

Hardeman County, TX

Risk-assessment baseline packet

County FIPS: 48197 Release: 2026-10 Data as of: 2026-09-30 Storm Events data through: 2026-06-30

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

Summary

Plan status as of 2026-09-30: Expired on 2025-05-31. Plan: Hardeman County (FEMA plan 105920), approved 2020-06-01.
Update: FEMA tracker shows a plan in progress.
Since the plan was approved on 2020-06-01: 2 new hazard declarations (1 incident): EM-3554-TX (Severe Winter Storm), DR-4586-TX (Severe Winter Storms).
NOAA Storm Events records since that date: 138 records (data through 2026-06-30).
Highest expected annual loss (FEMA National Risk Index, modeled total; see B1-a): Drought (\$628,397 a year), Strong Wind (\$530,071) and Tornado (\$395,071).
Repetitive-loss flood properties now: FMA RL 0, SRL 0 (44 CFR 77.2); any definition: 0.
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; 48197 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.

CONTENTS

1. Summary and terms used, page 1
2. Plan clock, page 2
3. What changed since your last plan (approved 2020-06-01), page 2
4. Supports FEMA checklist item B1-a: hazard identification, page 3
5. Supports FEMA checklist item B1-b: hazard location, page 4
6. Supports FEMA checklist item B1-c: hazard extent, page 5
7. Supports FEMA checklist item B1-d: previous occurrences, page 7
8. Supports FEMA checklist item B1-e: probability of future events, page 11
9. Supports FEMA checklist item B1-f: hazards that vary across jurisdictions, page 13
10. Supports FEMA checklist items B2-a and B2-b: vulnerability and potential impacts, page 15
11. Supports FEMA checklist item B2-a: vulnerability (county context), page 16
12. Supports FEMA checklist item B2-c: repetitive loss properties, page 17
13. Sources, what the plan adds, disclaimer and citation, page 18

Plan clock

Status:Expired on 2025-05-31

Plan:Hardeman County (FEMA plan 105920)

Approved:2020-06-01

Days since expiry:487

Update underway:FEMA tracker shows a plan in progress

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

What changed since your last plan (approved 2020-06-01)

New federal declarations:2 new hazard declarations (1 incident): EM-3554-TX (Severe Winter Storm), DR-4586-TX (Severe Winter Storms)

Storm Events records since approval:138 records (data through 2026-06-30)

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

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	Update underway
Hardeman County	County	Expired on 2025-05-31	Hardeman County (FEMA plan 105920)	2020-06-01	2025-05-31	-487	FEMA tracker shows a plan in progress
Chillicothe city	City	Expired on 2025-05-31	Hardeman County (FEMA plan 105920)	2020-06-01	2025-05-31	-487	FEMA tracker shows a plan in progress
Quanah city	City	Expired on 2025-05-31	Hardeman County (FEMA plan 105920)	2020-06-01	2025-05-31	-487	FEMA tracker shows a plan in progress
Chillicothe Independent School District	School/School District	No approved plan on record	none	none	none		FEMA tracker shows a plan in progress
Quanah Independent School District	School/School District	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	Drought	Relatively Moderate	Relatively Moderate	n/a	\$628,397	n/a	\$628,397	126	
2	Strong Wind	Relatively Moderate	Relatively Low	\$467,322	\$4,651	\$58,098	\$530,071	114	Includes 23 High Wind and 1 Strong Wind records (NOAA non-thunderstorm wind types, outside NRI's Strong Wind definition).
3	Tornado	Relatively Low	Relatively Low	\$238,943	\$822	\$155,306	\$395,071	13	
4	Inland Flooding	Very Low	Very Low	\$379,839	\$61	\$748	\$380,648	8	
5	Hail	Relatively Low	Relatively Low	\$164,683	\$65,993	\$13,279	\$243,955	215	
6	Heat Wave	Very Low	Very Low	\$16	\$1,071	\$102,912	\$103,998	18	
7	Ice Storm	Relatively Moderate	Relatively Low	\$82,215	n/a	\$5,745	\$87,960	8	
8	Cold Wave	Very Low	Very Low	\$2,247	\$21,836	\$42,552	\$66,634	3	Includes 1 Frost/Freeze record (outside NRI's Cold Wave definition; counted in this table and in B1-d, not in the B1-e descriptor).
9	Wildfire	Very Low	Very Low	\$54,279	\$125	\$2,239	\$56,644	2	
10	Earthquake	Very Low	Very Low	\$17,921	n/a	\$3,933	\$21,854		Storm Events does not record earthquakes.
11	Winter Weather	Very Low	Relatively Low	\$7,419	\$189	\$4,740	\$12,348	30	
12	Lightning	Very Low	Very Low	\$4,360	n/a	\$3,053	\$7,412	1	

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	Hurricane	Very Low	Very Low	\$3,062	\$1,249	\$17	\$4,328	0	No recorded events in Storm Events since 1996 (data through 2026-06-30).
14	Landslide	Very Low	Very Low	\$1	n/a	\$52	\$54	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.

Local data needed: state and local landslide records (Storm Events records this hazard only in part).

Not applicable to this county per NRI, with no federal declaration and no Storm Events record since 1996: avalanche, coastal flooding, 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, Ice Storm, Lightning, Strong Wind and Winter Weather.

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

NRI rating of the county's single census tract

Source: 5

Hazard	Census tract <i>NRI risk rating, score 0 to 100</i>
Earthquake	tract 9501 (Relatively Low, 53.9)
Hurricane	tract 9501 (Very Low, 49.9)
Landslide	tract 9501 (Very Low, 80.1)
Tornado	tract 9501 (Very High, 97.5)
Wildfire	tract 9501 (Relatively Moderate, 94.4)

A tract number is the Census tract number (for example 9501 is Census Tract 9501). 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
Cold/Wind Chill, Extreme Cold/Wind Chill	wind chill	2 records, 2021 to 2024 (2 zone-level)	3 days to 4 days (median 3.5 days); 2 with a recorded value	4 consecutive days, 2024-01-13 to 2024-01-16, zone-level		Countywide (zone-level records).	Wind chill: in event narratives only (local data needed).
Frost/Freeze (outside NRI's Cold Wave definition)	crop damage	1 record, 2024 (1 zone-level)		No crop damage reported in 1 record.		Countywide (zone-level records).	Temperature: in event narratives only (local data needed).
Drought	U.S. Drought Monitor scale (D0 to D4)	126 records, 2000 to 2026 (126 zone-level)	7 days to 1,156 days (median 62 days); 20 with a recorded value	1156 days (38 months), 2012-04-01 to 2015-05-31, a run of 38 consecutive Storm Events drought records, zone-level	Drought, 2006-08-01, \$20,000 property; \$500,000 crops, reported for the zone (2006 dollars)	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)	284 records, 1961 to 2026 (1 zone-level)	0.75 in to 5 in (median 1 in); 283 with a recorded value	5 in hail, 1971-06-08	Hail, 1993-10-12, \$50,000 property; crops not recorded (1993 dollars)	Event records naming jurisdictions in the plan: Quanah city (107 records), Chillicothe city (63 records). Zone-level records (1) apply countywide.	
Excessive Heat, Heat	heat index (in event narratives)	18 records, 2006 to 2026 (18 zone-level)	1 day to 21 days (median 1.5 days); 10 with a recorded value	July 2006 (1 monthly summary record), zone-level		Countywide (zone-level records).	Heat index: in event narratives only (local data needed).
Hurricane, Tropical Storm, Tropical Depression	Saffir-Simpson	0					Storm Events files every zone of a storm's episode under the storm's type; flooding from the storm is filed as Flood or Flash Flood records.
Ice Storm	Sperry-Piltz ice scale (local data)	8 records, 1998 to 2020 (8 zone-level)		No damage reported in 8 records.		Countywide (zone-level records).	Ice thickness: in event narratives only (local data needed).

Hazard	Scale	Records <i>count and years</i>	Observed range	Worst recorded event	Most damaging (when different)	How it applies to jurisdictions	Note
Flash Flood, Flood, Lakeshore Flood	damage and flood days (flood depth: FIRM)	8 records, 2000 to 2015		No damage reported in 8 records.		Event records naming jurisdictions in the plan: Quanah city (5 records), Chillicothe city (3 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)	0					Physical measure: in event narratives only (local data needed).
Lightning	annualized frequency (the measure FEMA's Local Mitigation Planning Handbook names)	1 record, 2001		Lightning, 2001-08-09, \$2,000 property; crops not reported (2001 dollars)		Event records naming jurisdictions in the plan: Quanah 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)	24 records, 1996 to 2026 (24 zone-level)	35 kt (40 mph) to 67 kt (77 mph) (median 51.5 kt (59 mph)); 18 with a recorded value	67 kt (77 mph) measured gust, High Wind, 2023-02-26; NWS zone TXZ083	High Wind, 2008-01-29, \$5,000 property; \$0 crops, reported for the zone (2008 dollars)	Countywide (zone-level records).	
Thunderstorm Wind	wind speed (kt and mph)	130 records, 1956 to 2026	50 kt (58 mph) to 87 kt (100 mph) (median 54 kt (62 mph)); 104 with a recorded value	87 kt (100 mph) measured, Thunderstorm Wind, 2001-05-29	Thunderstorm Wind, 2001-05-29, \$300,000 property; crops not reported (2001 dollars)	Event records naming jurisdictions in the plan: Quanah city (30 records), Chillicothe city (28 records).	Speeds under 20 kt (likely entry errors) are left out of the observed range.
Tornado	Enhanced Fujita (Fujita before Feb 2007)	42 records, 1954 to 2021	F/EF0 to F/EF2 (median F/EF0); 36 with a recorded value	F2 tornado, 1970-08-18, 0.8 mi path length (whole path, pre-1996), 440 yd wide, \$25,000 property; crops not recorded (1970 dollars), 1 direct injury	Tornado, 2003-04-15, \$75,000 property; crops not reported (2003 dollars)	Event records naming jurisdictions in the plan: Chillicothe city (8 records), Quanah city (3 records).	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).

Hazard	Scale	Records <i>count and years</i>	Observed range	Worst recorded event	Most damaging (when different)	How it applies to jurisdictions	Note
Wildfire	acres burned (local data)	2 records, 2019 to 2023 (2 zone-level)		Wildfire, 2019-08-16, \$2,200,000 property; \$0 crops (2019 dollars); NWS zone TXZ083		Countywide (zone-level records).	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)	30 records, 1997 to 2026 (30 zone-level)		Winter Storm, 2000-12-26, \$25,000 property; crops not reported (2000 dollars); NWS zone TXZ083		Countywide (zone-level records).	Snow depth: in event narratives only (local data needed).

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

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

A monthly summary record covers most or all of a month; it does not count days at wave conditions.

Supports FEMA checklist item B1-d: previous occurrences

Federal declarations for this county: 16 declarations covering 9 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
2021-02-19	2021-02-11	DR-4586-TX	Major disaster	Severe Winter Storms	Ice Storm	no Public Assistance recorded	new since last plan	
2021-02-14	2021-02-11	EM-3554-TX	Emergency	Severe Winter Storm	Ice Storm	no Public Assistance recorded	new since last plan	same incident as DR-4586
2020-03-25	2020-01-20	DR-4485-TX	Major disaster	COVID-19 Pandemic	Non-natural, not counted	no Public Assistance recorded	in the 12 months before plan approval	
2020-03-13	2020-01-20	EM-3458-TX	Emergency	COVID-19	Non-natural, not counted	no Public Assistance recorded	in the 12 months before plan approval	same incident as DR-4485
2019-08-18	2019-08-16	FM-5288-TX	Fire management	Copper Breaks Fire	Wildfire	no Public Assistance recorded	in the 12 months before plan approval	
2016-02-09	2015-12-26	DR-4255-TX	Major disaster	Severe Winter Storms, Tornadoes, Straight-Line Winds, and Flooding	Inland Flooding; Strong Wind; Tornado; Winter Weather	\$33,696.56		
2011-07-01	2011-04-06	DR-1999-TX	Major disaster	Wildfires	Wildfire	no Public Assistance recorded		
2008-03-14	2008-03-14	EM-3284-TX	Emergency	Wildfires	Wildfire	no Public Assistance recorded		

Declared	Incident began	FEMA number	Type	Title	Mapped hazard	County Public Assistance	Flags	Notes
						<i>federal share obligated, nominal dollars</i>		
2006-01-11	2005-11-27	DR-1624-TX	Major disaster	Extreme Wildfire Threat	Wildfire	\$2,112.16		
2005-09-24	2005-09-23	DR-1606-TX	Major disaster	Hurricane Rita	Hurricane: evacuation support (county designated for sheltering evacuees, no Individual Assistance), not a local hazard event; not counted	no Public Assistance recorded		
2005-09-21	2005-09-20	EM-3261-TX	Emergency	Hurricane Rita	Hurricane: evacuation support (county designated for sheltering evacuees, no Individual Assistance), not a local hazard event; not counted	no Public Assistance recorded		same incident as DR-1606
2005-09-02	2005-08-29	EM-3216-TX	Emergency	Hurricane Katrina Evacuation	Hurricane: evacuation support, not a local hazard event; not counted	no Public Assistance recorded		
1999-09-01	1999-08-01	EM-3142-TX	Emergency	Extreme Fire Hazards	Wildfire	no Public Assistance recorded		
1998-08-26	1998-08-22	DR-1239-TX	Major disaster	Tropical Storm Charley	Hurricane; Inland Flooding: designated for Hazard Mitigation only (no Public or Individual Assistance for this county); not counted	PA not declared for this county		
1996-02-23	1996-02-23	EM-3117-TX	Emergency	Extreme Fire Hazard	Wildfire	no Public Assistance recorded		
1993-09-10	1993-08-30	EM-3113-TX	Emergency	Extreme Fire Hazard	Drought (primary); also designated: Wildfire	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
1998-06-23	1998-06-04	EM-3127-TX	Emergency	Fire	Wildfire
1963-09-24	1963-09-24	DR-159-TX	Major disaster	Hurricane Cindy	Hurricane (primary); also designated: Inland Flooding
1961-09-16	1961-09-16	DR-118-TX	Major disaster	Hurricane Carla	Hurricane (primary); also designated: Inland Flooding
1960-07-15	1960-07-15	DR-103-TX	Major disaster	Heavy Rains, Hail, Floods & Tornadoes	Hail; Inland Flooding; Tornado
1959-07-08	1959-07-08	DR-93-TX	Major disaster	Floods	Inland Flooding
1958-06-06	1958-06-06	DR-85-TX	Major disaster	Tornadoes, Rain, Hail & Floods	Tornado (primary); also designated: Hail, Inland Flooding
1957-04-29	1957-04-29	DR-72-TX	Major disaster	Hurricane, Rain, Wind, Hail & Floods	Hurricane (primary); also designated: Hail, Inland Flooding
1954-07-01	1954-07-01	DR-18-TX	Major disaster	Flood	Inland Flooding
1953-06-19	1953-06-19	DR-9-TX	Major disaster	Flood	Inland Flooding
1953-05-15	1953-05-15	DR-2-TX	Major disaster	Tornado & Heavy Rainfall	Tornado

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.

91 Fire Management declarations (1988-03-12 to 2009-04-10) FEMA filed as Statewide with no county; each names one local fire. Listed on the state page.

Public Assistance not placed in any Texas county: 1 row, \$902,084.65; listed on the Texas state page.

Source: 3

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
Cold Wave	3	3	0	2	0	0	1996 to 2026-06-30	Includes 1 Frost/Freeze record.
Drought	126	44	2	40	1	0	1996 to 2026-06-30	
Earthquake	0	0	0	0	0	0		Storm Events does not record earthquakes; the USGS earthquake catalog is the source.
Hail	284	25	8	17	0	0	1955 to 2026-06-30	
Heat Wave	18	17	0	17	0	0	1996 to 2026-06-30	
Hurricane	0	0	0	0	0	0	1996 to 2026-06-30	No recorded events, 1996 to 2026-06-30, NOAA NCEI Storm Events
Ice Storm	8	1	0	0	1	1	1996 to 2026-06-30	
Inland Flooding	8	0	0	0	1	0	1996 to 2026-06-30	
Landslide	0	0	0	0	0	0	1996 to 2026-06-30	No recorded events, 1996 to 2026-06-30, NOAA NCEI Storm Events
Lightning	1	0	0	0	0	0	1996 to 2026-06-30	
Strong Wind	154	36	1	33	1	0	1955 to 2026-06-30	Includes 23 High Wind and 1 Strong Wind records.
Tornado	42	6	0	0	1	0	1950 to 2026-06-30	
Wildfire	2	1	1	1	7	0	1996 to 2026-06-30	
Winter Weather	30	5	0	4	1	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
2024-01-13	Cold/Wind Chill		damage not reported	0, 0	NWS zone TXZ083 (HARDEMAN), zone-level	new since last plan; within last 5 years	B1-c worst recorded: Cold/Wind Chill, Extreme Cold/Wind Chill
2023-02-26	High Wind	67 kt (77 mph) measured gust	damage not reported	0, 0	NWS zone TXZ083 (HARDEMAN), zone-level	new since last plan; within last 5 years	B1-c worst recorded: High Wind and Strong Wind
2019-08-16	Wildfire		\$2,200,000 property; \$0 crops, reported for the zone (2019 dollars)	0, 0	NWS zone TXZ083 (HARDEMAN), zone-level	in the 12 months before plan approval	B1-c worst recorded: Wildfire
2012-04-01	Drought		damage not reported	0, 0	NWS zone TXZ083 (HARDEMAN), zone-level		B1-c worst recorded: Drought
2006-08-01	Drought		\$20,000 property; \$500,000 crops, reported for the zone (2006 dollars)	0, 0	NWS zone TXZ083 (HARDEMAN), zone-level		B1-c most damaging: Drought
2006-07-11	Heat		damage not reported	0, 0	NWS zone TXZ083 (HARDEMAN), zone-level		B1-c worst recorded: Excessive Heat, Heat
2001-08-09	Lightning		\$2,000 property; crops not reported (2001 dollars)	0, 0	QUANAH		B1-c worst recorded: Lightning
2001-05-29	Tornado	F1, 8 mi within this county, 660 yd wide	\$60,000 property; crops not reported (2001 dollars)	0, 1	QUANAH		deaths or injuries recorded
2001-05-29	Thunderstorm Wind	87 kt (100 mph) measured	damage not reported	0, 0	CHILLICOTHE		B1-c worst recorded: Thunderstorm Wind
2000-12-26	Winter Storm		\$25,000 property; crops not reported, reported for the zone (2000 dollars)	0, 0	NWS zone TXZ083 (HARDEMAN), zone-level		B1-c worst recorded: Winter Storm, Heavy Snow, Blizzard, Lake-Effect Snow, Winter Weather, Sleet
1971-06-08	Hail	5 in	damage not recorded (pre-1996 record)	0, 0	location not recorded		B1-c worst recorded: Hail
1970-08-18	Tornado	F2, 0.8 mi path length (whole path, pre-1996), 440 yd wide	\$25,000 property; crops not recorded (1970 dollars)	0, 1	location not recorded		deaths or injuries recorded

The full list is in the Excel file, sheet "B1-d Storm Events history" (676 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
Cold Wave	1.21	event-days per year	about 1.21 days per year	Possible (from Storm Events: 2 of 30 years)	event-days in 2 of 30 years, 1996 to 2025 (6.67%)	23	2005-11-12 to 2024-11-12 (19 years)	countywide	
Drought	150	event-days per year	about 150 days per year	Likely (from Storm Events: 18 of 30 years)	event-days in 18 of 30 years, 1996 to 2025 (60%)	3,780	2000 to 2025 (25.25 years; D3 and D4 only)	countywide	
Earthquake	0.000818	annual probability at a location	chance a given location in the county has at least minor-damage shaking in a year: 0.0818%			not shown	modeled	see B1-f	No descriptor (Storm Events does not record earthquakes).
Hail	7.65	events per year	about 7.65 per year	Highly likely	FEMA annualized frequency (modeled)	290.7 (modeled)	1986 to 2023 (38 years)	countywide	
Heat Wave	11.2	event-days per year	about 11.2 days per year	Likely (from Storm Events: 3 of 30 years)	event-days in 3 of 30 years, 1996 to 2025 (10%)	162	2005-11-12 to 2024-11-12 (19 years)	countywide	
Hurricane	0.00944	events per year	about 1 in 106 years	Unlikely	FEMA annualized frequency (modeled)	0	1851 to 2024 (Atlantic)	see B1-f	NRI counts hurricane and tropical storm tracks passing within storm-force wind range; federal declarations are in B1-d.
Ice Storm	0.657	event-days per year	about 0.657 days per year	Likely (from Storm Events: 6 of 30 years)	event-days in 6 of 30 years, 1996 to 2025 (20%)	45	1946-12-31 to 2014-02-12 (67 years)	countywide	
Inland Flooding	0.214	event-days per year	about 0.214 days per year	Likely (from Storm Events: 5 of 30 years)	event-days in 5 of 30 years, 1996 to 2025 (16.7%)	6	1996 to 2023 (28 years)	see B1-f	
Landslide	0.109	events per year (modeled)	about 1 in 9 years	Likely	FEMA annualized frequency (modeled)	not shown	modeled	see B1-f	
Lightning	48.9	days per year with a strike	about 48.9 days per year	Highly likely	FEMA annualized frequency (modeled)	not shown	1995 to 2023 (29 years; CONUS)	countywide	
Strong Wind	3.24	events per year	about 3.24 per year	Highly likely	FEMA annualized frequency (modeled)	124	1986 to 2023 (38 years)	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
Tornado	0.473	events per year	about 1 in 2 years	Likely	FEMA annualized frequency (modeled)	not shown	1950 to 2023 (EF2+); 1986 to 2023 (EF0-1)	see B1-f	
Wildfire	0.00229	annual probability at a location	chance a given location in the county burns in a year: 0.229%	Possible (from Storm Events: 2 of 30 years)	Storm Events records in 2 of 30 years, 1996 to 2025 (6.67%)	not shown	modeled	see B1-f	Descriptor from Storm Events, not NRI.
Winter Weather	6.84	event-days per year	about 6.84 days per year	Likely (from Storm Events: 19 of 30 years)	event-days in 19 of 30 years, 1996 to 2025 (63.3%)	130	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	108	30	3.6
Hail	2.00 in+	1996 to 2025	21	30	0.7
Thunderstorm Wind (counted as NRI Strong Wind)	50-64 kt	1996 to 2025	63	30	2.1
Thunderstorm Wind (counted as NRI Strong Wind)	65 kt+	1996 to 2025	13	30	0.433
Thunderstorm Wind (counted as NRI Strong Wind)	unmeasured or below 50 kt	1996 to 2025	8	30	0.267
Tornado	EF0-1	1996 to 2025	6	30	0.2
Tornado	EF2-3	1996 to 2025	1	30	0.0333
Tornado	EF4-5	1996 to 2025	0	30	0
Tornado	unrated (EFU)	1996 to 2025	6	30	0.2

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

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

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

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

NRI risk score of the county's single census tract

Source: 5

Hazard	Tract score <i>NRI score, 0 to 100</i>	Rating
Cold Wave	69.3	Relatively Moderate
Drought	99.4	Relatively High
Earthquake	53.9	Relatively Low
Hail	98.7	Very High
Heat Wave	89.1	Relatively High
Hurricane	49.9	Very Low
Ice Storm	98.4	Very High
Inland Flooding	53.0	Relatively Moderate
Landslide	80.1	Very Low
Lightning	51.2	Relatively Moderate
Strong Wind	99.9	Very High
Tornado	97.5	Very High

Hazard	Tract score <i>NRI score, 0 to 100</i>	Rating
Wildfire	94.4	Relatively Moderate
Winter Weather	92.7	Relatively High

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

Each jurisdiction (starting figures from federal data)

Sources: 1, 3, 4, 6

Jurisdiction	Type	Plan status	Repetitive loss <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>
Hardeman County	County	Expired on 2025-05-31	FMA RL 0, SRL 0; any 0	\$35,808.72	0 total; 0 since its plan
Chillicothe city	City	Expired on 2025-05-31	FMA RL 0, SRL 0; any 0	no Public Assistance recorded	102 total; 7 since its plan
Quanah city	City	Expired on 2025-05-31	FMA RL 0, SRL 0; any 0	no Public Assistance recorded	146 total; 18 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.

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
- Texas A&M Forest Service TxWRAP for wildfire risk; Texas State Hazard Mitigation Plan hazard list for B1-a exclusions.

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 2020-06-01 <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
Cold Wave	\$1,245,786,386	\$23,175,820	3,547	\$2,247	\$21,836	\$42,552	0.00018%		\$0		
Drought	n/a	\$3,528,402	n/a	n/a	\$628,397	n/a	17.8% (agriculture)		\$0		NRI has no building exposure for this hazard; agriculture shown
Earthquake	\$2,249,459,629	n/a	3,549	\$17,921	n/a	\$3,933	0.000797%				
Hail	\$1,245,786,386	\$23,175,820	3,547	\$164,683	\$65,993	\$13,279	0.0132%	\$0			
Heat Wave	\$1,245,786,386	\$23,175,820	3,547	\$16	\$1,071	\$102,912	under 0.0001%				
Hurricane	\$1,245,786,386	\$23,175,820	3,547	\$3,062	\$1,249	\$17	0.000246%				
Ice Storm	\$1,245,786,386	n/a	3,547	\$82,215	n/a	\$5,745	0.0066%		\$0	no Public Assistance recorded (2 declarations)	
Inland Flooding	\$1,245,745,120	\$20,490	52	\$379,839	\$61	\$748	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	\$718,808	n/a	1	\$1	n/a	\$52	0.000171%				

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 2020-06-01 <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
Lightning	\$1,245,786,386	n/a	3,547	\$4,360	n/a	\$3,053	0.00035%				
Strong Wind	\$1,245,786,386	\$23,175,820	3,547	\$467,322	\$4,651	\$58,098	0.0375%	\$40,000	\$0		
Tornado	\$1,245,786,386	\$23,175,820	3,547	\$238,943	\$822	\$155,306	0.0192%	\$1,000			
Wildfire	\$371,121,321	\$10,117,080	1,340	\$54,279	\$125	\$2,239	0.0146%				
Winter Weather	\$1,245,786,386	\$23,175,820	3,547	\$7,419	\$189	\$4,740	0.000596%		\$0		

Totals since 2020-06-01 (Storm Events through 2026-06-30): 56 county-coded records, 21 with a damage value recorded (including \$0), \$41,000; 82 zone-level records, 26 with a damage value recorded (including \$0), \$0 reported for the zone; Public Assistance: none recorded on the 2 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	3,547
Building value (total, not at risk)	\$1,245,786,386
Agriculture value (total, not at risk)	\$23,175,820
NRI risk rating (all hazards)	Very Low
Expected annual loss, buildings and agriculture, all hazards	\$2,146,700
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)	\$392,674
Social vulnerability rating	Very 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)	0
Repetitive loss, NFIP insurance definition	0	Severe repetitive loss, NFIP insurance definition	0

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

Repeat-flood properties: county and state-level rows

Sources: 1, 4

Scope	RL, FMA <i>properties</i>	SRL, FMA <i>properties</i>	RL, NFIP <i>properties</i>	SRL, NFIP <i>properties</i>	Any category <i>properties</i>	Mitigated <i>properties</i>	Currently insured <i>properties</i>
County total	0	0	0	0	0	0	0
Statewide, no county in FEMA's file	3	8	12	7	13	1	9

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>
Hardeman County	480844	0	0	0	0	0	0	0
Chillicothe city	481202	0	0	0	0	0	0	0
Quanah city	480283	0	0	0	0	0	0	0

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

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

County repeat-flood properties by occupancy group: 0 in every occupancy group.

Sources: 1, 4

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

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

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

Exact counts; no count suppression.

Sources

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

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)
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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.

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Cite this: Hazard Plain (2026). Hardeman County, TX: risk-assessment baseline packet, release 2026-10 (data as of 2026-09-30; County FIPS 48197). Automated baseline. <https://hazardplain.org/tx/48197/> 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

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