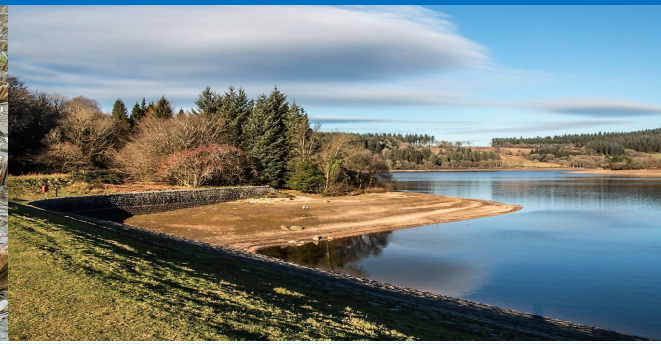
Drought Information Statement for Eastern IA, Northwest IL & Northeast MO

Valid October 20, 2023

Issued By: WFO Quad Cities IA/IL

Contact Information: nws.quadcities@noaa.gov

- This product will be updated November 3, 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/DVN/DroughtInformationStatement for previous statements.



U.S. Drought Monitor

Link to the latest U.S. Drought Monitor

- Exceptional Drought Conditions removed from the DVN County Warning Area (CWA)

- Drought intensity and Extent
  - Widespread improvements have occurred over the past week.
  - D4 (Exceptional Drought): Now is entirely absent from the DVN CWA.
  - D3 (Extreme Drought): Now covers **21.86%** of the DVN CWA. Most of this is within eastern Iowa.
  - D2 (Severe Drought): Now covers **37.9%** of the DVN CWA, again with the majority being in eastern Iowa.
  - D1 (Moderate Drought): Now covers over **61.66%** of the DVN CWA.

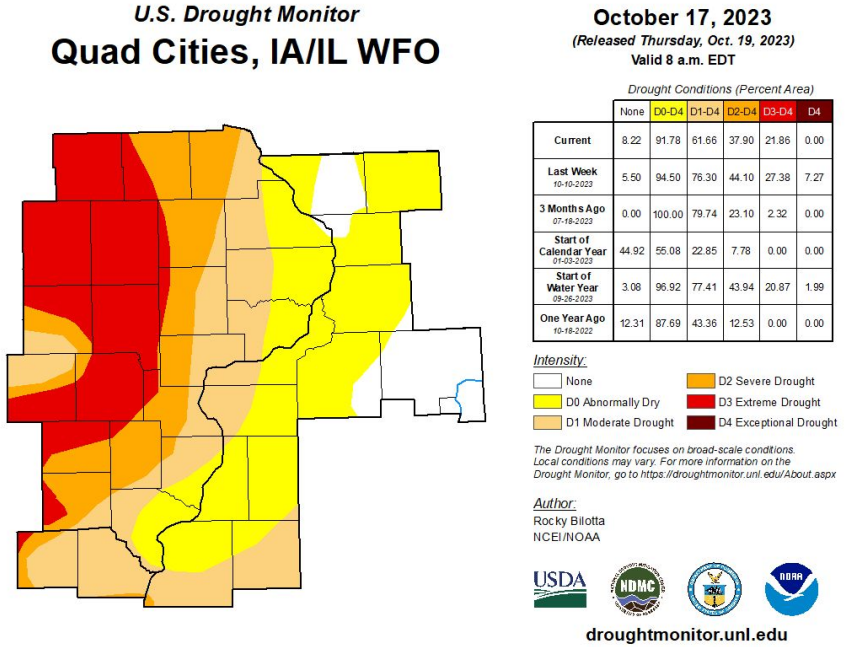


Image Caption: U.S. Drought Monitor valid 8am EDT October 17th 2023

Recent Change in Drought Intensity

Link to the latest 4-week change map for Midwest

- Four Week Drought Monitor Class Change.
  - **Drought Worsened:** Through much of the Ohio River Valley, southwest Kentucky, and northwest and the bootheel of Missouri.
  - **No Change:** Areas scattered throughout the region have seen little to no change, but this is not focused on any specific areas. Michigan remains majority drought free.
  - **Drought Improved:** Through most of the upper Mississippi River Basin, northern and central Illinois, northern Indiana, and southwest Missouri.

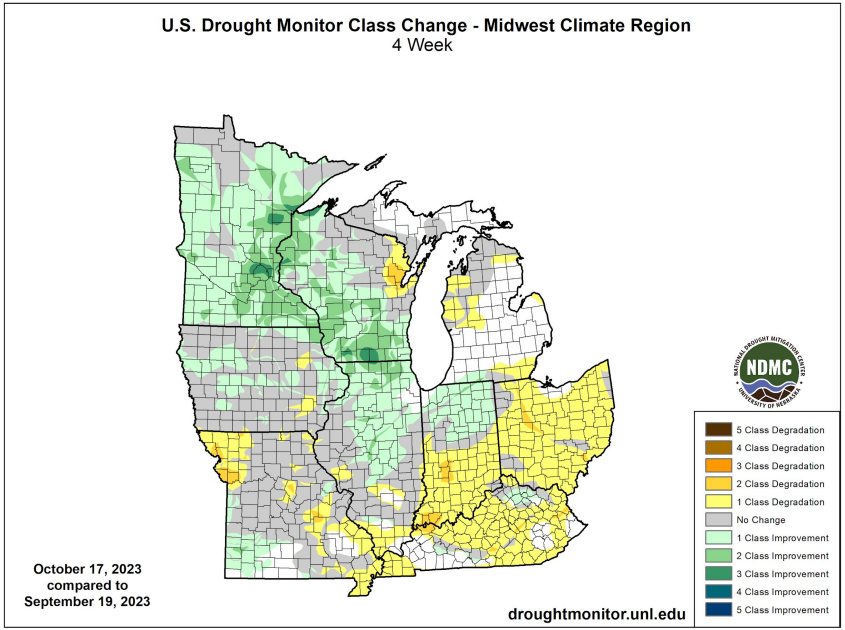
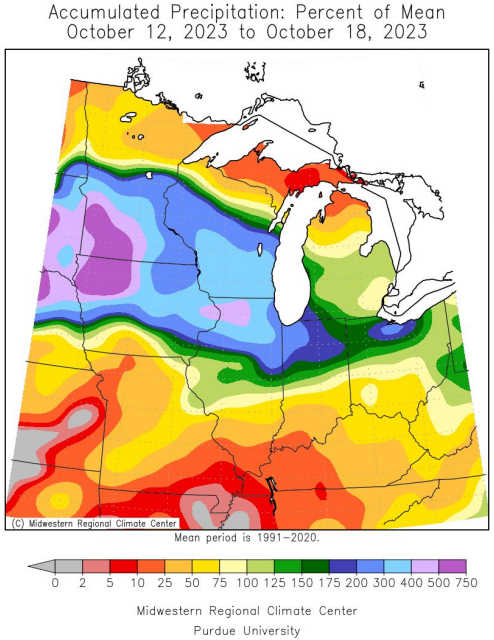


Image Caption: U.S. Drought Monitor 4-week change map valid 8am EDT October 17th.

Precipitation

- Most of the DVN CWA saw significant rainfall in the previous week. Highest amounts were along the Illinois/Wisconsin border and into eastern Iowa. Lowest amounts were in far northwest Missouri

- Outside of the DVN CWA rainfall amounts were also high in much of the upper Mississippi Valley, and were well below average generally to the south.



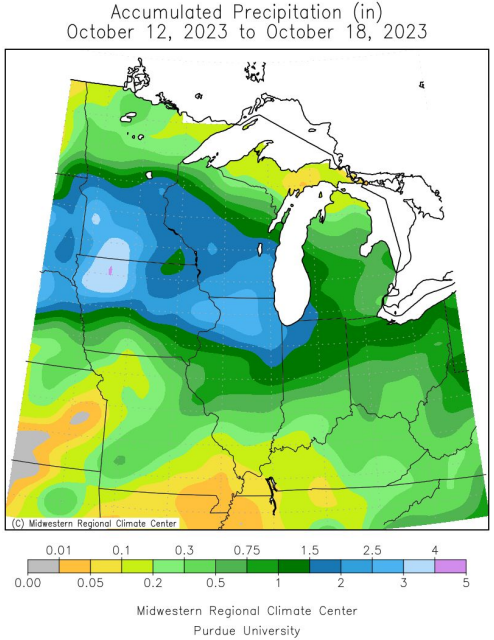
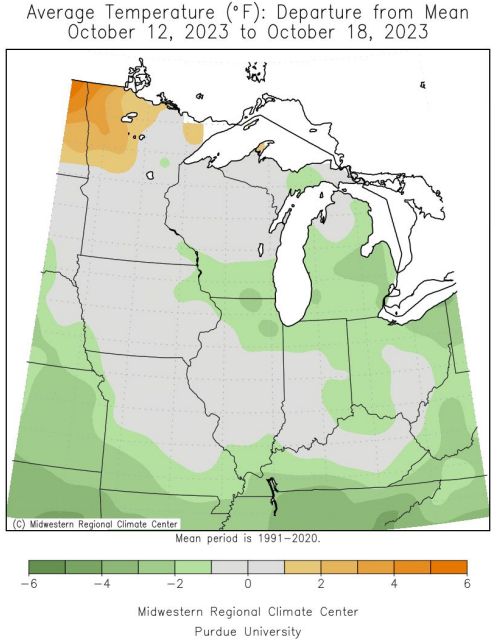


Image Captions:
Left - Precipitation Amount for the Midwest
Right - Percent of Normal Precipitation for the Midwest
Data Courtesy High Plains Regional Climate Center.
Data over the past 7 days ending 10/18/2023

Temperature

- Average temperatures ranged between 50-55 degrees. This is normal.
- Regionally, temperatures were at or below normal in the entire midwest except northern Minnesota and the Keweenaw Peninsula of Michigan.



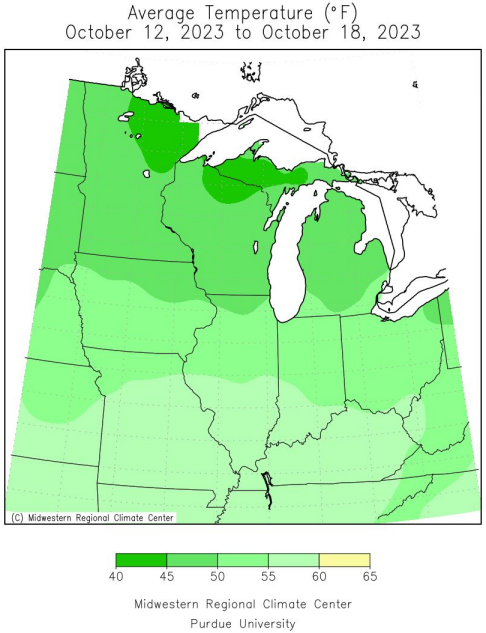


Image Captions:
Left - Average Temperature
Right - Departure from Normal Temperature
Data Courtesy High Plains Regional Climate Center.
Data over the past 7 days ending 10/18/2023

Summary of Impacts

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

Hydrologic Impacts

- Streamflows remain much below normal across most basins in eastern Iowa and northeast Missouri. Most basins across Illinois are at or above normal. See the next slide for more details.

Agricultural Impacts

- Anomalously dry soils remain, with crop moisture abnormally to excessively dry throughout the region.

Other Impacts

- Rainfall is forecast next week and potentially could aid in some drought relief.

Mitigation Actions

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

Hydrologic Conditions and Impacts

- River levels have began to rebound slightly throughout the DVN Hydrologic Service Area (HSA).
- Streamflows are running below to much below normal in many basins in Iowa.
- Despite the low levels, the Mississippi River still remains navigable at this time.

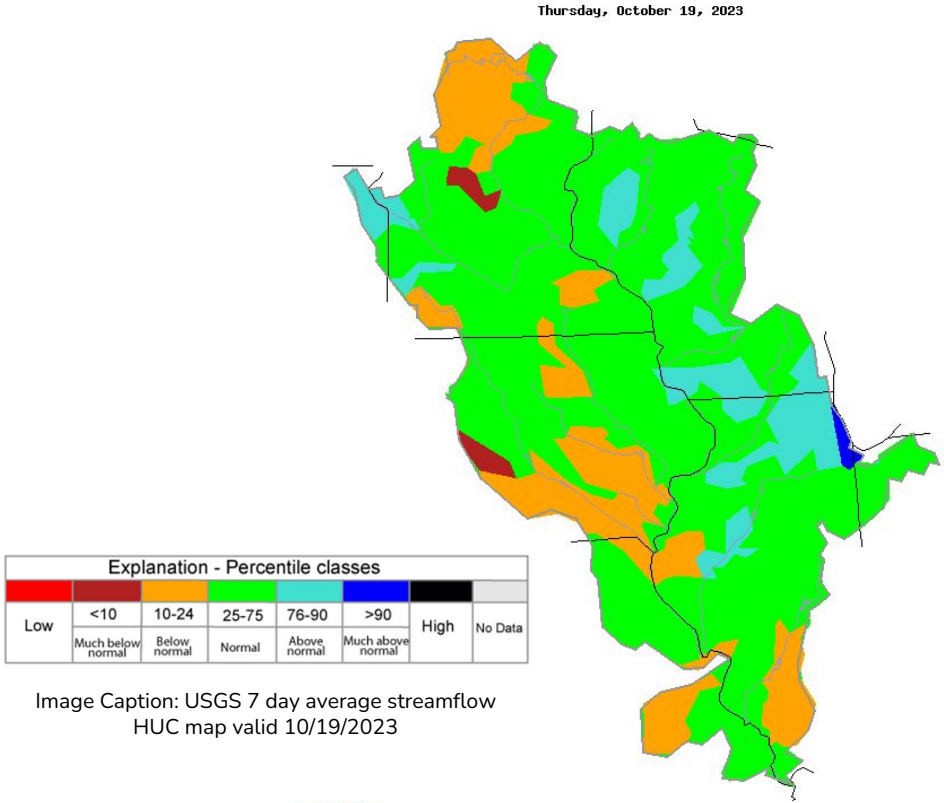
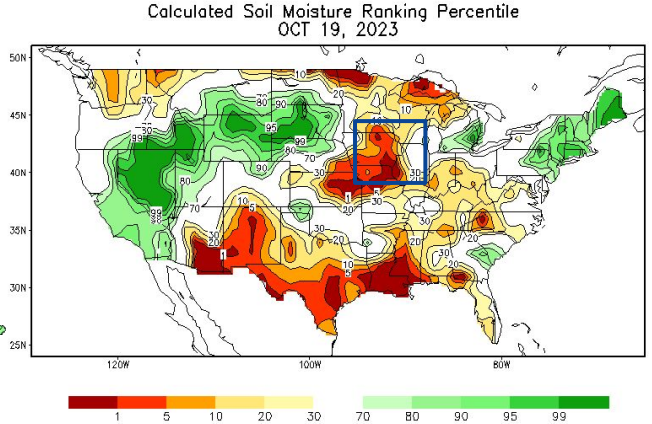


Image Caption: USGS 7 day average streamflow
HUC map valid 10/19/2023

Agricultural Impacts

- Locally, we are observing well below normal soil moisture. These very dry soils can be seen throughout Minnesota and Wisconsin as well.

- Much of the local area, along with areas directly north, are seeing near normal available crop moisture. This change can partially be attributed to the end of the traditional growing season.



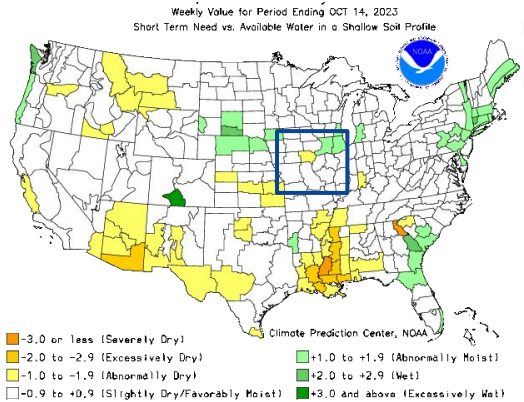


Image Captions:
Left: CPC Calculated Soil Moisture Ranking Percentile valid October 19, 2023
Right: Crop Moisture Index by Division. Weekly value for period ending October 14, 2023

Seven Day Precipitation Forecast

- Through the next 7 days, we are expecting to see one to two inches of rain with higher local amounts possible.
- If these precipitation totals occur, continued improvement in the drought conditions would be expected.

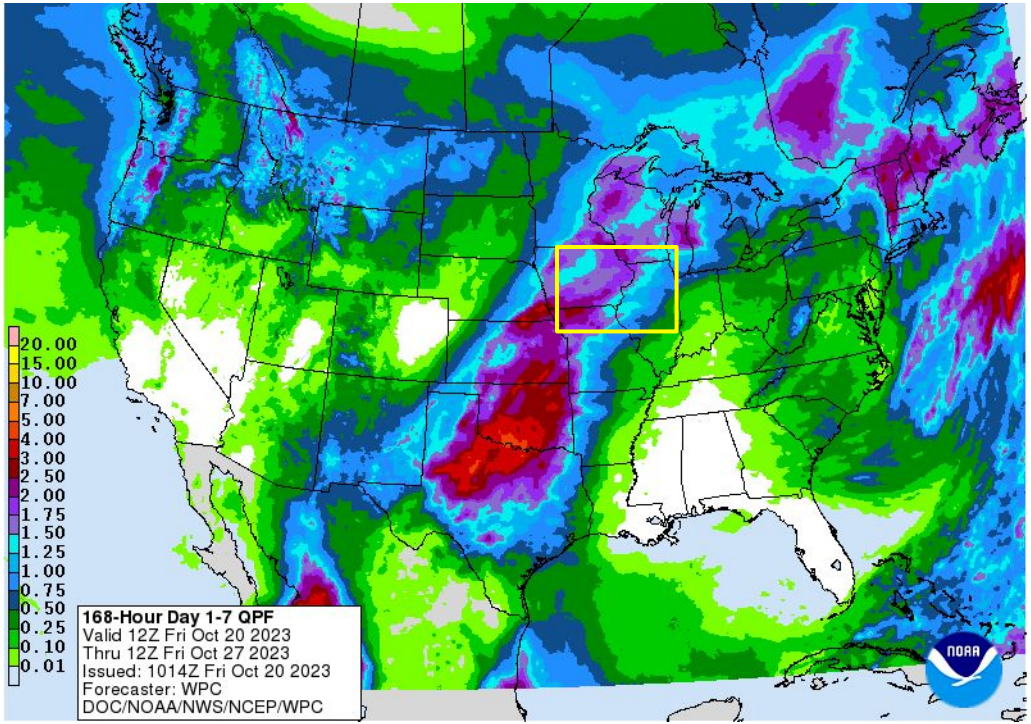
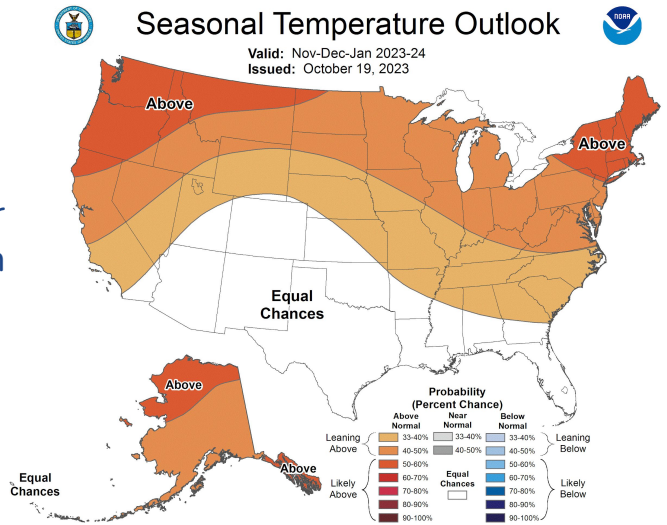


Image Caption: Weather Prediction Center [7-day precipitation forecast] valid Friday October 20 to Friday October 27

Long-Range Outlooks

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

- Above normal chances for warmer than normal temperatures are favored from November to January for much of the northern half of the country.
- Equal chances for above or below normal precipitation amounts is possible from November to January in much of the Upper Midwest.



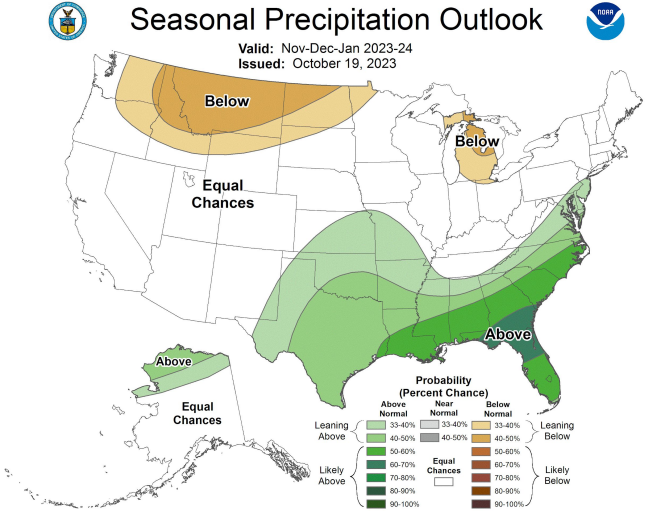
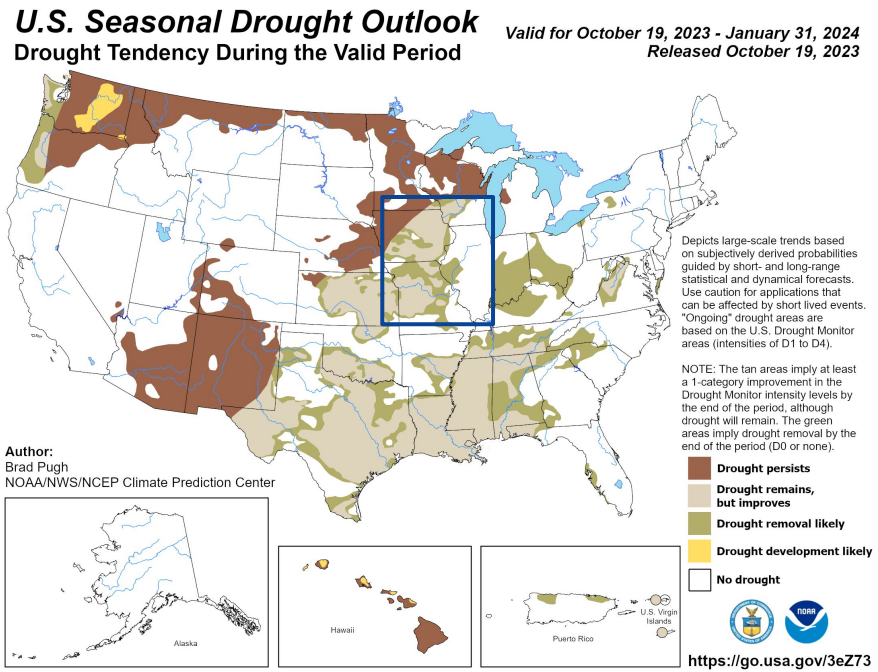


Image Captions:
Left - Climate Prediction Center Seasonal Temperature Outlook.
Right - Climate Prediction Center Seasonal Precipitation Outlook.
Valid Nov, Dec, Jan 2023-24

Drought Outlook

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

- Drought will improve across the DVN CWA. Drought will likely be removed in far eastern Iowa and western Illinois.
- Where drought conditions will remain, the impacts will gradually improve through the end of January.



Links to the latest:
Climate Prediction Center Monthly Drought Outlook
Climate Prediction Center Seasonal Drought Outlook

Image Caption:
Climate Prediction Center Seasonal Drought Outlook Released October 19, 2023 valid for October 19 to January 31, 2024.