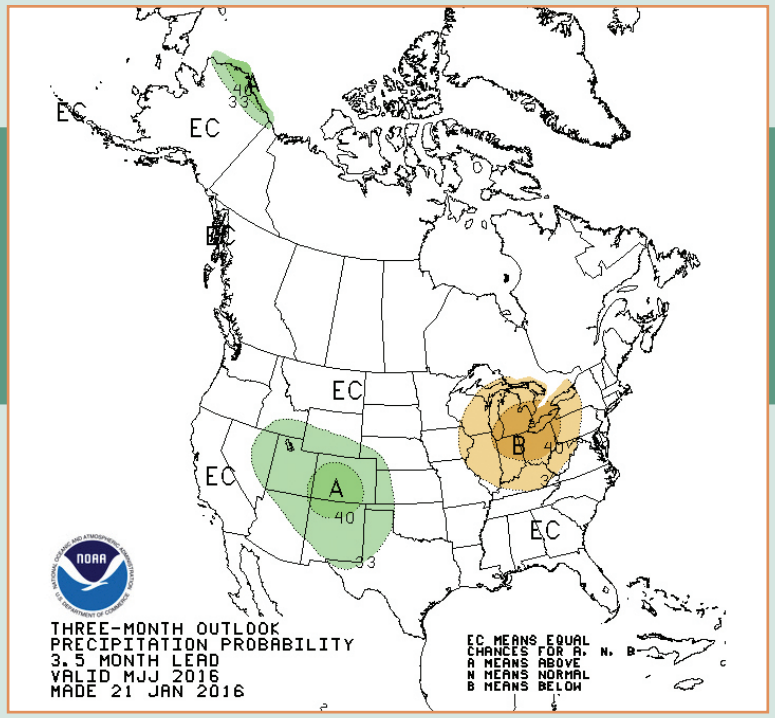
THE
ATMOSPHERICRESERVOIR
Examining the Atmosphere and Atmospheric Resource Management

El Niño Update



By Mark D. Schneider

Between last Autumn, when El Nino began developing in earnest, and early February when this article was written, North Dakota experienced milder temperatures and less precipitation than normal. The mild temperatures were most notable in December and January. During the month of December, Bismarck recorded a monthly average temperature of 5.9°F above normal, Dickinson 5.5°F, Fargo 9.0°F, Grand Forks International 8.4°F, Hettinger 4.5°F, Jamestown 6.7°F, Minot 9.1°F, and Williston 7.8°F.

In January, Bismarck recorded a monthly average temperature of 4.3°F above normal, Fargo 3.9°F, Grand Forks 4.2°F, Jamestown 4.5°F, Minot 6.2°F, and Williston 5.8°F. Temperature departures of this magnitude are significant and indicative of a strong climate forcing anomaly, this year being El Nino.

Looking at snowfall totals, which are cumulative beginning July 1 of each year and continuing through June 30 of the next year, North Dakota stations were below normal to start February. As of February 5, Bismarck was 12.6 inches of snowfall below normal, Fargo 11.6 inches, and Grand Forks 7.7 inches. As North Dakotans are well aware, these snowfall deficits and drier conditions can change with one spring storm. However, these drier than normal conditions are a reflection of the El Nino pattern that is forecast to gradually weaken through early spring and likely disappear by early summer.

With North Dakota experiencing recent dry conditions, it's important to note that upcoming growing season conditions could still be close to normal. The Climate Prediction Center's Three-Month Outlook for Precipitation Probability shows equal chances for above normal, normal, and below normal precipitation for North Dakota from May through July.

Only on rare occasions can meteorologists and climatologists predict long-term weather conditions with great accuracy. This El Nino was an exception to the rule and will likely be recorded as one of the top three strongest next to the 1997-98 and 1982-83 events.

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