

Rota Municipality, MP

Risk-assessment baseline packet

Unit **County area 69100** 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 2029-07-27	Plan	Northern Mariana Islands state-level plan (plan 109829)
Approved	2024-07-28	Expires	2029-07-27
As of	2026-09-28	Days	1,033 days to expiry

Plan clock from the Northern Mariana Islands state-level plan; FEMA plan data has no county-level or local plan row for this area.

What changed since your last plan (approved 2024-07-28)

New federal declarations	EM-3645-MP, DR-4910-MP, EM-3647-MP, DR-4931-MP (4 declaration rows; 2 counted incidents)	Storm Events records since approval	5 (data through 2026-06-30)
Repetitive loss now	FMA RL 0, SRL 0 (44 CFR 77.2); any definition: 0	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
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No rows for this unit.

No member jurisdictions in FEMA plan data for this unit.

Plan 109829 also covers 1 other participant not listed on this page: Northern Mariana Islands.

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 2024-07-28), page 1	8. Supports B1-f: variation across the planning area, page 17
3. Supports B1-a: hazards, page 2	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 6	11. Supports B2-c: repetitive loss, page 21
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	Tsunami	Insufficient Data	Relatively Low	\$19,845		\$1,450,606	\$1,470,451	0		No recorded events in Storm Events since 1996 (data through 2026-06-30). Storm Events files some records for the whole legacy area "NORTHERN MARIANAS" (for example Super Typhoon Yutu, 2018-10-24, whose eye crossed Tinian); those records are assigned to the Northern Islands Municipality, which has no page here, so they are counted on no page, and a zero does not show that no events occurred. Storm Events coverage of this hazard is limited; absence is not evidence of low risk.
2	Hurricane	Insufficient Data	Relatively Low	\$908,155	\$382	\$40,461	\$948,998	18		Includes 3 Tropical Depression records, event types the NRI definition of this hazard leaves out.
3	Earthquake	Insufficient Data	Relatively Low	\$256,106		\$93,664	\$349,771			Not in Storm Events. Storm Events coverage of this hazard is limited; absence is not evidence of low risk.
4	Coastal Flooding	Insufficient Data	Very Low	\$5,813		\$8	\$5,821	0		No recorded events in Storm Events since 1996 (data through 2026-06-30). Storm Events files some records for the whole legacy area "NORTHERN MARIANAS" (for example Super Typhoon Yutu, 2018-10-24, whose eye crossed Tinian); those records are assigned to the Northern Islands Municipality, which has no page here, so they are counted on no page, and a zero does not show that no events occurred. Storm Events coverage of this hazard is limited; absence is not evidence of low risk.

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 count	Evidence for an omission <i>NRI Not Applicable, no declaration and no Storm Events record since 1996</i>	Storm Events coverage note
5	Inland Flooding	Insufficient Data	Very Low	\$0	under \$1	\$86	\$86	0		No recorded events in Storm Events since 1996 (data through 2026-06-30). Storm Events files some records for the whole legacy area "NORTHERN MARIANAS" (for example Super Typhoon Yutu, 2018-10-24, whose eye crossed Tinian); those records are assigned to the Northern Islands Municipality, which has no page here, so they are counted on no page, and a zero does not show that no events occurred. Storm Events coverage of this hazard is limited; absence is not evidence of low risk.
6	Volcanic Activity	Insufficient Data	Very Low	under \$1		\$45	\$45	2		
7	Cold Wave	Insufficient Data	No Expected Annual Losses	\$0	\$0	\$0	\$0	0		No recorded events in Storm Events since 1996 (data through 2026-06-30). Storm Events files some records for the whole legacy area "NORTHERN MARIANAS" (for example Super Typhoon Yutu, 2018-10-24, whose eye crossed Tinian); those records are assigned to the Northern Islands Municipality, which has no page here, so they are counted on no page, and a zero does not show that no events occurred. Storm Events coverage of this hazard is limited; absence is not evidence of low risk.
8	Heat Wave	Insufficient Data	No Expected Annual Losses	\$0	\$0	\$0	\$0	0		No recorded events in Storm Events since 1996 (data through 2026-06-30). Storm Events files some records for the whole legacy area "NORTHERN MARIANAS" (for example Super Typhoon Yutu, 2018-10-24, whose eye crossed Tinian); those records are assigned to the Northern Islands Municipality, which has no page here, so they are counted on no page, and a zero does not show that no events occurred. Storm Events coverage of this hazard is limited; absence is not evidence of low risk.
9	Winter Weather	Insufficient Data	No Expected Annual Losses	\$0	\$0	\$0	\$0	0		No recorded events in Storm Events since 1996 (data through 2026-06-30). Storm Events files some records for the whole legacy area "NORTHERN MARIANAS" (for example Super Typhoon Yutu, 2018-10-24, whose eye crossed Tinian); those records are assigned to the Northern Islands Municipality, which has no page here, so they are counted on no page, and a zero does not show that no events occurred. 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). Storm Events files some records for the whole legacy area "NORTHERN MARIANAS" (for example Super Typhoon Yutu, 2018-10-24, whose eye crossed Tinian); those records are assigned to the Northern Islands Municipality, which has no page here, so they are counted on no page, and a zero does not show that no events occurred.
	Drought	Insufficient Data	Insufficient Data					10		

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 count	Evidence for an omission <i>NRI Not Applicable, no declaration and no Storm Events record since 1996</i>	Storm Events coverage note
	Hail	Insufficient Data	Insufficient Data					0		No recorded events in Storm Events since 1996 (data through 2026-06-30). Storm Events files some records for the whole legacy area "NORTHERN MARIANAS" (for example Super Typhoon Yutu, 2018-10-24, whose eye crossed Tinian); those records are assigned to the Northern Islands Municipality, which has no page here, so they are counted on no page, and a zero does not show that no events occurred. Storm Events coverage of this hazard is limited; absence is not evidence of low risk.
	Ice Storm	Not Applicable	Not Applicable					0	NRI rates ice storm 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 files some records for the whole legacy area "NORTHERN MARIANAS" (for example Super Typhoon Yutu, 2018-10-24, whose eye crossed Tinian); those records are assigned to the Northern Islands Municipality, which has no page here, so they are counted on no page, and a zero does not show that no events occurred.
	Landslide	Insufficient Data	Insufficient Data					0		No recorded events in Storm Events since 1996 (data through 2026-06-30). Storm Events files some records for the whole legacy area "NORTHERN MARIANAS" (for example Super Typhoon Yutu, 2018-10-24, whose eye crossed Tinian); those records are assigned to the Northern Islands Municipality, which has no page here, so they are counted on no page, and a zero does not show that no events occurred. Storm Events coverage of this hazard is limited; absence is not evidence of low risk.
	Lightning	Insufficient Data	Insufficient Data					1		
	Strong Wind	Insufficient Data	Insufficient Data					0		No recorded events in Storm Events since 1996 (data through 2026-06-30). Storm Events files some records for the whole legacy area "NORTHERN MARIANAS" (for example Super Typhoon Yutu, 2018-10-24, whose eye crossed Tinian); those records are assigned to the Northern Islands Municipality, which has no page here, so they are counted on no page, and a zero does not show that no events occurred. Storm Events coverage of this hazard is limited; absence is not evidence of low risk.
	Tornado	Insufficient Data	Insufficient Data					0		No recorded events in Storm Events since 1996 (data through 2026-06-30). Storm Events files some records for the whole legacy area "NORTHERN MARIANAS" (for example Super Typhoon Yutu, 2018-10-24, whose eye crossed Tinian); those records are assigned to the Northern Islands Municipality, which has no page here, so they are counted on no page, and a zero does not show that no events occurred. Storm Events coverage of this hazard is limited; absence is not evidence of low risk.

Rank by EAL	Hazard	NRI risk rating	EAL rating	EAL buildings	EAL agriculture	EAL population equivalence	EAL total (see note)	Storm Events records since 1996	Evidence for an omission	Storm Events coverage note
				<i>modeled dollars per year</i>	<i>modeled dollars per year</i>	<i>statistical value of life and injury, \$13.7M per life, not property damage</i>	<i>modeled dollars per year</i>	<i>count</i>	<i>NRI Not Applicable, no declaration and no Storm Events record since 1996</i>	
	Wildfire	Insufficient Data	Insufficient Data					0		No recorded events in Storm Events since 1996 (data through 2026-06-30). Storm Events files some records for the whole legacy area "NORTHERN MARIANAS" (for example Super Typhoon Yutu, 2018-10-24, whose eye crossed Tinian); those records are assigned to the Northern Islands Municipality, which has no page here, so they are counted on no page, and a zero does not show that no events occurred. 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 1
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.	0 of 1
Cold Wave	Affects the whole planning area; national data do not distinguish locations within the county. Confirm locally.	0 of 1
Drought	Affects the whole planning area; national data do not distinguish locations within the county. Confirm locally.	0 of 1
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.	0 of 1
Hail	Affects the whole planning area; national data do not distinguish locations within the county. Confirm locally.	0 of 1
Heat Wave	Affects the whole planning area; national data do not distinguish locations within the county. Confirm locally.	0 of 1
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.	0 of 1
Ice Storm	Affects the whole planning area; national data do not distinguish locations within the county. Confirm locally.	0 of 1
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.	0 of 1
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.	0 of 1
Lightning	Affects the whole planning area; national data do not distinguish locations within the county. Confirm locally.	0 of 1
Strong Wind	Affects the whole planning area; national data do not distinguish locations within the county. Confirm locally.	0 of 1
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.	0 of 1
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 1
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 1

Hazard	Location	Census tracts rated <i>rated of all tracts</i>
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.	0 of 1
Winter Weather	Affects the whole planning area; national data do not distinguish locations within the county. Confirm locally.	0 of 1

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)	0					Flood depth: see the FEMA Flood Insurance Rate Map.
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	0					Temperature: in event narratives only; local data required.
Drought	US Drought Monitor D-scale	10, 2016 to 2025 (10 zone-level)	30 days to 153 days (median 52.5 days); 4 with a recorded value	153 days (5 months), 2020-04-01 to 2020-08-31, a run of 5 consecutive Storm Events drought records, zone-level	Drought, 2025-05-13, \$8,250 property; crops not reported, reported for the zone (2025 dollars)	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)	0					
Excessive Heat, Heat	heat index (narratives)	0					Heat index: 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
Hurricane, Tropical Storm, Tropical Depression	Saffir-Simpson	18, 1997 to 2026 (17 zone- level)		Strongest recorded (records with damage, a wind speed or direct casualties first, then storm type, category and wind): Hurricane (Typhoon) record, 2018-10-24 to 2018-10-25, category 3, \$1,000,000 property; \$1,000,000 crops, reported for the zone (2018 dollars) (as recorded; larger than this county's annual agriculture value in the National Risk Index; confirm with the county or the state extension service); Storm Events area ROTA (legacy zone code GUZ008), zone- level: may include parts of neighboring counties	Most damaging recorded: Hurricane (Typhoon), 2002-12-08, \$50,000,000 property; crops not reported, reported for the zone (2002 dollars)	No event record names a member place. Zone-level records (17) apply countywide.	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)	0					Ice thickness: in event narratives only; local data required.
Flash Flood, Flood, Lakeshore Flood	damage and flood days (FIRM for depth)	0					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)	1, 2003 to 2003		Lightning, 2003-06-27, \$12,000 property; crops not reported (2003 dollars)		No event record names a member place.	Storm Events lists lightning with damage or casualties; physical measure 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
High Wind and Strong Wind (outside NRI Strong Wind definition)	wind speed (kt and mph)	0					
Thunderstorm Wind	wind speed (kt and mph)	0					
Tornado	Enhanced Fujita (F before Feb 2007)	0					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)	2, 2003 to 2003 (2 zone-level)		No damage reported in 2 records.		Zone-level records: applies countywide; national data do not locate these events within the county.	Physical measure: in event narratives only; local data required.
Wildfire	acres burned (local data)	0					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)	0					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/>

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>

Supports B1-d: previous occurrences

Declaration rows

26

Counted incidents

19

Federal disaster declarations for this county

Declared	Incident began	FEMA number	Type	Title	Mapped hazard	County Public Assistance <i>federal share obligated, nominal dollars</i>	Flags	Notes
2026-08-03	2026-07-04	DR-4931-MP	Major disaster	SUPER TYPHOON BAVI	Hurricane	not yet in FEMA's PA summaries (they cover declarations through 2026-06-30)	new since last plan; within last 5 years	
2026-07-03	2026-07-02	EM-3647-MP	Emergency	TYPHOON BAVI	Hurricane	not yet in FEMA's PA summaries (they cover declarations through 2026-06-30)	new since last plan; within last 5 years	same incident as DR-4931
2026-04-23	2026-04-11	DR-4910-MP	Major disaster	SUPER TYPHOON SINLAKU	Hurricane		new since last plan; within last 5 years	
2026-04-11	2026-04-11	EM-3645-MP	Emergency	TYPHOON SINLAKU	Hurricane		new since last plan; within last 5 years	same incident as DR-4910
2023-10-08	2023-10-09	EM-3602-MP	Emergency	TROPICAL STORM BOLAVEN	Hurricane		during plan review, check whether your last plan included it; within last 5 years	
2023-06-02	2023-05-22	DR-4716-MP	Major disaster	TYPHOON MAWAR	Hurricane		within last 5 years	
2023-05-22	2023-05-22	EM-3593-MP	Emergency	TYPHOON MAWAR	Hurricane		within last 5 years	same incident as DR-4716
2020-04-01	2020-01-20	DR-4511-MP	Major disaster	COVID-19 PANDEMIC	Non-natural, not counted			
2020-03-13	2020-01-20	EM-3463-MP	Emergency	COVID-19	Non-natural, not counted			same incident as DR-4511
2019-10-20	2019-10-20	EM-3425-MP	Emergency	TYPHOON BUALOI	Hurricane			
2019-10-07	2019-10-07	EM-3424-MP	Emergency	TYPHOON HAGIBIS	Hurricane			
2018-10-26	2018-10-24	DR-4404-MP	Major disaster	SUPER TYPHOON YUTU	Hurricane			
2018-10-23	2018-10-24	EM-3408-MP	Emergency	TYPHOON YUTU	Hurricane			same incident as DR-4404
2018-09-29	2018-09-10	DR-4396-MP	Major disaster	TYPHOON MANGKHUT	Hurricane			

Declared	Incident began	FEMA number	Type	Title	Mapped hazard	County Public Assistance <i>federal share obligated, nominal dollars</i>	Flags	Notes
2018-09-10	2018-09-10	EM-3402-MP	Emergency	TYPHOON MANGKHUT	Hurricane	none found		same incident as DR-4396
2015-08-05	2015-08-01	DR-4235-MP	Major disaster	TYPHOON SOUDELOR	Hurricane	none found		
2005-11-08	2005-08-30	DR-1611-MP	Major disaster	TYPHOON NABI	Hurricane	none found		
2004-08-26	2004-08-21	DR-1541-MP	Major disaster	FLOODING, HIGH SURF, STORM SURGE, AND HIGH WINDS AS A RESULT OF SUPER TYPHOON CH	Hurricane	none found		
2004-07-29	2004-06-27	DR-1532-MP	Major disaster	FLOODING, HIGH SURF, HIGH WINDS, AND WIND-DRIVEN RAIN ASSOCIATED W TYPH TINGTING	Hurricane	none found		
2002-12-11	2002-12-08	DR-1447-MP	Major disaster	SUPER TYPHOON PONGSONA	Hurricane	none found		
2002-08-06	2002-07-04	DR-1430-MP	Major disaster	TYPHOON CHATA'AN	Hurricane	none found		
1997-12-24	1997-12-16	DR-1194-MP	Major disaster	SUPER TYPHOON PAKA	Hurricane	none found		
1997-12-08	1997-11-02	DR-1192-MP	Major disaster	SUPER TYPHOON KEITH	Hurricane	none found		
1990-02-05	1990-01-15	DR-854-MP	Major disaster	TYPHOON KORYN	Hurricane	none found		
1988-01-20	1988-01-11	DR-811-MP	Major disaster	TYPHOON ROY	Hurricane	none found		
1987-11-03	1987-10-18	DR-800-MP	Major disaster	TYPHOON LYNN	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)

Previous occurrences by hazard, with explicit no-event rows

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
Avalanche	0	0	0	0	0	0	1996 to 2026-06-30	No recorded events, 1996 to 2026-06-30, NOAA NCEI Storm Events. Storm Events files some records for the whole legacy area "NORTHERN MARIANAS" (for example Super Typhoon Yutu, 2018-10-24, whose eye crossed Tinian); those records are assigned to the Northern Islands Municipality, which has no page here, so they are counted on no page, and a zero does not show that no events occurred.
Coastal Flooding	0	0	0	0	0	0	1996 to 2026-06-30	No recorded events, 1996 to 2026-06-30, NOAA NCEI Storm Events. Storm Events files some records for the whole legacy area "NORTHERN MARIANAS" (for example Super Typhoon Yutu, 2018-10-24, whose eye crossed Tinian); those records are assigned to the Northern Islands Municipality, which has no page here, so they are counted on no page, and a zero does not show that no events occurred.
Cold Wave	0	0	0	0	0	0	1996 to 2026-06-30	No recorded events, 1996 to 2026-06-30, NOAA NCEI Storm Events. Storm Events files some records for the whole legacy area "NORTHERN MARIANAS" (for example Super Typhoon Yutu, 2018-10-24, whose eye crossed Tinian); those records are assigned to the Northern Islands Municipality, which has no page here, so they are counted on no page, and a zero does not show that no events occurred.
Drought	10	2	2	4	0	0	1996 to 2026-06-30	
Earthquake	0	0	0	0	0	0		No Storm Events record; local data required (e.g., USGS).. Storm Events files some records for the whole legacy area "NORTHERN MARIANAS" (for example Super Typhoon Yutu, 2018-10-24, whose eye crossed Tinian); those records are assigned to the Northern Islands Municipality, which has no page here, so they are counted on no page, and a zero does not show that no events occurred.
Hail	0	0	0	0	0	0	1955 to 2026-06-30	No recorded events, 1955 to 2026-06-30, NOAA NCEI Storm Events. Storm Events files some records for the whole legacy area "NORTHERN MARIANAS" (for example Super Typhoon Yutu, 2018-10-24, whose eye crossed Tinian); those records are assigned to the Northern Islands Municipality, which has no page here, so they are counted on no page, and a zero does not show that no events occurred.
Heat Wave	0	0	0	0	0	0	1996 to 2026-06-30	No recorded events, 1996 to 2026-06-30, NOAA NCEI Storm Events. Storm Events files some records for the whole legacy area "NORTHERN MARIANAS" (for example Super Typhoon Yutu, 2018-10-24, whose eye crossed Tinian); those records are assigned to the Northern Islands Municipality, which has no page here, so they are counted on no page, and a zero does not show that no events occurred.
Hurricane	18	3	1	5	19	2	1996 to 2026-06-30	Includes 3 Tropical Depression records, event types the NRI definition of this hazard leaves out.
Ice Storm	0	0	0	0	0	0	1996 to 2026-06-30	No recorded events, 1996 to 2026-06-30, NOAA NCEI Storm Events. Storm Events files some records for the whole legacy area "NORTHERN MARIANAS" (for example Super Typhoon Yutu, 2018-10-24, whose eye crossed Tinian); those records are assigned to the Northern Islands Municipality, which has no page here, so they are counted on no page, and a zero does not show that no events occurred.
Inland Flooding	0	0	0	0	0	0	1996 to 2026-06-30	No recorded events, 1996 to 2026-06-30, NOAA NCEI Storm Events. Storm Events files some records for the whole legacy area "NORTHERN MARIANAS" (for example Super Typhoon Yutu, 2018-10-24, whose eye crossed Tinian); those records are assigned to the Northern Islands Municipality, which has no page here, so they are counted on no page, and a zero does not show that no events occurred.
Landslide	0	0	0	0	0	0	1996 to 2026-06-30	No recorded events, 1996 to 2026-06-30, NOAA NCEI Storm Events. Storm Events files some records for the whole legacy area "NORTHERN MARIANAS" (for example Super Typhoon Yutu, 2018-10-24, whose eye crossed Tinian); those records are assigned to the Northern Islands Municipality, which has no page here, so they are counted on no page, and a zero does not show that no events occurred.
Lightning	1	0	0	0	0	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
Strong Wind	0	0	0	0	0	0	1955 to 2026-06-30	No recorded events, 1955 to 2026-06-30, NOAA NCEI Storm Events. Storm Events files some records for the whole legacy area "NORTHERN MARIANAS" (for example Super Typhoon Yutu, 2018-10-24, whose eye crossed Tinian); those records are assigned to the Northern Islands Municipality, which has no page here, so they are counted on no page, and a zero does not show that no events occurred.
Tornado	0	0	0	0	0	0	1950 to 2026-06-30	No recorded events, 1950 to 2026-06-30, NOAA NCEI Storm Events. Storm Events files some records for the whole legacy area "NORTHERN MARIANAS" (for example Super Typhoon Yutu, 2018-10-24, whose eye crossed Tinian); those records are assigned to the Northern Islands Municipality, which has no page here, so they are counted on no page, and a zero does not show that no events occurred.
Tsunami	0	0	0	0	0	0	1996 to 2026-06-30	No recorded events, 1996 to 2026-06-30, NOAA NCEI Storm Events. Storm Events files some records for the whole legacy area "NORTHERN MARIANAS" (for example Super Typhoon Yutu, 2018-10-24, whose eye crossed Tinian); those records are assigned to the Northern Islands Municipality, which has no page here, so they are counted on no page, and a zero does not show that no events occurred.
Volcanic Activity	2	0	0	0	0	0	1996 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. Storm Events files some records for the whole legacy area "NORTHERN MARIANAS" (for example Super Typhoon Yutu, 2018-10-24, whose eye crossed Tinian); those records are assigned to the Northern Islands Municipality, which has no page here, so they are counted on no page, and a zero does not show that no events occurred.
Winter Weather	0	0	0	0	0	0	1996 to 2026-06-30	No recorded events, 1996 to 2026-06-30, NOAA NCEI Storm Events. Storm Events files some records for the whole legacy area "NORTHERN MARIANAS" (for example Super Typhoon Yutu, 2018-10-24, whose eye crossed Tinian); those records are assigned to the Northern Islands Municipality, which has no page here, so they are counted on no page, and a zero does not show that no events occurred.

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
2025-05-13	Drought		\$8,250 property; crops not reported, reported for the zone (2025 dollars)	0, 0	Storm Events area ROTA (legacy zone code GUZ008), zone-level: may include parts of neighboring counties	new since last plan; within last 5 years	B1-c most damaging: Drought
2020-04-01	Drought		damage not reported	0, 0	Storm Events area ROTA (legacy zone code GUZ008), zone-level: may include parts of neighboring counties		B1-c worst recorded: Drought
2018-10-24	Hurricane (Typhoon)	category 3	\$1,000,000 property; \$1,000,000 crops, reported for the zone (2018 dollars) (as recorded; larger than this county's annual agriculture value in the National Risk Index; confirm with the county or the state extension service)	0, 0	Storm Events area ROTA (legacy zone code GUZ008), zone-level: may include parts of neighboring counties		B1-c worst recorded: Hurricane, Tropical Storm, Tropical Depression

Date	Event type	Magnitude or extent	Damage <i>nominal dollars</i>	Direct deaths, injuries <i>indirect not counted</i>	Location	Flags	Why listed
2003-06-27	Lightning		\$12,000 property; crops not reported (2003 dollars)	0, 0	COUNTYWIDE		B1-c worst recorded: Lightning
2002-12-08	Hurricane (Typhoon)		\$50,000,000 property; crops not reported, reported for the zone (2002 dollars)	0, 10	Storm Events area ROTA (legacy zone code GUZ008), zone-level: may include parts of neighboring counties		deaths or injuries recorded
1997-12-15	Hurricane (Typhoon)		\$4,400,000 property; crops not reported (1997 dollars)	0, 0	SONGSONG		large reported damage

The full list is in the XLSX file, sheet "B1-d Storm Events history" (31 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.

FEMA's declaration data list no tribal or special-area declarations for this state.

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	0.012	events per year at a location (modeled)	about 0.012 per year at a given location in the county		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). Storm Events files some records for the whole legacy area "NORTHERN MARIANAS" (for example Super Typhoon Yutu, 2018-10-24, whose eye crossed Tinian); those records are assigned to the Northern Islands Municipality, which has no page here, so they are counted on no page, and a zero does not show that no events occurred.

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	event-days per year	none modeled		event-days in 0 of 30 years, 1996 to 2025 (0%)	0	2005-11-12 to 2024-11-12 (19 years)	countywide	No recorded event-days, 1996 to 2025; descriptor not assigned. Storm Events files some records for the whole legacy area "NORTHERN MARIANAS" (for example Super Typhoon Yutu, 2018-10-24, whose eye crossed Tinian); those records are assigned to the Northern Islands Municipality, which has no page here, so they are counted on no page, and a zero does not show that no events occurred. Frost/Freeze records are not counted in this descriptor: they record crop freezes, not cold waves.
Drought		event-days per year		Likely	event-days in 4 of 30 years, 1996 to 2025 (13.3%)		2000 to 2025 (25.25 years; D3 and D4 only)	countywide	
Earthquake	0.0747	annual probability at a location	chance a given location in the county has at least minor- damage shaking in a year: 7.47%			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		events per year					1986 to 2023 (38 years)	countywide	NRI publishes no annualized frequency for this hazard in this county.
Heat Wave	0	event-days per year	none modeled		event-days in 0 of 30 years, 1996 to 2025 (0%)	0	2005-11-12 to 2024-11-12 (19 years)	countywide	No recorded event-days, 1996 to 2025; descriptor not assigned. Storm Events files some records for the whole legacy area "NORTHERN MARIANAS" (for example Super Typhoon Yutu, 2018-10-24, whose eye crossed Tinian); those records are assigned to the Northern Islands Municipality, which has no page here, so they are counted on no page, and a zero does not show that no events occurred.
Hurricane	0.145	events per year	about 1 in 7 years	Likely	FEMA annualized frequency (modeled)	11	1949 to 2024 (Pacific)	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		event-days per year					1946-12-31 to 2014-02-12 (67 years)	countywide	Not Applicable in NRI for this county; no descriptor.
Inland Flooding	0.01	event-days per year	about 0.01 days per year		event-days in 0 of 30 years, 1996 to 2025 (0%)	0	1996 to 2023 (28 years)	see B1-f	No recorded event-days, 1996 to 2025; descriptor not assigned. Storm Events files some records for the whole legacy area "NORTHERN MARIANAS" (for example Super Typhoon Yutu, 2018-10-24, whose eye crossed Tinian); those records are assigned to the Northern Islands Municipality, which has no page here, so they are counted on no page, and a zero does not show that no events occurred.
Landslide		events per year (modeled)				not shown	modeled	see B1-f	NRI publishes no annualized frequency for this hazard in this county.

	FEMA annualized frequency (modeled) <i>unit per row</i>					NRI events or days in its record period (hail, wind and tornado are area- weighted, so can be fractional)				
Hazard		Unit	In plain terms	Descriptor	Descriptor basis		NRI period	Location	Note	
Lightning		days per year with a strike				not shown	1995 to 2023 (29 years; CONUS)	countywide	Descriptor not assigned: NRI publishes no lightning frequency for this county.	
Strong Wind		events per year					1986 to 2023 (38 years)	countywide	NRI publishes no annualized frequency for this hazard in this county.	
Tornado		events per year				not shown	1950 to 2023 (EF2+); 1986 to 2023 (EF0-1)	see B1-f	NRI publishes no annualized frequency for this hazard in this county.	
Tsunami	0.122	annual probability at the most exposed location (used in place of a county value)	chance at the county's most exposed location in a year: 12.2%		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). Storm Events files some records for the whole legacy area "NORTHERN MARIANAS" (for example Super Typhoon Yutu, 2018-10-24, whose eye crossed Tinian); those records are assigned to the Northern Islands Municipality, which has no page here, so they are counted on no page, and a zero does not show that no events occurred.	
Volcanic Activity	0.0101	annual probability	about 1 in 99 years	Possible	FEMA annualized frequency (modeled)	not shown	modeled	see B1-f		
Wildfire		annual probability at a location			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). Storm Events files some records for the whole legacy area "NORTHERN MARIANAS" (for example Super Typhoon Yutu, 2018-10-24, whose eye crossed Tinian); those records are assigned to the Northern Islands Municipality, which has no page here, so they are counted on no page, and a zero does not show that no events occurred.	
Winter Weather	0	event-days per year	none modeled		event-days in 0 of 30 years, 1996 to 2025 (0%)	0	2005-11-12 to 2024-11-12 (19 years)	countywide	No recorded event-days, 1996 to 2025; descriptor not assigned. Storm Events files some records for the whole legacy area "NORTHERN MARIANAS" (for example Super Typhoon Yutu, 2018-10-24, whose eye crossed Tinian); those records are assigned to the Northern Islands Municipality, which has no page here, so they are counted on no page, and a zero does not show that no events occurred.	

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	0	30	0
Hail	2.00 in+	1996 to 2025	0	30	0
Strong Wind (Thunderstorm Wind records)	50-64 kt	1996 to 2025	0	30	0
Strong Wind (Thunderstorm Wind records)	65 kt+	1996 to 2025	0	30	0
Strong Wind (Thunderstorm Wind records)	unmeasured or below 50 kt	1996 to 2025	0	30	0
Tornado	EF0-1	1996 to 2025	0	30	0
Tornado	EF2-3	1996 to 2025	0	30	0
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 <i>rated of all</i>	Risk score min <i>NRI score, 0 to 100</i>	Median	Max	Tracts by rating	Note
Avalanche	0 of 1				Not Applicable 1	
Coastal Flooding	0 of 1				Insufficient Data 1	
Cold Wave	0 of 1				Insufficient Data 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.
Drought	0 of 1				Insufficient Data 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.
Earthquake	0 of 1				Insufficient Data 1	
Hail	0 of 1				Insufficient Data 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.
Heat Wave	0 of 1				Insufficient Data 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.
Hurricane	0 of 1				Insufficient Data 1	
Ice Storm	0 of 1				Not Applicable 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.
Inland Flooding	0 of 1				Insufficient Data 1	
Landslide	0 of 1				Insufficient Data 1	
Lightning	0 of 1				Insufficient Data 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	0 of 1				Insufficient Data 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.
Tornado	0 of 1				Insufficient Data 1	
Tsunami	0 of 1				Insufficient Data 1	

Hazard	Tracts <i>rated of all</i>	Risk score min		Median	Max	Tracts by rating	Note
		<i>NRI score, 0 to 100</i>					
Volcanic Activity	0 of 1					Insufficient Data 1	
Wildfire	0 of 1					Insufficient Data 1	
Winter Weather	0 of 1					Insufficient Data 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		Public Assistance matched	Event records naming this place	Notes
			<i>FMA RL and SRL (44 CFR 77.2); repeat- flood, any definition</i>				
					<i>federal share obligated, nominal dollars</i>	<i>all years; since the member's plan</i>	

No rows for this unit.

No city, town, township or county member rows in FEMA plan data for this unit; same as 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 2024-07-28 <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	\$179,552,196		307	\$5,813		\$8	0.00324%				
Cold Wave	\$0	\$0	0	\$0	\$0	\$0					building exposure is 0 in NRI
Drought									\$8,250		NRI publishes no agriculture exposure for this county
Earthquake	\$779,689,654		1,897	\$256,106		\$93,664	0.0328%				
Hail											NRI publishes no building exposure for this county
Heat Wave	\$0	\$0	0	\$0	\$0	\$0					building exposure is 0 in NRI
Hurricane	\$436,865,276	\$58,524	1,872	\$908,155	\$382	\$40,461	0.208%		\$0	none found (4 declarations)	
Ice Storm											Not Applicable in NRI for this county
Inland Flooding	\$0	\$1,893	296	\$0	under \$1	\$86	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											NRI publishes no building exposure for this county
Lightning											NRI publishes no building exposure for this county
Strong Wind											NRI publishes no building exposure for this county
Tornado											NRI publishes no building exposure for this county
Tsunami	\$251,163,530		184	\$19,845		\$1,450,606	0.0079%				
Volcanic Activity	\$436,865,276		1,872	under \$1		\$45	under 0.0001%				
Wildfire											NRI publishes no building exposure for this county

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 2024-07-28 <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
Winter Weather	\$0	\$0	0	\$0	\$0	\$0					building exposure is 0 in NRI

Totals since 2024-07-28 (Storm Events through 2026-06-30): 0 county-coded records, 0 with a damage value recorded (including \$0), \$0; 5 zone-level records, 5 with a damage value recorded (including \$0), \$8,250 reported for the zone; Public Assistance on counted declarations none found (4 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/>
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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	1,872
Building value (total, not at risk)	\$436,865,276
Agriculture value (total, not at risk)	\$58,524
NRI risk rating (all hazards)	Insufficient Data
Expected annual loss, buildings and agriculture, all hazards	\$1,190,301
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)	\$1,584,870
Social vulnerability rating	Data Unavailable
Community resilience rating	Data Unavailable
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)	0	Severe repetitive loss, FMA definition (44 CFR 77.2)	0
Repetitive loss, NFIP insurance definition	0	Severe repetitive loss, NFIP insurance definition	0

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 total and NFIP communities

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	0	0	0	0	0	0	0

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)

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	0	0	0	0	0	0	0
2 to 4 unit residential	0	0	0	0	0	0	0
other residential	0	0	0	0	0	0	0
non-residential	0	0	0	0	0	0	0
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 fmaRL field description omits the Increased Cost of Compliance clause of 44 CFR 77.2(i). NFIP repetitive loss (FEMA insurance definition, nfipRL) 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 0 properties are FMA repetitive loss but not NFIP repetitive loss, and 0 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)
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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_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_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_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

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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_MP_69100. Preview: automated baseline.