

THE ATMOSPHERIC RESERVOIR

Examining the Atmosphere and Atmospheric Resource Management

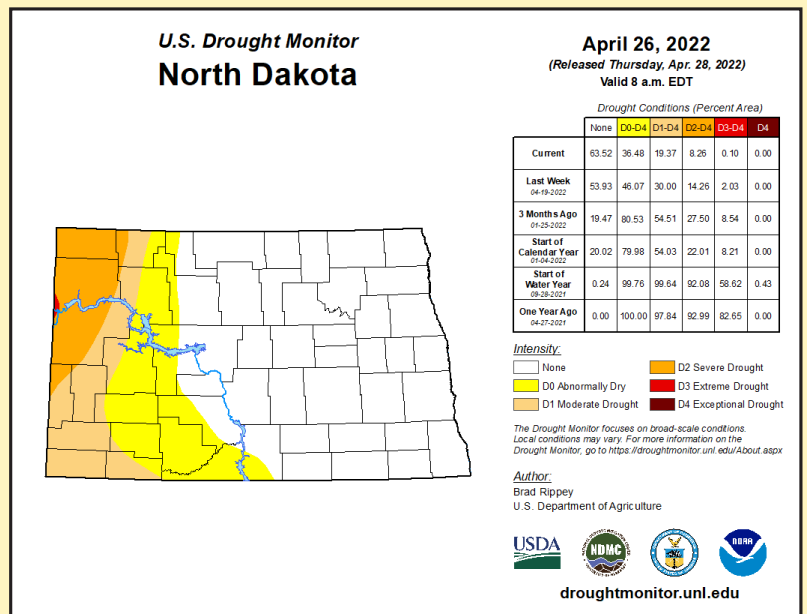
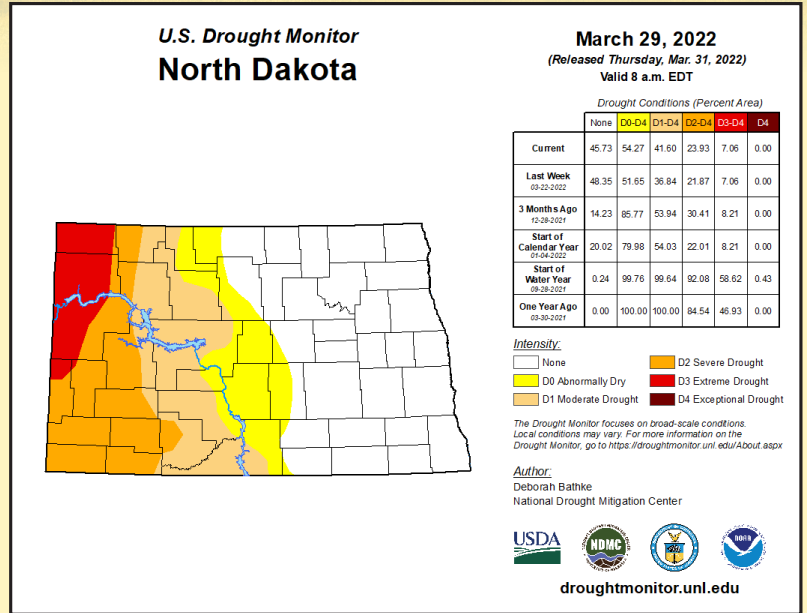
AN ASTOUNDING APRIL

By Mark D. Schneider

Moisture conditions across North Dakota improved significantly during the month of April. Looking at a comparison between the March 29 and April 26 drought monitor graphics, there is a noticeable retreat in drought conditions across western and central North Dakota. Minot's normal precipitation for the month of April is 1.22 inches, however, 5.68 inches fell this April, which eclipsed the 3.16 inches of precipitation that fell between last November and March! This April was also Minot's fourth wettest on record. Bismarck broke its April snowfall record with 21.9 inches measured; 18.3 inches of snowfall just from the April 12-14 blizzard alone.

In the eastern part of the state, Grand Forks (NWS/UND) recorded its wettest (6.49 inches) and snowiest (16.1 inches of snow) April on record dating back to 1893. Fargo had its second wettest (5.45 inches) April on record since reporting began there in 1881. This precipitation worsened flood conditions throughout the Maple, Pembina, Red, and Sheyenne River basins primarily due to its occurrence in mid to late April coinciding with colder than normal temperatures. Grand Forks had its seventh coldest April and Fargo trailed closely with its ninth coldest. Cold temperatures weren't just confined to the eastern part of the state though. Dickinson's April monthly average temperature was 7.9 degrees below average and ranked fourth coldest since 1893.

Even with record moisture in April, the long-term drought in western and central North Dakota might continue into this summer. The main takeaway, though, is that April gave this growing season a fighting chance. The old adage that "it takes moisture to get moisture" originated from the concept that evaporation from soils and transpiration from vegetation provides additional moisture to the boundary layer of our atmosphere. This additional moisture could literally mean the difference between thunderstorms developing or not developing throughout the next few months.



Atmospheric Resource Board | North Dakota Department of Water Resources | 900 East Boulevard, Bismarck, ND 58505
(701) 328-2788 | dwr.nd.gov

ND Weather Modification Association | PO Box 2599 | Bismarck, ND 58502 | (701) 223-4232