

## **CARC Meeting Minutes**

Monday, June 4, 2019

901 Hardin Hall, UNL East Campus

Meeting was called to order at 9:34 a.m.

### In Attendance:

*Committee members or representatives:* Amelia Breinig (chair), Nebraska Department of Agriculture; Dr. Shuhai Zheng, Nebraska Department of Natural Resources; Matt Joeckel, UNL Conservation and Survey Division; Tyler Williams, UNL Extension; Carl Sousek, crops farmer; Bryan Tuma, Nebraska Emergency Management Agency; and State Senator Steve Halloran, chair, Nebraska Legislature Agriculture Committee.

*Staff and Audience:* Brian Fuchs, National Drought Mitigation Center; Martha Shulski, Nebraska State Climatologist; Steve Roth, Nebraska Department of Agriculture; Nick Streff, USDA-NASS (National Agricultural Statistics Service); Marcia Trompke, Central Nebraska Public Power and Irrigation District; David Pearson, National Weather Service-Omaha, Eric Zach, Nebraska Game and Parks Commission; Ginger Willson, Senator Ben Sasse's office; Donny Christensen, Nebraska Emergency Management Agency; Nicholas Walsh, Nebraska Emergency Management Agency; Michael Hayes, University of Nebraska; Pascal Ntagunda, University of Nebraska; Libert Niyonkuru, University of Nebraska; and Doug Klein, USDA-Farm Service Agency.

Committee Chair Amelia Breinig opened the meeting stating that CARC follows provisions in Nebraska's Open Meetings Act and a copy of the act was available for review. She also had copies available of the affidavits of the public notices published in the Lincoln Journal Star and Kearney Hub newspapers on May 17, 2019.

Minutes from the Nov. 19, 2018 CARC meeting were accepted by the committee as presented.

Reports were provided as follows:

### ***Nebraska Drought Conditions and Water Supply Update***

Presented by Brian Fuchs, National Drought Mitigation Center

#### Past/Current Climate & Drought Report

The U.S. Drought Monitor map from a year ago, showed only a small area of southeast Nebraska abnormally dry or D1 drought conditions with the rest of the state drought free.

For the United States as a whole last June, the map indicated exceptional and extreme drought conditions in a significant portion of the four-corner region (Colorado, Utah, Arizona and New Mexico) of the country. There were also areas of abnormally dry conditions, D1 and D2 drought conditions, in many areas of the western United States as well as in North Dakota, South Dakota, Kansas, Oklahoma and Texas.

In the next 6-months, significant rainfall across the country resulted in 3-4 class improvements in previously drought-stricken areas. The U.S. Drought Monitor map for last May, showed only a few small areas of the country with abnormally dry or D1 conditions.

## Page 2 CARC Meeting Minutes, June 4, 2019

Nebraska remains drought free as it has been for several months. Fuchs commented that it is quite unusual for Nebraska to have no drought or even abnormally dry conditions at this time of year, and knowing the state's history, wondered when a switch to dry conditions could come.

Temperatures in Nebraska in May ranged from 8-10°F below normal and were 2-4° below normal the past 60 days. Meanwhile, precipitation amounts during that time frame were well above normal resulting in a cold, wet spring.

Most of the High Plains region had well-above-normal precipitation in May with some areas receiving 400percent above normal rainfall for the month.

Cold and wet conditions have prevailed in Nebraska during the past two months. These conditions have slowed seed germination for row crops that have been planted this spring.

The current NLDAS Soil Moist Model indicates that all of Nebraska is showing very adequate to above surplus amounts of soil moisture up to three foot deep of the soil profile. Many fields in the state still have standing water.

The U.S. Seasonal Drought Outlook for the next three months indicates just a very few areas in the entire country expected to have persistent drought conditions. Fuchs commented that the United States has its lowest level of drought in the 20 years the U.S. Drought Mitigation Center has been issuing its Drought Monitor.

Here is a climate/drought summary provided by Fuchs during his PowerPoint presentation:

- Cooler than normal conditions have dominated the state and region so far in 2019 with Nebraska averaging about 3-5 ° F below normal.
- Almost the entire state of Nebraska has recorded above-normal precipitation for this year so far with areas of north central Nebraska 3-6 inches above normal.
- During the spring (March-May), the entire region has been below normal for temperatures with the northern portions of the Plains 6-8° F below normal and the southern portions 2-4° F below normal.
- Nebraska is drought-free and has been since early September 2018. There has been no abnormal dryness depicted since May. The last time Nebraska had 10 percent or more of the state in drought was August 2017.
- The seasonal drought outlooks do not show drought conditions developing in Nebraska through the end of August 2019.

### Nebraska Water Supply Update

Snowpack in the western United States, especially in the Rocky Mountains, has been way above normal. Water equivalency levels in those areas are 200 to 400 percent above normal. That would indicate significant runoff into the Platte River basin in Nebraska later this summer. Fuchs did point out however, that the runoff may come later or even slower than normal due to below normal temperatures in the higher elevations. A prolonged runoff season, coupled with additional rainfall in the basin may result in additional flooding across Nebraska.

### Page 3 CARC Meeting Minutes, June 4, 2019

Water supplies in streams, lakes and reservoirs along the Platte and Republican Rivers are near, at, or above water storage capacities.

Lake McConaughy is currently at 88 percent full pool compared to 85.4 percent a year ago. Inflows into the lake have been running 2,940 cubic feet per second, which is almost double the amount at the same time last year. Inflows along the Platte at Overton and Grand Island have been nearly double the amount in June of last year.

Fuchs said one positive result of the higher river levels and faster flow, is that it “scours” the riverbed of weeds and debris.

The Central Nebraska Public Power and Irrigation District (CNPPID) reports that the canal system along the Platte is at near capacity in preparation for irrigation season.

The 14-day average stream flows in Nebraska have been running far above average and in some cases near, at, or above record amounts.

Most of the water supply reservoirs along the Republican River basin are far above conservation pool levels compared to levels in November of last year. Storage level at the Harlan County Reservoir is at 100 percent, significantly above levels last June.

Fuchs commented that Irrigation season could start later than normal in Nebraska, which can be good for producers in regards to irrigation costs. However, there have been challenges in planting row crops due to the wet conditions.

Marcia Trompke with CNPPID, commented at the meeting, that irrigation season in her district typically would begin Monday (June 10) but with all the rain they aren't anticipating the season to get into full swing for another month. This is raising concerns about having to move more water downstream that could possibly contribute to possible flooding along the Platte.

Here is a water supply summary provided by Fuchs during his PowerPoint presentation:

- A significant amount of water is stored and still accumulating in the Rocky Mountains, which will come through the Platte Basin yet this year.
- Lake McConaughy is currently 88 percent of capacity, which is slightly higher compared, to levels in November 2018 (last CARC meeting).
- The Republican River basin reservoirs are higher than in November as water levels increased due to the lack of irrigation and recharge taking place.
- Harlan County Reservoir is holding about 164,722 acre-feet more water now than in November 2018.
- Harlan County Reservoir is holding about 130,638 acre-feet more water now than at this time last year and is about 128,350 acre-feet above average for this time of year.
- All reservoir levels and storage should hold steady until or even increase until the irrigation season begins.

Fuchs PowerPoint presentation will be posted on the CARC website.

**Nebraska Climate Update**

Presented by Martha Shulski, Nebraska State Climatologist

This past fall saw temperatures below normal in Nebraska, especially in the eastern portion of the state. The Panhandle had the driest conditions during that period but those conditions have since been mitigated.

During the winter months, snowfall was plentiful throughout the state with record amounts recorded in Lincoln and Omaha. Temperatures were also below normal with Nebraska having its eighth coldest February on record.

With such cold weather conditions, Shulski said it was important for UNL Extension to have a tool to identify potential for cattle stress. Such a tool exists that tracks wind chills over a period of time. Wind chills need to be 30° F below zero in order to qualify for USDA's Livestock Indemnity Program (LIP). Information from the Winter Cattle Stress tool was sent to USDA to supplement the LIP criteria.

In looking at historic weather trends for the month of February in Nebraska, Shulski said that the long-term trend (over 100 years) has indicated warming temperatures with little change in precipitation amounts. However, the short-term trend (the past 30 years) for the month of February indicates temperatures have been cooling in the state with wetter conditions.

It was conditions this past February that set the stage for the major floods that occurred in Nebraska in March. This included saturated and frozen soils, deeply frozen rivers and streams, and accumulated snow with high water equivalency.

Winter storm Ulmer came to Nebraska on March 12-13. A blizzard with sustained 25-mile an hour winds in the western part of the state, coupled with heavy rain in the east, led to one of the most impactful floods ever recorded in the state. Many rivers stayed above flood stage for weeks. The damage in Nebraska has been estimated at more than \$2 billion. The floods are blamed for four deaths, numerous cattle losses, transportation in and out of some communities being temporarily halted, water quality concerns and grain losses.

Shulski commented that the National Weather Service did a good job of predicting events prior to the storm and warning people what was to come. She added that there has been some concerns that the response during and after the storm events could have been better.

The Nebraska Emergency Management Agency and Federal Emergency Management Agency held a stakeholder meeting on April 24 to discuss ways to improve communication and mitigation during such weather events in the future.

The spring months in Nebraska included a cool March, warm April and a very wet (tied with 1995 for record wettest) and cool May.

Rain occurred in various places throughout the state in half to three quarters of the days in May. Some places received more than half of their annual total of rainfall in that 31-day period. The abundant rainfall led to continued flooding in some areas and delayed planting of row crops in most places.

In looking ahead to the rest of June, the National Climate Prediction Center was calling for greater chances of below normal temperatures and above normal precipitation for most of the state. The 3-month outlook (June-July-August) calls for much of the same wet and cooler trends.

Shulski also showed a new Grassland Production product from the National Drought Mitigation Center and National Weather service that is designed to estimate the potential for grassland production based on climate information in the western grassland ranges of North Dakota, South Dakota, Nebraska, Kansas, Oklahoma and Texas.

Potential weather impacts this summer due to current conditions include: slow development of the corn crop because of planting delays, yellowing corn due to saturated soils, nitrogen loss and weed control issues.

A cool wet June as currently being predicted could result in poor crop development in Nebraska. This could create problems such as shallow root systems or the need for a warm September with no early frost.

Shulski's PowerPoint Presentation will be posted on the CARC website.

### ***Nebraska Hay Stocks and Crop Condition Report***

Presented by Nick Streff, USDA NASS

In March, Nebraska producers had intentions to plant 9.7 million acres of corn, up 100,000 acres from the previous years. Planting intentions for soybeans were at 5.4 million acres, down 300,000 acres from the previous year. Streff pointed out these were intended planted acres and the actual number of planted acres could change in the coming months due to planting delays, government programs and/or price fluctuations.

The first USDA-NASS prediction of the winter wheat harvest in Nebraska in 2019 would result in the second lowest number of harvested acres in the state. The estimate of 50 bushels per acre average would be up one bushel per acre from last year. The record in Nebraska is 54 bushels per acre. The majority of Nebraska's winter wheat crop is rated in good or excellent condition but is running well behind average for being headed.

As expected, topsoil and subsoil moisture throughout most of the state is rated as adequate or in surplus due to ample rainfall this winter and spring.

USDA-NASS puts out a hay stocks survey twice a year, with the first one released in May. As of May 1, hay stocks in Nebraska were estimated at 1.07 million tons, up 370,000 tons from the previous year. The 10-year average is 1.1 million tons. The lowest recorded stocks in the last 10 years was 610,000 tons in 2013.

The following Crops Progress and Conditions report for Nebraska was released by USDA-NASS on June 2:

- Corn condition rated 1 percent very poor, 2 percent poor, 23 percent fair, 67 percent good, and 7 percent excellent. Corn planted was 88 percent, behind 99 percent last year and 98 percent for the five-year average. Emerged was 67 percent, well behind 90 percent last year and 88 percent average.
- Soybeans planted was 64 percent, well behind 94 percent last year and 87 percent average. Emerged was 39 percent, well behind 74 percent last year and 60 percent average.
- Winter wheat condition rated 2 percent very poor, 6 percent poor, 25 percent fair, 48 percent good, and 19 percent excellent. Winter wheat headed was 45 percent, well behind 67 percent last year and 75 percent average.
- Sorghum planted was 36 percent, well behind 77 percent last year and 70 percent average.
- Oats condition rated 1 percent very poor, 3 percent poor, 35 percent fair, 56 percent good, and 5 percent excellent. Oats planted was 96 percent, near 100 percent both last year and average. Emerged was 88 percent, behind 96 percent last year and 98 percent average. Headed was 14 percent, well behind 36 percent last year, and behind 33 percent average.
- Pasture and range conditions rated 1 percent very poor, 1 percent poor, 15 percent fair, 70 percent good, and 13 percent excellent.

Streff's PowerPoint presentation will be posted on the CARC website.

#### ***Water Availability and Outlook Committee (WOAC) Discussion***

Requested by Brian Fuchs, National Mitigation Center and David Pearson, National Weather Service Omaha

Fuchs said that representatives from several state and federal weather-related agencies have been meeting on a regular basis to share information and coordinate communication efforts. Many of the agencies are either represented on CARC or have been members of the Water Availability and Outlook Committee (WOAC) which was originally created in the State Drought Plan.

Pearson, who has been leading the organization of the group and said the goal has been to have a consolidated effort among the various agencies in procedures and information dissemination. Some of the agencies and organizations that have been represented at the meetings are: High Plains Regional Climate Center, National Drought Mitigation Center, several Nebraska offices of the National Weather Service, State Climatologist Office and UNL Extension.

Fuchs and Pearson stated that at their last meeting, the question came up as to whether or not it makes sense to re-activate the WOAC, which has been dormant the past few years.

**Page 7 CARC Meeting Minutes, June 4, 2019**

Breinig pointed out that the structure and objectives of WOAC are spelled out in the most recent update of the State Drought Plan that was accepted by CARC in 2000. She suggested that parties interested in activating WOAC meet to clarify the objectives, procedures and structure of the committee. Interested parties plan to meet in the near future and report back at the next CARC meeting.

**Other Updates from CARC Members/Advisors**

Breinig read the following weather conditions report submitted by CARC livestock representative Barb Cooksley of Anselmo who was unable to attend the meeting:

*Winter was bitter cold, snowy, windy. Our ranch doesn't start calving until late April, so we missed the blizzards and the flooding.*

*The last late blizzard was 20 miles west, the flooding started five miles east. We feel so blessed.*

*The rains have continued and even the Sandhills are "full." Hard to tell a difference between ground and surface water! We are close to 12 inches of moisture for the year, with over six inches coming in May. Our average rainfall is around 19-22" inches.*

*Sincerely,  
Barb Cooksley*

In recapping conditions in his area (Prague), Carl Sousek, crops representative for CARC, mentioned that winter set in early and therefore a lot of cover crops were never planted. He said the heavy rains and flooding caused a lot of damage to conservation structures in the area. He commented that farmers and ranchers in Nebraska have had to face one challenge after another including weather conditions, large surpluses of grain, high taxes, tariffs and devalued land due to flooding. Concern is mounting with financial institutions receiving requests for operating costs. Farmers have to make tough planting decisions the longer planting is delayed.

The meeting adjourned at 11:05 a.m.