CARC Meeting Minutes
Friday, April 8, 2022
Nebraska Department of Agriculture
245 Fallbrook Blvd, Lincoln, NE

Meeting was called to order at 1:00p.m.

In Attendance
Committee members: Cicely Wardyn (Chair), Nebraska Department of Agriculture; Jesse Bradley, Nebraska Department of Natural Resources; Carl Sousek, crops farmers representative, Aaron Young, UNL Conservation and Survey Division; Mark Svoboda, National Drought Mitigation Center; Barb Cooksley, Livestock Producer

Staff and audience: Brian Fuchs, National Drought Mitigation Center; Martha Shulski, Nebraska State Climatologist; John Berge and Sarah Heidzig-Kraeger, Farm Service Agency; Eric Zach, Nebraska Game and Parks Commission; Steve Wellman, Nebraska Department of Agriculture; Kelly Brunkhorst, Nebraska Corn Board; Jacy Hauge, Nebraska Cattlemen.

Committee Chair Cicely Wardyn opened the meeting stating that CARC follows provisions in Nebraska's Open Meetings Act. A copy of the Act was available at the new office location for the Nebraska Department of Agriculture for review. She also introduced Breanna Wirth who recently became the Legislative Coordinator for the Nebraska Department of Agriculture.

Minutes from the November 12, 2021, CARC meeting were accepted as presented.

Reports were provided as follows:

Nebraska Drought Conditions and Water Supply Update
Presented by Brian Fuchs, National Drought Mitigation Center
Note: Maps, statistics, charts and other details are available on Fuch's PowerPoint presentation that can be found at carc.nebraska.gov

Past/Current Climate & Drought Report
Fuchs presented U.S. Drought Monitor maps from the past year demonstrating the regional perspective of drought conditions. At this time last year, there wasn't much depiction represented; however, the most recent map from April 2022 illustrates severe conditions west of the Missouri River.

Throughout the plains, from Nebraska to Texas, drought conditions intensified from late October 2021 into April 2022. More specifically, the central to northeast areas of Nebraska experienced the most change in conditions, as last year the panhandle and southeast region of the state were suffering from more pockets of dryness.

Cooler than normal temperatures have been saving land conditions as less precipitation was experienced throughout the winter months. As October-April usually serves as a recharge period,

less than favorable environments have created problematic soil moistures considering spring planting and crop establishment.

Considering present drought conditions, Fuchs references the weather experienced throughout the southern states, particularly in Texas and Oklahoma. As regulatory air masses move northward from the gulf, atmospheric moisture is depleted. Therefore, in the areas of the plains where drought is seen currently, circumstances will continue to develop and persist. As long as dry conditions continue to the south, less air moisture will be delivered to the Midwest.

The official summer outlook predicts an elevated probability of higher temperatures in the southwestern part of the country. Therefore, Nebraska is expected to follow on trend and experience higher temperatures with a below average precipitation outlook. Knowing this information, it will be an unfavorable summer for not only Nebraska but for much of the plains region.

The following is the climate/drought summary from Fuchs:

- Temperatures have been cooler than normal throughout the High Plains into spring; unlike 2012 where we had an early "green up" and unseasonably warm weather that year. Over the last 60 days, most all the region was 2-4 degrees below normal with the greatest departures in the Rock Mountains and eastern Dakotas which were 3-4 degrees below normal.
- Much of the region has recorded below normal temperatures this year. Precipitation has been spotty and inconsistent for the current water year that began October 1, 2021 with most of the region recording precipitation amounts that are well below normal. The exception in the eastern Dakotas which were very wet last fall.
- Nebraska is currently showing 96.43 percent of the state in drought. Most of the drought is moderate drought (D1) to severe drought (D2) with a pocket of extreme drought (D3) in central Nebraska. This compares to early November when 31.57% of the state was in drought with 13.98% in D2 or worse at that time.
- The seasonal drought outlook that goes through the end of June has current drought persisting during this time for most all regions west of the Missouri River.

Nebraska Water Supply Update

Throughout Nebraska, water supply numbers do not seem to be out of the ordinary. As less water is being released from the northern states, there is less of an inflow of water resources. Therefore, a reduced amount of water is being released from the many lakes throughout the state. When considering snowfall, Nebraska has seen below average numbers. However, due to 90% snowpack on the South Platte River Basin, there has been 85-95% snowpack feeding into the Platte River. While this will not aid in drought conditions, it is expected that normal water flow should continue throughout the summer.

Regarding the Republican River Basin, an influx of water flow has been reported, 20,000 acre-feet more than the historical average. This is a great indicator the system is capable of holding more water.

The following is Fuchs' Water Supply Summary:

- Lake McConaughy is currently 67.2 percent of capacity and has been slowly rising since the end of the irrigation season and through the winter.
- Upstream reservoirs in Wyoming are mixed for this time of year with most being higher than last November, but a few are still lower.
- The Republican River basin reservoirs are higher than they were in November 2021 as water levels have stabilized with the end of irrigation season and less demand and have added water during the winter months.
- Harlan County reservoir is holding about 22,000 acre-feet more water now than in November 2021 and is also about 20,000 acre-feet more than the historical average for this time of year.

Nebraska Climate Update

Presented by Nebraska State Climatologist Martha Shulksi,
Note: Maps, statistics, charts and other details are available on Shulski's PowerPoint presentation that can be found at carc.nebraska.gov

Throughout the winter months, a lack of precipitation, or "snow drought", was experienced through much of the central and southern plains. It was the 4th driest winter on record for Nebraska, with higher-than-normal highs and lower-than-normal lows reflecting the dry atmosphere.

Central Nebraska has struggled the most from the lack of precipitation, with severe degradations concentrated in the east central region. Meanwhile, the panhandle and southeastern regions have benefitted from more rain and snowfall; however, 96% of the state is still suffering from drought conditions. Referencing the drought monitor map, change is not expected looking forward to the summer months.

As of the first week of April, 81% of the state has short to vert short topsoil (first 6 inches) moisture, while subsoil moisture was 82% short to very short.

Throughout eastern Nebraska, more pockets of wetness are seen in most grass covered areas. However, this is not reflective of agricultural lands for use.

Shulski outlined the following implications to agriculture as a result of present conditions:

- Reports of low stock ponds around the state.
- Some considerations of herd culling due to grass concerns.
- Doesn't appear that warm planting weather will develop until April 17, 2022.
- The slow grass growth and dry vegetation will continue to be supportive of high fire danger for the next several weeks, minimum.

The following was her outlook summary for Nebraska during the summer months:

- We are entering our wet season and need at least normal rainfall going forward However, climate outlooks suggest otherwise with warm/dry pattern.
- Expect general drought persistence, with potential for worsening.
- Wildland fire will be a high risk scenario.

Shulski said her office utilizes the Nebraska Mesonet weather stations to gather air temperature, humidity, liquid precipitation, wind speed and direction, solar radiation, barometric pressure, soil temperature and soil moisture data from across the state. There are currently 64 stations located in 47 counties in Nebraska. Current plans are to add one weather station in 2022 and 6 more in 2023.

Other Updates from CARC Members/Advisors
Note: Additional details from individual reports can be found in the CARC Agency and Organization Summaries.

Sarah Heidzig-Kraeger, Program Specialist, Conservation Environmental Price Support Programs, Nebraska State Office, Farm Service Agency

Sarah reported on the six programs available to producers suffering losses due to drought from the Farm Service Agency. The six programs are:

- Livestock Forage Disaster Program (LFP)
- Emergency Assistance for Livestock, Honeybee, and Farm-raised Fish (ELAP)
- Emergency Conservation Program
- Conservation Reserve Program (CRP) Emergency Haying and Grazing
- Noninsured Crop Disaster Assistance Program (NAP)
- Tree Assistance Program (TAP)

Carl Sousek, Row Crop Producer

Economically, the ag groups throughout Nebraska have always advocated for risk management tools through the federal level, and their goal is to educate ag producers. Commodities groups have and will continue to practice drought preparedness adapting the Best Management Practices (BMP's) to maximize irrigation water use efficiencies and sequestration of rain fall.

Striving for a more sustainable system of production of Nebraska's ag products, these groups will continue to fund research projects seeking to achieve the various goals of the industry.

Cicely Wardyn, Nebraska Department of Agriculture

Wardyn reported on the Nebraska Department of Agriculture's level of involvement with drought prevention. The department strives to find a solution and can assist in connecting individuals with the tools needed.

Jesse Bradley, Nebraska Department of Natural Resources

Bradley introduced the NeDNR as the leading state agency on water quantity planning. They conduct water quantity planning in each Natural Resource District and through several basin-wide plans to ensure a coordinated approach to long-term planning for surface water and hydrologically connected groundwater resources across the state. With the current plans established, various monitoring data, triggers, and communication protocols will be utilized in the event of drought conditions.

Eric Zach, Ag Program Manager, Nebraska Game and Parks Commission

Considering the current state of Nebraska and the high-fire danger conditions, the Commission's Wildfire Response Plan is being updated. This document directs the response to wildfire events across the state and includes communications plans, protocols for fires on various property types, staffing, and equipment availability. Numerous staff are already engaged in federal wildfire training and assist with wildfires currently. The Commission maintains firebreaks on many properties to provide access and containment options in the event of a wildfire. Often their lakes and reservoirs are used as water sources for helicopters and firefighting rigs.

Barb Cooksley, Livestock Producer

With an update as a livestock producer from the sandhills, their particular soil profile is proving adequate ground water available from the above normal rainfall in recent years. Their personal range management plan always accounts for drought conditions, and adjustments are made as necessary in terms of harvesting their grasslands.

Cooksley also made the announcement she is stepping down from the Climate Assessment and Response Committee but will continue to serve as an ally in the agriculture industry.

The meeting was adjourned at 2:48 p.m.