



LOWER PLATTE SOUTH natural resources district

3125 Portia Street | P.O. Box 83581 • Lincoln, Nebraska 68501-3581 | P: 402.476.2729 • F: 402.476.6454 | www.lpsnrd.org

WEATHER/PRECIPITATION OUTLOOK 2018 GROWING SEASON ISSUE #1—May, 2018 LOWER PLATTE SOUTH NATURAL RESOURCES DISTRICT

Background

In today's digital world, there are many sources of information on weather, climate, precipitation, temperature, and related data. Many of these sources are focused on national, regional, or state scales. While such sources are useful, the Lower Platte South Natural Resources District, as part of its ongoing Drought Response Plan, has committed to providing information more specifically focused on the District itself to help farmers, businesspeople, and citizens be more aware of and prepared for weather-related events, especially during the growing season (roughly May through September). However, it's important to realize that weather patterns can change quickly in Nebraska. Should this seasonal outlook change significantly over the 2018 growing season, LPSNRD will make every attempt to update this outlook as conditions change.

Current Conditions as of May 2018

Although moisture during the fall and winter of 2017-2018 was near normal, April was extremely dry in southeastern Nebraska, with most locations receiving less than 50% of normal precipitation. For example, Lincoln received only 0.67 inches, which was 25% of normal, and the 10th driest April on record. Luckily, unseasonably cool conditions were in place all across the central U.S. (Lincoln's average temperature was 44.4°F, which was the 3rd coolest April on record), and drought conditions did not develop in the Lower Platte South NRD area during this time. However, as noted below, dry/drought conditions exist not far to the south of LPSNRD, and expansion of these conditions can't be discounted.

Outlook

Based on the above sources, a general outlook for the LPSNRD and vicinity for the growing season of 2018 is **NORMAL TO DRIER THAN NORMAL**. At present, the Climate Prediction Center (CPC) is indicating that the odds are shifting toward better chances of above normal temperatures for the growing season across the southwestern half of the country, and potentially including Nebraska by the end of the growing season. Precipitation odds during the growing season do not yet show a clear indication of any above normal or below normal trends for the growing season. However, given that there are currently drought conditions to the north and especially to the south of Nebraska, absent higher than normal precipitation, it is certainly possible that these dry conditions can extend into the LPSNRD area sometime in the upcoming growing season. In addition, the snowpack in the Rocky Mountains feeding the Platte River Basin is slightly below average for this time of year, and precipitation in the recent months has likewise been slightly below normal. This has led the National Weather Service to predict stream flow in the Platte River Basin to be below normal for the upcoming spring and summer months, contributing to the possibility of drier than normal conditions. Once again, should these

conditions change significantly during the season, LPSNRD will issue an update to this outlook as soon as possible.

For Further Information:

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

Specific Questions?

- Climate Science, Drought, Research:
 - Natalie Umphlett, Interim Director and Regional Climatologist
High Plains Regional Climate Center
402-472-6764; numphlett2@unl.edu
- Drought Effects on Agriculture; Dealing with Drought:
 - Tyler Williams, Extension Educator
University of Nebraska-Lincoln Extension
402-441-7180; tyler.williams@unl.edu
- Lower Platte South NRD Programs; Questions on this Publication:
 - Dick Ehrman, Water Resources Specialist
Lower Platte South Natural Resources District
402-476-2729; dehrman@lpsnrd.org

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 be 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.