

Ottawa County, OH

Risk-assessment baseline packet

Unit **County area 39123** 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 2027-08-07	Plan	Ottawa County Hazard Mitigation Plan (FEMA plan 108465)
Approved	2022-08-08	Expires	2027-08-07
As of	2026-09-28	Days	313 days to expiry
Update underway	none in FEMA's plan tracker		

What changed since your last plan (approved 2022-08-08)

New federal declarations	none (0 declaration rows; 0 counted incidents)	Storm Events records since approval	42 (data through 2026-06-30)
Repetitive loss now	FMA RL 3, SRL 7 (44 CFR 77.2); any definition: 141	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
Ottawa County	County	Approved, expires 2027-08-07	Ottawa County Hazard Mitigation Plan (FEMA plan 108465)	2022-08-08	2027-08-07	313		
Clay Center village	Village	Approved, expires 2027-08-07	Ottawa County Hazard Mitigation Plan (FEMA plan 108465)	2022-08-08	2027-08-07	313		
Elmore village	Village	Approved, expires 2027-08-07	Ottawa County Hazard Mitigation Plan (FEMA plan 108465)	2022-08-08	2027-08-07	313		member approved 2022-10-07
Genoa village	Village	Approved, expires 2027-08-07	Ottawa County Hazard Mitigation Plan (FEMA plan 108465)	2022-08-08	2027-08-07	313		member approved 2022-10-07

Jurisdiction	Type	Status	Plan	Approved	Expires	Days to expiry	Update underway	Notes
						<i>negative = days since expiry</i>		
Marblehead village	Village	Approved, expires 2027-08-07	Ottawa County Hazard Mitigation Plan (FEMA plan 108465)	2022-08-08	2027-08-07	313		member approved 2022-10-07
Oak Harbor village	Village	Approved, expires 2027-08-07	Ottawa County Hazard Mitigation Plan (FEMA plan 108465)	2022-08-08	2027-08-07	313		member approved 2022-11-09
Port Clinton city	City	Approved, expires 2027-08-07	Ottawa County Hazard Mitigation Plan (FEMA plan 108465)	2022-08-08	2027-08-07	313		member approved 2022-10-07
Put-in-Bay village	Village	Plan 108465 approved 2022-08-08, pending adoption here; not yet eligible	Ottawa County Hazard Mitigation Plan (FEMA plan 108465), pending adoption here	2022-08-08 by FEMA; not yet adopted here	2027-08-07 once adopted		FEMA tracker shows a plan approvable pending adoption	Not yet eligible: adopt the approved plan.
Rocky Ridge village	Village	Approved, expires 2027-08-07	Ottawa County Hazard Mitigation Plan (FEMA plan 108465)	2022-08-08	2027-08-07	313		member approved 2022-11-09

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.

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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	Inland Flooding	Relatively Low	Relatively Low	\$15,222,380	\$159,820	\$39,792	\$15,421,992	34		
2	Tornado	Relatively Moderate	Relatively Moderate	\$1,959,422	\$490	\$984,029	\$2,943,940	10		
3	Strong Wind	Relatively Moderate	Relatively Moderate	\$541,459	\$63,812	\$713,865	\$1,319,137	230		Includes 45 High Wind records and 5 Strong Wind records, event types the NRI definition of this hazard leaves out.
4	Hail	Relatively Low	Relatively Low	\$578,291	\$12,353	\$4,376	\$595,020	94		
5	Cold Wave	Relatively Low	Relatively Low	\$3,215	\$8,839	\$549,525	\$561,579	10		
6	Earthquake	Very Low	Relatively Low	\$287,027		\$53,289	\$340,316			Not in Storm Events. Storm Events coverage of this hazard is limited; absence is not evidence of low risk.
7	Ice Storm	Relatively Moderate	Relatively Moderate	\$299,442		\$735	\$300,177	3		
8	Winter Weather	Relatively Moderate	Relatively Moderate	\$156,056	\$223	\$30,850	\$187,129	35		
9	Heat Wave	Very Low	Very Low	\$3,550	\$1	\$168,409	\$171,960	2		
10	Lightning	Relatively Low	Relatively Low	\$21,252		\$93,996	\$115,248	4		

Rank by EAL	Hazard	NRI risk rating	EAL rating	EAL buildings <i>modeled dollars per year</i>	EAL agriculture <i>modeled dollars per year</i>	EAL population equivalence <i>statistical value of life and injury, \$13.7M per life, not property damage</i>	EAL total (see note) <i>modeled dollars per year</i>	Storm Events records since 1996 <i>count</i>	Evidence for an omission <i>NRI Not Applicable, no declaration and no Storm Events record since 1996</i>	Storm Events coverage note
11	Coastal Flooding	Relatively Low	Relatively Low	\$84,345		\$4,107	\$88,451	10		
12	Hurricane	Very Low	Very Low	\$36,599	\$7,604	\$338	\$44,541	0		No recorded events in Storm Events since 1996 (data through 2026-06-30).
13	Wildfire	Very Low	Very Low	\$4,768	\$1	\$252	\$5,020	0		No recorded events in Storm Events since 1996 (data through 2026-06-30). Storm Events coverage of this hazard is limited; absence is not evidence of low risk.
14	Landslide	Very Low	Very Low	\$31		\$112	\$143	0		No recorded events in Storm Events since 1996 (data through 2026-06-30). Storm Events coverage of this hazard is limited; absence is not evidence of low risk.
15	Drought	No Rating	No Expected Annual Losses		\$0		\$0	5		
	Avalanche	Not Applicable	Not Applicable					0	NRI rates avalanche Not Applicable for this county, and no federal declaration for this county names it.	No recorded events in Storm Events since 1996 (data through 2026-06-30).
	Tsunami	Insufficient Data	Insufficient Data					0		No recorded events in Storm Events since 1996 (data through 2026-06-30). Storm Events coverage of this hazard is limited; absence is not evidence of low risk.
	Volcanic Activity	Not Applicable	Not Applicable					0	NRI rates volcanic activity Not Applicable for this county, and no federal declaration for this county names it.	No recorded events in Storm Events since 1996 (data through 2026-06-30). Storm Events coverage of this hazard is limited; absence is not evidence of low risk.

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

SOURCES

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

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

Supports B1-b: location

Where each hazard occurs

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

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

Supports B1-c: extent

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

Hazard	Scale	Records <i>count, years</i>	Observed range	Worst recorded event	Most damaging (when different)	How it applies to members	Note
Avalanche	none (count and damage)	0					Physical measure: in event narratives only; local data required.

Hazard	Scale	Records <i>count, years</i>	Observed range	Worst recorded event	Most damaging (when different)	How it applies to members	Note
Coastal Flood, Storm Surge/ Tide	none in data (FIRM for depth)	10, 1997 to 2019 (4 zone- level)		Storm Surge/Tide, 1998-04-09, \$2,000,000 property; crops not reported (1998 dollars)		Event records naming member places: Port Clinton city (4 records). Zone-level records (4) apply countywide.	Flood depth: see the FEMA Flood Insurance Rate Map.
Cold/Wind Chill, Extreme Cold/Wind Chill	wind chill	10, 1996 to 2022 (10 zone- level)	1 day to 10 days (median 2 days); 10 with a recorded value	10 consecutive days, 1997-01-10 to 1997-01-19, zone-level	Cold/Wind Chill, 1996-02-02, \$50,000 property; crops not reported, reported for the zone (1996 dollars)	Zone-level records: applies countywide; national data do not locate these events within the county.	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	5, 1996 to 1999 (5 zone- level)	31 days to 122 days (median 76.5 days); 2 with a recorded value	122 days (4 months), 1999-06-01 to 1999-09-30, a run of 4 consecutive Storm Events drought records, zone- level	Drought, 1999-09-01, property not reported; \$5,000,000 crops, reported for the zone (1999 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)	114, 1957 to 2026	0.25 in to 2.5 in (median 0.88 in); 114 with a recorded value	2.5 in hail, 2012-07-01		Event records naming member places: Oak Harbor village (33 records), Port Clinton city (16 records), Genoa village (12 records), Elmore village (8 records), Marblehead village (6 records), Rocky Ridge village (3 records), Put-in-Bay village (1 record).	
Excessive Heat, Heat	heat index (narratives)	2, 1999 to 1999 (2 zone- level)	7 days to 31 days (median 19 days); 2 with a recorded value	31 days, 1999-07-01 to 1999-07-31, from 1 monthly summary record (a monthly summary record covers most or all of a month; it does not count days at wave conditions), zone-level		Zone-level records: applies countywide; national data do not locate these events within the county.	Heat index: in event narratives only; local data required.
Hurricane, Tropical Storm, Tropical Depression	Saffir-Simpson	0					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.

Hazard	Scale	Records <i>count, years</i>	Observed range	Worst recorded event	Most damaging (when different)	How it applies to members	Note
Ice Storm	Sperry-Piltz (local data)	3, 2002 to 2025 (3 zone- level)		Ice Storm, 2005-01-05, \$600,000 property; crops not reported, reported for the zone (2005 dollars); NWS zone OHZ007 (OTTAWA), zone-level: may include parts of neighboring counties		Zone-level records: applies countywide; national data do not locate these events within the county.	Ice thickness: in event narratives only; local data required.
Flash Flood, Flood, Lakeshore Flood	damage and flood days (FIRM for depth)	34, 1996 to 2023 (13 zone- level)		Flash Flood, 2006-06-21, \$8,000,000 property; crops not reported (2006 dollars)		Event records naming member places: Oak Harbor village (5 records), Port Clinton city (4 records), Put-in-Bay village (2 records), Marblehead village (1 record). Zone-level records (13) apply countywide.	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)	4, 1998 to 2000		Lightning, 1998-09-07, \$45,000 property; crops not reported (1998 dollars)		Event records naming member places: Genoa village (1 record).	Storm Events lists lightning with damage or casualties; physical measure in event narratives only; local data required.
High Wind and Strong Wind (outside NRI Strong Wind definition)	wind speed (kt and mph)	50, 1996 to 2021 (50 zone- level)	35 kt (40 mph) to 61 kt (70 mph) (median 50 kt (58 mph)); 39 with a recorded value	61 kt (70 mph) measured gust, High Wind, 2017-01-10; NWS zone OHZ007 (OTTAWA), zone- level: may include parts of neighboring counties	High Wind, 2008-09-14, \$1,500,000 property; \$500,000 crops, reported for the zone (2008 dollars)	Zone-level records: applies countywide; national data do not locate these events within the county.	
Thunderstorm Wind	wind speed (kt and mph)	242, 1956 to 2026	45 kt (52 mph) to 80 kt (92 mph) (median 50 kt (58 mph)); 157 with a recorded value	80 kt (92 mph), measurement type not recorded, Thunderstorm Wind, 1998-06-24; same speed and measurement basis also recorded on 1957-06-06		Event records naming member places: Oak Harbor village (38 records), Port Clinton city (29 records), Elmore village (21 records), Genoa village (16 records), Put-in-Bay village (9 records), Clay Center village (5 records), Rocky Ridge village (5 records), Marblehead village (4 records).	Speeds under 20 kt (likely entry errors) are left out of the observed range.

Hazard	Scale	Records <i>count, years</i>	Observed range	Worst recorded event	Most damaging (when different)	How it applies to members	Note
Tornado	Enhanced Fujita (F before Feb 2007)	15, 1959 to 2025	F/EF0 to F/EF3 (median F/EF1); 15 with a recorded value	EF3 tornado, 2010-06-05, 2.3 mi within this county, 200 yd wide, \$2,400,000 property; \$0 crops (2010 dollars)	Tornado, 1998-06-24, \$20,000,000 property; \$5,000,000 crops (1998 dollars)	Event records naming member places: Oak Harbor village (2 records), Port Clinton city (2 records), Clay Center village (1 record), Elmore village (1 record).	From 1996 on, tornado records are per-county segments and length is the path length within this county (NWS Instruction 10-1605); records before 1996 may give the whole path length, including the path outside this county, and before 1996 a tornado is listed once, under the county where it began, with the whole path's rating; counties farther along the path may not list it. Length is not used to rank tornadoes.
Tsunami	none (count and damage)	0					Physical measure: in event narratives only; local data required.
Volcanic Ash, Volcanic Ashfall	Volcanic Explosivity Index (local data)	0					Physical measure: in event narratives only; local data required.
Wildfire	acres burned (local data)	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)	35, 1996 to 2022 (34 zone-level)		Winter Storm, 2004-12-22, \$1,000,000 property; crops not reported, reported for the zone (2004 dollars); NWS zone OHZ007 (OTTAWA), zone-level: may include parts of neighboring counties		No event record names a member place. Zone-level records (34) apply countywide.	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 13 Counted incidents 8

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
2020-03-31	2020-01-20	DR-4507-OH	Major disaster	COVID-19 PANDEMIC	Non-natural, not counted	\$402,886.88		
2020-03-13	2020-01-20	EM-3457-OH	Emergency	COVID-19	Non-natural, not counted	none found		same incident as DR-4507
2012-06-30	2012-06-29	EM-3346-OH	Emergency	SEVERE STORMS	Hazard not mapped (severe storm title names no single hazard); not counted	none found		
2005-09-13	2005-08-29	EM-3250-OH	Emergency	HURRICANE KATRINA EVACUATION	Hurricane: evacuation support, not a local hazard event; not counted	none found		
2004-09-19	2004-08-27	DR-1556-OH	Major disaster	SEVERE STORMS AND FLOODING	Inland Flooding: designated for Hazard Mitigation only (no Public or Individual Assistance for this county); not counted	PA not declared for this county		
2002-11-18	2002-11-10	DR-1444-OH	Major disaster	SEVERE STORMS AND TORNADOES	Tornado	PA not declared for this county		
1998-06-30	1998-06-24	DR-1227-OH	Major disaster	SEVERE STORMS, FLOODING, AND TORNADOES	Inland Flooding; Tornado	none found		
1992-08-04	1992-07-12	DR-951-OH	Major disaster	SEVERE STORMS, TORNADOES & FLOODING	Inland Flooding; Tornado	none found		
1978-01-26	1978-01-26	EM-3055-OH	Emergency	BLIZZARDS & SNOWSTORMS	Winter Weather	none found		
1974-05-31	1974-05-31	DR-436-OH	Major disaster	SEVERE STORMS & FLOODING	Inland Flooding	none found		
1973-04-27	1973-04-27	DR-377-OH	Major disaster	SEVERE STORMS & FLOODING	Inland Flooding	none found		
1972-11-24	1972-11-24	DR-362-OH	Major disaster	SEVERE STORMS & FLOODING	Inland Flooding	none found		
1969-07-15	1969-07-15	DR-266-OH	Major disaster	TORNADOES, SEVERE STORMS & FLOODING	Tornado (primary); also designated: Inland Flooding	none found		

County Public Assistance: applicants the FEMA record places in this county, including any state agencies FEMA files there; statewide rows are listed on the state page; federal share obligated, nominal dollars. Dollars are nominal (as reported), labeled with the year; not adjusted for inflation.

SOURCES

FEMA, OpenFEMA DisasterDeclarationsSummaries v2, version 2026-09-27T010817Z, pulled 2026-09-28, <https://www.fema.gov/api/open/v2/DisasterDeclarationsSummaries> (API)
FEMA, OpenFEMA PublicAssistanceFundedProjectsSummaries v1, version 2026-09-26T151157Z, pulled 2026-09-28, <https://www.fema.gov/api/open/v1/PublicAssistanceFundedProjectsSummaries> (API)
FEMA, OpenFEMA HazardMitigationPlanStatuses v1, version 2026-09-26T121003Z, pulled 2026-09-28, <https://www.fema.gov/api/open/v1/HazardMitigationPlanStatuses> (API)

Statewide declarations

Declared	Incident began	FEMA number	Type	Title	Mapped hazard	Flags	Notes
1964-03-24	1964-03-24	DR-167-OH	Major disaster	SEVERE STORMS & FLOODING	Inland Flooding		
1959-01-23	1959-01-23	DR-90-OH	Major disaster	FLOODS	Inland Flooding		
1956-05-17	1956-05-17	DR-57-OH	Major disaster	WIND STORM	Other, not an NRI hazard; not counted		

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

SOURCE

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

Public Assistance not placed in a county in this state: 1 row, \$3,080,910.74

Disaster number	Declared	Applicant	County field in FEMA data	PA obligated <i>federal share obligated, nominal dollars</i>	Why not placed
4507	2020-03-31	Prime Healthcare Foundation, Inc. (Ohio)	San Bernardino County	\$3,080,910.74	county field is a county of another state and the applicant name does not identify a place in the declaring state

FEMA's Public Assistance summaries file these applicants under a county field that is not a county of this state (an Alaska school area, the former Valdez-Cordova Census Area, or another state's county), and the applicant name does not identify one place here. They are listed for the whole state and are not in any county total. Check whether any of them worked in your county.

SOURCE

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

Previous occurrences by hazard, with explicit no-event rows

Hazard	Storm Events records <i>full period</i>	Since plan approval records	During plan review records	Last 5 years records	Declared incidents <i>distinct incidents</i>	Declared since approval <i>distinct incidents</i>	Period	Statement
Avalanche	0	0	0	0	0	0	1996 to 2026-06-30	No recorded events, 1996 to 2026-06-30, NOAA NCEI Storm Events
Coastal Flooding	10	0	0	0	0	0	1996 to 2026-06-30	
Cold Wave	10	1	0	1	0	0	1996 to 2026-06-30	
Drought	5	0	0	0	0	0	1996 to 2026-06-30	
Earthquake	0	0	0	0	0	0		No Storm Events record; local data required (e.g., USGS).
Hail	114	5	0	5	0	0	1955 to 2026-06-30	
Heat Wave	2	0	0	0	0	0	1996 to 2026-06-30	
Hurricane	0	0	0	0	0	0	1996 to 2026-06-30	No recorded events, 1996 to 2026-06-30, NOAA NCEI Storm Events
Ice Storm	3	1	0	1	0	0	1996 to 2026-06-30	

Hazard	Storm Events records <i>full period</i>	Since plan approval records	During plan review records	Last 5 years records	Declared incidents <i>distinct incidents</i>	Declared since approval <i>distinct incidents</i>	Period	Statement
Inland Flooding	34	3	0	3	6	0	1996 to 2026-06-30	
Landslide	0	0	0	0	0	0	1996 to 2026-06-30	No recorded events, 1996 to 2026-06-30, NOAA NCEI Storm Events
Lightning	4	0	0	0	0	0	1996 to 2026-06-30	
Strong Wind	292	27	8	28	0	0	1955 to 2026-06-30	Includes 45 High Wind records and 5 Strong Wind records, event types the NRI definition of this hazard leaves out.
Tornado	15	4	0	4	4	0	1950 to 2026-06-30	
Tsunami	0	0	0	0	0	0	1996 to 2026-06-30	No recorded events, 1996 to 2026-06-30, NOAA NCEI Storm Events
Volcanic Activity	0	0	0	0	0	0	1996 to 2026-06-30	No recorded events, 1996 to 2026-06-30, NOAA NCEI Storm Events
Wildfire	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	35	1	1	2	1	0	1996 to 2026-06-30	

SOURCES

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

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

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

Notable Storm Events records

Date	Event type	Magnitude or extent	Damage <i>nominal dollars</i>	Direct deaths, injuries <i>indirect not counted</i>	Location	Flags	Why listed
2017-01-10	High Wind	61 kt (70 mph) measured gust	\$0 property; \$0 crops, reported for the zone (2017 dollars)	0, 0	NWS zone OHZ007 (OTTAWA), zone-level: may include parts of neighboring counties		B1-c worst recorded: High Wind and Strong Wind (outside NRI Strong Wind definition)
2012-07-01	Hail	2.5 in	\$750,000 property; \$50,000 crops (2012 dollars)	0, 0	CATAWBA IS to LAKESIDE		B1-c worst recorded: Hail
2011-05-29	Thunderstorm Wind	50 kt (58 mph) estimated gust	\$20,000 property; \$0 crops (2011 dollars)	0, 5	PORT CLINTON		deaths or injuries recorded
2010-06-05	Tornado	EF3, 2.3 mi within this county, 200 yd wide	\$2,400,000 property; \$0 crops (2010 dollars)	0, 0	CLAY CENTER		B1-c worst recorded: Tornado
2006-06-21	Flash Flood		\$8,000,000 property; crops not reported (2006 dollars)	0, 0	COUNTYWIDE		B1-c worst recorded: Flash Flood, Flood, Lakeshore Flood
2005-01-05	Ice Storm		\$600,000 property; crops not reported, reported for the zone (2005 dollars)	0, 0	NWS zone OHZ007 (OTTAWA), zone-level: may include parts of neighboring counties		B1-c worst recorded: Ice Storm

			Direct deaths, injuries		Location	Flags	Why listed
Date	Event type	Magnitude or extent	Damage nominal dollars	indirect not counted			
2004-12-22	Winter Storm		\$1,000,000 property; crops not reported, reported for the zone (2004 dollars)	0, 0	NWS zone OHZ007 (OTTAWA), zone-level: may include parts of neighboring counties		B1-c worst recorded: Winter Storm, Heavy Snow, Blizzard, Lake-Effect Snow, Winter Weather, Sleet
1999-07-01	Heat		damage not reported	0, 0	NWS zone OHZ007 (OTTAWA), zone-level: may include parts of neighboring counties		B1-c worst recorded: Excessive Heat, Heat
1999-06-29	High Wind	speed not recorded	\$3,000 property; crops not reported, reported for the zone (1999 dollars)	0, 15	NWS zone OHZ007 (OTTAWA), zone-level: may include parts of neighboring counties		deaths or injuries recorded
1998-06-24	Thunderstorm Wind	80 kt (92 mph), measurement type not recorded	\$3,000,000 property; \$1,000,000 crops (1998 dollars)	0, 0	COUNTYWIDE		B1-c worst recorded: Thunderstorm Wind
1998-06-24	Tornado	F2, 3.5 mi within this county, 100 yd wide	\$20,000,000 property; \$5,000,000 crops (1998 dollars)	0, 13	PORT CLINTON		deaths or injuries recorded
1997-01-10	Cold/Wind Chill		\$5,000 property; crops not reported, reported for the zone (1997 dollars)	0, 0	NWS zone OHZ007 (OTTAWA), zone-level: may include parts of neighboring counties		B1-c worst recorded: Cold/Wind Chill, Extreme Cold/Wind Chill

The full list is in the XLSX file, sheet "B1-d Storm Events history" (524 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

FEMA annualized frequency (modeled)		NRI events or days in its record period (hail, wind and tornado are area-weighted, so can be fractional)		Descriptor basis		NRI period	Location	Note
Hazard	unit per row	Unit	In plain terms	Descriptor				
Avalanche		events per year				1994 to 2023 (30 years)	see B1-f	Not Applicable in NRI for this county; no descriptor.

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
Coastal Flooding	0.0152	events per year at a location (modeled)	about 0.015 per year at a given location in the county	Likely	Storm Events records in 3 of 30 years, 1996 to 2025 (10%)	not shown	modeled	see B1-f	Descriptor from Storm Events, not NRI: the NRI value is the chance at a location in the county, not how often the hazard affects the county.
Cold Wave	4.21	event-days per year	about 4.21 days per year	Likely	event-days in 8 of 30 years, 1996 to 2025 (26.7%)	80	2005-11-12 to 2024-11-12 (19 years)	countywide	NRI gives about 4.21 cold wave event-days a year here (its annualized frequency over 19 years; not its event count divided by the years), but Storm Events has a record in only 8 of 30 years. NRI counts from a different source that records far more events than Storm Events, so this descriptor reads much lower than NRI's frequency; read the two together. Frost/Freeze records are not counted in this descriptor: they record crop freezes, not cold waves.
Drought	0	event-days per year	none modeled	Possible	event-days in 2 of 30 years, 1996 to 2025 (6.67%)	0	2000 to 2025 (25.25 years; D3 and D4 only)	countywide	NRI models no drought event-days here (2000 to 2025, 25.25 years; D3 and D4 only), but Storm Events has a record in 2 of 30 years. The descriptor comes from Storm Events, which records events NRI's definition leaves out, so the two use different thresholds; read them together.
Earthquake	0.00112	annual probability at a location	chance a given location in the county has at least minor- damage shaking in a year: 0.112%			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	3.28	events per year	about 3.28 per year	Highly likely	FEMA annualized frequency (modeled)	275.0 (modeled)	1986 to 2023 (38 years)	countywide	
Heat Wave	2.95	event-days per year	about 2.95 days per year	Possible	event-days in 1 of 30 years, 1996 to 2025 (3.33%)	51	2005-11-12 to 2024-11-12 (19 years)	countywide	NRI gives about 2.95 heat wave event-days a year here (its annualized frequency over 19 years; not its event count divided by the years), but Storm Events has a record in only 1 of 30 years. NRI counts from a different source that records far more events than Storm Events, so this descriptor reads much lower than NRI's frequency; read the two together.
Hurricane	0.0173	events per year	about 1 in 58 years	Possible	FEMA annualized frequency (modeled)	6	1851 to 2024 (Atlantic)	see B1-f	NRI counts hurricane and tropical storm tracks passing within storm-force wind range; federal declarations are counted separately in B1-d and need not match.
Ice Storm	1.19	event-days per year	about 1.19 days per year	Likely	event-days in 3 of 30 years, 1996 to 2025 (10%)	73	1946-12-31 to 2014-02-12 (67 years)	countywide	NRI gives about 1.19 ice storm event-days a year here (its annualized frequency over 67 years; not its event count divided by the years), but Storm Events has a record in only 3 of 30 years. NRI counts from a different source that records far more events than Storm Events, so this descriptor reads much lower than NRI's frequency; read the two together.

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
Inland Flooding	1.07	event-days per year	about 1.07 days per year	Likely	event-days in 11 of 30 years, 1996 to 2025 (36.7%)	30	1996 to 2023 (28 years)	see B1-f	NRI gives about 1.07 inland flooding event-days a year here (its annualized frequency over 28 years; not its event count divided by the years), but Storm Events has a record in only 11 of 30 years. NRI counts from a different source that records far more events than Storm Events, so this descriptor reads much lower than NRI's frequency; read the two together.
Landslide	0.0356	events per year (modeled)	about 1 in 28 years	Possible	FEMA annualized frequency (modeled)	not shown	modeled	see B1-f	
Lightning	37.3	days per year with a strike	about 37.3 days per year	Highly likely	FEMA annualized frequency (modeled)	not shown	1995 to 2023 (29 years; CONUS)	countywide	
Strong Wind	3.42	events per year	about 3.42 per year	Highly likely	FEMA annualized frequency (modeled)	126	1986 to 2023 (38 years)	countywide	
Tornado	0.254	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	
Tsunami		annual probability at the most exposed location (used in place of a county value)			Storm Events records in 0 of 30 years, 1996 to 2025 (0%)	not shown	modeled	see B1-f	No Storm Events record of this hazard, 1996 to 2025; descriptor not assigned (the NRI value is the chance at a location in the county, not how often the hazard affects the county)
Volcanic Activity		annual probability				not shown	modeled	see B1-f	Not Applicable in NRI for this county; no descriptor.
Wildfire	0.0000133	annual probability at a location	chance a given location in the county burns in a year: 0.00133%		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)
Winter Weather	8.89	event-days per year	about 8.89 days per year	Likely	event-days in 21 of 30 years, 1996 to 2025 (70%)	169	2005-11-12 to 2024-11-12 (19 years)	countywide	

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	28	30	0.933
Hail	2.00 in+	1996 to 2025	1	30	0.0333
Strong Wind (Thunderstorm Wind records)	50-64 kt	1996 to 2025	124	30	4.13
Strong Wind (Thunderstorm Wind records)	65 kt+	1996 to 2025	6	30	0.2
Strong Wind (Thunderstorm Wind records)	unmeasured or below 50 kt	1996 to 2025	42	30	1.4
Tornado	EF0-1	1996 to 2025	6	30	0.2
Tornado	EF2-3	1996 to 2025	4	30	0.133
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	Risk score		Median	Max	Tracts by rating	Note
	Tracts <i>rated of all</i>	min <i>NRI score, 0 to 100</i>				
Avalanche	0 of 15				Not Applicable 15	
Coastal Flooding	14 of 15	73.0	82.6	90.8	Relatively Moderate 1, Relatively Low 11, Very Low 2, No Rating 1	
Cold Wave	15 of 15	23.9	40.6	59.7	Relatively Moderate 5, Relatively Low 10	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 15				No Rating 15	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	15 of 15	26.3	38.1	64.2	Relatively Low 7, Very Low 8	
Hail	15 of 15	66.9	78.5	90.9	Relatively High 1, Relatively Moderate 11, Relatively Low 3	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	15 of 15	3.9	14.1	32.4	Relatively Low 7, Very Low 8	National data give a county-wide or coarse (49 km grid or NWS zone) frequency for this hazard, so they cannot show members' hazard differing. The tract range above mostly reflects where buildings and people are. Confirm locally.
Hurricane	15 of 15	35.4	41.8	49.3	Very Low 15	
Ice Storm	15 of 15	69.4	79.0	92.9	Relatively High 2, Relatively Moderate 13	National data give a county-wide or coarse (49 km grid or NWS zone) frequency for this hazard, so they cannot show members' hazard differing. The tract range above mostly reflects where buildings and people are. Confirm locally.
Inland Flooding	15 of 15	44.8	76.0	95.3	Relatively High 6, Relatively Moderate 4, Relatively Low 5	
Landslide	15 of 15	28.5	50.8	75.3	Very Low 15	
Lightning	15 of 15	14.6	38.0	57.8	Relatively Moderate 3, Relatively Low 10, Very Low 2	National data give a county-wide or coarse (49 km grid or NWS zone) frequency for this hazard, so they cannot show members' hazard differing. The tract range above mostly reflects where buildings and people are. Confirm locally.
Strong Wind	15 of 15	70.7	84.9	96.2	Relatively High 9, Relatively Moderate 6	National data give a county-wide or coarse (49 km grid or NWS zone) frequency for this hazard, so they cannot show members' hazard differing. The tract range above mostly reflects where buildings and people are. Confirm locally.
Tornado	15 of 15	56.7	70.3	90.7	Relatively High 6, Relatively Moderate 9	
Tsunami	0 of 15				Insufficient Data 15	
Volcanic Activity	0 of 15				Not Applicable 15	
Wildfire	15 of 15	36.9	55.8	67.0	Very Low 15	

Hazard	Tracts rated of all	Risk score min			Tracts by rating	Note
		NRI score, 0 to 100	Median	Max		
Winter Weather	15 of 15	69.8	84.8	95.7	Relatively High 12, Relatively Moderate 3	National data give a county-wide or coarse (49 km grid or NWS zone) frequency for this hazard, so they cannot show members' hazard differing. The tract range above mostly reflects where buildings and people are. Confirm locally.

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

SOURCE

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

Per-member block (Starter, confirm locally)

Member	Type	Plan status	Repetitive loss <i>FMA RL and SRL (44 CFR 77.2); repeat-flood, any definition</i>	Public Assistance matched <i>federal share obligated, nominal dollars</i>	Event records naming this place <i>all years; since the member's plan</i>	Notes
Ottawa County	County	Approved, expires 2027-08-07	FMA RL 3, SRL 5; any 120	none found	0; 0	
Clay Center village	Village	Approved, expires 2027-08-07	FMA RL 0, SRL 0; any 0	none found	6; 2	
Elmore village	Village	Approved, expires 2027-08-07	FMA RL 0, SRL 0; any 0	none found	30; 4	
Genoa village	Village	Approved, expires 2027-08-07	FMA RL 0, SRL 0; any 0	none found	29; 2	
Marblehead village	Village	Approved, expires 2027-08-07	FMA RL 0, SRL 0; any 0	none found	11; 0	
Oak Harbor village	Village	Approved, expires 2027-08-07	FMA RL 0, SRL 0; any 4	none found	78; 3	
Port Clinton city	City	Approved, expires 2027-08-07	FMA RL 0, SRL 2; any 16	none found	55; 2	
Put-in-Bay village	Village	Plan 108465 approved 2022-08-08, pending adoption here; not yet eligible	FMA RL 0, SRL 0; any 0	none found	12; no approved plan	
Rocky Ridge village	Village	Approved, expires 2027-08-07	FMA RL 0, SRL 0; any 0	none found	8; 1	

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

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

SOURCES

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

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

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

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

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

Local data required

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

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

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

Hazard	Building exposure <i>modeled dollars</i>	Agriculture exposure <i>modeled dollars</i>	Population exposed <i>people</i>	EAL buildings <i>modeled dollars per year</i>	EAL agriculture <i>modeled dollars per year</i>	EAL population equivalence <i>statistical value of life and injury, \$13.7M per life, not property damage</i>	EAL as % of exposure <i>buildings; agriculture where noted</i>	Storm Events damage since 2022-08-08 <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	\$8,189,893,633		4,988	\$84,345		\$4,107	0.00103%				
Cold Wave	\$15,573,602,896	\$76,243,817	40,343	\$3,215	\$8,839	\$549,525	under 0.0001%				
Drought		\$0			\$0						agriculture exposure is 0 in NRI
Earthquake	\$26,279,392,274		40,364	\$287,027		\$53,289	0.00109%				
Hail	\$15,573,602,896	\$76,243,817	40,343	\$578,291	\$12,353	\$4,376	0.00371%	\$0			
Heat Wave	\$15,573,602,896	\$76,243,817	40,343	\$3,550	\$1	\$168,409	under 0.0001%				
Hurricane	\$15,553,174,250	\$75,763,562	40,289	\$36,599	\$7,604	\$338	0.000235%				
Ice Storm	\$15,392,470,786		39,941	\$299,442		\$735	0.00195%		\$0		
Inland Flooding	\$15,417,026,194	\$12,791,217	3,773	\$15,222,380	\$159,820	\$39,792	n/a (see note)	\$1,400,000			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	\$55,806,604		118	\$31		\$112	under 0.0001%				
Lightning	\$15,573,602,896		40,343	\$21,252		\$93,996	0.000136%				
Strong Wind	\$15,573,602,896	\$76,243,817	40,343	\$541,459	\$63,812	\$713,865	0.00348%	\$38,000			
Tornado	\$15,573,602,896	\$76,243,817	40,343	\$1,959,422	\$490	\$984,029	0.0126%	\$419,000			
Tsunami											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 2022-08-08 <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
Volcanic Activity											Not Applicable in NRI for this county
Wildfire	\$4,440,360,503	\$11,172,463	11,274	\$4,768	\$1	\$252	0.000107%				
Winter Weather	\$15,573,602,896	\$76,243,817	40,343	\$156,056	\$223	\$30,850	0.001%				

Totals since 2022-08-08 (Storm Events through 2026-06-30): 39 county-coded records, 39 with a damage value recorded (including \$0), \$1,857,000; 3 zone-level records, 1 with a damage value recorded (including \$0), \$0 reported for the zone; Public Assistance on counted declarations none found (0 declarations, 0 with PA).

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

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

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

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

Supports B2-a: context

County context

Measure	Value
Population	40,343
Building value (total, not at risk)	\$15,573,602,896
Agriculture value (total, not at risk)	\$76,243,817
NRI risk rating (all hazards)	Relatively Low
Expected annual loss, buildings and agriculture, all hazards	\$19,450,979
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)	\$2,643,674
Social vulnerability rating	Relatively Low
Community resilience rating	Very High
NRI version	December 2025

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

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

Supports B2-c: repetitive loss

Repetitive loss in this county, both definitions

Definition	Properties	Severe repetitive loss	Properties
Repetitive loss, FMA definition (44 CFR 77.2)	3	Severe repetitive loss, FMA definition (44 CFR 77.2)	7
Repetitive loss, NFIP insurance definition	140	Severe repetitive loss, NFIP insurance definition	4

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

SOURCES

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

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

Repeat-flood properties: county and state-level rows

Scope	RL, FMA <i>properties</i>	SRL, FMA <i>properties</i>	RL, NFIP <i>properties</i>	SRL, NFIP <i>properties</i>	Any category <i>properties</i>	Mitigated <i>properties</i>	Currently insured <i>properties</i>
County total	3	7	140	4	141	1	24
OTTAWA COUNTY *	3	5	119	2	120	1	23
OAK HARBOR, VILLAGE OF	0	0	4	0	4	0	0
PORT CLINTON, CITY OF	0	2	16	2	16	0	1
CATAWBA ISLAND, TOWNSHIP OF (community ID not in plan data)	0	0	1	0	1	0	0
State level, not in this county: county not reported	0	0	1	0	1	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)

Repeat-flood properties by plan member (NFIP community)

Member	NFIP community ID	RL, FMA <i>properties</i>	SRL, FMA <i>properties</i>	RL, NFIP <i>properties</i>	SRL, NFIP <i>properties</i>	Any category <i>properties</i>	Mitigated <i>properties</i>	Currently insured <i>properties</i>	Note
Ottawa County	390432	3	5	119	2	120	1	23	
Clay Center village	390875	0	0	0	0	0	0	0	
Elmore village	390610	0	0	0	0	0	0	0	
Genoa village	390612	0	0	0	0	0	0	0	
Marblehead village	390748	0	0	0	0	0	0	0	
Oak Harbor village	390433	0	0	4	0	4	0	0	
Port Clinton city	390434	0	2	16	2	16	0	1	
Put-in-Bay village	390600	0	0	0	0	0	0	0	
Rocky Ridge village	390224	0	0	0	0	0	0	0	

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

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

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	3	6	118	3	119	1	23
2 to 4 unit residential	0	0	2	0	2	0	1
other residential	0	0	2	0	2	0	0
non-residential	0	1	18	1	18	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 fmaRI field description omits the Increased Cost of Compliance clause of 44 CFR 77.2(i). NFIP repetitive loss (FEMA insurance definition, nfipRI) is 2 or more claims over \$1,000 in 10 years and can drop to false when a property is mitigated. Also shown: NFIP severe repetitive loss, any category, mitigated and currently insured.

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

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

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

In this county 0 properties are FMA repetitive loss but not NFIP repetitive loss, and 137 properties are NFIP repetitive loss but not FMA repetitive loss.

Exact counts; no count suppression.

Sources

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

1. FEMA, OpenFEMA HazardMitigationPlanStatuses v1, version 2026-09-26T121003Z, pulled 2026-09-28, <https://www.fema.gov/api/open/v1/HazardMitigationPlanStatuses> (API)
2. FEMA, OpenFEMA DisasterDeclarationsSummaries v2, version 2026-09-27T010817Z, pulled 2026-09-28, <https://www.fema.gov/api/open/v2/DisasterDeclarationsSummaries> (API)
3. FEMA, OpenFEMA PublicAssistanceFundedProjectsSummaries v1, version 2026-09-26T151157Z, pulled 2026-09-28, <https://www.fema.gov/api/open/v1/PublicAssistanceFundedProjectsSummaries> (API)
4. FEMA, OpenFEMA NfipMultipleLossProperties v1, version 2026-08-04T164045Z, pulled 2026-09-28, <https://www.fema.gov/api/open/v1/NfipMultipleLossProperties> (API)
5. FEMA, FEMA National Risk Index 1.20.0 (December 2025), county and census tract tables, version 1.20.0, pulled 2026-09-28, https://www.fema.gov/about/reports-and-data/openfema/nri/v120/NRI_Table_Counties.zip (download, 25 MB), https://www.fema.gov/about/reports-and-data/openfema/nri/v120/NRI_Table_CensusTracts.zip (download, 635 MB)
6. NOAA NCEI, NOAA NCEI Storm Events Database, details files (csvfiles v1.0), version c20260918, pulled 2026-09-28, <https://www.ncei.noaa.gov/pub/data/swdi/stormevents/csvfiles/>
7. NOAA National Weather Service, NWS county-public forecast zones correlation file, version bp03mr20 to bp16ap26 (11 files; newest bp16ap26), pulled 2026-09-28, <https://www.weather.gov/gis/ZoneCounty>

8. U.S. Census Bureau, Census 2024 Gazetteer, 2020 place by county, CT county-to-cousub crosswalk, version 2024-gazetteer, pulled 2026-09-28, https://www2.census.gov/geo/docs/maps-data/data/gazetteer/2024_Gazetteer/2024_Gaz_counties_national.zip, https://www2.census.gov/geo/docs/maps-data/data/gazetteer/2024_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_OH_39123. Preview: automated baseline.