

Benton County, WA

Risk-assessment baseline packet

County FIPS: 53005 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: Expired on 2024-11-18. Plan: Benton County Hazard Mitigation Plan (FEMA plan 104423), approved 2019-11-19.

Update: FEMA tracker shows a plan in review.

Since the plan was approved on 2019-11-19: 1 new hazard declaration (1 incident) and 42 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 (\$40,279,691 a year), Earthquake (\$9,620,318) and Wildfire (\$6,888,937).

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; 53005 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:	Expired on 2024-11-18	Plan:	Benton County Hazard Mitigation Plan (FEMA plan 104423)
Approved:	2019-11-19	Days since expiry:	681
Update underway:	FEMA tracker shows a plan in review		

Until a new plan is approved, FEMA mitigation project grants (HMGP, FMA) need a FEMA exception (44 CFR 201.6(a)(3)).

What changed since your last plan (approved 2019-11-19)

New federal declarations:

1 new hazard declaration (1 incident): EM-3629-WA (Severe Storms, Straight-Line Winds, Flooding, Landslides, and Mudslides); also 2 COVID-19 declarations (not counted)

Repetitive loss now:

FMA RL 0, SRL 3 (44 CFR 77.2); any definition: 9

Storm Events records since approval:

42 records (data through 2026-06-30)

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

Source: 1

Jurisdiction	Type	Status	Plan	Approved	Expires	Days to expiry negative = days since expiry	Update underway
Benton County	County	Expired on 2024-11-18	Benton County Hazard Mitigation Plan (FEMA plan 104423)	2019-11-19	2024-11-18	-681	FEMA tracker shows a plan in review
Benton City city	City	Expired on 2024-11-18	Benton County Hazard Mitigation Plan (FEMA plan 104423)	2019-11-19	2024-11-18	-681	FEMA tracker shows a plan in review
Kennewick city	City	Expired on 2024-11-18	Benton County Hazard Mitigation Plan (FEMA plan 104423)	2019-11-19	2024-11-18	-681	FEMA tracker shows a plan in review
Prosser city	City	Expired on 2024-11-18	Benton County Hazard Mitigation Plan (FEMA plan 104423)	2019-11-19	2024-11-18	-681	FEMA tracker shows a plan in review
Richland city	City	Expired on 2024-11-18	Benton County Hazard Mitigation Plan (FEMA plan 104423)	2019-11-19	2024-11-18	-681	FEMA tracker shows a plan in review
West Richland city	City	Expired on 2024-11-18	Benton County Hazard Mitigation Plan (FEMA plan 104423)	2019-11-19	2024-11-18	-681	FEMA tracker shows a plan in review

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

Supports FEMA checklist item B1-a: hazard identification

Hazards NRI does not cover (local data needed)

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

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

Sources: 5, 6

Rank by EAL	Hazard	NRI risk rating	EAL rating	EAL buildings modeled dollars per year	EAL agriculture modeled dollars per year	Cost of expected deaths and injuries FEMA's dollar value per year, not property damage	EAL total (see note) modeled dollars per year	Storm Events records, 1996 to 2026-06-30 count	Why this hazard can be left out NRI Not Applicable, no declaration and no Storm Events record since 1996	Storm Events coverage note
1	Inland Flooding	Relatively Moderate	Relatively Moderate	\$40,272,531	\$252	\$6,908	\$40,279,691	12		
2	Earthquake	Relatively Moderate	Relatively Moderate	\$6,278,363	n/a	\$3,341,955	\$9,620,318			Storm Events does not record earthquakes.
3	Wildfire	Relatively Moderate	Relatively Moderate	\$6,386,616	\$19,848	\$482,473	\$6,888,937	30		
4	Heat Wave	Relatively Moderate	Relatively Moderate	\$1,194	\$293,126	\$5,313,352	\$5,607,672	14		
5	Cold Wave	Relatively Moderate	Relatively High	\$192	\$567,874	\$3,941,334	\$4,509,400	12		Includes 5 Frost/Freeze records (outside NRI's Cold Wave definition; counted in this table and in B1-d, not in the B1-e descriptor).
6	Ice Storm	Relatively High	Relatively High	\$53	n/a	\$929,179	\$929,232	6		
7	Strong Wind	Relatively Low	Relatively Low	\$83,843	\$1,270	\$443,331	\$528,444	141		Includes 93 High Wind and 5 Strong Wind records (NOAA non-thunderstorm wind types, outside NRI's Strong Wind definition).
8	Winter Weather	Relatively High	Relatively High	\$6,578	\$7,789	\$481,539	\$495,906	29		
9	Lightning	Relatively Moderate	Relatively Moderate	\$24,830	n/a	\$375,627	\$400,457	0		No recorded events in Storm Events since 1996 (data through 2026-06-30).

Rank by EAL	Hazard	NRI risk rating	EAL rating	EAL buildings <i>modeled dollars per year</i>	EAL agriculture <i>modeled dollars per year</i>	Cost of expected deaths and injuries <i>FEMA's dollar value per year, not property damage</i>	EAL total (see note) <i>modeled dollars per year</i>	Storm Events records, 1996 to 2026-06-30 <i>count</i>	Why this hazard can be left out <i>NRI Not Applicable, no declaration and no Storm Events record since 1996</i>	Storm Events coverage note
10	Hail	Relatively Low	Relatively Low	\$15,615	\$241,132	\$47,788	\$304,535	12		
11	Tornado	Very Low	Very Low	\$103,387	\$925	\$135,382	\$239,693	4		
12	Drought	Very Low	Very Low	n/a	\$20,260	n/a	\$20,260	1		
13	Landslide	Relatively Low	Relatively Low	\$12,905	n/a	\$99	\$13,004	1		
14	Volcanic Activity	Very Low	Very Low	\$3	n/a	\$853	\$856	0		Declared 1 time; no Storm Events record of this type.
15	Avalanche	Very Low	Very Low	\$0	n/a	\$148	\$148	0		No recorded events in Storm Events since 1996 (data through 2026-06-30).
	Hurricane	Not Applicable	Not Applicable					0	NRI rates hurricane Not Applicable for this county, and no counted federal declaration for this county names it (EM-3227-WA names it but is not counted as a local occurrence; see B1-d).	No recorded events in Storm Events since 1996 (data through 2026-06-30).

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 lightning and volcanic activity records (Storm Events records these hazards only in part).

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

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

Supports FEMA checklist item B1-b: hazard location

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

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

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

Source: 5

Hazard	Highest-rated census tracts <i>NRI risk rating, score 0 to 100</i>
Avalanche	tract 116 (Very Low, 24.7); tract 120 (Very Low, 22.2); tract 118.01 (Very Low, 21.8)
Earthquake	tract 112.01 (Relatively High, 89.2); tract 106 (Relatively High, 88.9); tract 110.02 (Relatively Moderate, 88.1)
Hurricane	no tract has a National Risk Index rating for this hazard
Landslide	tract 116 (Relatively Moderate, 97.0); tract 115.06 (Relatively Low, 95.3); tract 118.01 (Relatively Low, 93.4)
Tornado	tract 108.15 (Very Low, 25.7); tract 102.01 (Very Low, 21.5); tract 108.09 (Very Low, 21.2)
Volcanic Activity	tract 117.02 (Relatively Low, 96.1); tract 118.02 (Relatively Low, 90.9); tract 117.01 (Relatively Low, 89.8)
Wildfire	tract 108.15 (Relatively High, 98.8); tract 108.14 (Relatively High, 98.8); tract 118.01 (Relatively High, 98.2)

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 116 is Census Tract 116). FEMA's Resilience Analysis and Planning Tool maps the National Risk Index for every tract: <https://www.fema.gov/emergency-managers/practitioners/resilience-analysis-and-planning-tool>

Supports FEMA checklist item B1-c: hazard extent

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

Sources: 6, 7

Hazard	Scale	Records <i>count and years</i>	Observed range	Worst recorded event	Most damaging (when different)	How it applies to jurisdictions	Note
Avalanche	none (count and damage only)	0					
Cold/Wind Chill, Extreme Cold/Wind Chill	wind chill	7 records, 2002 to 2022 (7 zone-level)	1 day to 14 days (median 2 days); 6 with a recorded value	14 consecutive days, 2005-12-08 to 2005-12-21, zone-level		Countywide (zone-level records).	
Frost/Freeze (outside NRI's Cold Wave definition)	crop damage	5 records, 2022 to 2024 (5 zone-level)		No crop damage reported in 5 records.		Countywide (zone-level records).	

Hazard	Scale	Records <i>count and years</i>	Observed range	Worst recorded event	Most damaging (when different)	How it applies to jurisdictions	Note
Drought	U.S. Drought Monitor scale (D0 to D4)	1 record, 1999 (1 zone-level)	31 days; 1 with a recorded value	31 days (1 month), 1999-07-01 to 1999-07-31, 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)	14 records, 1970 to 2019	0.75 in to 1 in (median 0.88 in); 13 with a recorded value	1 in hail, 2019-05-28; same size also recorded on 1970-07-04, 2012-07-14, 2012-07-20, 2013-06-29, 2017-05-04		Event records naming jurisdictions in the plan: Prosser city (2 records), Benton City city (1 record), Kennewick city (1 record), Richland city (1 record).	
Excessive Heat, Heat	heat index (in event narratives)	14 records, 2002 to 2024 (14 zone-level)	1 day to 8 days (median 4.5 days); 12 with a recorded value	8 consecutive days, 2022-07-25 to 2022-08-01, zone-level		Countywide (zone-level records).	
Hurricane, Tropical Storm, Tropical Depression	Saffir-Simpson	0					Storm Events files every zone of a storm's episode under the storm's type; flooding from the storm is filed as Flood or Flash Flood records.
Ice Storm	Sperry-Piltz ice scale (local data)	6 records, 1996 to 2017 (6 zone-level)		No damage reported in 6 records.		Countywide (zone-level records).	
Flash Flood, Flood, Lakeshore Flood	damage and flood days (flood depth: FIRM)	12 records, 1997 to 2019 (4 zone-level)		Flood, 2009-01-08, \$453,000 property; \$0 crops (2009 dollars)		Event records naming jurisdictions in the plan: Prosser city (2 records), Richland city (2 records). Zone-level records (4) 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)	1 record, 2012 (1 zone-level)		No damage reported in 1 record.		Countywide (zone-level records).	
Lightning	annualized frequency (the measure FEMA's Local Mitigation Planning Handbook names)	0					Storm Events lists lightning with damage or casualties.
High Wind and Strong Wind (outside NRI's Strong Wind definition)	wind speed (kt and mph)	98 records, 1997 to 2026 (98 zone-level)	35 kt (40 mph) to 83 kt (96 mph) (median 56 kt (64 mph)); 93 with a recorded value	83 kt (96 mph) measured gust, High Wind, 2011-01-16; NWS zone WAZ028	Strong Wind, 2018-04-27, \$1,000,000 property; \$0 crops (zone total, 2018 dollars)	Countywide (zone-level records).	
Thunderstorm Wind	wind speed (kt and mph)	52 records, 1978 to 2020	50 kt (58 mph) to 70 kt (81 mph) (median 53 kt (61 mph)); 46 with a recorded value	70 kt (81 mph) estimated gust, Thunderstorm Wind, 2006-05-19	Thunderstorm Wind, 2002-07-07, \$20,000 property; crops not reported (2002 dollars)	Event records naming jurisdictions in the plan: Kennewick city (6 records), Richland city (5 records), Prosser city (3 records), West Richland city (1 record).	

Hazard	Scale	Records <i>count and years</i>	Observed range	Worst recorded event	Most damaging (when different)	How it applies to jurisdictions	Note
Tornado	Enhanced Fujita (Fujita before Feb 2007)	5 records, 1956 to 2020	F/EF0; 5 with a recorded value	EF0 tornado, 2016-05-21, 0.15 mi within this county, 100 yd wide, \$20,000 property; \$0 crops (2016 dollars)		No event record names a jurisdiction in the plan.	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).
Volcanic Ash, Volcanic Ashfall	Volcanic Explosivity Index (local data)	0					
Wildfire	acres burned (local data)	30 records, 1997 to 2020 (27 zone-level)		Wildfire, 2005-06-25, \$46,000 property; crops not reported (2005 dollars); NWS zone WAZ028		Event records naming jurisdictions in the plan: Prosser city (1 record). Zone-level records (27) apply countywide.	
Winter Storm, Heavy Snow, Blizzard, Lake- Effect Snow, Winter Weather, Sleet	none in data (snowfall: local data)	29 records, 1998 to 2022 (29 zone-level)		No damage reported in 29 records.		Countywide (zone-level records).	

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, lightning and volcanic ash, volcanic ashfall.

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: 20 declarations covering 17 separate hazard incidents counted in this packet (declarations for the same incident count once; non-natural and evacuation-only declarations are not counted).

Federal disaster declarations for this county

Sources: 1, 2, 3

Declared	Incident began	FEMA number	Type	Title	Mapped hazard	County Public Assistance <i>federal share obligated, nominal dollars</i>	Flags	Notes
2025-12-12	2025-12-09	EM-3629-WA	Emergency	Severe Storms, Straight-Line Winds, Flooding, Landslides, and Mudslides	Inland Flooding (primary); also designated: Landslide, Strong Wind	no Public Assistance recorded	new since last plan; within last 5 years	
2020-03-22	2020-01-20	DR-4481-WA	Major disaster	COVID-19 Pandemic	Non-natural, not counted	\$361,212.02	new since last plan	
2020-03-13	2020-01-20	EM-3427-WA	Emergency	COVID-19	Non-natural, not counted	no Public Assistance recorded	new since last plan	same incident as DR-4481
2017-04-21	2017-01-30	DR-4309-WA	Major disaster	Severe Winter Storms, Flooding, Landslides, Mudslides	Inland Flooding (primary); also designated: Landslide, Winter Weather	\$1,756,801.90		

Declared	Incident began	FEMA number	Type	Title	Mapped hazard	County Public Assistance	Flags	Notes
						<i>federal share obligated, nominal dollars</i>		
2016-08-01	2016-07-31	FM-5142-WA	Fire management	South Ward Gap Fire	Wildfire	no Public Assistance recorded		
2009-08-22	2009-08-21	FM-2827-WA	Fire management	Dry Creek Fire Complex	Wildfire	no Public Assistance recorded		
2009-03-02	2008-12-12	DR-1825-WA	Major disaster	Severe Winter Storm and Record and Near Record Snow	Winter Weather	\$67,594.08		
2009-01-30	2009-01-06	DR-1817-WA	Major disaster	Severe Winter Storm, Landslides, Mudslides, and Flooding	Inland Flooding (primary); also designated: Landslide, Winter Weather	PA not declared for this county		
2005-09-07	2005-08-29	EM-3227-WA	Emergency	Hurricane Katrina Evacuation	Hurricane: evacuation support, not a local hazard event; not counted	no Public Assistance recorded		
2001-03-01	2001-02-28	DR-1361-WA	Major disaster	Earthquake	Earthquake	PA not declared for this county		
2000-02-29	2000-06-28	FM-2311-WA	Fire management	Two Fork Fire	Wildfire	no Public Assistance recorded		
1997-01-17	1996-12-26	DR-1159-WA	Major disaster	Severe Winter Storms, Land & Muds Slides, Flooding	Inland Flooding; Landslide; Winter Weather	no Public Assistance recorded		
1996-02-09	1996-01-26	DR-1100-WA	Major disaster	High Winds, Severe Storms and Flooding	Inland Flooding (primary); also designated: Strong Wind	no Public Assistance recorded		
1990-01-18	1990-01-06	DR-852-WA	Major disaster	Severe Storms & Flooding	Inland Flooding	no Public Assistance recorded		
1980-05-21	1980-05-21	DR-623-WA	Major disaster	Volcanic Eruption, Mt. St. Helens	Volcanic Activity	no Public Assistance recorded		
1977-12-10	1977-12-10	DR-545-WA	Major disaster	Severe Storms, Mudslides, & Flooding	Inland Flooding (primary); also designated: Landslide	no Public Assistance recorded		
1977-03-31	1977-03-31	EM-3037-WA	Emergency	Drought	Drought	no Public Assistance recorded		
1975-12-13	1975-12-13	DR-492-WA	Major disaster	Severe Storms & Flooding	Inland Flooding	no Public Assistance recorded		
1974-01-25	1974-01-25	DR-414-WA	Major disaster	Severe Storms, Snowmelt & Flooding	Inland Flooding	no Public Assistance recorded		
1964-12-29	1964-12-29	DR-185-WA	Major disaster	Heavy Rains & Flooding	Inland Flooding	no Public Assistance recorded		

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

Statewide declarations

Source: 2

Declared	Incident began	FEMA number	Type	Title	Mapped hazard
1963-03-02	1963-03-02	DR-146-WA	Major disaster	Floods	Inland Flooding
1962-10-20	1962-10-20	DR-137-WA	Major disaster	Severe Storms	Hazard not mapped (severe storm title names no single hazard); not counted
1957-03-06	1957-03-06	DR-70-WA	Major disaster	Floods	Inland Flooding
1956-02-25	1956-02-25	DR-50-WA	Major disaster	Flood	Inland Flooding

FEMA recorded these with designated area Statewide and no county, so they are listed on every county page in the state and not counted with county rows. Local data needed: whether each one affected this county.

16 Fire Management declarations (1970-07-18 to 1998-09-25) FEMA filed as Statewide with no county; each names one local fire. Listed on the state page.

Public Assistance not placed in any Washington county: 1 row, \$248,381.20; listed on the Washington state page.

Source: 3

Previous occurrences by hazard, with explicit no-event rows

Sources: 2, 6, 7

Hazard	Storm Events records, all years on file <i>(years in the Period column)</i>	Since plan approval <i>records</i>	In the 12 months before plan approval <i>records</i>	Last 5 years <i>records</i>	Declared incidents, all years <i>separate disasters</i>	Declared since approval <i>separate disasters</i>	Period	Statement
Avalanche	0	0	0	0	0	0	1996 to 2026-06-30	No recorded events, 1996 to 2026-06-30, NOAA NCEI Storm Events
Cold Wave	12	6	0	6	0	0	1996 to 2026-06-30	Includes 5 Frost/Freeze records.
Drought	1	0	0	0	1	0	1996 to 2026-06-30	
Earthquake	0	0	0	0	1	0		Storm Events does not record earthquakes; the USGS earthquake catalog is the source.
Hail	14	0	1	0	0	0	1955 to 2026-06-30	
Heat Wave	14	9	0	6	0	0	1996 to 2026-06-30	
Hurricane	0	0	0	0	0	0	1996 to 2026-06-30	No recorded events, 1996 to 2026-06-30, NOAA NCEI Storm Events
Ice Storm	6	0	0	0	0	0	1996 to 2026-06-30	
Inland Flooding	12	0	1	0	10	1	1996 to 2026-06-30	
Landslide	1	0	0	0	5	1	1996 to 2026-06-30	
Lightning	0	0	0	0	0	0	1996 to 2026-06-30	No recorded events, 1996 to 2026-06-30, NOAA NCEI Storm Events
Strong Wind	150	21	2	14	2	1	1955 to 2026-06-30	Includes 93 High Wind and 5 Strong Wind records.
Tornado	5	1	0	0	0	0	1950 to 2026-06-30	
Volcanic Activity	0	0	0	0	1	0	1996 to 2026-06-30	No Storm Events records of this type; 1 federal declared incident (see declarations table)
Wildfire	30	1	1	0	3	0	1996 to 2026-06-30	
Winter Weather	29	4	4	2	4	0	1996 to 2026-06-30	

Notable Storm Events records

Sources: 1, 6, 7

Date	Event type	Magnitude or extent	Damage <i>nominal dollars</i>	Deaths, injuries <i>direct only</i>	Location	Flags	Why listed
2024-07-12	Excessive Heat		\$0 property; \$0 crops (zone total, 2024 dollars)	3, 0	NWS zone WAZ028 (LOWER COLUMBIA BASIN), zone-level	new since last plan; within last 5 years	deaths or injuries recorded
2022-07-25	Excessive Heat		\$0 property; \$0 crops (zone total, 2022 dollars)	0, 0	NWS zone WAZ028 (LOWER COLUMBIA BASIN), zone-level	new since last plan; within last 5 years	B1-c worst recorded: Excessive Heat, Heat
2021-06-26	Excessive Heat		\$0 property; \$0 crops (zone total, 2021 dollars)	2, 0	NWS zone WAZ028 (LOWER COLUMBIA BASIN), zone-level	new since last plan	deaths or injuries recorded
2019-05-28	Hail	1 in	damage not reported	0, 0	BENTON CITY	in the 12 months before plan approval	B1-c worst recorded: Hail
2016-05-21	Tornado	EF0, 0.15 mi within this county, 100 yd wide	\$20,000 property; \$0 crops (2016 dollars)	0, 0	KENNEWICK VISTA ARPT		B1-c worst recorded: Tornado
2011-01-16	High Wind	83 kt (96 mph) measured gust	damage not reported	0, 0	NWS zone WAZ028 (LOWER COLUMBIA BASIN), zone-level		B1-c worst recorded: High Wind and Strong Wind
2009-01-08	Flood		\$453,000 property; \$0 crops (2009 dollars)	0, 0	PROSSER to RICHLAND JCT		B1-c worst recorded: Flash Flood, Flood, Lakeshore Flood
2006-05-19	Thunderstorm Wind	70 kt (81 mph) estimated gust	damage not reported	0, 0	FINLEY		B1-c worst recorded: Thunderstorm Wind
2005-12-08	Cold/Wind Chill		damage not reported	0, 0	NWS zone WAZ028 (BENTON/FRANKLIN/WALLA WALLA T SE/E KCLICKITAT), zone-level		B1-c worst recorded: Cold/Wind Chill, Extreme Cold/Wind Chill
2005-06-25	Wildfire		\$46,000 property; crops not reported (zone total, 2005 dollars)	0, 0	NWS zone WAZ028 (LOWER COLUMBIA BASIN), zone-level		B1-c worst recorded: Wildfire
1999-07-01	Drought		damage not reported	0, 0	NWS zone WAZ028 (LOWER COLUMBIA BASIN), zone-level		B1-c worst recorded: Drought
1997-01-16	Ice Storm		damage not reported	1, 5	NWS zone WAZ028 (LOWER COLUMBIA BASIN), zone-level		deaths or injuries recorded

The full list is in the Excel file, sheet "B1-d Storm Events history" (274 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).

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

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

Probability: FEMA annualized frequency and descriptor per hazard

Sources: 5, 6

Hazard	FEMA annualized frequency (modeled) <i>unit per row</i>	Unit	In plain terms	Descriptor	Descriptor basis	NRI events or days in its record period (hail, wind and tornado are area-weighted, so can be fractional)	NRI period	Location	Note
Avalanche	0.01	events per year	about 1 in 100 years	Possible	FEMA annualized frequency (modeled)	0	1994 to 2023 (30 years)	see B1-f	0.01 is NRI's minimum avalanche frequency for a county in an avalanche susceptibility zone; NRI records no avalanche here, so the descriptor reflects the floor, not local events.
Cold Wave	0.421	event-days per year	about 0.421 days per year	Likely	Storm Events event-days in 6 of 30 years, 1996 to 2025 (20%)	8	2005-11-12 to 2024-11-12 (19 years)	countywide	
Drought	25.7	event-days per year	about 25.7 days per year	Possible	Storm Events event-days in 1 of 30 years, 1996 to 2025 (3.33%)	826	2000 to 2025 (25.25 years; D3 and D4 only)	countywide	
Earthquake	0.00576	annual probability at a location	chance a given location in the county has at least minor-damage shaking in a year: 0.576%			not shown	modeled	see B1-f	No descriptor (Storm Events does not record earthquakes).
Hail	0.214	events per year	about 1 in 5 years	Likely	FEMA annualized frequency (modeled)	8.2 (modeled)	1986 to 2023 (38 years)	countywide	
Heat Wave	7.89	event-days per year	about 7.89 days per year	Likely	Storm Events event-days in 8 of 30 years, 1996 to 2025 (26.7%)	109	2005-11-12 to 2024-11-12 (19 years)	countywide	
Hurricane		events per year					1851 to 2024 (Atlantic); 1949 to 2024 (Pacific)	see B1-f	Not Applicable in NRI for this county; no descriptor.
Ice Storm	0.228	event-days per year	about 0.228 days per year	Likely	Storm Events event-days in 4 of 30 years, 1996 to 2025 (13.3%)	16	1946-12-31 to 2014-02-12 (67 years)	countywide	
Inland Flooding	0.393	event-days per year	about 0.393 days per year	Likely	Storm Events event-days in 6 of 30 years, 1996 to 2025 (20%)	11	1996 to 2023 (28 years)	see B1-f	
Landslide	0.476	events per year (modeled)	about 1 in 2 years	Likely	FEMA annualized frequency (modeled)	not shown	modeled	see B1-f	

Hazard	FEMA annualized frequency (modeled)	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
	<i>unit per row</i>								
Lightning	7.44	days per year with a strike	about 7.44 days per year	Highly likely	FEMA annualized frequency (modeled)	not shown	1995 to 2023 (29 years; CONUS)	countywide	
Strong Wind	0.294	events per year	about 1 in 3 years	Likely	FEMA annualized frequency (modeled)	12	1986 to 2023 (38 years)	countywide	
Tornado	0.0642	events per year	about 1 in 16 years	Possible	FEMA annualized frequency (modeled)	not shown	1950 to 2023 (EF2+); 1986 to 2023 (EF0-1)	see B1-f	
Volcanic Activity	0.0131	annual probability	about 1 in 76 years	Possible	FEMA annualized frequency (modeled)	not shown	modeled	see B1-f	
Wildfire	0.0109	annual probability at a location	chance a given location in the county burns in a year: 1.09%	Likely	Storm Events records in 14 of 30 years, 1996 to 2025 (46.7%)	not shown	modeled	see B1-f	
Winter Weather	7.95	event-days per year	about 7.95 days per year	Likely	Storm Events event- days in 13 of 30 years, 1996 to 2025 (43.3%)	151	2005-11-12 to 2024-11-12 (19 years)	countywide	

FEMA annualized frequency (modeled) is the National Risk Index v1.20 (December 2025) estimate of how often a hazard affects this county in a year; it is not recorded events divided by years, and its unit differs by hazard (events, event-days, or days with a lightning strike per year). For earthquake, wildfire, coastal flooding and tsunami the value is the chance (or number of events) at a location in the county, not across the county, so no "1 in N years" is given and the descriptor comes from Storm Events where it has a record (none for earthquake). The Methods page gives each hazard's method, from FEMA's National Risk Index Technical Documentation v1.20.

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

Descriptor scale used in this packet (defined per unit)

Sources: 5, 6

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

Intensity bands: historical frequency (Storm Events)

Source: 6

Hazard	Band	Years	Events <i>county-coded records</i>	Years in period	Events per year <i>events / years</i>
Hail	1.00-1.99 in	1996 to 2025	5	30	0.167
Hail	2.00 in+	1996 to 2025	0	30	0
Thunderstorm Wind (counted as NRI Strong Wind)	50-64 kt	1996 to 2025	39	30	1.3
Thunderstorm Wind (counted as NRI Strong Wind)	65 kt+	1996 to 2025	2	30	0.0667
Thunderstorm Wind (counted as NRI Strong Wind)	unmeasured or below 50 kt	1996 to 2025	2	30	0.0667
Tornado	EF0-1	1996 to 2025	4	30	0.133
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 <i>rated of all</i>	NRI risk score, 0 to 100			Tracts by rating
		Min	Median	Max	
Avalanche	6 of 45	17.3	21.4	24.7	Very Low 6, Not Applicable 39
Cold Wave	45 of 45	16.8	65.7	95.1	Relatively High 3, Relatively Moderate 41, Very Low 1
Drought	34 of 45	67.1	69.4	89.8	Relatively Low 3, Very Low 31, No Rating 11
Earthquake	45 of 45	33.2	76.4	89.2	Relatively High 2, Relatively Moderate 20, Relatively Low 22, Very Low 1
Hail	45 of 45	12.4	26.9	96.8	Relatively High 1, Relatively Moderate 1, Relatively Low 9, Very Low 34
Heat Wave	45 of 45	2.2	83.5	94.3	Relatively High 20, Relatively Moderate 24, Very Low 1
Hurricane	0 of 45				Not Applicable 45
Ice Storm	45 of 45	1.3	83.0	95.9	Relatively High 4, Relatively Moderate 35, Relatively Low 2, Very Low 4
Inland Flooding	45 of 45	9.5	68.3	97.8	Very High 1, Relatively High 13, Relatively Moderate 17, Relatively Low 13, Very Low 1
Landslide	44 of 45	13.4	53.1	97.0	Relatively Moderate 1, Relatively Low 11, Very Low 32, No Rating 1
Lightning	45 of 45	1.1	41.9	70.9	Relatively Moderate 11, Relatively Low 32, Very Low 2

Hazard	Tracts <i>rated of all</i>	NRI risk score, 0 to 100			Tracts by rating
		Min	Median	Max	
Strong Wind	45 of 45	10.3	40.0	64.3	Relatively Moderate 1, Relatively Low 42, Very Low 2
Tornado	45 of 45	3.8	12.7	25.7	Very Low 45
Volcanic Activity	45 of 45	41.2	84.6	96.1	Relatively Low 5, Very Low 40
Wildfire	41 of 45	18.5	93.0	98.8	Relatively High 15, Relatively Moderate 8, Relatively Low 10, Very Low 8, No Rating 4
Winter Weather	45 of 45	16.8	83.0	94.9	Relatively High 33, Relatively Moderate 11, Very Low 1

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

Hail: Agriculture is 79% of NRI's expected annual loss for this hazard in the county, so the tract range mostly reflects where crop and livestock value is.

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

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

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

Each jurisdiction (starting figures from federal data)

Sources: 1, 3, 4, 6

Jurisdiction	Type	Plan status	Repetitive loss <i>FMA RL and SRL (44 CFR 77.2); repeat-flood, any definition</i>	Public Assistance to this jurisdiction <i>FEMA records matched by applicant name; federal share obligated, nominal dollars</i>	Event records naming this place <i>all years; since its plan</i>	Notes
Benton County	County	Expired on 2024-11-18	FMA RL 0, SRL 2; any 7	\$638,245.61	0 total; 0 since its plan	Includes \$173,622.90 for declarations not counted as hazard incidents (DR-4481-WA).
Benton City city	City	Expired on 2024-11-18	FMA RL 0, SRL 0; any 0	\$33,685.28	1 total; 0 since its plan	
Kennewick city	City	Expired on 2024-11-18	FMA RL 0, SRL 0; any 0	\$1,266,115.13	7 total; 1 since its plan	
Prosser city	City	Expired on 2024-11-18	FMA RL 0, SRL 0; any 0	\$54,171.59	8 total; 1 since its plan	
Richland city	City	Expired on 2024-11-18	FMA RL 0, SRL 0; any 0	no Public Assistance recorded	8 total; 0 since its plan	
West Richland city	City	Expired on 2024-11-18	FMA RL 0, SRL 1; any 2	\$5,801.27	1 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 <i>modeled dollars</i>	Agriculture exposure <i>modeled dollars</i>	Population exposed <i>people</i>	EAL buildings <i>modeled dollars per year</i>	EAL agriculture <i>modeled dollars per year</i>	Cost of expected deaths and injuries <i>FEMA's dollar value per year, not property damage</i>	EAL as % of exposure <i>buildings; agriculture where noted</i>	Storm Events damage since 2019-11-19 <i>county-coded records, property plus crops, nominal dollars</i>	Zone-level damage since plan <i>property plus crops, reported for the zone</i>	Public Assistance since plan <i>nominal dollars; see note</i>	Note
Avalanche	\$0	n/a	under 1	\$0	n/a	\$148					building exposure is 0 in NRI
Cold Wave	\$39,345,841,761	\$1,294,299,762	206,541	\$192	\$567,874	\$3,941,334	under 0.0001%		\$0		
Drought	n/a	\$744,008,360	n/a	n/a	\$20,260	n/a	0.00272% (agriculture)				NRI has no building exposure for this hazard; agriculture shown
Earthquake	\$69,232,928,785	n/a	206,873	\$6,278,363	n/a	\$3,341,955	0.00907%				
Hail	\$39,345,841,761	\$1,294,299,762	206,541	\$15,615	\$241,132	\$47,788	under 0.0001%				
Heat Wave	\$39,345,841,761	\$1,294,299,762	206,541	\$1,194	\$293,126	\$5,313,352	under 0.0001%		\$0		
Hurricane											Not Applicable in NRI for this county
Ice Storm	\$39,317,739,371	n/a	206,318	\$53	n/a	\$929,179	under 0.0001%				

Hazard	Building exposure <i>modeled dollars</i>	Agriculture exposure <i>modeled dollars</i>	Population exposed <i>people</i>	EAL buildings <i>modeled dollars per year</i>	EAL agriculture <i>modeled dollars per year</i>	Cost of expected deaths and injuries <i>FEMA's dollar value per year, not property damage</i>	EAL as % of exposure <i>buildings; agriculture where noted</i>	Storm Events damage since 2019-11-19 <i>county-coded records, property plus crops, nominal dollars</i>	Zone-level damage since plan <i>property plus crops, reported for the zone</i>	Public Assistance since plan <i>nominal dollars; see note</i>	Note
Inland Flooding	\$39,335,884,620	\$14,213,211	1,963	\$40,272,531	\$252	\$6,908	n/a (see note)			no Public Assistance recorded (1 declaration)	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	\$556,618,217	n/a	2,561	\$12,905	n/a	\$99	0.00232%			no Public Assistance recorded (1 declaration)	
Lightning	\$39,345,841,761	n/a	206,541	\$24,830	n/a	\$375,627	under 0.0001%				
Strong Wind	\$39,345,841,761	\$1,294,299,762	206,541	\$83,843	\$1,270	\$443,331	0.000213%	\$0	\$0	no Public Assistance recorded (1 declaration)	
Tornado	\$39,345,841,761	\$1,294,299,762	206,541	\$103,387	\$925	\$135,382	0.000263%	\$0			
Volcanic Activity	\$39,345,841,761	n/a	206,541	\$3	n/a	\$853	under 0.0001%				
Wildfire	\$4,155,182,805	\$580,807,908	31,726	\$6,386,616	\$19,848	\$482,473	0.154%		\$0		
Winter Weather	\$39,345,841,761	\$1,294,299,762	206,541	\$6,578	\$7,789	\$481,539	under 0.0001%		\$0		

Totals since 2019-11-19 (Storm Events through 2026-06-30): 4 county-coded records, 4 with a damage value recorded (including \$0), \$0; 38 zone-level records, 38 with a damage value recorded (including \$0), \$0 reported for the zone; Public Assistance: none recorded on the 1 counted declaration.

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	206,541
Building value (total, not at risk)	\$39,345,841,761
Agriculture value (total, not at risk)	\$1,294,299,762
NRI risk rating (all hazards)	Relatively Moderate
Expected annual loss, buildings and agriculture, all hazards	\$54,338,586
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)	\$15,499,969
Social vulnerability rating	Relatively Low
Community resilience rating	Relatively Moderate
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)	0	Severe repetitive loss, FMA definition (44 CFR 77.2)	3
Repetitive loss, NFIP insurance definition	9	Severe repetitive loss, NFIP insurance definition	3

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 <i>properties</i>	SRL, FMA <i>properties</i>	RL, NFIP <i>properties</i>	SRL, NFIP <i>properties</i>	Any category <i>properties</i>	Mitigated <i>properties</i>	Currently insured <i>properties</i>
County total	0	3	9	3	9	0	1
of which: West Richland city	0	1	2	1	2	0	0
of which: Benton County (unincorporated area)	0	2	7	2	7	0	1
Statewide, no county in FEMA's file	0	0	2	0	2	0	0

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

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

Sources: 1, 4

Jurisdiction	NFIP community ID	RL, FMA <i>properties</i>	SRL, FMA <i>properties</i>	RL, NFIP <i>properties</i>	SRL, NFIP <i>properties</i>	Any category <i>properties</i>	Mitigated <i>properties</i>	Currently insured <i>properties</i>
Benton County	530237	0	2	7	2	7	0	1
Benton City city	530010	0	0	0	0	0	0	0
Kennewick city	530011	0	0	0	0	0	0	0
Prosser city	530012	0	0	0	0	0	0	0
Richland city	535533	0	0	0	0	0	0	0
West Richland city	530014	0	1	2	1	2	0	0

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

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

County repeat-flood properties by occupancy group

Sources: 1, 4

Occupancy group	RL, FMA <i>properties</i>	SRL, FMA <i>properties</i>	RL, NFIP <i>properties</i>	SRL, NFIP <i>properties</i>	Any category <i>properties</i>	Mitigated <i>properties</i>	Currently insured <i>properties</i>
single-family residential	0	3	9	3	9	0	1
2 to 4 unit residential	0	0	0	0	0	0	0
other residential	0	0	0	0	0	0	0
non-residential	0	0	0	0	0	0	0
not reported	0	0	0	0	0	0	0

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 9 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)
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3. FEMA, OpenFEMA PublicAssistanceFundedProjectsSummaries v1, version 2026-09-29T150754Z, pulled 2026-09-30, <https://www.fema.gov/api/open/v1/PublicAssistanceFundedProjectsSummaries> (API)
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5. FEMA, FEMA National Risk Index 1.20.0 (December 2025), county and census tract tables, version 1.20.0, pulled 2026-09-30, https://www.fema.gov/about/reports-and-data/openfema/nri/v120/NRI_Table_Counties.zip (download, 25 MB), https://www.fema.gov/about/reports-and-data/openfema/nri/v120/NRI_Table_CensusTracts.zip (download, 635 MB)
6. NOAA NCEI, NOAA NCEI Storm Events Database, details files (csvfiles v1.0), version c20260918, pulled 2026-09-30, <https://www.ncei.noaa.gov/pub/data/swdi/stormevents/csvfiles/>
7. NOAA National Weather Service, NWS county-public forecast zones correlation file, version bp03mr20 to bp16ap26 (11 files; newest bp16ap26), pulled 2026-09-30, <https://www.weather.gov/gis/ZoneCounty>
8. U.S. Census Bureau, Census 2024 Gazetteer, 2020 place by county, CT county-to-cousub crosswalk, version 2024-gazetteer, pulled 2026-09-30, https://www2.census.gov/geo/docs/maps-data/data/gazetteer/2024_Gazetteer/2024_Gaz_counties_national.zip, [https://www2.census.gov/geo/docs/maps-data/data/gazetteer/2024_Gazetteer/2024_Gaz_cousubs_national.zip](https://www2.census.gov/geo/docs/maps-data/data/gazetteer/2024_Gaz_cousubs_national.zip), [https://www2.census.gov/geo/docs/maps-data/data/gazetteer/2024_Gazetteer/2024_Gaz_place_national.zip](https://www2.census.gov/geo/docs/maps-data/data/gazetteer/2024_Gaz_place_national.zip), [https://www2.census.gov/geo/docs/maps-data/data/gazetteer/2024_Gazetteer/2024_Gaz_unsd_national.zip](https://www2.census.gov/geo/docs/maps-data/data/gazetteer/2024_Gaz_unsd_national.zip), [https://www2.census.gov/geo/docs/maps-data/data/gazetteer/2024_Gazetteer/2024_Gaz_elsd_national.zip](https://www2.census.gov/geo/docs/maps-data/data/gazetteer/2024_Gaz_elsd_national.zip), [https://www2.census.gov/geo/docs/maps-data/data/gazetteer/2024_Gazetteer/2024_Gaz_scsd_national.zip](https://www2.census.gov/geo/docs/maps-data/data/gazetteer/2024_Gaz_scsd_national.zip), https://www2.census.gov/geo/docs/reference/codes2020/national_place_by_county2020.txt, https://www2.census.gov/geo/docs/reference/ct_change/ct_cou_to_cousub_crosswalk.xlsx (used to match place names and codes; no table prints its values)

What this packet is and what the plan adds

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

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

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

OpenFEMA disclaimer

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

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