



THE ATMOSPHERIC RESERVOIR

Examining the Atmosphere and Atmospheric Resource Management

SAVING A GROWING SEASON

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Dry soil moisture conditions had become concerning for western and central North Dakota in June. An evolution from last November's saturated soil conditions resulting from a record wet Fall to June's dry conditions can be seen on the NOAA Climate Prediction Center's ranking percentile maps. Small grains such as wheat and durum were in dire need of precipitation and (for the most part) Mother Nature came through with significant rainfall late June into early July. Notice on the Atmospheric Resource Board Cooperative Observer Network (ARBCON) percentage of normal rainfall maps for May and June, many areas of North Dakota that were drier in May were wetter in June and vice versa.

At the heart of dry conditions this season were parts of southwest, west central, and central North Dakota including Bismarck, Dickinson, and Hettinger. The normal year-to-date precipitation for Bismarck from January 1 through September 1 is 13.88 inches, but by that date only 6.68 inches were recorded. Hettinger only received 5.10 inches of moisture during this period and Dickinson collected a mere 6.48 inches. In contrast, the 2019 growing season was so wet that Bismarck had already received 18.84 inches of precipitation (year-to-date) last September 1! The far eastern part of North Dakota including the Red River Valley fared much better with near normal precipitation this growing season.

An important takeaway from this growing season is that even if overall precipitation is below normal, the timing of the precipitation can determine whether crops flourish or flounder. The August 30 crop report from the USDA National Agricultural Statistics Service (NASS) rated the condition of at least 60% of soybean, spring wheat, durum wheat, corn, canola, sugar beet, barley, sunflower, flaxseed, potato, and dry edible bean crops in good to excellent condition.

