

# Climate Review for the month of December 2011

Presented by:  
BelMel Publishing

# Summary

December was a warm and extremely dry month compared to December 2010. With above normal ridging dominating across the eastern half of the country, maximum temperatures averaged in the upper 50s to lower 60s and average lows ranging in the upper 30s to lower 40s. December was 4-5 degrees above normal (average temperature). The majority of our CWA continued to be below normal with precipitation with Beaufort (2000) and Bayboro (1968) being the driest Decembers on record. To contrast, Cape Hatteras was the 35<sup>th</sup> driest (1893). The rainiest day within our CWA was the 27<sup>th</sup> of December which was associated with a low pressure system that originated from the Gulf states. Cape Hatteras again broke another 24-hr precipitation total record of 2.16 inches on December 27 (previous record of 1.11 inches back in 1991).

La Niña conditions continued to dominate across the United States. The Niño index in December was  $-1.0^{\circ}\text{C}$  for the Niño 3.4 region which according to CPC this is considered to be a weak to moderate La Niña. Both the Northerly and Southerly Jets (200mb) continue to have a typical La Niña pattern. Drought conditions across our CWA have worsened to D1 (Abnormally Dry) and dry conditions are expected to continue.

*DISCLAIMER from Bel: The climate data provided are preliminary and have not undergone final quality control by NCDC. Therefore...this data is subject to revision.*

# Average Temperatures within our CWA

	Avg_ Max	Avg_ Max Normal	Avg_ Min	Avg_ Min Normal
<b>Beaufort</b>	61.8	na	43.6	na
<b>Cape Hatteras</b>	60.9	57.3	47.8	42.6
<b>New Bern</b>	62.7	57.7	38.9	36.3
<b>Greenville</b>	60.8	55.4	37.8	33.8
<b>Kinston AG</b>	63.5	59.3	41.2	36.1
<b>Williamston</b>	59.7	55.5	38.7	34.4
<b>Plymouth</b>	60.7	57.5	39.0	36.0
<b>Aurora</b>	60.6	56.8	43.1	34.9
<b>Bayboro</b>	62.2	58.9	38.8	36.1

The CWA was 4 to 5 degrees above normal on average temperature for the month.

# Max and Min Temperature within our CWA

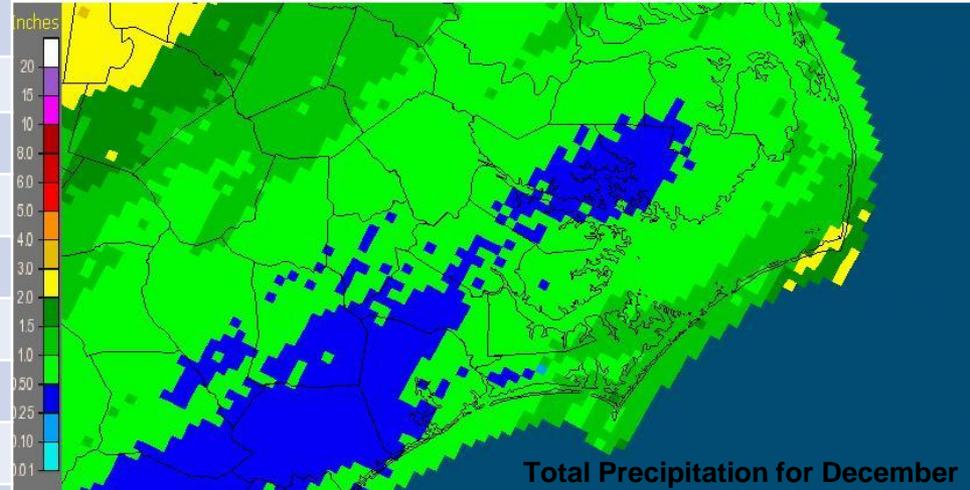
	MAX	MIN
Beaufort	73	28
Cape Hatteras	72	30
New Bern	78	25
Greenville	76	27
Kinston AG	76	26
Williamston	76	29
Plymouth	75	24
Aurora	76	36
Bayboro	79	29

Warmest temperatures occurred around mid-December while the coldest night was 19<sup>th</sup>.

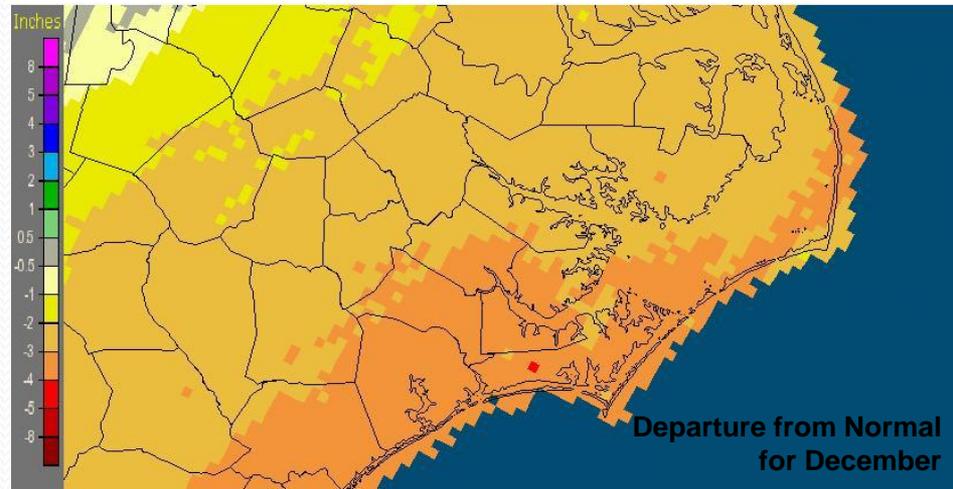
# December's Rain versus Normal

	Precipitation (inches)	Normal	Differences
Beaufort	1.24	na	na
Cape Hatteras	3.16	4.27	-1.11
New Bern	0.73	3.4	-2.67
Greenville	0.84	3.25	-2.41
Kinston AG	0.76	3.08	-2.32
Williamston	1.17	3.24	-2.07
Plymouth	0.89	3.29	-2.4
Aurora*	0.46	3.18	-2.72
Bayboro	0.6	3.75	-3.15

Newport/Morehead City, NC (MHX): December, 2011 Monthly Observed Precipitation  
Valid at 1/1/2012 1200 UTC- Created 1/3/12 21:38 UTC



Newport/Morehead City, NC (MHX): December, 2011 Monthly Departure from Normal Precipitation  
Valid at 1/1/2012 1200 UTC- Created 1/3/12 21:40 UTC



Extremely dry month with observed precipitation being below to way below normal.

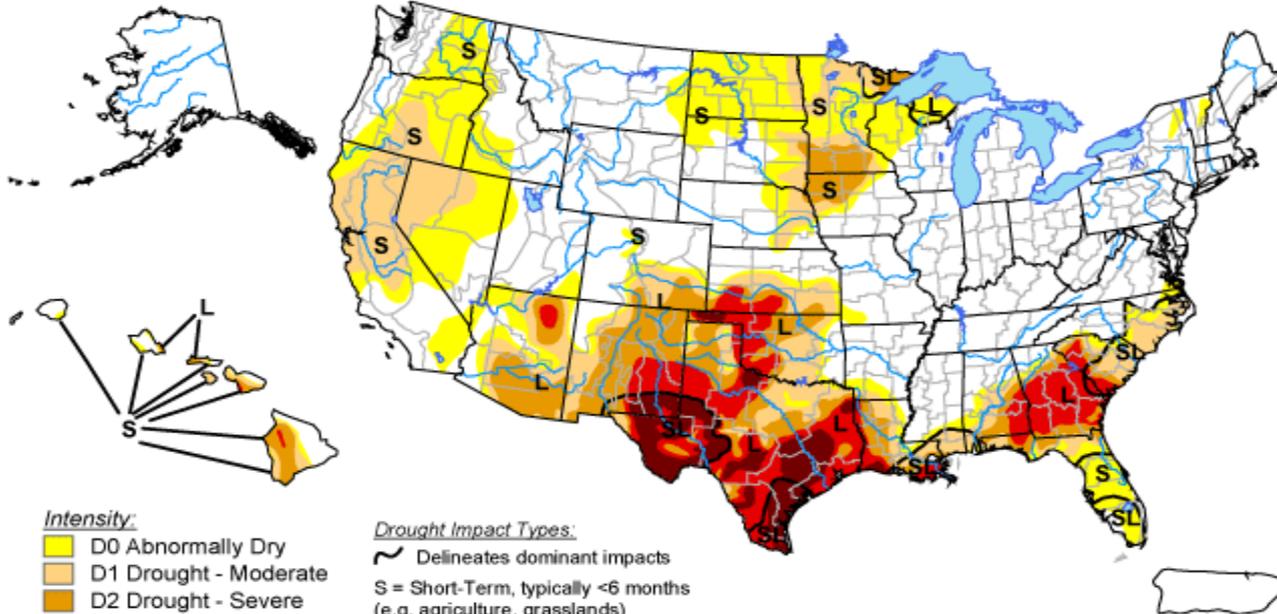
# December's Driest Ranking

	Starting Year of Data Collection	December 2011 Ranking (Driest)	# 1 December Ranking
<b>Beaufort</b>	2000	1 <sup>st</sup>	Previous 2001 w/ 1.51"
<b>Cape Hatteras</b>	1893	35 <sup>th</sup>	1933 w/ 0.37"
<b>New Bern</b>	1948	3 <sup>th</sup>	1965 w/ 0.30"
<b>Greenville</b>	1875	6 <sup>th</sup>	1988 w/ 0.44"
<b>Kinston AG</b>	1966	3 <sup>th</sup>	1988 w/ 0.14"
<b>Williamston</b>	1930	8 <sup>th</sup>	1965 w/ 0.51"
<b>Plymouth</b>	1945	5 <sup>th</sup>	1985 w/0.54"
<b>Bayboro</b>	1968	1 <sup>st</sup>	Previous 1988 w/ 0.62"

# U.S. Drought Monitor

January 3, 2012

Valid 7 a.m. EST



Intensity:

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

Drought Impact Types:

- Delineates dominant impacts
- S = Short-Term, typically <6 months (e.g. agriculture, grasslands)
- L = Long-Term, typically >6 months (e.g. hydrology, ecology)

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



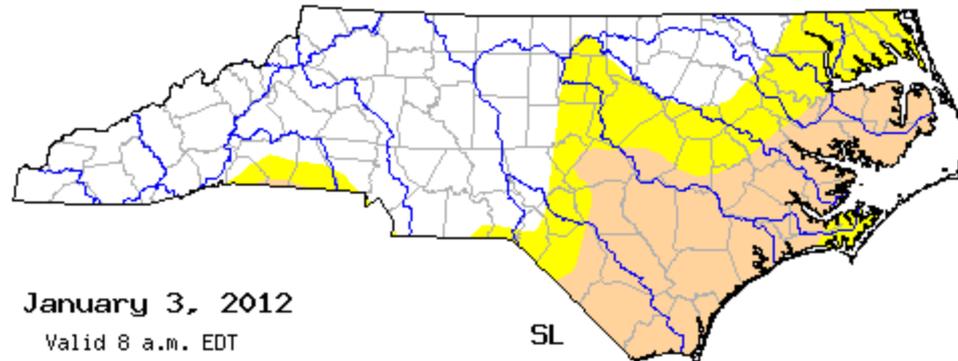
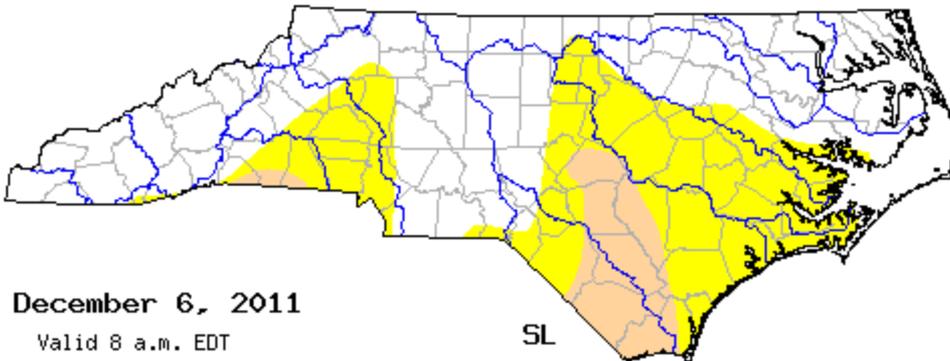
Released Thursday, January 5, 2012

Author: Brad Rippey, U.S. Department of Agriculture

<http://droughtmonitor.unl.edu/>

Before

Now



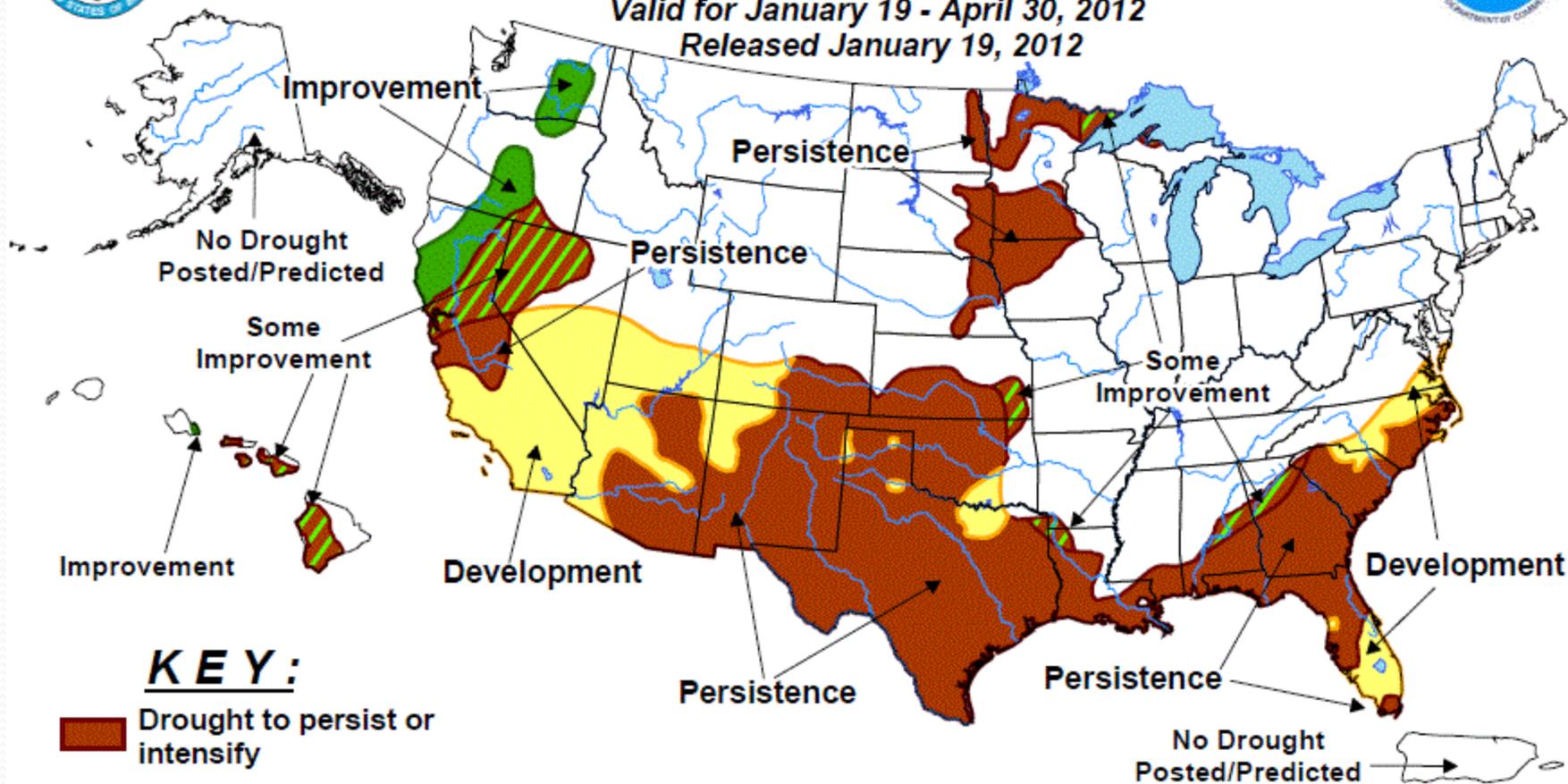


# U.S. Seasonal Drought Outlook

## Drought Tendency During the Valid Period

Valid for January 19 - April 30, 2012

Released January 19, 2012



### KEY:

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

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.