Report on 90-day Weather Projection for the Northern Half of New Mexico

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Introduction:

This 90-day weather forecast is for the northern half of New Mexico. The forecast area is bounded by the state borders on the north, west, and east, and Interstate 40 on the south.

The report contains a summary weather outlook for October through December (directly below), a review of the current El Nino Southern Oscillation (ENSO) condition, which is rapidly becoming an official El Nino, and an overview of current weather trends along with outlook maps for the next 90 days.

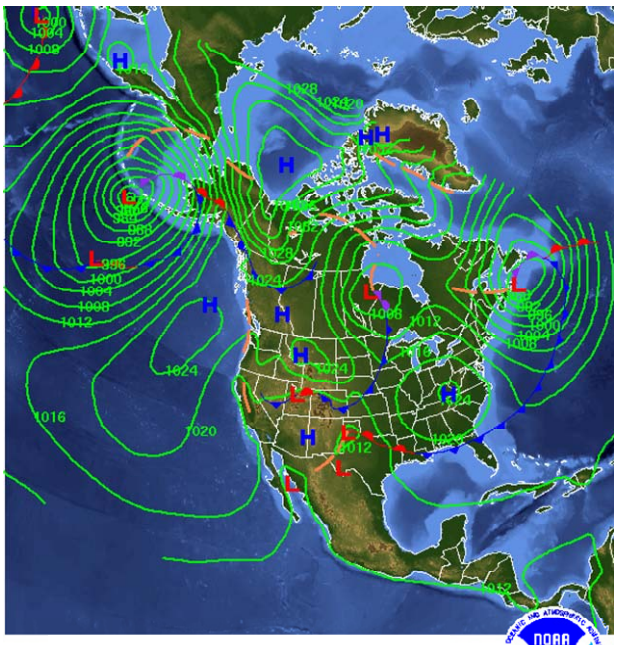
Summary, Ninety-day weather outlook for forecast area:

- *The El Nino condition continues to strengthen.* At this rate an official El Nino will be declared in November.
- Long-range computer models agree that an El Nino condition will persist until Spring of 2010. Computer models predict that this El Nino will most significantly affect the forecast area in the winter, with higher than normal precipitation expected.
- Precipitation throughout the forecast area during the past four weeks has been above average. The September rains were due mostly to low pressure excursions (storms) migrating across the state. The monsoon condition was stymied most of the summer and did little to aid the precipitation during September.

Review of Current El Nino Southern Oscillation Situation and Discussion:

The Historic Oceanic Nino Index, which is the official metric from which a La Nina or El Nino is declared, is at +0.8C, 14% more positive than last month.

All but three of the of the 22 international computer models used to predict El Nino events suggest that it will last through next winter. Most of the models predict a moderate to strong event.



Last 30 days. Generally precipitation in the forecast area was above normal in September. The weather pattern that produced most of the precipitation was unusual for the time of year. It resembled the conditions that normally occur in winter months.

The map at right reflects surface pressure for October 2nd (courtesy National Weather Service). The Bermuda high, which is largely responsible for driving the SW US monsoon, has essentially disappeared. The

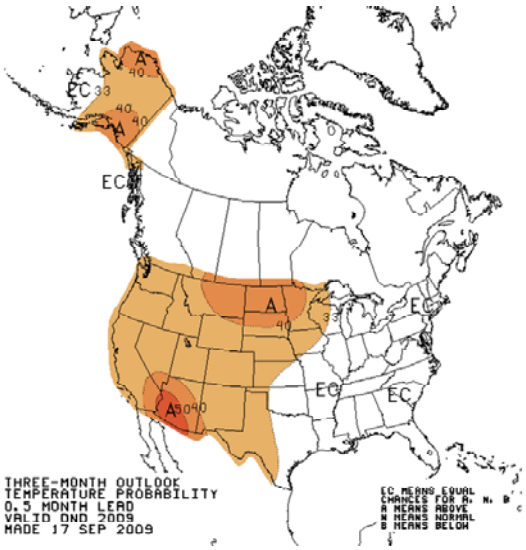
dominant features are the very powerful low pressure areas to the NE and NW of North America. The one of interest to those in the forecast area is in the NW, called the Aleutian Low Pressure Center. It spawns storms that move into the SW US during the winter. Precipitation in September came largely from storms that were spawned from the Aleutian Low.

Next 90 days.

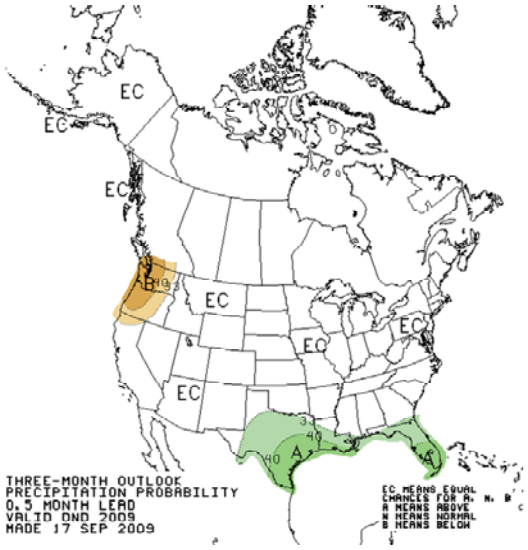
Upcoming long-range precipitation/temperature projections are beginning to reflect the expected impact of the El Nino. The graphic below shows the official prediction of temperature and precipitation for the next 90 days (from the National Climate Prediction Center).

Outlook for Oct Through Dec 09

Temperature



Precipitation



It is noteworthy that precipitation in the SW US is predicted to be about normal. The models indicate that the initial effects of this El Nino will be manifested in the Gulf States and later in the SW US. Thus, the Gulf States are expected to be wetter than normal this fall. The SW states are expected to receive higher than normal precipitation this coming winter.

However, as is typical with most El Nino events, temperatures might be higher than normal because much of the moisture that will be ushered into the area will originate in the warm sub-tropics to the south. This situation will create slightly higher than normal snow-elevation levels.

Recent Weather Trends

Beneficial rains are now occurring regularly over the forecast area. The blocking high pressure area that so frustratingly stifled precipitation producing systems over the summer is either weak or non-existent. If these conditions prevail into the colder period, these storms will produce significant precipitation throughout the state with heavy snows in the higher locations.

Next Report: Early November, 2009.