

CARC Meeting Minutes (DRAFT)

Monday, Nov. 28, 2022

Nebraska Department of Agriculture

245 Fallbrook Blvd, Lincoln, NE

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

In Attendance

Committee members: Cicely Wardyn (Chair), Nebraska Department of Agriculture; Jesse Bradley, Nebraska Department of Natural Resources; Matt Joeckel, UNL Conservation and Survey Division; Rick Rasby, UNL Cooperative Extension; Rick Leonard, Representative for Senator Steve Halloran; Doug Gillespie, Nebraska Department of Health and Human Services (in place of Becky Wisell); Ervin Portis, Nebraska Emergency Management Agency

Staff and audience: Brian Fuchs, National Drought Mitigation Center; Martha Durr, State Climatologist; Nick Streff, USDA National Agriculture Statistics Service; Breanna Wirth, Nebraska Department of Agriculture; Taylor Nicolaisen, NWS; Eric Zach, NGPC; Nick Streft, USDA NASS; Pete McClymont, Nebraska Cattlemen; Pat Lechner, FSA; Andy Pedley, Nebraska Department of Natural Resources; Tyler Martin, Nebraska Department of Natural Resources; Ryan Kelly, Nebraska Department of Natural Resources;; Rachael Whitehar, Nebraska Corn Board; Rick Rasby, UNL

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 meeting location of the Nebraska Department of Agriculture for review.

Minutes from the April 8, 2022, CARC meeting were amended to add "Aaron Young" as Matt Joeckel's representative. The minutes were then accepted as amended.

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

When considering climate, temperatures have logged cooler than normal throughout the High Plains in recent months and have averaged near normal for the year thus far. Over the past 60 days alone, most all the region was 1-2 degrees below normal.

As expected, precipitation has been well below normal for the year. The only exceptions have been North Dakota and portions of the Rocky Mountains as they have received the most precipitation in 2022. For the second year in a row, the autumn months have provided little to no

Page 2 – CARC Meeting Minutes, November 28, 2022

soil moisture recharge and will most likely cause problematic conditions when considering the 2023 agricultural season.

Comparing Nebraska alone to one year ago, only 40% of the state was facing drought conditions. Today, however, Nebraska is showing 99.78% of the state in drought with just over 85% in severe drought or worse. When considering the previous CARC meeting held in April, just under 60% of the state was in severe drought or worse at that point in time. Currently, 87% of Nebraska is showing short to very short soil moisture.

Looking ahead to the winter months, this will be the third straight winter of experiencing La Nina type weather patterns. The seasonal drought outlook extending through the end of February shows current drought persisting for most all the region with drought development expected to the south.

Nebraska Water Supply Update

Last November, Lake McConaughy was at 60% capacity and rose to 67% capacity in April of 2022. However, levels have continued to decline in the months following. Considering the state of Lake McConaughy today, it is currently at 42.7% capacity and has been slowly rising since the end of the irrigation season.

Harlan County Reservoir is holding about 73,000 acre-feet less water now than in April 2021 and is also 18,000 acre-feet less than the historical average for this time of year. However, at this point in time, it does not prove to be terribly problematic.

The Republican River Basin reservoirs are lower than they were in April 2022 as water levels have stabilized with the end of irrigation season and less demand. Currently, the conservation pool is 71.9% full compared to 95.2% in April 2022. There is 225,693 acre-feet in storage compared to 298,901 acre-feet of water in storage during April 2022, and at this time last year, 276,275 acre-feet was in storage. The historical average for this time of year is 243,496 acre-feet, proving that levels are much lower than normal.

Upstream reservoirs in Wyoming are near normal levels for this time of year; however, most are showing much lower levels than they were during the previous CARC meeting in April 2022.

Nebraska Climate Update

Presented by Nebraska State Climatologist, Martha Durr

Note: Maps, statistics, charts and other details are available on Durr's PowerPoint presentation that can be found at carc.nebraska.gov

To shine light on the issue of drought in the United States, 42% of the country was in drought one year ago, mostly concentrated in the western hemisphere. Conditions now, however, show 50% of the country in drought with expansion eastward and some alleviation in the west due to an

Page 3 – CARC Meeting Minutes, November 28, 2022

active monsoon season. Intensification of conditions have been most prominent among the central, southern Plains throughout the last year.

Regarding Nebraska specifically, in November 2021, 32% of Nebraska was in drought in terms of short and long-term dryness. Today, all of Nebraska is in drought, ranging from moderate to exceptional conditions, and most of the state experiencing degradation. From 2019 to now, much of the state has experienced precipitation deficits in the 12-inch range or worse, with the southwest and northeast averaging 20+ inch moisture deficits. In 2022 alone, moisture deficits are averaging 9 inches for the southwest, central and eastern Nebraska areas, with 12-15-inch pockets most notably in the northeast. This of course has impacted the soil moisture content which currently shows topsoil at 86% short to very short and subsoil 90% short to very short.

Considering pasture and rangeland conditions, 77% is considered poor to very poor with only 4% equating to good. These statistics can be attested to the dryness of the land and the number of wildfires experienced across the state. This was the second worst year on record for wildfires with 200,000 acres burned so far this year. Given persistent conditions, as well as the wind, Nebraska will continue to be considered in high fire danger for the time being.

Looking ahead into the month of December, climate is predicted to be warmer than normal for much of Nebraska with precipitation to be considered as an equal chance category with no strong indication of wetter or drier than normal. Considering the La Nina weather patterns, it can lead to cool/wet conditions across the north with warm/dry to the south; however, should this be a weak year, higher snow averages throughout the northern Great Plains would be seen.

Drought will continue to persist throughout the state of Nebraska through the winter months, as this is our driest season with an 8% annual moisture average. However, it is expected that the state will transition out of La Nina to neutral conditions by next spring and summer, which could signal a pattern change bringing more moisture and *some* drought relief. Drought alleviation will take some time and moisture retention will largely depend on soil temperature. Above normal rainfall will be necessary when entering the wet season to ensure an adequate production year ahead.

***Nick Streff, Regional Director, USDA-NASS
November Crop Progress and Condition Report***

Although Nebraska battled hardships this year, not much seems out of sync with the normal corn crop progression. Just less than 40% of this year's crop finished in good to excellent corn crop condition. At this time, it is forecasted that the state will finish with 168 bushels/acre (for reference, 2013 was the last time this range was seen). The average bushel/acre for the state of Nebraska is 180. Although it is no where near the usual output, corn production is predicted to be 1.56 billion bushels for 2022.

Page 4 – CARC Meeting Minutes, November 28, 2022

Soybeans finished similarly, with 40% of the total crop production to be in good to excellent condition. Still lower than usual, 50 bushels/acre is the average and a total of 285 million bushels is the 2022 forecast production for soybeans.

Regarding pasture and rangeland, 2021 and 2022 have not been great years in terms of good to excellent conditions. Down 22% from last year's alfalfa hay production, only 2.92 million tons was harvested for use. Other hay is forecasted to be down 18% at 2.1 million tons. Compared to one year ago, the amount of land for use in 2022 was 810,000 acres, down 11%. As pasture conditions continue to decline, costs will continue to increase. Current hay prices are as follows: \$198 a ton for alfalfa and \$118 for other hay. For reference, last year's prices for alfalfa were \$151/ton and \$103/ton for other hay.

Other Updates and Thoughts from CARC Members/Advisors

Note: Additional details from individual reports can be found in the CARC Agency and Organization Summaries.

Ervin Portis, Nebraska Emergency Response Agency

In terms of response, we provided the most assistance for wildfires. There were 34 fires in which the state aided either through the Governor's Emergency Fund, aerial assets or other assistance. Out of the 200,000 acres burned this year, the state provided assistance to 160,000 acres. The total cost for fighting these fires, with not all costs being accounted for quite yet, is just under \$6 million.

Carl Sousek, Row Crop Producer

As a volunteer on a local fire department, we responded to more fires in the past 4 months than in the last 4 years. We were able to recognize pitfalls on in our response strategy: incident command, training, lack of/holes in communication, education, etc. One issue that arose, although not consistently, was that of insurance with volunteers from the public. If a producer was asked to assist and he lost a piece of equipment, they needed to ensure their insurance would cover the loss. Collectively, we need to find a way to provide insurance for from local fire departments in the event they ask individuals to join the fight and sacrifice resources.

Cicely Wardyn, Nebraska Department of Agriculture

It is important to keep in mind that while southern states continue to reach far and wide for resources, it is likely that feed lots across the state will continue to expand given our close proximity to resources for feed. Additionally, the Nebraska Department of Agriculture does not keep tons of information on drought preparedness, and the drought plan we currently utilize is outdated. How can we update this statewide plan and collaborate with the necessary stakeholders to ensure better preparedness for the future?

Brian Fuchs, National Drought Mitigation Center

2023 is a Farm Bill year, and it will be important to utilize this data on drought across the United States to assist in making changes to programs at the federal level. The USDA will continue to

Page 5 – CARC Meeting Minutes, November 28, 2022

use the Drought Monitor in these efficient capacities, and the better job we can do at the state level, the better we will be able to assist in making change.

Martha Durr, Nebraska State Climatologist

In comparison to other states utilizing mesonet stations, the advantage Nebraska has is ensuring longevity of equipment. We revisit different sites to recalibrate the equipment we have to provide quality in terms of completeness and accuracy. Nebraska would be best represented if they had 130 stations across the state. However, \$1 million a year would be needed to implement the additional stations but provide better accuracy in terms of conditions across the state.

Jesse Bradley, Nebraska Department of Natural Resources

The DNR has been working with numerous NRD's across the state to develop drought resiliency plans. Our focus has been around communication, messaging, and setting up triggers for the weel fields. These NRD's are also working at the local level to update irrigation limits based on the 2022 statistics.

The meeting was adjourned at 2:36 p.m.