# Drought Information Statement for Eastern OR & South Central WA Valid April 12, 2024 Issued By: NWS Pendleton Contact Information: pdt.operations@noaa.gov

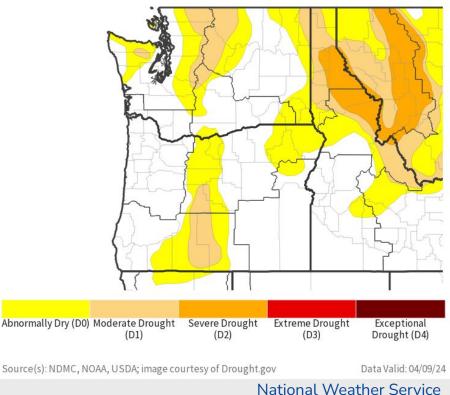
- This product will be updated if drought conditions change significantly.
- Please see all currently available products at <a href="https://drought.gov/drought-information-statements">https://drought.gov/drought-information-statements</a>.
- Please visit <u>https://www.weather.gov/pdt/DroughtInformationStatement</u> for previous statements
- Please visit <u>https://www.drought.gov/drought-status-updates/</u> for regional drought status updates.
- Moderate drought is affecting portions of central Oregon and central WA Cascades
- Mountain snowpack is below normal across south central Washington to southeast WA
- Northwest Geographic Area denotes the potential for significant fires will remain minimal or low risk until late June or July





- Drought intensity and Extent
  - D1 (Moderate Drought): Portions of central Oregon and portions of the central Washington Cascades
  - D0: (Abnormally Dry): Northern Blue Mountains of OR and WA, Wallowa county, the Grande Ronde Valley, parts of central OR, north central OR, and much of the eastern slopes of the Washington and Oregon Cascades

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



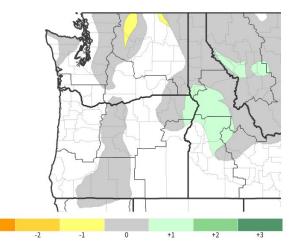
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Pendleton, OR

## **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 Improved</u>: Eastern Wallowa county
- Four-Week Drought Monitor Class Change
  - Drought Worsened (1 <u>Class Degradation</u>): Portions of the upper eastern slopes of the Washington Cascades
  - <u>Drought Improved</u>: Limited portions of central and north central Oregon and eastern Wallowa county



Data Valid: 04/09/24

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

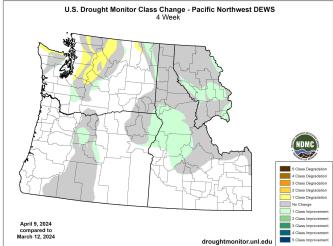


Image Captions: Right - 4 Week Drought Class Change Left - 1 Week Drought Class Change Data Courtesy U.S. Drought Monitor and Drought.gov

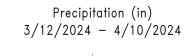
> National Weather Service Pendleton, OR

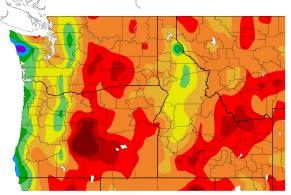


U.S. Drought Monitor 1-Week Change Map

# Precipitation - Last 30 Days

- Above to near normal precipitation across north central OR and the western Lower Basin
- While there has been rounds of rain and mountain snow, they have been mainly light with below normal precipitation seen across much the Cascades, eastern mountains and central OR mountains
- While weather systems and their attendant atmospheric rivers have mainly impacted the Pacific NW coast central and southern CA, the Blue mountains and Wallowa have seen near to above normal precip *the last two weeks*





Generated 4/11/2024 at HPRCC using provisional data.

Percent of Normal Precipitation (%) 3/12/2024 - 4/10/2024

NOAA Regional Climate Centers 1/2024 at HPRCC using provisional data.

NOAA Regional Climate Centers

300

150

130

110

70

50 25

Image Captions:

Right - Precipitation Amount for Pacific NW Left - Percent of Normal Precipitation for Pacific NW Data Courtesy High Plains Regional Climate Center Data over the past 30 days ending April 10, 2024

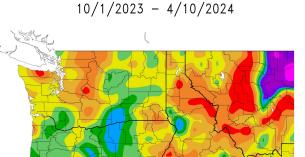
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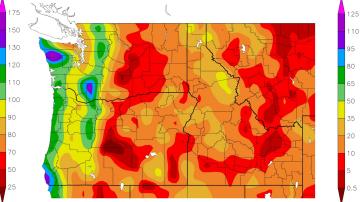
## **Precipitation - Current Water Year**

- Below normal precipitation seen over October and November 2023 continue to affect the current water year as a whole, especially across the WA Cascades were deficits exceeded 2-4 inches in spots each month
- Areas of above normal precipitation across the lower elevations of the interior Pacific NW could largely be attributable to January 2024 where percent of normal precipitation commonly exceeded 150% (surpluses of 0.5-1 inches and more)



Percent of Normal Precipitation (%)

Precipitation (in) 10/1/2023 — 4/10/2024



Generated 4/11/2024 at HPRCC using provisional data.

NOAA Regional Climate Centers /11/2024 at HPRCC using provisional data.

NOAA Regional Climate Centers

#### Image Captions:

Right - Precipitation Amount for Pacific NW Left - Percent of Normal Precipitation for Pacific NW Data Courtesy High Plains Regional Climate Center Data for the current water year ending April 10, 2024

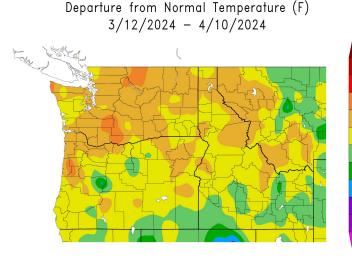
#### National Weather Service Pendleton, OR



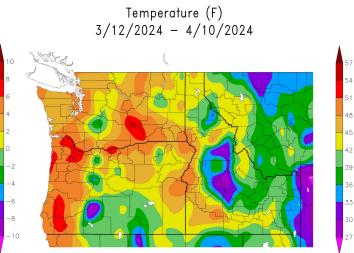
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## Temperature - Last 30 Days

- Predominantly near normal to above normal average temperature the last 30 days
- Average low temperatures were slightly above normal except for slightly below normal in central and north central OR and the Ochoco Mountains
- Average high temperatures were near to a few degrees above normal, except for a pocket of below normal temperatures across portions of north central OR



Generated 4/11/2024 at HPRCC using provisional data.



NOAA Regional Climate Centers /11/2024 at HPRCC using provisional data.

NOAA Regional Climate Centers

Image Captions: Right - Temperature for Pacific NW Left - Percent of Normal Precipitation for Pacific NW Data Courtesy High Plains Regional Climate Center Data for the last 30 days ending April 10, 2024

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

### Hydrologic Impacts

• Below normal streamflow (70-95%) for some streams and rivers across portions of Washington and eastern Oregon, including Upper Columbia-Priest Rapids and Lower Yakima basins, as well as low reservoir levels for some area reservoirs - this may affect fish and other aquatic species as well as recreation activities through spring and into summer. Further south, near to slightly above normal streamflows in Oregon

### **Snowpack Impacts**

• There are no known impacts at this time with sites reporting below normal mountain snowpack (70-80%) across the Washington Cascades with the exception of 56% for the Lower Yakima Basin

#### Agricultural Impacts

• There are no known impacts at this time

### **Fire Hazard Impacts**

• There are no known impacts at this time

### **Other Impacts**

- Oregon Jefferson County has requested a Drought Declaration
- Washington Drought Emergency declared for portions of Kittitas, Yakima, Benton, Klickitat, Walla Walla and Columbia Counties

### **Mitigation actions**

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



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# Hydrologic Conditions and Impacts - Washington

#### Main Takeaways

- The Upper Columbia-Priest Rapids basin has below normal streamflow
- Most river, stream, and creek flows (left) across south central and southeast Washington are considered normal



No known impacts at this time

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

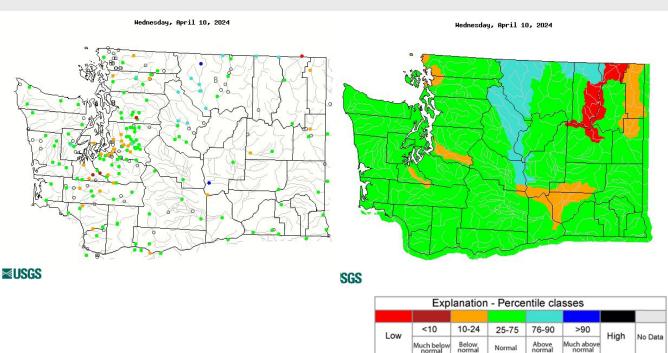


Image Captions:

Right - USGS 7-day average streamflow station map valid April 10, 2024 Left - USGS 7-day average streamflow HUC map valid April 10, 2024 Data Courtesy USGS Water Watch



## Hydrologic Conditions and Impacts - Oregon

#### Main Takeaways

 All reporting river, stream, and creek flows (left) across eastern and central OR are normal, except below normal for Meacham Creek at Gibbon and above normal for Wallowa River near Joseph

#### Impacts

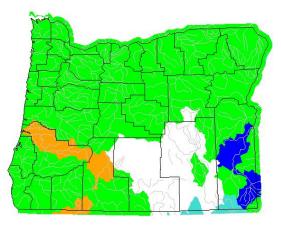
No known impacts at this time

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



Hednesday, April 10, 2024





Wednesday, April 10, 2024

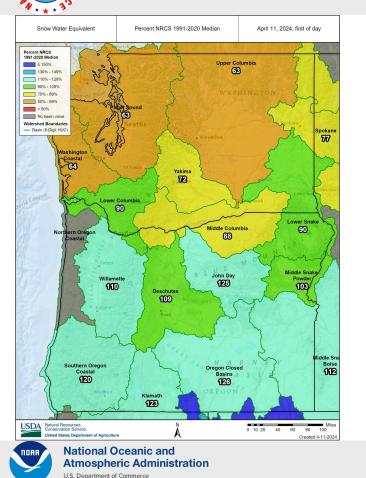
	Expl	anation	- Perce	ntile cla	asses		
Low	<10	10-24	25-75	76-90	>90	High	No Data
	Much below normal	Below	Normal	Above	Much above normal		

#### Image Captions:

Right - USGS 7-day average streamflow station map valid April 10, 2024 Left - USGS 7-day average streamflow HUC map valid April 10, 2024 Data Courtesy USGS Water Watch



## Snowpack Conditions and Impacts



#### Main Takeaways

- Mountain snowpack is at or has past their peak across much of the Cascades and mountains of Oregon and Washington
- Above normal snowpack is seen across the OR Cascades and across central OR into the southern Blue Mountains
- Much of the mountain snowpack across south central Washington to southeast WA is below normal between 70-90%
  - This includes the Naches, Upper/Lower Yakima, northern Blue mountains of WA, and Lower Grande Ronde basins

### Impacts

No known impacts at this time

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

• The lack of 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: Oregon and Washington SNOTEL Current Snow Water Equivalent % of Normal Data Courtesy USDA Natural Resources Conservation Service Daily Value as of April 11, 2024

## Water Supply Forecast - April - September 2024

Period: APR-SEP

Forecast (% Normal)

No Normal, No Data

25-50

50-75

00-110 110 - 125125-150

150-175

Link to the latest Northwest River Forecast Center Water Supply Forecast.

### Main Takeaways

- Most locations across south central WA and eastern OR are forecast to have a near or below normal water supply
- Areas across the Ochoco-John Day Highlands and parts of the Northern Blue Mountains are forecast to have a near to above normal water supply
- A few locations, mainly in the Blue Mountains and eastern Columbia Basin are forecast to have a well below normal water supply

#### Impacts

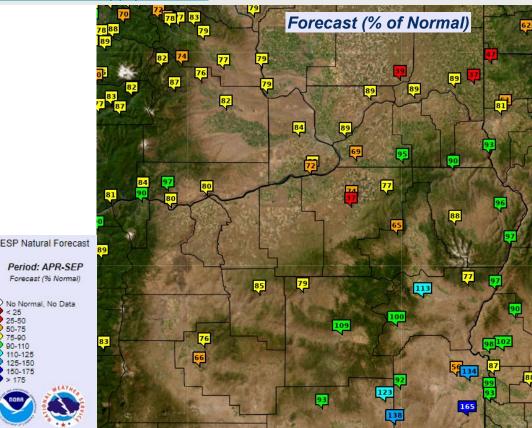
No known impacts at this time

Low reservoir levels would be expected to affect agriculture production, fish, and other aguatic species.

Image Caption: Ensemble Streamflow Prediction Natural Forecast Data Courtesy NOAA NWS Northwest River Forecast Center Issued 4-10-2024



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## Fire Hazard Impacts - March through June

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

#### Main Takeaways

- Near normal (i.e., very low) risk of significant wildland fire potential through July 2024
- Identical forecasts of normal wildland fire potential from April 2024 through July 2024
- The Northwest Geographic Area denotes the potential for significant fires will remain minimal or low risk until late June or July.

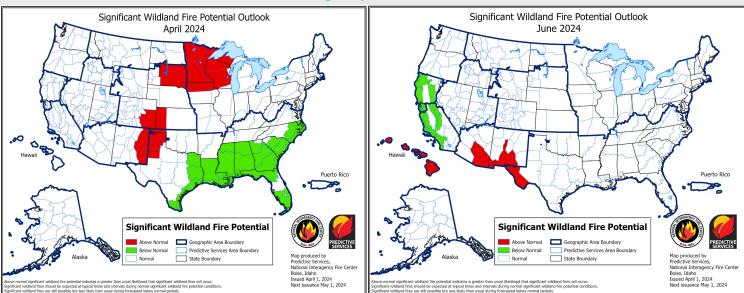


Image Caption: Left - April 2024 Right - June 2024 Data Courtesy National Interagency Coordination Center

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- An upper low and trough will bring a chance of showers and thunderstorms over the eastern Oregon mountains Friday through the weekend (Days 1-3) with mainly light precipitation
- An unsettled weather pattern will continue next week (Days 4-6) with light precipitation and below normal temperatures expected
- High pressure is expected Thursday into the weekend (Days 7-9) with fair and dry weather anticipated
- Visit <u>weather.gov/Pendleton</u> for the latest weather forecast

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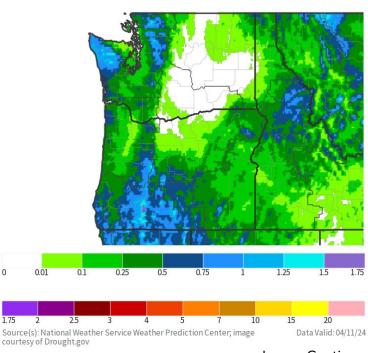


Image Caption: Weather Prediction Center <u>7-day precipitation forecast</u>

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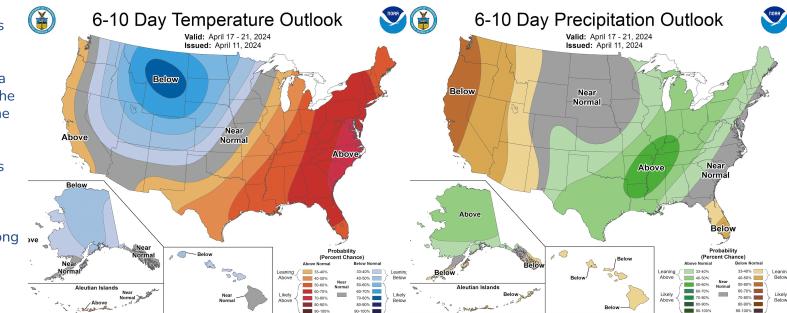
7-Day Quantitative Precipitation Forecast

### 6-10 Day Outlook

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

#### Main Takeaways

- Leaning towards below normal temperatures area-wide with a greater shift in the odds towards the east (33-50%)
- Leaning towards below normal precipitation area-wide with greater odds along the Oregon Cascades and central Oregon (40-60%)



#### 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 April 17-21, 2024



8-14 Day Outlook

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

- Main Takeaways

  Tilted in the odds for above normal temperatures (40-60%)
  - Leaning towards below normal precipitation (33-50%)

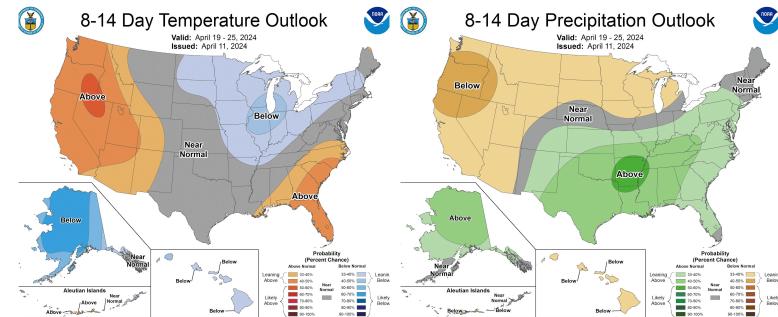


Image Captions:

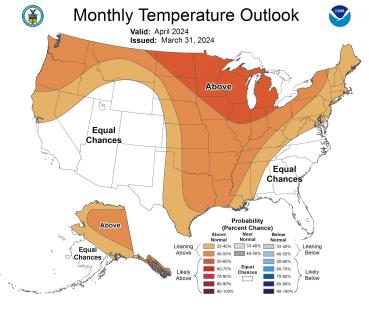
Left - <u>Climate Prediction Center 8-14 Day Temperature Outlook.</u> Right - <u>Climate Prediction Center 8-14 Day Precipitation Outlook.</u> Valid April 19-25, 2024

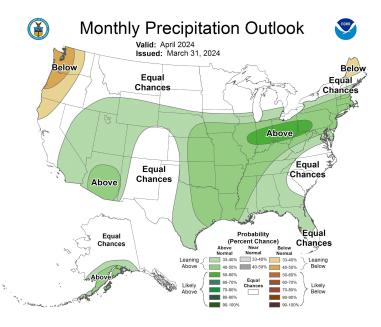


### Monthly Climate Outlook

Link to the latest Climate Prediction Center Monthly Outlook.

- Main Takeaways
  - Odds tilted for above normal temperatures (40-50%)
  - Odds tilted for slightly below normal precipitation (33-40%) western portions of the area and equal chances of below normal, near normal and above normal precipitation in eastern portions of the area





#### Image Captions:

Left - <u>Climate Prediction Center Seasonal Temperature Outlook</u>. Right - <u>Climate Prediction Center Seasonal Precipitation Outlook</u>. Valid April 2024

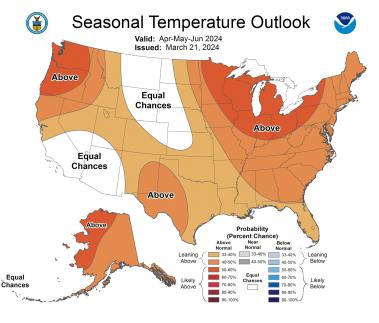


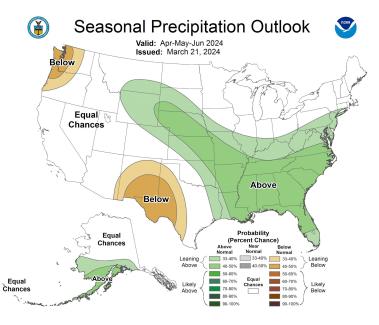


Link to the latest Climate Prediction Center Seasonal Outlook.

### Main Takeaways

- Likely above normal temperatures area-wide (50-60%)
- Odds leaning for below normal precipitation across central OR and WA (33-40%) and equal chances of below normal, near normal and above normal precipitation in eastern OR and WA





#### Image Captions:

Left - <u>Climate Prediction Center Seasonal Temperature Outlook</u>. Right - <u>Climate Prediction Center Seasonal Precipitation Outlook</u>. Valid April, May and June 2024



### Drought Outlook

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

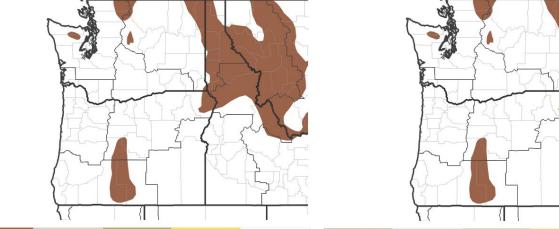
Seasonal (3-Month) Drought Outlook

#### Main Takeaways

- Drought is expected to persist in central Oregon
- These areas are vulnerable given the current low snowpack conditions in tandem with the warm seasonal outlook
- Drought is expected to develop in eastern Wallowa county

#### **Possible Impact**

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



No Drought

#### Persist Improve End Develop

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

Data Valid: 04/11/24

Persist

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

End

Data Valid: 04/11/24

No Drought

#### Image Captions:

Left - Climate Prediction Center Monthly Drought Outlook Released April 11, 2024 Right - Climate Prediction Center Seasonal Drought Outlook Released April 11, 2024

Improve



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Develop

**1-Month Drought Outlook**