

Kauai County, HI

Risk-assessment baseline packet

County FIPS: 15007 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 2031-04-30. Plan: Kauai County (FEMA plan 111636), approved 2026-05-01.

Since the plan was approved on 2026-05-01: 1 new hazard declaration (1 incident) and 0 NOAA Storm Events records; details under "What changed since your last plan".

Highest expected annual loss (FEMA National Risk Index, modeled total; see B1-a): Inland Flooding (\$47,667,097 a year), Tsunami (\$8,627,482) and Wildfire (\$2,616,951).

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; 15007 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 2031-04-30

Approved:2026-05-01

Plan:Kauai County (FEMA plan 111636)

Days to expiry:1,673

What changed since your last plan (approved 2026-05-01)

New federal declarations:1 new hazard declaration (1 incident): EM-3654-HI (Tropical Storm Nolo)

Repetitive loss now:FMA RL 7, SRL 6 (44 CFR 77.2); any definition: 56

Storm Events records since approval:0 records (data through 2026-06-30)

Repeat-flood change:this release sets the baseline count.

Sources: 1, 2, 4, 6 (numbered list at the end)

Plan status for every jurisdiction listed in this county

Source: 1

Jurisdiction	Type	Status	Plan	Approved	Expires	Days to expiry negative = days since expiry
Kauai County	County	Approved, expires 2031-04-30	Kauai County (FEMA plan 111636)	2026-05-01	2031-04-30	1,673

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

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	Inland Flooding	Relatively Moderate	Relatively Moderate	\$34,837,858	\$202,000	\$12,627,240	\$47,667,097	202		
2	Tsunami	Relatively Moderate	Relatively Moderate	\$8,627,482	n/a	\$0	\$8,627,482	0		No recorded events in Storm Events since 1996 (data through 2026-06-30).
3	Wildfire	Relatively Moderate	Relatively Moderate	\$2,456,564	\$367	\$160,020	\$2,616,951	25		
4	Lightning	Relatively High	Relatively High	\$46,506	n/a	\$959,605	\$1,006,112	4		
5	Hurricane	Relatively Low	Relatively Low	\$355,622	\$4,120	\$35,658	\$395,399	0		Declared 6 times; no Storm Events record of this type.
6	Earthquake	Very Low	Very Low	\$182,819	n/a	\$27,363	\$210,182			Storm Events does not record earthquakes.
7	Landslide	Relatively Moderate	Relatively Low	\$165,966	n/a	\$104	\$166,069	8		
8	Coastal Flooding	Relatively Low	Relatively Low	\$140,052	n/a	\$306	\$140,358	0		No recorded events in Storm Events since 1996 (data through 2026-06-30).
9	Drought	Very Low	Very Low	n/a	\$17,655	n/a	\$17,655	68		
10	Strong Wind	Very Low	Very Low	\$2,058	\$120	\$3,630	\$5,808	59		Includes 38 High Wind and 11 Strong Wind records (NOAA non- thunderstorm wind types, outside NRI's Strong Wind definition).
11	Tornado	Very Low	Very Low	\$4,753	\$28	\$195	\$4,975	3		

Rank by EAL	Hazard	NRI risk rating	EAL rating	Cost of expected deaths and injuries			EAL total (see note)	Storm Events records, 1996 to 2026-06-30 count	Why this hazard can be left out <i>NRI Not Applicable, no declaration and no Storm Events record since 1996</i>	Storm Events coverage note
				EAL buildings <i>modeled dollars per year</i>	EAL agriculture <i>modeled dollars per year</i>	<i>FEMA's dollar value per year, not property damage</i>				
12	Cold Wave	No Rating	No Expected Annual Losses	\$0	\$0	\$0	\$0	0		No recorded events in Storm Events since 1996 (data through 2026-06-30).
13	Hail	No Rating	No Expected Annual Losses	\$0	\$0	\$0	\$0	1		
14	Heat Wave	No Rating	No Expected Annual Losses	\$0	\$0	\$0	\$0	0		No recorded events in Storm Events since 1996 (data through 2026-06-30).
15	Volcanic Activity	No Rating	No Expected Annual Losses	\$0	n/a	\$0	\$0	0		No recorded events in Storm Events since 1996 (data through 2026-06-30).
	Winter Weather	Not Applicable	Not Applicable					1	NRI rates this Not Applicable, but 1 Storm Events record of this type exists since 1996; review before omitting.	

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

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

Local data needed: state and local tsunami and volcanic activity records (Storm Events records these hazards only in part).

Not applicable to this county per NRI, with no federal declaration and no Storm Events record since 1996: avalanche and ice storm. 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>
Earthquake	tract 405 (Relatively Low, 68.9); tract 406.03 (Relatively Low, 42.0); tract 403.02 (Very Low, 40.6)
Hurricane	tract 405 (Relatively Low, 68.1); tract 401.06 (Relatively Low, 63.9); tract 401.05 (Relatively Low, 63.7)
Landslide	tract 408 (Relatively Moderate, 99.2); tract 401.05 (Relatively Moderate, 98.8); tract 409 (Relatively Moderate, 98.6)
Tornado	tract 405 (Very Low, 2.7); tract 406.03 (Very Low, 1.9); tract 409 (Very Low, 1.9)
Tsunami	tract 409 (Relatively Moderate, 94.9); tract 403.02 (Relatively Moderate, 94.7); tract 402.05 (Relatively Moderate, 93.8)
Volcanic Activity	no tract has a National Risk Index rating for this hazard
Wildfire	tract 406.04 (Relatively High, 98.2); tract 407.01 (Relatively High, 97.2); tract 9400 (Relatively High, 97.1)

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 405 is Census Tract 405). 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
Coastal Flood, Storm Surge/ Tide	none in data (flood depth: FIRM)	0					Flood depth: see the FEMA Flood Insurance Rate Map.
Cold/Wind Chill, Extreme Cold/Wind Chill	wind chill	0					
Frost/Freeze (outside NRI's Cold Wave definition)	crop damage	0					

Hazard	Scale	Records <i>count and years</i>	Observed range	Worst recorded event	Most damaging (when different)	How it applies to jurisdictions	Note
Drought	U.S. Drought Monitor scale (D0 to D4)	68 records, 1996 to 2025 (68 zone-level)	3 days to 168 days (median 59 days); 23 with a recorded value	168 days (about 5.5 months), 2012-08-01 to 2013-01-15, a run of 6 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)	1 record, 2012	0.75 in; 1 with a recorded value	0.75 in hail, 2012-03-09		No event record names a jurisdiction in the plan.	
Excessive Heat, Heat	heat index (in event narratives)	0					
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.
Flash Flood, Flood, Lakeshore Flood	damage and flood days (flood depth: FIRM)	202 records, 1996 to 2026		Flash Flood, 2020-03-28, \$30,600,000 property; \$0 crops (2020 dollars)		No event record names a jurisdiction in the plan.	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)	8 records, 2013 to 2021		Debris Flow, 2021-03-06, \$3,900,000 property; \$0 crops (2021 dollars)		No event record names a jurisdiction in the plan.	
Lightning	annualized frequency (the measure FEMA's Local Mitigation Planning Handbook names)	4 records, 2002 to 2017		Lightning, 2017-08-20, \$10,000 property; \$0 crops (2017 dollars)		No event record names a jurisdiction in the plan.	Storm Events lists lightning with damage or casualties.
High Wind and Strong Wind (outside NRI's Strong Wind definition)	wind speed (kt and mph)	49 records, 1996 to 2026 (49 zone-level)	39 kt (45 mph) to 109 kt (125 mph) (median 52 kt (60 mph)); 36 with a recorded value	109 kt (125 mph), measurement type not recorded, High Wind, 1996-02-10; NWS zone HIZ003	High Wind, 1996-03-03, \$600,000 property; \$500,000 crops (zone total, 1996 dollars)	Countywide (zone-level records).	
Thunderstorm Wind	wind speed (kt and mph)	10 records, 1996 to 2024	48 kt (55 mph) to 65 kt (75 mph) (median 50 kt (58 mph)); 9 with a recorded value	65 kt (75 mph) estimated gust, Thunderstorm Wind, 2005-01-08		No event record names a jurisdiction in the plan.	
Tornado	Enhanced Fujita (Fujita before Feb 2007)	6 records, 1967 to 2008	F/EF0; 3 with a recorded value	F0 tornado, 2002-03-24, 1 mi within this county, 30 yd wide, \$60,000 property; crops not reported (2002 dollars)	Tornado, 1967-12-17, \$250,000 property; crops not recorded (1967 dollars)	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)	0					

Hazard	Scale	Records <i>count and years</i>	Observed range	Worst recorded event	Most damaging (when different)	How it applies to jurisdictions	Note
Volcanic Ash, Volcanic Ashfall	Volcanic Explosivity Index (local data)	0					
Wildfire	acres burned (local data)	25 records, 1999 to 2024 (21 zone-level)		Wildfire, 2011-08-17, \$950,000 property; \$0 crops (2011 dollars); NWS zone HIZ002		No event record names a jurisdiction in the plan. Zone-level records (21) apply countywide.	
Winter Storm, Heavy Snow, Blizzard, Lake- Effect Snow, Winter Weather, Sleet	none in data (snowfall: local data)	1 record, 1996 (1 zone-level)		No damage reported in 1 record.		Countywide (zone-level records).	

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

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

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

Supports FEMA checklist item B1-d: previous occurrences

Federal declarations for this county: 18 declarations covering 15 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
2026-09-25	2026-09-23	EM-3654-HI	Emergency	Tropical Storm Nolo	Hurricane (primary); also designated: Inland Flooding, Landslide	not yet in FEMA's PA summaries (they cover declarations through 2026-06-30)	new since last plan; within last 5 years	
2024-06-17	2024-04-11	DR-4793-HI	Major disaster	Severe Storms, Flooding, and Landslides	Inland Flooding (primary); also designated: Landslide	\$553,826.11	within last 5 years	
2020-07-25	2020-07-23	EM-3529-HI	Emergency	Hurricane Douglas	Hurricane	no Public Assistance recorded		
2020-07-09	2020-03-27	DR-4549-HI	Major disaster	Severe Storms and Flooding	Inland Flooding	\$468,684.49		
2020-04-01	2020-01-20	DR-4510-HI	Major disaster	COVID-19 Pandemic	Non-natural, not counted	\$740,253.72		
2020-03-13	2020-01-20	EM-3431-HI	Emergency	COVID-19	Non-natural, not counted	no Public Assistance recorded		same incident as DR-4510

Declared	Incident began	FEMA number	Type	Title	Mapped hazard	County Public Assistance <i>federal share obligated, nominal dollars</i>	Flags	Notes
2018-09-27	2018-08-22	DR-4395-HI	Major disaster	Hurricane Lane	Hurricane	\$374,792.97		
2018-09-12	2018-09-09	EM-3404-HI	Emergency	Tropical Storm Olivia	Hurricane	no Public Assistance recorded		
2018-08-22	2018-08-22	EM-3399-HI	Emergency	Hurricane Lane	Hurricane	no Public Assistance recorded		same incident as DR-4395
2018-05-08	2018-04-13	DR-4365-HI	Major disaster	Severe Storms, Flooding, Landslides, and Mudslides	Inland Flooding (primary); also designated: Landslide	\$8,678,755.67		
2012-04-18	2012-03-03	DR-4062-HI	Major disaster	Severe Storms, Flooding, and Landslides	Inland Flooding; Landslide	\$1,375,746.48		
2009-01-05	2008-12-10	DR-1814-HI	Major disaster	Severe Storms and Flooding	Inland Flooding	\$100,253.90		
2008-02-06	2007-12-04	DR-1743-HI	Major disaster	Severe Storms, High Surf, Flooding, and Mudslides	Inland Flooding; Landslide	\$6,152.93		
2006-10-17	2006-10-15	DR-1664-HI	Major disaster	Earthquake	Earthquake	\$860.73		
2006-05-02	2006-02-20	DR-1640-HI	Major disaster	Severe Storms, Flooding, Landslides, and Mudslides	Inland Flooding; Landslide	\$1,093,853.97		
1992-09-12	1992-09-11	DR-961-HI	Major disaster	Hurricane Iniki	Hurricane	no Public Assistance recorded		
1982-11-27	1982-11-27	DR-671-HI	Major disaster	Typhoon Iwa	Hurricane	no Public Assistance recorded		
1974-05-07	1974-05-07	DR-433-HI	Major disaster	Heavy Rains & Flooding	Inland Flooding	PA not declared for this county		

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

Statewide declarations

Source: 2

Declared	Incident began	FEMA number	Type	Title	Mapped hazard
1963-04-24	1963-04-24	DR-152-HI	Major disaster	Heavy Rains & Flooding	Inland Flooding
1960-05-25	1960-05-25	DR-101-HI	Major disaster	Tidal Waves	Tsunami
1960-01-21	1960-01-21	DR-96-HI	Major disaster	Earthquakes & Volcanic Disturbances	Earthquake (primary); also designated: Volcanic Activity
1959-08-16	1959-08-16	DR-94-HI	Major disaster	Hurricane Dot	Hurricane (primary); also designated: Inland Flooding
1957-03-16	1957-03-16	DR-71-HI	Major disaster	Tidal Wave	Tsunami
1955-04-01	1955-04-01	DR-32-HI	Major disaster	Volcano	Volcanic Activity

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.

4 Fire Management declarations (1983-03-04 to 1998-08-25) FEMA filed as Statewide with no county; each names one local fire. Listed on the state page.

Previous occurrences by hazard, with explicit no-event rows

Sources: 2, 6, 7

Hazard	Storm Events records, all years on file <i>(years in the Period column)</i>	Since plan approval records	In the 12 months before plan approval records	Last 5 years records	Declared incidents, all years separate disasters	Declared since approval separate disasters	Period	Statement
Coastal Flooding	0	0	0	0	0	0	1996 to 2026-06-30	No recorded events, 1996 to 2026-06-30, NOAA NCEI Storm Events
Cold Wave	0	0	0	0	0	0	1996 to 2026-06-30	No recorded events, 1996 to 2026-06-30, NOAA NCEI Storm Events
Drought	68	0	0	20	0	0	1996 to 2026-06-30	
Earthquake	0	0	0	0	1	0		Storm Events does not record earthquakes; the USGS earthquake catalog is the source.
Hail	1	0	0	0	0	0	1955 to 2026-06-30	
Heat Wave	0	0	0	0	0	0	1996 to 2026-06-30	No recorded events, 1996 to 2026-06-30, NOAA NCEI Storm Events
Hurricane	0	0	0	0	6	1	1996 to 2026-06-30	No Storm Events records of this type; 6 federal declared incidents (see declarations table)
Inland Flooding	202	0	3	20	9	1	1996 to 2026-06-30	
Landslide	8	0	0	0	6	1	1996 to 2026-06-30	
Lightning	4	0	0	0	0	0	1996 to 2026-06-30	
Strong Wind	59	0	1	6	0	0	1955 to 2026-06-30	Includes 38 High Wind and 11 Strong Wind records.

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
Tornado	6	0	0	0	0	0	1950 to 2026-06-30	
Tsunami	0	0	0	0	0	0	1996 to 2026-06-30	No recorded events, 1996 to 2026-06-30, NOAA NCEI Storm Events
Volcanic Activity	0	0	0	0	0	0	1996 to 2026-06-30	No recorded events, 1996 to 2026-06-30, NOAA NCEI Storm Events
Wildfire	25	0	0	1	0	0	1996 to 2026-06-30	
Winter Weather	1	0	0	0	0	0	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	Why listed
2021-03-06	Debris Flow		\$3,900,000 property; \$0 crops (2021 dollars)	0, 0	HANALEI	B1-c worst recorded: Debris Flow
2020-03-28	Flash Flood		\$30,600,000 property; \$0 crops (2020 dollars)	0, 0	PRINCEVILLE	B1-c worst recorded: Flash Flood, Flood, Lakeshore Flood
2018-08-28	Flash Flood		\$1,500,000 property; \$0 crops (2018 dollars)	1, 0	PRINCEVILLE	deaths or injuries recorded
2017-08-20	Lightning		\$10,000 property; \$0 crops (2017 dollars)	0, 0	KALIHIWAI	B1-c worst recorded: Lightning
2016-12-03	Flash Flood		\$0 property; \$0 crops (2016 dollars)	1, 0	WAILUA	deaths or injuries recorded
2012-08-01	Drought		\$0 property; \$0 crops (zone total, 2012 dollars)	0, 0	NWS zone HIZ002 (KAUAI WINDWARD), zone-level	B1-c worst recorded: Drought
2012-03-09	Hail	0.75 in	\$0 property; \$0 crops (2012 dollars)	0, 0	KAPAA	B1-c worst recorded: Hail
2011-08-17	Wildfire		\$950,000 property; \$0 crops (zone total, 2011 dollars)	0, 0	NWS zone HIZ002 (KAUAI WINDWARD), zone-level	B1-c worst recorded: Wildfire
2006-03-13	Flash Flood		damage not reported	7, 0	HANALEI	deaths or injuries recorded
2005-01-08	Thunderstorm Wind	65 kt (75 mph) estimated gust	\$100,000 property; crops not reported (2005 dollars)	0, 0	KALAHEO	B1-c worst recorded: Thunderstorm Wind
2002-03-24	Tornado	F0, 1 mi within this county, 30 yd wide	\$60,000 property; crops not reported (2002 dollars)	0, 0	ANAHOLA	B1-c worst recorded: Tornado
1996-02-10	High Wind	109 kt (125 mph), measurement type not recorded	damage not reported	0, 0	NWS zone HIZ003 (KAUAI LEEWARD), zone-level	B1-c worst recorded: High Wind and Strong Wind

The full list is in the Excel file, sheet "B1-d Storm Events history" (374 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).

FEMA's declaration data list no tribal or special-area declarations for this state.

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
Coastal Flooding	0.26	events per year at a location (modeled)	about 0.26 per year at a given location in the county		Storm Events records in 0 of 30 years, 1996 to 2025 (0%)	not shown	modeled	see B1-f	No descriptor: no Storm Events record 1996 to 2025
Cold Wave	0	event-days per year	none modeled		Storm Events 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	4.18	event-days per year	about 4.18 days per year	Likely	Storm Events event-days in 18 of 30 years, 1996 to 2025 (60%)	329	2000 to 2025 (25.25 years; D3 and D4 only)	countywide	
Earthquake	0.000846	annual probability at a location	chance a given location in the county has at least minor-damage shaking in a year: 0.0846%			not shown	modeled	see B1-f	No descriptor (Storm Events does not record earthquakes).
Hail	0	events per year	none modeled	Unlikely	FEMA annualized frequency (modeled)	0.0 (modeled)	1986 to 2023 (38 years)	countywide	
Heat Wave	0	event-days per year	none modeled		Storm Events 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 heat wave record, 1996 to 2025
Hurricane	0.104	events per year	about 1 in 10 years	Likely	FEMA annualized frequency (modeled)	13	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	5.82	event-days per year	about 5.82 days per year	Highly likely	Storm Events event-days in 29 of 30 years, 1996 to 2025 (96.7%)	163	1996 to 2023 (28 years)	see B1-f	
Landslide	0.173	events per year (modeled)	about 1 in 6 years	Likely	FEMA annualized frequency (modeled)	not shown	modeled	see B1-f	
Lightning	78.7	days per year with a strike	about 78.7 days per year	Highly likely	FEMA annualized frequency (modeled)	not shown	1995 to 2023 (29 years; CONUS)	countywide	

Hazard	FEMA annualized frequency (modeled) <i>unit per row</i>	Unit	In plain terms	Descriptor	Descriptor basis	NRI events or days in its record period (hail, wind and tornado are area-weighted, so can be fractional)	NRI period	Location	Note
Strong Wind	0.00666	events per year	about 1 in 150 years	Unlikely	FEMA annualized frequency (modeled)	1	1986 to 2023 (38 years)	countywide	
Tornado	0.00838	events per year	about 1 in 119 years	Unlikely	FEMA annualized frequency (modeled)	not shown	1950 to 2023 (EF2+); 1986 to 2023 (EF0-1)	see B1-f	
Tsunami	0.664	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: 66.4%		Storm Events records in 0 of 30 years, 1996 to 2025 (0%)	not shown	modeled	see B1-f	No descriptor: no Storm Events record 1996 to 2025
Volcanic Activity	0	annual probability	none modeled	Unlikely	FEMA annualized frequency (modeled)	not shown	modeled	see B1-f	
Wildfire	0.00493	annual probability at a location	chance a given location in the county burns in a year: 0.493%	Likely	Storm Events records in 15 of 30 years, 1996 to 2025 (50%)	not shown	modeled	see B1-f	
Winter Weather		event-days per year		Possible			2005-11-12 to 2024-11-12 (19 years)	countywide	Not Applicable in NRI for this county; the descriptor comes from Storm Events, not NRI: event-days in 1 of 30 years, 1996 to 2025.

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.

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	0	30	0
Hail	2.00 in+	1996 to 2025	0	30	0
Thunderstorm Wind (counted as NRI Strong Wind)	50-64 kt	1996 to 2025	6	30	0.2
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	3	30	0.1
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	
Coastal Flooding	15 of 18	75.9	85.4	89.8	Relatively Moderate 2, Relatively Low 12, Very Low 1, No Rating 3
Cold Wave	0 of 18				No Rating 18
Drought	9 of 18	68.2	77.0	86.7	Relatively Low 3, Very Low 6, No Rating 9
Earthquake	17 of 18	6.8	23.1	68.9	Relatively Low 2, Very Low 15, No Rating 1
Hail	0 of 18				No Rating 18
Heat Wave	0 of 18				No Rating 18
Hurricane	18 of 18	25.2	57.1	68.1	Relatively Low 16, Very Low 2
Inland Flooding	17 of 18	52.8	96.1	99.9	Very High 9, Relatively High 7, Relatively Moderate 1, No Rating 1
Landslide	18 of 18	17.9	93.7	99.2	Relatively Moderate 7, Relatively Low 8, Very Low 3
Lightning	18 of 18	4.5	92.1	98.7	Very High 6, Relatively High 10, Relatively Moderate 1, Very Low 1
Strong Wind	18 of 18	0.3	4.2	8.2	Very Low 18
Tornado	18 of 18	0.2	1.6	2.7	Very Low 18
Tsunami	15 of 18	28.4	81.1	94.9	Relatively Moderate 8, Relatively Low 6, Very Low 1, No Rating 1, Not Applicable 2
Volcanic Activity	0 of 18				No Rating 18
Wildfire	18 of 18	38.3	94.4	98.2	Relatively High 6, Relatively Moderate 7, Relatively Low 4, Very Low 1
Winter Weather	0 of 18				Not Applicable 18

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, lightning and strong wind 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	Public Assistance to this jurisdiction	Event records naming this place
			FMA RL and SRL (44 CFR 77.2); repeat-flood, any definition	FEMA records matched by applicant name; federal share obligated, nominal dollars	all years; since its plan
Kauai County	County	Approved, expires 2031-04-30	FMA RL 7, SRL 6; any 56	no Public Assistance recorded	0 total; 0 since its plan

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

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 2026-05-01 <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
Coastal Flooding	\$2,905,770,454	n/a	9,715	\$140,052	n/a	\$306	0.00482%				
Cold Wave	\$0	\$0	0	\$0	\$0	\$0					building exposure is 0 in NRI
Drought	n/a	\$11,240,311	n/a	n/a	\$17,655	n/a	0.157% (agriculture)				NRI has no building exposure for this hazard; agriculture shown
Earthquake	\$27,617,944,173	n/a	73,298	\$182,819	n/a	\$27,363	0.000662%				
Hail	\$16,320,589,989	\$78,564,726	73,136	\$0	\$0	\$0	0%				
Heat Wave	\$0	\$0	0	\$0	\$0	\$0					building exposure is 0 in NRI
Hurricane	\$16,320,589,989	\$78,564,726	73,136	\$355,622	\$4,120	\$35,658	0.00218%			no Public Assistance recorded (1 declaration)	

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 2026-05-01 <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	\$16,304,355,663	\$4,199,853	7,516	\$34,837,858	\$202,000	\$12,627,240	n/a (see note)			no Public Assistance recorded (1 declaration)	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	\$730,235,142	n/a	3,598	\$165,966	n/a	\$104	0.0227%			no Public Assistance recorded (1 declaration)	
Lightning	\$16,320,589,989	n/a	73,136	\$46,506	n/a	\$959,605	0.000285%				
Strong Wind	\$16,320,589,989	\$78,564,726	73,136	\$2,058	\$120	\$3,630	under 0.0001%				
Tornado	\$16,320,589,989	\$78,564,726	73,136	\$4,753	\$28	\$195	under 0.0001%				
Tsunami	\$12,833,603,735	n/a	12,020	\$8,627,482	n/a	\$0	0.0672%				
Volcanic Activity	\$0	n/a	0	\$0	n/a	\$0					building exposure is 0 in NRI
Wildfire	\$2,177,143,213	\$25,778,002	13,815	\$2,456,564	\$367	\$160,020	0.113%				
Winter Weather											Not Applicable in NRI for this county

Totals since 2026-05-01 (Storm Events through 2026-06-30): 0 county-coded records, 0 with a damage value recorded (including \$0), \$0; 0 zone-level records, 0 with a damage value recorded (including \$0), \$0 reported for the zone; Public Assistance: none recorded on the 1 counted declaration.

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	73,136
Building value (total, not at risk)	\$16,320,589,989
Agriculture value (total, not at risk)	\$78,564,726
NRI risk rating (all hazards)	Relatively Moderate
Expected annual loss, buildings and agriculture, all hazards	\$47,043,969
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)	\$13,814,119
Social vulnerability rating	Relatively Low
Community resilience rating	Very High
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)	6
Repetitive loss, NFIP insurance definition	53	Severe repetitive loss, NFIP insurance definition	3

The state NFIP coordinator's list, the source FEMA's Handbook names, often uses the NFIP insurance definition (second row).

Repeat-flood properties: county total and NFIP communities

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	6	53	3	56	0	23
of which: Kauai County (unincorporated area)	7	6	53	3	56	0	23

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>
Kauai County	150002	7	6	53	3	56	0	23

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	3	38	1	40	0	17
2 to 4 unit residential	0	0	3	0	3	0	2
other residential	0	1	1	1	2	0	0
non-residential	1	2	11	1	11	0	4
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 47 properties are NFIP repetitive loss but not FMA repetitive loss.

Exact counts; no count suppression.

Sources

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

- 1. FEMA, OpenFEMA HazardMitigationPlanStatuses v1, version 2026-09-29T134039Z, pulled 2026-09-30, <https://www.fema.gov/api/open/v1/HazardMitigationPlanStatuses> (API)

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

What this packet is and what the plan adds

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

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

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

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