

Kanawha County, WV

Risk-assessment baseline packet

County FIPS: 54039 Release: 2026-10 Data as of: 2026-09-30 Storm Events data through: 2026-06-30

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

Summary

Plan status as of 2026-09-30: Approved, expires 2027-10-19. Plan: RPDC 03 Hazard Mitigation Plan (FEMA plan 108578), approved 2022-10-20.

Since the plan was approved on 2022-10-20: 4 new hazard declarations (4 incidents) and 260 NOAA Storm Events records; details under "What changed since your last plan".

Highest expected annual loss (FEMA National Risk Index, modeled total; see B1-a): Inland Flooding (\$132,659,912 a year), Heat Wave (\$3,079,622) and Strong Wind (\$1,675,879).

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

TERMS USED

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

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

NFIP: National Flood Insurance Program.

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

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

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

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

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

FIPS: the federal code for a place; 54039 is this area.

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

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

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

CFR: Code of Federal Regulations.

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

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

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Plan clock

Status:	Approved, expires 2027-10-19	Plan:	RPDC 03 Hazard Mitigation Plan (FEMA plan 108578)
Approved:	2022-10-20	Days to expiry:	384

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

New federal declarations:	4 new hazard declarations (4 incidents): DR-4756-WV (Severe Storms, Flooding, Landslides, and Mudslides), DR-4783-WV (Severe Storms, Straight-Line Winds, Tornadoes, Flooding, Landslides, and Mudslides), DR-4787-WV (Severe Storms, Flooding, Landslides, and Mudslides), EM-3639-WV (Severe Winter Storm)	Storm Events records since approval:	260 records (data through 2026-06-30)
Repetitive loss now:	FMA RL 37, SRL 39 (44 CFR 77.2); any definition: 259	Repeat-flood change:	this release sets the baseline count.

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

Plan status for every jurisdiction listed in this county: 15 rows, in the section "Plan clock: Plan status for every jurisdiction listed in this county" on the following pages.

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

Plan clock

Plan status for every jurisdiction listed in this county

Source: 1

						Days to expiry negative = days since expiry
Jurisdiction	Type	Status	Plan	Approved	Expires	
Kanawha County	County	Approved, expires 2027-10-19	RPDC 03 Hazard Mitigation Plan (FEMA plan 108578)	2022-10-20	2027-10-19	384
Belle town	Town	Approved, expires 2027-10-19	RPDC 03 Hazard Mitigation Plan (FEMA plan 108578)	2022-10-20	2027-10-19	384
Cedar Grove town	Town	Approved, expires 2027-10-19	RPDC 03 Hazard Mitigation Plan (FEMA plan 108578)	2022-10-20	2027-10-19	384
Charleston city	City	Approved, expires 2027-10-19	RPDC 03 Hazard Mitigation Plan (FEMA plan 108578)	2022-10-20	2027-10-19	384
Chesapeake town	Town	Approved, expires 2027-10-19	RPDC 03 Hazard Mitigation Plan (FEMA plan 108578)	2022-10-20	2027-10-19	384
Clendenin town	Town	Approved, expires 2027-10-19	RPDC 03 Hazard Mitigation Plan (FEMA plan 108578)	2022-10-20	2027-10-19	384
Dunbar city	City	Approved, expires 2027-10-19	RPDC 03 Hazard Mitigation Plan (FEMA plan 108578)	2022-10-20	2027-10-19	384
East Bank town	Town	Approved, expires 2027-10-19	RPDC 03 Hazard Mitigation Plan (FEMA plan 108578)	2022-10-20	2027-10-19	384
Handley town	Town	Approved, expires 2027-10-19	RPDC 03 Hazard Mitigation Plan (FEMA plan 108578)	2022-10-20	2027-10-19	384
Marmet city	City	Approved, expires 2027-10-19	RPDC 03 Hazard Mitigation Plan (FEMA plan 108578)	2022-10-20	2027-10-19	384
Montgomery city	City	Approved, expires 2027-09-06	RPDC 04 Hazard Mitigation Plan (FEMA plan 108485)	2022-09-07	2027-09-06	341
Nitro city	City	Approved, expires 2027-10-19	RPDC 03 Hazard Mitigation Plan (FEMA plan 108578)	2022-10-20	2027-10-19	384
Pratt town	Town	Approved, expires 2027-10-19	RPDC 03 Hazard Mitigation Plan (FEMA plan 108578)	2022-10-20	2027-10-19	384
South Charleston city	City	Approved, expires 2027-10-19	RPDC 03 Hazard Mitigation Plan (FEMA plan 108578)	2022-10-20	2027-10-19	384
St. Albans city	City	Approved, expires 2027-10-19	RPDC 03 Hazard Mitigation Plan (FEMA plan 108578)	2022-10-20	2027-10-19	384

Plan 108578 covers 14 other participants, named in the Excel file.

Supports FEMA checklist item B1-a: hazard identification

Hazards NRI does not cover (local data needed)

- dam failure (incl. upstream dams)
- levee failure
- flash flood as its own subtype
- ice jams
- debris flows
- erosion (riverine and coastal)
- land subsidence and sinkholes
- expansive soils

The 18 National Risk Index hazards, ranked by expected annual loss (EAL)

Sources: 5, 6

Rank by EAL	Hazard	NRI risk rating	EAL rating	EAL buildings <i>modeled dollars per year</i>	EAL agriculture <i>modeled dollars per year</i>	Cost of expected deaths and injuries <i>FEMA's dollar value per year, not property damage</i>	EAL total (see note) <i>modeled dollars per year</i>	Storm Events records, 1996 to 2026-06-30 <i>count</i>	Storm Events coverage note
1	Inland Flooding	Relatively High	Relatively High	\$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 and 37 Strong Wind records (NOAA non-thunderstorm wind types, outside NRI's Strong Wind definition).
4	Lightning	Relatively High	Relatively High	\$61,444	n/a	\$1,086,118	\$1,147,563	11	
5	Earthquake	Relatively Low	Relatively Low	\$830,081	n/a	\$274,348	\$1,104,429		Storm Events does not record earthquakes.
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 (outside NRI's Cold Wave definition; counted in this table and in B1-d, not in the B1-e descriptor).
9	Ice Storm	Relatively Moderate	Relatively Moderate	\$322,090	n/a	\$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	

Rank by EAL	Hazard	NRI risk rating	EAL rating	EAL buildings <i>modeled dollars per year</i>	EAL agriculture <i>modeled dollars per year</i>	Cost of expected deaths and injuries <i>FEMA's dollar value per year, not property damage</i>	EAL total (see note) <i>modeled dollars per year</i>	Storm Events records, 1996 to 2026-06-30 <i>count</i>	Storm Events coverage note
12	Landslide	Relatively Moderate	Relatively Low	\$56,528	n/a	\$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	n/a	\$13,201	\$13,202	0	No recorded events in Storm Events since 1996 (data through 2026-06-30).
15	Drought	Very Low	Very Low	n/a	\$7,144	n/a	\$7,144	24	

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

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

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

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

Supports FEMA checklist item B1-b: hazard location

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

Inland Flooding: The FEMA Flood Insurance Rate Map (FIRM) is the required location source for flooding. See the FEMA Flood Map Service Center (<https://msc.fema.gov>) for this county.

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

Source: 5

Hazard	Highest-rated census tracts <i>NRI risk rating, score 0 to 100</i>
Avalanche	tract 118 (Very Low, 68.8); tract 121 (Very Low, 68.7); tract 122 (Very Low, 68.6)
Earthquake	tract 12 (Relatively Low, 73.3); tract 11 (Relatively Low, 67.7); tract 15 (Relatively Low, 67.1)
Hurricane	tract 9 (Relatively Low, 56.5); tract 136 (Relatively Low, 53.3); tract 12 (Relatively Low, 53.3)
Landslide	tract 111 (Relatively Moderate, 98.9); tract 112 (Relatively Moderate, 98.7); tract 118 (Relatively Moderate, 98.6)
Tornado	tract 136 (Relatively Low, 35.0); tract 9 (Relatively Low, 35.0); tract 137.02 (Relatively Low, 31.6)
Wildfire	tract 123.01 (Relatively Low, 84.5); tract 132 (Relatively Low, 81.6); tract 123.02 (Relatively Low, 81.1)

Up to 3 census tracts per hazard, highest National Risk Index rating first, then highest score; a tract number is the Census tract number (for example 118 is Census Tract 118). FEMA's Resilience Analysis and Planning Tool maps the National Risk Index for every tract: <https://www.fema.gov/emergency-managers/practitioners/resilience-analysis-and-planning-tool>

Supports FEMA checklist item B1-c: hazard extent

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

Sources: 6, 7

Hazard	Scale	Records <i>count and years</i>	Observed range	Worst recorded event	Most damaging (when different)	How it applies to jurisdictions	Note
Avalanche	none (count and damage only)	0					
Cold/Wind Chill, Extreme Cold/Wind Chill	wind chill	27 records, 1996 to 2026 (27 zone-level)	1 day to 31 days (median 3.5 days); 24 with a recorded value	March 2001 (1 monthly summary record), zone-level	Extreme Cold/Wind Chill, 2014-01-06, \$300,000 property; \$0 crops (zone total, 2014 dollars)	Countywide (zone-level records).	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's Cold Wave definition)	crop damage	3 records, 2003 to 2004 (3 zone-level)		No crop damage reported in 3 records.		Countywide (zone-level records).	
Drought	U.S. Drought Monitor scale (D0 to D4)	24 records, 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		Countywide (zone-level records).	Storm Events enters a drought at D2 or worse east of the Rockies and D3 or worse from the Rockies west (NWS Instruction 10-1605); NRI drought counts D3 and D4 only.
Earthquake	Modified Mercalli (local data)	0					Storm Events does not record earthquakes; the USGS earthquake catalog is the source.
Hail	hail size (inches)	207 records, 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 jurisdictions in the plan: 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 jurisdiction (see the Excel file).	
Excessive Heat, Heat	heat index (in event narratives)	20 records, 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		Countywide (zone-level records).	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 type; flooding from the storm is filed as Flood or Flash Flood records.
Ice Storm	Sperry-Piltz ice scale (local data)	2 records, 1999 to 2021 (2 zone-level)		Ice Storm, 2021-02-15, \$5,000 property; \$0 crops (2021 dollars); NWS zone WVZ015		Countywide (zone-level records).	

Hazard	Scale	Records <i>count and years</i>	Observed range	Worst recorded event	Most damaging (when different)	How it applies to jurisdictions	Note
Flash Flood, Flood, Lakeshore Flood	damage and flood days (flood depth: FIRM)	204 records, 1996 to 2026 (10 zone-level)		Flood, 2016-06-23, \$36,000,000 property; \$0 crops (2016 dollars), 4 direct deaths		Event records naming jurisdictions in the plan: 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 jurisdictions (see the Excel file). Zone-level records (10) apply countywide.	Flood depth: see the FEMA Flood Insurance Rate Map. Storm Events damage is often \$0 or blank for floods, major ones included; FEMA Public Assistance by declaration (B1-d) shows which floods cost the most.
Debris Flow	none (count and damage only)	3 records, 2009 to 2015 (1 zone-level)		Debris Flow, 2015-03-12, \$1,000,000 property; \$0 crops (2015 dollars)		No event record names a jurisdiction in the plan. Zone-level records (1) apply countywide.	
Lightning	annualized frequency (the measure FEMA's Local Mitigation Planning Handbook names)	11 records, 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 jurisdictions in the plan: Charleston city (2 records), South Charleston city (2 records), St. Albans city (1 record).	Storm Events lists lightning with damage or casualties.
High Wind and Strong Wind (outside NRI's Strong Wind definition)	wind speed (kt and mph)	54 records, 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	Strong Wind, 2014-03-12, \$150,000 property; \$0 crops (zone total, 2014 dollars)	Event records naming jurisdictions in the plan: Charleston city (2 records), Belle town (1 record). Zone-level records (51) apply countywide.	
Thunderstorm Wind	wind speed (kt and mph)	554 records, 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 jurisdictions in the plan: 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 jurisdictions (see the Excel file).	
Tornado	Enhanced Fujita (Fujita before Feb 2007)	15 records, 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 jurisdictions in the plan: Charleston city (2 records), Marmet city (1 record), Nitro city (1 record), South Charleston city (1 record).	Before 1996 a tornado is listed once, under the county where it began, with its whole path's rating and length; from 1996 on, each county lists its own segment. Length is not used to rank tornadoes (see Methods).

Hazard	Scale	Records <i>count and years</i>	Observed range	Worst recorded event	Most damaging (when different)	How it applies to jurisdictions	Note
Wildfire	acres burned (local data)	3 records, 1999 to 2014 (1 zone-level)		Wildfire, 2014-03-11, \$25,000 property; \$0 crops (2014 dollars); NWS zone WVZ015		No event record names a jurisdiction in the plan. Zone-level records (1) apply countywide.	
Winter Storm, Heavy Snow, Blizzard, Lake- Effect Snow, Winter Weather, Sleet	none in data (snowfall: local data)	76 records, 1996 to 2026 (76 zone-level)		Winter Storm, 2003-02-16, \$1,800,000 property; crops not reported (2003 dollars); NWS zone WVZ015		Countywide (zone-level records).	

Where a hazard names more than 10 jurisdictions, the table lists the 10 with the most records; every one is in the Excel file, sheet "B1-c Extent".

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

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

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

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

Supports FEMA checklist item B1-d: previous occurrences

Federal declarations for this county: 34 declarations covering 28 separate hazard incidents counted in this packet (declarations for the same incident count once; non-natural and evacuation-only declarations are not counted).

Federal disaster declarations for this county

Sources: 1, 2, 3

Declared	Incident began	FEMA number	Type	Title	Mapped hazard	County Public Assistance <i>federal share obligated, nominal dollars</i>	Flags	Notes
2026-01-24	2026-01-23	EM-3639-WV	Emergency	Severe Winter Storm	Winter Weather	no Public Assistance recorded	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	
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	

Declared	Incident began	FEMA number	Type	Title	Mapped hazard	County Public Assistance	Flags	Notes
						<i>federal share obligated, nominal dollars</i>		
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	no Public Assistance recorded		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	no Public Assistance recorded		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	no Public Assistance recorded		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	no Public Assistance recorded		
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		
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	no Public Assistance recorded		

Declared	Incident began	FEMA number	Type	Title	Mapped hazard	County Public Assistance	Flags	Notes
						<i>federal share obligated, nominal dollars</i>		
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	no Public Assistance recorded		
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	no Public Assistance recorded		
1996-01-13	1996-01-06	DR-1084-WV	Major disaster	Blizzard of 96 (Severe Snow Storm)	Winter Weather	no Public Assistance recorded		
1993-03-17	1993-03-13	EM-3109-WV	Emergency	Severe Snowfall & Winter Storm	Winter Weather	no Public Assistance recorded		
1980-08-15	1980-08-15	DR-628-WV	Major disaster	Severe Storms & Flooding	Inland Flooding	no Public Assistance recorded		
1974-01-29	1974-01-29	DR-416-WV	Major disaster	Severe Storms & Flooding	Inland Flooding	no Public Assistance recorded		
1972-02-27	1972-02-27	DR-323-WV	Major disaster	Heavy Rains & Flooding	Inland Flooding	no Public Assistance recorded		
1967-03-13	1967-03-13	DR-224-WV	Major disaster	Flooding	Inland Flooding	no Public Assistance recorded		

County Public Assistance: applicants the FEMA record places in this county, including any state agencies FEMA files there; statewide rows are listed on the state page; federal share obligated, nominal dollars.

Statewide declarations

Source: 2

Declared	Incident began	FEMA number	Type	Title	Mapped hazard
1964-03-20	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
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, so they are listed on every county page in the state and not counted with county rows. Local data needed: whether each one affected this county.

Public Assistance filed under this county for declarations that do not list it: 1 row, \$1,424,088.06

Sources: 2, 3

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.

Previous occurrences by hazard, with explicit no-event rows

Sources: 2, 6, 7

Hazard	Storm Events records, all years on file <i>(years in the Period column)</i>	Since plan approval <i>records</i>	In the 12 months before plan approval <i>records</i>	Last 5 years <i>records</i>	Declared incidents, all years <i>separate disasters</i>	Declared since approval <i>separate disasters</i>	Period	Statement
Avalanche	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.
Drought	24	10	0	10	0	0	1996 to 2026-06-30	
Earthquake	0	0	0	0	0	0		Storm Events does not record earthquakes; the USGS earthquake catalog is the source.
Hail	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	
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 and 37 Strong Wind records.
Tornado	15	5	0	5	1	1	1950 to 2026-06-30	
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	

Notable Storm Events records

Sources: 1, 6, 7

Date	Event type	Magnitude or extent	Damage <i>nominal dollars</i>	Deaths, injuries <i>direct only</i>	Location	Flags	Why listed
2024-04-02	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 (zone total, 2021 dollars)	0, 0	NWS zone WVZ015 (KANAWHA), zone-level		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 (zone total, 2011 dollars)	0, 0	NWS zone WVZ015 (KANAWHA), zone-level		B1-c worst recorded: Excessive Heat, Heat
2009-12-09	High Wind	64 kt (74 mph) measured gust	\$125,000 property; \$0 crops (zone total, 2009 dollars)	0, 0	NWS zone WVZ015 (KANAWHA), zone-level		B1-c worst recorded: High Wind and Strong Wind
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 (zone total, 2003 dollars)	0, 0	NWS zone WVZ015 (KANAWHA), zone-level		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		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 Excel file, sheet "B1-d Storm Events history" (1,203 rows).

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

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

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

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

Probability: FEMA annualized frequency and descriptor per hazard

Sources: 5, 6

Hazard	FEMA annualized frequency (modeled) <i>unit per row</i>	Unit	In plain terms	Descriptor	Descriptor basis	NRI events or days in its record period (hail, wind and tornado are area-weighted, so can be fractional)	NRI period	Location	Note
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.
Cold Wave	0.737	event-days per year	about 0.737 days per year	Likely	Storm Events event-days in 12 of 30 years, 1996 to 2025 (40%)	14	2005-11-12 to 2024-11-12 (19 years)	countywide	
Drought	3.04	event-days per year	about 3.04 days per year	Likely	Storm Events event-days in 6 of 30 years, 1996 to 2025 (20%)	161	2000 to 2025 (25.25 years; D3 and D4 only)	countywide	
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	No descriptor (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	Storm Events event-days in 9 of 30 years, 1996 to 2025 (30%)	70	2005-11-12 to 2024-11-12 (19 years)	countywide	
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 in B1-d.
Ice Storm	0.222	event-days per year	about 0.222 days per year	Possible	Storm Events 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	Storm Events event-days in 26 of 30 years, 1996 to 2025 (86.7%)	118	1996 to 2023 (28 years)	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
Landslide	2.49	events per year (modeled)	about 2.49 per year	Highly likely	FEMA annualized frequency (modeled)	not shown	modeled	see B1-f	
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	
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	
Winter Weather	9.63	event-days per year	about 9.63 days per year	Likely	Storm Events 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) is the National Risk Index v1.20 (December 2025) estimate of how often a hazard affects this county in a year; it is not recorded events divided by years, and its unit differs by hazard (events, event-days, or days with a lightning strike per year). For earthquake, wildfire, coastal flooding and tsunami the value is the chance (or number of events) at a location in the county, not across the county, so no "1 in N years" is given and the descriptor comes from Storm Events where it has a record (none for earthquake). The Methods page gives each hazard's method, from FEMA's National Risk Index Technical Documentation v1.20.

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

Descriptor scale used in this packet (defined per unit)

Sources: 5, 6

Unit	Descriptor	Definition
events per year	Highly likely	1 or more per year
events per year	Likely	about once in 1 to 10 years
events per year	Possible	about once in 10 to 100 years
events per year	Unlikely	less than once in 100 years
annual probability	Likely	10% to under 100% chance in a given year
annual probability	Possible	1% to under 10% chance in a given year
annual probability	Unlikely	under 1% chance in a given year
event-days (share of years)	Highly likely	event-days recorded in 90% or more of years
event-days (share of years)	Likely	event-days recorded in 10% to under 90% of years
event-days (share of years)	Possible	event-days recorded in some years but under 10% of years
lightning strike-days	Highly likely	cloud-to-ground strikes on 1 or more days per year

Intensity bands: historical frequency (Storm Events)

Source: 6

Hazard	Band	Years	Events <i>county-coded records</i>	Years in period	Events per year <i>events / years</i>
Hail	1.00-1.99 in	1996 to 2025	83	30	2.77
Hail	2.00 in+	1996 to 2025	9	30	0.3
Thunderstorm Wind (counted as NRI Strong Wind)	50-64 kt	1996 to 2025	330	30	11
Thunderstorm Wind (counted as NRI Strong Wind)	65 kt+	1996 to 2025	12	30	0.4
Thunderstorm Wind (counted as NRI Strong Wind)	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

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

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

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

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

Range of census tract risk within the county

Source: 5

Hazard	Tracts <i>rated of all</i>	NRI risk score, 0 to 100			Tracts by rating
		Min	Median	Max	
Avalanche	13 of 57	66.2	67.3	68.8	Very Low 13, Not Applicable 44
Cold Wave	57 of 57	19.4	22.1	26.6	Relatively Low 57
Drought	3 of 57	74.1	84.3	84.8	Relatively Low 2, Very Low 1, No Rating 54
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
Heat Wave	57 of 57	27.7	59.4	80.2	Relatively Moderate 37, Relatively Low 20
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
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
Strong Wind	57 of 57	46.3	66.4	86.6	Relatively High 2, Relatively Moderate 47, Relatively Low 8
Tornado	57 of 57	12.8	23.7	35.0	Relatively Low 7, Very Low 50
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

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

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

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

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

Each jurisdiction (starting figures from federal data)

Sources: 1, 3, 4, 6

Jurisdiction	Type	Plan status	Repetitive loss <i>FMA RL and SRL (44 CFR 77.2); repeat-flood, any definition</i>	Public Assistance to this jurisdiction <i>FEMA records matched by applicant name; federal share obligated, nominal dollars</i>	Event records naming this place <i>all years; since its plan</i>	Notes
Kanawha County	County	Approved, expires 2027-10-19	FMA RL 33, SRL 30; any 199	\$7,805,272.65	0 total; 0 since its plan	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	no Public Assistance recorded	10 total; 4 since its plan	
Cedar Grove town	Town	Approved, expires 2027-10-19	FMA RL 0, SRL 0; any 0	\$26,619.37	9 total; 2 since its plan	
Charleston city	City	Approved, expires 2027-10-19	FMA RL 3, SRL 4; any 30	\$1,382,355.31	95 total; 7 since its plan	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	no Public Assistance recorded	6 total; 3 since its plan	
Clendenin town	Town	Approved, expires 2027-10-19	FMA RL 0, SRL 2; any 6	\$1,228,388.97	19 total; 4 since its plan	
Dunbar city	City	Approved, expires 2027-10-19	FMA RL 0, SRL 0; any 6	\$11,401.43	10 total; 0 since its plan	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 total; 0 since its plan	
Handley town	Town	Approved, expires 2027-10-19	FMA RL 0, SRL 0; any 0	no Public Assistance recorded	3 total; 1 since its plan	
Marmet city	City	Approved, expires 2027-10-19	FMA RL 0, SRL 0; any 1	\$168,904.48	12 total; 5 since its plan	
Montgomery city	City	Approved, expires 2027-09-06	FMA RL 0, SRL 0; any 0	no Public Assistance recorded	3 total; 0 since its plan	
Nitro city	City	Approved, expires 2027-10-19	FMA RL 0, SRL 1; any 4	\$51,404.45	21 total; 5 since its plan	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	no Public Assistance recorded	4 total; 1 since its plan	
South Charleston city	City	Approved, expires 2027-10-19	FMA RL 1, SRL 2; any 7	\$509,111.96	27 total; 5 since its plan	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 total; 2 since its plan	

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

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

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

Local data needed

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

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

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

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

Hazard	Building exposure <i>modeled dollars</i>	Agriculture exposure <i>modeled dollars</i>	Population exposed <i>people</i>	EAL buildings <i>modeled dollars per year</i>	EAL agriculture <i>modeled dollars per year</i>	Cost of expected deaths and injuries <i>FEMA's dollar value per year, not property damage</i>	EAL as % of exposure <i>buildings; agriculture where noted</i>	Storm Events damage since 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	n/a	3	\$1	n/a	\$13,201	under 0.0001%				
Cold Wave	\$43,226,943,402	\$1,297,002	180,603	\$29,381	\$144	\$382,378	under 0.0001%		\$10,000		
Drought	n/a	\$457,782	n/a	n/a	\$7,144	n/a	1.56% (agriculture)		\$0		NRI has no building exposure for this hazard; agriculture shown
Earthquake	\$76,990,037,371	n/a	180,745	\$830,081	n/a	\$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	n/a	180,563	\$322,090	n/a	\$87,128	0.000745%				

Hazard	Building exposure <i>modeled dollars</i>	Agriculture exposure <i>modeled dollars</i>	Population exposed <i>people</i>	EAL buildings <i>modeled dollars per year</i>	EAL agriculture <i>modeled dollars per year</i>	Cost of expected deaths and injuries <i>FEMA's dollar value per year, not property damage</i>	EAL as % of exposure <i>buildings; agriculture where noted</i>	Storm Events damage since 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
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.
Landslide	\$8,689,283,934	n/a	47,944	\$56,528	n/a	\$102,751	0.000651%			\$4,463,867.12	
Lightning	\$43,226,943,402	n/a	180,603	\$61,444	n/a	\$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	no Public Assistance recorded (1 declaration)	Storm Events damage since the plan includes 16 zone-level Strong Wind records (\$37,950): a NOAA non-thunderstorm wind type, outside NRI's Strong Wind definition.
Tornado	\$43,226,943,402	\$1,297,002	180,603	\$364,077	\$10	\$235,757	0.000842%	\$550,000		no Public Assistance recorded (1 declaration)	
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	no Public Assistance recorded (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: \$4,463,867.12 on 4 counted declarations, 2 of them with Public Assistance.

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

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

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

County context

Source: 5

Measure	Value
Population	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 adds buildings, agriculture and population equivalence; this table gives the property part and the population-equivalence part as separate rows.

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

Supports FEMA checklist item B2-c: repetitive loss properties

Repetitive loss in this county, both definitions

Sources: 1, 4

Definition	Properties	Severe repetitive loss	Properties
Repetitive loss, FMA definition (44 CFR 77.2)	37	Severe repetitive loss, FMA definition (44 CFR 77.2)	39
Repetitive loss, NFIP insurance definition	248	Severe repetitive loss, NFIP insurance definition	34

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

Repeat-flood properties: county total and NFIP communities

Sources: 1, 4

Scope	RL, FMA <i>properties</i>	SRL, FMA <i>properties</i>	RL, NFIP <i>properties</i>	SRL, NFIP <i>properties</i>	Any category <i>properties</i>	Mitigated <i>properties</i>	Currently insured <i>properties</i>
County total	37	39	248	34	259	5	37
of which: Kanawha County (unincorporated area)	33	30	191	27	199	3	30
of which: Charleston city	3	4	28	3	30	2	3
of which: Chesapeake town	0	0	1	0	1	0	0
of which: Clendenin town	0	2	5	1	6	0	0
of which: Dunbar city	0	0	6	0	6	0	2
of which: Marmet town	0	0	1	0	1	0	0
of which: Nitro city	0	1	2	1	2	0	0
of which: Pratt town	0	0	5	0	5	0	0
of which: St. Albans city	0	0	2	0	2	0	1
of which: South Charleston city	1	2	7	2	7	0	1

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

Sources: 1, 4

Jurisdiction	NFIP community ID	RL, FMA <i>properties</i>	SRL, FMA <i>properties</i>	RL, NFIP <i>properties</i>	SRL, NFIP <i>properties</i>	Any category <i>properties</i>	Mitigated <i>properties</i>	Currently insured <i>properties</i>	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.
Pratt town	540082	0	0	5	0	5	0	0	

Jurisdiction	NFIP community ID	RL, FMA <i>properties</i>	SRL, FMA <i>properties</i>	RL, NFIP <i>properties</i>	SRL, NFIP <i>properties</i>	Any category <i>properties</i>	Mitigated <i>properties</i>	Currently insured <i>properties</i>	Note
South Charleston city	540223	1	2	7	2	7	0	1	
St. Albans city	540083	0	0	2	0	2	0	1	

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

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

County repeat-flood properties by occupancy group

Sources: 1, 4

Occupancy group	RL, FMA <i>properties</i>	SRL, FMA <i>properties</i>	RL, NFIP <i>properties</i>	SRL, NFIP <i>properties</i>	Any category <i>properties</i>	Mitigated <i>properties</i>	Currently insured <i>properties</i>
single-family residential	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

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

FMA RL and FMA SRL are the Flood Mitigation Assistance definitions (44 CFR 77.2), the ones the FEMA Local Mitigation Planning Policy Guide cites. NFIP repetitive loss (the FEMA insurance definition) is 2 or more claims over \$1,000 in 10 years, and a property can leave that group once it is mitigated. Also shown: NFIP severe repetitive loss, any category, mitigated and currently insured. The Methods page gives the OpenFEMA field details.

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

In this county 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

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

1. FEMA, OpenFEMA HazardMitigationPlanStatuses v1, version 2026-09-29T134039Z, pulled 2026-09-30, <https://www.fema.gov/api/open/v1/HazardMitigationPlanStatuses> (API)
2. FEMA, OpenFEMA DisasterDeclarationsSummaries v2, version 2026-09-29T162832Z, pulled 2026-09-30, <https://www.fema.gov/api/open/v2/DisasterDeclarationsSummaries> (API)
3. FEMA, OpenFEMA PublicAssistanceFundedProjectsSummaries v1, version 2026-09-29T150754Z, pulled 2026-09-30, <https://www.fema.gov/api/open/v1/PublicAssistanceFundedProjectsSummaries> (API)
4. FEMA, OpenFEMA NfipMultipleLossProperties v1, version 2026-08-04T164045Z, pulled 2026-09-30, <https://www.fema.gov/api/open/v1/NfipMultipleLossProperties> (API)
5. FEMA, FEMA National Risk Index 1.20.0 (December 2025), county and census tract tables, version 1.20.0, pulled 2026-09-30, https://www.fema.gov/about/reports-and-data/openfema/nri/v120/NRI_Table_Counties.zip (download, 25 MB), https://www.fema.gov/about/reports-and-data/openfema/nri/v120/NRI_Table_CensusTracts.zip (download, 635 MB)
6. NOAA NCEI, NOAA NCEI Storm Events Database, details files (csvfiles v1.0), version c20260918, pulled 2026-09-30, <https://www.ncei.noaa.gov/pub/data/swdi/stormevents/csvfiles/>

7. NOAA National Weather Service, NWS county-public forecast zones correlation file, version bp03mr20 to bp16ap26 (11 files; newest bp16ap26), pulled 2026-09-30, <https://www.weather.gov/gis/ZoneCounty>
8. U.S. Census Bureau, Census 2024 Gazetteer, 2020 place by county, CT county-to-cousub crosswalk, version 2024-gazetteer, pulled 2026-09-30, https://www2.census.gov/geo/docs/maps-data/data/gazetteer/2024_Gazetteer/2024_Gaz_counties_national.zip, https://www2.census.gov/geo/docs/maps-data/data/gazetteer/2024_Gazetteer/2024_Gaz_cousubs_national.zip, https://www2.census.gov/geo/docs/maps-data/data/gazetteer/2024_Gazetteer/2024_Gaz_place_national.zip, https://www2.census.gov/geo/docs/maps-data/data/gazetteer/2024_Gazetteer/2024_Gaz_unsd_national.zip, https://www2.census.gov/geo/docs/maps-data/data/gazetteer/2024_Gazetteer/2024_Gaz_elsd_national.zip, https://www2.census.gov/geo/docs/maps-data/data/gazetteer/2024_Gazetteer/2024_Gaz_scsd_national.zip, https://www2.census.gov/geo/docs/reference/codes2020/national_place_by_county2020.txt, https://www2.census.gov/geo/docs/reference/ct_change/ct_cou_to_cousub_crosswalk.xlsx (used to match place names and codes; no table prints its values)

What this packet is and what the plan adds

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

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

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

OpenFEMA disclaimer

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

Reuse, citation and corrections

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Corrections: to report an error, name the packet, the table and what your records show. Contact: contact@hazardplain.org