

Pender County, NC

Risk-assessment baseline packet

Unit **County area 37141** Release **2026-10** As of **2026-09-28** Storm Events data through **2026-06-30**

Hazard Plain is an independent product built from public federal data. It is not a FEMA document and is not reviewed or endorsed by FEMA or any state agency.

A starting point for the plan's risk assessment (FEMA Local Mitigation Plan Review Tool, Element B). It does not replace local data or FEMA review. Section headings say which FEMA review item each table supports; whether an item is satisfied is decided by the plan and its reviewers.

OPENFEMA DISCLAIMER

This product uses the Federal Emergency Management Agency's OpenFEMA API, but is not endorsed by FEMA. The Federal Government or FEMA cannot vouch for the data or analyses derived from these data after the data have been retrieved from the Agency's website(s).

Plan clock

Status	Approved, expires 2031-04-20	Plan	Southeastern NC Regional (FEMA plan 111751)
Approved	2026-04-21	Expires	2031-04-20
As of	2026-09-28	Days	1,665 days to expiry

What changed since your last plan (approved 2026-04-21)

New federal declarations	none (0 declaration rows; 0 counted incidents)	Storm Events records since approval	0 (data through 2026-06-30)
Repetitive loss now	FMA RL 67, SRL 113 (44 CFR 77.2); any definition: 669	Repeat-flood change	First release: no prior release to compare.

SOURCES: FEMA, OpenFEMA HazardMitigationPlanStatuses v1, version 2026-09-26T121003Z, pulled 2026-09-28, <https://www.fema.gov/api/open/v1/HazardMitigationPlanStatuses> (API); FEMA, OpenFEMA DisasterDeclarationsSummaries v2, version 2026-09-27T010817Z, pulled 2026-09-28, <https://www.fema.gov/api/open/v2/DisasterDeclarationsSummaries> (API); NOAA NCEI, NOAA NCEI Storm Events Database, details files (csvfiles v1.0), version c20260918, pulled 2026-09-28, <https://www.ncei.noaa.gov/pub/data/swdi/stormevents/csvfiles/>; FEMA, OpenFEMA NfipMultipleLossProperties v1, version 2026-08-04T164045Z, pulled 2026-09-28, <https://www.fema.gov/api/open/v1/NfipMultipleLossProperties> (API)

Plan status for every jurisdiction listed in this county

Jurisdiction	Type	Status	Plan	Approved	Expires	Days to expiry <i>negative = days since expiry</i>	Update underway	Notes
Pender County	County	Approved, expires 2031-04-20	Southeastern NC Regional (FEMA plan 111751)	2026-04-21	2031-04-20	1,665		member approved 2026-05-01
Atkinson town	Town	Approved, expires 2031-04-20	Southeastern NC Regional (FEMA plan 111751)	2026-04-21	2031-04-20	1,665		member approved 2026-09-11
Burgaw town	Town	Approved, expires 2031-04-20	Southeastern NC Regional (FEMA plan 111751)	2026-04-21	2031-04-20	1,665		member approved 2026-06-08
St. Helena village	Village	Approved, expires 2031-04-20	Southeastern NC Regional (FEMA plan 111751)	2026-04-21	2031-04-20	1,665		member approved 2026-05-01
Surf City town	Town	Approved, expires 2031-04-20	Southeastern NC Regional (FEMA plan 111751)	2026-04-21	2031-04-20	1,665		member approved 2026-05-01
Topsail Beach town	Town	Approved, expires 2031-04-20	Southeastern NC Regional (FEMA plan 111751)	2026-04-21	2031-04-20	1,665		member approved 2026-07-17

Jurisdiction	Type	Status	Plan	Approved	Expires	Days to expiry	Update underway	Notes
						<i>negative = days since expiry</i>		
Watha town	Town	Plan 111751 approved 2026-04-21, pending adoption here; not yet eligible	Southeastern NC Regional (FEMA plan 111751), pending adoption here	2026-04-21 by FEMA; not yet adopted here	2031-04-20 once adopted		FEMA tracker shows a plan approvable pending adoption	Not yet eligible: adopt the approved plan.

Plan 111751 lists 34 other participants not on this page, 1 of them not covered by it yet (named in the XLSX file).

SOURCE: FEMA, OpenFEMA HazardMitigationPlanStatuses v1, version 2026-09-26T121003Z, pulled 2026-09-28, <https://www.fema.gov/api/open/v1/HazardMitigationPlanStatuses> (API)

State plan status and tribal plans in this state: see the state page.

CONTENTS

1. Plan clock, page 1	7. Supports B1-e: probability, page 13
2. What changed since your last plan (approved 2026-04-21), page 1	8. Supports B1-f: variation across the planning area, page 17
3. Supports B1-a: hazards, page 3	9. Supports B2-a and B2-b: assets and impacts, page 18
4. Supports B1-b: location, page 5	10. Supports B2-a: context, page 20
5. Supports B1-c: extent, page 5	11. Supports B2-c: repetitive loss, page 20
6. Supports B1-d: previous occurrences, page 9	12. Sources and OpenFEMA disclaimer, page 22

Supports B1-a: hazards

Hazards NRI does not cover: check locally

- dam failure (incl. upstream dams)
 - levee failure
 - flash flood as its own subtype
 - ice jams
- debris flows
 - erosion (riverine and coastal)
 - land subsidence and sinkholes
 - expansive soils

The 18 National Risk Index hazards, ranked by expected annual loss (EAL)

Rank by EAL	Hazard	NRI risk rating	EAL rating	EAL buildings modeled dollars per year	EAL agriculture modeled dollars per year	EAL population equivalence statistical value of life and injury, \$13.7M per life, not property damage	EAL total (see note) modeled dollars per year	Storm Events records since 1996 count	Evidence for an omission NRI Not Applicable, no declaration and no Storm Events record since 1996	Storm Events coverage note
1	Hurricane	Relatively High	Relatively High	\$36,370,349	\$4,018,949	\$2,678,141	\$43,067,439	9		
2	Inland Flooding	Relatively Low	Relatively Low	\$11,969,527	\$493,064	\$940,667	\$13,403,259	92		
3	Tornado	Relatively Moderate	Relatively Moderate	\$956,855	\$13,247	\$1,722,290	\$2,692,392	35		
4	Coastal Flooding	Relatively Moderate	Relatively High	\$2,481,842		\$184,845	\$2,666,686	3		
5	Lightning	Relatively High	Relatively High	\$21,587		\$978,571	\$1,000,159	14		
6	Wildfire	Relatively Low	Relatively Low	\$801,715	\$1,928	\$92,916	\$896,559	5		
7	Cold Wave	Relatively Low	Relatively Low	\$4,110	\$94,868	\$588,830	\$687,808	2		Includes 2 Frost/Freeze records, event types the NRI definition of this hazard leaves out.
8	Heat Wave	Relatively Low	Relatively Low	\$65	\$571	\$684,477	\$685,112	4		
9	Strong Wind	Relatively Moderate	Relatively Moderate	\$138,027	\$144,805	\$342,491	\$625,323	115		Includes 2 High Wind records and 1 Strong Wind record, event types the NRI definition of this hazard leaves out.

Rank by EAL	Hazard	NRI risk rating	EAL rating	EAL buildings <i>modeled dollars per year</i>	EAL agriculture <i>modeled dollars per year</i>	EAL population equivalence <i>statistical value of life and injury, \$13.7M per life, not property damage</i>	EAL total (see note) <i>modeled dollars per year</i>	Storm Events records since 1996 <i>count</i>	Evidence for an omission <i>NRI Not Applicable, no declaration and no Storm Events record since 1996</i>	Storm Events coverage note
10	Earthquake	Very Low	Relatively Low	\$301,723		\$83,170	\$384,893			Not in Storm Events. Storm Events coverage of this hazard is limited; absence is not evidence of low risk.
11	Winter Weather	Relatively High	Relatively High	\$40,020	\$310	\$319,012	\$359,342	9		
12	Ice Storm	Relatively Moderate	Relatively Moderate	\$255,290		\$28,361	\$283,651	1		
13	Hail	Very Low	Very Low	\$53,205	\$65,137	\$1,999	\$120,341	105		
14	Drought	Relatively Low	Relatively Low		\$56,325		\$56,325	2		
15	Landslide	Very Low	Very Low	\$240		\$3	\$244	0		Declared 1 time; no Storm Events record of this type. Storm Events coverage of this hazard is limited; absence is not evidence of low risk.
	Avalanche	Not Applicable	Not Applicable					0	NRI rates avalanche Not Applicable for this county, and no federal declaration for this county names it.	No recorded events in Storm Events since 1996 (data through 2026-06-30).
	Tsunami	Insufficient Data	Insufficient Data					0		No recorded events in Storm Events since 1996 (data through 2026-06-30). Storm Events coverage of this hazard is limited; absence is not evidence of low risk.
	Volcanic Activity	Not Applicable	Not Applicable					0	NRI rates volcanic activity Not Applicable for this county, and no federal declaration for this county names it.	No recorded events in Storm Events since 1996 (data through 2026-06-30). Storm Events coverage of this hazard is limited; absence is not evidence of low risk.

Total = buildings + agriculture + population equivalence; FEMA values each expected death (or 10 injuries) at \$13.7 million (2024 dollars).

SOURCES

FEMA, FEMA National Risk Index 1.20.0 (December 2025), county and census tract tables, version 1.20.0, pulled 2026-09-28, https://www.fema.gov/about/reports-and-data/openfema/nri/v120/NRI_Table_Counties.zip (download, 25 MB),

https://www.fema.gov/about/reports-and-data/openfema/nri/v120/NRI_Table_CensusTracts.zip (download, 635 MB)

NOAA NCEI, NOAA NCEI Storm Events Database, details files (csvfiles v1.0), version c20260918, pulled 2026-09-28, <https://www.ncei.noaa.gov/pub/data/swdi/stormevents/csvfiles/>

Check your state hazard mitigation plan's hazard list for this county; explain any hazard you drop.

Supports B1-b: location

Where each hazard occurs

Hazard	Location	Census tracts rated <i>rated of all tracts</i>
Avalanche	Census tract rating counts from the National Risk Index tract table (see B1-f). Tract maps and place names are not in this packet.	0 of 15
Coastal Flooding	The FEMA Flood Insurance Rate Map (FIRM) is the required location source for flooding. See the FEMA Flood Map Service Center (https://msc.fema.gov) for this county.	12 of 15
Cold Wave	Affects the whole planning area; national data do not distinguish locations within the county. Confirm locally.	15 of 15
Drought	Affects the whole planning area; national data do not distinguish locations within the county. Confirm locally.	14 of 15
Earthquake	Census tract rating counts from the National Risk Index tract table (see B1-f). Tract maps and place names are not in this packet.	15 of 15
Hail	Affects the whole planning area; national data do not distinguish locations within the county. Confirm locally.	15 of 15
Heat Wave	Affects the whole planning area; national data do not distinguish locations within the county. Confirm locally.	15 of 15
Hurricane	Census tract rating counts from the National Risk Index tract table (see B1-f). Tract maps and place names are not in this packet.	15 of 15
Ice Storm	Affects the whole planning area; national data do not distinguish locations within the county. Confirm locally.	15 of 15
Inland Flooding	The FEMA Flood Insurance Rate Map (FIRM) is the required location source for flooding. See the FEMA Flood Map Service Center (https://msc.fema.gov) for this county.	15 of 15
Landslide	Census tract rating counts from the National Risk Index tract table (see B1-f). Tract maps and place names are not in this packet.	15 of 15
Lightning	Affects the whole planning area; national data do not distinguish locations within the county. Confirm locally.	15 of 15
Strong Wind	Affects the whole planning area; national data do not distinguish locations within the county. Confirm locally.	15 of 15
Tornado	Census tract rating counts from the National Risk Index tract table (see B1-f). Tract maps and place names are not in this packet.	15 of 15
Tsunami	Census tract rating counts from the National Risk Index tract table (see B1-f). Tract maps and place names are not in this packet.	0 of 15
Volcanic Activity	Census tract rating counts from the National Risk Index tract table (see B1-f). Tract maps and place names are not in this packet.	0 of 15
Wildfire	Census tract rating counts from the National Risk Index tract table (see B1-f). Tract maps and place names are not in this packet.	15 of 15
Winter Weather	Affects the whole planning area; national data do not distinguish locations within the county. Confirm locally.	15 of 15

SOURCE
FEMA, FEMA National Risk Index 1.20.0 (December 2025), county and census tract tables, version 1.20.0, pulled 2026-09-28, https://www.fema.gov/about/reports-and-data/openfema/nri/v120/NRI_Table_Counties.zip (download, 25 MB), https://www.fema.gov/about/reports-and-data/openfema/nri/v120/NRI_Table_CensusTracts.zip (download, 635 MB)

Supports B1-c: extent

Extent: scale, observed range and worst recorded event per hazard

Hazard	Scale	Records <i>count, years</i>	Observed range	Worst recorded event	Most damaging (when different)	How it applies to members	Note
Avalanche	none (count and damage)	0					Physical measure: in event narratives only; local data required.
Coastal Flood, Storm Surge/ Tide	none in data (FIRM for depth)	3, 1998 to 2022 (2 zone-level)		No damage reported in 3 records.		Event records naming member places: Surf City town (1 record). Zone-level records (2) apply countywide.	Flood depth: see the FEMA Flood Insurance Rate Map.

Hazard	Scale	Records <i>count, years</i>	Observed range	Worst recorded event	Most damaging (when different)	How it applies to members	Note
Cold/Wind Chill, Extreme Cold/Wind Chill	wind chill	0					Wind chill: in event narratives only; local data required.
Frost/Freeze (outside NRI Cold Wave definition)	crop damage	2, 2017 to 2017 (2 zone- level)		No crop damage reported in 2 records.		Zone-level records: applies countywide; national data do not locate these events within the county.	Temperature: in event narratives only; local data required.
Drought	US Drought Monitor D- scale	2, 2011 to 2011 (2 zone- level)	48 days; 1 with a recorded value	48 days (about 1.6 months), 2011-06-14 to 2011-07-31, a run of 2 consecutive Storm Events drought records, zone- level		Zone-level records: applies countywide; national data do not locate these events within the county.	Storm Events enters a drought at D2 or worse east of the Rockies and D3 or worse from the Rockies west (NWS Instruction 10-1605); NRI drought counts D3 and D4 only.
Earthquake	Modified Mercalli (local data)	0					No Storm Events record; local data required (e.g., USGS).
Hail	hail size (inches)	126, 1966 to 2025	0.75 in to 1.75 in (median 0.88 in); 126 with a recorded value	1.75 in hail, 2012-05-22; same size also recorded on 1966-05-30, 1980-02-23, 1985-04-16, 1989-04-26, 1998-09-08, 2000-07-16, 2001-05-12, 2001-05-28, 2006-04-03, 2006-05-26, 2008-05-11	Hail, 2000-07-16, property not reported; \$75,000 crops (2000 dollars)	Event records naming member places: Burgaw town (12 records), Watha town (9 records), Atkinson town (5 records), Surf City town (3 records).	
Excessive Heat, Heat	heat index (narratives)	4, 2011 to 2015 (4 zone- level)	2 days to 13 days (median 3 days); 4 with a recorded value	13 consecutive days, 2015-06-14 to 2015-06-26, zone-level		Zone-level records: applies countywide; national data do not locate these events within the county.	Heat index: in event narratives only; local data required.
Hurricane, Tropical Storm, Tropical Depression	Saffir-Simpson	9, 2011 to 2023 (9 zone- level)		Strongest recorded (records with damage, a wind speed or direct casualties first, then storm type, category and wind): Hurricane (Typhoon) record, 2018-09-14 to 2018-09-15, category 1, \$300,000,000 property; \$0 crops, reported for the zone (2018 dollars); NWS zone NCZ105 (INLAND PENDER), zone-level: may include parts of neighboring counties		Zone-level records: applies countywide; national data do not locate these events within the county.	Storm Events files every zone of a storm's episode under the storm's event type and category, so a Hurricane (Typhoon) record, especially an inland or remnant one, does not by itself mean hurricane-force winds here; read the damage and wind columns.
Ice Storm	Sperry-Piltz (local data)	1, 2015 to 2015 (1 zone- level)		No damage reported in 1 records.		Zone-level records: applies countywide; national data do not locate these events within the county.	Ice thickness: in event narratives only; local data required.

Hazard	Scale	Records <i>count, years</i>	Observed range	Worst recorded event	Most damaging (when different)	How it applies to members	Note
Flash Flood, Flood, Lakeshore Flood	damage and flood days (FIRM for depth)	92, 1996 to 2024		Flash Flood, 2018-09-15, \$5,000,000 property; \$0 crops (2018 dollars), 1 direct death		Event records naming member places: Burgaw town (16 records), Atkinson town (3 records), Surf City town (3 records), Watha town (2 records).	Flood depth: see the FEMA Flood Insurance Rate Map. Storm Events damage can be \$0 or blank even for a major flood, so the worst record here may not be the worst flood; compare FEMA Public Assistance by declaration in B1-d.
Debris Flow	none (count and damage)	0					Physical measure: in event narratives only; local data required.
Lightning	annualized frequency (the measure FEMA's Local Mitigation Planning Handbook names)	14, 1999 to 2025		Lightning, 2025-06-29, \$0 property; \$0 crops (2025 dollars), 1 direct death	Lightning, 2023-07-14, \$0 property; \$400,000 crops (2023 dollars)	Event records naming member places: Burgaw town (2 records), Surf City town (2 records).	Storm Events lists lightning with damage or casualties; physical measure in event narratives only; local data required.
High Wind and Strong Wind (outside NRI Strong Wind definition)	wind speed (kt and mph)	3, 2013 to 2024 (3 zone-level)	43 kt (49 mph) to 63 kt (72 mph) (median 52 kt (60 mph)); 3 with a recorded value	63 kt (72 mph) measured gust, High Wind, 2024-01-09; NWS zone NCZ106 (COASTAL PENDER), zone-level: may include parts of neighboring counties	Strong Wind, 2013-02-17, \$1,000 property; \$0 crops, reported for the zone (2013 dollars)	Zone-level records: applies countywide; national data do not locate these events within the county.	
Thunderstorm Wind	wind speed (kt and mph)	152, 1967 to 2026	50 kt (58 mph) to 83 kt (96 mph) (median 54.5 kt (63 mph)); 120 with a recorded value	83 kt (96 mph) estimated gust, Thunderstorm Wind, 2008-03-15, 7 direct injuries		Event records naming member places: Burgaw town (21 records), Surf City town (12 records), Watha town (9 records), Atkinson town (5 records), St. Helena village (1 record).	

Hazard	Scale	Records <i>count, years</i>	Observed range	Worst recorded event	Most damaging (when different)	How it applies to members	Note
Tornado	Enhanced Fujita (F before Feb 2007)	47, 1951 to 2025	F/EF0 to F/EF2 (median F/EF0); 47 with a recorded value	F2 tornado, 2004-08-13, 5 mi within this county, 500 yd wide, \$1,300,000 property; crops not reported (2004 dollars), 3 direct deaths, 29 direct injuries	Tornado, 2008-03-15, \$2,000,000 property; crops not reported (2008 dollars)	Event records naming member places: Atkinson town (4 records), Burgaw town (3 records), Surf City town (3 records), Watha town (1 record).	From 1996 on, tornado records are per-county segments and length is the path length within this county (NWS Instruction 10-1605); records before 1996 may give the whole path length, including the path outside this county, and before 1996 a tornado is listed once, under the county where it began, with the whole path's rating; counties farther along the path may not list it. Length is not used to rank tornadoes.
Tsunami	none (count and damage)	0					Physical measure: in event narratives only; local data required.
Volcanic Ash, Volcanic Ashfall	Volcanic Explosivity Index (local data)	0					Physical measure: in event narratives only; local data required.
Wildfire	acres burned (local data)	5, 1998 to 2014 (4 zone-level)		Wildfire, 2014-04-04, \$45,500 property; crops not reported, reported for the zone (2014 dollars); NWS zone NCZ105 (INLAND PENDER), zone-level: may include parts of neighboring counties		No event record names a member place. Zone-level records (4) apply countywide.	Acres burned: in event narratives only; local data required.
Winter Storm, Heavy Snow, Blizzard, Lake-Effect Snow, Winter Weather, Sleet	none in data (snowfall local)	9, 2014 to 2026 (9 zone-level)		Winter Weather, 2015-01-09, \$40,000 property; \$0 crops, reported for the zone (2015 dollars), 1 direct death (reported for the zone); NWS zone NCZ105 (INLAND PENDER), zone-level: may include parts of neighboring counties		Zone-level records: applies countywide; national data do not locate these events within the county.	Snow depth: in event narratives only; local data required.

Storm Events records are more complete after 1996; before 1996 only Tornado (from 1950), Hail and Thunderstorm Wind (from 1955) exist. Zone-level records are placed with NWS zone-county files, which exist from 2020 on; an earlier record is placed by its zone number in the nearest later file only when its zone name matches that file, records from zones NWS renumbered are placed by name or left out, and a record whose zone is in no known file is left out of every count, so counts before 2020 can be low. Some current zones are also missing from the NWS files, so recent counts can be low too.

Dollars are nominal (as reported), labeled with the year; not adjusted for inflation.

SOURCES

NOAA NCEI, NOAA NCEI Storm Events Database, details files (csvfiles v1.0), version c20260918, pulled 2026-09-28, <https://www.ncei.noaa.gov/pub/data/swdi/stormevents/csvfiles/>

Supports B1-d: previous occurrences

Declaration rows31

Counted incidents21

Federal disaster declarations for this county

Declared	Incident began	FEMA number	Type	Title	Mapped hazard	County Public Assistance federal share obligated, nominal dollars	Flags	Notes
2026-01-24	2026-01-21	EM-3637-NC	Emergency	SEVERE WINTER STORM	Winter Weather	none found	during plan review, check whether your last plan included it; within last 5 years	
2024-09-26	2024-09-25	EM-3617-NC	Emergency	HURRICANE HELENE	Hurricane (primary); also designated: Inland Flooding, Landslide	none found	within last 5 years	
2024-08-06	2024-08-05	EM-3608-NC	Emergency	TROPICAL STORM DEBBY	Hurricane	\$128,379.57	within last 5 years	
2022-10-01	2022-09-28	EM-3586-NC	Emergency	HURRICANE IAN	Hurricane	\$43,063.39	within last 5 years	
2020-10-14	2020-07-31	DR-4568-NC	Major disaster	HURRICANE ISAIAS	Hurricane	\$1,793,741.11		
2020-08-02	2020-07-31	EM-3534-NC	Emergency	HURRICANE ISAIAS	Hurricane	none found		same incident as DR-4568
2020-05-08	2020-02-06	DR-4543-NC	Major disaster	SEVERE STORMS, TORNADOES, AND FLOODING	Inland Flooding; Tornado	none found		
2020-03-25	2020-01-20	DR-4487-NC	Major disaster	COVID-19 PANDEMIC	Non-natural, not counted	\$27,700.41		
2020-03-13	2020-01-20	EM-3471-NC	Emergency	COVID-19	Non-natural, not counted	none found		same incident as DR-4487
2019-10-04	2019-09-01	DR-4465-NC	Major disaster	HURRICANE DORIAN	Hurricane	\$2,734,626.12		
2019-09-03	2019-09-01	EM-3423-NC	Emergency	HURRICANE DORIAN	Hurricane	none found		same incident as DR-4465
2018-09-14	2018-09-07	DR-4393-NC	Major disaster	HURRICANE FLORENCE	Hurricane	\$52,485,070.76		
2018-09-10	2018-09-07	EM-3401-NC	Emergency	HURRICANE FLORENCE	Hurricane	none found		same incident as DR-4393
2016-10-10	2016-10-04	DR-4285-NC	Major disaster	HURRICANE MATTHEW	Hurricane	\$9,511,717.78		
2016-10-07	2016-10-04	EM-3380-NC	Emergency	HURRICANE MATTHEW	Hurricane	none found		same incident as DR-4285
2011-08-31	2011-08-25	DR-4019-NC	Major disaster	HURRICANE IRENE	Hurricane	\$5,922,546.65		
2011-08-25	2011-08-25	EM-3327-NC	Emergency	HURRICANE IRENE	Hurricane	none found		same incident as DR-4019

Declared	Incident began	FEMA number	Type	Title	Mapped hazard	County Public Assistance	Flags	Notes
						<i>federal share obligated, nominal dollars</i>		
2010-10-14	2010-09-27	DR-1942-NC	Major disaster	SEVERE STORMS, FLOODING, AND STRAIGHT-LINE WINDS	Inland Flooding; Strong Wind	PA not declared for this county		
2010-09-01	2010-09-01	EM-3314-NC	Emergency	HURRICANE EARL	Hurricane	none found		
2005-10-07	2005-09-11	DR-1608-NC	Major disaster	HURRICANE OPHELIA	Hurricane	\$199,080.75		
2005-09-14	2005-09-11	EM-3254-NC	Emergency	HURRICANE OPHELIA	Hurricane	\$1,138,106.87		same incident as DR-1608
2005-09-05	2005-08-29	EM-3222-NC	Emergency	HURRICANE KATRINA EVACUATION	Hurricane: evacuation support, not a local hazard event; not counted	none found		
2003-09-18	2003-09-18	DR-1490-NC	Major disaster	HURRICANE ISABEL	Hurricane	\$141,969.59		
1999-09-16	1999-09-15	DR-1292-NC	Major disaster	HURRICANE FLOYD MAJOR DISASTER DECLARATIONS	Hurricane	\$8,852,923.94		
1999-09-15	1999-09-15	EM-3146-NC	Emergency	HURRICANE FLOYD EMERGENCY DECLARATIONS	Hurricane	none found		same incident as DR-1292
1999-09-01	1999-08-29	EM-3141-NC	Emergency	HURRICANE DENNIS	Hurricane	\$43,879.93		
1998-08-27	1998-08-20	DR-1240-NC	Major disaster	HURRICANE BONNIE	Hurricane	none found		
1996-09-06	1996-09-05	DR-1134-NC	Major disaster	HURRICANE FRAN	Hurricane	none found		
1996-07-18	1996-07-10	DR-1127-NC	Major disaster	HURRICANE BERTHA	Hurricane	none found		
1993-03-17	1993-03-13	EM-3110-NC	Emergency	SEVERE SNOWFALL & WINTER STORM	Winter Weather	none found		
1984-09-21	1984-09-11	DR-724-NC	Major disaster	HURRICANE DIANA	Hurricane	none found		

County Public Assistance: applicants the FEMA record places in this county, including any state agencies FEMA files there; statewide rows are listed on the state page; federal share obligated, nominal dollars.

Dollars are nominal (as reported), labeled with the year; not adjusted for inflation.

SOURCES

FEMA, OpenFEMA DisasterDeclarationsSummaries v2, version 2026-09-27T010817Z, pulled 2026-09-28, <https://www.fema.gov/api/open/v2/DisasterDeclarationsSummaries> (API)

FEMA, OpenFEMA PublicAssistanceFundedProjectsSummaries v1, version 2026-09-26T151157Z, pulled 2026-09-28, <https://www.fema.gov/api/open/v1/PublicAssistanceFundedProjectsSummaries> (API)

FEMA, OpenFEMA HazardMitigationPlanStatuses v1, version 2026-09-26T121003Z, pulled 2026-09-28, <https://www.fema.gov/api/open/v1/HazardMitigationPlanStatuses> (API)

Statewide declarations

Declared	Incident began	FEMA number	Type	Title	Mapped hazard	Flags	Notes
1964-10-13	1964-10-13	DR-179-NC	Major disaster	SEVERE STORMS & FLOODING	Inland Flooding		
1962-03-16	1962-03-16	DR-130-NC	Major disaster	SEVERE STORM, HIGH TIDES & FLOODING	Inland Flooding (primary); also designated: Coastal Flooding		
1960-09-16	1960-09-16	DR-107-NC	Major disaster	HURRICANE DONNA	Hurricane (primary); also designated: Inland Flooding		
1958-10-01	1958-10-01	DR-87-NC	Major disaster	HURRICANE & SEVERE STORM	Hurricane		

Declared	Incident began	FEMA number	Type	Title	Mapped hazard	Flags	Notes
1956-04-24	1956-04-24	DR-56-NC	Major disaster	SEVERE STORM	Hazard not mapped (severe storm title names no single hazard); not counted		
1955-08-13	1955-08-13	DR-37-NC	Major disaster	HURRICANES	Hurricane (primary); also designated: Inland Flooding		
1954-10-17	1954-10-17	DR-28-NC	Major disaster	HURRICANE	Hurricane (primary); also designated: Inland Flooding		

FEMA recorded these with designated area Statewide and no county. Listed on every county page in the state; not counted with county rows.

1 Fire Management declaration (1986-05-10 to 1986-05-10) FEMA filed as Statewide with no county; each names one local fire. Listed on the state page.

SOURCE

FEMA, OpenFEMA DisasterDeclarationsSummaries v2, version 2026-09-27T010817Z, pulled 2026-09-28, <https://www.fema.gov/api/open/v2/DisasterDeclarationsSummaries> (API)

Public Assistance filed under this county for declarations that do not list it: 1 row, \$43,507.52

FEMA number	Declared	Title	Applicant	PA obligated <i>federal share obligated, nominal dollars</i>
DR-1969-NC	2011-04-19	SEVERE STORMS, TORNADOES, AND FLOODING	Four County EMC	\$43,507.52

FEMA's Public Assistance summaries file these applicants under this county, but FEMA's declaration rows for these disasters do not designate it (an electric cooperative or district serving several counties, for example). Not in any declaration row above and not counted.

SOURCES

FEMA, OpenFEMA PublicAssistanceFundedProjectsSummaries v1, version 2026-09-26T151157Z, pulled 2026-09-28, <https://www.fema.gov/api/open/v1/PublicAssistanceFundedProjectsSummaries> (API)

FEMA, OpenFEMA DisasterDeclarationsSummaries v2, version 2026-09-27T010817Z, pulled 2026-09-28, <https://www.fema.gov/api/open/v2/DisasterDeclarationsSummaries> (API)

Previous occurrences by hazard, with explicit no-event rows

Hazard	Storm Events records <i>full period</i>	Since plan approval records	During plan review records	Last 5 years records	Declared incidents <i>distinct incidents</i>	Declared since approval <i>distinct incidents</i>	Period	Statement
Avalanche	0	0	0	0	0	0	1996 to 2026-06-30	No recorded events, 1996 to 2026-06-30, NOAA NCEI Storm Events
Coastal Flooding	3	0	0	2	0	0	1996 to 2026-06-30	
Cold Wave	2	0	0	0	0	0	1996 to 2026-06-30	Includes 2 Frost/Freeze records, event types the NRI definition of this hazard leaves out.
Drought	2	0	0	0	0	0	1996 to 2026-06-30	
Earthquake	0	0	0	0	0	0		No Storm Events record; local data required (e.g., USGS).
Hail	126	0	1	3	0	0	1955 to 2026-06-30	
Heat Wave	4	0	0	0	0	0	1996 to 2026-06-30	
Hurricane	9	0	0	2	17	0	1996 to 2026-06-30	
Ice Storm	1	0	0	0	0	0	1996 to 2026-06-30	
Inland Flooding	92	0	0	8	3	0	1996 to 2026-06-30	

Hazard	Storm Events records <i>full period</i>	Since plan approval <i>records</i>	During plan review <i>records</i>	Last 5 years <i>records</i>	Declared incidents <i>distinct incidents</i>	Declared since approval <i>distinct incidents</i>	Period	Statement
Landslide	0	0	0	0	1	0	1996 to 2026-06-30	No Storm Events records of this type; 1 federal declared incident (see declarations table)
Lightning	14	0	1	2	0	0	1996 to 2026-06-30	
Strong Wind	155	0	3	20	1	0	1955 to 2026-06-30	Includes 2 High Wind records and 1 Strong Wind record, event types the NRI definition of this hazard leaves out.
Tornado	47	0	0	3	1	0	1950 to 2026-06-30	
Tsunami	0	0	0	0	0	0	1996 to 2026-06-30	No recorded events, 1996 to 2026-06-30, NOAA NCEI Storm Events
Volcanic Activity	0	0	0	0	0	0	1996 to 2026-06-30	No recorded events, 1996 to 2026-06-30, NOAA NCEI Storm Events
Wildfire	5	0	0	0	0	0	1996 to 2026-06-30	
Winter Weather	9	0	2	4	2	0	1996 to 2026-06-30	

SOURCES

NOAA NCEI, NOAA NCEI Storm Events Database, details files (csvfiles v1.0), version c20260918, pulled 2026-09-28, <https://www.ncei.noaa.gov/pub/data/swdi/stormevents/csvfiles/>

FEMA, OpenFEMA DisasterDeclarationsSummaries v2, version 2026-09-27T010817Z, pulled 2026-09-28, <https://www.fema.gov/api/open/v2/DisasterDeclarationsSummaries> (API)

NOAA National Weather Service, NWS county-public forecast zones correlation file, version bp03mr20 to bp16ap26 (11 files; newest bp16ap26), pulled 2026-09-28, <https://www.weather.gov/gis/ZoneCounty>

Notable Storm Events records

Date	Event type	Magnitude or extent	Damage <i>nominal dollars</i>	Direct deaths, injuries <i>indirect not counted</i>	Location	Flags	Why listed
2025-06-29	Lightning		\$0 property; \$0 crops (2025 dollars)	1, 0	SCOTTS HILL	during plan review, check whether your last plan included it; within last 5 years	deaths or injuries recorded
2024-01-09	High Wind	63 kt (72 mph) measured gust	\$0 property; \$0 crops, reported for the zone (2024 dollars)	0, 0	NWS zone NCZ106 (COASTAL PENDER), zone-level: may include parts of neighboring counties	within last 5 years	B1-c worst recorded: High Wind and Strong Wind (outside NRI Strong Wind definition)
2018-09-15	Flash Flood		\$5,000,000 property; \$0 crops (2018 dollars)	1, 0	SCOTTS HILL to ROCKY PT		B1-c worst recorded: Flash Flood, Flood, Lakeshore Flood
2018-09-14	Hurricane (Typhoon)	category 1	\$300,000,000 property; \$0 crops, reported for the zone (2018 dollars)	0, 0	NWS zone NCZ105 (INLAND PENDER), zone-level: may include parts of neighboring counties		B1-c worst recorded: Hurricane, Tropical Storm, Tropical Depression
2015-06-14	Heat		damage not reported	0, 0	NWS zone NCZ106 (COASTAL PENDER), zone-level: may include parts of neighboring counties		B1-c worst recorded: Excessive Heat, Heat
2015-01-09	Winter Weather		\$40,000 property; \$0 crops, reported for the zone (2015 dollars)	1, 0	NWS zone NCZ105 (INLAND PENDER), zone-level: may include parts of neighboring counties		B1-c worst recorded: Winter Storm, Heavy Snow, Blizzard, Lake-Effect Snow, Winter Weather, Sleet

Date	Event type	Magnitude or extent	Damage <i>nominal dollars</i>	Direct deaths, injuries <i>indirect not counted</i>	Location	Flags	Why listed
2014-04-04	Wildfire		\$45,500 property; crops not reported, reported for the zone (2014 dollars)	0, 0	NWS zone NCZ105 (INLAND PENDER), zone-level: may include parts of neighboring counties		B1-c worst recorded: Wildfire
2012-05-22	Hail	1.75 in	\$1,500 property; \$0 crops (2012 dollars)	0, 0	HAMPSTEAD		B1-c worst recorded: Hail
2011-06-14	Drought		damage not reported	0, 0	NWS zone NCZ106 (COASTAL PENDER), zone-level: may include parts of neighboring counties		B1-c worst recorded: Drought
2008-07-07	Lightning		damage not reported	1, 4	TOPSAIL		deaths or injuries recorded
2008-03-15	Thunderstorm Wind	83 kt (96 mph) estimated gust	\$2,000,000 property; crops not reported (2008 dollars)	0, 7	ASHTON		B1-c worst recorded: Thunderstorm Wind
2004-08-13	Tornado	F2, 5 mi within this county, 500 yd wide	\$1,300,000 property; crops not reported (2004 dollars)	3, 29	ROCKY PT		deaths or injuries recorded

The full list is in the XLSX file, sheet "B1-d Storm Events history" (469 rows).

Storm Events records are more complete after 1996; before 1996 only Tornado (from 1950), Hail and Thunderstorm Wind (from 1955) exist. Zone-level records are placed with NWS zone-county files, which exist from 2020 on; an earlier record is placed by its zone number in the nearest later file only when its zone name matches that file, records from zones NWS renumbered are placed by name or left out, and a record whose zone is in no known file is left out of every count, so counts before 2020 can be low. Some current zones are also missing from the NWS files, so recent counts can be low too.

SOURCES

NOAA NCEI, NOAA NCEI Storm Events Database, details files (csvfiles v1.0), version c20260918, pulled 2026-09-28, <https://www.ncei.noaa.gov/pub/data/swdi/stormevents/csvfiles/>
NOAA National Weather Service, NWS county-public forecast zones correlation file, version bp03mr20 to bp16ap26 (11 files; newest bp16ap26), pulled 2026-09-28, <https://www.weather.gov/gis/ZoneCounty>
FEMA, OpenFEMA HazardMitigationPlanStatuses v1, version 2026-09-26T121003Z, pulled 2026-09-28, <https://www.fema.gov/api/open/v1/HazardMitigationPlanStatuses> (API)

State-declared emergencies are not in federal data. Add them from your state emergency management agency.

Tribal and special-area declarations in this state are listed on the state page.

Supports B1-e: probability

Probability: FEMA annualized frequency and descriptor per hazard

Hazard	FEMA annualized frequency (modeled) <i>unit per row</i>	Unit	In plain terms	Descriptor	Descriptor basis	NRI events or days in its record period (hail, wind and tornado are area-weighted, so can be fractional)	NRI period	Location	Note
Avalanche		events per year					1994 to 2023 (30 years)	see B1-f	Not Applicable in NRI for this county; no descriptor.
Coastal Flooding	3.54	events per year at a location (modeled)	about 3.5 per year at a given location in the county	Highly likely	FEMA annualized frequency (modeled)	not shown	modeled	see B1-f	Descriptor from NRI: the rate at a location is 1 or more a year, so the county rate is at least that.

Hazard	FEMA annualized frequency (modeled) <i>unit per row</i>	Unit	In plain terms	Descriptor	Descriptor basis	NRI events or days in its record period (hail, wind and tornado are area- weighted, so can be fractional)	NRI period	Location	Note
Cold Wave	0.472	event-days per year	about 0.472 days per year		event-days in 0 of 30 years, 1996 to 2025 (0%)	8.48	2005-11-12 to 2024-11-12 (19 years)	countywide	No recorded event-days, 1996 to 2025; descriptor not assigned. Frost/Freeze records are not counted in this descriptor: they record crop freezes, not cold waves.
Drought	8.02	event-days per year	about 8.02 days per year	Possible	event-days in 1 of 30 years, 1996 to 2025 (3.33%)	224	2000 to 2025 (25.25 years; D3 and D4 only)	countywide	NRI gives about 8.02 drought event-days a year here (its annualized frequency over 25.25 years; not its event count divided by the years), but Storm Events has a record in only 1 of 30 years. NRI counts from a different source that records far more events than Storm Events, so this descriptor reads much lower than NRI's frequency; read the two together.
Earthquake	0.00137	annual probability at a location	chance a given location in the county has at least minor- damage shaking in a year: 0.137%			not shown	modeled	see B1-f	Descriptor not assigned: the NRI value is the chance at a location in the county, not how often the hazard affects the county, and Storm Events does not record earthquakes.
Hail	2.89	events per year	about 2.89 per year	Highly likely	FEMA annualized frequency (modeled)	109.7 (modeled)	1986 to 2023 (38 years)	countywide	
Heat Wave	8.13	event-days per year	about 8.13 days per year	Likely	event-days in 3 of 30 years, 1996 to 2025 (10%)	126	2005-11-12 to 2024-11-12 (19 years)	countywide	NRI gives about 8.13 heat wave event-days a year here (its annualized frequency over 19 years; not its event count divided by the years), but Storm Events has a record in only 3 of 30 years. NRI counts from a different source that records far more events than Storm Events, so this descriptor reads much lower than NRI's frequency; read the two together.
Hurricane	0.355	events per year	about 1 in 3 years	Likely	FEMA annualized frequency (modeled)	128	1851 to 2024 (Atlantic)	see B1-f	NRI counts hurricane and tropical storm tracks passing within storm-force wind range; federal declarations are counted separately in B1-d and need not match.
Ice Storm	0.868	event-days per year	about 0.868 days per year	Possible	event-days in 1 of 30 years, 1996 to 2025 (3.33%)	55	1946-12-31 to 2014-02-12 (67 years)	countywide	
Inland Flooding	1.75	event-days per year	about 1.75 days per year	Likely	event-days in 18 of 30 years, 1996 to 2025 (60%)	49	1996 to 2023 (28 years)	see B1-f	
Landslide	0.123	events per year (modeled)	about 1 in 8 years	Likely	FEMA annualized frequency (modeled)	not shown	modeled	see B1-f	

Hazard	FEMA annualized frequency (modeled) <i>unit per row</i>	Unit	In plain terms	Descriptor	Descriptor basis	NRI events or days in its record period (hail, wind and tornado are area- weighted, so can be fractional)	NRI period	Location	Note
Lightning	57.1	days per year with a strike	about 57.1 days per year	Highly likely	FEMA annualized frequency (modeled)	not shown	1995 to 2023 (29 years; CONUS)	countywide	
Strong Wind	1.64	events per year	about 1.64 per year	Highly likely	FEMA annualized frequency (modeled)	59	1986 to 2023 (38 years)	countywide	
Tornado	0.609	events per year	about 0.61 per year	Likely	FEMA annualized frequency (modeled)	not shown	1950 to 2023 (EF2+); 1986 to 2023 (EF0-1)	see B1-f	
Tsunami		annual probability at the most exposed location (used in place of a county value)			Storm Events records in 0 of 30 years, 1996 to 2025 (0%)	not shown	modeled	see B1-f	No Storm Events record of this hazard, 1996 to 2025; descriptor not assigned (the NRI value is the chance at a location in the county, not how often the hazard affects the county)
Volcanic Activity		annual probability				not shown	modeled	see B1-f	Not Applicable in NRI for this county; no descriptor.
Wildfire	0.00171	annual probability at a location	chance a given location in the county burns in a year: 0.171%	Likely	Storm Events records in 4 of 30 years, 1996 to 2025 (13.3%)	not shown	modeled	see B1-f	Descriptor from Storm Events, not NRI: the NRI value is the chance at a location in the county, not how often the hazard affects the county.
Winter Weather	2.23	event-days per year	about 2.23 days per year	Likely	event-days in 6 of 30 years, 1996 to 2025 (20%)	40.8	2005-11-12 to 2024-11-12 (19 years)	countywide	NRI gives about 2.23 winter weather event-days a year here (its annualized frequency over 19 years; not its event count divided by the years), but Storm Events has a record in only 6 of 30 years. NRI counts from a different source that records far more events than Storm Events, so this descriptor reads much lower than NRI's frequency; read the two together.

FEMA annualized frequency (modeled) comes from the National Risk Index v1.20 (December 2025). It is not recorded events divided by years, and what it measures depends on the hazard. For most hazards it estimates how often the hazard affects this county each year: it counts events or event-days (drought, heat wave, cold wave, winter weather, ice storm and inland flooding are in days per year; lightning is the number of days per year with a recorded cloud-to-ground strike, from the NOAA Storm Prediction Center daily lightning climatology); it may count events in the surrounding area (hail, strong wind, tornado, hurricane and ice storm use a 49 km grid and buffers) and is averaged over the county's area; and some hazards use a minimum value for places with no recorded event. Earthquake, wildfire and coastal flooding are different: FEMA computes them for each census block and averages them over the county, so the value is the chance (for coastal flooding, the modeled number of floods per year) at a location in the county, which is lower than the chance that the hazard strikes somewhere in the county. Earthquake is the chance of at least minor-damage shaking (U.S. Geological Survey model); wildfire is the chance that a location burns in a large fire (U.S. Forest Service burn probability); coastal flooding comes from FEMA flood zones and NOAA high-tide flooding, so it can be above 1 where high-tide flooding is frequent. Tsunami is the value at the county's most exposed location, from recorded events and modeled return periods. For these four hazards the packet gives no "1 in N years" and takes the descriptor from Storm Events (none for earthquake) unless the value is 1 or more a year. Landslide is a U.S. Geological Survey modeled county rate spread by slope susceptibility. Volcanic activity is the chance that a volcano affecting the county erupts in a year. Drought counts only extreme and exceptional drought (D3 and D4). Source: FEMA, National Risk Index Technical Documentation v1.20, sections 5.2.2 (Table 5), 5.2.3, 7.4, 10.4, 16.5, 17.1, 17.3.1, 17.5, 20.3.1, 21.4, 22.4 and 6 to 23.

SOURCES

FEMA, FEMA National Risk Index 1.20.0 (December 2025), county and census tract tables, version 1.20.0, pulled 2026-09-28, https://www.fema.gov/about/reports-and-data/openfema/nri/v120/NRI_Table_Counties.zip (download, 25 MB), https://www.fema.gov/about/reports-and-data/openfema/nri/v120/NRI_Table_CensusTracts.zip (download, 635 MB)
 NOAA NCEI, NOAA NCEI Storm Events Database, details files (csvfiles v1.0), version c20260918, pulled 2026-09-28, <https://www.ncei.noaa.gov/pub/data/swdi/stormevents/csvfiles/>

Descriptor scale used in this packet (defined per unit)

Unit	Descriptor	Definition
events per year	Highly likely	1 or more per year
events per year	Likely	about once in 1 to 10 years
events per year	Possible	about once in 10 to 100 years
events per year	Unlikely	less than once in 100 years
annual probability	Likely	10% to under 100% chance in a given year
annual probability	Possible	1% to under 10% chance in a given year
annual probability	Unlikely	under 1% chance in a given year
event-days (share of years)	Highly likely	event-days recorded in 90% or more of years
event-days (share of years)	Likely	event-days recorded in 10% to under 90% of years
event-days (share of years)	Possible	event-days recorded in some years but under 10% of years
lightning strike-days	Highly likely	cloud-to-ground strikes on 1 or more days per year

SOURCES

FEMA, FEMA National Risk Index 1.20.0 (December 2025), county and census tract tables, version 1.20.0, pulled 2026-09-28, https://www.fema.gov/about/reports-and-data/openfema/nri/v120/NRI_Table_Counties.zip (download, 25 MB), https://www.fema.gov/about/reports-and-data/openfema/nri/v120/NRI_Table_CensusTracts.zip (download, 635 MB)

NOAA NCEI, NOAA NCEI Storm Events Database, details files (csvfiles v1.0), version c20260918, pulled 2026-09-28, <https://www.ncei.noaa.gov/pub/data/swdi/stormevents/csvfiles/>

Intensity bands: historical frequency (Storm Events)

Hazard	Band	Years	Events <i>county-coded records</i>	Years in period	Events per year <i>events / years</i>
Hail	1.00-1.99 in	1996 to 2025	52	30	1.73
Hail	2.00 in+	1996 to 2025	0	30	0
Strong Wind (Thunderstorm Wind records)	50-64 kt	1996 to 2025	98	30	3.27
Strong Wind (Thunderstorm Wind records)	65 kt+	1996 to 2025	12	30	0.4
Strong Wind (Thunderstorm Wind records)	unmeasured or below 50 kt	1996 to 2025	0	30	0
Tornado	EF0-1	1996 to 2025	34	30	1.13
Tornado	EF2-3	1996 to 2025	1	30	0.0333
Tornado	EF4-5	1996 to 2025	0	30	0
Tornado	unrated (EFU)	1996 to 2025	0	30	0

Hail smaller than 1 inch is not counted: on 2010-01-05 the National Weather Service raised its severe-hail threshold from 3/4 inch to 1 inch, so smaller reports became less common after 2009 (NWS Service Change Notice 09-52). NRI hail frequency uses a 0.75 inch threshold.

SOURCE

NOAA NCEI, NOAA NCEI Storm Events Database, details files (csvfiles v1.0), version c20260918, pulled 2026-09-28, <https://www.ncei.noaa.gov/pub/data/swdi/stormevents/csvfiles/>

Optional: future conditions. Not a required item in the 2025 FEMA Local Mitigation Planning Policy Guide; some states ask for it. The federal Climate Mapping for Resilience and Adaptation (CMRA) site gives county exposure to future climate conditions.

Supports B1-f: variation across the planning area

Range of census tract risk within the county

Hazard	Tracts rated of all	Risk score min NRI score, 0 to 100	Median	Max	Tracts by rating	Note
Avalanche	0 of 15				Not Applicable 15	
Coastal Flooding	12 of 15	72.0	83.3	99.9	Very High 1, Relatively High 1, Relatively Moderate 3, Relatively Low 5, Very Low 2, No Rating 3	
Cold Wave	15 of 15	29.1	46.9	66.6	Relatively Moderate 7, Relatively Low 8	National data give a county-wide or coarse (49 km grid or NWS zone) frequency for this hazard, so they cannot show members' hazard differing. The tract range above mostly reflects where buildings and people are. Confirm locally.
Drought	14 of 15	72.4	83.8	89.9	Relatively Low 9, Very Low 5, No Rating 1	National data give a county-wide or coarse (49 km grid or NWS zone) frequency for this hazard, so they cannot show members' hazard differing. Agriculture is all of NRI's expected annual loss for this hazard in the county, so the tract range above mostly reflects where crop and livestock value is, not where buildings and people are. Confirm locally.
Earthquake	15 of 15	17.9	46.6	64.0	Relatively Low 9, Very Low 6	
Hail	15 of 15	30.0	49.0	74.0	Relatively Moderate 1, Relatively Low 13, Very Low 1	National data give a county-wide or coarse (49 km grid or NWS zone) frequency for this hazard, so they cannot show members' hazard differing. Agriculture is 54% of NRI's expected annual loss for this hazard in the county, so the tract range above mostly reflects where crop and livestock value is, not where buildings and people are. Confirm locally.
Heat Wave	15 of 15	22.3	53.1	81.3	Relatively Moderate 7, Relatively Low 8	National data give a county-wide or coarse (49 km grid or NWS zone) frequency for this hazard, so they cannot show members' hazard differing. The tract range above mostly reflects where buildings and people are. Confirm locally.
Hurricane	15 of 15	94.5	99.1	99.7	Very High 12, Relatively High 3	
Ice Storm	15 of 15	42.9	84.4	89.9	Relatively Moderate 13, Relatively Low 2	National data give a county-wide or coarse (49 km grid or NWS zone) frequency for this hazard, so they cannot show members' hazard differing. The tract range above mostly reflects where buildings and people are. Confirm locally.
Inland Flooding	15 of 15	8.1	72.7	88.5	Relatively High 6, Relatively Moderate 7, Relatively Low 1, Very Low 1	
Landslide	15 of 15	29.3	67.9	74.6	Very Low 15	
Lightning	15 of 15	73.2	94.7	99.4	Very High 7, Relatively High 7, Relatively Moderate 1	National data give a county-wide or coarse (49 km grid or NWS zone) frequency for this hazard, so they cannot show members' hazard differing. The tract range above mostly reflects where buildings and people are. Confirm locally.
Strong Wind	15 of 15	37.4	76.9	90.4	Relatively High 2, Relatively Moderate 11, Relatively Low 2	National data give a county-wide or coarse (49 km grid or NWS zone) frequency for this hazard, so they cannot show members' hazard differing. The tract range above mostly reflects where buildings and people are. Confirm locally.
Tornado	15 of 15	47.5	73.3	86.4	Relatively High 6, Relatively Moderate 8, Relatively Low 1	
Tsunami	0 of 15				Insufficient Data 15	
Volcanic Activity	0 of 15				Not Applicable 15	
Wildfire	15 of 15	86.3	92.2	95.6	Relatively Moderate 13, Relatively Low 2	
Winter Weather	15 of 15	75.3	93.5	98.8	Very High 5, Relatively High 9, Relatively Moderate 1	National data give a county-wide or coarse (49 km grid or NWS zone) frequency for this hazard, so they cannot show members' hazard differing. The tract range above mostly reflects where buildings and people are. Confirm locally.

Rated tracts only: No Rating (score 0.0), Not Applicable and Insufficient Data tracts are counted but not used for the minimum, median and maximum.

SOURCE
FEMA, FEMA National Risk Index 1.20.0 (December 2025), county and census tract tables, version 1.20.0, pulled 2026-09-28, https://www.fema.gov/about/reports-and-data/openfema/nri/v120/NRI_Table_Counties.zip (download, 25 MB), https://www.fema.gov/about/reports-and-data/openfema/nri/v120/NRI_Table_CensusTracts.zip (download, 635 MB)

Per-member block (Starter, confirm locally)

Member	Type	Plan status	Repetitive loss <i>FMA RL and SRL (44 CFR 77.2); repeat-flood, any definition</i>	Public Assistance matched <i>federal share obligated, nominal dollars</i>	Event records naming this place <i>all years; since the member's plan</i>	Notes
Pender County	County	Approved, expires 2031-04-20	FMA RL 60, SRL 43; any 160	\$15,491,204.16	0; 0	Includes \$27,700.41 for declarations not counted as hazard incidents (DR-4487-NC).
Atkinson town	Town	Approved, expires 2031-04-20	FMA RL 0, SRL 0; any 0	\$134,907.48	17; 0	
Burgaw town	Town	Approved, expires 2031-04-20	FMA RL 0, SRL 1; any 4	\$834,589.38	54; 0	
St. Helena village	Village	Approved, expires 2031-04-20	FMA RL 0, SRL 0; any 0	none found	1; 0	
Surf City town	Town	Approved, expires 2031-04-20	FMA RL 2, SRL 22; any 243	\$12,319,102.91	24; 0	Whole community, including the part in Onslow County, plus 2 properties with no county in FEMA's file; in-county portion (county table): FMA RL 1, FMA SRL 16, NFIP RL 180, NFIP SRL 14, any category 182.
Topsail Beach town	Town	Approved, expires 2031-04-20	FMA RL 6, SRL 53; any 323	\$32,774,836.22	0; 0	
Watha town	Town	Plan 111751 approved 2026-04-21, pending adoption here; not yet eligible	FMA RL 0, SRL 0; any 0	none found	21; no approved plan	

Member rows are whole NFIP communities and need not add up to the county total: a community that extends into another county is counted in full on each member row, while the county table counts only its part in this county.

School districts and special districts get a plan clock row only.

SOURCES
FEMA, OpenFEMA HazardMitigationPlanStatuses v1, version 2026-09-26T121003Z, pulled 2026-09-28, <https://www.fema.gov/api/open/v1/HazardMitigationPlanStatuses> (API)
FEMA, OpenFEMA NfipMultipleLossProperties v1, version 2026-08-04T164045Z, pulled 2026-09-28, <https://www.fema.gov/api/open/v1/NfipMultipleLossProperties> (API)
FEMA, OpenFEMA PublicAssistanceFundedProjectsSummaries v1, version 2026-09-26T151157Z, pulled 2026-09-28, <https://www.fema.gov/api/open/v1/PublicAssistanceFundedProjectsSummaries> (API)
NOAA NCEI, NOAA NCEI Storm Events Database, details files (csvfiles v1.0), version c20260918, pulled 2026-09-28, <https://www.ncei.noaa.gov/pub/data/swdi/stormevents/csvfiles/>

Supports B2-a and B2-b: assets and impacts

Local data required

County-level starter. The plan must describe impacts for each participant and its own assets.

- Critical facilities and lifelines per hazard
 - A problem statement per participant per hazard
- Changes in development in hazard-prone areas since the last approval, or a statement of none (E1-a)

- Future assets

County-level starter: exposure, expected annual loss and damage since the plan

Hazard	Building exposure <i>modeled dollars</i>	Agriculture exposure <i>modeled dollars</i>	Population exposed <i>people</i>	EAL buildings <i>modeled dollars per year</i>	EAL agriculture <i>modeled dollars per year</i>	EAL population equivalence <i>statistical value of life and injury, \$13.7M per life, not property damage</i>	EAL as % of exposure <i>buildings; agriculture where noted</i>	Storm Events damage since 2026-04-21 <i>county-coded records, property plus crops, nominal dollars</i>	Zone-level damage since plan <i>property plus crops, reported for the zone</i>	Public Assistance since plan <i>nominal dollars; see note</i>	Note
Avalanche											Not Applicable in NRI for this county
Coastal Flooding	\$2,684,170,519		8,604	\$2,481,842		\$184,845	0.0925%				
Cold Wave	\$12,406,181,701	\$257,904,088	60,195	\$4,110	\$94,868	\$588,830	under 0.0001%				
Drought		\$43,107,986			\$56,325		0.131% (agriculture)				NRI has no building exposure for this hazard; agriculture shown
Earthquake	\$20,637,405,652		60,203	\$301,723		\$83,170	0.00146%				
Hail	\$12,406,181,701	\$257,904,088	60,195	\$53,205	\$65,137	\$1,999	0.000429%				
Heat Wave	\$12,406,181,701	\$257,904,088	60,195	\$65	\$571	\$684,477	under 0.0001%				
Hurricane	\$12,406,181,701	\$257,904,088	60,195	\$36,370,349	\$4,018,949	\$2,678,141	0.293%				
Ice Storm	\$12,403,112,838		60,177	\$255,290		\$28,361	0.00206%				
Inland Flooding	\$12,323,997,665	\$20,050,849	5,918	\$11,969,527	\$493,064	\$940,667	n/a (see note)				NRI counts the full building value of any census block with some flood loss; this is not the value of buildings in the floodplain. Use local FIRM overlays for B2-a/B2-b. EAL as % of exposure: n/a.
Landslide	\$37,854,367		166	\$240		\$3	0.000635%				
Lightning	\$12,406,181,701		60,195	\$21,587		\$978,571	0.000174%				
Strong Wind	\$12,406,181,701	\$257,904,088	60,195	\$138,027	\$144,805	\$342,491	0.00111%				
Tornado	\$12,406,181,701	\$257,904,088	60,195	\$956,855	\$13,247	\$1,722,290	0.00771%				
Tsunami											NRI publishes no building exposure for this county
Volcanic Activity											Not Applicable in NRI for this county
Wildfire	\$4,161,083,024	\$132,708,608	30,693	\$801,715	\$1,928	\$92,916	0.0193%				
Winter Weather	\$12,406,181,701	\$257,904,088	60,195	\$40,020	\$310	\$319,012	0.000323%				

Totals since 2026-04-21 (Storm Events through 2026-06-30): 0 county-coded records, 0 with a damage value recorded (including \$0), \$0; 0 zone-level records, 0 with a damage value recorded (including \$0), \$0 reported for the zone; Public Assistance on counted declarations none found (0 declarations, 0 with PA).

Total = buildings + agriculture + population equivalence; FEMA values each expected death (or 10 injuries) at \$13.7 million (2024 dollars).

FEMA does not split Public Assistance by hazard. A declaration mapped to several hazards is listed under each of them with its full amount, so the per-hazard column must not be added up; the unit total counts each declaration once.

Dollars are nominal (as reported), labeled with the year; not adjusted for inflation.

SOURCES

FEMA, FEMA National Risk Index 1.20.0 (December 2025), county and census tract tables, version 1.20.0, pulled 2026-09-28, https://www.fema.gov/about/reports-and-data/openfema/nri/v120/NRI_Table_Counties.zip (download, 25 MB), https://www.fema.gov/about/reports-and-data/openfema/nri/v120/NRI_Table_CensusTracts.zip (download, 635 MB)
NOAA NCEI, NOAA NCEI Storm Events Database, details files (csvfiles v1.0), version c20260918, pulled 2026-09-28, <https://www.ncei.noaa.gov/pub/data/swdi/stormevents/csvfiles/>
NOAA National Weather Service, NWS county-public forecast zones correlation file, version bp03mr20 to bp16ap26 (11 files; newest bp16ap26), pulled 2026-09-28, <https://www.weather.gov/gis/ZoneCounty>
FEMA, OpenFEMA DisasterDeclarationsSummaries v2, version 2026-09-27T010817Z, pulled 2026-09-28, <https://www.fema.gov/api/open/v2/DisasterDeclarationsSummaries> (API)
FEMA, OpenFEMA PublicAssistanceFundedProjectsSummaries v1, version 2026-09-26T151157Z, pulled 2026-09-28, <https://www.fema.gov/api/open/v1/PublicAssistanceFundedProjectsSummaries> (API)
FEMA, OpenFEMA HazardMitigationPlanStatuses v1, version 2026-09-26T121003Z, pulled 2026-09-28, <https://www.fema.gov/api/open/v1/HazardMitigationPlanStatuses> (API)

Supports B2-a: context

County context

Measure	Value
Population	60,195
Building value (total, not at risk)	\$12,406,181,701
Agriculture value (total, not at risk)	\$257,904,088
NRI risk rating (all hazards)	Relatively Moderate
Expected annual loss, buildings and agriculture, all hazards	\$58,283,761
Expected annual loss, population equivalence, all hazards (NRI values each statistical life at \$13.7M; a modeled value of expected deaths and injuries, not property damage)	\$8,645,772
Social vulnerability rating	Relatively Low
Community resilience rating	Relatively High
NRI version	December 2025

FEMA's all-hazard expected annual loss total adds buildings, agriculture and population equivalence; the two parts are shown separately so the property figure is not read as including the statistical value of life.

SOURCE

FEMA, FEMA National Risk Index 1.20.0 (December 2025), county and census tract tables, version 1.20.0, pulled 2026-09-28, https://www.fema.gov/about/reports-and-data/openfema/nri/v120/NRI_Table_Counties.zip (download, 25 MB), https://www.fema.gov/about/reports-and-data/openfema/nri/v120/NRI_Table_CensusTracts.zip (download, 635 MB)

Supports B2-c: repetitive loss

Repetitive loss in this county, both definitions

Definition	Properties	Severe repetitive loss	Properties
Repetitive loss, FMA definition (44 CFR 77.2)	67	Severe repetitive loss, FMA definition (44 CFR 77.2)	113
Repetitive loss, NFIP insurance definition	639	Severe repetitive loss, NFIP insurance definition	83

Your state NFIP coordinator's list may use the NFIP insurance definition, so its counts can be higher.

SOURCES

FEMA, OpenFEMA NfipMultipleLossProperties v1, version 2026-08-04T164045Z, pulled 2026-09-28, <https://www.fema.gov/api/open/v1/NfipMultipleLossProperties> (API)
FEMA, OpenFEMA HazardMitigationPlanStatuses v1, version 2026-09-26T121003Z, pulled 2026-09-28, <https://www.fema.gov/api/open/v1/HazardMitigationPlanStatuses> (API)

Repeat-flood properties: county and state-level rows

Scope	RL, FMA <i>properties</i>	SRL, FMA <i>properties</i>	RL, NFIP <i>properties</i>	SRL, NFIP <i>properties</i>	Any category <i>properties</i>	Mitigated <i>properties</i>	Currently insured <i>properties</i>
County total	67	113	639	83	669	10	349
SURF CITY, TOWN OF	1	16	180	14	182	2	108
TOPSAIL BEACH, TOWN OF	6	53	317	44	323	5	157
PENDER COUNTY*	60	43	138	24	160	3	80
BURGAU, TOWN OF	0	1	4	1	4	0	4
State level, not in this county: county not reported	0	0	2	0	2	0	0

SOURCESFEMA, OpenFEMA NfipMultipleLossProperties v1, version 2026-08-04T164045Z, pulled 2026-09-28, <https://www.fema.gov/api/open/v1/NfipMultipleLossProperties> (API)FEMA, OpenFEMA HazardMitigationPlanStatuses v1, version 2026-09-26T121003Z, pulled 2026-09-28, <https://www.fema.gov/api/open/v1/HazardMitigationPlanStatuses> (API)**Repeat-flood properties by plan member (NFIP community)**

Member	NFIP community ID	RL, FMA <i>properties</i>	SRL, FMA <i>properties</i>	RL, NFIP <i>properties</i>	SRL, NFIP <i>properties</i>	Any category <i>properties</i>	Mitigated <i>properties</i>	Currently insured <i>properties</i>	Note
Pender County	370344	60	43	138	24	160	3	80	
Atkinson town	370542	0	0	0	0	0	0	0	
Burgaw town	370483	0	1	4	1	4	0	4	
St. Helena village	370649	0	0	0	0	0	0	0	
Surf City town	370186	2	22	241	20	243	2	137	Whole community, including the part in Onslow County, plus 2 properties with no county in FEMA's file; in-county portion (county table): FMA RL 1, FMA SRL 16, NFIP RL 180, NFIP SRL 14, any category 182.
Topsail Beach town	370187	6	53	317	44	323	5	157	
Watha town	370486	0	0	0	0	0	0	0	

Per-member types: XLSX sheet 'B2-c Members'.

Member rows are whole NFIP communities and need not add up to the county total: a community that extends into another county is counted in full on each member row, while the county table counts only its part in this county.

SOURCESFEMA, OpenFEMA NfipMultipleLossProperties v1, version 2026-08-04T164045Z, pulled 2026-09-28, <https://www.fema.gov/api/open/v1/NfipMultipleLossProperties> (API)FEMA, OpenFEMA HazardMitigationPlanStatuses v1, version 2026-09-26T121003Z, pulled 2026-09-28, <https://www.fema.gov/api/open/v1/HazardMitigationPlanStatuses> (API)**County repeat-flood properties by occupancy group**

Occupancy group	RL, FMA <i>properties</i>	SRL, FMA <i>properties</i>	RL, NFIP <i>properties</i>	SRL, NFIP <i>properties</i>	Any category <i>properties</i>	Mitigated <i>properties</i>	Currently insured <i>properties</i>
single-family residential	66	104	577	75	606	9	327

Occupancy group	RL, FMA <i>properties</i>	SRL, FMA <i>properties</i>	RL, NFIP <i>properties</i>	SRL, NFIP <i>properties</i>	Any category <i>properties</i>	Mitigated <i>properties</i>	Currently insured <i>properties</i>
2 to 4 unit residential	1	5	30	4	30	0	11
other residential	0	2	12	2	12	1	4
non-residential	0	2	20	2	21	0	7
not reported	0	0	0	0	0	0	0

Institutional properties cannot be separated in this data: FEMA's occupancy groups have no institutional class, so they fall in non-residential or other residential in the table by occupancy group.

SOURCES

FEMA, OpenFEMA NfipMultipleLossProperties v1, version 2026-08-04T164045Z, pulled 2026-09-28, <https://www.fema.gov/api/open/v1/NfipMultipleLossProperties> (API)

FEMA, OpenFEMA HazardMitigationPlanStatuses v1, version 2026-09-26T121003Z, pulled 2026-09-28, <https://www.fema.gov/api/open/v1/HazardMitigationPlanStatuses> (API)

FMA RL and FMA SRL are the Flood Mitigation Assistance definitions (44 CFR 77.2), the ones the FEMA Local Mitigation Planning Policy Guide cites; OpenFEMA's fmaRI field description omits the Increased Cost of Compliance clause of 44 CFR 77.2(i). NFIP repetitive loss (FEMA insurance definition, nfipRI) is 2 or more claims over \$1,000 in 10 years and can drop to false when a property is mitigated. Also shown: NFIP severe repetitive loss, any category, mitigated and currently insured.

Your state NFIP coordinator's list may use the NFIP insurance definition, so its counts can be higher.

Counts are aggregates of FEMA's public NFIP Multiple Loss Properties file (as of 2026-08-02). No property is identified. County assignment is FEMA's geocode.

Counts may differ from your state NFIP coordinator's list, which is the source the Handbook names.

In this county 20 properties are FMA repetitive loss but not NFIP repetitive loss, and 592 properties are NFIP repetitive loss but not FMA repetitive loss.

Exact counts; no count suppression.

Sources

Every table above lists its own sources. The full list, for the plan's bibliography (FEMA review item A4-a):

1. FEMA, OpenFEMA HazardMitigationPlanStatuses v1, version 2026-09-26T121003Z, pulled 2026-09-28, <https://www.fema.gov/api/open/v1/HazardMitigationPlanStatuses> (API)
2. FEMA, OpenFEMA DisasterDeclarationsSummaries v2, version 2026-09-27T010817Z, pulled 2026-09-28, <https://www.fema.gov/api/open/v2/DisasterDeclarationsSummaries> (API)
3. FEMA, OpenFEMA PublicAssistanceFundedProjectsSummaries v1, version 2026-09-26T151157Z, pulled 2026-09-28, <https://www.fema.gov/api/open/v1/PublicAssistanceFundedProjectsSummaries> (API)
4. FEMA, OpenFEMA NfipMultipleLossProperties v1, version 2026-08-04T164045Z, pulled 2026-09-28, <https://www.fema.gov/api/open/v1/NfipMultipleLossProperties> (API)
5. FEMA, FEMA National Risk Index 1.20.0 (December 2025), county and census tract tables, version 1.20.0, pulled 2026-09-28, https://www.fema.gov/about/reports-and-data/openfema/nri/v120/NRI_Table_Counties.zip (download, 25 MB), https://www.fema.gov/about/reports-and-data/openfema/nri/v120/NRI_Table_CensusTracts.zip (download, 635 MB)
6. NOAA NCEI, NOAA NCEI Storm Events Database, details files (csvfiles v1.0), version c20260918, pulled 2026-09-28, <https://www.ncei.noaa.gov/pub/data/swdi/stormevents/csvfiles/>
7. NOAA National Weather Service, NWS county-public forecast zones correlation file, version bp03mr20 to bp16ap26 (11 files; newest bp16ap26), pulled 2026-09-28, <https://www.weather.gov/gis/ZoneCounty>
8. U.S. Census Bureau, Census 2024 Gazetteer, 2020 place by county, CT county-to-cousub crosswalk, version 2024-gazetteer, pulled 2026-09-28, https://www2.census.gov/geo/docs/maps-data/data/gazetteer/2024_Gazetteer/2024_Gaz_counties_national.zip, https://www2.census.gov/geo/docs/maps-data/data/gazetteer/2024_Gaz_cousubs_national.zip, https://www2.census.gov/geo/docs/maps-data/data/gazetteer/2024_Gaz_place_national.zip, https://www2.census.gov/geo/docs/maps-data/data/gazetteer/2024_Gaz_unsd_national.zip, https://www2.census.gov/geo/docs/maps-data/data/gazetteer/2024_Gaz_elsd_national.zip, https://www2.census.gov/geo/docs/maps-data/data/gazetteer/2024_Gaz_scsd_national.zip, https://www2.census.gov/geo/docs/reference/codes2020/national_place_by_county2020.txt, https://www2.census.gov/geo/docs/reference/ct_change/ct_cou_to_cousub_crosswalk.xlsx

OpenFEMA disclaimer

This product uses the Federal Emergency Management Agency's OpenFEMA API, but is not endorsed by FEMA. The Federal Government or FEMA cannot vouch for the data or analyses derived from these data after the data have been retrieved from the Agency's website(s).

Hazard Plain is an independent product built from public federal data. It is not a FEMA document and is not reviewed or endorsed by FEMA or any state agency.

Reuse, citation and corrections

Reuse and citation: Hazard Plain text and tables are licensed under Creative Commons Attribution 4.0 International (CC BY 4.0, <https://creativecommons.org/licenses/by/4.0/>); credit Hazard Plain and the release. The underlying federal data are public domain; OpenFEMA data are also subject to the OpenFEMA terms and conditions.

Cite this: Hazard Plain (2026). Pender County, NC: risk-assessment baseline packet, release 2026-10 (data as of 2026-09-28; County area 37141). Preview: automated baseline. Built from FEMA OpenFEMA, the FEMA National Risk Index and NOAA NCEI Storm Events; source versions in the packet's Sources list.

Corrections: to report an error, name the packet, the table and what your records show. Contact: to be added

Hazard Plain release 2026-10. As of 2026-09-28; Storm Events data through 2026-06-30. File hazard-plain_2026-10_NC_37141. Preview: automated baseline.