



December 2021 Climate Review

Presented By:

**National Weather Service
Newport/Morehead City, NC**

December 2021 Highlights



The sun sets on the Beaufort, NC waterfront on December 4th, 2021.

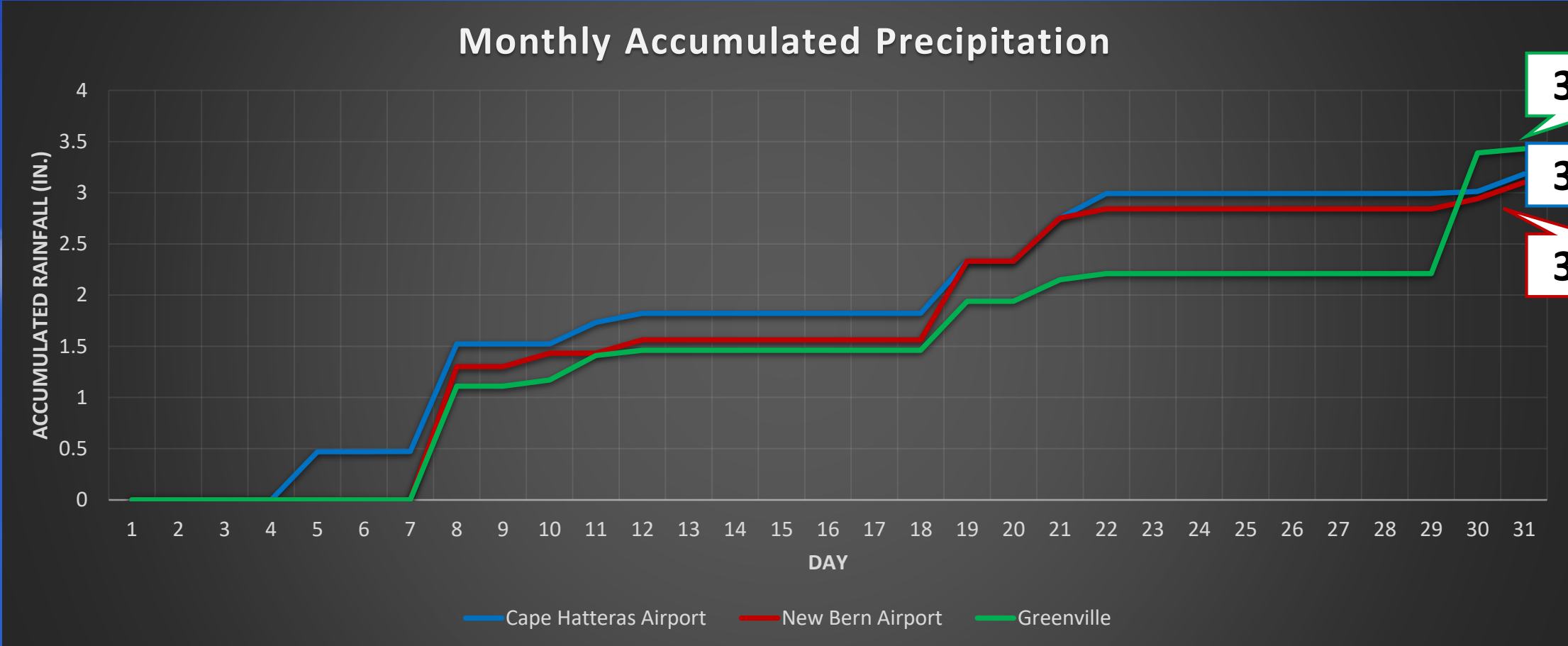
December continued the trend of below average precipitation, although most sites were within an inch of their historical averages. Despite this, drought conditions did improve slightly to end the year.

This month was one of the warmest Decembers on record – both New Bern and Hatteras’s average temperatures placed among the 5 warmest. Across eastern NC, temperatures were 6-8 degrees above average.

Monthly Rankings

	Average Temp	Total Rainfall
Hatteras	2 nd Warmest	37 th Driest
New Bern	4 th Warmest	36 th Driest

December 2021 Rainfall

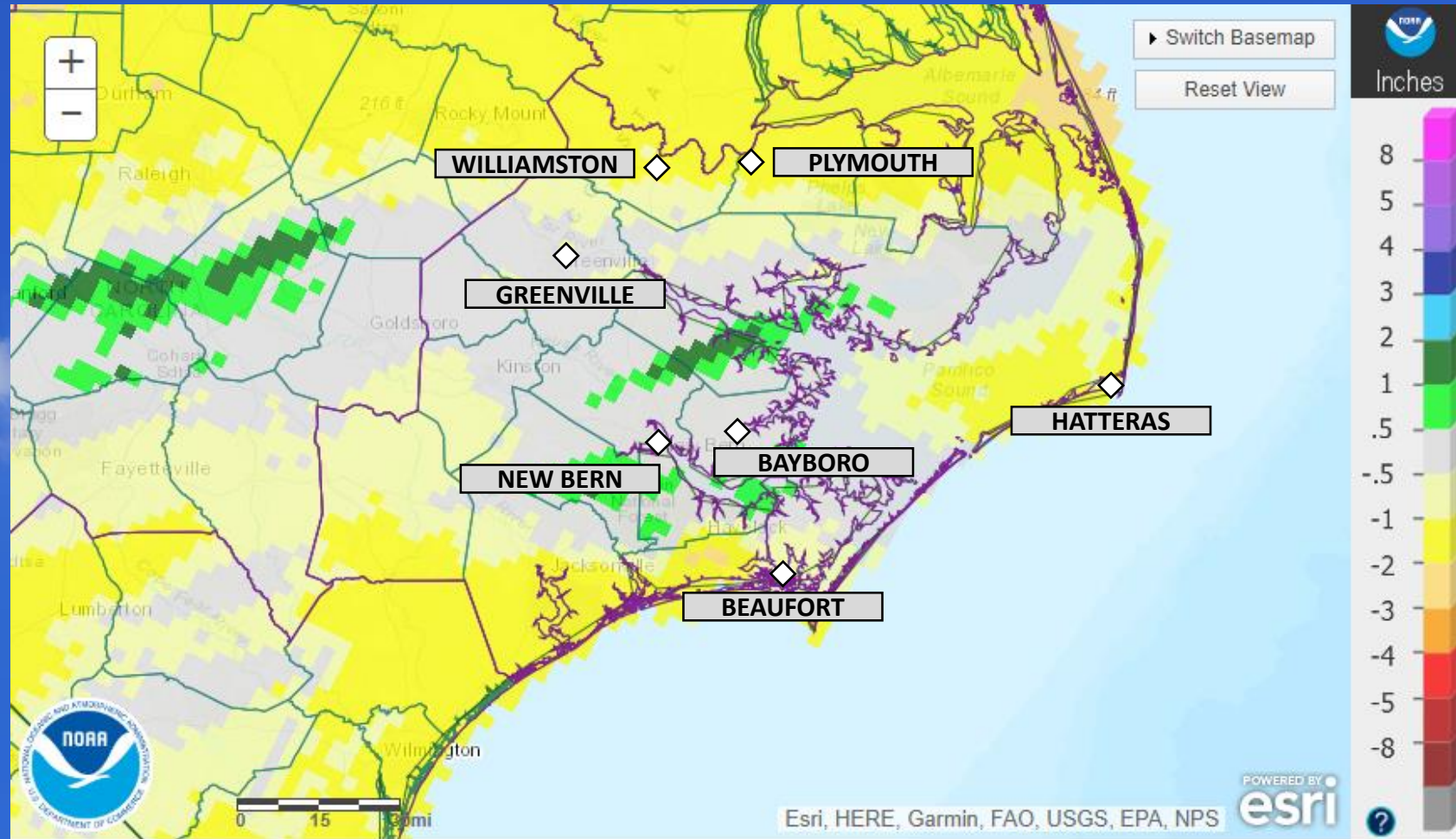


White diamonds denote missing 24-hour precipitation report. Asterisk denotes total with missing data.

December 2021 Rainfall vs. Climate Normal

	Observed (In.)	Normal	Difference
Beaufort	2.80	3.79	▼ 0.99
Hatteras	3.18	4.73	▼ 1.55
New Bern	3.10	3.63	▼ 0.53
Greenville	3.43	3.55	▼ 0.12
Williamston	2.82	3.57	▼ 0.75
Plymouth	2.01	3.64	▼ 1.63
Bayboro	3.11	4.10	▼ 0.99

Red sites have missing data



December 2021 Precipitation: Departure from Normal
 Analysis from the Advanced Hydrologic Prediction Service

Wettest and Driest Decembers

	Cape Hatteras	Year Observed	New Bern	Year Observed
Wettest	10.92"	2018	9.78"	1973
2 nd Wettest	10.19"	1936	8.14"	1936
3 rd Wettest	10.09"	1928	7.69"	1935
4 th Wettest	8.98"	1938	7.50"	2003
5 th Wettest	8.91"	1948	7.17"	1945

	Cape Hatteras	Year Observed	New Bern	Year Observed
5 th Driest	0.98"	1919	0.74"	1988
4 th Driest	0.75"	1988	0.72"	2011
3 rd Driest	0.71"	1955	0.60"	1985
2 nd Driest	0.64"	1985	0.50"	1933
Driest	0.37"	1933	0.30"	1965

Average Temperatures: December 2021

	Average High	Normal High	Difference	Average Low	Normal Low	Difference
Beaufort	65.6	58.9	▲ 6.7	47.6	41.0	▲ 6.6
Hatteras	65.0	59.3	▲ 5.7	50.7	44.9	▲ 5.8
New Bern	67.7	58.5	▲ 9.2	43.5	36.9	▲ 6.6
Greenville	65.1	56.4	▲ 8.7	42.5	35.4	▲ 7.1
Kinston	64.4	58.9	▲ 5.5	41.7	38.0	▲ 3.7
Williamston	63.2	55.3	▲ 7.9	40.3	36.3	▲ 4.0
Plymouth	64.0	56.7	▲ 7.3	41.8	36.7	▲ 5.1
Bayboro	66.2	58.4	▲ 7.8	42.2	37.1	▲ 5.1

Red sites have missing data

Temperature Extremes: December 2021

	Max High	Date Obs.	Min Low	Date Obs.
Beaufort	74	26 th , 31 st	32	24 th
Hatteras	73	4 th , 30 th	31	24 th
New Bern	78	18 th , 29 th	29	24 th
Greenville	79	29 th	26	1 st
Kinston	78	30 th	28	13 th
Williamston	75	30 th	26	13 th
Plymouth	76	29 th	26	13 th
Bayboro	77	12 th , 19 th , 30 th	27	1 st

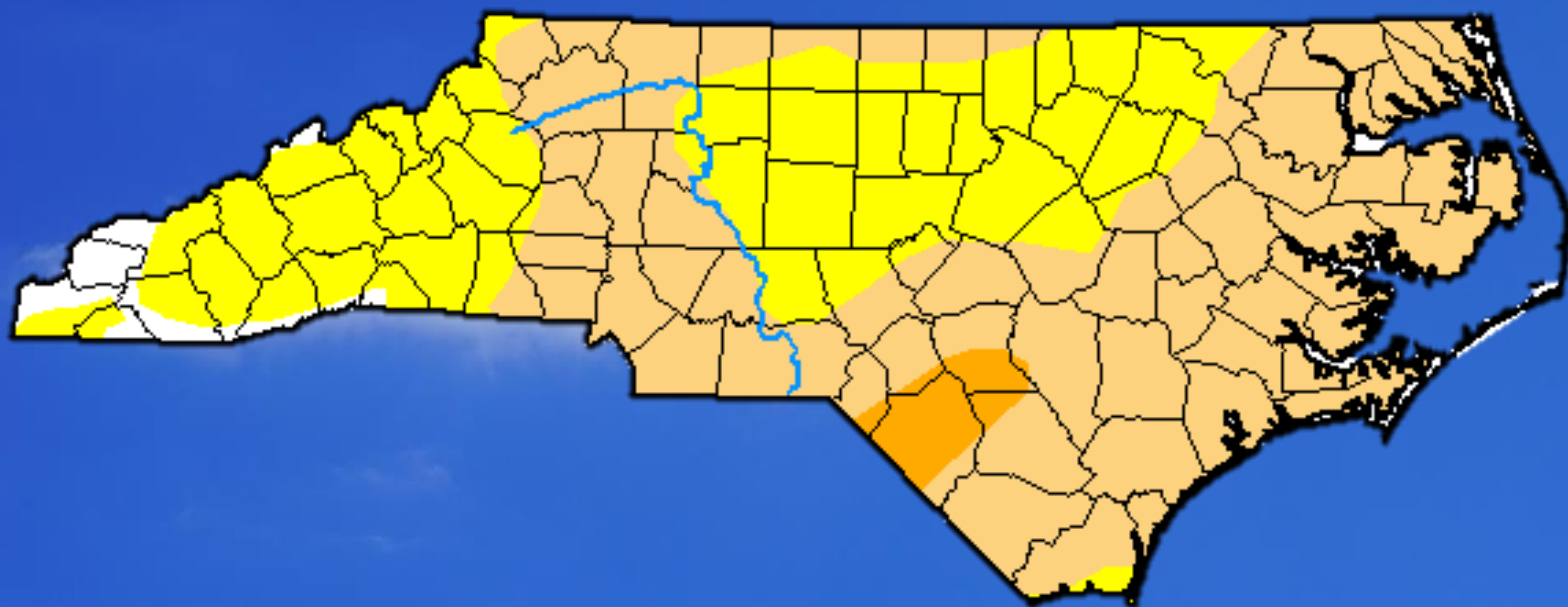
Red sites have missing data

Warmest and Coolest Decembers By Avg. Temp

	Cape Hatteras	Year Observed	New Bern	Year Observed
Warmest	62.8°	2015	59.8°	2015
2 nd Warmest	57.9°	2021	56.3°	1971
3 rd Warmest	56.6°	1956	55.9°	1956
4 th Warmest	56.2°	2001	55.6°	2021
5 th Warmest	56.2°	1994	54.7°	1984

	Cape Hatteras	Year Observed	New Bern	Year Observed
5 th Coolest	41.8°	1903	39.9°	2000
4 th Coolest	41.3°	1989	39.4°	1935
3 rd Coolest	41.1°	1963	37.1°	1963
2 nd Coolest	40.5°	2010	36.9°	1989
Coolest	40.3°	1917	36.5°	2010

Drought Monitor: North Carolina



January 4, 2022

(Released Thursday, Jan. 6, 2022)

Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	2.84	97.16	60.20	2.76	0.00	0.00
Last Week <i>12-28-2021</i>	0.70	99.30	86.81	41.64	0.00	0.00
3 Months Ago <i>10-05-2021</i>	51.56	48.44	0.00	0.00	0.00	0.00
Start of Calendar Year <i>01-04-2022</i>	2.84	97.16	60.20	2.76	0.00	0.00
Start of Water Year <i>09-28-2021</i>	91.27	8.73	0.00	0.00	0.00	0.00
One Year Ago <i>01-05-2021</i>	100.00	0.00	0.00	0.00	0.00	0.00

Intensity:

- None
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to <https://droughtmonitor.unl.edu/About.aspx>

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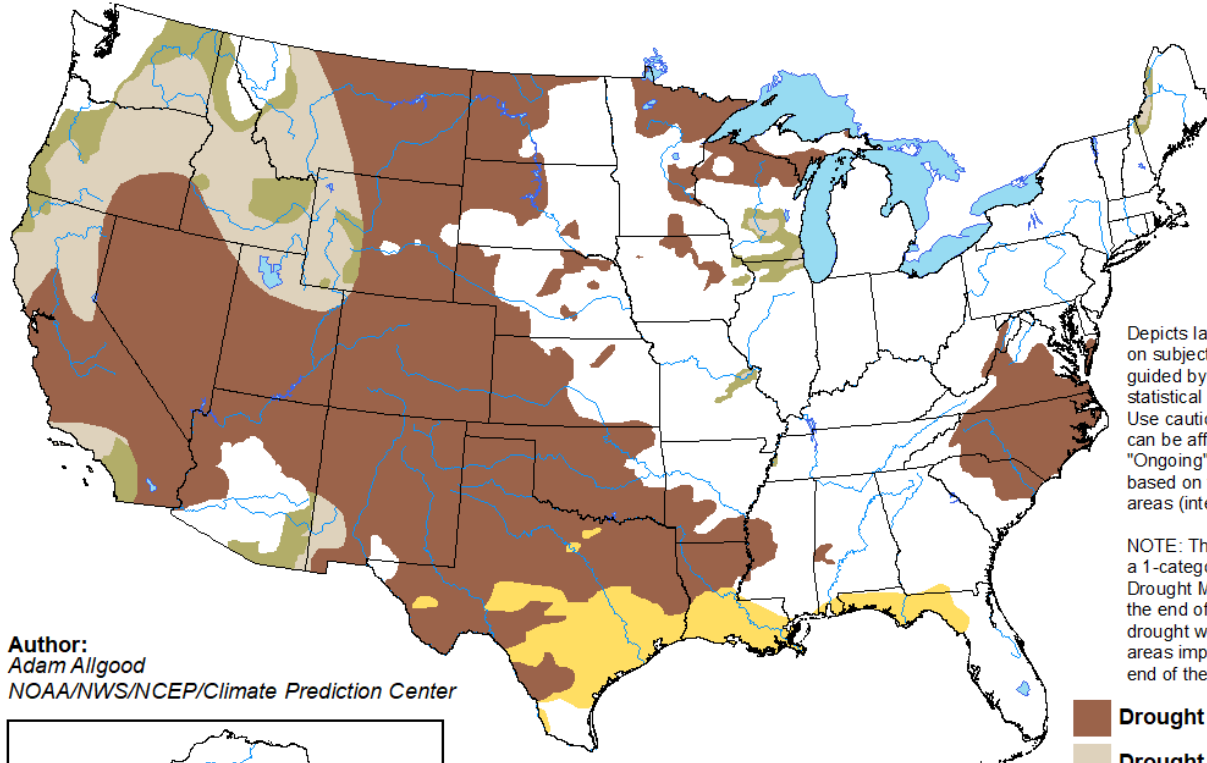


droughtmonitor.unl.edu

Monthly Drought Outlook

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

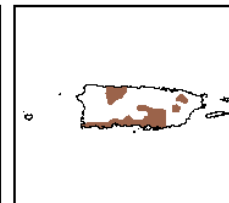
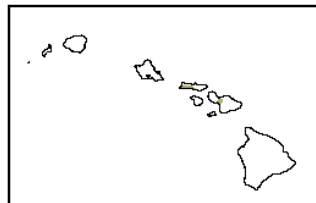
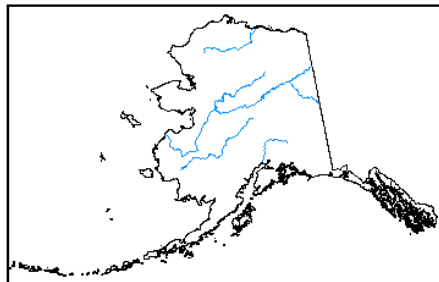
Valid for January 2022
Released December 31, 2021







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).

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



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