

Sioux County, IA

Risk-assessment baseline packet

Unit **County area 19167** Release **2026-10** As of **2026-09-28** Storm Events data through **2026-06-30**

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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.

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Plan clock

Status	Approved, expires 2027-01-17	Plan	Sioux, O'Brien and Osceola Counties Multi-Jurisdictional HM Plan (FEMA plan 107675)
Approved	2022-01-17	Expires	2027-01-17
As of	2026-09-28	Days	111 days to expiry
Update underway	none in FEMA's plan tracker		

What changed since your last plan (approved 2022-01-17)

New federal declarations	DR-4796-IA (1 declaration row; 1 counted incident)	Storm Events records since approval	210 (data through 2026-06-30)
Repetitive loss now	FMA RL 0, SRL 0 (44 CFR 77.2); any definition: 3	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: 16 rows, in the section "Plan clock: Plan status for every jurisdiction listed in this county" after these cover pages.

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

CONTENTS

1. Plan clock, page 1
2. What changed since your last plan (approved 2022-01-17), page 1
3. Supports B1-a: hazards, page 3
4. Supports B1-b: location, page 5
5. Supports B1-c: extent, page 6
6. Supports B1-d: previous occurrences, page 9
7. Supports B1-e: probability, page 13
8. Supports B1-f: variation across the planning area, page 16
9. Supports B2-a and B2-b: assets and impacts, page 18
10. Supports B2-a: context, page 20
11. Supports B2-c: repetitive loss, page 21
12. Sources and OpenFEMA disclaimer, page 22

Plan clock**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
Sioux County	County	Approved, expires 2027-01-17	Sioux, O'Brien and Osceola Counties Multi-Jurisdictional HM Plan (FEMA plan 107675)	2022-01-17	2027-01-17	111		member approved 2022-06-21
Alton city	City	Approved, expires 2027-01-17	Sioux, O'Brien and Osceola Counties Multi-Jurisdictional HM Plan (FEMA plan 107675)	2022-01-17	2027-01-17	111		member approved 2022-06-21
Boyden city	City	Approved, expires 2027-01-17	Sioux, O'Brien and Osceola Counties Multi-Jurisdictional HM Plan (FEMA plan 107675)	2022-01-17	2027-01-17	111		member approved 2022-06-21
Chatsworth city	City	Plan 107675 approved 2022-01-17, pending adoption here; not yet eligible	Sioux, O'Brien and Osceola Counties Multi-Jurisdictional HM Plan (FEMA plan 107675), pending adoption here	2022-01-17 by FEMA; not yet adopted here	2027-01-17 once adopted		FEMA tracker shows a plan approvable pending adoption	Not yet eligible: adopt the approved plan.
Granville city	City	Approved, expires 2027-01-17	Sioux, O'Brien and Osceola Counties Multi-Jurisdictional HM Plan (FEMA plan 107675)	2022-01-17	2027-01-17	111		member approved 2022-06-21
Hawarden city	City	Approved, expires 2027-01-17	Sioux, O'Brien and Osceola Counties Multi-Jurisdictional HM Plan (FEMA plan 107675)	2022-01-17	2027-01-17	111		member approved 2022-06-21
Hospers city	City	Approved, expires 2027-01-17	Sioux, O'Brien and Osceola Counties Multi-Jurisdictional HM Plan (FEMA plan 107675)	2022-01-17	2027-01-17	111		member approved 2022-07-21
Hull city	City	Approved, expires 2027-01-17	Sioux, O'Brien and Osceola Counties Multi-Jurisdictional HM Plan (FEMA plan 107675)	2022-01-17	2027-01-17	111		member approved 2022-06-21
Ireton city	City	Approved, expires 2027-01-17	Sioux, O'Brien and Osceola Counties Multi-Jurisdictional HM Plan (FEMA plan 107675)	2022-01-17	2027-01-17	111		member approved 2022-06-21
Matlock city	City	Approved, expires 2027-01-17	Sioux, O'Brien and Osceola Counties Multi-Jurisdictional HM Plan (FEMA plan 107675)	2022-01-17	2027-01-17	111		member approved 2022-07-26
Maurice city	City	Approved, expires 2027-01-17	Sioux, O'Brien and Osceola Counties Multi-Jurisdictional HM Plan (FEMA plan 107675)	2022-01-17	2027-01-17	111		member approved 2022-06-21
Orange City city	City	Approved, expires 2027-01-17	Sioux, O'Brien and Osceola Counties Multi-Jurisdictional HM Plan (FEMA plan 107675)	2022-01-17	2027-01-17	111		member approved 2022-06-21
Rock Valley city	City	Approved, expires 2027-01-17	Sioux, O'Brien and Osceola Counties Multi-Jurisdictional HM Plan (FEMA plan 107675)	2022-01-17	2027-01-17	111		member approved 2022-06-21
Sioux Center city	City	Approved, expires 2027-01-17	Sioux, O'Brien and Osceola Counties Multi-Jurisdictional HM Plan (FEMA plan 107675)	2022-01-17	2027-01-17	111		member approved 2022-06-21

Jurisdiction	Type	Status	Plan	Approved	Expires	Days to expiry <i>negative = days since expiry</i>	Update underway	Notes
Remsen-Union Community School District	College/University	Plan 111762 approved 2026-04-28, pending adoption here; not yet eligible	Cherokee, Ida, Monona, Plymouth, Woodbury Counties HMP (FEMA plan 111762), pending adoption here	2026-04-28 by FEMA; not yet adopted here	2031-04-27 once adopted		FEMA tracker shows a plan approvable pending adoption	Not yet eligible: adopt the approved plan.
Sheldon Community School District	School/School District	Approved, expires 2027-01-17	Sioux, O'Brien and Osceola Counties Multi-Jurisdictional HM Plan (FEMA plan 107675)	2022-01-17	2027-01-17	111		member approved 2022-06-21

Plan 107675 also covers 16 other participants not listed on this page (named in the XLSX file).

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

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 <i>statistical value of life and injury, \$13.7M per life, not property damage</i>	EAL total (see note) modeled dollars per year	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
1	Inland Flooding	Relatively Low	Relatively Low	\$11,185,261	\$158,041	\$20,759	\$11,364,061	164		
2	Tornado	Relatively Moderate	Relatively Moderate	\$4,320,077	\$81,892	\$2,212,789	\$6,614,758	33		
3	Hail	Relatively High	Relatively High	\$622,990	\$4,935,867	\$96,777	\$5,655,634	232		
4	Cold Wave	Relatively Low	Relatively Moderate	\$2,744	\$639,837	\$1,874,795	\$2,517,376	28		
5	Drought	Relatively Moderate	Relatively Moderate		\$1,000,019		\$1,000,019	54		
6	Strong Wind	Relatively Low	Relatively Moderate	\$165,915	\$49,696	\$718,866	\$934,477	211		Includes 33 High Wind records and 12 Strong Wind records, event types the NRI definition of this hazard leaves out.

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 <i>NRI Not Applicable, no declaration and no Storm Events record since 1996</i>	Storm Events coverage note
7	Winter Weather	Relatively High	Relatively High	\$387,039	\$3,540	\$166,694	\$557,274	179		
8	Ice Storm	Relatively Moderate	Relatively Moderate	\$266,239		\$154,349	\$420,588	6		
9	Heat Wave	Relatively Low	Relatively Low	\$4,817	\$39	\$407,420	\$412,276	28		
10	Lightning	Relatively Low	Relatively Low	\$29,459		\$157,423	\$186,882	2		
11	Earthquake	Very Low	Very Low	\$37,344		\$8,173	\$45,517			Not in Storm Events. Storm Events coverage of this hazard is limited; absence is not evidence of low risk.
12	Wildfire	Very Low	Very Low	\$39,321	\$1,245	\$3,721	\$44,287	1		
13	Landslide	Very Low	Very Low	\$56		\$483	\$538	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.
	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).
	Coastal Flooding	Not Applicable	Not Applicable					0	NRI rates coastal flooding 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).
	Hurricane	Not Applicable	Not Applicable					0	NRI rates hurricane Not Applicable for this county, and no counted federal declaration for this county names it (EM-3239-IA names it but is not counted as a local occurrence; see B1-d).	No recorded events in Storm Events since 1996 (data through 2026-06-30).
	Tsunami	Not Applicable	Not Applicable					0	NRI rates tsunami 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.
	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 9
Coastal Flooding	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 9
Cold Wave	Affects the whole planning area; national data do not distinguish locations within the county. Confirm locally.	9 of 9
Drought	Affects the whole planning area; national data do not distinguish locations within the county. Confirm locally.	9 of 9
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.	9 of 9
Hail	Affects the whole planning area; national data do not distinguish locations within the county. Confirm locally.	9 of 9
Heat Wave	Affects the whole planning area; national data do not distinguish locations within the county. Confirm locally.	9 of 9
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 9
Ice Storm	Affects the whole planning area; national data do not distinguish locations within the county. Confirm locally.	9 of 9
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.	9 of 9
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.	8 of 9
Lightning	Affects the whole planning area; national data do not distinguish locations within the county. Confirm locally.	9 of 9
Strong Wind	Affects the whole planning area; national data do not distinguish locations within the county. Confirm locally.	9 of 9
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.	9 of 9
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 9
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 9
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.	9 of 9
Winter Weather	Affects the whole planning area; national data do not distinguish locations within the county. Confirm locally.	9 of 9

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	28, 1996 to 2025 (28 zone-level)	1 day to 5 days (median 2 days); 25 with a recorded value	5 consecutive days, 2024-01-12 to 2024-01-16, zone-level		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	54, 1999 to 2026 (54 zone-level)	3 days to 351 days (median 77 days); 10 with a recorded value	351 days (about 11.5 months), 2020-07-28 to 2021-07-13, a run of 13 consecutive Storm Events drought records, zone-level	Drought, 2022-07-01, property not reported; \$9,160,000 crops, reported for the zone (2022 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)	261, 1961 to 2026	0.75 in to 2.75 in (median 1 in); 260 with a recorded value	2.75 in hail, 1984-08-07; same size also recorded on 1975-08-21, 1978-07-05, 1980-09-03, 1983-09-05	Hail, 2002-10-01, property not reported; \$2,000,000 crops (2002 dollars)	Event records naming member places: Hawarden city (25 records), Sioux Center city (18 records), Orange City city (16 records), Alton city (15 records), Granville city (15 records), Hospers city (13 records), Chatsworth city (12 records), Hull city (12 records), Boyden city (11 records), Ireton city (7 records); and 2 more member places (see the XLSX file).	
Excessive Heat, Heat	heat index (narratives)	28, 1999 to 2026 (28 zone-level)	1 day to 7 days (median 2 days); 26 with a recorded value	7 consecutive days, 2012-07-18 to 2012-07-24, 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.

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	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.
Ice Storm	Sperry-Piltz (local data)	6, 1996 to 2023 (6 zone- level)		Ice Storm, 2019-04-10, \$172,000 property; \$0 crops, reported for the zone (2019 dollars); NWS zone IAZ012 (SIOUX), 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)	164, 1996 to 2026 (6 zone- level)		Flood, 2024-06-20, \$6,500,000 property; \$0 crops (2024 dollars), 1 direct death		Event records naming member places: Hawarden city (48 records), Chatsworth city (10 records), Hospers city (9 records), Orange City city (9 records), Maurice city (8 records), Sioux Center city (8 records), Granville city (6 records), Hull city (5 records), Boyden city (4 records), Alton city (2 records); and 1 more member place (see the XLSX file). Zone-level records (6) 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)	2, 1998 to 2009		Lightning, 1998-10-04, \$30,000 property; crops not reported (1998 dollars)		Event records naming member places: Hawarden city (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)	45, 1996 to 2026 (45 zone- level)	35 kt (40 mph) to 63 kt (72 mph) (median 50 kt (58 mph)); 44 with a recorded value	63 kt (72 mph) measured gust, High Wind, 2025-05-19; NWS zone IAZ012 (SIOUX), zone- level: may include parts of neighboring counties	High Wind, 2010-10-26, \$50,000 property; \$0 crops, reported for the zone (2010 dollars)	Zone-level records: applies countywide; national data do not locate these events within the county.	

Hazard	Scale	Records <i>count, years</i>	Observed range	Worst recorded event	Most damaging (when different)	How it applies to members	Note
Thunderstorm Wind	wind speed (kt and mph)	226, 1956 to 2026	50 kt (58 mph) to 87 kt (100 mph) (median 56 kt (64 mph)); 205 with a recorded value	87 kt (100 mph) estimated gust, Thunderstorm Wind, 2010-07-21, 4 direct injuries	Thunderstorm Wind, 1994-07-05, \$500,000 property; \$50,000 crops (1994 dollars)	Event records naming member places: Hawarden city (28 records), Sioux Center city (22 records), Hull city (14 records), Boyden city (13 records), Orange City city (13 records), Hospers city (9 records), Maurice city (8 records), Alton city (7 records), Ireton city (6 records), Chatsworth city (4 records); and 3 more member places (see the XLSX file).	
Tornado	Enhanced Fujita (F before Feb 2007)	47, 1963 to 2024	F/EF0 to F/EF3 (median F/EF0); 42 with a recorded value	F3 tornado, 1968-09-22, 4.7 mi path length (records before 1996 may include the whole path; rating and listing come from the county where the tornado began), 50 yd wide, \$2,500,000 property; crops not recorded (1968 dollars)	Tornado, 2014-05-11, \$3,000,000 property; \$0 crops (2014 dollars)	Event records naming member places: Sioux Center city (7 records), Hospers city (3 records), Alton city (2 records), Granville city (2 records), Ireton city (2 records), Maurice city (2 records), Chatsworth city (1 record), Hawarden city (1 record), Hull city (1 record), Matlock city (1 record); and 1 more member place (see the XLSX file).	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)	1, 2011 to 2011 (1 zone-level)		No damage reported in 1 records.		Zone-level records: applies countywide; national data do not locate these events within the county.	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)	179, 1996 to 2026 (179 zone-level)		Winter Storm, 2013-04-09, \$10,000,000 property; \$0 crops, reported for the zone (2013 dollars); NWS zone IAZ012 (SIOUX), zone-level: may include parts of neighboring counties		Zone-level records: applies countywide; national data do not locate these events within the county.	Snow depth: in event narratives only; local data required.

Where a hazard names more than 10 member places, the table lists the 10 with the most records; every place is in the XLSX file, sheet "B1-c Extent".

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 15 Counted incidents 12

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
2024-06-24	2024-06-16	DR-4796-IA	Major disaster	SEVERE STORMS, FLOODING, STRAIGHT-LINE WINDS, AND TORNADOES	Inland Flooding; Strong Wind; Tornado	\$47,112,596.23	new since last plan; within last 5 years	
2020-03-23	2020-01-20	DR-4483-IA	Major disaster	COVID-19 PANDEMIC	Non-natural, not counted	\$259,606.83		
2020-03-13	2020-01-20	EM-3480-IA	Emergency	COVID-19	Non-natural, not counted	none found		same incident as DR-4483
2019-03-23	2019-03-12	DR-4421-IA	Major disaster	SEVERE STORMS AND FLOODING	Inland Flooding	\$771,585.31		
2018-08-20	2018-06-06	DR-4386-IA	Major disaster	SEVERE STORMS, TORNADOES, STRAIGHT-LINE WINDS, AND FLOODING	Inland Flooding; Strong Wind; Tornado	\$852,765.07		
2014-07-24	2014-06-14	DR-4184-IA	Major disaster	SEVERE STORMS, TORNADOES, STRAIGHT-LINE WINDS, AND FLOODING	Inland Flooding (primary); also designated: Strong Wind, Tornado	\$2,093,138.76		
2013-07-02	2013-05-19	DR-4126-IA	Major disaster	SEVERE STORMS, TORNADOES, AND FLOODING	Inland Flooding; Tornado	\$239,276.36		
2013-05-06	2013-04-09	DR-4114-IA	Major disaster	SEVERE WINTER STORM	Winter Weather	\$206,372.37		
2010-07-29	2010-06-01	DR-1930-IA	Major disaster	SEVERE STORMS, FLOODING, AND TORNADOES	Inland Flooding; Tornado	\$224,274.68		
2010-02-25	2009-12-23	DR-1877-IA	Major disaster	SEVERE WINTER STORMS AND SNOWSTORM	Winter Weather	\$163,164.67		
2005-09-10	2005-08-29	EM-3239-IA	Emergency	HURRICANE KATRINA EVACUATION	Hurricane: evacuation support, not a local hazard event; not counted	none found		
1993-07-09	1993-04-13	DR-996-IA	Major disaster	SEVERE STORMS & FLOODING	Inland Flooding	none found		
1977-03-31	1977-03-31	EM-3036-IA	Emergency	DROUGHT	Drought	none found		
1969-04-25	1969-04-25	DR-259-IA	Major disaster	FLOODING	Inland Flooding	none found		
1965-04-22	1965-04-22	DR-193-IA	Major disaster	FLOODING	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
1962-09-05	1962-09-05	DR-133-IA	Major disaster	FLOODS	Inland Flooding		
1961-03-31	1961-03-31	DR-111-IA	Major disaster	FLOODS	Inland Flooding		
1958-07-05	1958-07-05	DR-86-IA	Major disaster	FLOODS	Inland Flooding		
1954-06-23	1954-06-23	DR-17-IA	Major disaster	FLOOD	Inland Flooding		
1953-06-11	1953-06-11	DR-8-IA	Major disaster	FLOOD	Inland Flooding		

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

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: 11 rows, \$7,881,708.52

Disaster number	Declared	Applicant	County field in FEMA data	PA obligated <i>federal share obligated, nominal dollars</i>	Why not placed
4557	2020-08-17	The Evangelical Lutheran Good Samaritan Society	Minnehaha County	\$47,682.27	county field is a county of another state and the applicant name does not identify a place in the declaring state
4483	2020-03-23	Gundersen Lutheran Health System, Inc	La Crosse County	\$326,644.22	county field is a county of another state and the applicant name does not identify a place in the declaring state
4421	2019-03-23	City of Bigelow	Nobles County	\$80,835.34	county field is a county of another state and the applicant name does not identify a place in the declaring state
4421	2019-03-23	Dairyland Power Cooperative	La Crosse County	\$247,337.47	county field is a county of another state and the applicant name does not identify a place in the declaring state
4421	2019-03-23	South Dakota Dept of Transportation	Hughes County	\$3,666,245.52	county field is a county of another state and the applicant name does not identify a place in the declaring state
4421	2019-03-23	City of Omaha Parks and Recreation Dept(The Omaha Parks and Recreation)	Douglas County	\$379,432.23	county field is a county of another state and the applicant name does not identify a place in the declaring state
4184	2014-07-24	South Dakota Dept of Transportation	Hughes County	\$1,245,084.61	county field is a county of another state and the applicant name does not identify a place in the declaring state
4181	2014-07-14	Lincoln Electric System	Lancaster County	\$383,692.95	county field is a county of another state and the applicant name does not identify a place in the declaring state
4114	2013-05-06	City of Bigelow	Nobles County	\$5,961.43	county field is a county of another state and the applicant name does not identify a place in the declaring state
1998	2011-06-27	Lincoln Electric System	Lancaster County	\$65,027.74	county field is a county of another state and the applicant name does not identify a place in the declaring state
1688	2007-03-14	Dairyland Power Cooperative	La Crosse County	\$1,433,764.74	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.

SOURCEFEMA, 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 <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
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
Cold Wave	28	9	4	12	0	0	1996 to 2026-06-30	
Drought	54	26	6	26	1	0	1996 to 2026-06-30	
Earthquake	0	0	0	0	0	0		No Storm Events record; local data required (e.g., USGS).
Hail	261	25	4	25	0	0	1955 to 2026-06-30	
Heat Wave	28	15	0	15	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	6	1	0	1	0	0	1996 to 2026-06-30	
Inland Flooding	164	30	0	30	9	1	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	2	0	0	0	0	0	1996 to 2026-06-30	
Strong Wind	271	68	9	70	3	1	1955 to 2026-06-30	Includes 33 High Wind records and 12 Strong Wind records, event types the NRI definition of this hazard leaves out.
Tornado	47	6	0	6	5	1	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	1	0	0	0	0	0	1996 to 2026-06-30	
Winter Weather	179	30	6	32	2	0	1996 to 2026-06-30	

SOURCESNOAA 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)

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
2025-05-19	High Wind	63 kt (72 mph) measured gust	damage not reported	0, 0	NWS zone IAZ012 (SIOUX), zone-level: may include parts of neighboring counties	new since last plan; within last 5 years	B1-c worst recorded: High Wind and Strong Wind (outside NRI Strong Wind definition)
2024-06-20	Flood		\$6,500,000 property; \$0 crops (2024 dollars)	1, 0	CHATSWORTH to GRANVILLE	new since last plan; within last 5 years	deaths or injuries recorded
2024-01-12	Extreme Cold/ Wind Chill		damage not reported	0, 0	NWS zone IAZ012 (SIOUX), zone-level: may include parts of neighboring counties	new since last plan; within last 5 years	B1-c worst recorded: Cold/Wind Chill, Extreme Cold/Wind Chill
2020-07-28	Drought		\$0 property; \$890,000 crops, reported for the zone (2020 dollars)	0, 0	NWS zone IAZ012 (SIOUX), zone-level: may include parts of neighboring counties		B1-c worst recorded: Drought
2019-04-10	Ice Storm		\$172,000 property; \$0 crops, reported for the zone (2019 dollars)	0, 0	NWS zone IAZ012 (SIOUX), zone-level: may include parts of neighboring counties		B1-c worst recorded: Ice Storm
2013-04-09	Winter Storm		\$10,000,000 property; \$0 crops, reported for the zone (2013 dollars)	0, 0	NWS zone IAZ012 (SIOUX), zone-level: may include parts of neighboring counties		B1-c worst recorded: Winter Storm, Heavy Snow, Blizzard, Lake-Effect Snow, Winter Weather, Sleet
2012-07-18	Excessive Heat		\$0 property; \$0 crops, reported for the zone (2012 dollars)	0, 0	NWS zone IAZ012 (SIOUX), zone-level: may include parts of neighboring counties		B1-c worst recorded: Excessive Heat, Heat
2010-07-21	Thunderstorm Wind	87 kt (100 mph) estimated gust	\$200,000 property; \$0 crops (2010 dollars)	0, 4	MAURICE		deaths or injuries recorded
2005-07-24	Thunderstorm Wind	69 kt (79 mph) estimated gust	\$50,000 property; crops not reported (2005 dollars)	1, 0	SHELDON		deaths or injuries recorded
1998-10-04	Lightning		\$30,000 property; crops not reported (1998 dollars)	0, 0	HAWARDEN		B1-c worst recorded: Lightning
1984-08-07	Hail	2.75 in	damage not recorded (pre-1996 record)	0, 0	location not recorded		B1-c worst recorded: Hail
1968-09-22	Tornado	F3, 4.7 mi path length (records before 1996 may include the whole path; rating and listing come from the county where the tornado began), 50 yd wide	\$2,500,000 property; crops not recorded (1968 dollars)	0, 0	location not recorded		B1-c worst recorded: Tornado

The full list is in the XLSX file, sheet "B1-d Storm Events history" (1,041 rows).

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

SOURCES

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

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

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

Supports B1-e: probability

Probability: FEMA annualized frequency and descriptor per hazard

Hazard	FEMA annualized frequency (modeled) <i>unit per row</i>	Unit	In plain terms	Descriptor	Descriptor basis	NRI events or days in its record period (hail, wind and tornado are area-weighted, so can be fractional)	NRI period	Location	Note
Avalanche		events per year					1994 to 2023 (30 years)	see B1-f	Not Applicable in NRI for this county; no descriptor.
Coastal Flooding		events per year at a location (modeled)				not shown	modeled	see B1-f	Not Applicable in NRI for this county; no descriptor.
Cold Wave	7.53	event-days per year	about 7.53 days per year	Likely	event-days in 14 of 30 years, 1996 to 2025 (46.7%)	143	2005-11-12 to 2024-11-12 (19 years)	countywide	NRI gives about 7.53 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 14 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	24.4	event-days per year	about 24.4 days per year	Likely	event-days in 10 of 30 years, 1996 to 2025 (33.3%)	805	2000 to 2025 (25.25 years; D3 and D4 only)	countywide	NRI gives about 24.4 drought event-days a year here (its annualized frequency over 25.25 years; not its event count divided by the years), but Storm Events has a record in only 10 of 30 years. NRI counts from a different source that records far more events than Storm Events, so this descriptor reads much lower than NRI's frequency; read the two together.
Earthquake	0.000419	annual probability at a location	chance a given location in the county has at least minor- damage shaking in a year: 0.0419%			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	6.49	events per year	about 6.49 per year	Highly likely	FEMA annualized frequency (modeled)	246.5 (modeled)	1986 to 2023 (38 years)	countywide	

Hazard	FEMA annualized frequency (modeled) <i>unit per row</i>	Unit	In plain terms	Descriptor	Descriptor basis	NRI events or days in its record period (hail, wind and tornado are area-weighted, so can be fractional)	NRI period	Location	Note
Heat Wave	5.89	event-days per year	about 5.89 days per year	Likely	event-days in 9 of 30 years, 1996 to 2025 (30%)	98	2005-11-12 to 2024-11-12 (19 years)	countywide	NRI gives about 5.89 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 9 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		events per year					1851 to 2024 (Atlantic)	see B1-f	Not Applicable in NRI for this county; no descriptor.
Ice Storm	0.968	event-days per year	about 0.968 days per year	Likely	event-days in 5 of 30 years, 1996 to 2025 (16.7%)	66	1946-12-31 to 2014-02-12 (67 years)	countywide	
Inland Flooding	3.29	event-days per year	about 3.29 days per year	Likely	event-days in 21 of 30 years, 1996 to 2025 (70%)	92	1996 to 2023 (28 years)	see B1-f	
Landslide	0.0846	events per year (modeled)	about 1 in 12 years	Possible	FEMA annualized frequency (modeled)	not shown	modeled	see B1-f	
Lightning	39.4	days per year with a strike	about 39.4 days per year	Highly likely	FEMA annualized frequency (modeled)	not shown	1995 to 2023 (29 years; CONUS)	countywide	
Strong Wind	4.39	events per year	about 4.39 per year	Highly likely	FEMA annualized frequency (modeled)	167	1986 to 2023 (38 years)	countywide	
Tornado	0.676	events per year	about 0.68 per year	Likely	FEMA annualized frequency (modeled)	not shown	1950 to 2023 (EF2+); 1986 to 2023 (EF0-1)	see B1-f	
Tsunami		annual probability at the most exposed location (used in place of a county value)				not shown	modeled	see B1-f	Not Applicable in NRI for this county; no descriptor.
Volcanic Activity		annual probability				not shown	modeled	see B1-f	Not Applicable in NRI for this county; no descriptor.
Wildfire	0.000403	annual probability at a location	chance a given location in the county burns in a year: 0.0403%	Possible	Storm Events records in 1 of 30 years, 1996 to 2025 (3.33%)	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.

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
Winter Weather	16.8	event-days per year	about 16.8 days per year	Highly likely	event-days in 30 of 30 years, 1996 to 2025 (100%)	320	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	128	30	4.27
Hail	2.00 in+	1996 to 2025	5	30	0.167
Strong Wind (Thunderstorm Wind records)	50-64 kt	1996 to 2025	132	30	4.4
Strong Wind (Thunderstorm Wind records)	65 kt+	1996 to 2025	31	30	1.03
Strong Wind (Thunderstorm Wind records)	unmeasured or below 50 kt	1996 to 2025	0	30	0
Tornado	EF0-1	1996 to 2025	30	30	1
Tornado	EF2-3	1996 to 2025	1	30	0.0333
Tornado	EF4-5	1996 to 2025	0	30	0
Tornado	unrated (EFU)	1996 to 2025	2	30	0.0667

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 9				Not Applicable 9	
Coastal Flooding	0 of 9				Not Applicable 9	
Cold Wave	9 of 9	61.6	81.6	91.2	Relatively High 7, Relatively Moderate 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.
Drought	9 of 9	79.7	95.4	97.4	Relatively Moderate 5, Relatively Low 4	National data give a county-wide or coarse (49 km grid or NWS zone) frequency for this hazard, so they cannot show members' hazard differing. Agriculture is all of NRI's expected annual loss for this hazard in the county, so the tract range above mostly reflects where crop and livestock value is, not where buildings and people are. Confirm locally.
Earthquake	9 of 9	3.8	15.3	22.9	Very Low 9	
Hail	9 of 9	83.0	99.4	99.8	Very High 5, Relatively High 1, 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. Agriculture is 87% of NRI's expected annual loss for this hazard in the county, so the tract range above mostly reflects where crop and livestock value is, not where buildings and people are. Confirm locally.

Hazard	Tracts <i>rated of all</i>	Risk score min <i>NRI score, 0 to 100</i>	Median	Max	Tracts by rating	Note
Heat Wave	9 of 9	24.1	46.7	54.7	Relatively Low 9	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 9				Not Applicable 9	
Ice Storm	9 of 9	81.6	89.7	93.6	Relatively High 4, Relatively Moderate 5	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	9 of 9	12.0	65.6	94.9	Relatively High 4, Relatively Moderate 1, Relatively Low 2, Very Low 2	
Landslide	8 of 9	26.8	66.8	87.0	Relatively Low 1, Very Low 7, No Rating 1	
Lightning	9 of 9	38.6	61.2	68.0	Relatively Moderate 7, Relatively Low 2	National data give a county-wide or coarse (49 km grid or NWS zone) frequency for this hazard, so they cannot show members' hazard differing. The tract range above mostly reflects where buildings and people are. Confirm locally.
Strong Wind	9 of 9	71.5	86.9	91.2	Relatively High 7, Relatively Moderate 2	National data give a county-wide or coarse (49 km grid or NWS zone) frequency for this hazard, so they cannot show members' hazard differing. The tract range above mostly reflects where buildings and people are. Confirm locally.
Tornado	9 of 9	82.4	94.3	98.7	Very High 6, Relatively High 3	
Tsunami	0 of 9				Not Applicable 9	
Volcanic Activity	0 of 9				Not Applicable 9	
Wildfire	9 of 9	43.6	75.2	86.0	Relatively Low 7, Very Low 2	
Winter Weather	9 of 9	93.9	97.4	99.0	Very High 8, Relatively High 1	National data give a county-wide or coarse (49 km grid or NWS zone) frequency for this hazard, so they cannot show members' hazard differing. The tract range above mostly reflects where buildings and people are. Confirm locally.

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

SOURCE

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

Per-member block (Starter, confirm locally)

Member	Type	Plan status	Repetitive loss <i>FMA RL and SRL (44 CFR 77.2); repeat- flood, any definition</i>	Public Assistance matched <i>federal share obligated, nominal dollars</i>	Event records naming this place <i>all years; since the member's plan</i>	Notes
Sioux County	County	Approved, expires 2027-01-17	FMA RL 0, SRL 0; any 1	none found	0; 0	
Alton city	City	Approved, expires 2027-01-17	FMA RL 0, SRL 0; any 0	\$1,643,863.39	26; 3	
Boyden city	City	Approved, expires 2027-01-17	FMA RL 0, SRL 0; any 0	\$24,144.12	28; 2	

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
Chatsworth city	City	Plan 107675 approved 2022-01-17, pending adoption here; not yet eligible	FMA RL 0, SRL 0; any 1	\$47,882.27	27; no approved plan	
Granville city	City	Approved, expires 2027-01-17	FMA RL 0, SRL 0; any 0	none found	26; 3	
Hawarden city	City	Approved, expires 2027-01-17	FMA RL 0, SRL 0; any 0	\$1,296,812.14	103; 10	
Hospers city	City	Approved, expires 2027-01-17	FMA RL 0, SRL 0; any 0	\$48,375	34; 3	
Hull city	City	Approved, expires 2027-01-17	FMA RL 0, SRL 0; any 0	\$74,672.44	32; 12	
Ireton city	City	Approved, expires 2027-01-17	FMA RL 0, SRL 0; any 0	\$8,788.20	15; 0	
Matlock city	City	Approved, expires 2027-01-17	FMA RL 0, SRL 0; any 0	none found	7; 3	
Maurice city	City	Approved, expires 2027-01-17	FMA RL 0, SRL 0; any 0	\$15,482.59	25; 11	
Orange City city	City	Approved, expires 2027-01-17	FMA RL 0, SRL 0; any 0	\$217,971.24	39; 6	
Rock Valley city	City	Approved, expires 2027-01-17	FMA RL 0, SRL 0; any 1	\$24,326,589.66	2; 0	
Sioux Center city	City	Approved, expires 2027-01-17	FMA RL 0, SRL 0; any 0	\$173,987.47	55; 13	

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 2022-01-17 <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											Not Applicable in NRI for this county
Cold Wave	\$15,063,529,888	\$2,183,736,139	35,872	\$2,744	\$639,837	\$1,874,795	under 0.0001%		\$0		
Drought		\$262,578,509			\$1,000,019		0.381% (agriculture)		\$21,755,000		NRI has no building exposure for this hazard; agriculture shown
Earthquake	\$25,942,877,382		35,872	\$37,344		\$8,173	0.000144%				
Hail	\$15,063,545,316	\$2,183,736,139	35,872	\$622,990	\$4,935,867	\$96,777	0.00414%	\$329,000			
Heat Wave	\$15,063,529,888	\$2,183,736,139	35,872	\$4,817	\$39	\$407,420	under 0.0001%				
Hurricane											Not Applicable in NRI for this county
Ice Storm	\$15,063,529,888		35,872	\$266,239		\$154,349	0.00177%				
Inland Flooding	\$15,056,578,646	\$404,672,100	863	\$11,185,261	\$158,041	\$20,759	n/a (see note)	\$8,105,000		\$47,112,596.23	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	\$41,712,676		68	\$56		\$483	0.000133%				
Lightning	\$15,063,545,316		35,872	\$29,459		\$157,423	0.000196%				
Strong Wind	\$15,063,545,316	\$2,183,736,139	35,872	\$165,915	\$49,696	\$718,866	0.0011%	\$57,000	\$0	\$47,112,596.23	
Tornado	\$15,063,545,316	\$2,183,736,139	35,872	\$4,320,077	\$81,892	\$2,212,789	0.0287%			\$47,112,596.23	
Tsunami											Not Applicable in NRI for this county
Volcanic Activity											Not Applicable in NRI for this county
Wildfire	\$1,692,141,294	\$310,021,454	6,107	\$39,321	\$1,245	\$3,721	0.00232%				

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 2022-01-17 <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	\$15,063,529,888	\$2,183,736,139	35,872	\$387,039	\$3,540	\$166,694	0.00257%		\$0		

Totals since 2022-01-17 (Storm Events through 2026-06-30): 105 county-coded records, 34 with a damage value recorded (including \$0), \$8,491,000; 105 zone-level records, 17 with a damage value recorded (including \$0), \$21,755,000 reported for the zone; Public Assistance on counted declarations \$47,112,596.23 (1 declaration, 1 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	35,872
Building value (total, not at risk)	\$15,063,545,316
Agriculture value (total, not at risk)	\$2,183,736,139
NRI risk rating (all hazards)	Relatively Low
Expected annual loss, buildings and agriculture, all hazards	\$23,931,438
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)	\$5,822,249
Social vulnerability rating	Very 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)	0	Severe repetitive loss, FMA definition (44 CFR 77.2)	0
Repetitive loss, NFIP insurance definition	3	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 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	0	0	3	0	3	0	1
ROCK VALLEY, CITY OF	0	0	1	0	1	0	0
CHATSWORTH, CITY OF	0	0	1	0	1	0	1
SIOUX COUNTY *	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
Sioux County	190906	0	0	1	0	1	0	0	
Alton city	190508	0	0	0	0	0	0	0	
Boyden city	190556	0	0	0	0	0	0	0	
Chatsworth city	190509	0	0	1	0	1	0	1	
Granville city	190737	0	0	0	0	0	0	0	
Hawarden city	190252	0	0	0	0	0	0	0	
Hospers city	190510	0	0	0	0	0	0	0	
Hull city	190595	0	0	0	0	0	0	0	
Ireton city	190511	0	0	0	0	0	0	0	
Matlock city	195241	0	0	0	0	0	0	0	
Maurice city	190512	0	0	0	0	0	0	0	
Orange City city	190635	0	0	0	0	0	0	0	

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
Rock Valley city	190253	0	0	1	0	1	0	0	
Sioux Center city	190658	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	0	0	3	0	3	0	1
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 3 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_Gaz_cousubs_national.zip), [https://www2.census.gov/geo/docs/maps-data/data/gazetteer/2024_Gazetteer/2024_Gaz_place_national.zip](https://www2.census.gov/geo/docs/maps-data/data/gazetteer/2024_Gaz_place_national.zip), [https://www2.census.gov/geo/docs/maps-data/data/gazetteer/2024_Gazetteer/2024_Gaz_unsd_national.zip](https://www2.census.gov/geo/docs/maps-data/data/gazetteer/2024_Gaz_unsd_national.zip), [https://www2.census.gov/geo/docs/maps-data/data/gazetteer/2024_Gazetteer/2024_Gaz_elsd_national.zip](https://www2.census.gov/geo/docs/maps-data/data/gazetteer/2024_Gaz_elsd_national.zip), [https://www2.census.gov/geo/docs/maps-data/data/gazetteer/2024_Gazetteer/2024_Gaz_scsd_national.zip](https://www2.census.gov/geo/docs/maps-data/data/gazetteer/2024_Gaz_scsd_national.zip), https://www2.census.gov/geo/docs/reference/codes2020/national_place_by_county2020.txt, https://www2.census.gov/geo/docs/reference/ct_change/ct_cou_to_cousub_crosswalk.xlsx

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Cite this: Hazard Plain (2026). Sioux County, IA: risk-assessment baseline packet, release 2026-10 (data as of 2026-09-28; County area 19167). Preview: automated baseline. Built from FEMA OpenFEMA, the FEMA National Risk Index and NOAA NCEI Storm Events; source versions in the packet's Sources list.

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

Hazard Plain release 2026-10. As of 2026-09-28; Storm Events data through 2026-06-30. File hazard-plain_2026-10_IA_19167. Preview: automated baseline.