

Clatsop County, OR

Risk-assessment baseline packet

County FIPS: 41007 Release: 2026-10 Data as of: 2026-09-30 Storm Events data through: 2026-06-30

Hazard Plain is an independent product built from public federal data. It is not a FEMA document and is not reviewed or endorsed by FEMA or any state agency.

Summary

Plan status as of 2026-09-30: Expired on 2026-03-07. Plan: Clatsop County Multi-Jurisdictional Hazard Mitigation Plan (FEMA plan 107228), approved 2021-03-08. Since the plan was approved on 2021-03-08: 1 new hazard declaration (1 incident): DR-4907-OR (Severe Storms, Straight-Line Winds, Flooding, Landslides, and Mudslides). NOAA Storm Events records since that date: 63 records (data through 2026-06-30). Highest expected annual loss (FEMA National Risk Index, modeled total; see B1-a): Tsunami (\$99,744,510 a year), Earthquake (\$20,551,926) and Coastal Flooding (\$12,210,570). Repetitive-loss flood properties now: FMA RL 0, SRL 1 (44 CFR 77.2); any definition: 9. The tables that follow are organized by the items of FEMA's Local Mitigation Plan Review Tool, Element B (B1-a to B2-c); each heading says which item its tables support.

TERMS USED

EAL: expected annual loss: FEMA's modeled average yearly loss from a hazard.
NRI: FEMA's National Risk Index (version 1.20, December 2025).
NFIP: National Flood Insurance Program.
RL, SRL: repetitive loss and severe repetitive loss: flood-insured properties with repeated claims (definitions in B2-c).
FMA, HMGP: Flood Mitigation Assistance and Hazard Mitigation Grant Program, FEMA mitigation grants.
PA: FEMA Public Assistance: disaster aid to governments and some nonprofits.
Zone-level: NOAA logged the event for a National Weather Service forecast zone, which may include parts of neighboring counties.
County-coded: NOAA logged the event to this county.
FIPS: the federal code for a place; 41007 is this area.
D0 to D4: U.S. Drought Monitor categories, from abnormally dry (D0) to exceptional drought (D4).
F/EF, EFU: Fujita and Enhanced Fujita tornado ratings; EFU is an unrated tornado.
kt, CONUS: knots (1 kt is about 1.15 mph); the contiguous United States.
CFR: Code of Federal Regulations.
A4-a, E1-a: other items of FEMA's Local Mitigation Plan Review Tool (sources, and changes since the last plan).
Dollars: nominal (as reported, labeled with the year), not adjusted for inflation.

CONTENTS

1. Summary and terms used, page 1
2. Plan clock, page 2
3. What changed since your last plan (approved 2021-03-08), page 2
4. Supports FEMA checklist item B1-a: hazard identification, page 4
5. Supports FEMA checklist item B1-b: hazard location, page 6
6. Supports FEMA checklist item B1-c: hazard extent, page 6
7. Supports FEMA checklist item B1-d: previous occurrences, page 9
8. Supports FEMA checklist item B1-e: probability of future events, page 13
9. Supports FEMA checklist item B1-f: hazards that vary across jurisdictions, page 16
10. Supports FEMA checklist items B2-a and B2-b: vulnerability and potential impacts, page 18
11. Supports FEMA checklist item B2-a: vulnerability (county context), page 20
12. Supports FEMA checklist item B2-c: repetitive loss properties, page 20
13. Sources, what the plan adds, disclaimer and citation, page 22

Plan clock

Status:	Expired on 2026-03-07	Plan:	Clatsop County Multi-Juisdictional Hazard Mitigation Plan (FEMA plan 107228)
Approved:	2021-03-08	Days since expiry:	207
Update underway:	none recorded in FEMA's plan tracker		

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

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

New federal declarations:	1 new hazard declaration (1 incident): DR-4907-OR (Severe Storms, Straight-Line Winds, Flooding, Landslides, and Mudslides)	Storm Events records since approval:	63 records (data through 2026-06-30)
Repetitive loss now:	FMA RL 0, SRL 1 (44 CFR 77.2); any definition: 9	Repeat-flood change:	this release sets the baseline count.

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

Plan status for every jurisdiction listed in this county: 16 rows, in the section "Plan clock: Plan status for every jurisdiction listed in this county" on the following pages.

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

Plan clock

Plan status for every jurisdiction listed in this county

Source: 1

Jurisdiction	Type	Status	Plan	Approved	Expires	Days to expiry negative = days since expiry	Notes
Clatsop County	County	Expired on 2026-03-07	Clatsop County Multi-Jurisdictional Hazard Mitigation Plan (FEMA plan 107228)	2021-03-08	2026-03-07	-207	this jurisdiction 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	-207	this jurisdiction 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	-207	this jurisdiction 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	-207	
Seaside city	City	Expired on 2026-03-07	Clatsop County Multi-Jurisdictional Hazard Mitigation Plan (FEMA plan 107228)	2021-03-08	2026-03-07	-207	this jurisdiction 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	-207	this jurisdiction 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	-207	this jurisdiction 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	-207	
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	-207	
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	-207	this jurisdiction 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	-207	this jurisdiction 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	-207	this jurisdiction 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	-207	this jurisdiction 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	-207	this jurisdiction approved 2021-07-08
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	-207	this jurisdiction 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	-207	this jurisdiction approved 2021-07-08

Supports FEMA checklist item B1-a: hazard identification

Hazards NRI does not cover (local data needed)

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

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

Sources: 5, 6

Rank by EAL	Hazard	NRI risk rating	EAL rating	EAL buildings modeled dollars per year	EAL agriculture modeled dollars per year	Cost of expected deaths and injuries FEMA's dollar value per year, not property damage	EAL total (see note) modeled dollars per year	Storm Events records, 1996 to 2026-06-30 count	Why this hazard can be left out <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	n/a	\$92,741,899	\$99,744,510	1		
2	Earthquake	Relatively Moderate	Relatively Moderate	\$14,149,112	n/a	\$6,402,814	\$20,551,926			Storm Events does not record earthquakes.
3	Coastal Flooding	Very High	Very High	\$11,547,616	n/a	\$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 (outside NRI's Cold Wave definition; counted in this table and in B1-d, not in the B1-e descriptor).
7	Strong Wind	Relatively Low	Relatively Low	\$142,270	\$2	\$21,185	\$163,457	372		Includes 362 High Wind and 7 Strong Wind records (NOAA non-thunderstorm wind types, outside NRI's Strong Wind definition).
8	Tornado	Very Low	Very Low	\$6,538	\$44	\$70,636	\$77,219	2		
9	Lightning	Very Low	Very Low	\$1,267	n/a	\$48,929	\$50,196	1		
10	Ice Storm	Relatively Low	Relatively Low	\$16,034	n/a	\$31,385	\$47,418	6		

Rank by EAL	Hazard	NRI risk rating	EAL rating	EAL buildings modeled dollars per year	EAL agriculture modeled dollars per year	Cost of expected deaths and injuries FEMA's dollar value per year, not property damage	EAL total (see note) modeled dollars per year	Storm Events records, 1996 to 2026-06-30 count	Why this hazard can be left out NRI Not Applicable, no declaration and no Storm Events record since 1996	Storm Events coverage note
11	Landslide	Relatively Moderate	Relatively Low	\$16,847	n/a	\$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).
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	n/a	\$982	\$987	0		No recorded events in Storm Events since 1996 (data through 2026-06-30).
16	Avalanche	Very Low	Very Low	\$1	n/a	\$22	\$23	0		No recorded events in Storm Events since 1996 (data through 2026-06-30).
17	Drought	Very Low	Very Low	n/a	under \$1	n/a	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).

NRI risk rating combines expected annual loss with social vulnerability and community resilience; EAL rating rates expected annual loss alone. Both compare this county with all U.S. counties.

Local data needed: state and local wildfire and volcanic activity records (Storm Events records these hazards only in part).

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

Supports FEMA checklist item B1-b: hazard location

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

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

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

Source: 5

Hazard	Highest-rated census tracts <i>NRI risk rating, score 0 to 100</i>
Avalanche	tract 9504 (Very Low, 8.1); tract 9506 (Very Low, 7.8); tract 9511 (Very Low, 7.6)
Earthquake	tract 9505 (Very High, 99.1); tract 9509 (Very High, 98.5); tract 9504 (Very High, 97.9)
Hurricane	no tract has a National Risk Index rating for this hazard
Landslide	tract 9511 (Relatively Moderate, 98.5); tract 9512 (Relatively Moderate, 98.4); tract 9504 (Relatively Moderate, 97.1)
Tornado	tract 9509 (Very Low, 25.8); tract 9511 (Very Low, 24.1); tract 9504 (Very Low, 23.0)
Tsunami	tract 9509 (Very High, 99.9); tract 9505 (Very High, 99.5); tract 9507 (Relatively High, 99.0)
Volcanic Activity	tract 9505 (Relatively Low, 96.0); tract 9509 (Relatively Low, 95.3); tract 9511 (Relatively Low, 94.1)
Wildfire	tract 9504 (Relatively Low, 84.2); tract 9512 (Relatively Low, 79.1); tract 9513 (Relatively Low, 77.7)

Up to 3 census tracts per hazard, highest National Risk Index rating first, then highest score; a tract number is the Census tract number (for example 9504 is Census Tract 9504). FEMA's Resilience Analysis and Planning Tool maps the National Risk Index for every tract: <https://www.fema.gov/emergency-managers/practitioners/resilience-analysis-and-planning-tool>

Supports FEMA checklist item B1-c: hazard extent

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

Sources: 6, 7

Hazard	Scale	Records <i>count and years</i>	Observed range	Worst recorded event	Most damaging (when different)	How it applies to jurisdictions	Note
Avalanche	none (count and damage only)	0					Physical measure: in event narratives only (local data needed).
Coastal Flood, Storm Surge/ Tide	none in data (flood depth: FIRM)	15 records, 2003 to 2022 (15 zone-level)		Coastal Flood, 2007-12-03, \$18,300,000 property; \$0 crops (2007 dollars); NWS zone ORZ001		Countywide (zone-level records).	Flood depth: see the FEMA Flood Insurance Rate Map.
Cold/Wind Chill, Extreme Cold/Wind Chill	wind chill	1 record, 1998 (1 zone-level)	7 days; 1 with a recorded value	7 consecutive days, 1998-12-18 to 1998-12-24, zone-level		Countywide (zone-level records).	Wind chill: in event narratives only (local data needed).

Hazard	Scale	Records <i>count and years</i>	Observed range	Worst recorded event	Most damaging (when different)	How it applies to jurisdictions	Note
Frost/Freeze (outside NRI's Cold Wave definition)	crop damage	3 records, 2024 (3 zone- level)		No crop damage reported in 3 records.		Countywide (zone-level records).	Temperature: in event narratives only (local data needed).
Drought	U.S. Drought Monitor scale (D0 to D4)	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					Storm Events does not record earthquakes; the USGS earthquake catalog is the source.
Hail	hail size (inches)	4 records, 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 jurisdictions in the plan: Cannon Beach city (1 record), Seaside city (1 record), Warrenton city (1 record).	
Excessive Heat, Heat	heat index (in event narratives)	5 records, 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		Countywide (zone-level records).	Heat index: in event narratives only (local data needed).
Hurricane, Tropical Storm, Tropical Depression	Saffir-Simpson	0					Storm Events files every zone of a storm's episode under the storm's type; flooding from the storm is filed as Flood or Flash Flood records.
Ice Storm	Sperry-Piltz ice scale (local data)	6 records, 1996 to 2024 (6 zone-level)		Ice Storm, 2024-01-13, \$673,000 property; \$0 crops (2024 dollars); NWS zone ORZ001		Countywide (zone-level records).	Ice thickness: in event narratives only (local data needed).
Flash Flood, Flood, Lakeshore Flood	damage and flood days (flood depth: FIRM)	21 records, 1996 to 2023 (14 zone-level)		Flood, 1999-11-25, \$2,410,000 property; crops not reported (1999 dollars); NWS zone ORZ001		Event records naming jurisdictions in the plan: 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 is often \$0 or blank for floods, major ones included; FEMA Public Assistance by declaration (B1-d) shows which floods cost the most.
Debris Flow	none (count and damage only)	11 records, 1996 to 2011 (11 zone-level)		Debris Flow, 2007-12-11, \$1,500,000 property; \$0 crops (2007 dollars); NWS zone ORZ003		Countywide (zone-level records).	Physical measure: in event narratives only (local data needed).

Hazard	Scale	Records <i>count and years</i>	Observed range	Worst recorded event	Most damaging (when different)	How it applies to jurisdictions	Note
Lightning	annualized frequency (the measure FEMA's Local Mitigation Planning Handbook names)	1 record, 2004		Lightning, 2004-12-08, damage not reported, 1 direct injury		Event records naming jurisdictions in the plan: Astoria city (1 record).	Storm Events lists lightning with damage or casualties; physical measure in event narratives only (local data needed).
High Wind and Strong Wind (outside NRI's Strong Wind definition)	wind speed (kt and mph)	369 records, 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		Countywide (zone-level records).	
Thunderstorm Wind	wind speed (kt and mph)	4 records, 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 jurisdictions in the plan: Astoria city (1 record), Cannon Beach city (1 record).	
Tornado	Enhanced Fujita (Fujita before Feb 2007)	5 records, 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 (whole path, pre-1996), 70 yd wide, \$25,000 property; crops not recorded (1967 dollars)		Event records naming jurisdictions in the plan: Seaside city (2 records), Warrenton city (1 record).	Before 1996 a tornado is listed once, under the county where it began, with its whole path's rating and length; from 1996 on, each county lists its own segment. Length is not used to rank tornadoes (see Methods).
Tsunami	none (count and damage only)	1 record, 2022 (1 zone-level)		No damage reported in 1 record.		Countywide (zone-level records).	Physical measure: in event narratives only (local data needed).
Volcanic Ash, Volcanic Ashfall	Volcanic Explosivity Index (local data)	0					Physical measure: in event narratives only (local data needed).
Wildfire	acres burned (local data)	0					Acres burned: in event narratives only (local data needed).
Winter Storm, Heavy Snow, Blizzard, Lake-Effect Snow, Winter Weather, Sleet	none in data (snowfall: local data)	92 records, 1996 to 2025 (92 zone-level)		Winter Storm, 2021-02-11, \$100,000 property; \$0 crops (2021 dollars); NWS zone ORZ003		Countywide (zone-level records).	Snow depth: in event narratives only (local data needed).

Storm Events records are more complete after 1996; before 1996 only Tornado (from 1950), Hail and Thunderstorm Wind (from 1955) exist. Zone-level records whose zone no NWS zone-county file places in this county (mostly before 2020) are not counted here (the Methods page explains the zone matching).

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

Supports FEMA checklist item B1-d: previous occurrences

Federal declarations for this county: 19 declarations covering 15 separate hazard incidents counted in this packet (declarations for the same incident count once; non-natural and evacuation-only declarations are not counted).

Federal disaster declarations for this county

Sources: 1, 2, 3

Declared	Incident began	FEMA number	Type	Title	Mapped hazard	County Public Assistance <i>federal share obligated, nominal dollars</i>	Flags	Notes
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	in the 12 months before plan approval	
2020-03-13	2020-01-20	EM-3429-OR	Emergency	COVID-19	Non-natural, not counted	no Public Assistance recorded	in the 12 months before plan approval	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	no Public Assistance recorded		
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	no Public Assistance recorded		
2004-02-19	2003-12-26	DR-1510-OR	Major disaster	Severe Winter Storms	Winter Weather	no Public Assistance recorded		
1996-03-19	1996-12-10	DR-1107-OR	Major disaster	Severe Storms and High Winds	Strong Wind	no Public Assistance recorded		
1996-02-09	1996-02-04	DR-1099-OR	Major disaster	High Winds, Severe Storms and Flooding	Inland Flooding (primary); also designated: Strong Wind	no Public Assistance recorded		

Declared	Incident began	FEMA number	Type	Title	Mapped hazard	County Public Assistance	Flags	Notes
						<i>federal share obligated, nominal dollars</i>		
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		
1990-01-24	1990-01-06	DR-853-OR	Major disaster	Severe Storms & Flooding	Inland Flooding	no Public Assistance recorded		
1972-01-21	1972-01-21	DR-319-OR	Major disaster	Severe Storms & Flooding	Inland Flooding	no Public Assistance recorded		
1971-02-13	1971-02-13	DR-301-OR	Major disaster	Storms & Flooding	Inland Flooding	no Public Assistance recorded		
1964-12-24	1964-12-24	DR-184-OR	Major disaster	Heavy Rains & Flooding	Inland Flooding	no Public Assistance recorded		

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 participants in this county. They have no row of their own in the jurisdiction table, 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), so this line is not added to it.

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

Statewide declarations

Source: 2

Declared	Incident began	FEMA number	Type	Title	Mapped hazard
1963-02-25	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, so they are listed on every county page in the state and not counted with county rows. Local data needed: whether each one affected this county.

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.

Public Assistance not placed in any Oregon county: 1 row, \$479,867.27; listed on the Oregon state page.

Source: 3

Previous occurrences by hazard, with explicit no-event rows

Sources: 2, 6, 7

Hazard	Storm Events records, all years on file <i>(years in the Period column)</i>	Since plan approval <i>records</i>	In the 12 months before plan approval <i>records</i>	Last 5 years <i>records</i>	Declared incidents, all years <i>separate disasters</i>	Declared since approval <i>separate disasters</i>	Period	Statement
Avalanche	0	0	0	0	0	0	1996 to 2026-06-30	No recorded events, 1996 to 2026-06-30, NOAA NCEI Storm Events
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.
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		Storm Events does not record earthquakes; the USGS earthquake catalog is the source.
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 and 7 Strong Wind records.
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	

Notable Storm Events records

Sources: 1, 6, 7

Date	Event type	Magnitude or extent	Damage <i>nominal dollars</i>	Deaths, injuries <i>direct only</i>	Location	Flags	Why listed
2024-01-13	Ice Storm		\$673,000 property; \$0 crops, reported for the zone (2024 dollars)	0, 0	NWS zone ORZ001 (NORTHERN OREGON COAST), zone-level	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	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		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		B1-c worst recorded: High Wind and Strong Wind
2006-07-20	Heat		damage not reported	0, 0	NWS zone ORZ003 (COAST RANGE OF NW OREGON), zone-level		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		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		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		deaths or injuries recorded
1996-02-03	Ice Storm		damage not reported	1, 0	NWS zone ORZ001 (NORTHERN OREGON COAST), zone-level		deaths or injuries recorded
1967-10-03	Tornado	F1, 0.5 mi path length (whole path, pre-1996), 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 Excel file, sheet "B1-d Storm Events history" (538 rows).

Location is the place NOAA recorded, as written in its data; it need not be a jurisdiction in this plan.

Local data needed: state-declared emergencies, from your state emergency management agency (federal data do not include them).

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

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

Probability: FEMA annualized frequency and descriptor per hazard

Sources: 5, 6

Hazard	FEMA annualized frequency (modeled) <i>unit per row</i>	Unit	In plain terms	Descriptor	Descriptor basis	NRI events or days in its record period (hail, wind and tornado are area-weighted, so can be fractional)	NRI period	Location	Note
Avalanche	0.01	events per year	about 1 in 100 years	Possible	FEMA annualized frequency (modeled)	0	1994 to 2023 (30 years)	see B1-f	0.01 is NRI's minimum avalanche frequency for a county in an avalanche susceptibility zone; NRI records no avalanche here, so the descriptor reflects the floor, not local events.
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 (from Storm Events: 1 of 30 years)	event-days in 1 of 30 years, 1996 to 2025 (3.33%)	1.87	2005-11-12 to 2024-11-12 (19 years)	countywide	
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 Storm Events drought record, 1996 to 2025
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	No descriptor (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 (from Storm Events: 3 of 30 years)	event-days in 3 of 30 years, 1996 to 2025 (10%)	43.7	2005-11-12 to 2024-11-12 (19 years)	countywide	
Hurricane		events per year					1851 to 2024 (Atlantic); 1949 to 2024 (Pacific)	see B1-f	Not Applicable in NRI for this county; no descriptor.
Ice Storm	0.712	event-days per year	about 0.712 days per year	Likely (from Storm Events: 4 of 30 years)	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 (from Storm Events: 11 of 30 years)	event-days in 11 of 30 years, 1996 to 2025 (36.7%)	6	1996 to 2023 (28 years)	see B1-f	

Hazard	FEMA annualized frequency (modeled) <i>unit per row</i>	Unit	In plain terms	Descriptor	Descriptor basis	NRI events or days in its record period (hail, wind and tornado are area-weighted, so can be fractional)	NRI period	Location	Note
Landslide	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 (from Storm Events: 1 of 30 years)	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.
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 descriptor: no Storm Events record 1996 to 2025
Winter Weather	11.8	event-days per year	about 11.8 days per year	Highly likely (from Storm Events: 28 of 30 years)	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) is the National Risk Index v1.20 (December 2025) estimate of how often a hazard affects this county in a year; it is not recorded events divided by years, and its unit differs by hazard (events, event-days, or days with a lightning strike per year). For earthquake, wildfire, coastal flooding and tsunami the value is the chance (or number of events) at a location in the county, not across the county, so no "1 in N years" is given and the descriptor comes from Storm Events where it has a record (none for earthquake). The Methods page gives each hazard's method, from FEMA's National Risk Index Technical Documentation v1.20.

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

Descriptor scale used in this packet (defined per unit)

Sources: 5, 6

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

Intensity bands: historical frequency (Storm Events)

Source: 6

Hazard	Band	Years	Events <i>county-coded records</i>	Years in period	Events per year <i>events / years</i>
Hail	1.00-1.99 in	1996 to 2025	1	30	0.0333
Hail	2.00 in+	1996 to 2025	1	30	0.0333
Thunderstorm Wind (counted as NRI Strong Wind)	50-64 kt	1996 to 2025	3	30	0.1
Thunderstorm Wind (counted as NRI Strong Wind)	65 kt+	1996 to 2025	0	30	0
Thunderstorm Wind (counted as NRI Strong Wind)	unmeasured or below 50 kt	1996 to 2025	0	30	0
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

The bands show how often events of each severity were recorded in this county, to profile how severe events have been (FEMA's probability item asks for the range of intensities).

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

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

Supports FEMA checklist item B1-f: hazards that vary across jurisdictions

Range of census tract risk within the county

Source: 5

Hazard	Tracts <i>rated of all</i>	NRI risk score, 0 to 100			Tracts by rating
		Min	Median	Max	
Avalanche	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
Drought	1 of 11	67.1	67.1	67.1	Very Low 1, No Rating 10
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
Heat Wave	11 of 11	14.0	27.2	49.3	Relatively Low 9, Very Low 2
Hurricane	0 of 11				Not Applicable 11
Ice Storm	11 of 11	38.4	50.3	63.8	Relatively Low 11
Inland Flooding	11 of 11	29.5	69.8	97.7	Very High 2, Relatively High 3, Relatively Moderate 4, Relatively Low 2
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
Strong Wind	11 of 11	31.7	49.0	65.6	Relatively Moderate 4, Relatively Low 7
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

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

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

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

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

Each jurisdiction (starting figures from federal data)

Sources: 1, 3, 4, 6

Jurisdiction	Type	Plan status	Repetitive loss <i>FMA RL and SRL (44 CFR 77.2); repeat-flood, any definition</i>	Public Assistance to this jurisdiction <i>FEMA records matched by applicant name; federal share obligated, nominal dollars</i>	Event records naming this place <i>all years; since its plan</i>	Notes
Clatsop County	County	Expired on 2026-03-07	FMA RL 0, SRL 1; any 6	\$313,040.15	0 total; 0 since its plan	
Astoria city	City	Expired on 2026-03-07	FMA RL 0, SRL 0; any 0	\$945,484.48	2 total; 0 since its plan	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 total; 0 since its plan	
Gearhart city	City	Expired on 2026-03-07	FMA RL 0, SRL 0; any 1	\$63,491.67	2 total; 1 since its plan	
Seaside city	City	Expired on 2026-03-07	FMA RL 0, SRL 0; any 2	\$175,526.49	6 total; 0 since its plan	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 total; 0 since its plan	

Repetitive-loss counts are for whole NFIP communities, which can extend beyond this county (see the note in B2-c).

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

County Public Assistance in B1-d also includes applicants filed under the county that are not jurisdictions in this plan (for example state agencies, special districts and nonprofits), so the jurisdiction rows add up to less.

Supports FEMA checklist items B2-a and B2-b: vulnerability and potential impacts

Local data needed

The table below gives county-level starting figures; the plan describes impacts for each jurisdiction and its own assets.

- Critical facilities and lifelines per hazard
- A problem statement per jurisdiction per hazard
- Changes in development in hazard-prone areas since the last approval, or a statement of none (E1-a)
- Future assets

County-level starter: exposure, expected annual loss and damage since the plan

Sources: 1, 2, 3, 5, 6, 7

Hazard	Building exposure <i>modeled dollars</i>	Agriculture exposure <i>modeled dollars</i>	Population exposed <i>people</i>	EAL buildings <i>modeled dollars per year</i>	EAL agriculture <i>modeled dollars per year</i>	Cost of expected deaths and injuries <i>FEMA's dollar value per year; not property damage</i>	EAL as % of exposure <i>buildings; agriculture where noted</i>	Storm Events damage since 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	n/a	under 1	\$1	n/a	\$22	0.000105%				
Coastal Flooding	\$2,276,242,630	n/a	6,622	\$11,547,616	n/a	\$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	n/a	\$365,932	n/a	n/a	under \$1	n/a	under 0.0001% (agriculture)				NRI has no building exposure for this hazard; agriculture shown
Earthquake	\$23,173,641,863	n/a	41,072	\$14,149,112	n/a	\$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	n/a	40,942	\$16,034	n/a	\$31,385	0.000122%		\$673,000		
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.
Landslide	\$841,590,579	n/a	3,063	\$16,847	n/a	\$24,159	0.002%			\$5,247.60	
Lightning	\$13,247,904,538	n/a	41,036	\$1,267	n/a	\$48,929	under 0.0001%				

Hazard	Building exposure <i>modeled dollars</i>	Agriculture exposure <i>modeled dollars</i>	Population exposed <i>people</i>	EAL buildings <i>modeled dollars per year</i>	EAL agriculture <i>modeled dollars per year</i>	Cost of expected deaths and injuries <i>FEMA's dollar value per year, not property damage</i>	EAL as % of exposure <i>buildings; agriculture where noted</i>	Storm Events damage since 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
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): a NOAA non-thunderstorm wind type, outside NRI's Strong Wind definition.
Tornado	\$13,247,904,538	\$12,438,433	41,036	\$6,538	\$44	\$70,636	under 0.0001%				
Tsunami	\$17,662,203,374	n/a	20,491	\$7,002,611	n/a	\$92,741,899	0.0396%				
Volcanic Activity	\$13,247,904,538	n/a	41,036	\$5	n/a	\$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: \$5,247.60 on 1 counted declaration.

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

NRI computes earthquake exposure on its own basis, so it exceeds the county building value in B2-a.

Supports FEMA checklist item B2-a: vulnerability (county context)

County context

Source: 5

Measure	Value
Population	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 adds buildings, agriculture and population equivalence; this table gives the property part and the population-equivalence part as separate rows.

Social vulnerability: higher means people are more likely to be harmed and slower to recover. Community resilience: lower means the community is less able to recover. High social vulnerability and low resilience both raise the NRI risk rating.

Supports FEMA checklist item B2-c: repetitive loss properties

Repetitive loss in this county, both definitions

Sources: 1, 4

Definition	Properties	Severe repetitive loss	Properties
Repetitive loss, FMA definition (44 CFR 77.2)	0	Severe repetitive loss, FMA definition (44 CFR 77.2)	1
Repetitive loss, NFIP insurance definition	9	Severe repetitive loss, NFIP insurance definition	1

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

Repeat-flood properties: county and state-level rows

Sources: 1, 4

Scope	RL, FMA <i>properties</i>	SRL, FMA <i>properties</i>	RL, NFIP <i>properties</i>	SRL, NFIP <i>properties</i>	Any category <i>properties</i>	Mitigated <i>properties</i>	Currently insured <i>properties</i>
County total	0	1	9	1	9	0	2
of which: Clatsop County (unincorporated area)	0	1	6	1	6	0	2
of which: Gearhart city	0	0	1	0	1	0	0
of which: Seaside city	0	0	2	0	2	0	0
Statewide, no county in FEMA's file	0	0	1	0	1	0	0

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

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

Sources: 1, 4

Jurisdiction	NFIP community ID	RL, FMA <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>
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

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

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

County repeat-flood properties by occupancy group

Sources: 1, 4

Occupancy group	RL, FMA <i>properties</i>	SRL, FMA <i>properties</i>	RL, NFIP <i>properties</i>	SRL, NFIP <i>properties</i>	Any category <i>properties</i>	Mitigated <i>properties</i>	Currently insured <i>properties</i>
single-family residential	0	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

FEMA's occupancy groups have no institutional class; institutional properties are counted in non-residential or other residential in the table by occupancy group.

FMA RL and FMA SRL are the Flood Mitigation Assistance definitions (44 CFR 77.2), the ones the FEMA Local Mitigation Planning Policy Guide cites. NFIP repetitive loss (the FEMA insurance definition) is 2 or more claims over \$1,000 in 10 years, and a property can leave that group once it is mitigated. Also shown: NFIP severe repetitive loss, any category, mitigated and currently insured. The Methods page gives the OpenFEMA field details.

Counts are aggregates of FEMA's public NFIP Multiple Loss Properties file (FEMA's data date 2026-08-02; file version 2026-08-04). No property is identified. County assignment is FEMA's geocode.

In this county 0 properties are FMA repetitive loss but not NFIP repetitive loss, and 9 properties are NFIP repetitive loss but not FMA repetitive loss.

Exact counts; no count suppression.

Sources

Tables cite these sources by number. The full list, for the plan's bibliography (FEMA review item A4-a):

1. FEMA, OpenFEMA HazardMitigationPlanStatuses v1, version 2026-09-29T134039Z, pulled 2026-09-30, <https://www.fema.gov/api/open/v1/HazardMitigationPlanStatuses> (API)
2. FEMA, OpenFEMA DisasterDeclarationsSummaries v2, version 2026-09-29T162832Z, pulled 2026-09-30, <https://www.fema.gov/api/open/v2/DisasterDeclarationsSummaries> (API)
3. FEMA, OpenFEMA PublicAssistanceFundedProjectsSummaries v1, version 2026-09-29T150754Z, pulled 2026-09-30, <https://www.fema.gov/api/open/v1/PublicAssistanceFundedProjectsSummaries> (API)
4. FEMA, OpenFEMA NfipMultipleLossProperties v1, version 2026-08-04T164045Z, pulled 2026-09-30, <https://www.fema.gov/api/open/v1/NfipMultipleLossProperties> (API)
5. FEMA, FEMA National Risk Index 1.20.0 (December 2025), county and census tract tables, version 1.20.0, pulled 2026-09-30, https://www.fema.gov/about/reports-and-data/openfema/nri/v120/NRI_Table_Counties.zip (download, 25 MB), https://www.fema.gov/about/reports-and-data/openfema/nri/v120/NRI_Table_CensusTracts.zip (download, 635 MB)
6. NOAA NCEI, NOAA NCEI Storm Events Database, details files (csvfiles v1.0), version c20260918, pulled 2026-09-30, <https://www.ncei.noaa.gov/pub/data/swdi/stormevents/csvfiles/>
7. NOAA National Weather Service, NWS county-public forecast zones correlation file, version bp03mr20 to bp16ap26 (11 files; newest bp16ap26), pulled 2026-09-30, <https://www.weather.gov/gis/ZoneCounty>
8. U.S. Census Bureau, Census 2024 Gazetteer, 2020 place by county, CT county-to-cousub crosswalk, version 2024-gazetteer, pulled 2026-09-30, https://www2.census.gov/geo/docs/maps-data/data/gazetteer/2024_Gazetteer/2024_Gaz_counties_national.zip, [https://www2.census.gov/geo/docs/maps-data/data/gazetteer/2024_Gazetteer/2024_Gaz_cousubs_national.zip](https://www2.census.gov/geo/docs/maps-data/data/gazetteer/2024_Gaz_cousubs_national.zip), [https://www2.census.gov/geo/docs/maps-data/data/gazetteer/2024_Gazetteer/2024_Gaz_place_national.zip](https://www2.census.gov/geo/docs/maps-data/data/gazetteer/2024_Gaz_place_national.zip), [https://www2.census.gov/geo/docs/maps-data/data/gazetteer/2024_Gazetteer/2024_Gaz_unsd_national.zip](https://www2.census.gov/geo/docs/maps-data/data/gazetteer/2024_Gaz_unsd_national.zip), [https://www2.census.gov/geo/docs/maps-data/data/gazetteer/2024_Gazetteer/2024_Gaz_elsd_national.zip](https://www2.census.gov/geo/docs/maps-data/data/gazetteer/2024_Gaz_elsd_national.zip), [https://www2.census.gov/geo/docs/maps-data/data/gazetteer/2024_Gazetteer/2024_Gaz_scsd_national.zip](https://www2.census.gov/geo/docs/maps-data/data/gazetteer/2024_Gaz_scsd_national.zip), https://www2.census.gov/geo/docs/reference/codes2020/national_place_by_county2020.txt, https://www2.census.gov/geo/docs/reference/ct_change/ct_cou_to_cousub_crosswalk.xlsx (used to match place names and codes; no table prints its values)

What this packet is and what the plan adds

This packet is the federal data for the plan's risk assessment, organized by the items of FEMA's Local Mitigation Plan Review Tool, Element B. Each section heading names the item its tables support; the plan and FEMA's review decide whether the item is met.

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

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

OpenFEMA disclaimer

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

Reuse, citation and corrections

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 2026-09-30; County FIPS 41007). Automated baseline. <https://hazardplain.org/or/41007/> Built from FEMA OpenFEMA, the FEMA National Risk Index and NOAA NCEI Storm Events; source versions in the packet's Sources list.

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

Hazard Plain release 2026-10. As of 2026-09-30; Storm Events data through 2026-06-30. Automated baseline.