

Snowpack Evaluation

Weather Research and Consulting Services, LLC

This is the March 1, 2021 Washington and Oregon snowpack report, along with comparisons to 2017, 2018, 2019 and 2020. The report will be updated on or about March 15.

February was a very good month for snow in the Pacific Northwest with both Washington and Oregon increasing over 30% of median from the end of January. Heavy mountain snow occurred on numerous days in Washington and northern Oregon due to a series of cold storms from the Gulf of Alaska. The Oregon Snow Water Equivalent (SWE) increased to 109% of median on March 1 but ranged from much above normal in the Blue and northern Cascades to near and below normal in southern Oregon. The SWE ranges from 143% of median in the Umatilla River Basin to 79% in Lake County and 83% in the Klamath and Owyhee River Basins. The Washington SWE is 132% of median with nearly all river basins much above the median for this date. In fact, Washington's snowpack is the best it has been since 1999 and the fourth best dating back to 1981. The snowpack ranges from 164% of median in the Olympic Mountains to 104% in the Spokane River Basin. The west slopes of the Washington Cascades experienced the heaviest snowfall during the month resulting in high avalanche danger on a number of days. While the first week of March should be relatively dry, a series of storms should add to the snowpack by the second week. The La Nina this winter has certainly resulted in a banner year for snow in the Pacific Northwest!

A graphic of Snow Water Equivalent (SWE) percentages across the western United States is also included for comparison. Areas shaded in blue indicate above normal snowpack, green indicates near normal, and yellow, orange and red below normal. The best snowpacks are located in Washington and northeastern Oregon, the worst in New Mexico and eastern Arizona. The statewide California snowpack (not shown on map but reported by the California Department of Water Resources) decreased a little from February 14 and is now 61% of normal. While this is still below the long term average, it is a little better than last year's 46% on this date.

We will continue to monitor snowpack figures through June 1. If you have questions about this report, please contact Weather Research and Consulting Services, LLC using the links at the end of this report.

Oregon and Washington Snowpack Comparison as of March 1, 2021

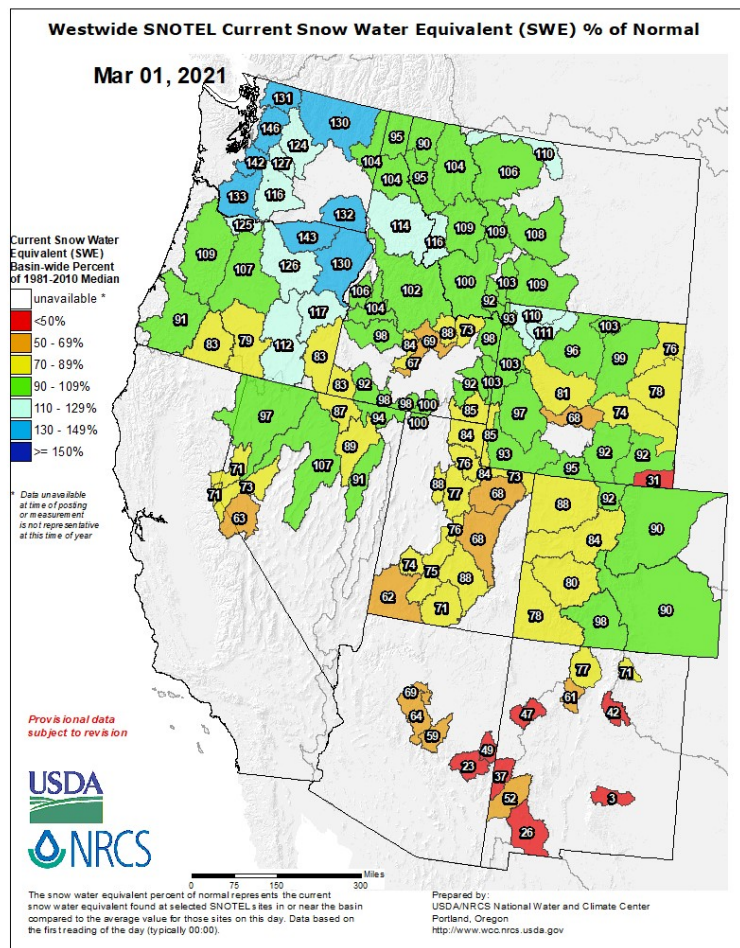
Oregon

		(Percent of Normal)				
<u>River Basin</u>	<u>Date</u>	<u>2021</u>	<u>2020</u>	<u>2019</u>	<u>2018</u>	<u>2017</u>
Owyhee	March 1	83	104	128	40	140
Malheur	March 1	117	103	160	47	126
Grande Ronde	March 1	130	111	127	72	118
Umatilla	March 1	143	123	144	77	131
John Day	March 1	126	105	150	59	137
Deschutes	March 1	107	84	112	58	134
Lower Columbia	March 1	125	91	89	80	122
Willamette	March 1	109	87	108	64	139
Rogue/Umpqua	March 1	91	73	115	51	129
Klamath	March 1	83	67	114	43	123
Lake County	March 1	79	72	145	48	143
Harney	March 1	112	93	130	49	123
State AVG		109	93	127	57	130

Note: Red figures indicate the lowest snowpack average in the past 5 years.

Washington

River Basin	Date	(Percent of Normal)				
		2021	2020	2019	2018	2017
Spokane	March 1	104	107	93	113	90
Columbia/Methow	March 1	130	104	90	124	109
Chelan/Wenatchee	March 1	124	100	91	104	96
Upper Yakima	March 1	127	93	80	99	87
Lower Yakima	March 1	116	114	99	101	99
Lower Snake	March 1	132	112	108	111	103
Lewis/Cowlitz	March 1	133	104	92	100	127
White/Green	March 1	142	122	94	97	103
Cedar/Snoqualmie	March 1	146	106	76	106	104
Baker/Skagit	March 1	131	109	83	122	91
Olympic	March 1	164	111	88	124	104
State AVG		132	107	90	109	101



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