### **Drought Information Statement for Eastern OR & South Central WA** Valid December 20, 2024 Issued By: NWS Pendleton Contact Information: pdt.operations@noaa.gov This product will be updated if drought conditions change significantly. $\bullet$ Please see all currently available products at https://drought.gov/drought-information-statements.

- Please visit <a href="https://www.weather.gov/pdt/DroughtInformationStatement">https://www.weather.gov/pdt/DroughtInformationStatement</a> for previous statements
- Please visit <u>https://www.drought.gov/drought-status-updates/</u> for regional drought status updates.
- Drought conditions improving but Moderate Drought continues to affect portions of central Kittitas and extreme northern Yakima counties, central and north central Oregon, the northern Blue Mountains, Grande Ronde Valley and Wallowa County
- While precip has been above average the last 30 days with a near to above average snowpack, generally dry conditions have been prevailing over the last 90 days outside the Lower Columbia Basin into the Blue mountains
  - Near to above normal precipitation this winter is expected to end or improve drought conditions



- Link to the latest U.S. Drought Monitor
- Drought intensity and Extent
  - **D2 (Severe Drought)**: None
  - D1 (Moderate Drought): Portions of central Kittitas and extreme northern Yakima counties, central and north central Oregon, the northern Blue Mountains, WA Blue Mountain Foothills, Grande Ronde Valley, and Wallowa County
  - D0: (Abnormally Dry): Much of the area, except portions of the crest of the Oregon Cascades, Yakima and Klickitat counties extending southeast into the Lower Oregon Columbia Basin

#### **U.S. Drought Monitor**



Source(s): NDMC, NOAA, USDA; image courtesy of Drought.gov





## **Recent Change in Drought Intensity**

#### Link to the latest <u>4-week change map</u> for the Pacific Northwest

- One-Week Drought Monitor Class
  Change
  - <u>Drought Worsened (1 Class</u> <u>Degradation)</u>: No change
  - <u>Drought Improved (1 Class</u> <u>Improvement)</u>: No change
- Four-Week Drought Monitor Class Change
  - Drought Improved (1 Class Improvement): Most areas except portions of the Grande Ronde Valley, northern Wallowa county, central and north central OR, and western Kittitas county
  - <u>Drought Improved (2 Class</u> <u>Degradation)</u>: Mainly portions of eastern Kittitas county



Image Captions: Right - 4 Week Drought Class Change Left - 1 Week Drought Class Change Data Courtesy U.S. Drought Monitor and Drought.gov



# Precipitation - Last 30 Days

- Mostly well above normal precipitation (100-200 percent of normal) with isolated small pockets of 200-300% of normal in the WA Columbia Basin and Southern Blue Mountains
- Below normal precipitation (0-100%) in central and north central Oregon, central WA Cascades and in portions of the Ochoco-John Day Highlands, and Wallowa County
- Highest precipitation amounts were 6 to 8 inches over the OR and WA Cascade crest, the northern Blue Mountains and the Wallowa Mountains
- Generally dry and below normal precip over the last 90 days outside the Lower Columbia Basin into the Blue mountains



National Oceanic and Atmospheric Administration







**NWPS 30-Day Precipitation Accumulations (inches)** 

Inches of Precipitation



Image Captions: Right - Precipitation Amount for Pacific NW Left - Percent of Normal Precipitation for Pacific NW Data Courtesy High Plains Regional Climate Center

#### National Weather Service Pendleton, OR

**30-Day Precipitation: Percent of PRISM Normal** 

## **Precipitation - 2025 Water Year**

- Below normal precipitation (50-90%) over the WA and OR Cascades, eastern Columbia River Gorge, central and north central OR, Blue Mountains, Grande Ronde valley and Wallowa county since the start of the 2025 water year on October 1st, 2024
- Near to above normal precipitation (90-150%) in the OR and WA Columbia Basin, Ochoco-John Day Highlands, the southern Blue Mountains and portions of Wallowa county





Generated 12/18/2024 at HPRCC using provisional data.



NOAA Regional Climate Cent Generated 12/18/2024 at HPRCC using provisional data.

NOAA Regional Climate Centers

Image Captions: Right - Precipitation Amounts for Pacific NW Left - Percent of Normal Precipitation for Pacific NW Data Courtesy High Plains Regional Climate Center Data for the new 2025 water year beginning October 1, 2024

#### National Weather Service Pendleton, OR



National Oceanic and Atmospheric Administration

## Temperature - Last 7 and 30 Days

30-Day Temperature Anomaly

- Mainly above normal temperatures in the Cascades and much of the eastern mountains the last 7 and 30 days
- Mainly near to below normal across parts of north central OR and the Lower Columbia Basin into the surrounding valleys
- Greatest departures (6 degrees or more) from normal were seen across the Cascades and the eastern mountains the last seven days



7-Day Temperature Anomaly

courtesy of Drought.gov



Image Captions: Right - Temperature for Pacific NW Left - Percent of Normal Precipitation for Pacific NW Data Courtesy High Plains Regional Climate Center





#### See/submit Condition Monitoring Observer Reports (CMOR) and view the Drought Impacts Reporter

#### Hydrologic Impacts

- Below normal streamflow (10th-24th percentile) across the Naches, Upper and Lower Yakima, Klickitat, Middle Columbia-Hood, Middle Columbia-Lake Wallula, Lower Snake-Tucannon and Lower Grande Ronde, Upper and Little Deschutes, Upper Crooked, and Beaver-South Fork basins
- Above normal streamflow below normal streamflow (76th-90th percentile) across the Wallowa basin and near normal streamflows (25th-75th percentile) for all other basins

#### **Snowpack Impacts**

• Most snow telemetry (SNOTEL) monitoring sites show above normal snow (100-200% of normal). There are no known impacts at this time.

#### **Agricultural Impacts**

• There are no known impacts at this time

#### **Fire Hazard Impacts**

• There are no known impacts at this time

#### **Other Impacts**

- Washington Drought Emergency declared for all counties east of the Cascades
- Jefferson County Oregon Drought Emergency Declared (Executive order expires December 31, 2024)

#### **Mitigation actions**

• Please refer to your municipality and/or water provider for mitigation information



# Hydrologic Conditions and Impacts - Washington

#### Main Takeaways

- The Naches, Upper and Lower Yakima, Klickitat, Middle Columbia-Hood, Middle Columbia-Lake Wallula, Lower Snake-Tucannon and Lower Grande Ronde basins have below normal streamflow (10th-24th percentile)
- Other river, stream, and creek flows are near normal (25th-75th percentile)

#### Impacts

No known impacts at this time

Reduced streamflow may be detrimental to aquatic species and recreational activities.



	Expl	anatior	1 - Perce	entile cla	asses		_
Low	<10	10-24	25-75	76-90	>90	Llink	
LOW	Much below normal	Below	Normal	Above normal	Much above normal	High	No Data

Image Captions:

Right - USGS 7-day average streamflow station map valid November 13, 2024 Left - USGS 7-day average streamflow HUC map valid November 13, 2024

Data Courtesy USGS Water Watch



# Hydrologic Conditions and Impacts - Oregon

Main Takeaways

- Below normal streamflows (10th-24th percentile) for the Middle Columbia-Hood, Middle Columbia-Lake Wallula, Upper and Little Deschutes, Upper Crooked, Beaver-South Fork basins
- Above normal streamflows (76th-90th percentile) for the Wallowa basin
- Near normal streamflows (25th-75th percentile) for all other basins



Tuesday, December 17, 2024



Tuesday, December 17, 2024

**≥USGS** 

Impacts

No known impacts at this time

Reduced streamflow may be detrimental to aquatic species and recreational activities.

**Atmospheric Administration** 

**National Oceanic and** 

U.S. Department of Commerce

**≥USGS** 

	Expl	anation	- Perce	entile cla	asses		_
Low	<10	10-24	25-75	76-90	>90	High	
	Much below normal	Below	Normal	Above normal	Much above normal	High	No Data

Image Captions:

Right - USGS 7-day average streamflow station map valid December 17, 2024 Left - USGS 7-day average streamflow HUC map valid December 17, 2024 Data Courtesy USGS Water Watch



# Snowpack Conditions and Impacts

#### Link to the latest Snow Water Equivalent Percent of 1991-2020 Median map



National Oceanic and Atmospheric Administration

U.S. Department of Commerce

#### Main Takeaways

- Snowpack SWE values are widely well above normal (≥ 150% percent) across the eastern mountains
- Near normal to slightly above normal snowpack (90%-149) across the Cascades and Washington Blue mountains

#### Impacts

No known impacts at this time

Snow water equivalent is related to the amount of water stored in snowpack.

 Snow can affect the amount of available water for spring and summer snow melt. This can have impacts on water storage, irrigation, fisheries, vegetation, municipal water supplies, and wildfire. Image Captions:

Washington SNOTEL Current Snow Water Equivalent % of Normal Data Courtesy USDA Natural Resources Conservation Service Daily Value as of December 18, 2024

## Fire Hazard Impacts - September through December

Link to Wildfire Potential Outlooks from the National Interagency Coordination Center.

#### Main Takeaways

- Normal significant wildland fire potential (i.e., very low risk) for all areas December 2024 through March 2025
- Significant wildland fires are expected at typical times (e.g., warm season) and intervals during normal significant wildland fire potential conditions



Image Caption: Left - December 2024 Right - January 2025 Data Courtesy National Interagency Coordination Center Issued December 2, 2024





- A progressive and warmer weather pattern with a couple of cold fronts will bring rain and higher mountain snow to the area through the middle of next week.
  - The Cascades are forecast 1 to 4 inches of rain and melted snowfall (high mountain snow) while other mountain areas will get 0.75 to 2 inches
  - Lower elevations are forecast to receive
    0.25-0.75 inches of rain
- Visit <u>weather.gov/Pendleton</u> for the latest weather forecast

7-Day Quantitative Precipitation Forecast for December 18, 2024–December 25, 2024





Image Caption: Weather Prediction Center <u>7-day precipitation forecast</u>



## 6-10 Day Outlook

Link to the latest Climate Prediction Center 6 to 10 day Temperature Outlook and Precipitation Outlook.

#### Main Takeaways

- Above normal temperatures likely in all areas (60-70%)
- Above normal precipitation likely in all areas (50-80%)



#### Image Captions:

Left - <u>Climate Prediction Center 6-10 Day Temperature Outlook.</u> Right - <u>Climate Prediction Center 6-10 Day Precipitation Outlook.</u> Valid December 23-27, 2024



## 8-14 Day Outlook

Link to the latest Climate Prediction Center 8 to 14 day Temperature Outlook and Precipitation Outlook.

#### Main Takeaways

- Leaning towards above normal temperatures area-wide (40-50%)
- Above normal precipitation likely area-wide (40-60%)



#### Image Captions:

Left - <u>Climate Prediction Center 8-14 Day Temperature Outlook.</u> Right - <u>Climate Prediction Center 8-14 Day Precipitation Outlook.</u> Valid December 25-31, 2024



Monthly Climate Outlook

Link to the latest Climate Prediction Center Monthly Outlook.

#### Main Takeaways for December

- Odds favor normal temperatures (33-50%) area-wide
- Equal chances of above, near and below normal precipitation, except favoring above normal precipitation (33-40%) in northeastern portions

Monthly Temperature Outlook for December 1, 2024-December 31, 2024



**Probability of Below-Normal Temperatures** 33% 50% 60% 70% 90% **Probability of Above-Normal Temperatures** 40% 50% 60% 70% 80% **Probability of Near-Normal Temperatures** 33% 40% 50% Last Updated: 11/30/24

Source(s): Climate Prediction Center; image courtesy of Drought.gov

Monthly Precipitation Outlook for December 1. 2024-December 31, 2024



Probability of Below-Normal Precipitation

33%	40%	50%	60%	70%	80%	90%	100%
Probab	ility of Abov	e-Normal Pre	cipitation				



Image Captions:

Left - Climate Prediction Center Seasonal Temperature Outlook.

Right - Climate Prediction Center Seasonal Precipitation Outlook.

Updated November 30, 2024



## Seasonal Climate Outlook

#### Link to the latest Climate Prediction Center Seasonal Outlook.

#### Main Takeaways for **November-December-January**

- Odds leaning towards below normal temperatures (33-50%) for all areas
- Odds leaning towards above normal precipitation (33-40%) for all areas except equal chances of above, near and below precipitation in southwestern Deschutes county

Seasonal (3-Month) Temperature Outlook for December 1, 2024-February 28, 2025

Seasonal (3-Month) Precipitation Outlook for December 1, 2024-February 28, 2025







Probability of Below-Normal Precipitation

33%	40%	50%	60%	70%	80%	90%	100%
Probab	ility of Abov	e-Normal Pre	cipitation				
33%	40%	50%	60%	70%	80%	90%	100%
Probab	ility of Near-	Normal Preci	pitation				

33%	40%	50
Source(s): Climate Predic	tion Center; image courtesy of Drought.gov	Last Updated: 11/21/

Image Captions:

Left - Climate Prediction Center Seasonal Temperature Outlook.

Right - Climate Prediction Center Seasonal Precipitation Outlook.

Valid December 2024 and January-February 2025



## **Drought Outlook**

#### The latest drought outlooks can be found on the <u>CPC homepage</u>.

#### Main Takeaways

- Current conditions are expected to persist over portions of central and north central OR
- Drought is expected to end over parts of Kittitas county. central and north central OR. and the Blues and Wallowa over the November through February time period

#### **Possible Impact**

Reduced streamflows and reservoir levels, possible reduction in agricultural yield, crop loss, and poor pasture conditions where irrigation water is not available.

Seasonal (3-Month) Drought Outlook for November 30, 2024-February 28, 2025

# **Drought Is Predicted To..**

Persist Improve End Develop No Drought Source(s): Climate Prediction Center; image courtesy of Drought.gov Last Updated: 11/30/24 1-Month Drought Outlook for December 1, 2024-December 31, 2024



Image Captions:

Right - Climate Prediction Center Monthly Drought Outlook Released November 30, 2024 Left - Climate Prediction Center Seasonal Drought Outlook Released November 30, 2024



#### **National Oceanic and Atmospheric Administration**