

# Snowpack Evaluation

## Weather Research and Consulting Services, LLC

This is the June 1, 2024 Washington and Oregon snowpack report, along with comparisons to 2020, 2021, 2022 and 2023. This is the final report of the 2023-2024 snowpack season.

The last half of May was cooler and drier than normal across much of the Pacific Northwest. The bulk of precipitation during this time occurred in northwestern Washington. Snowmelt rates accelerated across southern Oregon but continued at seasonal norms elsewhere. The snowpack has pretty-well melted below 4-5,000 feet msl. The Oregon Snow Water Equivalent (SWE) percentage dropped significantly and is now 86% of median. This compares to 117% last year and 148% in 2022. The snowpack in the Owyhee, Malheur and John Day River Basins has melted. Elsewhere, the SWE ranges from 234% of median in Harney County to 93% in the Grande River Basin. The river basins draining the Oregon Cascades are near median for this date. In contrast, Washington's snowpack changed little but is still well median at 59%. Surprisingly, this is a little better than last year's 52% on June 1. The SWE ranges from 102% of median in the Lewis/Cowlitz River Basin to 0% in the Lower Yakima River Basin. Our fire season severity algorithms, comprising of the winter snowpack, snow melt rates and past fire history indicate Washington has a high probability of an above average fire season while Oregon's fire season should be near normal.

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 compared to median are in California, Nevada, Utah, Colorado, and Wyoming. The snowpack in Arizona and New Mexico has melted. Elsewhere, the lowest snowpacks are in Washington and Montana. The statewide California snowpack (not shown on map but reported by the California Department of Water Resources) is now 44% of normal, way below last year's record setting 311%.

We will monitor snowpack figures again starting January 1, 2025. 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 June 1, 2024

#### Oregon

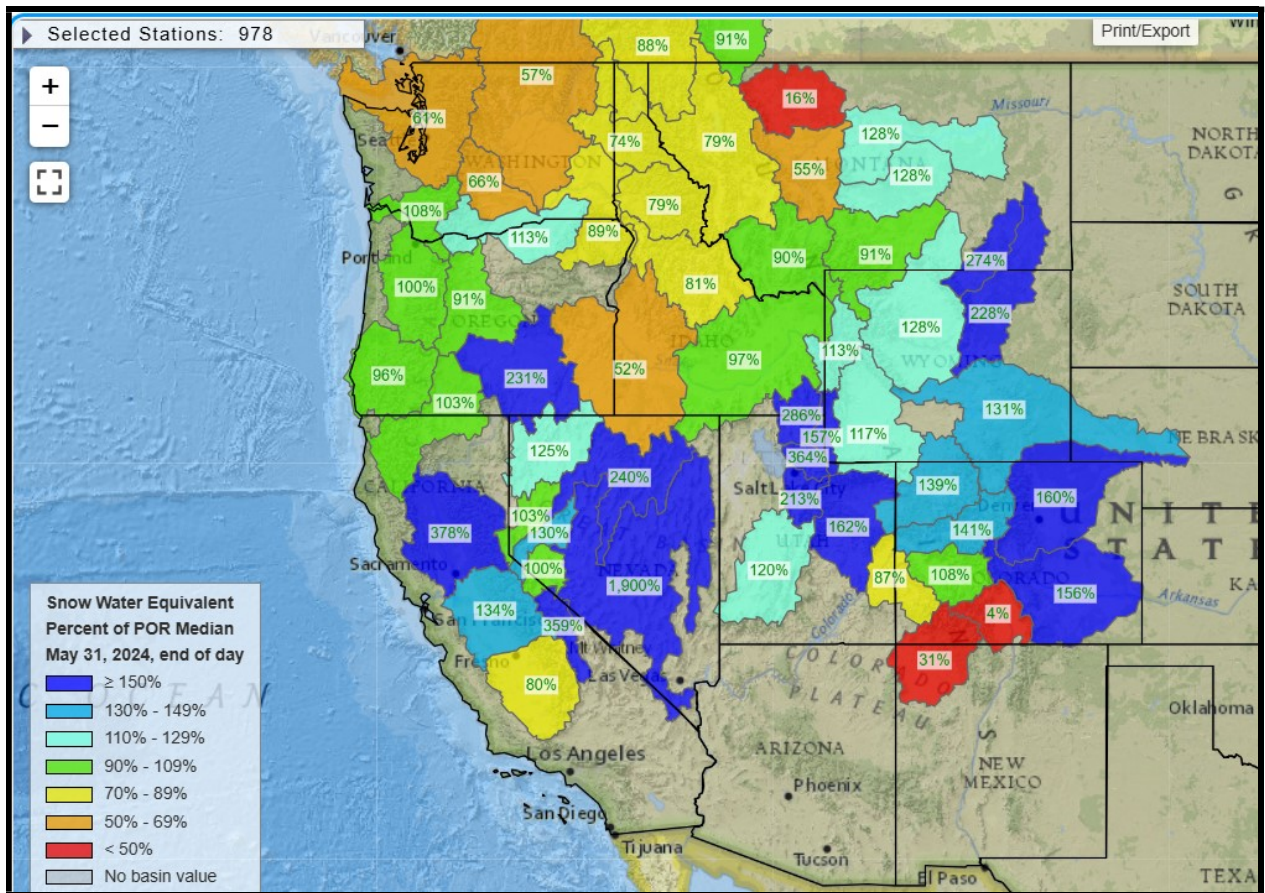
		(Percent of Normal)				
<u>River Basin</u>	<u>Date</u>	<u>2024</u>	<u>2023</u>	<u>2022</u>	<u>2021</u>	<u>2020</u>
Owyhee	June 1	0	0	0	0	0
Malheur	June 1	0	0	0	0	0
Grande Ronde	June 1	93	98	253	5	101
Umatilla	June 1	112	77	275	0	0
John Day	June 1	0	0	0	0	0
Deschutes	June 1	99	83	173	41	35
Lower Columbia	June 1	108	82	305	82	49
Willamette	June 1	100	103	222	40	35
Rogue/Umpqua	June 1	96	166	142	34	31
Klamath	June 1	105	293	218	0	0
Lake County	June 1	N/A	389	49	0	5
Harney	June 1	234	N/A	137	0	37
<b>State AVG</b>		<b>86</b>	<b>117</b>	<b>148</b>	<b>17</b>	<b>24</b>

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

# Washington

(Percent of Normal)

River Basin	Date	2024	2023	2022	2021	2020
Spokane	June 1	79	40	206	66	118
Columbia/Methow	June 1	54	7	197	124	90
Chelan/Wenatchee	June 1	34	28	188	96	52
Upper Yakima	June 1	62	37	241	204	50
Lower Yakima	June 1	0	0	(1850)	0	77
Lower Snake	June 1	93	91	243	2	95
Lewis/Cowlitz	June 1	102	119	187	152	90
White/Green	June 1	62	53	183	137	88
Cedar/Snoqualmie	June 1	66	64	319	358	81
Baker/Skagit	June 1	56	42	146	109	81
Olympic	June 1	39	90	196	206	91
<b>State AVG</b>		<b>59</b>	<b>52</b>	<b>211</b>	<b>132</b>	<b>83</b>



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