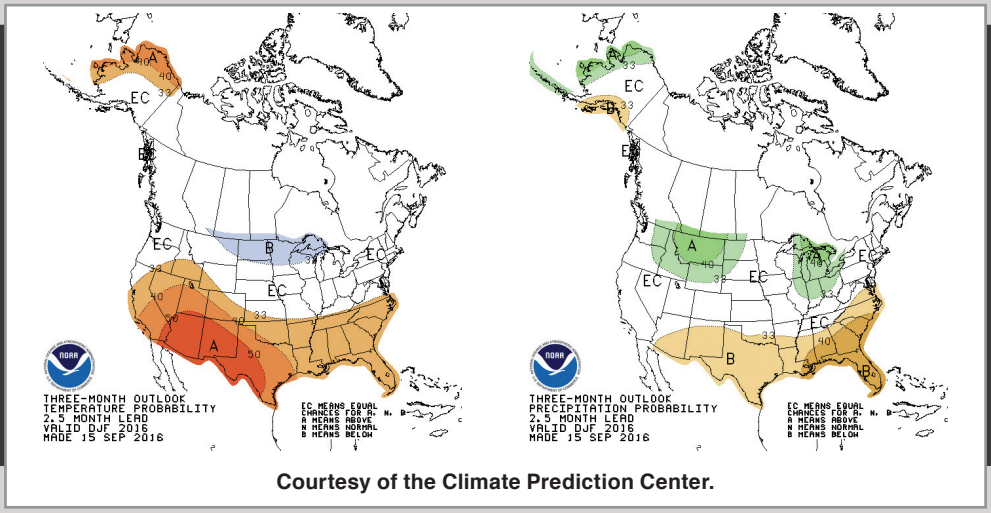
THE
ATMOSPHERICRESERVOIR
Examining the Atmosphere and Atmospheric Resource Management

AT ODDS WITH NORTH DAKOTA'S Winter OUTLOOK



Courtesy of the Climate Prediction Center.

By Mark D. Schneider

Without a strong El Nino or La Nina to base this winter's weather outlook on, meteorologists and climatologists are left scratching their heads. The Climate Prediction Center (CPC) favors El Nino Southern Oscillation (ENSO) neutral to weak La Nina conditions for the upcoming winter. To review, El Nino is indicated by Sea Surface Temperature (SST) Anomalies in the Pacific Ocean greater than +0.5 degrees Celsius and La Nina is anything less than -0.5 degrees Celsius. When the ENSO index falls between the two values we call this "neutral." It's important to note that there are many other regional and global "climate drivers" besides ENSO, most of which we're still struggling to fully understand.

What this means is an added level of uncertainty when attempting to make a seasonal weather prediction. As you can see from the CPC December through February Outlook images, North Dakota has a slightly above normal chance of receiving below normal temperatures. This isn't a strongly indicated chance, however, as you can see by the 33 percent shading in blue. In regards to precipitation (mainly snowfall) western and central North Dakota have an above normal chance of receiving above normal precipitation. Again this is only about a 33 percent chance of receiving above normal precipitation. Eastern North Dakota has an equal chance of receiving above normal, normal, or below normal precipitation during the winter months.

Two very knowledgeable scientists, Adnan Akyuz, ND State Climatologist and Mark Ewens, former National Weather Service Meteorologist and current consultant with Home On The Prairie Weather in Grand Forks, have their own differing forecasts for this coming winter.

Adnan Akyuz states that, "Persistence is the only other useful factor we are left with for this winter." He is referring to the absence of a strong ENSO and the uncertainty of how much influence other climate drivers will have. "I have more reason to believe this winter may be another warmer-than-normal winter." Akyuz is basing that prediction on the persistence of the recent long mild spell of weather we've had in North Dakota. As far as precipitation is concerned, Akyuz believes that it should be near to slightly above normal. "The soils are moist from late-summer and fall rains, and that moisture will be available to generate more precipitation when the mechanism is right," he said.

Mark Ewens predicts a late December, "Christmas time flip" when milder Fall temperatures make an abrupt change. "Winter temperatures are apt to be 1 to 3 degrees below the median. That might not sound like a lot, but people will feel it," Ewens said. He also commented that, "The return to a more classic winter will feel worse than it is because of the recent run of mild winters." With regards to snowfall this coming season, Ewens stated that, "A return to normal snowfall will be an abrupt change for a region that has experienced relatively dry winters in recent years."

One thing that scientists and North Dakotans (in general) agree on is that if "normal" winter conditions are experienced; temperatures will feel extra brisk relative to last year's very mild winter.

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