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EASTERN NORTH CAROLINA
MONTHLY CLIMATE REPORT

SEPTEMBER 2026

WEATHER FORECAST OFFICE
NEWPORT/MOREHEAD CITY, NC

National Weather Service
NEWPORT/MOREHEAD CITY, NC

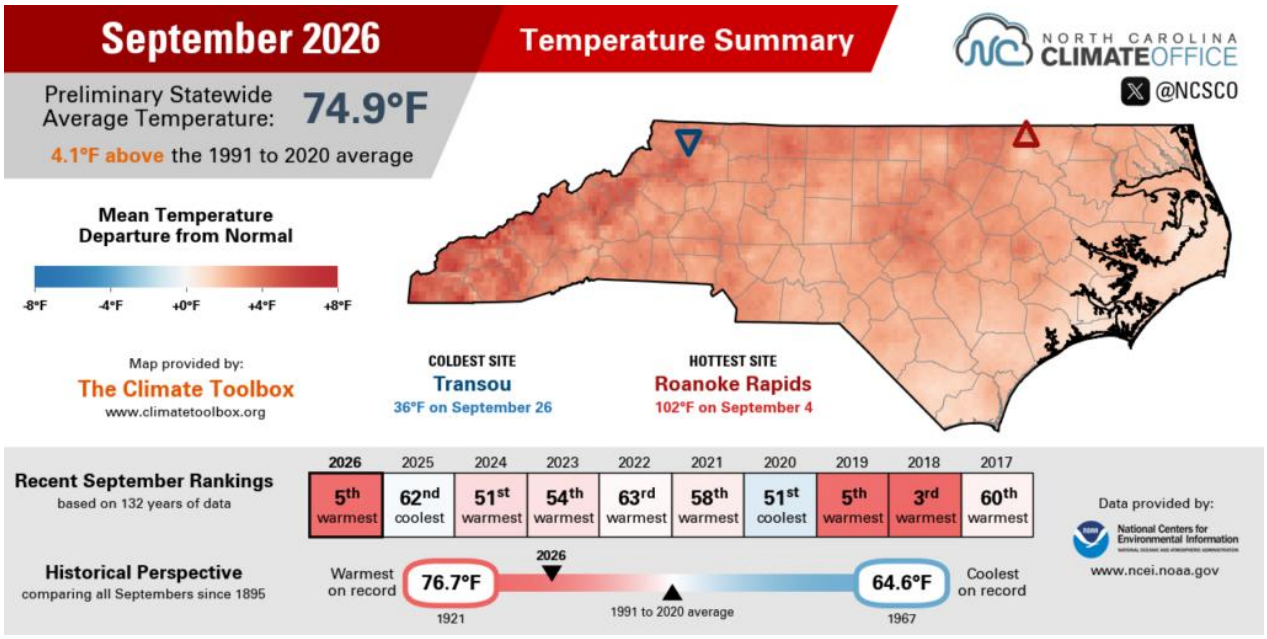
MONTHLY SUMMARY

September ended up being an especially dry month across North Carolina, but especially across eastern portions as a historically strong El Nino kept tropical activity across the Atlantic highly suppressed and denied typically high tropical moisture for the region. This left locales, like a more typical summer month, highly reliant on fronts and local sound and sea breezes for precipitation. Many spots struggled, among them Cape Hatteras which recorded less than a third of an inch and ended up having its 2nd driest September on record. New Bern picked up roughly twice that amount but also had its 2nd driest. Overall precipitation amounts across the region were a mere 30% of normal, and drought conditions expanded – especially so across Greene and Lenoir counties where Extreme (D3) drought developed by the beginning of October.

Temperatures stayed anomalously high in September across the state although eastern NC was comparatively cooler. This was thanks to a stronger front and developing mid-level troughing along the southeastern coast in the last week of the month, which knocked daily temperature averages down to 3-6 degrees below normal and brought lows in the 50s for some locations for the first time since spring. The first week of the month remained very hot and muggy with another round of multiple record warm lows set at Hatteras and New Bern.

TEMPERATURES

Statewide temperatures across North Carolina remained anomalously high in September, especially across the far west, according to the North Carolina State Climate Office. The average temperature statewide for the month was 74.9°F or 4.1°F above the 1991-2020 average. This was the 5th warmest September statewide since records began in 1895, with 132 years of data.



September 2026 Temperature Summary | Source: NC State Climate Office

Eastern North Carolina temperature anomalies were well below the statewide average but still above normal. Temperatures across our 15 counties were 2.5°F above the 1991-2020 average with 5 counties experiencing among their top 10 warmest Septembers on record. Since their respective records began, August 2026 was the 10th warmest for Cape Hatteras and the 11th warmest for New Bern.

MHX Select Site Temperature Statistics: September 2026

Site	Avg. High (°F)	Avg. Low (°F)	Avg. Temp (°F)	Normal (°F)	Departure (°F)
Beaufort (KMRH)	83.5	70.1	76.8	75.4	1.4
Hatteras (KHSE)	83.2	71.8	77.5	76.9	0.6
New Bern (KEWN)	86.4	67.3	76.9	74.2	2.6

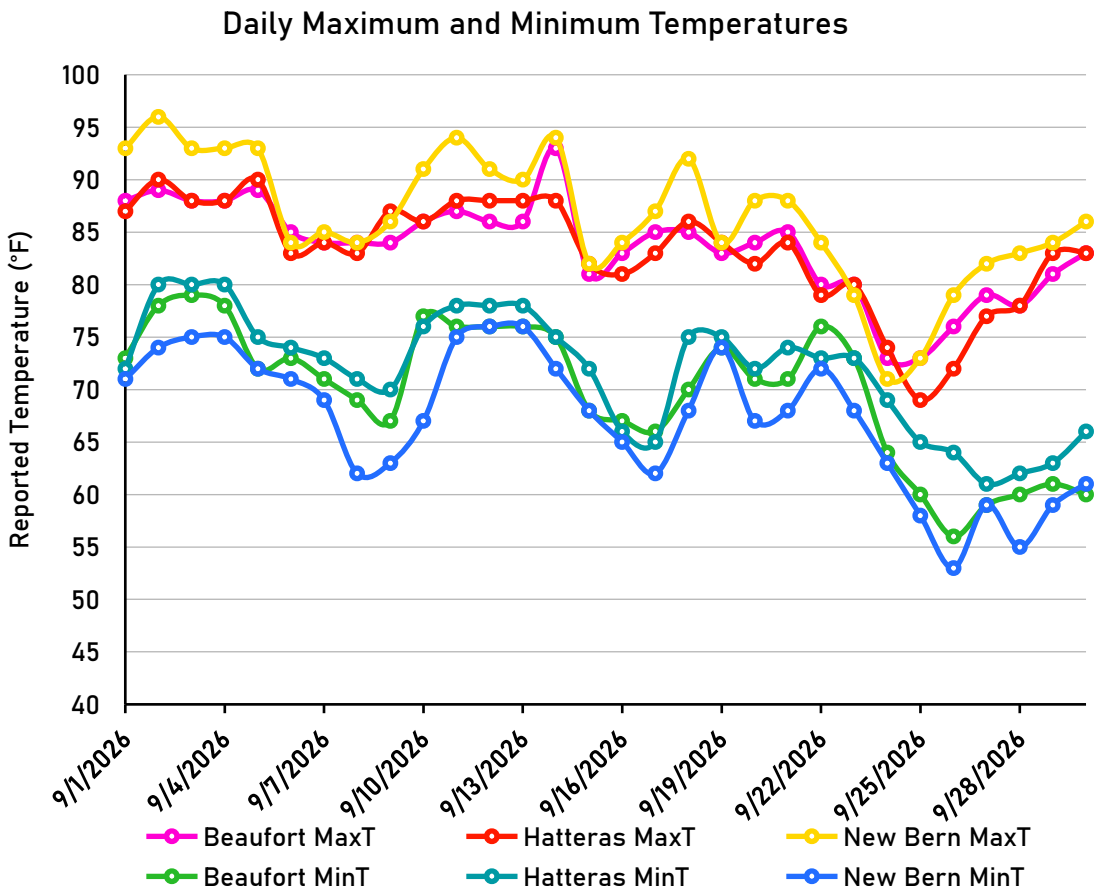
Normals are based on a period from 1990-2020.

County-averaged statistics are presented in the following table. Mean and departure calculations are based on the 1991-2020 climate normals. Data courtesy of the National Centers for Environmental Information (NCEI).

County	Avg. Temperature (°F)	Mean (°F)	Departure (°F)	Rank
Beaufort	76.3	73.4	2.9	8 W
Carteret	77.5	75.0	2.5	11 W
Craven	76.4	73.6	2.8	11 W
Dare	76.5	74.3	2.2	16 W
Duplin	74.6	72.9	1.7	27 W
Greene	75.2	72.7	2.5	12 W
Hyde	76.8	74.3	2.5	11 W
Jones	75.5	73.2	2.3	17 W
Lenoir	75.2	72.9	2.3	18 W
Martin	75.6	72.4	3.2	8 W
Onslow	75.5	73.6	1.9	23 W
Pamlico	77.3	74.3	3.0	9 W
Pitt	75.8	72.7	3.1	10 W
Tyrrell	76.1	73.7	2.4	14 W
Washington	75.8	73.0	2.8	9 W
Area Average	76.0	73.5	2.5	

Means are based on a period from 1991-2020. For rankings, “C” designates coldest and “W” designates warmest.

The upper air pattern in September was characterized by anomalously strong ridging across the central and eastern United States with weak troughing along the coasts. The Carolinas were largely under the influence of ridging through the first three weeks, before weak troughing became dominant along the southeastern coast through the end of the month. This coincided with the first big drop in temperatures since the spring with both Beaufort and New Bern recording lows in the upper 50s.



The following records were set or tied at New Bern and Cape Hatteras in September:

<u>New Bern, NC</u>

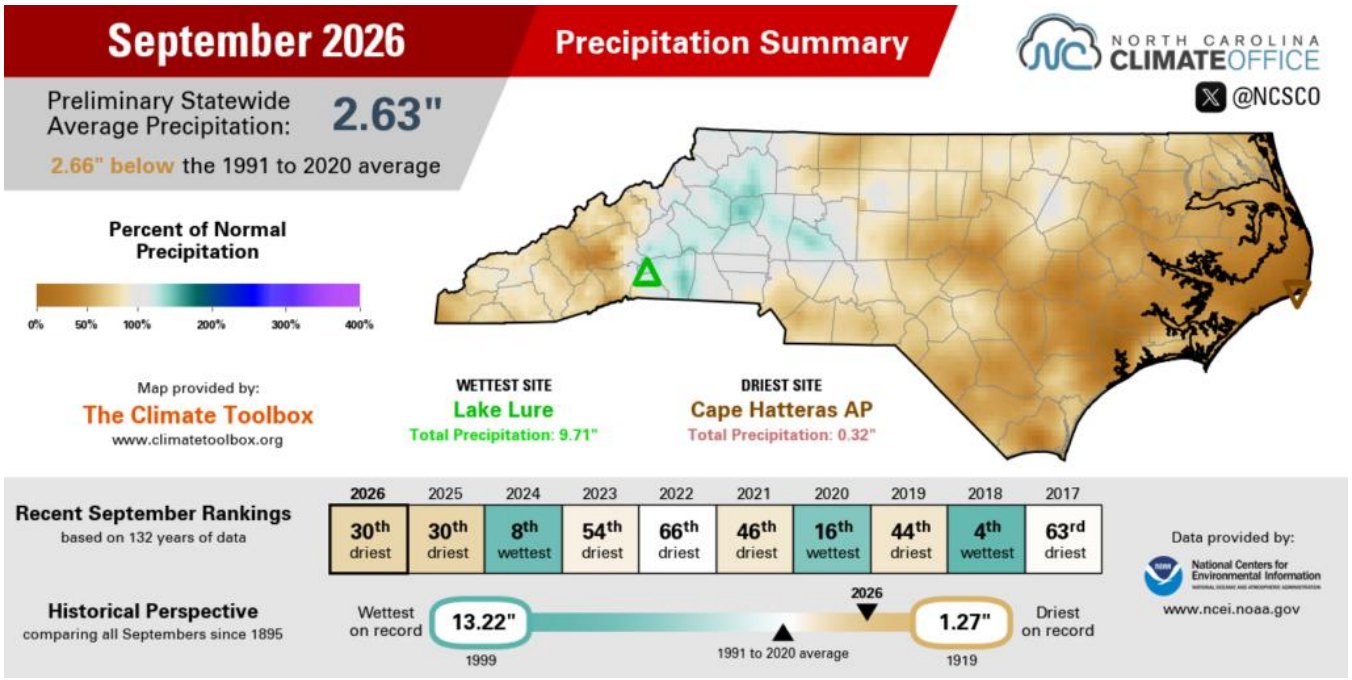
Record High: Sept. 2 – 96°F (OR: 96°F / 2014)
Record Warm Low: Sept. 4 – 75°F (OR: 75°F / 1979)
Record Warm Low: Sept. 12 – 76°F (OR: 74°F / 1933)
Record Warm Low: Sept. 13 – 76°F (OR: 76°F / 1936)
Record High: Sept. 14 – 94°F (OR: 94°F / 1933)
Record Warm Low: Sept. 19 – 74°F (OR: 74°F / 1998)

<u>Cape Hatteras, NC</u>

Record Warm Low: Sept. 2 – 80°F (OR: 79°F / 1898)
Record Warm Low: Sept. 4 – 80°F (OR: 80°F / 1993)

PRECIPITATION

Analysis conducted by the North Carolina State Climate Office indicated average statewide precipitation was 2.66" for September, or 2.66" inches below average. This was the 30th driest September since records began in 1895.



September 2026 Precipitation Summary | Source: NC State Climate Office

Eastern North Carolina was far drier than the statewide average. A major contribution to this was a historically strong El Nino, and consequently the lack of any landfalling tropical systems which play a large role in higher precipitation averages in August and September. The average accumulation across the MHX forecast area was 2.09" (roughly 30% of the 1991-2020 normal). New Bern and Hatteras both had their 2nd driest Septembers on record.

MHX Select Site Precipitation Statistics: September 2026

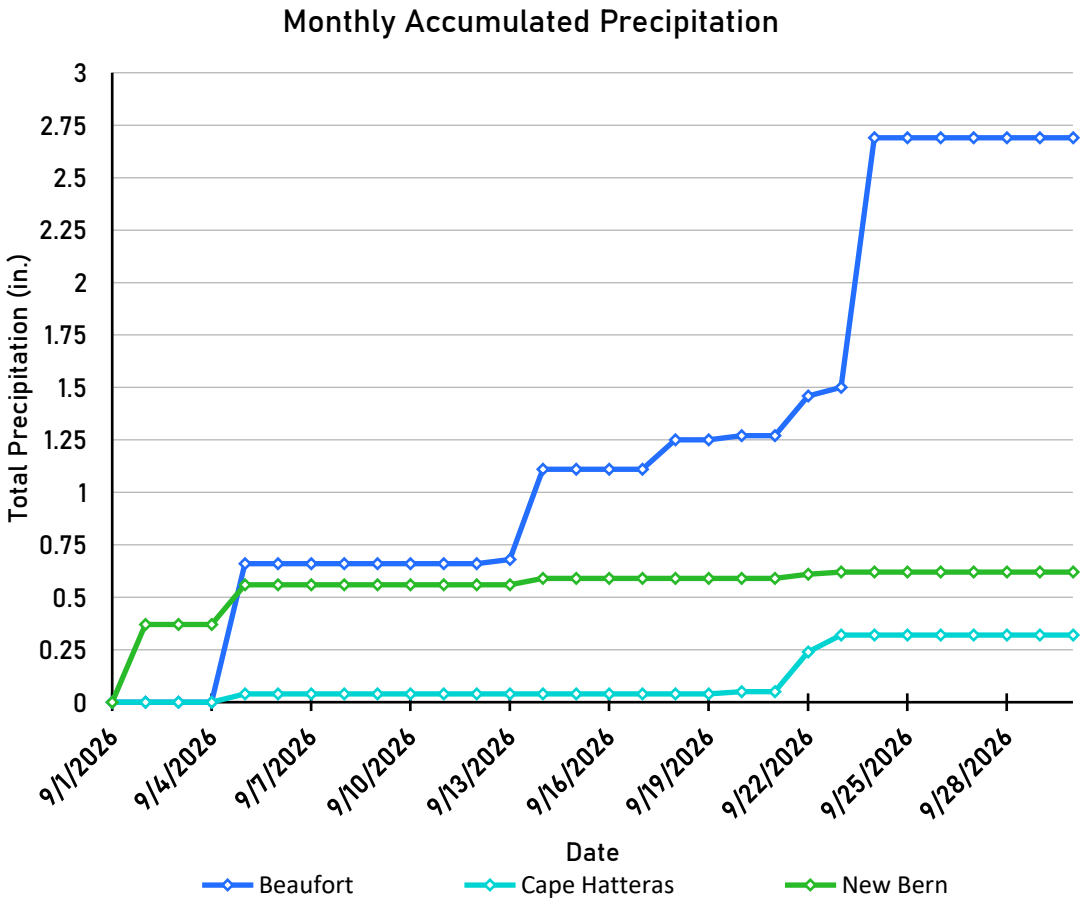
Site	Total Precipitation (in.)	Normal (in.)	Departure (in.)
Beaufort (KMRH)	2.69	8.46	-5.77
Hatteras (KHSE)	0.32	7.63	-7.31
New Bern (KEWN)	0.62	6.33	-5.71

County-averaged statistics are presented in the following table. Mean and departure calculations are based on the 1991-2020 climate normals. Data courtesy of the National Centers for Environmental Information (NCEI).

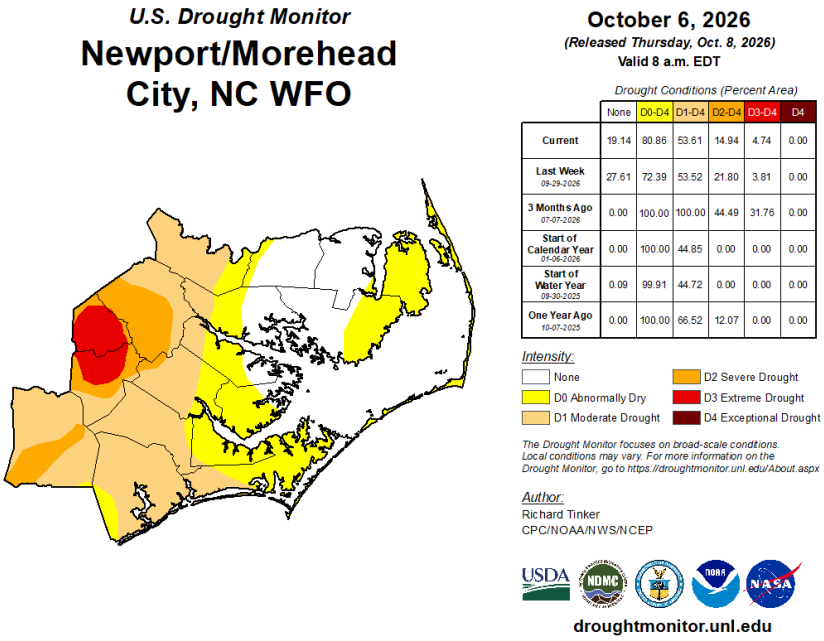
County	Avg. Accum. (in.)	Mean (in.)	Departure (in.)	Rank
Beaufort	1.74	6.36	-4.62	14 D
Carteret	2.50	7.74	-5.24	19 D
Craven	2.29	7.05	-4.76	17 D
Dare	1.42	5.81	-4.39	10 D
Duplin	2.62	7.00	-4.38	27 D
Greene	2.45	6.43	-3.98	28 D
Hyde	1.27	6.08	-4.81	10 D
Jones	2.31	7.04	-4.73	23 D
Lenoir	2.42	6.67	-4.25	27 D
Martin	1.73	6.26	-4.53	18 D
Onslow	2.91	7.40	-4.49	27 D
Pamlico	1.96	6.92	-4.96	12 D
Pitt	2.21	6.61	-4.40	24 D
Tyrrell	1.78	5.69	-3.91	15 D
Washington	1.81	5.86	-4.05	18 D
Area Average	2.09	6.59	-4.50	

Means are based on a period from 1991-2020. For rankings, "W" designates wettest and "D" designates driest.

The lack of tropical cyclones meant that, like July and August, eastern NC was highly reliant on passing fronts and sea/sound breezes for their rainfall. This was disadvantageous for Hatteras, which ended up recording less than a third of an inch for the entire month. New Bern, which last month picked up over 9 inches of rain, ended the month with less than two-thirds of an inch. Beaufort and areas along the Crystal Coast faired relatively better, registering around 2-4 inches.



With such little rainfall, drought expanded noticeably across eastern NC in September with a pocket of Extreme (D3) drought developing across portions of Lenoir and Greene counties. Coverage of areas in at least Moderate (D1) drought jumped to 54%, a jump of 11 points from August.



ADDITIONAL CLIMATE RESOURCES

For a look at climate on the national scale, as well as statistics from a CONUS-wide to county and city level, please visit the **National Centers for Environmental Information** at https://www.ncei.noaa.gov/. Additional maps and data, as well as teaching materials and a climate resiliency toolkit, can be found at **NOAA's** https://www.climate.gov.

For additional drought information, including a wealth of maps of data focused on topics such as agriculture, fire, and water supply, please visit **NOAA's National Integrated Drought Information System (NIDIS)** at https://www.drought.gov.

For climate statistics and real time observations across the state of North Carolina, please visit the **North Carolina State Climate Office** at https://climate.ncsu.edu/.

For climate forecasts and outlooks, visit the **Climate Prediction Center** at https://www.cpc.ncep.noaa.gov/.

For community-based precipitation observations from across the United States, visit **CoCoRaHS** at https://www.cocorahs.org/.

For climate statistics relevant to various regions of North Carolina, please visit the following climate pages:

Eastern (WFO Morehead City): https://www.weather.gov/wrh/climate?wfo=mhx

Southeastern (WFO Wilmington): https://www.weather.gov/wrh/climate?wfo=ilm

Northeastern (WFO Wakefield, VA): https://www.weather.gov/wrh/climate?wfo=akq

Central (WFO Raleigh): https://www.weather.gov/wrh/climate?wfo=rah

Northwestern (WFO Blacksburg, VA): https://www.weather.gov/wrh/climate?wfo=rnk

Southwestern (WFO Greer, SC): https://www.weather.gov/wrh/climate?wfo=gsp

Cherokee and Clay Co. (WFO Knoxville, TN): https://www.weather.gov/wrh/climate?wfo=mrx

APPENDIX A: ADDITIONAL TEMPERATURE DATA

Cooperative Observation Site Temperature Statistics: September 2026

Site	Avg. High (°F)	Avg. Low (°F)	Avg. Temp (°F)	Normal (°F)	Departure (°F)
Greenville	87.2	66.5	76.9	73.6	3.3
Kinston	88.1	65.0	76.6	74.0	2.6
Williamston	85.8	64.5	75.2	73.0	2.2
Plymouth	85.9	66.1	76.0	73.3	2.7
Bayboro	87.2	65.6	76.4	73.1	3.3
Manteo	81.6	69.3	75.5	73.9	1.5

Normals are based on a period from 1991-2020. Red sites have missing data.

Maximum and Minimum Monthly Temperatures: September 2026

Site	Max High (°F)	Date Observed	Min Low (°F)	Date Observed
Beaufort (KMRH)	93	Sep 14	56	Sep 26
Hatteras (KHSE)	90	Sep 2, 5	61	Sep 27
New Bern (KEWN)	96	Sep 2	53	Sep 26
Greenville	98	Sep 2	55	Sep 16, 26, 28
Kinston	98	Sep 3	51	Sep 26
Williamston	96	Sep 3-5	54	Sep 9, 26
Plymouth	95	Sep 2-3	55	Sep 26, 28
Bayboro	97	Sep 3	54	Sep 28-29
Manteo	94	Sep 5	60	Sep 27

APPENDIX B: ADDITIONAL PRECIPITATION DATA

Cooperative Observation Site Precipitation Statistics: September 2026

Site	Total Precipitation (in.)	Normal (in.)	Departure (in.)
Greenville	2.79	7.33	-4.54
Kinston	2.57	6.64	-4.07
Williamston	1.32	6.92	-5.60
Plymouth	2.40	6.13	-3.73
Bayboro	1.21	7.14	-5.93

Sites in red have missing data in their record.

CoCoRaHS Monthly Accumulated Precipitation: September 2026

Site	County	Amount (in.)
Pantego 0.4 WSW	Beaufort	2.31
Swansboro 2.7 NE	Carteret	5.30
Cedar Point 0.9 WSW	Carteret	4.16
Newport 1.0 N	Carteret	3.98
Beaufort 3.4 NNW	Carteret	3.85
Beaufort 0.5 W	Carteret	3.67
Beaufort 3.8 N	Carteret	3.65
Newport 0.2 SW	Carteret	3.42
Beaufort 5.3 N	Carteret	3.13
Newport 2.5 W	Carteret	3.04
Emerald Isle 2.3 WSW	Carteret	2.99

CoCoRaHS Monthly Accumulated Precipitation: September 2026

Site	County	Amount (in.)
Swansboro 3.7 NNE	Carteret	2.61
Morehead City 2.9 WNW	Carteret	2.60
Beaufort 12.1 N	Carteret	2.41
Morehead City 0.6 NW	Carteret	2.10
Morehead City 6.0 WNW	Carteret	1.93
Newport 1.7 SSE	Carteret	1.78
Havelock 1.9 SSE	Craven	5.14
New Bern 1.3 NNE	Craven	2.69
New Bern 3.8 S	Craven	1.34
Trent Woods 1.0 NNE	Craven	1.32
Trent Woods 1.2 ENE	Craven	1.30
Trent Woods 1.3 SSE	Craven	1.26
New Bern 2.9 SSE	Craven	1.00
Trent Woods 1.2 E	Craven	0.99
Bridgeton 0.3 SSE	Craven	0.88
Kill Devil Hills 2.6 NNW	Dare	2.92
Duck 0.3 ENE	Dare	2.39
Duck 0.7 SSE	Dare	2.32
Southern Shores 1.9 NNW	Dare	1.85
Wanchese 1.0 ENE	Dare	1.24
Southern Shores 0.5 NNE	Dare	1.23

CoCoRaHS Monthly Accumulated Precipitation: September 2026

Site	County	Amount (in.)
Manteo 2.8 NW	Dare	1.19
Buxton 0.3 ENE	Dare	0.69
Rodanthe 1.0 SSE	Dare	0.53
Faison 3.3 SSE	Duplin	2.75
Rose Hill 0.1 NNW	Duplin	2.35
Mount Olive 6.0 SE	Duplin	1.31
Kenansville 1.1 SW	Duplin	0.85
Ayden 6.5 WNW	Greene	2.69
Engelhard 0.8 NW	Hyde	2.60
SQ Tower	Hyde	0.95
Ocracoke 0.6 SW	Hyde	0.32
New Bern 7.7 SW	Jones	1.69
Kinston 5.1 WNW	Lenoir	2.53
Kinston 4.4 WNW	Lenoir	1.97
Kinston 4.6 ESE	Lenoir	1.79
Kinston 1.2 NW	Lenoir	1.69
Pink Hill 2.5 NE	Lenoir	1.13
Kinston 7.0 SW	Lenoir	0.64
Jamesville 6.1 SW	Martin	2.54
Williamston 8.9 SSE	Martin	1.36
Swansboro 2.8 WSW	Onslow	2.69

CoCoRaHS Monthly Accumulated Precipitation: September 2026

Site	County	Amount (in.)
Hubert 4.9 SE	Onslow	2.27
Sneads Ferry 3.3 SW	Onslow	1.92
Jacksonville 5.4 WSW	Onslow	1.42
Jacksonville 1.0 NW	Onslow	0.68
Holly Ridge 3.7 E	Onslow	0.43
Jacksonville 4.5 NW	Onslow	0.32
Jacksonville 2.4 NNE	Onslow	0.18
Oriental 4.3 NNW	Pamlico	2.01
Merritt 1.5 WSW	Pamlico	1.95
Oriental 1.8 WNW	Pamlico	1.64
Oriental 2.1 WSW	Pamlico	1.04
Greenville 7.1 SSE	Pitt	2.98
Greenville 2.8 ESE	Pitt	2.87
Winterville 1.0 ENE	Pitt	2.44
Greenville 5.0 SE	Pitt	2.40
Winterville 3.0 NNW	Pitt	2.34
Winterville 2.5 NNW	Pitt	2.21
Greenville 5.7 NW	Pitt	1.89
Greenville 2.8 S	Pitt	1.89
Fountain 0.1 NE	Pitt	1.43
Columbia 3.8 NW	Tyrrell	2.56

CoCoRaHS Monthly Accumulated Precipitation: September 2026

Site	County	Amount (in.)

CoCoRaHS inclusion in this table is based on a complete 30-day liquid precipitation record. Thank you to all observers!