

# Centre County, PA

## Risk-assessment baseline packet

**County FIPS:** 42027    **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 2030-06-16. Plan: Centre County Hazard Mitigation Plan (FEMA plan 109107), approved 2025-06-17.

Since the plan was approved on 2025-06-17: no new hazard declaration and 39 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 (\$19,375,419 a year), Hurricane (\$1,284,952) and Lightning (\$1,053,132).

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; 42027 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 2030-06-16                      | Plan:                                | Centre County Hazard Mitigation Plan (FEMA plan 109107) |
| Approved:                                                      | 2025-06-17                                        | Days to expiry:                      | 1,355                                                   |
| <b>What changed since your last plan (approved 2025-06-17)</b> |                                                   |                                      |                                                         |
| New federal declarations:                                      | none                                              | Storm Events records since approval: | 39 records (data through 2026-06-30)                    |
| Repetitive loss now:                                           | FMA RL 1, SRL 0 (44 CFR 77.2); any definition: 22 | 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: 36 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<br>expiry<br><small>negative =<br/>days since<br/>expiry</small> | Notes                                    |
|-----------------------|----------------------|------------------------------|---------------------------------------------------------|------------|------------|--------------------------------------------------------------------------|------------------------------------------|
| Centre County         | County               | Approved, expires 2030-06-16 | Centre County Hazard Mitigation Plan (FEMA plan 109107) | 2025-06-17 | 2030-06-16 | 1,355                                                                    |                                          |
| Belleville borough    | Organized<br>Borough | Approved, expires 2030-06-16 | Centre County Hazard Mitigation Plan (FEMA plan 109107) | 2025-06-17 | 2030-06-16 | 1,355                                                                    | this jurisdiction<br>approved 2025-07-07 |
| Centre Hall borough   | Organized<br>Borough | Approved, expires 2030-06-16 | Centre County Hazard Mitigation Plan (FEMA plan 109107) | 2025-06-17 | 2030-06-16 | 1,355                                                                    | this jurisdiction<br>approved 2025-07-10 |
| Howard borough        | Organized<br>Borough | Approved, expires 2030-06-16 | Centre County Hazard Mitigation Plan (FEMA plan 109107) | 2025-06-17 | 2030-06-16 | 1,355                                                                    | this jurisdiction<br>approved 2025-07-14 |
| Milesburg borough     | Organized<br>Borough | Approved, expires 2030-06-16 | Centre County Hazard Mitigation Plan (FEMA plan 109107) | 2025-06-17 | 2030-06-16 | 1,355                                                                    | this jurisdiction<br>approved 2025-10-13 |
| Millheim borough      | Organized<br>Borough | Approved, expires 2030-06-16 | Centre County Hazard Mitigation Plan (FEMA plan 109107) | 2025-06-17 | 2030-06-16 | 1,355                                                                    | this jurisdiction<br>approved 2025-07-08 |
| Philipsburg borough   | Organized<br>Borough | Approved, expires 2030-06-16 | Centre County Hazard Mitigation Plan (FEMA plan 109107) | 2025-06-17 | 2030-06-16 | 1,355                                                                    | this jurisdiction<br>approved 2026-02-16 |
| Port Matilda borough  | Organized<br>Borough | Approved, expires 2030-06-16 | Centre County Hazard Mitigation Plan (FEMA plan 109107) | 2025-06-17 | 2030-06-16 | 1,355                                                                    | this jurisdiction<br>approved 2025-08-26 |
| Snow Shoe borough     | Organized<br>Borough | Approved, expires 2030-06-16 | Centre County Hazard Mitigation Plan (FEMA plan 109107) | 2025-06-17 | 2030-06-16 | 1,355                                                                    | this jurisdiction<br>approved 2025-08-12 |
| State College borough | Organized<br>Borough | Approved, expires 2030-06-16 | Centre County Hazard Mitigation Plan (FEMA plan 109107) | 2025-06-17 | 2030-06-16 | 1,355                                                                    | this jurisdiction<br>approved 2025-08-18 |
| Unionville borough    | Organized<br>Borough | Approved, expires 2030-06-16 | Centre County Hazard Mitigation Plan (FEMA plan 109107) | 2025-06-17 | 2030-06-16 | 1,355                                                                    | this jurisdiction<br>approved 2025-07-07 |
| Benner township       | Township             | Approved, expires 2030-06-16 | Centre County Hazard Mitigation Plan (FEMA plan 109107) | 2025-06-17 | 2030-06-16 | 1,355                                                                    | this jurisdiction<br>approved 2025-07-07 |
| Boggs township        | Township             | Approved, expires 2030-06-16 | Centre County Hazard Mitigation Plan (FEMA plan 109107) | 2025-06-17 | 2030-06-16 | 1,355                                                                    | this jurisdiction<br>approved 2025-07-01 |
| Burnside township     | Township             | Approved, expires 2030-06-16 | Centre County Hazard Mitigation Plan (FEMA plan 109107) | 2025-06-17 | 2030-06-16 | 1,355                                                                    | this jurisdiction<br>approved 2025-07-02 |
| College township      | Township             | Approved, expires 2030-06-16 | Centre County Hazard Mitigation Plan (FEMA plan 109107) | 2025-06-17 | 2030-06-16 | 1,355                                                                    | this jurisdiction<br>approved 2025-07-17 |
| Curtin township       | Township             | Approved, expires 2030-06-16 | Centre County Hazard Mitigation Plan (FEMA plan 109107) | 2025-06-17 | 2030-06-16 | 1,355                                                                    | this jurisdiction<br>approved 2025-12-15 |
| Ferguson township     | Township             | Approved, expires 2030-06-16 | Centre County Hazard Mitigation Plan (FEMA plan 109107) | 2025-06-17 | 2030-06-16 | 1,355                                                                    | this jurisdiction<br>approved 2025-08-05 |
| Gregg township        | Township             | Approved, expires 2030-06-16 | Centre County Hazard Mitigation Plan (FEMA plan 109107) | 2025-06-17 | 2030-06-16 | 1,355                                                                    | this jurisdiction<br>approved 2025-11-06 |
| Haines township       | Township             | Approved, expires 2030-06-16 | Centre County Hazard Mitigation Plan (FEMA plan 109107) | 2025-06-17 | 2030-06-16 | 1,355                                                                    | this jurisdiction<br>approved 2025-07-15 |

| Jurisdiction       | Type     | Status                       | Plan                                                    | Approved   | Expires    | Days to<br>expiry<br><small>negative =<br/>days since<br/>expiry</small> | Notes                                 |
|--------------------|----------|------------------------------|---------------------------------------------------------|------------|------------|--------------------------------------------------------------------------|---------------------------------------|
| Halfmoon township  | Township | Approved, expires 2030-06-16 | Centre County Hazard Mitigation Plan (FEMA plan 109107) | 2025-06-17 | 2030-06-16 | 1,355                                                                    | this jurisdiction approved 2025-07-10 |
| Harris township    | Township | Approved, expires 2030-06-16 | Centre County Hazard Mitigation Plan (FEMA plan 109107) | 2025-06-17 | 2030-06-16 | 1,355                                                                    | this jurisdiction approved 2025-07-14 |
| Howard township    | Township | Approved, expires 2030-06-16 | Centre County Hazard Mitigation Plan (FEMA plan 109107) | 2025-06-17 | 2030-06-16 | 1,355                                                                    | this jurisdiction approved 2025-08-04 |
| Huston township    | Township | Approved, expires 2030-06-16 | Centre County Hazard Mitigation Plan (FEMA plan 109107) | 2025-06-17 | 2030-06-16 | 1,355                                                                    | this jurisdiction approved 2025-08-04 |
| Liberty township   | Township | Approved, expires 2030-06-16 | Centre County Hazard Mitigation Plan (FEMA plan 109107) | 2025-06-17 | 2030-06-16 | 1,355                                                                    | this jurisdiction approved 2025-07-01 |
| Marion township    | Township | Approved, expires 2030-06-16 | Centre County Hazard Mitigation Plan (FEMA plan 109107) | 2025-06-17 | 2030-06-16 | 1,355                                                                    | this jurisdiction approved 2025-07-09 |
| Miles township     | Township | Approved, expires 2030-06-16 | Centre County Hazard Mitigation Plan (FEMA plan 109107) | 2025-06-17 | 2030-06-16 | 1,355                                                                    | this jurisdiction approved 2025-08-07 |
| Patton township    | Township | Approved, expires 2030-06-16 | Centre County Hazard Mitigation Plan (FEMA plan 109107) | 2025-06-17 | 2030-06-16 | 1,355                                                                    | this jurisdiction approved 2025-07-09 |
| Penn township      | Township | Approved, expires 2030-06-16 | Centre County Hazard Mitigation Plan (FEMA plan 109107) | 2025-06-17 | 2030-06-16 | 1,355                                                                    | this jurisdiction approved 2025-06-25 |
| Potter township    | Township | Approved, expires 2030-06-16 | Centre County Hazard Mitigation Plan (FEMA plan 109107) | 2025-06-17 | 2030-06-16 | 1,355                                                                    | this jurisdiction approved 2025-07-07 |
| Rush township      | Township | Approved, expires 2030-06-16 | Centre County Hazard Mitigation Plan (FEMA plan 109107) | 2025-06-17 | 2030-06-16 | 1,355                                                                    | this jurisdiction approved 2025-10-14 |
| Snow Shoe township | Township | Approved, expires 2030-06-16 | Centre County Hazard Mitigation Plan (FEMA plan 109107) | 2025-06-17 | 2030-06-16 | 1,355                                                                    | this jurisdiction approved 2026-03-02 |
| Spring township    | Township | Approved, expires 2030-06-16 | Centre County Hazard Mitigation Plan (FEMA plan 109107) | 2025-06-17 | 2030-06-16 | 1,355                                                                    | this jurisdiction approved 2025-10-06 |
| Taylor township    | Township | Approved, expires 2030-06-16 | Centre County Hazard Mitigation Plan (FEMA plan 109107) | 2025-06-17 | 2030-06-16 | 1,355                                                                    | this jurisdiction approved 2025-07-14 |
| Union township     | Township | Approved, expires 2030-06-16 | Centre County Hazard Mitigation Plan (FEMA plan 109107) | 2025-06-17 | 2030-06-16 | 1,355                                                                    | this jurisdiction approved 2025-09-09 |
| Walker township    | Township | Approved, expires 2030-06-16 | Centre County Hazard Mitigation Plan (FEMA plan 109107) | 2025-06-17 | 2030-06-16 | 1,355                                                                    | this jurisdiction approved 2025-10-01 |
| Worth township     | Township | Approved, expires 2030-06-16 | Centre County Hazard Mitigation Plan (FEMA plan 109107) | 2025-06-17 | 2030-06-16 | 1,355                                                                    | this jurisdiction approved 2025-07-03 |

## 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<br>by EAL | Hazard             | NRI risk<br>rating     | EAL rating             | EAL buildings<br><i>modeled dollars<br/>per year</i> | EAL<br>agriculture<br><i>modeled dollars<br/>per year</i> | Cost of expected<br>deaths and injuries<br><i>FEMA's dollar value per<br/>year, not property<br/>damage</i> | EAL total (see<br>note)<br><i>modeled dollars<br/>per year</i> | Storm Events<br>records, 1996 to<br>2026-06-30<br><i>count</i> | Storm Events coverage note                                                                                                |
|----------------|--------------------|------------------------|------------------------|------------------------------------------------------|-----------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------|----------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|
| 1              | Inland<br>Flooding | Relatively<br>Moderate | Relatively<br>Moderate | \$19,286,497                                         | \$4,944                                                   | \$83,977                                                                                                    | \$19,375,419                                                   | 34                                                             |                                                                                                                           |
| 2              | Hurricane          | Relatively<br>Low      | Relatively Low         | \$1,098,060                                          | \$132,056                                                 | \$54,836                                                                                                    | \$1,284,952                                                    | 1                                                              |                                                                                                                           |
| 3              | Lightning          | Relatively<br>High     | Relatively High        | \$22,461                                             | n/a                                                       | \$1,030,671                                                                                                 | \$1,053,132                                                    | 3                                                              |                                                                                                                           |
| 4              | Tornado            | Relatively<br>Low      | Relatively Low         | \$620,428                                            | \$1,384                                                   | \$271,193                                                                                                   | \$893,006                                                      | 9                                                              |                                                                                                                           |
| 5              | Winter<br>Weather  | Relatively<br>High     | Relatively High        | \$34,795                                             | \$49                                                      | \$540,912                                                                                                   | \$575,756                                                      | 103                                                            |                                                                                                                           |
| 6              | Strong Wind        | Relatively<br>Moderate | Relatively<br>Moderate | \$64,525                                             | \$1,845                                                   | \$503,199                                                                                                   | \$569,570                                                      | 390                                                            | Includes 18 High Wind and 5 Strong Wind records (NOAA non-thunderstorm wind types, outside NRI's Strong Wind definition). |
| 7              | Earthquake         | Very Low               | Relatively Low         | \$315,941                                            | n/a                                                       | \$66,470                                                                                                    | \$382,411                                                      |                                                                | Storm Events does not record earthquakes.                                                                                 |
| 8              | Heat Wave          | Relatively<br>Low      | Relatively Low         | under \$1                                            | \$29                                                      | \$316,205                                                                                                   | \$316,234                                                      | 3                                                              |                                                                                                                           |
| 9              | Cold Wave          | Very Low               | Relatively Low         | \$491                                                | \$20,731                                                  | \$222,958                                                                                                   | \$244,180                                                      | 20                                                             |                                                                                                                           |
| 10             | Hail               | Very Low               | Very Low               | \$26,532                                             | \$2,102                                                   | \$61,474                                                                                                    | \$90,107                                                       | 73                                                             |                                                                                                                           |
| 11             | Ice Storm          | Relatively<br>Low      | Relatively Low         | \$44,101                                             | n/a                                                       | \$4,070                                                                                                     | \$48,170                                                       | 13                                                             |                                                                                                                           |
| 12             | Landslide          | Relatively<br>Moderate | Relatively Low         | \$25,226                                             | n/a                                                       | \$15,362                                                                                                    | \$40,588                                                       | 0                                                              | No recorded events in Storm Events since 1996 (data through 2026-06-30).                                                  |
| 13             | Wildfire           | Very Low               | Very Low               | \$11,953                                             | \$23                                                      | \$3,569                                                                                                     | \$15,545                                                       | 2                                                              |                                                                                                                           |

| Rank<br>by EAL | Hazard    | NRI risk<br>rating | EAL rating                   | EAL buildings<br><i>modeled dollars<br/>per year</i> | EAL agriculture<br><i>modeled dollars<br/>per year</i> | Cost of expected<br>deaths and injuries<br><i>FEMA's dollar value per<br/>year, not property<br/>damage</i> | EAL total (see<br>note)<br><i>modeled dollars<br/>per year</i> | Storm Events<br>records, 1996 to<br>2026-06-30<br><i>count</i> | Storm Events coverage note                                               |
|----------------|-----------|--------------------|------------------------------|------------------------------------------------------|--------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------|----------------------------------------------------------------|--------------------------------------------------------------------------|
| 14             | Avalanche | Very Low           | Very Low                     | under \$1                                            | n/a                                                    | \$2,380                                                                                                     | \$2,380                                                        | 0                                                              | No recorded events in Storm Events since 1996 (data through 2026-06-30). |
| 15             | Drought   | No Rating          | No Expected<br>Annual Losses | n/a                                                  | \$0                                                    | n/a                                                                                                         | \$0                                                            | 7                                                              |                                                                          |

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<br><i>NRI risk rating, score 0 to 100</i>                                               |
|------------|---------------------------------------------------------------------------------------------------------------------|
| Avalanche  | tract 107 (Very Low, 58.9); tract 106 (Very Low, 57.2); tract 108.02 (Very Low, 56.4)                               |
| Earthquake | tract 122 (Relatively Low, 73.0); tract 120 (Relatively Low, 44.2); tract 111.01 (Relatively Low, 44.0)             |
| Hurricane  | tract 122 (Relatively Moderate, 83.6); tract 107 (Relatively Low, 76.8); tract 108.02 (Relatively Low, 73.1)        |
| Landslide  | tract 105 (Relatively Moderate, 98.4); tract 101 (Relatively Moderate, 96.8); tract 106 (Relatively Moderate, 96.8) |
| Tornado    | tract 122 (Relatively Moderate, 64.3); tract 107 (Relatively Low, 42.5); tract 117.02 (Relatively Low, 40.4)        |
| Wildfire   | tract 106 (Relatively Low, 74.8); tract 105 (Relatively Low, 72.1); tract 104 (Very Low, 67.9)                      |

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 107 is Census Tract 107). 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<br><i>count and years</i>        | Observed range                                               | Worst recorded event                                                                                                  | Most damaging<br>(when different)                                 | How it applies to jurisdictions                                                                                                                                                                                                                                                                                                                                             | Note                                                                                                                                                                 |
|---------------------------------------------------|---------------------------------------|------------------------------------------|--------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Avalanche                                         | none (count and damage only)          | 0                                        |                                                              |                                                                                                                       |                                                                   |                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                      |
| Cold/Wind Chill, Extreme Cold/Wind Chill          | wind chill                            | 20 records, 2004 to 2026 (20 zone-level) | 1 day to 4 days (median 2 days); 17 with a recorded value    | 4 consecutive days, 2007-02-03 to 2007-02-06, zone-level                                                              |                                                                   | Countywide (zone-level records).                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                      |
| Frost/Freeze (outside NRI's Cold Wave definition) | crop damage                           | 0                                        |                                                              |                                                                                                                       |                                                                   |                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                      |
| Drought                                           | U.S. Drought Monitor scale (D0 to D4) | 7 records, 1997 to 2020 (7 zone-level)   | 1 day to 70 days (median 31.5 days); 4 with a recorded value | 70 days (about 2.3 months), 2020-09-22 to 2020-11-30, a run of 3 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)                    | 83 records, 1960 to 2026                 | 0.75 in to 3 in (median 0.88 in); 83 with a recorded value   | 3 in hail, 1960-07-19                                                                                                 | Hail, 2021-07-13, \$20,000 property; \$4,000 crops (2021 dollars) | Event records naming jurisdictions in the plan: State College borough (22 records), Bellefonte borough (7 records), Centre Hall borough (4 records), Philipsburg borough (4 records), Port Matilda borough (4 records), Howard borough (2 records), Howard township (2 records), Millheim borough (2 records), Snow Shoe borough (1 record), Snow Shoe township (1 record). |                                                                                                                                                                      |
| Excessive Heat, Heat                              | heat index (in event narratives)      | 3 records, 2006 to 2025 (3 zone-level)   | 1 day to 3 days (median 2 days); 3 with a recorded value     | 3 consecutive days, 2025-06-23 to 2025-06-25, zone-level                                                              |                                                                   | Countywide (zone-level records).                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                      |
| Hurricane, Tropical Storm, Tropical Depression    | Saffir-Simpson                        | 1 record, 2003 (1 zone-level)            |                                                              | Strongest recorded: Tropical Storm record, 2003-09-18 to 2003-09-19, damage not reported; NWS zone PAZ019             |                                                                   | 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<br><i>count and years</i>        | Observed range                                                                       | Worst recorded event                                                                                                                       | Most damaging<br>(when different)                                                       | How it applies to jurisdictions                                                                                                                                                                                                                                                                                                                                                                                                   | Note                                                                                                                                                                                                                 |
|------------------------------------------------------------------|------------------------------------------------------------------------------------|------------------------------------------|--------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Ice Storm                                                        | Sperry-Piltz ice scale (local data)                                                | 13 records, 1997 to 2022 (13 zone-level) |                                                                                      | Ice Storm, 2002-10-29, \$1,000,000 property; crops not reported (2002 dollars); NWS zone PAZ018                                            |                                                                                         | Countywide (zone-level records).                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                      |
| Flash Flood, Flood, Lakeshore Flood                              | damage and flood days (flood depth: FIRM)                                          | 34 records, 1996 to 2025 (3 zone-level)  |                                                                                      | Flash Flood, 2016-10-20, \$5,000,000 property; \$0 crops (2016 dollars)                                                                    |                                                                                         | Event records naming jurisdictions in the plan: State College borough (6 records), Port Matilda borough (3 records), Philipsburg borough (2 records), Curtin township (1 record), Millheim borough (1 record). Zone-level records (3) 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) | 3 records, 2000 to 2024                  |                                                                                      | Lightning, 2021-07-13, \$500,000 property; \$0 crops (2021 dollars)                                                                        |                                                                                         | Event records naming jurisdictions in the plan: Port Matilda borough (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)                                                            | 23 records, 1996 to 2025 (23 zone-level) | 35 kt (40 mph) to 64 kt (74 mph) (median 52 kt (60 mph)); 21 with a recorded value   | 64 kt (74 mph), measurement type not recorded, High Wind, 1996-03-25; NWS zone PAZ018                                                      | High Wind, 2000-12-12, \$13,900 property; crops not reported (zone total, 2000 dollars) | Countywide (zone-level records).                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                      |
| Thunderstorm Wind                                                | wind speed (kt and mph)                                                            | 441 records, 1957 to 2026                | 43 kt (49 mph) to 96 kt (110 mph) (median 52 kt (60 mph)); 364 with a recorded value | 96 kt (110 mph) estimated gust, Thunderstorm Wind, 2021-07-11                                                                              | Thunderstorm Wind, 2025-03-16, \$140,000 property; \$0 crops (2025 dollars)             | Event records naming jurisdictions in the plan: State College borough (61 records), Bellefonte borough (24 records), Millheim borough (12 records), Centre Hall borough (11 records), Philipsburg borough (11 records), Port Matilda borough (10 records), Milesburg borough (7 records), Howard borough (6 records), Howard township (6 records), Unionville borough (5 records); and 3 more jurisdictions (see the Excel file). |                                                                                                                                                                                                                      |
| Tornado                                                          | Enhanced Fujita (Fujita before Feb 2007)                                           | 15 records, 1975 to 2026                 | F/EF0 to F/EF4 (median F/EF1); 15 with a recorded value                              | F4 tornado, 1985-05-31, 4.5 mi path length (whole path, pre-1996), 3,330 yd wide, \$25,000,000 property; crops not recorded (1985 dollars) |                                                                                         | Event records naming jurisdictions in the plan: Bellefonte borough (1 record), Philipsburg 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). |

| Hazard                                                                                      | Scale                                     | Records<br><i>count and years</i>                    | Observed range | Worst recorded event                                                                                  | Most damaging<br>(when different) | How it applies to jurisdictions  | Note |
|---------------------------------------------------------------------------------------------|-------------------------------------------|------------------------------------------------------|----------------|-------------------------------------------------------------------------------------------------------|-----------------------------------|----------------------------------|------|
| Wildfire                                                                                    | acres burned<br>(local data)              | 2 records,<br>2022 to 2023<br>(2 zone-level)         |                | No damage reported in 2 records.                                                                      |                                   | Countywide (zone-level records). |      |
| Winter Storm,<br>Heavy Snow,<br>Blizzard, Lake-<br>Effect Snow,<br>Winter<br>Weather, Sleet | none in data<br>(snowfall: local<br>data) | 103 records,<br>1996 to 2026<br>(103 zone-<br>level) |                | Winter Weather,<br>2025-04-01, \$100,000<br>property; \$0 crops (2025<br>dollars); NWS zone<br>PAZ018 |                                   | 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: 15 declarations covering 11 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<br>began | FEMA<br>number | Type              | Title                                                                        | Mapped hazard                                                                                                                             | County Public Assistance<br><i>federal share obligated, nominal<br/>dollars</i> | Notes                       |
|------------|-------------------|----------------|-------------------|------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|-----------------------------|
| 2020-03-30 | 2020-01-20        | DR-4506-PA     | Major<br>disaster | COVID-19 Pandemic                                                            | Non-natural, not counted                                                                                                                  | \$5,724,549.30                                                                  |                             |
| 2020-03-13 | 2020-01-20        | EM-3441-PA     | Emergency         | COVID-19                                                                     | Non-natural, not counted                                                                                                                  | no Public Assistance recorded                                                   | same incident<br>as DR-4506 |
| 2016-12-02 | 2016-10-20        | DR-4292-PA     | Major<br>disaster | Severe Storms and Flooding                                                   | Inland Flooding                                                                                                                           | \$2,479,676.35                                                                  |                             |
| 2013-10-01 | 2013-06-26        | DR-4149-PA     | Major<br>disaster | Severe Storms, Tornadoes, and<br>Flooding                                    | Inland Flooding; Tornado                                                                                                                  | \$551,113.42                                                                    |                             |
| 2012-10-29 | 2012-10-26        | EM-3356-PA     | Emergency         | Hurricane Sandy                                                              | Hurricane                                                                                                                                 | no Public Assistance recorded                                                   |                             |
| 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                                                   |                             |
| 2005-09-10 | 2005-08-29        | EM-3235-PA     | Emergency         | Hurricane Katrina                                                            | Hurricane: evacuation support, not a local hazard event; not<br>counted                                                                   | no Public Assistance recorded                                                   |                             |
| 2004-09-19 | 2004-09-17        | DR-1557-PA     | Major<br>disaster | Tropical Depression Ivan                                                     | Hurricane                                                                                                                                 | \$477,707.67                                                                    |                             |
| 2004-09-19 | 2004-09-08        | DR-1555-PA     | Major<br>disaster | Severe Storms and Flooding<br>Associated with Tropical Depression<br>Frances | Hurricane; Inland Flooding: designated for Hazard Mitigation<br>only (no Public or Individual Assistance for this county); not<br>counted | PA not declared for this county                                                 |                             |

| Declared   | Incident began | FEMA number | Type           | Title                                 | Mapped hazard                                         | County Public Assistance                        | Notes |
|------------|----------------|-------------|----------------|---------------------------------------|-------------------------------------------------------|-------------------------------------------------|-------|
|            |                |             |                |                                       |                                                       | <i>federal share obligated, nominal dollars</i> |       |
| 1996-01-21 | 1996-01-19     | DR-1093-PA  | Major disaster | Severe Storms and Flooding            | Inland Flooding                                       | no Public Assistance recorded                   |       |
| 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                   |       |
| 1972-06-23 | 1972-06-23     | DR-340-PA   | Major disaster | Tropical Storm Agnes                  | Inland Flooding (primary); also designated: Hurricane | 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: 3 rows, \$298,217.32

Sources: 2, 3

| FEMA number | Declared   | Title                                  | Applicant                                     | PA obligated                                    |
|-------------|------------|----------------------------------------|-----------------------------------------------|-------------------------------------------------|
|             |            |                                        |                                               | <i>federal share obligated, nominal dollars</i> |
| DR-4267-PA  | 2016-03-23 | Severe Winter Storm and Snowstorm      | Pennsylvania State University (Centre County) | \$136,693.58                                    |
| DR-1898-PA  | 2010-04-16 | Severe Winter Storms and Snowstorms    | Pennsylvania State University (Centre County) | \$6,593.17                                      |
| DR-1649-PA  | 2006-06-30 | Severe Storms, Flooding, and Mudslides | Pennsylvania State University (Centre County) | \$154,930.57                                    |

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

| <b>Hazard</b>      | <b>Storm Events records,<br/>all years on file</b><br><i>(years in the Period column)</i> | <b>Since plan<br/>approval</b><br><i>records</i> | <b>In the 12 months before<br/>plan approval</b><br><i>records</i> | <b>Last 5<br/>years</b><br><i>records</i> | <b>Declared incidents,<br/>all years</b><br><i>separate disasters</i> | <b>Declared since<br/>approval</b><br><i>separate disasters</i> | <b>Period</b>         | <b>Statement</b>                                                                        |
|--------------------|-------------------------------------------------------------------------------------------|--------------------------------------------------|--------------------------------------------------------------------|-------------------------------------------|-----------------------------------------------------------------------|-----------------------------------------------------------------|-----------------------|-----------------------------------------------------------------------------------------|
| Avalanche          | 0                                                                                         | 0                                                | 0                                                                  | 0                                         | 0                                                                     | 0                                                               | 1996 to<br>2026-06-30 | No recorded events, 1996 to 2026-06-30, NOAA<br>NCEI Storm Events                       |
| Cold Wave          | 20                                                                                        | 1                                                | 1                                                                  | 3                                         | 0                                                                     | 0                                                               | 1996 to<br>2026-06-30 |                                                                                         |
| Drought            | 7                                                                                         | 0                                                | 0                                                                  | 0                                         | 0                                                                     | 0                                                               | 1996 to<br>2026-06-30 |                                                                                         |
| Earthquake         | 0                                                                                         | 0                                                | 0                                                                  | 0                                         | 0                                                                     | 0                                                               |                       | Storm Events does not record earthquakes; the<br>USGS earthquake catalog is the source. |
| Hail               | 83                                                                                        | 7                                                | 0                                                                  | 12                                        | 0                                                                     | 0                                                               | 1955 to<br>2026-06-30 |                                                                                         |
| Heat Wave          | 3                                                                                         | 1                                                | 0                                                                  | 1                                         | 0                                                                     | 0                                                               | 1996 to<br>2026-06-30 |                                                                                         |
| Hurricane          | 1                                                                                         | 0                                                | 0                                                                  | 0                                         | 4                                                                     | 0                                                               | 1996 to<br>2026-06-30 |                                                                                         |
| Ice Storm          | 13                                                                                        | 0                                                | 0                                                                  | 1                                         | 0                                                                     | 0                                                               | 1996 to<br>2026-06-30 |                                                                                         |
| Inland<br>Flooding | 34                                                                                        | 1                                                | 0                                                                  | 3                                         | 6                                                                     | 0                                                               | 1996 to<br>2026-06-30 |                                                                                         |
| Landslide          | 0                                                                                         | 0                                                | 0                                                                  | 0                                         | 0                                                                     | 0                                                               | 1996 to<br>2026-06-30 | No recorded events, 1996 to 2026-06-30, NOAA<br>NCEI Storm Events                       |
| Lightning          | 3                                                                                         | 0                                                | 0                                                                  | 1                                         | 0                                                                     | 0                                                               | 1996 to<br>2026-06-30 |                                                                                         |
| Strong Wind        | 464                                                                                       | 20                                               | 43                                                                 | 114                                       | 0                                                                     | 0                                                               | 1955 to<br>2026-06-30 | Includes 18 High Wind and 5 Strong Wind records.                                        |
| Tornado            | 15                                                                                        | 1                                                | 0                                                                  | 2                                         | 1                                                                     | 0                                                               | 1950 to<br>2026-06-30 |                                                                                         |
| Wildfire           | 2                                                                                         | 0                                                | 0                                                                  | 2                                         | 0                                                                     | 0                                                               | 1996 to<br>2026-06-30 |                                                                                         |
| Winter<br>Weather  | 103                                                                                       | 8                                                | 4                                                                  | 30                                        | 3                                                                     | 0                                                               | 1996 to<br>2026-06-30 |                                                                                         |

## Notable Storm Events records

Sources: 1, 6, 7

| Date       | Event type              | Magnitude or extent                                          | Damage<br><i>nominal dollars</i>                         | Deaths,<br>injuries<br><i>direct only</i> | Location                                      | Flags                                                      | Why listed                                                                                       |
|------------|-------------------------|--------------------------------------------------------------|----------------------------------------------------------|-------------------------------------------|-----------------------------------------------|------------------------------------------------------------|--------------------------------------------------------------------------------------------------|
| 2025-06-23 | Heat                    |                                                              | \$0 property; \$0 crops (zone total, 2025 dollars)       | 0, 0                                      | NWS zone PAZ019 (SOUTHERN CENTRE), zone-level | new since last plan; within last 5 years                   | B1-c worst recorded: Excessive Heat, Heat                                                        |
| 2025-04-01 | Winter Weather          |                                                              | \$100,000 property; \$0 crops (zone total, 2025 dollars) | 0, 0                                      | NWS zone PAZ018 (NORTHERN CENTRE), zone-level | in the 12 months before plan approval; within last 5 years | B1-c worst recorded: Winter Storm, Heavy Snow, Blizzard, Lake-Effect Snow, Winter Weather, Sleet |
| 2021-07-13 | Lightning               |                                                              | \$500,000 property; \$0 crops (2021 dollars)             | 0, 0                                      | BUFFALO RUN                                   |                                                            | B1-c worst recorded: Lightning                                                                   |
| 2021-07-11 | Thunderstorm Wind       | 96 kt (110 mph) estimated gust                               | \$20,000 property; \$0 crops (2021 dollars)              | 0, 0                                      | INGLEBY                                       |                                                            | B1-c worst recorded: Thunderstorm Wind                                                           |
| 2017-05-01 | Tornado                 | EF1, 1.1 mi within this county, 100 yd wide                  | \$200,000 property; \$0 crops (2017 dollars)             | 0, 1                                      | SMULLTON to REBERSBURG                        |                                                            | deaths or injuries recorded                                                                      |
| 2016-10-20 | Flash Flood             |                                                              | \$5,000,000 property; \$0 crops (2016 dollars)           | 0, 0                                      | YARNELL to HUBLERSBURG                        |                                                            | B1-c worst recorded: Flash Flood, Flood, Lakeshore Flood                                         |
| 2012-07-26 | Thunderstorm Wind       | 50 kt (58 mph) estimated gust                                | \$5,000 property; \$0 crops (2012 dollars)               | 0, 3                                      | OAK HALL                                      |                                                            | deaths or injuries recorded                                                                      |
| 2007-02-03 | Extreme Cold/Wind Chill |                                                              | \$0 property; \$0 crops (zone total, 2007 dollars)       | 0, 0                                      | NWS zone PAZ018 (NORTHERN CENTRE), zone-level |                                                            | B1-c worst recorded: Cold/Wind Chill, Extreme Cold/Wind Chill                                    |
| 2003-09-18 | Tropical Storm          |                                                              | damage not reported                                      | 0, 0                                      | NWS zone PAZ019 (SOUTHERN CENTRE), zone-level |                                                            | B1-c worst recorded: Hurricane, Tropical Storm, Tropical Depression                              |
| 2000-06-11 | Lightning               |                                                              | damage not reported                                      | 0, 2                                      | PORT MATILDA                                  |                                                            | deaths or injuries recorded                                                                      |
| 1996-03-25 | High Wind               | 64 kt (74 mph), measurement type not recorded                | damage not reported                                      | 0, 0                                      | NWS zone PAZ018 (NORTHERN CENTRE), zone-level |                                                            | B1-c worst recorded: High Wind and Strong Wind                                                   |
| 1985-05-31 | Tornado                 | F4, 4.5 mi path length (whole path, pre-1996), 3,330 yd wide | \$25,000,000 property; crops not recorded (1985 dollars) | 0, 0                                      | location not recorded                         |                                                            | B1-c worst recorded: Tornado                                                                     |

The full list is in the Excel file, sheet "B1-d Storm Events history" (748 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)<br><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       | 2.46                                                       | event-days per year              | about 2.46 days per year                                                                   | Likely        | Storm Events event-days in 9 of 30 years, 1996 to 2025 (30%)    | 46.7                                                                                                     | 2005-11-12 to 2024-11-12 (19 years)        | countywide |                                                                                                                                                                                                                     |
| Drought         | 0                                                          | event-days per year              | none modeled                                                                               | Likely        | Storm Events event-days in 4 of 30 years, 1996 to 2025 (13.3%)  | 0                                                                                                        | 2000 to 2025 (25.25 years; D3 and D4 only) | countywide | NRI models no drought event-days here (2000 to 2025, 25.25 years; D3 and D4 only); Storm Events has a record in 4 of 30 years. The descriptor comes from Storm Events, which counts D2 drought that NRI leaves out. |
| Earthquake      | 0.000562                                                   | annual probability at a location | chance a given location in the county has at least minor-damage shaking in a year: 0.0562% |               |                                                                 | not shown                                                                                                | modeled                                    | see B1-f   | No descriptor (Storm Events does not record earthquakes).                                                                                                                                                           |
| Hail            | 1.21                                                       | events per year                  | about 1.21 per year                                                                        | Highly likely | FEMA annualized frequency (modeled)                             | 45.9 (modeled)                                                                                           | 1986 to 2023 (38 years)                    | countywide |                                                                                                                                                                                                                     |
| Heat Wave       | 1.09                                                       | event-days per year              | about 1.09 days per year                                                                   | Possible      | Storm Events event-days in 2 of 30 years, 1996 to 2025 (6.67%)  | 17.7                                                                                                     | 2005-11-12 to 2024-11-12 (19 years)        | countywide |                                                                                                                                                                                                                     |
| Hurricane       | 0.0414                                                     | events per year                  | about 1 in 24 years                                                                        | Possible      | FEMA annualized frequency (modeled)                             | 16                                                                                                       | 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       | 0.0712                                                     | event-days per year              | about 0.0712 days per year                                                                 | Likely        | Storm Events event-days in 11 of 30 years, 1996 to 2025 (36.7%) | 5                                                                                                        | 1946-12-31 to 2014-02-12 (67 years)        | countywide |                                                                                                                                                                                                                     |
| Inland Flooding | 1.04                                                       | event-days per year              | about 1.04 days per year                                                                   | Likely        | Storm Events event-days in 20 of 30 years, 1996 to 2025 (66.7%) | 29                                                                                                       | 1996 to 2023 (28 years)                    | see B1-f   |                                                                                                                                                                                                                     |

| Hazard            | FEMA<br>annualized<br>frequency<br>(modeled)<br><i>unit per row</i> | Unit                                   | In plain terms                                                          | Descriptor       | Descriptor basis                                                         | NRI events or days in its<br>record period (hail, wind<br>and tornado are area-<br>weighted, so can be<br>fractional) | NRI period                                      | Location   | Note |
|-------------------|---------------------------------------------------------------------|----------------------------------------|-------------------------------------------------------------------------|------------------|--------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|------------|------|
| Landslide         | 1.1                                                                 | events per<br>year<br>(modeled)        | about 1.1 per year                                                      | Highly<br>likely | FEMA annualized<br>frequency<br>(modeled)                                | not shown                                                                                                             | modeled                                         | see B1-f   |      |
| Lightning         | 34.5                                                                | days per year<br>with a strike         | about 34.5 days per<br>year                                             | Highly<br>likely | FEMA annualized<br>frequency<br>(modeled)                                | not shown                                                                                                             | 1995 to 2023<br>(29 years;<br>CONUS)            | countywide |      |
| Strong<br>Wind    | 2.62                                                                | events per<br>year                     | about 2.62 per year                                                     | Highly<br>likely | FEMA annualized<br>frequency<br>(modeled)                                | 100                                                                                                                   | 1986 to 2023<br>(38 years)                      | countywide |      |
| Tornado           | 0.347                                                               | events per<br>year                     | about 1 in 3 years                                                      | Likely           | FEMA annualized<br>frequency<br>(modeled)                                | not shown                                                                                                             | 1950 to 2023<br>(EF2+); 1986 to<br>2023 (EF0-1) | see B1-f   |      |
| Wildfire          | 0.000181                                                            | annual<br>probability at<br>a location | chance a given<br>location in the county<br>burns in a year:<br>0.0181% | Possible         | Storm Events<br>records in 2 of 30<br>years, 1996 to<br>2025 (6.67%)     | not shown                                                                                                             | modeled                                         | see B1-f   |      |
| Winter<br>Weather | 14.4                                                                | event-days<br>per year                 | about 14.4 days per<br>year                                             | Highly<br>likely | Storm Events<br>event-days in 28 of<br>30 years, 1996 to<br>2025 (93.3%) | 273                                                                                                                   | 2005-11-12 to<br>2024-11-12 (19<br>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<br><i>county-coded records</i> | Years in period | Events per year<br><i>events / years</i> |
|------------------------------------------------|---------------------------|--------------|---------------------------------------|-----------------|------------------------------------------|
| Hail                                           | 1.00-1.99 in              | 1996 to 2025 | 28                                    | 30              | 0.933                                    |
| Hail                                           | 2.00 in+                  | 1996 to 2025 | 2                                     | 30              | 0.0667                                   |
| Thunderstorm Wind (counted as NRI Strong Wind) | 50-64 kt                  | 1996 to 2025 | 310                                   | 30              | 10.3                                     |
| Thunderstorm Wind (counted as NRI Strong Wind) | 65 kt+                    | 1996 to 2025 | 16                                    | 30              | 0.533                                    |
| Thunderstorm Wind (counted as NRI Strong Wind) | unmeasured or below 50 kt | 1996 to 2025 | 26                                    | 30              | 0.867                                    |
| Tornado                                        | EF0-1                     | 1996 to 2025 | 8                                     | 30              | 0.267                                    |
| Tornado                                        | EF2-3                     | 1996 to 2025 | 0                                     | 30              | 0                                        |
| 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<br><i>rated of all</i> | NRI risk score, 0 to 100 |        |      | Tracts by rating                                                          |
|-----------------|-------------------------------|--------------------------|--------|------|---------------------------------------------------------------------------|
|                 |                               | Min                      | Median | Max  |                                                                           |
| Avalanche       | 10 of 41                      | 53.8                     | 55.2   | 58.9 | Very Low 10, Not Applicable 31                                            |
| Cold Wave       | 41 of 41                      | 17.3                     | 21.9   | 26.6 | Relatively Low 35, Very Low 6                                             |
| Drought         | 0 of 41                       |                          |        |      | No Rating 41                                                              |
| Earthquake      | 41 of 41                      | 5.0                      | 20.9   | 73.0 | Relatively Low 3, Very Low 38                                             |
| Hail            | 41 of 41                      | 16.8                     | 32.3   | 50.2 | Relatively Low 4, Very Low 37                                             |
| Heat Wave       | 41 of 41                      | 3.3                      | 10.6   | 26.7 | Relatively Low 6, Very Low 35                                             |
| Hurricane       | 41 of 41                      | 45.4                     | 59.6   | 83.6 | Relatively Moderate 1, Relatively Low 36, Very Low 4                      |
| Ice Storm       | 41 of 41                      | 2.6                      | 11.8   | 68.8 | Relatively Low 1, Very Low 40                                             |
| Inland Flooding | 41 of 41                      | 0.4                      | 33.0   | 88.5 | Relatively High 3, Relatively Moderate 10, Relatively Low 16, Very Low 12 |
| Landslide       | 41 of 41                      | 19.4                     | 67.1   | 98.4 | Relatively Moderate 3, Relatively Low 14, Very Low 24                     |
| Lightning       | 41 of 41                      | 37.8                     | 77.1   | 94.1 | Relatively High 19, Relatively Moderate 18, Relatively Low 4              |
| Strong Wind     | 41 of 41                      | 20.2                     | 46.3   | 69.2 | Relatively Moderate 8, Relatively Low 33                                  |
| Tornado         | 41 of 41                      | 16.6                     | 31.4   | 64.3 | Relatively Moderate 1, Relatively Low 25, Very Low 15                     |
| Wildfire        | 38 of 41                      | 19.1                     | 46.5   | 74.8 | Relatively Low 2, Very Low 36, No Rating 3                                |
| Winter Weather  | 41 of 41                      | 61.2                     | 88.7   | 96.2 | Very High 2, Relatively High 32, Relatively Moderate 7                    |

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, 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.

**Each jurisdiction (starting figures from federal data)**

Sources: 1, 3, 4, 6

| <b>Jurisdiction</b>   | <b>Type</b>       | <b>Plan status</b>           | <b>Repetitive loss</b><br><i>FMA RL and SRL (44 CFR 77.2); repeat-flood, any definition</i> | <b>Public Assistance to this jurisdiction</b><br><i>FEMA records matched by applicant name; federal share obligated, nominal dollars</i> | <b>Event records naming this place</b><br><i>all years; since its plan</i> | <b>Notes</b>                                                                       |
|-----------------------|-------------------|------------------------------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------|------------------------------------------------------------------------------------|
| Centre County         | County            | Approved, expires 2030-06-16 |                                                                                             | \$24,815.21                                                                                                                              | 0 total; 0 since its plan                                                  | No NFIP community ID on this jurisdiction's plan row.                              |
| Bellefonte borough    | Organized Borough | Approved, expires 2030-06-16 | FMA RL 0, SRL 0; any 2                                                                      | \$575,480.22                                                                                                                             | 32 total; 3 since its plan                                                 |                                                                                    |
| Centre Hall borough   | Organized Borough | Approved, expires 2030-06-16 | FMA RL 0, SRL 0; any 0                                                                      | no Public Assistance recorded                                                                                                            | 15 total; 0 since its plan                                                 |                                                                                    |
| Howard borough        | Organized Borough | Approved, expires 2030-06-16 | FMA RL 0, SRL 0; any 0                                                                      | \$5,583.85                                                                                                                               | 8 total; 0 since its plan                                                  |                                                                                    |
| Milesburg borough     | Organized Borough | Approved, expires 2030-06-16 | FMA RL 0, SRL 0; any 3                                                                      | \$30,184.40                                                                                                                              | 7 total; 0 since its plan                                                  |                                                                                    |
| Millheim borough      | Organized Borough | Approved, expires 2030-06-16 | FMA RL 1, SRL 0; any 1                                                                      | \$18,861.07                                                                                                                              | 15 total; 1 since its plan                                                 |                                                                                    |
| Philipsburg borough   | Organized Borough | Approved, expires 2030-06-16 | FMA RL 0, SRL 0; any 0                                                                      | no Public Assistance recorded                                                                                                            | 18 total; 1 since its plan                                                 |                                                                                    |
| Port Matilda borough  | Organized Borough | Approved, expires 2030-06-16 | FMA RL 0, SRL 0; any 0                                                                      | \$5,139.88                                                                                                                               | 18 total; 1 since its plan                                                 |                                                                                    |
| Snow Shoe borough     | Organized Borough | Approved, expires 2030-06-16 | FMA RL 0, SRL 0; any 0                                                                      | no Public Assistance recorded                                                                                                            | 5 total; 1 since its plan                                                  |                                                                                    |
| State College borough | Organized Borough | Approved, expires 2030-06-16 | FMA RL 0, SRL 0; any 1                                                                      | \$9,699.53                                                                                                                               | 89 total; 5 since its plan                                                 |                                                                                    |
| Unionville borough    | Organized Borough | Approved, expires 2030-06-16 | FMA RL 0, SRL 0; any 0                                                                      | \$2,543.21                                                                                                                               | 5 total; 1 since its plan                                                  |                                                                                    |
| Benner township       | Township          | Approved, expires 2030-06-16 | FMA RL 0, SRL 0; any 1                                                                      | \$1,795,706.57                                                                                                                           | 0 total; 0 since its plan                                                  |                                                                                    |
| Boggs township        | Township          | Approved, expires 2030-06-16 | FMA RL 0, SRL 0; any 2                                                                      | \$161,248.52                                                                                                                             | 0 total; 0 since its plan                                                  |                                                                                    |
| Burnside township     | Township          | Approved, expires 2030-06-16 | FMA RL 0, SRL 0; any 0                                                                      | \$1,760.47                                                                                                                               | 0 total; 0 since its plan                                                  |                                                                                    |
| College township      | Township          | Approved, expires 2030-06-16 | FMA RL 0, SRL 0; any 4                                                                      | \$17,292.47                                                                                                                              | 0 total; 0 since its plan                                                  | Includes \$5,112.73 for declarations not counted as hazard incidents (DR-4506-PA). |
| Curtin township       | Township          | Approved, expires 2030-06-16 | FMA RL 0, SRL 0; any 0                                                                      | \$26,516.48                                                                                                                              | 4 total; 0 since its plan                                                  |                                                                                    |
| Ferguson township     | Township          | Approved, expires 2030-06-16 | FMA RL 0, SRL 0; any 0                                                                      | \$20,559.12                                                                                                                              | 0 total; 0 since its plan                                                  |                                                                                    |
| Gregg township        | Township          | Approved, expires 2030-06-16 | FMA RL 0, SRL 0; any 1                                                                      | \$25,334.04                                                                                                                              | 0 total; 0 since its plan                                                  |                                                                                    |

| Jurisdiction       | Type     | Plan status                  | Repetitive loss<br><i>FMA RL and SRL (44 CFR 77.2); repeat-flood, any definition</i> | Public Assistance to this jurisdiction<br><i>FEMA records matched by applicant name; federal share obligated, nominal dollars</i> | Event records naming this place<br><i>all years; since its plan</i> | Notes |
|--------------------|----------|------------------------------|--------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------|-------|
| Haines township    | Township | Approved, expires 2030-06-16 | FMA RL 0, SRL 0; any 0                                                               | no Public Assistance recorded                                                                                                     | 0 total; 0 since its plan                                           |       |
| Halfmoon township  | Township | Approved, expires 2030-06-16 | FMA RL 0, SRL 0; any 0                                                               | \$3,442.88                                                                                                                        | 0 total; 0 since its plan                                           |       |
| Harris township    | Township | Approved, expires 2030-06-16 | FMA RL 0, SRL 0; any 1                                                               | \$24,396.31                                                                                                                       | 0 total; 0 since its plan                                           |       |
| Howard township    | Township | Approved, expires 2030-06-16 | FMA RL 0, SRL 0; any 0                                                               | \$51,935.14                                                                                                                       | 8 total; 0 since its plan                                           |       |
| Huston township    | Township | Approved, expires 2030-06-16 | FMA RL 0, SRL 0; any 0                                                               | no Public Assistance recorded                                                                                                     | 0 total; 0 since its plan                                           |       |
| Liberty township   | Township | Approved, expires 2030-06-16 | FMA RL 0, SRL 0; any 0                                                               | \$161,801.53                                                                                                                      | 0 total; 0 since its plan                                           |       |
| Marion township    | Township | Approved, expires 2030-06-16 | FMA RL 0, SRL 0; any 0                                                               | no Public Assistance recorded                                                                                                     | 0 total; 0 since its plan                                           |       |
| Miles township     | Township | Approved, expires 2030-06-16 | FMA RL 0, SRL 0; any 0                                                               | no Public Assistance recorded                                                                                                     | 0 total; 0 since its plan                                           |       |
| Patton township    | Township | Approved, expires 2030-06-16 | FMA RL 0, SRL 0; any 0                                                               | \$138,240.38                                                                                                                      | 0 total; 0 since its plan                                           |       |
| Penn township      | Township | Approved, expires 2030-06-16 | FMA RL 0, SRL 0; any 3                                                               | \$6,228.94                                                                                                                        | 0 total; 0 since its plan                                           |       |
| Potter township    | Township | Approved, expires 2030-06-16 | FMA RL 0, SRL 0; any 1                                                               | \$4,038.77                                                                                                                        | 0 total; 0 since its plan                                           |       |
| Rush township      | Township | Approved, expires 2030-06-16 | FMA RL 0, SRL 0; any 0                                                               | no Public Assistance recorded                                                                                                     | 0 total; 0 since its plan                                           |       |
| Snow Shoe township | Township | Approved, expires 2030-06-16 | FMA RL 0, SRL 0; any 0                                                               | \$3,364.21                                                                                                                        | 5 total; 1 since its plan                                           |       |
| Spring township    | Township | Approved, expires 2030-06-16 | FMA RL 0, SRL 0; any 2                                                               | \$61,044.12                                                                                                                       | 0 total; 0 since its plan                                           |       |
| Taylor township    | Township | Approved, expires 2030-06-16 | FMA RL 0, SRL 0; any 0                                                               | \$26,885                                                                                                                          | 0 total; 0 since its plan                                           |       |
| Union township     | Township | Approved, expires 2030-06-16 | FMA RL 0, SRL 0; any 0                                                               | \$167,131.54                                                                                                                      | 0 total; 0 since its plan                                           |       |
| Walker township    | Township | Approved, expires 2030-06-16 | FMA RL 0, SRL 0; any 0                                                               | \$14,078.18                                                                                                                       | 0 total; 0 since its plan                                           |       |
| Worth township     | Township | Approved, expires 2030-06-16 | FMA RL 0, SRL 0; any 0                                                               | no Public Assistance recorded                                                                                                     | 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.

- 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<br><i>modeled dollars</i> | Agriculture exposure<br><i>modeled dollars</i> | Population exposed<br><i>people</i> | EAL buildings<br><i>modeled dollars per year</i> | EAL agriculture<br><i>modeled dollars per year</i> | Cost of expected deaths and injuries<br><i>FEMA's dollar value per year, not property damage</i> | EAL as % of exposure<br><i>buildings; agriculture where noted</i> | Storm Events damage since 2025-06-17<br><i>county-coded records, property plus crops, nominal dollars</i> | Zone-level damage since plan<br><i>property plus crops, reported for the zone</i> | Public Assistance since plan<br><i>nominal dollars; see note</i> | Note                                                                                                                                                                      |
|-----------------|---------------------------------------------|------------------------------------------------|-------------------------------------|--------------------------------------------------|----------------------------------------------------|--------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Avalanche       | \$137,261                                   | n/a                                            | 1                                   | under \$1                                        | n/a                                                | \$2,380                                                                                          | under 0.0001%                                                     |                                                                                                           |                                                                                   |                                                                  |                                                                                                                                                                           |
| Cold Wave       | \$34,386,547,141                            | \$117,776,389                                  | 158,157                             | \$491                                            | \$20,731                                           | \$222,958                                                                                        | under 0.0001%                                                     |                                                                                                           | \$0                                                                               |                                                                  |                                                                                                                                                                           |
| Drought         | n/a                                         | \$0                                            | n/a                                 | n/a                                              | \$0                                                | n/a                                                                                              |                                                                   |                                                                                                           |                                                                                   |                                                                  | agriculture exposure is 0 in NRI                                                                                                                                          |
| Earthquake      | \$63,532,224,510                            | n/a                                            | 158,172                             | \$315,941                                        | n/a                                                | \$66,470                                                                                         | 0.000497%                                                         |                                                                                                           |                                                                                   |                                                                  |                                                                                                                                                                           |
| Hail            | \$34,386,574,896                            | \$117,776,389                                  | 158,157                             | \$26,532                                         | \$2,102                                            | \$61,474                                                                                         | under 0.0001%                                                     | \$0                                                                                                       |                                                                                   |                                                                  |                                                                                                                                                                           |
| Heat Wave       | \$34,386,547,141                            | \$117,776,389                                  | 158,157                             | under \$1                                        | \$29                                               | \$316,205                                                                                        | under 0.0001%                                                     |                                                                                                           | \$0                                                                               |                                                                  |                                                                                                                                                                           |
| Hurricane       | \$34,384,765,978                            | \$117,518,910                                  | 158,144                             | \$1,098,060                                      | \$132,056                                          | \$54,836                                                                                         | 0.00319%                                                          |                                                                                                           |                                                                                   |                                                                  |                                                                                                                                                                           |
| Ice Storm       | \$34,386,427,665                            | n/a                                            | 158,157                             | \$44,101                                         | n/a                                                | \$4,070                                                                                          | 0.000128%                                                         |                                                                                                           |                                                                                   |                                                                  |                                                                                                                                                                           |
| Inland Flooding | \$34,343,211,157                            | \$6,636,790                                    | 3,753                               | \$19,286,497                                     | \$4,944                                            | \$83,977                                                                                         | n/a (see note)                                                    | \$0                                                                                                       |                                                                                   |                                                                  | 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       | \$1,125,959,830                             | n/a                                            | 5,867                               | \$25,226                                         | n/a                                                | \$15,362                                                                                         | 0.00224%                                                          |                                                                                                           |                                                                                   |                                                                  |                                                                                                                                                                           |
| Lightning       | \$34,386,574,896                            | n/a                                            | 158,157                             | \$22,461                                         | n/a                                                | \$1,030,671                                                                                      | under 0.0001%                                                     |                                                                                                           |                                                                                   |                                                                  |                                                                                                                                                                           |
| Strong Wind     | \$34,386,574,896                            | \$117,776,389                                  | 158,157                             | \$64,525                                         | \$1,845                                            | \$503,199                                                                                        | 0.000188%                                                         | \$116,500                                                                                                 |                                                                                   |                                                                  |                                                                                                                                                                           |
| Tornado         | \$34,386,574,896                            | \$117,776,389                                  | 158,157                             | \$620,428                                        | \$1,384                                            | \$271,193                                                                                        | 0.0018%                                                           | \$150,000                                                                                                 |                                                                                   |                                                                  |                                                                                                                                                                           |

| Hazard         | Building exposure<br><i>modeled dollars</i> | Agriculture exposure<br><i>modeled dollars</i> | Population exposed<br><i>people</i> | EAL buildings<br><i>modeled dollars per year</i> | EAL agriculture<br><i>modeled dollars per year</i> | Cost of expected deaths and injuries<br><i>FEMA's dollar value per year, not property damage</i> | EAL as % of exposure<br><i>buildings; agriculture where noted</i> | Storm Events damage since 2025-06-17<br><i>county-coded records, property plus crops, nominal dollars</i> | Zone-level damage since plan<br><i>property plus crops, reported for the zone</i> | Public Assistance since plan<br><i>nominal dollars; see note</i> | Note |
|----------------|---------------------------------------------|------------------------------------------------|-------------------------------------|--------------------------------------------------|----------------------------------------------------|--------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------|------|
| Wildfire       | \$2,725,779,199                             | \$13,362,145                                   | 18,532                              | \$11,953                                         | \$23                                               | \$3,569                                                                                          | 0.000439%                                                         |                                                                                                           |                                                                                   |                                                                  |      |
| Winter Weather | \$34,386,547,141                            | \$117,776,389                                  | 158,157                             | \$34,795                                         | \$49                                               | \$540,912                                                                                        | 0.000101%                                                         |                                                                                                           | \$50,000                                                                          |                                                                  |      |

Totals since 2025-06-17 (Storm Events through 2026-06-30): 29 county-coded records, 29 with a damage value recorded (including \$0), \$266,500; 10 zone-level records, 10 with a damage value recorded (including \$0), \$50,000 reported for the zone; Public Assistance: no counted declaration since the plan.

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                                                                                                                                                                    | 158,157             |
| Building value (total, not at risk)                                                                                                                                           | \$34,386,574,896    |
| Agriculture value (total, not at risk)                                                                                                                                        | \$117,776,389       |
| NRI risk rating (all hazards)                                                                                                                                                 | Relatively Low      |
| Expected annual loss, buildings and agriculture, all hazards                                                                                                                  | \$21,714,174        |
| 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) | \$3,177,276         |
| Social vulnerability rating                                                                                                                                                   | Relatively Moderate |
| Community resilience rating                                                                                                                                                   | Relatively 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) | 1          | Severe repetitive loss, FMA definition (44 CFR 77.2) | 0          |
| Repetitive loss, NFIP insurance definition    | 22         | Severe repetitive loss, NFIP insurance definition    | 0          |

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<br><i>properties</i> | SRL, FMA<br><i>properties</i> | RL, NFIP<br><i>properties</i> | SRL, NFIP<br><i>properties</i> | Any category<br><i>properties</i> | Mitigated<br><i>properties</i> | Currently insured<br><i>properties</i> |
|-------------------------------------|------------------------------|-------------------------------|-------------------------------|--------------------------------|-----------------------------------|--------------------------------|----------------------------------------|
| County total                        | 1                            | 0                             | 22                            | 0                              | 22                                | 0                              | 5                                      |
| of which: Bellefonte borough        | 0                            | 0                             | 2                             | 0                              | 2                                 | 0                              | 0                                      |
| of which: College township          | 0                            | 0                             | 4                             | 0                              | 4                                 | 0                              | 3                                      |
| of which: Harris township           | 0                            | 0                             | 1                             | 0                              | 1                                 | 0                              | 0                                      |
| of which: Milesburg borough         | 0                            | 0                             | 3                             | 0                              | 3                                 | 0                              | 1                                      |
| of which: Millheim borough          | 1                            | 0                             | 1                             | 0                              | 1                                 | 0                              | 0                                      |
| of which: Spring township           | 0                            | 0                             | 2                             | 0                              | 2                                 | 0                              | 0                                      |
| of which: State College borough     | 0                            | 0                             | 1                             | 0                              | 1                                 | 0                              | 0                                      |
| of which: Boggs township            | 0                            | 0                             | 2                             | 0                              | 2                                 | 0                              | 1                                      |
| of which: Gregg township            | 0                            | 0                             | 1                             | 0                              | 1                                 | 0                              | 0                                      |
| of which: Benner township           | 0                            | 0                             | 1                             | 0                              | 1                                 | 0                              | 0                                      |
| of which: Penn township             | 0                            | 0                             | 3                             | 0                              | 3                                 | 0                              | 0                                      |
| of which: Potter township           | 0                            | 0                             | 1                             | 0                              | 1                                 | 0                              | 0                                      |
| 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<br><i>properties</i> | SRL, FMA<br><i>properties</i> | RL, NFIP<br><i>properties</i> | SRL, NFIP<br><i>properties</i> | Any category<br><i>properties</i> | Mitigated<br><i>properties</i> | Currently insured<br><i>properties</i> |
|---------------------|-------------------|------------------------------|-------------------------------|-------------------------------|--------------------------------|-----------------------------------|--------------------------------|----------------------------------------|
| Bellefonte borough  | 420257            | 0                            | 0                             | 2                             | 0                              | 2                                 | 0                              | 0                                      |
| Centre Hall borough | 420258            | 0                            | 0                             | 0                             | 0                              | 0                                 | 0                              | 0                                      |
| Howard borough      | 420263            | 0                            | 0                             | 0                             | 0                              | 0                                 | 0                              | 0                                      |

| <b>Jurisdiction</b>   | <b>NFIP community ID</b> | <b>RL, FMA<br/><i>properties</i></b> | <b>SRL, FMA<br/><i>properties</i></b> | <b>RL, NFIP<br/><i>properties</i></b> | <b>SRL, NFIP<br/><i>properties</i></b> | <b>Any category<br/><i>properties</i></b> | <b>Mitigated<br/><i>properties</i></b> | <b>Currently insured<br/><i>properties</i></b> |
|-----------------------|--------------------------|--------------------------------------|---------------------------------------|---------------------------------------|----------------------------------------|-------------------------------------------|----------------------------------------|------------------------------------------------|
| Milesburg borough     | 420264                   | 0                                    | 0                                     | 3                                     | 0                                      | 3                                         | 0                                      | 1                                              |
| Millheim borough      | 420265                   | 1                                    | 0                                     | 1                                     | 0                                      | 1                                         | 0                                      | 0                                              |
| Philipsburg borough   | 420267                   | 0                                    | 0                                     | 0                                     | 0                                      | 0                                         | 0                                      | 0                                              |
| Port Matilda borough  | 420268                   | 0                                    | 0                                     | 0                                     | 0                                      | 0                                         | 0                                      | 0                                              |
| Snow Shoe borough     | 421459                   | 0                                    | 0                                     | 0                                     | 0                                      | 0                                         | 0                                      | 0                                              |
| State College borough | 420270                   | 0                                    | 0                                     | 1                                     | 0                                      | 1                                         | 0                                      | 0                                              |
| Unionville borough    | 420272                   | 0                                    | 0                                     | 0                                     | 0                                      | 0                                         | 0                                      | 0                                              |
| Benner township       | 421460                   | 0                                    | 0                                     | 1                                     | 0                                      | 1                                         | 0                                      | 0                                              |
| Boggs township        | 421193                   | 0                                    | 0                                     | 2                                     | 0                                      | 2                                         | 0                                      | 1                                              |
| Burnside township     | 421461                   | 0                                    | 0                                     | 0                                     | 0                                      | 0                                         | 0                                      | 0                                              |
| College township      | 420259                   | 0                                    | 0                                     | 4                                     | 0                                      | 4                                         | 0                                      | 3                                              |
| Curtin township       | 421462                   | 0                                    | 0                                     | 0                                     | 0                                      | 0                                         | 0                                      | 0                                              |
| Ferguson township     | 420260                   | 0                                    | 0                                     | 0                                     | 0                                      | 0                                         | 0                                      | 0                                              |
| Gregg township        | 421194                   | 0                                    | 0                                     | 1                                     | 0                                      | 1                                         | 0                                      | 0                                              |
| Haines township       | 420261                   | 0                                    | 0                                     | 0                                     | 0                                      | 0                                         | 0                                      | 0                                              |
| Halfmoon township     | 421463                   | 0                                    | 0                                     | 0                                     | 0                                      | 0                                         | 0                                      | 0                                              |
| Harris township       | 420262                   | 0                                    | 0                                     | 1                                     | 0                                      | 1                                         | 0                                      | 0                                              |
| Howard township       | 421464                   | 0                                    | 0                                     | 0                                     | 0                                      | 0                                         | 0                                      | 0                                              |
| Huston township       | 421195                   | 0                                    | 0                                     | 0                                     | 0                                      | 0                                         | 0                                      | 0                                              |
| Liberty township      | 421196                   | 0                                    | 0                                     | 0                                     | 0                                      | 0                                         | 0                                      | 0                                              |
| Marion township       | 421465                   | 0                                    | 0                                     | 0                                     | 0                                      | 0                                         | 0                                      | 0                                              |
| Miles township        | 421197                   | 0                                    | 0                                     | 0                                     | 0                                      | 0                                         | 0                                      | 0                                              |
| Patton township       | 420266                   | 0                                    | 0                                     | 0                                     | 0                                      | 0                                         | 0                                      | 0                                              |
| Penn township         | 421466                   | 0                                    | 0                                     | 3                                     | 0                                      | 3                                         | 0                                      | 0                                              |
| Potter township       | 421467                   | 0                                    | 0                                     | 1                                     | 0                                      | 1                                         | 0                                      | 0                                              |
| Rush township         | 421468                   | 0                                    | 0                                     | 0                                     | 0                                      | 0                                         | 0                                      | 0                                              |
| Snow Shoe township    | 421198                   | 0                                    | 0                                     | 0                                     | 0                                      | 0                                         | 0                                      | 0                                              |
| Spring township       | 420269                   | 0                                    | 0                                     | 2                                     | 0                                      | 2                                         | 0                                      | 0                                              |
| Taylor township       | 421469                   | 0                                    | 0                                     | 0                                     | 0                                      | 0                                         | 0                                      | 0                                              |
| Union township        | 421470                   | 0                                    | 0                                     | 0                                     | 0                                      | 0                                         | 0                                      | 0                                              |
| Walker township       | 421471                   | 0                                    | 0                                     | 0                                     | 0                                      | 0                                         | 0                                      | 0                                              |
| Worth township        | 421472                   | 0                                    | 0                                     | 0                                     | 0                                      | 0                                         | 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<br><i>properties</i> | SRL, FMA<br><i>properties</i> | RL, NFIP<br><i>properties</i> | SRL, NFIP<br><i>properties</i> | Any category<br><i>properties</i> | Mitigated<br><i>properties</i> | Currently insured<br><i>properties</i> |
|---------------------------|------------------------------|-------------------------------|-------------------------------|--------------------------------|-----------------------------------|--------------------------------|----------------------------------------|
| single-family residential | 1                            | 0                             | 16                            | 0                              | 16                                | 0                              | 5                                      |
| 2 to 4 unit residential   | 0                            | 0                             | 2                             | 0                              | 2                                 | 0                              | 0                                      |
| other residential         | 0                            | 0                             | 0                             | 0                              | 0                                 | 0                              | 0                                      |
| non-residential           | 0                            | 0                             | 4                             | 0                              | 4                                 | 0                              | 0                                      |
| 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 21 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](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](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_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/codes2020/national_place_by_county2020.txt), [https://www2.census.gov/geo/docs/reference/ct\\_change/ct\\_cou\\_to\\_cousub\\_crosswalk.xlsx](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)

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## 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.

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## 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).

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## Reuse, citation and corrections

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Cite this: Hazard Plain (2026). Centre County, PA: risk-assessment baseline packet, release 2026-10 (data as of 2026-09-30; County FIPS 42027). Automated baseline. <https://hazardplain.org/pa/42027/> 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](mailto:contact@hazardplain.org)