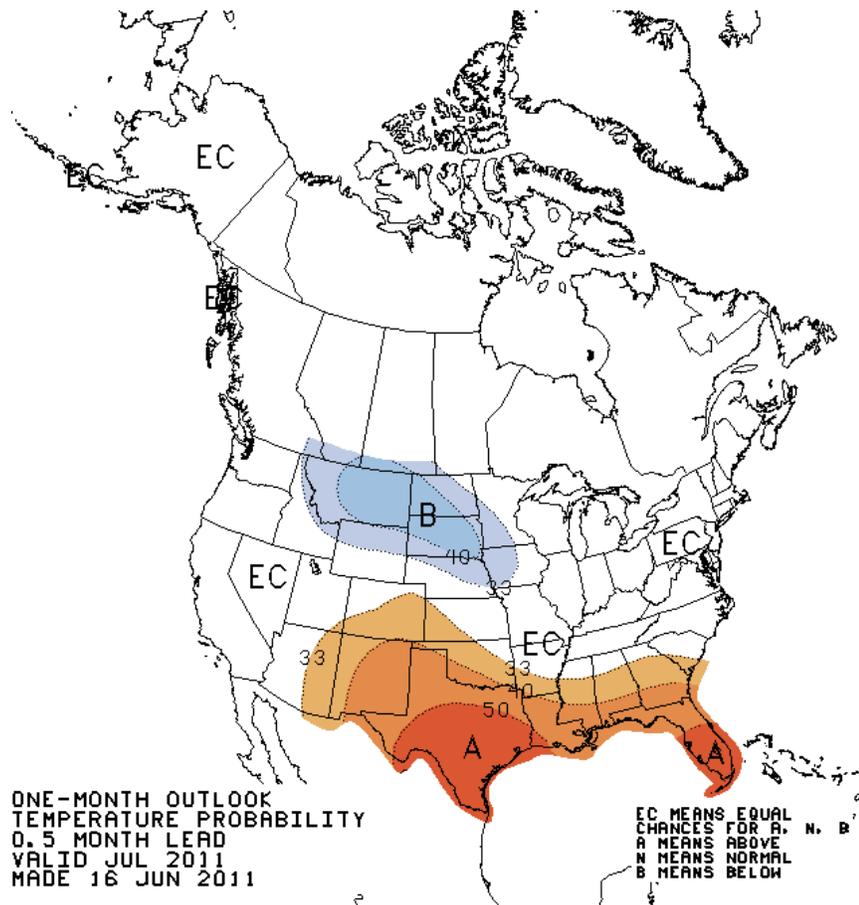


# North Central United States July & July-August-September 2011 Climate Prediction Center (CPC) Climate Outlook and Summary

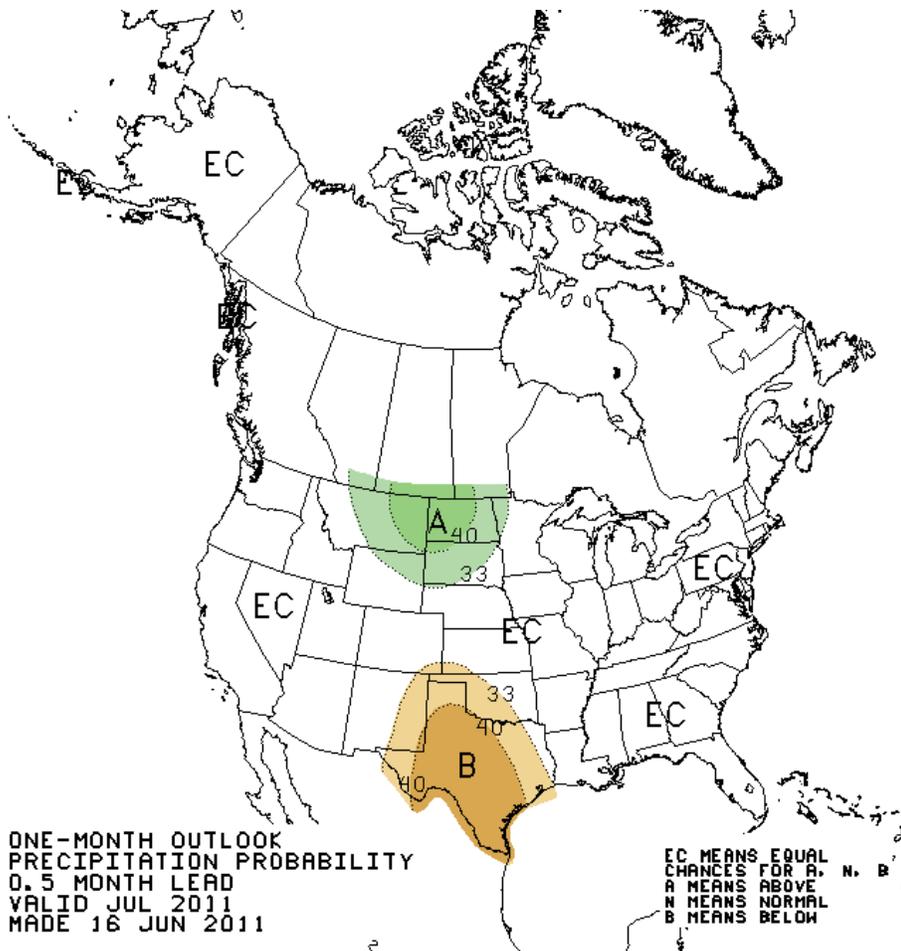
## July Temperature Outlook:

Much of the North central United States has a higher than usual chance of below normal temperatures in July. There will be a greater than 40% chance for colder than normal temperatures relative to climatology (with a 33% chance of near normal, and a 17% to 27% chance for warmer than normal) for western North Dakota and most of the northern and eastern portions of South Dakota; while a 33% to 40% chance of colder than normal temperatures (with a 33% chance of normal, and 27% to 33% chance of warmer) are indicated for eastern North Dakota, southwestern Minnesota, western Iowa, most of northern Nebraska, and southwestern South Dakota. Northern and eastern Minnesota, eastern Iowa, and southern and western Nebraska are depicted with indeterminate chances for above normal, near normal, and below normal temperatures.



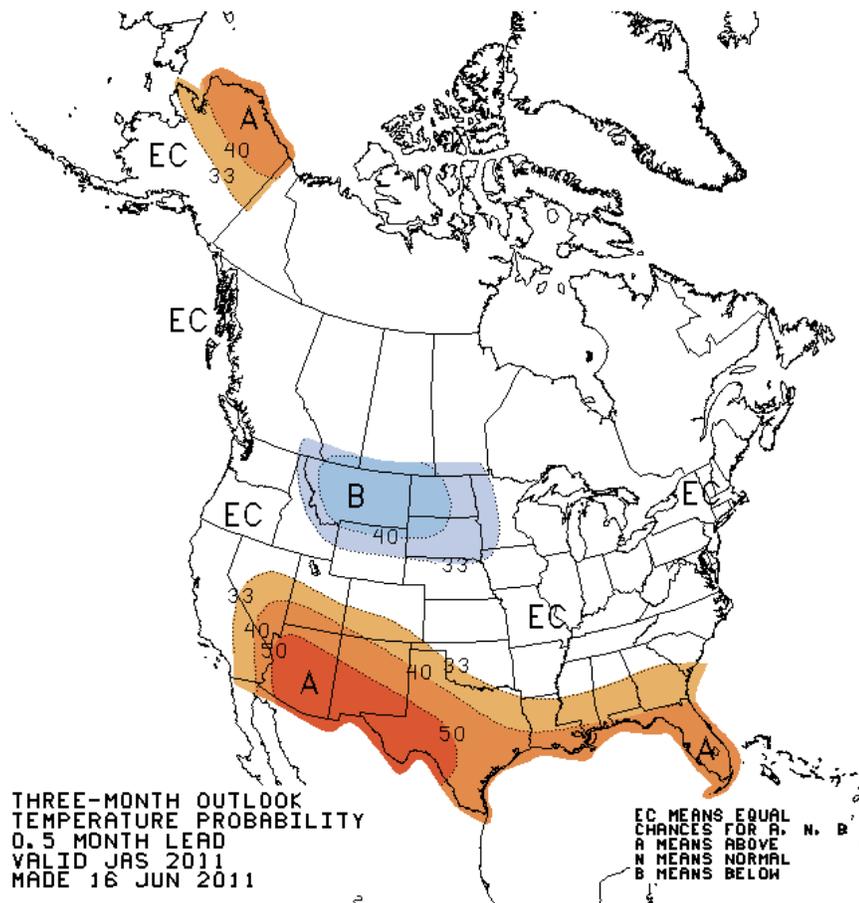
## July Precipitation Outlook:

Much of the North Central Region has indeterminate chances for above normal, near normal, and below normal precipitation for July. However, there will be a higher than usual chance for wet conditions across western North Dakota and extreme northwestern South Dakota, with a greater than 40% chance of above normal precipitation relative to climatology (as well as a 33% chance of normal precipitation, and a 17% to 27% chance of below normal precipitation). Bordering that area, through western and northern South Dakota, eastern North Dakota, and northwestern Minnesota, there is a 33% to 40% chance of above normal precipitation relative to climatology (with a 33% chance of normal precipitation, and a 27% to 33% chance of below normal precipitation).



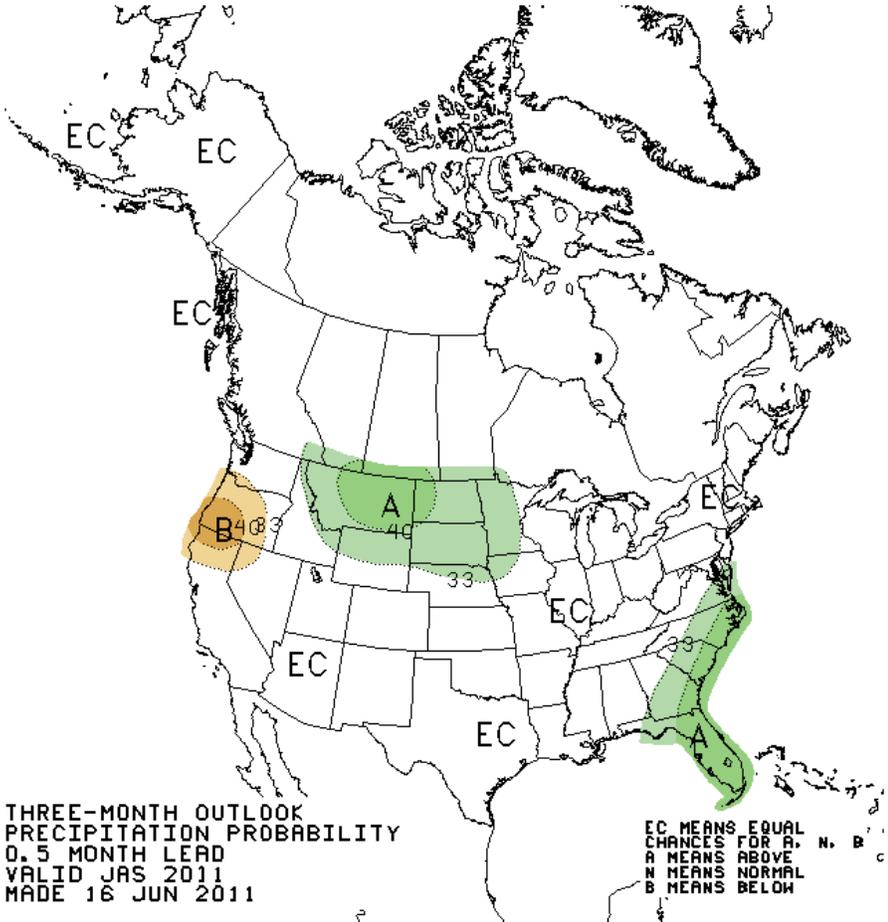
## July - September Temperature Outlook:

The eastern and southern portions of the North Central Region have indeterminate chances of above normal, near normal, and below normal temperatures for the period of July through September. The remainder of the region has a higher than usual chance of below normal temperatures; with a greater than 40% chance of temperatures colder than normal over western North Dakota and northwestern South Dakota (as well as a 33% chance of near normal temperatures, and a 17% to 27% chance of temperatures above normal). Over eastern North Dakota, northeastern and southern South Dakota, and western Minnesota, a 33% to 40% chance of temperatures colder than normal relative to climatology are indicated (with a 33% chance of temperatures near normal, and a 27% to 33% chance of temperatures warmer than normal).



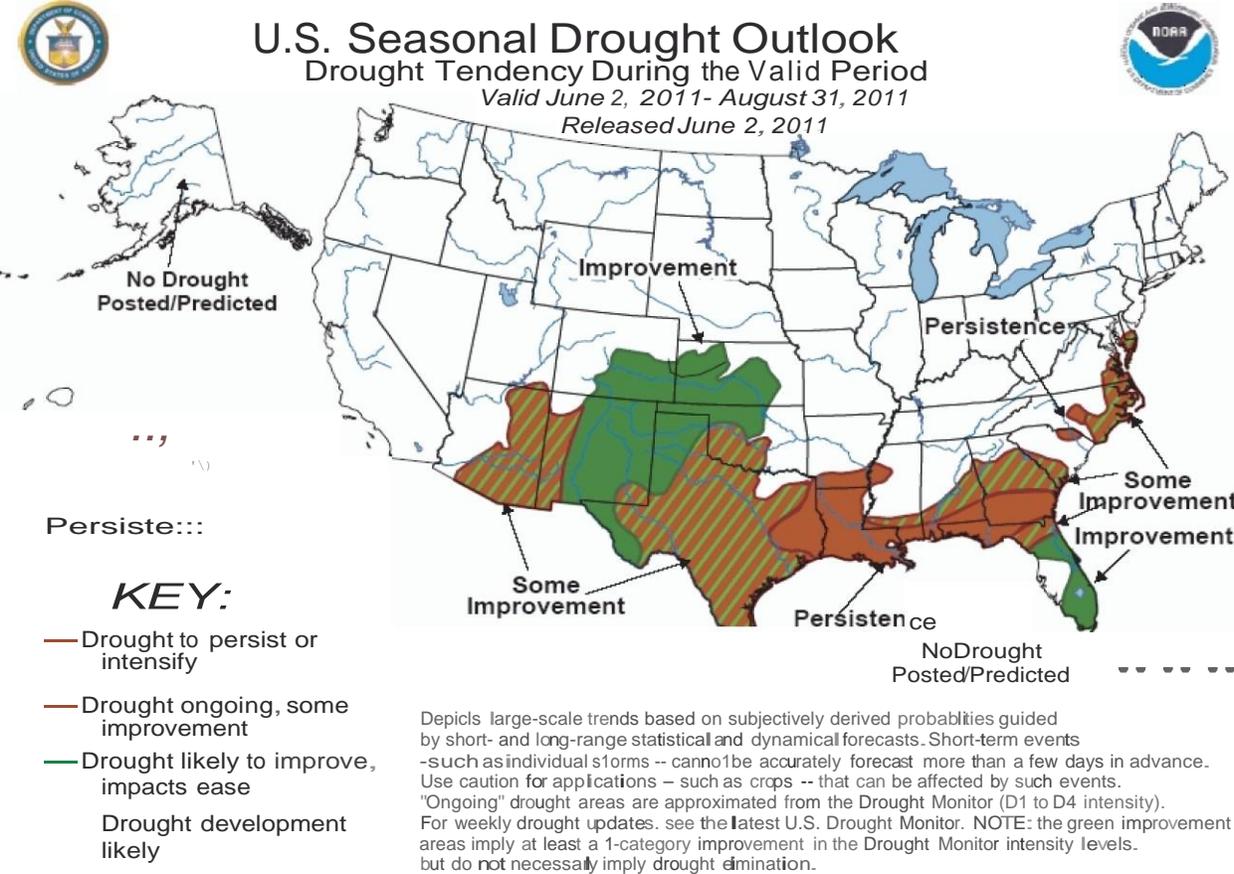
# July – September Precipitation Outlook:

The three month outlook for precipitation has changed significantly from the last issuance. Due to large soil moisture anomalies and wet conditions across the Northern Plains and Northern Rockies, the outlook points towards enhanced chances of wetter than normal conditions in the Upper Missouri River Basin. For the July through September period, there will be a 33% to 40% chance of above normal precipitation relative to climatology (with a 33% chance of near normal precipitation, and a 27% to 33% chance of below normal precipitation) over much of North Dakota, South Dakota, western Minnesota, and into far northern Nebraska and northwestern Iowa. The best chance of wet conditions will be over far western North Dakota where there will be a greater than 40% chance of above normal precipitation (as well as a 33% chance of near normal precipitation, and a 17% to 27% chance of below normal precipitation).



# Seasonal Drought Outlook

The most recent Seasonal Drought Outlook indicates that drought conditions are not expected over the North Central United States.



# Seasonal Outlook Interpretation Guide

The outlooks indicate probability of being in three specific categories in reference to the 30-year climatology from 1971-2000:

| Temperature                         |                      | Precipitation                     |                      |
|-------------------------------------|----------------------|-----------------------------------|----------------------|
| Social Science                      | Climate Science      | Social Science                    | Climate Science      |
| Uncommonly Cold                     | Below Normal Tercile | Uncommonly Wet                    | Above Normal Tercile |
| Uncommonly Warm                     | Above Normal Tercile | Uncommonly Dry                    | Below Normal Tercile |
| Moderate<br>(Neither Warm Nor Cold) | Normal Tercile       | Moderate<br>(Neither Wet nor Dry) | Normal Tercile       |

The National Weather Service Seasonal Climate Outlooks predict the probability of conditions being among the warmest/coldest or wettest/driest terciles of years compared to the period of 1971-2000:

| Precip | Temp | Probability of Occurrence |             |             | Most likely category |
|--------|------|---------------------------|-------------|-------------|----------------------|
|        |      | Above                     | Near        | Below       |                      |
|        |      | 80.0%-90.0%               | 16.7%-06.7% | 03.3%       | "Above"              |
|        |      | 70.0%-80.0%               | 26.7%-16.7% | 03.3%       | "Above"              |
|        |      | 60.0%-70.0%               | 33.3%-26.7% | 06.7%-03.3% | "Above"              |
|        |      | 50.0%-60.0%               | 33.3%       | 16.7%-06.7% | "Above"              |
|        |      | 40.0%-50.0%               | 33.3%       | 26.7%-16.7% | "Above"              |
|        |      | 33.3%-30.0%               | 33.3%-40.0% | 33.3%-30.0% | "Near Normal"        |
|        |      | 30.0%-25.0%               | 40.0%-50.0% | 30.0%-25.0% | "Near Normal"        |
|        |      | 33.3%-26.7%               | 33.3%       | 33.3%-40.0% | "Below"              |
|        |      | 26.7%-16.7%               | 33.3%       | 40.0%-50.0% | "Below"              |
|        |      | 16.7%-06.7%               | 33.3%       | 50.0%-60.0% | "Below"              |
|        |      | 06.7%-03.3%               | 33.3%-26.7% | 60.0%-70.0% | "Below"              |
|        |      | 03.3%                     | 26.7%-16.7% | 70.0%-80.0% | "Below"              |
|        |      | 03.3%                     | 16.7%-06.7% | 80.0%-90.0% | "Below"              |
|        |      | 33.3%                     | 33.3%       | 33.3%       | "Equal Chances"      |