

Graham County, AZ

Risk-assessment baseline packet

County FIPS: 04009 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: No approved plan on record.
Update: FEMA tracker shows a plan in progress.
Highest expected annual loss (FEMA National Risk Index, modeled total; see B1-a): Inland Flooding (\$9,037,003 a year), Heat Wave (\$4,596,000) and Wildfire (\$2,202,447).
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; 04009 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:	No approved plan on record	Plan:	none
Approved:	none	Expires:	none
Update underway:	FEMA tracker shows a plan in progress		

FEMA's plan status data lists no approved plan for this jurisdiction.

What changed since your last plan

Not available. No approved plan on record, so there is no approval date to count from.

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	Update underway
Graham County	County	No approved plan on record	none	none	none		FEMA tracker shows a plan in progress
Pima town	Town	No approved plan on record	none	none	none		FEMA tracker shows a plan in progress
Safford city	City	No approved plan on record	none	none	none		FEMA tracker shows a plan in progress
Thatcher town	Town	No approved plan on record	none	none	none		FEMA tracker shows a plan in progress

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>	Storm Events coverage note
1	Inland Flooding	Relatively Low	Relatively Low	\$8,154,341	\$1,124	\$881,538	\$9,037,003	52	
2	Heat Wave	Relatively Moderate	Relatively Moderate	\$167	\$15,971	\$4,579,862	\$4,596,000	70	
3	Wildfire	Relatively Moderate	Relatively Moderate	\$2,046,814	\$447	\$155,186	\$2,202,447	51	
4	Lightning	Relatively High	Relatively High	\$4,372	n/a	\$1,147,961	\$1,152,333	2	
5	Drought	Relatively Moderate	Relatively Moderate	n/a	\$676,503	n/a	\$676,503	86	
6	Earthquake	Very Low	Very Low	\$147,955	n/a	\$37,094	\$185,049		Storm Events does not record earthquakes.
7	Winter Weather	Relatively Moderate	Relatively Moderate	\$1,161	under \$1	\$115,593	\$116,754	44	
8	Hail	Very Low	Very Low	\$61,019	\$37,119	\$633	\$98,770	13	
9	Strong Wind	Very Low	Very Low	\$45,730	\$6,014	\$43,072	\$94,816	112	Includes 21 High Wind and 4 Strong Wind records (NOAA non-thunderstorm wind types, outside NRI's Strong Wind definition).
10	Tornado	Very Low	Very Low	\$2,378	\$136	\$1,382	\$3,895	1	
11	Cold Wave	Very Low	Very Low	\$88	\$3	\$2,969	\$3,060	11	Includes 5 Frost/Freeze records (outside NRI's Cold Wave definition; counted in this table and in B1-d, not in the B1-e descriptor).
12	Hurricane	Very Low	Very Low	\$1,230	\$1,225	under \$1	\$2,455	0	No recorded events in Storm Events since 1996 (data through 2026-06-30).

Rank by EAL	Hazard	NRI risk rating	EAL rating	EAL buildings <i>modeled dollars per year</i>	EAL agriculture <i>modeled dollars per year</i>	Cost of expected deaths and injuries <i>FEMA's dollar value per year, not property damage</i>	EAL total (see note) <i>modeled dollars per year</i>	Storm Events records, 1996 to 2026-06-30 <i>count</i>	Storm Events coverage note
13	Landslide	Very Low	Very Low	\$304	n/a	\$304	\$608	1	
14	Avalanche	Very Low	Very Low	\$5	n/a	\$586	\$591	0	No recorded events in Storm Events since 1996 (data through 2026-06-30).

Total = buildings + agriculture + population equivalence; FEMA values each expected death (or 10 injuries) at \$13.7 million (2024 dollars).
NRI risk rating combines expected annual loss with social vulnerability and community resilience; EAL rating rates expected annual loss alone. Both compare this county with all U.S. counties.

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

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 9405 (Very Low, 46.1); tract 9611 (Very Low, 42.9); tract 9615 (Very Low, 42.6)
Earthquake	tract 9613 (Relatively Low, 62.1); tract 9615 (Relatively Low, 52.0); tract 9614 (Relatively Low, 48.6)
Hurricane	tract 9616 (Very Low, 32.2); tract 9611 (Very Low, 31.9); tract 9617 (Very Low, 27.5)
Landslide	tract 9616 (Relatively Low, 88.5); tract 9405 (Relatively Low, 88.0); tract 9617 (Very Low, 74.3)
Tornado	tract 9616 (Very Low, 3.6); tract 9612.02 (Very Low, 3.1); tract 9405 (Very Low, 2.5)
Wildfire	tract 9616 (Relatively High, 98.7); tract 9405 (Relatively High, 98.5); tract 9611 (Relatively High, 98.2)

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 9405 is Census Tract 9405). 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					
Cold/Wind Chill, Extreme Cold/Wind Chill	wind chill	6 records, 2011 to 2025 (6 zone-level)	1 day to 2 days (median 2 days); 4 with a recorded value	2 consecutive days, 2025-01-24 to 2025-01-25, 2 direct deaths, zone-level		Countywide (zone-level records).	
Frost/Freeze (outside NRI's Cold Wave definition)	crop damage	5 records, 2011 to 2023 (5 zone-level)		No crop damage reported in 5 records.	Frost/Freeze, 2011-02-02, \$1,000,000 property; \$0 crops (zone total, 2011 dollars)	Countywide (zone-level records).	
Drought	U.S. Drought Monitor scale (D0 to D4)	86 records, 2011 to 2026 (86 zone-level)	71 days to 437 days (median 277.5 days); 8 with a recorded value	437 days (about 14.4 months), 2014-02-18 to 2015-04-30, a run of 18 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)	19 records, 1958 to 2025	0.75 in to 4 in (median 1 in); 19 with a recorded value	4 in hail, 1958-03-12	Hail, 2016-10-08, \$1,500,000 property; \$4,500,000 crops (2016 dollars)	Event records naming jurisdictions in the plan: Safford city (4 records), Pima town (1 record), Thatcher town (1 record).	
Excessive Heat, Heat	heat index (in event narratives)	70 records, 2011 to 2026 (70 zone-level)	1 day to 14 days (median 2 days); 58 with a recorded value	14 consecutive days, 2023-07-15 to 2023-07-28, 1 direct death, zone-level		Countywide (zone-level records).	Heat records from November to March (unseasonable warmth, not a heat wave) are counted but not used for the longest run.
Hurricane, Tropical Storm, Tropical Depression	Saffir-Simpson	0					Storm Events files every zone of a storm's episode under the storm's type; flooding from the storm is filed as Flood or Flash Flood records.
Flash Flood, Flood, Lakeshore Flood	damage and flood days (flood depth: FIRM)	52 records, 1997 to 2024		Flash Flood, 2018-09-19, \$250,000 property; \$0 crops (2018 dollars)		Event records naming jurisdictions in the plan: Safford city (17 records), Pima town (5 records), Thatcher town (5 records).	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)	1 record, 2022		No damage reported in 1 record.		No event record names a jurisdiction in the plan.	

Hazard	Scale	Records <i>count and years</i>	Observed range	Worst recorded event	Most damaging (when different)	How it applies to jurisdictions	Note
Lightning	annualized frequency (the measure FEMA's Local Mitigation Planning Handbook names)	2 records, 2019 to 2021		Lightning, 2021-06-28, \$100,000 property; \$0 crops (2021 dollars)		Event records naming jurisdictions in the plan: Pima town (1 record).	Storm Events lists lightning with damage or casualties.
High Wind and Strong Wind (outside NRI's Strong Wind definition)	wind speed (kt and mph)	25 records, 2011 to 2026 (25 zone-level)	35 kt (40 mph) to 80 kt (92 mph) (median 54 kt (62 mph)); 25 with a recorded value	80 kt (92 mph) measured gust, High Wind, 2023-02-22; NWS zone AZZ509	Strong Wind, 2011-05-09, \$11,200,000 property; \$0 crops (zone total, 2011 dollars)	Countywide (zone-level records).	
Thunderstorm Wind	wind speed (kt and mph)	104 records, 1974 to 2025	49 kt (56 mph) to 69 kt (79 mph) (median 53 kt (61 mph)); 86 with a recorded value	69 kt (79 mph) measured, Thunderstorm Wind, 2002-07-12; same speed and measurement basis also recorded on 2001-08-10	Thunderstorm Wind, 2021-09-05, \$500,000 property; \$0 crops (2021 dollars)	Event records naming jurisdictions in the plan: Safford city (23 records), Pima town (3 records), Thatcher town (2 records).	
Tornado	Enhanced Fujita (Fujita before Feb 2007)	1 record, 2015	F/EF0; 1 with a recorded value	EF0 tornado, 2015-07-31, 0.58 mi within this county, 15 yd wide, \$0 property; \$0 crops (2015 dollars)		Event records naming jurisdictions in the plan: Safford city (1 record), Thatcher town (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).
Wildfire	acres burned (local data)	51 records, 2011 to 2025 (51 zone-level)		Wildfire, 2017-06-20, \$750,000 property; \$0 crops (2017 dollars); NWS zone AZZ507		Countywide (zone-level records).	
Winter Storm, Heavy Snow, Blizzard, Lake-Effect Snow, Winter Weather, Sleet	none in data (snowfall: local data)	44 records, 2010 to 2024 (44 zone-level)		Winter Storm, 2019-01-01, \$15,000 property; \$0 crops (2019 dollars); NWS zone AZZ509		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 avalanche, debris flow and lightning.

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: 13 declarations covering 10 separate hazard incidents counted in this packet (declarations for the same incident count once; non-natural and evacuation-only declarations are not counted).

No approved plan on record, so there is no approval date to count from.

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>	Notes
2020-04-04	2020-01-20	DR-4524-AZ	Major disaster	COVID-19 Pandemic	Non-natural, not counted	\$98,504.80	
2020-03-13	2020-01-20	EM-3442-AZ	Emergency	COVID-19	Non-natural, not counted	no Public Assistance recorded	same incident as DR-4524
2006-09-07	2006-07-25	DR-1660-AZ	Major disaster	Severe Storms and Flooding	Inland Flooding	\$254,134.99	
2005-09-12	2005-08-29	EM-3241-AZ	Emergency	Hurricane Katrina Evacuation	Hurricane: evacuation support, not a local hazard event; not counted	no Public Assistance recorded	
2005-04-14	2005-02-10	DR-1586-AZ	Major disaster	Severe Storms and Flooding	Inland Flooding	\$263,839.70	
1993-01-19	1993-01-05	DR-977-AZ	Major disaster	Severe Storms, Tornadoes & Flooding	Inland Flooding (primary); also designated: Tornado	no Public Assistance recorded	
1990-12-06	1990-07-08	DR-884-AZ	Major disaster	Severe Storms & Flooding	Inland Flooding	no Public Assistance recorded	
1983-10-05	1983-09-23	DR-691-AZ	Major disaster	Severe Storms & Flooding	Inland Flooding	no Public Assistance recorded	
1978-12-21	1978-12-21	DR-570-AZ	Major disaster	Severe Storms & Flooding	Inland Flooding	no Public Assistance recorded	
1978-03-04	1978-03-04	DR-551-AZ	Major disaster	Severe Storms & Flooding	Inland Flooding	no Public Assistance recorded	
1977-04-15	1977-04-15	EM-3038-AZ	Emergency	Drought	Drought	no Public Assistance recorded	
1972-10-25	1972-10-25	DR-360-AZ	Major disaster	Heavy Rains & Flooding	Inland Flooding	no Public Assistance recorded	
1966-04-30	1966-04-30	DR-217-AZ	Major disaster	Flooding	Inland Flooding	no Public Assistance recorded	

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

Statewide declarations

Source: 2

Declared	Incident began	FEMA number	Type	Title	Mapped hazard
2000-10-27	2000-10-21	DR-1347-AZ	Major disaster	Severe Storms and Flooding	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.

15 Fire Management declarations (1990-06-27 to 1996-06-24) 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 <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		1996 to 2026-06-30	No recorded events, 1996 to 2026-06-30, NOAA NCEI Storm Events
Cold Wave	11			5	0		1996 to 2026-06-30	Includes 5 Frost/Freeze records.
Drought	86			29	1		1996 to 2026-06-30	
Earthquake	0			0	0			Storm Events does not record earthquakes; the USGS earthquake catalog is the source.
Hail	19			3	0		1955 to 2026-06-30	
Heat Wave	70			37	0		1996 to 2026-06-30	
Hurricane	0			0	0		1996 to 2026-06-30	No recorded events, 1996 to 2026-06-30, NOAA NCEI Storm Events
Inland Flooding	52			3	9		1996 to 2026-06-30	
Landslide	1			1	0		1996 to 2026-06-30	
Lightning	2			0	0		1996 to 2026-06-30	
Strong Wind	129			24	0		1955 to 2026-06-30	Includes 21 High Wind and 4 Strong Wind records.
Tornado	1			0	1		1950 to 2026-06-30	
Wildfire	51			18	0		1996 to 2026-06-30	
Winter Weather	44			13	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	Flags	Why listed
2026-06-24	Excessive Heat		\$0 property; \$0 crops (zone total, 2026 dollars)	2, 0	NWS zone AZZ507 (UPPER SAN PEDRO RIVER VALLEY), zone-level	within last 5 years	deaths or injuries recorded
2024-07-10	Heat		\$0 property; \$0 crops (zone total, 2024 dollars)	2, 0	NWS zone AZZ509 (UPPER GILA RIVER AND ARAVAIPA VALLEYS), zone-level	within last 5 years	deaths or injuries recorded
2023-07-15	Excessive Heat		\$0 property; \$0 crops (zone total, 2023 dollars)	1, 0	NWS zone AZZ507 (UPPER SAN PEDRO RIVER VALLEY), zone-level	within last 5 years	B1-c worst recorded: Excessive Heat, Heat
2023-07-03	Excessive Heat		\$0 property; \$0 crops (zone total, 2023 dollars)	2, 0	NWS zone AZZ507 (UPPER SAN PEDRO RIVER VALLEY), zone-level	within last 5 years	deaths or injuries recorded
2023-02-22	High Wind	80 kt (92 mph) measured gust	\$0 property; \$0 crops (zone total, 2023 dollars)	0, 0	NWS zone AZZ509 (UPPER GILA RIVER AND ARAVAIPA VALLEYS), zone-level	within last 5 years	B1-c worst recorded: High Wind and Strong Wind
2021-06-28	Lightning		\$100,000 property; \$0 crops (2021 dollars)	0, 0	CENTRAL		B1-c worst recorded: Lightning
2019-01-01	Winter Storm		\$15,000 property; \$0 crops (zone total, 2019 dollars)	0, 0	NWS zone AZZ509 (UPPER GILA RIVER AND ARAVAIPA VALLEYS), zone-level		B1-c worst recorded: Winter Storm, Heavy Snow, Blizzard, Lake-Effect Snow, Winter Weather, Sleet
2018-09-19	Flash Flood		\$250,000 property; \$0 crops (2018 dollars)	0, 0	THATCHER		B1-c worst recorded: Flash Flood, Flood, Lakeshore Flood
2017-06-20	Wildfire		\$750,000 property; \$0 crops (zone total, 2017 dollars)	0, 0	NWS zone AZZ507 (UPPER SAN PEDRO RIVER VALLEY), zone-level		B1-c worst recorded: Wildfire
2014-02-18	Drought		\$0 property; crops not reported (zone total, 2014 dollars)	0, 0	NWS zone AZZ507 (UPPER SAN PEDRO RIVER VALLEY), zone-level		B1-c worst recorded: Drought
2002-07-12	Thunderstorm Wind	69 kt (79 mph) measured	\$0 property; \$0 crops (2002 dollars)	0, 0	SAFFORD ARPT		B1-c worst recorded: Thunderstorm Wind
1958-03-12	Hail	4 in	damage not recorded (pre-1996 record)	0, 0	location not recorded		B1-c worst recorded: Hail

The full list is in the Excel file, sheet "B1-d Storm Events history" (466 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.
Cold Wave	0.0169	event-days per year	about 0.0169 days per year	Likely	Storm Events event-days in 3 of 30 years, 1996 to 2025 (10%)	0.32	2005-11-12 to 2024-11-12 (19 years)	countywide	
Drought	85.2	event-days per year	about 85.2 days per year	Likely	Storm Events event-days in 11 of 30 years, 1996 to 2025 (36.7%)	3,143	2000 to 2025 (25.25 years; D3 and D4 only)	countywide	
Earthquake	0.00118	annual probability at a location	chance a given location in the county has at least minor-damage shaking in a year: 0.118%			not shown	modeled	see B1-f	No descriptor (Storm Events does not record earthquakes).
Hail	0.187	events per year	about 1 in 5 years	Likely	FEMA annualized frequency (modeled)	7.1 (modeled)	1986 to 2023 (38 years)	countywide	
Heat Wave	4.85	event-days per year	about 4.85 days per year	Likely	Storm Events event-days in 11 of 30 years, 1996 to 2025 (36.7%)	53.1	2005-11-12 to 2024-11-12 (19 years)	countywide	
Hurricane	0.0226	events per year	about 1 in 44 years	Possible	FEMA annualized frequency (modeled)	3	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	1.71	event-days per year	about 1.71 days per year	Likely	Storm Events event-days in 21 of 30 years, 1996 to 2025 (70%)	48	1996 to 2023 (28 years)	see B1-f	
Landslide	1.96	events per year (modeled)	about 1.96 per year	Highly likely	FEMA annualized frequency (modeled)	not shown	modeled	see B1-f	
Lightning	57.8	days per year with a strike	about 57.8 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	0.483	events per year	about 1 in 2 years	Likely	FEMA annualized frequency (modeled)	19	1986 to 2023 (38 years)	countywide	
Tornado	0.0888	events per year	about 1 in 11 years	Possible	FEMA annualized frequency (modeled)	not shown	1950 to 2023 (EF2+); 1986 to 2023 (EF0-1)	see B1-f	
Wildfire	0.00556	annual probability at a location	chance a given location in the county burns in a year: 0.556%	Likely	Storm Events records in 10 of 30 years, 1996 to 2025 (33.3%)	not shown	modeled	see B1-f	
Winter Weather	7.08	event-days per year	about 7.08 days per year	Likely	Storm Events event- days in 15 of 30 years, 1996 to 2025 (50%)	134	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	6	30	0.2
Hail	2.00 in+	1996 to 2025	2	30	0.0667
Thunderstorm Wind (counted as NRI Strong Wind)	50-64 kt	1996 to 2025	79	30	2.63
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	6	30	0.2
Tornado	EF0-1	1996 to 2025	1	30	0.0333
Tornado	EF2-3	1996 to 2025	0	30	0
Tornado	EF4-5	1996 to 2025	0	30	0
Tornado	unrated (EFU)	1996 to 2025	0	30	0

The bands show how often events of each severity were recorded in this county, to profile how severe events have been (FEMA's probability item asks for the range of intensities).

Hail smaller than 1 inch is not counted: on 2010-01-05 the National Weather Service raised its severe-hail threshold from 3/4 inch to 1 inch, so smaller reports became less common after 2009 (NWS Service Change Notice 09-52). NRI hail frequency uses a 0.75 inch threshold.

Optional: future conditions. Not a required item in the 2025 FEMA Local Mitigation Planning Policy Guide; some states ask for it. The federal Climate Mapping for Resilience and Adaptation (CMRA) site gives county exposure to future climate conditions (<https://resilience.climate.gov/>).

Supports FEMA checklist item B1-f: hazards that vary across jurisdictions

Range of census tract risk within the county

Source: 5

Hazard	Tracts <i>rated of all</i>	NRI risk score, 0 to 100			Tracts by rating
		Min	Median	Max	
Avalanche	5 of 9	40.4	42.6	46.1	Very Low 5, Not Applicable 4
Cold Wave	4 of 9	15.5	17.0	17.5	Very Low 4, No Rating 5
Drought	9 of 9	78.5	92.4	98.1	Relatively High 2, Relatively Moderate 3, Relatively Low 3, Very Low 1
Earthquake	9 of 9	20.8	43.7	62.1	Relatively Low 5, Very Low 4
Hail	9 of 9	49.4	54.6	78.0	Relatively Moderate 2, Relatively Low 7
Heat Wave	9 of 9	95.5	97.8	98.9	Very High 6, Relatively High 3
Hurricane	9 of 9	19.4	24.4	32.2	Very Low 9
Inland Flooding	9 of 9	42.3	77.4	94.3	Relatively High 4, Relatively Moderate 4, Relatively Low 1
Landslide	8 of 9	8.8	67.0	88.5	Relatively Low 2, Very Low 6, No Rating 1
Lightning	9 of 9	97.4	99.5	99.8	Very High 9
Strong Wind	9 of 9	29.2	41.1	53.4	Relatively Low 9

Hazard	Tracts <i>rated of all</i>	NRI risk score, 0 to 100			Tracts by rating
		Min	Median	Max	
Tornado	9 of 9	1.0	1.7	3.6	Very Low 9
Wildfire	9 of 9	73.7	96.5	98.7	Relatively High 5, Relatively Moderate 3, Relatively Low 1
Winter Weather	9 of 9	79.6	90.8	94.6	Relatively High 9

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 cold wave, 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	Public Assistance to this jurisdiction	Event records naming this place
			<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>
Graham County	County	No approved plan on record	FMA RL 0, SRL 0; any 1	\$157,551.21	0 total; no approved plan
Pima town	Town	No approved plan on record	FMA RL 0, SRL 0; any 0	\$30,550.56	10 total; no approved plan
Safford city	City	No approved plan on record	FMA RL 0, SRL 1; any 2	no Public Assistance recorded	45 total; no approved plan
Thatcher town	Town	No approved plan on record	FMA RL 0, SRL 0; any 0	no Public Assistance recorded	9 total; no approved 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.

No approved plan on record, so there is no approval date to count from.

- 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 plan <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	\$6,802,486	n/a	1	\$5	n/a	\$586	under 0.0001%				
Cold Wave	\$202,285,611	\$851,658	337	\$88	\$3	\$2,969	under 0.0001%				
Drought	n/a	\$44,575,658	n/a	n/a	\$676,503	n/a	1.52% (agriculture)				NRI has no building exposure for this hazard; agriculture shown
Earthquake	\$10,926,179,138	n/a	38,533	\$147,955	n/a	\$37,094	0.00135%				
Hail	\$6,305,824,046	\$79,930,432	38,453	\$61,019	\$37,119	\$633	0.000968%				
Heat Wave	\$6,305,824,046	\$79,930,432	38,453	\$167	\$15,971	\$4,579,862	under 0.0001%				
Hurricane	\$6,305,566,646	\$79,606,928	38,453	\$1,230	\$1,225	under \$1	under 0.0001%				
Inland Flooding	\$6,305,605,598	\$29,235,570	2,530	\$8,154,341	\$1,124	\$881,538	n/a (see note)				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	\$52,557,468	n/a	166	\$304	n/a	\$304	0.000578%				
Lightning	\$6,305,824,046	n/a	38,453	\$4,372	n/a	\$1,147,961	under 0.0001%				
Strong Wind	\$6,305,824,046	\$79,930,432	38,453	\$45,730	\$6,014	\$43,072	0.000725%				
Tornado	\$6,305,824,046	\$79,930,432	38,453	\$2,378	\$136	\$1,382	under 0.0001%				

Hazard	Building exposure <i>modeled dollars</i>	Agriculture exposure <i>modeled dollars</i>	Population exposed <i>people</i>	EAL buildings <i>modeled dollars per year</i>	EAL agriculture <i>modeled dollars per year</i>	Cost of expected deaths and injuries <i>FEMA's dollar value per year, not property damage</i>	EAL as % of exposure <i>buildings; agriculture where noted</i>	Storm Events damage since plan <i>county-coded records, property plus crops, nominal dollars</i>	Zone-level damage since plan <i>property plus crops, reported for the zone</i>	Public Assistance since plan <i>nominal dollars; see note</i>	Note
Wildfire	\$1,650,520,057	\$31,341,220	16,493	\$2,046,814	\$447	\$155,186	0.124%				
Winter Weather	\$6,305,824,046	\$79,930,432	38,453	\$1,161	under \$1	\$115,593	under 0.0001%				

Totals since the plan: not available. No approved plan on record, so there is no approval date to count from.

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	38,453
Building value (total, not at risk)	\$6,305,824,046
Agriculture value (total, not at risk)	\$79,930,432
NRI risk rating (all hazards)	Relatively Low
Expected annual loss, buildings and agriculture, all hazards	\$11,204,104
Expected annual loss, population equivalence, all hazards (NRI values each statistical life at \$13.7M; a modeled value of expected deaths and injuries, not property damage)	\$6,966,180
Social vulnerability rating	Relatively High
Community resilience rating	Very Low
NRI version	December 2025

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

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

Supports FEMA checklist item B2-c: repetitive loss properties

Repetitive loss in this county, both definitions

Sources: 1, 4

Definition	Properties	Severe repetitive loss	Properties
Repetitive loss, FMA definition (44 CFR 77.2)	0	Severe repetitive loss, FMA definition (44 CFR 77.2)	1
Repetitive loss, NFIP insurance definition	3	Severe repetitive loss, NFIP insurance definition	1

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

Repeat-flood properties: county and state-level rows

Sources: 1, 4

Scope	RL, FMA <i>properties</i>	SRL, FMA <i>properties</i>	RL, NFIP <i>properties</i>	SRL, NFIP <i>properties</i>	Any category <i>properties</i>	Mitigated <i>properties</i>	Currently insured <i>properties</i>
County total	0	1	3	1	3	0	0
of which: Graham County (unincorporated area)	0	0	1	0	1	0	0
of which: Safford city	0	1	2	1	2	0	0
Statewide, no county in FEMA's file	0	1	0	0	1	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>
Graham County	040032	0	0	1	0	1	0	0
Pima town	040033	0	0	0	0	0	0	0
Safford city	040124	0	1	2	1	2	0	0
Thatcher town	040117	0	0	0	0	0	0	0

Counts by occupancy group for each jurisdiction are in the Excel file, sheet "B2-c Jurisdictions".

Jurisdiction rows are whole NFIP communities and need not add up to the county total: a community that extends into another county is counted in full on each jurisdiction row, while the county table counts only its part in this county.

County repeat-flood properties by occupancy group

Sources: 1, 4

Occupancy group	RL, FMA <i>properties</i>	SRL, FMA <i>properties</i>	RL, NFIP <i>properties</i>	SRL, NFIP <i>properties</i>	Any category <i>properties</i>	Mitigated <i>properties</i>	Currently insured <i>properties</i>
single-family residential	0	1	3	1	3	0	0
2 to 4 unit residential	0	0	0	0	0	0	0
other residential	0	0	0	0	0	0	0
non-residential	0	0	0	0	0	0	0
not reported	0	0	0	0	0	0	0

FEMA's occupancy groups have no institutional class; institutional properties are counted in non-residential or other residential in the table by occupancy group.

FMA RL and FMA SRL are the Flood Mitigation Assistance definitions (44 CFR 77.2), the ones the FEMA Local Mitigation Planning Policy Guide cites. NFIP repetitive loss (the FEMA insurance definition) is 2 or more claims over \$1,000 in 10 years, and a property can leave that group once it is mitigated. Also shown: NFIP severe repetitive loss, any category, mitigated and currently insured. The Methods page gives the OpenFEMA field details.

Counts are aggregates of FEMA's public NFIP Multiple Loss Properties file (FEMA's data date 2026-08-02; file version 2026-08-04). No property is identified. County assignment is FEMA's geocode.

In this county 0 properties are FMA repetitive loss but not NFIP repetitive loss, and 3 properties are NFIP repetitive loss but not FMA repetitive loss.

Exact counts; no count suppression.

Sources

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

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

What this packet is and what the plan adds

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

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

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

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

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Cite this: Hazard Plain (2026). Graham County, AZ: risk-assessment baseline packet, release 2026-10 (data as of 2026-09-30; County FIPS 04009). Automated baseline. <https://hazardplain.org/az/04009/> Built from FEMA OpenFEMA, the FEMA National Risk Index and NOAA NCEI Storm Events; source versions in the packet's Sources list.

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