

Drought Information Statement for Eastern OR & South Central WA

Valid March 15, 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 https://drought.gov/drought-information-statements.
- Please visit https://www.weather.gov/pdt/DroughtInformationStatement for previous statements.
- Moderate drought is affecting portions of central Oregon into north central Oregon and Wallowa county
- Mountain snowpack has been growing steadily owing to storms over the January through March time period
- Northwest Geographic Area denotes the potential for significant fires will remain minimal or low risk until late June or July



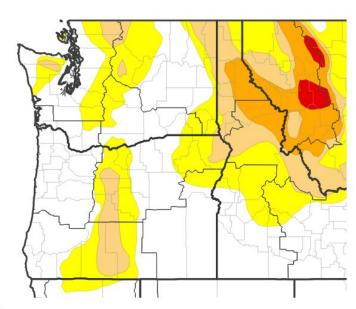


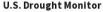
U.S. Drought Monitor

Link to the latest U.S. Drought Monitor

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

U.S. Drought Monitor







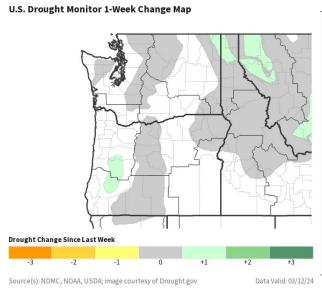
Source(s): NDMC, NOAA, USDA; image courtesy of Drought.gov

Data Valid: 03/12/24

Recent Change in Drought Intensity

Link to the latest 4-week change map for the Pacific Northwest

- One-Week Drought Monitor Class Change
 - No Change
- Four-Week Drought Monitor Class Change
 - <u>Drought Worsened (1</u>
 <u>Class Degradation)</u>:
 portions of the upper
 eastern slopes of the
 Washington Cascades
 and the Northern Blue
 Mountains
 - <u>Drought Improved</u>: Limited portions of central and north central Oregon



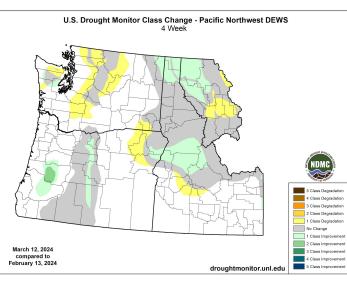


Image Captions:

Right - 4 Week Drought Class Change Left - 1 Week Drought Class Change

Data Courtesy U.S. Drought Monitor and Drought.gov

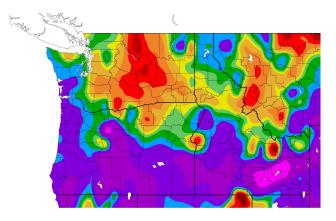




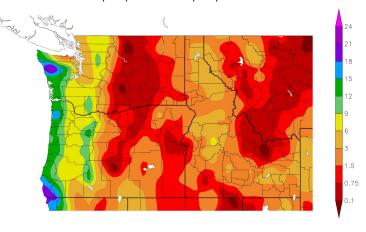
Precipitation - Last 30 Days

- Below normal precipitation across south central WA south into portions of the eastern Columbia River Gorge and portions of the foothills of the Blue Mountains
- The areas of below normal could attributed to recent weather systems and their attendant atmospheric rivers that have impacted mainly northern CA, the Pacific NW coast, and central/southern OR
- Above normal precipitation mostly across parts of central OR and the central OR mountains

Percent of Normal Precipitation (%) 2/13/2024 - 3/13/2024



Precipitation (in) 2/13/2024 - 3/13/2024



Generated 3/14/2024 at HPRCC using provisional data.

NOAA Regional (Generated 3/14/2024 at HPRCC using provisional data.

NOAA Regional Climate Centers

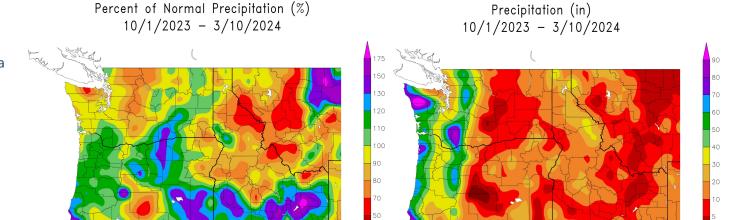
Image Captions:
Right - Precipitation Amount for Pacific NW
Left - Percent of Normal Precipitation for Pacific NW
Data Courtesy High Plains Regional Climate Center
Data over the past 30 days ending March 13, 2024





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)



Generated 3/11/2024 at HPRCC using provisional data.

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

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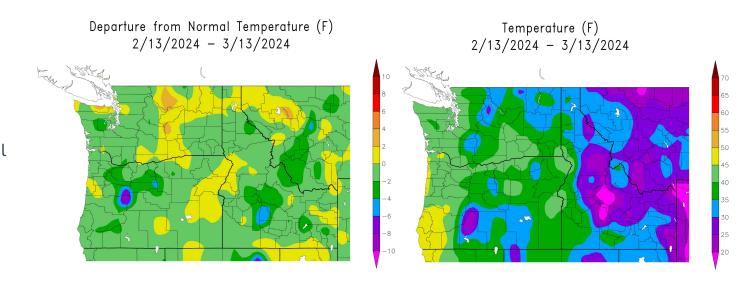
Image Captions:
Right - Precipitation Amount for Pacific NW
Left - Percent of Normal Precipitation for Pacific NW
Data Courtesy High Plains Regional Climate Center
Data for the current water year ending March 11, 2024





Temperature - Last 30 Days

- Predominantly near normal average temperature the last 30 days
- Average low temperatures were slightly above normal across parts of south central WA and central OR, near normal elsewhere
- Average high temperatures were near normal, except for pockets of below normal across areas of central OR



Generated 3/14/2024 at HPRCC using provisional data.

NOAA Regional Climate Centers /14/2024 at HPRCC using provisional data.

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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 March 14, 2024





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

Hydrologic Impacts

 Below normal streamflow 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

Snowpack Impacts

• There are no known impacts at this time with sites reporting slightly below normal mountain snowpack across the Washington Cascades between 70-89%

Agricultural Impacts

There are no known impacts at this time

Fire Hazard Impacts

There are no known impacts at this time

Other Impacts

- No Oregon Drought declarations
- No Washington Drought Advisories or Drought emergencies

Mitigation actions



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

National Weather Service Pendleton. OR

Atmospheric Administration



Hydrologic Conditions and Impacts - Washington

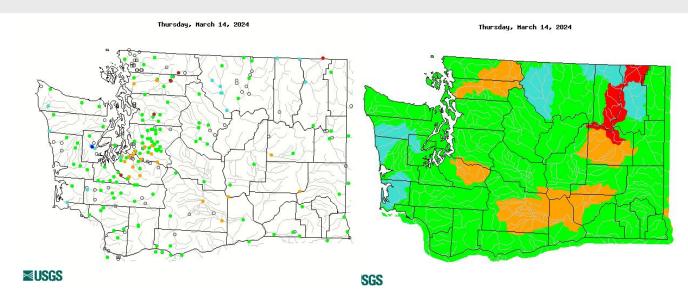
Main Takeaways

- Upper Columbia-Priest Rapids and Lower Yakima basins have below normal streamflow
- Most river, stream, and creek flows (left) across south central and southeast Washington are considered normal

Impacts

No known impacts at this time

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



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

Image Captions:

Right - USGS 7-day average streamflow station map valid March 14, 2024 Left - USGS 7-day average streamflow HUC map valid March 14, 2024 Data Courtesy USGS Water Watch





Hydrologic Conditions and Impacts - Oregon

■USGS

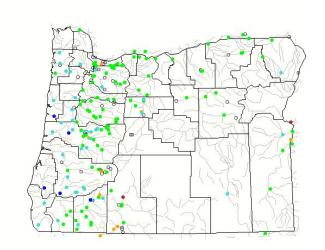
Main Takeaways

- All reporting river, stream, and creek flows (left) across eastern and central OR are normal or above normal
- The Lower Crooked basin in central OR is considered above normal with the Crooked River below Opal Springs reporting above the 75th percentile (141% percent of normal / median)

Impacts

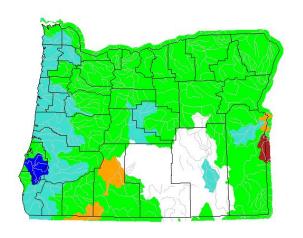
No known impacts at this time

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



Thursday, March 14, 2024

Thursday, March 14, 2024



■USGS

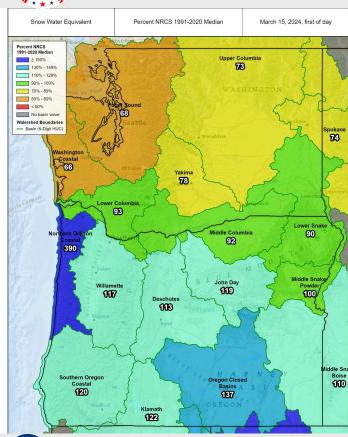
	Expl	anation	- Perce	ntile cla	asses		
Low	<10	10-24	25-75	76-90	>90	High	No Data
	Much below normal	Below normal	Normal	Above normal	Much above normal		

Image Captions:

Right - USGS 7-day average streamflow station map valid March 14, 2024 Left - USGS 7-day average streamflow HUC map valid March 14, 2024 Data Courtesy USGS Water Watch



Snowpack Conditions and Impacts



Main Takeaways

- Mountain snowpack has been growing steadily across much of the Cascades and mountains of Oregon and Washington owing to storms over the January through March time period
- Above normal snowpack is seen across the OR Cascades and across central OR into the southern Blue Mountains
- Much of the mountain snowpack across Washington and northeastern OR is below normal between 70-89%

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 March 15, 2024





Water Supply Forecast - April - September 2024

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 see near or slightly above or below normal water supply
- Areas across the Ochoco-John Day Highlands and parts of the Northern Blue Mountains are forecast to see above-normal water supply

Impacts

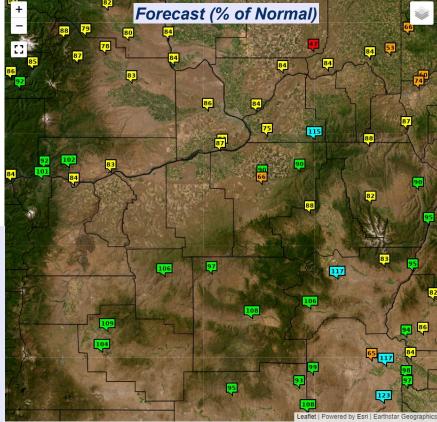
No known impacts at this time

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

Image Caption:

Ensemble Streamflow Prediction Natural Forecast Data Courtesy NOAA NWS Northwest River Forecast Center Issued 3-15-2024







Fire Hazard Impacts - March, April, and May

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 June 2024
- Identical forecasts of normal wildland fire potential from March 2024 through June 2024
- The Northwest Geographic Area denotes the potential for significant fires will remain minimal or low risk until late June or July.

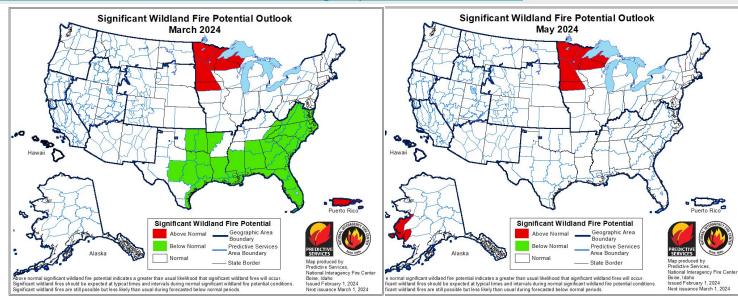


Image Caption: Left - March 2024 Right - May 2024

Data Courtesy National Interagency Coordination Center

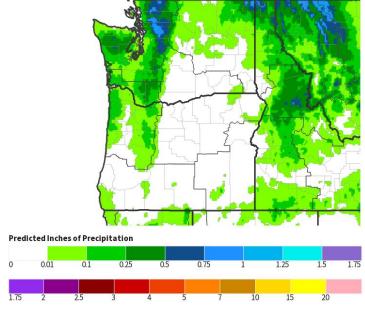




Seven Day Precipitation Forecast

- Dry weather and above normal temperatures will prevail through Tuesday (Day 4) owing to upper-level high pressure dominating the weather pattern
- Renewed potential for precipitation and mountain snow starting Wednesday (Day 5) as the synoptic pattern looks more likely than not to transition as high pressure breaks down and gets shunted to the east
- Visit <u>weather.gov/Pendleton</u> for the latest weather forecast

7-Day Quantitative Precipitation Forecast



Source(s): National Weather Service Weather Prediction Center; image courtesy of Drought.gov

Data Valid: 03/15/24

Image Caption:

Weather Prediction Center 7-day 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 above normal area-wide with a greater shift in the odds towards southeast Oregon (40-50%)
- Tilted slightly towards above normal for above average precipitation (33-40%)

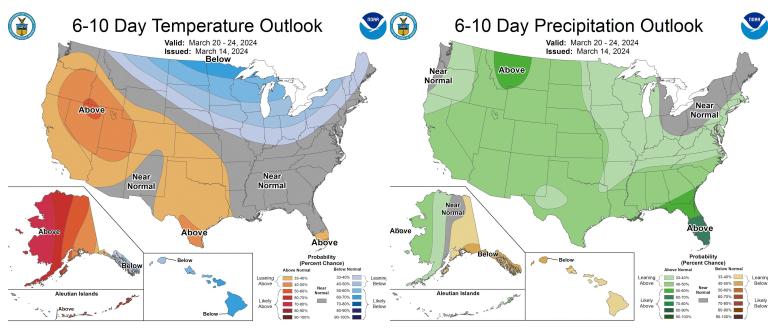


Image Captions:

Left - Climate Prediction Center 6-10 Day Temperature Outlook.

Right - Climate Prediction Center 6-10 Day Precipitation Outlook.

Valid March 20-24, 2024





8-14 Day Outlook

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

Main Takeaways

- Slight tilt in the odds for below normal temperatures towards eastern WA (33-40%)
- Leaning above normal for above average precipitation (33-40%)

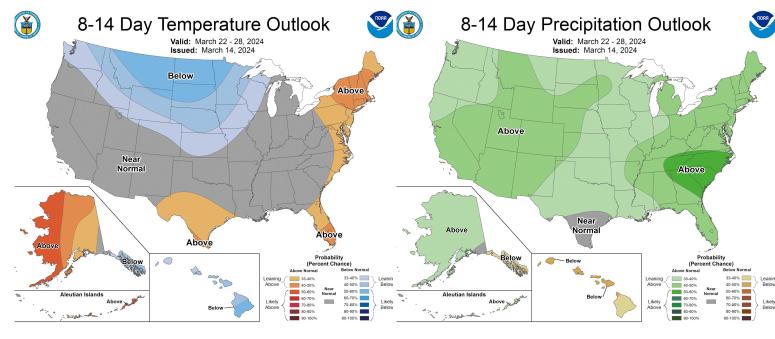


Image Captions:

Left - Climate Prediction Center 8-14 Day Temperature Outlook.

Right - Climate Prediction Center 8-14 Day Precipitation Outlook.

Valid March 22-28, 2024



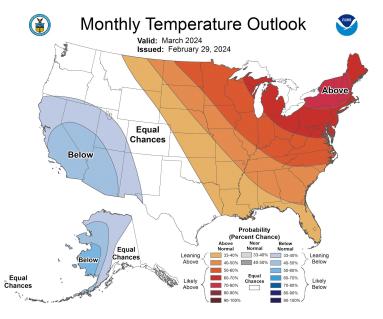


Monthly Climate Outlook

Link to the latest Climate Prediction Center Monthly Outlook.

Main Takeaways

- Equal chances of above, below, or near normal temperatures
- Odds tilted slightly for above normal precipitation (33-40%) across central OR and the central OR mountains



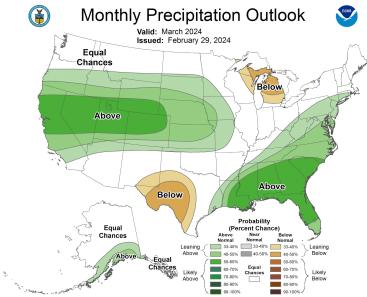


Image Captions:

Left - Climate Prediction Center Seasonal Temperature Outlook.

Right - Climate Prediction Center Seasonal Precipitation Outlook.

Valid March 2024



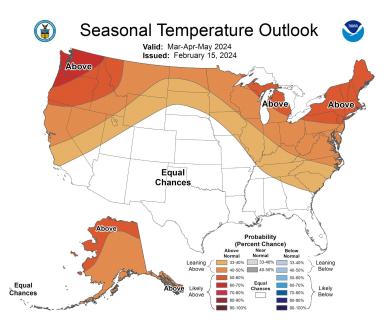


Seasonal Climate Outlook

Link to the latest Climate Prediction Center Seasonal Outlook.

Main Takeaways

- Likely above normal temperatures area-wide with highest odds across parts of south central WA (60-70%)
- Odds leaning for below normal precipitation with the highest odds across eastern WA into extreme northeast OR (40-50%)



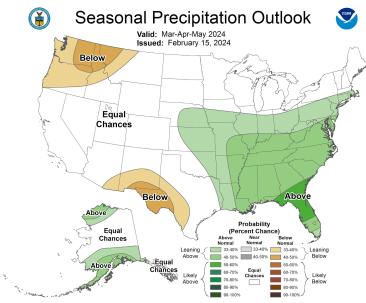


Image Captions:

Left - Climate Prediction Center Seasonal Temperature Outlook.

 $\textbf{Right-} \underbrace{\textbf{Climate Prediction Center Seasonal Precipitation Outlook}}.$

Valid March, April, and May 2024





The latest monthly and seasonal outlooks can be found on the CPC homepage

Main Takeaways

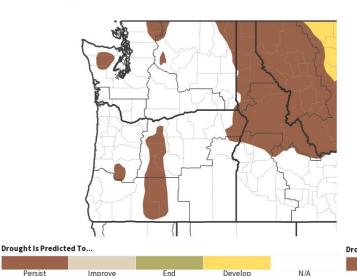
- Drought is expected to persist
- Drought conditions anticipated to develop through the spring across parts of south central WA and the eastern mountains, and parts of extreme southeast WA and northeast OR
 - These areas are vulnerable given the current low snowpack conditions in tandem with the warm seasonal outlook

Possible Impact

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

1-Month Drought Outlook

Persist



Develop

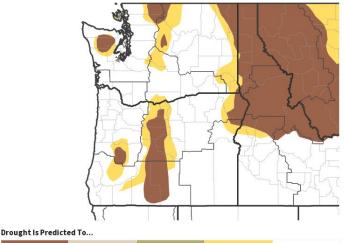
Source(s): Climate Prediction Center; image courtesy of Drought.gov

Improve

N/A Persist Improve

Data Valid: 03/15/24 Source(s): Climate Prediction Center; image courtesy of Drought.gov

Seasonal (3-Month) Drought Outlook



End Develop

Image Captions:

Data Valid: 03/15/24

Left - Climate Prediction Center Monthly Drought Outlook Released March 15, 2024 Right - Climate Prediction Center Seasonal Drought Outlook Released March 15, 2024



National Weather Service Pendleton, OR