

Orange County, CA

Risk-assessment baseline packet

County FIPS: 06059 Release: 2026-10 Data as of: 2026-09-30 Storm Events data through: 2026-06-30

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

Summary

Plan status as of 2026-09-30: Approved, expires 2026-12-26. Plan: Orange County (FEMA plan 107719), approved 2021-12-27.

Since the plan was approved on 2021-12-27: 3 new hazard declarations (3 incidents): FM-5439-CA (Coastal Fire), EM-3591-CA (Severe Winter Storms, Flooding, and Mudslides), EM-3592-CA (Severe Winter Storms, Flooding, Landslides, and Mudslides); also 1 non-natural declaration (not counted).

NOAA Storm Events records since that date: 125 records (data through 2026-06-30).

Highest expected annual loss (FEMA National Risk Index, modeled total; see B1-a): Earthquake (\$1,015,337,591 a year), Inland Flooding (\$819,930,991) and Wildfire (\$57,585,624).

Repetitive-loss flood properties now: FMA RL 10, SRL 11 (44 CFR 77.2); any definition: 103.

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; 06059 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 2026-12-26	Plan:	Orange County (FEMA plan 107719)
Approved:	2021-12-27	Days to expiry:	87
Update underway:	none recorded in FEMA's plan tracker		

What changed since your last plan (approved 2021-12-27)

New federal declarations:	3 new hazard declarations (3 incidents): FM-5439-CA (Coastal Fire), EM-3591-CA (Severe Winter Storms, Flooding, and Mudslides), EM-3592-CA (Severe Winter Storms, Flooding, Landslides, and Mudslides); also 1 non-natural declaration (not counted)	Storm Events records since approval:	125 records (data through 2026-06-30)
Repetitive loss now:	FMA RL 10, SRL 11 (44 CFR 77.2); any definition: 103	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: 56 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 <i>negative = days since expiry</i>	Update underway	Notes
Orange County	County	Approved, expires 2026-12-26	Orange County (FEMA plan 107719)	2021-12-27	2026-12-26	87		
Aliso Viejo city	City	Approved, expires 2029-07-17	Aliso Viejo, City of (FEMA plan 109776)	2024-07-18	2029-07-17	1,021		
Anaheim city	City	Approved, expires 2027-09-05	Anaheim, City of (FEMA plan 108316)	2022-09-06	2027-09-05	340		
Brea city	City	Approved, expires 2029-10-29	Brea, City of (FEMA plan 110113)	2024-10-30	2029-10-29	1,125		
Buena Park city	City	Approved, expires 2027-12-19	Buena Park, City of (FEMA plan 108548)	2022-12-20	2027-12-19	445		
Costa Mesa city	City	Approved, expires 2028-04-17	Costa Mesa, City of (FEMA plan 108776)	2023-04-18	2028-04-17	565		
Dana Point city	City	Approved, expires 2030-02-04	Dana Point, City of (FEMA plan 110327)	2025-02-05	2030-02-04	1,223		
Fountain Valley city	City	Approved, expires 2030-11-09	Fountain Valley, City of (FEMA plan 111077)	2025-11-10	2030-11-09	1,501		
Fullerton city	City	Approved, expires 2031-07-08	Fullerton, City of (FEMA plan 111785)	2026-07-09	2031-07-08	1,742		
Garden Grove city	City	Expired on 2025-09-17	Garden Grove, City of (FEMA plan 106425)	2020-09-18	2025-09-17	-378		
Huntington Beach city	City	Approved, expires 2028-01-13	Huntington Beach, City of (FEMA plan 108619)	2023-01-14	2028-01-13	470		
Irvine city	City	No approved plan on record. Approvable pending adoption, not yet eligible	none	none	none		FEMA tracker shows a plan approvable pending adoption	Not yet eligible: adopt the approved plan.
La Habra city	City	Expired on 2025-04-13	La Habra, City of (FEMA plan 106180)	2020-04-14	2025-04-13	-535		
La Palma city	City	Expired on 2025-04-16	La Palma, City of (FEMA plan 106229)	2020-04-17	2025-04-16	-532		
Laguna Beach city	City	Approved, expires 2028-12-21	Laguna Beach, City of (FEMA plan 109423)	2023-12-22	2028-12-21	813		
Laguna Hills city	City	Approved, expires 2030-04-14	Laguna Hills, City of (FEMA plan 110334)	2025-04-15	2030-04-14	1,292		
Laguna Niguel city	City	Approved, expires 2029-01-22	Laguna Niguel, City of (FEMA plan 108847)	2024-01-22	2029-01-22	845		
Laguna Woods city	City	Expired on 2018-05-27	Laguna Woods, City of (FEMA plan 81270)	2013-05-27	2018-05-27	-3,048		
Lake Forest city	City	Approved, expires 2029-09-05	Lake Forest, City of (FEMA plan 109899)	2024-09-06	2029-09-05	1,071		
Mission Viejo city	City	Approved, expires 2030-04-14	Mission Viejo, City of (FEMA plan 109926)	2025-04-15	2030-04-14	1,292		
Newport Beach city	City	Expired on 2021-09-26	Newport Beach, City of (FEMA plan 102049)	2016-09-26	2021-09-26	-1,830		
Orange city	City	Approved, expires 2031-05-06	Orange, City of (FEMA plan 111787)	2026-05-07	2031-05-06	1,679		
Placentia city	City	Approved, expires 2029-07-17	Placentia, City of (FEMA plan 109772)	2024-07-18	2029-07-17	1,021		
Rancho Santa Margarita city	City	Approved, expires 2030-07-15	Rancho Santa Margarita, City of (FEMA plan 110553)	2025-07-16	2030-07-15	1,384		
San Clemente city	City	Approved, expires 2030-04-14	San Clemente, City of (FEMA plan 110458)	2025-04-15	2030-04-14	1,292		
San Juan Capistrano city	City	Expired on 2025-04-22	San Juan Capistrano, City of (FEMA plan 106331)	2020-04-23	2025-04-22	-526		
Santa Ana city	City	Approved, expires 2028-02-06	Santa Ana, City of (FEMA plan 108208)	2023-02-07	2028-02-06	494		
Seal Beach city	City	Approved, expires 2030-11-16	Seal Beach, City of (FEMA plan 111135)	2025-11-17	2030-11-16	1,508		
Stanton city	City	Approved, expires 2028-04-17	Stanton, City of (FEMA plan 108608)	2023-04-18	2028-04-17	565		

Jurisdiction	Type	Status	Plan	Approved	Expires	Days to expiry	Update underway	Notes
						<i>negative = days since expiry</i>		
Tustin city	City	Expired on 2024-11-06	Tustin, City of (FEMA plan 105774)	2019-11-07	2024-11-06	-693		
Villa Park city	City	Expired on 2026-07-13	Villa Park, City of (FEMA plan 107223)	2021-07-14	2026-07-13	-79		
Westminster city	City	Expired on 2021-05-13	Westminster, City of (FEMA plan 102262)	2016-05-13	2021-05-13	-1,966		
Yorba Linda city	City	Approved, expires 2028-10-22	Yorba Linda, City of (FEMA plan 109252)	2023-10-23	2028-10-22	753		
Name not given in FEMA data (ID R09_202794)	School/School District	Expired on 2010-07-26	Saddleback Valley Unified School District (FEMA plan 81413)	2005-07-26	2010-07-26	-5,910		
Coast Community College District	College/University	Approved, expires 2027-05-19	Coast Community College District (FEMA plan 107939)	2022-05-20	2027-05-19	231		
Costa Mesa Sanitary District	Water/Sewer Authority	Approved, expires 2030-04-14	Orange County, Municipal Water District of (FEMA plan 110682)	2025-04-15	2030-04-14	1,292		this jurisdiction approved 2025-05-14
East Orange County Water District	Water/Sewer Authority	Approved, expires 2031-02-10	East Orange County Water District (FEMA plan 111579)	2026-02-11	2031-02-10	1,594		
El Toro Water District	Water/Sewer Authority	Approved, expires 2030-04-14	Orange County, Municipal Water District of (FEMA plan 110682)	2025-04-15	2030-04-14	1,292		this jurisdiction approved 2025-05-14
Irvine Ranch Water District	Water/Sewer Authority	Approved, expires 2030-04-14	Orange County, Municipal Water District of (FEMA plan 110682)	2025-04-15	2030-04-14	1,292		this jurisdiction approved 2025-05-14
Laguna Beach County Water District	Water/Sewer Authority	Approved, expires 2030-04-14	Orange County, Municipal Water District of (FEMA plan 110682)	2025-04-15	2030-04-14	1,292		this jurisdiction approved 2025-06-02
Mesa Consolidated Water District	Water/Sewer Authority	Approved, expires 2030-04-14	Orange County, Municipal Water District of (FEMA plan 110682)	2025-04-15	2030-04-14	1,292		
Midway City Sanitary District	Water/Sewer Authority	Approved, expires 2030-10-21	Midway City Sanitary District (FEMA plan 111078)	2025-10-22	2030-10-21	1,482		
Moulton Niguel Water District	Water/Sewer Authority	Approved, expires 2030-04-14	Orange County, Municipal Water District of (FEMA plan 110682)	2025-04-15	2030-04-14	1,292		this jurisdiction approved 2025-05-27
Municipal Water District of Orange County	Water/Sewer Authority	Approved, expires 2030-04-14	Orange County, Municipal Water District of (FEMA plan 110682)	2025-04-15	2030-04-14	1,292		
Orange County Fire Authority	Fire/EMS District	Approved, expires 2026-12-26	Orange County (FEMA plan 107719)	2021-12-27	2026-12-26	87		
Orange County Sanitation District	Water/Sewer Authority	Approved, expires 2030-04-14	Orange County, Municipal Water District of (FEMA plan 110682)	2025-04-15	2030-04-14	1,292		this jurisdiction approved 2025-07-28
Orange County Transportation Authority	Transit/Airport	Approved, expires 2027-10-26	Orange County Transportation Authority (FEMA plan 108228)	2022-10-27	2027-10-26	391		
Orange County Water District	Water/Sewer Authority	Approved, expires 2030-04-14	Orange County, Municipal Water District of (FEMA plan 110682)	2025-04-15	2030-04-14	1,292		this jurisdiction approved 2025-09-15

Jurisdiction	Type	Status	Plan	Approved	Expires	Days to expiry	Update underway	Notes
						<i>negative = days since expiry</i>		
Rancho Santiago Community College District	College/ University	Expired on 2022-11-14	Rancho Santiago Community College District (FEMA plan 102698)	2017-11-15	2022-11-14	-1,416		
Santa Margarita Water District	Water/Sewer Authority	Approved, expires 2030-04-14	Orange County, Municipal Water District of (FEMA plan 110682)	2025-04-15	2030-04-14	1,292		this jurisdiction approved 2025-09-05
Serrano Water District	Water/Sewer Authority	Approved, expires 2030-04-14	Orange County, Municipal Water District of (FEMA plan 110682)	2025-04-15	2030-04-14	1,292		this jurisdiction approved 2025-06-02
South Coast Water District	Water/Sewer Authority	Approved, expires 2030-04-14	Orange County, Municipal Water District of (FEMA plan 110682)	2025-04-15	2030-04-14	1,292		this jurisdiction approved 2025-09-15
South Orange County Wastewater Authority	Water/Sewer Authority	Approved, expires 2030-04-14	Orange County, Municipal Water District of (FEMA plan 110682)	2025-04-15	2030-04-14	1,292		this jurisdiction approved 2025-05-14
Southern Orange County Community College District	College/ University	Approved, expires 2027-09-13	South Orange County Community College District (FEMA plan 108217)	2022-09-14	2027-09-13	348		
Trabuco Canyon Water District	Water/Sewer Authority	Approved, expires 2030-04-14	Orange County, Municipal Water District of (FEMA plan 110682)	2025-04-15	2030-04-14	1,292		this jurisdiction approved 2025-05-27
Yorba Linda Water District	Water/Sewer Authority	Approved, expires 2030-04-14	Orange County, Municipal Water District of (FEMA plan 110682)	2025-04-15	2030-04-14	1,292		this jurisdiction approved 2025-06-02

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>	Storm Events coverage note
1	Earthquake	Very High	Very High	\$706,143,269	n/a	\$309,194,322	\$1,015,337,591		Storm Events does not record earthquakes.
2	Inland Flooding	Very High	Very High	\$818,458,922	\$42,587	\$1,429,482	\$819,930,991	138	
3	Wildfire	Relatively High	Relatively High	\$54,812,095	\$3,585	\$2,769,945	\$57,585,624	40	
4	Heat Wave	Relatively High	Relatively High	\$5,894	\$6,845	\$11,014,018	\$11,026,757	51	
5	Coastal Flooding	Relatively High	Relatively High	\$8,410,595	n/a	\$2,542	\$8,413,133	14	
6	Tornado	Relatively Moderate	Relatively Moderate	\$3,429,754	\$610	\$1,917,996	\$5,348,360	7	
7	Landslide	Relatively High	Relatively High	\$942,120	n/a	\$3,237,130	\$4,179,250	13	
8	Tsunami	Relatively Low	Relatively Low	\$2,529,600	n/a	\$0	\$2,529,600	3	
9	Hail	Relatively Moderate	Relatively Moderate	\$900,264	\$441	\$36,678	\$937,384	11	
10	Strong Wind	Relatively Moderate	Relatively Moderate	\$339,316	\$1,650	\$311,609	\$652,575	255	Includes 195 High Wind and 28 Strong Wind records (NOAA non-thunderstorm wind types, outside NRI's Strong Wind definition).
11	Lightning	Relatively Moderate	Relatively Moderate	\$5,801	n/a	\$482,869	\$488,671	4	
12	Drought	Relatively Low	Relatively Low	n/a	\$36,627	n/a	\$36,627	26	

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>	Storm Events coverage note
13	Winter Weather	Very Low	Very Low	\$2	under \$1	\$131	\$133	10	
14	Avalanche	Very Low	Very Low	\$2	n/a	\$14	\$16	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	2	Includes 2 Frost/Freeze records (outside NRI's Cold Wave definition; counted in this table and in B1-d, not in the B1-e descriptor).
16	Hurricane	No Rating	No Expected Annual Losses	\$0	\$0	\$0	\$0	1	

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: ice storm and 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, 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 320.11 (Very Low, 5.5); tract 219.24 (Very Low, 5.0); tract 320.41 (Very Low, 4.7)
Earthquake	tract 116.02 (Very High, 100.0); tract 115.04 (Very High, 99.9); tract 1101.13 (Very High, 99.9)
Hurricane	no tract has a National Risk Index rating for this hazard
Landslide	tract 320.11 (Very High, 99.9); tract 320.66 (Relatively High, 99.9); tract 626.56 (Relatively High, 99.9)
Tornado	tract 626.14 (Relatively Low, 48.9); tract 755.16 (Relatively Low, 43.3); tract 116.02 (Relatively Low, 42.4)
Tsunami	tract 995.14 (Relatively Moderate, 88.7); tract 995.12 (Relatively Moderate, 85.1); tract 995.13 (Relatively Moderate, 81.9)
Wildfire	tract 320.66 (Very High, 100.0); tract 320.11 (Very High, 99.8); tract 320.42 (Very High, 99.6)

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 320.11 is Census Tract 320.11). 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)	14 records, 1998 to 2026 (12 zone-level)		Storm Surge/Tide, 2001-01-09, \$240,000 property; crops not reported (2001 dollars)		Event records naming jurisdictions in the plan: Newport Beach city (1 record), Seal Beach city (1 record). Zone-level records (12) 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).
Frost/Freeze (outside NRI's Cold Wave definition)	crop damage	2 records, 2004 to 2022 (2 zone-level)		No crop damage reported in 2 records.		Countywide (zone-level records).	Temperature: in event narratives only (local data needed).
Drought	U.S. Drought Monitor scale (D0 to D4)	26 records, 2007 to 2009 (26 zone-level)	167 days to 365 days (median 245 days); 3 with a recorded value	365 days (12 months), 2009-01-01 to 2009-12-31, a run of 12 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)	13 records, 1979 to 2019	0.25 in to 2 in (median 0.75 in); 13 with a recorded value	2 in hail, 1979-01-31	Hail, 2000-03-06, \$75,000 property; crops not reported (2000 dollars)	Event records naming jurisdictions in the plan: Yorba Linda city (2 records), Anaheim city (1 record), Costa Mesa city (1 record), Garden Grove city (1 record), Huntington Beach city (1 record), Laguna Beach city (1 record), Laguna Hills city (1 record), San Clemente city (1 record), Tustin city (1 record).	
Excessive Heat, Heat	heat index (in event narratives)	51 records, 1997 to 2026 (51 zone-level)	1 day to 12 days (median 3 days); 35 with a recorded value	12 consecutive days, 2023-07-11 to 2023-07-22, 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.

Hazard	Scale	Records <i>count and years</i>	Observed range	Worst recorded event	Most damaging (when different)	How it applies to jurisdictions	Note
Hurricane, Tropical Storm, Tropical Depression	Saffir-Simpson	1 record, 2023 (1 zone-level)		Strongest recorded: Tropical Storm record, 2023-08-20 to 2023-08-21, \$0 property; \$0 crops (2023 dollars); NWS zone CAZ057		Countywide (zone-level records).	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.
Flash Flood, Flood, Lakeshore Flood	damage and flood days (flood depth: FIRM)	138 records, 1997 to 2026		Flood, 2010-12-19, \$36,000,000 property; \$0 crops (2010 dollars)		Event records naming jurisdictions in the plan: San Clemente city (10 records), Huntington Beach city (9 records), Seal Beach city (9 records), Irvine city (7 records), Yorba Linda city (7 records), Santa Ana city (6 records), Garden Grove city (4 records), Laguna Beach city (4 records), Placentia city (4 records), Tustin city (4 records); and 11 more jurisdictions (see the Excel file).	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)	13 records, 2003 to 2023 (3 zone-level)		Debris Flow, 2005-02-20, \$300,000 property; crops not reported (2005 dollars), 1 direct death (reported for the zone); NWS zone CAZ057		Event records naming jurisdictions in the plan: Mission Viejo city (1 record), San Clemente city (1 record). Zone-level records (3) apply countywide.	Physical measure: in event narratives only (local data needed).
Lightning	annualized frequency (the measure FEMA's Local Mitigation Planning Handbook names)	4 records, 1998 to 2016		Lightning, 2000-03-03, \$50,000 property; crops not reported (2000 dollars)		Event records naming jurisdictions in the plan: Irvine city (1 record), Newport Beach city (1 record), San Clemente city (1 record).	Storm Events lists lightning with damage or casualties; physical measure in event narratives only (local data needed).
High Wind and Strong Wind (outside NRI's Strong Wind definition)	wind speed (kt and mph)	223 records, 1996 to 2026 (223 zone- level)	26 kt (30 mph) to 104 kt (120 mph) (median 60 kt (69 mph)); 223 with a recorded value	104 kt (120 mph), measurement type not recorded, High Wind, 1999-12-03; NWS zone CAZ057	Strong Wind, 2017-02-17, \$200,000 property; \$0 crops, reported for the zone (2017 dollars)	Countywide (zone-level records).	
Thunderstorm Wind	wind speed (kt and mph)	38 records, 1978 to 2026	26 kt (30 mph) to 81 kt (93 mph) (median 52 kt (60 mph)); 35 with a recorded value	81 kt (93 mph) measured gust, Thunderstorm Wind, 2010-01-19	Thunderstorm Wind, 1998-12-06, \$450,000 property; crops not reported (1998 dollars)	Event records naming jurisdictions in the plan: Laguna Beach city (3 records), Newport Beach city (3 records), Costa Mesa city (2 records), Huntington Beach city (2 records), Orange city (2 records), San Clemente city (2 records), Brea city (1 record), Buena Park city (1 record), Fullerton city (1 record), Garden Grove city (1 record); and 6 more jurisdictions (see the Excel file).	

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)	31 records, 1958 to 2010	F/EF0 to F/EF3 (median F/EF0); 28 with a recorded value	F3 tornado, 1978-02-09, 2 mi path length (whole path, pre-1996), 67 yd wide, \$2,500,000 property; crops not recorded (1978 dollars), 6 direct injuries	Tornado, 1993-01-17, \$5,000,000 property; crops not recorded (1993 dollars)	Event records naming jurisdictions in the plan: Huntington Beach city (3 records), Newport Beach city (2 records), Brea city (1 record), Irvine city (1 record), Lake Forest city (1 record), Orange city (1 record), Santa Ana city (1 record), Seal Beach city (1 record), Tustin city (1 record).	Before 1996 a tornado is listed once, under the county where it began, with its whole path's rating and length; from 1996 on, each county lists its own segment. Length is not used to rank tornadoes (see Methods).
Tsunami	none (count and damage only)	3 records, 2015 to 2025 (3 zone-level)		No damage reported in 3 records.		Countywide (zone-level records).	Physical measure: in event narratives only (local data needed).
Wildfire	acres burned (local data)	40 records, 1996 to 2024 (20 zone-level)		Wildfire, 2022-05-11, \$60,000,000 property; \$0 crops (2022 dollars); NWS zone CAZ552		Event records naming jurisdictions in the plan: Mission Viejo city (4 records), Lake Forest city (2 records), San Clemente city (2 records), Yorba Linda city (2 records), Anaheim city (1 record), Costa Mesa city (1 record), Garden Grove city (1 record), Laguna Beach city (1 record). Zone-level records (20) 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)	10 records, 1997 to 2023 (10 zone-level)		Heavy Snow, 2019-02-21, \$30,000 property; \$0 crops (2019 dollars); NWS zone CAZ057		Countywide (zone-level records).	Snow depth: in event narratives only (local data needed).

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

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: 42 declarations covering 34 separate hazard incidents counted in this packet (declarations for the same incident count once; non-natural and evacuation-only declarations are not counted).

Federal disaster declarations for this county

Sources: 1, 2, 3

Declared	Incident began	FEMA number	Type	Title	Mapped hazard	County Public Assistance <i>federal share obligated, nominal dollars</i>	Flags	Notes
2026-05-25	2026-05-21	EM-3646-CA	Emergency	Chemical Release	Non-natural, not counted	no Public Assistance recorded	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	
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	
2022-05-12	2022-05-11	FM-5439-CA	Fire management	Coastal Fire	Wildfire	no Public Assistance recorded	new since last plan; within last 5 years	
2020-12-03	2020-12-03	FM-5383-CA	Fire management	Bond Fire	Wildfire	no Public Assistance recorded		
2020-10-26	2020-10-26	FM-5381-CA	Fire management	Blue Ridge Fire	Wildfire	no Public Assistance recorded		
2020-10-26	2020-10-26	FM-5380-CA	Fire management	Silverado Fire	Wildfire	no Public Assistance recorded		
2020-03-22	2020-01-20	DR-4482-CA	Major disaster	COVID-19 Pandemic	Non-natural, not counted	\$213,521,546.04		
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
2017-10-10	2017-10-08	DR-4344-CA	Major disaster	Wildfires	Wildfire	\$2,685,239.42		
2017-10-09	2017-10-09	FM-5223-CA	Fire management	Canyon 2 Fire	Wildfire	no Public Assistance recorded		same incident as DR-4344
2017-09-26	2017-09-25	FM-5213-CA	Fire management	Canyon Fire	Wildfire	no Public Assistance recorded		
2017-03-16	2017-01-18	DR-4305-CA	Major disaster	Severe Winter Storms, Flooding, and Mudslides	Inland Flooding (primary); also designated: Landslide, Winter Weather	\$4,108,333.72		
2011-01-26	2010-12-17	DR-1952-CA	Major disaster	Severe Winter Storms, Flooding, and Debris and Mud Flows	Inland Flooding (primary); also designated: Winter Weather	\$11,846,048.30		
2008-11-18	2008-11-13	DR-1810-CA	Major disaster	Wildfires	Wildfire	\$2,146,095.15		
2008-11-15	2008-11-15	FM-2792-CA	Fire management	Freeway Fire Complex	Wildfire	no Public Assistance recorded		same incident as DR-1810

Declared	Incident began	FEMA number	Type	Title	Mapped hazard	County Public Assistance	Flags	Notes
						<i>federal share obligated, nominal dollars</i>		
2007-10-24	2007-10-21	DR-1731-CA	Major disaster	Wildfires, Flooding, Mud Flows, and Debris Flows	Wildfire	\$2,547,928.83		
2007-10-23	2007-10-21	EM-3279-CA	Emergency	Wildfires	Wildfire	no Public Assistance recorded		same incident as DR-1731
2007-10-22	2007-10-21	FM-2737-CA	Fire management	Santiago Fire	Wildfire	no Public Assistance recorded		same incident as DR-1731
2007-03-11	2007-03-11	FM-2683-CA	Fire management	241 Fire	Wildfire	no Public Assistance recorded		
2006-02-06	2006-02-06	FM-2630-CA	Fire management	Sierra Fire	Wildfire	no Public Assistance recorded		
2005-09-13	2005-08-29	EM-3248-CA	Emergency	Hurricane Katrina Evacuation	Hurricane: evacuation support, not a local hazard event; not counted	\$1,214.70		
2005-04-14	2005-02-16	DR-1585-CA	Major disaster	Severe Storms, Flooding, Landslides, and Mud and Debris Flows	Inland Flooding; Landslide	\$30,740,786.15		
2005-02-04	2004-12-27	DR-1577-CA	Major disaster	Severe Storms, Flooding, Debris Flows, and Mudslides	Inland Flooding; Landslide	\$16,064,610.35		
2002-05-14	2002-05-13	FM-2405-CA	Fire management	Antonio Fire	Wildfire	no Public Assistance recorded		
1998-02-09	1998-02-02	DR-1203-CA	Major disaster	Severe Winter Storms and Flooding	Inland Flooding; Winter Weather	no Public Assistance recorded		
1996-10-23	1996-10-21	EM-3120-CA	Emergency	Severe Firestorms	Wildfire	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		
1994-01-17	1994-01-17	DR-1008-CA	Major disaster	Northridge Earthquake	Earthquake	no Public Assistance recorded		
1993-10-28	1993-10-26	DR-1005-CA	Major disaster	Fires, Mud/Landslides, Flooding, Soil Erosion	Wildfire (primary); also designated: Inland Flooding, Landslide	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		
1992-02-25	1992-02-10	DR-935-CA	Major disaster	Rain/Snow/Wind Storms, Flooding, Mudslides	Inland Flooding (primary); also designated: Landslide, Strong Wind, Winter Weather	no Public Assistance recorded		
1988-02-05	1988-01-17	DR-812-CA	Major disaster	Severe Storms, High Tides & Flooding	Inland Flooding (primary); also designated: Coastal Flooding	no Public Assistance recorded		
1987-10-07	1987-10-01	DR-799-CA	Major disaster	Earthquake & Aftershocks	Earthquake	PA not declared for this county		
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		
1982-04-24	1982-04-24	DR-657-CA	Major disaster	Urban Fire	Wildfire	PA not declared for this county		
1980-11-27	1980-11-27	DR-635-CA	Major disaster	Brush & Timber Fires	Wildfire	no Public Assistance recorded		

Declared	Incident began	FEMA number	Type	Title	Mapped hazard	County Public Assistance <i>federal share obligated, nominal dollars</i>	Flags	Notes
1980-02-21	1980-01-08	DR-615-CA	Major disaster	Severe Storms, Mudslides & Flooding	Inland Flooding (primary); also designated: Landslide	no Public Assistance recorded		
1978-10-09	1978-10-09	DR-566-CA	Major disaster	Landslides	Inland Flooding (primary); also designated: Landslide	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		
1969-01-26	1969-01-26	DR-253-CA	Major disaster	Severe Storms & Flooding	Inland Flooding	no Public Assistance recorded		

School districts and special districts in this county: \$25,554,968.15 (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, \$249,401.57

Sources: 2, 3

FEMA number	Declared	Title	Applicant	PA obligated <i>federal share obligated, nominal dollars</i>
DR-4431-CA	2019-05-01	Severe Winter Storms, Flooding, Landslides, and Mudslides	Orange County Water District	\$249,401.57

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	14	4	0	4	3	0	1996 to 2026-06-30	
Cold Wave	2	1	0	1	0	0	1996 to 2026-06-30	Includes 2 Frost/Freeze records.
Drought	26	0	0	0	0	0	1996 to 2026-06-30	
Earthquake	0	0	0	0	2	0		Storm Events does not record earthquakes; the USGS earthquake catalog is the source.
Hail	13	0	0	0	0	0	1955 to 2026-06-30	
Heat Wave	51	17	8	19	0	0	1996 to 2026-06-30	
Hurricane	1	1	0	1	0	0	1996 to 2026-06-30	
Inland Flooding	138	40	11	46	17	2	1996 to 2026-06-30	
Landslide	13	3	2	3	14	2	1996 to 2026-06-30	
Lightning	4	0	0	0	0	0	1996 to 2026-06-30	
Strong Wind	261	48	11	56	1	0	1955 to 2026-06-30	Includes 195 High Wind and 28 Strong Wind records.
Tornado	31	0	0	0	1	0	1950 to 2026-06-30	
Tsunami	3	2	0	2	0	0	1996 to 2026-06-30	
Wildfire	40	7	1	7	15	1	1996 to 2026-06-30	
Winter Weather	10	2	0	2	9	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
2026-06-09	Storm Surge/ Tide		\$0 property; \$0 crops, reported for the zone (2026 dollars)	1, 0	NWS zone CAZ552 (ORANGE COUNTY COASTAL), zone-level	new since last plan; within last 5 years	deaths or injuries recorded
2023-07-11	Excessive Heat		\$0 property; \$0 crops, reported for the zone (2023 dollars)	0, 0	NWS zone CAZ554 (ORANGE COUNTY INLAND), zone-level	new since last plan; within last 5 years	B1-c worst recorded: Excessive Heat, Heat
2022-05-11	Wildfire		\$60,000,000 property; \$0 crops, reported for the zone (2022 dollars)	0, 0	NWS zone CAZ552 (ORANGE COUNTY COASTAL), zone-level	new since last plan; within last 5 years	B1-c worst recorded: Wildfire
2010-12-19	Flood		\$36,000,000 property; \$0 crops (2010 dollars)	0, 0	SAN CLEMENTE to SUNSET BEACH		B1-c worst recorded: Flash Flood, Flood, Lakeshore Flood
2010-01-19	Thunderstorm Wind	81 kt (93 mph) measured gust	\$350,000 property; \$0 crops (2010 dollars)	0, 0	COSTA MESA to NEWPORT BEACH		B1-c worst recorded: Thunderstorm Wind
2005-02-20	Debris Flow		\$300,000 property; crops not reported, reported for the zone (2005 dollars)	1, 0	NWS zone CAZ057 (NE ORANGE), zone-level		deaths or injuries recorded
2001-01-09	Storm Surge/ Tide		\$240,000 property; crops not reported (2001 dollars)	0, 0	SEAL BEACH		B1-c worst recorded: Coastal Flood, Storm Surge/Tide
2000-03-03	Lightning		\$50,000 property; crops not reported (2000 dollars)	0, 0	NEWPORT BEACH		B1-c worst recorded: Lightning
1999-12-03	High Wind	104 kt (120 mph), measurement type not recorded	\$20,000 property; crops not reported, reported for the zone (1999 dollars)	0, 0	NWS zone CAZ057 (SANTA ANA MOUNTAINS AND FOOTHILLS), zone-level		B1-c worst recorded: High Wind and Strong Wind
1998-02-23	Flash Flood		\$29,700,000 property; \$280,000 crops (1998 dollars)	2, 2	COUNTYWIDE		deaths or injuries recorded
1979-01-31	Hail	2 in	damage not recorded (pre-1996 record)	0, 0	location not recorded		B1-c worst recorded: Hail
1978-02-09	Tornado	F3, 2 mi path length (whole path, pre-1996), 67 yd wide	\$2,500,000 property; crops not recorded (1978 dollars)	0, 6	location not recorded		B1-c worst recorded: Tornado

The full list is in the Excel file, sheet "B1-d Storm Events history" (607 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	2.13	events per year at a location (modeled)	about 2.1 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	62.6	event-days per year	about 62.6 days per year	Likely (from Storm Events: 3 of 30 years)	event-days in 3 of 30 years, 1996 to 2025 (10%)	2,569	2000 to 2025 (25.25 years; D3 and D4 only)	countywide	
Earthquake	0.0975	annual probability at a location	chance a given location in the county has at least minor-damage shaking in a year: 9.75%			not shown	modeled	see B1-f	No descriptor (Storm Events does not record earthquakes).
Hail	0.104	events per year	about 1 in 10 years	Likely	FEMA annualized frequency (modeled)	4.0 (modeled)	1986 to 2023 (38 years)	countywide	
Heat Wave	7.41	event-days per year	about 7.41 days per year	Likely (from Storm Events: 13 of 30 years)	event-days in 13 of 30 years, 1996 to 2025 (43.3%)	81.2	2005-11-12 to 2024-11-12 (19 years)	countywide	
Hurricane	0	events per year	none modeled	Unlikely	FEMA annualized frequency (modeled)	0	1851 to 2024 (Atlantic); 1949 to 2024 (Pacific)	see B1-f	NRI counts hurricane and tropical storm tracks passing within storm-force wind range; federal declarations are in B1-d.
Inland Flooding	2.89	event-days per year	about 2.89 days per year	Likely (from Storm Events: 25 of 30 years)	event-days in 25 of 30 years, 1996 to 2025 (83.3%)	81	1996 to 2023 (28 years)	see B1-f	
Landslide	17.8	events per year (modeled)	about 17.8 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	7.43	days per year with a strike	about 7.43 days per year	Highly likely	FEMA annualized frequency (modeled)	not shown	1995 to 2023 (29 years; CONUS)	countywide	
Strong Wind	0.175	events per year	about 1 in 6 years	Likely	FEMA annualized frequency (modeled)	6	1986 to 2023 (38 years)	countywide	
Tornado	0.129	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%	Likely (from Storm Events: 3 of 30 years)	Storm Events records in 3 of 30 years, 1996 to 2025 (10%)	not shown	modeled	see B1-f	Descriptor from Storm Events, not NRI.
Wildfire	0.0107	annual probability at a location	chance a given location in the county burns in a year: 1.07%	Likely (from Storm Events: 18 of 30 years)	Storm Events records in 18 of 30 years, 1996 to 2025 (60%)	not shown	modeled	see B1-f	Descriptor from Storm Events, not NRI.
Winter Weather	0.201	event-days per year	about 0.201 days per year	Likely (from Storm Events: 7 of 30 years)	event-days in 7 of 30 years, 1996 to 2025 (23.3%)	3.19	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	15	30	0.5
Thunderstorm Wind (counted as NRI Strong Wind)	65 kt+	1996 to 2025	6	30	0.2
Thunderstorm Wind (counted as NRI Strong Wind)	unmeasured or below 50 kt	1996 to 2025	10	30	0.333
Tornado	EF0-1	1996 to 2025	7	30	0.233
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	3 of 613	4.7	5.0	5.5	Very Low 3, Not Applicable 610
Coastal Flooding	90 of 613	69.6	83.0	99.9	Very High 2, Relatively High 6, Relatively Moderate 10, Relatively Low 50, Very Low 22, No Rating 523
Cold Wave	0 of 613				No Rating 613
Drought	43 of 613	66.9	74.2	89.6	Relatively Low 3, Very Low 40, No Rating 570
Earthquake	613 of 613	74.6	92.3	100.0	Very High 77, Relatively High 400, Relatively Moderate 134, Relatively Low 2
Hail	613 of 613	2.8	24.2	57.4	Relatively Low 32, Very Low 581
Heat Wave	613 of 613	1.8	23.8	73.8	Relatively Moderate 7, Relatively Low 409, Very Low 197
Hurricane	0 of 613				No Rating 613
Inland Flooding	613 of 613	3.3	74.3	100.0	Very High 84, Relatively High 186, Relatively Moderate 212, Relatively Low 117, Very Low 14
Landslide	574 of 613	8.9	60.6	99.9	Very High 1, Relatively High 14, Relatively Moderate 46, Relatively Low 111, Very Low 402, No Rating 39
Lightning	612 of 613	0.4	4.0	33.8	Relatively Low 1, Very Low 611, No Rating 1
Strong Wind	613 of 613	1.7	9.5	29.1	Relatively Low 3, Very Low 610
Tornado	613 of 613	2.9	18.6	48.9	Relatively Low 33, Very Low 580
Tsunami	55 of 613	12.3	40.7	88.7	Relatively Moderate 3, Relatively Low 19, Very Low 33, No Rating 12, Not Applicable 546
Wildfire	260 of 613	18.6	73.7	100.0	Very High 14, Relatively High 27, Relatively Moderate 38, Relatively Low 63, Very Low 118, No Rating 353
Winter Weather	23 of 613	10.5	10.6	15.8	Very Low 23, No Rating 590

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

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

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

Frequency data for 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
Orange County	County	Approved, expires 2026-12-26	FMA RL 0, SRL 0; any 11	\$180,664,202.60	0 total; 0 since its plan	Includes \$173,716,030.32 for declarations not counted as hazard incidents (DR-4482-CA, EM-3248-CA).
Aliso Viejo city	City	Approved, expires 2029-07-17	FMA RL 0, SRL 0; any 0	\$45,308.85	0 total; 0 since its plan	
Anaheim city	City	Approved, expires 2027-09-05	FMA RL 0, SRL 0; any 0	\$3,939,002.96	5 total; 0 since its plan	Includes \$606,168.07 for declarations not counted as hazard incidents (DR-4482-CA).
Brea city	City	Approved, expires 2029-10-29	FMA RL 0, SRL 0; any 0	\$475,654.56	3 total; 0 since its plan	Includes \$121,520.22 for declarations not counted as hazard incidents (DR-4482-CA).
Buena Park city	City	Approved, expires 2027-12-19	FMA RL 0, SRL 0; any 0	\$503,510.73	1 total; 1 since its plan	Includes \$503,510.73 for declarations not counted as hazard incidents (DR-4482-CA).
Costa Mesa city	City	Approved, expires 2028-04-17	FMA RL 1, SRL 1; any 4	\$1,431,853.35	7 total; 0 since its plan	Includes \$1,335,061.03 for declarations not counted as hazard incidents (DR-4482-CA).
Dana Point city	City	Approved, expires 2030-02-04	FMA RL 0, SRL 1; any 1	\$530,452.72	0 total; 0 since its plan	Includes \$186,403.49 for declarations not counted as hazard incidents (DR-4482-CA).
Fountain Valley city	City	Approved, expires 2030-11-09	FMA RL 0, SRL 0; any 1	\$126,043.66	0 total; 0 since its plan	Includes \$119,798.87 for declarations not counted as hazard incidents (DR-4482-CA).
Fullerton city	City	Approved, expires 2031-07-08	FMA RL 0, SRL 0; any 2	\$374,886.45	2 total; not yet covered	Includes \$208,207.90 for declarations not counted as hazard incidents (DR-4482-CA).
Garden Grove city	City	Expired on 2025-09-17	FMA RL 0, SRL 1; any 5	\$17,011.38	7 total; 0 since its plan	
Huntington Beach city	City	Approved, expires 2028-01-13	FMA RL 0, SRL 0; any 8	\$4,722,413.37	15 total; 4 since its plan	Includes \$4,258,379.06 for declarations not counted as hazard incidents (DR-4482-CA).
Irvine city	City	No approved plan on record. Approvable pending adoption, not yet eligible	FMA RL 0, SRL 0; any 0	\$2,040,125.30	9 total; no approved plan	Includes \$1,532,458.90 for declarations not counted as hazard incidents (DR-4482-CA).
La Habra city	City	Expired on 2025-04-13	FMA RL 0, SRL 0; any 0	\$112,454.08	1 total; 0 since its plan	
La Palma city	City	Expired on 2025-04-16	FMA RL 0, SRL 0; any 0	no Public Assistance recorded	0 total; 0 since its plan	
Laguna Beach city	City	Approved, expires 2028-12-21	FMA RL 8, SRL 6; any 31	\$25,533,428.36	9 total; 0 since its plan	Includes \$181,216.19 for declarations not counted as hazard incidents (DR-4482-CA).
Laguna Hills city	City	Approved, expires 2030-04-14	FMA RL 0, SRL 0; any 0	\$10,081.37	5 total; 0 since its plan	
Laguna Niguel city	City	Approved, expires 2029-01-22	FMA RL 0, SRL 0; any 0	\$438,076.82	0 total; 0 since its plan	Includes \$86,894.62 for declarations not counted as hazard incidents (DR-4482-CA).

Jurisdiction	Type	Plan status	Repetitive loss	Public Assistance to this jurisdiction	Event records naming this place	Notes
			<i>FMA RL and SRL (44 CFR 77.2); repeat-flood, any definition</i>	<i>FEMA records matched by applicant name; federal share obligated, nominal dollars</i>	<i>all years; since its plan</i>	
Laguna Woods city	City	Expired on 2018-05-27	FMA RL 0, SRL 0; any 0	\$8,027.29	0 total; 0 since its plan	Includes \$8,027.29 for declarations not counted as hazard incidents (DR-4482-CA).
Lake Forest city	City	Approved, expires 2029-09-05	FMA RL 0, SRL 0; any 0	\$215,264.26	3 total; 0 since its plan	
Mission Viejo city	City	Approved, expires 2030-04-14	FMA RL 0, SRL 0; any 1	\$2,603,062.72	9 total; 0 since its plan	Includes \$497,629.51 for declarations not counted as hazard incidents (DR-4482-CA).
Newport Beach city	City	Expired on 2021-09-26	FMA RL 0, SRL 0; any 8	\$518,699.06	8 total; 1 since its plan	
Orange city	City	Approved, expires 2031-05-06	FMA RL 0, SRL 0; any 0	\$499,346.61	3 total; 0 since its plan	Includes \$85,269.27 for declarations not counted as hazard incidents (DR-4482-CA).
Placentia city	City	Approved, expires 2029-07-17	FMA RL 0, SRL 0; any 0	\$70,418.26	4 total; 0 since its plan	Includes \$57,758.26 for declarations not counted as hazard incidents (DR-4482-CA).
Rancho Santa Margarita city	City	Approved, expires 2030-07-15	FMA RL 0, SRL 0; any 0	\$75,270.04	0 total; 0 since its plan	
San Clemente city	City	Approved, expires 2030-04-14	FMA RL 1, SRL 1; any 5	\$1,239,849.91	17 total; 0 since its plan	
San Juan Capistrano city	City	Expired on 2025-04-22	FMA RL 0, SRL 0; any 1	\$4,658,465.26	2 total; 1 since its plan	
Santa Ana city	City	Approved, expires 2028-02-06	FMA RL 0, SRL 0; any 7	\$886,781.12	8 total; 2 since its plan	Includes \$381,590.90 for declarations not counted as hazard incidents (DR-4482-CA).
Seal Beach city	City	Approved, expires 2030-11-16	FMA RL 0, SRL 1; any 13	\$75,688.93	11 total; 0 since its plan	
Stanton city	City	Approved, expires 2028-04-17	FMA RL 0, SRL 0; any 0	no Public Assistance recorded	0 total; 0 since its plan	
Tustin city	City	Expired on 2024-11-06	FMA RL 0, SRL 0; any 0	\$131,406.99	7 total; 3 since its plan	Includes \$87,666.32 for declarations not counted as hazard incidents (DR-4482-CA).
Villa Park city	City	Expired on 2026-07-13	FMA RL 0, SRL 0; any 0	\$305,655.37	1 total; 0 since its plan	Includes \$11,663.17 for declarations not counted as hazard incidents (DR-4482-CA).
Westminster city	City	Expired on 2021-05-13	FMA RL 0, SRL 0; any 3	\$134,366.70	2 total; 2 since its plan	Includes \$125,791.68 for declarations not counted as hazard incidents (DR-4482-CA).
Yorba Linda city	City	Approved, expires 2028-10-22	FMA RL 0, SRL 0; any 0	\$940,207.59	12 total; 0 since its plan	

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

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

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

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

Local data needed

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

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

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

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

Hazard	Building exposure <i>modeled dollars</i>	Agriculture exposure <i>modeled dollars</i>	Population exposed <i>people</i>	EAL buildings <i>modeled dollars per year</i>	EAL agriculture <i>modeled dollars per year</i>	Cost of expected deaths and injuries <i>FEMA's dollar value per year, not property damage</i>	EAL as % of exposure <i>buildings; agriculture where noted</i>	Storm Events damage since 2021-12-27 <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	\$2,115,116	n/a	under 1	\$2	n/a	\$14	0.000105%				
Coastal Flooding	\$227,200,148,733	n/a	1,407,001	\$8,410,595	n/a	\$2,542	0.0037%		\$0		
Cold Wave	\$0	\$0	0	\$0	\$0	\$0			\$0		building exposure is 0 in NRI
Drought	n/a	\$104,082,934	n/a	n/a	\$36,627	n/a	0.0352% (agriculture)				NRI has no building exposure for this hazard; agriculture shown
Earthquake	\$1,036,878,807,347	n/a	3,186,989	\$706,143,269	n/a	\$309,194,322	0.0681%				
Hail	\$606,399,782,637	\$106,232,076	3,183,647	\$900,264	\$441	\$36,678	0.000148%				
Heat Wave	\$606,392,893,807	\$106,232,076	3,183,636	\$5,894	\$6,845	\$11,014,018	under 0.0001%		\$0		
Hurricane	\$606,399,782,637	\$106,232,076	3,183,647	\$0	\$0	\$0	0%		\$0		

Hazard	Building exposure <i>modeled dollars</i>	Agriculture exposure <i>modeled dollars</i>	Population exposed <i>people</i>	EAL buildings <i>modeled dollars per year</i>	EAL agriculture <i>modeled dollars per year</i>	Cost of expected deaths and injuries <i>FEMA's dollar value per year, not property damage</i>	EAL as % of exposure <i>buildings; agriculture where noted</i>	Storm Events damage since 2021-12-27 <i>county-coded records, property plus crops, nominal dollars</i>	Zone-level damage since plan <i>property plus crops, reported for the zone</i>	Public Assistance since plan <i>nominal dollars; see note</i>	Note
Inland Flooding	\$605,852,900,878	\$5,118,118	104,939	\$818,458,922	\$42,587	\$1,429,482	n/a (see note)	\$10,000		no Public Assistance recorded (2 declarations)	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	\$19,882,297,040	n/a	78,135	\$942,120	n/a	\$3,237,130	0.00474%	\$30,000		no Public Assistance recorded (2 declarations)	
Lightning	\$606,399,782,637	n/a	3,183,647	\$5,801	n/a	\$482,869	under 0.0001%				
Strong Wind	\$606,399,782,637	\$106,232,076	3,183,647	\$339,316	\$1,650	\$311,609	under 0.0001%	\$2,000	\$74,000		Storm Events damage since the plan includes 1 zone-level High Wind record (\$40,000) and 7 zone-level Strong Wind records (\$34,000): NOAA non-thunderstorm wind types, outside NRI's Strong Wind definition.
Tornado	\$606,399,782,637	\$106,232,076	3,183,647	\$3,429,754	\$610	\$1,917,996	0.000566%				
Tsunami	\$38,426,334,141	n/a	75,685	\$2,529,600	n/a	\$0	0.00658%		\$0		

Hazard	Building exposure <i>modeled dollars</i>	Agriculture exposure	Population exposed <i>people</i>	EAL buildings	EAL agriculture	Cost of expected deaths and injuries	EAL as % of exposure	Storm Events damage since 2021-12-27	Zone-level damage since plan	Public Assistance since plan	Note
		<i>modeled dollars</i>		<i>dollars per year</i>	<i>modeled dollars per year</i>	<i>FEMA's dollar value per year, not property damage</i>	<i>county-coded records, property plus crops, nominal dollars</i>	<i>property plus crops, reported for the zone</i>	<i>nominal dollars; see note</i>		
Wildfire	\$16,625,760,768	\$74,070,839	112,865	\$54,812,095	\$3,585	\$2,769,945	0.33%		\$110,140,000	no Public Assistance recorded (1 declaration)	
Winter Weather	\$1,500,418,974	\$260,659	5,810	\$2	under \$1	\$131	under 0.0001%		\$0	no Public Assistance recorded (2 declarations)	

Totals since 2021-12-27 (Storm Events through 2026-06-30): 47 county-coded records, 45 with a damage value recorded (including \$0), \$42,000; 78 zone-level records, 72 with a damage value recorded (including \$0), \$110,214,000 reported for the zone; Public Assistance: none recorded on the 3 counted declarations.

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	3,183,647
Building value (total, not at risk)	\$606,399,782,637
Agriculture value (total, not at risk)	\$106,232,076
NRI risk rating (all hazards)	Very High
Expected annual loss, buildings and agriculture, all hazards	\$1,596,069,979
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)	\$330,396,735
Social vulnerability rating	Relatively Low
Community resilience rating	Very Low
NRI version	December 2025

FEMA's all-hazard expected annual loss adds buildings, agriculture and population equivalence; this table gives the property part and the population-equivalence part as separate rows.

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

Supports FEMA checklist item B2-c: repetitive loss properties

Repetitive loss in this county, both definitions

Sources: 1, 4

Definition	Properties	Severe repetitive loss	Properties
Repetitive loss, FMA definition (44 CFR 77.2)	10	Severe repetitive loss, FMA definition (44 CFR 77.2)	11
Repetitive loss, NFIP insurance definition	100	Severe repetitive loss, NFIP insurance definition	9

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 properties	SRL, FMA properties	RL, NFIP properties	SRL, NFIP properties	Any category properties	Mitigated properties	Currently insured properties
County total	10	11	100	9	103	0	30
of which: Orange County (unincorporated area)	0	0	11	0	11	0	0
of which: Costa Mesa city	1	1	4	1	4	0	2
of which: Fountain Valley city	0	0	1	0	1	0	0
of which: Fullerton city	0	0	2	0	2	0	2
of which: Garden Grove city	0	1	5	1	5	0	1
of which: Laguna Beach city	8	6	28	5	31	0	10
of which: Newport Beach city	0	0	8	0	8	0	1
of which: San Clemente city	1	1	5	0	5	0	2
of which: San Juan Capistrano city	0	0	1	0	1	0	1
of which: Santa Ana city	0	0	7	0	7	0	2
of which: Seal Beach city	0	1	13	1	13	0	5
of which: Westminster city	0	0	3	0	3	0	0
of which: Mission Viejo city	0	0	1	0	1	0	0
of which: Dana Point city	0	1	1	1	1	0	1
of which: Huntington Beach city	0	0	8	0	8	0	3
of which: Unknown (community ID Unknown in FEMA data)	0	0	2	0	2	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>
Orange County	060212	0	0	11	0	11	0	0
Aliso Viejo city	060770	0	0	0	0	0	0	0
Anaheim city	060213	0	0	0	0	0	0	0
Brea city	060214	0	0	0	0	0	0	0
Buena Park city	060215	0	0	0	0	0	0	0
Costa Mesa city	060216	1	1	4	1	4	0	2
Dana Point city	060736	0	1	1	1	1	0	1
Fountain Valley city	060218	0	0	1	0	1	0	0
Fullerton city	060219	0	0	2	0	2	0	2
Garden Grove city	060220	0	1	5	1	5	0	1
Huntington Beach city	065034	0	0	8	0	8	0	3
Irvine city	060222	0	0	0	0	0	0	0
La Habra city	060224	0	0	0	0	0	0	0
La Palma city	060225	0	0	0	0	0	0	0
Laguna Beach city	060223	8	6	28	5	31	0	10
Laguna Hills city	060760	0	0	0	0	0	0	0
Laguna Niguel city	060764	0	0	0	0	0	0	0
Laguna Woods city	060768	0	0	0	0	0	0	0
Lake Forest city	060759	0	0	0	0	0	0	0
Mission Viejo city	060735	0	0	1	0	1	0	0
Newport Beach city	060227	0	0	8	0	8	0	1
Orange city	060228	0	0	0	0	0	0	0
Placentia city	060229	0	0	0	0	0	0	0
Rancho Santa Margarita city	060769	0	0	0	0	0	0	0
San Clemente city	060230	1	1	5	0	5	0	2
San Juan Capistrano city	060231	0	0	1	0	1	0	1
Santa Ana city	060232	0	0	7	0	7	0	2
Seal Beach city	060233	0	1	13	1	13	0	5
Stanton city	060234	0	0	0	0	0	0	0
Tustin city	060235	0	0	0	0	0	0	0
Villa Park city	060236	0	0	0	0	0	0	0

Jurisdiction	NFIP community ID	RL, FMA <i>properties</i>	SRL, FMA <i>properties</i>	RL, NFIP <i>properties</i>	SRL, NFIP <i>properties</i>	Any category <i>properties</i>	Mitigated <i>properties</i>	Currently insured <i>properties</i>
Westminster city	060237	0	0	3	0	3	0	0
Yorba Linda city	060238	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	8	8	71	6	74	0	22
2 to 4 unit residential	0	0	11	0	11	0	2
other residential	0	0	6	0	6	0	0
non-residential	2	3	12	3	12	0	6
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 3 properties are FMA repetitive loss but not NFIP repetitive loss, and 93 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, 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).

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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.