

Climate Review
for the month
September 2018

Presented by:
National Weather Service
Newport/Morehead City

September 2018 Summary

September 2018 was a historic month in eastern North Carolina. Hurricane Florence brought incredible rainfall totals in excess of 20-30 inches, producing devastating flooding. Florence also produced a storm surge of over 10 feet in New Bern, and downed many trees and power lines across the region producing widespread power outages. Damage from Florence was in the billions of dollars with more than 30 people killed in North Carolina from the storm. With the rainfall from Florence, almost all of eastern North Carolina, other than the Outer Banks, shattered all-time monthly rainfall records. Additionally, September was one of the warmest on record with temperatures up to 5 degrees above normal. For more information on Florence, go to weather.gov/mhx/Florence2018.

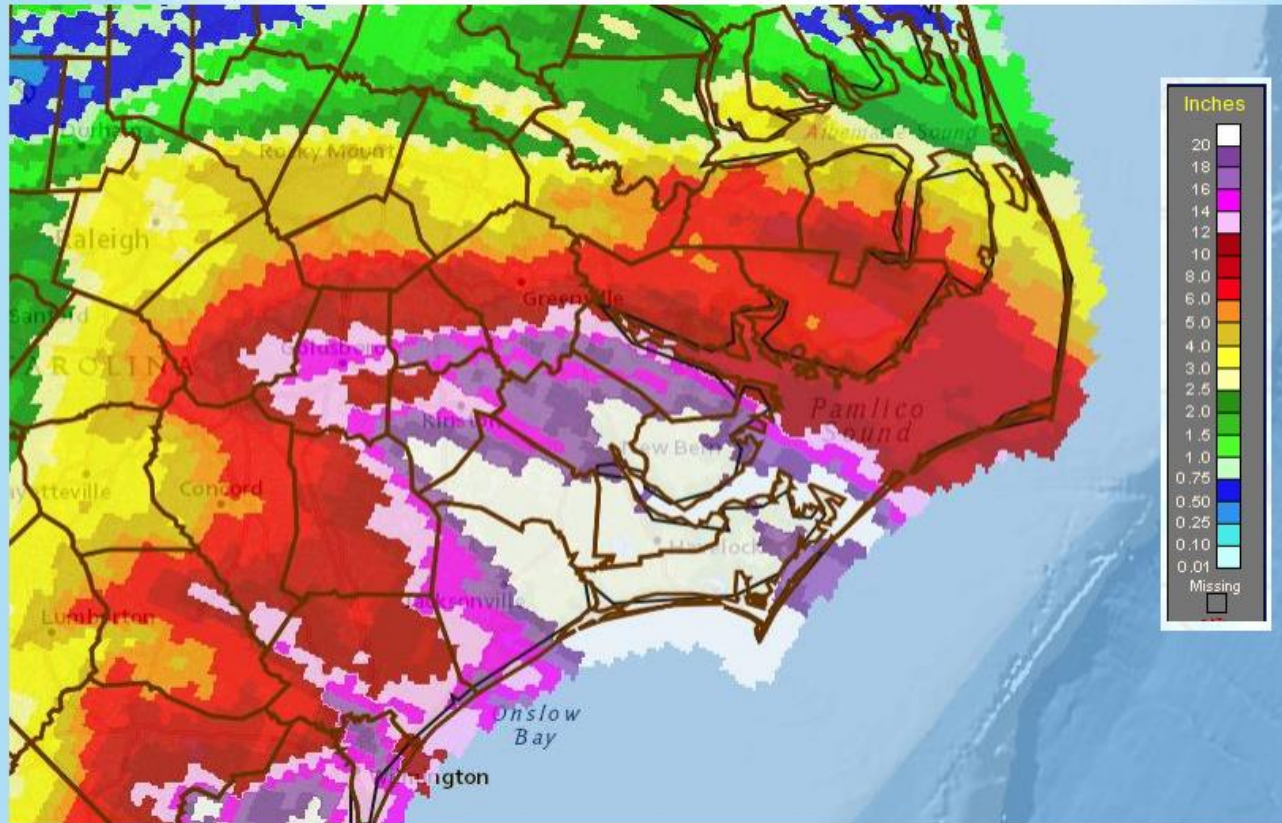


Damage in Morehead City following Hurricane Florence,
September 14, 2018.

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

3-Day Rainfall from Hurricane Florence

3 Day Observed Rainfall as of 7 AM Saturday



Rainfall totals from September 12-15, 2018 from Hurricane Florence. Areas in white depict over 20 inches of rainfall.

Average Temperatures within our CWA in September 2018

	Avg Max	Avg_Max Normal	Avg_Min	Avg_Min Normal
Beaufort	86.8	80.9	73.9	68.0
Cape Hatteras	87.3	79.9	75.5	69.0
New Bern	86.5	82.9	70.3	64.9
Greenville	87.7	82.9	71.4	62.9
Kinston	88.5	84.4	70.4	63.6
Williamston	85.5	81.8	72.5	61.1
Plymouth	87.0	82.7	70.0	62.9
Bayboro	85.9	83.2	69.0	63.9

Temperatures in September 2018 were well above seasonal normals.

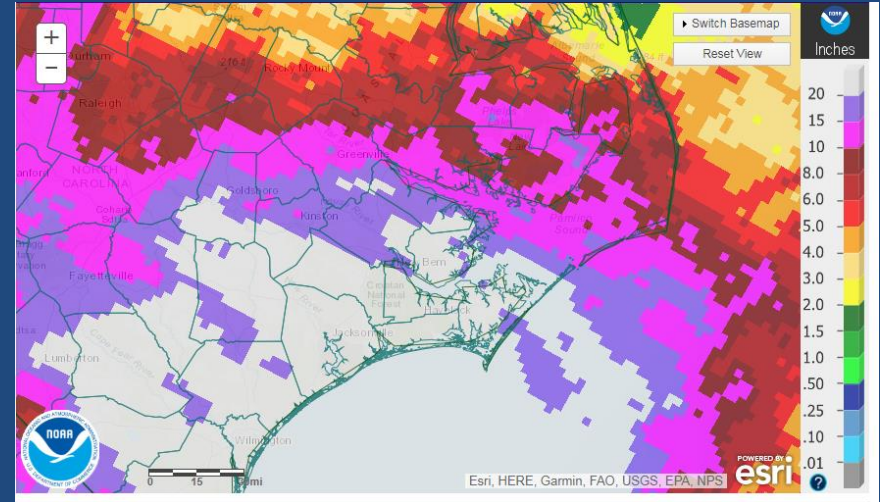
Temperature Extremes within our CWA in September 2018.

	MAX	MIN
Beaufort	89	66
Cape Hatteras	93	68
New Bern	91	61
Greenville	94	64
Kinston	93	64
Williamston	90	65
Plymouth	92	61
Bayboro	90	62

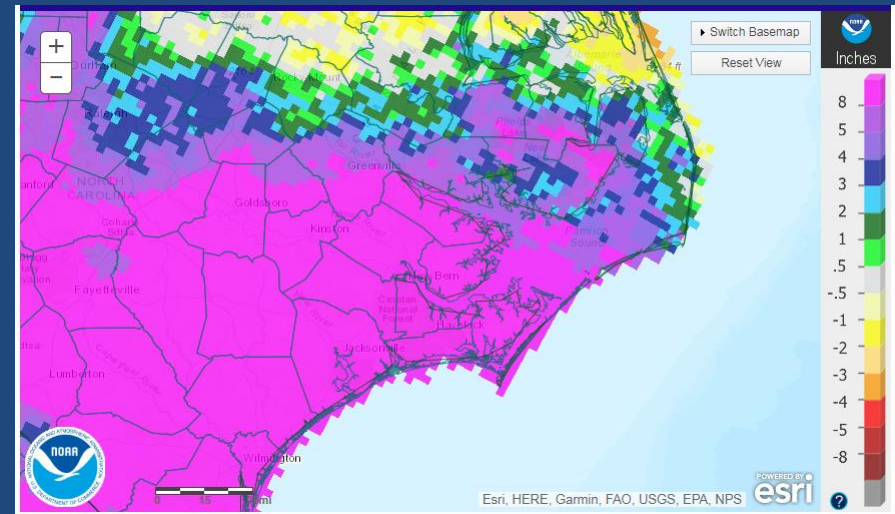
September 2018 Precipitation Vs Climate Normal

	Precipitation (inches)	Normal	Difference
Cape Hatteras	6.02	6.25	-0.23
New Bern	18.39	5.89	12.50
Greenville	13.85	5.83	8.02
Kinston	14.04	5.71	8.33
Williamston	10.65	6.07	4.58
Plymouth	8.63	5.39	3.24
Bayboro	14.12	5.88	8.24

With the exception of the Outer Banks, September was extremely wet across eastern North Carolina thanks to Hurricane Florence. Most all of the area was over 8 inches above normal. Portions of the southern coastal counties received well over 20 inches of rainfall, with a few spots receiving better than 30 inches!



Observed Rainfall



Departure from Normal

Latest Drought Monitor for North Carolina

U.S. Drought Monitor North Carolina

October 2, 2018
(Released Thursday, Oct. 4, 2018)
Valid 8 a.m. EDT



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	99.50	0.50	0.00	0.00	0.00	0.00
Last Week <i>09-25-2018</i>	100.00	0.00	0.00	0.00	0.00	0.00
3 Months Ago <i>07-03-2018</i>	93.42	6.58	0.00	0.00	0.00	0.00
Start of Calendar Year <i>01-02-2018</i>	15.67	84.33	35.34	0.00	0.00	0.00
Start of Water Year <i>09-25-2018</i>	100.00	0.00	0.00	0.00	0.00	0.00
One Year Ago <i>10-02-2017</i>	64.07	35.93	0.00	0.00	0.00	0.00

Intensity:

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

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

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

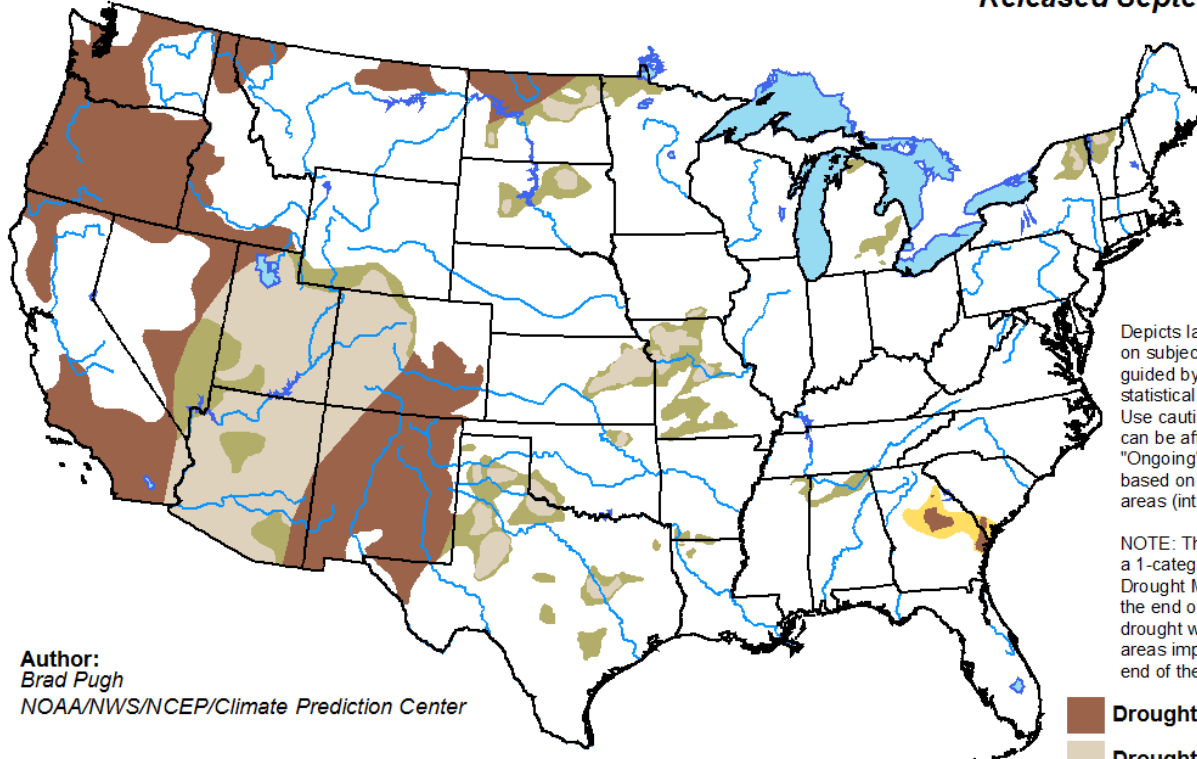
Only a tiny area in the southern mountains has abnormally dry conditions. No drought conditions are being observed across the remainder of the state due to extreme rainfall from Hurricane Florence on September 12-15.

Monthly Drought Outlook

For October

U.S. Monthly Drought Outlook Drought Tendency During the Valid Period





Valid for October 2018
Released September 30, 2018

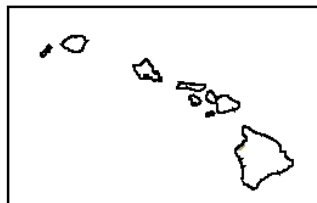
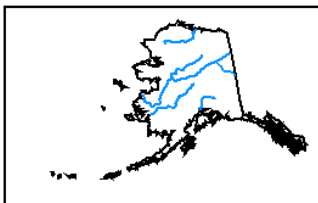


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Depicts large-scale trends based on subjectively derived probabilities guided by short- and long-range statistical and dynamical forecasts. Use caution for applications that can be affected by short lived events. "Ongoing" drought areas are based on the U.S. Drought Monitor areas (intensities of D1 to D4).

NOTE: The tan areas imply at least a 1-category improvement in the Drought Monitor intensity levels by the end of the period, although drought will remain. The green areas imply drought removal by the end of the period (D0 or none).

-  Drought persists
-  Drought remains but improves
-  Drought removal likely
-  Drought development likely



<http://go.usa.gov/3eZGd>