

Clatsop County, OR

Risk-assessment baseline packet

Unit **County area 41007** Release **2026-10** As of **2026-09-28** 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.

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.

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).

Plan clock

Status	Expired on 2026-03-07	Plan	Clatsop County Multi-Jurisdictional Hazard Mitigation Plan (FEMA plan 107228)
Approved	2021-03-08	Expires	2026-03-07
As of	2026-09-28	Days	205 days since expiry
Update underway	none in FEMA's plan tracker		

Generally not eligible for FEMA mitigation project grants (HMGP, FMA) until a new plan is approved, barring a 44 CFR 201.6(a)(3) exception. Planning grants are not affected.

What changed since your last plan (approved 2021-03-08)

New federal declarations	DR-4907-OR (1 declaration row; 1 counted incident)	Storm Events records since approval	63 (data through 2026-06-30)
Repetitive loss now	FMA RL 0, SRL 1 (44 CFR 77.2); any definition: 9	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: 16 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.

CONTENTS

1. Plan clock, page 1
2. What changed since your last plan (approved 2021-03-08), page 1
3. Supports B1-a: hazards, page 3
4. Supports B1-b: location, page 5
5. Supports B1-c: extent, page 5
6. Supports B1-d: previous occurrences, page 9
7. Supports B1-e: probability, page 13
8. Supports B1-f: variation across the planning area, page 16
9. Supports B2-a and B2-b: assets and impacts, page 18
10. Supports B2-a: context, page 20
11. Supports B2-c: repetitive loss, page 20
12. Sources and OpenFEMA disclaimer, page 22

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
Clatsop County	County	Expired on 2026-03-07	Clatsop County Multi-Jurisdictional Hazard Mitigation Plan (FEMA plan 107228)	2021-03-08	2026-03-07	-205		member approved 2021-05-04
Astoria city	City	Expired on 2026-03-07	Clatsop County Multi-Jurisdictional Hazard Mitigation Plan (FEMA plan 107228)	2021-03-08	2026-03-07	-205		member approved 2021-07-08
Cannon Beach city	City	Expired on 2026-03-07	Clatsop County Multi-Jurisdictional Hazard Mitigation Plan (FEMA plan 107228)	2021-03-08	2026-03-07	-205		member approved 2021-05-20
Gearhart city	City	Expired on 2026-03-07	Clatsop County Multi-Jurisdictional Hazard Mitigation Plan (FEMA plan 107228)	2021-03-08	2026-03-07	-205		
Seaside city	City	Expired on 2026-03-07	Clatsop County Multi-Jurisdictional Hazard Mitigation Plan (FEMA plan 107228)	2021-03-08	2026-03-07	-205		member approved 2021-09-27
Warrenton city	City	Expired on 2026-03-07	Clatsop County Multi-Jurisdictional Hazard Mitigation Plan (FEMA plan 107228)	2021-03-08	2026-03-07	-205		member approved 2021-09-27
Seaside School District 10	School/School District	Expired on 2026-03-07	Clatsop County Multi-Jurisdictional Hazard Mitigation Plan (FEMA plan 107228)	2021-03-08	2026-03-07	-205		member approved 2021-09-27
Arch Cape Domestic Water Supply District	Water/Sewer Authority	Expired on 2026-03-07	Clatsop County Multi-Jurisdictional Hazard Mitigation Plan (FEMA plan 107228)	2021-03-08	2026-03-07	-205		
Arch Cape Sanitary District	Water/Sewer Authority	Expired on 2026-03-07	Clatsop County Multi-Jurisdictional Hazard Mitigation Plan (FEMA plan 107228)	2021-03-08	2026-03-07	-205		
Cannon Beach Rural Fire Protection District	Fire/EMS District	Expired on 2026-03-07	Clatsop County Multi-Jurisdictional Hazard Mitigation Plan (FEMA plan 107228)	2021-03-08	2026-03-07	-205		member approved 2021-09-27
Clatsop Community College	College/University	Expired on 2026-03-07	Clatsop County Multi-Jurisdictional Hazard Mitigation Plan (FEMA plan 107228)	2021-03-08	2026-03-07	-205		member approved 2021-09-27
Falcon Cove Beach Domestic Water Supply District	Water/Sewer Authority	Expired on 2026-03-07	Clatsop County Multi-Jurisdictional Hazard Mitigation Plan (FEMA plan 107228)	2021-03-08	2026-03-07	-205		member approved 2021-09-27
Knappa-Svensen-Burnside Rural Fire Protection District	Fire/EMS District	Expired on 2026-03-07	Clatsop County Multi-Jurisdictional Hazard Mitigation Plan (FEMA plan 107228)	2021-03-08	2026-03-07	-205		member approved 2021-05-04
Lewis & Clark Rural Fire Protection District	Fire/EMS District	Expired on 2026-03-07	Clatsop County Multi-Jurisdictional Hazard Mitigation Plan (FEMA plan 107228)	2021-03-08	2026-03-07	-205		member approved 2021-07-08

Jurisdiction	Type	Status	Plan	Approved	Expires	Days to expiry <i>negative = days since expiry</i>	Update underway	Notes
Port of Astoria	Highway/Port/Rail	Expired on 2026-03-07	Clatsop County Multi-Jurisdictional Hazard Mitigation Plan (FEMA plan 107228)	2021-03-08	2026-03-07	-205		member approved 2021-09-27
Sunset Empire Transportation District	Transit/Airport	Expired on 2026-03-07	Clatsop County Multi-Jurisdictional Hazard Mitigation Plan (FEMA plan 107228)	2021-03-08	2026-03-07	-205		member approved 2021-07-08

SOURCEFEMA, 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 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 <i>NRI Not Applicable, no declaration and no Storm Events record since 1996</i>	Storm Events coverage note
1	Tsunami	Very High	Very High	\$7,002,611		\$92,741,899	\$99,744,510	1		
2	Earthquake	Relatively Moderate	Relatively Moderate	\$14,149,112		\$6,402,814	\$20,551,926			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	\$11,547,616		\$662,948	\$12,210,570	15		
4	Inland Flooding	Relatively Low	Relatively Low	\$11,726,007	\$1,191	\$32,199	\$11,759,398	21		
5	Heat Wave	Relatively Low	Relatively Low	\$51	\$1,069	\$208,310	\$209,430	5		
6	Cold Wave	Very Low	Relatively Low	\$334	\$845	\$190,954	\$192,133	4		Includes 3 Frost/Freeze records, event types the NRI definition of this hazard leaves out.
7	Strong Wind	Relatively Low	Relatively Low	\$142,270	\$2	\$21,185	\$163,457	372		Includes 362 High Wind records and 7 Strong Wind records, event types the NRI definition of this hazard leaves out.
8	Tornado	Very Low	Very Low	\$6,538	\$44	\$70,636	\$77,219	2		

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 <i>NRI Not Applicable, no declaration and no Storm Events record since 1996</i>	Storm Events coverage note
9	Lightning	Very Low	Very Low	\$1,267		\$48,929	\$50,196	1		
10	Ice Storm	Relatively Low	Relatively Low	\$16,034		\$31,385	\$47,418	6		
11	Landslide	Relatively Moderate	Relatively Low	\$16,847		\$24,159	\$41,006	11		
12	Wildfire	Very Low	Very Low	\$26,622	\$1	\$941	\$27,564	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.
13	Winter Weather	Very Low	Relatively Low	\$4,388	\$151	\$8,187	\$12,726	92		
14	Hail	Very Low	Very Low	\$6,308	\$149	\$1,348	\$7,805	4		
15	Volcanic Activity	Very Low	Very Low	\$5		\$982	\$987	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.
16	Avalanche	Very Low	Very Low	\$1		\$22	\$23	0		No recorded events in Storm Events since 1996 (data through 2026-06-30).
17	Drought	Very Low	Very Low		under \$1		under \$1	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-3228-OR 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.	4 of 11
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.	11 of 11
Cold Wave	Affects the whole planning area; national data do not distinguish locations within the county. Confirm locally.	11 of 11
Drought	Affects the whole planning area; national data do not distinguish locations within the county. Confirm locally.	1 of 11
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.	11 of 11
Hail	Affects the whole planning area; national data do not distinguish locations within the county. Confirm locally.	11 of 11
Heat Wave	Affects the whole planning area; national data do not distinguish locations within the county. Confirm locally.	11 of 11
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 11
Ice Storm	Affects the whole planning area; national data do not distinguish locations within the county. Confirm locally.	11 of 11
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.	11 of 11
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.	11 of 11
Lightning	Affects the whole planning area; national data do not distinguish locations within the county. Confirm locally.	11 of 11
Strong Wind	Affects the whole planning area; national data do not distinguish locations within the county. Confirm locally.	11 of 11
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.	11 of 11
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.	10 of 11
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.	11 of 11
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.	11 of 11
Winter Weather	Affects the whole planning area; national data do not distinguish locations within the county. Confirm locally.	11 of 11

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.

Hazard	Scale	Records <i>count, years</i>	Observed range	Worst recorded event	Most damaging (when different)	How it applies to members	Note
Coastal Flood, Storm Surge/ Tide	none in data (FIRM for depth)	15, 2003 to 2022 (15 zone- level)		Coastal Flood, 2007-12-03, \$18,300,000 property; \$0 crops, reported for the zone (2007 dollars); NWS zone ORZ001 (NORTHERN OREGON COAST), zone- level: may include parts of neighboring counties		Zone-level records: applies countywide; national data do not locate these events within the county.	Flood depth: see the FEMA Flood Insurance Rate Map.
Cold/Wind Chill, Extreme Cold/Wind Chill	wind chill	1, 1998 to 1998 (1 zone- level)	7 days; 1 with a recorded value	7 consecutive days, 1998-12-18 to 1998-12-24, 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	3, 2024 to 2024 (3 zone- level)		No crop damage reported in 3 records.		Zone-level records: applies countywide; national data do not locate these events within the county.	Temperature: in event narratives only; local data required.
Drought	US Drought Monitor D- scale	0					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)	4, 1996 to 2021	0.75 in to 2 in (median 1.19 in); 4 with a recorded value	2 in hail, 2018-01-18		Event records naming member places: Cannon Beach city (1 record), Seaside city (1 record), Warrenton city (1 record).	
Excessive Heat, Heat	heat index (narratives)	5, 2006 to 2021 (5 zone- level)	1 day to 5 days (median 2 days); 5 with a recorded value	5 consecutive days, 2006-07-20 to 2006-07-24, 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.
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.

Hazard	Scale	Records <i>count, years</i>	Observed range	Worst recorded event	Most damaging (when different)	How it applies to members	Note
Ice Storm	Sperry-Piltz (local data)	6, 1996 to 2024 (6 zone- level)		Ice Storm, 2024-01-13, \$673,000 property; \$0 crops, reported for the zone (2024 dollars); NWS zone ORZ001 (NORTHERN OREGON 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)	21, 1996 to 2023 (14 zone- level)		Flood, 1999-11-25, \$2,410,000 property; crops not reported, reported for the zone (1999 dollars); NWS zone ORZ001 (NORTHERN COAST), zone-level: may include parts of neighboring counties		Event records naming member places: Seaside city (3 records), Gearhart city (2 records). Zone-level records (14) apply countywide.	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)	11, 1996 to 2011 (11 zone- level)		Debris Flow, 2007-12-11, \$1,500,000 property; \$0 crops, reported for the zone (2007 dollars); NWS zone ORZ003 (COAST RANGE OF NW OREGON), zone-level: may include parts of neighboring counties		Zone-level records: applies countywide; national data do not locate these events within the county.	Physical measure: in event narratives only; local data required.
Lightning	annualized frequency (the measure FEMA's Local Mitigation Planning Handbook names)	1, 2004 to 2004		Lightning, 2004-12-08, damage not reported, 1 direct injury		Event records naming member places: Astoria city (1 record).	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)	369, 1996 to 2025 (369 zone-level)	31 kt (36 mph) to 112 kt (129 mph) (median 56 kt (64 mph)); 361 with a recorded value	112 kt (129 mph) measured gust, High Wind, 2007-12-02; NWS zone ORZ001 (NORTHERN OREGON COAST), zone-level: may include parts of neighboring counties		Zone-level records: applies countywide; national data do not locate these events within the county.	
Thunderstorm Wind	wind speed (kt and mph)	4, 1957 to 2016	50 kt (58 mph) to 83 kt (96 mph) (median 53.5 kt (62 mph)); 4 with a recorded value	83 kt (96 mph), measurement type not recorded, Thunderstorm Wind, 1957-06-05		Event records naming member places: Astoria city (1 record), Cannon Beach city (1 record).	

Hazard	Scale	Records <i>count, years</i>	Observed range	Worst recorded event	Most damaging (when different)	How it applies to members	Note
Tornado	Enhanced Fujita (F before Feb 2007)	5, 1966 to 1998	F/EF0 to F/EF1 (median F/EF0); 5 with a recorded value	F1 tornado, 1967-10-03, 0.5 mi path length (records before 1996 may include the whole path; rating and listing come from the county where the tornado began), 70 yd wide, \$25,000 property; crops not recorded (1967 dollars)		Event records naming member places: Seaside city (2 records), Warrenton 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)	1, 2022 to 2022 (1 zone-level)		No damage reported in 1 records.		Zone-level records: applies countywide; national data do not locate these events within the county.	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)	0					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)	92, 1996 to 2025 (92 zone-level)		Winter Storm, 2021-02-11, \$100,000 property; \$0 crops, reported for the zone (2021 dollars); NWS zone ORZ003 (COAST RANGE OF NW OREGON), zone-level: may include parts of neighboring counties		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.

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>

Supports B1-d: previous occurrences

Declaration rows

19

Counted incidents

15

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	2025-12-15	DR-4907-OR	Major disaster	SEVERE STORMS, STRAIGHT-LINE WINDS, FLOODING, LANDSLIDES, AND MUDSLIDES	Inland Flooding; Landslide; Strong Wind; Winter Weather	\$5,247.60	new since last plan; within last 5 years	
2020-03-28	2020-01-20	DR-4499-OR	Major disaster	COVID-19 PANDEMIC	Non-natural, not counted	\$5,453,637.24	during plan review, check whether your last plan included it	
2020-03-13	2020-01-20	EM-3429-OR	Emergency	COVID-19	Non-natural, not counted	none found	during plan review, check whether your last plan included it	same incident as DR-4499
2016-02-17	2015-12-06	DR-4258-OR	Major disaster	SEVERE WINTER STORMS, STRAIGHT-LINE WINDS, FLOODING, LANDSLIDES, AND MUDSLIDES	Inland Flooding; Landslide; Strong Wind; Winter Weather	\$1,662,732.87		
2011-02-17	2011-01-13	DR-1956-OR	Major disaster	SEVERE WINTER STORM, FLOODING, MUDSLIDES, LANDSLIDES, AND DEBRIS FLOWS	Inland Flooding; Landslide; Winter Weather	\$230,925.69		
2009-03-02	2008-12-13	DR-1824-OR	Major disaster	SEVERE WINTER STORM, RECORD AND NEAR RECORD SNOW	Winter Weather	none found		
2007-12-08	2007-12-01	DR-1733-OR	Major disaster	SEVERE STORMS, FLOODING, LANDSLIDES, AND MUDSLIDES	Inland Flooding; Landslide	\$1,511,722.98		
2007-02-22	2006-12-14	DR-1683-OR	Major disaster	SEVERE WINTER STORM AND FLOODING	Inland Flooding; Winter Weather	\$49,617.03		
2006-12-29	2006-11-05	DR-1672-OR	Major disaster	SEVERE STORMS, FLOODING, LANDSLIDES, AND MUDSLIDES	Inland Flooding; Landslide	\$234,256.74		
2006-03-20	2005-12-18	DR-1632-OR	Major disaster	SEVERE STORMS, FLOODING, LANDSLIDES, AND MUDSLIDES	Inland Flooding; Landslide	\$143,870.40		
2005-09-07	2005-08-29	EM-3228-OR	Emergency	HURRICANE KATRINA EVACUATION	Hurricane: evacuation support, not a local hazard event; not counted	none found		
2004-02-19	2003-12-26	DR-1510-OR	Major disaster	SEVERE WINTER STORMS	Winter Weather	none found		
1996-03-19	1996-12-10	DR-1107-OR	Major disaster	SEVERE STORMS AND HIGH WINDS	Strong Wind	none found		
1996-02-09	1996-02-04	DR-1099-OR	Major disaster	HIGH WINDS, SEVERE STORMS AND FLOODING	Inland Flooding (primary); also designated: Strong Wind	none found		
1994-08-02	1994-05-01	DR-1036-OR	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		

Declared	Incident began	FEMA number	Type	Title	Mapped hazard	County Public Assistance <i>federal share obligated, nominal dollars</i>	Flags	Notes
1990-01-24	1990-01-06	DR-853-OR	Major disaster	SEVERE STORMS & FLOODING	Inland Flooding	none found		
1972-01-21	1972-01-21	DR-319-OR	Major disaster	SEVERE STORMS & FLOODING	Inland Flooding	none found		
1971-02-13	1971-02-13	DR-301-OR	Major disaster	STORMS & FLOODING	Inland Flooding	none found		
1964-12-24	1964-12-24	DR-184-OR	Major disaster	HEAVY RAINS & FLOODING	Inland Flooding	none found		

School districts and special districts in this county: \$1,623,026.20 (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
1963-02-25	1963-02-25	DR-144-OR	Major disaster	FLOODS	Inland Flooding		
1962-10-16	1962-10-16	DR-136-OR	Major disaster	SEVERE STORMS	Hazard not mapped (severe storm title names no single hazard); not counted		
1957-03-01	1957-03-01	DR-69-OR	Major disaster	FLOOD	Inland Flooding		
1956-07-20	1956-07-20	DR-60-OR	Major disaster	STORM & FLOOD	Inland Flooding		
1955-12-29	1955-12-29	DR-49-OR	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.

27 Fire Management declarations (1973-08-17 to 2001-08-17) 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, \$479,867.27

Disaster number	Declared	Applicant	County field in FEMA data	PA obligated <i>federal share obligated, nominal dollars</i>	Why not placed
4519	2020-04-03	City of Walla Walla	Walla Walla County	\$479,867.27	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	15	3	5	3	0	0	1996 to 2026-06-30	
Cold Wave	4	3	0	3	0	0	1996 to 2026-06-30	Includes 3 Frost/Freeze records, event types the NRI definition of this hazard leaves out.
Drought	0	0	0	0	0	0	1996 to 2026-06-30	No recorded events, 1996 to 2026-06-30, NOAA NCEI Storm Events
Earthquake	0	0	0	0	0	0		No Storm Events record; local data required (e.g., USGS).
Hail	4	0	1	0	0	0	1955 to 2026-06-30	
Heat Wave	5	2	0	0	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	2	1	2	0	0	1996 to 2026-06-30	
Inland Flooding	21	2	1	2	12	1	1996 to 2026-06-30	
Landslide	11	0	0	0	6	1	1996 to 2026-06-30	
Lightning	1	0	0	0	0	0	1996 to 2026-06-30	
Strong Wind	373	32	10	32	4	1	1955 to 2026-06-30	Includes 362 High Wind records and 7 Strong Wind records, event types the NRI definition of this hazard leaves out.
Tornado	5	0	0	0	0	0	1950 to 2026-06-30	
Tsunami	1	1	0	1	0	0	1996 to 2026-06-30	
Volcanic Activity	0	0	0	0	0	0	1996 to 2026-06-30	No recorded events, 1996 to 2026-06-30, NOAA NCEI Storm Events
Wildfire	0	0	0	0	0	0	1996 to 2026-06-30	No recorded events, 1996 to 2026-06-30, NOAA NCEI Storm Events
Winter Weather	92	18	1	18	6	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
2024-01-13	Ice Storm		\$673,000 property; \$0 crops, reported for the zone (2024 dollars)	0, 0	NWS zone ORZ001 (NORTHERN OREGON COAST), zone-level: may include parts of neighboring counties	new since last plan; within last 5 years	B1-c worst recorded: Ice Storm
2022-12-27	High Wind	51 kt (59 mph) measured gust	\$3,000,000 property; \$0 crops, reported for the zone (2022 dollars)	3, 1	NWS zone ORZ003 (COAST RANGE OF NW OREGON), zone-level: may include parts of neighboring counties	new since last plan; within last 5 years	deaths or injuries recorded
2007-12-03	Coastal Flood		\$18,300,000 property; \$0 crops, reported for the zone (2007 dollars)	0, 0	NWS zone ORZ001 (NORTHERN OREGON COAST), zone-level: may include parts of neighboring counties		B1-c worst recorded: Coastal Flood, Storm Surge/Tide
2007-12-02	High Wind	112 kt (129 mph) measured gust	\$62,600,000 property; \$0 crops, reported for the zone (2007 dollars)	0, 0	NWS zone ORZ001 (NORTHERN OREGON COAST), zone-level: may include parts of neighboring counties		B1-c worst recorded: High Wind and Strong Wind (outside NRI Strong Wind definition)
2006-07-20	Heat		damage not reported	0, 0	NWS zone ORZ003 (COAST RANGE OF NW OREGON), zone-level: may include parts of neighboring counties		B1-c worst recorded: Excessive Heat, Heat
2004-12-08	Lightning		damage not reported	0, 1	ASTORIA		B1-c worst recorded: Lightning
1999-11-25	Flood		\$2,410,000 property; crops not reported, reported for the zone (1999 dollars)	0, 0	NWS zone ORZ001 (NORTHERN COAST), zone-level: may include parts of neighboring counties		B1-c worst recorded: Flash Flood, Flood, Lakeshore Flood
1998-12-18	Cold/Wind Chill		damage not reported	0, 0	NWS zone ORZ001 (NORTHERN COAST), zone-level: may include parts of neighboring counties		B1-c worst recorded: Cold/Wind Chill, Extreme Cold/Wind Chill
1998-01-11	Winter Storm		\$50,000 property; crops not reported, reported for the zone (1998 dollars)	1, 0	NWS zone ORZ001 (CLATSOP/ TILLAMOOK), zone-level: may include parts of neighboring counties		deaths or injuries recorded
1996-02-03	Ice Storm		damage not reported	1, 0	NWS zone ORZ001 (NORTHERN OREGON COAST), zone-level: may include parts of neighboring counties		deaths or injuries recorded
1967-10-03	Tornado	F1, 0.5 mi path length (records before 1996 may include the whole path; rating and listing come from the county where the tornado began), 70 yd wide	\$25,000 property; crops not recorded (1967 dollars)	0, 0	location not recorded		B1-c worst recorded: Tornado
1957-06-05	Thunderstorm Wind	83 kt (96 mph), measurement type not recorded	damage not recorded (pre-1996 record)	0, 0	location not recorded		B1-c worst recorded: Thunderstorm Wind

The full list is in the **XLSX** file, sheet "B1-d Storm Events history" (538 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	4.44	events per year at a location (modeled)	about 4.4 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	0.128	event-days per year	about 0.128 days per year	Possible	event-days in 1 of 30 years, 1996 to 2025 (3.33%)	1.87	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	0.444	event-days per year	about 0.444 days per year		event-days in 0 of 30 years, 1996 to 2025 (0%)	14	2000 to 2025 (25.25 years; D3 and D4 only)	countywide	No recorded event-days, 1996 to 2025; descriptor not assigned
Earthquake	0.0192	annual probability at a location	chance a given location in the county has at least minor-damage shaking in a year: 1.92%			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	0.0324	events per year	about 1 in 31 years	Possible	FEMA annualized frequency (modeled)	1.3 (modeled)	1986 to 2023 (38 years)	countywide	
Heat Wave	3.42	event-days per year	about 3.42 days per year	Likely	event-days in 3 of 30 years, 1996 to 2025 (10%)	43.7	2005-11-12 to 2024-11-12 (19 years)	countywide	NRI gives about 3.42 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 3 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	0.712	event-days per year	about 0.712 days per year	Likely	event-days in 4 of 30 years, 1996 to 2025 (13.3%)	40	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 11 of 30 years, 1996 to 2025 (36.7%)	6	1996 to 2023 (28 years)	see B1-f	
Landslide	3.82	events per year (modeled)	about 3.82 per year	Highly likely	FEMA annualized frequency (modeled)	not shown	modeled	see B1-f	
Lightning	5.2	days per year with a strike	about 5.2 days per year	Highly likely	FEMA annualized frequency (modeled)	not shown	1995 to 2023 (29 years; CONUS)	countywide	
Strong Wind	0.0376	events per year	about 1 in 27 years	Possible	FEMA annualized frequency (modeled)	2	1986 to 2023 (38 years)	countywide	
Tornado	0.0744	events per year	about 1 in 13 years	Possible	FEMA annualized frequency (modeled)	not shown	1950 to 2023 (EF2+); 1986 to 2023 (EF0-1)	see B1-f	
Tsunami	0.145	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: 14.5%	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.
Volcanic Activity	0.0101	annual probability	about 1 in 99 years	Possible	FEMA annualized frequency (modeled)	not shown	modeled	see B1-f	
Wildfire	0.0000243	annual probability at a location	chance a given location in the county burns in a year: 0.00243%		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)
Winter Weather	11.8	event-days per year	about 11.8 days per year	Highly likely	event-days in 28 of 30 years, 1996 to 2025 (93.3%)	172	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	1	30	0.0333
Hail	2.00 in+	1996 to 2025	1	30	0.0333
Strong Wind (Thunderstorm Wind records)	50-64 kt	1996 to 2025	3	30	0.1
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	2	30	0.0667
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	4 of 11	6.9	7.7	8.1	Very Low 4, Not Applicable 7	
Coastal Flooding	11 of 11	88.3	97.7	100.0	Very High 5, Relatively High 2, Relatively Moderate 3, Relatively Low 1	
Cold Wave	11 of 11	24.9	31.2	38.3	Relatively Low 11	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.
Drought	1 of 11	67.1	67.1	67.1	Very Low 1, No Rating 10	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	11 of 11	88.7	96.9	99.1	Very High 4, Relatively High 7	
Hail	11 of 11	10.8	18.7	25.0	Very Low 11	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	11 of 11	14.0	27.2	49.3	Relatively Low 9, Very Low 2	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 11				Not Applicable 11	
Ice Storm	11 of 11	38.4	50.3	63.8	Relatively Low 11	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	11 of 11	29.5	69.8	97.7	Very High 2, Relatively High 3, Relatively Moderate 4, Relatively Low 2	

Hazard	Tracts <i>rated of all</i>	Risk score min <i>NRI score, 0 to 100</i>	Median	Max	Tracts by rating	Note
Landslide	11 of 11	35.3	81.6	98.5	Relatively Moderate 3, Relatively Low 3, Very Low 5	
Lightning	11 of 11	18.2	28.3	43.9	Relatively Low 9, Very Low 2	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	11 of 11	31.7	49.0	65.6	Relatively Moderate 4, Relatively Low 7	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	11 of 11	12.9	19.4	25.8	Very Low 11	
Tsunami	10 of 11	63.9	94.8	99.9	Very High 2, Relatively High 3, Relatively Moderate 2, Relatively Low 3, No Rating 1	
Volcanic Activity	11 of 11	88.3	91.6	96.0	Relatively Low 11	
Wildfire	11 of 11	57.9	74.0	84.2	Relatively Low 7, Very Low 4	
Winter Weather	11 of 11	27.7	35.4	47.0	Relatively Low 11	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
Clatsop County	County	Expired on 2026-03-07	FMA RL 0, SRL 1; any 6	\$313,040.15	0; 0	
Astoria city	City	Expired on 2026-03-07	FMA RL 0, SRL 0; any 0	\$945,484.48	2; 0	Includes \$30,959.50 for declarations not counted as hazard incidents (DR-4499-OR).
Cannon Beach city	City	Expired on 2026-03-07	FMA RL 0, SRL 0; any 0	\$110,682.58	2; 0	
Gearhart city	City	Expired on 2026-03-07	FMA RL 0, SRL 0; any 1	\$63,491.67	2; 1	
Seaside city	City	Expired on 2026-03-07	FMA RL 0, SRL 0; any 2	\$175,526.49	6; 0	Includes \$97,547.15 for declarations not counted as hazard incidents (DR-4499-OR).
Warrenton city	City	Expired on 2026-03-07	FMA RL 0, SRL 0; any 0	\$77,138.28	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 2021-03-08 <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	\$904,742		under 1	\$1		\$22	0.000105%				
Coastal Flooding	\$2,276,242,630		6,622	\$11,547,616		\$662,948	0.507%		\$0		
Cold Wave	\$13,247,275,989	\$12,438,433	41,034	\$334	\$845	\$190,954	under 0.0001%		\$0		
Drought		\$365,932			under \$1		under 0.0001% (agriculture)				NRI has no building exposure for this hazard; agriculture shown
Earthquake	\$23,173,641,863		41,072	\$14,149,112		\$6,402,814	0.0611%				
Hail	\$13,247,904,538	\$12,438,433	41,036	\$6,308	\$149	\$1,348	under 0.0001%				
Heat Wave	\$13,247,904,538	\$12,438,433	41,036	\$51	\$1,069	\$208,310	under 0.0001%		\$0		
Hurricane											Not Applicable in NRI for this county
Ice Storm	\$13,193,109,972		40,942	\$16,034		\$31,385	0.000122%		\$673,000		

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 2021-03-08 <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	\$13,136,203,886	\$3,133,041	3,681	\$11,726,007	\$1,191	\$32,199	n/a (see note)	\$0		\$5,247.60	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	\$841,590,579		3,063	\$16,847		\$24,159	0.002%			\$5,247.60	
Lightning	\$13,247,904,538		41,036	\$1,267		\$48,929	under 0.0001%				
Strong Wind	\$13,247,904,538	\$12,438,433	41,036	\$142,270	\$2	\$21,185	0.00107%		\$3,010,250	\$5,247.60	Storm Events damage since the plan includes 4 zone-level High Wind records (\$3,010,250), an event type the NRI definition of this hazard leaves out.
Tornado	\$13,247,904,538	\$12,438,433	41,036	\$6,538	\$44	\$70,636	under 0.0001%				
Tsunami	\$17,662,203,374		20,491	\$7,002,611		\$92,741,899	0.0396%				
Volcanic Activity	\$13,247,904,538		41,036	\$5		\$982	under 0.0001%				
Wildfire	\$5,447,959,262	\$10,591,943	18,349	\$26,622	\$1	\$941	0.000489%				
Winter Weather	\$13,247,904,538	\$12,438,433	41,036	\$4,388	\$151	\$8,187	under 0.0001%		\$0	\$5,247.60	

Totals since 2021-03-08 (Storm Events through 2026-06-30): 2 county-coded records, 2 with a damage value recorded (including \$0), \$0; 61 zone-level records, 57 with a damage value recorded (including \$0), \$3,683,250 reported for the zone; Public Assistance on counted declarations \$5,247.60 (1 declaration, 1 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	41,036
Building value (total, not at risk)	\$13,247,904,538
Agriculture value (total, not at risk)	\$12,438,433
NRI risk rating (all hazards)	Relatively High
Expected annual loss, buildings and agriculture, all hazards	\$44,649,463
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)	\$100,446,898
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)	0	Severe repetitive loss, FMA definition (44 CFR 77.2)	1
Repetitive loss, NFIP insurance definition	9	Severe repetitive loss, NFIP insurance definition	1

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	0	1	9	1	9	0	2
CLATSOP COUNTY*	0	1	6	1	6	0	2
GEARHART, CITY OF	0	0	1	0	1	0	0
SEASIDE, CITY OF	0	0	2	0	2	0	0
State level, not in this county: county not reported	0	0	1	0	1	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
Clatsop County	410027	0	1	6	1	6	0	2	
Astoria city	410028	0	0	0	0	0	0	0	
Cannon Beach city	410029	0	0	0	0	0	0	0	
Gearhart city	410030	0	0	1	0	1	0	0	
Seaside city	410032	0	0	2	0	2	0	0	
Warrenton city	410033	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	0	1	9	1	9	0	2
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

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.

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)

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 fmaRL field description omits the Increased Cost of Compliance clause of 44 CFR 77.2(i). NFIP repetitive loss (FEMA insurance definition, nfipRL) 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 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

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_scscd_national.zip](https://www2.census.gov/geo/docs/maps-data/data/gazetteer/2024_Gaz_scscd_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
-

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).

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.

Reuse, citation and corrections

Reuse and citation: Hazard Plain text and tables are licensed under Creative Commons Attribution 4.0 International (CC BY 4.0, <https://creativecommons.org/licenses/by/4.0/>); credit Hazard Plain and the release. The underlying federal data are public domain; OpenFEMA data are also subject to the OpenFEMA terms and conditions.

Cite this: Hazard Plain (2026). Clatsop County, OR: risk-assessment baseline packet, release 2026-10 (data as of 2026-09-28; County area 41007). 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_OR_41007. Preview: automated baseline.