

Berks County, PA

Risk-assessment baseline packet

County FIPS: 42011 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: No county-level plan row in FEMA data.

Highest expected annual loss (FEMA National Risk Index, modeled total; see B1-a): Inland Flooding (\$69,050,051 a year), Hurricane (\$11,944,669) and Cold Wave (\$8,816,043).

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; 42011 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

No county-level plan row in FEMA data

What changed since your last plan

Not available. No county-level plan row in FEMA data, so there is no approval date to count from.

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

Plan status for every jurisdiction listed in this county: 72 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

Jurisdiction	Type	Status	Plan	Approved	Expires	Days to expiry negative = days since expiry	Notes
Bally borough	Organized Borough	Approved, expires 2028-11-05	Berks County Hazard Mitigation Plan (FEMA plan 108977)	2023-11-06	2028-11-05	767	this jurisdiction approved 2023-11-07
Bechtelsville borough	Organized Borough	Approved, expires 2028-11-05	Berks County Hazard Mitigation Plan (FEMA plan 108977)	2023-11-06	2028-11-05	767	this jurisdiction approved 2023-11-21
Bernville borough	Organized Borough	Approved, expires 2028-11-05	Berks County Hazard Mitigation Plan (FEMA plan 108977)	2023-11-06	2028-11-05	767	this jurisdiction approved 2024-01-02
Birdsboro borough	Organized Borough	Approved, expires 2028-11-05	Berks County Hazard Mitigation Plan (FEMA plan 108977)	2023-11-06	2028-11-05	767	
Boyetown borough	Organized Borough	Approved, expires 2028-11-05	Berks County Hazard Mitigation Plan (FEMA plan 108977)	2023-11-06	2028-11-05	767	this jurisdiction approved 2023-12-04
Centerport borough	Organized Borough	Approved, expires 2028-11-05	Berks County Hazard Mitigation Plan (FEMA plan 108977)	2023-11-06	2028-11-05	767	this jurisdiction approved 2023-11-07
Fleetwood borough	Organized Borough	Approved, expires 2028-11-05	Berks County Hazard Mitigation Plan (FEMA plan 108977)	2023-11-06	2028-11-05	767	this jurisdiction approved 2023-11-13
Hamburg borough	Organized Borough	Approved, expires 2028-11-05	Berks County Hazard Mitigation Plan (FEMA plan 108977)	2023-11-06	2028-11-05	767	this jurisdiction approved 2023-11-28
Kenhorst borough	Organized Borough	Approved, expires 2028-11-05	Berks County Hazard Mitigation Plan (FEMA plan 108977)	2023-11-06	2028-11-05	767	this jurisdiction approved 2024-02-01
Kutztown borough	Organized Borough	Approved, expires 2028-11-05	Berks County Hazard Mitigation Plan (FEMA plan 108977)	2023-11-06	2028-11-05	767	this jurisdiction approved 2023-11-21
Laureldale borough	Organized Borough	Approved, expires 2028-11-05	Berks County Hazard Mitigation Plan (FEMA plan 108977)	2023-11-06	2028-11-05	767	this jurisdiction approved 2023-11-13
Leesport borough	Organized Borough	Approved, expires 2028-11-05	Berks County Hazard Mitigation Plan (FEMA plan 108977)	2023-11-06	2028-11-05	767	this jurisdiction approved 2023-11-15
Lenhartsville borough	Organized Borough	Approved, expires 2028-11-05	Berks County Hazard Mitigation Plan (FEMA plan 108977)	2023-11-06	2028-11-05	767	this jurisdiction approved 2024-05-06
Lyons borough	Organized Borough	Approved, expires 2028-11-05	Berks County Hazard Mitigation Plan (FEMA plan 108977)	2023-11-06	2028-11-05	767	this jurisdiction approved 2024-07-01
Mohnton borough	Organized Borough	Approved, expires 2028-11-05	Berks County Hazard Mitigation Plan (FEMA plan 108977)	2023-11-06	2028-11-05	767	this jurisdiction approved 2024-03-13
Mount Penn borough	Organized Borough	Approved, expires 2028-11-05	Berks County Hazard Mitigation Plan (FEMA plan 108977)	2023-11-06	2028-11-05	767	this jurisdiction approved 2024-01-13
New Morgan borough	Organized Borough	Approved, expires 2028-11-05	Berks County Hazard Mitigation Plan (FEMA plan 108977)	2023-11-06	2028-11-05	767	this jurisdiction approved 2024-03-11
Reading city	City	Approved, expires 2028-11-05	Berks County Hazard Mitigation Plan (FEMA plan 108977)	2023-11-06	2028-11-05	767	this jurisdiction approved 2023-11-13
Robesonia borough	Organized Borough	Approved, expires 2028-11-05	Berks County Hazard Mitigation Plan (FEMA plan 108977)	2023-11-06	2028-11-05	767	this jurisdiction approved 2024-05-06

Jurisdiction	Type	Status	Plan	Approved	Expires	Days to expiry	Notes
						negative = days since expiry	
Shillington borough	Organized Borough	Approved, expires 2028-11-05	Berks County Hazard Mitigation Plan (FEMA plan 108977)	2023-11-06	2028-11-05	767	this jurisdiction approved 2023-11-09
Shoemakersville borough	Organized Borough	Approved, expires 2028-11-05	Berks County Hazard Mitigation Plan (FEMA plan 108977)	2023-11-06	2028-11-05	767	this jurisdiction approved 2023-11-08
Sinking Spring borough	Organized Borough	Approved, expires 2028-11-05	Berks County Hazard Mitigation Plan (FEMA plan 108977)	2023-11-06	2028-11-05	767	this jurisdiction approved 2023-11-09
St. Lawrence borough	Organized Borough	Approved, expires 2028-11-05	Berks County Hazard Mitigation Plan (FEMA plan 108977)	2023-11-06	2028-11-05	767	this jurisdiction approved 2023-12-14
Topton borough	Organized Borough	Approved, expires 2028-11-05	Berks County Hazard Mitigation Plan (FEMA plan 108977)	2023-11-06	2028-11-05	767	this jurisdiction approved 2024-04-08
Wernersville borough	Organized Borough	Approved, expires 2028-11-05	Berks County Hazard Mitigation Plan (FEMA plan 108977)	2023-11-06	2028-11-05	767	this jurisdiction approved 2023-12-06
West Reading borough	Organized Borough	Approved, expires 2028-11-05	Berks County Hazard Mitigation Plan (FEMA plan 108977)	2023-11-06	2028-11-05	767	this jurisdiction approved 2023-11-07
Womelsdorf borough	Organized Borough	Approved, expires 2028-11-05	Berks County Hazard Mitigation Plan (FEMA plan 108977)	2023-11-06	2028-11-05	767	this jurisdiction approved 2024-03-05
Wyomissing borough	Organized Borough	Approved, expires 2028-11-05	Berks County Hazard Mitigation Plan (FEMA plan 108977)	2023-11-06	2028-11-05	767	this jurisdiction approved 2023-11-14
Albany township	Township	Approved, expires 2028-11-05	Berks County Hazard Mitigation Plan (FEMA plan 108977)	2023-11-06	2028-11-05	767	this jurisdiction approved 2024-02-05
Alsace township	Township	Approved, expires 2028-11-05	Berks County Hazard Mitigation Plan (FEMA plan 108977)	2023-11-06	2028-11-05	767	this jurisdiction approved 2023-11-15
Amity township	Township	Approved, expires 2028-11-05	Berks County Hazard Mitigation Plan (FEMA plan 108977)	2023-11-06	2028-11-05	767	this jurisdiction approved 2023-11-15
Bern township	Township	Approved, expires 2028-11-05	Berks County Hazard Mitigation Plan (FEMA plan 108977)	2023-11-06	2028-11-05	767	this jurisdiction approved 2023-12-05
Bethel township	Township	Approved, expires 2028-11-05	Berks County Hazard Mitigation Plan (FEMA plan 108977)	2023-11-06	2028-11-05	767	this jurisdiction approved 2024-03-14
Brecknock township	Township	Approved, expires 2028-11-05	Berks County Hazard Mitigation Plan (FEMA plan 108977)	2023-11-06	2028-11-05	767	this jurisdiction approved 2024-04-02
Caernarvon township	Township	Approved, expires 2028-11-05	Berks County Hazard Mitigation Plan (FEMA plan 108977)	2023-11-06	2028-11-05	767	this jurisdiction approved 2024-03-27
Centre township	Township	Approved, expires 2028-11-05	Berks County Hazard Mitigation Plan (FEMA plan 108977)	2023-11-06	2028-11-05	767	this jurisdiction approved 2023-11-28
Colebrookdale township	Township	Approved, expires 2028-11-05	Berks County Hazard Mitigation Plan (FEMA plan 108977)	2023-11-06	2028-11-05	767	this jurisdiction approved 2023-12-04
Cumru township	Township	Approved, expires 2028-11-05	Berks County Hazard Mitigation Plan (FEMA plan 108977)	2023-11-06	2028-11-05	767	this jurisdiction approved 2024-01-30
District township	Township	Approved, expires 2028-11-05	Berks County Hazard Mitigation Plan (FEMA plan 108977)	2023-11-06	2028-11-05	767	this jurisdiction approved 2023-11-16
Douglass township	Township	Approved, expires 2028-11-05	Berks County Hazard Mitigation Plan (FEMA plan 108977)	2023-11-06	2028-11-05	767	this jurisdiction approved 2023-11-13

Jurisdiction	Type	Status	Plan	Approved	Expires	Days to expiry <i>negative = days since expiry</i>	Notes
Earl township	Township	Approved, expires 2028-11-05	Berks County Hazard Mitigation Plan (FEMA plan 108977)	2023-11-06	2028-11-05	767	this jurisdiction approved 2023-12-18
Exeter township	Township	Approved, expires 2028-11-05	Berks County Hazard Mitigation Plan (FEMA plan 108977)	2023-11-06	2028-11-05	767	this jurisdiction approved 2024-02-26
Greenwich township	Township	Approved, expires 2028-11-05	Berks County Hazard Mitigation Plan (FEMA plan 108977)	2023-11-06	2028-11-05	767	this jurisdiction approved 2024-02-05
Heidelberg township	Township	Approved, expires 2028-11-05	Berks County Hazard Mitigation Plan (FEMA plan 108977)	2023-11-06	2028-11-05	767	this jurisdiction approved 2024-01-31
Hereford township	Township	Approved, expires 2028-11-05	Berks County Hazard Mitigation Plan (FEMA plan 108977)	2023-11-06	2028-11-05	767	this jurisdiction approved 2024-03-19
Jefferson township	Township	Approved, expires 2028-11-05	Berks County Hazard Mitigation Plan (FEMA plan 108977)	2023-11-06	2028-11-05	767	this jurisdiction approved 2024-01-02
Longswamp township	Township	Approved, expires 2028-11-05	Berks County Hazard Mitigation Plan (FEMA plan 108977)	2023-11-06	2028-11-05	767	this jurisdiction approved 2024-01-09
Lower Alsace township	Township	Approved, expires 2028-11-05	Berks County Hazard Mitigation Plan (FEMA plan 108977)	2023-11-06	2028-11-05	767	this jurisdiction approved 2024-01-09
Lower Heidelberg township	Township	Approved, expires 2028-11-05	Berks County Hazard Mitigation Plan (FEMA plan 108977)	2023-11-06	2028-11-05	767	this jurisdiction approved 2024-03-18
Maidencreek township	Township	Approved, expires 2028-11-05	Berks County Hazard Mitigation Plan (FEMA plan 108977)	2023-11-06	2028-11-05	767	this jurisdiction approved 2023-11-09
Marion township	Township	Approved, expires 2028-11-05	Berks County Hazard Mitigation Plan (FEMA plan 108977)	2023-11-06	2028-11-05	767	this jurisdiction approved 2023-11-16
Maxatawny township	Township	Approved, expires 2028-11-05	Berks County Hazard Mitigation Plan (FEMA plan 108977)	2023-11-06	2028-11-05	767	this jurisdiction approved 2024-03-13
Muhlenberg township	Township	Approved, expires 2028-11-05	Berks County Hazard Mitigation Plan (FEMA plan 108977)	2023-11-06	2028-11-05	767	this jurisdiction approved 2023-11-20
North Heidelberg township	Township	Approved, expires 2028-11-05	Berks County Hazard Mitigation Plan (FEMA plan 108977)	2023-11-06	2028-11-05	767	this jurisdiction approved 2024-01-02
Oley township	Township	Approved, expires 2028-11-05	Berks County Hazard Mitigation Plan (FEMA plan 108977)	2023-11-06	2028-11-05	767	this jurisdiction approved 2023-11-13
Ontelaunee township	Township	Approved, expires 2028-11-05	Berks County Hazard Mitigation Plan (FEMA plan 108977)	2023-11-06	2028-11-05	767	this jurisdiction approved 2023-12-07
Penn township	Township	Approved, expires 2028-11-05	Berks County Hazard Mitigation Plan (FEMA plan 108977)	2023-11-06	2028-11-05	767	this jurisdiction approved 2024-01-29
Perry township	Township	Approved, expires 2028-11-05	Berks County Hazard Mitigation Plan (FEMA plan 108977)	2023-11-06	2028-11-05	767	this jurisdiction approved 2023-11-14
Pike township	Township	Approved, expires 2028-11-05	Berks County Hazard Mitigation Plan (FEMA plan 108977)	2023-11-06	2028-11-05	767	this jurisdiction approved 2023-12-05
Richmond township	Township	Approved, expires 2028-11-05	Berks County Hazard Mitigation Plan (FEMA plan 108977)	2023-11-06	2028-11-05	767	this jurisdiction approved 2024-02-12
Robeson township	Township	Approved, expires 2028-11-05	Berks County Hazard Mitigation Plan (FEMA plan 108977)	2023-11-06	2028-11-05	767	this jurisdiction approved 2024-04-16

Jurisdiction	Type	Status	Plan	Approved	Expires	Days to expiry <i>negative = days since expiry</i>	Notes
Rockland township	Township	Approved, expires 2028-11-05	Berks County Hazard Mitigation Plan (FEMA plan 108977)	2023-11-06	2028-11-05	767	this jurisdiction approved 2023-11-13
Ruscombmanor township	Township	Approved, expires 2028-11-05	Berks County Hazard Mitigation Plan (FEMA plan 108977)	2023-11-06	2028-11-05	767	this jurisdiction approved 2024-01-24
South Heidelberg township	Township	Approved, expires 2028-11-05	Berks County Hazard Mitigation Plan (FEMA plan 108977)	2023-11-06	2028-11-05	767	this jurisdiction approved 2024-03-19
Spring township	Township	Approved, expires 2028-11-05	Berks County Hazard Mitigation Plan (FEMA plan 108977)	2023-11-06	2028-11-05	767	this jurisdiction approved 2023-11-27
Tilden township	Township	Approved, expires 2028-11-05	Berks County Hazard Mitigation Plan (FEMA plan 108977)	2023-11-06	2028-11-05	767	this jurisdiction approved 2024-03-13
Tulpehocken township	Township	Approved, expires 2028-11-05	Berks County Hazard Mitigation Plan (FEMA plan 108977)	2023-11-06	2028-11-05	767	this jurisdiction approved 2023-12-13
Union township	Township	Approved, expires 2028-11-05	Berks County Hazard Mitigation Plan (FEMA plan 108977)	2023-11-06	2028-11-05	767	this jurisdiction approved 2024-03-20
Upper Bern township	Township	Approved, expires 2028-11-05	Berks County Hazard Mitigation Plan (FEMA plan 108977)	2023-11-06	2028-11-05	767	this jurisdiction approved 2024-02-08
Upper Tulpehocken township	Township	Approved, expires 2028-11-05	Berks County Hazard Mitigation Plan (FEMA plan 108977)	2023-11-06	2028-11-05	767	this jurisdiction approved 2023-11-14
Washington township	Township	Approved, expires 2028-11-05	Berks County Hazard Mitigation Plan (FEMA plan 108977)	2023-11-06	2028-11-05	767	this jurisdiction approved 2024-04-25
Windsor township	Township	Approved, expires 2028-11-05	Berks County Hazard Mitigation Plan (FEMA plan 108977)	2023-11-06	2028-11-05	767	this jurisdiction approved 2023-11-08

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	\$64,467,838	\$919,020	\$3,663,194	\$69,050,051	238	
2	Hurricane	Relatively Moderate	Relatively High	\$9,912,840	\$1,662,088	\$369,741	\$11,944,669	2	
3	Cold Wave	Relatively High	Relatively High	\$340	\$267	\$8,815,436	\$8,816,043	35	Includes 2 Frost/Freeze records (outside NRI's Cold Wave definition; counted in this table and in B1-d, not in the B1-e descriptor).
4	Tornado	Relatively High	Relatively Moderate	\$4,318,255	\$8,897	\$2,781,436	\$7,108,589	12	
5	Earthquake	Relatively Moderate	Relatively Moderate	\$4,528,998	n/a	\$1,527,875	\$6,056,872		Storm Events does not record earthquakes.
6	Heat Wave	Relatively Moderate	Relatively Moderate	\$4	\$4,561	\$4,996,197	\$5,000,762	70	
7	Strong Wind	Relatively High	Relatively High	\$1,160,285	\$71,778	\$3,651,013	\$4,883,076	908	Includes 39 High Wind and 85 Strong Wind records (NOAA non-thunderstorm wind types, outside NRI's Strong Wind definition).
8	Winter Weather	Very High	Very High	\$332,303	\$270	\$1,727,608	\$2,060,181	295	Includes 5 Sleet records (outside NRI's Winter Weather definition).
9	Lightning	Relatively High	Relatively High	\$71,586	n/a	\$1,843,963	\$1,915,549	49	
10	Drought	Relatively High	Relatively High	n/a	\$1,797,871	n/a	\$1,797,871	44	
11	Hail	Relatively Low	Relatively Low	\$62,580	\$394,872	\$19,486	\$476,938	124	

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	Ice Storm	Relatively Moderate	Relatively Moderate	\$58,147	n/a	\$252,220	\$310,367	2	
13	Landslide	Relatively Moderate	Relatively Low	\$56,120	n/a	\$10,410	\$66,531	0	Declared 1 time; no Storm Events record of this type.
14	Wildfire	Very Low	Very Low	\$18,391	\$38	\$2,844	\$21,272	10	
15	Avalanche	Very Low	Very Low	\$0	n/a	\$122	\$122	0	No recorded events in Storm Events since 1996 (data through 2026-06-30).

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.

Local data needed: state and local landslide records (Storm Events records this hazard only in part).

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 122 (Very Low, 20.0); tract 116.03 (Very Low, 19.7); tract 102.02 (Very Low, 19.6)
Earthquake	tract 1 (Relatively Moderate, 82.2); tract 112 (Relatively Moderate, 80.7); tract 25 (Relatively Moderate, 80.4)
Hurricane	tract 104.02 (Relatively Moderate, 88.7); tract 109.03 (Relatively Moderate, 87.0); tract 103.04 (Relatively Moderate, 86.1)
Landslide	tract 139.01 (Relatively Moderate, 97.4); tract 104.02 (Relatively Moderate, 97.0); tract 130 (Relatively Moderate, 96.6)
Tornado	tract 1 (Relatively Moderate, 69.9); tract 109.03 (Relatively Moderate, 69.8); tract 103.04 (Relatively Moderate, 68.0)
Wildfire	tract 139.01 (Very Low, 67.8); tract 104.02 (Very Low, 67.8); tract 101 (Very Low, 66.5)

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 122 is Census Tract 122). 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	33 records, 1996 to 2022 (33 zone-level)	1 day to 16 days (median 2 days); 27 with a recorded value	16 consecutive days, 2003-01-14 to 2003-01-29, zone-level	Cold/Wind Chill, 1997-04-09, property not reported; \$13,000,000 crops (zone total, 1997 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	2 records, 2007 (2 zone-level)		No crop damage reported in 2 records.		Countywide (zone-level records).	
Drought	U.S. Drought Monitor scale (D0 to D4)	44 records, 1997 to 2010 (44 zone-level)	1 day to 385 days (median 21 days); 17 with a recorded value	385 days (about 12.6 months), 2001-11-06 to 2002-11-25, a run of 13 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)	142 records, 1956 to 2025	0.75 in to 2.5 in (median 1 in); 142 with a recorded value	2.5 in hail, 2014-05-22		Event records naming jurisdictions in the plan: Boyertown borough (7 records), Kutztown borough (7 records), Bernville borough (6 records), Centerport borough (4 records), Fleetwood borough (4 records), Mount Penn borough (3 records), Oley township (3 records), Shillington borough (3 records), Bechtelsville borough (2 records), Birdsboro borough (2 records); and 14 more jurisdictions (see the Excel file).	
Excessive Heat, Heat	heat index (in event narratives)	70 records, 1996 to 2025 (70 zone-level)	1 day to 10 days (median 3 days); 47 with a recorded value	10 consecutive days, 2002-08-11 to 2002-08-20, 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	2 records, 2008 to 2011 (2 zone-level)		Strongest recorded: Tropical Storm record, 2008-09-06, \$100,000 property; \$0 crops (2008 dollars); NWS zone PAZ060		Countywide (zone-level records).	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.

Hazard	Scale	Records <i>count and years</i>	Observed range	Worst recorded event	Most damaging (when different)	How it applies to jurisdictions	Note
Ice Storm	Sperry-Piltz ice scale (local data)	2 records, 1997 to 2022 (2 zone-level)		No damage reported in 2 records.		Countywide (zone-level records).	
Flash Flood, Flood, Lakeshore Flood	damage and flood days (flood depth: FIRM)	238 records, 1996 to 2025 (15 zone-level)		Flood, 2006-06-27, \$17,700,000 property; \$1,000,000 crops (2006 dollars)		Event records naming jurisdictions in the plan: Reading city (9 records), Bethel township (8 records), Leesport borough (4 records), West Reading borough (4 records), Wyomissing borough (4 records), Bally borough (3 records), Birdsboro borough (3 records), Kutztown borough (3 records), Mohnton borough (3 records), Oley township (3 records); and 14 more jurisdictions (see the Excel file). Zone-level records (15) 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)	0					
Lightning	annualized frequency (the measure FEMA's Local Mitigation Planning Handbook names)	49 records, 1996 to 2025		Lightning, 1998-05-25, property not reported; \$0 crops (1998 dollars), 1 direct death	Lightning, 2010-09-22, \$0 property; \$300,000 crops (2010 dollars)	Event records naming jurisdictions in the plan: Bernville borough (4 records), Reading city (4 records), Hamburg borough (3 records), Mount Penn borough (2 records), Oley township (2 records), St. Lawrence borough (2 records), West Reading borough (2 records), Albany township (1 record), Bally borough (1 record), Birdsboro borough (1 record); and 7 more jurisdictions (see the Excel file).	Storm Events lists lightning with damage or casualties.
High Wind and Strong Wind (outside NRI's Strong Wind definition)	wind speed (kt and mph)	124 records, 1996 to 2021 (124 zone-level)	29 kt (33 mph) to 56 kt (64 mph) (median 41 kt (47 mph)); 99 with a recorded value	56 kt (64 mph) measured gust, High Wind, 2012-10-29, 1 direct death (reported for the zone); NWS zone PAZ060		Countywide (zone-level records).	
Thunderstorm Wind	wind speed (kt and mph)	886 records, 1960 to 2026	50 kt (58 mph) to 88 kt (101 mph) (median 50 kt (58 mph)); 792 with a recorded value	88 kt (101 mph), measurement type not recorded, Thunderstorm Wind, 1992-08-11	Thunderstorm Wind, 2007-07-16, \$1,000,000 property; \$0 crops (2007 dollars)	Event records naming jurisdictions in the plan: Reading city (22 records), Boyertown borough (17 records), Hamburg borough (16 records), Centerport borough (15 records), Kutztown borough (15 records), Womelsdorf borough (14 records), Oley township (13 records), Topton borough (13 records), Fleetwood borough (12 records), Bernville borough (11 records); and 20 more jurisdictions (see the Excel file).	

Hazard	Scale	Records <i>count and years</i>	Observed range	Worst recorded event	Most damaging (when different)	How it applies to jurisdictions	Note
Tornado	Enhanced Fujita (Fujita before Feb 2007)	30 records, 1950 to 2025	F/EF0 to F/EF3 (median F/EF1); 29 with a recorded value	F3 tornado, 1998-05-31, 8.3 mi within this county, 120 yd wide, \$1,400,000 property; crops not reported (1998 dollars), 7 direct injuries	Tornado, 1984-07-05, \$2,500,000 property; crops not recorded (1984 dollars)	Event records naming jurisdictions in the plan: Bernville borough (1 record), Lyons borough (1 record), Shoemakersville borough (1 record), Womelsdorf borough (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).
Wildfire	acres burned (local data)	10 records, 2000 to 2012 (9 zone-level)		No damage reported in 10 records.		No event record names a jurisdiction in the plan. Zone-level records (9) apply countywide.	
Winter Storm, Heavy Snow, Blizzard, Lake- Effect Snow, Winter Weather, Sleet	none in data (snowfall: local data)	295 records, 1996 to 2026 (295 zone- level)		Blizzard, 1996-01-07, \$4,500,000 property; crops not reported (1996 dollars); NWS zone PAZ060		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.

Supports FEMA checklist item B1-d: previous occurrences

Federal declarations for this county: 23 declarations covering 16 separate hazard incidents counted in this packet (declarations for the same incident count once; non-natural and evacuation-only declarations are not counted).

No county-level plan row in FEMA data, so there is no approval date to count from.

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>	Notes
2020-03-30	2020-01-20	DR-4506-PA	Major disaster	COVID-19 Pandemic	Non-natural, not counted	\$18,584,892.70	
2020-03-13	2020-01-20	EM-3441-PA	Emergency	COVID-19	Non-natural, not counted	no Public Assistance recorded	same incident as DR-4506
2016-03-23	2016-01-22	DR-4267-PA	Major disaster	Severe Winter Storm and Snowstorm	Winter Weather	\$1,558,807.03	
2012-10-29	2012-10-26	EM-3356-PA	Emergency	Hurricane Sandy	Hurricane	no Public Assistance recorded	
2011-09-12	2011-09-03	DR-4030-PA	Major disaster	Tropical Storm Lee	Inland Flooding (primary); also designated: Hurricane	\$1,852,272.77	

Declared	Incident began	FEMA number	Type	Title	Mapped hazard	County Public Assistance	Notes
						<i>federal share obligated, nominal dollars</i>	
2011-09-08	2011-09-03	EM-3340-PA	Emergency	Remnants of Tropical Storm Lee	Inland Flooding (primary); also designated: Hurricane	no Public Assistance recorded	same incident as DR-4030
2006-06-30	2006-06-23	DR-1649-PA	Major disaster	Severe Storms, Flooding, and Mudslides	Inland Flooding; Landslide	\$1,554,838.29	
2005-09-10	2005-08-29	EM-3235-PA	Emergency	Hurricane Katrina	Hurricane: evacuation support, not a local hazard event; not counted	no Public Assistance recorded	
2004-09-19	2004-09-17	DR-1557-PA	Major disaster	Tropical Depression Ivan	Hurricane: designated for Hazard Mitigation only (no Public or Individual Assistance for this county); not counted	PA not declared for this county	
2004-09-19	2004-09-08	DR-1555-PA	Major disaster	Severe Storms and Flooding Associated with Tropical Depression Frances	Hurricane; Inland Flooding: designated for Hazard Mitigation only (no Public or Individual Assistance for this county); not counted	PA not declared for this county	
2004-08-06	2004-07-27	DR-1538-PA	Major disaster	Severe Storms and Flooding	Inland Flooding: designated for Hazard Mitigation only (no Public or Individual Assistance for this county); not counted	PA not declared for this county	
2003-03-14	2003-02-14	EM-3180-PA	Emergency	Snow	Winter Weather	\$608,226.02	
2001-06-21	2001-06-15	DR-1383-PA	Major disaster	Tropical Storm Allison	Hurricane; Inland Flooding	\$553,931.33	
1999-09-18	1999-09-16	DR-1294-PA	Major disaster	Hurricane Floyd Major Disaster Declarations	Hurricane	PA not declared for this county	
1998-06-08	1998-05-31	DR-1219-PA	Major disaster	Severe Storms, Tornadoes, and Flooding	Inland Flooding; Tornado	no Public Assistance recorded	
1996-01-21	1996-01-19	DR-1093-PA	Major disaster	Severe Storms and Flooding	Inland Flooding	PA not declared for this county	
1996-01-13	1996-01-06	DR-1085-PA	Major disaster	Blizzard of 96	Winter Weather	no Public Assistance recorded	
1994-03-10	1994-01-04	DR-1015-PA	Major disaster	Severe Winter Storms	Winter Weather	no Public Assistance recorded	
1993-03-16	1993-03-13	EM-3105-PA	Emergency	Severe Snowfall & Winter Storm	Winter Weather	no Public Assistance recorded	
1975-09-26	1975-09-26	DR-485-PA	Major disaster	Severe Storms, Heavy Rains & Flooding	Inland Flooding	no Public Assistance recorded	
1973-07-17	1973-07-17	DR-400-PA	Major disaster	Severe Storms & Flooding	Inland Flooding	no Public Assistance recorded	
1972-06-23	1972-06-23	DR-340-PA	Major disaster	Tropical Storm Agnes	Inland Flooding (primary); also designated: Hurricane	no Public Assistance recorded	
1965-08-18	1965-08-18	DR-206-PA	Major disaster	Water Shortage	Drought	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
2003-08-23	2003-07-21	DR-1485-PA	Major disaster	Severe Storms, Tornadoes, and Flooding	Inland Flooding; Tornado
1959-01-23	1959-01-23	DR-89-PA	Major disaster	Floods	Inland Flooding
1956-08-09	1956-08-09	DR-61-PA	Major disaster	Storm	Hazard not mapped (severe storm title names no single hazard); not counted
1956-05-21	1956-05-21	DR-58-PA	Major disaster	Severe Storm	Hazard not mapped (severe storm title names no single hazard); not counted
1956-03-15	1956-03-15	DR-51-PA	Major disaster	Flood	Inland Flooding
1955-08-20	1955-08-20	DR-40-PA	Major disaster	Floods & Rains	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, \$1,760.24

Sources: 2, 3

FEMA number	Declared	Title	Applicant	PA obligated <i>federal share obligated, nominal dollars</i>
DR-4025-PA	2011-09-03	Hurricane Irene	Weisenberg Volunteer Fire Department (Berks County)	\$1,760.24

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 records	In the 12 months before plan approval records	Last 5 years records	Declared incidents, all years <i>separate disasters</i>	Declared since approval <i>separate disasters</i>	Period	Statement
Avalanche	0			0	0		1996 to 2026-06-30	No recorded events, 1996 to 2026-06-30, NOAA NCEI Storm Events
Cold Wave	35			1	0		1996 to 2026-06-30	Includes 2 Frost/Freeze records.
Drought	44			0	1		1996 to 2026-06-30	
Earthquake	0			0	0			Storm Events does not record earthquakes; the USGS earthquake catalog is the source.
Hail	142			20	0		1955 to 2026-06-30	
Heat Wave	70			4	0		1996 to 2026-06-30	
Hurricane	2			0	5		1996 to 2026-06-30	
Ice Storm	2			1	0		1996 to 2026-06-30	

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
Inland Flooding	238			34	8		1996 to 2026-06-30	
Landslide	0			0	1		1996 to 2026-06-30	No Storm Events records of this type; 1 federal declared incident (see declarations table)
Lightning	49			1	0		1996 to 2026-06-30	
Strong Wind	1,010			189	0		1955 to 2026-06-30	Includes 39 High Wind and 85 Strong Wind records.
Tornado	30			4	1		1950 to 2026-06-30	
Wildfire	10			0	0		1996 to 2026-06-30	
Winter Weather	295			29	5		1996 to 2026-06-30	Includes 5 Sleet records.

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	Why listed
2019-07-11	Flash Flood		\$0 property; \$0 crops (2019 dollars)	2, 0	PINE FORGE	deaths or injuries recorded
2015-02-03	Cold/Wind Chill		\$0 property; \$0 crops (zone total, 2015 dollars)	1, 0	NWS zone PAZ060 (BERKS), zone-level	deaths or injuries recorded
2012-10-29	High Wind	56 kt (64 mph) measured gust	\$2,500,000 property; \$0 crops (zone total, 2012 dollars)	1, 0	NWS zone PAZ060 (BERKS), zone-level	B1-c worst recorded: High Wind and Strong Wind
2008-09-06	Tropical Storm		\$100,000 property; \$0 crops (zone total, 2008 dollars)	0, 0	NWS zone PAZ060 (BERKS), zone-level	B1-c worst recorded: Hurricane, Tropical Storm, Tropical Depression
2008-02-10	Strong Wind	43 kt (49 mph) measured gust	\$50,000 property; \$0 crops (zone total, 2008 dollars)	1, 1	NWS zone PAZ060 (BERKS), zone-level	deaths or injuries recorded
2006-06-27	Flood		\$17,700,000 property; \$1,000,000 crops (2006 dollars)	0, 0	BERNE	B1-c worst recorded: Flash Flood, Flood, Lakeshore Flood
2003-01-14	Cold/Wind Chill		damage not reported	0, 0	NWS zone PAZ060 (BERKS), zone-level	B1-c worst recorded: Cold/Wind Chill, Extreme Cold/Wind Chill
2002-08-11	Heat		damage not reported	0, 0	NWS zone PAZ060 (BERKS), zone-level	B1-c worst recorded: Excessive Heat, Heat
1998-05-31	Tornado	F3, 8.3 mi within this county, 120 yd wide	\$1,400,000 property; crops not reported (1998 dollars)	0, 7	EVANSVILLE to LYONS	B1-c worst recorded: Tornado
1998-05-25	Lightning		property not reported; \$0 crops (1998 dollars)	1, 0	BREEZY CORNER	B1-c worst recorded: Lightning
1996-01-07	Blizzard		\$4,500,000 property; crops not reported (zone total, 1996 dollars)	0, 0	NWS zone PAZ060 (BERKS), zone-level	B1-c worst recorded: Winter Storm, Heavy Snow, Blizzard, Lake-Effect Snow, Winter Weather, Sleet
1992-08-11	Thunderstorm Wind	88 kt (101 mph), measurement type not recorded	damage not recorded (pre-1996 record)	0, 0	location not recorded	B1-c worst recorded: Thunderstorm Wind

The full list is in the Excel file, sheet "B1-d Storm Events history" (1,927 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	1	event-day per year	about 1 day per year	Likely	Storm Events event-days in 13 of 30 years, 1996 to 2025 (43.3%)	19	2005-11-12 to 2024-11-12 (19 years)	countywide	
Drought	2.06	event-days per year	about 2.06 days per year	Likely	Storm Events event-days in 10 of 30 years, 1996 to 2025 (33.3%)	91	2000 to 2025 (25.25 years; D3 and D4 only)	countywide	
Earthquake	0.00126	annual probability at a location	chance a given location in the county has at least minor-damage shaking in a year: 0.126%			not shown	modeled	see B1-f	No descriptor (Storm Events does not record earthquakes).
Hail	2.64	events per year	about 2.64 per year	Highly likely	FEMA annualized frequency (modeled)	100.3 (modeled)	1986 to 2023 (38 years)	countywide	
Heat Wave	6.32	event-days per year	about 6.32 days per year	Likely	Storm Events event-days in 21 of 30 years, 1996 to 2025 (70%)	96	2005-11-12 to 2024-11-12 (19 years)	countywide	
Hurricane	0.0649	events per year	about 1 in 15 years	Possible	FEMA annualized frequency (modeled)	22	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	1.39	event-days per year	about 1.39 days per year	Possible	Storm Events event-days in 2 of 30 years, 1996 to 2025 (6.67%)	94	1946-12-31 to 2014-02-12 (67 years)	countywide	
Inland Flooding	4.82	event-days per year	about 4.82 days per year	Highly likely	Storm Events event-days in 28 of 30 years, 1996 to 2025 (93.3%)	135	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	0.838	events per year (modeled)	about 0.84 per year	Likely	FEMA annualized frequency (modeled)	not shown	modeled	see B1-f	
Lightning	34.9	days per year with a strike	about 34.9 days per year	Highly likely	FEMA annualized frequency (modeled)	not shown	1995 to 2023 (29 years; CONUS)	countywide	
Strong Wind	6.22	events per year	about 6.22 per year	Highly likely	FEMA annualized frequency (modeled)	237	1986 to 2023 (38 years)	countywide	
Tornado	0.472	events per year	about 1 in 2 years	Likely	FEMA annualized frequency (modeled)	not shown	1950 to 2023 (EF2+); 1986 to 2023 (EF0-1)	see B1-f	
Wildfire	0.0000322	annual probability at a location	chance a given location in the county burns in a year: 0.00322%	Likely	Storm Events records in 6 of 30 years, 1996 to 2025 (20%)	not shown	modeled	see B1-f	
Winter Weather	12.6	event-days per year	about 12.6 days per year	Highly likely	Storm Events event-days in 30 of 30 years, 1996 to 2025 (100%)	240	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	66	30	2.2
Hail	2.00 in+	1996 to 2025	3	30	0.1
Thunderstorm Wind (counted as NRI Strong Wind)	50-64 kt	1996 to 2025	726	30	24.2
Thunderstorm Wind (counted as NRI Strong Wind)	65 kt+	1996 to 2025	10	30	0.333
Thunderstorm Wind (counted as NRI Strong Wind)	unmeasured or below 50 kt	1996 to 2025	19	30	0.633
Tornado	EF0-1	1996 to 2025	9	30	0.3
Tornado	EF2-3	1996 to 2025	2	30	0.0667
Tornado	EF4-5	1996 to 2025	0	30	0
Tornado	unrated (EFU)	1996 to 2025	1	30	0.0333

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	6 of 107	13.2	18.9	20.0	Very Low 6, Not Applicable 101
Cold Wave	107 of 107	35.1	61.4	79.4	Relatively High 3, Relatively Moderate 96, Relatively Low 8
Drought	60 of 107	67.2	88.8	97.8	Relatively High 1, Relatively Moderate 13, Relatively Low 33, Very Low 13, No Rating 47
Earthquake	107 of 107	26.7	57.9	82.2	Relatively Moderate 6, Relatively Low 92, Very Low 9
Hail	107 of 107	5.1	22.8	81.8	Relatively Moderate 5, Relatively Low 26, Very Low 76
Heat Wave	107 of 107	20.5	55.2	77.9	Relatively Moderate 51, Relatively Low 56
Hurricane	107 of 107	58.5	77.2	88.7	Relatively Moderate 39, Relatively Low 68
Ice Storm	107 of 107	10.8	34.9	58.1	Relatively Low 61, Very Low 46
Inland Flooding	107 of 107	3.9	43.8	95.2	Relatively High 13, Relatively Moderate 33, Relatively Low 55, Very Low 6
Landslide	107 of 107	13.8	64.2	97.4	Relatively Moderate 5, Relatively Low 36, Very Low 66
Lightning	107 of 107	30.7	62.9	85.6	Relatively High 12, Relatively Moderate 81, Relatively Low 14
Strong Wind	107 of 107	47.3	75.4	91.3	Relatively High 22, Relatively Moderate 81, Relatively Low 4
Tornado	107 of 107	31.1	49.2	69.9	Relatively Moderate 31, Relatively Low 76
Wildfire	95 of 107	19.3	45.0	67.8	Very Low 95, No Rating 12
Winter Weather	107 of 107	70.4	91.7	97.6	Very High 14, Relatively High 88, Relatively Moderate 5

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.

Hail: Agriculture is 83% 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
Bally borough	Organized Borough	Approved, expires 2028-11-05	FMA RL 0, SRL 0; any 0	\$8,853.83	7 total; 0 since its plan	
Bechtelsville borough	Organized Borough	Approved, expires 2028-11-05	FMA RL 0, SRL 0; any 1	\$2,143.73	10 total; 2 since its plan	
Bernville borough	Organized Borough	Approved, expires 2028-11-05	FMA RL 0, SRL 0; any 0	\$18,289.21	24 total; 4 since its plan	
Birdsboro borough	Organized Borough	Approved, expires 2028-11-05	FMA RL 0, SRL 0; any 1	\$107,304.42	16 total; 3 since its plan	Includes \$19,484.28 for declarations not counted as hazard incidents (DR-4506-PA).
Boyetown borough	Organized Borough	Approved, expires 2028-11-05	FMA RL 0, SRL 0; any 0	\$9,935.71	27 total; 1 since its plan	
Centerport borough	Organized Borough	Approved, expires 2028-11-05	FMA RL 0, SRL 0; any 0	\$998.25	19 total; 7 since its plan	
Fleetwood borough	Organized Borough	Approved, expires 2028-11-05	FMA RL 0, SRL 0; any 1	\$24,977.14	17 total; 9 since its plan	
Hamburg borough	Organized Borough	Approved, expires 2028-11-05	FMA RL 0, SRL 0; any 2	\$58,704.32	22 total; 2 since its plan	
Kenhorst borough	Organized Borough	Approved, expires 2028-11-05	FMA RL 0, SRL 0; any 0	\$33,021.12	0 total; 0 since its plan	
Kutztown borough	Organized Borough	Approved, expires 2028-11-05	FMA RL 0, SRL 1; any 5	\$29,092.07	26 total; 0 since its plan	
Laureldale borough	Organized Borough	Approved, expires 2028-11-05	FMA RL 0, SRL 0; any 0	\$3,824.72	9 total; 3 since its plan	
Leesport borough	Organized Borough	Approved, expires 2028-11-05	FMA RL 0, SRL 0; any 1	\$17,541.85	13 total; 0 since its plan	
Lenhartsville borough	Organized Borough	Approved, expires 2028-11-05	FMA RL 0, SRL 0; any 0	no Public Assistance recorded	13 total; 1 since its plan	
Lyons borough	Organized Borough	Approved, expires 2028-11-05	FMA RL 0, SRL 0; any 0	no Public Assistance recorded	5 total; 0 since its plan	
Mohnton borough	Organized Borough	Approved, expires 2028-11-05	FMA RL 0, SRL 0; any 1	\$10,714.26	14 total; 1 since its plan	
Mount Penn borough	Organized Borough	Approved, expires 2028-11-05	FMA RL 0, SRL 0; any 0	\$17,317.39	11 total; 2 since its plan	
New Morgan borough	Organized Borough	Approved, expires 2028-11-05	FMA RL 0, SRL 0; any 0	\$3,727	0 total; 0 since its plan	Includes \$3,727 for declarations not counted as hazard incidents (DR-4506-PA).
Reading city	City	Approved, expires 2028-11-05	FMA RL 0, SRL 1; any 7	\$1,692,976.92	37 total; 4 since its plan	

Jurisdiction	Type	Plan status	Repetitive loss	Public Assistance to this jurisdiction	Event records naming this place	Notes
			<i>FMA RL and SRL (44 CFR 77.2); repeat-flood, any definition</i>	<i>FEMA records matched by applicant name; federal share obligated, nominal dollars</i>	<i>all years; since its plan</i>	
Robesonia borough	Organized Borough	Approved, expires 2028-11-05	FMA RL 0, SRL 0; any 0	\$39,891.38	12 total; 0 since its plan	
Shillington borough	Organized Borough	Approved, expires 2028-11-05	FMA RL 0, SRL 0; any 0	\$27,806.03	9 total; 0 since its plan	
Shoemakersville borough	Organized Borough	Approved, expires 2028-11-05	FMA RL 0, SRL 0; any 1	\$51,765.16	4 total; 1 since its plan	
Sinking Spring borough	Organized Borough	Approved, expires 2028-11-05	FMA RL 0, SRL 0; any 1	\$15,068.41	0 total; 0 since its plan	
St. Lawrence borough	Organized Borough	Approved, expires 2028-11-05	FMA RL 0, SRL 0; any 0	\$5,619.05	4 total; 0 since its plan	
Topton borough	Organized Borough	Approved, expires 2028-11-05	FMA RL 0, SRL 0; any 1	\$3,503.67	17 total; 2 since its plan	
Wernersville borough	Organized Borough	Approved, expires 2028-11-05	FMA RL 0, SRL 0; any 1	\$12,168.24	11 total; 0 since its plan	
West Reading borough	Organized Borough	Approved, expires 2028-11-05	FMA RL 0, SRL 0; any 0	\$70,195.54	13 total; 3 since its plan	Includes \$8,018.93 for declarations not counted as hazard incidents (DR-4506-PA).
Womelsdorf borough	Organized Borough	Approved, expires 2028-11-05	FMA RL 0, SRL 0; any 1	\$14,823.40	18 total; 0 since its plan	
Wyomissing borough	Organized Borough	Approved, expires 2028-11-05	FMA RL 0, SRL 0; any 3	\$83,987.02	17 total; 2 since its plan	
Albany township	Township	Approved, expires 2028-11-05	FMA RL 0, SRL 0; any 2	\$28,409.62	6 total; 1 since its plan	
Alsace township	Township	Approved, expires 2028-11-05	FMA RL 0, SRL 0; any 0	\$12,403.92	0 total; 0 since its plan	
Amity township	Township	Approved, expires 2028-11-05	FMA RL 0, SRL 0; any 10	\$109,493.58	0 total; 0 since its plan	Includes \$7,983 for declarations not counted as hazard incidents (DR-4506-PA).
Bern township	Township	Approved, expires 2028-11-05	FMA RL 0, SRL 0; any 1	\$47,497.70	0 total; 0 since its plan	
Bethel township	Township	Approved, expires 2028-11-05	FMA RL 0, SRL 0; any 0	\$118,169.76	18 total; 1 since its plan	
Brecknock township	Township	Approved, expires 2028-11-05	FMA RL 0, SRL 0; any 0	\$35,047	0 total; 0 since its plan	Includes \$16,266.21 for declarations not counted as hazard incidents (DR-4506-PA).
Caernarvon township	Township	Approved, expires 2028-11-05	FMA RL 0, SRL 0; any 0	\$18,139.88	0 total; 0 since its plan	Includes \$5,843.07 for declarations not counted as hazard incidents (DR-4506-PA).
Centre township	Township	Approved, expires 2028-11-05	FMA RL 0, SRL 0; any 1	\$4,893.57	0 total; 0 since its plan	
Colebrookdale township	Township	Approved, expires 2028-11-05	FMA RL 0, SRL 0; any 3	\$23,629.67	3 total; 1 since its plan	

Jurisdiction	Type	Plan status	Repetitive loss	Public Assistance to this jurisdiction	Event records naming this place	Notes
			<i>FMA RL and SRL (44 CFR 77.2); repeat-flood, any definition</i>	<i>FEMA records matched by applicant name; federal share obligated, nominal dollars</i>	<i>all years; since its plan</i>	
Cumru township	Township	Approved, expires 2028-11-05	FMA RL 0, SRL 0; any 0	\$114,828.52	0 total; 0 since its plan	
District township	Township	Approved, expires 2028-11-05	FMA RL 0, SRL 0; any 0	\$2,199.17	0 total; 0 since its plan	
Douglass township	Township	Approved, expires 2028-11-05	FMA RL 1, SRL 0; any 7	\$37,160.48	0 total; 0 since its plan	
Earl township	Township	Approved, expires 2028-11-05	FMA RL 2, SRL 2; any 6	\$16,780.29	0 total; 0 since its plan	
Exeter township	Township	Approved, expires 2028-11-05	FMA RL 0, SRL 0; any 5	\$93,397.55	0 total; 0 since its plan	
Greenwich township	Township	Approved, expires 2028-11-05	FMA RL 1, SRL 1; any 3	\$62,118.02	0 total; 0 since its plan	
Heidelberg township	Township	Approved, expires 2028-11-05	FMA RL 0, SRL 0; any 1	\$19,591.84	0 total; 0 since its plan	
Hereford township	Township	Approved, expires 2028-11-05	FMA RL 0, SRL 0; any 0	\$43,068.28	2 total; 1 since its plan	
Jefferson township	Township	Approved, expires 2028-11-05	FMA RL 0, SRL 0; any 0	\$15,063.13	0 total; 0 since its plan	
Longswamp township	Township	Approved, expires 2028-11-05	FMA RL 0, SRL 0; any 0	\$26,420.91	0 total; 0 since its plan	
Lower Alsace township	Township	Approved, expires 2028-11-05	FMA RL 0, SRL 0; any 1	\$31,621.89	0 total; 0 since its plan	
Lower Heidelberg township	Township	Approved, expires 2028-11-05	FMA RL 0, SRL 1; any 1	\$35,270.72	0 total; 0 since its plan	
Maidencreek township	Township	Approved, expires 2028-11-05	FMA RL 0, SRL 0; any 5	\$37,027.02	0 total; 0 since its plan	Includes \$5,038.48 for declarations not counted as hazard incidents (DR-4506-PA).
Marion township	Township	Approved, expires 2028-11-05	FMA RL 0, SRL 0; any 0	\$15,276.63	0 total; 0 since its plan	
Maxatawny township	Township	Approved, expires 2028-11-05	FMA RL 0, SRL 0; any 2	\$32,700.48	5 total; 0 since its plan	
Muhlenberg township	Township	Approved, expires 2028-11-05	FMA RL 0, SRL 4; any 20	\$105,665.33	0 total; 0 since its plan	
North Heidelberg township	Township	Approved, expires 2028-11-05	FMA RL 0, SRL 0; any 0	\$47,761.93	0 total; 0 since its plan	
Oley township	Township	Approved, expires 2028-11-05	FMA RL 0, SRL 0; any 1	\$21,983.72	21 total; 4 since its plan	
Ontelaunee township	Township	Approved, expires 2028-11-05	FMA RL 0, SRL 0; any 1	\$14,676.54	0 total; 0 since its plan	

Jurisdiction	Type	Plan status	Repetitive loss	Public Assistance to this jurisdiction	Event records naming this place	Notes
			<i>FMA RL and SRL (44 CFR 77.2); repeat-flood, any definition</i>	<i>FEMA records matched by applicant name; federal share obligated, nominal dollars</i>	<i>all years; since its plan</i>	
Penn township	Township	Approved, expires 2028-11-05	FMA RL 0, SRL 0; any 0	\$68,577.68	0 total; 0 since its plan	
Perry township	Township	Approved, expires 2028-11-05	FMA RL 0, SRL 1; any 5	\$9,412.63	0 total; 0 since its plan	
Pike township	Township	Approved, expires 2028-11-05	FMA RL 0, SRL 0; any 0	\$36,591.92	0 total; 0 since its plan	
Richmond township	Township	Approved, expires 2028-11-05	FMA RL 1, SRL 0; any 2	\$21,542.12	0 total; 0 since its plan	
Robeson township	Township	Approved, expires 2028-11-05	FMA RL 0, SRL 1; any 2	\$62,431.12	0 total; 0 since its plan	Includes \$3,518.50 for declarations not counted as hazard incidents (DR-4506-PA).
Rockland township	Township	Approved, expires 2028-11-05	FMA RL 0, SRL 0; any 0	\$16,725.36	0 total; 0 since its plan	
Ruscombmanor township	Township	Approved, expires 2028-11-05	FMA RL 0, SRL 0; any 0	\$21,210.71	0 total; 0 since its plan	
South Heidelberg township	Township	Approved, expires 2028-11-05	FMA RL 0, SRL 0; any 0	\$114,210.20	0 total; 0 since its plan	Includes \$3,546.66 for declarations not counted as hazard incidents (DR-4506-PA).
Spring township	Township	Approved, expires 2028-11-05	FMA RL 0, SRL 0; any 2	\$102,061.32	0 total; 0 since its plan	
Tilden township	Township	Approved, expires 2028-11-05	FMA RL 1, SRL 0; any 1	\$29,738.56	0 total; 0 since its plan	
Tulpehocken township	Township	Approved, expires 2028-11-05	FMA RL 0, SRL 0; any 0	\$38,582.64	0 total; 0 since its plan	
Union township	Township	Approved, expires 2028-11-05	FMA RL 0, SRL 0; any 6	\$69,582.37	0 total; 0 since its plan	
Upper Bern township	Township	Approved, expires 2028-11-05	FMA RL 0, SRL 0; any 0	\$152,388.27	0 total; 0 since its plan	
Upper Tulpehocken township	Township	Approved, expires 2028-11-05	FMA RL 0, SRL 0; any 0	\$238,969.76	0 total; 0 since its plan	
Washington township	Township	Approved, expires 2028-11-05	FMA RL 0, SRL 0; any 1	\$21,409.48	0 total; 0 since its plan	
Windsor township	Township	Approved, expires 2028-11-05	FMA RL 0, SRL 0; any 1	\$3,682.39	0 total; 0 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.

No county-level plan row in FEMA data, so there is no approval date to count from.

- 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 plan <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	\$0	n/a	under 1	\$0	n/a	\$122					building exposure is 0 in NRI
Cold Wave	\$95,963,785,745	\$714,136,629	428,624	\$340	\$267	\$8,815,436	under 0.0001%				
Drought	n/a	\$192,826,369	n/a	n/a	\$1,797,871	n/a	0.932% (agriculture)				NRI has no building exposure for this hazard; agriculture shown
Earthquake	\$168,141,004,192	n/a	428,849	\$4,528,998	n/a	\$1,527,875	0.00269%				
Hail	\$95,963,785,745	\$714,136,629	428,624	\$62,580	\$394,872	\$19,486	under 0.0001%				
Heat Wave	\$95,963,785,745	\$714,136,629	428,624	\$4	\$4,561	\$4,996,197	under 0.0001%				
Hurricane	\$95,897,273,911	\$711,896,305	428,052	\$9,912,840	\$1,662,088	\$369,741	0.0103%				
Ice Storm	\$95,959,250,424	n/a	428,594	\$58,147	n/a	\$252,220	under 0.0001%				
Inland Flooding	\$95,931,031,166	\$25,812,049	6,221	\$64,467,838	\$919,020	\$3,663,194	n/a (see note)				NRI counts the full building value of any census block with some flood loss; this is not the value of buildings in the floodplain. Use local FIRM overlays for B2-a/B2-b.
Landslide	\$3,299,193,540	n/a	14,674	\$56,120	n/a	\$10,410	0.0017%				
Lightning	\$95,963,785,745	n/a	428,624	\$71,586	n/a	\$1,843,963	under 0.0001%				
Strong Wind	\$95,963,785,745	\$714,136,629	428,624	\$1,160,285	\$71,778	\$3,651,013	0.00121%				
Tornado	\$95,963,785,745	\$714,136,629	428,624	\$4,318,255	\$8,897	\$2,781,436	0.0045%				

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 plan <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
Wildfire	\$14,416,521,684	\$129,965,260	67,636	\$18,391	\$38	\$2,844	0.000128%				
Winter Weather	\$95,963,785,745	\$714,136,629	428,624	\$332,303	\$270	\$1,727,608	0.000346%				

Totals since the plan: not available. No county-level plan row in FEMA data, so there is no approval date to count from.

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	428,624
Building value (total, not at risk)	\$95,963,785,745
Agriculture value (total, not at risk)	\$714,136,629
NRI risk rating (all hazards)	Relatively Moderate
Expected annual loss, buildings and agriculture, all hazards	\$89,847,348
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)	\$29,661,545
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)	6	Severe repetitive loss, FMA definition (44 CFR 77.2)	12
Repetitive loss, NFIP insurance definition	116	Severe repetitive loss, NFIP insurance definition	7

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

Repeat-flood properties: county and state-level rows

Sources: 1, 4

Scope	RL, FMA properties	SRL, FMA properties	RL, NFIP properties	SRL, NFIP properties	Any category properties	Mitigated properties	Currently insured properties
County total	6	12	116	7	120	3	50
of which: Amity township	0	0	10	0	10	0	1
of which: Bechtelsville borough	0	0	1	0	1	0	0
of which: Birdsboro borough	0	0	1	0	1	0	0
of which: Douglass township	1	0	7	0	7	0	4
of which: Earl township	2	2	6	2	6	0	1
of which: Fleetwood borough	0	0	1	0	1	0	0
of which: Hamburg Borough of	0	0	2	0	2	0	0
of which: Kutztown borough	0	1	5	0	5	0	1
of which: Leesport borough	0	0	1	0	1	0	0
of which: Lower Alsace township	0	0	1	0	1	0	1
of which: Mohnton borough	0	0	1	0	1	0	1
of which: Muhlenberg township	0	4	16	0	20	3	10
of which: Reading city	0	1	7	1	7	0	1
of which: Robeson township	0	1	2	1	2	0	1
of which: Shoemakersville borough	0	0	1	0	1	0	1
of which: Sinking Spring borough	0	0	1	0	1	0	0
of which: Temple borough (community ID not in plan data)	0	0	3	0	3	0	0
of which: Topton borough	0	0	1	0	1	0	0
of which: Union township	0	0	6	0	6	0	3
of which: Womelsdorf borough	0	0	1	0	1	0	0
of which: Oley township	0	0	1	0	1	0	1
of which: Ontelaunee township	0	0	1	0	1	0	1

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>
of which: Albany township	0	0	2	0	2	0	2
of which: Bern township	0	0	1	0	1	0	1
of which: Centre township	0	0	1	0	1	0	1
of which: Colebrookdale township	0	0	3	0	3	0	2
of which: Exeter township	0	0	5	0	5	0	3
of which: Greenwich township	1	1	3	1	3	0	1
of which: Heidelberg township	0	0	1	0	1	0	1
of which: Lower Heidelberg township	0	1	1	1	1	0	1
of which: Maiden creek township	0	0	5	0	5	0	3
of which: Perry township	0	1	5	1	5	0	2
of which: Richmond township	1	0	2	0	2	0	2
of which: Spring township	0	0	2	0	2	0	1
of which: Tilden township	1	0	1	0	1	0	0
of which: Windsor township	0	0	1	0	1	0	0
of which: Wernersville borough	0	0	1	0	1	0	0
of which: Wyomissing borough	0	0	3	0	3	0	0
of which: Maxatawny township	0	0	2	0	2	0	2
of which: Washington township	0	0	1	0	1	0	1
Statewide, no county in FEMA's file	0	0	1	0	1	0	0

The statewide row counts properties FEMA's file gives with no county in this state; they are listed for reference and are not in this county's counts.

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>
Bally borough	420125	0	0	0	0	0	0	0
Bechtelsville borough	420126	0	0	1	0	1	0	0
Bernville borough	421051	0	0	0	0	0	0	0
Birdsboro borough	420127	0	0	1	0	1	0	0
Boyertown borough	420128	0	0	0	0	0	0	0
Centerport borough	420129	0	0	0	0	0	0	0
Fleetwood borough	420133	0	0	1	0	1	0	0
Hamburg borough	420134	0	0	2	0	2	0	0
Kenhorst borough	420135	0	0	0	0	0	0	0
Kutztown borough	420136	0	1	5	0	5	0	1
Laureldale borough	422646	0	0	0	0	0	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>
Leesport borough	420138	0	0	1	0	1	0	0
Lenhartsville borough	420139	0	0	0	0	0	0	0
Lyons borough	422674	0	0	0	0	0	0	0
Mohnton borough	420142	0	0	1	0	1	0	1
Mount Penn borough	420143	0	0	0	0	0	0	0
New Morgan borough	422755	0	0	0	0	0	0	0
Reading city	420145	0	1	7	1	7	0	1
Robesonia borough	420147	0	0	0	0	0	0	0
Shillington borough	420148	0	0	0	0	0	0	0
Shoemakersville borough	420149	0	0	1	0	1	0	1
Sinking Spring borough	420150	0	0	1	0	1	0	0
St. Lawrence borough	420151	0	0	0	0	0	0	0
Topton borough	420154	0	0	1	0	1	0	0
Wernersville borough	421374	0	0	1	0	1	0	0
West Reading borough	420156	0	0	0	0	0	0	0
Womelsdorf borough	420157	0	0	1	0	1	0	0
Wyomissing borough	421375	0	0	3	0	3	0	0
Albany township	421046	0	0	2	0	2	0	2
Alsace township	421376	0	0	0	0	0	0	0
Amity township	420124	0	0	10	0	10	0	1
Bern township	421050	0	0	1	0	1	0	1
Bethel township	421052	0	0	0	0	0	0	0
Brecknock township	421053	0	0	0	0	0	0	0
Caernarvon township	421055	0	0	0	0	0	0	0
Centre township	421056	0	0	1	0	1	0	1
Colebrookdale township	421057	0	0	3	0	3	0	2
Cumru township	420130	0	0	0	0	0	0	0
District township	421378	0	0	0	0	0	0	0
Douglass township	420131	1	0	7	0	7	0	4
Earl township	420132	2	2	6	2	6	0	1
Exeter township	421063	0	0	5	0	5	0	3
Greenwich township	421067	1	1	3	1	3	0	1
Heidelberg township	421069	0	0	1	0	1	0	1
Hereford township	421379	0	0	0	0	0	0	0
Jefferson township	421071	0	0	0	0	0	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>
Longswamp township	421380	0	0	0	0	0	0	0
Lower Alsace township	420140	0	0	1	0	1	0	1
Lower Heidelberg township	421077	0	1	1	1	1	0	1
Maidencreek township	421078	0	0	5	0	5	0	3
Marion township	421079	0	0	0	0	0	0	0
Maxatawny township	421381	0	0	2	0	2	0	2
Muhlenberg township	420144	0	4	16	0	20	3	10
North Heidelberg township	421086	0	0	0	0	0	0	0
Oley township	420965	0	0	1	0	1	0	1
Ontelaunee township	420966	0	0	1	0	1	0	1
Penn township	421091	0	0	0	0	0	0	0
Perry township	421093	0	1	5	1	5	0	2
Pike township	421382	0	0	0	0	0	0	0
Richmond township	421096	1	0	2	0	2	0	2
Robeson township	420146	0	1	2	1	2	0	1
Rockland township	421098	0	0	0	0	0	0	0
Ruscombmanor township	421099	0	0	0	0	0	0	0
South Heidelberg township	421107	0	0	0	0	0	0	0
Spring township	421108	0	0	2	0	2	0	1
Tilden township	421112	1	0	1	0	1	0	0
Tulpehocken township	421115	0	0	0	0	0	0	0
Union township	420155	0	0	6	0	6	0	3
Upper Bern township	421118	0	0	0	0	0	0	0
Upper Tulpehocken township	421120	0	0	0	0	0	0	0
Washington township	421383	0	0	1	0	1	0	1
Windsor township	421125	0	0	1	0	1	0	0

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	6	11	86	7	90	3	44
2 to 4 unit residential	0	0	5	0	5	0	1
other residential	0	0	5	0	5	0	1
non-residential	0	1	20	0	20	0	4
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 0 properties are FMA repetitive loss but not NFIP repetitive loss, and 110 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):

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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_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 (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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Cite this: Hazard Plain (2026). Berks County, PA: risk-assessment baseline packet, release 2026-10 (data as of 2026-09-30; County FIPS 42011). Automated baseline. <https://hazardplain.org/pa/42011/> 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: contact@hazardplain.org