

Month in Review - April 2024

Photo taken by NWS Pendleton staff at Wallowa Lake, Oregon





Weather Forecast Office Pendleton, OR Monday, May 6

The Month in Review is a retrospective collection of climate statistics for NWS Pendleton's forecast area with specific emphasis on ASOS-based climate sites, snowpack and drought evolution, and various statistics for the water year to date.

Prepared by NWS Pendleton's Climate Services team.



- Temperatures ranged from slightly below normal to slightly above normal across the forecast area during April.
- Aside from near- to above-normal precipitation in central and far northeast OR, below-normal precipitation was observed during April.
- Snow water equivalent (SWE) generally declined area-wide during April for all basins/watersheds in NWS Pendleton's forecast area due to an extended dry stretch and typical springtime warming relative to winter months. A small increase in SWE was observed towards the end of the month as a cooler, more unsettled weather pattern brought additional snowfall to the mountains.



• Iowa State University's website provides a nice graphical interface for viewing archived local storm reports. See the following link for April's local storm reports in NWS Pendleton's forecast area:

https://mesonet.agron.iastate.edu/lsr/#PDT/202404010700/202405010700/011011

• For recent LSRs, <u>https://www.weather.gov/source/crh/lsrmap.html?sid=pdt</u> or https://mesonet.agron.iastate.edu/lsr/#PDT/202405052108/202405062108/111111



Precipitation Anomaly - April 2024

Pacific Northwest - Precipitation April 2024, Percent of 1991-2020 Computed Average(s)





Aside from near- to above-normal precipitation in central and far northeast OR, below-normal precipitation was observed during April.





Precipitation Percentiles - April 2024

Pacific Northwest - Precipitation April 2024, Percentile



WestWide Drought Tracker, WRCC, Climate Engine, Data Source: PRISM Prelim, created 05 May 2024

Aside from near- to above-normal precipitation in central and far northeast OR, below-normal precipitation was observed during April.

Record Wettest

Much Above Normal Top 10% Above Normal Top 33% Near Normal Below Normal Bottom 33% Much Below Normal Bottom 10%

Driest



Temperature Anomaly - April 2024

Pacific Northwest - Mean Temperature April 2024, Departure from 1991-2020 Computed Average(s)





Temperatures ranged from slightly below normal to slightly above normal across the forecast area during April.



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Temperature Percentiles - April 2024

Pacific Northwest - Mean Temperature April 2024, Percentile



WestWide Drought Tracker, WRCC, Climate Engine, Data Source: PRISM Prelim, created 05 May 2024

Temperatures ranged from slightly below normal to slightly above normal across the forecast area during April.

Record Warmest	
Much Above Normal Top 10%	ਹ
Above Normal Top 33%	lanking
Near Normal	js (189
Below Normal Bottom 33%	5-2024
Much Below Normal Bottom 10%	
Record Coldest	



Variable (units)	Observed	Normal	Departure
Warmest Daily Maximum Temperature (F)	79	-	-
Average Daily Maximum Temperature (F)	63.5	61.8	1.7
Average Daily Minimum Temperature (F)	38.8	38.3	0.5
Coolest Daily Minimum Temperature (F)	29	-	-
Average Temperature (F)	51.1	50.1	1.0
Total Precipitation (inches)	0.51	1.21	-0.70
Total Snow (inches)	0.0	0.0	0.0





Variable (units)	Observed	Normal	Departure
Warmest Daily Maximum Temperature (F)	77	-	-
Average Daily Maximum Temperature (F)	62.2	62.5	-0.3
Average Daily Minimum Temperature (F)	41.4	42.5	-1.1
Coolest Daily Minimum Temperature (F)	33	-	-
Average Temperature (F)	51.8	52.5	-0.7
Total Precipitation (inches)	0.40	1.98	-1.58





Variable (units)	Observed	Normal	Departure
Warmest Daily Maximum Temperature (F)	80	-	-
Average Daily Maximum Temperature (F)	64.1	64.2	-0.1
Average Daily Minimum Temperature (F)	41.0	41.7	-0.7
Coolest Daily Minimum Temperature (F)	30		
Average Temperature (F)	52.6	53.0	-0.4
Total Precipitation (inches)	0.29	0.83	-0.54





Variable (units)	Observed	Normal	Departure
Warmest Daily Maximum Temperature (F) 77		-	-
Average Daily Maximum Temperature (F)	61.0	61.4	-0.4
Average Daily Minimum Temperature (F)	35.9	36.5	-0.6
Coolest Daily Minimum Temperature (F)	28	-	-
Average Temperature (F)	48.5	49.0	-0.5
Total Precipitation (inches)	0.13	0.68	-0.55



Variable (units)	Observed	Normal	Departure
Warmest Daily Maximum Temperature (F)	80	-	-
Average Daily Maximum Temperature (F)	66.3	66.6	-0.3
Average Daily Minimum Temperature (F)	37.0	38.9	-1.9
Coolest Daily Minimum Temperature (F)	27	-	-
Average Temperature (F)	51.7	52.8	-1.1
Total Precipitation (inches)	0.12	0.78	-0.66



Variable (units)	Observed	Normal	Departure
Warmest Daily Maximum Temperature (F)	71	-	-
Average Daily Maximum Temperature (F)	52.7	52.3	0.4
Average Daily Minimum Temperature (F)	28.6	29.0	-0.4
Coolest Daily Minimum Temperature (F)	18	-	-
Average Temperature (F)	40.6	40.6	0.0
Total Precipitation (inches)	1.58	3.93	-2.35

Variable (units)	Observed	Normal	Departure
Warmest Daily Maximum Temperature (F)	83	-	-
Average Daily Maximum Temperature (F)	67.7	67.0	0.7
Average Daily Minimum Temperature (F)	39.1	38.4	0.7
Coolest Daily Minimum Temperature (F)	28	-	-
Average Temperature (F)	53.4	52.7	0.7
Total Precipitation (inches)	0.11	0.66	-0.55





Variable (units)	Observed	Normal	Departure
Warmest Daily Maximum Temperature (F)	80		
Average Daily Maximum Temperature (F)	60.3	60.2	0.1
Average Daily Minimum Temperature (F)	28.8	30.7	-1.9
Coolest Daily Minimum Temperature (F)	19		
Average Temperature (F)	44.5	45.5	-1.0
Total Precipitation (inches)	0.82	0.71	0.11

Variable (units)	Observed	Normal	Departure
Warmest Daily Maximum Temperature (F)	81		
Average Daily Maximum Temperature (F)	64.4	64.7	-0.3
Average Daily Minimum Temperature (F)	34.9	35.2	-0.3
Coolest Daily Minimum Temperature (F)	27		
Average Temperature (F)	49.7	49.9	-0.2
Total Precipitation (inches)	0.15	0.55	-0.40



Water Year Climate Graphs - Pendleton ASOS





So far this water year, Pendleton has observed above-normal precipitation and slightly below-normal snowfall.

Water Year Climate Graphs - Walla Walla ASOS



So far this water year, Walla Walla has received below-normal precipitation.

Water Year Climate Graphs - The Dalles ASOS





So far this water year, The Dalles has recorded near-normal precipitation.

Water Year Climate Graphs - Ellensburg ASOS





So far this water year, Ellensburg has observed slightly below-normal precipitation.

Water Year Climate Graphs - Hermiston ASOS





So far this water year, Hermiston has recorded above-normal precipitation.

Water Year Climate Graphs - Meacham ASOS





So far this water year, Meacham has received slightly below-normal precipitation.

Water Year Climate Graphs - Pasco ASOS



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So far this water year, Pasco has observed near-normal precipitation.

Water Year Climate Graphs - Redmond ASOS





So far this water year, primarily due to a wet January through early May, Redmond has recorded slightly above-normal precipitation.

Water Year Climate Graphs - Yakima ASOS



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So far this water year, Yakima has recorded slightly below-normal precipitation.

Drought Status: Current Conditions

U.S. Drought Monitor Pacific Northwest DEWS



April 30, 2024

(Released Thursday, May. 2, 2024) Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	52.02	47.98	<mark>18.8</mark> 7	7.41	0.57	0.00
Last Week 04-23-2024	52.02	47.98	18.87	7.41	0.57	0.00
3 Month s Ago 01-30-2024	55.94	44.06	27.60	8.75	0.00	0.00
Start of Calendar Year 01-02-2024	44.0 6	55.94	26.37	<mark>4.4</mark> 8	0.00	0.00
Start of Water Year 09-26-2023	34.73	65.27	50.11	28.69	7.48	0.00
One Year Ago	33.89	66.11	35.65	9.93	2.05	0.00

Intensity:

None D0 Abnormally Dry



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

D1 Moderate Drought



droughtmonitor.unl.edu



<u>D4 (Exceptional Drought)</u>: None.

<u>D3 (Extreme Drought)</u>: None.

<u>D2 (Severe Drought)</u>: None.

D1 (Moderate Drought): Portions of Jefferson, Deschutes, Crook, Kittitas, and Yakima counties.

<u>D0 (Abnormally Dry)</u>: Portions of Umatilla, Union, Wallowa, Grant, Wasco, Sherman, Gilliam, Jefferson, Deschutes, Crook, Wheeler, Klickitat, Yakima, Kittitas, Walla Walla, Columbia, and Benton counties.





<u>Improved</u>: Portions of eastern Wallowa County.

<u>Degraded</u>: Portions of Kittitas, Yakima, Umatilla, Walla Walla, Columbia, Benton, and Grant counties.

<u>No change</u>: Portions of Columbia, Walla Walla, Umatilla, Union, Wallowa, Grant, Deschutes, Crook, Jefferson, Sherman, Gilliam, Wasco, Yakima, Kittitas, and Klickitat counties.



SNOTEL Snow Water Equivalent (SWE) - Basin/Watershed Map



Basin-wide snow water equivalent (SWE) percent of 1991-2020 median is shown on the left. Basin names are displayed, and individual SNOTELs are represented as circles.

Driven by a cool, wet, and snowy end of April and early May, SWE is near to above the climatological median for central and southeast Oregon, and near to below the median for northeast Oregon. SWE remains well below the median for most of Washington.



SNOTEL Precipitation - Basin/Watershed Map





Basin-wide SNOTEL precipitation for the water year to date (October 1, 2023-May 5, 2024) relative to the 1991-2020 median is shown on the left. Basin names are displayed, and individual SNOTELs are represented as circles.

For the water year to date, precipitation has been mostly near or above the climatological median for areas south of approximately 45-46N latitude. Conversely, precipitation has been mostly near or below the median north of roughly 45-46N latitude.



SNOW WATER EQUIVALENT IN LOWER SNAKE





Shading breaks at the 10th, 30th, 50th, 70th, and 90th percentiles for the period of record.

The black line indicates the current water year, while the green line shows the median value, and the green "x" is the median peak SWE magnitude and date.





SNOW WATER EQUIVALENT IN MIDDLE COLUMBIA





Shading breaks at the 10th, 30th, 50th, 70th, and 90th percentiles for the period of record.

The black line indicates the current water year, while the green line shows the median value, and the green "x" is the median peak SWE magnitude and date.





SNOW WATER EQUIVALENT IN YAKIMA





Shading breaks at the 10th, 30th, 50th, 70th, and 90th percentiles for the period of record.

The black line indicates the current water year, while the green line shows the median value, and the green "x" is the median peak SWE magnitude and date.





SNOW WATER EQUIVALENT IN DESCHUTES





Shading breaks at the 10th, 30th, 50th, 70th, and 90th percentiles for the period of record.

The black line indicates the current water year, while the green line shows the median value, and the green "x" is the median peak SWE magnitude and date.





SNOW WATER EQUIVALENT IN JOHN DAY





Shading breaks at the 10th, 30th, 50th, 70th, and 90th percentiles for the period of record.

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