

**Climate Assessment Response Committee Meeting
April 21, 2005**

Members Present:

Barb Cooksley
Greg Ibach
Mark Kuzila
Paul Jasa for Elbert Dickey
John Erickson

Steve Soberski for Roger Patterson
Al Berndt for Roger Lempke
Mark Svoboda for Don Wilhite
Jack Daniel for Dr. Richard Raymond

Members Absent:

Merwin Fricke

Chairman Greg Ibach called the meeting to order at 10:08 a.m.

Mark Svoboda, with the National Drought Mitigation Center, representing the CARC Water Availability and Outlook Committee, provided a Nebraska drought conditions update. He showed the U.S. Drought Monitors from last year at this time through October 2004 to show the slight improvement during that time period in the Panhandle. He cautioned that the area still has a long-term, accumulating drought.

Svoboda also showed a map detailing the change in drought monitor classification for Nebraska from December 28, 2004, through April 12, 2005. Most of the state went unchanged, with the exception of a small area of south-central Nebraska, which showed slight improvement.

The most recent U.S. Drought Monitor shows that the recent wetness has lessened the growing abnormally dry area in southeastern Nebraska. Svoboda noted that much of the state, particularly the western two-thirds, is still suffering hydrological impacts of drought. Range condition, reflected in lower plant populations, is also a problem.

He showed a series of Departure from Normal and Percent of Normal Precipitation maps. Maps showing conditions within the past month indicate good precipitation levels in most of the eastern half of Nebraska. Over the water recharge season from October of 2004 through present, Svoboda said conditions have been about "a wash," with only an inch above or below normal across the state. Comparing current conditions to this time of year in 2002, maps indicate below normal precipitation for almost the entire state, with deficits of 12 to 20 inches in a few areas.

Svoboda reviewed the USDA topsoil moisture map, showing short to very-short conditions for the current year versus the five-year average. Nebraska currently has 18 percent of its topsoil in the short to very short category, compared to 42 percent for the 5-year average.

Svoboda next reported on the water supply for the state. He reviewed a United States Geological Survey (USGS) map of stream flows, dated Tuesday, April 19, 2005, for a seven-day average

compared to historical streamflow. In areas where the Republican, North Platte, and South Platte rivers enter Nebraska, record or near record low streamflows were recorded.

Svoboda reviewed maps showing snow water content averages for the basins that feed the North Platte and South Platte rivers. The areas currently are averaging 50 to 90 percent of normal. The area that feeds the Missouri River in eastern Nebraska also is in bad shape as far as accumulated precipitation for the current water year. Svoboda showed a series of maps detailing snowpack and snow/water equivalencies for the area.

The Republican River basin has seen a slight improvement in conditions this spring compared to last year, Svoboda said, based on reports from the Bureau of Reclamation office. However, irrigation districts will still face allocation issues. Inflows in 2005 are better than the past three years; however, the past three years were all record lows. Basin reservoir levels are mostly slightly better than 2004 levels. Harlan County Reservoir is at 41 percent of capacity, compared to 37 percent this time last year.

Soil moisture levels are higher than last year across the basin, Svoboda said, and officials are hoping this will help inflows and delay the beginning of irrigation season.

Lake McConaughy is currently at 36 percent of capacity and three feet lower than this time last year. The water in storage for North Platte project irrigators is at 50 percent of average.

Svoboda reviewed the forecast for Nebraska. Currently, the state is in an active weather pattern that will continue the chances for precipitation. Seasonal outlooks show a slight chance of above-normal temperatures in May and equal chances for above or below normal precipitation. For May through July 2005, models indicate temperatures could be below normal for the north central and northeastern part of the state. There is a slight chance of above normal precipitation in the same area.

The U.S. Seasonal Drought Outlook, through June 2005, indicates the drought in the western one-half of the state will be ongoing, with a chance for some improvement.

Svoboda summarized the reports by noting:

- Winter and spring seasons have resulted in different winners and losers;
- The snowpack situation is average at best in Colorado/Wyoming;
- Relative to past years, soil moisture levels are better this year, which could lead to a delay in irrigation demands;
- There seems to be a lag between good rains in the Republican River valley and a response in streamflows and groundwater levels there;
- There is more work to do in breaking the hydrological drought in the Republican River Valley and for Lake McConaughy; and
- We are currently in a very favorable storm pattern; there is guarded optimism in the long-lead seasonal forecasts.

Dayle Williamson asked about the likelihood of an El Niño weather pattern starting. Svoboda said there is some potential for that to happen and, in his opinion, an El Niño would be favorable for Nebraska.

Member Barb Cooksley, co-chair of the CARC Agricultural, Natural Resources, and Wildlife Subcommittee, reported on the Subcommittee's meeting. She said that subcommittee, in consultation with the Risk Assessment Committee, found three areas to work on regarding drought mitigation:

- The Subcommittee will work on calling attention to existing subsoil moisture monitoring information, and, if needed, getting additional subsoil moisture information, to individuals that are determining drought disaster designation recommendations for the counties. This is especially important, she said, because while current conditions have improved the overall look of perennial forage, the drought has negatively affected long-term capacity of these lands.
- The Subcommittee partners will monitor forage conditions and make recommendations as needed to the Governor.
- The Subcommittee will look into working with relevant parties to promote existing and alternative tourism activities at reservoirs.

Jack Daniel, co-chair of the CARC Municipal Water Supply, Health and Energy Subcommittee, provided a report of that group's meeting. In consultation with the Risk Assessment Committee, the Subcommittee found three areas to work on regarding drought mitigation:

- The Subcommittee will work with Natural Resources Districts and with any communities that wind up on the HHSS Public Water Supply Concerns list to distribute copies of the pamphlets "Make Every Drop Count in Your Yard" and "Make Every Drop Count in Your Home."
- The Subcommittee will seek the assistance of the medical community in determining whether blowing dust, due to drought, has a negative impact on people with health issues such as asthma; if so, the Subcommittee will devise an appropriate communications plan.
- The Subcommittee will work with the Well Drillers Association to encourage reporting of instances when wells are dropped due to declining groundwater tables.

Cooksley noted a new program, the Nebraska Platte-Republican Resources Area CREP, is designed to help conserve water in the Platte and Republican river basins. Sign-up is ongoing.

Greg Ibach summarized the meeting by saying it seems there is a short-term positive trend regarding moisture conditions, but that long-term impacts like low reservoirs and range carrying capacities are still large problems. He noted that the Committee would rely on WAOC to alert CARC to any changes in weather trends necessitating a meeting prior to the regular fall meeting.

Dean Edson, a CARC adviser who is Executive Director of the Nebraska Association of Resources Districts, gave a report on the status of the development of integrated management plans for basins that have been declared over appropriated by the Nebraska Department of Natural Resources. This activity is being conducted as part of the implementation of LB 962.

Jack Wergin with the Bureau of Reclamation noted that several irrigation districts in the Republican River basin received bureau emergency money in 2004 to assist them with operation and maintenance issues associated with not drawing irrigation water. The DNR has applied for similar funding for 2005.

Svoboda noted that the National Drought Preparedness Act has again been introduced in the Senate.

The Committee approved some wording changes offered by the Municipal Water Supply, Health and Energy Subcommittee, to number 9 of their drought mitigation sheet.

The meeting was adjourned at 11:15 a.m.

CARCminutes042105.doc