Drought Information Statement for Eastern OR & South Central WA

Valid July 12, 2024

Issued By: NWS Pendleton

Contact Information: pdt.operations@noaa.gov

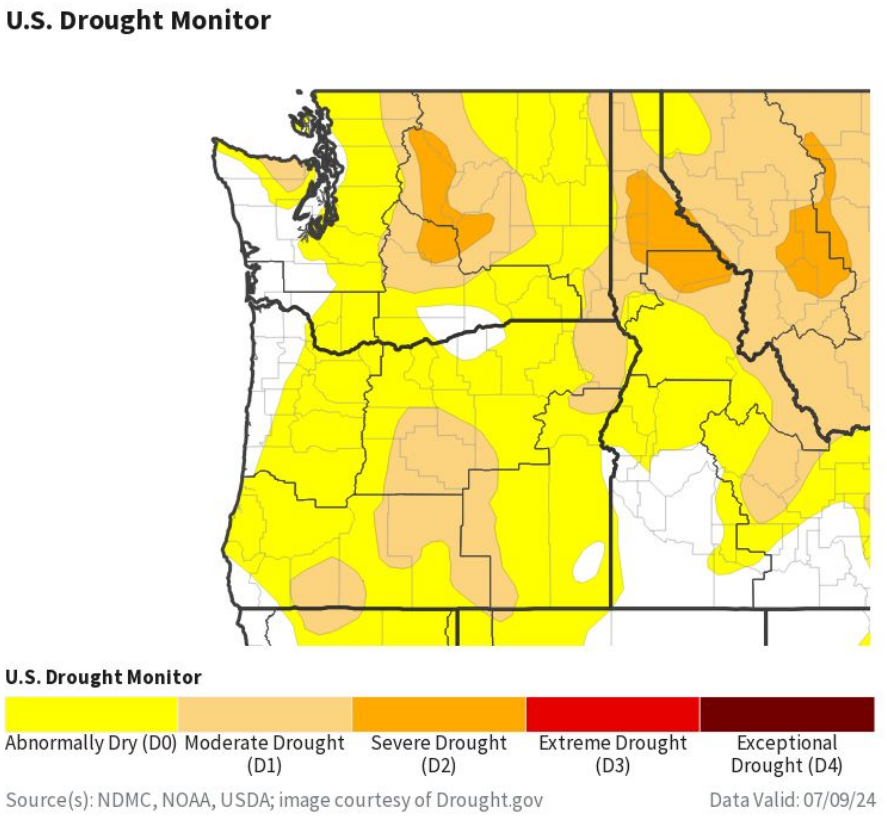
- This product will be updated if drought conditions change significantly.
- Please see all currently available products at https://drought.gov/drought-information-statements.
- Please visit https://www.weather.gov/pdt/DroughtInformationStatement for previous statements
- Please visit https://www.drought.gov/drought-status-updates/ for regional drought status updates.

- Severe Drought is affecting portions of the Kittitas Valley
- Moderate drought is affecting portions of the central WA Cascades, Kittitas Valley, Yakima, Central OR, and extreme northeast OR
- Abnormally dry conditions continue over most of the rest of the area with mostly well below normal precipitation seen area-wide the last 30 days
- Above normal significant fire potential is forecast through September for central OR, north central OR, and south and southeast of John Day (Northwest Coordination Center)

U.S. Drought Monitor

Link to the latest U.S. Drought Monitor

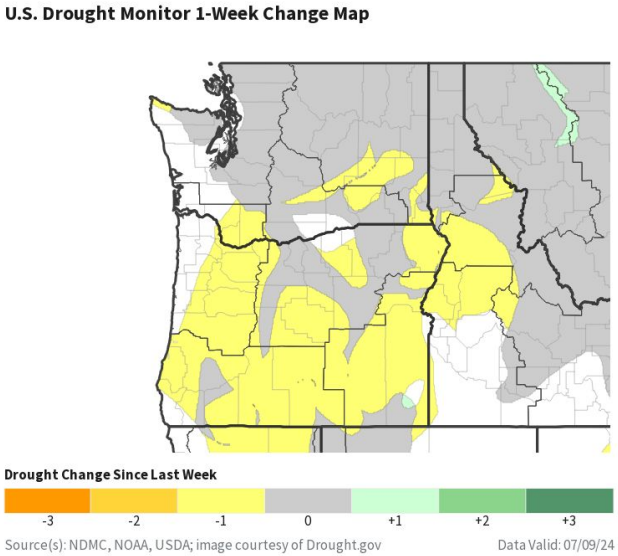
- Drought intensity and Extent
  - **D2 (Severe Drought)**: Portions of the Kittitas Valley
  - **D1 (Moderate Drought)**: Portions of the central Washington Cascades, the Kittitas and Yakima Valleys, central Oregon, the Ochoco-John Day Highlands and Wallowa County
  - **D0: (Abnormally Dry)**: All other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



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): Portions of the Yakima Valley, WA Columbia Basin, Southern Blue Mountains, Wallowa County, OR Cascades, central OR, and the Ochoco-John Day Highlands
- Four-Week Drought Monitor Class Change
  - Drought Worsened (2 Class Degradation): Portions of the Ochoco-John Day Highlands and far southeastern Wallowa County
  - Drought Worsened (1 Class Degradation): Most areas, except portions of the WA Cascades, Simcoe Highlands, Lower Columbia Basin, Blue Mountain Foothills of WA and OR, Northern Blue Mountains, and the Grande Ronde Valley



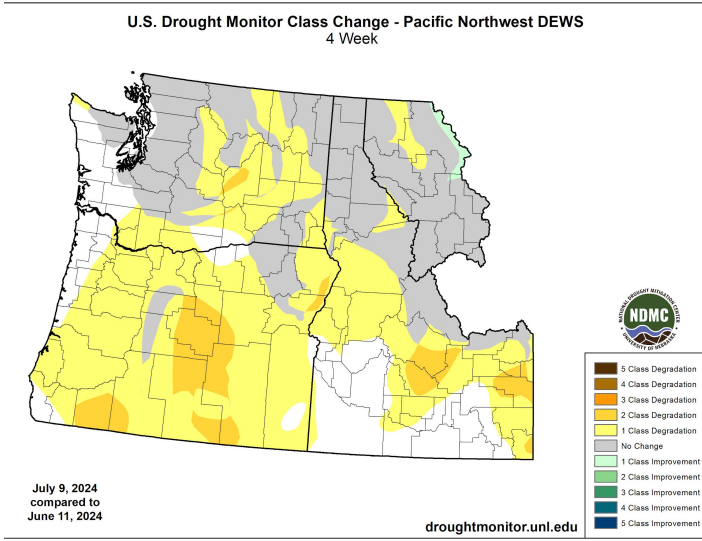
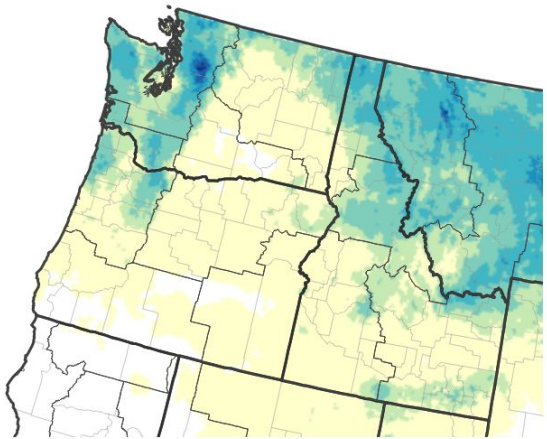


Image Captions:
Right - 4 Week Drought Class Change
Left - 1 Week Drought Class Change
Data Courtesy U.S. Drought Monitor and Drought.gov
Data over the past 7 and 28 days ending July 9, 2024

Precipitation - Last 30 Days

- Mainly well below normal precipitation areawide (less than 25 percent of normal)
- Portions of the Washington Cascade crest was 50 to 75 percent of normal
- Highest precipitation amounts were 0.5 to 1 inch along portions of the WA Cascade crest, northern Blue, and Wallowa Mountains

NWPS 30-Day Precipitation Accumulations (inches)



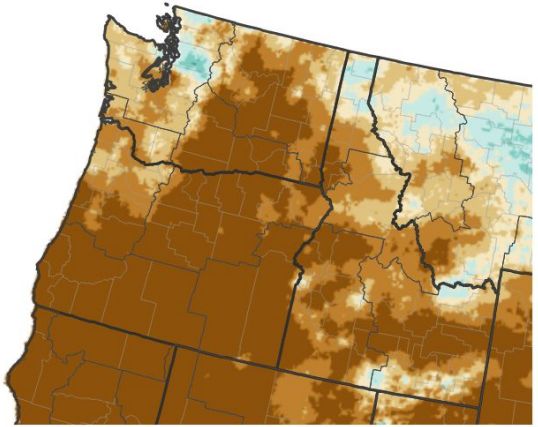
Inches of Precipitation

0 0.01 0.5 1 2 4 6 8

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

Data Valid: 07/11/24

30-Day Precipitation: Percent of PRISM Normal



Percent of Normal Precipitation (%)

0% 25% 50% 75% 100%

100% 150% 200% 300%

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

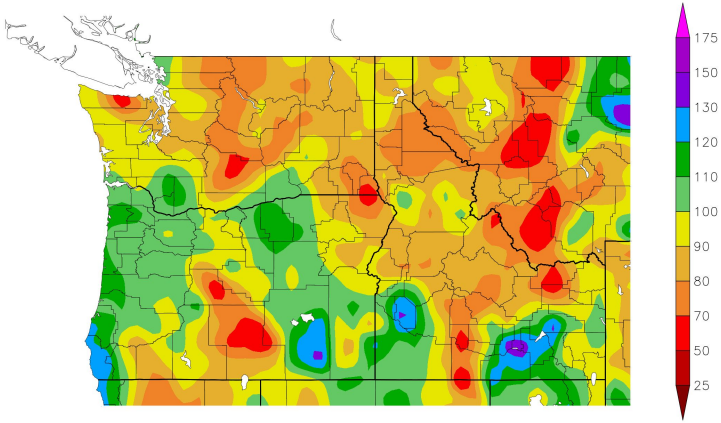
Data Valid: 07/11/24

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 July 11, 2024

Precipitation - Current Water Year

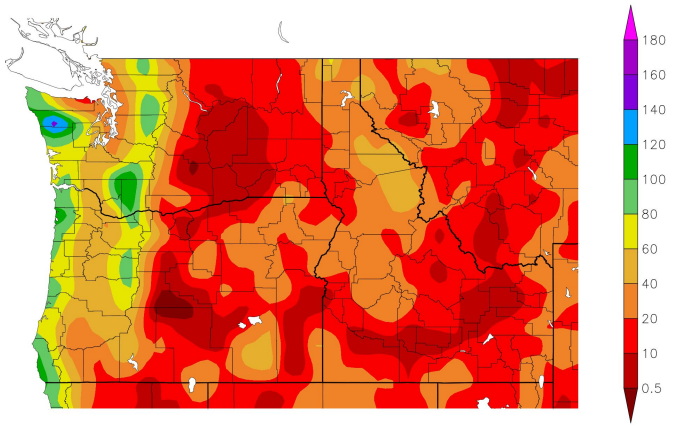
- Below normal precipitation continues for the current water year over much of the area
- The exception: areas of near to above normal precipitation (100-120%) seen across parts of north central OR and from the Ochoco-John Day Highlands north through the southern Blue Mountains and OR Blue Mountain Foothills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

Percent of Normal Precipitation (%)
10/1/2023 – 7/10/2024



Generated 7/11/2024 at HPRCC using provisional data.

Precipitation (in)
10/1/2023 – 7/11/2024



NOAA Regional Climate Centers /12/2024 at HPRCC using provisional data.

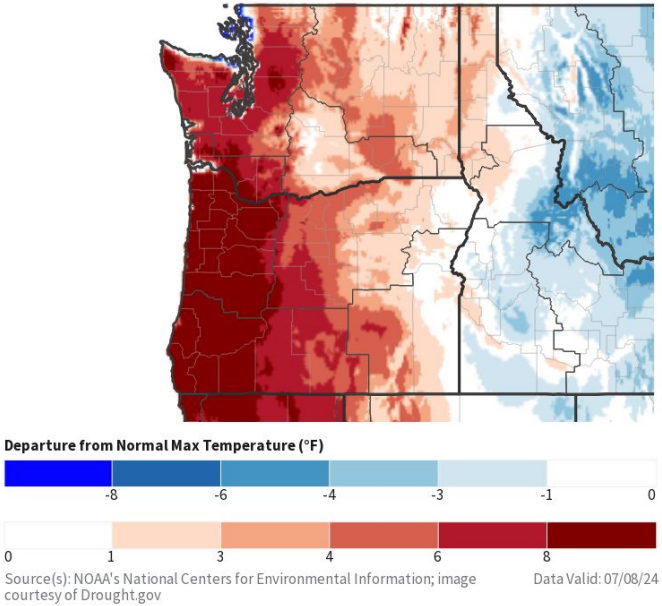
NOAA Regional Climate Centers

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 July 10, 2024

Temperature - Last 30 Days

- Mainly above normal highs the last 30 days, except near to slightly below normal average temperatures in the central WA Cascades, Yakima and Kittitas Valleys, and portions of the eastern Simcoe Highlands
- Well above normal highs (> 4 degrees) in portions of the Oregon Cascades, central Oregon, and portions of the Ochoco-John Day Highlands
- Average low temperatures were mainly within a couple of degrees of normal except for 2-4 degrees below normal in the Grande Ronde Valley
- Average high temperatures were mainly 0-4 degrees above normal except for 4-6 degrees above normal across portions of central and north central OR, the Ochoco-John Day Highlands, the Grande Ronde Valley and Wallowa County

7-Day Temperature Anomaly



30-Day Temperature Anomaly

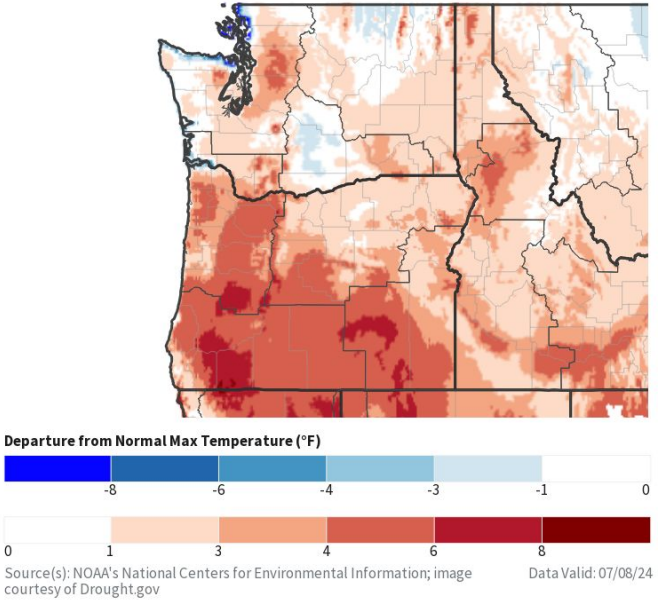


Image Captions:
Right - Temperature for Pacific NW
Left - Percent of Normal Precipitation for Pacific NW
Data Courtesy High Plains Regional Climate Center
Data for the last 30 days ending July 8, 2024

Summary of Impacts

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

Hydrologic Impacts

- Below to well below normal streamflow (10-25%) across the Upper and Lower Yakima, Naches, Upper Columbia-Entiat, Upper Columbia-Priest Rapids, Lower Snake, Lower Snake-Tucannon and Lower Snake-Asotin, Upper John Day, Lower Crooked, North Fork and Middle Fork John Day, Upper and Lower Grande Ronde, Wallowa and Imnaha basins, above to well above normal (76-100%) for the Willow and Umatilla basin, elsewhere near normal streamflows (25-75%).

- Reservoir levels are near to slightly below normal (60-90%) with a few outliers below to well below normal (35-55%) - 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

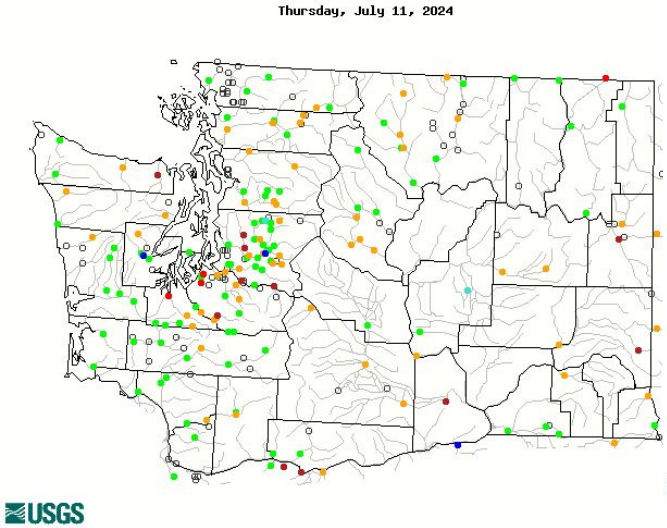
Mitigation actions

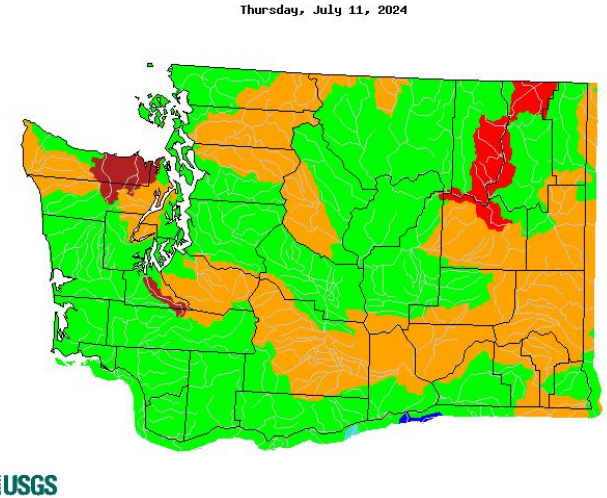
- Please refer to your municipality and/or water provider for mitigation information

Hydrologic Conditions and Impacts - Washington

Main Takeaways

- The Upper and Lower Yakima, Naches, Upper Columbia-Entiat, Upper Columbia-Priest Rapids, Lower Snake, Lower Snake-Tucannon and Lower Snake-Asotin basins have below normal streamflow (10th-24th percentile)
- Most other river, stream, and creek flows are near to below normal





Impacts

No known impacts at this time

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

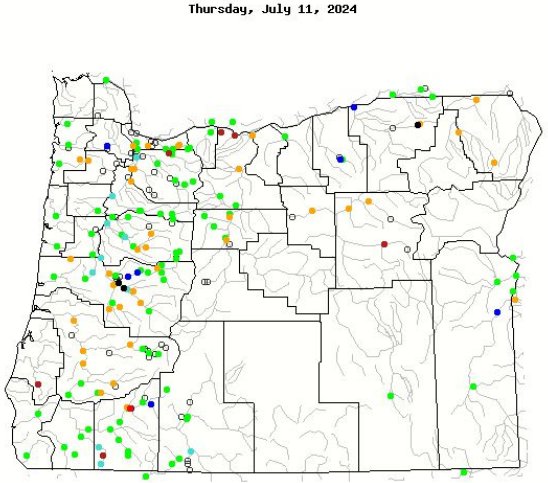
Explanation - Percentile classes							
Low	<10	10-24	25-75	76-90	>90	High	No Data
	Much below normal	Below normal	Normal	Above normal	Much above normal		

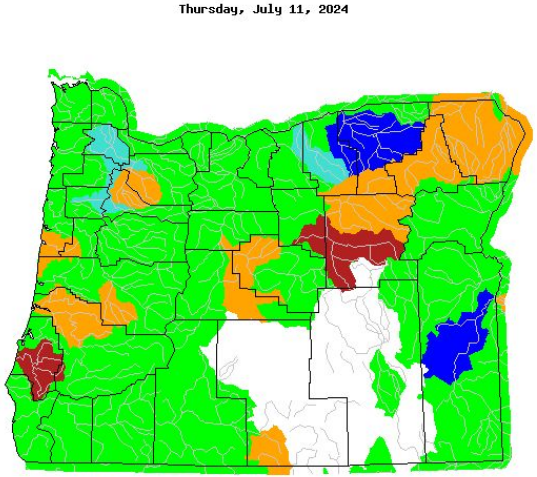
Image Captions:
Right - USGS 7-day average streamflow station map valid July 11, 2024
Left - USGS 7-day average streamflow HUC map valid July 11, 2024
Data Courtesy USGS Water Watch

Hydrologic Conditions and Impacts - Oregon

Main Takeaways

- All reporting river, stream, and creek flows across eastern and central OR are near to below normal, notably:
    - Well below normal for the Columbia River at The Dalles
    - Well below normal for the Upper John Day basin
    - Above normal for Willow Creek near Heppner, Umatilla River at Umatilla and Meacham Creek near Gibbon





Impacts

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 July 11, 2024
Left - USGS 7-day average streamflow HUC map valid July 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

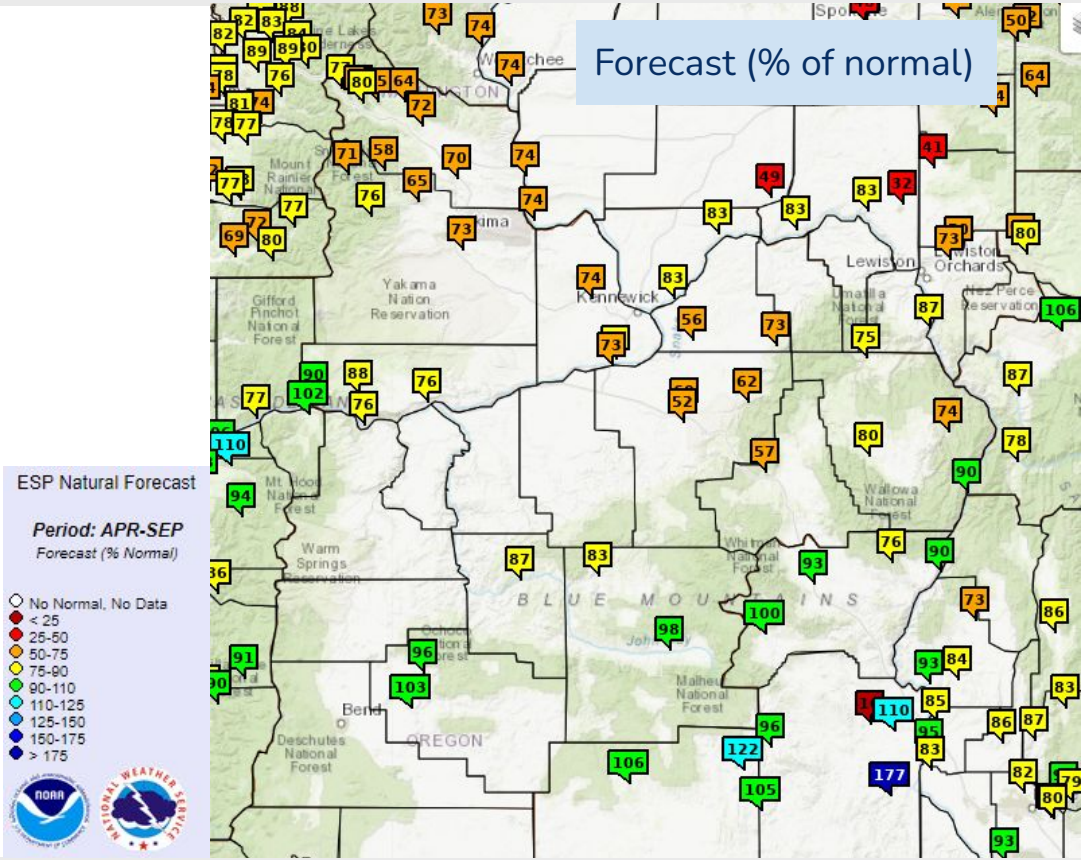
- Below to much below normal water supply (55-85% of the 1991-2020 normal) is forecast for the April-September 2024 period across much of south central and southeast WA into northeast Oregon
- Below-normal water supply (75-90%) is forecast across much of north central OR, Wallowa, and parts of the eastern slopes of the WA Cascades
- 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 July 10, 2024

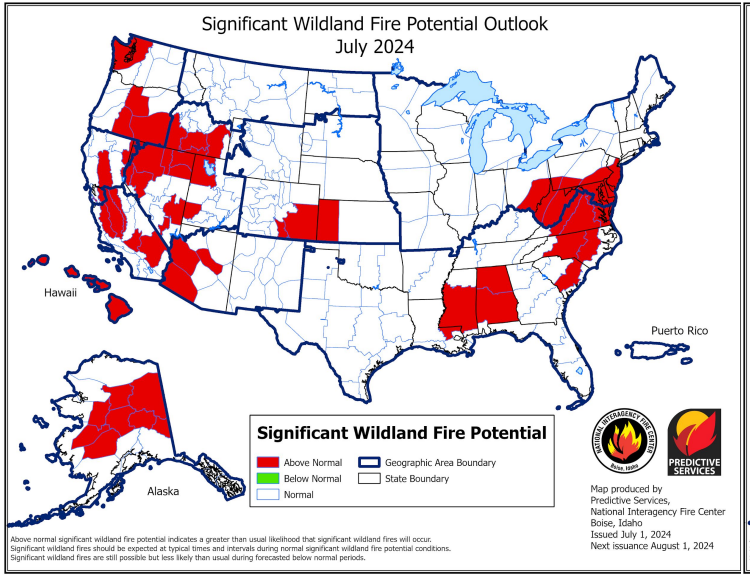


Fire Hazard Impacts - July through October

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

Main Takeaways

- *Above normal for central and north central OR and south and southeast of John Day* for July through September 2024
- Near normal wildland fire potential (i.e., very low risk) for all other areas through October 2024
- Significant wildland fires are expected at typical times and intervals during normal significant wildland fire potential conditions



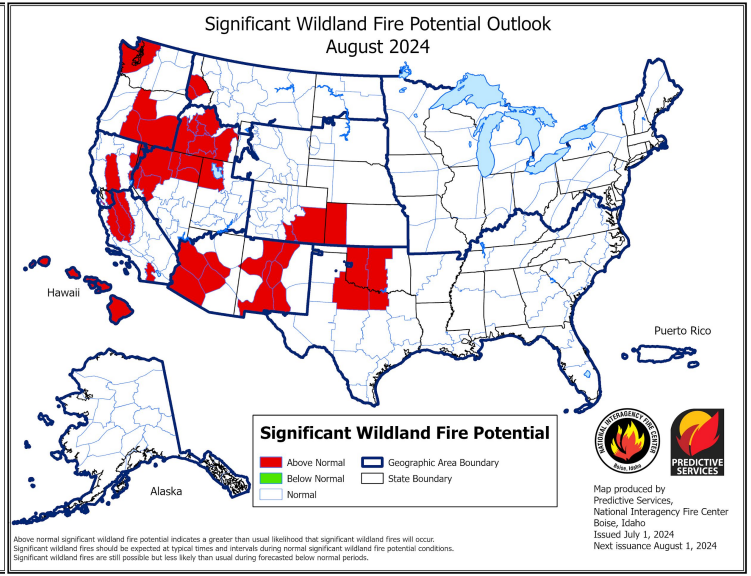


Image Caption:
Left - July 2024
Right - August 2024
Data Courtesy National Interagency Coordination Center
Issued July 1, 2024

Seven Day Precipitation Forecast

- Persistent high pressure over the western CONUS will keep the area dry for the next 7 days
    - This weekend, a few thunderstorms may bring very light rain amounts of less than a tenth of an inch to the higher terrain of the Blue and Wallowa Mountains, the Ochoco-John Day Highlands and central OR
- Visit weather.gov/Pendleton for the latest weather forecast

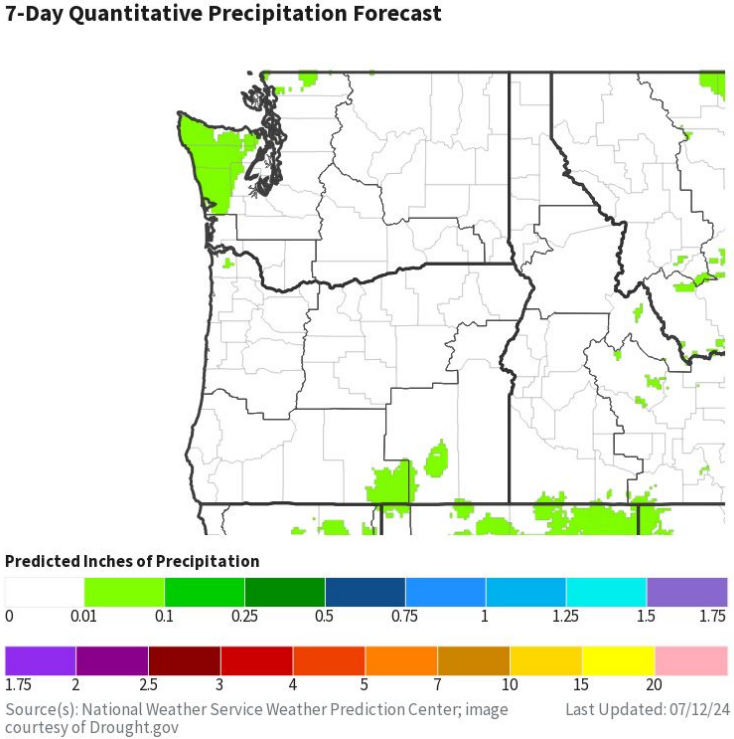


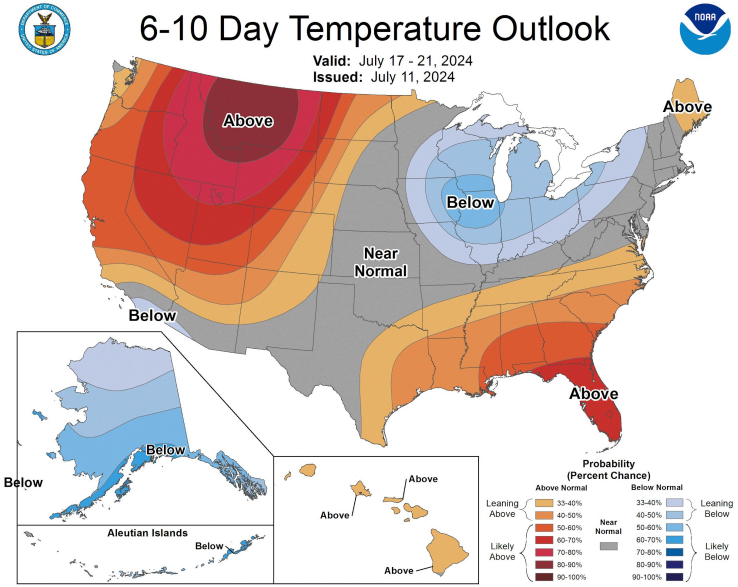
Image Caption:
Weather Prediction Center 7-day precipitation forecast

6-10 Day Outlook

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

Main Takeaways

- Leaning towards above normal temperatures area-wide (50-80%)
- Leaning towards above normal precipitation (33-50%) towards western WA, except for equal chances of above, near and below normal in the Ochoco-John Day Highlands and Blue Mountains eastward



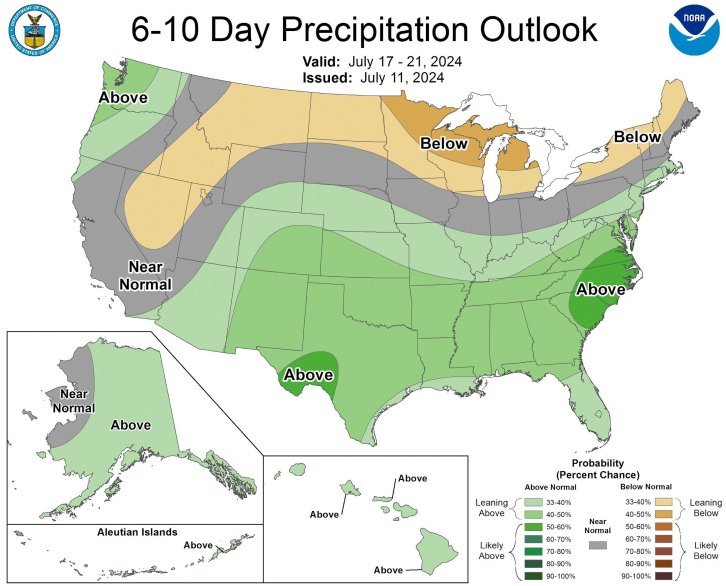


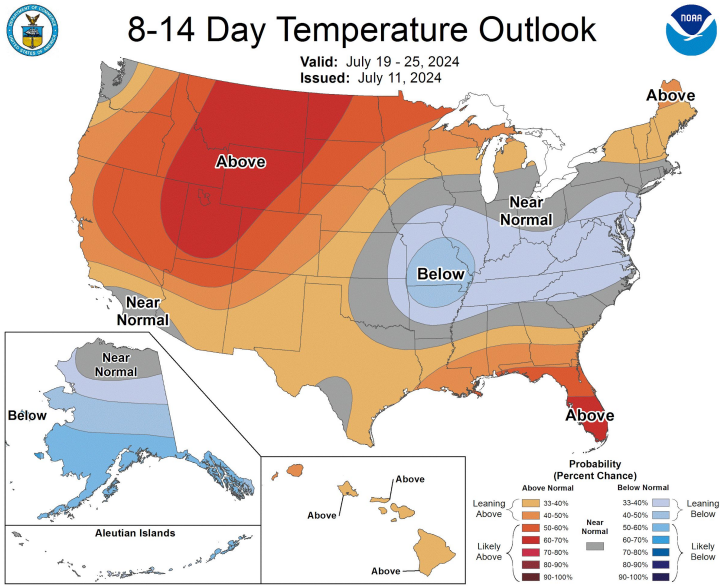
Image Captions:
Left - Climate Prediction Center 6-10 Day Temperature Outlook.
Right - Climate Prediction Center 6-10 Day Precipitation Outlook.
Valid July 17-21, 2024

8-14 Day Outlook

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

Main Takeaways

- Above normal temperatures (33-60% chance) in WA and OR
- Above normal precipitation (33-40% chance) in WA and OR



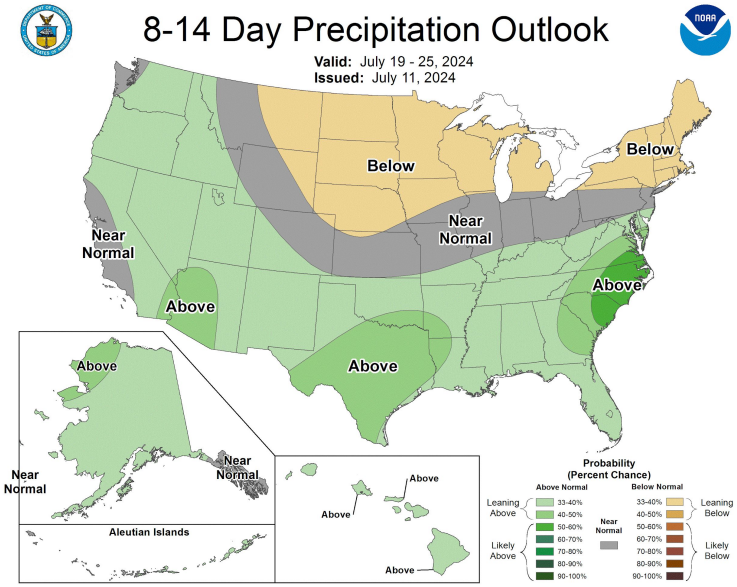


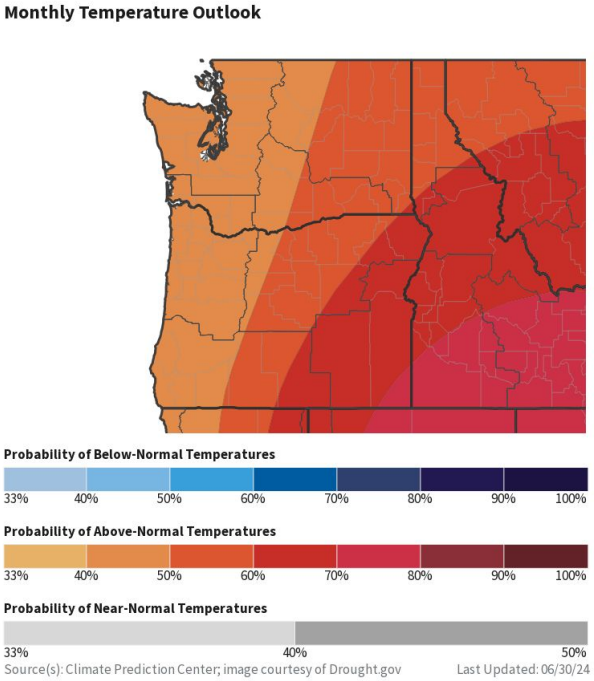
Image Captions:
Left - Climate Prediction Center 8-14 Day Temperature Outlook.
Right - Climate Prediction Center 8-14 Day Precipitation Outlook.
Valid July 19 - July 25, 2024

Monthly Climate Outlook

Link to the latest Climate Prediction Center Monthly Outlook.

Main Takeaways for July

- Odds favor above normal temperatures area wide (40-70%)
- Odds favor below normal precipitation area wide (50-60%)



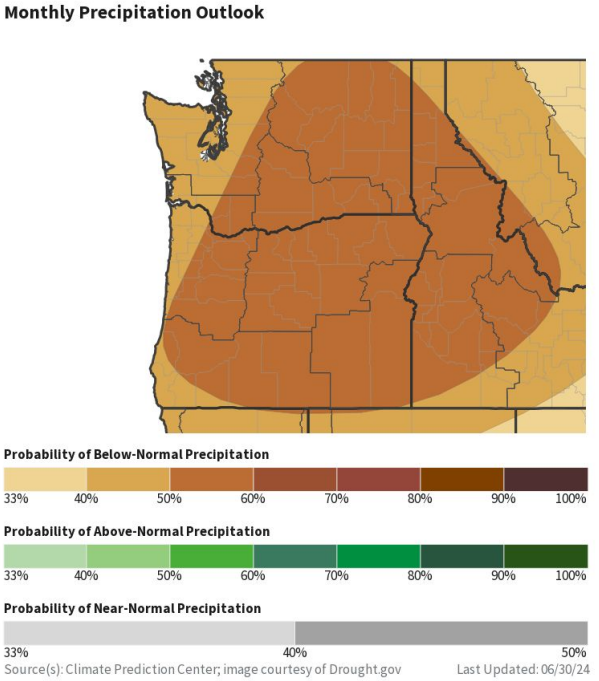


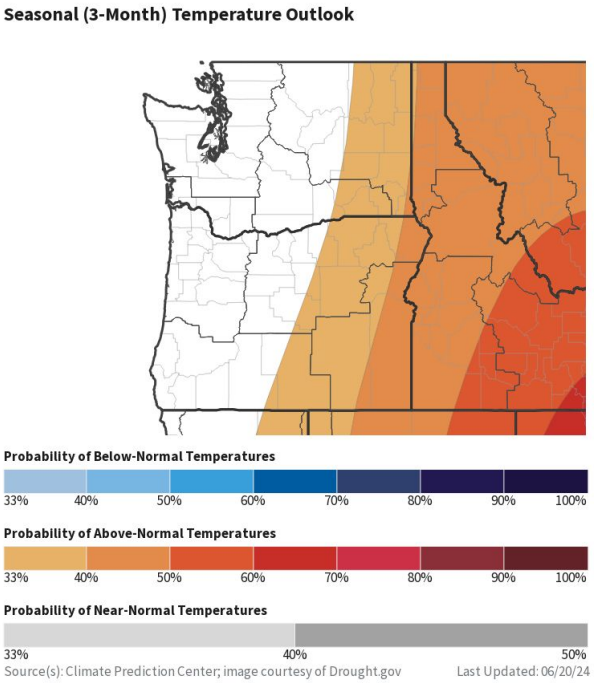
Image Captions:
Left - Climate Prediction Center Seasonal Temperature Outlook.
Right - Climate Prediction Center Seasonal Precipitation Outlook.
Valid July 2024

Seasonal Climate Outlook

Link to the latest Climate Prediction Center Seasonal Outlook.

Main Takeaways for July-August-September

- Odds leaning towards normal temperatures except leaning towards above normal temperatures (33-50%) for the eastern half of the area
- Odds leaning towards normal precipitation area-wide except leaning towards below normal precipitation (33-40%) for the northern Blue Mountains of WA and Wallowa County



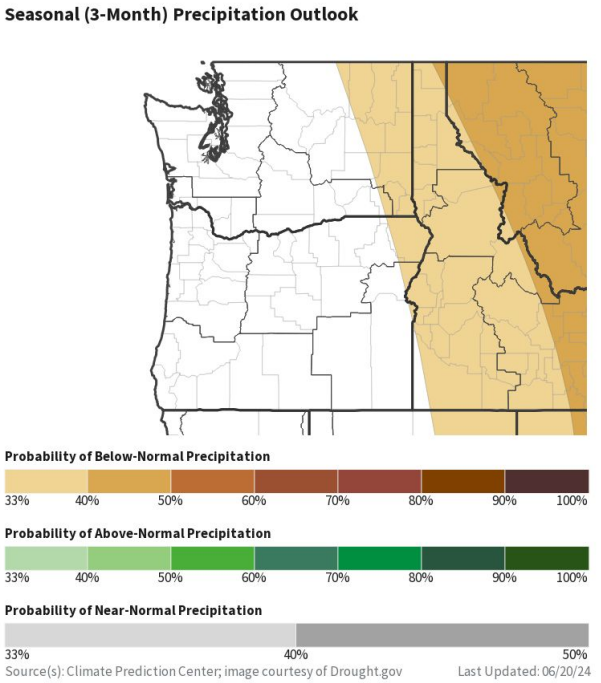


Image Captions:
Left - Climate Prediction Center Seasonal Temperature Outlook.
Right - Climate Prediction Center Seasonal Precipitation Outlook.
Valid July, August and September 2024

Drought Outlook

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

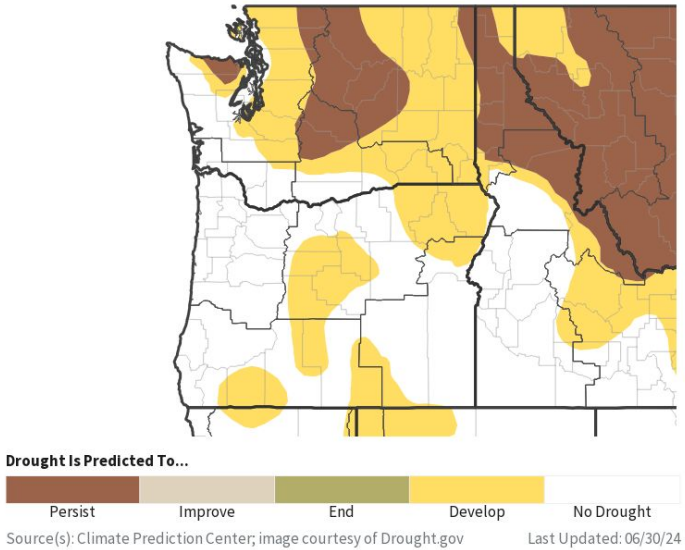
Main Takeaways

- Drought is expected to persist along the east slopes of the central and northern WA Cascades
- Drought is expected to develop over most of eastern WA, central OR 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

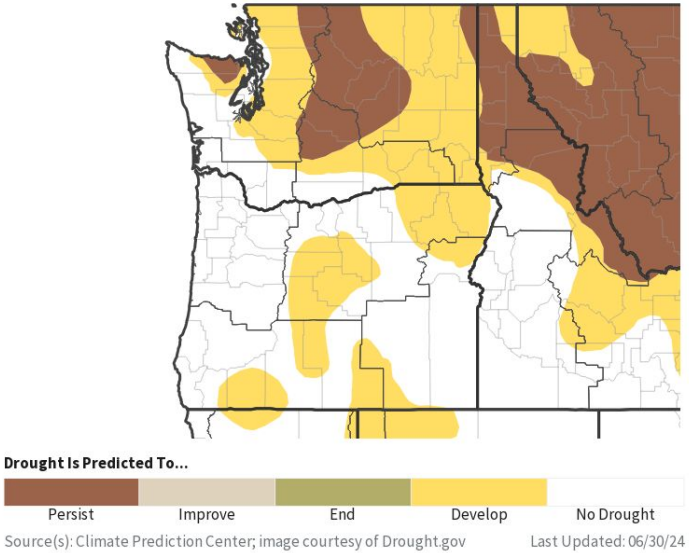


Image Captions:
Right - Climate Prediction Center Monthly Drought Outlook Released June 30, 2024
Left - Climate Prediction Center Seasonal Drought Outlook Released June 30, 2024