

Mecklenburg County, NC

Risk-assessment baseline packet

County FIPS: 37119 Release: 2026-10 Data as of: 2026-09-30 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.

Summary

Plan status as of 2026-09-30: Approved, expires 2030-10-13. Plan: Mecklenburg County (FEMA plan 111011), approved 2025-10-14.

Since the plan was approved on 2025-10-14: 1 new hazard declaration (1 incident) and 8 NOAA Storm Events records; details under "What changed since your last plan".

Highest expected annual loss (FEMA National Risk Index, modeled total; see B1-a): Inland Flooding (\$256,410,844 a year), Tornado (\$24,454,435) and Earthquake (\$10,959,092).

The tables that follow are organized by the items of FEMA's Local Mitigation Plan Review Tool, Element B (B1-a to B2-c); each heading says which item its tables support.

TERMS USED

EAL: expected annual loss: FEMA's modeled average yearly loss from a hazard.

NRI: FEMA's National Risk Index (version 1.20, December 2025).

NFIP: National Flood Insurance Program.

RL, SRL: repetitive loss and severe repetitive loss: flood-insured properties with repeated claims (definitions in B2-c).

FMA, HMGP: Flood Mitigation Assistance and Hazard Mitigation Grant Program, FEMA mitigation grants.

PA: FEMA Public Assistance: disaster aid to governments and some nonprofits.

Zone-level: NOAA logged the event for a National Weather Service forecast zone, which may include parts of neighboring counties.

County-coded: NOAA logged the event to this county.

FIPS: the federal code for a place; 37119 is this area.

D0 to D4: U.S. Drought Monitor categories, from abnormally dry (D0) to exceptional drought (D4).

F/EF, EFU: Fujita and Enhanced Fujita tornado ratings; EFU is an unrated tornado.

kt, CONUS: knots (1 kt is about 1.15 mph); the contiguous United States.

CFR: Code of Federal Regulations.

A4-a, E1-a: other items of FEMA's Local Mitigation Plan Review Tool (sources, and changes since the last plan).

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

CONTENTS

1. Summary and terms used, page 1
2. Plan clock, page 2
3. What changed since your last plan (approved 2025-10-14), page 2
4. B1-a: hazard identification, page 3
5. B1-b: hazard location, page 4
6. B1-c: hazard extent, page 5
7. B1-d: previous occurrences, page 7
8. B1-e: probability of future events, page 11
9. B1-f: hazards that vary across jurisdictions, page 13
10. B2-a and B2-b: vulnerability and potential impacts, page 15
11. B2-a: vulnerability (county context), page 17
12. B2-c: repetitive loss properties, page 17
13. Sources, what the plan adds, disclaimer and citation, page 19

Plan clock

Status: Approved, expires 2030-10-13
Approved: 2025-10-14

Plan: Mecklenburg County (FEMA plan 111011)
Days to expiry: 1,474

What changed since your last plan (approved 2025-10-14)

New federal declarations: 1 new hazard declaration (1 incident): EM-3637-NC (Severe Winter Storm)
Repetitive loss now: FMA RL 27, SRL 67 (44 CFR 77.2); any definition: 330

Storm Events records since approval: 8 records (data through 2026-06-30)
Repeat-flood change: this release sets the baseline count.

Sources: 1, 2, 4, 6 (numbered list at the end)

Plan status for every jurisdiction listed in this county

Source: 1

Jurisdiction	Type	Status	Plan	Approved	Expires	Days to expiry <i>negative = days since expiry</i>	Update underway	Notes
Mecklenburg County (unincorporated area)	Unincorporated	Approved, expires 2030-10-13	Mecklenburg County (FEMA plan 111011)	2025-10-14	2030-10-13	1,474		this jurisdiction approved 2025-10-21
Charlotte city	City	Approved, expires 2030-10-13	Mecklenburg County (FEMA plan 111011)	2025-10-14	2030-10-13	1,474		this jurisdiction approved 2025-10-21
Cornelius town	Town	Approved, expires 2030-10-13	Mecklenburg County (FEMA plan 111011)	2025-10-14	2030-10-13	1,474		this jurisdiction approved 2025-10-17
Davidson town	Town	Approved, expires 2030-10-13	Mecklenburg County (FEMA plan 111011)	2025-10-14	2030-10-13	1,474		this jurisdiction approved 2025-10-21
Huntersville town	Town	Approved, expires 2030-10-13	Mecklenburg County (FEMA plan 111011)	2025-10-14	2030-10-13	1,474		
Matthews town	Town	Approved, expires 2030-10-13	Mecklenburg County (FEMA plan 111011)	2025-10-14	2030-10-13	1,474		this jurisdiction approved 2025-10-21
Mint Hill town	Town	Approved, expires 2030-10-13	Mecklenburg County (FEMA plan 111011)	2025-10-14	2030-10-13	1,474		
Pineville town	Town	Approved, expires 2030-10-13	Mecklenburg County (FEMA plan 111011)	2025-10-14	2030-10-13	1,474		this jurisdiction approved 2025-10-21
University of North Carolina Western Campuses	College/University	Expired on 2026-09-01	University of North Carolina Western Campuses (FEMA plan 107579)	2021-09-02	2026-09-01	-29	FEMA tracker shows a plan in review	

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

Supports FEMA checklist item B1-a: hazard identification

Hazards NRI does not cover (local data needed)

- 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)

Sources: 5, 6

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>	Cost of expected deaths and injuries <i>FEMA's dollar value per year, not property damage</i>	EAL total (see note) <i>modeled dollars per year</i>	Storm Events records, 1996 to 2026-06-30 <i>count</i>	Storm Events coverage note
1	Inland Flooding	Relatively High	Relatively High	\$252,894,637	\$754	\$3,515,452	\$256,410,844	126	
2	Tornado	Relatively High	Relatively High	\$10,476,261	\$151	\$13,978,023	\$24,454,435	14	
3	Earthquake	Relatively Moderate	Relatively Moderate	\$9,023,813	n/a	\$1,935,278	\$10,959,092		Storm Events does not record earthquakes.
4	Heat Wave	Relatively Moderate	Relatively Moderate	\$133	\$5	\$6,328,157	\$6,328,294	4	
5	Cold Wave	Relatively Moderate	Relatively High	\$15,105	\$56,090	\$4,981,984	\$5,053,179	12	Includes 3 Frost/Freeze records (outside NRI's Cold Wave definition; counted in this table and in B1-d, not in the B1-e descriptor).
6	Hurricane	Relatively Moderate	Relatively Moderate	\$3,813,985	\$10,698	\$209,001	\$4,033,683	4	
7	Hail	Relatively High	Relatively High	\$3,249,733	\$266	\$68,164	\$3,318,162	171	
8	Strong Wind	Relatively High	Relatively High	\$186,641	\$42	\$2,544,286	\$2,730,968	369	Includes 13 High Wind and 11 Strong Wind records (NOAA non-thunderstorm wind types, outside NRI's Strong Wind definition).
9	Lightning	Relatively High	Relatively High	\$231,190	n/a	\$2,006,071	\$2,237,262	46	
10	Ice Storm	Relatively High	Very High	\$1,511,256	n/a	\$457,234	\$1,968,490	6	
11	Winter Weather	Relatively High	Relatively High	\$97,620	\$17	\$247,043	\$344,680	65	Includes 3 Sleet records (outside NRI's Winter Weather definition).
12	Wildfire	Very Low	Relatively Low	\$105,381	\$1	\$13,363	\$118,745	0	No recorded events in Storm Events since 1996 (data through 2026-06-30).

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>	Cost of expected deaths and injuries <i>FEMA's dollar value per year, not property damage</i>	EAL total (see note) <i>modeled dollars per year</i>	Storm Events records, 1996 to 2026-06-30 <i>count</i>	Storm Events coverage note
13	Drought	Very Low	Very Low	n/a	\$24,842	n/a	\$24,842	35	
14	Landslide	Relatively Low	Very Low	\$8,278	n/a	\$177	\$8,455	0	Declared 1 time; no Storm Events record of this type.

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

NRI risk rating combines expected annual loss with social vulnerability and community resilience; EAL rating rates expected annual loss alone. Both compare this county with all U.S. counties.

Local data needed: state and local wildfire and landslide records (Storm Events records these hazards only in part).

Not applicable to this county per NRI, with no federal declaration and no Storm Events record since 1996: avalanche, coastal flooding, tsunami and volcanic activity. That is the evidence for leaving them out of the plan.

The state hazard mitigation plan also lists hazards for this county; FEMA asks the plan to explain any hazard it leaves out.

Supports FEMA checklist item B1-b: hazard location

Affects the whole county (national data give no location within it): Cold Wave, Drought, Hail, Heat Wave, Ice Storm, Lightning, Strong Wind and Winter Weather.

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.

Hazards that vary within the county: highest-rated census tracts

Source: 5

Hazard	Highest-rated census tracts <i>NRI risk rating, score 0 to 100</i>
Earthquake	tract 9802 (Relatively Moderate, 81.1); tract 38.02 (Relatively Moderate, 79.5); tract 40 (Relatively Moderate, 79.4)
Hurricane	tract 9802 (Relatively Low, 64.4); tract 56.04 (Relatively Low, 63.5); tract 58.33 (Relatively Low, 63.4)
Landslide	tract 59.08 (Relatively Low, 92.2); tract 59.26 (Relatively Low, 90.9); tract 63.05 (Relatively Low, 89.9)
Tornado	tract 40 (Relatively Moderate, 71.0); tract 15.08 (Relatively Moderate, 70.6); tract 12 (Relatively Moderate, 70.0)
Wildfire	tract 64.03 (Relatively Low, 80.5); tract 57.19 (Relatively Low, 76.9); tract 57.20 (Relatively Low, 76.8)

Up to 3 census tracts per hazard, highest National Risk Index rating first, then highest score; a tract number is the Census tract number (for example 9802 is Census Tract 9802). FEMA's Resilience Analysis and Planning Tool maps the National Risk Index for every tract: <https://www.fema.gov/emergency-managers/practitioners/resilience-analysis-and-planning-tool>

Supports FEMA checklist item B1-c: hazard extent

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

Sources: 6, 7

Hazard	Scale	Records <i>count and years</i>	Observed range	Worst recorded event	Most damaging (when different)	How it applies to jurisdictions	Note
Cold/Wind Chill, Extreme Cold/Wind Chill	wind chill	9 records, 1996 to 2026 (9 zone-level)	1 day to 31 days (median 2 days); 9 with a recorded value	December 2000 (1 monthly summary record), zone-level		Countywide (zone-level records).	
Frost/Freeze (outside NRI's Cold Wave definition)	crop damage	3 records, 2002 to 2007 (3 zone-level)		Frost/Freeze, 2007-04-08, \$1,000,000 crop damage (2007 dollars); NWS zone NCZ071		Countywide (zone-level records).	
Drought	U.S. Drought Monitor scale (D0 to D4)	35 records, 1998 to 2026 (35 zone-level)	31 days to 276 days (median 61 days); 12 with a recorded value	276 days (9 months), 2007-05-01 to 2008-01-31, a run of 9 consecutive Storm Events drought records, zone-level		Countywide (zone-level records).	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					Storm Events does not record earthquakes; the USGS earthquake catalog is the source.
Hail	hail size (inches)	246 records, 1955 to 2025	0.75 in to 3 in (median 0.89 in); 246 with a recorded value	3 in hail, 1974-04-03	Hail, 1996-05-24, \$1,000,000 property; crops not reported (1996 dollars)	Event records naming jurisdictions in the plan: Charlotte city (52 records), Huntersville town (18 records), Matthews town (14 records), Pineville town (14 records), Mint Hill town (12 records), Cornelius town (9 records), Davidson town (3 records).	
Excessive Heat, Heat	heat index (in event narratives)	4 records, 1998 to 2012 (4 zone-level)	1 day to 3 days (median 1 day); 3 with a recorded value	3 consecutive days, 2012-06-29 to 2012-07-01, zone-level		Countywide (zone-level records).	
Hurricane, Tropical Storm, Tropical Depression	Saffir-Simpson	4 records, 2018 to 2024 (4 zone-level)		Strongest recorded: Tropical Storm record, 2024-09-27, \$3,000,000 property; \$0 crops (2024 dollars), 2 direct deaths (reported for the zone); NWS zone NCZ071		Countywide (zone-level records).	Storm Events files every zone of a storm's episode under the storm's type; flooding from the storm is filed as Flood or Flash Flood records.
Ice Storm	Sperry-Piltz ice scale (local data)	6 records, 1996 to 2005 (6 zone-level)		Ice Storm, 2002-12-04, \$40,000,000 property; crops not reported (2002 dollars); NWS zone NCZ071		Countywide (zone-level records).	

Hazard	Scale	Records <i>count and years</i>	Observed range	Worst recorded event	Most damaging (when different)	How it applies to jurisdictions	Note
Flash Flood, Flood, Lakeshore Flood	damage and flood days (flood depth: FIRM)	126 records, 1996 to 2025 (6 zone-level)		Flash Flood, 2024-09-27, \$25,000,000 property; \$0 crops (2024 dollars)		Event records naming jurisdictions in the plan: Charlotte city (46 records), Pineville town (14 records), Matthews town (6 records), Huntersville town (2 records), Cornelius town (1 record). Zone-level records (6) apply countywide.	Flood depth: see the FEMA Flood Insurance Rate Map. Storm Events damage is often \$0 or blank for floods, major ones included; FEMA Public Assistance by declaration (B1-d) shows which floods cost the most.
Debris Flow	none (count and damage only)	0					
Lightning	annualized frequency (the measure FEMA's Local Mitigation Planning Handbook names)	46 records, 1997 to 2017		Lightning, 2003-07-29, \$30,000 property; crops not reported (2003 dollars), 3 direct deaths, 1 direct injury	Lightning, 1998-07-20, \$1,000,000 property; crops not reported (1998 dollars)	Event records naming jurisdictions in the plan: Charlotte city (23 records), Huntersville town (4 records), Matthews town (4 records), Pineville town (3 records).	Storm Events lists lightning with damage or casualties.
High Wind and Strong Wind (outside NRI's Strong Wind definition)	wind speed (kt and mph)	24 records, 1996 to 2024 (24 zone-level)	35 kt (40 mph) to 65 kt (75 mph) (median 47.5 kt (55 mph)); 20 with a recorded value	65 kt (75 mph) estimated gust, High Wind, 2004-03-07, 1 direct death, 2 direct injuries (reported for the zone); NWS zone NCZ071	High Wind, 2007-04-16, \$500,000 property; \$0 crops (zone total, 2007 dollars)	Countywide (zone-level records).	
Thunderstorm Wind	wind speed (kt and mph)	429 records, 1957 to 2026	40 kt (46 mph) to 80 kt (92 mph) (median 50 kt (58 mph)); 355 with a recorded value	80 kt (92 mph), measurement type not recorded, Thunderstorm Wind, 1962-07-23	Thunderstorm Wind, 2020-05-22, \$500,000 property; \$0 crops (2020 dollars)	Event records naming jurisdictions in the plan: Charlotte city (104 records), Huntersville town (30 records), Mint Hill town (23 records), Pineville town (21 records), Matthews town (18 records), Cornelius town (15 records), Davidson town (12 records).	
Tornado	Enhanced Fujita (Fujita before Feb 2007)	28 records, 1960 to 2026	F/EF0 to F/EF2 (median F/EF1); 28 with a recorded value	F2 tornado, 1992-03-10, 3.4 mi path length (whole path, pre-1996), 180 yd wide, \$2,500,000 property; crops not recorded (1992 dollars), 18 direct injuries		Event records naming jurisdictions in the plan: Charlotte city (4 records), Pineville town (2 records), Cornelius town (1 record), Huntersville town (1 record), Mint Hill town (1 record).	Before 1996 a tornado is listed once, under the county where it began, with its whole path's rating and length; from 1996 on, each county lists its own segment. Length is not used to rank tornadoes (see Methods).

Hazard	Scale	Records <i>count and years</i>	Observed range	Worst recorded event	Most damaging (when different)	How it applies to jurisdictions	Note
Wildfire	acres burned (local data)	0					
Winter Storm, Heavy Snow, Blizzard, Lake- Effect Snow, Winter Weather, Sleet	none in data (snowfall: local data)	65 records, 1996 to 2026 (65 zone-level)		Heavy Snow, 2004-02-26, \$2,500,000 property; crops not reported (2004 dollars); NWS zone NCZ071		Countywide (zone-level records).	

In event narratives only (local data needed): wind chill, temperature, heat index, ice thickness, acres burned and snow depth; any physical measure of debris flow and lightning.

Storm Events records are more complete after 1996; before 1996 only Tornado (from 1950), Hail and Thunderstorm Wind (from 1955) exist. Zone-level records from zones that no NWS zone-county file places in this county (mostly before 2020) are not counted here (the Methods page explains the zone matching).

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

A monthly summary record covers most or all of a month; it does not count days at wave conditions.

Supports FEMA checklist item B1-d: previous occurrences

Federal declarations for this county: 18 declarations covering 14 separate hazard incidents counted in this packet (declarations for the same incident count once; non-natural and evacuation-only declarations are not counted).

Federal disaster declarations for this county

Sources: 1, 2, 3

Declared	Incident began	FEMA number	Type	Title	Mapped hazard	County Public Assistance <i>federal share obligated, nominal dollars</i>	Flags	Notes
2026-01-24	2026-01-21	EM-3637-NC	Emergency	Severe Winter Storm	Winter Weather	no Public Assistance recorded	new since last plan; within last 5 years	
2024-09-28	2024-09-25	DR-4827-NC	Major disaster	Tropical Storm Helene	Hurricane	\$892,010.67	within last 5 years	
2024-09-26	2024-09-25	EM-3617-NC	Emergency	Hurricane Helene	Hurricane (primary); also designated: Inland Flooding, Landslide	no Public Assistance recorded	within last 5 years	same incident as DR-4827
2024-08-06	2024-08-05	EM-3608-NC	Emergency	Tropical Storm Debby	Hurricane	no Public Assistance recorded	within last 5 years	
2022-10-01	2022-09-28	EM-3586-NC	Emergency	Hurricane Ian	Hurricane	no Public Assistance recorded	within last 5 years	
2020-08-02	2020-07-31	EM-3534-NC	Emergency	Hurricane Isaias	Hurricane	no Public Assistance recorded		
2020-03-25	2020-01-20	DR-4487-NC	Major disaster	COVID-19 Pandemic	Non-natural, not counted	\$288,287,247.78		
2020-03-13	2020-01-20	EM-3471-NC	Emergency	COVID-19	Non-natural, not counted	no Public Assistance recorded		same incident as DR-4487
2019-09-03	2019-09-01	EM-3423-NC	Emergency	Hurricane Dorian	Hurricane	no Public Assistance recorded		
2018-09-10	2018-09-07	EM-3401-NC	Emergency	Hurricane Florence	Hurricane	no Public Assistance recorded		
2005-09-05	2005-08-29	EM-3222-NC	Emergency	Hurricane Katrina Evacuation	Hurricane: evacuation support, not a local hazard event; not counted	\$477,474.70		

Declared	Incident began	FEMA number	Type	Title	Mapped hazard	County Public Assistance	Flags	Notes
						<i>federal share obligated, nominal dollars</i>		
2004-09-10	2004-09-07	DR-1546-NC	Major disaster	Tropical Storm Frances	Hurricane	PA not declared for this county		
2002-12-12	2002-12-04	DR-1448-NC	Major disaster	Severe Ice Storm	Ice Storm	\$5,666,890.09		
2000-01-31	2000-01-24	DR-1312-NC	Major disaster	Severe Winter Storm	Winter Weather	\$564,300.86		
1996-01-13	1996-01-06	DR-1087-NC	Major disaster	Blizzard of 96	Winter Weather	no Public Assistance recorded		
1989-09-25	1989-09-21	DR-844-NC	Major disaster	Hurricane Hugo	Hurricane	no Public Assistance recorded		
1977-08-11	1977-08-11	EM-3049-NC	Emergency	Drought	Drought	no Public Assistance recorded		
1977-03-02	1977-03-02	EM-3033-NC	Emergency	Drought & Freezing	Winter Weather (primary); also designated: Drought	no Public Assistance recorded		

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.

Statewide declarations

Source: 2

Declared	Incident began	FEMA number	Type	Title	Mapped hazard
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
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, so they are listed on every county page in the state and not counted with county rows. Local data needed: whether each one affected this county.

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.

Previous occurrences by hazard, with explicit no-event rows

Sources: 2, 6, 7

Hazard	Storm Events records, all years on file <i>(years in the Period column)</i>	Since plan approval <i>records</i>	In the 12 months before plan approval <i>records</i>	Last 5 years <i>records</i>	Declared incidents, all years <i>separate disasters</i>	Declared since approval <i>separate disasters</i>	Period	Statement
Cold Wave	12	1	0	2	0	0	1996 to 2026-06-30	Includes 3 Frost/Freeze records.
Drought	35	2	0	2	2	0	1996 to 2026-06-30	
Earthquake	0	0	0	0	0	0		Storm Events does not record earthquakes; the USGS earthquake catalog is the source.
Hail	246	0	2	8	0	0	1955 to 2026-06-30	
Heat Wave	4	0	0	0	0	0	1996 to 2026-06-30	
Hurricane	4	0	0	2	8	0	1996 to 2026-06-30	
Ice Storm	6	0	0	0	1	0	1996 to 2026-06-30	
Inland Flooding	126	0	3	9	1	0	1996 to 2026-06-30	
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	46	0	0	0	0	0	1996 to 2026-06-30	
Strong Wind	453	2	9	45	0	0	1955 to 2026-06-30	Includes 13 High Wind and 11 Strong Wind records.
Tornado	28	1	1	4	0	0	1950 to 2026-06-30	
Wildfire	0	0	0	0	0	0	1996 to 2026-06-30	No recorded events, 1996 to 2026-06-30, NOAA NCEI Storm Events
Winter Weather	65	2	2	7	4	1	1996 to 2026-06-30	Includes 3 Sleet records.

Notable Storm Events records

Sources: 1, 6, 7

Date	Event type	Magnitude or extent	Damage <i>nominal dollars</i>	Deaths, injuries <i>direct only</i>	Location	Flags	Why listed
2024-09-27	Flash Flood		\$25,000,000 property; \$0 crops (2024 dollars)	0, 0	THRIFT	within last 5 years	B1-c worst recorded: Flash Flood, Flood, Lakeshore Flood
2024-09-27	Tropical Storm		\$3,000,000 property; \$0 crops (zone total, 2024 dollars)	2, 0	NWS zone NCZ071 (MECKLENBURG), zone-level	within last 5 years	deaths or injuries recorded
2012-06-29	Heat		damage not reported	0, 0	NWS zone NCZ071 (MECKLENBURG), zone-level		B1-c worst recorded: Excessive Heat, Heat
2007-04-08	Frost/Freeze		\$0 property; \$1,000,000 crops (zone total, 2007 dollars)	0, 0	NWS zone NCZ071 (MECKLENBURG), zone-level		B1-c worst recorded: Frost/Freeze
2004-03-07	High Wind	65 kt (75 mph) estimated gust	\$75,000 property; crops not reported (zone total, 2004 dollars)	1, 2	NWS zone NCZ071 (MECKLENBURG), zone-level		B1-c worst recorded: High Wind and Strong Wind
2003-07-29	Lightning		\$30,000 property; crops not reported (2003 dollars)	3, 1	MATTHEWS		deaths or injuries recorded
2002-12-04	Ice Storm		\$40,000,000 property; crops not reported (zone total, 2002 dollars)	0, 0	NWS zone NCZ071 (MECKLENBURG), zone-level		B1-c worst recorded: Ice Storm
2000-12-01	Extreme Cold/ Wind Chill		damage not reported	0, 0	NWS zone NCZ071 (MECKLENBURG), zone-level		B1-c worst recorded: Cold/Wind Chill, Extreme Cold/Wind Chill
1997-07-23	Flash Flood		\$8,500,000 property; crops not reported (1997 dollars)	3, 0	COUNTYWIDE		deaths or injuries recorded
1992-03-10	Tornado	F2, 3.4 mi path length (whole path, pre-1996), 180 yd wide	\$2,500,000 property; crops not recorded (1992 dollars)	0, 18	location not recorded		B1-c worst recorded: Tornado
1974-04-03	Hail	3 in	damage not recorded (pre-1996 record)	0, 0	location not recorded		B1-c worst recorded: Hail
1962-07-23	Thunderstorm Wind	80 kt (92 mph), measurement type not recorded	damage not recorded (pre-1996 record)	0, 0	location not recorded		B1-c worst recorded: Thunderstorm Wind

The full list is in the Excel file, sheet "B1-d Storm Events history" (1,025 rows).

Location is the place NOAA recorded, as written in its data; it need not be a jurisdiction in this plan.

Local data needed: state-declared emergencies, from your state emergency management agency (federal data do not include them).

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

Supports FEMA checklist item B1-e: probability of future events

Probability: FEMA annualized frequency and descriptor per hazard

Sources: 5, 6

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	0.316	event-days per year	about 0.316 days per year	Likely	Storm Events event- days in 8 of 30 years, 1996 to 2025 (26.7%)	6	2005-11-12 to 2024-11-12 (19 years)	countywide	
Drought	24.1	event-days per year	about 24.1 days per year	Likely	Storm Events event- days in 8 of 30 years, 1996 to 2025 (26.7%)	903	2000 to 2025 (25.25 years; D3 and D4 only)	countywide	
Earthquake	0.002	annual probability at a location	chance a given location in the county has at least minor-damage shaking in a year: 0.2%			not shown	modeled	see B1-f	No descriptor (Storm Events does not record earthquakes).
Hail	4.8	events per year	about 4.8 per year	Highly likely	FEMA annualized frequency (modeled)	182.7 (modeled)	1986 to 2023 (38 years)	countywide	
Heat Wave	3	event-days per year	about 3 days per year	Possible	Storm Events event- days in 2 of 30 years, 1996 to 2025 (6.67%)	47	2005-11-12 to 2024-11-12 (19 years)	countywide	
Hurricane	0.0859	events per year	about 1 in 12 years	Possible	FEMA annualized frequency (modeled)	28	1851 to 2024 (Atlantic)	see B1-f	NRI counts hurricane and tropical storm tracks passing within storm-force wind range; federal declarations are in B1-d.
Ice Storm	2.1	event-days per year	about 2.1 days per year	Likely	Storm Events event- days in 6 of 30 years, 1996 to 2025 (20%)	141	1946-12-31 to 2014-02-12 (67 years)	countywide	
Inland Flooding	3.5	event-days per year	about 3.5 days per year	Highly likely	Storm Events event- days in 27 of 30 years, 1996 to 2025 (90%)	98	1996 to 2023 (28 years)	see B1-f	
Landslide	0.394	events per year (modeled)	about 1 in 3 years	Likely	FEMA annualized frequency (modeled)	not shown	modeled	see B1-f	
Lightning	52.1	days per year with a strike	about 52.1 days per year	Highly likely	FEMA annualized frequency (modeled)	not shown	1995 to 2023 (29 years; CONUS)	countywide	
Strong Wind	2.73	events per year	about 2.73 per year	Highly likely	FEMA annualized frequency (modeled)	104	1986 to 2023 (38 years)	countywide	

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
Tornado	0.284	events per year	about 1 in 4 years	Likely	FEMA annualized frequency (modeled)	not shown	1950 to 2023 (EF2+); 1986 to 2023 (EF0-1)	see B1-f	
Wildfire	0.000026	annual probability at a location	chance a given location in the county burns in a year: 0.0026%		Storm Events records in 0 of 30 years, 1996 to 2025 (0%)	not shown	modeled	see B1-f	No descriptor: no Storm Events record 1996 to 2025
Winter Weather	5.26	event-days per year	about 5.26 days per year	Likely	Storm Events event-days in 23 of 30 years, 1996 to 2025 (76.7%)	100	2005-11-12 to 2024-11-12 (19 years)	countywide	

FEMA annualized frequency (modeled) is the National Risk Index v1.20 (December 2025) estimate of how often a hazard affects this county in a year; it is not recorded events divided by years, and its unit differs by hazard (events, event-days, or days with a lightning strike per year). For earthquake, wildfire, coastal flooding and tsunami the value is the chance (or number of events) at a location in the county, not across the county, so no "1 in N years" is given and the descriptor comes from Storm Events where it has a record (none for earthquake). The Methods page gives each hazard's method, from FEMA's National Risk Index Technical Documentation v1.20.

Where NRI gives event-days, the descriptor comes from the share of years with a Storm Events record; NRI's source records more events, so the two differ.

Descriptor scale used in this packet (defined per unit)

Sources: 5, 6

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

Intensity bands: historical frequency (Storm Events)

Source: 6

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	79	30	2.63
Hail	2.00 in+	1996 to 2025	5	30	0.167
Thunderstorm Wind (counted as NRI Strong Wind)	50-64 kt	1996 to 2025	326	30	10.9
Thunderstorm Wind (counted as NRI Strong Wind)	65 kt+	1996 to 2025	5	30	0.167
Thunderstorm Wind (counted as NRI Strong Wind)	unmeasured or below 50 kt	1996 to 2025	12	30	0.4
Tornado	EF0-1	1996 to 2025	11	30	0.367
Tornado	EF2-3	1996 to 2025	2	30	0.0667
Tornado	EF4-5	1996 to 2025	0	30	0
Tornado	unrated (EFU)	1996 to 2025	0	30	0

The bands show how often events of each severity were recorded in this county, to profile how severe events have been (FEMA's probability item asks for the range of intensities).

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.

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 (<https://resilience.climate.gov/>).

Supports FEMA checklist item B1-f: hazards that vary across jurisdictions

Range of census tract risk within the county

Source: 5

Hazard	Tracts <i>rated of all</i>	NRI risk score, 0 to 100			Tracts by rating
		Min	Median	Max	
Cold Wave	305 of 305	16.0	27.3	43.2	Relatively Low 302, Very Low 3
Drought	23 of 305	69.7	75.6	84.9	Relatively Low 6, Very Low 17, No Rating 282
Earthquake	305 of 305	13.5	45.9	81.1	Relatively Moderate 3, Relatively Low 193, Very Low 109
Hail	305 of 305	26.9	53.8	77.2	Relatively Moderate 9, Relatively Low 286, Very Low 10
Heat Wave	305 of 305	1.4	26.0	58.2	Relatively Moderate 2, Relatively Low 247, Very Low 56
Hurricane	305 of 305	39.1	52.7	64.4	Relatively Low 198, Very Low 107
Ice Storm	305 of 305	15.4	53.7	81.8	Relatively Moderate 23, Relatively Low 265, Very Low 17
Inland Flooding	305 of 305	1.2	56.2	98.7	Very High 6, Relatively High 48, Relatively Moderate 121, Relatively Low 102, Very Low 28
Landslide	305 of 305	14.9	54.6	92.2	Relatively Low 12, Very Low 293
Lightning	305 of 305	1.0	33.9	61.8	Relatively Moderate 25, Relatively Low 259, Very Low 21
Strong Wind	305 of 305	4.2	30.9	56.7	Relatively Moderate 2, Relatively Low 282, Very Low 21

Hazard	Tracts <i>rated of all</i>	NRI risk score, 0 to 100			Tracts by rating
		Min	Median	Max	
Tornado	305 of 305	23.6	52.0	71.0	Relatively Moderate 138, Relatively Low 165, Very Low 2
Wildfire	292 of 305	20.3	49.3	80.5	Relatively Low 15, Very Low 277, No Rating 13
Winter Weather	305 of 305	16.5	32.0	48.2	Relatively Low 303, Very Low 2

Drought: Agriculture is all of NRI's expected annual loss for this hazard in the county, so the tract range mostly reflects where crop and livestock value is.

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.

The score ranks a tract against all U.S. tracts (100 = highest). The rating is FEMA's category for the tract's risk value, computed differently, so the two can disagree.

Frequency data for cold wave, drought, hail, heat wave, ice storm, lightning, strong wind and winter weather are county-wide or coarse (49 km grid or NWS zone), the same for every jurisdiction; the tract range mostly reflects where buildings and people are (crop and livestock value where a line above names agriculture).

Each jurisdiction (starting figures from federal data)

Sources: 1, 3, 4, 6

Jurisdiction	Type	Plan status	Repetitive loss <i>FMA RL and SRL (44 CFR 77.2); repeat-flood, any definition</i>	Public Assistance to this jurisdiction <i>FEMA records matched by applicant name; federal share obligated, nominal dollars</i>	Event records naming this place <i>all years; since its plan</i>	Notes
Mecklenburg County (unincorporated area)	Unincorporated	Approved, expires 2030-10-13	FMA RL 3, SRL 2; any 18	\$19,976,968.75	0 total; 0 since its plan	Includes \$19,059,899.20 for declarations not counted as hazard incidents (DR-4487-NC).
Charlotte city	City	Approved, expires 2030-10-13	FMA RL 24, SRL 65; any 307	\$6,916,102.11	229 total; 2 since its plan	Includes \$1,735,007.92 for declarations not counted as hazard incidents (DR-4487-NC, EM-3222-NC).
Cornelius town	Town	Approved, expires 2030-10-13	FMA RL 0, SRL 0; any 0	\$178,366.41	26 total; 0 since its plan	Includes \$10,852.66 for declarations not counted as hazard incidents (DR-4487-NC).
Davidson town	Town	Approved, expires 2030-10-13	FMA RL 0, SRL 0; any 0	\$159,103.94	15 total; 0 since its plan	Includes \$104,983.97 for declarations not counted as hazard incidents (DR-4487-NC).
Huntersville town	Town	Approved, expires 2030-10-13	FMA RL 0, SRL 0; any 1	\$370,653.82	55 total; 0 since its plan	Includes \$93,065.26 for declarations not counted as hazard incidents (DR-4487-NC).
Matthews town	Town	Approved, expires 2030-10-13	FMA RL 0, SRL 0; any 2	\$294,599.06	42 total; 1 since its plan	Includes \$124,542.68 for declarations not counted as hazard incidents (DR-4487-NC).
Mint Hill town	Town	Approved, expires 2030-10-13	FMA RL 0, SRL 0; any 2	\$220,992.57	36 total; 0 since its plan	
Pineville town	Town	Approved, expires 2030-10-13	FMA RL 0, SRL 0; any 0	\$23,930.90	54 total; 0 since its plan	

Repetitive-loss counts are for whole NFIP communities, which can extend beyond this county (see the note in B2-c).

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

County Public Assistance in B1-d also includes applicants filed under the county that are not jurisdictions in this plan (for example state agencies, special districts and nonprofits), so the jurisdiction rows add up to less.

Supports FEMA checklist items B2-a and B2-b: vulnerability and potential impacts

Local data needed

The table below gives county-level starting figures; the plan describes impacts for each jurisdiction and its own assets.

- Critical facilities and lifelines per hazard
- A problem statement per jurisdiction 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

Sources: 1, 2, 3, 5, 6, 7

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>	Cost of expected deaths and injuries <i>FEMA's dollar value per year, not property damage</i>	EAL as % of exposure <i>buildings; agriculture where noted</i>	Storm Events damage since 2025-10-14 <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
Cold Wave	\$233,473,907,981	\$5,560,254	1,114,693	\$15,105	\$56,090	\$4,981,984	under 0.0001%		\$0		
Drought	n/a	\$3,071,507	n/a	n/a	\$24,842	n/a	0.809% (agriculture)		\$0		NRI has no building exposure for this hazard; agriculture shown
Earthquake	\$395,317,454,354	n/a	1,115,482	\$9,023,813	n/a	\$1,935,278	0.00228%				
Hail	\$233,473,907,981	\$5,560,254	1,114,693	\$3,249,733	\$266	\$68,164	0.00139%				
Heat Wave	\$233,473,907,981	\$5,560,254	1,114,693	\$133	\$5	\$6,328,157	under 0.0001%				
Hurricane	\$233,461,281,529	\$5,560,254	1,114,618	\$3,813,985	\$10,698	\$209,001	0.00163%				
Ice Storm	\$233,462,381,005	n/a	1,114,624	\$1,511,256	n/a	\$457,234	0.000647%				

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>	Cost of expected deaths and injuries <i>FEMA's dollar value per year, not property damage</i>	EAL as % of exposure <i>buildings; agriculture where noted</i>	Storm Events damage since 2025-10-14 <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
Inland Flooding	\$233,327,507,893	\$340,514	10,565	\$252,894,637	\$754	\$3,515,452	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.
Landslide	\$4,163,225,837	n/a	19,676	\$8,278	n/a	\$177	0.000199%				
Lightning	\$233,473,907,981	n/a	1,114,693	\$231,190	n/a	\$2,006,071	under 0.0001%				
Strong Wind	\$233,473,907,981	\$5,560,254	1,114,693	\$186,641	\$42	\$2,544,286	under 0.0001%	\$0			
Tornado	\$233,473,907,981	\$5,560,254	1,114,693	\$10,476,261	\$151	\$13,978,023	0.00449%	\$50,000			
Wildfire	\$72,418,403,582	\$2,766,640	381,000	\$105,381	\$1	\$13,363	0.000146%				
Winter Weather	\$233,473,907,981	\$5,560,254	1,114,693	\$97,620	\$17	\$247,043	under 0.0001%		\$0	no Public Assistance recorded (1 declaration)	

Totals since 2025-10-14 (Storm Events through 2026-06-30): 3 county-coded records, 3 with a damage value recorded (including \$0), \$50,000; 5 zone-level records, 5 with a damage value recorded (including \$0), \$0 reported for the zone; Public Assistance: none recorded on the 1 counted declaration.

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 does not add up to the total; the unit total counts each declaration once.

NRI computes earthquake exposure on its own basis, so it exceeds the county building value in B2-a.

Supports FEMA checklist item B2-a: vulnerability (county context)

County context

Source: 5

Measure	Value
Population	1,114,693
Building value (total, not at risk)	\$233,473,907,981
Agriculture value (total, not at risk)	\$5,560,254
NRI risk rating (all hazards)	Relatively High
Expected annual loss, buildings and agriculture, all hazards	\$281,706,898
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)	\$36,284,232
Social vulnerability rating	Very Low
Community resilience rating	Relatively Moderate
NRI version	December 2025

FEMA's all-hazard expected annual loss adds buildings, agriculture and population equivalence; this table gives the property part and the population-equivalence part as separate rows.

Social vulnerability: higher means people are more likely to be harmed and slower to recover. Community resilience: lower means the community is less able to recover. High social vulnerability and low resilience both raise the NRI risk rating.

Supports FEMA checklist item B2-c: repetitive loss properties

Repetitive loss in this county, both definitions

Sources: 1, 4

Definition	Properties	Severe repetitive loss	Properties
Repetitive loss, FMA definition (44 CFR 77.2)	27	Severe repetitive loss, FMA definition (44 CFR 77.2)	67
Repetitive loss, NFIP insurance definition	314	Severe repetitive loss, NFIP insurance definition	53

The state NFIP coordinator's list, the source FEMA's Handbook names, often uses the NFIP insurance definition (second row).

Repeat-flood properties: county and state-level rows

Sources: 1, 4

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	27	67	314	53	330	14	123
of which: Mecklenburg County (unincorporated area)	3	2	18	2	18	0	7
of which: Charlotte city	24	65	291	51	307	14	112
of which: Matthews town	0	0	2	0	2	0	1
of which: Huntersville town	0	0	1	0	1	0	1
of which: Mint Hill town	0	0	2	0	2	0	2
Statewide, no county in FEMA's file	0	0	2	0	2	0	0

The statewide row counts properties FEMA's file gives with no county in this state; they are listed for reference and are not in this county's counts.

Repeat-flood properties by jurisdiction in the plan (NFIP community)

Sources: 1, 4

Jurisdiction	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>
Mecklenburg County (unincorporated area)	370158	3	2	18	2	18	0	7
Charlotte city	370159	24	65	291	51	307	14	112
Cornelius town	370498	0	0	0	0	0	0	0
Davidson town	370503	0	0	0	0	0	0	0
Huntersville town	370478	0	0	1	0	1	0	1
Matthews town	370310	0	0	2	0	2	0	1
Mint Hill town	370539	0	0	2	0	2	0	2
Pineville town	370160	0	0	0	0	0	0	0

Counts by occupancy group for each jurisdiction are in the Excel file, sheet "B2-c Jurisdictions".

Jurisdiction 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 jurisdiction row, while the county table counts only its part in this county.

County repeat-flood properties by occupancy group

Sources: 1, 4

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	24	47	220	34	236	14	109
2 to 4 unit residential	0	4	11	4	11	0	1
other residential	2	13	66	13	66	0	9
non-residential	1	3	17	2	17	0	4
not reported	0	0	0	0	0	0	0

FEMA's occupancy groups have no institutional class; institutional properties are counted in non-residential or other residential in the table by occupancy group.

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. NFIP repetitive loss (the FEMA insurance definition) is 2 or more claims over \$1,000 in 10 years, and a property can leave that group once it is mitigated. Also shown: NFIP severe repetitive loss, any category, mitigated and currently insured. The Methods page gives the OpenFEMA field details.

Counts are aggregates of FEMA's public NFIP Multiple Loss Properties file (FEMA's data date 2026-08-02; file version 2026-08-04). No property is identified. County assignment is FEMA's geocode.

In this county 9 properties are FMA repetitive loss but not NFIP repetitive loss, and 296 properties are NFIP repetitive loss but not FMA repetitive loss.

Exact counts; no count suppression.

Sources

Tables cite these sources by number. The full list, for the plan's bibliography (FEMA review item A4-a):

1. FEMA, OpenFEMA HazardMitigationPlanStatuses v1, version 2026-09-29T134039Z, pulled 2026-09-30, <https://www.fema.gov/api/open/v1/HazardMitigationPlanStatuses> (API)
2. FEMA, OpenFEMA DisasterDeclarationsSummaries v2, version 2026-09-29T162832Z, pulled 2026-09-30, <https://www.fema.gov/api/open/v2/DisasterDeclarationsSummaries> (API)
3. FEMA, OpenFEMA PublicAssistanceFundedProjectsSummaries v1, version 2026-09-29T150754Z, pulled 2026-09-30, <https://www.fema.gov/api/open/v1/PublicAssistanceFundedProjectsSummaries> (API)
4. FEMA, OpenFEMA NfipMultipleLossProperties v1, version 2026-08-04T164045Z, pulled 2026-09-30, <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 2026-09-30, 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 2026-09-30, <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 2026-09-30, <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 2026-09-30, 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_Gazetteer/2024_Gaz_cousubs_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_Gazetteer/2024_Gaz_place_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_Gazetteer/2024_Gaz_unsd_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_Gazetteer/2024_Gaz_elsd_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_Gazetteer/2024_Gaz_scsd_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 (used to match place names and codes; no table prints its values)

What this packet is and what the plan adds

This packet is the federal data for the plan's risk assessment (the summary on page 1 says how it is organized); the plan and FEMA's review decide whether each item is met.

The plan adds what only the community has: local data on assets, critical facilities, development and each jurisdiction's impacts; local hazard history, including state-declared emergencies; the mitigation strategy; and adoption.

How the federal data are built: National Risk Index values are FEMA's model, not counts of events. Storm Events is more complete from 1996; zone-level records are placed by forecast zone, not by location in the county. Public Assistance for a jurisdiction is matched by applicant name. The Methods page gives every rule and the known edge cases.

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).

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). Mecklenburg County, NC: risk-assessment baseline packet, release 2026-10 (data as of 2026-09-30; County FIPS 37119). Automated baseline. <https://hazardplain.org/nc/37119/> 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: contact@hazardplain.org