



Drought Information Statement for Western Washington

Valid September 19, 2023

Issued By: NWS Seattle, WA

Contact Information: w-sew.webmaster@noaa.gov

- This product will be updated by Sept. 30, 2023 or sooner if drought conditions change significantly.
- Please see all currently available products at <https://drought.gov/drought-information-statements>.
- Please visit <https://www.weather.gov/ewx/DroughtInformationStatement> for previous statements.



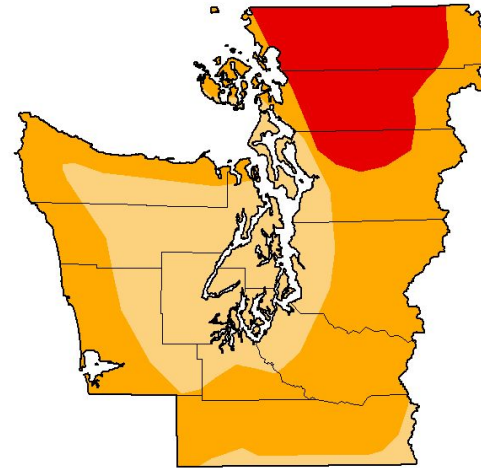


U.S. Drought Monitor

Link to the [latest U.S. Drought Monitor](#) for Washington

- Drought intensity and Extent
 - D3 Extreme Drought: Covers much of the northern portions of western WA, 17% of our region
 - D2 Severe Drought: Covers 51% of the area
 - D1 Moderate Drought: Covers most of the Puget Sound and inland Olympic Peninsula
- Drought is expected to persist (see Drought Outlook last slide)

U.S. Drought Monitor Seattle, WA WFO



September 12, 2023

(Released Thursday, Sep. 14, 2023)

Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0	D1	D2	D3	D4
Current	0.00	0.00	31.91	51.37	16.73	0.00
Last Week 09-05-2023	0.00	0.00	45.47	37.80	16.73	0.00
3 Months Ago 06-13-2023	7.81	64.51	27.67	0.00	0.00	0.00
Start of Calendar Year 01-01-2023	32.94	59.67	7.39	0.00	0.00	0.00
Start of Water Year 09-27-2022	0.87	99.13	0.00	0.00	0.00	0.00
One Year Ago 09-13-2022	100.00	0.00	0.00	0.00	0.00	0.00

Intensity

None	D2 Severe Drought
D0 Abnormally Dry	D3 Extreme Drought
D1 Moderate Drought	D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to <https://droughtmonitor.unl.edu/About.aspx>

Author

Brad Pugh
CPC/NOAA



droughtmonitor.unl.edu

Image Caption: U.S. Drought Monitor valid 8am PDT September 19, 2023.



National Oceanic and
Atmospheric Administration

U.S. Department of Commerce

National Weather Service
Seattle, WA



Recent Change in Drought Intensity

Link to the latest [4-week change map](#) for south central Texas

- Four Week Drought Monitor Class Change.
 - Drought Worsened: Over much of the area with a 2 category change in the southwest
 - No Change: Portions of the central Cascades and foothills, and north slopes of the Olympics
 - Drought Improved: No drought improvement was observed.

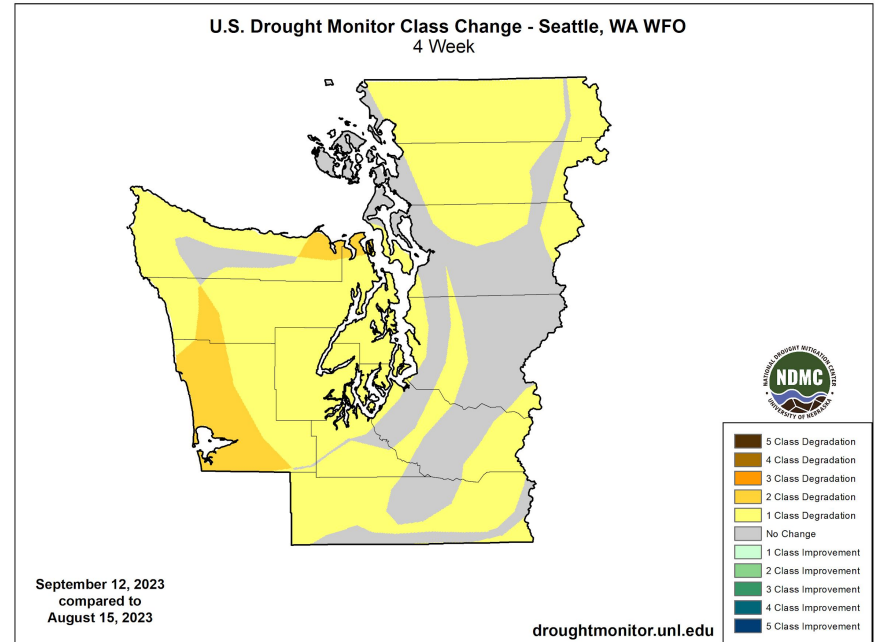


Image Caption: U.S. Drought Monitor 4-week change map valid 8am PDT September 19, 2023





Precipitation

Last 60 days

- The majority of the region has seen less than 70% of normal rainfall over this period
- A significant amount of the coast and north west have seen less than 50% of normal rainfall over this period

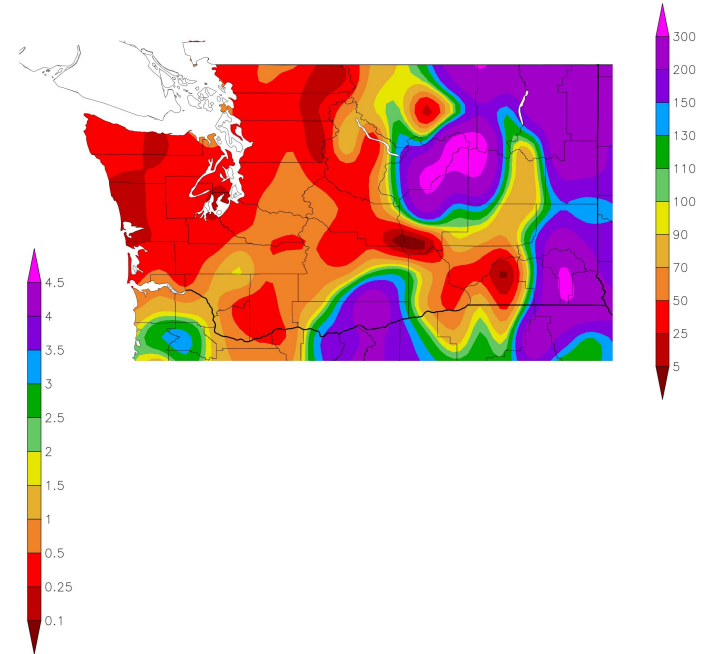
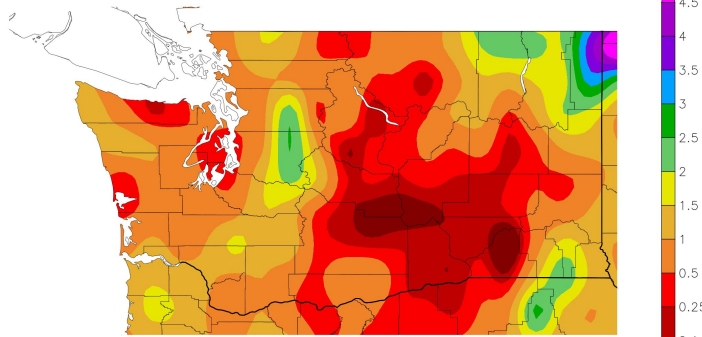


Image Captions:
Left - Precipitation Amount Map for Washington
Right - Percent of Normal Precipitation for Washington
Data Courtesy Advanced Hydrologic Prediction Service (AHPS)
Data over the past 30 days ending September 19, 2023

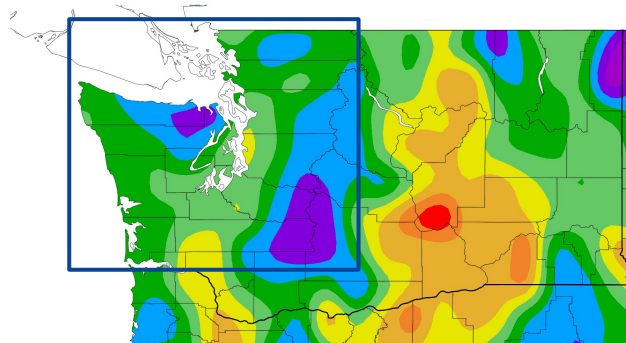




Temperature

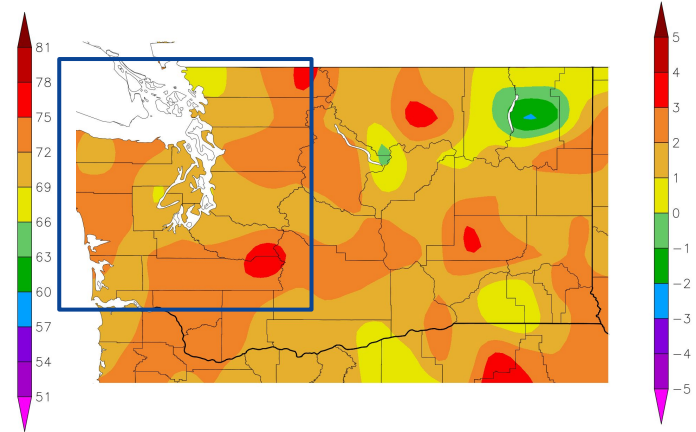
- It has been 2 to 3 degrees warmer than normal over the last 60 days for much of the area

Temperature (F)
8/20/2023 - 9/18/2023



Generated 9/19/2023 at HPRCC using provisional data.

Departure from Normal Temperature (F)
8/20/2023 - 9/18/2023



NOAA Regional Climate Centers ⁰²³ at HPRCC using provisional data.

NOAA Regional Climate Centers

Image Captions:
Left - Average Temperature
Right - Departure from Normal Temperature
Data Courtesy High Plains Regional Climate Center.
Data over the past 30 days ending September 18, 2023





Summary of Impacts

Links: See/submit [Condition Monitoring Observer Reports \(CMOR\)](#) and view the [Drought Impacts Reporter](#)

Hydrologic Impacts

- Most streamflows remain below to much below normal across most basins in the region, and have worsened over the past 30 days. See next slide for more details

Agricultural Impacts

- Soil Moistures have continued to decrease over the past 30 days with much of the area showing much below normal soil moisture. Crop moistures remain severely dry

Fire Hazard Impacts

- Wildfire activity has continued over the last 30 days
- Burn bans are in effect
- See slide 8 for more details

Other Impacts

- Statewide Drought Advisory in effect
- Drought Emergency declared for Clallam, Skagit, Whatcom, and part of Snohomish Counties
- 3 public water system wells in Whatcom County have run dry

Drought Mitigation Actions

- Sequim encourages water conservation
- Please refer to your municipality and/or water provider for mitigation information.

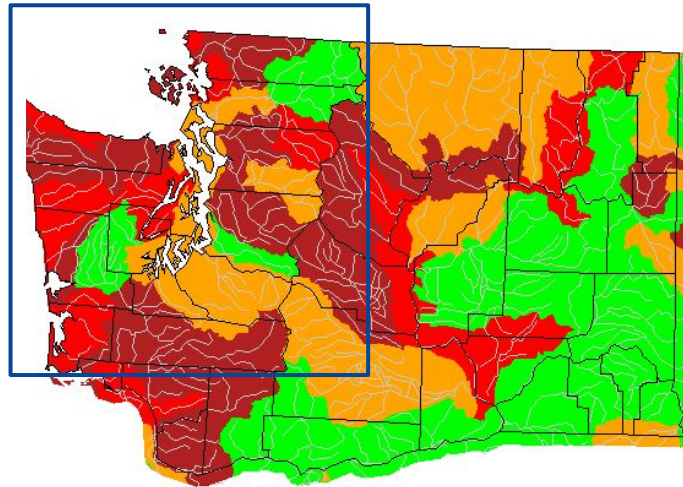




Hydrologic Conditions and Impacts

- Streamflows over the past 7 days show the lowest streamflow in basins of the Olympic Peninsula, southwest WA, and northwest WA
- Much of the streamflow across the area is in the less than 10th percentile for this time of year (maroon/red shading on the map)

Monday, September 18, 2023



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		

Figure Caption: [USGS 7 day streamflows for Washington](#), valid September 19, 2023

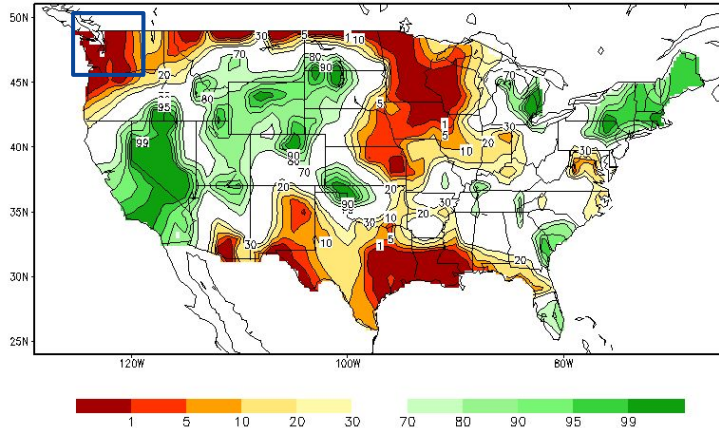




Agricultural Impacts

- Soil Moistures have continued to decrease and much of the area showing much below normal, at the lowest percentile.
- Crop moistures remain in the Excessively Dry category along the Olympic Peninsula

Calculated Soil Moisture Ranking Percentile
SEP 18, 2023



Crop Moisture Index by Division
Weekly Value for Period Ending SEP 16, 2023
Short Term Need vs. Available Water in a Shallow Soil Profile

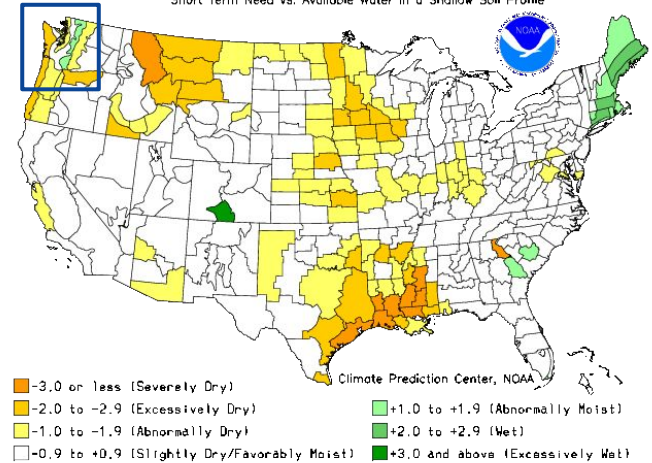


Image Captions:

Left: CPC Calculated [Soil Moisture Ranking Percentile](#) valid September 18, 2023

Above: [Crop Moisture Index by Division](#). Weekly value for period ending September 16, 2023

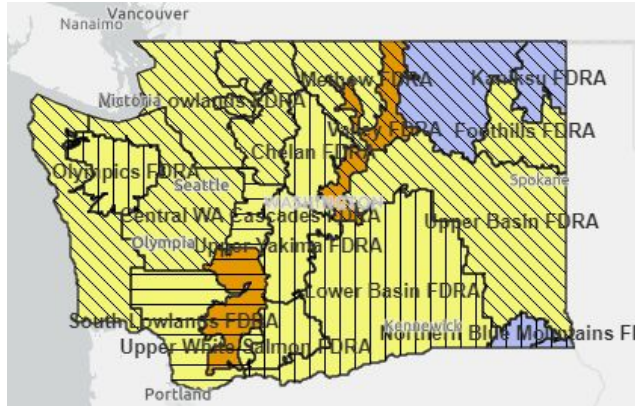




Fire Hazard Impacts

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

- Noticeable wildland fire activity has been observed in western WA over the past couple of months as the outlooks suggested this summer into September
- Burn bans are in effect for many areas



Burn Bans

- Rule Burns are banned
- Rule and Permit Burns are banned
- Rule, Permit and Recreation Burns are banned
- Other Combination, described
- No burn ban in effect

Image caption: Latest DNR Burn Ban map available [here](#).

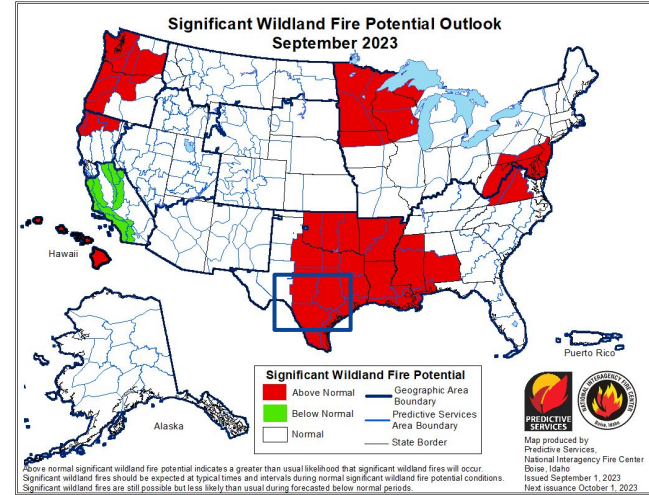


Image Caption: [Significant Wildland Fire Potential Monthly Outlook](#) for September 2023





Seven Day Precipitation Forecast

- Rainfall is forecast in western Washington over the coming week.

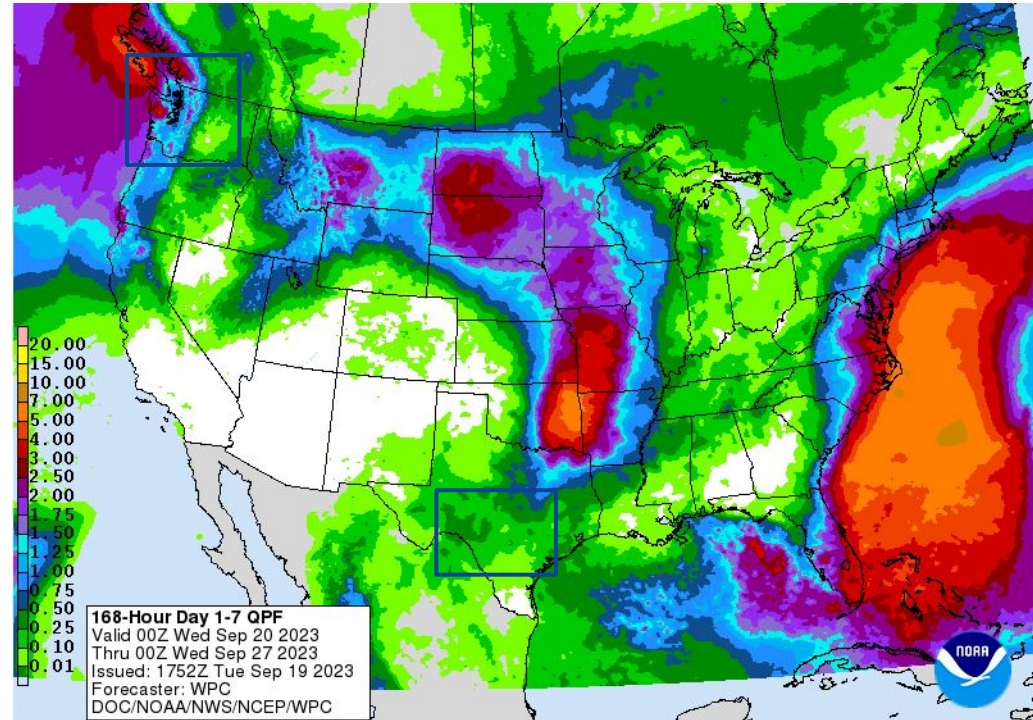


Image Caption: Weather Prediction Center [7-day precipitation forecast](#) valid Tuesday September 19 to Tuesday September 28.





Long-Range Outlooks

The latest monthly and seasonal outlooks can be found on the [CPC homepage](#)

- Equal chance of above, below, or normal temperatures on average through the month of September
- Odds lean towards above normal precipitation in September across

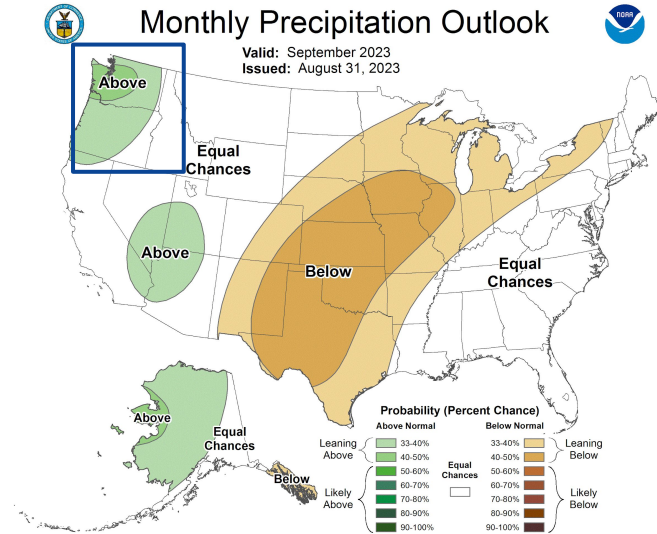
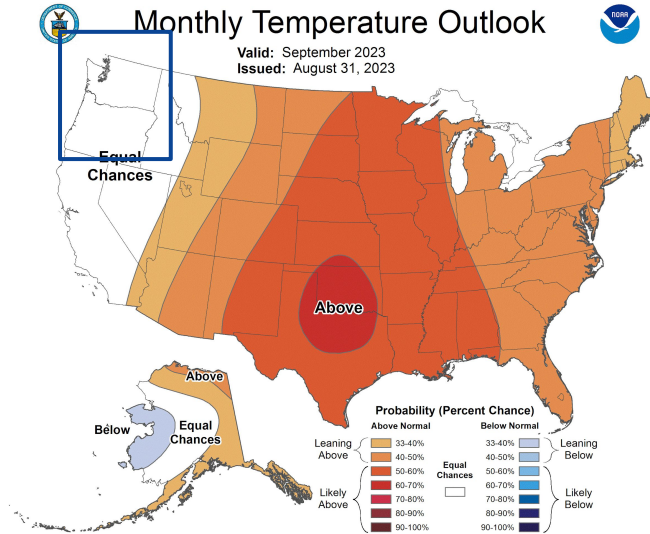


Image Captions:

Left - [Climate Prediction Center Monthly Temperature Outlook](#),

Right - [Climate Prediction Center Monthly Precipitation Outlook](#),

Valid September 2023





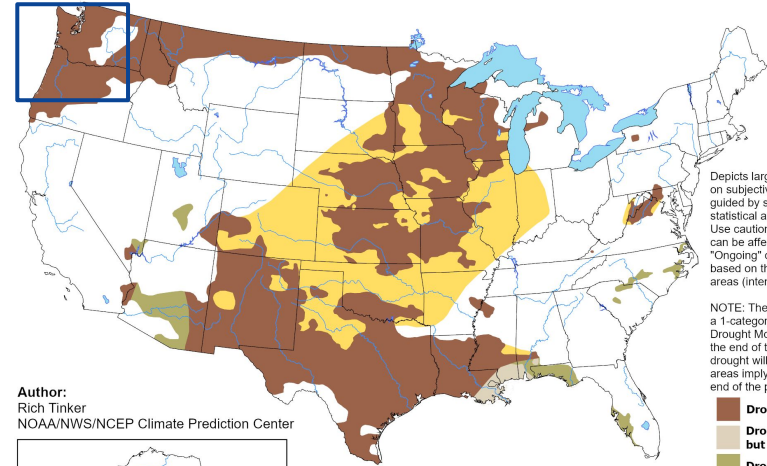
Drought Outlook

The latest monthly and seasonal outlooks can be found on the [CPC homepage](#)

- Drought will will persist

U.S. Monthly Drought Outlook Drought Tendency During the Valid Period

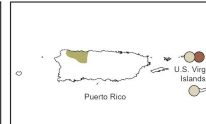
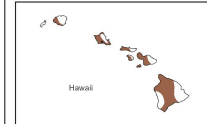
Valid for September 2023
Released August 31, 2023



Depicts large-scale trends based on subjectively derived probabilities guided by short- and long-range statistical and dynamical forecasts. Use caution for applications that can be affected by short lived events. *Ongoing* drought areas are based on the U.S. Drought Monitor areas (intensities of D1 to D4).

NOTE: The tan areas imply at least a 1-category improvement in the Drought Monitor intensity levels by the end of the period, although drought will remain. The green areas imply drought removal by the end of the period (D0 or none).

Author:
Rich Tinker
NOAA/NWS/NCEP Climate Prediction Center



- Drought persists
- Drought remains, but improves
- Drought removal likely
- Drought development likely
- No drought



<https://go.usa.gov/3eZGd>

Image Caption:
Climate Prediction Center Monthly Drought Outlook Released August 31, 2023 valid for September 2023

Links to the latest:
[Climate Prediction Center Monthly Drought Outlook](#)
[Climate Prediction Center Seasonal Drought Outlook](#)