

Kanawha County, WV

Risk-assessment baseline packet

Unit **County area 54039** 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 2027-10-19	Plan	RPDC 03 Hazard Mitigation Plan (FEMA plan 108578)
Approved	2022-10-20	Expires	2027-10-19
As of	2026-09-28	Days	386 days to expiry

What changed since your last plan (approved 2022-10-20)

New federal declarations	DR-4756-WV, DR-4783-WV, DR-4787-WV, EM-3639-WV (4 declaration rows; 4 counted incidents)	Storm Events records since approval	260 (data through 2026-06-30)
Repetitive loss now	FMA RL 37, SRL 39 (44 CFR 77.2); any definition: 259	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: 15 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 2022-10-20), page 1

3. Supports B1-a: hazards, page 2

4. Supports B1-b: location, page 4

5. Supports B1-c: extent, page 5

6. Supports B1-d: previous occurrences, page 8
7. Supports B1-e: probability, page 13

8. Supports B1-f: variation across the planning area, page 17

9. Supports B2-a and B2-b: assets and impacts, page 19

10. Supports B2-a: context, page 21

11. Supports B2-c: repetitive loss, page 21

12. Sources and OpenFEMA disclaimer, page 23

Plan clock

Plan status for every jurisdiction listed in this county

Jurisdiction	Type	Status	Plan	Approved	Expires	Days to expiry negative = days since expiry	Update underway	Notes
Kanawha County	County	Approved, expires 2027-10-19	RPDC 03 Hazard Mitigation Plan (FEMA plan 108578)	2022-10-20	2027-10-19	386		
Belle town	Town	Approved, expires 2027-10-19	RPDC 03 Hazard Mitigation Plan (FEMA plan 108578)	2022-10-20	2027-10-19	386		
Cedar Grove town	Town	Approved, expires 2027-10-19	RPDC 03 Hazard Mitigation Plan (FEMA plan 108578)	2022-10-20	2027-10-19	386		
Charleston city	City	Approved, expires 2027-10-19	RPDC 03 Hazard Mitigation Plan (FEMA plan 108578)	2022-10-20	2027-10-19	386		
Chesapeake town	Town	Approved, expires 2027-10-19	RPDC 03 Hazard Mitigation Plan (FEMA plan 108578)	2022-10-20	2027-10-19	386		
Clendenin town	Town	Approved, expires 2027-10-19	RPDC 03 Hazard Mitigation Plan (FEMA plan 108578)	2022-10-20	2027-10-19	386		
Dunbar city	City	Approved, expires 2027-10-19	RPDC 03 Hazard Mitigation Plan (FEMA plan 108578)	2022-10-20	2027-10-19	386		
East Bank town	Town	Approved, expires 2027-10-19	RPDC 03 Hazard Mitigation Plan (FEMA plan 108578)	2022-10-20	2027-10-19	386		
Handley town	Town	Approved, expires 2027-10-19	RPDC 03 Hazard Mitigation Plan (FEMA plan 108578)	2022-10-20	2027-10-19	386		
Marmet city	City	Approved, expires 2027-10-19	RPDC 03 Hazard Mitigation Plan (FEMA plan 108578)	2022-10-20	2027-10-19	386		
Montgomery city	City	Approved, expires 2027-09-06	RPDC 04 Hazard Mitigation Plan (FEMA plan 108485)	2022-09-07	2027-09-06	343		
Nitro city	City	Approved, expires 2027-10-19	RPDC 03 Hazard Mitigation Plan (FEMA plan 108578)	2022-10-20	2027-10-19	386		
Pratt town	Town	Approved, expires 2027-10-19	RPDC 03 Hazard Mitigation Plan (FEMA plan 108578)	2022-10-20	2027-10-19	386		
South Charleston city	City	Approved, expires 2027-10-19	RPDC 03 Hazard Mitigation Plan (FEMA plan 108578)	2022-10-20	2027-10-19	386		
St. Albans city	City	Approved, expires 2027-10-19	RPDC 03 Hazard Mitigation Plan (FEMA plan 108578)	2022-10-20	2027-10-19	386		

Plan 108578 also covers 14 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 <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
1	Inland Flooding	Relatively High	Relatively High	\$126,606,316	\$5,004	\$6,048,591	\$132,659,912	204		
2	Heat Wave	Relatively Moderate	Relatively Moderate	\$466	\$1	\$3,079,154	\$3,079,622	20		
3	Strong Wind	Relatively High	Relatively High	\$745,679	\$19	\$930,181	\$1,675,879	550		Includes 17 High Wind records and 37 Strong Wind records, event types the NRI definition of this hazard leaves out.
4	Lightning	Relatively High	Relatively High	\$61,444		\$1,086,118	\$1,147,563	11		
5	Earthquake	Relatively Low	Relatively Low	\$830,081		\$274,348	\$1,104,429			Not in Storm Events. Storm Events coverage of this hazard is limited; absence is not evidence of low risk.
6	Hail	Relatively Moderate	Relatively Moderate	\$714,190	\$118	\$206,685	\$920,994	176		
7	Tornado	Relatively Low	Relatively Low	\$364,077	\$10	\$235,757	\$599,845	11		
8	Cold Wave	Relatively Low	Relatively Low	\$29,381	\$144	\$382,378	\$411,904	30		Includes 3 Frost/Freeze records, event types the NRI definition of this hazard leaves out.
9	Ice Storm	Relatively Moderate	Relatively Moderate	\$322,090		\$87,128	\$409,217	2		
10	Hurricane	Relatively Low	Relatively Low	\$282,200	\$343	\$11,344	\$293,887	0		Declared 1 time; no Storm Events record of this type.
11	Winter Weather	Relatively High	Relatively High	\$174,708	under \$1	\$113,697	\$288,405	76		
12	Landslide	Relatively Moderate	Relatively Low	\$56,528		\$102,751	\$159,279	3		
13	Wildfire	Very Low	Very Low	\$59,228	\$3	\$23,712	\$82,942	3		
14	Avalanche	Relatively Low	Very Low	\$1		\$13,201	\$13,202	0		No recorded events in Storm Events since 1996 (data through 2026-06-30).
15	Drought	Very Low	Very Low		\$7,144		\$7,144	24		
	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).

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
	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.	13 of 57
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 57
Cold Wave	Affects the whole planning area; national data do not distinguish locations within the county. Confirm locally.	57 of 57
Drought	Affects the whole planning area; national data do not distinguish locations within the county. Confirm locally.	3 of 57
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.	57 of 57
Hail	Affects the whole planning area; national data do not distinguish locations within the county. Confirm locally.	57 of 57
Heat Wave	Affects the whole planning area; national data do not distinguish locations within the county. Confirm locally.	57 of 57
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.	57 of 57
Ice Storm	Affects the whole planning area; national data do not distinguish locations within the county. Confirm locally.	57 of 57
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.	57 of 57
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.	57 of 57
Lightning	Affects the whole planning area; national data do not distinguish locations within the county. Confirm locally.	57 of 57
Strong Wind	Affects the whole planning area; national data do not distinguish locations within the county. Confirm locally.	57 of 57
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.	57 of 57

Hazard	Location	Census tracts rated <i>rated of all tracts</i>
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 57
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 57
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.	40 of 57
Winter Weather	Affects the whole planning area; national data do not distinguish locations within the county. Confirm locally.	57 of 57

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	27, 1996 to 2026 (27 zone-level)	1 day to 31 days (median 3.5 days); 24 with a recorded value	31 days, 2001-03-01 to 2001-03-31, 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	Extreme Cold/Wind Chill, 2014-01-06, \$300,000 property; \$0 crops, reported for the zone (2014 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. Cold/ Wind Chill records from May to September (a frost night, not a cold wave) are counted but not used for the longest run.
Frost/Freeze (outside NRI Cold Wave definition)	crop damage	3, 2003 to 2004 (3 zone-level)		No crop damage reported in 3 records.		Zone-level records: applies countywide; national data do not locate these events within the county.	Temperature: in event narratives only; local data required.
Drought	US Drought Monitor D-scale	24, 1997 to 2026 (24 zone-level)	25 days to 184 days (median 91 days); 7 with a recorded value	184 days (6 months), 1999-05-01 to 1999-10-31, a run of 6 consecutive Storm Events drought records, zone-level		Zone-level records: applies countywide; national data do not locate these events within the county.	Storm Events enters a drought at D2 or worse east of the Rockies and D3 or worse from the Rockies west (NWS Instruction 10-1605); NRI drought counts D3 and D4 only.
Earthquake	Modified Mercalli (local data)	0					No Storm Events record; local data required (e.g., USGS).

Hazard	Scale	Records <i>count, years</i>	Observed range	Worst recorded event	Most damaging (when different)	How it applies to members	Note
Hail	hail size (inches)	207, 1958 to 2026	0.75 in to 4.25 in (median 1 in); 207 with a recorded value	4.25 in hail, 2019-05-23	Hail, 2006-08-30, \$6,000,000 property; crops not reported (2006 dollars)	Event records naming member places: Charleston city (32 records), St. Albans city (9 records), Clendenin town (6 records), Dunbar city (2 records), Nitro city (2 records), South Charleston city (2 records), Belle town (1 record), Cedar Grove town (1 record), East Bank town (1 record), Marmet city (1 record); and 1 more member place (see the XLSX file).	
Excessive Heat, Heat	heat index (narratives)	20, 1996 to 2011 (20 zone- level)	1 day to 4 days (median 2 days); 5 with a recorded value	4 consecutive days, 2011-07-20 to 2011-07-23, 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. Heat records from November to March (unseasonable warmth, not a heat wave) are counted but not used for the longest run.
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)	2, 1999 to 2021 (2 zone- level)		Ice Storm, 2021-02-15, \$5,000 property; \$0 crops, reported for the zone (2021 dollars); NWS zone WVZ015 (KANAWHA), 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)	204, 1996 to 2026 (10 zone- level)		Flood, 2016-06-23, \$36,000,000 property; \$0 crops (2016 dollars), 4 direct deaths		Event records naming member places: Charleston city (8 records), Nitro city (8 records), Belle town (5 records), South Charleston city (4 records), Cedar Grove town (3 records), Chesapeake town (3 records), Marmet city (3 records), Clendenin town (2 records), Handley town (2 records), Montgomery city (2 records); and 3 more member places (see the XLSX file). Zone-level records (10) 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)	3, 2009 to 2015 (1 zone- level)		Debris Flow, 2015-03-12, \$1,000,000 property; \$0 crops (2015 dollars)		No event record names a member place. Zone-level records (1) apply countywide.	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
Lightning	annualized frequency (the measure FEMA's Local Mitigation Planning Handbook names)	11, 2001 to 2018		Lightning, 2005-07-27, damage not reported, 1 direct death	Lightning, 2012-07-05, \$100,000 property; \$0 crops (2012 dollars)	Event records naming member places: Charleston city (2 records), South Charleston city (2 records), St. Albans 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)	54, 1999 to 2026 (51 zone-level)	24 kt (28 mph) to 64 kt (74 mph) (median 45 kt (52 mph)); 41 with a recorded value	64 kt (74 mph) measured gust, High Wind, 2009-12-09; NWS zone WVZ015 (KANAWHA), zone-level: may include parts of neighboring counties	Strong Wind, 2014-03-12, \$150,000 property; \$0 crops, reported for the zone (2014 dollars)	Event records naming member places: Charleston city (2 records), Belle town (1 record). Zone-level records (51) apply countywide.	
Thunderstorm Wind	wind speed (kt and mph)	554, 1957 to 2026	30 kt (35 mph) to 87 kt (100 mph) (median 50 kt (58 mph)); 484 with a recorded value	87 kt (100 mph) estimated gust, Thunderstorm Wind, 2019-06-24	Thunderstorm Wind, 2012-06-29, \$6,000,000 property; \$0 crops (2012 dollars)	Event records naming member places: Charleston city (49 records), St. Albans city (33 records), South Charleston city (18 records), Clendenin town (11 records), Nitro city (10 records), Dunbar city (7 records), Marmet city (7 records), Cedar Grove town (5 records), Belle town (3 records), Chesapeake town (3 records); and 4 more member places (see the XLSX file).	
Tornado	Enhanced Fujita (F before Feb 2007)	15, 1969 to 2024	F/EF0 to F/EF2 (median F/EF1); 15 with a recorded value	EF2 tornado, 2024-04-02, 8 mi within this county, 300 yd wide, \$40,000 property; \$0 crops (2024 dollars)	Tornado, 2019-06-24, \$500,000 property; \$0 crops (2019 dollars)	Event records naming member places: Charleston city (2 records), Marmet city (1 record), Nitro city (1 record), South Charleston city (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.

Hazard	Scale	Records <i>count, years</i>	Observed range	Worst recorded event	Most damaging (when different)	How it applies to members	Note
Wildfire	acres burned (local data)	3, 1999 to 2014 (1 zone- level)		Wildfire, 2014-03-11, \$25,000 property; \$0 crops, reported for the zone (2014 dollars); NWS zone WVZ015 (KANAWHA), zone-level: may include parts of neighboring counties		No event record names a member place. Zone-level records (1) apply countywide.	Acres burned: in event narratives only; local data required.
Winter Storm, Heavy Snow, Blizzard, Lake- Effect Snow, Winter Weather, Sleet	none in data (snowfall local)	76, 1996 to 2026 (76 zone- level)		Winter Storm, 2003-02-16, \$1,800,000 property; crops not reported, reported for the zone (2003 dollars); NWS zone WVZ015 (KANAWHA), 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 34 Counted incidents 28

Federal disaster declarations for this county

Declared	Incident began	FEMA number	Type	Title	Mapped hazard	County Public Assistance <i>federal share obligated, nominal dollars</i>	Flags	Notes
2026-01-24	2026-01-23	EM-3639-WV	Emergency	SEVERE WINTER STORM	Winter Weather	none found	new since last plan; within last 5 years	
2024-05-24	2024-04-11	DR-4787-WV	Major disaster	SEVERE STORMS, FLOODING, LANDSLIDES, AND MUDSLIDES	Inland Flooding (primary); also designated: Landslide	\$196,291.65	new since last plan; within last 5 years	FEMA's declaration record does not list Public Assistance, but FEMA's PA project summaries show obligations for this county
2024-05-22	2024-04-02	DR-4783-WV	Major disaster	SEVERE STORMS, STRAIGHT-LINE WINDS, TORNADOES, FLOODING, LANDSLIDES, AND MUDSLIDES	Inland Flooding; Landslide; Strong Wind; Tornado	PA not declared for this county	new since last plan; within last 5 years	

Declared	Incident began	FEMA number	Type	Title	Mapped hazard	County Public Assistance		Flags	Notes
						federal share obligated, nominal dollars			
2024-01-30	2023-08-28	DR-4756-WV	Major disaster	SEVERE STORMS, FLOODING, LANDSLIDES, AND MUDSLIDES	Inland Flooding (primary); also designated: Landslide	\$4,267,575.47		new since last plan; within last 5 years	
2021-05-20	2021-02-27	DR-4605-WV	Major disaster	SEVERE STORMS AND FLOODING	Inland Flooding	\$2,066,495.51			
2020-04-03	2020-01-20	DR-4517-WV	Major disaster	COVID-19 PANDEMIC	Non-natural, not counted	\$21,538,824.55			
2020-03-13	2020-01-20	EM-3450-WV	Emergency	COVID-19	Non-natural, not counted	none found			same incident as DR-4517
2016-06-25	2016-06-22	DR-4273-WV	Major disaster	SEVERE STORMS, FLOODING, LANDSLIDES, AND MUDSLIDES	Inland Flooding (primary); also designated: Landslide	\$29,626,628.43			
2015-03-31	2015-03-03	DR-4210-WV	Major disaster	SEVERE WINTER STORM, FLOODING, LANDSLIDES, AND MUDSLIDES	Inland Flooding; Landslide; Winter Weather	\$4,354,680.74			
2014-01-10	2014-01-09	EM-3366-WV	Emergency	CHEMICAL SPILL	Non-natural, not counted	\$611,836.22			
2012-11-27	2012-10-29	DR-4093-WV	Major disaster	HURRICANE SANDY	Hurricane	\$175,076.25			
2012-10-29	2012-10-29	EM-3358-WV	Emergency	HURRICANE SANDY	Hurricane	none found			same incident as DR-4093
2012-07-23	2012-06-29	DR-4071-WV	Major disaster	SEVERE STORMS AND STRAIGHT-LINE WINDS	Strong Wind	\$1,055,455.53			
2012-06-30	2012-06-29	EM-3345-WV	Emergency	SEVERE STORMS	Hazard not mapped (severe storm title names no single hazard); not counted	none found			same incident as DR-4071
2010-03-29	2010-03-12	DR-1893-WV	Major disaster	SEVERE STORMS, FLOODING, MUDSLIDES, AND LANDSLIDES	Inland Flooding; Landslide	PA not declared for this county			
2010-03-02	2009-12-18	DR-1881-WV	Major disaster	SEVERE WINTER STORM AND SNOWSTORM	Winter Weather	\$52,242.11			
2005-09-05	2005-08-29	EM-3221-WV	Emergency	HURRICANE KATRINA EVACUATION	Hurricane: evacuation support, not a local hazard event; not counted	none found			
2004-09-20	2004-09-16	DR-1558-WV	Major disaster	SEVERE STORMS, FLOODING, AND LANDSLIDES	Inland Flooding; Landslide	\$25,774.54			
2004-06-07	2004-05-27	DR-1522-WV	Major disaster	SEVERE STORMS, FLOODING, AND LANDSLIDES	Inland Flooding; Landslide	PA not declared for this county			
2003-11-21	2003-11-11	DR-1500-WV	Major disaster	SEVERE STORMS, FLOODING, AND LANDSLIDES	Inland Flooding; Landslide	\$443,720.30			
2003-06-21	2003-06-11	DR-1474-WV	Major disaster	SEVERE STORMS, FLOODING, AND LANDSLIDES	Inland Flooding; Landslide	\$726,216.64			

Declared	Incident began	FEMA number	Type	Title	Mapped hazard	County Public Assistance	Flags	Notes
						<i>federal share obligated, nominal dollars</i>		
2003-03-14	2003-02-16	DR-1455-WV	Major disaster	SEVERE WINTER STORM, RECORD/NEAR RECORD SNOW, HEAVY RAINS, FLOODING AND LANDSLIDES	Inland Flooding; Landslide; Winter Weather	\$233,764.20		
2002-05-05	2002-05-02	DR-1410-WV	Major disaster	SEVERE STORMS, FLOODING AND LANDSLIDES	Inland Flooding; Landslide	PA not declared for this county		
2001-11-16	2001-11-16	FM-2391-WV	Fire management	WV - SOUTHEAST FIRE COMPLEX - 11/16/2001	Wildfire	none found		
2001-06-03	2001-05-15	DR-1378-WV	Major disaster	SEVERE STORMS, FLOODING AND LANDSLIDES	Inland Flooding; Landslide	PA not declared for this county		
2000-02-28	2000-02-18	DR-1319-WV	Major disaster	FLOODING, SEVERE STORMS, AND LANDSLIDES	Inland Flooding (primary); also designated: Landslide	\$23,830.94		
1998-07-01	1998-06-26	DR-1229-WV	Major disaster	SEVERE STORMS AND FLOODING	Inland Flooding; Winter Weather	none found		
1997-03-07	1997-02-28	DR-1168-WV	Major disaster	HEAVY & WIND DRIVEN RAIN, HIGH WINDS,FLOODING,SLIDES	Inland Flooding (primary); also designated: Landslide	none found		
1996-01-13	1996-01-06	DR-1084-WV	Major disaster	BLIZZARD OF 96 (SEVERE SNOW STORM)	Winter Weather	none found		
1993-03-17	1993-03-13	EM-3109-WV	Emergency	SEVERE SNOWFALL & WINTER STORM	Winter Weather	none found		
1980-08-15	1980-08-15	DR-628-WV	Major disaster	SEVERE STORMS & FLOODING	Inland Flooding	none found		
1974-01-29	1974-01-29	DR-416-WV	Major disaster	SEVERE STORMS & FLOODING	Inland Flooding	none found		
1972-02-27	1972-02-27	DR-323-WV	Major disaster	HEAVY RAINS & FLOODING	Inland Flooding	none found		
1967-03-13	1967-03-13	DR-224-WV	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
1964-03-20	1964-03-20	DR-165-WV	Major disaster	SEVERE STORMS & FLOODING	Inland Flooding		
1963-03-13	1963-03-13	DR-147-WV	Major disaster	SEVERE STORMS & FLOODING	Inland Flooding		
1962-03-09	1962-03-09	DR-125-WV	Major disaster	SEVERE STORM, HIGH TIDES & FLOODING	Inland Flooding (primary); also designated: Coastal Flooding		
1961-07-23	1961-07-23	DR-117-WV	Major disaster	FLOODS	Inland Flooding		

Declared	Incident began	FEMA number	Type	Title	Mapped hazard	Flags	Notes
1957-01-31	1957-01-31	DR-67-WV	Major disaster	FLOOD	Inland Flooding		
1954-08-04	1954-08-04	DR-21-WV	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 filed under this county for declarations that do not list it: 1 row, \$1,424,088.06

FEMA number	Declared	Title	Applicant	PA obligated <i>federal share obligated, nominal dollars</i>
DR-4603-WV	2021-05-13	SEVERE WINTER STORMS	West Virginia Division of Highways / District 1	\$1,424,088.06

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

SOURCES

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

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

Previous occurrences by hazard, with explicit no-event rows

Hazard	Storm Events records <i>full period</i>	Since plan approval records	During plan review records	Last 5 years records	Declared incidents <i>distinct incidents</i>	Declared since approval <i>distinct incidents</i>	Period	Statement
Avalanche	0	0	0	0	0	0	1996 to 2026-06-30	No recorded events, 1996 to 2026-06-30, NOAA NCEI Storm Events
Coastal Flooding	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	30	3	0	3	0	0	1996 to 2026-06-30	Includes 3 Frost/Freeze records, event types the NRI definition of this hazard leaves out.
Drought	24	10	0	10	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	207	28	6	34	0	0	1955 to 2026-06-30	
Heat Wave	20	0	0	0	0	0	1996 to 2026-06-30	
Hurricane	0	0	0	0	1	0	1996 to 2026-06-30	No Storm Events records of this type; 1 federal declared incident (see declarations table)
Ice Storm	2	0	0	0	0	0	1996 to 2026-06-30	
Inland Flooding	204	74	16	91	21	3	1996 to 2026-06-30	
Landslide	3	0	0	0	15	3	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
Lightning	11	0	0	0	0	0	1996 to 2026-06-30	
Strong Wind	608	117	60	177	2	1	1955 to 2026-06-30	Includes 17 High Wind records and 37 Strong Wind records, event types the NRI definition of this hazard leaves out.
Tornado	15	5	0	5	1	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	3	0	0	0	1	0	1996 to 2026-06-30	
Winter Weather	76	23	4	27	7	1	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
2024-04-02	Tornado	EF2, 8 mi within this county, 300 yd wide	\$40,000 property; \$0 crops (2024 dollars)	0, 0	NITRO to GUTHRIE	new since last plan; within last 5 years	B1-c worst recorded: Tornado
2021-02-15	Ice Storm		\$5,000 property; \$0 crops, reported for the zone (2021 dollars)	0, 0	NWS zone WVZ015 (KANAWHA), zone-level: may include parts of neighboring counties		B1-c worst recorded: Ice Storm
2019-06-24	Thunderstorm Wind	87 kt (100 mph) estimated gust	\$15,000 property; \$0 crops (2019 dollars)	0, 0	WALLACE		B1-c worst recorded: Thunderstorm Wind
2019-05-23	Hail	4.25 in	\$500,000 property; \$0 crops (2019 dollars)	0, 0	PINCH		B1-c worst recorded: Hail
2016-06-23	Flood		\$26,000,000 property; \$0 crops (2016 dollars)	2, 0	ISLAND BRANCH to BIG CHIMNEY		deaths or injuries recorded
2016-06-23	Flood		\$36,000,000 property; \$0 crops (2016 dollars)	4, 0	KING to WELFORD		deaths or injuries recorded
2011-07-20	Heat		\$0 property; \$0 crops, reported for the zone (2011 dollars)	0, 0	NWS zone WVZ015 (KANAWHA), zone-level: may include parts of neighboring counties		B1-c worst recorded: Excessive Heat, Heat

Date	Event type	Magnitude or extent	Damage <i>nominal dollars</i>	Direct deaths, injuries <i>indirect not counted</i>	Location	Flags	Why listed
2009-12-09	High Wind	64 kt (74 mph) measured gust	\$125,000 property; \$0 crops, reported for the zone (2009 dollars)	0, 0	NWS zone WVZ015 (KANAWHA), zone-level: may include parts of neighboring counties		B1-c worst recorded: High Wind and Strong Wind (outside NRI Strong Wind definition)
2005-07-27	Lightning		damage not reported	1, 0	ST ALBANS		B1-c worst recorded: Lightning
2003-02-16	Winter Storm		\$1,800,000 property; crops not reported, reported for the zone (2003 dollars)	0, 0	NWS zone WVZ015 (KANAWHA), zone-level: may include parts of neighboring counties		B1-c worst recorded: Winter Storm, Heavy Snow, Blizzard, Lake-Effect Snow, Winter Weather, Sleet
2001-03-01	Cold/Wind Chill		damage not reported	0, 0	NWS zone WVZ015 (KANAWHA), zone-level: may include parts of neighboring counties		B1-c worst recorded: Cold/Wind Chill, Extreme Cold/Wind Chill
2000-02-18	Flash Flood		\$500,000 property; crops not reported (2000 dollars)	3, 0	SISSONVILLE		deaths or injuries recorded

The full list is in the XLSX file, sheet "B1-d Storm Events history" (1,203 rows).

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

SOURCES

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

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

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

Supports B1-e: probability

Probability: FEMA annualized frequency and descriptor per hazard

Hazard	FEMA annualized frequency (modeled) <i>unit per row</i>	Unit	In plain terms	Descriptor	Descriptor basis	NRI events or days in its record period (hail, wind and tornado are area-weighted, so can be fractional)	NRI period	Location	Note
Avalanche	0.01	events per year	about 1 in 100 years	Possible	FEMA annualized frequency (modeled)	0	1994 to 2023 (30 years)	see B1-f	0.01 is NRI's minimum avalanche frequency for a county in an avalanche susceptibility zone; NRI records no avalanche here, so the descriptor reflects the floor, not local events.
Coastal Flooding		events per year at a location (modeled)				not shown	modeled	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
Cold Wave	0.737	event-days per year	about 0.737 days per year	Likely	event-days in 12 of 30 years, 1996 to 2025 (40%)	14	2005-11-12 to 2024-11-12 (19 years)	countywide	Frost/Freeze records are not counted in this descriptor: they record crop freezes, not cold waves.
Drought	3.04	event-days per year	about 3.04 days per year	Likely	event-days in 6 of 30 years, 1996 to 2025 (20%)	161	2000 to 2025 (25.25 years; D3 and D4 only)	countywide	NRI gives about 3.04 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 6 of 30 years. NRI counts from a different source that records far more events than Storm Events, so this descriptor reads much lower than NRI's frequency; read the two together.
Earthquake	0.00109	annual probability at a location	chance a given location in the county has at least minor-damage shaking in a year: 0.109%			not shown	modeled	see B1-f	Descriptor not assigned: the NRI value is the chance at a location in the county, not how often the hazard affects the county, and Storm Events does not record earthquakes.
Hail	2.87	events per year	about 2.87 per year	Highly likely	FEMA annualized frequency (modeled)	109.1 (modeled)	1986 to 2023 (38 years)	countywide	
Heat Wave	4.16	event-days per year	about 4.16 days per year	Likely	event-days in 9 of 30 years, 1996 to 2025 (30%)	70	2005-11-12 to 2024-11-12 (19 years)	countywide	NRI gives about 4.16 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	0.0195	events per year	about 1 in 51 years	Possible	FEMA annualized frequency (modeled)	8	1851 to 2024 (Atlantic)	see B1-f	NRI counts hurricane and tropical storm tracks passing within storm-force wind range; federal declarations are counted separately in B1-d and need not match.
Ice Storm	0.222	event-days per year	about 0.222 days per year	Possible	event-days in 2 of 30 years, 1996 to 2025 (6.67%)	15	1946-12-31 to 2014-02-12 (67 years)	countywide	
Inland Flooding	4.21	event-days per year	about 4.21 days per year	Likely	event-days in 26 of 30 years, 1996 to 2025 (86.7%)	118	1996 to 2023 (28 years)	see B1-f	
Landslide	2.49	events per year (modeled)	about 2.49 per year	Highly likely	FEMA annualized frequency (modeled)	not shown	modeled	see B1-f	

Hazard	FEMA annualized frequency (modeled) <i>unit per row</i>	Unit	In plain terms	Descriptor	Descriptor basis	NRI events or days in its record period (hail, wind and tornado are area-weighted, so can be fractional)	NRI period	Location	Note
Lightning	47.7	days per year with a strike	about 47.7 days per year	Highly likely	FEMA annualized frequency (modeled)	not shown	1995 to 2023 (29 years; CONUS)	countywide	
Strong Wind	0.866	events per year	about 0.87 per year	Likely	FEMA annualized frequency (modeled)	33	1986 to 2023 (38 years)	countywide	
Tornado	0.0849	events per year	about 1 in 12 years	Possible	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	0.0013	annual probability at a location	chance a given location in the county burns in a year: 0.13%	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.
Winter Weather	9.63	event-days per year	about 9.63 days per year	Likely	event-days in 22 of 30 years, 1996 to 2025 (73.3%)	183	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	83	30	2.77
Hail	2.00 in+	1996 to 2025	9	30	0.3
Strong Wind (Thunderstorm Wind records)	50-64 kt	1996 to 2025	330	30	11
Strong Wind (Thunderstorm Wind records)	65 kt+	1996 to 2025	12	30	0.4
Strong Wind (Thunderstorm Wind records)	unmeasured or below 50 kt	1996 to 2025	137	30	4.57
Tornado	EF0-1	1996 to 2025	10	30	0.333
Tornado	EF2-3	1996 to 2025	1	30	0.0333
Tornado	EF4-5	1996 to 2025	0	30	0
Tornado	unrated (EFU)	1996 to 2025	0	30	0

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

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

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

Supports B1-f: variation across the planning area

Range of census tract risk within the county

Hazard	Tracts <i>rated of all</i>	Risk score min <i>NRI score, 0 to 100</i>	Median	Max	Tracts by rating	Note
Avalanche	13 of 57	66.2	67.3	68.8	Very Low 13, Not Applicable 44	
Coastal Flooding	0 of 57				Not Applicable 57	
Cold Wave	57 of 57	19.4	22.1	26.6	Relatively Low 57	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	3 of 57	74.1	84.3	84.8	Relatively Low 2, Very Low 1, No Rating 54	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	57 of 57	14.4	37.1	73.3	Relatively Low 20, Very Low 37	
Hail	57 of 57	49.0	65.5	83.4	Relatively Moderate 19, Relatively Low 38	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	57 of 57	27.7	59.4	80.2	Relatively Moderate 37, Relatively Low 20	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	57 of 57	40.1	47.7	56.5	Relatively Low 7, Very Low 50	
Ice Storm	57 of 57	37.1	60.3	85.9	Relatively Moderate 13, Relatively Low 44	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	57 of 57	58.9	96.5	99.8	Very High 30, Relatively High 20, Relatively Moderate 7	
Landslide	57 of 57	16.3	90.3	98.9	Relatively Moderate 14, Relatively Low 23, Very Low 20	
Lightning	57 of 57	42.8	66.9	86.4	Relatively High 15, Relatively Moderate 38, 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. The tract range above mostly reflects where buildings and people are. Confirm locally.
Strong Wind	57 of 57	46.3	66.4	86.6	Relatively High 2, Relatively Moderate 47, Relatively Low 8	National data give a county-wide or coarse (49 km grid or NWS zone) frequency for this hazard, so they cannot show members' hazard differing. The tract range above mostly reflects where buildings and people are. Confirm locally.
Tornado	57 of 57	12.8	23.7	35.0	Relatively Low 7, Very Low 50	
Tsunami	0 of 57				Not Applicable 57	
Volcanic Activity	0 of 57				Not Applicable 57	

Hazard	Tracts <i>rated of all</i>	Risk score min <i>NRI score, 0 to 100</i>	Median	Max	Tracts by rating	Note
Wildfire	40 of 57	25.4	70.6	84.5	Relatively Low 22, Very Low 18, No Rating 17	
Winter Weather	57 of 57	45.6	67.1	87.2	Relatively High 5, Relatively Moderate 51, Relatively Low 1	National data give a county-wide or coarse (49 km grid or NWS zone) frequency for this hazard, so they cannot show members' hazard differing. 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
Kanawha County	County	Approved, expires 2027-10-19	FMA RL 33, SRL 30; any 199	\$7,805,272.65	0; 0	Includes \$336,762.35 for declarations not counted as hazard incidents (DR-4517-WV, EM-3366-WV).
Belle town	Town	Approved, expires 2027-10-19	FMA RL 0, SRL 0; any 0	none found	10; 4	
Cedar Grove town	Town	Approved, expires 2027-10-19	FMA RL 0, SRL 0; any 0	\$26,619.37	9; 2	
Charleston city	City	Approved, expires 2027-10-19	FMA RL 3, SRL 4; any 30	\$1,382,355.31	95; 7	Includes \$34,894.70 for declarations not counted as hazard incidents (EM-3366-WV).
Chesapeake town	Town	Approved, expires 2027-10-19	FMA RL 0, SRL 0; any 1	none found	6; 3	
Clendenin town	Town	Approved, expires 2027-10-19	FMA RL 0, SRL 2; any 6	\$1,228,388.97	19; 4	
Dunbar city	City	Approved, expires 2027-10-19	FMA RL 0, SRL 0; any 6	\$11,401.43	10; 0	Includes \$2,135.93 for declarations not counted as hazard incidents (EM-3366-WV).
East Bank town	Town	Approved, expires 2027-10-19	FMA RL 0, SRL 0; any 0	\$4,317.78	2; 0	
Handley town	Town	Approved, expires 2027-10-19	FMA RL 0, SRL 0; any 0	none found	3; 1	
Marmet city	City	Approved, expires 2027-10-19	FMA RL 0, SRL 0; any 1	\$168,904.48	12; 5	
Montgomery city	City	Approved, expires 2027-09-06	FMA RL 0, SRL 0; any 0	none found	3; 0	

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
Nitro city	City	Approved, expires 2027-10-19	FMA RL 0, SRL 1; any 4	\$51,404.45	21; 5	Whole community, including the part in Putnam County; in-county portion (county table): FMA RL 0, FMA SRL 1, NFIP RL 2, NFIP SRL 1, any category 2. Includes \$16,176.38 for declarations not counted as hazard incidents (EM-3366-WV).
Pratt town	Town	Approved, expires 2027-10-19	FMA RL 0, SRL 0; any 5	none found	4; 1	
South Charleston city	City	Approved, expires 2027-10-19	FMA RL 1, SRL 2; any 7	\$509,111.96	27; 5	Includes \$57,224.63 for declarations not counted as hazard incidents (EM-3366-WV).
St. Albans city	City	Approved, expires 2027-10-19	FMA RL 0, SRL 0; any 2	\$91,926.75	45; 2	

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
- Changes in development in hazard-prone areas since the last approval, or a statement of none (E1-a)
- A problem statement per participant per hazard
- 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 2022-10-20 <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	\$3,597,410		3	\$1		\$13,201	under 0.0001%				

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 2022-10-20 <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
Coastal Flooding											Not Applicable in NRI for this county
Cold Wave	\$43,226,943,402	\$1,297,002	180,603	\$29,381	\$144	\$382,378	under 0.0001%		\$10,000		
Drought		\$457,782			\$7,144		1.56% (agriculture)		\$0		NRI has no building exposure for this hazard; agriculture shown
Earthquake	\$76,990,037,371		180,745	\$830,081		\$274,348	0.00108%				
Hail	\$43,226,943,402	\$1,297,002	180,603	\$714,190	\$118	\$206,685	0.00165%	\$0			
Heat Wave	\$43,226,943,402	\$1,297,002	180,603	\$466	\$1	\$3,079,154	under 0.0001%				
Hurricane	\$43,097,103,219	\$1,297,002	180,234	\$282,200	\$343	\$11,344	0.000655%				
Ice Storm	\$43,220,789,967		180,563	\$322,090		\$87,128	0.000745%				
Inland Flooding	\$43,131,777,440	\$249,419	22,339	\$126,606,316	\$5,004	\$6,048,591	n/a (see note)	\$4,545,400		\$4,463,867.12	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	\$8,689,283,934		47,944	\$56,528		\$102,751	0.000651%			\$4,463,867.12	
Lightning	\$43,226,943,402		180,603	\$61,444		\$1,086,118	0.000142%				
Strong Wind	\$43,226,943,402	\$1,297,002	180,603	\$745,679	\$19	\$930,181	0.00173%	\$298,700	\$37,950	none found (1 declaration)	Storm Events damage since the plan includes 16 zone-level Strong Wind records (\$37,950), an event type the NRI definition of this hazard leaves out.
Tornado	\$43,226,943,402	\$1,297,002	180,603	\$364,077	\$10	\$235,757	0.000842%	\$550,000		none found (1 declaration)	
Tsunami											Not Applicable in NRI for this county
Volcanic Activity											Not Applicable in NRI for this county
Wildfire	\$487,211,946	\$412,366	8,833	\$59,228	\$3	\$23,712	0.0122%				
Winter Weather	\$43,226,943,402	\$1,297,002	180,603	\$174,708	under \$1	\$113,697	0.000404%		\$3,000	none found (1 declaration)	

Totals since 2022-10-20 (Storm Events through 2026-06-30): 206 county-coded records, 206 with a damage value recorded (including \$0), \$5,394,100; 54 zone-level records, 54 with a damage value recorded (including \$0), \$50,950 reported for the zone; Public Assistance on counted declarations \$4,463,867.12 (4 declarations, 2 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	180,603
Building value (total, not at risk)	\$43,226,943,402
Agriculture value (total, not at risk)	\$1,297,002
NRI risk rating (all hazards)	Relatively High
Expected annual loss, buildings and agriculture, all hazards	\$130,259,177
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)	\$12,595,046
Social vulnerability rating	Relatively Moderate
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)	37	Severe repetitive loss, FMA definition (44 CFR 77.2)	39
Repetitive loss, NFIP insurance definition	248	Severe repetitive loss, NFIP insurance definition	34

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

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

Scope	RL, FMA <i>properties</i>	SRL, FMA <i>properties</i>	RL, NFIP <i>properties</i>	SRL, NFIP <i>properties</i>	Any category <i>properties</i>	Mitigated <i>properties</i>	Currently insured <i>properties</i>
County total	37	39	248	34	259	5	37
KANAWHA COUNTY *	33	30	191	27	199	3	30
CHARLESTON, CITY OF	3	4	28	3	30	2	3
CHESAPEAKE, TOWN OF	0	0	1	0	1	0	0
CLENDENIN, TOWN OF	0	2	5	1	6	0	0
DUNBAR, CITY OF	0	0	6	0	6	0	2
MARMET, TOWN OF	0	0	1	0	1	0	0
NITRO, CITY OF	0	1	2	1	2	0	0
PRATT, TOWN OF	0	0	5	0	5	0	0
ST. ALBANS, CITY OF	0	0	2	0	2	0	1
SOUTH CHARLESTON, CITY OF	1	2	7	2	7	0	1

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

Member	NFIP community ID	RL, FMA <i>properties</i>	SRL, FMA <i>properties</i>	RL, NFIP <i>properties</i>	SRL, NFIP <i>properties</i>	Any category <i>properties</i>	Mitigated <i>properties</i>	Currently insured <i>properties</i>	Note
Kanawha County	540070	33	30	191	27	199	3	30	
Belle town	540071	0	0	0	0	0	0	0	
Cedar Grove town	540072	0	0	0	0	0	0	0	
Charleston city	540073	3	4	28	3	30	2	3	
Chesapeake town	540074	0	0	1	0	1	0	0	
Clendenin town	540075	0	2	5	1	6	0	0	
Dunbar city	540076	0	0	6	0	6	0	2	
East Bank town	540077	0	0	0	0	0	0	0	
Handley town	540279	0	0	0	0	0	0	0	
Marmet city	540079	0	0	1	0	1	0	0	
Montgomery city	540029	0	0	0	0	0	0	0	
Nitro city	540081	0	1	4	1	4	0	0	Whole community, including the part in Putnam County; in-county portion (county table): FMA RL 0, FMA SRL 1, NFIP RL 2, NFIP SRL 1, any category 2.

Member	NFIP community ID	RL, FMA properties	SRL, FMA properties	RL, NFIP properties	SRL, NFIP properties	Any category properties	Mitigated properties	Currently insured properties	Note
Pratt town	540082	0	0	5	0	5	0	0	
South Charleston city	540223	1	2	7	2	7	0	1	
St. Albans city	540083	0	0	2	0	2	0	1	

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 properties	SRL, FMA properties	RL, NFIP properties	SRL, NFIP properties	Any category properties	Mitigated properties	Currently insured properties
single-family residential	32	33	210	27	221	5	34
2 to 4 unit residential	2	1	17	1	17	0	0
other residential	1	1	2	1	2	0	0
non-residential	2	4	19	5	19	0	3
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 8 properties are FMA repetitive loss but not NFIP repetitive loss, and 219 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

OpenFEMA disclaimer

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

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

Reuse, citation and corrections

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

Cite this: Hazard Plain (2026). Kanawha County, WV: risk-assessment baseline packet, release 2026-10 (data as of 2026-09-28; County area 54039). 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_WV_54039. Preview: automated baseline.