WEATHER/PRECIPITATION OUTLOOK 2023 GROWING SEASON ISSUE #6—June, 2023



Background

This is the sixth in an annual series of outlooks for weather/precipitation for the Lower Platte South Natural Resources District and surrounding area. These outlooks will be produced at least annually, usually in May or June, and will be updated throughout the growing season (i.e., May through September) as warranted.

Current Conditions as of June, 2023

The graph below shows precipitation from September through May since 1973 as a general indicator of moisture conditions entering the growing season. From September 2022 through May 2023, Lincoln received a total of 6.82 inches of precipitation, compared to the 1973-2023 average of 13.76 inches for that same time period, and compared to 15.96 inches for 2021-2022. This total of 6.82 inches is the lowest total for that time period back to 1973. As a result, the Drought Monitor for June 8, 2023 (see below) shows the entire LPSNRD is in varying stages of drought from D1 (Moderate Drought) in the east to D4 (Exceptional Drought) in the northwest.



Outlook

Based on the sources cited below, a general precipitation outlook for the LPSNRD and vicinity for the remainder of the growing season of 2023 is **BELOW NORMAL TO NORMAL**. As noted above, all of LPSNRD is currently in varying stages of drought due to abnormally low precipitation, and field observations indicate that in some parts of the District irrigation is already underway due to extremely dry soil conditions. However, the current Seasonal Drought Outlook from June through August (see

below) illustrates the possibility that drought conditions, while persisting, may ease somewhat throughout the growing season due to indications of more normal precipitation through the summer. Regardless, the early part of the summer of 2023 is extremely dry across LPSNRD, and so farmers, property owners, and all water users are encouraged to conserve water to help prevent conditions from worsening, especially if the predictions for easing of the drought do not materialize. Of course, conditions can change rapidly, and should the conditions described above change significantly during the season, LPSNRD will issue an update(s) to this outlook.



For Further Information:

- National Weather Service—Climate Prediction Center: <u>http://www.cpc.ncep.noaa.gov/</u>
- National Weather Service—Missouri River Basin Water Supply Statement: <u>https://www.weather.gov/mbrfc/water_supply</u>
- National Weather Service--Missouri Basin River Forecast Center Ensemble Streamflow Outlook: <u>https://www.weather.gov/mbrfc/ensemble</u>
- National Drought Mitigation Center: <u>http://drought.unl.edu/</u>
- National Integrated Drought Information System: <u>http://www.drought.gov</u>
- United States Drought Monitor: http://droughtmonitor.unl.edu
- CLIMOD (temperature and precipitation data): <u>http://climod.unl.edu/</u>
- High Plains Regional Climate Center: <u>https://hprcc.unl.edu/</u>

Specific Questions?

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Additional Information:

These outlooks will be generated with input from the following entities:

- High Plains Regional Climate Center
- National Drought Mitigation Center
- Nebraska State Climate Office
- University of Nebraska Extension
- University of Nebraska School of Natural Resources

Going forward, additional entities with relevant information for the region will also be consulted as necessary for these outlooks.

In generating this outlook, the team assembled by LPSNRD utilized the following resources:

- Short- and long-term outlooks from the National Weather Service Climate Prediction Center (CPC)
- Short- and long-term precipitation analyses
- Palmer Drought Severity Indices
- Soil Moisture Indices
- United States Drought Monitor
- National Integrated Drought Information System (NIDIS); most relevant information for the LPSNRD area can be found in the Missouri River Basin Quarterly Climate Impacts and Outlook as well as the section on Nebraska.