

Drought Information Statement for Eastern OR & South Central WA

Valid May 19, 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
- Please visit https://www.drought.gov/drought-status-updates/ for regional drought status updates.
- Moderate drought is affecting portions of the central WA Cascades but has improved in central OR
- Abnormally dry conditions are expected to develop in most of WA in the next few months
- Mountain snowpack is well below normal across the Yakima and Upper Columbia Basin in WA and near to slightly below normal elsewhere
- Northwest Geographic Area denotes the potential for significant fires will remain minimal or low risk through August



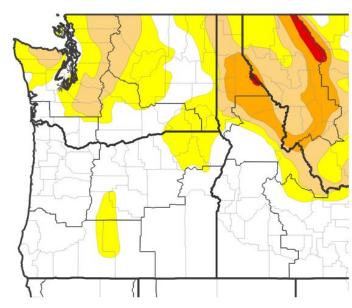


U.S. Drought Monitor

Link to the <u>latest U.S. Drought Monitor</u>

- Drought intensity and Extent
 - D1 (Moderate Drought): Portions of the central Washington Cascades
 - OD: (Abnormally Dry): Northern Blue Mountains of OR and WA, Blue Mountain Foothills of WA, Northern Blue Mountain Foothills of OR, the Grande Ronde Valley, the Kittitas Valley, portions of central OR, portions of the Columbia Basin of OR and WA, western Wallowa County and much of the eastern slopes of the Washington Cascades

U.S. Drought Monitor







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

Data Valid: 05/14/24

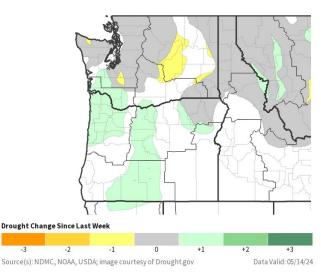


Recent Change in Drought Intensity

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

- One-Week Drought Monitor Class Change
 - <u>Drought Worsened (1 Class</u>
 <u>Degradation)</u>: A small portion of the eastern Kittitas Valley
 - <u>Drought Improved</u>: Central and North Central Oregon and portions of the Simcoe Highlands and Southern Blue Mountains
- Four-Week Drought Monitor Class Change
 - <u>Drought Worsened (1 Class</u>
 <u>Degradation)</u>: Portions of the
 OR and WA Blue Mountain
 Foothills and Kittitas Valley
 - <u>Drought Improved</u>: Central and North Central Oregon and portions of the Simcoe Highlands





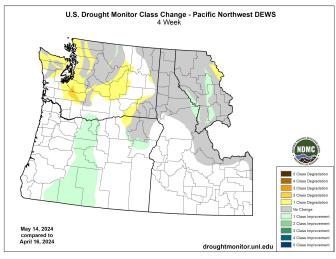


Image Captions:

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

Data Courtesy U.S. Drought Monitor and Drought.gov Data over the past 7 and 28 days ending May 14, 2024



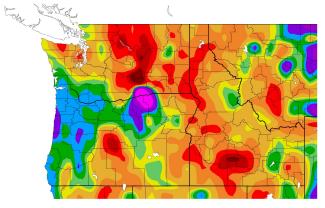


Precipitation - Last 30 Days

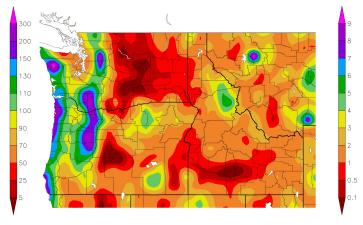
Mostly below normal precipitation across most of WA (dry bullseye around Hanford - less than 5 percent of normal) and mostly above normal in OR (The wet bullseye near Hermiston - 130-300 percent of normal is incorrect due to inaccurate data)

- In OR, the Northern Blue Mountains, eastern Wallowa County and SE Deschutes County were less than 70 percent of normal
- While there has been one 3-4 day period of heavy rain and mountain snow in early May, otherwise rain and snow has been very light

Percent of Normal Precipitation (%) 4/16/2024 — 5/15/2024



Precipitation (in) 4/16/2024 - 5/15/2024



Generated 5/16/2024 at HPRCC using provisional data.

NOAA Regional Climate Centers 6/2024 at HPRCC using provisional data.

NOAA Regional Climate Centers

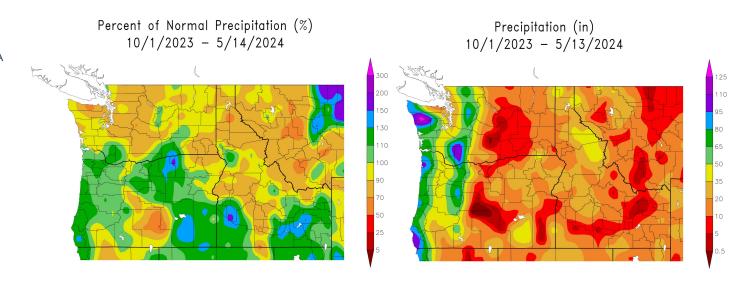
Image Captions:
Right - Precipitation Amount for Pacific NW
Left - Percent of Normal Precipitation for Pacific NW
Data Courtesy High Plains Regional Climate Center
Data over the past 30 days ending May 15, 2024





Precipitation - Current Water Year

- Below normal precipitation continues to affect the current water year as a whole, especially across WA and portions of Deschutes County, eastern Columbia Basin, Blue Mountain Foothills of WA and Wallowa County where precipitation was 70-100 percent of normal
- Areas of above normal precipitation (100-130%) across much of OR and the WA Columbia Basin are largely attributable to precipitation in January and May 2024
- The area of 130-200% above normal precipitation near Hermiston is incorrect due to erroneous data



Generated 5/15/2024 at HPRCC using provisional data.

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

NOAA Regional Climate Centers

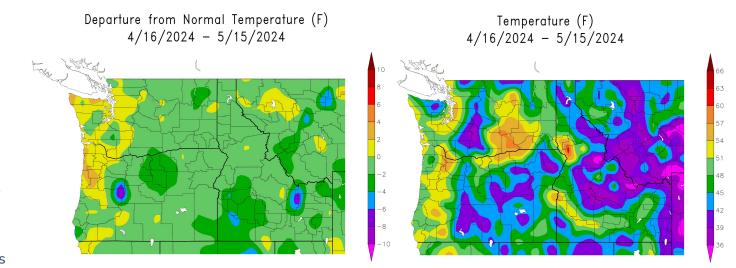
Image Captions:
Right - Precipitation Amount for Pacific NW
Left - Percent of Normal Precipitation for Pacific NW
Data Courtesy High Plains Regional Climate Center
Data for the current water year ending May 14, 2024





Temperature - Last 30 Days

- Below normal average temperature the last 30 days
- Average low temperatures were zero to 4 degrees below normal except for slightly above normal in portions of the central WA Cascades
- Average high temperatures were mainly a few degrees below normal, except for pockets of slightly above normal temperatures across portions of the WA Cascades, WA Columbia Basin, Blue Mountain Foothills of OR, Grande Ronde Valley and Wallowa County



Generated 5/16/2024 at HPRCC using provisional data.

NOAA Regional Climate Centers /16/2024 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 May 15, 2024





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 most portions of Washington, near to above normal streamflow (90-140%) in most of Oregon and well below normal streamflow in the OR and WA Columbia Basin (55-75%). Reservoir levels are near to slightly above normal (80-125%) - this may affect fish and other aquatic species as well as recreation activities through spring and into summer, especially in the Columbia Basin.

Snowpack Impacts

• There are no known impacts at this time with sites reporting below normal mountain snowpack (60-90%) along the Washington Cascades crest with mostly below 15% away from the Cascade crest. Eastern Oregon mountains are also at 60-90% of normal with a few outliers below 40%.

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

Mitigation actions

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





Hydrologic Conditions and Impacts - Washington

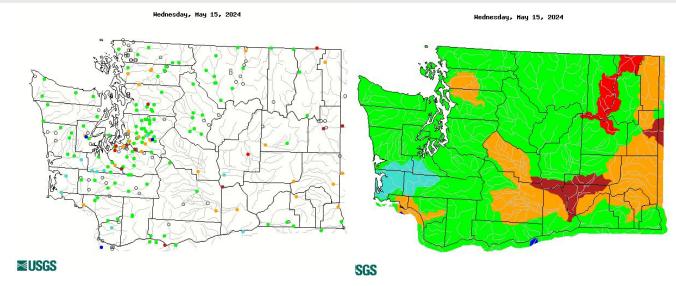
Main Takeaways

- The Upper Columbia-Priest Rapids basin has well below normal streamflow
- The Upper and Lower Yakima and Lower Snake basins have below normal streamflow
- Most other 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		
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 May 15, 2024 Left - USGS 7-day average streamflow HUC map valid May 15, 2024 Data Courtesy USGS Water Watch





Hydrologic Conditions and Impacts - Oregon

■USGS

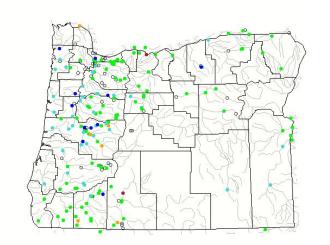
Main Takeaways

 All reporting river, stream, and creek flows (left) across eastern and central OR are normal, except below normal for the Upper Grande Ronde and Wallowa basins and much above normal for the Willow Creek basin

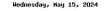
Impacts

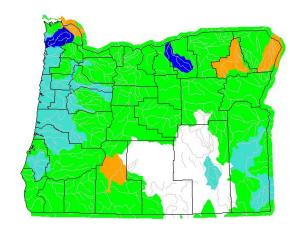
No known impacts at this time

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



Hednesday, May 15, 2024





4	US	GS

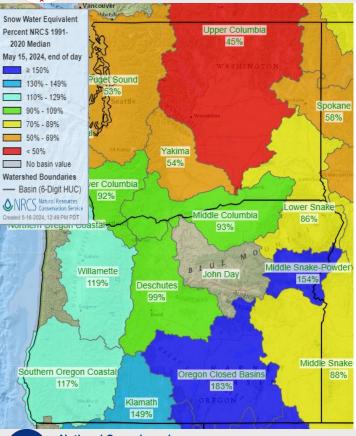
	Expl	anation	- Perce	ntile cla	asses		
Low	<10	10-24	25-75	76-90	>90	High	No Data
	Much below normal	Below normal	Normal	Above normal	Much above normal		

Image Captions:

Right - USGS 7-day average streamflow station map valid May 15, 2024 Left - USGS 7-day average streamflow HUC map valid May 15, 2024 Data Courtesy USGS Water Watch



Snowpack Conditions and Impacts



Main Takeaways

- Mountain snowpack is past peak across much of the Cascades and is gone in some locations and mountains of Oregon and Washington
- Near to below normal snowpack (85-100%) is seen across OR and southern WA
- Mountain snowpack across the Yakima and Upper Columbia basins are well below normal (45-55%)

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 May 15, 2024



Water Supply Forecast - April - September 2024

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

Main Takeaways

- Most locations across southeast WA and northeast OR are forecast to have a below normal water supply (65-85%)
- Areas across the Ochoco-John Day Highlands and central OR are forecast to have a near to above normal water supply (90-105%)
- The Blue Mountains, Blue Mountain Foothills and the Yakima Valley are forecast to have a well below normal water supply (55-75%)

Impacts

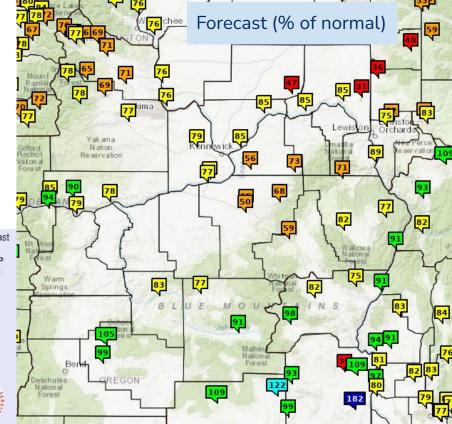
No known impacts at this time

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 May 16, 2024







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 August 2024
- Identical forecasts of normal wildland fire potential for May and June 2024 and for July and August 2024
- Significant wildland fires are expected at typical times and intervals during normal significant wildland fire potential conditions





Image Caption: Left - May 2024 Right - July 2024 Data Courtesy National Interagency Coordination Center Issued May 1, 2024



Seven Day Precipitation Forecast

- An upper trough will bring a chance of rain, higher mountain snow showers and a slight chance of thunderstorms over far eastern Oregon mountains today and Monday (Days 1-2) with mainly light precipitation
- An unsettled weather pattern with a pair of upper lows and troughs will bring more significant rain and higher mountain snow amounts. There will also be a slight chance of thunderstorms mainly over the eastern Oregon mountains. The first will impact the area Tuesday and Wednesday and the second Friday through next weekend (Days 3-7)
- Visit <u>weather.gov/Pendleton</u> for the latest weather forecast

7-Day Quantitative Precipitation Forecast

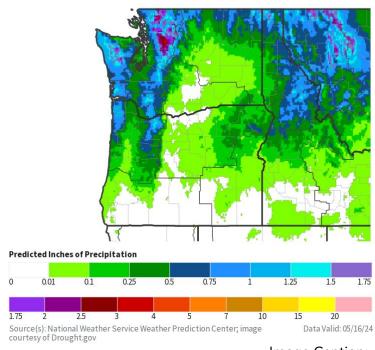


Image Caption:

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

- Likely below normal temperatures area-wide (40-60%)
- Leaning towards above normal precipitation area-wide (33-40%) except near normal in portions of the eastern Oregon mountains

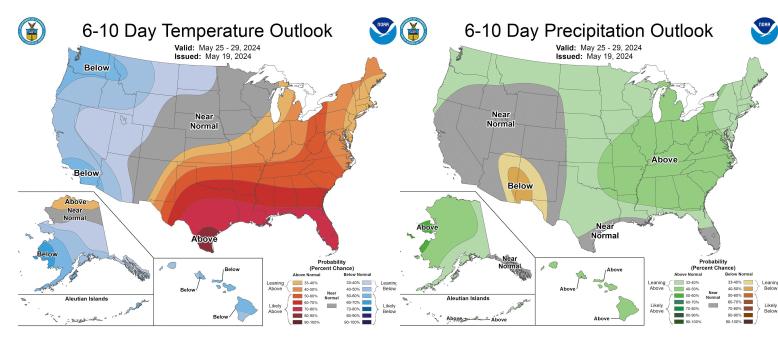


Image Captions:

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

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

Valid May 25-29, 2024





8-14 Day Outlook

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

Main Takeaways

- Equal chances of near, above and below normal temperatures except leaning towards below normal temperatures (33-40%) in the Cascades
- Leaning towards above normal precipitation (33-40%) except equal chances of near, above and below normal in the eastern Oregon mountains

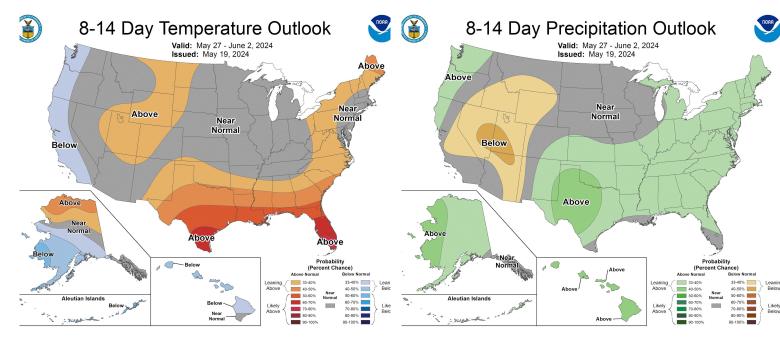


Image Captions:

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

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

Valid May 27 - June 2, 2024





Monthly Climate Outlook

Link to the latest Climate Prediction Center Monthly Outlook.

Main Takeaways

- Odds favor above normal temperatures (40-50%)
- Odds favor below normal precipitation (33-50%) for most areas, except equal chances of below normal, near normal and above normal precipitation in central Oregon

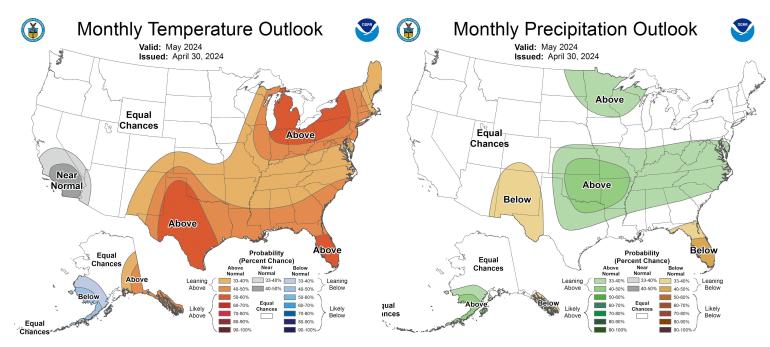


Image Captions:

Left - Climate Prediction Center Seasonal Temperature Outlook.

Right - Climate Prediction Center Seasonal Precipitation Outlook.

Valid May 2024



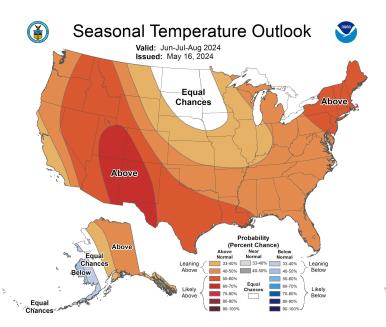


Seasonal Climate Outlook

Link to the latest Climate Prediction Center Seasonal Outlook.

Main Takeaways

- Odds leaning towards above normal temperatures area-wide (40-60%)
- Odds leaning towards below normal precipitation area-wide (33-50%)



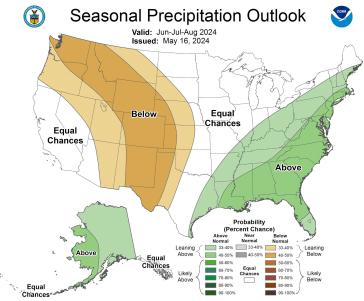


Image Captions:

Left - Climate Prediction Center Seasonal Temperature Outlook.

Right - Climate Prediction Center Seasonal Precipitation Outlook.

Valid June, July and August 2024



The latest drought outlooks can be found on the CPC homepage.

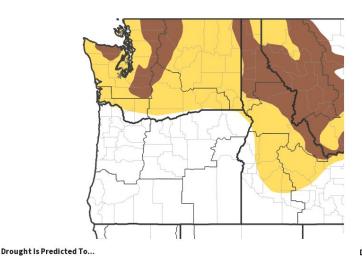
Main Takeaways

- Drought is expected to persist along the east slopes of the central WA Cascades but has been lifted in central OR since the 1 month outlook was issued
- Abnormally dry conditions are expected to eventually develop in most of eastern WA
- 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.

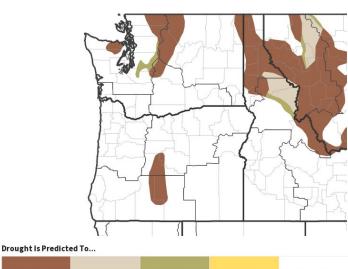
Seasonal (3-Month) Drought Outlook







1-Month Drought Outlook



Persist Improve End Develop Source(s): Climate Prediction Center; image courtesy of Drought.gov Data Valid: 04/30/24

Image Captions:

No Drought

Right - Climate Prediction Center Monthly Drought Outlook Released April 30, 2024

Left - Climate Prediction Center Seasonal Drought Outlook Released May 16, 2024

