THE
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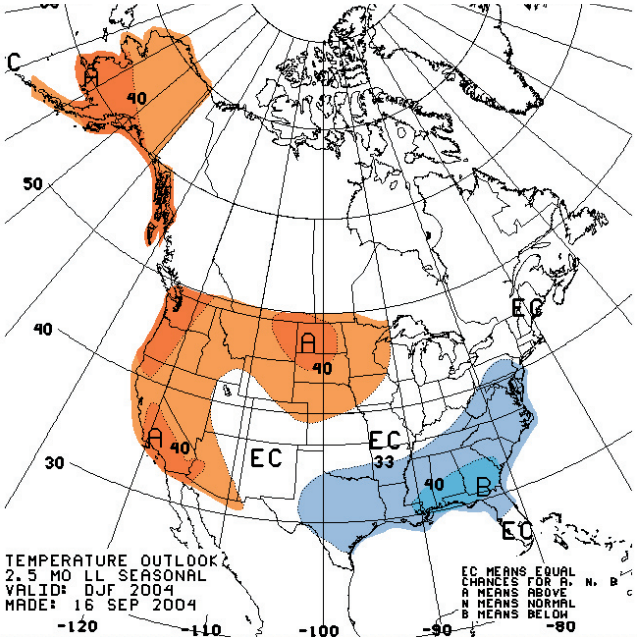
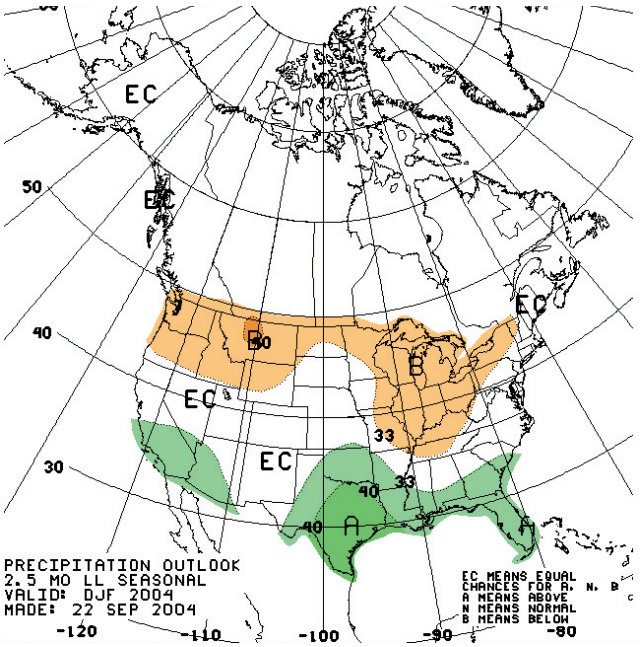
Winter Outlook: Warm and Dry

By Darin Langerud

The Climate Prediction Center (CPC) recently released it's predictions for the upcoming winter, and it's a good news/bad news scenario for North Dakota. At the crux of the predictions, once again, is El Nino, which appeared during the summer months and is forecast to persist through spring of 2005. Readers of *The Atmospheric Reservoir* will recall that El Nino is characterized by a warming of the waters of the equatorial Pacific Ocean. The phenomenon contributes to changes in atmospheric circulations and thus deviations in "normal" weather patterns, most notable during the winter months.

In North Dakota, El Nino typically brings warmer and drier conditions than normal. As you can see from the maps, the prediction for this winter is consistent with that trend. While the warmer temperatures are sure to please most everyone, the prospect of another relatively dry winter will surely receive mixed reviews. Those wearily and warily watching Devils Lake are sure to be buoyed by such a forecast, but for western North Dakota, another dry winter will only exacerbate an already pervasive drought.





El Nino's effects elsewhere around the nation are varied. Warmer than normal temperatures are expected in the Northern Plains, the Pacific Northwest, and western U.S, while below average temperatures are expected for a large part of the southeast, from the Gulf coast to the mid-Atlantic states. Precipitation is generally expected to be above normal over the desert southwest and along the Gulf coast, while below normal totals are forecast for the northern tier of the country, primarily the northern Rockies and the Great Lakes regions. If realized, this would be a continuation of the recent droughty trend and an additional blow to the already record-low reservoirs on the upper Missouri River.

All of the attention El Nino has received during the last 20 years has greatly improved scientist's ability to forecast its effects. Recent events in 1994-95, 1997-98, and 2002-03 have all borne out the warmer and drier conditions to varying degrees; the El Nino of 2004-05 will be the fourth in the last ten years. We'll see how this one plays out over the next few months. For those who are interested in more of the details, visit the Climate Prediction Center's web site at www.cpc.ncep.noaa.gov.

Atmospheric Resource Board
North Dakota State Water Commission
900 East Boulevard, Bismarck, ND 58505
(701) 328-2788
www.swc.state.nd.us/ARB/

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