

## **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 August through October (directly below), a review of the current El Nino Southern Oscillation (ENSO) condition, and an overview of current weather trends along with outlook maps for the next 90 days. Also included are discussions about the current monsoon condition.

Generally, not much has changed over the past month.

### Summary, Ninety-day weather outlook for forecast area:

- *An El Nino condition continues to rapidly develop.* Climate models predict an official El Nino will be declared next winter and will persist through the winter. Higher than normal precipitation is predicted over the forecast area for that period.
- *Precipitation throughout the forecast area during the past four weeks has been average to below average.* The NW corner has been the driest. Temperatures have been above normal in the same period.
- The summer monsoon condition has been affected by a high pressure center over Arizona that has diverted moisture north of the state. Fortunately, some of that moisture has been directed southward over the state and has produced some beneficial rainfall. However, recent positioning of that high has essentially shut off shower activity for the western two-thirds of the state.

### 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 +0.6C, 200% more positive than last month. All but one of the international ENSO models are now predicting that the El Nino event will last through next winter and will be moderate to strong. Most of the computerized climatic models are predicting that an official El Nino will be declared by late fall or early winter.

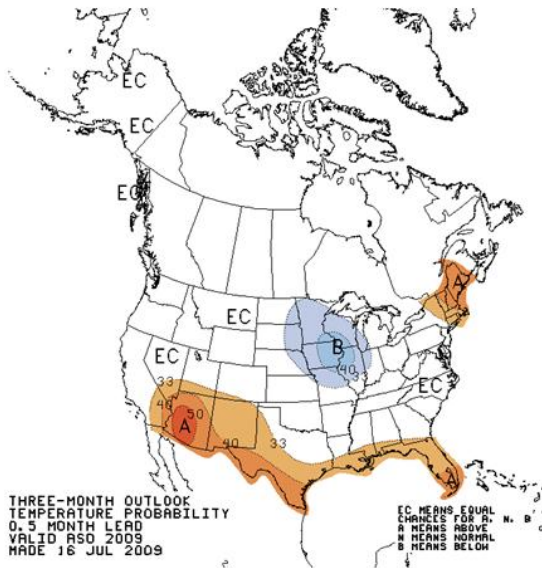
### Next 90 days.

The projection for the next 90 days now reflects the expected impact of the developing El Nino. The map on the next page shows the predictions (from the National Climate Prediction Center).

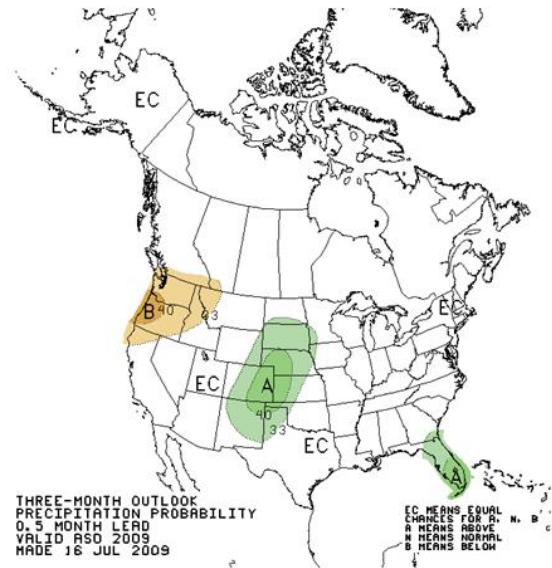
Above normal precipitation is expected, but temperatures should be only a little above normal. Temperature is moderated by both cloud cover and rainfall.

# Outlook for Aug Through Oct 09

## Temperature



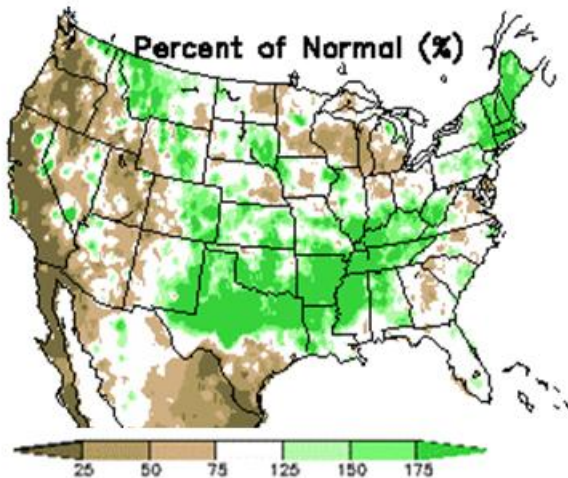
## Precipitation



### Recent Weather Trends

The summer season started out with a healthy and early monsoon flow. This involved moisture being advected into the area from the SE. However, a very unusual high pressure center developed over AZ that shut off that flow pattern and diverted the moisture to the east and north of the state.

### **30-day (ending 2 Aug 2009) % of average precipitation**



Fortunately, that same high pressure center, with its clockwise winds, sent some of that moisture back into the state. The NE corner of the state was the biggest beneficiary. But the NW corner was drier than normal. See the associated map at left for details.

That high pressure center is showing signs of migrating back to the east of the state, where it belongs and where it can assist in moving moisture back into the state from the SE. But it is moving slowly and while it migrates over the state it will suppress storm activity, as it has for the past few days. Models show that by this weekend we may resume a normal condition.

There is considerable confusion about why that high pressure center positioned itself over AZ at

this time of year. It was unusual, especially with the developing El Niño and all of the models calling for a robust monsoon. I will follow this problem, but will not report on it again unless it is pertinent to the forecast.

Next Report: Early September, 2009.