

Okanogan County, WA

Risk-assessment baseline packet

County FIPS: 53047 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: Approved, expires 2027-06-21. Plan: Okanogan County Multi-Jurisdictional Hazard Mitigation Plan (FEMA plan 104429), approved 2022-06-22.

Since the plan was approved on 2022-06-22: 7 new hazard declarations (6 incidents) and 96 NOAA Storm Events records; details under "What changed since your last plan".

Highest expected annual loss (FEMA National Risk Index, modeled total; see B1-a): Inland Flooding (\$22,926,689 a year), Wildfire (\$19,555,444) and Cold Wave (\$3,337,409).

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; 53047 is this area.

D0 to D4: U.S. Drought Monitor categories, from abnormally dry (D0) to exceptional drought (D4).

F/EF, EFU: Fujita and Enhanced Fujita tornado ratings; EFU is an unrated tornado.

kt, CONUS: knots (1 kt is about 1.15 mph); the contiguous United States.

CFR: Code of Federal Regulations.

A4-a, E1-a: other items of FEMA's Local Mitigation Plan Review Tool (sources, and changes since the last plan).

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

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Plan clock

Status:	Approved, expires 2027-06-21	Plan:	Okanogan County Multi-Jurisdictional Hazard Mitigation Plan (FEMA plan 104429)
Approved:	2022-06-22	Days to expiry:	264
Update underway:	none recorded in FEMA's plan tracker		

What changed since your last plan (approved 2022-06-22)

New federal declarations:	7 new hazard declarations (6 incidents): DR-4682-WA (Severe Winter Storm, Straight-Line Winds, Flooding, Landslides, and Mudslides), FM-5472-WA (Eagle Bluff Fire), DR-4775-WA (Severe Winter Storms, Straight-Line Winds, Flooding, Landslides, and Mudslides), FM-5518-WA (Swawilla Fire), FM-5646-WA (Kaiser Canyon Fire), FM-5657-WA (Sinlahekin Fire), EM-3650-WA (Wildfires)	Storm Events records since approval:	96 records (data through 2026-06-30)
Repetitive loss now:	FMA RL 0, SRL 0 (44 CFR 77.2); any definition: 3	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: 15 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
Okanogan County	County	Approved, expires 2027-06-21	Okanogan County Multi-Jurisdictional Hazard Mitigation Plan (FEMA plan 104429)	2022-06-22	2027-06-21	264
Brewster city	City	Approved, expires 2027-06-21	Okanogan County Multi-Jurisdictional Hazard Mitigation Plan (FEMA plan 104429)	2022-06-22	2027-06-21	264
Conconully town	Town	Approved, expires 2027-06-21	Okanogan County Multi-Jurisdictional Hazard Mitigation Plan (FEMA plan 104429)	2022-06-22	2027-06-21	264
Coulee Dam town	Town	Approved, expires 2027-06-21	Okanogan County Multi-Jurisdictional Hazard Mitigation Plan (FEMA plan 104429)	2022-06-22	2027-06-21	264
Elmer City town	Town	Approved, expires 2027-06-21	Okanogan County Multi-Jurisdictional Hazard Mitigation Plan (FEMA plan 104429)	2022-06-22	2027-06-21	264
Nespelem town	Town	Approved, expires 2027-06-21	Okanogan County Multi-Jurisdictional Hazard Mitigation Plan (FEMA plan 104429)	2022-06-22	2027-06-21	264
Okanogan city	City	Approved, expires 2027-06-21	Okanogan County Multi-Jurisdictional Hazard Mitigation Plan (FEMA plan 104429)	2022-06-22	2027-06-21	264
Omak city	City	Approved, expires 2027-06-21	Okanogan County Multi-Jurisdictional Hazard Mitigation Plan (FEMA plan 104429)	2022-06-22	2027-06-21	264
Oroville city	City	Approved, expires 2027-06-21	Okanogan County Multi-Jurisdictional Hazard Mitigation Plan (FEMA plan 104429)	2022-06-22	2027-06-21	264
Pateros city	City	Approved, expires 2027-06-21	Okanogan County Multi-Jurisdictional Hazard Mitigation Plan (FEMA plan 104429)	2022-06-22	2027-06-21	264
Riverside town	Town	Approved, expires 2027-06-21	Okanogan County Multi-Jurisdictional Hazard Mitigation Plan (FEMA plan 104429)	2022-06-22	2027-06-21	264
Tonasket city	City	Approved, expires 2027-06-21	Okanogan County Multi-Jurisdictional Hazard Mitigation Plan (FEMA plan 104429)	2022-06-22	2027-06-21	264
Twisp town	Town	Approved, expires 2027-06-21	Okanogan County Multi-Jurisdictional Hazard Mitigation Plan (FEMA plan 104429)	2022-06-22	2027-06-21	264
Winthrop town	Town	Approved, expires 2027-06-21	Okanogan County Multi-Jurisdictional Hazard Mitigation Plan (FEMA plan 104429)	2022-06-22	2027-06-21	264
Okangoan Conservation District	Conservation District	Approved, expires 2027-06-21	Okanogan County Multi-Jurisdictional Hazard Mitigation Plan (FEMA plan 104429)	2022-06-22	2027-06-21	264

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 <i>FEMA's dollar value per year, not property damage</i>	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	Inland Flooding	Relatively Moderate	Relatively Moderate	\$22,822,720	\$158	\$103,811	\$22,926,689	82		
2	Wildfire	Relatively High	Relatively High	\$18,469,555	\$12,465	\$1,073,423	\$19,555,444	171		
3	Cold Wave	Relatively Moderate	Relatively Moderate	\$6,060	\$436,793	\$2,894,556	\$3,337,409	8		
4	Earthquake	Relatively Low	Relatively Low	\$1,488,765	n/a	\$520,349	\$2,009,114			Storm Events does not record earthquakes.
5	Avalanche	Relatively High	Relatively Moderate	\$27,332	n/a	\$1,051,984	\$1,079,317	7		
6	Heat Wave	Relatively Low	Relatively Low	\$177	\$57,571	\$598,787	\$656,535	2		
7	Hail	Relatively Moderate	Relatively Low	\$11,093	\$606,005	\$2,887	\$619,986	33		
8	Lightning	Relatively Moderate	Relatively Low	\$6,081	n/a	\$247,231	\$253,312	2		
9	Strong Wind	Relatively Low	Relatively Low	\$23,199	\$71,369	\$45,596	\$140,163	110		Includes 42 High Wind and 18 Strong Wind records (NOAA non-thunderstorm wind types, outside NRI's Strong Wind definition).

Rank by EAL	Hazard	NRI risk rating	EAL rating	EAL buildings <i>modeled dollars per year</i>	EAL agriculture <i>modeled dollars per year</i>	Cost of expected deaths and injuries <i>FEMA's dollar value per year, not property damage</i>	EAL total (see note) <i>modeled dollars per year</i>	Storm Events records, 1996 to 2026-06-30 <i>count</i>	Why this hazard can be left out <i>NRI Not Applicable, no declaration and no Storm Events record since 1996</i>	Storm Events coverage note
10	Winter Weather	Relatively Moderate	Relatively Moderate	\$16,500	\$4,940	\$67,099	\$88,539	306		
11	Landslide	Relatively Moderate	Relatively Low	\$58,097	n/a	\$23,622	\$81,719	51		
12	Tornado	Very Low	Very Low	\$9,597	\$515	\$10,281	\$20,393	2		
13	Ice Storm	Very Low	Very Low	\$57	n/a	\$2,866	\$2,923	4		
14	Drought	Very Low	Very Low	n/a	\$2,723	n/a	\$2,723	0		No recorded events in Storm Events since 1996 (data through 2026-06-30).
15	Volcanic Activity	Very Low	Very Low	\$1	n/a	\$165	\$166	0		Declared 1 time; no Storm Events record of this type.
	Hurricane	Not Applicable	Not Applicable					0	NRI rates hurricane Not Applicable for this county, and no counted federal declaration for this county names it (EM-3227-WA names it but is not counted as a local occurrence; see B1-d).	No recorded events in Storm Events since 1996 (data through 2026-06-30).

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

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

Local data needed: state and local volcanic activity records (Storm Events records this hazard only in part).

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

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

Supports FEMA checklist item B1-b: hazard location

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

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

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

Source: 5

Hazard	Highest-rated census tracts <i>NRI risk rating, score 0 to 100</i>
Avalanche	tract 9703.02 (Relatively Moderate, 86.1); tract 9402 (Relatively Moderate, 86.0); tract 9401 (Relatively Moderate, 84.8)
Earthquake	tract 9708 (Relatively Moderate, 86.7); tract 9707 (Relatively Moderate, 85.6); tract 9706.02 (Relatively Moderate, 84.1)
Hurricane	no tract has a National Risk Index rating for this hazard
Landslide	tract 9709 (Relatively High, 99.4); tract 9710 (Relatively Moderate, 98.4); tract 9703.03 (Relatively Moderate, 98.0)
Tornado	tract 9401 (Very Low, 15.2); tract 9708 (Very Low, 11.1); tract 9707 (Very Low, 9.8)
Volcanic Activity	tract 9708 (Relatively Low, 86.9); tract 9402 (Relatively Low, 86.7); tract 9710 (Relatively Low, 86.6)
Wildfire	tract 9709 (Very High, 99.9); tract 9710 (Very High, 99.8); tract 9703.03 (Very High, 99.8)

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 9703.02 is Census Tract 9703.02). 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)	7 records, 1997 to 2025 (7 zone-level)		Avalanche, 2008-02-07, \$1,100,000 property; \$0 crops (2008 dollars); NWS zone WAZ042		Countywide (zone-level records).	
Cold/Wind Chill, Extreme Cold/Wind Chill	wind chill	8 records, 1998 to 2013 (8 zone-level)	1 day to 3 days (median 2 days); 5 with a recorded value	3 consecutive days, 2006-11-27 to 2006-11-29, zone-level		Countywide (zone-level records).	
Frost/Freeze (outside NRI's Cold Wave definition)	crop damage	0					

Hazard	Scale	Records <i>count and years</i>	Observed range	Worst recorded event	Most damaging (when different)	How it applies to jurisdictions	Note
Drought	U.S. Drought Monitor scale (D0 to D4)	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)	36 records, 1973 to 2022	0.25 in to 1.75 in (median 0.94 in); 36 with a recorded value	1.75 in hail, 2008-07-03; same size also recorded on 1982-06-26	Hail, 1995-07-09, \$10,000,000 property; \$15,000,000 crops (1995 dollars)	Event records naming jurisdictions in the plan: Oroville city (4 records), Conconully town (3 records), Brewster city (2 records), Okanogan city (2 records), Riverside town (2 records), Nespelem town (1 record), Tonasket city (1 record), Twisp town (1 record), Winthrop town (1 record).	
Excessive Heat, Heat	heat index (in event narratives)	2 records, 2021 to 2022 (2 zone-level)	1 day to 5 days (median 3 days); 2 with a recorded value	5 consecutive days, 2021-06-26 to 2021-06-30, zone-level		Countywide (zone-level records).	
Hurricane, Tropical Storm, Tropical Depression	Saffir-Simpson	0					Storm Events files every zone of a storm's episode under the storm's type; flooding from the storm is filed as Flood or Flash Flood records.
Ice Storm	Sperry-Piltz ice scale (local data)	4 records, 2005 to 2017 (4 zone-level)		No damage reported in 4 records.		Countywide (zone-level records).	
Flash Flood, Flood, Lakeshore Flood	damage and flood days (flood depth: FIRM)	82 records, 1996 to 2023 (3 zone-level)		Flood, 2018-05-05, \$12,000,000 property; \$0 crops (2018 dollars)		Event records naming jurisdictions in the plan: Winthrop town (8 records), Conconully town (6 records), Oroville city (6 records), Okanogan city (4 records), Brewster city (2 records), Omak city (2 records), Twisp town (2 records), Coulee Dam town (1 record), Pateros city (1 record), Riverside town (1 record); and 1 more jurisdiction (see the Excel file). Zone-level records (3) 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)	51 records, 2003 to 2024 (17 zone-level)		Debris Flow, 2008-05-18, \$1,040,000 property; \$0 crops (2008 dollars); NWS zone WAZ042		Event records naming jurisdictions in the plan: Conconully town (2 records), Winthrop town (2 records), Brewster city (1 record), Elmer City town (1 record), Oroville city (1 record). Zone-level records (17) apply countywide.	
Lightning	annualized frequency (the measure FEMA's Local Mitigation Planning Handbook names)	2 records, 2006 to 2009		Lightning, 2009-07-06, \$2,000 property; \$0 crops (2009 dollars)		Event records naming jurisdictions in the plan: Omak city (1 record), Twisp town (1 record).	Storm Events lists lightning with damage or casualties.

Hazard	Scale	Records <i>count and years</i>	Observed range	Worst recorded event	Most damaging (when different)	How it applies to jurisdictions	Note
High Wind and Strong Wind (outside NRI's Strong Wind definition)	wind speed (kt and mph)	60 records, 1997 to 2026 (60 zone-level)	30 kt (35 mph) to 94 kt (108 mph) (median 52 kt (60 mph)); 57 with a recorded value	94 kt (108 mph) measured gust, High Wind, 2003-10-28; same speed and measurement basis also recorded on 2003-03-05; NWS zone WAZ043	High Wind, 2002-08-16, \$300,000 property; \$25,000,000 crops (zone total, 2002 dollars)	Countywide (zone-level records).	
Thunderstorm Wind	wind speed (kt and mph)	54 records, 1991 to 2024	26 kt (30 mph) to 76 kt (87 mph) (median 53 kt (61 mph)); 49 with a recorded value	76 kt (87 mph) measured gust, Thunderstorm Wind, 2013-08-10	Thunderstorm Wind, 2001-05-24, \$125,000 property; \$1,000,000 crops (2001 dollars)	Event records naming jurisdictions in the plan: Okanogan city (5 records), Oroville city (5 records), Brewster city (3 records), Nespelém town (3 records), Twisp town (3 records), Conconully town (2 records), Coulee Dam town (2 records), Omak city (2 records), Winthrop town (2 records), Elmer City town (1 record); and 2 more jurisdictions (see the Excel file).	
Tornado	Enhanced Fujita (Fujita before Feb 2007)	4 records, 1982 to 1997	F/EF0 to F/EF1 (median F/EF1); 4 with a recorded value	F1 tornado, 1982-05-03, 0.1 mi path length (whole path, pre-1996), 10 yd wide, \$25,000 property; crops not recorded (1982 dollars)		Event records naming jurisdictions in the plan: Nespelém town (1 record), Omak 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).
Volcanic Ash, Volcanic Ashfall	Volcanic Explosivity Index (local data)	0					
Wildfire	acres burned (local data)	171 records, 1998 to 2026 (163 zone-level)		Wildfire, 2014-07-14, \$120,000,000 property; \$1,000,000 crops (2014 dollars); NWS zone WAZ043		Event records naming jurisdictions in the plan: Okanogan city (2 records), Omak city (2 records), Winthrop town (2 records), Oroville city (1 record). Zone-level records (163) apply countywide.	
Winter Storm, Heavy Snow, Blizzard, Lake-Effect Snow, Winter Weather, Sleet	none in data (snowfall: local data)	306 records, 1996 to 2026 (306 zone-level)		Winter Weather, 2012-12-17, \$5,600,000 property; \$0 crops (2012 dollars); NWS zone WAZ042		Countywide (zone-level records).	

Where a hazard names more than 10 jurisdictions, the table lists the 10 with the most records; every one is in the Excel file, sheet "B1-c Extent".

In event narratives only (local data needed): wind chill, temperature, heat index, ice thickness, acres burned and snow depth; any physical measure of avalanche, debris flow, lightning and volcanic ash, volcanic ashfall.

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

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

Supports FEMA checklist item B1-d: previous occurrences

Federal declarations for this county: 42 declarations covering 30 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
2026-08-03	2026-08-01	EM-3650-WA	Emergency	Wildfires	Wildfire	not yet in FEMA's PA summaries (they cover declarations through 2026-06-30)	new since last plan; within last 5 years	
2026-08-01	2026-08-01	FM-5657-WA	Fire management	Sinlahekin Fire	Wildfire	not yet in FEMA's PA summaries (they cover declarations through 2026-06-30)	new since last plan; within last 5 years	same incident as EM-3650
2026-07-17	2026-07-16	FM-5646-WA	Fire management	Kaiser Canyon Fire	Wildfire	not yet in FEMA's PA summaries (they cover declarations through 2026-06-30)	new since last plan; within last 5 years	
2024-07-24	2024-07-17	FM-5518-WA	Fire management	Swawilla Fire	Wildfire	no Public Assistance recorded	new since last plan; within last 5 years	
2024-04-28	2024-01-05	DR-4775-WA	Major disaster	Severe Winter Storms, Straight-Line Winds, Flooding, Landslides, and Mudslides	Inland Flooding; Landslide; Strong Wind; Winter Weather	\$279,129.06	new since last plan; within last 5 years	
2023-07-30	2023-07-29	FM-5472-WA	Fire management	Eagle Bluff Fire	Wildfire	no Public Assistance recorded	new since last plan; within last 5 years	
2023-01-12	2022-11-03	DR-4682-WA	Major disaster	Severe Winter Storm, Straight-Line Winds, Flooding, Landslides, and Mudslides	Inland Flooding; Landslide; Strong Wind; Winter Weather	\$703,430.27	new since last plan; within last 5 years	
2022-03-29	2021-12-26	DR-4650-WA	Major disaster	Severe Winter Storms, Snowstorms, Straight-Line Winds, Flooding	Inland Flooding (primary); also designated: Strong Wind, Winter Weather	no Public Assistance recorded	in the 12 months before plan approval; within last 5 years	
2021-08-16	2021-08-15	FM-5410-WA	Fire management	Muckamuck Fire	Wildfire	no Public Assistance recorded	in the 12 months before plan approval	
2021-07-20	2021-07-19	FM-5401-WA	Fire management	Cedar Creek Fire	Wildfire	no Public Assistance recorded	in the 12 months before plan approval	

Declared	Incident began	FEMA number	Type	Title	Mapped hazard	County Public Assistance <i>federal share obligated, nominal dollars</i>	Flags	Notes
2021-04-08	2020-12-29	DR-4593-WA	Major disaster	Severe Winter Storm, Straight-Line Winds, Flooding, Landslides, and Mudslides	Inland Flooding; Landslide; Strong Wind; Winter Weather	\$271,509.94		
2021-02-04	2020-09-01	DR-4584-WA	Major disaster	Wildfires and Straight-Line Winds	Wildfire	\$16,064,347.48		
2020-09-07	2020-09-07	FM-5351-WA	Fire management	Cold Springs/Pearl Hill Fire	Wildfire	no Public Assistance recorded		same incident as DR-4584
2020-08-20	2020-08-18	FM-5337-WA	Fire management	Palmer Fire	Wildfire	no Public Assistance recorded		
2020-07-28	2020-07-27	FM-5323-WA	Fire management	Anglin Fire	Wildfire	no Public Assistance recorded		
2020-03-22	2020-01-20	DR-4481-WA	Major disaster	COVID-19 Pandemic	Non-natural, not counted	\$9,158,785.24		
2020-03-13	2020-01-20	EM-3427-WA	Emergency	COVID-19	Non-natural, not counted	no Public Assistance recorded		same incident as DR-4481
2015-10-20	2015-08-09	DR-4243-WA	Major disaster	Wildfires and Mudslides	Wildfire	\$6,500,411.11		
2015-08-21	2015-08-13	EM-3372-WA	Emergency	Wildfires	Wildfire	no Public Assistance recorded		same incident as DR-4243
2015-08-19	2015-08-19	FM-5106-WA	Fire management	Twisp River Fire	Wildfire	no Public Assistance recorded		same incident as DR-4243
2015-08-15	2015-08-14	FM-5104-WA	Fire management	Okanagan County Fire Complex	Wildfire	no Public Assistance recorded		same incident as DR-4243
2015-08-14	2015-08-14	FM-5100-WA	Fire management	Chelan Fire Complex	Wildfire	no Public Assistance recorded		same incident as DR-4243
2015-08-14	2015-08-13	FM-5098-WA	Fire management	Nine Mile Fire	Wildfire	no Public Assistance recorded		same incident as DR-4243
2014-08-11	2014-07-09	DR-4188-WA	Major disaster	Wildfires	Wildfire	\$9,277,362.30		
2014-07-23	2014-07-09	EM-3371-WA	Emergency	Wildfires	Wildfire	no Public Assistance recorded		same incident as DR-4188
2014-07-17	2014-07-15	FM-5062-WA	Fire management	Carlton Complex Fire	Wildfire	no Public Assistance recorded		same incident as DR-4188
2012-09-25	2012-07-20	DR-4083-WA	Major disaster	Severe Storm, Straight-Line Winds, and Flooding	Inland Flooding; Strong Wind	\$179,718.02		

Declared	Incident began	FEMA number	Type	Title	Mapped hazard	County Public Assistance <i>federal share obligated, nominal dollars</i>	Flags	Notes
2009-08-22	2009-08-21	FM-2826-WA	Fire management	Oden Road Fire	Wildfire	no Public Assistance recorded		
2007-07-16	2007-07-16	FM-2714-WA	Fire management	Tunk Grade Fire	Wildfire	no Public Assistance recorded		
2005-09-07	2005-08-29	EM-3227-WA	Emergency	Hurricane Katrina Evacuation	Hurricane: evacuation support, not a local hazard event; not counted	no Public Assistance recorded		
2003-11-07	2003-10-15	DR-1499-WA	Major disaster	Severe Storms and Flooding	Inland Flooding	PA not declared for this county		
2003-09-06	2003-09-05	FM-2498-WA	Fire management	Wa-Needle Fire-09-06-2003	Wildfire	no Public Assistance recorded		
2003-07-16	2003-07-15	FM-2481-WA	Fire management	Wa-Okanogan City Fire-07-16-2003	Wildfire	no Public Assistance recorded		
2002-07-25	2002-07-24	FM-2451-WA	Fire management	Wa - Pickens Fire - 07/24/02	Wildfire	no Public Assistance recorded		
2001-08-16	2001-08-14	FM-2376-WA	Fire management	Wa Tonasket Fire Complex 2376	Wildfire	no Public Assistance recorded		
2001-08-14	2001-08-13	FM-2373-WA	Fire management	Wa Brewster Fire Complex 2373	Wildfire	no Public Assistance recorded		
2001-08-14	2001-08-13	FM-2372-WA	Fire management	Wa - Virginia Lakes Complex - 2372	Wildfire	no Public Assistance recorded		
2000-07-22	2000-07-22	FM-2313-WA	Fire management	Wa-Wildfire-07-24-2000	Wildfire	no Public Assistance recorded		
1997-01-17	1996-12-26	DR-1159-WA	Major disaster	Severe Winter Storms, Land & Muds Slides,Flooding	Inland Flooding; Landslide; Winter Weather	no Public Assistance recorded		
1989-04-14	1989-03-08	DR-822-WA	Major disaster	Heavy Rains, Flooding & Mudslides	Inland Flooding (primary); also designated: Landslide	no Public Assistance recorded		
1980-05-21	1980-05-21	DR-623-WA	Major disaster	Volcanic Eruption, Mt. St. Helens	Volcanic Activity	no Public Assistance recorded		
1972-06-10	1972-06-10	DR-334-WA	Major disaster	Severe Storms & Flooding	Inland Flooding	no Public Assistance recorded		

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

Statewide declarations

Source: 2

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

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

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

Public Assistance filed under this county for declarations that do not list it: 2 rows, \$44,365.44

Sources: 2, 3

FEMA number	Declared	Title	Applicant	PA obligated <i>federal share obligated, nominal dollars</i>
DR-4309-WA	2017-04-21	Severe Winter Storms, Flooding, Landslides, Mudslides	DO NOT USE COLVILLE INDIAN RESERVATION	\$19,822.91
DR-1825-WA	2009-03-02	Severe Winter Storm and Record and Near Record Snow	DO NOT USE COLVILLE INDIAN RESERVATION	\$24,542.53

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.

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

Source: 3

Previous occurrences by hazard, with explicit no-event rows

Sources: 2, 6, 7

Hazard	Storm Events records, all years on file <i>(years in the Period column)</i>	Since plan approval records	In the 12 months before plan approval records	Last 5 years records	Declared incidents, all years <i>separate disasters</i>	Declared since approval <i>separate disasters</i>	Period	Statement
Avalanche	7	1	0	1	0	0	1996 to 2026-06-30	
Cold Wave	8	0	0	0	0	0	1996 to 2026-06-30	
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	36	3	0	3	0	0	1955 to 2026-06-30	
Heat Wave	2	1	1	1	0	0	1996 to 2026-06-30	

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
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	4	0	0	0	0	0	1996 to 2026-06-30	
Inland Flooding	82	9	4	13	9	2	1996 to 2026-06-30	
Landslide	51	6	3	6	5	2	1996 to 2026-06-30	
Lightning	2	0	0	0	0	0	1996 to 2026-06-30	
Strong Wind	114	11	4	15	5	2	1955 to 2026-06-30	Includes 42 High Wind and 18 Strong Wind records.
Tornado	4	0	0	0	0	0	1950 to 2026-06-30	
Volcanic Activity	0	0	0	0	1	0	1996 to 2026-06-30	No Storm Events records of this type; 1 federal declared incident (see declarations table)
Wildfire	171	36	4	37	20	4	1996 to 2026-06-30	
Winter Weather	306	29	4	33	5	2	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
2021-06-26	Excessive Heat		\$0 property; \$0 crops (zone total, 2021 dollars)	0, 0	NWS zone WAZ038 (OKANOGAN HIGHLANDS), zone-level	in the 12 months before plan approval	B1-c worst recorded: Excessive Heat, Heat
2020-09-07	Wildfire		\$11,000,000 property; crops not reported (zone total, 2020 dollars)	1, 2	NWS zone WAZ043 (OKANOGAN VALLEY), zone-level		deaths or injuries recorded
2018-05-05	Flood		\$12,000,000 property; \$0 crops (2018 dollars)	0, 0	OROVILLE		B1-c worst recorded: Flash Flood, Flood, Lakeshore Flood
2014-07-14	Wildfire		\$120,000,000 property; \$1,000,000 crops (zone total, 2014 dollars)	0, 0	NWS zone WAZ043 (OKANOGAN VALLEY), zone-level		B1-c worst recorded: Wildfire
2013-08-10	Thunderstorm Wind	76 kt (87 mph) measured gust	\$1,000 property; \$0 crops (2013 dollars)	0, 0	WINTHROP ARPT to WINTHROP		B1-c worst recorded: Thunderstorm Wind
2009-07-06	Lightning		\$2,000 property; \$0 crops (2009 dollars)	0, 0	TWISP		B1-c worst recorded: Lightning
2008-07-03	Hail	1.75 in	property not reported; \$0 crops (2008 dollars)	0, 0	DISAUTEL		B1-c worst recorded: Hail
2008-02-07	Avalanche		\$1,100,000 property; \$0 crops (zone total, 2008 dollars)	0, 0	NWS zone WAZ042 (EAST SLOPES NORTHERN CASCADES), zone-level		B1-c worst recorded: Avalanche
2006-11-27	Extreme Cold/ Wind Chill		\$0 property; \$0 crops (zone total, 2006 dollars)	0, 0	NWS zone WAZ043 (OKANOGAN VALLEY), zone-level		B1-c worst recorded: Cold/Wind Chill, Extreme Cold/Wind Chill
2006-03-19	Avalanche		damage not reported	1, 1	NWS zone WAZ042 (EAST SLOPES NORTHERN CASCADES), zone-level		deaths or injuries recorded
2003-10-28	High Wind	94 kt (108 mph) measured gust	damage not reported	0, 0	NWS zone WAZ043 (OKANOGAN VALLEY), zone-level		B1-c worst recorded: High Wind and Strong Wind
2001-07-09	Wildfire		damage not reported	4, 4	WINTHROP		deaths or injuries recorded

The full list is in the Excel file, sheet "B1-d Storm Events history" (787 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	0.167	events per year	about 1 in 6 years	Likely	FEMA annualized frequency (modeled)	5	1994 to 2023 (30 years)	see B1-f	
Cold Wave	0.739	event-days per year	about 0.739 days per year	Likely	Storm Events event-days in 5 of 30 years, 1996 to 2025 (16.7%)	14.2	2005-11-12 to 2024-11-12 (19 years)	countywide	
Drought	7.18	event-days per year	about 7.18 days per year		Storm Events event-days in 0 of 30 years, 1996 to 2025 (0%)	315	2000 to 2025 (25.25 years; D3 and D4 only)	countywide	No Storm Events drought record, 1996 to 2025
Earthquake	0.00543	annual probability at a location	chance a given location in the county has at least minor-damage shaking in a year: 0.543%			not shown	modeled	see B1-f	No descriptor (Storm Events does not record earthquakes).
Hail	0.0843	events per year	about 1 in 12 years	Possible	FEMA annualized frequency (modeled)	3.2 (modeled)	1986 to 2023 (38 years)	countywide	
Heat Wave	3.94	event-days per year	about 3.94 days per year	Possible	Storm Events event-days in 2 of 30 years, 1996 to 2025 (6.67%)	38.4	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	0.0149	event-days per year	about 0.0149 days per year	Likely	Storm Events event-days in 3 of 30 years, 1996 to 2025 (10%)	0	1946-12-31 to 2014-02-12 (67 years)	countywide	
Inland Flooding	1.96	event-days per year	about 1.96 days per year	Likely	Storm Events event-days in 21 of 30 years, 1996 to 2025 (70%)	55	1996 to 2023 (28 years)	see B1-f	
Landslide	4.5	events per year (modeled)	about 4.5 per year	Highly likely	FEMA annualized frequency (modeled)	not shown	modeled	see B1-f	
Lightning	15.8	days per year with a strike	about 15.8 days per year	Highly likely	FEMA annualized frequency (modeled)	not shown	1995 to 2023 (29 years; CONUS)	countywide	
Strong Wind	0.0959	events per year	about 1 in 10 years	Possible	FEMA annualized frequency (modeled)	4	1986 to 2023 (38 years)	countywide	
Tornado	0.0765	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	

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
Volcanic Activity	0.0022	annual probability	about 1 in 455 years	Unlikely	FEMA annualized frequency (modeled)	not shown	modeled	see B1-f	
Wildfire	0.0174	annual probability at a location	chance a given location in the county burns in a year: 1.74%	Likely	Storm Events records in 26 of 30 years, 1996 to 2025 (86.7%)	not shown	modeled	see B1-f	
Winter Weather	22.2	event-days per year	about 22.2 days per year	Highly likely	Storm Events event-days in 30 of 30 years, 1996 to 2025 (100%)	421	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	15	30	0.5
Hail	2.00 in+	1996 to 2025	0	30	0
Thunderstorm Wind (counted as NRI Strong Wind)	50-64 kt	1996 to 2025	35	30	1.17
Thunderstorm Wind (counted as NRI Strong Wind)	65 kt+	1996 to 2025	5	30	0.167
Thunderstorm Wind (counted as NRI Strong Wind)	unmeasured or below 50 kt	1996 to 2025	10	30	0.333
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	11 of 13	81.0	83.8	86.1	Relatively Moderate 11, Not Applicable 2
Cold Wave	13 of 13	36.0	92.4	98.3	Very High 2, Relatively High 8, Relatively Moderate 2, Relatively Low 1
Drought	13 of 13	68.1	72.9	82.6	Relatively Low 1, Very Low 12
Earthquake	13 of 13	54.8	78.0	86.7	Relatively Moderate 7, Relatively Low 6
Hail	13 of 13	47.8	73.3	99.1	Very High 1, Relatively High 1, Relatively Moderate 6, Relatively Low 5
Heat Wave	13 of 13	47.6	66.9	84.0	Relatively Moderate 11, Relatively Low 2
Hurricane	0 of 13				Not Applicable 13
Ice Storm	13 of 13	2.6	3.2	5.4	Very Low 13
Inland Flooding	13 of 13	72.9	94.7	99.7	Very High 6, Relatively High 5, Relatively Moderate 2
Landslide	13 of 13	54.7	95.6	99.4	Relatively High 1, Relatively Moderate 5, Relatively Low 5, Very Low 2
Lightning	13 of 13	69.3	76.2	84.5	Relatively High 5, Relatively Moderate 8

Hazard	Tracts <i>rated of all</i>	NRI risk score, 0 to 100			Tracts by rating
		Min	Median	Max	
Strong Wind	13 of 13	24.3	37.2	85.2	Relatively High 1, Relatively Moderate 1, Relatively Low 11
Tornado	13 of 13	2.0	3.2	15.2	Very Low 13
Volcanic Activity	13 of 13	81.7	85.8	86.9	Relatively Low 3, Very Low 10
Wildfire	13 of 13	98.1	99.2	99.9	Very High 8, Relatively High 5
Winter Weather	13 of 13	70.8	76.7	89.8	Relatively High 5, Relatively Moderate 8

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

Hail: Agriculture is 98% of NRI's expected annual loss for this hazard in the county, so the tract range mostly reflects where crop and livestock value is.

Strong Wind: Agriculture is 51% 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
Okanogan County	County	Approved, expires 2027-06-21	FMA RL 0, SRL 0; any 1	\$2,523,643.23	0 total; 0 since its plan	
Brewster city	City	Approved, expires 2027-06-21	FMA RL 0, SRL 0; any 0	\$122,573.77	8 total; 0 since its plan	
Conconully town	Town	Approved, expires 2027-06-21	FMA RL 0, SRL 0; any 0	\$38,484.47	13 total; 2 since its plan	
Coulee Dam town	Town	Approved, expires 2027-06-21		\$5,342.28	3 total; 0 since its plan	No NFIP community ID on this jurisdiction's plan row.
Elmer City town	Town	Approved, expires 2027-06-21	FMA RL 0, SRL 0; any 0	no Public Assistance recorded	2 total; 1 since its plan	
Nespelem town	Town	Approved, expires 2027-06-21	FMA RL 0, SRL 0; any 0	\$2,841.28	5 total; 0 since its plan	
Okanogan city	City	Approved, expires 2027-06-21	FMA RL 0, SRL 0; any 1	no Public Assistance recorded	13 total; 1 since its plan	
Omak city	City	Approved, expires 2027-06-21	FMA RL 0, SRL 0; any 1	\$27,138.42	8 total; 0 since its plan	
Oroville city	City	Approved, expires 2027-06-21	FMA RL 0, SRL 0; any 0	no Public Assistance recorded	17 total; 2 since its plan	

Jurisdiction	Type	Plan status	Repetitive loss	Public Assistance to this jurisdiction	Event records naming this place	Notes
			<i>FMA RL and SRL (44 CFR 77.2); repeat-flood, any definition</i>	<i>FEMA records matched by applicant name; federal share obligated, nominal dollars</i>	<i>all years; since its plan</i>	
Pateros city	City	Approved, expires 2027-06-21	FMA RL 0, SRL 0; any 0	\$720,261.73	2 total; 0 since its plan	
Riverside town	Town	Approved, expires 2027-06-21	FMA RL 0, SRL 0; any 0	\$285,654.42	3 total; 1 since its plan	
Tonasket city	City	Approved, expires 2027-06-21	FMA RL 0, SRL 0; any 0	no Public Assistance recorded	3 total; 0 since its plan	
Twisp town	Town	Approved, expires 2027-06-21	FMA RL 0, SRL 0; any 0	\$69,457.81	7 total; 0 since its plan	
Winthrop town	Town	Approved, expires 2027-06-21	FMA RL 0, SRL 0; any 0	\$36,518.32	15 total; 1 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 modeled dollars	Agriculture exposure modeled dollars	Population exposed people	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 as % of exposure buildings; agriculture where noted	Storm Events damage since 2022-06-22 county-coded records, property plus crops, nominal dollars	Zone-level damage since plan property plus crops, reported for the zone	Public Assistance since plan nominal dollars; see note	Note
Avalanche	\$7,477,580	n/a	10	\$27,332	n/a	\$1,051,984	0.366%		\$9,000		
Cold Wave	\$10,565,235,836	\$435,308,730	42,016	\$6,060	\$436,793	\$2,894,556	under 0.0001%				
Drought	n/a	\$293,311,527	n/a	n/a	\$2,723	n/a	0.000928% (agriculture)				NRI has no building exposure for this hazard; agriculture shown
Earthquake	\$18,696,840,370	n/a	42,104	\$1,488,765	n/a	\$520,349	0.00796%				
Hail	\$10,565,235,836	\$435,308,730	42,016	\$11,093	\$606,005	\$2,887	0.000105%	\$0			
Heat Wave	\$10,565,235,836	\$435,308,730	42,016	\$177	\$57,571	\$598,787	under 0.0001%				
Hurricane											Not Applicable in NRI for this county
Ice Storm	\$10,565,235,836	n/a	42,016	\$57	n/a	\$2,866	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 2022-06-22 <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	\$10,537,716,314	\$17,094,486	2,709	\$22,822,720	\$158	\$103,811	n/a (see note)	\$1,057,000		\$982,559.33	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	\$625,553,798	n/a	2,758	\$58,097	n/a	\$23,622	0.00929%	\$24,000		\$982,559.33	
Lightning	\$10,565,235,836	n/a	42,016	\$6,081	n/a	\$247,231	under 0.0001%				
Strong Wind	\$10,565,235,836	\$435,308,730	42,016	\$23,199	\$71,369	\$45,596	0.00022%	\$381,000	\$27,500	\$982,559.33	Storm Events damage since the plan includes 2 zone-level High Wind records (\$25,000) and 2 zone-level Strong Wind records (\$2,500): NOAA non-thunderstorm wind types, outside NRI's Strong Wind definition.
Tornado	\$10,565,235,836	\$435,308,730	42,016	\$9,597	\$515	\$10,281	under 0.0001%				
Volcanic Activity	\$10,565,235,836	n/a	42,016	\$1	n/a	\$165	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 2022-06-22 <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
Wildfire	\$3,247,908,496	\$280,405,720	21,212	\$18,469,555	\$12,465	\$1,073,423	0.569%		\$201,362,900	no Public Assistance recorded (5 declarations)	
Winter Weather	\$10,565,235,836	\$435,308,730	42,016	\$16,500	\$4,940	\$67,099	0.000156%		\$15,000	\$982,559.33	

Totals since 2022-06-22 (Storm Events through 2026-06-30): 24 county-coded records, 23 with a damage value recorded (including \$0), \$1,462,000; 72 zone-level records, 71 with a damage value recorded (including \$0), \$201,414,400 reported for the zone; Public Assistance: \$982,559.33 on 7 counted declarations, 2 of them with Public Assistance.

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	42,016
Building value (total, not at risk)	\$10,565,235,836
Agriculture value (total, not at risk)	\$435,308,730
NRI risk rating (all hazards)	Relatively Moderate
Expected annual loss, buildings and agriculture, all hazards	\$44,131,774
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)	\$6,642,659
Social vulnerability rating	Very High
Community resilience rating	Very Low
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)	0
Repetitive loss, NFIP insurance definition	3	Severe repetitive loss, NFIP insurance definition	0

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	0	3	0	3	0	1
of which: Okanogan County (unincorporated area)	0	0	1	0	1	0	1
of which: Okanogan city	0	0	1	0	1	0	0
of which: Omak city	0	0	1	0	1	0	0
Statewide, no county in FEMA's file	0	0	2	0	2	0	0

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

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

Sources: 1, 4

Jurisdiction	NFIP community ID	RL, FMA <i>properties</i>	SRL, FMA <i>properties</i>	RL, NFIP <i>properties</i>	SRL, NFIP <i>properties</i>	Any category <i>properties</i>	Mitigated <i>properties</i>	Currently insured <i>properties</i>
Okanogan County	530117	0	0	1	0	1	0	1
Brewster city	530275	0	0	0	0	0	0	0
Conconully town	530118	0	0	0	0	0	0	0
Elmer City town	530246	0	0	0	0	0	0	0
Nespelem town	530255	0	0	0	0	0	0	0
Okanogan city	530119	0	0	1	0	1	0	0
Omak city	530120	0	0	1	0	1	0	0
Oroville city	530121	0	0	0	0	0	0	0
Pateros city	530258	0	0	0	0	0	0	0
Riverside town	530122	0	0	0	0	0	0	0
Tonasket city	530123	0	0	0	0	0	0	0

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>
Twisp town	530124	0	0	0	0	0	0	0
Winthrop town	530125	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	0	2	0	2	0	1
2 to 4 unit residential	0	0	0	0	0	0	0
other residential	0	0	0	0	0	0	0
non-residential	0	0	1	0	1	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 3 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_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 (used to match place names and codes; no table prints its values)

What this packet is and what the plan adds

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

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

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

OpenFEMA disclaimer

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

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Cite this: Hazard Plain (2026). Okanogan County, WA: risk-assessment baseline packet, release 2026-10 (data as of 2026-09-30; County FIPS 53047). Automated baseline. <https://hazardplain.org/wa/53047/> 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