

# 2015 DROUGHT

WATER

METROLINA

Factsheet produced by:

 NORTH CAROLINA  
CLIMATE OFFICE  
<https://climate.ncsu.edu>



An exposed sandbar at Lake Wylie, from WCNC

## Summary

A few dry months in the spring and summer of 2015 were enough to kick-start a flash drought in the western Piedmont. Although brief — drought was gone by early October — it did cause lake levels to drop and water conservation measures to be implemented.

## Statistics

For the Charlotte  
Douglas Airport



DM

2015	Feb	-7.1°	-0.3"	none
	Mar	+2.3°	-1.8"	none
	Apr	+2.2°	+3.1"	D0
	May	+3.7°	-2.9"	none
	Jun	+4.1°	-0.8"	D0
	Jul	+2.8°	-2.5"	D1
	Aug	+1.5°	-0.4"	D1
	Sep	+1.5°	-0.5"	D1
	Oct	-0.6°	+2.2"	none
	Nov	+3.1°	+6.9"	none

## Narrative

The spring weather was highly variable. March was warm and dry, then April saw an active jet stream bring regular rainfall, which eliminated any emerging dryness in western NC.



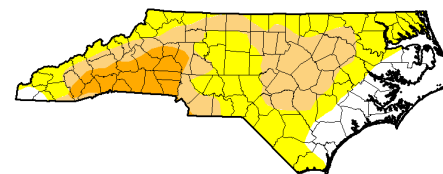
Clark's Creek in Charlotte runs low, from John Simmons (Charlotte Observer)

The large-scale pattern again reversed in May, with jet stream ridging over the Southeast US causing a month of bone-dry weather. **Charlotte had 6.14" of rain in April but just 0.32" in May.**

With ongoing ridging and 100°F heat in June, Moderate Drought (D1) emerged in the western Piedmont as streamflows rapidly declined.

Increased evaporation and demand during a hot July escalated the Catawba-Wateree basin to Stage 1 of the Low Inflow Protocol, with **voluntary conservation recommended**.

Amid the state's 8th-warmest summer on record, Severe Drought (D2) expanded across the western Piedmont by late August, with reservoirs along the Catawba River **3 to 4 feet below targets** — the lowest levels since 2007.



US Drought Monitor, Sep. 22, 2015

In late September and early October, tropical moisture poured in to fuel a week of heavy rainfall. With 4 to 8 inches of precipitation especially upstream, **lakes and streams were topped off**, and the drought was ended, by this one event.

## Timeline Legend



Temp. and precip. departures from 1901-2000 normal for the **Charlotte Douglas Airport**, from the National Centers for Environmental Information.

DM

Most common US Drought Monitor category in **Charlotte**, by area covered.

### Monthly Temperature Rankings:

Record Coolest	Coolest 10%	Coolest 33%	Near Normal	Warmest 33%	Warmest 10%	Record Warmest
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### Monthly Precipitation Rankings:

Record Driest	Driest 10%	Driest 33%	Near Normal	Wettest 33%	Wettest 10%	Record Wettest
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### US Drought Monitor Categories:

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