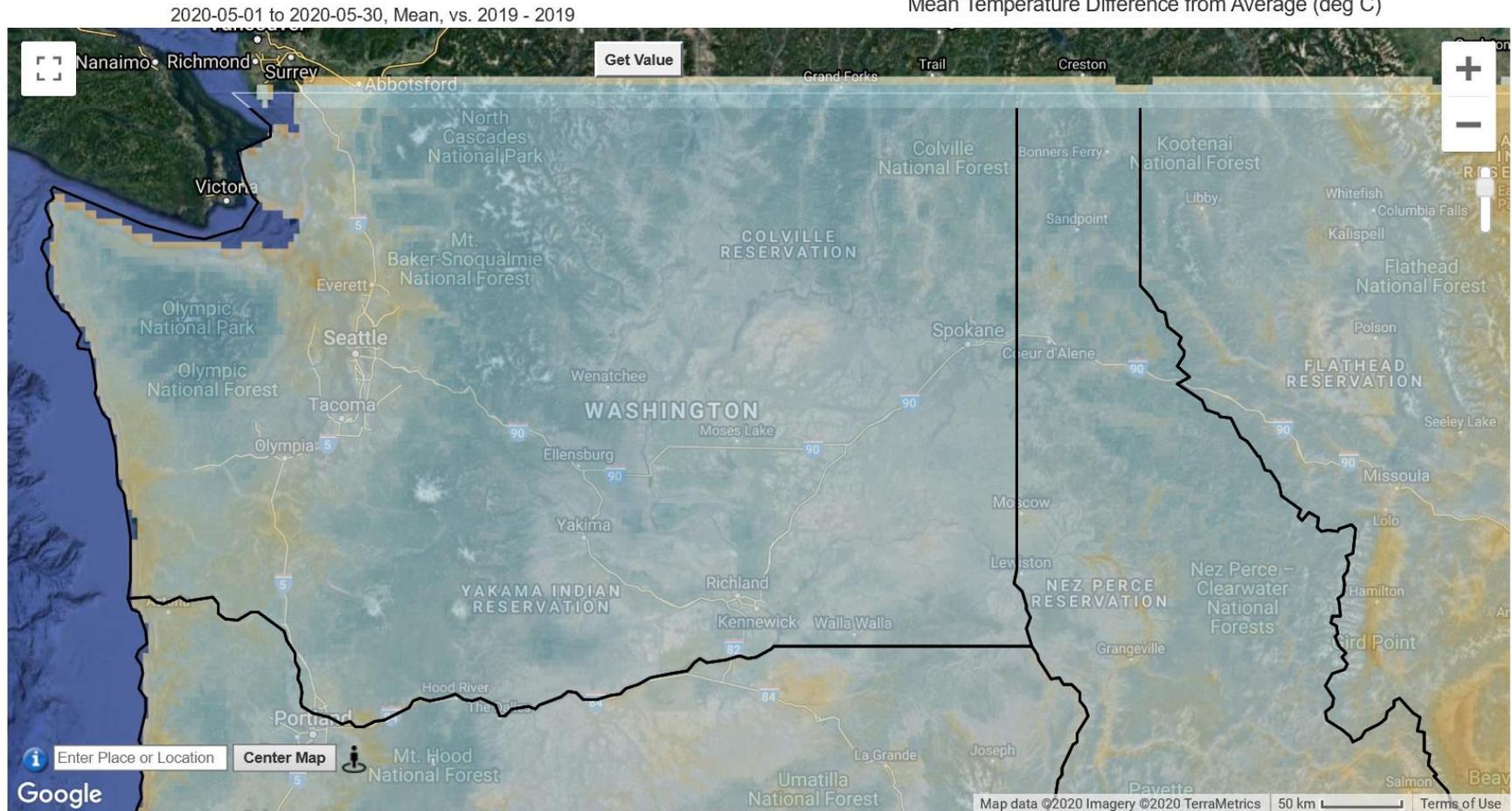
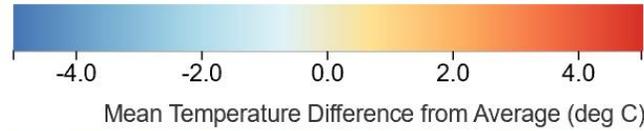
Mean Daily Temperature Anomaly, Last 30 Days

2020/05/03 - 2020/06/01



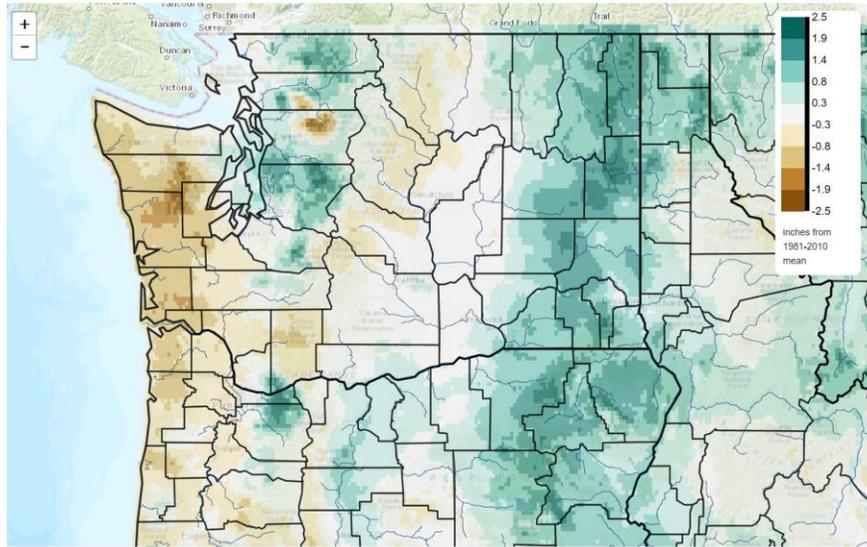
Compare to Last Year, we are cooler (temperature, not personality)

Mean Temperature Difference from Average
(gridMET)



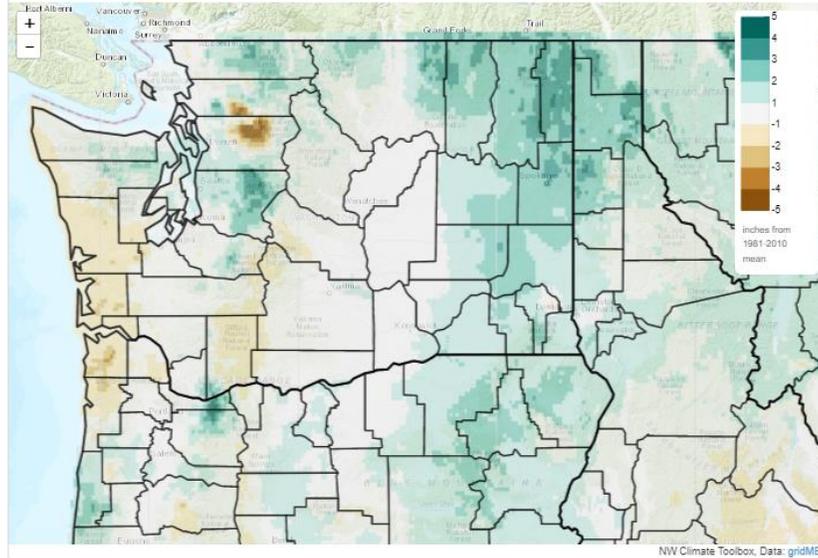
Total Precipitation Anomaly, Last 15 Days

2020/05/18 - 2020/06/01



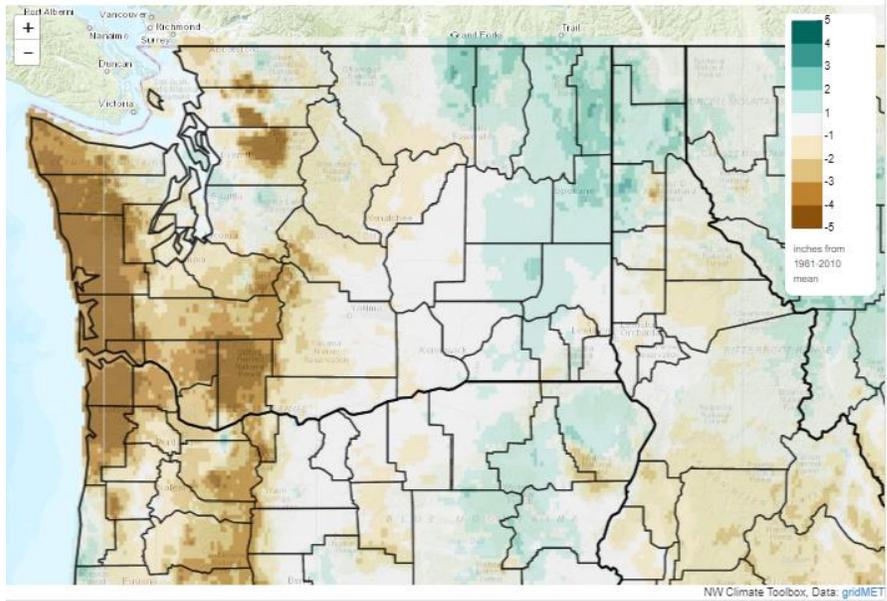
Total Precipitation Anomaly, Last 30 Days

2020/05/03 - 2020/06/01



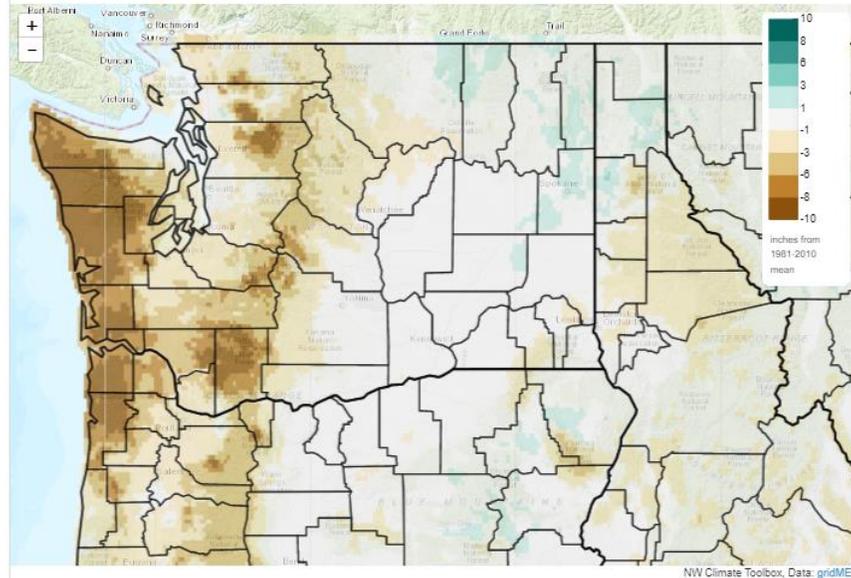
Total Precipitation Anomaly, Last 60 Days

2020/04/03 - 2020/06/01



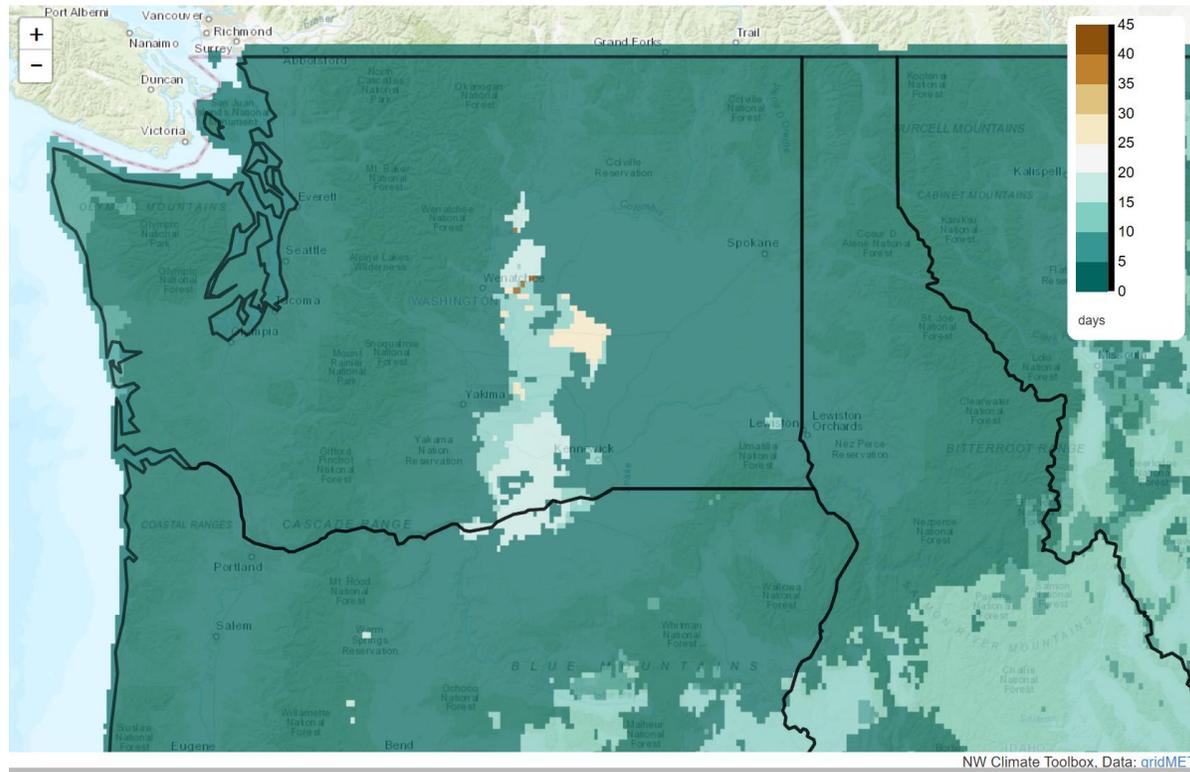
Total Precipitation Anomaly, Last 90 Days

2020/03/04 - 2020/06/01



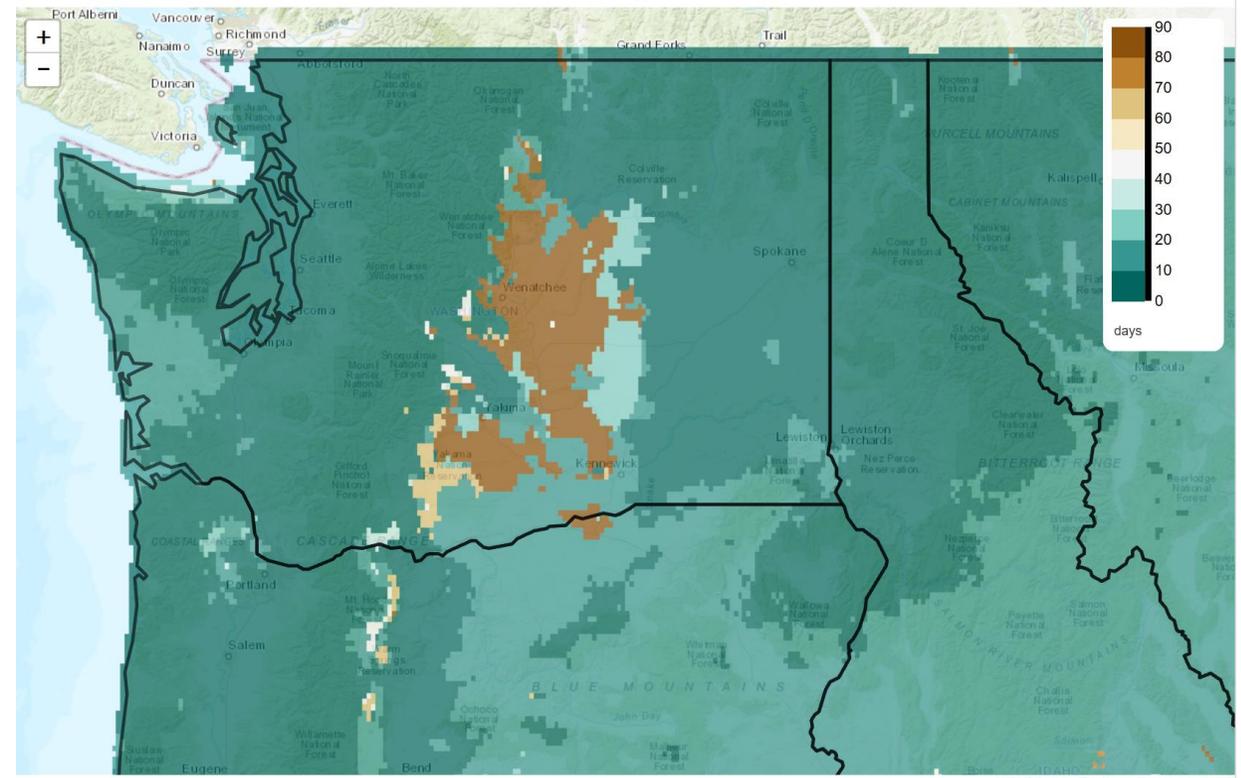
Days Since Precipitation $\geq 0.1"$ (days)

2020/06/01



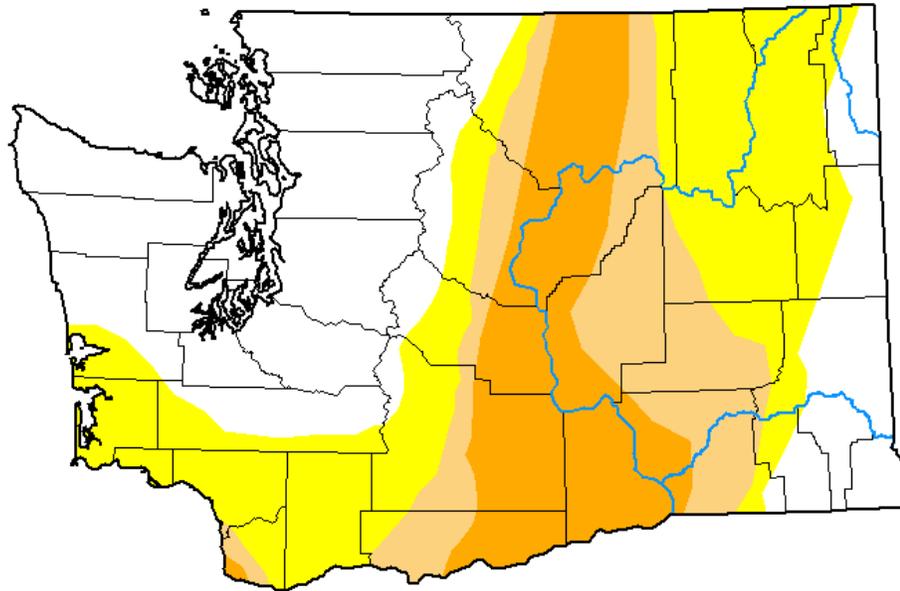
Days Since Precipitation $\geq 0.25"$ (days)

2020/06/01



U.S. Drought Monitor
Washington

May 26, 2020
(Released Thursday, May. 28, 2020)
Valid 8 a.m. EDT



Intensity:

-  None
-  D0 Abnormally Dry
-  D1 Moderate Drought
-  D2 Severe Drought
-  D3 Extreme Drought
-  D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to <https://droughtmonitor.unl.edu/About.aspx>

Author:

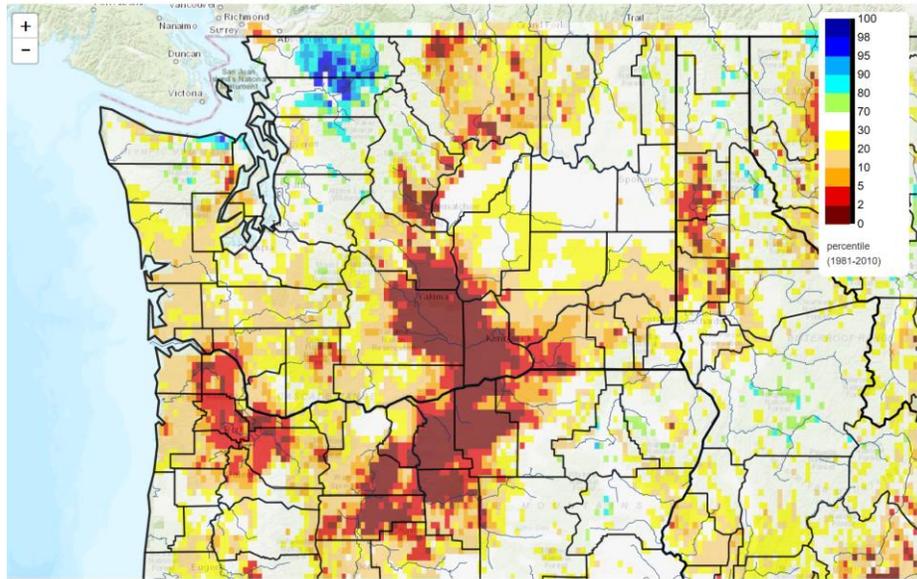
Curtis Riganti
National Drought Mitigation Center



droughtmonitor.unl.edu

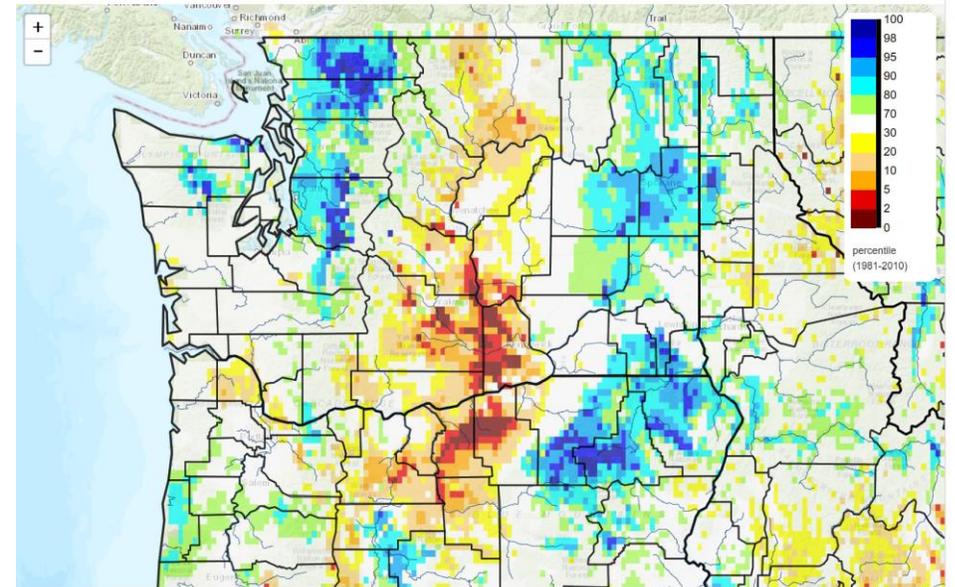
Total Moisture Percentile

2020/05/01



Total Moisture Percentile

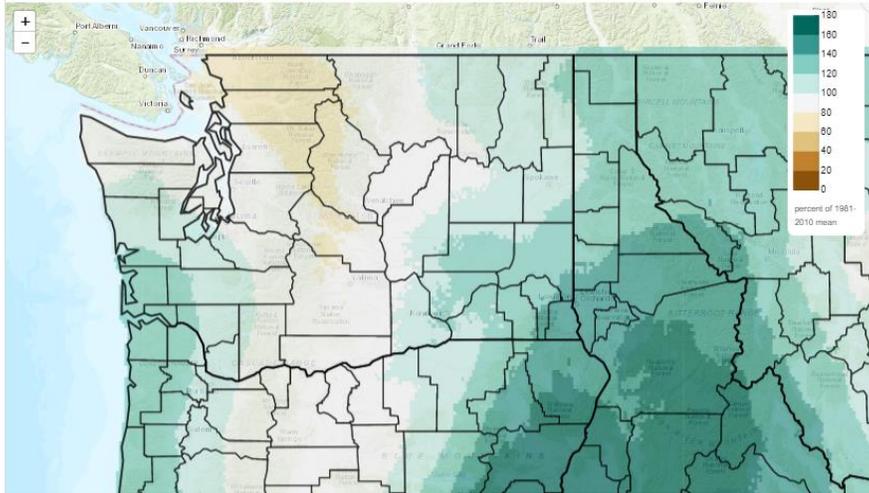
2020/05/30



Precipitation Anomaly, Week 1-2, Next 1-14 Days

2020/06/04 - 2020/06/17

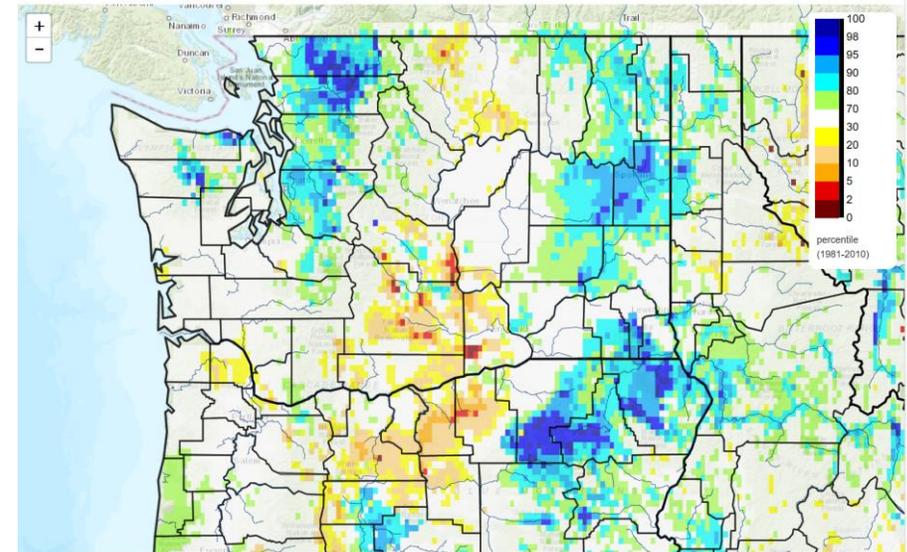
Multi-ensemble mean from 48 downscaled CFSv2 ensemble forecasts - forecast made 12Z-31-May-2020 to 6Z-03-Jun-2020



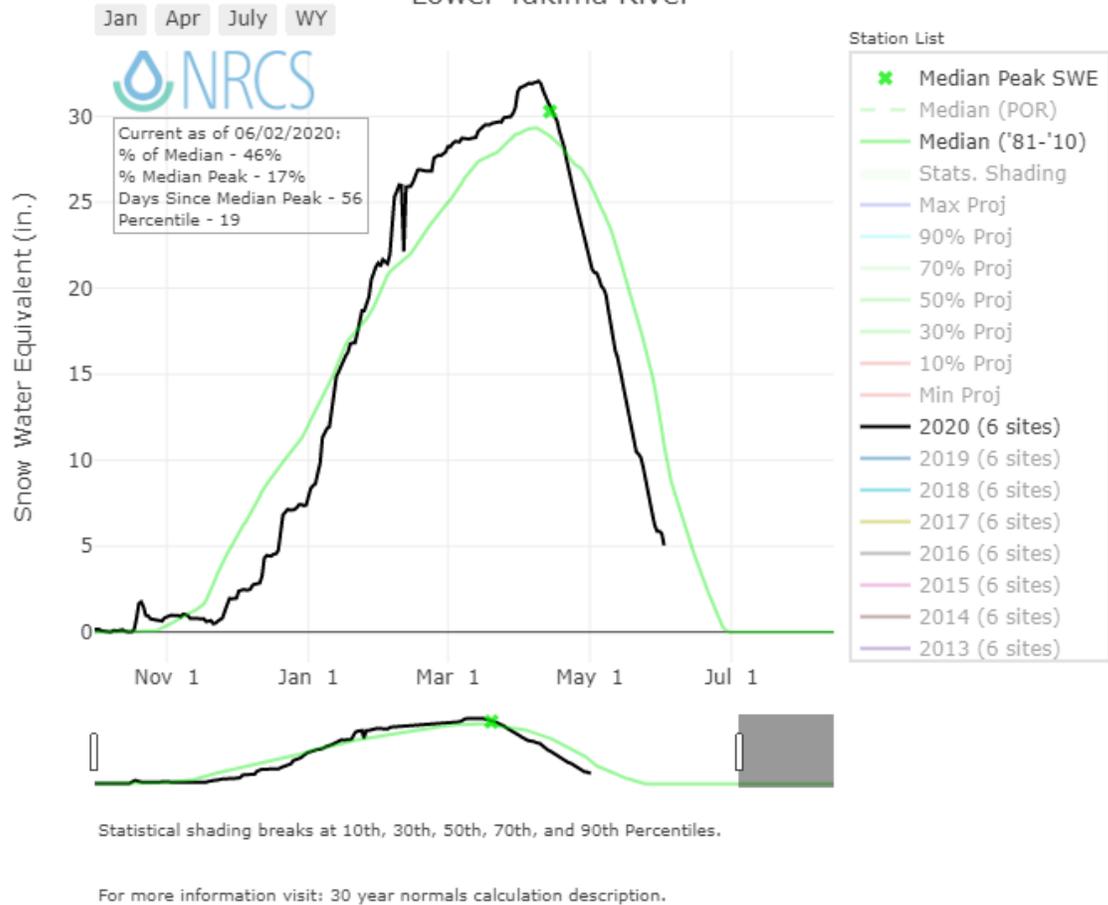
Total Moisture Percentile, Week 1-2, Next 1-14 Days

2020/06/01 - 2020/06/14

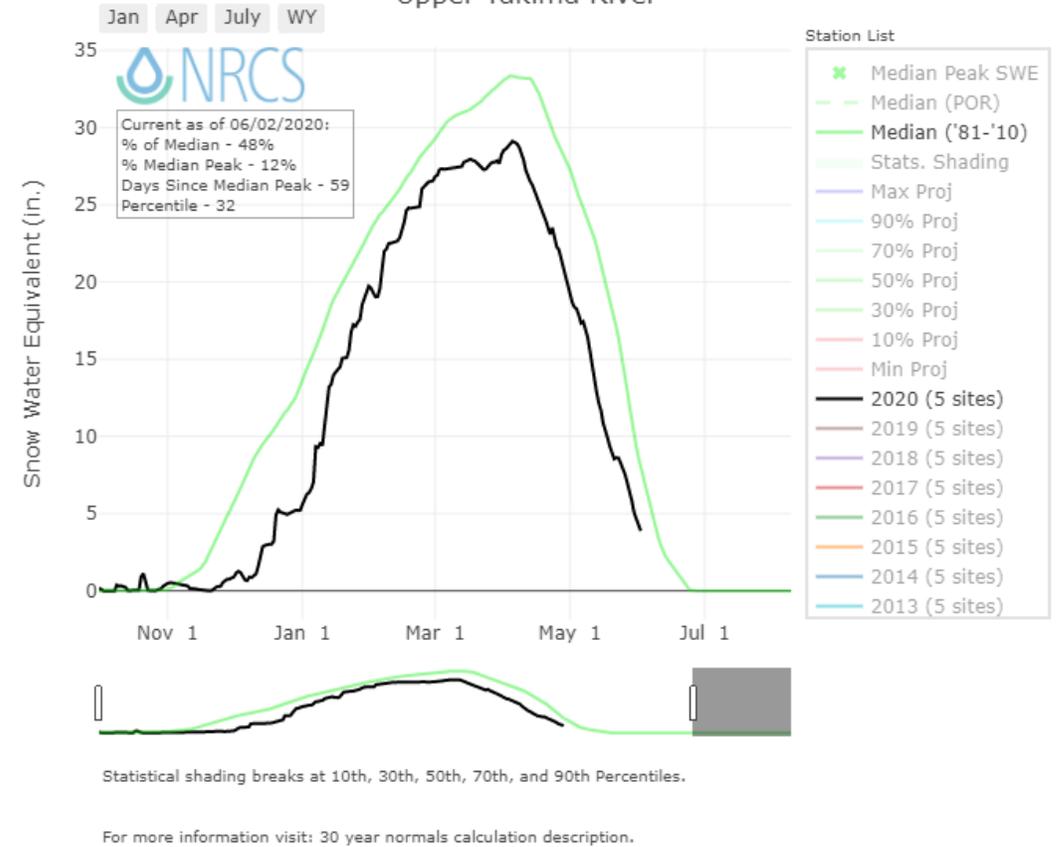
Multi-ensemble mean from 16 VIC runs forced by downscaled CFSv2 ensemble forecasts - forecast made 12Z-30-May-2020 to 6Z-31-May-2020



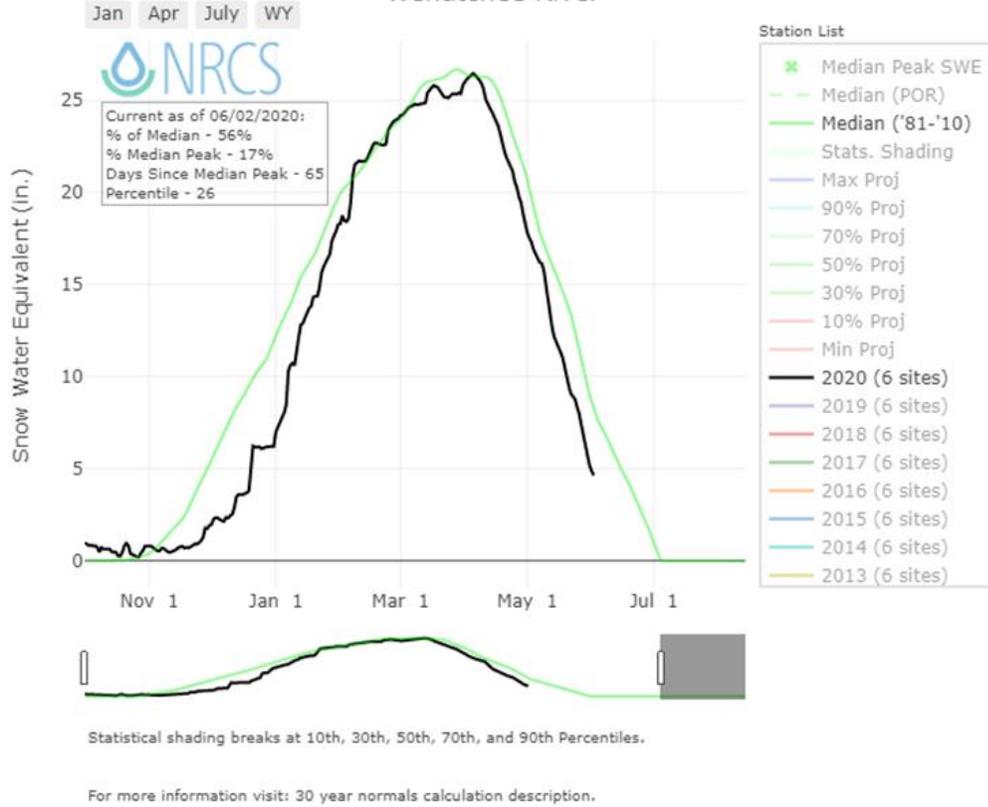
Snow Water Equivalent Projections in Lower Yakima River



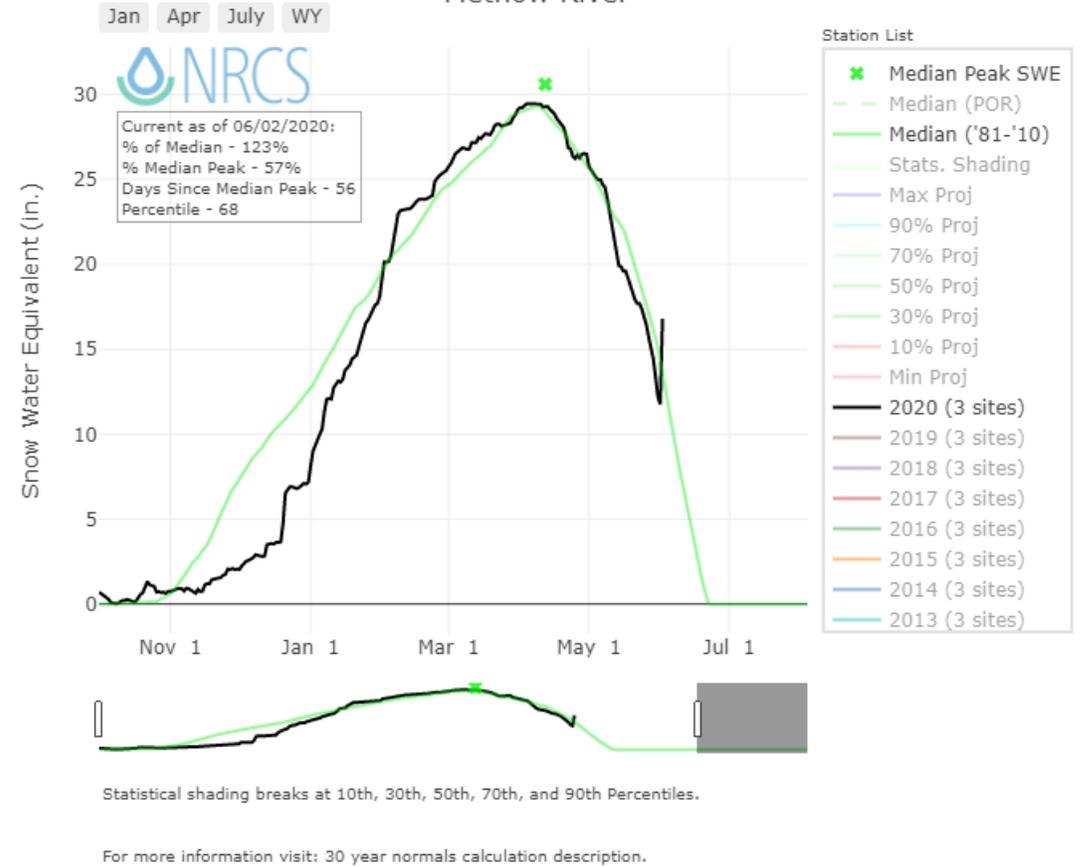
Snow Water Equivalent Projections in Upper Yakima River



Snow Water Equivalent Projections in Wenatchee River



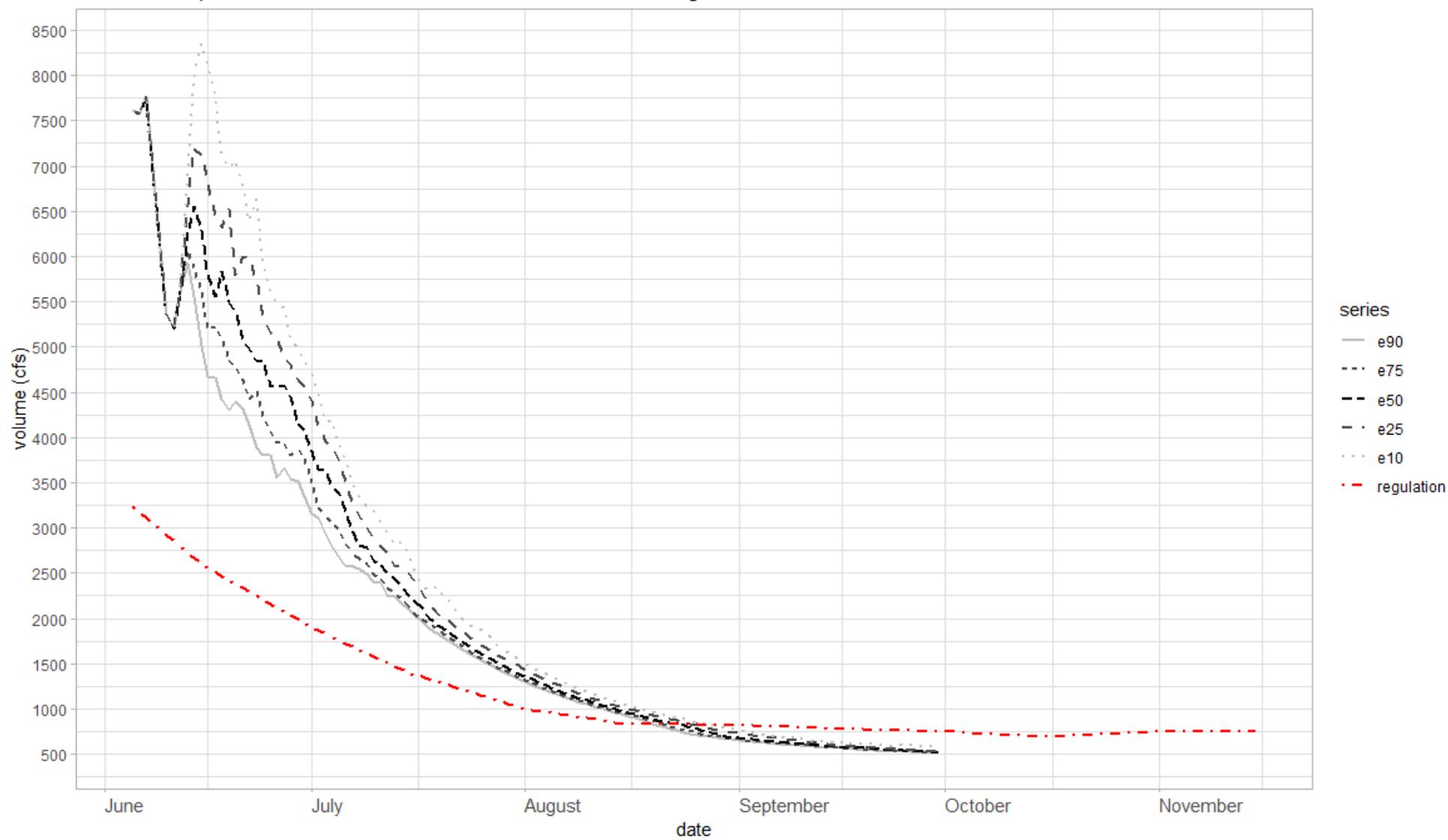
Snow Water Equivalent Projections in Methow River



Forecasted Monthly Runoff, Selected Stations (NWRFC data 06032020)
Pink Shaded Means <75 % of Normal

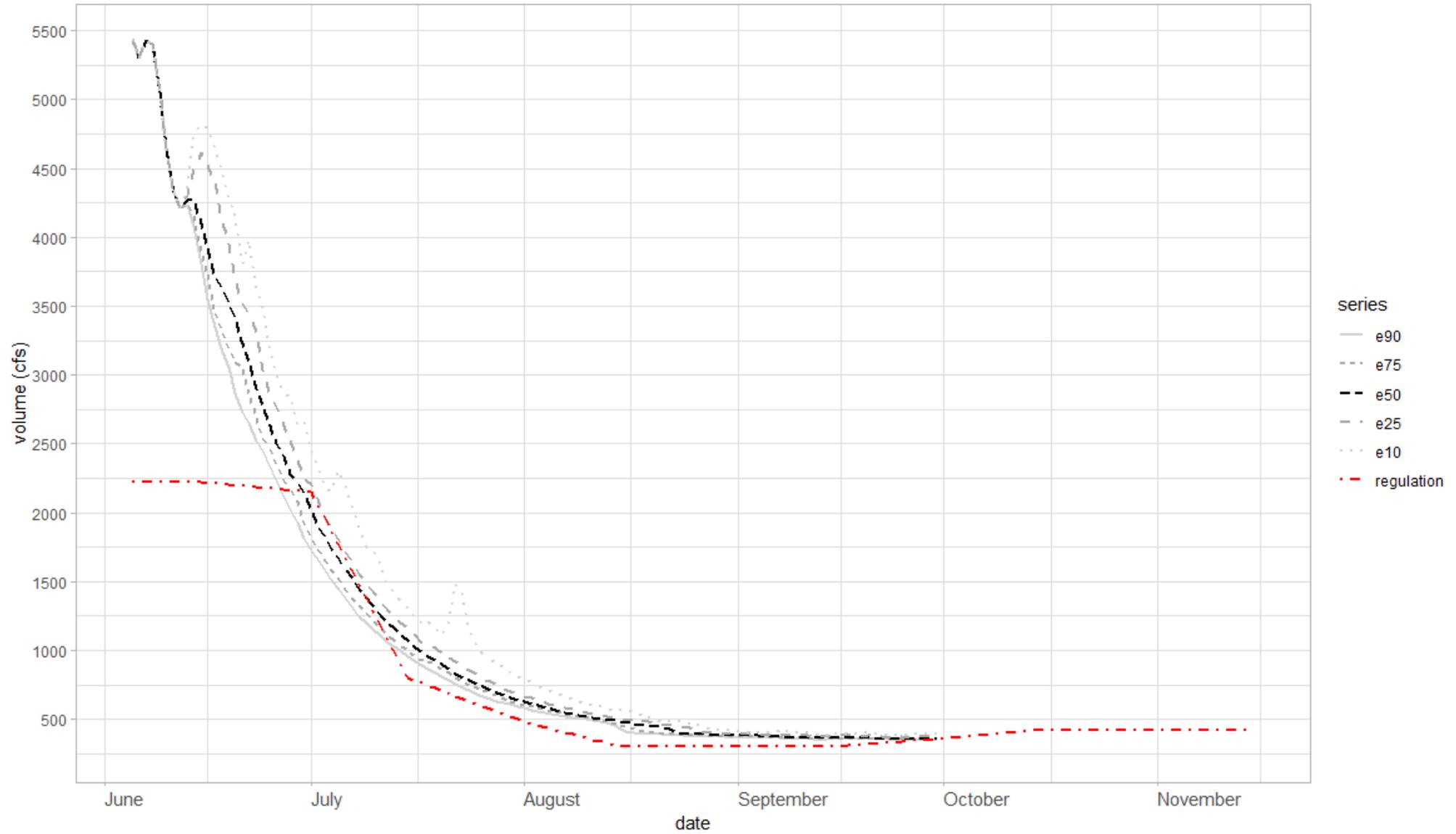
WRIA_NR	WRIA_NM	Name	JUN	JUL	AUG	SEP
30	Klickitat	KLICKITAT - NEAR PITT	58%	71%	79%	81%
37	Lower Yakima	YAKIMA - AT KIONA	77%	76%	82%	83%
37	Lower Yakima	YAKIMA - NEAR PARKER	75%	75%	83%	84%
38	Naches	BUMPING - BELOW BUMPING DAM	79%	61%	69%	76%
38	Naches	NACHES - NEAR CLIFFDEL	68%	52%	63%	69%
38	Naches	NACHES - NEAR NACHES	68%	60%	84%	75%
38	Naches	TIETON - AT TIETON DAM	81%	85%	111%	107%
39	Upper Yakima	CLE ELUM - NEAR ROSLYN	84%	65%	33%	48%
39	Upper Yakima	KACHESS - NEAR EASTON	79%	92%	72%	52%
39	Upper Yakima	TEANAWAY - BELOW FORKS	34%	33%	50%	77%
39	Upper Yakima	YAKIMA - AT EASTON	81%	88%	76%	67%
39	Upper Yakima	YAKIMA - AT UMTANUM	79%	83%	79%	78%
39	Upper Yakima	YAKIMA - NEAR MARTIN	77%	77%	67%	68%
40	Upper Yakima	YAKIMA - NEAR HORLICK	80%	75%	65%	80%
45	Wenatchee	WENATCHEE - AT PESHASTIN	80%	63%	78%	81%
46	Entiat	ENTIAT - NEAR ARDENVOIR	75%	80%	78%	88%
47	Chelan	CHELAN - LAKE CHELAN DAM	61%	55%	63%	64%
47	Chelan	STEHEKIN - AT STEHEKIN	71%	68%	69%	71%
48	Methow	METHOW - AT WINTHROP	79%	64%	71%	93%
48	Methow	METHOW - NEAR PATEROS	81%	62%	77%	96%
49	Okanogan	OKANOGAN - AT MALOTT	114%	87%	81%	106%
49	Okanogan	OKANOGAN - AT OROVILLE	168%	113%	108%	103%
49	Okanogan	OKANOGAN - NEAR TONASKET	114%	88%	82%	106%
49	Okanogan	SIMILKAMEEN - NEAR NIGHTHAWK	103%	86%	80%	97%

2020-06-03 | ensemble forecast vs Wenatche at Peshastin regulation flows



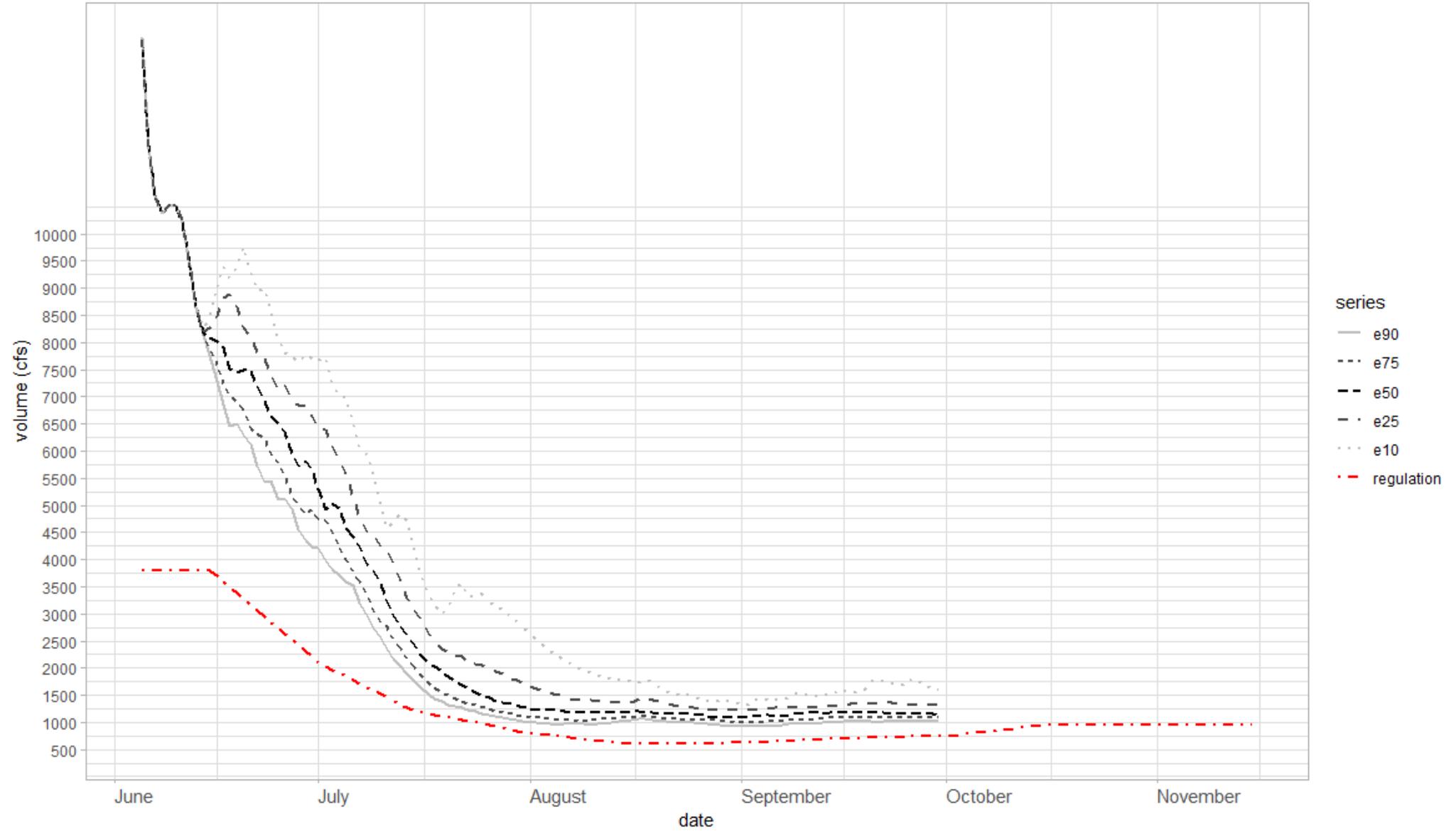
data: NWRFC (QINE file),WDOE

2020-06-03 | ensemble forecast vs Methow River nr Pateros regulation flows



data: NWRFC (QINE file),WDOE

2020-06-03 | ensemble forecast vs Okanogan at Malott regulation flows



data: NWRFC (QINE file),WDOE

Summary

- Be thankful that a decent snowpack developed before dryness set in
- Recent rains have helped (and even hurt)
- Positive reports from water managers who have reservoirs or draw from larger rivers
- A few reports of poor rangeland condition in Okanogan area – low soil moisture, drying ponds and springs
- Some tributaries could be stressed as we move deeper into summer.

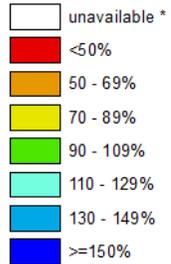
Thank you
jeff.marti@ecy.wa.gov



Washington SNOTEL Current Snow Water Equivalent (SWE) % of Normal

Jun 03, 2020

Current Snow Water Equivalent (SWE) Basin-wide Percent of 1981-2010 Median

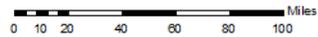


* Data unavailable at time of posting or measurement is not representative at this time of year

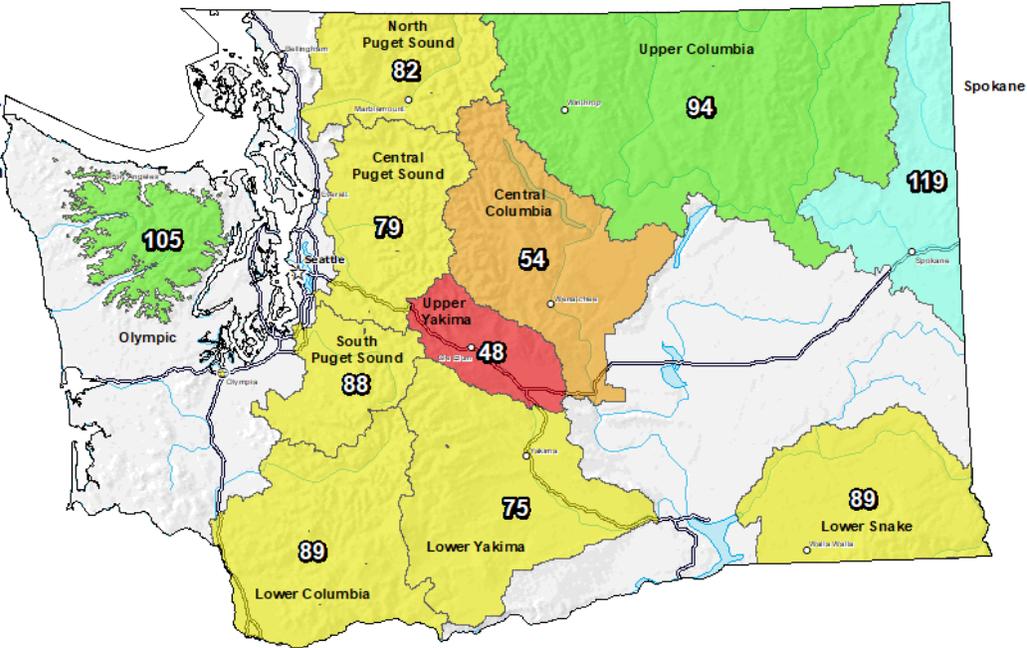
Provisional Data
Subject to Revision



The snow water equivalent percent of normal represents the current snow water equivalent found at selected SNOTEL sites in or near the basin compared to the average value for those sites on this day. Data based on the first reading of the day (typically 00:00).



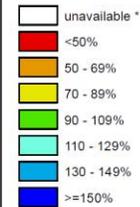
Prepared by:
USDA/NRCS National Water and Climate Center
Portland, Oregon
<http://www.wcc.nrcs.usda.gov>



Washington SNOTEL Current Snow Water Equivalent (SWE) % of Normal

Apr 01, 2020

Current Snow Water Equivalent (SWE) Basin-wide Percent of 1981-2010 Median



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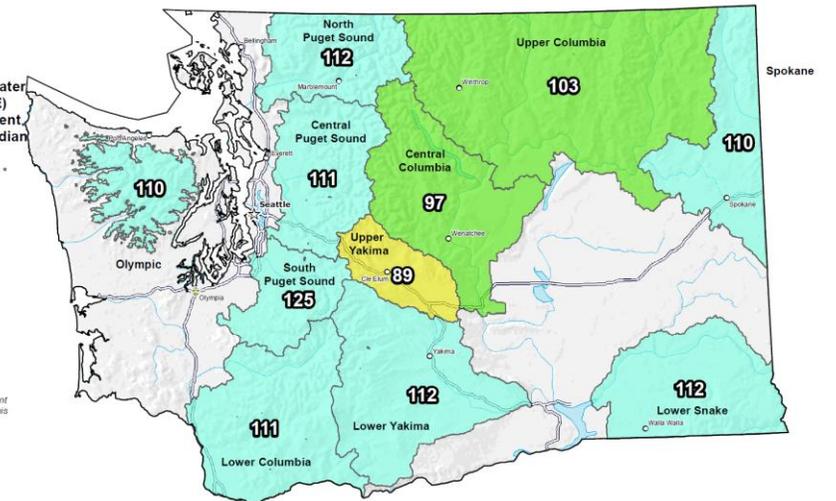
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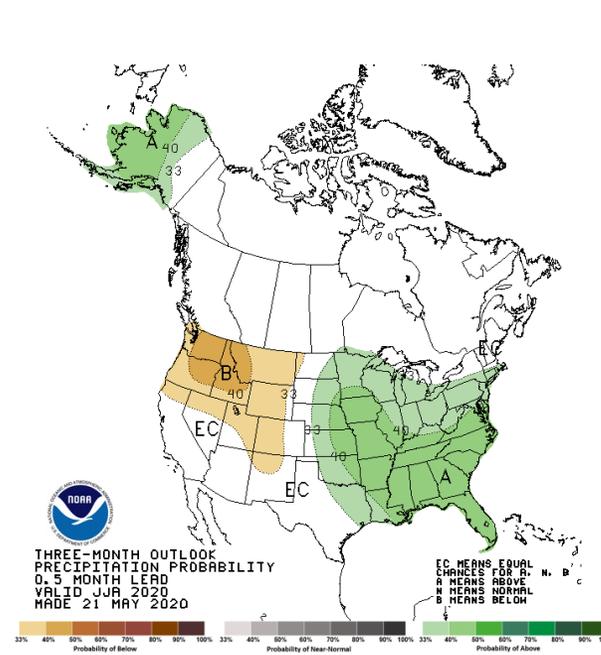
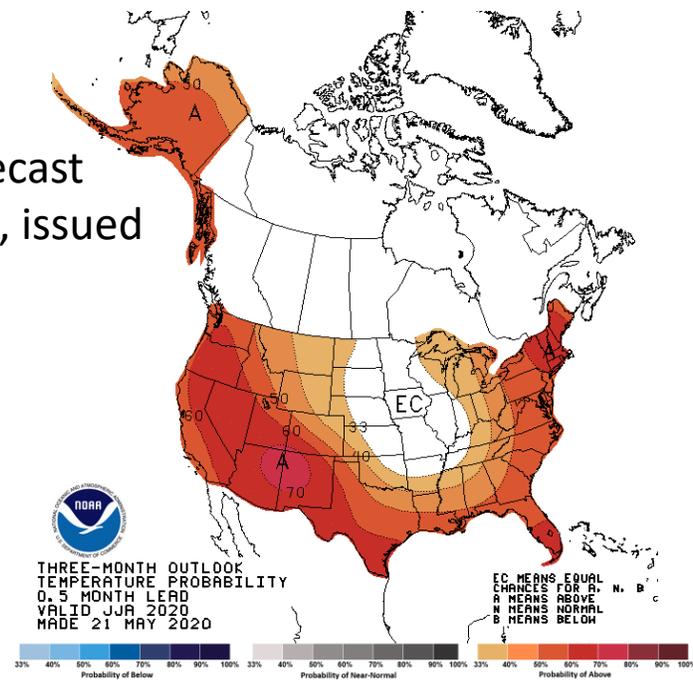
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Long Lead Forecast (June – August, issued May 21)



Revised Monthly June Forecast (Issued May 31)

