

Climate Review for the month of May 2011

Presented by:
BelMel Publishing

Summary

May was a warm and dry month, with temperatures reaching into the 90s during the last two weeks of the month as record breaking highs occurred on May 31. We continue to have a La Nina pattern across the area, some locations such as New Bern, Beaufort, Greenville, Kinston and Aurora observed their driest May since record-keeping began. We had a series of shortwaves and cold fronts that produced rainfall, but not enough to improve drought conditions in Eastern North Carolina. Drought conditions have worsened across most of the area, taking us to a D2 (Severe Drought).

Average Temperatures within our CWA

| | Avg_ Max | Avg_ Max Normal | Avg_ Min | Avg_ Min Normal |
|---------------|----------|-----------------|----------|-----------------|
| Beaufort | 79.9 | na | 64.2 | na |
| Cape Hatteras | 78.5 | 74.9 | 65.1 | 60.2 |
| New Bern | 82.7 | 79.0 | 58.4 | 58.7 |
| Greenville | 82.7 | 79.3 | 58.7 | 57.3 |
| Kinston AG | 82.9 | 83.4 | 60.0 | 56.8 |
| Williamston | 79.0 | 78.2 | 57.4 | 56.4 |
| Plymouth | 81.4 | 80.8 | 57.7 | 56.8 |
| Aurora | 80.8 | 78.8 | 62.8 | 57.5 |
| Bayboro | 81.2 | 80.5 | 55.2 | 57.4 |

Overall, average Max & Min temperature were near to above normal this month.
Average temperatures were 1 to 4 degrees above normal.

Max and Min Temperature within our CWA

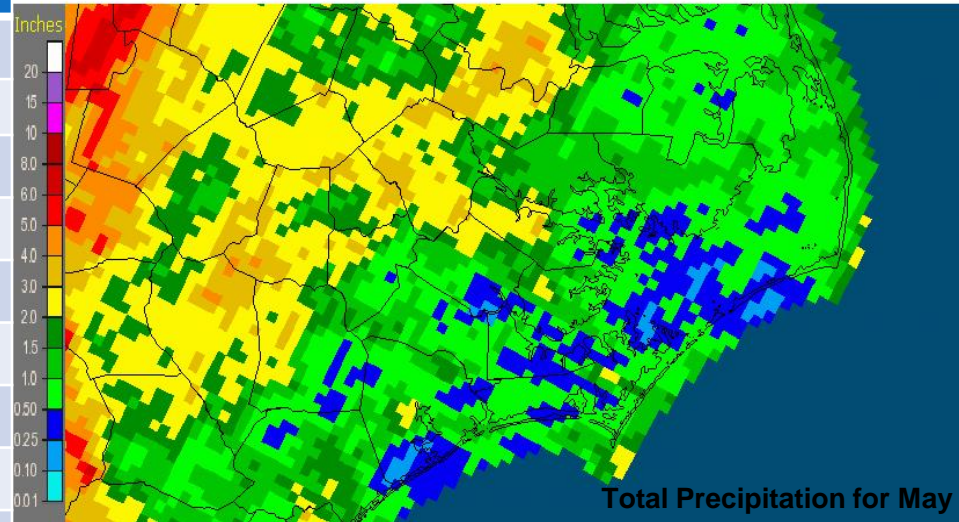
| | MAX | MIN | # of Days \geq 90° F |
|---------------|-----|-----|---------------------------|
| Beaufort | 99 | 49 | 1 |
| Cape Hatteras | 91 | 52 | 1 |
| New Bern | 98 | 44 | 5 |
| Greenville | 100 | 45 | 7 |
| Kinston AG | 97 | 45 | 6 |
| Williamston | 91 | 44 | 3 |
| Plymouth | 96 | 43 | 6 |
| Aurora | 95 | 50 | 4 |
| Bayboro | 95 | 43 | 4 |

All the counties within our CWA have reached to the 90s, with Greenville (Water Treatment Plant) reaching 100° F. There were some cool nights during the first half of the month.

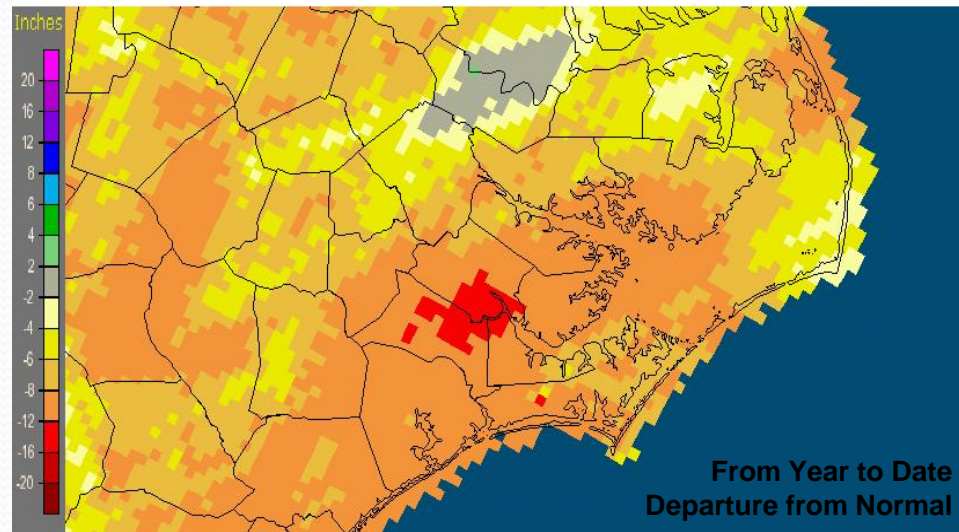
May's Rain versus Normal

| | Precipitation (inches) | Normal | Differences |
|---------------|---------------------------|--------|-------------|
| Beaufort | 0.66 | na | na |
| Cape Hatteras | 0.53 | 3.92 | -3.39 |
| New Bern | 0.47 | 4.19 | -3.72 |
| Greenville | 1.3 | 4.05 | -2.75 |
| Kinston AG | 0.53 | 3.87 | -3.34 |
| Williamston | 2.16 | 4.09 | -1.93 |
| Plymouth | 1.21 | 4.5 | -3.29 |
| Aurora | 0.59 | 4.26 | -3.67 |
| Bayboro | 1.44 | 4.71 | -3.27 |

Newport/Morehead City, NC (MHX): May, 2011 Monthly Observed Precipitation
Valid at 6/1/2011 1200 UTC- Created 6/3/11 21:44 UTC



Newport/Morehead City, NC (MHX): Current Year to Date Departure from Normal Precipitation
Valid at 6/11/2011 1200 UTC- Created 6/11/11 19:58 UTC



Most of the rainfall was to the NW section of our CWA. Precipitation totals generally ranged from ~0.50 to 2.0 inches over the area with the higher precipitation totals were to the NW section of our CWA.

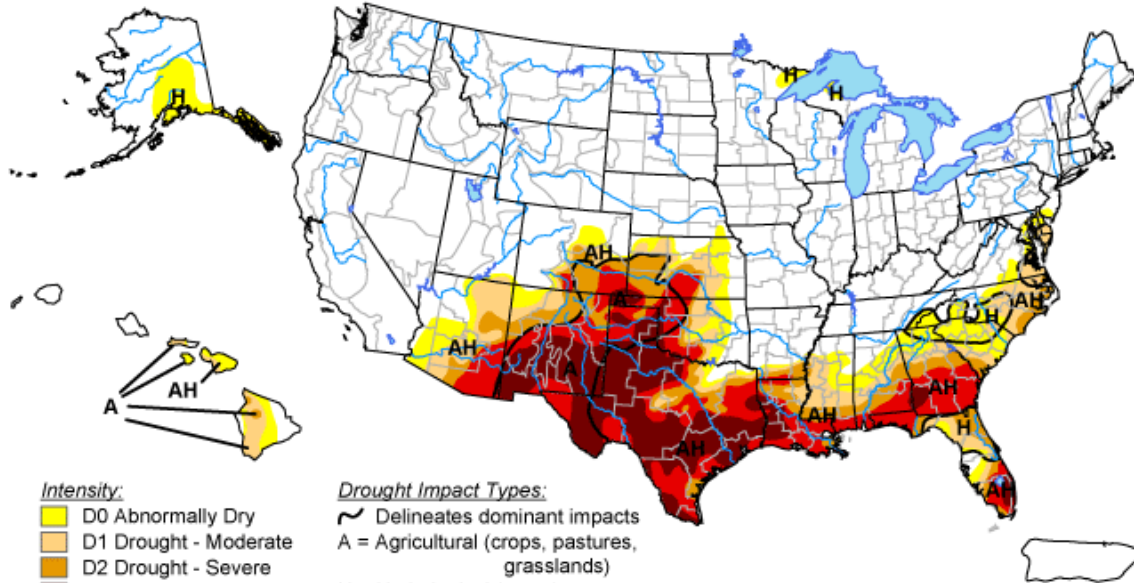
Since January, our CWA is below normal on precipitation amounts. (look @ bottom graphic)

May's Driest Ranking

| | Starting Year of Data Collection | May 2011 Ranking (Driest) | # 1 May Ranking |
|----------------------|----------------------------------|---------------------------|----------------------------|
| Beaufort | 2000 | 1 st | Previous was 2007 w/ 0.90" |
| Cape Hatteras | 1893 | 3 rd | 1997 w/ 0.35" |
| New Bern | 1948 | 1 st | Previous was 1982 w/ 0.99" |
| Greenville | 1875 | 11 th | 1876 w/ 0.35" |
| Kinston AG | 1966 | 1 st | Previous was 1987 w/ 0.76" |
| Williamston | 1930 | 18 th | 1959 w/ 0.57" |
| Plymouth | 1945 | 4 th | 1964 w/0.88" |
| Aurora | 1973 | 1 st | Previous was 1985 w/ 0.59" |
| Bayboro | 1968 | 3 rd | 1983 w/ 0.36" |

U.S. Drought Monitor

June 7, 2011
Valid 8 a.m. EDT



- Intensity:**
- D0 Abnormally Dry
 - D1 Drought - Moderate
 - D2 Drought - Severe
 - D3 Drought - Extreme
 - D4 Drought - Exceptional

- Drought Impact Types:**
- Delineates dominant impacts
 - A = Agricultural (crops, pastures, grasslands)
 - H = Hydrological (water)

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

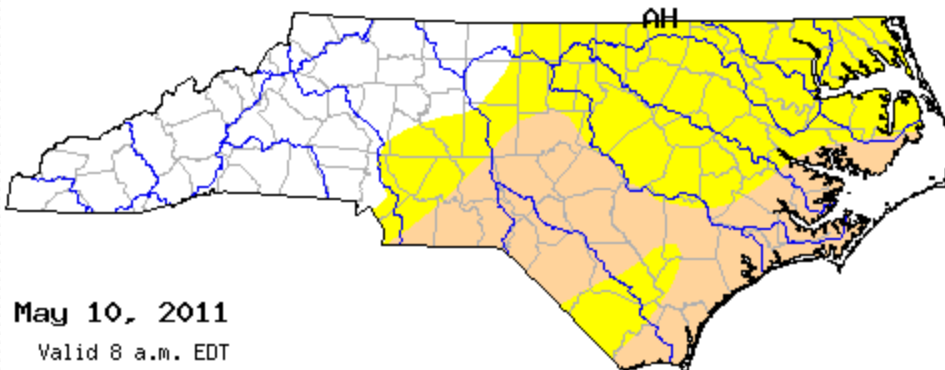
<http://drought.unl.edu/dm>



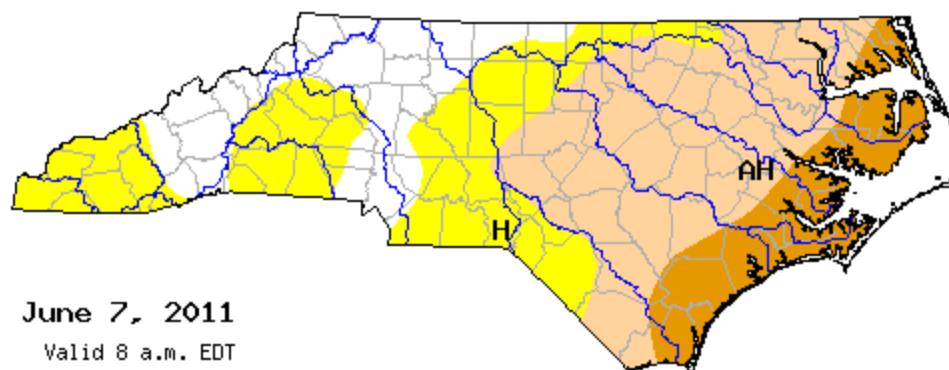
Released Thursday, June 9, 2011

Author: Matthew Rosencrans, NOAA/NWS/NCEP/CPC

Before



Now



May 10, 2011
Valid 8 a.m. EDT

June 7, 2011
Valid 8 a.m. EDT

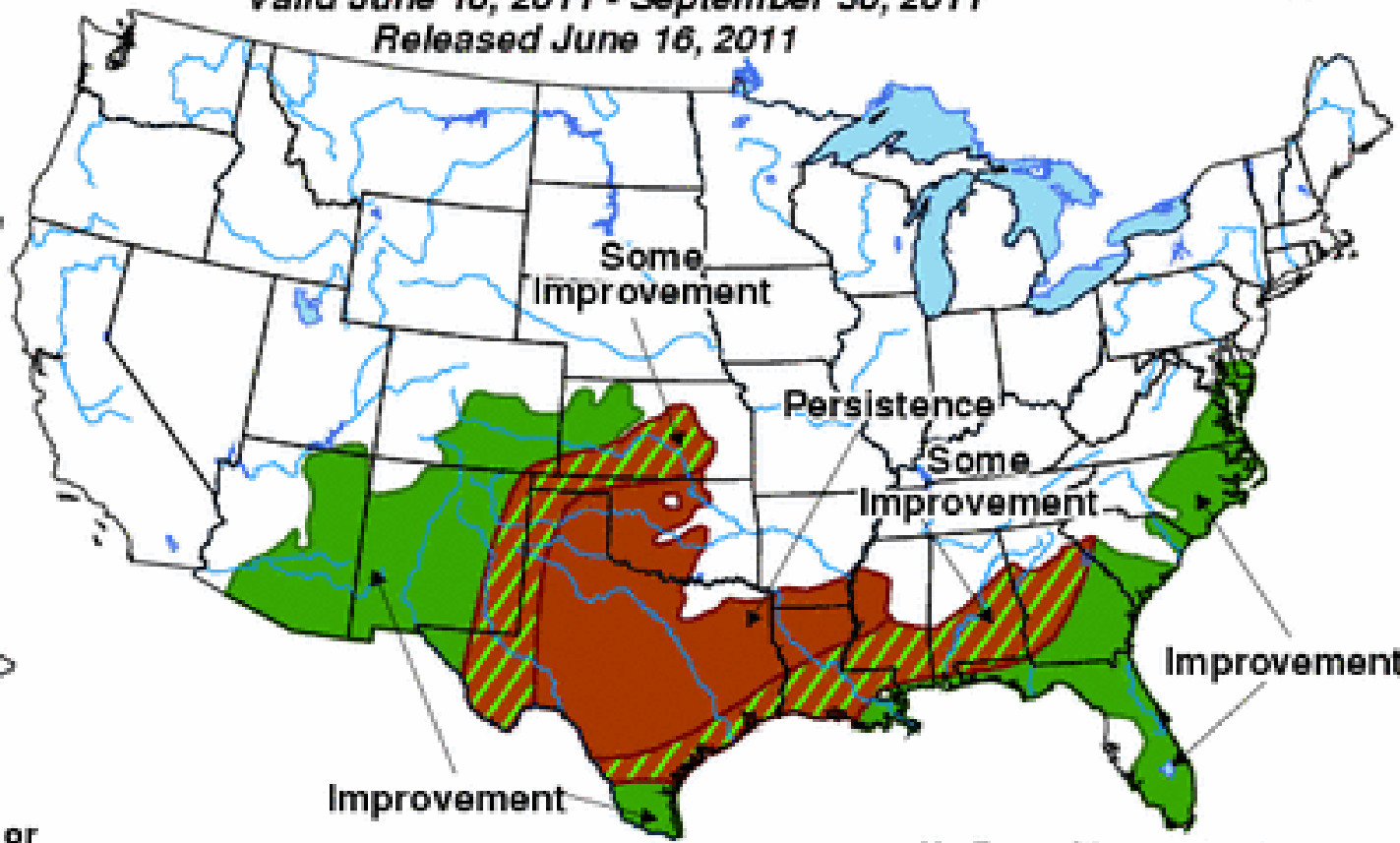
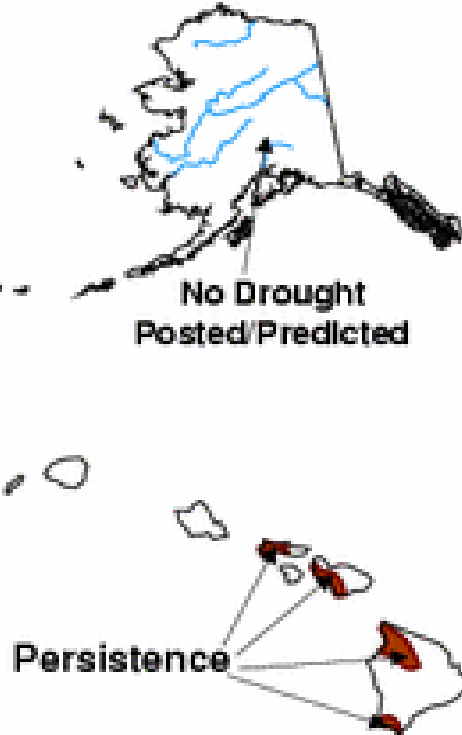


U.S. Seasonal Drought Outlook


Drought Tendency During the Valid Period

Valid June 16, 2011 - September 30, 2011

Released June 16, 2011



KEY:

-  Drought to persist or intensify
-  Drought ongoing, some improvement
-  Drought likely to improve, impacts ease
-  Drought development likely

No Drought Posted/Predicted



Depicts large-scale trends based on subjectively derived probabilities guided by short- and long-range statistical and dynamical forecasts. Short-term events -- such as individual storms -- cannot be accurately forecast more than a few days in advance. Use caution for applications -- such as crops -- that can be affected by such events. "Ongoing" drought areas are approximated from the Drought Monitor (D1 to D4 intensity). For weekly drought updates, see the latest U.S. Drought Monitor. NOTE: the green improvement areas imply at least a 1-category improvement in the Drought Monitor intensity levels, but do not necessarily imply drought elimination.