

Grays Harbor County, WA

Risk-assessment baseline packet

Unit **County area 53027** Release **2026-10** As of **2026-09-28** Storm Events data through **2026-06-30**

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A starting point for the plan's risk assessment (FEMA Local Mitigation Plan Review Tool, Element B). It does not replace local data or FEMA review. Section headings say which FEMA review item each table supports; whether an item is satisfied is decided by the plan and its reviewers.

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Plan clock

Status	Approved, expires 2029-04-15	Plan	Grays Harbor County Hazard Mitigation Plan (FEMA plan 109601)
Approved	2024-04-16	Expires	2029-04-15
As of	2026-09-28	Days	930 days to expiry

What changed since your last plan (approved 2024-04-16)

New federal declarations	DR-4775-WA, EM-3629-WA, DR-4906-WA (3 declaration rows; 2 counted incidents)	Storm Events records since approval	4 (data through 2026-06-30)
Repetitive loss now	FMA RL 4, SRL 7 (44 CFR 77.2); any definition: 72	Repeat-flood change	First release: no prior release to compare.

SOURCES: FEMA, OpenFEMA HazardMitigationPlanStatuses v1, version 2026-09-26T121003Z, pulled 2026-09-28, <https://www.fema.gov/api/open/v1/HazardMitigationPlanStatuses> (API); FEMA, OpenFEMA DisasterDeclarationsSummaries v2, version 2026-09-27T010817Z, pulled 2026-09-28, <https://www.fema.gov/api/open/v2/DisasterDeclarationsSummaries> (API); NOAA NCEI, NOAA NCEI Storm Events Database, details files (csvfiles v1.0), version c20260918, pulled 2026-09-28, <https://www.ncei.noaa.gov/pub/data/swdi/stormevents/csvfiles/>; FEMA, OpenFEMA NfipMultipleLossProperties v1, version 2026-08-04T164045Z, pulled 2026-09-28, <https://www.fema.gov/api/open/v1/NfipMultipleLossProperties> (API)

Plan status for every jurisdiction listed in this county: 20 rows, in the section "Plan clock: Plan status for every jurisdiction listed in this county" after these cover pages.

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

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Plan clock

Plan status for every jurisdiction listed in this county

Jurisdiction	Type	Status	Plan	Approved	Expires	Days to expiry negative = days since expiry	Update underway	Notes
Grays Harbor County	County	Approved, expires 2029-04-15	Grays Harbor County Hazard Mitigation Plan (FEMA plan 109601)	2024-04-16	2029-04-15	930		member approved 2024-04-13
Aberdeen city	City	Approved, expires 2029-04-15	Grays Harbor County Hazard Mitigation Plan (FEMA plan 109601)	2024-04-16	2029-04-15	930		member approved 2024-04-13
Cosmopolis city	City	Approved, expires 2029-04-15	Grays Harbor County Hazard Mitigation Plan (FEMA plan 109601)	2024-04-16	2029-04-15	930		member approved 2024-04-13
Elma city	City	Approved, expires 2029-04-15	Grays Harbor County Hazard Mitigation Plan (FEMA plan 109601)	2024-04-16	2029-04-15	930		member approved 2024-04-13
Hoquiam city	City	Approved, expires 2029-04-15	Grays Harbor County Hazard Mitigation Plan (FEMA plan 109601)	2024-04-16	2029-04-15	930		member approved 2024-04-13
McCleary city	City	Approved, expires 2029-04-15	Grays Harbor County Hazard Mitigation Plan (FEMA plan 109601)	2024-04-16	2029-04-15	930		member approved 2024-04-13
Montesano city	City	Approved, expires 2029-04-15	Grays Harbor County Hazard Mitigation Plan (FEMA plan 109601)	2024-04-16	2029-04-15	930		member approved 2024-04-13
Oakville city	City	Approved, expires 2029-04-15	Grays Harbor County Hazard Mitigation Plan (FEMA plan 109601)	2024-04-16	2029-04-15	930		member approved 2024-04-13
Ocean Shores city	City	Approved, expires 2029-04-15	Grays Harbor County Hazard Mitigation Plan (FEMA plan 109601)	2024-04-16	2029-04-15	930		member approved 2024-04-13
Westport city	City	Approved, expires 2029-04-15	Grays Harbor County Hazard Mitigation Plan (FEMA plan 109601)	2024-04-16	2029-04-15	930		member approved 2024-04-13
North Beach School District	School/School District	Approved, expires 2029-04-15	Grays Harbor County Hazard Mitigation Plan (FEMA plan 109601)	2024-04-16	2029-04-15	930		member approved 2024-04-13
Grays Harbor College	College/University	Approved, expires 2029-04-15	Grays Harbor County Hazard Mitigation Plan (FEMA plan 109601)	2024-04-16	2029-04-15	930		member approved 2024-04-13
Grays Harbor FD #2	Fire/EMS District	Approved, expires 2029-04-15	Grays Harbor County Hazard Mitigation Plan (FEMA plan 109601)	2024-04-16	2029-04-15	930		member approved 2024-04-13
Grays Harbor FD #7	Fire/EMS District	Approved, expires 2029-04-15	Grays Harbor County Hazard Mitigation Plan (FEMA plan 109601)	2024-04-16	2029-04-15	930		member approved 2024-04-13
Grays Harbor FD #8	Fire/EMS District	Approved, expires 2029-04-15	Grays Harbor County Hazard Mitigation Plan (FEMA plan 109601)	2024-04-16	2029-04-15	930		member approved 2024-04-13

Jurisdiction	Type	Status	Plan	Approved	Expires	Days to expiry	Update underway	Notes
						<i>negative = days since expiry</i>		
Grays Harbor Public Utility District #1	Electric/Power Authority	Plan 109601 approved 2024-04-16, pending adoption here; not yet eligible	Grays Harbor County Hazard Mitigation Plan (FEMA plan 109601), pending adoption here	2024-04-16 by FEMA; not yet adopted here	2029-04-15 once adopted		FEMA tracker shows a plan approvable pending adoption	Not yet eligible: adopt the approved plan.
Grays Harbor Transit	Transit/Airport	Approved, expires 2029-04-15	Grays Harbor County Hazard Mitigation Plan (FEMA plan 109601)	2024-04-16	2029-04-15	930		member approved 2024-04-13
Harbor Regional Health	Hospital/ Medical Facility	Approved, expires 2029-04-15	Grays Harbor County Hazard Mitigation Plan (FEMA plan 109601)	2024-04-16	2029-04-15	930		member approved 2024-04-13
Port of Grays Harbor	Highway/Port/ Rail	Approved, expires 2029-04-15	Grays Harbor County Hazard Mitigation Plan (FEMA plan 109601)	2024-04-16	2029-04-15	930		member approved 2024-04-13
South Beach Regional Fire Authority	Fire/EMS District	Approved, expires 2029-04-15	Grays Harbor County Hazard Mitigation Plan (FEMA plan 109601)	2024-04-16	2029-04-15	930		member approved 2024-04-13

SOURCE
FEMA, OpenFEMA HazardMitigationPlanStatuses v1, version 2026-09-26T121003Z, pulled 2026-09-28, <https://www.fema.gov/api/open/v1/HazardMitigationPlanStatuses> (API)

Supports B1-a: hazards

Hazards NRI does not cover: check locally

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

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

Rank by EAL	Hazard	NRI risk rating	EAL rating	EAL buildings	EAL agriculture	EAL population equivalence	EAL total (see note)	Storm Events records since 1996	Evidence for an omission	Storm Events coverage note
				<i>modeled dollars per year</i>	<i>modeled dollars per year</i>	<i>statistical value of life and injury, \$13.7M per life, not property damage</i>	<i>modeled dollars per year</i>	<i>count</i>	<i>NRI Not Applicable, no declaration and no Storm Events record since 1996</i>	
1	Tsunami	Very High	Very High	\$6,325,754		\$114,398,120	\$120,723,873	0		No recorded events in Storm Events since 1996 (data through 2026-06-30). Storm Events coverage of this hazard is limited; absence is not evidence of low risk.
2	Earthquake	Relatively High	Relatively High	\$29,848,288		\$16,784,218	\$46,632,506			Not in Storm Events. Storm Events coverage of this hazard is limited; absence is not evidence of low risk.
3	Coastal Flooding	Very High	Very High	\$20,689,152		\$3,151,600	\$23,840,755	8		

Rank by EAL	Hazard	NRI risk rating	EAL rating	EAL buildings modeled dollars per year	EAL agriculture modeled dollars per year	EAL population equivalence statistical value of life and injury, \$13.7M per life, not property damage	EAL total (see note) modeled dollars per year	Storm Events records since 1996 count	Evidence for an omission NRI Not Applicable, no declaration and no Storm Events record since 1996	Storm Events coverage note
4	Inland Flooding	Relatively Moderate	Relatively Moderate	\$19,117,190	\$11,501	\$215,329	\$19,344,020	6		
5	Ice Storm	Relatively High	Relatively High	\$28,721		\$575,710	\$604,431	3		
6	Heat Wave	Relatively Low	Relatively Low	\$121	\$3,288	\$447,095	\$450,503	14		
7	Landslide	Relatively Moderate	Relatively Low	\$73,669		\$39,240	\$112,909	2		
8	Tornado	Very Low	Very Low	\$31,260	\$95	\$58,774	\$90,129	3		
9	Strong Wind	Very Low	Very Low	\$17,674	\$78	\$24,261	\$42,013	93		Includes 90 High Wind records and 2 Strong Wind records, event types the NRI definition of this hazard leaves out.
10	Lightning	Very Low	Very Low	\$2,932		\$36,114	\$39,046	0		No recorded events in Storm Events since 1996 (data through 2026-06-30). Storm Events coverage of this hazard is limited; absence is not evidence of low risk.
11	Winter Weather	Relatively Low	Relatively Low	\$8,299	\$209	\$27,450	\$35,957	50		
12	Wildfire	Very Low	Very Low	\$14,035	\$1	\$752	\$14,788	1		
13	Hail	Very Low	Very Low	\$2,481	\$126	\$511	\$3,118	0		No recorded events in Storm Events since 1996 (data through 2026-06-30).
14	Avalanche	Very Low	Very Low	\$2		\$130	\$132	0		No recorded events in Storm Events since 1996 (data through 2026-06-30).
15	Drought	Very Low	Very Low		\$33		\$33	2		
16	Cold Wave	Very Low	Very Low	under \$1	under \$1	under \$1	\$1	6		
17	Volcanic Activity	No Rating	No Expected Annual Losses	\$0		\$0	\$0	0		Declared 1 time; no Storm Events record of this type. Storm Events coverage of this hazard is limited; absence is not evidence of low risk.
	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).

SOURCES

FEMA, FEMA National Risk Index 1.20.0 (December 2025), county and census tract tables, version 1.20.0, pulled 2026-09-28, https://www.fema.gov/about/reports-and-data/openfema/nri/v120/NRI_Table_Counties.zip (download, 25 MB), https://www.fema.gov/about/reports-and-data/openfema/nri/v120/NRI_Table_CensusTracts.zip (download, 635 MB)
NOAA NCEI, NOAA NCEI Storm Events Database, details files (csvfiles v1.0), version c20260918, pulled 2026-09-28, <https://www.ncei.noaa.gov/pub/data/swdi/stormevents/csvfiles/>

Check your state hazard mitigation plan's hazard list for this county; explain any hazard you drop.

Supports B1-b: location

Where each hazard occurs

Hazard	Location	Census tracts rated <i>rated of all tracts</i>
Avalanche	Census tract rating counts from the National Risk Index tract table (see B1-f). Tract maps and place names are not in this packet.	6 of 20
Coastal 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.	17 of 20
Cold Wave	Affects the whole planning area; national data do not distinguish locations within the county. Confirm locally.	3 of 20
Drought	Affects the whole planning area; national data do not distinguish locations within the county. Confirm locally.	12 of 20
Earthquake	Census tract rating counts from the National Risk Index tract table (see B1-f). Tract maps and place names are not in this packet.	20 of 20
Hail	Affects the whole planning area; national data do not distinguish locations within the county. Confirm locally.	20 of 20
Heat Wave	Affects the whole planning area; national data do not distinguish locations within the county. Confirm locally.	20 of 20
Hurricane	Census tract rating counts from the National Risk Index tract table (see B1-f). Tract maps and place names are not in this packet.	0 of 20
Ice Storm	Affects the whole planning area; national data do not distinguish locations within the county. Confirm locally.	20 of 20
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.	20 of 20
Landslide	Census tract rating counts from the National Risk Index tract table (see B1-f). Tract maps and place names are not in this packet.	20 of 20
Lightning	Affects the whole planning area; national data do not distinguish locations within the county. Confirm locally.	20 of 20
Strong Wind	Affects the whole planning area; national data do not distinguish locations within the county. Confirm locally.	20 of 20
Tornado	Census tract rating counts from the National Risk Index tract table (see B1-f). Tract maps and place names are not in this packet.	20 of 20
Tsunami	Census tract rating counts from the National Risk Index tract table (see B1-f). Tract maps and place names are not in this packet.	16 of 20
Volcanic Activity	Census tract rating counts from the National Risk Index tract table (see B1-f). Tract maps and place names are not in this packet.	0 of 20
Wildfire	Census tract rating counts from the National Risk Index tract table (see B1-f). Tract maps and place names are not in this packet.	20 of 20
Winter Weather	Affects the whole planning area; national data do not distinguish locations within the county. Confirm locally.	20 of 20

SOURCE

FEMA, FEMA National Risk Index 1.20.0 (December 2025), county and census tract tables, version 1.20.0, pulled 2026-09-28, https://www.fema.gov/about/reports-and-data/openfema/nri/v120/NRI_Table_Counties.zip (download, 25 MB), https://www.fema.gov/about/reports-and-data/openfema/nri/v120/NRI_Table_CensusTracts.zip (download, 635 MB)

Supports B1-c: extent

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

Hazard	Scale	Records <i>count, years</i>	Observed range	Worst recorded event	Most damaging (when different)	How it applies to members	Note
Avalanche	none (count and damage)	0					Physical measure: in event narratives only; local data required.
Coastal Flood, Storm Surge/ Tide	none in data (FIRM for depth)	8, 1999 to 2024 (5 zone-level)		Coastal Flood, 2020-11-15, \$2,000,000 property; crops not reported, reported for the zone (2020 dollars); NWS zone WAZ517 (CENTRAL COAST), zone-level: may include parts of neighboring counties		Event records naming member places: Westport city (1 record). Zone-level records (5) apply countywide.	Flood depth: see the FEMA Flood Insurance Rate Map.
Cold/Wind Chill, Extreme Cold/Wind Chill	wind chill	6, 2021 to 2024 (6 zone-level)	2 days to 3 days (median 2 days); 3 with a recorded value	3 consecutive days, 2024-01-13 to 2024-01-15, zone-level		Zone-level records: applies countywide; national data do not locate these events within the county.	Wind chill: in event narratives only; local data required.
Frost/Freeze (outside NRI Cold Wave definition)	crop damage	0					Temperature: in event narratives only; local data required.
Drought	US Drought Monitor D-scale	2, 2001 to 2005 (2 zone-level)	1 day to 21 days (median 11 days); 2 with a recorded value	21 days, 2005-03-10 to 2005-03-30, zone-level		Zone-level records: applies countywide; national data do not locate these events within the county.	Storm Events enters a drought at D2 or worse east of the Rockies and D3 or worse from the Rockies west (NWS Instruction 10-1605); NRI drought counts D3 and D4 only.
Earthquake	Modified Mercalli (local data)	0					No Storm Events record; local data required (e.g., USGS).
Hail	hail size (inches)	1, 1969 to 1969	0.75 in; 1 with a recorded value	0.75 in hail, 1969-12-12		No event record names a member place.	
Excessive Heat, Heat	heat index (narratives)	14, 2021 to 2024 (14 zone-level)	1 day to 5 days (median 1 day); 10 with a recorded value	5 consecutive days, 2023-05-12 to 2023-05-16, zone-level		Zone-level records: applies countywide; national data do not locate these events within the county.	Heat index: in event narratives only; local data required. Heat records from November to March (unseasonable warmth, not a heat wave) are counted but not used for the longest run.

Hazard	Scale	Records <i>count, years</i>	Observed range	Worst recorded event	Most damaging (when different)	How it applies to members	Note
Hurricane, Tropical Storm, Tropical Depression	Saffir-Simpson	0					Storm Events files every zone of a storm's episode under the storm's event type and category, so a Hurricane (Typhoon) record, especially an inland or remnant one, does not by itself mean hurricane-force winds here; read the damage and wind columns.
Ice Storm	Sperry-Piltz (local data)	3, 2012 to 2022 (3 zone- level)		Ice Storm, 2012-01-19, \$350,000 property; \$0 crops, reported for the zone (2012 dollars); NWS zone WAZ517 (CENTRAL COAST), zone-level: may include parts of neighboring counties		Zone-level records: applies countywide; national data do not locate these events within the county.	Ice thickness: in event narratives only; local data required.
Flash Flood, Flood, Lakeshore Flood	damage and flood days (FIRM for depth)	6, 1996 to 2022		Flood, 2022-01-06, \$3,390,000 property; \$0 crops (2022 dollars), 2 direct deaths		Event records naming member places: Aberdeen city (1 record), Cosmopolis city (1 record).	Flood depth: see the FEMA Flood Insurance Rate Map. Storm Events damage can be \$0 or blank even for a major flood, so the worst record here may not be the worst flood; compare FEMA Public Assistance by declaration in B1-d.
Debris Flow	none (count and damage)	2, 2010 to 2015 (1 zone- level)		Debris Flow, 2015-01-05, \$300,000 property; \$0 crops (2015 dollars)		Event records naming member places: Aberdeen city (1 record). Zone-level records (1) apply countywide.	Physical measure: in event narratives only; local data required.
Lightning	annualized frequency (the measure FEMA's Local Mitigation Planning Handbook names)	0					Storm Events lists lightning with damage or casualties; physical measure in event narratives only; local data required.
High Wind and Strong Wind (outside NRI Strong Wind definition)	wind speed (kt and mph)	92, 1997 to 2025 (92 zone- level)	35 kt (40 mph) to 93 kt (107 mph) (median 50 kt (58 mph)); 92 with a recorded value	93 kt (107 mph) measured gust, High Wind, 2009-11-18; NWS zone WAZ513 (OLYMPICS), zone-level: may include parts of neighboring counties	High Wind, 2007-12-02, \$20,000,000 property; \$0 crops, reported for the zone (2007 dollars)	Zone-level records: applies countywide; national data do not locate these events within the county.	

Hazard	Scale	Records <i>count, years</i>	Observed range	Worst recorded event	Most damaging (when different)	How it applies to members	Note
Thunderstorm Wind	wind speed (kt and mph)	4, 1970 to 2010	55 kt (63 mph) to 61 kt (70 mph) (median 58 kt (67 mph)); 2 with a recorded value	61 kt (70 mph) measured gust, Thunderstorm Wind, 2010-12-14		No event record names a member place.	
Tornado	Enhanced Fujita (F before Feb 2007)	3, 1997 to 2020	F/EF0 to F/EF1 (median F/EF0); 3 with a recorded value	EF1 tornado, 2020-10-10, 0.5 mi within this county, 30 yd wide, \$0 property; \$0 crops (2020 dollars)		Event records naming member places: Elma city (1 record), Westport city (1 record).	From 1996 on, tornado records are per-county segments and length is the path length within this county (NWS Instruction 10-1605); records before 1996 may give the whole path length, including the path outside this county, and before 1996 a tornado is listed once, under the county where it began, with the whole path's rating; counties farther along the path may not list it. Length is not used to rank tornadoes.
Tsunami	none (count and damage)	0					Physical measure: in event narratives only; local data required.
Volcanic Ash, Volcanic Ashfall	Volcanic Explosivity Index (local data)	0					Physical measure: in event narratives only; local data required.
Wildfire	acres burned (local data)	1, 2015 to 2015 (1 zone- level)		Wildfire, 2015-07-31, \$800,000 property; \$0 crops, reported for the zone (2015 dollars); NWS zone WAZ512 (Lower Chehalis Valley Area), zone-level: may include parts of neighboring counties		Zone-level records: applies countywide; national data do not locate these events within the county.	Acres burned: in event narratives only; local data required.
Winter Storm, Heavy Snow, Blizzard, Lake- Effect Snow, Winter Weather, Sleet	none in data (snowfall local)	50, 1996 to 2025 (50 zone- level)		No damage reported in 50 records.		Zone-level records: applies countywide; national data do not locate these events within the county.	Snow depth: in event narratives only; local data required.

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

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

SOURCESNOAA NCEI, NOAA NCEI Storm Events Database, details files (csvfiles v1.0), version c20260918, pulled 2026-09-28, <https://www.ncei.noaa.gov/pub/data/swdi/stormevents/csvfiles/>NOAA National Weather Service, NWS county-public forecast zones correlation file, version bp03mr20 to bp16ap26 (11 files; newest bp16ap26), pulled 2026-09-28, <https://www.weather.gov/gis/ZoneCounty>**Supports B1-d: previous occurrences**Declaration rows **35**Counted incidents **30****Federal disaster declarations for this county**

Declared	Incident began	FEMA number	Type	Title	Mapped hazard	County Public Assistance <i>federal share obligated, nominal dollars</i>	Flags	Notes
2026-04-07	2025-12-05	DR-4906-WA	Major disaster	SEVERE STORMS, STRAIGHT-LINE WINDS, FLOODING, LANDSLIDES, AND MUDSLIDES	Inland Flooding (primary); also designated: Landslide, Strong Wind	\$6,315	new since last plan; within last 5 years	
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	none found	new since last plan; within last 5 years	same incident as DR-4906
2024-04-28	2024-01-05	DR-4775-WA	Major disaster	SEVERE WINTER STORMS, STRAIGHT-LINE WINDS, FLOODING, LANDSLIDES, AND MUDSLIDES	Inland Flooding; Landslide; Strong Wind; Winter Weather	\$530,797.94	new since last plan; within last 5 years	
2022-03-29	2021-12-26	DR-4650-WA	Major disaster	SEVERE WINTER STORMS, SNOWSTORMS, STRAIGHT-LINE WINDS, FLOODING	Inland Flooding (primary); also designated: Strong Wind, Winter Weather	\$1,600,271.49	within last 5 years	
2021-04-08	2020-12-29	DR-4593-WA	Major disaster	SEVERE WINTER STORM, STRAIGHT-LINE WINDS, FLOODING, LANDSLIDES, AND MUDSLIDES	Inland Flooding; Landslide; Strong Wind; Winter Weather	\$288,170.05		
2020-04-23	2020-01-20	DR-4539-WA	Major disaster	SEVERE STORMS, FLOODING, LANDSLIDES, AND MUDSLIDES	Inland Flooding (primary); also designated: Landslide	\$196,289.71		
2020-03-22	2020-01-20	DR-4481-WA	Major disaster	COVID-19 PANDEMIC	Non-natural, not counted	\$994,291.30		
2020-03-13	2020-01-20	EM-3427-WA	Emergency	COVID-19	Non-natural, not counted	none found		same incident as DR-4481
2019-03-04	2018-12-10	DR-4418-WA	Major disaster	SEVERE WINTER STORMS, STRAIGHT-LINE WINDS, FLOODING, LANDSLIDES, MUDSLIDES, TORNADO	Inland Flooding; Landslide; Strong Wind; Tornado; Winter Weather	\$898,204.47		
2016-02-02	2015-12-01	DR-4253-WA	Major disaster	SEVERE WINTER STORM, STRAIGHT-LINE WINDS, FLOODING, LANDSLIDES, MUDSLIDES, AND A T	Inland Flooding (primary); also designated: Landslide, Strong Wind, Winter Weather	\$235,632.69		
2015-10-15	2015-08-29	DR-4242-WA	Major disaster	SEVERE WINDSTORM	Strong Wind	\$177,140.18		
2012-03-05	2012-01-14	DR-4056-WA	Major disaster	SEVERE WINTER STORM, FLOODING, LANDSLIDES, AND MUDSLIDES	Inland Flooding; Landslide; Winter Weather	\$425,095		
2009-03-02	2008-12-12	DR-1825-WA	Major disaster	SEVERE WINTER STORM AND RECORD AND NEAR RECORD SNOW	Winter Weather	\$218,331.23		

Declared	Incident began	FEMA number	Type	Title	Mapped hazard	County Public Assistance		
						<i>federal share obligated, nominal dollars</i>	Flags	Notes
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	\$834,287.79		
2007-12-08	2007-12-01	DR-1734-WA	Major disaster	SEVERE STORMS, FLOODING, LANDSLIDES, AND MUDSLIDES	Inland Flooding; Landslide	\$10,988,341.44		
2007-02-14	2006-12-14	DR-1682-WA	Major disaster	SEVERE WINTER STORM, LANDSLIDES, AND MUDSLIDES	Landslide; Winter Weather	\$950,552.88		
2006-12-12	2006-11-02	DR-1671-WA	Major disaster	SEVERE STORMS, FLOODING, LANDSLIDES, AND MUDSLIDES	Inland Flooding; Landslide	\$599,175.23		
2006-05-17	2006-01-27	DR-1641-WA	Major disaster	SEVERE STORMS, FLOODING, TIDAL SURGE, LANDSLIDES, AND MUDSLIDES	Inland Flooding; Landslide	\$923,858.51		
2005-09-07	2005-08-29	EM-3227-WA	Emergency	HURRICANE KATRINA EVACUATION	Hurricane: evacuation support, not a local hazard event; not counted	none found		
2003-11-07	2003-10-15	DR-1499-WA	Major disaster	SEVERE STORMS AND FLOODING	Inland Flooding	\$286,214.05		
2001-03-01	2001-02-28	DR-1361-WA	Major disaster	EARTHQUAKE	Earthquake	\$141,124.79		
1997-04-02	1997-03-18	DR-1172-WA	Major disaster	HEAVY RAINS, SNOW MELT, FLOODING, LAND & MUD SLIDES	Inland Flooding (primary); also designated: Landslide	none found		
1997-01-17	1996-12-26	DR-1159-WA	Major disaster	SEVERE WINTER STORMS, LAND & MUDS SLIDES, FLOODING	Inland Flooding; Landslide; Winter Weather	none found		
1996-02-09	1996-01-26	DR-1100-WA	Major disaster	HIGH WINDS, SEVERE STORMS AND FLOODING	Inland Flooding (primary); also designated: Strong Wind	none found		
1996-01-03	1995-11-07	DR-1079-WA	Major disaster	SEVERE STORMS, HIGH WIND, AND FLOODING	Inland Flooding; Strong Wind	none found		
1994-08-02	1994-05-01	DR-1037-WA	Major disaster	THE EL NINO (THE SALMON INDUSTRY)	Fishing Losses: economic loss, not a physical hazard event; non-natural, not counted	PA not declared for this county		
1990-11-26	1990-11-09	DR-883-WA	Major disaster	SEVERE STORMS & FLOODING	Inland Flooding	none found		
1990-01-18	1990-01-06	DR-852-WA	Major disaster	SEVERE STORMS & FLOODING	Inland Flooding	none found		
1980-05-21	1980-05-21	DR-623-WA	Major disaster	VOLCANIC ERUPTION, MT. ST. HELENS	Volcanic Activity	none found		
1979-12-31	1979-12-31	DR-612-WA	Major disaster	STORMS, HIGH TIDES, MUDSLIDES & FLOODING	Inland Flooding (primary); also designated: Coastal Flooding, Landslide	PA not declared for this county		
1977-12-10	1977-12-10	DR-545-WA	Major disaster	SEVERE STORMS, MUDSLIDES, & FLOODING	Inland Flooding (primary); also designated: Landslide	none found		
1975-12-13	1975-12-13	DR-492-WA	Major disaster	SEVERE STORMS & FLOODING	Inland Flooding	none found		
1972-02-01	1972-02-01	DR-322-WA	Major disaster	SEVERE STORMS & FLOODING	Inland Flooding	none found		

Declared	Incident began	FEMA number	Type	Title	Mapped hazard	County Public Assistance		Flags	Notes
						<i>federal share obligated, nominal dollars</i>			
1971-02-09	1971-02-09	DR-300-WA	Major disaster	HEAVY RAINS, MELTING SNOWS & FLOODING	Inland Flooding		none found		
1964-12-29	1964-12-29	DR-185-WA	Major disaster	HEAVY RAINS & FLOODING	Inland Flooding		none found		

School districts and special districts in this county: \$9,590,864.32 (included in the county total above). Public Assistance matched by applicant name to the school districts and special districts FEMA lists as plan members in this county. They are not shown as member blocks, so their total is listed here. These dollars are already included in the county PA column of the declarations table (the FEMA record places each applicant in this county); do not add this line to the county total.

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

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

SOURCES

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

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

FEMA, OpenFEMA HazardMitigationPlanStatuses v1, version 2026-09-26T121003Z, pulled 2026-09-28, <https://www.fema.gov/api/open/v1/HazardMitigationPlanStatuses> (API)

Statewide declarations

Declared	Incident began	FEMA number	Type	Title	Mapped hazard	Flags	Notes
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. Listed on every county page in the state; not counted with county rows.

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.

SOURCE

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

Public Assistance not placed in a county in this state: 1 row, \$248,381.20

Disaster number	Declared	Applicant	County field in FEMA data	PA obligated	Why not placed
				<i>federal share obligated, nominal dollars</i>	
4539	2020-04-23	Confederated Tribes of the Umatilla Indian Reservation	Umatilla County	\$248,381.20	county field is a county of another state and the applicant name does not identify a place in the declaring state

FEMA's Public Assistance summaries file these applicants under a county field that is not a county of this state (an Alaska school area, the former Valdez-Cordova Census Area, or another state's county), and the applicant name does not identify one place here. They are listed for the whole state and are not in any county total. Check whether any of them worked in your county.

SOURCE

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

Previous occurrences by hazard, with explicit no-event rows

Hazard	Storm Events records <i>full period</i>	Since plan approval records	During plan review records	Last 5 years records	Declared incidents <i>distinct incidents</i>	Declared since approval <i>distinct incidents</i>	Period	Statement
Avalanche	0	0	0	0	0	0	1996 to 2026-06-30	No recorded events, 1996 to 2026-06-30, NOAA NCEI Storm Events
Coastal Flooding	8	1	0	1	1	0	1996 to 2026-06-30	
Cold Wave	6	0	4	6	0	0	1996 to 2026-06-30	
Drought	2	0	0	0	0	0	1996 to 2026-06-30	
Earthquake	0	0	0	0	1	0		No Storm Events record; local data required (e.g., USGS).
Hail	1	0	0	0	0	0	1955 to 2026-06-30	
Heat Wave	14	0	7	12	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	3	0	0	1	0	0	1996 to 2026-06-30	
Inland Flooding	6	0	0	1	25	2	1996 to 2026-06-30	
Landslide	2	0	0	0	16	2	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	96	2	0	5	9	2	1955 to 2026-06-30	Includes 90 High Wind records and 2 Strong Wind records, event types the NRI definition of this hazard leaves out.
Tornado	3	0	0	0	1	0	1950 to 2026-06-30	
Tsunami	0	0	0	0	0	0	1996 to 2026-06-30	No recorded events, 1996 to 2026-06-30, NOAA NCEI Storm Events
Volcanic Activity	0	0	0	0	1	0	1996 to 2026-06-30	No Storm Events records of this type; 1 federal declared incident (see declarations table)
Wildfire	1	0	0	0	0	0	1996 to 2026-06-30	
Winter Weather	50	1	2	8	10	1	1996 to 2026-06-30	

SOURCES

NOAA NCEI, NOAA NCEI Storm Events Database, details files (csvfiles v1.0), version c20260918, pulled 2026-09-28, <https://www.ncei.noaa.gov/pub/data/swdi/stormevents/csvfiles/>FEMA, OpenFEMA DisasterDeclarationsSummaries v2, version 2026-09-27T010817Z, pulled 2026-09-28, <https://www.fema.gov/api/open/v2/DisasterDeclarationsSummaries> (API)NOAA National Weather Service, NWS county-public forecast zones correlation file, version bp03mr20 to bp16ap26 (11 files; newest bp16ap26), pulled 2026-09-28, <https://www.weather.gov/gis/ZoneCounty>

Notable Storm Events records

Date	Event type	Magnitude or extent	Damage <i>nominal dollars</i>	Direct deaths, injuries <i>indirect not counted</i>	Location	Flags	Why listed
2023-05-12	Heat		\$0 property; \$0 crops, reported for the zone (2023 dollars)	0, 0	NWS zone WAZ512 (LOWER CHEHALIS VALLEY AREA), zone-level: may include parts of neighboring counties	during plan review, check whether your last plan included it; within last 5 years	B1-c worst recorded: Excessive Heat, Heat
2022-01-06	Flood		\$3,390,000 property; \$0 crops (2022 dollars)	2, 0	INDEPENDENCE to MC CLEARY JCT	within last 5 years	deaths or injuries recorded
2020-11-15	Coastal Flood		\$2,000,000 property; crops not reported, reported for the zone (2020 dollars)	0, 0	NWS zone WAZ517 (CENTRAL COAST), zone-level: may include parts of neighboring counties		B1-c worst recorded: Coastal Flood, Storm Surge/Tide
2020-10-10	Tornado	EF1, 0.5 mi within this county, 30 yd wide	\$0 property; \$0 crops (2020 dollars)	0, 0	NEILTON		B1-c worst recorded: Tornado
2015-07-31	Wildfire		\$800,000 property; \$0 crops, reported for the zone (2015 dollars)	0, 0	NWS zone WAZ512 (Lower Chehalis Valley Area), zone-level: may include parts of neighboring counties		B1-c worst recorded: Wildfire
2015-01-05	Debris Flow		\$300,000 property; \$0 crops (2015 dollars)	0, 0	(HQM)BOWERMAN FLD HO to ABERDEEN		B1-c worst recorded: Debris Flow
2012-01-19	Ice Storm		\$350,000 property; \$0 crops, reported for the zone (2012 dollars)	0, 0	NWS zone WAZ517 (CENTRAL COAST), zone-level: may include parts of neighboring counties		B1-c worst recorded: Ice Storm
2011-11-22	High Wind	39 kt (45 mph) measured sustained	\$50,000 property; \$0 crops, reported for the zone (2011 dollars)	1, 0	NWS zone WAZ517 (CENTRAL COAST), zone-level: may include parts of neighboring counties		deaths or injuries recorded
2010-12-14	Thunderstorm Wind	61 kt (70 mph) measured gust	\$0 property; \$0 crops (2010 dollars)	0, 0	(HQM)BOWERMAN FLD HO		B1-c worst recorded: Thunderstorm Wind
2009-11-18	High Wind	93 kt (107 mph) measured gust	\$0 property; \$0 crops, reported for the zone (2009 dollars)	0, 0	NWS zone WAZ513 (OLYMPICS), zone-level: may include parts of neighboring counties		B1-c worst recorded: High Wind and Strong Wind (outside NRI Strong Wind definition)
2007-12-02	High Wind	70 kt (81 mph) measured gust	\$20,000,000 property; \$0 crops, reported for the zone (2007 dollars)	1, 10	NWS zone WAZ517 (CENTRAL COAST), zone-level: may include parts of neighboring counties		deaths or injuries recorded
1969-12-12	Hail	0.75 in	damage not recorded (pre-1996 record)	0, 0	location not recorded		B1-c worst recorded: Hail

The full list is in the **XLSX** file, sheet "B1-d Storm Events history" (192 rows).

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

SOURCES

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

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

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

Supports B1-e: probability

Probability: FEMA annualized frequency and descriptor per hazard

Hazard	FEMA annualized frequency (modeled) <i>unit per row</i>	Unit	In plain terms	Descriptor	Descriptor basis	NRI events or days in its record period (hail, wind and tornado are area-weighted, so can be fractional)	NRI period	Location	Note
Avalanche	0.01	events per year	about 1 in 100 years	Possible	FEMA annualized frequency (modeled)	0	1994 to 2023 (30 years)	see B1-f	0.01 is NRI's minimum avalanche frequency for a county in an avalanche susceptibility zone; NRI records no avalanche here, so the descriptor reflects the floor, not local events.
Coastal Flooding	10.1	events per year at a location (modeled)	about 10 per year at a given location in the county	Highly likely	FEMA annualized frequency (modeled)	not shown	modeled	see B1-f	Descriptor from NRI: the rate at a location is 1 or more a year, so the county rate is at least that.
Cold Wave	0.0000551	event-days per year	about 0.0000551 days per year	Likely	event-days in 3 of 30 years, 1996 to 2025 (10%)	0.000927	2005-11-12 to 2024-11-12 (19 years)	countywide	Frost/Freeze records are not counted in this descriptor: they record crop freezes, not cold waves.
Drought	1.39	event-days per year	about 1.39 days per year	Possible	event-days in 2 of 30 years, 1996 to 2025 (6.67%)	35	2000 to 2025 (25.25 years; D3 and D4 only)	countywide	NRI gives about 1.39 drought event-days a year here (its annualized frequency over 25.25 years; not its event count divided by the years), but Storm Events has a record in only 2 of 30 years. NRI counts from a different source that records far more events than Storm Events, so this descriptor reads much lower than NRI's frequency; read the two together.
Earthquake	0.0235	annual probability at a location	chance a given location in the county has at least minor-damage shaking in a year: 2.35%			not shown	modeled	see B1-f	Descriptor not assigned: the NRI value is the chance at a location in the county, not how often the hazard affects the county, and Storm Events does not record earthquakes.
Hail	0.00504	events per year	about 1 in 199 years	Unlikely	FEMA annualized frequency (modeled)	0.2 (modeled)	1986 to 2023 (38 years)	countywide	
Heat Wave	1.98	event-days per year	about 1.98 days per year	Likely	event-days in 4 of 30 years, 1996 to 2025 (13.3%)	24.6	2005-11-12 to 2024-11-12 (19 years)	countywide	NRI gives about 1.98 heat wave event-days a year here (its annualized frequency over 19 years; not its event count divided by the years), but Storm Events has a record in only 4 of 30 years. NRI counts from a different source that records far more events than Storm Events, so this descriptor reads much lower than NRI's frequency; read the two together.

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
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	0.562	event-days per year	about 0.562 days per year	Likely	event-days in 3 of 30 years, 1996 to 2025 (10%)	35	1946-12-31 to 2014-02-12 (67 years)	countywide	
Inland Flooding	0.214	event-days per year	about 0.214 days per year	Likely	event-days in 5 of 30 years, 1996 to 2025 (16.7%)	6	1996 to 2023 (28 years)	see B1-f	
Landslide	11.5	events per year (modeled)	about 11.5 per year	Highly likely	FEMA annualized frequency (modeled)	not shown	modeled	see B1-f	
Lightning	5.13	days per year with a strike	about 5.13 days per year	Highly likely	FEMA annualized frequency (modeled)	not shown	1995 to 2023 (29 years; CONUS)	countywide	
Strong Wind	0.00899	events per year	about 1 in 111 years	Unlikely	FEMA annualized frequency (modeled)	1	1986 to 2023 (38 years)	countywide	
Tornado	0.0669	events per year	about 1 in 15 years	Possible	FEMA annualized frequency (modeled)	not shown	1950 to 2023 (EF2+); 1986 to 2023 (EF0-1)	see B1-f	
Tsunami	0.127	annual probability at the most exposed location (used in place of a county value)	chance at the county's most exposed location in a year: 12.7%		Storm Events records in 0 of 30 years, 1996 to 2025 (0%)	not shown	modeled	see B1-f	No Storm Events record of this hazard, 1996 to 2025; descriptor not assigned (the NRI value is the chance at a location in the county, not how often the hazard affects the county)
Volcanic Activity	0	annual probability	none modeled	Unlikely	FEMA annualized frequency (modeled)	not shown	modeled	see B1-f	
Wildfire	0.00003	annual probability at a location	chance a given location in the county burns in a year: 0.003%	Possible	Storm Events records in 1 of 30 years, 1996 to 2025 (3.33%)	not shown	modeled	see B1-f	Descriptor from Storm Events, not NRI: the NRI value is the chance at a location in the county, not how often the hazard affects the county.
Winter Weather	6.79	event-days per year	about 6.79 days per year	Likely	event-days in 20 of 30 years, 1996 to 2025 (66.7%)	113	2005-11-12 to 2024-11-12 (19 years)	countywide	

FEMA annualized frequency (modeled) comes from the National Risk Index v1.20 (December 2025). It is not recorded events divided by years, and what it measures depends on the hazard. For most hazards it estimates how often the hazard affects this county each year: it counts events or event-days (drought, heat wave, cold wave, winter weather, ice storm and inland flooding are in days per year; lightning is the number of days per year with a recorded cloud-to-ground strike, from the NOAA Storm Prediction Center daily lightning climatology); it may count events in the surrounding area (hail, strong wind, tornado, hurricane and ice storm use a 49 km grid and buffers) and is averaged over the county's area; and some hazards use a minimum value for places with no recorded event. Earthquake, wildfire and coastal flooding are different: FEMA computes them for each census block and averages them over the county, so the value is the chance (for coastal flooding, the modeled number of floods per year) at a location in the county, which is lower than the chance that the hazard strikes somewhere in the county. Earthquake is the chance of at least minor-damage shaking (U.S. Geological Survey model); wildfire is the chance that a location burns in a large fire (U.S. Forest Service burn probability); coastal flooding comes from FEMA flood zones and NOAA high-tide flooding, so it can be above 1 where high-tide flooding is frequent. Tsunami is the value at the county's most exposed location, from recorded events and modeled return periods. For these four hazards the packet gives no "1 in N years" and takes the descriptor from Storm Events (none for earthquake) unless the value is 1 or more a year. Landslide is a U.S. Geological Survey modeled county rate spread by slope susceptibility. Volcanic activity is the chance that a volcano affecting the county erupts in a year. Drought counts only extreme and exceptional drought (D3 and D4). Source: FEMA, National Risk Index Technical Documentation v1.20, sections 5.2.2 (Table 5), 5.2.3, 7.4, 10.4, 16.5, 17.1, 17.3.1, 17.5, 20.3.1, 21.4, 22.4 and 6 to 23.

SOURCES
FEMA, FEMA National Risk Index 1.20.0 (December 2025), county and census tract tables, version 1.20.0, pulled 2026-09-28, https://www.fema.gov/about/reports-and-data/openfema/nri/v120/NRI_Table_Counties.zip (download, 25 MB), https://www.fema.gov/about/reports-and-data/openfema/nri/v120/NRI_Table_CensusTracts.zip (download, 635 MB)
NOAA NCEI, NOAA NCEI Storm Events Database, details files (csvfiles v1.0), version c20260918, pulled 2026-09-28, <https://www.ncei.noaa.gov/pub/data/swdi/stormevents/csvfiles/>

Descriptor scale used in this packet (defined per unit)

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

SOURCES
FEMA, FEMA National Risk Index 1.20.0 (December 2025), county and census tract tables, version 1.20.0, pulled 2026-09-28, https://www.fema.gov/about/reports-and-data/openfema/nri/v120/NRI_Table_Counties.zip (download, 25 MB), https://www.fema.gov/about/reports-and-data/openfema/nri/v120/NRI_Table_CensusTracts.zip (download, 635 MB)
NOAA NCEI, NOAA NCEI Storm Events Database, details files (csvfiles v1.0), version c20260918, pulled 2026-09-28, <https://www.ncei.noaa.gov/pub/data/swdi/stormevents/csvfiles/>

Intensity bands: historical frequency (Storm Events)

Hazard	Band	Years	Events <i>county-coded records</i>	Years in period	Events per year <i>events / years</i>
Hail	1.00-1.99 in	1996 to 2025	0	30	0
Hail	2.00 in+	1996 to 2025	0	30	0
Strong Wind (Thunderstorm Wind records)	50-64 kt	1996 to 2025	1	30	0.0333
Strong Wind (Thunderstorm Wind records)	65 kt+	1996 to 2025	0	30	0
Strong Wind (Thunderstorm Wind records)	unmeasured or below 50 kt	1996 to 2025	0	30	0

Hazard	Band	Years	Events <i>county-coded records</i>	Years in period	Events per year <i>events / years</i>
Tornado	EF0-1	1996 to 2025	3	30	0.1
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

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

SOURCE

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

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

Supports B1-f: variation across the planning area

Range of census tract risk within the county

Hazard	Tracts <i>rated of all</i>	Risk score min <i>NRI score, 0 to 100</i>	Median	Max	Tracts by rating	Note
Avalanche	6 of 20	18.4	21.4	24.2	Very Low 6, Not Applicable 14	
Coastal Flooding	17 of 20	76.8	96.3	100.0	Very High 6, Relatively High 3, Relatively Moderate 3, Relatively Low 4, Very Low 1, No Rating 3	
Cold Wave	3 of 20	15.5	15.5	15.5	Very Low 3, No Rating 17	National data give a county-wide or coarse (49 km grid or NWS zone) frequency for this hazard, so they cannot show members' hazard differing. Agriculture is 52% of NRI's expected annual loss for this hazard in the county, so the tract range above mostly reflects where crop and livestock value is, not where buildings and people are. Confirm locally.
Drought	12 of 20	66.9	67.8	69.5	Very Low 12, No Rating 8	National data give a county-wide or coarse (49 km grid or NWS zone) frequency for this hazard, so they cannot show members' hazard differing. Agriculture is all of NRI's expected annual loss for this hazard in the county, so the tract range above mostly reflects where crop and livestock value is, not where buildings and people are. Confirm locally.
Earthquake	20 of 20	90.9	96.8	99.5	Very High 8, Relatively High 12	
Hail	20 of 20	1.1	4.0	14.5	Very Low 20	National data give a county-wide or coarse (49 km grid or NWS zone) frequency for this hazard, so they cannot show members' hazard differing. The tract range above mostly reflects where buildings and people are. Confirm locally.
Heat Wave	20 of 20	10.5	27.3	61.0	Relatively Moderate 2, Relatively Low 15, Very Low 3	National data give a county-wide or coarse (49 km grid or NWS zone) frequency for this hazard, so they cannot show members' hazard differing. The tract range above mostly reflects where buildings and people are. Confirm locally.
Hurricane	0 of 20				Not Applicable 20	
Ice Storm	20 of 20	81.4	90.4	96.1	Relatively High 11, Relatively Moderate 9	National data give a county-wide or coarse (49 km grid or NWS zone) frequency for this hazard, so they cannot show members' hazard differing. The tract range above mostly reflects where buildings and people are. Confirm locally.
Inland Flooding	20 of 20	30.1	78.5	94.8	Relatively High 10, Relatively Moderate 7, Relatively Low 3	

Hazard	Tracts <i>rated of all</i>	Risk score min <i>NRI score, 0 to 100</i>	Median	Max	Tracts by rating	Note
Landslide	20 of 20	33.1	92.9	99.2	Relatively Moderate 3, Relatively Low 13, Very Low 4	
Lightning	20 of 20	8.4	13.9	31.1	Relatively Low 1, Very Low 19	National data give a county-wide or coarse (49 km grid or NWS zone) frequency for this hazard, so they cannot show members' hazard differing. The tract range above mostly reflects where buildings and people are. Confirm locally.
Strong Wind	20 of 20	4.6	15.5	24.8	Relatively Low 1, Very Low 19	National data give a county-wide or coarse (49 km grid or NWS zone) frequency for this hazard, so they cannot show members' hazard differing. The tract range above mostly reflects where buildings and people are. Confirm locally.
Tornado	20 of 20	2.5	13.7	19.7	Very Low 20	
Tsunami	16 of 20	21.4	83.4	100.0	Very High 1, Relatively High 4, Relatively Moderate 5, Relatively Low 3, Very Low 3, Not Applicable 4	
Volcanic Activity	0 of 20				No Rating 20	
Wildfire	20 of 20	22.1	63.1	75.2	Relatively Low 4, Very Low 16	
Winter Weather	20 of 20	33.0	43.0	62.0	Relatively Moderate 5, Relatively Low 15	National data give a county-wide or coarse (49 km grid or NWS zone) frequency for this hazard, so they cannot show members' hazard differing. The tract range above mostly reflects where buildings and people are. Confirm locally.

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

SOURCE

FEMA, FEMA National Risk Index 1.20.0 (December 2025), county and census tract tables, version 1.20.0, pulled 2026-09-28, https://www.fema.gov/about/reports-and-data/openfema/nri/v120/NRI_Table_Counties.zip (download, 25 MB), https://www.fema.gov/about/reports-and-data/openfema/nri/v120/NRI_Table_CensusTracts.zip (download, 635 MB)

Per-member block (Starter, confirm locally)

Member	Type	Plan status	Repetitive loss <i>FMA RL and SRL (44 CFR 77.2); repeat-flood, any definition</i>	Public Assistance matched <i>federal share obligated, nominal dollars</i>	Event records naming this place <i>all years; since the member's plan</i>	Notes
Grays Harbor County	County	Approved, expires 2029-04-15	FMA RL 4, SRL 5; any 38	\$2,775,419.54	0; 0	Includes \$657,932.67 for declarations not counted as hazard incidents (DR-4481-WA).
Aberdeen city	City	Approved, expires 2029-04-15	FMA RL 0, SRL 1; any 14	\$1,789,280.26	2; 0	
Cosmopolis city	City	Approved, expires 2029-04-15	FMA RL 0, SRL 0; any 1	\$104,882.23	1; 0	
Elma city	City	Approved, expires 2029-04-15	FMA RL 0, SRL 0; any 3	\$528,098.70	1; 0	
Hoquiam city	City	Approved, expires 2029-04-15	FMA RL 0, SRL 1; any 11	\$131,919.71	0; 0	
McCleary city	City	Approved, expires 2029-04-15	FMA RL 0, SRL 0; any 0	\$123,254.10	0; 0	Includes \$11,280.23 for declarations not counted as hazard incidents (DR-4481-WA).

Member	Type	Plan status	Repetitive loss <i>FMA RL and SRL (44 CFR 77.2); repeat-flood, any definition</i>	Public Assistance matched <i>federal share obligated, nominal dollars</i>	Event records naming this place <i>all years; since the member's plan</i>	Notes
Montesano city	City	Approved, expires 2029-04-15	FMA RL 0, SRL 0; any 0	\$286,978.29	0; 0	
Oakville city	City	Approved, expires 2029-04-15	FMA RL 0, SRL 0; any 4	\$9,510.34	0; 0	
Ocean Shores city	City	Approved, expires 2029-04-15	FMA RL 0, SRL 0; any 1	\$77,883.60	0; 0	Includes \$17,082.26 for declarations not counted as hazard incidents (DR-4481-WA).
Westport city	City	Approved, expires 2029-04-15	FMA RL 0, SRL 0; any 0	\$186,456.65	2; 0	

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

School districts and special districts get a plan clock row only.

SOURCES

FEMA, OpenFEMA HazardMitigationPlanStatuses v1, version 2026-09-26T121003Z, pulled 2026-09-28, <https://www.fema.gov/api/open/v1/HazardMitigationPlanStatuses> (API)

FEMA, OpenFEMA NfipMultipleLossProperties v1, version 2026-08-04T164045Z, pulled 2026-09-28, <https://www.fema.gov/api/open/v1/NfipMultipleLossProperties> (API)

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

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

Supports B2-a and B2-b: assets and impacts

Local data required

County-level starter. The plan must describe impacts for each participant and its own assets.

- Critical facilities and lifelines per hazard
- A problem statement per participant 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

Hazard	Building exposure <i>modeled dollars</i>	Agriculture exposure <i>modeled dollars</i>	Population exposed <i>people</i>	EAL buildings <i>modeled dollars per year</i>	EAL agriculture <i>modeled dollars per year</i>	EAL population equivalence <i>statistical value of life and injury, \$13.7M per life, not property damage</i>	EAL as % of exposure <i>buildings; agriculture where noted</i>	Storm Events damage since 2024-04-16 <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	\$2,031,318		under 1	\$2		\$130	0.000105%				
Coastal Flooding	\$4,682,998,993		21,458	\$20,689,152		\$3,151,600	0.442%		\$0		
Cold Wave	\$909,625	\$110,772	15	under \$1	under \$1	under \$1	under 0.0001%				

Hazard	Building exposure <i>modeled dollars</i>	Agriculture exposure <i>modeled dollars</i>	Population exposed <i>people</i>	EAL buildings <i>modeled dollars per year</i>	EAL agriculture <i>modeled dollars per year</i>	EAL population equivalence <i>statistical value of life and injury, \$13.7M per life, not property damage</i>	EAL as % of exposure <i>buildings; agriculture where noted</i>	Storm Events damage since 2024-04-16 <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
Drought		\$22,188,441			\$33		0.000148% (agriculture)				NRI has no building exposure for this hazard; agriculture shown
Earthquake	\$31,333,187,572		75,636	\$29,848,288		\$16,784,218	0.0953%				
Hail	\$17,584,710,398	\$43,262,335	75,462	\$2,481	\$126	\$511	under 0.0001%				
Heat Wave	\$17,584,710,398	\$43,262,335	75,462	\$121	\$3,288	\$447,095	under 0.0001%				
Hurricane											Not Applicable in NRI for this county
Ice Storm	\$17,462,470,262		75,123	\$28,721		\$575,710	0.000164%				
Inland Flooding	\$17,528,331,089	\$30,254,994	15,299	\$19,117,190	\$11,501	\$215,329	n/a (see note)			\$537,112.94	NRI counts the full building value of any census block with some flood loss; this is not the value of buildings in the floodplain. Use local FIRM overlays for B2-a/B2-b. EAL as % of exposure: n/a.
Landslide	\$753,788,339		3,225	\$73,669		\$39,240	0.00977%			\$537,112.94	
Lightning	\$17,584,710,398		75,462	\$2,932		\$36,114	under 0.0001%				
Strong Wind	\$17,584,710,398	\$43,262,335	75,462	\$17,674	\$78	\$24,261	0.000101%		\$0	\$537,112.94	
Tornado	\$17,584,710,398	\$43,262,335	75,462	\$31,260	\$95	\$58,774	0.000178%				
Tsunami	\$17,741,419,048		32,303	\$6,325,754		\$114,398,120	0.0357%				
Volcanic Activity	\$0		0	\$0		\$0					building exposure is 0 in NRI
Wildfire	\$3,373,403,423	\$8,919,408	15,065	\$14,035	\$1	\$752	0.000416%				
Winter Weather	\$17,584,710,398	\$43,262,335	75,462	\$8,299	\$209	\$27,450	under 0.0001%		\$0	\$530,797.94	

Totals since 2024-04-16 (Storm Events through 2026-06-30): 0 county-coded records, 0 with a damage value recorded (including \$0), \$0; 4 zone-level records, 4 with a damage value recorded (including \$0), \$0 reported for the zone; Public Assistance on counted declarations \$537,112.94 (3 declarations, 2 with PA).

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

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

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

SOURCES

FEMA, FEMA National Risk Index 1.20.0 (December 2025), county and census tract tables, version 1.20.0, pulled 2026-09-28, https://www.fema.gov/about/reports-and-data/openfema/nri/v120/NRI_Table_Counties.zip (download, 25 MB), https://www.fema.gov/about/reports-and-data/openfema/nri/v120/NRI_Table_CensusTracts.zip (download, 635 MB)

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

NOAA National Weather Service, NWS county-public forecast zones correlation file, version bp03mr20 to bp16ap26 (11 files; newest bp16ap26), pulled 2026-09-28, <https://www.weather.gov/gis/ZoneCounty>

FEMA, OpenFEMA DisasterDeclarationsSummaries v2, version 2026-09-27T010817Z, pulled 2026-09-28, <https://www.fema.gov/api/open/v2/DisasterDeclarationsSummaries> (API)
FEMA, OpenFEMA PublicAssistanceFundedProjectsSummaries v1, version 2026-09-26T151157Z, pulled 2026-09-28, <https://www.fema.gov/api/open/v1/PublicAssistanceFundedProjectsSummaries> (API)
FEMA, OpenFEMA HazardMitigationPlanStatuses v1, version 2026-09-26T121003Z, pulled 2026-09-28, <https://www.fema.gov/api/open/v1/HazardMitigationPlanStatuses> (API)

Supports B2-a: context

County context

Measure	Value
Population	75,462
Building value (total, not at risk)	\$17,584,710,398
Agriculture value (total, not at risk)	\$43,262,335
NRI risk rating (all hazards)	Relatively High
Expected annual loss, buildings and agriculture, all hazards	\$76,174,909
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)	\$135,759,303
Social vulnerability rating	Relatively High
Community resilience rating	Relatively High
NRI version	December 2025

FEMA's all-hazard expected annual loss total adds buildings, agriculture and population equivalence; the two parts are shown separately so the property figure is not read as including the statistical value of life.

SOURCE
FEMA, FEMA National Risk Index 1.20.0 (December 2025), county and census tract tables, version 1.20.0, pulled 2026-09-28, https://www.fema.gov/about/reports-and-data/openfema/nri/v120/NRI_Table_Counties.zip (download, 25 MB), https://www.fema.gov/about/reports-and-data/openfema/nri/v120/NRI_Table_CensusTracts.zip (download, 635 MB)

Supports B2-c: repetitive loss

Repetitive loss in this county, both definitions

Definition	Properties	Severe repetitive loss	Properties
Repetitive loss, FMA definition (44 CFR 77.2)	4	Severe repetitive loss, FMA definition (44 CFR 77.2)	7
Repetitive loss, NFIP insurance definition	70	Severe repetitive loss, NFIP insurance definition	6

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

SOURCES
FEMA, OpenFEMA NfipMultipleLossProperties v1, version 2026-08-04T164045Z, pulled 2026-09-28, <https://www.fema.gov/api/open/v1/NfipMultipleLossProperties> (API)
FEMA, OpenFEMA HazardMitigationPlanStatuses v1, version 2026-09-26T121003Z, pulled 2026-09-28, <https://www.fema.gov/api/open/v1/HazardMitigationPlanStatuses> (API)

Repeat-flood properties: county and state-level rows

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	4	7	70	6	72	1	27
GRAYS HARBOR COUNTY*	4	5	36	4	38	0	13
ABERDEEN, CITY OF	0	1	14	1	14	1	5

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>
COSMOPOLIS, CITY OF	0	0	1	0	1	0	1
ELMA, CITY OF	0	0	3	0	3	0	1
HOQUIAM, CITY OF	0	1	11	1	11	0	4
OAKVILLE, CITY OF	0	0	4	0	4	0	3
OCEAN SHORES, CITY OF	0	0	1	0	1	0	0
State level, not in this county: county not reported	0	0	2	0	2	0	0

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

Member	NFIP community ID	RL, FMA <i>properties</i>	SRL, FMA <i>properties</i>	RL, NFIP <i>properties</i>	SRL, NFIP <i>properties</i>	Any category <i>properties</i>	Mitigated <i>properties</i>	Currently insured <i>properties</i>	Note
Grays Harbor County	530057	4	5	36	4	38	0	13	
Aberdeen city	530058	0	1	14	1	14	1	5	
Cosmopolis city	530059	0	0	1	0	1	0	1	
Elma city	530060	0	0	3	0	3	0	1	
Hoquiam city	530061	0	1	11	1	11	0	4	
McCleary city	530062	0	0	0	0	0	0	0	
Montesano city	530063	0	0	0	0	0	0	0	
Oakville city	530064	0	0	4	0	4	0	3	
Ocean Shores city	530065	0	0	1	0	1	0	0	
Westport city	530067	0	0	0	0	0	0	0	

Per-member types: XLSX sheet 'B2-c Members'.

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

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

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	4	6	67	5	69	1	25
2 to 4 unit residential	0	0	0	0	0	0	0
other residential	0	0	1	0	1	0	1
non-residential	0	1	2	1	2	0	1

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>
not reported	0	0	0	0	0	0	0

Institutional properties cannot be separated in this data: FEMA's occupancy groups have no institutional class, so they fall in non-residential or other residential in the table by occupancy group.

SOURCES

FEMA, OpenFEMA NfipMultipleLossProperties v1, version 2026-08-04T164045Z, pulled 2026-09-28, <https://www.fema.gov/api/open/v1/NfipMultipleLossProperties> (API)
FEMA, OpenFEMA HazardMitigationPlanStatuses v1, version 2026-09-26T121003Z, pulled 2026-09-28, <https://www.fema.gov/api/open/v1/HazardMitigationPlanStatuses> (API)

FMA RL and FMA SRL are the Flood Mitigation Assistance definitions (44 CFR 77.2), the ones the FEMA Local Mitigation Planning Policy Guide cites; OpenFEMA's fmaRI field description omits the Increased Cost of Compliance clause of 44 CFR 77.2(i). NFIP repetitive loss (FEMA insurance definition, nfipRI) is 2 or more claims over \$1,000 in 10 years and can drop to false when a property is mitigated. Also shown: NFIP severe repetitive loss, any category, mitigated and currently insured.

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

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

Counts may differ from your state NFIP coordinator's list, which is the source the Handbook names.

In this county 1 property is FMA repetitive loss but not NFIP repetitive loss, and 67 properties are NFIP repetitive loss but not FMA repetitive loss.

Exact counts; no count suppression.

Sources

Every table above lists its own sources. The full list, for the plan's bibliography (FEMA review item A4-a):

1. FEMA, OpenFEMA HazardMitigationPlanStatuses v1, version 2026-09-26T121003Z, pulled 2026-09-28, <https://www.fema.gov/api/open/v1/HazardMitigationPlanStatuses> (API)
2. FEMA, OpenFEMA DisasterDeclarationsSummaries v2, version 2026-09-27T010817Z, pulled 2026-09-28, <https://www.fema.gov/api/open/v2/DisasterDeclarationsSummaries> (API)
3. FEMA, OpenFEMA PublicAssistanceFundedProjectsSummaries v1, version 2026-09-26T151157Z, pulled 2026-09-28, <https://www.fema.gov/api/open/v1/PublicAssistanceFundedProjectsSummaries> (API)
4. FEMA, OpenFEMA NfipMultipleLossProperties v1, version 2026-08-04T164045Z, pulled 2026-09-28, <https://www.fema.gov/api/open/v1/NfipMultipleLossProperties> (API)
5. FEMA, FEMA National Risk Index 1.20.0 (December 2025), county and census tract tables, version 1.20.0, pulled 2026-09-28, https://www.fema.gov/about/reports-and-data/openfema/nri/v120/NRI_Table_Counties.zip (download, 25 MB), https://www.fema.gov/about/reports-and-data/openfema/nri/v120/NRI_Table_CensusTracts.zip (download, 635 MB)
6. NOAA NCEI, NOAA NCEI Storm Events Database, details files (csvfiles v1.0), version c20260918, pulled 2026-09-28, <https://www.ncei.noaa.gov/pub/data/swdi/stormevents/csvfiles/>
7. NOAA National Weather Service, NWS county-public forecast zones correlation file, version bp03mr20 to bp16ap26 (11 files; newest bp16ap26), pulled 2026-09-28, <https://www.weather.gov/gis/ZoneCounty>
8. U.S. Census Bureau, Census 2024 Gazetteer, 2020 place by county, CT county-to-cousub crosswalk, version 2024-gazetteer, pulled 2026-09-28, https://www2.census.gov/geo/docs/maps-data/data/gazetteer/2024_Gazetteer/2024_Gaz_counties_national.zip, [https://www2.census.gov/geo/docs/maps-data/data/gazetteer/2024_Gazetteer/2024_Gaz_cousubs_national.zip](https://www2.census.gov/geo/docs/maps-data/data/gazetteer/2024_Gaz_cousubs_national.zip), [https://www2.census.gov/geo/docs/maps-data/data/gazetteer/2024_Gazetteer/2024_Gaz_place_national.zip](https://www2.census.gov/geo/docs/maps-data/data/gazetteer/2024_Gaz_place_national.zip), [https://www2.census.gov/geo/docs/maps-data/data/gazetteer/2024_Gazetteer/2024_Gaz_unsd_national.zip](https://www2.census.gov/geo/docs/maps-data/data/gazetteer/2024_Gaz_unsd_national.zip), [https://www2.census.gov/geo/docs/maps-data/data/gazetteer/2024_Gazetteer/2024_Gaz_elsd_national.zip](https://www2.census.gov/geo/docs/maps-data/data/gazetteer/2024_Gaz_elsd_national.zip), [https://www2.census.gov/geo/docs/maps-data/data/gazetteer/2024_Gazetteer/2024_Gaz_scsd_national.zip](https://www2.census.gov/geo/docs/maps-data/data/gazetteer/2024_Gaz_scsd_national.zip), https://www2.census.gov/geo/docs/reference/codes2020/national_place_by_county2020.txt, https://www2.census.gov/geo/docs/reference/ct_change/ct_cou_to_cousub_crosswalk.xlsx

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Cite this: Hazard Plain (2026). Grays Harbor County, WA: risk-assessment baseline packet, release 2026-10 (data as of 2026-09-28; County area 53027). Preview: automated baseline. Built from FEMA OpenFEMA, the FEMA National Risk Index and NOAA NCEI Storm Events; source versions in the packet's Sources list.

Corrections: to report an error, name the packet, the table and what your records show. Contact: to be added

Hazard Plain release 2026-10. As of 2026-09-28; Storm Events data through 2026-06-30. File hazard-plain_2026-10_WA_53027. Preview: automated baseline.