

Monterey County, CA

Risk-assessment baseline packet

County FIPS: 06053 Release: 2026-10 Data as of: 2026-09-30 Storm Events data through: 2026-06-30

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Summary

Plan status as of 2026-09-30: Approved, expires 2027-09-13. Plan: Monterey County (FEMA plan 108423), approved 2022-09-14.

Since the plan was approved on 2022-09-14: 5 new hazard declarations (3 incidents): EM-3591-CA (Severe Winter Storms, Flooding, and Mudslides), 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), DR-4769-CA (Severe Winter Storms, Tornadoes, Flooding, Landslides, and Mudslides).

NOAA Storm Events records since that date: 95 records (data through 2026-06-30).

Highest expected annual loss (FEMA National Risk Index, modeled total; see B1-a): Earthquake (\$181,854,772 a year), Inland Flooding (\$109,289,014) and Drought (\$81,061,294).

Repetitive-loss flood properties now: FMA RL 7, SRL 10 (44 CFR 77.2); any definition: 127.

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; 06053 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 2027-09-13	Plan:	Monterey County (FEMA plan 108423)
Approved:	2022-09-14	Days to expiry:	348
Update underway:	none recorded in FEMA's plan tracker		

What changed since your last plan (approved 2022-09-14)

New federal declarations:	5 new hazard declarations (3 incidents): EM-3591-CA (Severe Winter Storms, Flooding, and Mudslides), 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), DR-4769-CA (Severe Winter Storms, Tornadoes, Flooding, Landslides, and Mudslides)	Storm Events records since approval:	95 records (data through 2026-06-30)
Repetitive loss now:	FMA RL 7, SRL 10 (44 CFR 77.2); any definition: 127	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: 19 rows, in the section "Plan clock: Plan status for every jurisdiction listed in this county" on the following pages.

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

Plan clock

Plan status for every jurisdiction listed in this county

Source: 1

Jurisdiction	Type	Status	Plan	Approved	Expires	Days to expiry negative = days since expiry	Notes
Monterey County	County	Approved, expires 2027-09-13	Monterey County (FEMA plan 108423)	2022-09-14	2027-09-13	348	
Carmel-by-the-Sea city	City	Approved, expires 2027-09-13	Monterey County (FEMA plan 108423)	2022-09-14	2027-09-13	348	this jurisdiction approved 2025-02-20
Del Rey Oaks city	City	Approved, expires 2027-09-13	Monterey County (FEMA plan 108423)	2022-09-14	2027-09-13	348	
Gonzales city	City	Approved, expires 2027-09-13	Monterey County (FEMA plan 108423)	2022-09-14	2027-09-13	348	
Greenfield city	City	Approved, expires 2027-09-13	Monterey County (FEMA plan 108423)	2022-09-14	2027-09-13	348	
King City city	City	Approved, expires 2027-09-13	Monterey County (FEMA plan 108423)	2022-09-14	2027-09-13	348	
Marina city	City	Approved, expires 2027-09-13	Monterey County (FEMA plan 108423)	2022-09-14	2027-09-13	348	
Monterey city	City	Approved, expires 2027-09-13	Monterey County (FEMA plan 108423)	2022-09-14	2027-09-13	348	
Pacific Grove city	City	Approved, expires 2027-09-13	Monterey County (FEMA plan 108423)	2022-09-14	2027-09-13	348	
Salinas city	City	Approved, expires 2027-09-13	Monterey County (FEMA plan 108423)	2022-09-14	2027-09-13	348	
Sand City city	City	Approved, expires 2027-09-13	Monterey County (FEMA plan 108423)	2022-09-14	2027-09-13	348	this jurisdiction approved 2024-11-07
Seaside city	City	Approved, expires 2027-09-13	Monterey County (FEMA plan 108423)	2022-09-14	2027-09-13	348	
Soledad city	City	Approved, expires 2027-09-13	Monterey County (FEMA plan 108423)	2022-09-14	2027-09-13	348	
Carmel Area Wastewater District	Water/Sewer Authority	Approved, expires 2027-09-13	Monterey County (FEMA plan 108423)	2022-09-14	2027-09-13	348	
Monterey One Water	Water/Sewer Authority	Approved, expires 2027-09-13	Monterey County (FEMA plan 108423)	2022-09-14	2027-09-13	348	
Monterey Regional Waste Management District	Water/Sewer Authority	Approved, expires 2027-09-13	Monterey County (FEMA plan 108423)	2022-09-14	2027-09-13	348	
Monterey Regional Water Pollution Control Agency	Water/Sewer Authority	Expired on 2012-01-24	Monterey Regional Water Pollution Control Agency (FEMA plan 81314)	2007-01-24	2012-01-24	-5,363	
Moss Landing Harbor District	Highway/Port/Rail	Approved, expires 2027-09-13	Monterey County (FEMA plan 108423)	2022-09-14	2027-09-13	348	
Pajaro/Sunny Mesa CSD	Community Services District	Approved, expires 2028-04-17	Pajaro/Sunny Mesa Community Services District (FEMA plan 108840)	2023-04-18	2028-04-17	565	

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 <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
1	Earthquake	Relatively High	Relatively High	\$130,411,228	n/a	\$51,443,544	\$181,854,772			Storm Events does not record earthquakes.
2	Inland Flooding	Relatively High	Relatively High	\$107,290,412	\$1,270,699	\$727,903	\$109,289,014	152		
3	Drought	Very High	Very High	n/a	\$81,061,294	n/a	\$81,061,294	0		Declared 1 time; no Storm Events record of this type.
4	Wildfire	Relatively High	Relatively High	\$16,498,050	\$26,726	\$581,076	\$17,105,853	22		
5	Heat Wave	Relatively Moderate	Relatively Moderate	\$5,416	\$1,533,390	\$4,758,035	\$6,296,841	14		
6	Landslide	Relatively High	Relatively High	\$3,148,127	n/a	\$1,550,977	\$4,699,104	38		
7	Tsunami	Very Low	Relatively Low	\$711,653	n/a	\$0	\$711,653	2		
8	Coastal Flooding	Relatively Low	Relatively Low	\$421,407	n/a	\$599	\$422,006	8		
9	Tornado	Relatively Low	Relatively Low	\$293,780	\$6,747	\$103,236	\$403,763	1		
10	Lightning	Relatively Moderate	Relatively Moderate	\$12,112	n/a	\$328,590	\$340,702	3		
11	Hail	Very Low	Very Low	\$21,821	\$91,441	\$6,742	\$120,004	21		
12	Strong Wind	Very Low	Very Low	\$27,579	\$2,495	\$44,731	\$74,806	104		Includes 36 High Wind and 61 Strong Wind records (NOAA non-thunderstorm wind types, outside NRI's Strong Wind definition).
13	Winter Weather	Very Low	Very Low	\$2,328	under \$1	\$1,381	\$3,709	2		

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	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
						<i>FEMA's dollar value per year, not property damage</i>				
14	Avalanche	Very Low	Very Low	\$2	n/a	\$99	\$101	0		No recorded events in Storm Events since 1996 (data through 2026-06-30).
15	Cold Wave	No Rating	No Expected Annual Losses	\$0	\$0	\$0	\$0	12		Includes 12 Frost/Freeze records (outside NRI's Cold Wave definition; counted in this table and in B1-d, not in the B1-e descriptor).
	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.

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

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

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

Source: 5

Hazard	Highest-rated census tracts <i>NRI risk rating, score 0 to 100</i>
Avalanche	tract 111.01 (Very Low, 18.1); tract 108.04 (Very Low, 18.0); tract 115.02 (Very Low, 17.3)
Earthquake	tract 145 (Very High, 100.0); tract 106.06 (Very High, 99.4); tract 114 (Very High, 99.3)
Hurricane	no tract has a National Risk Index rating for this hazard
Landslide	tract 114 (Very High, 100.0); tract 115.02 (Very High, 100.0); tract 110.02 (Relatively High, 99.9)
Tornado	tract 145 (Relatively Low, 38.7); tract 128 (Very Low, 23.8); tract 4 (Very Low, 23.7)
Tsunami	tract 127 (Relatively Moderate, 89.7); tract 130 (Relatively Low, 71.7); tract 146.01 (Relatively Low, 63.5)
Wildfire	tract 114 (Very High, 99.9); tract 113.03 (Very High, 99.6); tract 110.02 (Very High, 99.1)

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 111.01 is Census Tract 111.01). FEMA's Resilience Analysis and Planning Tool maps the National Risk Index for every tract: <https://www.fema.gov/emergency-managers/practitioners/resilience-analysis-and-planning-tool>

Supports FEMA checklist item B1-c: hazard extent

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

Sources: 6, 7

Hazard	Scale	Records <i>count and years</i>	Observed range	Worst recorded event	Most damaging (when different)	How it applies to jurisdictions	Note
Avalanche	none (count and damage only)	0					Physical measure: in event narratives only (local data needed).
Coastal Flood, Storm Surge/ Tide	none in data (flood depth: FIRM)	8 records, 1999 to 2026 (6 zone-level)		Storm Surge/Tide, 2001-03-04, \$100,000 property; crops not reported (2001 dollars)		Event records naming jurisdictions in the plan: Pacific Grove city (1 record). Zone-level records (6) apply countywide.	Flood depth: see the FEMA Flood Insurance Rate Map.
Cold/Wind Chill, Extreme Cold/Wind Chill	wind chill	0					Wind chill: in event narratives only (local data needed).

Hazard	Scale	Records <i>count and years</i>	Observed range	Worst recorded event	Most damaging (when different)	How it applies to jurisdictions	Note
Frost/Freeze (outside NRI's Cold Wave definition)	crop damage	12 records, 2007 to 2021 (12 zone-level)		Frost/Freeze, 2007-01-06, \$14,000,000 crop damage (2007 dollars); Storm Events area MONTEREY BAY/N SALINAS VALLEY/ HOLLISTER VALLEY/ CARMEL VALLEY (legacy zone code CAZ514)		Countywide (zone-level records).	Temperature: in event narratives only (local data needed).
Drought	U.S. Drought Monitor scale (D0 to D4)	0					Storm Events enters a drought at D2 or worse east of the Rockies and D3 or worse from the Rockies west (NWS Instruction 10-1605); NRI drought counts D3 and D4 only.
Earthquake	Modified Mercalli (local data)	0					Storm Events does not record earthquakes; the USGS earthquake catalog is the source.
Hail	hail size (inches)	21 records, 2001 to 2023	0.25 in to 1 in (median 0.25 in); 21 with a recorded value	1 in hail, 2010-01-20	Hail, 2017-01-22, \$10 property; \$10 crops (2017 dollars)	Event records naming jurisdictions in the plan: Del Rey Oaks city (3 records), Salinas city (2 records), Marina city (1 record), Pacific Grove city (1 record), Soledad city (1 record).	
Excessive Heat, Heat	heat index (in event narratives)	14 records, 2006 to 2026 (14 zone-level)	1 day to 7 days (median 1 day); 7 with a recorded value	7 consecutive days, 2006-07-21 to 2006-07-27, zone-level		Countywide (zone-level records).	Heat index: in event narratives only (local data needed). Heat records from November to March (unseasonable warmth, not a heat wave) are counted but not used for the longest run.
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					Ice thickness: in event narratives only (local data needed).

Hazard	Scale	Records <i>count and years</i>	Observed range	Worst recorded event	Most damaging (when different)	How it applies to jurisdictions	Note
Flash Flood, Flood, Lakeshore Flood	damage and flood days (flood depth: FIRM)	152 records, 1996 to 2026		Flash Flood, 1998-02-06, \$10,000,000 property; crops not reported (1998 dollars)		Event records naming jurisdictions in the plan: Salinas city (7 records), Gonzales city (2 records), Greenfield city (1 record), Seaside city (1 record), Soledad city (1 record).	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)	38 records, 2008 to 2025 (6 zone-level)		Debris Flow, 2017-05-19, \$10,000,000 property; \$0 crops (2017 dollars)		Event records naming jurisdictions in the plan: Salinas city (2 records). Zone-level records (6) apply countywide.	Physical measure: in event narratives only (local data needed).
Lightning	annualized frequency (the measure FEMA's Local Mitigation Planning Handbook names)	3 records, 2020 to 2023		Lightning, 2023-01-10, \$1,000 property; \$0 crops (2023 dollars)		No event record names a jurisdiction in the plan.	Storm Events lists lightning with damage or casualties; physical measure in event narratives only (local data needed).
High Wind and Strong Wind (outside NRI's Strong Wind definition)	wind speed (kt and mph)	97 records, 2006 to 2026 (97 zone-level)	22 kt (25 mph) to 79 kt (91 mph) (median 43 kt (49 mph)); 94 with a recorded value	79 kt (91 mph) measured gust, High Wind, 2025-12-23; NWS zone CAZ517	High Wind, 2009-10-13, \$1,000,000 property; \$0 crops, reported for the zone (2009 dollars)	Countywide (zone-level records).	Speeds under 20 kt (likely entry errors) are left out of the observed range.
Thunderstorm Wind	wind speed (kt and mph)	7 records, 2020 to 2025	26 kt (30 mph) to 68 kt (78 mph) (median 54 kt (62 mph)); 7 with a recorded value	68 kt (78 mph) measured gust, Thunderstorm Wind, 2024-12-14	Thunderstorm Wind, 2025-02-13, \$10 property; \$0 crops (2025 dollars)	No event record names a jurisdiction in the plan.	
Tornado	Enhanced Fujita (Fujita before Feb 2007)	5 records, 1987 to 2016	F/EF0 to F/EF1 (median F/EF0); 5 with a recorded value	F1 tornado, 1992-12-06, 7 mi path length (whole path, pre-1996), 73 yd wide, \$250,000 property; crops not recorded (1992 dollars), 2 direct injuries		No event record names a jurisdiction in the plan.	Before 1996 a tornado is listed once, under the county where it began, with its whole path's rating and length; from 1996 on, each county lists its own segment. Length is not used to rank tornadoes (see Methods).
Tsunami	none (count and damage only)	2 records, 2006 to 2011 (2 zone-level)		Tsunami, 2011-03-11, \$1,800,000 property; \$0 crops (2011 dollars); NWS zone CAZ530		Countywide (zone-level records).	Physical measure: in event narratives only (local data needed).

Hazard	Scale	Records <i>count and years</i>	Observed range	Worst recorded event	Most damaging (when different)	How it applies to jurisdictions	Note
Wildfire	acres burned (local data)	22 records, 1996 to 2021 (18 zone-level)		Wildfire, 1999-09-08, \$66,900,000 property; crops not reported (1999 dollars)		No event record names a jurisdiction in the plan. Zone-level records (18) apply countywide.	Acres burned: in event narratives only (local data needed).
Winter Storm, Heavy Snow, Blizzard, Lake- Effect Snow, Winter Weather, Sleet	none in data (snowfall: local data)	2 records, 2019 (2 zone- level)		No damage reported in 2 records.		Countywide (zone-level records).	Snow depth: in event narratives only (local data needed).

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

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

Supports FEMA checklist item B1-d: previous occurrences

Federal declarations for this county: 33 declarations covering 25 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
2024-04-13	2024-01-31	DR-4769-CA	Major disaster	Severe Winter Storms, Tornadoes, Flooding, Landslides, and Mudslides	Inland Flooding; Landslide; Tornado; Winter Weather	\$939,437.79	new since last plan; within last 5 years	
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	\$12,814,263.71	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	\$12,261,027.81	new since last plan; within last 5 years	
2023-01-09	2023-01-08	EM-3591-CA	Emergency	Severe Winter Storms, Flooding, 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-4683
2020-08-22	2020-08-14	DR-4558-CA	Major disaster	Wildfires	Wildfire	\$2,089,380.34		
2020-08-19	2020-08-18	FM-5333-CA	Fire management	Carmel Fire	Wildfire	no Public Assistance recorded		same incident as DR-4558
2020-08-17	2020-08-16	FM-5329-CA	Fire management	River Fire	Wildfire	no Public Assistance recorded		same incident as DR-4558

Declared	Incident began	FEMA number	Type	Title	Mapped hazard	County Public Assistance	Flags	Notes
						<i>federal share obligated, nominal dollars</i>		
2020-03-22	2020-01-20	DR-4482-CA	Major disaster	COVID-19 Pandemic	Non-natural, not counted	\$28,909,075.62		
2020-03-13	2020-01-20	EM-3428-CA	Emergency	COVID-19	Non-natural, not counted	no Public Assistance recorded		same incident as DR-4482
2019-05-17	2019-02-24	DR-4434-CA	Major disaster	Severe Winter Storms, Flooding, Landslides, and Mudslides	Inland Flooding; Landslide; Winter Weather	\$77,250.78		
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	\$8,183,372.66		
2017-02-14	2017-01-03	DR-4301-CA	Major disaster	Severe Winter Storms, Flooding, and Mudslides	Inland Flooding; Landslide; Winter Weather	\$9,601,336.75		
2016-07-28	2016-07-22	FM-5137-CA	Fire management	Soberanes Fire	Wildfire	no Public Assistance recorded		
2011-04-18	2011-03-11	DR-1968-CA	Major disaster	Tsunami Waves	Tsunami	\$3,107,906.35		
2008-07-04	2008-07-04	FM-2781-CA	Fire management	Basin Fire Complex	Wildfire	no Public Assistance recorded		same incident as EM-3287
2008-06-28	2008-06-20	EM-3287-CA	Emergency	Wildfires	Wildfire	\$414,879.09		
2007-03-13	2007-01-11	DR-1689-CA	Major disaster	Severe Freeze	Cold Wave	PA not declared for this county		
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		
1999-02-09	1998-12-20	DR-1267-CA	Major disaster	Ca-Citrus Crop Damage 2/2/99	Cold Wave	PA not declared for this county		
1998-02-09	1998-02-02	DR-1203-CA	Major disaster	Severe Winter Storms and Flooding	Inland Flooding; Winter Weather	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		
1995-01-10	1995-01-03	DR-1044-CA	Major disaster	Severe Winter Storms, Flooding, Landslides, Mud Flows	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		
1991-02-11	1990-12-19	DR-894-CA	Major disaster	Severe Freeze	Cold Wave	PA not declared for this county		
1989-10-18	1989-10-17	DR-845-CA	Major disaster	Loma Prieta Earthquake	Earthquake	no Public Assistance recorded		
1985-07-18	1985-06-26	DR-739-CA	Major disaster	Grass, Wildlands, & Forest Fires	Wildfire	no Public Assistance recorded		
1983-02-09	1983-01-21	DR-677-CA	Major disaster	Coastal Storms, Floods, Slides & Tornadoes	Coastal Flooding; Inland Flooding; Landslide; Tornado	no Public Assistance recorded		
1978-02-15	1978-02-15	DR-547-CA	Major disaster	Coastal Storms, Mudslides & Flooding	Coastal Flooding (primary); also designated: Landslide	no Public Assistance recorded		
1977-01-20	1977-01-20	EM-3023-CA	Emergency	Drought	Drought	no Public Assistance recorded		

Declared	Incident began	FEMA number	Type	Title	Mapped hazard	County Public Assistance	Flags	Notes
						<i>federal share obligated, nominal dollars</i>		
1969-01-26	1969-01-26	DR-253-CA	Major disaster	Severe Storms & Flooding	Inland Flooding	no Public Assistance recorded		
1967-01-02	1967-01-02	DR-223-CA	Major disaster	Severe Storms & Flooding	Inland Flooding	no Public Assistance recorded		

School districts and special districts in this county: \$5,635,292.94 (included in the county total above). Public Assistance matched by applicant name to the school districts and special districts FEMA lists as plan participants in this county. They have no row of their own in the jurisdiction table, so their total is listed here. These dollars are already included in the county PA column of the declarations table (the FEMA record places each applicant in this county), so this line is not added to it.

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

Statewide declarations

Source: 2

Declared	Incident began	FEMA number	Type	Title	Mapped hazard
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, \$5,011.43

Sources: 2, 3

FEMA number	Declared	Title	Applicant	PA obligated
				<i>federal share obligated, nominal dollars</i>
DR-1628-CA	2006-02-03	Severe Storms, Flooding, Mudslides, and Landslides	RECLAMATION DISTRICT #0784, PLUMAS LAKE	\$5,011.43

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 <i>records</i>	In the 12 months before plan approval <i>records</i>	Last 5 years <i>records</i>	Declared incidents, all years <i>separate disasters</i>	Declared since approval <i>separate disasters</i>	Period	Statement
Avalanche	0	0	0	0	0	0	1996 to 2026-06-30	No recorded events, 1996 to 2026-06-30, NOAA NCEI Storm Events
Coastal Flooding	8	3	0	3	2	0	1996 to 2026-06-30	
Cold Wave	12	0	0	0	3	0	1996 to 2026-06-30	Includes 12 Frost/Freeze records.
Drought	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)
Earthquake	0	0	0	0	1	0		Storm Events does not record earthquakes; the USGS earthquake catalog is the source.
Hail	21	1	0	1	0	0	1955 to 2026-06-30	
Heat Wave	14	4	6	10	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	152	54	1	55	14	3	1996 to 2026-06-30	
Landslide	38	2	0	2	12	3	1996 to 2026-06-30	
Lightning	3	1	1	2	0	0	1996 to 2026-06-30	
Strong Wind	104	30	1	31	1	1	1955 to 2026-06-30	Includes 36 High Wind and 61 Strong Wind records.
Tornado	5	0	0	0	2	1	1950 to 2026-06-30	
Tsunami	2	0	0	0	1	0	1996 to 2026-06-30	
Wildfire	22	0	0	0	4	0	1996 to 2026-06-30	
Winter Weather	2	0	0	0	10	3	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
2025-02-13	Flood		\$0 property; \$0 crops (2025 dollars)	1, 0	CARMEL VLY	new since last plan; within last 5 years	deaths or injuries recorded
2023-08-30	High Wind	25 kt (29 mph) estimated gust	\$0 property; \$0 crops, reported for the zone (2023 dollars)	1, 0	NWS zone CAZ530 (SOUTHERN MONTEREY BAY AND BIG SUR COAST), zone-level	new since last plan; within last 5 years	deaths or injuries recorded
2023-01-10	Lightning		\$1,000 property; \$0 crops (2023 dollars)	0, 0	MONTEREY PNSLA ARPT	new since last plan; within last 5 years	B1-c worst recorded: Lightning
2017-05-19	Debris Flow		\$10,000,000 property; \$0 crops (2017 dollars)	0, 0	GORDA		B1-c worst recorded: Debris Flow
2012-10-02	Heat		\$0 property; \$0 crops, reported for the zone (2012 dollars)	1, 0	NWS zone CAZ528 (NORTHERN SALINAS VALLEY / HOLLISTER VALLEY / CARMEL VALLEY), zone-level		deaths or injuries recorded
2011-03-11	Tsunami		\$1,800,000 property; \$0 crops, reported for the zone (2011 dollars)	0, 0	NWS zone CAZ530 (SOUTHERN MONTEREY BAY AND BIG SUR COAST), zone-level		B1-c worst recorded: Tsunami
2010-01-20	Hail	1 in	\$0 property; \$0 crops (2010 dollars)	0, 0	DEL REY OAKS		B1-c worst recorded: Hail
2006-07-21	Heat		damage not reported	0, 0	NWS zone CAZ516 (SOUTHERN SALINAS VALLEY / ARROYO SECO / LAKE SAN ANTONIO), zone-level		B1-c worst recorded: Excessive Heat, Heat
2001-03-04	Storm Surge/Tide		\$100,000 property; crops not reported (2001 dollars)	0, 0	(MRY)MONTEREY ARPT		B1-c worst recorded: Coastal Flood, Storm Surge/Tide
1999-09-08	Wildfire		\$66,900,000 property; crops not reported (1999 dollars)	0, 0	CARMEL		B1-c worst recorded: Wildfire
1998-02-06	Flash Flood		\$10,000,000 property; crops not reported (1998 dollars)	0, 0	WEST PORTION		B1-c worst recorded: Flash Flood, Flood, Lakeshore Flood
1992-12-06	Tornado	F1, 7 mi path length (whole path, pre-1996), 73 yd wide	\$250,000 property; crops not recorded (1992 dollars)	0, 2	location not recorded		B1-c worst recorded: Tornado

The full list is in the Excel file, sheet "B1-d Storm Events history" (383 rows).

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

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

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

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

Probability: FEMA annualized frequency and descriptor per hazard

Sources: 5, 6

Hazard	FEMA annualized frequency (modeled) <i>unit per row</i>	Unit	In plain terms	Descriptor	Descriptor basis	NRI events or days in its record period (hail, wind and tornado are area-weighted, so can be fractional)	NRI period	Location	Note
Avalanche	0.01	events per year	about 1 in 100 years	Possible	FEMA annualized frequency (modeled)	0	1994 to 2023 (30 years)	see B1-f	0.01 is NRI's minimum avalanche frequency for a county in an avalanche susceptibility zone; NRI records no avalanche here, so the descriptor reflects the floor, not local events.
Coastal Flooding	3.1	events per year at a location (modeled)	about 3.1 per year at a given location in the county	Highly likely	FEMA annualized frequency (modeled)	not shown	modeled	see B1-f	Descriptor from NRI: the rate at a location is 1 or more a year, so the county rate is at least that.
Cold Wave	0	event-days per year	none modeled		event-days in 0 of 30 years, 1996 to 2025 (0%)	0	2005-11-12 to 2024-11-12 (19 years)	countywide	No Storm Events cold wave record, 1996 to 2025.
Drought	94.4	event-days per year	about 94.4 days per year		event-days in 0 of 30 years, 1996 to 2025 (0%)	3,276	2000 to 2025 (25.25 years; D3 and D4 only)	countywide	No Storm Events drought record, 1996 to 2025
Earthquake	0.155	annual probability at a location	chance a given location in the county has at least minor-damage shaking in a year: 15.5%			not shown	modeled	see B1-f	No descriptor (Storm Events does not record earthquakes).
Hail	0.0481	events per year	about 1 in 21 years	Possible	FEMA annualized frequency (modeled)	1.8 (modeled)	1986 to 2023 (38 years)	countywide	
Heat Wave	7.46	event-days per year	about 7.46 days per year	Likely (from Storm Events: 4 of 30 years)	event-days in 4 of 30 years, 1996 to 2025 (13.3%)	81.6	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	1.82	event-days per year	about 1.82 days per year	Likely (from Storm Events: 21 of 30 years)	event-days in 21 of 30 years, 1996 to 2025 (70%)	51	1996 to 2023 (28 years)	see B1-f	

Hazard	FEMA annualized frequency (modeled) <i>unit per row</i>	Unit	In plain terms	Descriptor	Descriptor basis	NRI events or days in its record period (hail, wind and tornado are area- weighted, so can be fractional)	NRI period	Location	Note
Landslide	130	events per year (modeled)	about 130 per year	Highly likely	FEMA annualized frequency (modeled)	not shown	modeled	see B1-f	
Lightning	2.67	days per year with a strike	about 2.67 days per year	Highly likely	FEMA annualized frequency (modeled)	not shown	1995 to 2023 (29 years; CONUS)	countywide	
Strong Wind	0.017	events per year	about 1 in 59 years	Possible	FEMA annualized frequency (modeled)	1	1986 to 2023 (38 years)	countywide	
Tornado	0.133	events per year	about 1 in 8 years	Likely	FEMA annualized frequency (modeled)	not shown	1950 to 2023 (EF2+); 1986 to 2023 (EF0-1)	see B1-f	
Tsunami	0.388	annual probability at the most exposed location (used in place of a county value)	chance at the county's most exposed location in a year: 38.8%	Possible (from Storm Events: 2 of 30 years)	Storm Events records in 2 of 30 years, 1996 to 2025 (6.67%)	not shown	modeled	see B1-f	Descriptor from Storm Events, not NRI.
Wildfire	0.00879	annual probability at a location	chance a given location in the county burns in a year: 0.879%	Likely (from Storm Events: 9 of 30 years)	Storm Events records in 9 of 30 years, 1996 to 2025 (30%)	not shown	modeled	see B1-f	Descriptor from Storm Events, not NRI.
Winter Weather	1.5	event-days per year	about 1.5 days per year	Possible (from Storm Events: 1 of 30 years)	event-days in 1 of 30 years, 1996 to 2025 (3.33%)	24.9	2005-11-12 to 2024-11-12 (19 years)	countywide	

FEMA annualized frequency (modeled) is the National Risk Index v1.20 (December 2025) estimate of how often a hazard affects this county in a year; it is not recorded events divided by years, and its unit differs by hazard (events, event-days, or days with a lightning strike per year). For earthquake, wildfire, coastal flooding and tsunami the value is the chance (or number of events) at a location in the county, not across the county, so no "1 in N years" is given and the descriptor comes from Storm Events where it has a record (none for earthquake). The Methods page gives each hazard's method, from FEMA's National Risk Index Technical Documentation v1.20.

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

Descriptor scale used in this packet (defined per unit)

Sources: 5, 6

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

Intensity bands: historical frequency (Storm Events)

Source: 6

Hazard	Band	Years	Events <i>county-coded records</i>	Years in period	Events per year <i>events / years</i>
Hail	1.00-1.99 in	1996 to 2025	1	30	0.0333
Hail	2.00 in+	1996 to 2025	0	30	0
Thunderstorm Wind (counted as NRI Strong Wind)	50-64 kt	1996 to 2025	3	30	0.1
Thunderstorm Wind (counted as NRI Strong Wind)	65 kt+	1996 to 2025	2	30	0.0667
Thunderstorm Wind (counted as NRI Strong Wind)	unmeasured or below 50 kt	1996 to 2025	2	30	0.0667
Tornado	EF0-1	1996 to 2025	1	30	0.0333
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	7 of 103	15.5	17.1	18.1	Very Low 7, Not Applicable 96
Coastal Flooding	28 of 103	68.2	80.2	98.0	Relatively High 1, Relatively Moderate 3, Relatively Low 15, Very Low 9, No Rating 75
Cold Wave	0 of 103				No Rating 103
Drought	49 of 103	78.4	94.9	100.0	Very High 9, Relatively High 10, Relatively Moderate 12, Relatively Low 17, Very Low 1, No Rating 54
Earthquake	103 of 103	74.9	93.8	100.0	Very High 27, Relatively High 51, Relatively Moderate 24, Relatively Low 1
Hail	103 of 103	1.3	8.0	76.1	Relatively Moderate 1, Relatively Low 8, Very Low 94
Heat Wave	103 of 103	2.6	54.6	96.3	Relatively High 13, Relatively Moderate 38, Relatively Low 47, Very Low 5
Hurricane	0 of 103				Not Applicable 103
Ice Storm	0 of 103				Not Applicable 103
Inland Flooding	103 of 103	1.6	67.3	99.5	Very High 14, Relatively High 21, Relatively Moderate 41, Relatively Low 20, Very Low 7
Landslide	90 of 103	10.6	58.7	100.0	Very High 2, Relatively High 8, Relatively Moderate 12, Relatively Low 9, Very Low 59, No Rating 13
Lightning	103 of 103	0.3	19.3	45.8	Relatively Low 48, Very Low 55
Strong Wind	103 of 103	1.1	8.1	19.2	Very Low 103
Tornado	103 of 103	2.7	7.8	38.7	Relatively Low 1, Very Low 102
Tsunami	18 of 103	13.6	24.9	89.7	Relatively Moderate 1, Relatively Low 3, Very Low 14, No Rating 6, Not Applicable 79
Wildfire	87 of 103	18.6	71.4	99.9	Very High 4, Relatively High 12, Relatively Moderate 13, Relatively Low 18, Very Low 40, No Rating 16
Winter Weather	103 of 103	10.7	13.3	23.6	Relatively Low 4, Very Low 99

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 76% 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 drought, hail, heat wave, 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
Monterey County	County	Approved, expires 2027-09-13	FMA RL 7, SRL 10; any 123	\$46,944,030.62	0 total; 0 since its plan	Includes \$13,213,886.22 for declarations not counted as hazard incidents (DR-4482-CA).
Carmel-by-the-Sea city	City	Approved, expires 2027-09-13	FMA RL 0, SRL 0; any 0	\$125,915.54	0 total; 0 since its plan	Includes \$10,321.47 for declarations not counted as hazard incidents (DR-4482-CA).
Del Rey Oaks city	City	Approved, expires 2027-09-13	FMA RL 0, SRL 0; any 0	\$75,985.72	3 total; 0 since its plan	
Gonzales city	City	Approved, expires 2027-09-13	FMA RL 0, SRL 0; any 2	\$15,703	2 total; 0 since its plan	
Greenfield city	City	Approved, expires 2027-09-13	FMA RL 0, SRL 0; any 0	\$241,402.56	1 total; 0 since its plan	
King City city	City	Approved, expires 2027-09-13	FMA RL 0, SRL 0; any 0	\$136,223.96	0 total; 0 since its plan	Includes \$41,384.76 for declarations not counted as hazard incidents (DR-4482-CA).
Marina city	City	Approved, expires 2027-09-13	FMA RL 0, SRL 0; any 0	\$52,735.69	1 total; 0 since its plan	
Monterey city	City	Approved, expires 2027-09-13	FMA RL 0, SRL 0; any 2	\$1,612,094.10	0 total; 0 since its plan	Includes \$284,041.62 for declarations not counted as hazard incidents (DR-4482-CA).
Pacific Grove city	City	Approved, expires 2027-09-13	FMA RL 0, SRL 0; any 0	\$217,049.94	2 total; 0 since its plan	Includes \$15,039.83 for declarations not counted as hazard incidents (DR-4482-CA).
Salinas city	City	Approved, expires 2027-09-13	FMA RL 0, SRL 0; any 0	\$3,535,560.23	11 total; 2 since its plan	Includes \$28,000 for declarations not counted as hazard incidents (DR-4482-CA).
Sand City city	City	Approved, expires 2027-09-13	FMA RL 0, SRL 0; any 0	\$89,086.97	0 total; 0 since its plan	
Seaside city	City	Approved, expires 2027-09-13	FMA RL 0, SRL 0; any 0	\$1,877,849.71	1 total; 1 since its plan	Includes \$1,594,369.98 for declarations not counted as hazard incidents (DR-4482-CA).
Soledad city	City	Approved, expires 2027-09-13	FMA RL 0, SRL 0; any 0	\$179,728.21	2 total; 0 since its plan	Includes \$113,661.55 for declarations not counted as hazard incidents (DR-4482-CA).

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 2022-09-14 <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	\$1,906,394	n/a	under 1	\$2	n/a	\$99	0.000105%				
Coastal Flooding	\$32,339,787,357	n/a	220,628	\$421,407	n/a	\$599	0.0013%		\$0		
Cold Wave	\$0	\$0	0	\$0	\$0	\$0					building exposure is 0 in NRI
Drought	n/a	\$3,839,701,583	n/a	n/a	\$81,061,294	n/a	2.11% (agriculture)				NRI has no building exposure for this hazard; agriculture shown
Earthquake	\$148,756,901,122	n/a	439,035	\$130,411,228	n/a	\$51,443,544	0.0877%				
Hail	\$85,771,236,202	\$5,299,744,964	438,599	\$21,821	\$91,441	\$6,742	under 0.0001%	\$10			
Heat Wave	\$85,771,236,202	\$5,299,744,964	438,599	\$5,416	\$1,533,390	\$4,758,035	under 0.0001%		\$0		
Hurricane											Not Applicable in NRI for this county
Ice Storm										\$12,814,263.71	Not Applicable in NRI for this county
Inland Flooding	\$85,743,615,693	\$1,331,974,245	13,725	\$107,290,412	\$1,270,699	\$727,903	n/a (see note)	\$80		\$26,014,729.31	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	\$6,104,628,160	n/a	21,558	\$3,148,127	n/a	\$1,550,977	0.0516%	\$10		\$26,014,729.31	
Lightning	\$85,771,236,202	n/a	438,599	\$12,112	n/a	\$328,590	under 0.0001%	\$1,000			

Hazard	Building exposure <i>modeled dollars</i>	Agriculture exposure <i>modeled dollars</i>	Population exposed <i>people</i>	EAL buildings <i>modeled dollars per year</i>	EAL agriculture <i>modeled dollars per year</i>	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 2022-09-14 <i>county-coded records, property plus crops, nominal dollars</i>	Zone-level damage since plan <i>property plus crops, reported for the zone</i>	Public Assistance since plan <i>nominal dollars; see note</i>	Note
Strong Wind	\$85,771,236,202	\$5,299,744,964	438,599	\$27,579	\$2,495	\$44,731	under 0.0001%	\$10	\$110	\$12,814,263.71	Storm Events damage since the plan includes 1 zone-level High Wind record (\$10) and 10 zone-level Strong Wind records (\$100); NOAA non-thunderstorm wind types, outside NRI's Strong Wind definition.
Tornado	\$85,771,236,202	\$5,299,744,964	438,599	\$293,780	\$6,747	\$103,236	0.000343%			\$939,437.79	
Tsunami	\$4,777,323,781	n/a	1,137	\$711,653	n/a	\$0	0.0149%				
Wildfire	\$7,364,778,904	\$1,159,528,623	40,235	\$16,498,050	\$26,726	\$581,076	0.224%				
Winter Weather	\$85,771,236,202	\$5,299,744,964	438,599	\$2,328	under \$1	\$1,381	under 0.0001%			\$26,014,729.31	

Totals since 2022-09-14 (Storm Events through 2026-06-30): 64 county-coded records, 64 with a damage value recorded (including \$0), \$1,110; 31 zone-level records, 31 with a damage value recorded (including \$0), \$110 reported for the zone; Public Assistance: \$26,014,729.31 on 5 counted declarations, 3 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	438,599
Building value (total, not at risk)	\$85,771,236,202
Agriculture value (total, not at risk)	\$5,299,744,964
NRI risk rating (all hazards)	Relatively High
Expected annual loss, buildings and agriculture, all hazards	\$342,836,709
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)	\$59,546,915
Social vulnerability rating	Relatively Moderate
Community resilience rating	Relatively 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)	7	Severe repetitive loss, FMA definition (44 CFR 77.2)	10
Repetitive loss, NFIP insurance definition	124	Severe repetitive loss, NFIP insurance definition	8

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	7	10	124	8	127	1	36
of which: Monterey County (unincorporated area)	7	10	120	8	123	1	35
of which: Gonzales city	0	0	2	0	2	0	0
of which: Monterey city	0	0	2	0	2	0	1
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>
Monterey County	060195	7	10	120	8	123	1	35
Carmel-by-the-Sea city	060196	0	0	0	0	0	0	0
Del Rey Oaks city	060197	0	0	0	0	0	0	0
Gonzales city	060198	0	0	2	0	2	0	0
Greenfield city	060446	0	0	0	0	0	0	0
King City city	060199	0	0	0	0	0	0	0
Marina city	060727	0	0	0	0	0	0	0
Monterey city	060200	0	0	2	0	2	0	1
Pacific Grove city	060201	0	0	0	0	0	0	0
Salinas city	060202	0	0	0	0	0	0	0
Sand City city	060435	0	0	0	0	0	0	0
Seaside city	060203	0	0	0	0	0	0	0
Soledad city	060204	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	6	9	118	7	120	1	34
2 to 4 unit residential	0	1	2	1	2	0	0
other residential	0	0	3	0	3	0	1
non-residential	1	0	1	0	2	0	1
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 1 property is FMA repetitive loss but not NFIP repetitive loss, and 118 properties are NFIP repetitive loss but not FMA repetitive loss.

Exact counts; no count suppression.

Sources

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

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

What this packet is and what the plan adds

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

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

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

OpenFEMA disclaimer

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

Reuse, citation and corrections

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

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