

Washington County, OR

Risk-assessment baseline packet

Unit **County area 41067** 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.

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Plan clock

Status	Approved, expires 2028-04-19	Plan	Washington County Natural Hazard Mitigation Plan (FEMA plan 108876)
Approved	2023-04-20	Expires	2028-04-19
As of	2026-09-28	Days	569 days to expiry

What changed since your last plan (approved 2023-04-20)

New federal declarations	FM-5529-OR (1 declaration row; 1 counted incident)	Storm Events records since approval	21 (data through 2026-06-30)
Repetitive loss now	FMA RL 1, SRL 6 (44 CFR 77.2); any definition: 46	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

Jurisdiction	Type	Status	Plan	Approved	Expires	Days to expiry <i>negative = days since expiry</i>	Update underway	Notes
Washington County	County	Approved, expires 2028-04-19	Washington County Natural Hazard Mitigation Plan (FEMA plan 108876)	2023-04-20	2028-04-19	569		member approved 2023-04-19
Beaverton city	City	Approved, expires 2028-04-19	Washington County Natural Hazard Mitigation Plan (FEMA plan 108876)	2023-04-20	2028-04-19	569		member approved 2023-08-03
Cornelius city	City	Approved, expires 2028-04-19	Washington County Natural Hazard Mitigation Plan (FEMA plan 108876)	2023-04-20	2028-04-19	569		member approved 2023-11-14
Forest Grove city	City	Approved, expires 2028-04-19	Washington County Natural Hazard Mitigation Plan (FEMA plan 108876)	2023-04-20	2028-04-19	569		member approved 2023-11-14

Jurisdiction	Type	Status	Plan	Approved	Expires	Days to expiry <i>negative = days since expiry</i>	Update underway	Notes
Hillsboro city	City	Approved, expires 2028-04-19	Washington County Natural Hazard Mitigation Plan (FEMA plan 108876)	2023-04-20	2028-04-19	569		member approved 2023-05-02
North Plains city	City	Approved, expires 2028-04-19	Washington County Natural Hazard Mitigation Plan (FEMA plan 108876)	2023-04-20	2028-04-19	569		member approved 2023-05-18
Portland city	City	Approved, expires 2027-12-11	City of Portland 2021 Natural Hazard Mitigation Plan (FEMA plan 108245)	2022-12-12	2027-12-11	439		
Sherwood city	City	Approved, expires 2028-04-19	Washington County Natural Hazard Mitigation Plan (FEMA plan 108876)	2023-04-20	2028-04-19	569		member approved 2023-06-07
Tigard city	City	Approved, expires 2028-04-19	Washington County Natural Hazard Mitigation Plan (FEMA plan 108876)	2023-04-20	2028-04-19	569		member approved 2023-05-15
Clean Water Services	Water/Sewer Authority	Approved, expires 2028-04-19	Washington County Natural Hazard Mitigation Plan (FEMA plan 108876)	2023-04-20	2028-04-19	569		member approved 2023-07-17
Tualatin Hills Park and Recreation District	Special District	Approved, expires 2028-04-19	Washington County Natural Hazard Mitigation Plan (FEMA plan 108876)	2023-04-20	2028-04-19	569		member approved 2023-06-15
Tualatin Valley Water District	Water/Sewer Authority	Approved, expires 2028-04-19	Washington County Natural Hazard Mitigation Plan (FEMA plan 108876)	2023-04-20	2028-04-19	569		member approved 2023-05-12

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

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

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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 <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 total (see note) <i>modeled dollars per year</i>	Storm Events records since 1996 <i>count</i>	Evidence for an omission <i>NRI Not Applicable, no declaration and no Storm Events record since 1996</i>	Storm Events coverage note
1	Earthquake	Relatively High	Relatively High	\$102,699,341		\$60,155,929	\$162,855,270			Not in Storm Events. Storm Events coverage of this hazard is limited; absence is not evidence of low risk.
2	Inland Flooding	Relatively High	Relatively High	\$79,821,683	\$92,031	\$638,368	\$80,552,082	39		
3	Heat Wave	Relatively High	Relatively High	\$3,664	\$53,770	\$11,103,068	\$11,160,501	23		
4	Cold Wave	Relatively High	Relatively High	\$14,966	\$26,999	\$9,323,825	\$9,365,791	5		Includes 3 Frost/Freeze records, event types the NRI definition of this hazard leaves out.
5	Tornado	Relatively Low	Relatively Low	\$648,164	\$407	\$1,126,551	\$1,775,122	2		
6	Strong Wind	Relatively Moderate	Relatively High	\$1,334,235	\$121	\$362,111	\$1,696,467	164		Includes 123 High Wind records and 37 Strong Wind records, event types the NRI definition of this hazard leaves out.
7	Ice Storm	Relatively High	Relatively High	\$330,502		\$1,046,005	\$1,376,507	6		
8	Lightning	Relatively Moderate	Relatively High	\$23,965		\$993,117	\$1,017,083	5		
9	Winter Weather	Relatively Moderate	Relatively Moderate	\$63,175	\$2,625	\$150,665	\$216,465	117		

Rank by EAL	Hazard	NRI risk rating	EAL rating	EAL buildings modeled dollars per year	EAL agriculture modeled dollars per year	EAL population equivalence statistical value of life and injury, \$13.7M per life, not property damage	EAL total (see note) modeled dollars per year	Storm Events records since 1996 count	Evidence for an omission NRI Not Applicable, no declaration and no Storm Events record since 1996	Storm Events coverage note
10	Hail	Very Low	Relatively Low	\$125,695	\$3,470	\$21,959	\$151,124	5		
11	Wildfire	Very Low	Very Low	\$62,541	\$3	\$2,412	\$64,957	1		
12	Landslide	Relatively Low	Relatively Low	\$16,847		\$26,427	\$43,274	12		
13	Volcanic Activity	Relatively Low	Relatively Low	\$52		\$15,726	\$15,778	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.
14	Avalanche	Very Low	Very Low	\$0		\$11	\$11	0		No recorded events in Storm Events since 1996 (data through 2026-06-30).
15	Drought	Very Low	Very Low		under \$1		under \$1	0		No recorded events in Storm Events since 1996 (data through 2026-06-30).
16	Coastal Flooding	No Rating	No Expected Annual Losses	\$0		\$0	\$0	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).
	Tsunami	Not Applicable	Not Applicable					0	NRI rates tsunami Not Applicable for this county, and no federal declaration for this county names it.	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.

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.	5 of 134
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.	0 of 134
Cold Wave	Affects the whole planning area; national data do not distinguish locations within the county. Confirm locally.	134 of 134
Drought	Affects the whole planning area; national data do not distinguish locations within the county. Confirm locally.	2 of 134
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.	134 of 134
Hail	Affects the whole planning area; national data do not distinguish locations within the county. Confirm locally.	134 of 134
Heat Wave	Affects the whole planning area; national data do not distinguish locations within the county. Confirm locally.	134 of 134
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 134
Ice Storm	Affects the whole planning area; national data do not distinguish locations within the county. Confirm locally.	134 of 134
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.	134 of 134
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.	133 of 134
Lightning	Affects the whole planning area; national data do not distinguish locations within the county. Confirm locally.	134 of 134
Strong Wind	Affects the whole planning area; national data do not distinguish locations within the county. Confirm locally.	134 of 134
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.	134 of 134
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.	0 of 134
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.	134 of 134
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.	124 of 134
Winter Weather	Affects the whole planning area; national data do not distinguish locations within the county. Confirm locally.	134 of 134

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

Supports B1-c: extent

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

Hazard	Scale	Records <i>count, years</i>	Observed range	Worst recorded event	Most damaging (when different)	How it applies to members	Note
Avalanche	none (count and damage)	0					Physical measure: in event narratives only; local data required.
Coastal Flood, Storm Surge/ Tide	none in data (FIRM for depth)	0					Flood depth: see the FEMA Flood Insurance Rate Map.

Hazard	Scale	Records <i>count, years</i>	Observed range	Worst recorded event	Most damaging (when different)	How it applies to members	Note
Cold/Wind Chill, Extreme Cold/Wind Chill	wind chill	2, 1998 to 2017 (2 zone-level)	7 days to 11 days (median 9 days); 2 with a recorded value	11 consecutive days, 2017-01-01 to 2017-01-11, 4 direct deaths, 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)	8, 1963 to 2023	0.63 in to 1.75 in (median 1 in); 8 with a recorded value	1.75 in hail, 1993-05-12	Hail, 2007-07-12, \$1,000 property; \$0 crops (2007 dollars)	Event records naming member places: Beaverton city (1 record), Hillsboro city (1 record), Sherwood city (1 record).	
Excessive Heat, Heat	heat index (narratives)	23, 1998 to 2024 (23 zone-level)	1 day to 6 days (median 3 days); 23 with a recorded value	6 consecutive days, 2022-07-25 to 2022-07-30, 9 direct deaths, zone-level	Excessive Heat, 2021-06-26, \$50,000 property; \$50,000 crops, reported for the zone (2021 dollars)	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.
Ice Storm	Sperry-Piltz (local data)	6, 1998 to 2024 (6 zone-level)		Ice Storm, 2021-02-14, \$5,000,000 property; \$0 crops, reported for the zone (2021 dollars); NWS zone ORZ006 (GREATER PORTLAND METRO AREA), 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.

Hazard	Scale	Records <i>count, years</i>	Observed range	Worst recorded event	Most damaging (when different)	How it applies to members	Note
Flash Flood, Flood, Lakeshore Flood	damage and flood days (FIRM for depth)	39, 1996 to 2024 (13 zone-level)		Flood, 1996-11-18, \$3,200,000 property; crops not reported, reported for the zone (1996 dollars); NWS zone ORZ006 (GREATER PORTLAND METRO AREA), zone-level: may include parts of neighboring counties		Event records naming member places: Beaverton city (1 record). Zone-level records (13) 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)	12, 1996 to 2012 (12 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)	5, 1999 to 2018		Lightning, 2003-08-05, \$150,000 property; crops not reported (2003 dollars)		Event records naming member places: Hillsboro city (1 record), Tigard 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)	160, 1996 to 2025 (160 zone-level)	25 kt (29 mph) to 100 kt (115 mph) (median 54 kt (62 mph)); 159 with a recorded value	100 kt (115 mph) measured, High Wind, 2000-01-16; Storm Events area NORTHERN WILLAMETTE VALLEY INCLUDING PORTLAND METRO AREA (legacy zone code ORZ004), zone-level: may include parts of neighboring counties	High Wind, 2020-09-07, \$100,000,000 property; \$0 crops, reported for the zone (2020 dollars)	Zone-level records: applies countywide; national data do not locate these events within the county.	
Thunderstorm Wind	wind speed (kt and mph)	4, 2009 to 2022	47 kt (54 mph) to 52 kt (60 mph) (median 52 kt (60 mph)); 4 with a recorded value	52 kt (60 mph) estimated gust, Thunderstorm Wind, 2022-04-30; same speed and measurement basis also recorded on 2009-06-04, 2017-05-04	Thunderstorm Wind, 2017-05-04, \$15,000 property; \$0 crops (2017 dollars)	Event records naming member places: Beaverton city (1 record), Sherwood 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)	6, 1954 to 2018	F/EF0 to F/EF1 (median F/EF0); 6 with a recorded value	F1 tornado, 1991-11-12, 0.2 mi path length (records before 1996 may include the whole path; rating and listing come from the county where the tornado began), 40 yd wide, \$25,000 property; crops not recorded (1991 dollars)	Tornado, 2018-10-29, \$100,000 property; crops not reported (2018 dollars)	Event records naming member places: Forest Grove city (1 record), Sherwood city (1 record).	From 1996 on, tornado records are per-county segments and length is the path length within this county (NWS Instruction 10-1605); records before 1996 may give the whole path length, including the path outside this county, and before 1996 a tornado is listed once, under the county where it began, with the whole path's rating; counties farther along the path may not list it. Length is not used to rank tornadoes.
Tsunami	none (count and damage)	0					Physical measure: in event narratives only; local data required.
Volcanic Ash, Volcanic Ashfall	Volcanic Explosivity Index (local data)	0					Physical measure: in event narratives only; local data required.
Wildfire	acres burned (local data)	1, 2022 to 2022 (1 zone-level)		Wildfire, 2022-09-09, \$500,000 property; \$0 crops, reported for the zone (2022 dollars); NWS zone ORZ006 (GREATER PORTLAND METRO AREA), zone-level: may include parts of neighboring counties		Zone-level records: applies countywide; national data do not locate these events within the county.	Acres burned: in event narratives only; local data required.
Winter Storm, Heavy Snow, Blizzard, Lake-Effect Snow, Winter Weather, Sleet	none in data (snowfall local)	117, 1996 to 2025 (117 zone-level)		Winter Storm, 2008-12-20, \$9,000,000 property; \$11,600,000 crops, reported for the zone (2008 dollars); NWS zone ORZ006 (GREATER PORTLAND METRO AREA), 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 17 Counted incidents 11

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
2024-08-09	2024-08-08	FM-5529-OR	Fire management	LEE FALLS FIRE	Wildfire	none found	new since last plan; within last 5 years	
2020-09-15	2020-09-07	DR-4562-OR	Major disaster	WILDFIRES AND STRAIGHT-LINE WINDS	Wildfire	\$1,236,818.35		
2020-09-10	2020-09-08	FM-5371-OR	Fire management	CHEHALEM MOUNTAIN BALD PEAK FIRE	Wildfire	none found		same incident as DR-4562
2020-09-10	2020-09-08	EM-3542-OR	Emergency	WILDFIRES	Wildfire	none found		same incident as DR-4562
2020-09-08	2020-09-08	FM-5358-OR	Fire management	POWERLINE FIRE	Wildfire	none found		same incident as DR-4562
2020-03-28	2020-01-20	DR-4499-OR	Major disaster	COVID-19 PANDEMIC	Non-natural, not counted	\$32,309,649.04		
2020-03-13	2020-01-20	EM-3429-OR	Emergency	COVID-19	Non-natural, not counted	none found		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	\$472,875.47		
2009-03-02	2008-12-13	DR-1824-OR	Major disaster	SEVERE WINTER STORM, RECORD AND NEAR RECORD SNOW	Winter Weather	\$705,396.99		
2007-12-08	2007-12-01	DR-1733-OR	Major disaster	SEVERE STORMS, FLOODING, LANDSLIDES, AND MUDSLIDES	Inland Flooding; Landslide	\$825,830.28		
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		
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		
1993-04-26	1993-03-25	DR-985-OR	Major disaster	EARTHQUAKE	Earthquake	none found		
1974-01-25	1974-01-25	DR-413-OR	Major disaster	SEVERE STORMS, SNOWMELT & FLOODING	Inland Flooding	none found		
1972-01-21	1972-01-21	DR-319-OR	Major disaster	SEVERE 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: \$175,081.60 (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 filed under this county for declarations that do not list it: 2 rows, \$144,502.01

FEMA number	Declared	Title	Applicant	PA obligated <i>federal share obligated, nominal dollars</i>
DR-4854-OR	2025-01-01	WILDFIRES	WC Ranches Rangeland Fire Protection Association	\$138,477.90
DR-1510-OR	2004-02-19	SEVERE WINTER STORMS	Tualatin Valley Fire & Rescue (Clackamas County)	\$6,024.11

FEMA's Public Assistance summaries file these applicants under this county, but FEMA's declaration rows for these disasters do not designate it (an electric cooperative or district serving several counties, for example). Not in any declaration row above and not counted.

SOURCES

FEMA, OpenFEMA PublicAssistanceFundedProjectsSummaries v1, version 2026-09-26T151157Z, pulled 2026-09-28, <https://www.fema.gov/api/open/v1/PublicAssistanceFundedProjectsSummaries> (API)
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 <i>records</i>	During plan review <i>records</i>	Last 5 years <i>records</i>	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	0	0	0	0	0	0	1996 to 2026-06-30	No recorded events, 1996 to 2026-06-30, NOAA NCEI Storm Events
Cold Wave	5	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	1	0		No Storm Events record; local data required (e.g., USGS).
Hail	8	0	1	1	0	0	1955 to 2026-06-30	
Heat Wave	23	2	3	5	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	1	0	1	0	0	1996 to 2026-06-30	
Inland Flooding	39	3	0	3	6	0	1996 to 2026-06-30	
Landslide	12	0	0	0	2	0	1996 to 2026-06-30	
Lightning	5	0	0	0	0	0	1996 to 2026-06-30	
Strong Wind	164	4	6	17	3	0	1955 to 2026-06-30	Includes 123 High Wind records and 37 Strong Wind records, event types the NRI definition of this hazard leaves out.
Tornado	6	0	0	0	0	0	1950 to 2026-06-30	
Tsunami	0	0	0	0	0	0	1996 to 2026-06-30	No recorded events, 1996 to 2026-06-30, NOAA NCEI Storm Events
Volcanic Activity	0	0	0	0	0	0	1996 to 2026-06-30	No recorded events, 1996 to 2026-06-30, NOAA NCEI Storm Events
Wildfire	1	0	1	1	2	1	1996 to 2026-06-30	
Winter Weather	117	8	6	19	2	0	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
2024-01-12	Winter Storm		\$10,250,000 property; \$0 crops, reported for the zone (2024 dollars)	9, 12	NWS zone ORZ006 (GREATER PORTLAND METRO AREA), zone-level: may include parts of neighboring counties	new since last plan; within last 5 years	deaths or injuries recorded
2022-07-25	Excessive Heat		\$0 property; \$0 crops, reported for the zone (2022 dollars)	9, 0	NWS zone ORZ006 (GREATER PORTLAND METRO AREA), zone-level: may include parts of neighboring counties	during plan review, check whether your last plan included it; within last 5 years	deaths or injuries recorded
2022-04-30	Thunderstorm Wind	52 kt (60 mph) estimated gust	\$5,000 property; \$0 crops (2022 dollars)	0, 0	DURHAM	during plan review, check whether your last plan included it; within last 5 years	B1-c worst recorded: Thunderstorm Wind
2021-06-26	Excessive Heat		\$50,000 property; \$50,000 crops, reported for the zone (2021 dollars)	93, 0	NWS zone ORZ006 (GREATER PORTLAND METRO AREA), zone-level: may include parts of neighboring counties		deaths or injuries recorded
2021-02-14	Ice Storm		\$5,000,000 property; \$0 crops, reported for the zone (2021 dollars)	0, 0	NWS zone ORZ006 (GREATER PORTLAND METRO AREA), zone-level: may include parts of neighboring counties		B1-c worst recorded: Ice Storm
2017-01-01	Cold/Wind Chill		\$0 property; \$0 crops, reported for the zone (2017 dollars)	4, 0	NWS zone ORZ006 (GREATER PORTLAND METRO AREA), zone-level: may include parts of neighboring counties		B1-c worst recorded: Cold/ Wind Chill, Extreme Cold/Wind Chill
2008-12-20	Winter Storm		\$9,000,000 property; \$11,600,000 crops, reported for the zone (2008 dollars)	0, 0	NWS zone ORZ006 (GREATER PORTLAND METRO AREA), zone-level: may include parts of neighboring counties		B1-c worst recorded: Winter Storm, Heavy Snow, Blizzard, Lake-Effect Snow, Winter Weather, Sleet
2003-08-05	Lightning		\$150,000 property; crops not reported (2003 dollars)	0, 0	TIGARD		B1-c worst recorded: Lightning
2000-01-16	High Wind	100 kt (115 mph) measured	damage not reported	0, 0	Storm Events area NORTHERN WILLAMETTE VALLEY INCLUDING PORTLAND METRO AREA (legacy zone code ORZ004), zone-level: may include parts of neighboring counties		B1-c worst recorded: High Wind and Strong Wind (outside NRI Strong Wind definition)
1996-11-18	Flood		\$3,200,000 property; crops not reported, reported for the zone (1996 dollars)	0, 0	NWS zone ORZ006 (GREATER PORTLAND METRO AREA), zone-level: may include parts of neighboring counties		B1-c worst recorded: Flash Flood, Flood, Lakeshore Flood
1993-05-12	Hail	1.75 in	damage not recorded (pre-1996 record)	0, 0	Tualatin		B1-c worst recorded: Hail

				Direct deaths, injuries <i>indirect not counted</i>				
Date	Event type	Magnitude or extent	Damage <i>nominal dollars</i>		Location	Flags	Why listed	
1991-11-12	Tornado	F1, 0.2 mi path length (records before 1996 may include the whole path; rating and listing come from the county where the tornado began), 40 yd wide	\$25,000 property; crops not recorded (1991 dollars)	0, 0	location not recorded		B1-c worst recorded: Tornado	

The full list is in the XLSX file, sheet "B1-d Storm Events history" (386 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	0	events per year at a location (modeled)	none modeled		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)
Cold Wave	0.226	event-days per year	about 0.226 days per year	Possible	event-days in 2 of 30 years, 1996 to 2025 (6.67%)	4.29	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	0.191	event-days per year	about 0.191 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

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
Earthquake	0.0147	annual probability at a location	chance a given location in the county has at least minor-damage shaking in a year: 1.47%			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	0.0514	events per year	about 1 in 19 years	Possible	FEMA annualized frequency (modeled)	2.0 (modeled)	1986 to 2023 (38 years)	countywide	
Heat Wave	6.25	event-days per year	about 6.25 days per year	Likely	event-days in 11 of 30 years, 1996 to 2025 (36.7%)	97.8	2005-11-12 to 2024-11-12 (19 years)	countywide	NRI gives about 6.25 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 11 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.
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	1.22	event-days per year	about 1.22 days per year	Likely	event-days in 6 of 30 years, 1996 to 2025 (20%)	82	1946-12-31 to 2014-02-12 (67 years)	countywide	NRI gives about 1.22 ice storm event-days a year here (its annualized frequency over 67 years; not its event count divided by the years), but Storm Events has a record in only 6 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.
Inland Flooding	0.75	event-days per year	about 0.75 days per year	Likely	event-days in 18 of 30 years, 1996 to 2025 (60%)	21	1996 to 2023 (28 years)	see B1-f	
Landslide	3.91	events per year (modeled)	about 3.91 per year	Highly likely	FEMA annualized frequency (modeled)	not shown	modeled	see B1-f	
Lightning	5.88	days per year with a strike	about 5.88 days per year	Highly likely	FEMA annualized frequency (modeled)	not shown	1995 to 2023 (29 years; CONUS)	countywide	
Strong Wind	0.0546	events per year	about 1 in 18 years	Possible	FEMA annualized frequency (modeled)	3	1986 to 2023 (38 years)	countywide	

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
Tornado	0.0713	events per year	about 1 in 14 years	Possible	FEMA annualized frequency (modeled)	not shown	1950 to 2023 (EF2+); 1986 to 2023 (EF0-1)	see B1-f	
Tsunami		annual probability at the most exposed location (used in place of a county value)				not shown	modeled	see B1-f	Not Applicable in NRI for this county; no descriptor.
Volcanic Activity	0.0113	annual probability	about 1 in 88 years	Possible	FEMA annualized frequency (modeled)	not shown	modeled	see B1-f	
Wildfire	0.0000436	annual probability at a location	chance a given location in the county burns in a year: 0.00436%	Possible	Storm Events records in 1 of 30 years, 1996 to 2025 (3.33%)	not shown	modeled	see B1-f	Descriptor from Storm Events, not NRI: the NRI value is the chance at a location in the county, not how often the hazard affects the county.
Winter Weather	10.7	event-days per year	about 10.7 days per year	Highly likely	event-days in 28 of 30 years, 1996 to 2025 (93.3%)	202	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

Unit	Descriptor	Definition
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	2	30	0.0667
Hail	2.00 in+	1996 to 2025	0	30	0
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	1	30	0.0333
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 rated of all	Risk score min NRI score, 0 to 100	Median	Max	Tracts by rating	Note
Avalanche	5 of 134	4.0	4.3	4.5	Very Low 5, Not Applicable 129	
Coastal Flooding	0 of 134				No Rating 134	
Cold Wave	134 of 134	31.3	52.3	71.8	Relatively Moderate 96, Relatively Low 38	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	2 of 134	66.8	67.0	67.2	Very Low 2, No Rating 132	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	134 of 134	70.1	87.9	99.8	Very High 9, Relatively High 57, Relatively Moderate 63, Relatively Low 5	
Hail	134 of 134	7.6	19.7	35.0	Very Low 134	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	134 of 134	35.1	67.9	86.4	Relatively High 8, Relatively Moderate 103, Relatively Low 23	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 134				Not Applicable 134	
Ice Storm	134 of 134	35.4	65.1	83.8	Relatively Moderate 49, Relatively Low 85	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	134 of 134	4.5	35.6	95.3	Relatively High 10, Relatively Moderate 29, Relatively Low 76, Very Low 19	
Landslide	133 of 134	10.2	32.3	98.1	Relatively Moderate 4, Relatively Low 4, Very Low 125, No Rating 1	
Lightning	134 of 134	11.4	33.1	56.7	Relatively Moderate 11, Relatively Low 112, 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.
Strong Wind	134 of 134	18.4	35.7	66.2	Relatively Moderate 10, Relatively Low 122, 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.
Tornado	134 of 134	9.8	23.6	33.9	Relatively Low 19, Very Low 115	
Tsunami	0 of 134				Not Applicable 134	
Volcanic Activity	134 of 134	86.7	91.2	96.8	Relatively Low 134	

Hazard	Tracts <i>rated of all</i>	Risk score min	Median	Max	Tracts by rating	Note
		<i>NRI score, 0 to 100</i>				
Wildfire	124 of 134	18.5	45.2	82.2	Relatively Low 9, Very Low 115, No Rating 10	
Winter Weather	134 of 134	25.6	36.0	53.8	Relatively Moderate 8, Relatively Low 126	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	Public Assistance matched	Event records naming this place	Notes
			<i>FMA RL and SRL (44 CFR 77.2); repeat- flood, any definition</i>	<i>federal share obligated, nominal dollars</i>	<i>all years; since the member's plan</i>	
Washington County	County	Approved, expires 2028-04-19	FMA RL 1, SRL 5; any 32	\$8,406,046.41	0; 0	Includes \$7,158,545.08 for declarations not counted as hazard incidents (DR-4499-OR).
Beaverton city	City	Approved, expires 2028-04-19	FMA RL 0, SRL 0; any 6	\$64,627.55	3; 0	
Cornelius city	City	Approved, expires 2028-04-19	FMA RL 0, SRL 0; any 0	none found	0; 0	
Forest Grove city	City	Approved, expires 2028-04-19	FMA RL 0, SRL 0; any 1	\$14,783.44	1; 0	
Hillsboro city	City	Approved, expires 2028-04-19	FMA RL 0, SRL 0; any 1	\$543,774.33	2; 0	Includes \$517,038.81 for declarations not counted as hazard incidents (DR-4499-OR).
North Plains city	City	Approved, expires 2028-04-19	FMA RL 0, SRL 0; any 0	\$48,123.69	0; 0	
Portland city	City	Approved, expires 2027-12-11	FMA RL 0, SRL 3; any 16	none found	0; 0	Whole community, including the part in Multnomah County; in-county portion (county table): FMA RL 0, FMA SRL 0, NFIP RL 1, NFIP SRL 0, any category 1.
Sherwood city	City	Approved, expires 2028-04-19	FMA RL 0, SRL 0; any 0	\$15,207.33	3; 0	
Tigard city	City	Approved, expires 2028-04-19	FMA RL 0, SRL 0; any 2	\$169,743.19	1; 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)

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 2023-04-20 <i>county-coded records, property plus crops, nominal dollars</i>	Zone-level damage since plan <i>property plus crops, reported for the zone</i>	Public Assistance since plan <i>nominal dollars; see note</i>	Note
Avalanche	\$0		under 1	\$0		\$11					building exposure is 0 in NRI
Coastal Flooding	\$0		0	\$0		\$0					building exposure is 0 in NRI
Cold Wave	\$131,635,846,089	\$259,578,011	600,172	\$14,966	\$26,999	\$9,323,825	under 0.0001%		\$0		
Drought		\$404,080			under \$1		under 0.0001% (agriculture)				NRI has no building exposure for this hazard; agriculture shown
Earthquake	\$222,097,866,533		600,372	\$102,699,341		\$60,155,929	0.0462%				
Hail	\$131,635,846,089	\$259,578,011	600,172	\$125,695	\$3,470	\$21,959	under 0.0001%				
Heat Wave	\$131,635,846,089	\$259,578,011	600,172	\$3,664	\$53,770	\$11,103,068	under 0.0001%		\$0		
Hurricane											Not Applicable in NRI for this county
Ice Storm	\$131,416,606,287		598,963	\$330,502		\$1,046,005	0.000251%		\$0		

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 2023-04-20 <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	\$131,547,080,798	\$69,168,863	10,745	\$79,821,683	\$92,031	\$638,368	n/a (see note)	\$14,000			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	\$3,952,395,662		15,716	\$16,847		\$26,427	0.000426%				
Lightning	\$131,635,846,089		600,172	\$23,965		\$993,117	under 0.0001%				
Strong Wind	\$131,635,846,089	\$259,578,011	600,172	\$1,334,235	\$121	\$362,111	0.00101%		\$50,000		Storm Events damage since the plan includes 1 zone-level Strong Wind record (\$50,000), an event type the NRI definition of this hazard leaves out.
Tornado	\$131,635,846,089	\$259,578,011	600,172	\$648,164	\$407	\$1,126,551	0.000492%				
Tsunami											Not Applicable in NRI for this county
Volcanic Activity	\$131,635,846,089		600,172	\$52		\$15,726	under 0.0001%				
Wildfire	\$9,982,394,751	\$42,211,429	43,453	\$62,541	\$3	\$2,412	0.000627%			none found (1 declaration)	
Winter Weather	\$131,635,846,089	\$259,578,011	600,172	\$63,175	\$2,625	\$150,665	under 0.0001%		\$10,250,000		

Totals since 2023-04-20 (Storm Events through 2026-06-30): 3 county-coded records, 3 with a damage value recorded (including \$0), \$14,000; 18 zone-level records, 17 with a damage value recorded (including \$0), \$10,300,000 reported for the zone; Public Assistance on counted declarations none found (1 declaration, 0 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	600,172
Building value (total, not at risk)	\$131,635,846,089
Agriculture value (total, not at risk)	\$259,578,011
NRI risk rating (all hazards)	Relatively High
Expected annual loss, buildings and agriculture, all hazards	\$185,324,256
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)	\$84,966,174
Social vulnerability rating	Very Low
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)	1	Severe repetitive loss, FMA definition (44 CFR 77.2)	6
Repetitive loss, NFIP insurance definition	45	Severe repetitive loss, NFIP insurance definition	6

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

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

Repeat-flood properties: county and state-level rows

Scope	RL, FMA <i>properties</i>	SRL, FMA <i>properties</i>	RL, NFIP <i>properties</i>	SRL, NFIP <i>properties</i>	Any category <i>properties</i>	Mitigated <i>properties</i>	Currently insured <i>properties</i>
County total	1	6	45	6	46	0	24
PORTLAND, CITY OF	0	0	1	0	1	0	0
WASHINGTON COUNTY*	1	5	31	5	32	0	19
BEAVERTON,CITY OF	0	0	6	0	6	0	3
FOREST GROVE, CITY OF	0	0	1	0	1	0	0
HILLSBORO, CITY OF	0	0	1	0	1	0	0
TIGARD, CITY OF	0	0	2	0	2	0	1
TUALATIN, CITY OF (community ID not in plan data)	0	1	3	1	3	0	1
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
Washington County	410238	1	5	31	5	32	0	19	
Beaverton city	410240	0	0	6	0	6	0	3	
Cornelius city	410261	0	0	0	0	0	0	0	
Forest Grove city	410241	0	0	1	0	1	0	0	
Hillsboro city	410243	0	0	1	0	1	0	0	
North Plains city	410270	0	0	0	0	0	0	0	
Portland city	410183	0	3	15	2	16	2	5	Whole community, including the part in Multnomah County; in-county portion (county table): FMA RL 0, FMA SRL 0, NFIP RL 1, NFIP SRL 0, any category 1.
Sherwood city	410273	0	0	0	0	0	0	0	
Tigard city	410276	0	0	2	0	2	0	1	

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	1	5	34	5	35	0	21
2 to 4 unit residential	0	1	4	1	4	0	0
other residential	0	0	4	0	4	0	2
non-residential	0	0	3	0	3	0	1
not reported	0	0	0	0	0	0	0

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

SOURCES

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

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

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

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

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

In this county 1 property is FMA repetitive loss but not NFIP repetitive loss, and 45 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_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_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/reference/codes2020/national_place_by_county2020.txt, https://www2.census.gov/geo/docs/reference/ct_change/ct_cou_to_cousub_crosswalk.xlsx

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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_41067. Preview: automated baseline.