

# Drought Information Statement for Eastern OR & South Central WA

Valid August 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 <a href="https://www.weather.gov/pdt/DroughtInformationStatement">https://www.weather.gov/pdt/DroughtInformationStatement</a> for previous statements
- Please visit <a href="https://www.drought.gov/drought-status-updates/">https://www.drought.gov/drought-status-updates/</a> for regional drought status updates.
- Severe Drought is affecting portions of the Kittitas Valley
- Moderate drought is affecting portions of the central WA Cascades, Kittitas, Yakima, Central OR, and portions of northeast OR
- Abnormally dry conditions continue over most of the area with mainly well below normal precipitation seen area-wide the last 30 days
- Above normal significant fire potential is forecast through September for the entire area becoming normal significant fire potential for October and November (Northwest Coordination Center)



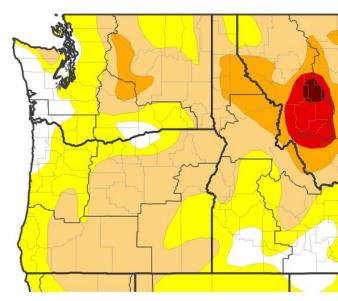


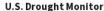
## U.S. Drought Monitor

Link to the latest U.S. Drought Monitor

- Drought intensity and Extent
  - **D2 (Severe Drought)**: Eastern portions of the Kittitas Valley
  - **D1 (Moderate Drought)**: Portions of the central Washington Cascades, Kittitas and Yakima counties, central and north central Oregon, the Ochoco-John Day Highlands, Blue Mountains, and Wallowa County
  - **D0: (Abnormally Dry)**: All other areas except portions of the OR and WA Columbia Basin and Simcoe Highlands

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







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

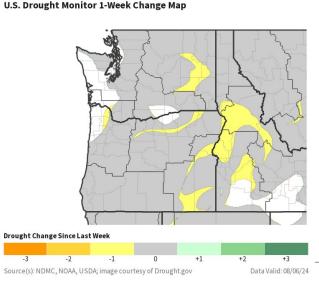
Data Valid: 08/06/24



## Recent Change in Drought Intensity

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

- One-Week Drought Monitor Class Change
  - Drought Worsened (1 Class Degradation): A thin swath of the Blue Mountains and north central Oregon
- Four-Week Drought Monitor Class Change
  - <u>Drought Worsened (1 Class Degradation)</u>: Portions of the OR Cascades, north central OR, Ochoco-John Day Highlands, Blue Mountains, the Grande Ronde Valley, and southeast WA



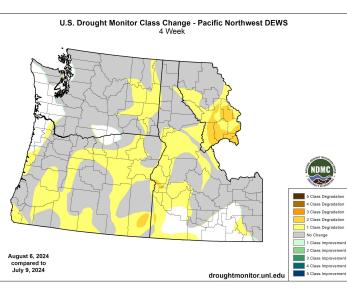


Image Captions:

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

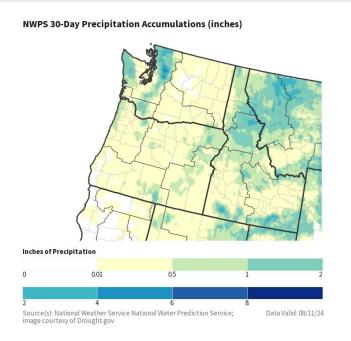
Data Courtesy U.S. Drought Monitor and Drought.gov Data over the past 7 and 28 days ending August 6, 2024



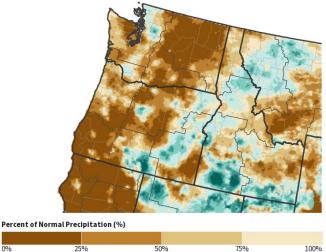


## **Precipitation - Last 30 Days**

- Mainly well below normal precipitation areawide (less than 50 percent of normal)
- Pockets of near to above normal precipitation (100-200 percent of normal) across central OR, the Blue Mountains, Grande Ronde Valley, and Wallowa county
- Highest precipitation amounts were 1 to 2 inches along portions of the Wallowa Mountains







0% 25% 50% 75% 100%

100% 150% 200% 300%

Source(s): National Weather Service National Water Prediction Service; Data Valid: 08/11/24 image courtesy of Drought.gov

Image Captions:

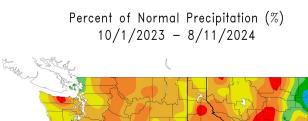
Right - Precipitation Amount for Pacific NW Left - Percent of Normal Precipitation for Pacific NW Data Courtesy NWS Water Prediction Service Data over the past 30 days ending August 11, 2024

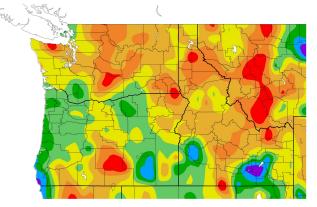


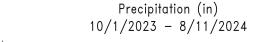


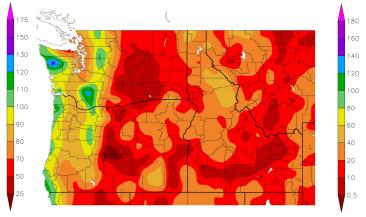
## **Precipitation - Current Water Year**

- Below normal precipitation (50-100%) continues for the current water year over much of the area
- The exception: areas of near to above normal precipitation (100-120%) seen across parts of the OR Cascades and from the Ochoco-John Day Highlands north north into the southern Blue Mountains. and OR Blue Mountain Foothills into the western WA Columbia Basin
  - This could largely be attributable to precipitation in December 2023. January 2024, and May 2024









Generated 8/12/2024 at HPRCC using provisional data.

NOAA Regional Climate Centers 2/2024 at HPRCC using provisional data.

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 August 12, 2024

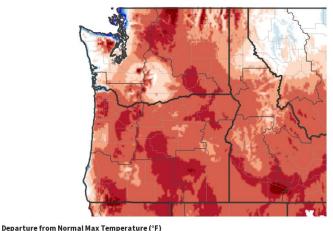


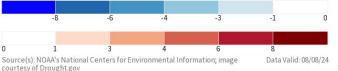


## **Temperature - Last 30 Days**

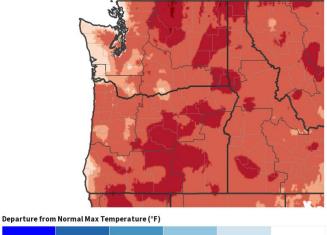
 Well above normal high temperatures the last 30 days with temperatures 3-8 degrees above normal except for a small area of 1-3 degrees above in the eastern Simcoe Highlands

#### 7-Day Temperature Anomaly





#### **30-Day Temperature Anomaly**



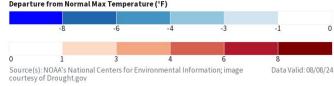


Image Captions:
Right - Temperature for Pacific NW
Left - Percent of Normal Precipitation for Pacific NW
Data Courtesy High Plains Regional Climate Center
Data for the last 30 days ending August 8, 2024





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

#### **Hydrologic Impacts**

- Much below normal streamflow (<10th percentile) across the Upper Columbia-Entiat basin, below normal streamflow (10th-25th percentile) across the Naches, Upper and Lower Yakima, Lower Snake, Lower Snake-Tucannon, Lower Snake-Asotin, Umatilla, North and Middle Forks John Day River, Upper and Lower Grande Ronde and Imnaha basins, and above normal (76th-90th percentile) for the Walla Walla basin, elsewhere near normal streamflows (25th-75th percentile).</li>
- Reservoir levels are near to slightly below normal (45-80% full) with a few outliers below to well below normal (15-35%) this may affect fish and other aquatic species as well as recreation activities through the summer, especially in the Columbia Basin.

#### **Snowpack Impacts**

• All snow telemetry (SNOTEL) monitoring sites show snow has melted/no remaining snow. 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
- <u>Jefferson County Oregon Drought Emergency Declared</u>

#### **Mitigation actions**



National Weather Service Pendleton. OR



## Hydrologic Conditions and Impacts - Washington

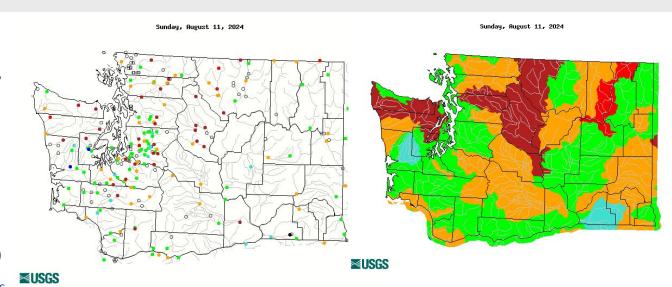
#### Main Takeaways

- The Upper Columbia-Entiat basin has well below normal streamflow (<10 percent of normal)</li>
- The Naches, Upper and Lower Yakima, Lower Snake, Lower Snake-Tucannon and Lower Snake-Asotin basins have below normal streamflow (10th-24th percentile)
- The Walla Walla basin has above normal flow (76th-90th 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	- 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	High	

Image Captions:

Right - USGS 7-day average streamflow station map valid August 11, 2024 Left - USGS 7-day average streamflow HUC map valid August 11, 2024 Data Courtesy USGS Water Watch





## Hydrologic Conditions and Impacts - Oregon

**■USGS** 

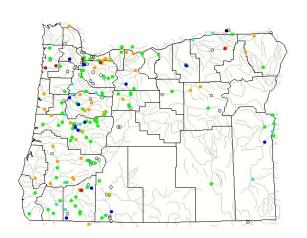
#### Main Takeaways

- Below normal (10th-24th percentile) for the Umatilla, North and Middle Forks John Day River, Upper and Lower Grande Ronde and Imnaha basins
- Above normal (76th-90th percentile) for the Walla Walla basin
- Other river, stream, and creek flows are near normal (25th-75th percentile)

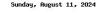
#### **Impacts**

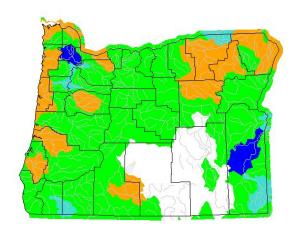
No known impacts at this time

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



Sunday, August 11, 2024





Z	US	GS
	vv	-

	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	High	

Image Captions:

Right - USGS 7-day average streamflow station map valid August 11, 2024 Left - USGS 7-day average streamflow HUC map valid August 11, 2024

Data Courtesy USGS Water Watch





## Water Supply Forecast - April - September 2024

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

#### Main Takeaways

- Below to much below normal water supply (52-83% of the 1991-2020 normal) is forecast for the April-September 2024 period across much of south central and southeast WA into northeast Oregon
- Below-normal water supply (75-90%) is forecast across much of Wallowa county, and parts of the eastern slopes of the WA Cascades and Simcoe Highlands
- Near-normal water supply (83-103%) is forecast across central OR east into the southern Blue mountains and the Ochoco-John Day Highlands

#### **Impacts**

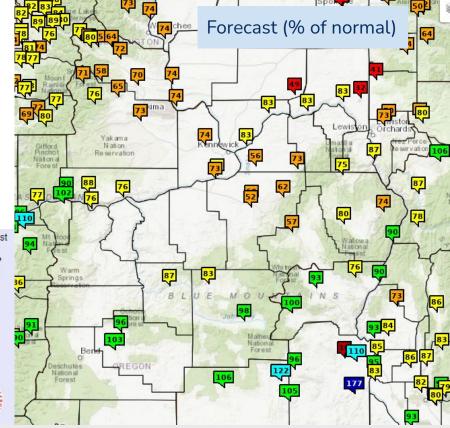
No known impacts at this time

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 August 11, 2024







## Fire Hazard Impacts - August through November

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

#### Main Takeaways

- Above normal wildland fire potential for all areas for August and September 2024
- Near normal wildland fire potential (i.e., very low risk) for all areas for October and November 2024
- Significant wildland fires are expected at typical times and intervals during normal significant wildland fire potential conditions



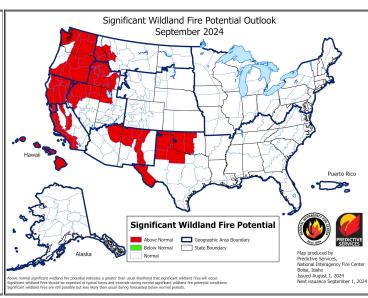


Image Caption: Left - August 2024 Right - September 2024

Data Courtesy National Interagency Coordination Center Issued August 1, 2024





## Seven Day Precipitation Forecast

- A persistent trough over the Pacific Northwest will give the area a chance of light rain and mountain thunderstorms for the next week, especially Thursday into next weekend
  - Most lower elevation areas will get a tenth of an inch or less while the mountains will get a tenth to a half of an inch
- Visit <u>weather.gov/Pendleton</u> for the latest weather forecast

#### 7-Day Quantitative Precipitation Forecast

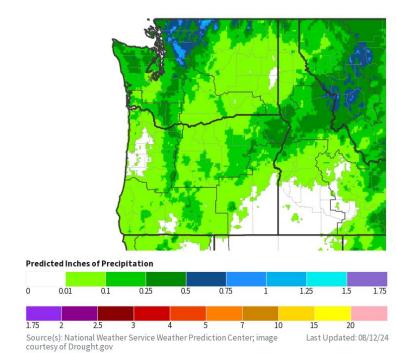


Image Caption:

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

- Leaning towards below normal temperatures area-wide (33-60%)
- Leaning towards above normal precipitation area-wide (33-50%)

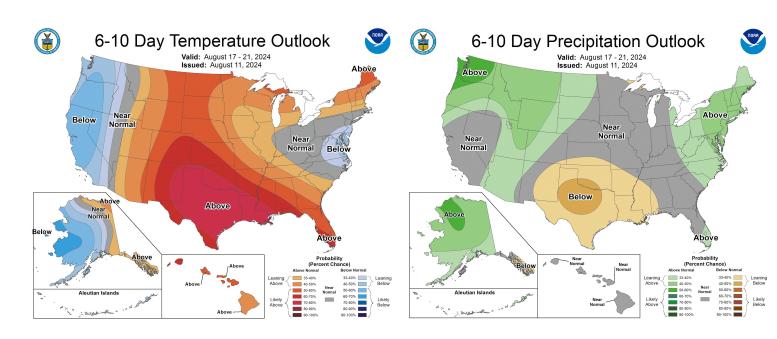


Image Captions:

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

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

Valid August 17-21, 2024



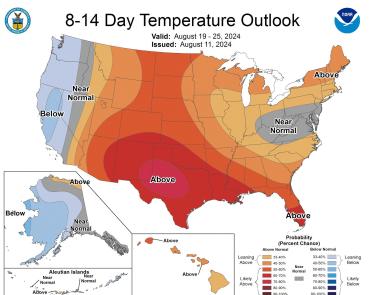


## 8-14 Day Outlook

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

#### Main Takeaways

- Below normal temperatures (33-40% chance) in WA and OR, except equal chance of above, near, or below normal temperatures in the eastern portions of the area
- Above normal precipitation
   (33-50% chance)
   in WA and OR



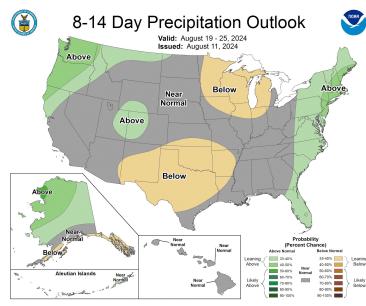


Image Captions:

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

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

Valid August 19 - 25, 2024



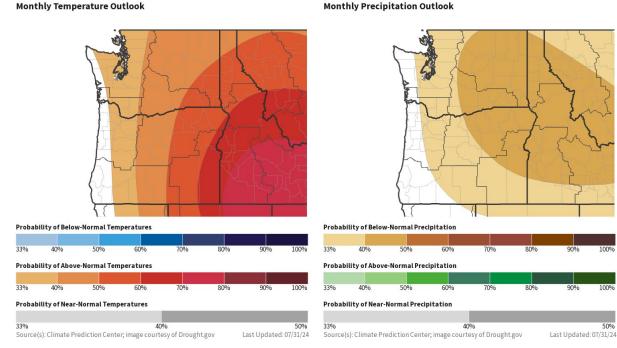


## Monthly Climate Outlook

Link to the latest Climate Prediction Center Monthly Outlook.

#### Main Takeaways for August

- Odds favor above normal temperatures area wide (40-70%)
- Odds favor below normal precipitation area wide (33-50%)



**Image Captions:** 

Left - Climate Prediction Center Seasonal Temperature Outlook.

Right - Climate Prediction Center Seasonal Precipitation Outlook.

Valid August 2024





### Seasonal Climate Outlook

Link to the latest Climate Prediction Center Seasonal Outlook.

#### Main Takeaways for August-September-October

- Odds leaning towards equal chances of above, near and below normal temperatures, except leaning towards above normal temperatures (33-40%) for the eastern and southern portions of the area
- Odds leaning towards equal chances of above, near and below normal precipitation area-wide

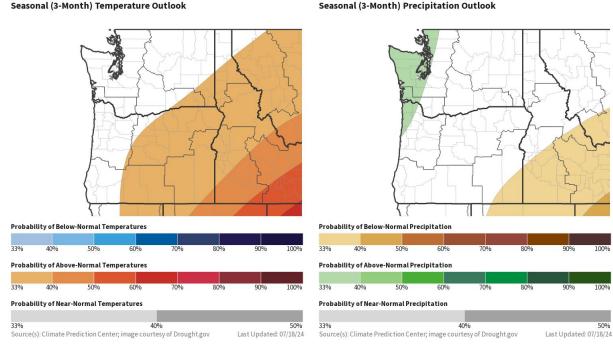


Image Captions:

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

Valid August, September and October 2024





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

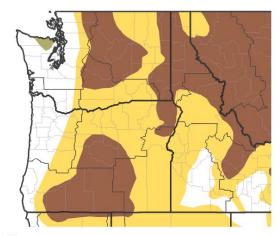
#### Main Takeaways

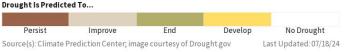
- Drought is expected to persist over Kittitas and eastern Yakima counties, the northern Blue Mountains, Wallowa county and central OR into the western Ochoco-John Day Highlands
- Drought is expected to develop over the rest of southeast WA and northeast OR
- These areas are vulnerable due to below normal precipitation and 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

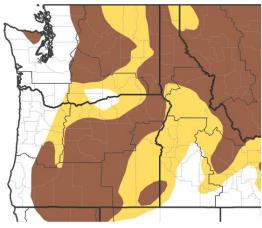




Image Captions:

Right - <u>Climate Prediction Center Monthly Drought Outlook</u> Released July 31, 2024 Left - <u>Climate Prediction Center Seasonal Drought Outlook</u> Released July 31, 2024

