

Wagoner County, OK

Risk-assessment baseline packet

County FIPS: 40145 Release: 2026-10 Data as of: 2026-09-30 Storm Events data through: 2026-06-30

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

Summary

Plan status as of 2026-09-30: Approved, expires 2027-04-05. Plan: Wagoner County (FEMA plan 106883), approved 2022-04-06.

Since the plan was approved on 2022-04-06: 2 new hazard declarations (2 incidents) and 115 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 (\$14,484,111 a year), Heat Wave (\$5,343,498) and Ice Storm (\$3,157,519).

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; 40145 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 2022-04-06), page 2
- 4. B1-a: hazard identification, page 4
- 5. B1-b: hazard location, page 6
- 6. B1-c: hazard extent, page 6
- 7. B1-d: previous occurrences, page 8
- 8. B1-e: probability of future events, page 13
- 9. B1-f: hazards that vary across jurisdictions, page 15
- 10. B2-a and B2-b: vulnerability and potential impacts, page 18
- 11. B2-a: vulnerability (county context), page 20
- 12. B2-c: repetitive loss properties, page 20
- 13. Sources, what the plan adds, disclaimer and citation, page 22

Plan clock

Status:	Approved, expires 2027-04-05	Plan:	Wagoner County (FEMA plan 106883)
Approved:	2022-04-06	Days to expiry:	187
Update underway:	none recorded in FEMA's plan tracker		

What changed since your last plan (approved 2022-04-06)

New federal declarations:	2 new hazard declarations (2 incidents): DR-4721-OK (Severe Storms, Straight-Line Winds, and Tornadoes), DR-4776-OK (Severe Storms, Straight-Line Winds, Tornadoes, and Flooding)	Storm Events records since approval:	115 records (data through 2026-06-30)
Repetitive loss now:	FMA RL 14, SRL 14 (44 CFR 77.2); any definition: 52	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: 20 rows, in the section "Plan clock: Plan status for every jurisdiction listed in this county" on the following pages.

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

Plan clock

Plan status for every jurisdiction listed in this county

Source: 1

Jurisdiction	Type	Status	Plan	Approved	Expires	Days to expiry <i>negative = days since expiry</i>	Update underway	Notes
Wagoner County	County	Approved, expires 2027-04-05	Wagoner County (FEMA plan 106883)	2022-04-06	2027-04-05	187		
Bixby city	City	Expired on 2026-06-13	Tulsa County (FEMA plan 106590)	2021-06-14	2026-06-13	-109		this jurisdiction approved 2021-06-16
Broken Arrow city	City	Approved, expires 2028-03-05	Broken Arrow (FEMA plan 108662)	2023-03-06	2028-03-05	522		
Catoosa city	City	Plan 110804 approved 2025-07-23, pending adoption here; not yet eligible	Rogers County (FEMA plan 110804), pending adoption here	2025-07-23 by FEMA; not yet adopted here	2030-07-22 once adopted		FEMA tracker shows a plan approvable pending adoption	Not yet eligible: adopt the approved plan.
Coweta city	City	Approved, expires 2027-04-05	Wagoner County (FEMA plan 106883)	2022-04-06	2027-04-05	187		
Okay town	Town	Plan 106883 approved 2022-04-06, pending adoption here; not yet eligible	Wagoner County (FEMA plan 106883), pending adoption here	2022-04-06 by FEMA; not yet adopted here	2027-04-05 once adopted		FEMA tracker shows a plan approvable pending adoption	Not yet eligible: adopt the approved plan.
Porter town	Town	Approved, expires 2027-04-05	Wagoner County (FEMA plan 106883)	2022-04-06	2027-04-05	187		
Redbird town	Town	Approved, expires 2027-04-05	Wagoner County (FEMA plan 106883)	2022-04-06	2027-04-05	187		
Tulahassee town	Town	Plan 106883 approved 2022-04-06, pending adoption here; not yet eligible	Wagoner County (FEMA plan 106883), pending adoption here	2022-04-06 by FEMA; not yet adopted here	2027-04-05 once adopted		FEMA tracker shows a plan approvable pending adoption	Not yet eligible: adopt the approved plan.
Tulsa city	City	Approved, expires 2029-12-11	Tulsa (FEMA plan 110187)	2024-12-12	2029-12-11	1,168		
Wagoner city	City	Approved, expires 2027-08-02	Wagoner (FEMA plan 108234)	2022-08-03	2027-08-02	306		
Broken Arrow Public Schools	School/School District	Approved, expires 2028-03-05	Broken Arrow (FEMA plan 108662)	2023-03-06	2028-03-05	522		
Catoosa Public Schools	School/School District	Plan 110804 approved 2025-07-23, pending adoption here; not yet eligible	Rogers County (FEMA plan 110804), pending adoption here	2025-07-23 by FEMA; not yet adopted here	2030-07-22 once adopted		FEMA tracker shows a plan approvable pending adoption	Not yet eligible: adopt the approved plan.
Chouteau-Mazie Public Schools	School/School District	Approved, expires 2030-10-16	Mayes County (FEMA plan 110824)	2025-10-17	2030-10-16	1,477		this jurisdiction approved 2026-07-13
Coweta Public Schools	School/School District	Approved, expires 2027-04-05	Wagoner County (FEMA plan 106883)	2022-04-06	2027-04-05	187		

Jurisdiction	Type	Status	Plan	Approved	Expires	Days to expiry <i>negative = days since expiry</i>	Update underway	Notes
Inola Public Schools	School/School District	Plan 110804 approved 2025-07-23, pending adoption here; not yet eligible	Rogers County (FEMA plan 110804), pending adoption here	2025-07-23 by FEMA; not yet adopted here	2030-07-22 once adopted		FEMA tracker shows a plan approvable pending adoption	Not yet eligible: adopt the approved plan.
Locust Grove Public Schools	School/School District	Approved, expires 2030-10-16	Mayes County (FEMA plan 110824)	2025-10-17	2030-10-16	1,477		this jurisdiction approved 2026-07-13
Okay Public Schools	School/School District	Approved, expires 2027-04-05	Wagoner County (FEMA plan 106883)	2022-04-06	2027-04-05	187		
Porter Consolidated Schools	School/School District	Plan 106883 approved 2022-04-06, pending adoption here; not yet eligible	Wagoner County (FEMA plan 106883), pending adoption here	2022-04-06 by FEMA; not yet adopted here	2027-04-05 once adopted		FEMA tracker shows a plan approvable pending adoption	Not yet eligible: adopt the approved plan.
Wagoner Public Schools	School/School District	Approved, expires 2027-04-05	Wagoner County (FEMA plan 106883)	2022-04-06	2027-04-05	187		

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	\$14,045,630	\$98,719	\$339,761	\$14,484,111	77	
2	Heat Wave	Relatively Moderate	Relatively Moderate	\$348	\$415	\$5,342,735	\$5,343,498	61	
3	Ice Storm	Very High	Very High	\$3,087,042	n/a	\$70,478	\$3,157,519	5	

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
4	Cold Wave	Relatively Moderate	Relatively Moderate	\$858	\$64,586	\$2,892,378	\$2,957,822	0	No recorded events in Storm Events since 1996 (data through 2026-06-30).
5	Tornado	Relatively Moderate	Relatively Moderate	\$874,213	\$2,741	\$2,031,714	\$2,908,668	44	
6	Hail	Relatively Moderate	Relatively Moderate	\$1,974,620	\$795	\$54,603	\$2,030,019	195	
7	Drought	Relatively Moderate	Relatively High	n/a	\$1,795,796	n/a	\$1,795,796	52	
8	Wildfire	Relatively Low	Relatively Low	\$365,098	\$394	\$150,233	\$515,726	8	
9	Lightning	Relatively Moderate	Relatively Moderate	\$22,315	n/a	\$489,286	\$511,601	2	
10	Strong Wind	Relatively Low	Relatively Low	\$196,260	\$2,339	\$127,299	\$325,898	240	Includes 11 High Wind records (a NOAA non-thunderstorm wind type, outside NRI's Strong Wind definition).
11	Earthquake	Very Low	Relatively Low	\$241,249	n/a	\$54,755	\$296,004		Storm Events does not record earthquakes.
12	Winter Weather	Relatively Moderate	Relatively Moderate	\$151,617	\$568	\$49,660	\$201,845	39	
13	Hurricane	Very Low	Very Low	\$4,245	\$3,194	\$109	\$7,547	0	No recorded events in Storm Events since 1996 (data through 2026-06-30).
14	Landslide	Very Low	Very Low	\$156	n/a	\$1,928	\$2,084	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.

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

Sources: 5

Hazard	Highest-rated census tracts <i>NRI risk rating, score 0 to 100</i>
Earthquake	tract 301.02 (Relatively Low, 65.0); tract 301.01 (Relatively Low, 60.3); tract 307.98 (Relatively Low, 41.3)
Hurricane	tract 307.98 (Very Low, 38.2); tract 303 (Very Low, 34.7); tract 308 (Very Low, 33.7)
Landslide	tract 304.02 (Relatively Low, 90.7); tract 306.01 (Relatively Low, 90.5); tract 302.01 (Relatively Low, 89.8)
Tornado	tract 301.02 (Relatively High, 78.8); tract 304.02 (Relatively High, 76.6); tract 301.01 (Relatively High, 75.5)
Wildfire	tract 306.01 (Relatively Moderate, 94.2); tract 302.02 (Relatively Moderate, 93.3); tract 307.98 (Relatively Moderate, 92.8)

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 301.02 is Census Tract 301.02). 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	0					
Frost/Freeze (outside NRI's Cold Wave definition)	crop damage	0					
Drought	U.S. Drought Monitor scale (D0 to D4)	52 records, 2005 to 2026 (52 zone-level)	50 days to 282 days (median 140 days); 10 with a recorded value	282 days (about 9.3 months), 2012-07-01 to 2013-04-08, a run of 10 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.

Hazard	Scale	Records <i>count and years</i>	Observed range	Worst recorded event	Most damaging (when different)	How it applies to jurisdictions	Note
Hail	hail size (inches)	274 records, 1956 to 2026	0.75 in to 2.75 in (median 0.88 in); 274 with a recorded value	2.75 in hail, 2003-05-04; same size also recorded on 1983-11-22, 1986-08-01, 2003-05-04	Hail, 2026-05-08, \$500,000 property; \$0 crops (2026 dollars)	Event records naming jurisdictions in the plan: Coweta city (40 records), Wagoner city (33 records), Broken Arrow city (28 records), Okay town (24 records), Porter town (21 records), Tullahassee town (9 records), Catoosa city (2 records), Redbird town (1 record).	
Excessive Heat, Heat	heat index (in event narratives)	61 records, 1998 to 2025 (61 zone-level)	1 day to 32 days (median 2 days); 56 with a recorded value	2011-07-09 to 2011-08-09 (2 records, 1 of them a monthly summary record), zone- level		Countywide (zone-level records).	
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)	5 records, 1996 to 2013 (5 zone-level)		Ice Storm, 2007-12-09, \$70,000,000 property; \$0 crops (2007 dollars); NWS zone OKZ067		Countywide (zone-level records).	
Flash Flood, Flood, Lakeshore Flood	damage and flood days (flood depth: FIRM)	77 records, 1996 to 2026 (4 zone-level)		Flash Flood, 2000-05-06, \$600,000 property; crops not reported (2000 dollars)		Event records naming jurisdictions in the plan: Coweta city (15 records), Broken Arrow city (13 records), Wagoner city (6 records), Okay town (2 records), Porter town (2 records), Catoosa city (1 record). Zone-level records (4) apply countywide.	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					
Lightning	annualized frequency (the measure FEMA's Local Mitigation Planning Handbook names)	2 records, 1998 to 1999		Lightning, 1998-08-09, damage not reported, 1 direct death		Event records naming jurisdictions in the plan: Wagoner city (2 records).	Storm Events lists lightning with damage or casualties.
High Wind and Strong Wind (outside NRI's Strong Wind definition)	wind speed (kt and mph)	11 records, 1998 to 2025 (11 zone-level)	39 kt (45 mph) to 61 kt (70 mph) (median 50 kt (58 mph)); 9 with a recorded value	61 kt (70 mph) estimated gust, High Wind, 2005-06-04; NWS zone OKZ067	High Wind, 2005-11-27, \$40,000 property; crops not reported (zone total, 2005 dollars)	Countywide (zone-level records).	
Thunderstorm Wind	wind speed (kt and mph)	282 records, 1971 to 2026	50 kt (58 mph) to 78 kt (90 mph) (median 61 kt (70 mph)); 209 with a recorded value	78 kt (90 mph) measured gust, Thunderstorm Wind, 2016-07-14	Thunderstorm Wind, 1993-04-24, \$5,000,000 property; crops not recorded (1993 dollars)	Event records naming jurisdictions in the plan: Coweta city (49 records), Wagoner city (45 records), Broken Arrow city (28 records), Porter town (16 records), Okay town (15 records), Tullahassee town (5 records), Redbird town (4 records), Catoosa city (1 record).	Speeds under 20 kt (likely entry errors) are left out of the observed range.

Hazard	Scale	Records <i>count and years</i>	Observed range	Worst recorded event	Most damaging (when different)	How it applies to jurisdictions	Note
Tornado	Enhanced Fujita (Fujita before Feb 2007)	63 records, 1960 to 2026	F/EF0 to F/EF3 (median F/EF1); 61 with a recorded value	F3 tornado, 1966-04-11, 7.3 mi path length (whole path, pre-1996), 100 yd wide, \$250,000 property; crops not recorded (1966 dollars), 6 direct injuries	Tornado, 1974-06-08, \$25,000,000 property; crops not recorded (1974 dollars)	Event records naming jurisdictions in the plan: Broken Arrow city (9 records), Okay town (4 records), Porter town (4 records), Wagoner city (4 records), Coweta city (3 records), Redbird town (2 records), Tulahassee 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)	8 records, 2005 to 2021 (8 zone-level)		No damage reported in 8 records.		Countywide (zone-level records).	
Winter Storm, Heavy Snow, Blizzard, Lake- Effect Snow, Winter Weather, Sleet	none in data (snowfall: local data)	39 records, 1996 to 2026 (39 zone-level)		Winter Storm, 2007-01-12, \$1,700,000 property; \$0 crops (2007 dollars); NWS zone OKZ067		Countywide (zone-level records).	

In event narratives only (local data needed): wind chill, temperature, heat index, ice thickness, acres burned and snow depth; any physical measure of 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.

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: 34 declarations covering 24 separate hazard incidents counted in this packet (declarations for the same incident count once; non-natural and evacuation-only declarations are not counted).

Federal disaster declarations for this county

Sources: 1, 2, 3

Declared	Incident began	FEMA number	Type	Title	Mapped hazard	County Public Assistance <i>federal share obligated, nominal dollars</i>	Flags	Notes
2024-04-30	2024-04-25	DR-4776-OK	Major disaster	Severe Storms, Straight-Line Winds, Tornadoes, and Flooding	Tornado (primary); also designated: Inland Flooding, Strong Wind	no Public Assistance recorded	new since last plan; within last 5 years	
2023-07-19	2023-06-14	DR-4721-OK	Major disaster	Severe Storms, Straight-Line Winds, and Tornadoes	Strong Wind; Tornado	no Public Assistance recorded	new since last plan; within last 5 years	
2021-02-24	2021-02-08	DR-4587-OK	Major disaster	Severe Winter Storms	Ice Storm	no Public Assistance recorded		
2021-02-17	2021-02-08	EM-3555-OK	Emergency	Severe Winter Storm	Ice Storm	no Public Assistance recorded		same incident as DR-4587
2020-04-05	2020-01-20	DR-4530-OK	Major disaster	COVID-19 Pandemic	Non-natural, not counted	no Public Assistance recorded		
2020-03-13	2020-01-20	EM-3462-OK	Emergency	COVID-19	Non-natural, not counted	no Public Assistance recorded		same incident as DR-4530

Declared	Incident began	FEMA number	Type	Title	Mapped hazard	County Public Assistance		Flags	Notes
						<i>federal share obligated, nominal dollars</i>			
2019-06-01	2019-05-07	DR-4438-OK	Major disaster	Severe Storms, Straight-Line Winds, Tornadoes, and Flooding	Inland Flooding; Strong Wind; Tornado	\$532,562.92			
2019-05-25	2019-05-07	EM-3411-OK	Emergency	Flooding	Inland Flooding	no Public Assistance recorded			same incident as DR-4438
2017-02-23	2017-02-23	FM-5169-OK	Fire management	141St Fire	Wildfire	no Public Assistance recorded			
2015-05-26	2015-05-05	DR-4222-OK	Major disaster	Severe Storms, Tornadoes, Straight-Line Winds, and Flooding	Inland Flooding; Strong Wind; Tornado	\$547,608.15			
2011-05-13	2011-01-31	DR-1985-OK	Major disaster	Severe Winter Storm and Snowstorm	Winter Weather	\$25,767.86			
2011-02-02	2011-01-31	EM-3316-OK	Emergency	Severe Winter Storm	Winter Weather	no Public Assistance recorded			same incident as DR-1985
2010-03-05	2010-01-28	DR-1883-OK	Major disaster	Severe Winter Storm	Ice Storm	\$180,499.07			
2010-02-25	2009-12-24	DR-1876-OK	Major disaster	Severe Winter Storm	Winter Weather	\$45,143.34			
2010-01-30	2010-01-28	EM-3308-OK	Emergency	Severe Winter Storm	Winter Weather	no Public Assistance recorded			same incident as DR-1883
2008-05-09	2008-04-09	DR-1754-OK	Major disaster	Severe Storms, Tornadoes, and Flooding	Inland Flooding (primary); also designated: Tornado	\$432,791.44			
2007-12-18	2007-12-08	DR-1735-OK	Major disaster	Severe Winter Storms	Ice Storm	\$930,967.93			
2007-12-10	2007-12-08	EM-3280-OK	Emergency	Severe Winter Storms	Ice Storm	no Public Assistance recorded			same incident as DR-1735
2007-07-07	2007-06-10	DR-1712-OK	Major disaster	Severe Storms, Flooding, and Tornadoes	Inland Flooding; Tornado	\$271,831.44			
2007-02-01	2007-01-12	DR-1678-OK	Major disaster	Severe Winter Storms	Winter Weather	\$1,278,242.06			
2007-01-14	2007-01-12	EM-3272-OK	Emergency	Severe Winter Storms and Flooding	Ice Storm	no Public Assistance recorded			same incident as DR-1678
2006-01-10	2005-11-27	DR-1623-OK	Major disaster	Extreme Wildfire Threat	Wildfire	\$28,756.82			
2005-09-05	2005-08-29	EM-3219-OK	Emergency	Hurricane Katrina Evacuation	Hurricane: evacuation support, not a local hazard event; not counted	\$27,236.52			
2001-01-05	2000-12-25	DR-1355-OK	Major disaster	Severe Winter Ice Storm	Ice Storm	\$736,618.51			
2000-12-28	2000-12-25	EM-3158-OK	Emergency	Severe Winter and Ice Storm	Ice Storm	no Public Assistance recorded			same incident as DR-1355
1993-05-12	1993-05-08	DR-991-OK	Major disaster	Severe Storms, Tornadoes & Flooding	Inland Flooding; Tornado	no Public Assistance recorded			
1993-04-26	1993-04-24	DR-987-OK	Major disaster	Severe Storms & Tornadoes	Tornado	PA not declared for this county			
1986-10-14	1986-09-26	DR-778-OK	Major disaster	Severe Storms & Flooding	Inland Flooding	no Public Assistance recorded			
1984-05-31	1984-05-26	DR-709-OK	Major disaster	Severe Storms & Flooding	Inland Flooding	no Public Assistance recorded			
1984-05-03	1984-04-26	DR-704-OK	Major disaster	Severe Storms & Tornadoes	Tornado	PA not declared for this county			
1976-06-05	1976-06-05	DR-504-OK	Major disaster	Severe Storms & Flooding	Inland Flooding	no Public Assistance recorded			
1974-06-10	1974-06-10	DR-441-OK	Major disaster	Severe Storms & Flooding	Inland Flooding	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>		
1972-01-14	1972-01-14	DR-317-OK	Major disaster	Severe Storms & Flooding	Inland Flooding	no Public Assistance recorded		
1971-09-28	1971-09-28	DR-314-OK	Major disaster	Heavy Rains & Floods	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
1995-04-19	1995-04-19	EM-3115-OK	Emergency	Explosion at Federal Courthouse in Oklahoma City	Non-natural, not counted
1960-07-15	1960-07-15	DR-104-OK	Major disaster	Heavy Rains, Hail, Floods & Tornadoes	Hail; Inland Flooding; Tornado
1959-11-09	1959-11-09	DR-95-OK	Major disaster	Heavy Rains & Floods	Inland Flooding
1959-07-08	1959-07-08	DR-92-OK	Major disaster	Flood	Inland Flooding
1957-05-18	1957-05-18	DR-74-OK	Major disaster	Flood	Inland Flooding
1956-04-07	1956-04-07	DR-54-OK	Major disaster	Tornadoes	Tornado
1955-06-01	1955-06-01	DR-35-OK	Major disaster	Flood & Tornado	Inland Flooding (primary); also designated: 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.

13 Fire Management declarations (1971-04-08 to 2012-07-30) 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 <i>separate disasters</i>	Declared since approval <i>separate disasters</i>	Period	Statement
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	52	16	4	20	0	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	274	24	0	24	0	0	1955 to 2026-06-30	
Heat Wave	61	23	5	23	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	5	0	0	0	5	0	1996 to 2026-06-30	

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
Inland Flooding	77	5	2	5	12	1	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	2	0	0	0	0	0	1996 to 2026-06-30	
Strong Wind	293	39	5	41	4	2	1955 to 2026-06-30	Includes 11 High Wind records.
Tornado	63	5	2	7	9	2	1950 to 2026-06-30	
Wildfire	8	0	1	1	2	0	1996 to 2026-06-30	
Winter Weather	39	3	2	5	4	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
2016-07-14	Thunderstorm Wind	78 kt (90 mph) measured gust	\$0 property; \$0 crops (2016 dollars)	0, 0	TULLAHASSEE	B1-c worst recorded: Thunderstorm Wind
2012-07-01	Drought		\$0 property; \$0 crops (zone total, 2012 dollars)	0, 0	NWS zone OKZ067 (WAGONER), zone-level	B1-c worst recorded: Drought
2011-07-09	Excessive Heat		\$0 property; \$0 crops (zone total, 2011 dollars)	0, 0	NWS zone OKZ067 (WAGONER), zone-level	B1-c worst recorded: Excessive Heat, Heat
2010-05-13	Tornado	EF2, 5.1 mi within this county, 550 yd wide	\$400,000 property; \$0 crops (2010 dollars)	0, 2	ONETA to COWETA EASLEY ARPT	deaths or injuries recorded
2007-12-09	Ice Storm		\$70,000,000 property; \$0 crops (zone total, 2007 dollars)	0, 0	NWS zone OKZ067 (WAGONER), zone-level	B1-c worst recorded: Ice Storm
2007-01-12	Winter Storm		\$1,700,000 property; \$0 crops (zone total, 2007 dollars)	0, 0	NWS zone OKZ067 (WAGONER), zone-level	B1-c worst recorded: Winter Storm, Heavy Snow, Blizzard, Lake-Effect Snow, Winter Weather, Sleet
2005-06-04	High Wind	61 kt (70 mph) estimated gust	damage not reported	0, 0	NWS zone OKZ067 (WAGONER), zone-level	B1-c worst recorded: High Wind and Strong Wind
2003-05-04	Hail	2.75 in	damage not reported	0, 0	WAGONER	B1-c worst recorded: Hail
2000-05-06	Flash Flood		\$600,000 property; crops not reported (2000 dollars)	0, 0	COUNTYWIDE	B1-c worst recorded: Flash Flood, Flood, Lakeshore Flood
1998-08-09	Lightning		damage not reported	1, 0	WAGONER	deaths or injuries recorded
1974-06-08	Tornado	F3, 20.4 mi path length (whole path, pre-1996), 100 yd wide	\$25,000,000 property; crops not recorded (1974 dollars)	0, 0	location not recorded	B1-c most damaging: Tornado
1966-04-11	Tornado	F3, 7.3 mi path length (whole path, pre-1996), 100 yd wide	\$250,000 property; crops not recorded (1966 dollars)	0, 6	location not recorded	deaths or injuries recorded

The full list is in the Excel file, sheet "B1-d Storm Events history" (874 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	1.47	event-days per year	about 1.47 days per year		Storm Events event- days in 0 of 30 years, 1996 to 2025 (0%)	28	2005-11-12 to 2024-11-12 (19 years)	countywide	No Storm Events cold wave record, 1996 to 2025.
Drought	22	event-days per year	about 22 days per year	Likely	Storm Events event- days in 12 of 30 years, 1996 to 2025 (40%)	686	2000 to 2025 (25.25 years; D3 and D4 only)	countywide	
Earthquake	0.00141	annual probability at a location	chance a given location in the county has at least minor-damage shaking in a year: 0.141%			not shown	modeled	see B1-f	No descriptor (Storm Events does not record earthquakes).
Hail	9.03	events per year	about 9.03 per year	Highly likely	FEMA annualized frequency (modeled)	343.3 (modeled)	1986 to 2023 (38 years)	countywide	
Heat Wave	25.7	event-days per year	about 25.7 days per year	Likely	Storm Events event- days in 19 of 30 years, 1996 to 2025 (63.3%)	337	2005-11-12 to 2024-11-12 (19 years)	countywide	
Hurricane	0.0087	events per year	about 1 in 115 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	1.35	event-days per year	about 1.35 days per year	Likely	Storm Events event- days in 4 of 30 years, 1996 to 2025 (13.3%)	91	1946-12-31 to 2014-02-12 (67 years)	countywide	
Inland Flooding	1.96	event-days per year	about 1.96 days per year	Likely	Storm Events event- days in 23 of 30 years, 1996 to 2025 (76.7%)	55	1996 to 2023 (28 years)	see B1-f	
Landslide	0.121	events per year (modeled)	about 1 in 8 years	Likely	FEMA annualized frequency (modeled)	not shown	modeled	see B1-f	
Lightning	55.7	days per year with a strike	about 55.7 days per year	Highly likely	FEMA annualized frequency (modeled)	not shown	1995 to 2023 (29 years; CONUS)	countywide	
Strong Wind	6.91	events per year	about 6.91 per year	Highly likely	FEMA annualized frequency (modeled)	264	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	0.689	events per year	about 0.69 per year	Likely	FEMA annualized frequency (modeled)	not shown	1950 to 2023 (EF2+); 1986 to 2023 (EF0-1)	see B1-f	
Wildfire	0.00319	annual probability at a location	chance a given location in the county burns in a year: 0.319%	Likely	Storm Events records in 4 of 30 years, 1996 to 2025 (13.3%)	not shown	modeled	see B1-f	
Winter Weather	8.05	event-days per year	about 8.05 days per year	Likely	Storm Events event- days in 21 of 30 years, 1996 to 2025 (70%)	153	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	81	30	2.7
Hail	2.00 in+	1996 to 2025	8	30	0.267
Thunderstorm Wind (counted as NRI Strong Wind)	50-64 kt	1996 to 2025	137	30	4.57
Thunderstorm Wind (counted as NRI Strong Wind)	65 kt+	1996 to 2025	55	30	1.83
Thunderstorm Wind (counted as NRI Strong Wind)	unmeasured or below 50 kt	1996 to 2025	35	30	1.17
Tornado	EF0-1	1996 to 2025	37	30	1.23
Tornado	EF2-3	1996 to 2025	4	30	0.133
Tornado	EF4-5	1996 to 2025	0	30	0
Tornado	unrated (EFU)	1996 to 2025	1	30	0.0333

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	
Cold Wave	25 of 25	52.1	70.1	85.1	Relatively High 6, Relatively Moderate 19
Drought	12 of 25	75.4	93.2	99.1	Relatively High 3, Relatively Moderate 4, Relatively Low 3, Very Low 2, No Rating 13
Earthquake	25 of 25	10.3	26.0	65.0	Relatively Low 3, Very Low 22
Hail	25 of 25	74.2	87.4	96.3	Relatively High 12, Relatively Moderate 13
Heat Wave	25 of 25	79.4	91.5	96.2	Relatively High 23, Relatively Moderate 2
Hurricane	25 of 25	17.9	22.7	38.2	Very Low 25
Ice Storm	25 of 25	92.3	97.4	99.7	Very High 12, Relatively High 13
Inland Flooding	25 of 25	4.5	35.6	89.0	Relatively High 2, Relatively Moderate 10, Relatively Low 10, Very Low 3
Landslide	25 of 25	19.2	45.8	90.7	Relatively Low 5, Very Low 20
Lightning	25 of 25	44.5	66.6	87.2	Relatively High 5, Relatively Moderate 18, Relatively Low 2
Strong Wind	25 of 25	24.6	39.8	67.1	Relatively Moderate 4, Relatively Low 21

Hazard	Tracts <i>rated of all</i>	NRI risk score, 0 to 100			Tracts by rating
		Min	Median	Max	
Tornado	25 of 25	47.6	58.5	78.8	Relatively High 3, Relatively Moderate 17, Relatively Low 5
Wildfire	25 of 25	55.5	83.8	94.2	Relatively Moderate 8, Relatively Low 15, Very Low 2
Winter Weather	25 of 25	55.4	75.6	91.7	Relatively High 9, Relatively Moderate 16

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, ice storm, lightning, strong wind and winter weather are county-wide or coarse (49 km grid or NWS zone), the same for every jurisdiction; the tract range mostly reflects where buildings and people are (crop and livestock value where a line above names agriculture).

Each jurisdiction (starting figures from federal data)

Sources: 1, 3, 4, 6

Jurisdiction	Type	Plan status	Repetitive loss <i>FMA RL and SRL (44 CFR 77.2); repeat-flood, any definition</i>	Public Assistance to this jurisdiction <i>FEMA records matched by applicant name; federal share obligated, nominal dollars</i>	Event records naming this place <i>all years; since its plan</i>	Notes
Wagoner County	County	Approved, expires 2027-04-05	FMA RL 6, SRL 8; any 29	\$3,831,188.45	0 total; 0 since its plan	
Bixby city	City	Expired on 2026-06-13	FMA RL 2, SRL 1; any 14	no Public Assistance recorded	0 total; 0 since its plan	Whole community, including the part in Tulsa County; none of its repeat-flood properties are in this county.
Broken Arrow city	City	Approved, expires 2028-03-05	FMA RL 6, SRL 6; any 15	no Public Assistance recorded	78 total; 9 since its plan	Whole community, including the part in Tulsa County; in-county portion (county table): FMA RL 6, FMA SRL 6, NFIP RL 13, NFIP SRL 6, any category 14.
Catoosa city	City	Plan 110804 approved 2025-07-23, pending adoption here; not yet eligible	FMA RL 0, SRL 0; any 0	no Public Assistance recorded	4 total; no approved plan	
Coweta city	City	Approved, expires 2027-04-05	FMA RL 1, SRL 0; any 6	\$466,962.73	107 total; 2 since its plan	
Okay town	Town	Plan 106883 approved 2022-04-06, pending adoption here; not yet eligible	FMA RL 0, SRL 0; any 0	\$19,371.59	45 total; no approved plan	
Porter town	Town	Approved, expires 2027-04-05	FMA RL 0, SRL 0; any 0	\$16,825.76	43 total; 1 since its plan	
Redbird town	Town	Approved, expires 2027-04-05	FMA RL 0, SRL 0; any 0	no Public Assistance recorded	7 total; 1 since its plan	
Tulahassee town	Town	Plan 106883 approved 2022-04-06, pending adoption here; not yet eligible	FMA RL 0, SRL 0; any 0	no Public Assistance recorded	15 total; no approved plan	
Tulsa city	City	Approved, expires 2029-12-11	FMA RL 0, SRL 8; any 82	no Public Assistance recorded	0 total; 0 since its plan	Whole community, including the part in Creek County, Osage County and Tulsa County; in-county portion (county table): FMA RL 0, FMA SRL 0, NFIP RL 1, NFIP SRL 0, any category 1.
Wagoner city	City	Approved, expires 2027-08-02	FMA RL 1, SRL 0; any 2	\$402,688.80	90 total; 2 since its plan	

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

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

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

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

Local data needed

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

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

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

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

Hazard	Building exposure <i>modeled dollars</i>	Agriculture exposure <i>modeled dollars</i>	Population exposed <i>people</i>	EAL buildings <i>modeled dollars per year</i>	EAL agriculture <i>modeled dollars per year</i>	Cost of expected deaths and injuries <i>FEMA's dollar value per year, not property damage</i>	EAL as % of exposure <i>buildings; agriculture where noted</i>	Storm Events damage since 2022-04-06 <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	\$12,324,381,055	\$59,177,842	80,907	\$858	\$64,586	\$2,892,378	under 0.0001%				
Drought	n/a	\$29,320,618	n/a	n/a	\$1,795,796	n/a	6.12% (agriculture)		\$0		NRI has no building exposure for this hazard; agriculture shown
Earthquake	\$20,445,736,692	n/a	80,981	\$241,249	n/a	\$54,755	0.00118%				
Hail	\$12,324,398,554	\$59,177,842	80,907	\$1,974,620	\$795	\$54,603	0.016%	\$755,000			
Heat Wave	\$12,324,381,055	\$59,177,842	80,907	\$348	\$415	\$5,342,735	under 0.0001%		\$0		
Hurricane	\$12,324,398,554	\$59,177,842	80,907	\$4,245	\$3,194	\$109	under 0.0001%				
Ice Storm	\$12,324,213,499	n/a	80,905	\$3,087,042	n/a	\$70,478	0.025%				

Hazard	Building exposure <i>modeled dollars</i>	Agriculture exposure <i>modeled dollars</i>	Population exposed <i>people</i>	EAL buildings <i>modeled dollars per year</i>	EAL agriculture <i>modeled dollars per year</i>	Cost of expected deaths and injuries <i>FEMA's dollar value per year, not property damage</i>	EAL as % of exposure <i>buildings; agriculture where noted</i>	Storm Events damage since 2022-04-06 <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	\$12,316,489,105	\$25,694,805	2,249	\$14,045,630	\$98,719	\$339,761	n/a (see note)	\$0		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	\$81,716,839	n/a	454	\$156	n/a	\$1,928	0.000191%				
Lightning	\$12,324,398,554	n/a	80,907	\$22,315	n/a	\$489,286	0.000181%				
Strong Wind	\$12,324,398,554	\$59,177,842	80,907	\$196,260	\$2,339	\$127,299	0.00159%	\$1,202,000	\$0	no Public Assistance recorded (2 declarations)	
Tornado	\$12,324,398,554	\$59,177,842	80,907	\$874,213	\$2,741	\$2,031,714	0.00709%	\$1,100,000		no Public Assistance recorded (2 declarations)	
Wildfire	\$1,435,088,073	\$18,237,876	21,387	\$365,098	\$394	\$150,233	0.0254%				
Winter Weather	\$12,324,381,055	\$59,177,842	80,907	\$151,617	\$568	\$49,660	0.00123%		\$0		

Totals since 2022-04-06 (Storm Events through 2026-06-30): 72 county-coded records, 72 with a damage value recorded (including \$0), \$3,057,000; 43 zone-level records, 43 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	80,907
Building value (total, not at risk)	\$12,324,398,554
Agriculture value (total, not at risk)	\$59,177,842
NRI risk rating (all hazards)	Relatively Low
Expected annual loss, buildings and agriculture, all hazards	\$22,933,200
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)	\$11,604,938
Social vulnerability rating	Relatively Low
Community resilience rating	Relatively Moderate
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)	14	Severe repetitive loss, FMA definition (44 CFR 77.2)	14
Repetitive loss, NFIP insurance definition	50	Severe repetitive loss, NFIP insurance definition	13

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	14	14	50	13	52	1	11
of which: Wagoner County (unincorporated area)	6	8	28	7	29	1	6
of which: Coweta city	1	0	6	0	6	0	1
of which: Wagoner city	1	0	2	0	2	0	0
of which: Broken Arrow city	6	6	13	6	14	0	4
of which: Tulsa city	0	0	1	0	1	0	0

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>	Note
Wagoner County	400215	6	8	28	7	29	1	6	
Bixby city	400207	2	1	11	0	14	2	1	Whole community, including the part in Tulsa County; none of its repeat-flood properties are in this county.
Broken Arrow city	400236	6	6	14	6	15	0	4	Whole community, including the part in Tulsa County; in-county portion (county table): FMA RL 6, FMA SRL 6, NFIP RL 13, NFIP SRL 6, any category 14.
Catoosa city	400185	0	0	0	0	0	0	0	
Coweta city	400216	1	0	6	0	6	0	1	
Okay town	400217	0	0	0	0	0	0	0	
Porter town	400434	0	0	0	0	0	0	0	
Redbird town	400321	0	0	0	0	0	0	0	
Tulahassee town	400218	0	0	0	0	0	0	0	
Tulsa city	405381	0	8	77	3	82	3	5	Whole community, including the part in Creek County, Osage County and Tulsa County; in-county portion (county table): FMA RL 0, FMA SRL 0, NFIP RL 1, NFIP SRL 0, any category 1.
Wagoner city	400219	1	0	2	0	2	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	14	13	47	12	49	1	11
2 to 4 unit residential	0	0	0	0	0	0	0
other residential	0	0	1	0	1	0	0
non-residential	0	1	2	1	2	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 1 property is FMA repetitive loss but not NFIP repetitive loss, and 37 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.

OpenFEMA disclaimer

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

Reuse, citation and corrections

Reuse and citation: Hazard Plain text and tables are licensed under Creative Commons Attribution 4.0 International (CC BY 4.0, <https://creativecommons.org/licenses/by/4.0/>); credit Hazard Plain and the release. The underlying federal data are public domain; OpenFEMA data are also subject to the OpenFEMA terms and conditions.

Cite this: Hazard Plain (2026). Wagoner County, OK: risk-assessment baseline packet, release 2026-10 (data as of 2026-09-30; County FIPS 40145). Automated baseline. <https://hazardplain.org/ok/40145/> 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