

Alpine County, CA

Risk-assessment baseline packet

County FIPS: 06003 **Release:** 2026-10 **Data as of:** 2026-09-30 **Storm Events data through:** 2026-06-30

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

Summary

Plan status as of 2026-09-30: Expired on 2023-08-16. Plan: Alpine County (FEMA plan 102700), approved 2018-08-17.

Since the plan was approved on 2018-08-17: 4 new hazard declarations (3 incidents) and 490 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): Avalanche (\$1,825,637 a year), Inland Flooding (\$1,392,587) and Wildfire (\$1,155,737).

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; 06003 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:	Expired on 2023-08-16	Plan:	Alpine County (FEMA plan 102700)
Approved:	2018-08-17	Days since expiry:	1,141
Update underway:	none recorded in FEMA's plan tracker		

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

What changed since your last plan (approved 2018-08-17)

New federal declarations:

4 new hazard declarations (3 incidents): EM-3571-CA (Caldor Fire), DR-4683-CA (Severe Winter Storms, Flooding, Landslides, and Mudslides), EM-3592-CA (Severe Winter Storms, Flooding, Landslides, and Mudslides), DR-4699-CA (Severe Winter Storms, Straight-Line Winds, Flooding, Landslides, and Mudslides); also 2 COVID-19 declarations (not counted)

Repetitive loss now:

FMA RL 0, SRL 0 (44 CFR 77.2); any definition: 0

Storm Events records since approval:

490 records (data through 2026-06-30)

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

Source: 1

Jurisdiction	Type	Status	Plan	Approved	Expires	Days to expiry <i>negative = days since expiry</i>
Alpine County	County	Expired on 2023-08-16	Alpine County (FEMA plan 102700)	2018-08-17	2023-08-16	-1,141
Name not given in FEMA data (ID R09_202706)	School/School District	Expired on 2023-08-16	Alpine County (FEMA plan 102700)	2018-08-17	2023-08-16	-1,141
Bear Valley Water District	Water/Sewer Authority	Expired on 2023-08-16	Alpine County (FEMA plan 102700)	2018-08-17	2023-08-16	-1,141
Kirkwood Meadows Public Utilities District	Electric/Power Authority	Expired on 2023-08-16	Alpine County (FEMA plan 102700)	2018-08-17	2023-08-16	-1,141
Markleeville Public Utilities District	Electric/Power Authority	Expired on 2023-08-16	Alpine County (FEMA plan 102700)	2018-08-17	2023-08-16	-1,141

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

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Supports FEMA checklist item B1-a: hazard identification

Hazards NRI does not cover (local data needed)

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

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

Sources: 5, 6

Rank by EAL	Hazard	NRI risk rating	EAL rating	EAL buildings modeled dollars per year	EAL agriculture modeled dollars per year	Cost of expected deaths and injuries FEMA's dollar value per year, not property damage	EAL total (see note) modeled dollars per year	Storm Events records, 1996 to 2026-06-30 count	Why this hazard can be left out NRI Not Applicable, no declaration and no Storm Events record since 1996	Storm Events coverage note
1	Avalanche	Relatively High	Relatively Moderate	\$36	n/a	\$1,825,600	\$1,825,637	20		
2	Inland Flooding	Very Low	Very Low	\$1,392,459	under \$1	\$128	\$1,392,587	4		
3	Wildfire	Relatively Moderate	Relatively Moderate	\$1,129,823	\$76	\$25,838	\$1,155,737	25		
4	Earthquake	Very Low	Relatively Low	\$300,903	n/a	\$8,328	\$309,231			Storm Events does not record earthquakes.
5	Winter Weather	Relatively Low	Relatively Low	\$6,741	under \$1	\$54,692	\$61,432	948		
6	Strong Wind	Very Low	Very Low	\$4,962	\$149	\$14,922	\$20,034	199		Includes 186 High Wind and 12 Strong Wind records (NOAA non-thunderstorm wind types, outside NRI's Strong Wind definition).
7	Lightning	Very Low	Very Low	\$859	n/a	\$9,192	\$10,052	0		No recorded events in Storm Events since 1996 (data through 2026-06-30).
8	Heat Wave	Very Low	Very Low	\$5	\$34	\$4,786	\$4,826	6		
9	Landslide	Relatively Low	Very Low	\$475	n/a	\$3,636	\$4,111	14		
10	Hail	Very Low	Very Low	\$230	\$259	\$975	\$1,464	5		
11	Tornado	Very Low	Very Low	\$181	\$2	\$13	\$197	0		No recorded events in Storm Events since 1996 (data through 2026-06-30).

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
12	Volcanic Activity	Very Low	Very Low	under \$1	n/a	under \$1	under \$1	0		No recorded events in Storm Events since 1996 (data through 2026-06-30).
13	Cold Wave	No Rating	No Expected Annual Losses	\$0	\$0	\$0	\$0	5		
14	Drought	No Rating	No Expected Annual Losses	n/a	\$0	n/a	\$0	31		
	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-3248-CA 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).
	Ice Storm	Not Applicable	Not Applicable					0		Declared 1 time; no Storm Events record of this type.

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 lightning and volcanic activity records (Storm Events records these hazards only in part).

Not applicable to this county per NRI, with no federal declaration and no Storm Events record since 1996: coastal flooding and tsunami. 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.

NRI rating of the county's single census tract

Source: 5

Hazard	Census tract <i>NRI risk rating, score 0 to 100</i>
Avalanche	tract 100 (Relatively Moderate, 88.1)
Earthquake	tract 100 (Relatively Moderate, 84.0)
Hurricane	no tract has a National Risk Index rating for this hazard
Landslide	tract 100 (Relatively Moderate, 96.5)
Tornado	tract 100 (Very Low, 1.6)
Volcanic Activity	tract 100 (Very Low, 41.2)
Wildfire	tract 100 (Very High, 99.2)

A tract number is the Census tract number (for example 100 is Census Tract 100). 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)	20 records, 1996 to 2026 (20 zone-level)		No damage reported in 20 records.		Countywide (zone-level records).	
Cold/Wind Chill, Extreme Cold/Wind Chill	wind chill	5 records, 1997 to 2025 (5 zone-level)	3 days; 1 with a recorded value	3 consecutive days, 1997-01-13 to 1997-01-15, zone-level		Countywide (zone-level records).	Cold/Wind Chill records from May to September (a frost night, not a cold wave) are counted but not used for the longest run.
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)	31 records, 2015 to 2023 (31 zone-level)	61 days to 460 days (median 123 days); 5 with a recorded value	460 days (about 15.1 months), 2021-10-08 to 2023-01-10, a run of 16 consecutive Storm Events drought records, zone-level		Countywide (zone-level records).	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)	5 records, 1998 to 2020	0.75 in to 1.75 in (median 1 in); 5 with a recorded value	1.75 in hail, 2015-07-20; same size also recorded on 2015-07-20		No event record names a jurisdiction in the plan.	
Excessive Heat, Heat	heat index (in event narratives)	6 records, 2021 to 2023 (6 zone-level)	2 days to 6 days (median 3.5 days); 6 with a recorded value	6 consecutive days, 2022-09-04 to 2022-09-09, 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)	0					
Flash Flood, Flood, Lakeshore Flood	damage and flood days (flood depth: FIRM)	4 records, 1997 to 2021 (2 zone-level)		Flood, 2005-12-31, \$1,000,000 property; crops not reported (2005 dollars)		No event record names a jurisdiction in the plan. Zone-level records (2) 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)	14 records, 1998 to 2025 (4 zone-level)		Debris Flow, 2005-12-22, \$2,000 property; crops not reported (2005 dollars); NWS zone CAZ072		No event record names a jurisdiction in the plan. Zone-level records (4) apply countywide.	
Lightning	annualized frequency (the measure FEMA's Local Mitigation Planning Handbook names)	0					Storm Events lists lightning with damage or casualties.
High Wind and Strong Wind (outside NRI's Strong Wind definition)	wind speed (kt and mph)	198 records, 1996 to 2026 (198 zone-level)	22 kt (25 mph) to 173 kt (199 mph) (median 69 kt (79 mph)); 197 with a recorded value	173 kt (199 mph) measured gust, High Wind, 2017-02-20; NWS zone CAZ069	High Wind, 2014-12-30, \$800,000 property; \$0 crops (zone total, 2014 dollars)	Countywide (zone-level records).	
Thunderstorm Wind	wind speed (kt and mph)	1 record, 2000		No wind speed recorded in 1 record.		No event record names a jurisdiction in the plan.	

Hazard	Scale	Records <i>count and years</i>	Observed range	Worst recorded event	Most damaging (when different)	How it applies to jurisdictions	Note
Tornado	Enhanced Fujita (Fujita before Feb 2007)	0					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)	25 records, 2007 to 2024 (25 zone-level)		Wildfire, 2007-06-24, \$500,000,000 property; crops not reported (2007 dollars), 3 direct injuries (reported for the zone); NWS zone CAZ072		Countywide (zone-level records).	
Winter Storm, Heavy Snow, Blizzard, Lake-Effect Snow, Winter Weather, Sleet	none in data (snowfall: local data)	948 records, 1996 to 2026 (948 zone-level)		Heavy Snow, 2002-04-15, \$500,000 property; crops not reported (2002 dollars), 4 direct injuries (reported for the zone); NWS zone CAZ072		Countywide (zone-level records).	

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: 15 declarations covering 11 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
2023-04-03	2023-02-21	DR-4699-CA	Major disaster	Severe Winter Storms, Straight-Line Winds, Flooding, Landslides, and Mudslides	Ice Storm; Inland Flooding; Landslide; Strong Wind; Winter Weather	\$71,887.38	new since last plan; within last 5 years	
2023-03-10	2023-03-09	EM-3592-CA	Emergency	Severe Winter Storms, Flooding, Landslides, and Mudslides	Inland Flooding (primary); also designated: Landslide, Winter Weather	no Public Assistance recorded	new since last plan; within last 5 years	same incident as DR-4699
2023-01-14	2022-12-27	DR-4683-CA	Major disaster	Severe Winter Storms, Flooding, Landslides, and Mudslides	Inland Flooding (primary); also designated: Landslide, Winter Weather	\$659,571.94	new since last plan; within last 5 years	

Declared	Incident began	FEMA number	Type	Title	Mapped hazard	County Public Assistance	Flags	Notes
						<i>federal share obligated, nominal dollars</i>		
2021-09-01	2021-08-14	EM-3571-CA	Emergency	Caldor Fire	Wildfire	no Public Assistance recorded	new since last plan	
2020-03-22	2020-01-20	DR-4482-CA	Major disaster	COVID-19 Pandemic	Non-natural, not counted	no Public Assistance recorded	new since last plan	
2020-03-13	2020-01-20	EM-3428-CA	Emergency	COVID-19	Non-natural, not counted	no Public Assistance recorded	new since last plan	same incident as DR-4482
2017-04-01	2017-02-01	DR-4308-CA	Major disaster	Severe Winter Storms, Flooding, and Mudslides	Inland Flooding (primary); also designated: Landslide, Winter Weather	\$204,237.43		
2006-02-03	2005-12-17	DR-1628-CA	Major disaster	Severe Storms, Flooding, Mudslides, and Landslides	Inland Flooding; Landslide	\$247,691.05		
2005-09-13	2005-08-29	EM-3248-CA	Emergency	Hurricane Katrina Evacuation	Hurricane: evacuation support, not a local hazard event; not counted	no Public Assistance recorded		
1997-01-04	1996-12-28	DR-1155-CA	Major disaster	Severe Storms, Flooding, Mud and Landslides	Inland Flooding; Landslide	no Public Assistance recorded		
1995-03-12	1995-02-13	DR-1046-CA	Major disaster	Severe Winter Storms, Flooding Landslides, Mud Flow	Inland Flooding; Landslide; Winter Weather	no Public Assistance recorded		
1993-02-03	1993-01-05	DR-979-CA	Major disaster	Severe Winter Storm, Mud & Land Slides, & Flooding	Inland Flooding (primary); also designated: Landslide, Winter Weather	no Public Assistance recorded		
1986-02-21	1986-02-12	DR-758-CA	Major disaster	Severe Storms & Flooding	Inland Flooding	no Public Assistance recorded		
1977-01-20	1977-01-20	EM-3023-CA	Emergency	Drought	Drought	no Public Assistance recorded		
1964-12-24	1964-12-24	DR-183-CA	Major disaster	Heavy Rains & 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
1964-04-01	1964-04-01	DR-169-CA	Major disaster	Seismic Sea Wave	Tsunami
1963-12-21	1963-12-21	DR-161-CA	Major disaster	Flood Due to Broken Dam	Other, not an NRI hazard; not counted
1963-02-25	1963-02-25	DR-145-CA	Major disaster	Severe Storms, Heavy Rains & Flooding	Inland Flooding
1962-10-24	1962-10-24	DR-138-CA	Major disaster	Severe Storms & Flooding	Inland Flooding
1962-03-06	1962-03-06	DR-122-CA	Major disaster	Floods	Inland Flooding
1961-11-16	1961-11-16	DR-119-CA	Major disaster	Fire (Los Angeles County)	Wildfire
1958-04-04	1958-04-04	DR-82-CA	Major disaster	Heavy Rainstorms & Flood	Inland Flooding
1956-12-29	1956-12-29	DR-65-CA	Major disaster	Forest Fire	Wildfire
1955-12-23	1955-12-23	DR-47-CA	Major disaster	Flood	Inland Flooding
1954-02-05	1954-02-05	DR-15-CA	Major disaster	Flood & Erosion	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.

5 Fire Management declarations (1977-08-07 to 1988-09-13) 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: 1 row, \$241,189

Sources: 2, 3

FEMA number	Declared	Title	Applicant	PA obligated <i>federal share obligated, nominal dollars</i>
DR-4301-CA	2017-02-14	Severe Winter Storms, Flooding, and Mudslides	KIRKWOOD MEADOWS PUBLIC UTILITY DISTRICT	\$241,189

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.

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	20	5	2	3	0	0	1996 to 2026-06-30	
Cold Wave	5	4	0	2	0	0	1996 to 2026-06-30	
Drought	31	21	0	16	1	0	1996 to 2026-06-30	
Earthquake	0	0	0	0	0	0		Storm Events does not record earthquakes; the USGS earthquake catalog is the source.
Hail	5	1	0	0	0	0	1955 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
Heat Wave	6	6	0	3	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	0	0	0	0	1	1	1996 to 2026-06-30	No Storm Events records of this type; 1 federal declared incident (see declarations table)
Inland Flooding	4	1	0	0	9	2	1996 to 2026-06-30	
Landslide	14	7	1	6	7	2	1996 to 2026-06-30	
Lightning	0	0	0	0	0	0	1996 to 2026-06-30	No recorded events, 1996 to 2026-06-30, NOAA NCEI Storm Events
Strong Wind	199	121	11	93	1	1	1955 to 2026-06-30	Includes 186 High Wind and 12 Strong Wind records.
Tornado	0	0	0	0	0	0	1950 to 2026-06-30	No recorded events, 1950 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	25	9	1	6	1	1	1996 to 2026-06-30	
Winter Weather	948	315	26	206	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
2026-02-15	Avalanche		\$0 property; \$0 crops (zone total, 2026 dollars)	9, 0	NWS zone CAZ072 (GREATER LAKE TAHOE AREA), zone-level	new since last plan; within last 5 years	deaths or injuries recorded
2025-06-18	Cold/Wind Chill		\$0 property; \$0 crops (zone total, 2025 dollars)	3, 0	NWS zone CAZ069 (WEST SLOPE NORTHERN SIERRA NEVADA), zone-level	new since last plan; within last 5 years	deaths or injuries recorded
2022-09-04	Excessive Heat		\$0 property; \$0 crops (zone total, 2022 dollars)	0, 0	NWS zone CAZ069 (WEST SLOPE NORTHERN SIERRA NEVADA), zone-level	new since last plan; within last 5 years	B1-c worst recorded: Excessive Heat, Heat
2021-10-08	Drought		\$0 property; \$0 crops (zone total, 2021 dollars)	0, 0	NWS zone CAZ069 (WEST SLOPE NORTHERN SIERRA NEVADA), zone-level	new since last plan; within last 5 years	B1-c worst recorded: Drought
2017-02-20	High Wind	173 kt (199 mph) measured gust	property not reported; \$0 crops (zone total, 2017 dollars)	0, 0	NWS zone CAZ069 (WEST SLOPE NORTHERN SIERRA NEVADA), zone-level		B1-c worst recorded: High Wind and Strong Wind
2015-09-09	Wildfire		\$0 property; \$0 crops (zone total, 2015 dollars)	2, 1	NWS zone CAZ069 (West Slope Northern Sierra Nevada), zone-level		deaths or injuries recorded
2015-07-20	Hail	1.75 in	\$5,000 property; \$0 crops (2015 dollars)	0, 0	LAKE ALPINE		B1-c worst recorded: Hail
2007-06-24	Wildfire		\$500,000,000 property; crops not reported (zone total, 2007 dollars)	0, 3	NWS zone CAZ072 (GREATER LAKE TAHOE AREA), zone-level		B1-c worst recorded: Wildfire
2005-12-31	Flood		\$1,000,000 property; crops not reported (2005 dollars)	0, 0	WOODFORDS		B1-c worst recorded: Flash Flood, Flood, Lakeshore Flood
2005-12-22	Debris Flow		\$2,000 property; crops not reported (zone total, 2005 dollars)	0, 0	NWS zone CAZ072 (E NEVADA/E PLACER/E EL DORADO/NE ALPINE), zone-level		B1-c worst recorded: Debris Flow
2002-04-15	Heavy Snow		\$500,000 property; crops not reported (zone total, 2002 dollars)	0, 4	NWS zone CAZ072 (GREATER LAKE TAHOE AREA), zone-level		B1-c worst recorded: Winter Storm, Heavy Snow, Blizzard, Lake-Effect Snow, Winter Weather, Sleet
1997-01-13	Cold/Wind Chill		damage not reported	0, 0	NWS zone CAZ072 (GREATER LAKE TAHOE AREA), zone-level		B1-c worst recorded: Cold/Wind Chill, Extreme Cold/Wind Chill

The full list is in the Excel file, sheet "B1-d Storm Events history" (1,257 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	0.333	events per year	about 1 in 3 years	Likely	FEMA annualized frequency (modeled)	10	1994 to 2023 (30 years)	see B1-f	
Cold Wave	0	event-days per year	none modeled	Likely	Storm Events event-days in 5 of 30 years, 1996 to 2025 (16.7%)	0	2005-11-12 to 2024-11-12 (19 years)	countywide	NRI models no cold wave event-days here (2005-11-12 to 2024-11-12, 19 years); Storm Events has a record in 5 of 30 years. The descriptor comes from Storm Events, which records events NRI's definition leaves out.
Drought	79.8	event-days per year	about 79.8 days per year	Likely	Storm Events event-days in 4 of 30 years, 1996 to 2025 (13.3%)	2,016	2000 to 2025 (25.25 years; D3 and D4 only)	countywide	
Earthquake	0.0391	annual probability at a location	chance a given location in the county has at least minor-damage shaking in a year: 3.91%			not shown	modeled	see B1-f	No descriptor (Storm Events does not record earthquakes).
Hail	0.153	events per year	about 1 in 7 years	Likely	FEMA annualized frequency (modeled)	5.8 (modeled)	1986 to 2023 (38 years)	countywide	
Heat Wave	1.29	event-days per year	about 1.29 days per year	Likely	Storm Events event-days in 3 of 30 years, 1996 to 2025 (10%)	13.3	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		event-days per year					1946-12-31 to 2014-02-12 (67 years)	countywide	Not Applicable in NRI for this county; no descriptor.
Inland Flooding	0.107	event-days per year	about 0.107 days per year	Likely	Storm Events event-days in 3 of 30 years, 1996 to 2025 (10%)	3	1996 to 2023 (28 years)	see B1-f	
Landslide	2.09	events per year (modeled)	about 2.09 per year	Highly likely	FEMA annualized frequency (modeled)	not shown	modeled	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
Lightning	21	days per year with a strike	about 21 days per year	Highly likely	FEMA annualized frequency (modeled)	not shown	1995 to 2023 (29 years; CONUS)	countywide	
Strong Wind	0.104	events per year	about 1 in 10 years	Likely	FEMA annualized frequency (modeled)	4	1986 to 2023 (38 years)	countywide	
Tornado	0.02	events per year	about 1 in 50 years	Possible	FEMA annualized frequency (modeled)	not shown	1950 to 2023 (EF2+); 1986 to 2023 (EF0-1)	see B1-f	
Volcanic Activity	0.0007	annual probability	about 1 in 1,429 years	Unlikely	FEMA annualized frequency (modeled)	not shown	modeled	see B1-f	
Wildfire	0.0102	annual probability at a location	chance a given location in the county burns in a year: 1.02%	Likely	Storm Events records in 13 of 30 years, 1996 to 2025 (43.3%)	not shown	modeled	see B1-f	
Winter Weather	39	event-days per year	about 39 days per year	Highly likely	Storm Events event-days in 30 of 30 years, 1996 to 2025 (100%)	741	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	4	30	0.133
Hail	2.00 in+	1996 to 2025	0	30	0
Thunderstorm Wind (counted as NRI Strong Wind)	50-64 kt	1996 to 2025	0	30	0
Thunderstorm Wind (counted as NRI Strong Wind)	65 kt+	1996 to 2025	0	30	0
Thunderstorm Wind (counted as NRI Strong Wind)	unmeasured or below 50 kt	1996 to 2025	1	30	0.0333
Tornado	EF0-1	1996 to 2025	0	30	0
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

NRI risk score of the county's single census tract

Source: 5

Hazard	Tract score	Rating
	NRI score, 0 to 100	
Avalanche	88.1	Relatively Moderate
Cold Wave		No Rating
Drought		No Rating
Earthquake	84.0	Relatively Moderate
Hail	27.9	Very Low
Heat Wave	6.7	Very Low
Hurricane		Not Applicable
Ice Storm		Not Applicable
Inland Flooding	90.5	Relatively High
Landslide	96.5	Relatively Moderate
Lightning	49.9	Relatively Moderate
Strong Wind	59.0	Relatively Moderate
Tornado	1.6	Very Low
Volcanic Activity	41.2	Very Low
Wildfire	99.2	Very High
Winter Weather	99.2	Very High

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.

Each jurisdiction (starting figures from federal data)

Sources: 1, 3, 4, 6

Jurisdiction	Type	Plan status	Repetitive loss	Public Assistance to this jurisdiction	Event records naming this place
			FMA RL and SRL (44 CFR 77.2); repeat-flood, any definition	FEMA records matched by applicant name; federal share obligated, nominal dollars	
Alpine County	County	Expired on 2023-08-16	FMA RL 0, SRL 0; any 0	\$1,124,757.77	0 total; 0 since its plan

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

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

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

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

Local data needed

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

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

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

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

Hazard	Building exposure <i>modeled dollars</i>	Agriculture exposure <i>modeled dollars</i>	Population exposed <i>people</i>	EAL buildings <i>modeled dollars per year</i>	EAL agriculture <i>modeled dollars per year</i>	Cost of expected deaths and injuries <i>FEMA's dollar value per year, not property damage</i>	EAL as % of exposure <i>buildings; agriculture where noted</i>	Storm Events damage since 2018-08-17 <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	\$1,039,853	n/a	10	\$36	n/a	\$1,825,600	0.0035%		\$0		
Cold Wave	\$0	\$0	0	\$0	\$0	\$0			\$0		building exposure is 0 in NRI
Drought	n/a	\$0	n/a	n/a	\$0	n/a			\$0		agriculture exposure is 0 in NRI
Earthquake	\$1,548,846,344	n/a	1,204	\$300,903	n/a	\$8,328	0.0194%				
Hail	\$967,195,880	\$2,556,318	1,198	\$230	\$259	\$975	under 0.0001%				
Heat Wave	\$967,195,880	\$2,556,318	1,198	\$5	\$34	\$4,786	under 0.0001%		\$0		
Hurricane											Not Applicable in NRI for this county
Ice Storm									\$71,887.38		Not Applicable in NRI for this county
Inland Flooding	\$965,031,911	\$3	3	\$1,392,459	under \$1	\$128	n/a (see note)	\$0		\$731,459.32	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	\$144,134,782	n/a	86	\$475	n/a	\$3,636	0.00033%	\$0		\$731,459.32	

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 2018-08-17 <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
Lightning	\$967,195,880	n/a	1,198	\$859	n/a	\$9,192	under 0.0001%				
Strong Wind	\$967,195,880	\$2,556,318	1,198	\$4,962	\$149	\$14,922	0.000513%		\$280,000	\$71,887.38	Storm Events damage since the plan includes 5 zone-level High Wind records (\$280,000): a NOAA non-thunderstorm wind type, outside NRI's Strong Wind definition.
Tornado	\$967,195,880	\$2,556,318	1,198	\$181	\$2	\$13	under 0.0001%				
Volcanic Activity	\$967,195,880	n/a	1,198	under \$1	n/a	under \$1	under 0.0001%				
Wildfire	\$400,324,120	\$2,404,426	815	\$1,129,823	\$76	\$25,838	0.282%		\$0	no Public Assistance recorded (1 declaration)	
Winter Weather	\$967,195,880	\$2,556,318	1,198	\$6,741	under \$1	\$54,692	0.000697%		\$1,000	\$731,459.32	

Totals since 2018-08-17 (Storm Events through 2026-06-30): 9 county-coded records, 8 with a damage value recorded (including \$0), \$0; 481 zone-level records, 411 with a damage value recorded (including \$0), \$281,000 reported for the zone; Public Assistance: \$731,459.32 on 4 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	1,198
Building value (total, not at risk)	\$967,195,880
Agriculture value (total, not at risk)	\$2,556,318
NRI risk rating (all hazards)	Very Low
Expected annual loss, buildings and agriculture, all hazards	\$2,837,196
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)	\$1,948,111
Social vulnerability rating	Relatively Moderate
Community resilience rating	Relatively Moderate
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	0	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	0	0	0	0	0
Statewide, no county in FEMA's file	0	1	3	0	4	1	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>
Alpine County	060632	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: 0 in every occupancy group.

Sources: 1, 4

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 0 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):

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

What this packet is and what the plan adds

This packet is the federal data for the plan's risk assessment (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.

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