ANNEX A
COAHOMA COUNTY

This annex includes jurisdiction-specific information for Coahoma County, City of Clarksdale, Town of Coahoma, Town of Friars Point, Town of Jonestown, Town of Lula, and Town of Lyon. It consists of the following five subsections:

- A.1 Coahoma County Community Profile
- A.2 Coahoma County Risk Assessment
- A.3 Coahoma County Vulnerability Assessment
- A.4 Coahoma County Capability Assessment
- A.5 Coahoma County Mitigation Strategy

A.1 COAHOMA COUNTY COMMUNITY PROFILE

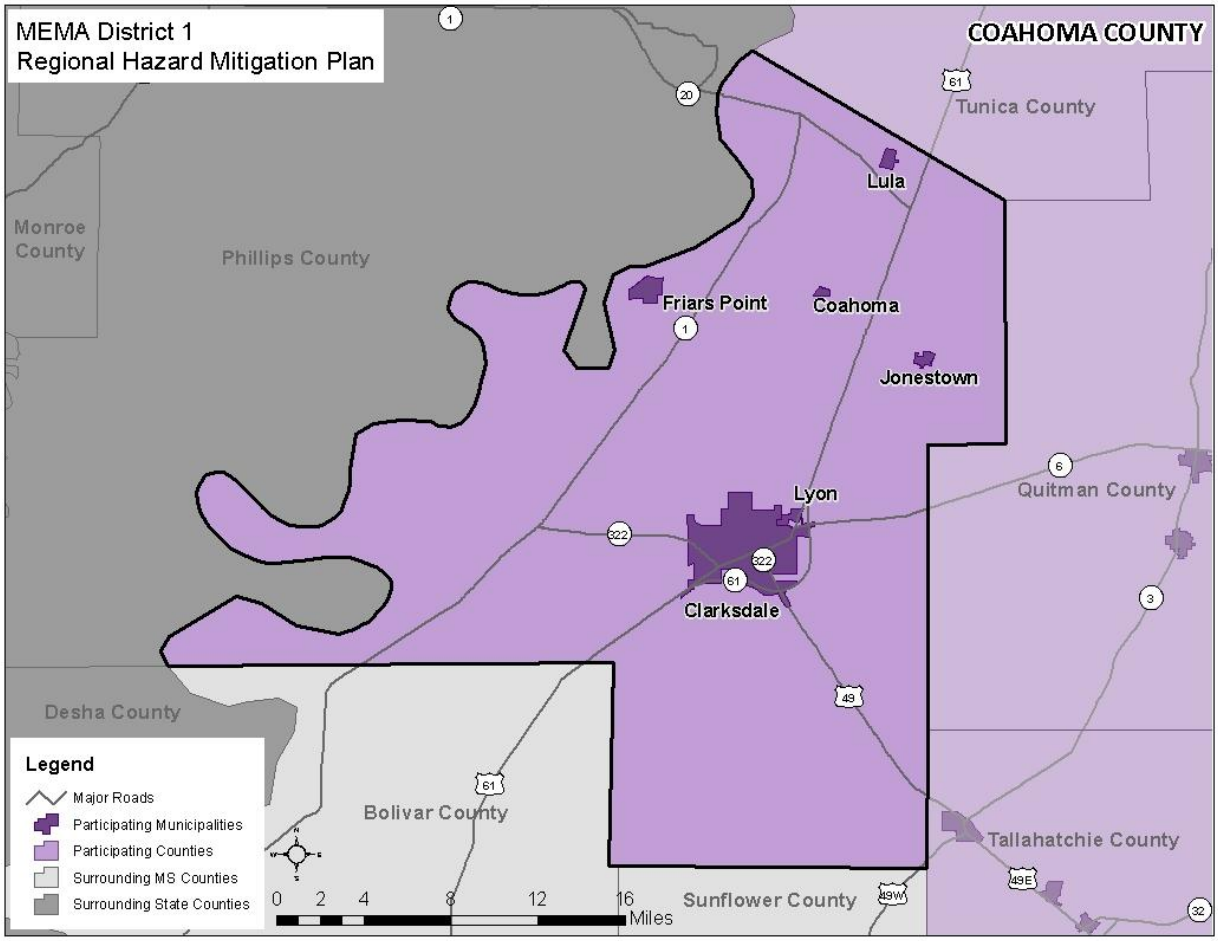
A.1.1 Geography and the Environment

Coahoma County is located in northwestern Mississippi. It comprises five towns and one city, City of Clarksdale, Town of Coahoma, Town of Friars Point, Town of Jonestown, Town of Lula, and Town of Lyon, as well as many small unincorporated communities. Where Coahoma County is mentioned in this annex, it refers to all of the above jurisdictions. An orientation map is provided as **Figure A.1**.

The county is located to the east of the Mississippi River suppling diverse recreational activities. The total area of the county is 583 square miles, 31 square miles of which is water area.

Summer temperatures in the county range from highs of about 90 degrees Fahrenheit (˚F) to lows in the upper 60s. Winter temperatures range from highs in the low to mid 50s to lows around 30˚F. Average annual rainfall is approximately 53 inches, with the wettest months being May and December.

FIGURE A.1: COAHOMA COUNTY ORIENTATION MAP



A.1.2 Population and Demographics

According to the 2020 Census, Coahoma County has a population of 21,390 people. The county has seen a decrease in population between 2010 and 2020, and the population density is 39 people per square mile. Population counts from the U.S. Census Bureau for 2000, 2010, and 2020 for the county and participating jurisdictions are presented in **Table A.1**.

TABLE A.1: POPULATION COUNTS FOR COAHOMA COUNTY

Jurisdiction	2000 Census Population	2010 Census Population	2020 Census Population	% Change 2010-2020
Coahoma County	**30,622**	**26,151**	**21,390**	**-22.3%**
Clarksdale	20,645	17,962	14,903	-20.5%
Coahoma (town)	325	377	229	-64.6%
Friars Point	1,480	1,200	896	-33.9%
Jonestown	1,701	1,298	962	-34.9%
Lula	370	298	204	-46.1%

Jurisdiction	2000 Census Population	2010 Census Population	2020 Census Population	% Change 2010-2020
Lyon	418	350	296	-18.2%
Unincorporated Area	5,683	4,666	3,900	-16.4%

Source: United States Census Bureau, 2000, 2010, and 2020 Census

Based on the 2020 Census, the median age of residents of Coahoma County is 34.8 years. The racial characteristics of the county are presented in **Table A.2**. Black or African American make up the majority of the population in the county, accounting for over 75 percent of the population.

TABLE A.2: DEMOGRAPHICS OF COAHOMA COUNTY

Jurisdiction	White, Percent (2020)	Black or African American, Percent (2020)	American Indian or Alaska Native, Percent (2020)	Asian, Percent (2020)	Native Hawaiian or Other Pacific Islander, Percent (2020)	Some other race (2020)	Two or More Races, percent (2020)	Persons of Hispanic Origin, Percent (2020)*
Coahoma County	**20.9%**	**77.6%**	**0.2%**	**0.5%**	**0.1%**	**1.0%**	**0.8%**	**1.7%**
Clarksdale	14.6%	81.9%	0.1%	0.7%	0.0%	0.8%	1.8%	1.4%
Coahoma (town)	0.9%	98.7%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%
Friars Point	1.7%	98.8%	0.0%	0.0%	0.0%	0.1%	1.3%	3.3%
Jonestown	0.5%	97.9%	0.1%	0.1%	0.0%	0.0%	0.5%	0.7%
Lula	13.2%	82.8%	0.0%	0.0%	0.0%	0.0%	0.4%	0.5%
Lyon	75.3%	19.3%	0.0%	0.0%	0.0%	1.7%	3.7%	3.4%

*Hispanics may be of any race, so also are included in applicable race categories
Source: United States Census Bureau, 2020 Census

A.1.3 Housing

According to the 2010 U.S. Census, there were 10,792 housing units in Coahoma County. The 2020 U.S. Census housing information for the county and six municipalities is also presented in **Table A.3**. As shown in the table, there were 10,162 housing units in Coahoma County. The table also includes the percentage of housing classified as mobile homes or other dwelling, and the median home value for 2015-2019.

TABLE A.3: HOUSING CHARACTERISTICS OF COAHOMA COUNTY

Jurisdiction	Housing Units (2010)	Housing Units (2020)	Mobile Homes or other, Percent (2020)	Median Home Value (2015-2019)
Coahoma County	**10,792**	**10,162**	**7.4%**	**$89,800**
Clarksdale	7,258	6,984	2.4%	$81,100
Coahoma (town)	150	115	21.8%	$32,500
Friars Point	467	409	13.6%	$84,700
Jonestown	476	404	17.3%	$52,000
Lula	138	115	7.8%	$43,800
Lyon	181	165	1.5%	$97,000

Source: United States Census Bureau, 2010 and 2020 Census and 2015-2019 American Community Survey 5-Year Estimates

A.1.4 Infrastructure

TRANSPORTATION

In Coahoma County, U.S. Highway 49 provides access to the north and south. U.S. Route 61, which crosses north and south, travels through Coahoma City. State Highway 1 and State Highway 6 provide access within Coahoma County.

Fletcher Field is located northeast of Clarksdale City and provides general aviation as a public use airport. Shannon Field is a local airport with private facility usage located southeast of the City of Clarksdale. The closest international airport is in Memphis, less than 100 miles away from the county.

A major freight rail lines operate within Coahoma County. MS Delta is a Class III Local railway that operates within Coahoma County from the Town of Jonestown to the City of Clarksdale through the County to Tallahatchie County, Mississippi. Business and industries rely on this line along with various other major highway routes as distribution of merchandises.

UTILITIES

Electrical power in Coahoma County is provided by different electric power association. The City of Clarksdale electric power association serves Coahoma County. Entergy Utility serves Coahoma County.

Water and sewer service is provided by all of the participating towns and/or community based associations, but unincorporated areas often rely on septic systems and wells in the Coahoma County.

COMMUNITY FACILITIES

There are a number of buildings and community facilities located throughout Coahoma County. According to the data collected for the vulnerability assessment (Section 6.4.1), there are 7 fire stations, 5 police stations, and 22 schools located within the county.

There is one hospital located in Coahoma County. Delta Health Northwest Regional Mississippi is a 195-bed medical-surgical hospital located in Clarksdale City of Coahoma County.

Educational institutions are found throughout Coahoma County. Coahoma Community College is a two year coeducational community college within Coahoma County. Coahoma Community College provides athletic opportunities for students and sporting events for county residents.

There are multiple museums in Coahoma County such as Delta Blues Museum, North Delta Museum, and Rock ‘n’ Roll Blues Heritage Museum. Other recreational opportunities include the Coahoma County Expo Center hosts livestock events throughout the year along with festivals, concerts, racing events, conventions, and flea markets. There is RV parking available with full access to necessities. Isle of Capri Entertainment Resort within Coahoma County offers gaming and dining. Quapaw Canoe Company operates within Coahoma County providing guided tours along the Lower Mississippi.

A.1.5 Land Use

Many areas of Coahoma County are undeveloped or sparsely developed. There are several small, incorporated municipalities located throughout the county, with a few larger hubs interspersed. These areas are where the county's population is generally concentrated. The incorporated areas are also where many of the businesses, commercial uses, and institutional uses are located. Land uses in the balance of the county generally consist of rural residential development, agricultural uses, and recreational areas, although there are some notable exceptions in the larger municipalities. Local land use and associated regulations are further discussed in *Section 7: Capability Assessment.*

North Delta Planning and Development District provides services related to regional planning, local technical assistance, and coordination and review of applications for federally sponsored programs within Northwest Mississippi. The purpose of the district is to promote economic development, encourage responsibility short and long term community planning, and to aid in general civic, social, and economic development.

A.1.6 Employment and Industry

According to the DATA USA, which cites source, the U.S. Census Bureau, in 2019, Coahoma County had an average annual employment of 8,024 workers and an average unemployment rate of 11.4 percent (compared to 6.1 percent for the state). In 2019, the most common employment sectors for those who lived in Coahoma County were in Office and Administrative Support Occupations (779 people) followed by Sales and Related Occupations (722 people); Food Preparation and Serving Related Occupations (704 people); Management Occupations (655 people); Education Instruction and Library Occupations (580 people). Compared to other counties, Coahoma County has an unusually high number of residents working as Farming, Fishing, & Forestry Occupations (4.14 times higher than expected). The average annual median household in 2019 for Coahoma County was $29,121 compared to $45,081 in the state of Mississippi.

A.2 COAHOMA COUNTY RISK ASSESSMENT

This subsection includes hazard profiles for each of the significant hazards identified in Section 4: *Hazard Identification* as they pertain to Coahoma County. Each hazard profile includes a description of the hazard's location and extent, notable historical occurrences, and the probability of future occurrences. Additional information can be found in Section 5: *Hazard Profiles*.

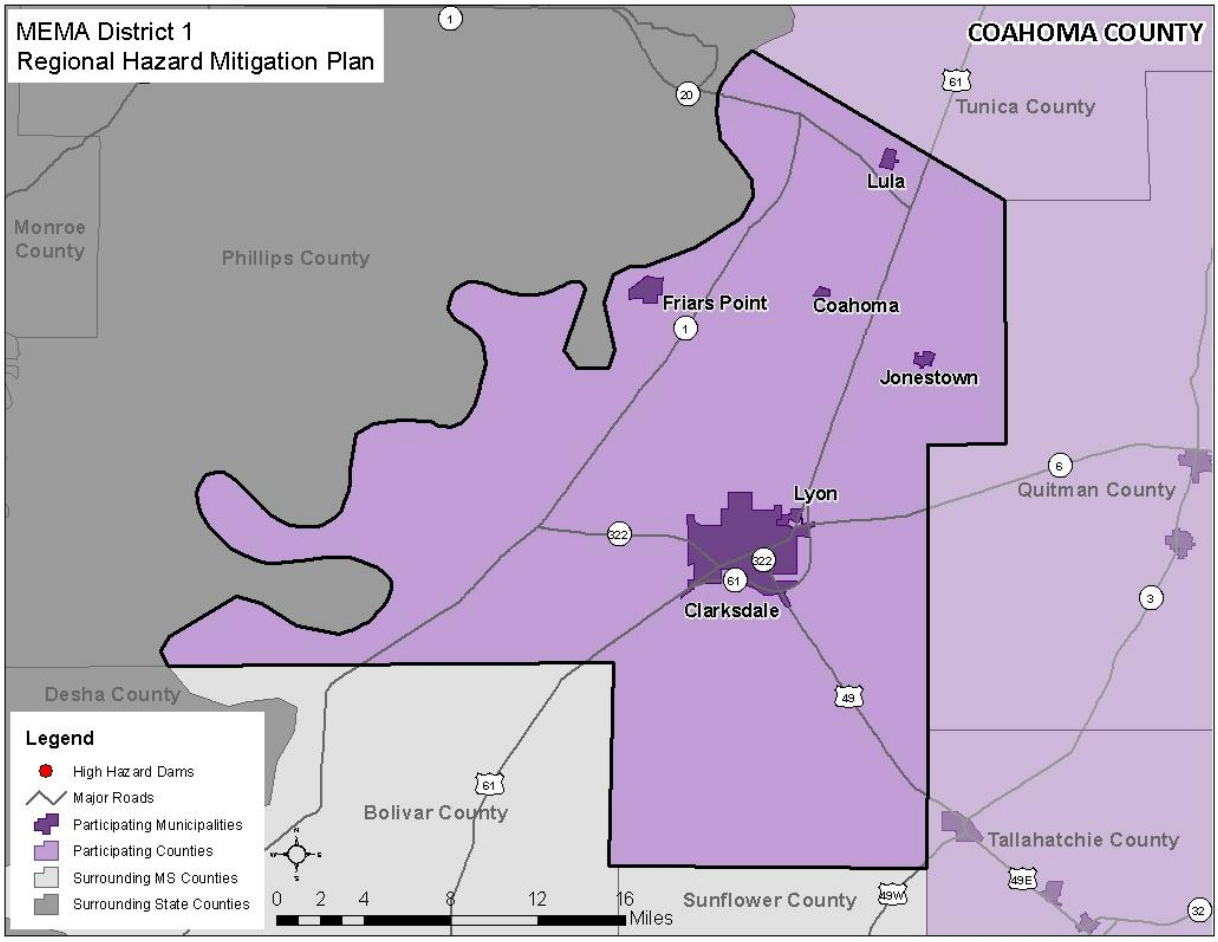
FLOOD-RELATED HAZARDS

A.2.1 Dam and Levee Failure

LOCATION AND SPATIAL EXTENT

According to the Mississippi Department of Environmental Quality, there are no high hazard dams in Coahoma County, which includes all jurisdictions in Coahoma County as shown in **Figure A.2** and **Table A.4**.[1]

FIGURE A.2: COAHOMA COUNTY HIGH HAZARD DAM LOCATIONS



Source: Mississippi Department of Environmental Quality

[1] The list of high hazard dams obtained from the Mississippi Department of Environmental Quality was reviewed and amended by local officials to the best of their knowledge.

TABLE A.4: COAHOMA COUNTY HIGH HAZARD DAMS

Dam Name	Hazard Potential
Coahoma County Unincorporated	*None*
Clarksdale	*None*
Coahoma	*None*
Friars Point	*None*
Jonestown	*None*
Lula	*None*
Lyon	*None*

Source: Mississippi Department of Environmental Quality

HISTORICAL OCCURRENCES

According to the Mississippi State Hazard Mitigation Plan, there is no record of dam breaches in Coahoma County, including all jurisdictions in Coahoma County (**Table A.5**). However, several breach scenarios in the region could be catastrophic.

TABLE A.5: COAHOMA COUNTY DAM FAILURES (1982-2021)

Date	Jurisdictions	Structure Name	Cause of Failure
None Reported	Coahoma County Unincorporated	--	--
None Reported	Clarksdale	--	--
None Reported	Coahoma	--	--
None Reported	Friars Point	--	--
None Reported	Jonestown	--	--
None Reported	Lula	--	--
None Reported	Lyon	--	--

Source: Mississippi Department of Environmental Quality

PROBABILITY OF FUTURE OCCURRENCES

Given the current dam inventory and historic data, a dam breach is unlikely (less than 1 percent annual probability) in the future. As has been demonstrated in the past, regular monitoring is necessary to prevent these events.

A.2.2 Erosion

LOCATION AND SPATIAL EXTENT

Erosion in Coahoma County is typically caused by flash flooding events. Unlike coastal areas, areas of concern for erosion in Coahoma County are primarily rivers/streams and reservoirs. Generally, vegetation helps to prevent erosion in the area, and it is not an extreme threat to the county.

At this time, there is limited data available on localized areas of erosion so it is not possible to depict extent on a map.

HISTORICAL OCCURRENCES

Several sources were vetted to identify areas of erosion in Coahoma County. This includes searching local newspapers, interviewing local officials, and reviewing previous hazard mitigation plans.

The Memphis District recently awarded a task order to restore existing revetment and repair over-steepened banks along the Mississippi River in Coahoma County, Mississippi, and Phillips County, Arkansas. A total of $1,344,000 was awarded on the current River Repairs. (Source: US Army Corps of Engineers Headquarters Website April 2021).

US Army Corps of Engineers reported erosion and scouring along banks of the MS River in Coahoma County due to the 2019 Mississippi River Flood. No major historical erosion occurrences have been found. Data is limited on the extent and impact of erosion in Coahoma County and all jurisdictions in Coahoma County.

PROBABILITY OF FUTURE OCCURRENCES

Erosion remains a natural, dynamic, and continuous process for Coahoma County, and it will continue to occur. The annual probability level assigned for erosion is likely (between 10 and 100 percent annually).

A.2.3 Flood

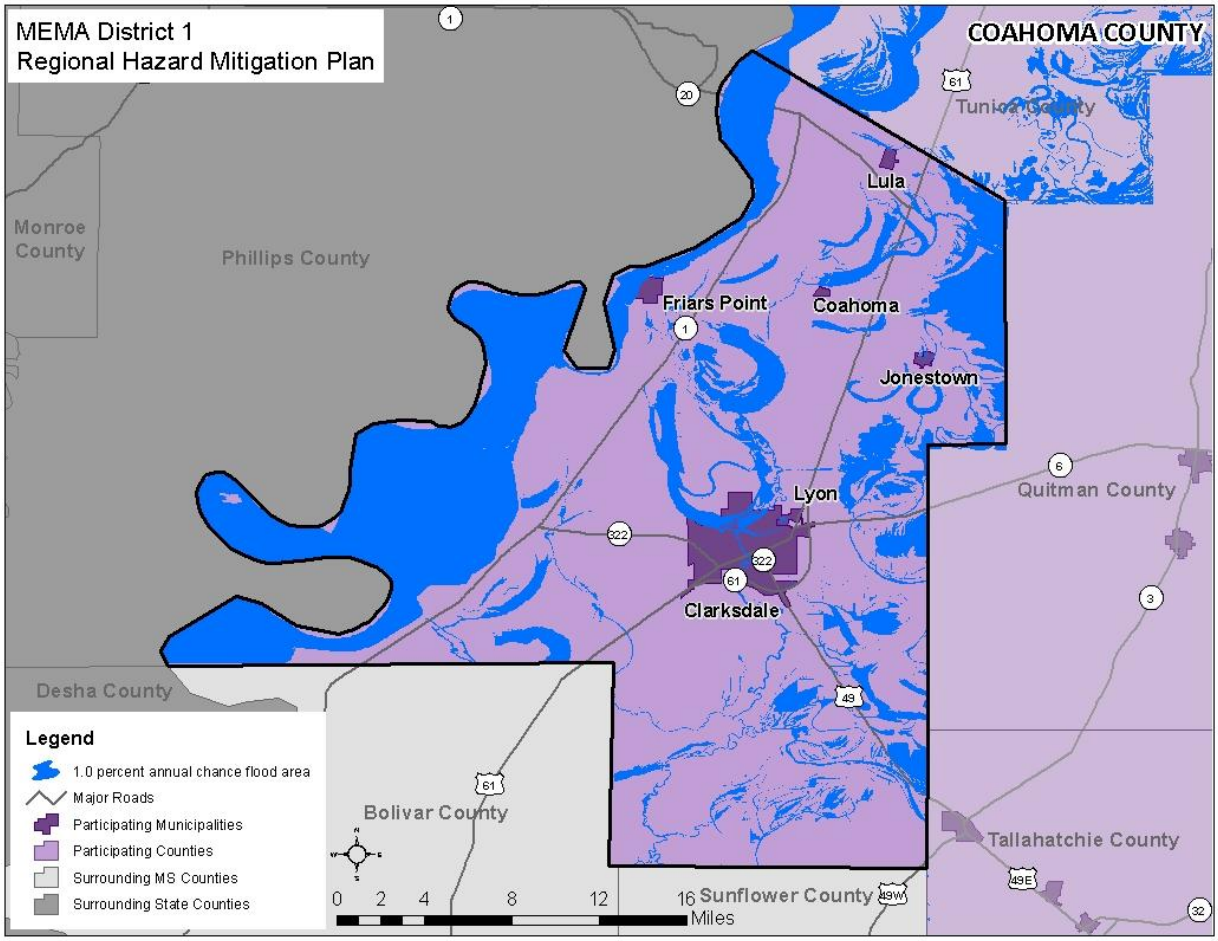
LOCATION AND SPATIAL EXTENT

There are areas in Coahoma County that are susceptible to flood events. Special flood hazard areas in the county were mapped using Geographic Information System (GIS) and FEMA Digital Flood Insurance Rate Maps (DFIRM).[2] This includes Zone A (1-percent annual chance floodplain) and Zone AE (1-percent annual chance floodplain with elevation). According to GIS analysis, of the 585.7 square miles that make up Coahoma County, there are 188.5 square miles of land in zones A and AE (1-percent annual chance floodplain/100-year floodplain).

These flood zone values account for 32.2 percent of the total land area in Coahoma County. It is important to note that while FEMA digital flood data is recognized as best available data for planning purposes, it does not always reflect the most accurate and up-to-date flood risk. Flooding and flood-related losses often do occur outside of delineated special flood hazard areas. **Figure A.3** and **Figure A.3.1** illustrate the location and extent of currently mapped special flood hazard areas for Coahoma County based on best available FEMA Digital Flood Insurance Rate Map (DFIRM) data.

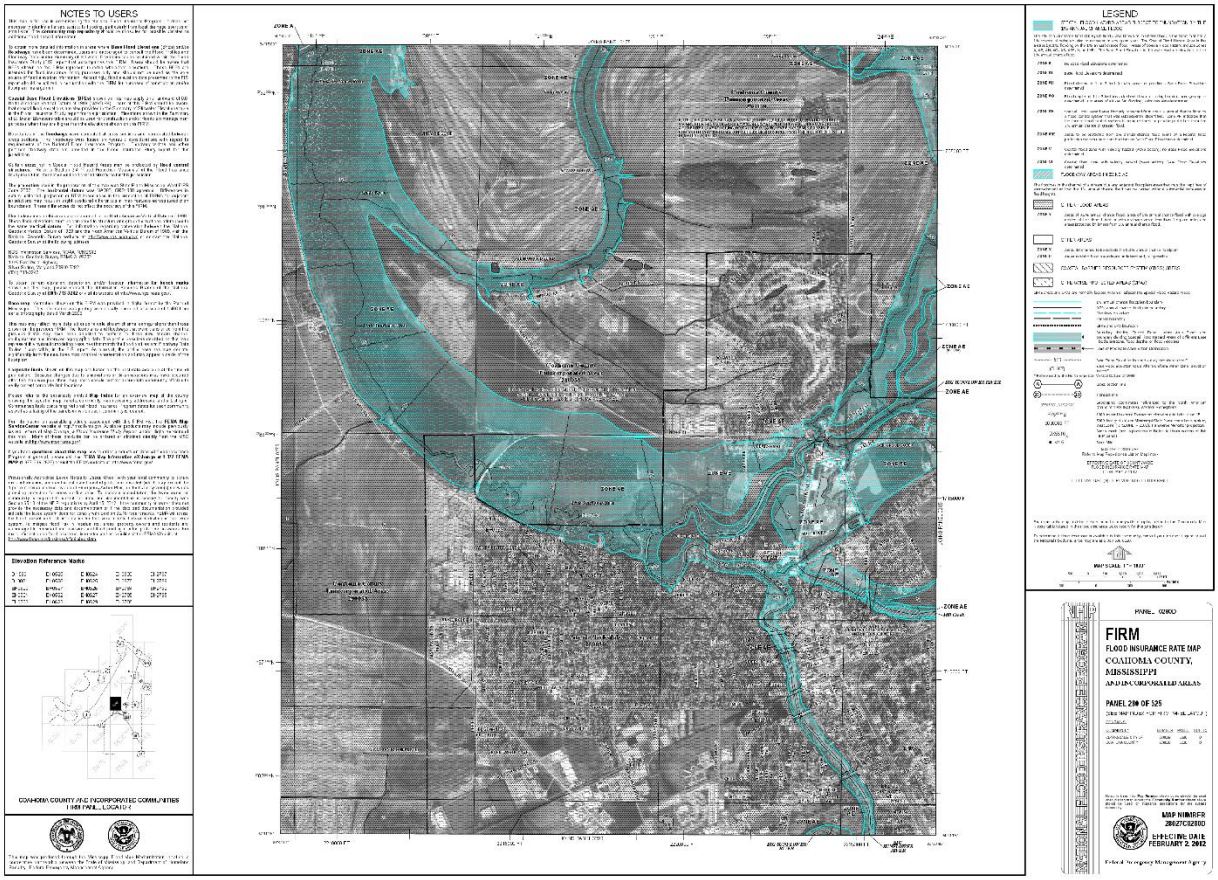
[2] The county-level DFIRM data used for Coahoma County were updated in 2012.

FIGURE A.3: SPECIAL FLOOD HAZARD AREAS IN COAHOMA COUNTY



Source: Federal Emergency Management Agency

FIGURE A.4.1: SPECIAL FLOOD HAZARD AREAS IN COAHOMA COUNTY



Source: Federal Emergency Management Agency

HISTORICAL OCCURRENCES

Floods were at least partially responsible for nine disaster declarations in Coahoma County in 1973, 1990, twice in 1991, 2001, twice in 2011, twice in 2016, 2019, and 2020.[3] Information from the National Climatic Data Center was used to ascertain additional historical flood events. The National Climatic Data Center reported a total of 23 events in Coahoma County since 1997.[4] A summary of these events is presented in **Table A.6**. These events accounted for $1,938,000 in property damage. Specific information on flood events, including date, type of flooding, and deaths and injuries, can be found in **Table A.7**.

TABLE A.6: SUMMARY OF FLOOD OCCURRENCES IN COAHOMA COUNTY

Location	Number of Occurrences	Deaths/Injuries	Property Damage (2021)	Annualized Property Losses
Clarksdale	15	0/0	$1,137,000	$47,375
Coahoma (town)	0	0/0	$0	$0

[3] A complete listing of historical disaster declarations can be found in Section 4: *Hazard Identification*.
[4] These flood events are only inclusive of those reported by the National Climatic Data Center (NCDC) from 1996 through May 2021. It is likely that additional occurrences have occurred and have gone unreported. As additional local data becomes available, this hazard profile will be amended.

Location	Number of Occurrences	Deaths/Injuries	Property Damage (2021)	Annualized Property Losses
Friars Point	3	0/0	$26,000	$1,083
Jonestown	0	0/0	$0	$0
Lula	0	0/0	$0	$0
Lyon	1	0/0	$0	$0
Unincorporated Area	4	0/0	$775,000	$32,292
COAHOMA COUNTY TOTAL	**23**	**0/0**	**$1,938,000**	**$80,750**

Source: National Climatic Data Center

TABLE A.7: HISTORICAL FLOOD EVENTS IN COAHOMA COUNTY

Location	Date	Type	Deaths/Injuries	Property Damage
Clarksdale				
CLARKSDALE	3/5/1997	Flash Flood	0/0	$1,497
CLARKSDALE	3/16/2000	Flash Flood	0/0	$6,975
CLARKSDALE	10/11/2001	Flash Flood	0/0	$20,347
CLARKSDALE	5/3/2002	Flash Flood	0/0	$1,335
CLARKSDALE	12/19/2002	Flash Flood	0/0	$13,354
CLARKSDALE	5/17/2003	Flash Flood	0/0	$6,528
CLARKSDALE	10/31/2006	Flash Flood	0/0	$0
CLARKSDALE	5/15/2007	Flash Flood	0/0	$0
CLARKSDALE	5/2/2008	Flash Flood	0/0	$111,580
CLARKSDALE	5/10/2008	Flash Flood	0/0	$0
CLARKSDALE	5/24/2009	Flash Flood	0/0	$0
CLARKSDALE	5/25/2010	Flash Flood	0/0	$0
CLARKSDALE	4/20/2011	Flash Flood	0/0	$0
CLARKSDALE	3/10/2016	Flood	0/0	$1,000,000
CLARKSDALE	6/10/2021	Flash Flood	0/0	$150,000
Coahoma (town)				
None Reported	--	--	--	--
Friars Point				
FRIARS PT	7/14/2002	Flash Flood	0/0	$1,335
FRIARS PT	5/2/2009	Flash Flood	0/0	$0
FRIARS PT	7/30/2009	Flash Flood	0/0	$27,995
Jonestown				
None Reported	--	--	--	--
Lula				
None Reported	--	--	--	--
Lyon				
LYON	7/23/2014	Flash Flood	0/0	$0
Unincorporated Area				
COAHOMA (ZONE)	11/28/2001	Flood	0/0	$6,783
COAHOMA (ZONE)	12/1/2001	Flood	0/0	$13,565
COAHOMA (ZONE)	12/18/2001	Flood	0/0	$13,565
HILLHOUSE	5/1/2011	Flood	0/0	$801,004

Location	Date	Type	Deaths/Injuries	Property Damage

Table 4.7 updated thru July 2021.
Source: National Climatic Data Center

HISTORICAL SUMMARY OF INSURED FLOOD LOSSES

The below information regarding repetitive loss and severe repetitive is the latest available data for this 2021 plan update due to directive regarding sharing NFIP information. According to FEMA flood insurance policy records as of June 2016, there have been 344 flood losses reported in Coahoma County through the National Flood Insurance Program (NFIP) since 1978, totaling almost $6.6 million in claims payments. A summary of these figures for the county is provided in **Table A.8**. It should be emphasized that these numbers include only those losses to structures that were insured through the NFIP policies, and for losses in which claims were sought and received. It is likely that many additional instances of flood loss in Coahoma County were either uninsured, denied claims payment, or not reported.

TABLE A.8: SUMMARY OF INSURED FLOOD LOSSES IN COAHOMA COUNTY

Location	Number of Policies	Flood Losses	Claims Payments
Clarksdale	91	52	$1,387,465
Coahoma (town)	0	0	$0
Friars Point	2	0	$0
Jonestown	4	5	$69,185
Lula	1	0	$0
Lyon	2	5	$162,782
Unincorporated Area	124	282	$4,935,684
COAHOMA COUNTY TOTAL	**224**	**344**	**$6,555,116**

Source: National Flood Insurance Program

REPETITIVE LOSS PROPERTIES

According to the Mississippi Emergency Management Agency, there are 40 non-mitigated repetitive loss properties located in Coahoma County, which accounted for 107 losses and almost $1.1 million in claims payments under the NFIP. The average claim amount for these properties is $9,882. Of the 40 properties, 37 are single family, 1 is multi-family, and 2 are non-residential. Without mitigation, these properties will likely continue to experience flood losses. **Table A.9** presents detailed information on repetitive loss properties and NFIP claims and policies for Coahoma County.

TABLE A.9: REPETITIVE LOSS PROPERTIES IN COAHOMA COUNTY

Location	Number of Properties	Types of Properties	Number of Losses	Building Payments	Content Payments	Total Payments	Average Payment
Clarksdale	10	10 single family	28	$201,668	$57,324	$258,992	$9,250
Coahoma (town)	6	6 single family	16	$77,923	$21,714	$99,637	$6,227
Friars Point	0	--	0	$0	$0	$0	$0
Jonestown	4	4 single family	8	$28,321	$17,947	$46,268	$5,784

Location	Number of Properties	Types of Properties	Number of Losses	Building Payments	Content Payments	Total Payments	Average Payment
Lula	2	2 single family	4	$30,018	$0	$30,018	$7,505
Lyon	2	1 single family, 1 multi-family	4	$10,914	$11,768	$22,682	$5,671
Unincorporated Area	16	14 single family, 2 non-residential	47	$510,459	$89,295	$599,755	$12,761
COAHOMA COUNTY TOTAL	**40**		**107**	**$859,303**	**$198,048**	**$1,057,352**	**$9,882**

Source: National Flood Insurance Program

PROBABILITY OF FUTURE OCCURRENCES

Flood events will remain a threat in Coahoma County, and the probability of future occurrences will remain highly likely (100 percent annual probability). The participating jurisdictions and unincorporated areas have risk to flooding, though not all areas will experience flood. The probability of future flood events based on magnitude and according to best available data is illustrated in the figure above, which indicates those areas susceptible to the 1-percent annual chance flood (100-year floodplain).

It can be inferred from the floodplain location maps, previous occurrences, and repetitive loss properties that risk varies throughout the county. For example, areas along the western border of the county have more floodplain and thus a higher risk of flood than the rest of the county. Flood is not the greatest hazard of concern but will continue to occur and cause damage. Therefore, mitigation actions may be warranted, particularly for repetitive loss properties.

FIRE-RELATED HAZARDS

A.2.4 Drought

LOCATION AND SPATIAL EXTENT

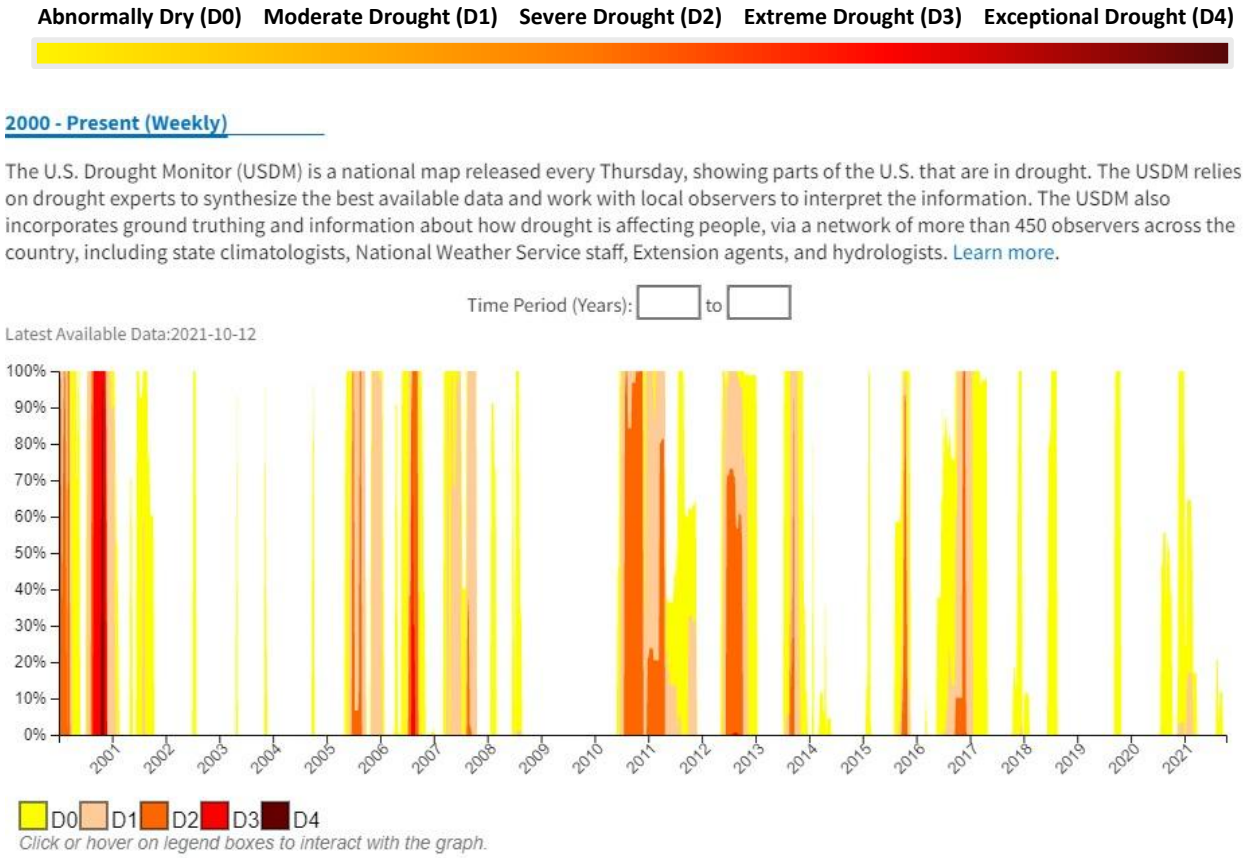
Drought typically covers a large area and cannot be confined to any geographic or political boundaries. District 1 Regional Hazard Mitigation Council determined that all jurisdictions in Coahoma County could be equally impacted by drought conditions, making the spatial extent potentially widespread. It is also notable that drought conditions typically do not cause significant damage to the built environment but may exacerbate wildfire conditions.

HISTORICAL OCCURRENCES

According to the U.S. Drought Monitor, Coahoma County had drought levels of Severe or worse in 9 of the last 22 years (January 2000-October 2021). **Figure 8.4** shows the most severe drought classification for each year, according to U.S. Drought Monitor classifications. It should be noted that the U.S. Drought Monitor also estimates what percentage of the county is in each classification of drought severity. For

example, the most severe classification reported may be exceptional but a majority of the county may actually be in a less severe condition.

FIGURE 8.4: HISTORICAL DROUGHT OCCURRENCES IN COAHOMA COUNTY



Drought.gov

Some additional anecdotal information and table of historical drought occurrences were provided from the National Climatic Data Center for Coahoma County and all jurisdictions.

Summer 2007 – Drought conditions began in early April across portions of Northeast Mississippi and expanded to North Central Mississippi by the end of April. Drought conditions continued throughout the summer months through October and at times reached exceptional conditions. The drought impacted agricultural and hydrological interests of the area. Burn bans in some locations were issued due to the lack of rainfall.

Summer 2010 to Spring 2011 – Below normal rainfall from June 2010 until April 2011 resulted in drought across Northwest Mississippi. The biggest impact of the drought was on agriculture as many crops suffered due to the lack of rainfall. Many pastures were in poor condition forcing farmers to feed livestock with baled hay. Hydrological concerns started to become an issue by the end of September into March as many lake and river levels dropped. Lack of moisture in the ground also caused several pipes to burst in the region. Burn bans were issued for most of North Mississippi.

Summer 2012 – Below normal rainfall fell during the month of July across North Mississippi. Many crops that were planted during the spring struggled to grow due to lack of water. Many pastures were in poor condition forcing farmers to feed cattle baled hay. Lake and river levels dropped to low levels. Burn bans were issued for many counties as a result of the dry conditions. Drought conditions improved during the month of October.

September 2013 – A prolonged dry spell during the latter part of the summer produced severe drought conditions across portions of Northwest Mississippi by the beginning of September. However, drought conditions improved by the latter part of the month as several periods of rain occurred from passing cold fronts. Little damage occurred to crops as crops were being harvested at the time. Cattle possibly had a hard time finding adequate water sources as rivers and lakes were at low levels.

Fall 2015 – Abnormally dry conditions during the latter part of the summer into the early part of fall led to moderate drought conditions over portions of Northwest Mississippi during October and November. The drought had little impact with agriculture as the dry weather allowed crops to be harvested and winter wheat to be planted. However, the dry conditions did elevate the risk of wildfires. River and lake levels were also at low levels.

Summer to Fall 2016 – Moderate to severe drought experienced in the MEMA District 1 Region.

HISTORICAL DROUGHT OCCURRENCES IN COAHOMA COUNTY (2010 – 2021)

Location	Date	Type	Magnitude	Death	Injury	Property Damage	Crop Damage
Coahoma (zone)	7/27/2010	Drought		0	0	0.00K	0.00K
Coahoma (zone)	8/1/2010	Drought		0	0	0.00K	0.00K
Coahoma (zone)	9/1/2010	Drought		0	0	0.00K	0.00K
Coahoma (zone)	10/1/2010	Drought		0	0	0.00K	0.00K
Coahoma (zone)	11/1/2010	Drought		0	0	0.00K	0.00K
Coahoma (zone)	12/28/2010	Drought		0	0	0.00K	0.00K
Coahoma (zone)	1/1/2011	Drought		0	0	0.00K	0.00K
Coahoma (zone)	2/1/2011	Drought		0	0	0.00K	0.00K
Coahoma (zone)	3/1/2011	Drought		0	0	0.00K	0.00K
Coahoma (zone)	4/1/2011	Drought		0	0	0.00K	0.00K

Coahoma (zone)	6/19/2012	Drought		0	0	0.00K	0.00K
Coahoma (zone)	7/1/2012	Drought		0	0	0.00K	0.00K
Coahoma (zone)	8/1/2012	Drought		0	0	0.00K	0.00K
Coahoma (zone)	9/1/2012	Drought		0	0	0.00K	0.00K
Coahoma (zone)	10/1/2012	Drought		0	0	0.00K	0.00K
Coahoma (zone)	9/3/2013	Drought		0	0	0.00K	0.00K
Coahoma (zone)	10/1/2015	Drought		0	0	0.00K	0.00K
Coahoma (zone)	11/1/2015	Drought		0	0	0.00K	0.00K
Coahoma (zone)	9/27/2016	Drought		0	0	0.00K	0.00K
Coahoma (zone)	10/1/2016	Drought		0	0	0.00K	0.00K
Coahoma (zone)	11/1/2016	Drought		0	0	0.00K	0.00K
Total				0	0	0.00K	0.00K

Source: National Climatic Data Center

PROBABILITY OF FUTURE OCCURRENCES

Based on historical occurrence information, it is assumed that Coahoma County has a probability level of likely (between 10 and 100 percent annual probability) for future drought events. However, the extent (or magnitude) of drought and the amount of geographic area covered by drought, varies with each year. Historic information indicates that there is a much lower probability for extreme, long-lasting drought conditions.

A.2.5 Lightning

LOCATION AND SPATIAL EXTENT

Lightning occurs randomly, therefore it is impossible to predict where and with what frequency it will strike. District 1 Regional Hazard Mitigation Council determined that all jurisdictions in Coahoma County could be equally impacted by lightning.

HISTORICAL OCCURRENCES

According to the National Climatic Data Center, there has been one recorded lightning event in Coahoma County since 1997.[5] This event resulted in almost $10,000 in property damages, as listed in summary **Table A.100**. Furthermore, lightning caused four deaths in Coahoma County. Detailed information on historical lightning events can be found in **Table A.111**.

It is certain that more than one event has impacted the county. Many of the reported events are those that cause damage, and it should be expected that damages are likely much higher for this hazard than what is reported.

TABLE A.10: SUMMARY OF LIGHTNING OCCURRENCES IN COAHOMA COUNTY

Location	Number of Occurrences	Deaths/Injuries	Property Damage (2021)	Annualized Property Losses
Clarksdale	0	0/0	$0	$0
Coahoma (town)	0	0/0	$0	$0
Friars Point	0	0/0	$0	$0
Jonestown	1	4/0	$10,000	$435
Lula	0	0/0	$0	$0
Lyon	0	0/0	$0	$0
Unincorporated Area	0	0/0	$0	$0
COAHOMA COUNTY TOTAL	**1**	**4/0**	**$10,000**	**$435**

Source: National Climatic Data Center

TABLE A.11: HISTORICAL LIGHTNING OCCURRENCES IN COAHOMA COUNTY

Location	Date	Deaths/ Injuries	Property Damage	Details
Clarksdale				
None Reported	--	--	--	--
Coahoma (town)				
None Reported	--	--	--	--
Friars Point				
None Reported	--	--	--	--
Jonestown				
JONESTOWN	3/2/1997	0/0	$10,000	A house was badly damaged by a fire started by lightning. Four children ranging in age from 18 months to 4 years old were killed in the fire.
Lula				
None Reported	--	--	--	--
Lyon				
None Reported	--	--	--	--
Unincorporated Area				

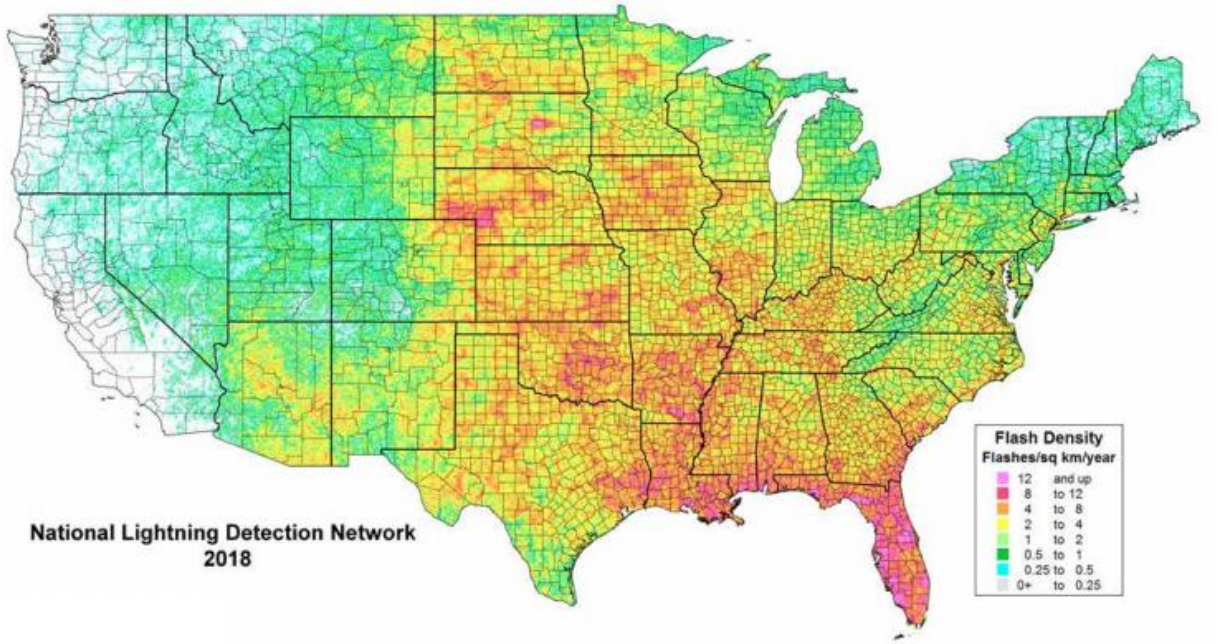
[5] These lightning events are only inclusive of those reported by the National Climatic Data Center (NCDC) from 1996 through May 2021. It is certain that additional lightning events have occurred in Coahoma County. As additional local data becomes available, this hazard profile will be amended.

Location	Date	Deaths/ Injuries	Property Damage	Details
None Reported	--	--	--	--

Source: National Climatic Data Center

PROBABILITY OF FUTURE OCCURRENCES

Although there was not a high number of historical lightning events reported in Coahoma County via NCDC data, it is a regular occurrence accompanied by thunderstorms. In fact, lightning events will assuredly happen on an annual basis, though not all events will cause damage. According to Vaisala's U.S. National Lightning Detection Network (NLDN), Coahoma County is located in an area of the country that experienced an average of 4 to 12 lightning flashes per square kilometer per year between 2005 and 2018. Therefore, the probability of future events is highly likely (100 percent annual probability). It can be expected that future lightning events will continue to threaten life and cause minor property damages throughout the county.



A.2.6 Wildfire

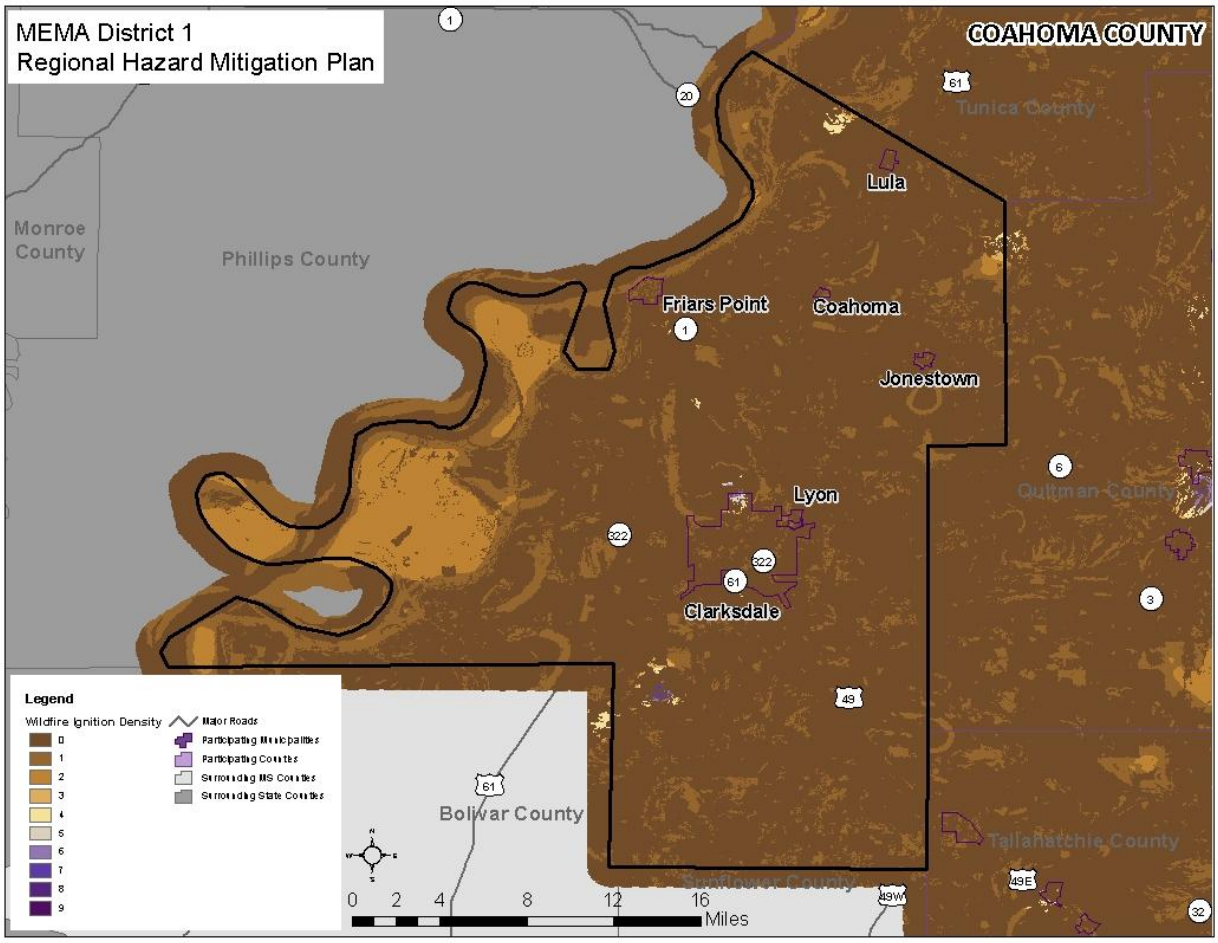
LOCATION AND SPATIAL EXTENT

The entire county is at risk to a wildfire occurrence. However, several factors such as drought conditions or high levels of fuel on the forest floor, may make a wildfire more likely. Wildfire is a spatial hazard, and jurisdiction specific information is required for location and extent; however, the Mississippi Forestry Commission only provides county-level data, so there is no data on each jurisdiction in Coahoma County. Areas in the urban-wildland interface are particularly susceptible to fire hazard as populations abut formerly undeveloped areas. The Wildfire Ignition Density data shown in the figure below give an indication of historic location.

HISTORICAL OCCURRENCES

Figure A.4 shows the Wildfire Ignition Density in Coahoma County based on data from the Southern Wildfire Risk Assessment. This data is based on historical fire ignitions and the likelihood of a wildfire igniting in an area. Occurrence is derived by modeling historic wildfire ignition locations to create an average ignition rate map. This is measured in the number of fires per year per 1,000 acres.[6]

FIGURE A.5: WILDFIRE IGNITION DENSITY IN COAHOMA COUNTY



Source: Southern Wildfire Risk Assessment

Based on data from the Mississippi Forestry Commission from 2012 to 2021, Coahoma County experienced an average of 0.2 wildfires annually which burned a combined 19.2 acres per year. The data indicate that these fires averaged about 96 acres per fire. **Table A.122** provides a summary of wildfire occurrences in Coahoma County and **Table A.13**3 lists the number of reported wildfire occurrences in the county between the years 2012 and 2021.

[6] Southern Wildfire Risk Assessment, 2014.

TABLE A.12: SUMMARY TABLE OF ANNUAL WILDFIRE OCCURRENCES (2012 -2021)*

	Coahoma County
Average Number of Fires per year	0.2
Average Number of Acres Burned per year	19.2
Average Number of Acres Burned per fire	96

*These values reflect averages over a 10-year period.
Source: Mississippi Forestry Commission

TABLE A.13: HISTORICAL WILDFIRE OCCURRENCES IN COAHOMA COUNTY

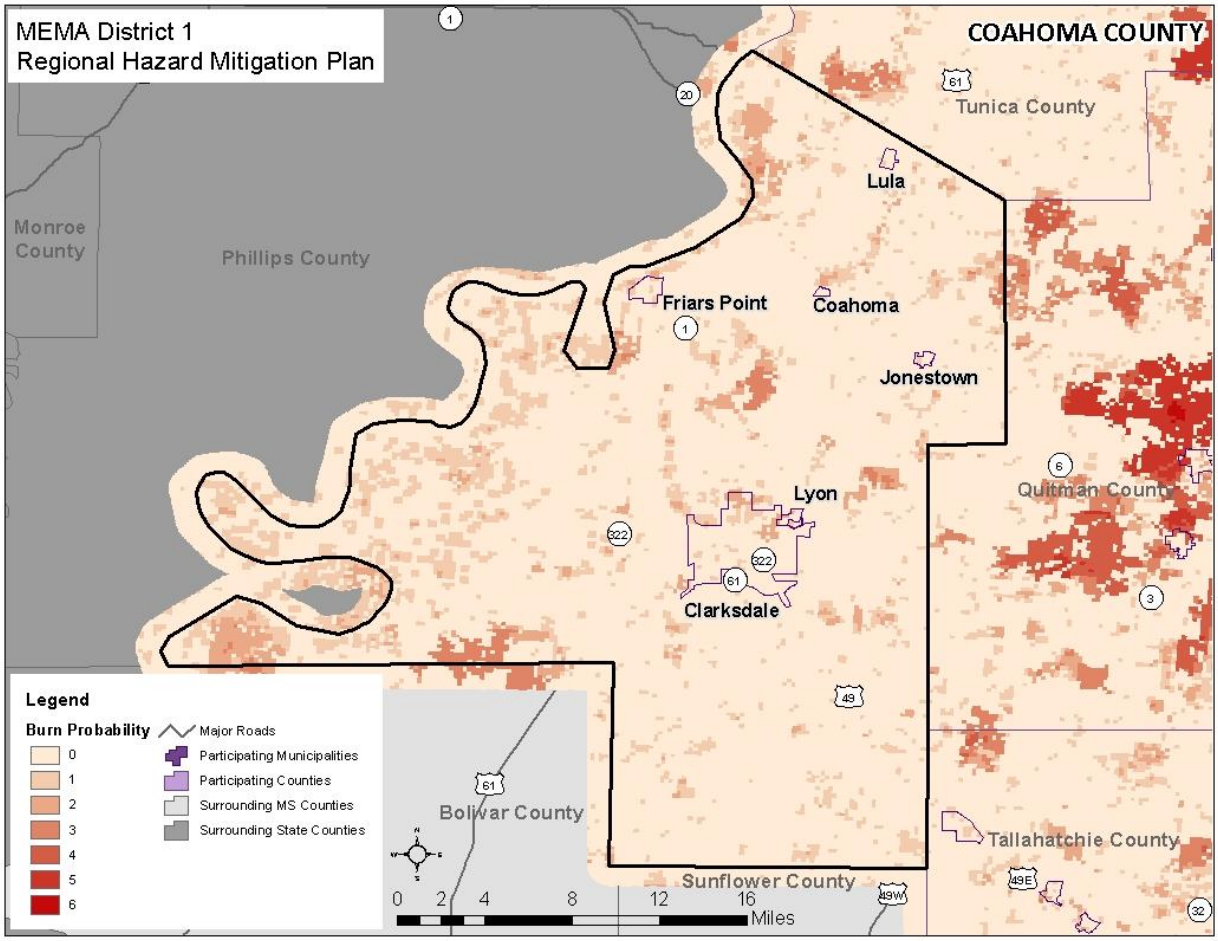
Year	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Coahoma County										
Number of Fires	0	0	0	0	2	0	0	0	0	0
Number of Acres Burned	0	0	0	0	115	0	0	0	0	0

Source: Mississippi Forestry Commission

PROBABILITY OF FUTURE OCCURRENCES

Wildfire events will be an ongoing occurrence in Coahoma County. **Figure A.5** shows that there is some probability a wildfire will occur throughout the county. However, the likelihood of wildfires increases during drought cycles and abnormally dry conditions. Fires are likely to stay small in size but could increase due to local climate and ground conditions. Dry, windy conditions with an accumulation of forest floor fuel (potentially due to ice storms or lack of fire) could create conditions for a large fire that spreads quickly. It should also be noted that some areas do vary somewhat in risk. For example, highly developed areas are less susceptible unless they are located near the urban-wildland boundary. The risk will also vary due to assets. Areas in the urban-wildland interface will have much more property at risk, resulting in increased vulnerability and need to mitigate compared to rural, mainly forested areas. The probability assigned to Coahoma County for future wildfire events is highly likely (100 percent annual probability).

FIGURE A.6: BURN PROBABILITY IN COAHOMA COUNTY



Source: Southern Wildfire Risk Assessment

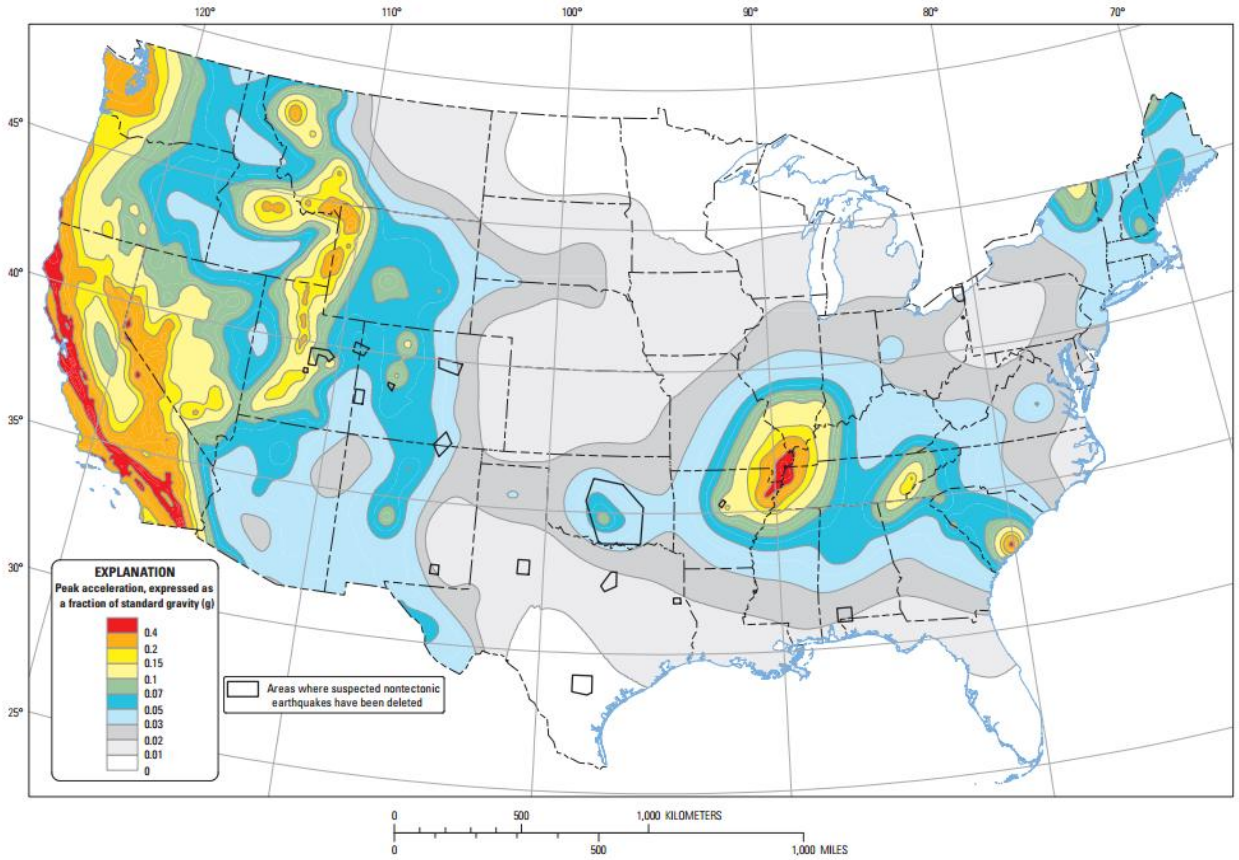
GEOLOGIC HAZARDS

A.2.7 Earthquake

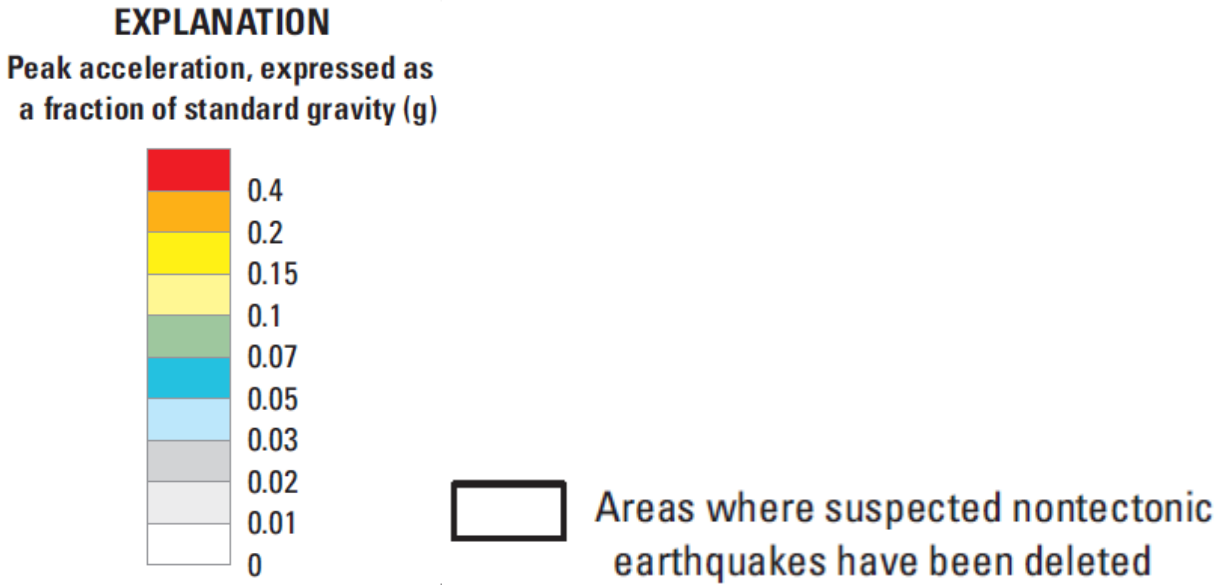
LOCATION AND SPATIAL EXTENT

Figure A.6 shows the intensity level associated with Coahoma County, based on the national USGS map of peak acceleration with 10 percent probability of exceedance in 50 years. It is the probability that ground motion will reach a certain level during an earthquake. The data show peak horizontal ground acceleration (the fastest measured change in speed, for a particle at ground level that is moving horizontally due to an earthquake) with a 10 percent probability of exceedance in 50 years. The map was compiled by the U.S. Geological Survey (USGS) Geologic Hazards Team, which conducts global investigations of earthquake, geomagnetic, and landslide hazards. According to this map, Coahoma County lies within an approximate zone of level "0.05" to "0.15" ground acceleration. This indicates that the county exists within an area of moderate to high seismic risk. All jurisdiction in Coahoma County could be equally impacted by earthquakes; however, jurisdiction specific information is provided for location and extent when available.

FIGURE A.7: PEAK ACCELERATION WITH 10 PERCENT PROBABILITY OF EXCEEDANCE IN 50 YEARS



Ten-percent probability of exceedance in 50 years map of peak ground acceleration



Source: United States Geological Survey, 2014

It should also be noted that the State of Mississippi Hazard Mitigation Plan identifies certain areas of concern for liquefaction and lists the counties and corresponding zones within those counties that have the highest liquefaction potential. The zones of high risk for Coahoma County can be found in **Table A.144.**

TABLE A.14: HIGH LIQUEFACTION HAZARD FOR COAHOMA COUNTY

County	Seismic Source*	Geographic Area of Concern	Liquefaction Potential by Seismic Zone
Coahoma County	NMSZ, WRFZ	Mississippi River Floodplain	Very High, Very High

*NMSZ = New Madrid Seismic Zone; WRFZ = White River Fault Zone
Source: State of Mississippi Standard Mitigation Plan (2018 Update)/USGS

HISTORICAL OCCURRENCES

At least 21 earthquakes are known to have affected Coahoma County since 1931. The strongest of these measured a V on the Modified Mercalli Intensity (MMI) scale. **Table A.155** provides a summary of earthquake events reported by the National Geophysical Data Center between 1638 and 1985. **Table A.166** presents a detailed occurrence of each event including the date, distance for the epicenter, magnitude and Modified Mercalli Intensity (if known). [7]

TABLE A.15: SUMMARY OF SEISMIC ACTIVITY IN COAHOMA COUNTY

Location	Number of Occurrences	Greatest MMI Reported	Greatest Richter Scale Reported
Clarksdale	4	IV	5.3
Coahoma (town)	1	V	4.9
Friars Point	3	V	4.9
Jonestown	1	II	5.0
Lula	2	III	4.9
Lyon	1	III	4.9
Unincorporated Area	9	V	5.0
COAHOMA COUNTY TOTAL	**21**	**V (slightly strong)**	**5.3**

Source: National Geophysical Data Center

TABLE A.16: SIGNIFICANT SEISMIC EVENTS IN COAHOMA COUNTY (1638 -1985)

Location	Date	Epicentral Distance	Magnitude	MMI
Clarksdale				
Clarksdale	12/17/1931	72.0 km	*Unknown*	IV
Clarksdale	6/4/1967	72.0 km	*Unknown*	IV
Clarksdale	11/9/1968	461.0 km	5.3	IV
Clarksdale	3/25/1976	154.0 km	4.9	IV
Coahoma (town)				
Coahoma (town)	3/25/1976	136.0 km	4.9	V

[7] Due to reporting mechanisms, not all earthquake events were recorded during this time. Furthermore, some are missing data, such as the epicenter location, due to a lack of widely used technology. In these instances, a value of "unknown" is reported.

Location	Date	Epicentral Distance	Magnitude	MMI
Friars Point				
Friars Point	12/17/1931	81.0 km	*Unknown*	IV
Friars Point	11/17/1970	183.0 km	3.6	III
Friars Point	3/25/1976	137.0 km	4.9	V
Jonestown				
Jonestown	3/25/1976	141.0 km	5.0	II
Lula				
Lula	11/17/1970	169.0 km	3.6	III
Lula	3/25/1976	126.0 km	4.9	III
Lyon				
Lyon	3/25/1976	152.0 km	4.9	III
Unincorporated Area				
Farrell	12/17/1931	81.0 km	*Unknown*	III
Farrell	6/4/1967	76.0 km	3.8	IV
Hillhouse	10/1/1971	190.0 km	*Unknown*	IV
Hillhouse	3/29/1972	256.0 km	3.7	IV
Farrell	3/25/1976	148.0 km	5.0	II
Mattson	3/25/1976	165.0 km	4.9	V
Rena Lara	3/25/1976	162.0 km	4.9	IV
Rich	3/25/1976	131.0 km	5.0	II
Sherard	3/25/1976	154.0 km	4.9	IV

Source: National Geophysical Data Center

Earthquakes Affecting Coahoma County, MS 1985 - 2020

Date	Origin	Magnitude	Maximum Intensity	Intensities Reported in MS	Jurisdiction
2/11/1991	New Madrid Seismic zone	2.7	Not felt	Not felt	Clarksdale
11/7/2004	25 miles SW of Tuscaloosa, AL	4.0	V	I, II, III, IV	Coahoma County
2/10/2005	22 miles WSW of Blytheville, AR	4.1	V	I, II, III	Coahoma County
10/10/2012	New Madrid Seismic zone	2.3	Not felt	Not felt	Jonestown

Source: State of Mississippi Hazard Mitigation Plan 2018/MDEQ/USGS

EARTHQUAKES EFFECTS OF DAMS

To assess the potential threat an earthquake could have on dams, the inventory of dams for MEMA District 1 is provided in **Table A.16.1**. These counties are located in areas that have felt impacts from previous tremors or are geographically susceptible to future impacts.

Table A.16.1 MEMA District 1 Dam Inventory in Relation to Earthquake Prone Counties

County	Significant	High	Low	Undetermined	Total
Coahoma County	0	0	4	0	4
Desoto County	1	26	90	40	157
Grenada County	0	3	29	19	51
Panola County	1	10	87	20	118
Quitman County	0	0	1	0	1
Tallahatchie County	1	11	34	3	49
Tate County	1	4	63	8	76
Tunica County	2	0	8	0	10
Yalobusha County	2	7	48	13	70

Source: 2018 National Inventory of Dams

PROBABILITY OF FUTURE OCCURRENCES

The probability of significant, damaging earthquake events affecting Coahoma County is unlikely. However, it is certainly possible that future earthquakes resulting in light or moderate perceived shaking and damages will affect the county much more frequently. The annual probability level for the county is estimated to be between 10 and 100 percent (likely).

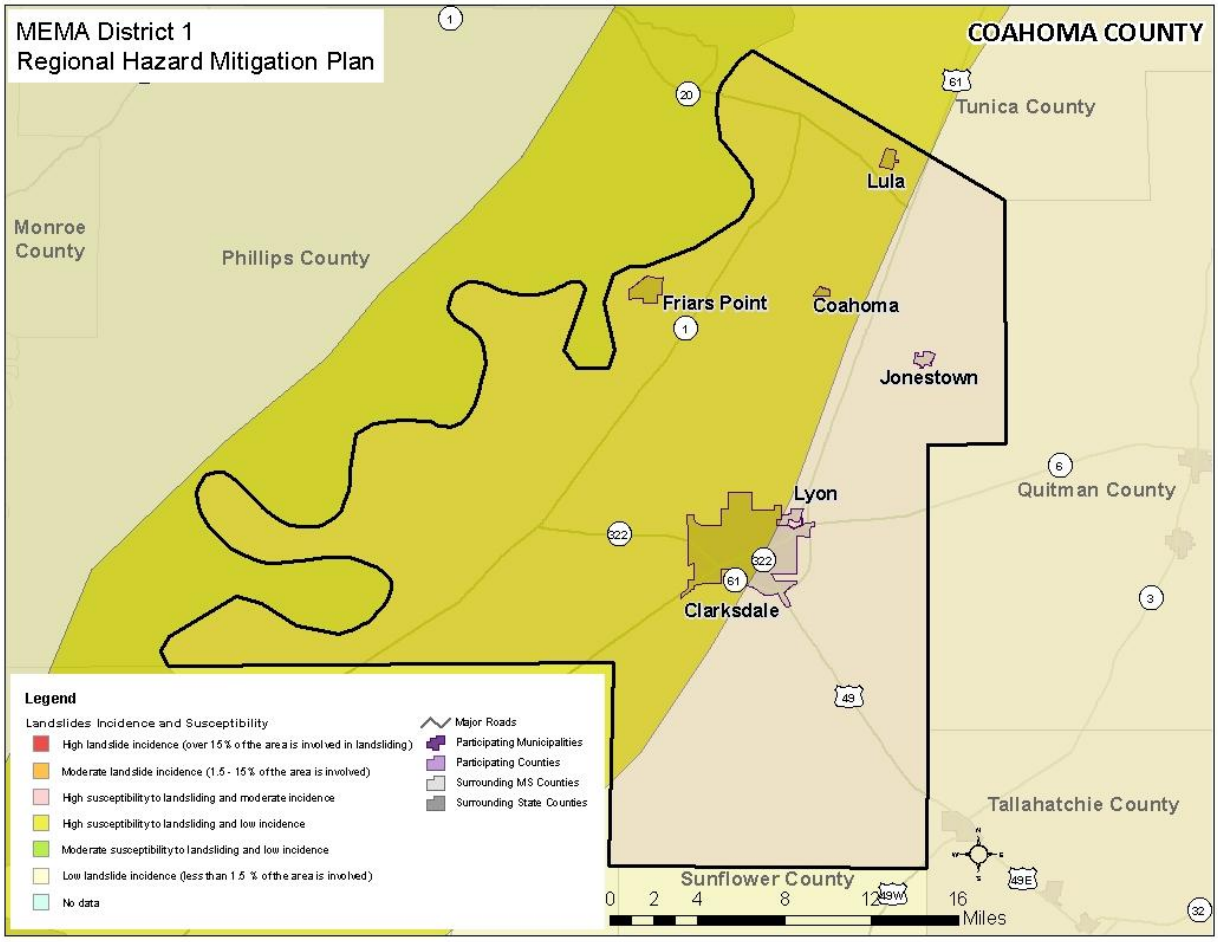
A.2.8 Landslide

LOCATION AND SPATIAL EXTENT

Landslides occur along steep slopes when the pull of gravity can no longer be resisted (often due to heavy rain). Human development can also exacerbate risk by building on previously undevelopable steep slopes. Landslides are possible throughout Coahoma County, though the risk is relatively low.

According to **Figure A.7** below, the entire county falls under a low incidence area, indicating that in these zones less than 1.5 percent of the area is involved in landsliding. There is an area across the northwestern portion of the county that has a high susceptibility, indicating that there is a somewhat higher potential for landslides to occur in this area.

FIGURE A.8: LANDSLIDE SUSCEPTIBILITY AND INCIDENCE MAP OF COAHOMA COUNTY



Source: United States Geological Survey

HISTORICAL OCCURRENCES

There is no extensive history of landslides in Coahoma County. Landslide events typically occur in isolated areas, but no major landslide events were reported.

PROBABILITY OF FUTURE OCCURRENCES

Based on historical information and the USGS susceptibility index, the probability of future landslide events is possible (between 1 and 10 percent annual probability). The USGS data indicates that all areas in Coahoma County have a low incidence rate and some areas also have low susceptibly to landsliding activity. There is one area across the northwestern half of county that has high susceptibility.

Local conditions may become more favorable for landslides due to heavy rain, for example. This would increase the likelihood of occurrence. It should also be noted that some areas in Coahoma County have greater risk than others given factors such as steepness on slope and modification of slopes.

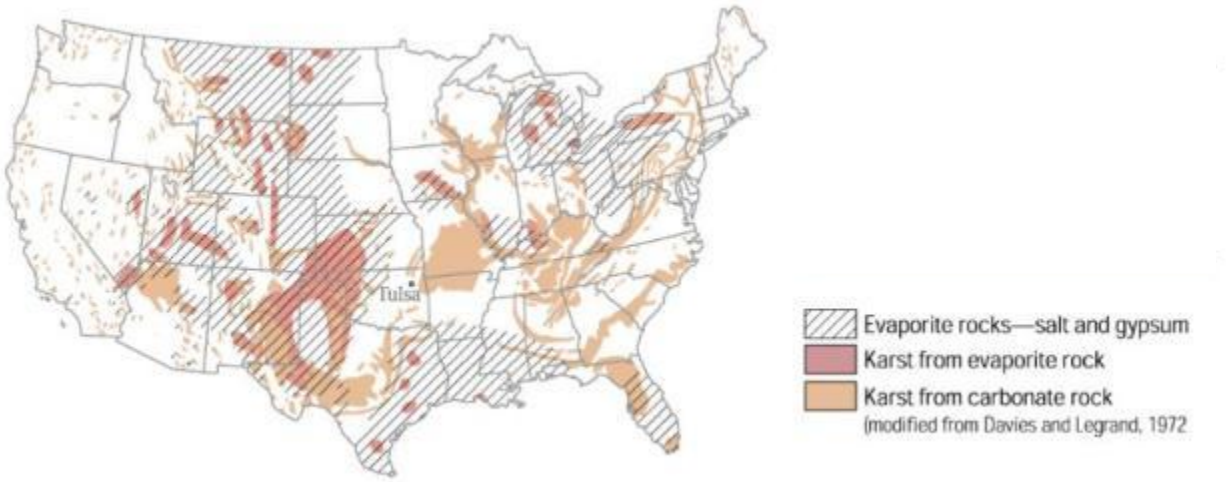
A.2.9 Land Subsidence/Sinkhole

LOCATION AND SPATIAL EXTENT

According to the U.S. Geological Survey (USGS), subsidence affects an estimated 17,000 square miles in 45 states, including Mississippi. Salt and gypsum underlie about 35 to 40 percent of the United States, though in many areas they are buried at great depths.

Figure A.8 shows the location of rock types associated with subsidence in the United States. It indicates that there may be areas in Coahoma County underlain with soil and rock types that are susceptible to land subsidence, but overall the northwest part of the state is not underlain by these soil/rock types.

FIGURE A.9: MAP OF ROCK TYPES ASSOCIATED WITH SUBSIDENCE IN THE UNITED STATES



Source: United States Geological Survey

HISTORICAL OCCURRENCES

Although there is no extensive recorded history of land subsidence in Coahoma County, anecdotal evidence of isolated incidents have been reported. Local county officials have noted the impacts from these swings and changes in soil as roads and other infrastructure have experienced large cracks and breaks, causing stops in daily operations and significant costs to local, state, and federal budgets. Often the cost to repair this infrastructure can be in the range of millions of dollars depending on the degree of damage and necessity for quick repairs.

PROBABILITY OF FUTURE OCCURRENCES

The probability of future land subsidence events in the county is possible (between 1 and 10 percent annual probability). The potential for land subsidence may be impacted by local conditions such as heavy rain or extremely dry periods.

WIND-RELATED HAZARDS

A.2.10 Extreme Heat

LOCATION AND SPATIAL EXTENT

Heat waves typically impact a large area and cannot be confined to any geographic or political boundaries. Therefore, Coahoma County and all the jurisdictions in the entire county are considered to be equally susceptible to extreme heat.

HISTORICAL OCCURRENCES

The National Climatic Data Center was used to determine historical heat wave occurrences in the county.

August 2007 – During the first half of August, a heat wave took hold of the region and brought some of the warmest temperatures since the summer of 2000. This heat wave began around August 5th and lasted until the 16th. Between August 10th and 15th, the entire area reached 100 degrees or higher. Twenty three record highs were also set during this time. As the temperature soared each day, high relative humidity resulted in heat index values between 105 and 112 degrees.

July to August 2010 – High pressure was firmly entrenched across the southeast and allowed temperatures to soar into the triple digits across much of the region numerous times during the months of July and August. Additionally, relatively high humidity levels made conditions even more oppressive, with heat index readings surpassing 110 degrees in many areas.

July to August 2011 – A strong upper ridge of high pressure moved over the Mid-South during the middle part of July and beginning of August. As a result, high temperatures ranged in the mid-90s to low 100s. Dew points ranged from the lower to upper 70s. The combination of the hot and humid conditions allowed heat indices to reach between 110 and 120 degrees during the afternoon hours.

July 2012 – An upper ridge of high pressure moved back over the Mid-South during the middle part of July. Temperatures rose into low 100s during the afternoon hours of July 19th-July 20th, 2012. The combination of heat and humidity produced heat indices above 110 degrees.

August 2021 – Excessive Heat Warning issued for Coahoma, Quitman, and Tallahatchie by the National Weather Service. Dangerously hot conditions with heat index values of 108 to 113 degrees.

Table A.17 provides a summary of excessive heat occurrences in the Coahoma County area from 2010 thru 2021. A total of 18 occurrences are recorded. The magnitude of the excessive heat was not available in NOAA.

TABLE A.17: SUMMARY OF EXCESSIVE HEAT OCCURRENCES IN COAHOMA COUNTY

Location	Date	Type	Magnitude	Deaths	Injury	Property Damage	Crop Damage
Coahoma (Zone)	8/1/10	Excessive Heat		0	0	0.00K	0.00K
Coahoma (Zone)	8/13/10	Excessive Heat		0	0	0.00K	0.00K
Coahoma (Zone)	8/19/10	Excessive Heat		0	0	0.00K	0.00K
Coahoma (Zone)	7/10/11	Excessive Heat		0	0	0.00K	0.00K
Coahoma (Zone)	8/3/11	Excessive Heat		0	0	0.00K	0.00K
Coahoma (Zone)	8/7/11	Excessive Heat		0	0	0.00K	0.00K
Coahoma (Zone)	7/20/11	Excessive Heat		0	0	0.00K	0.00K
Coahoma (Zone)	6/16/16	Excessive Heat		0	0	0.00K	0.00K
Coahoma (Zone)	7/22/16	Excessive Heat		0	0	0.00K	0.00K
Coahoma (Zone)	8/4/16	Excessive Heat		0	0	0.00K	0.00K
Coahoma (Zone)	8/5/16	Excessive Heat		0	0	0.00K	0.00K
Coahoma (Zone)	6/28/18	Excessive Heat		0	0	0.00K	0.00K
Coahoma (Zone)	6/30/18	Excessive Heat		0	0	0.00K	0.00K
Coahoma (Zone)	7/13/18	Excessive Heat		0	0	0.00K	0.00K
Coahoma (Zone)	7/20/18	Excessive Heat		0	0	0.00K	0.00K
Coahoma (Zone)	7/17/19	Excessive Heat		0	0	0.00K	0.00K
Coahoma (Zone)	8/12/19	Excessive Heat		0	0	0.00K	0.00K
Coahoma (Zone)	7/29/21	Excessive Heat		0	0	0.00K	0.00K
Totals:				0	0	0.00K	0.00K

Source: NOAA NCEI

PROBABILITY OF FUTURE OCCURRENCES

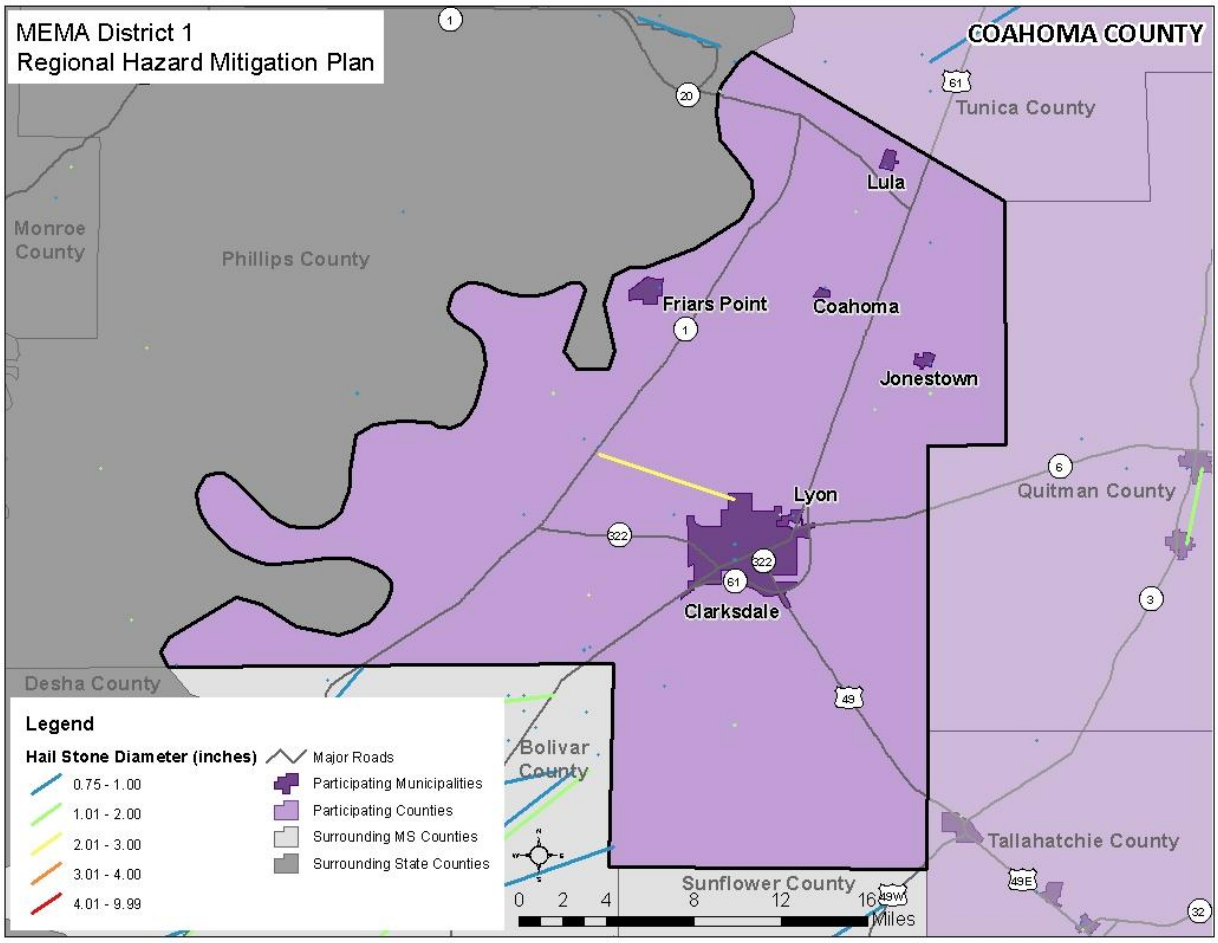
Based on historical occurrence information, it is assumed that all of Coahoma County has a probability level of likely (between 10 and 100 percent annual probability) for future heat wave events.

A.2.11 Hailstorm

LOCATION AND SPATIAL EXTENT

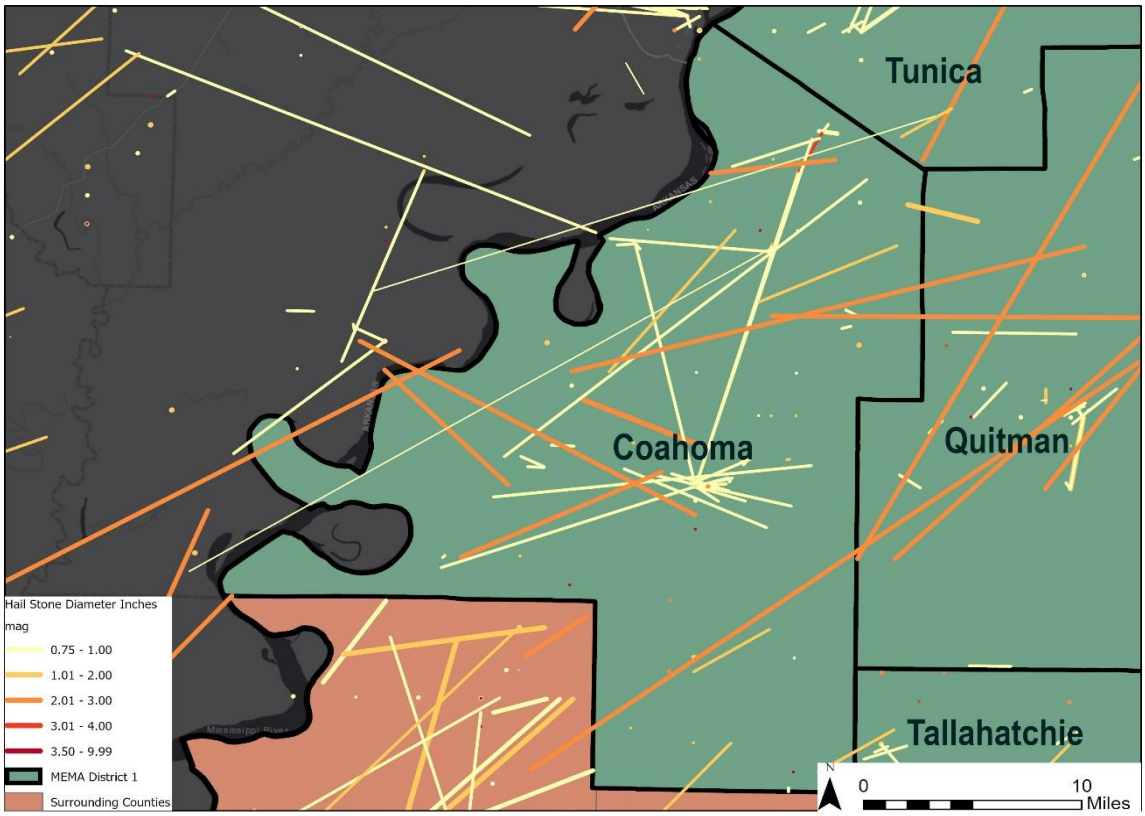
Hailstorms frequently accompany thunderstorms, so their locations and spatial extents coincide. It is assumed that Coahoma County is uniformly exposed to severe thunderstorms; therefore, all areas of the county are equally exposed to hail which may be produced by such storms. With that in mind, **Figure A.9** shows the location of hail events that have impacted the county between 1955 and 2015. **Figure A.9.1** shows the location of hail events that have impacted the county between 1955 and 2021.

FIGURE A.10: HAILSTORM TRACKS IN COAHOMA COUNTY



Source: National Weather Service Storm Prediction Center

FIGURE A.9.1: HAILSTORM TRACKS IN COAHOMA COUNTY



Source: National Weather Service Storm Prediction Center

HISTORICAL OCCURRENCES

According to the National Climatic Data Center, 59 recorded hailstorm events have affected Coahoma County since 1955.[8] **Table A.178** is a summary of the hail events in Coahoma County. **Table A.19** provides detailed information about each event that occurred in the county. In all, hail occurrences resulted in approximately $37,542 in property damages. Hail ranged in diameter from 0.75 inches to 2.75 inches. It should be noted that hail is notorious for causing substantial damage to cars, roofs, and other areas of the built environment that may not be reported to the National Climatic Data Center. Therefore, it is likely that damages are greater than the reported value.

TABLE A.18: SUMMARY OF HAIL OCCURRENCES IN COAHOMA COUNTY

Location	Number of Occurrences	Deaths/Injuries	Property Damage (2021)	Annualized Property Losses
Clarksdale	20	0/0	$15,800	$243
Coahoma (town)	2	0/0	$0	$0

[8] These hail events are only inclusive of those reported by the National Climatic Data Center (NCDC) from 1955 through May 2021. It is likely that additional hail events have affected Coahoma County. As additional local data becomes available, this hazard profile will be amended.

Location	Number of Occurrences	Deaths/Injuries	Property Damage (2021)	Annualized Property Losses
Friars Point	4	0/0	$8,500	$131
Jonestown	1	0/0	$0	$0
Lula	2	0/0	$1,116	$17
Lyon	3	0/0	$1,116	$17
Unincorporated Area	27	0/0	$11,010	$169
COAHOMA COUNTY TOTAL	**59**	**0/0**	**$37,542**	**$577**

Source: National Climatic Data Center

TABLE A.19: HISTORICAL HAIL OCCURRENCES IN COAHOMA COUNTY

Location	Date	Magnitude	Deaths/Injuries	Property Damage
Clarksdale				
CLARKSDALE	4/21/1996	0.88 in.	0/0	$77
CLARKSDALE	4/8/1998	1.00 in.	0/0	$221
CLARKSDALE	5/28/1998	0.75 in.	0/0	$15
CLARKSDALE	3/31/2001	0.75 in.	0/0	$27
CLARKSDALE	3/29/2002	1.00 in.	0/0	$13,354
CLARKSDALE	7/17/2002	0.75 in.	0/0	$13
CLARKSDALE	5/5/2003	0.75 in.	0/0	$13
CLARKSDALE	5/5/2003	0.88 in.	0/0	$65
CLARKSDALE	4/21/2006	0.75 in.	0/0	$1,192
CLARKSDALE	4/13/2007	0.88 in.	0/0	$1,159
CLARKSDALE	2/5/2008	1.00 in.	0/0	$2,232
CLARKSDALE	5/2/2008	0.88 in.	0/0	$1,674
CLARKSDALE	4/20/2011	0.88 in.	0/0	$0
CLARKSDALE	4/25/2011	0.75 in.	0/0	$0
CLARKSDALE	6/16/2011	1.00 in.	0/0	$0
CLARKSDALE	4/27/2014	1.00 in.	0/0	$0
CLARKSDALE	3/31/2015	2.75 in.	0/0	$0
CLARKSDALE	5/25/2016	1.00 in.	0/0	$0
CLARKSDALE	12/1/2018	1.00 in.	0/0	$0
Coahoma (town)				
COAHOMA	4/20/2011	0.88 in.	0/0	$0
COAHOMA	3/3/2017	1.00 in.	0/0	$0
Friars Point				
FRIARS PT	5/25/1996	2.00 in.	0/0	$766
FRIARS PT	4/2/2006	1.75 in.	0/0	$9,533
FRIARS PT	3/29/2015	1.00 in.	0/0	$0
FRIARS PT	4/19/2015	1.00 in.	0/0	$0
Jonestown				
JONESTOWN	4/27/2013	1.25 in.	0/0	$0
Lula				
LULA	5/10/2008	0.75 in.	0/0	$1,116
LULA	8/20/2018	0/75 in.	0/0	$0

Location	Date	Magnitude	Deaths/Injuries	Property Damage
Lyon				
LYON	5/10/2008	0.75 in.	0/0	$1,116
LYON	6/12/2009	1.00 in.	0/0	$0
LYON	6/16/2011	1.75 in.	0/0	$0
Unincorporated Area				
COAHOMA CO.	4/7/1966	2.00 in.	0/0	$0
COAHOMA CO.	4/27/1967	1.75 in.	0/0	$0
COAHOMA CO.	5/10/1969	1.75 in.	0/0	$0
COAHOMA CO.	4/20/1971	0.75 in.	0/0	$0
COAHOMA CO.	4/7/1972	1.75 in.	0/0	$0
COAHOMA CO.	6/12/1974	1.75 in.	0/0	$0
COAHOMA CO.	2/17/1976	1.00 in.	0/0	$0
COAHOMA CO.	4/19/1977	1.75 in.	0/0	$0
COAHOMA CO.	4/30/1978	1.75 in.	0/0	$0
COAHOMA CO.	4/25/1982	1.75 in.	0/0	$0
COAHOMA CO.	6/25/1985	1.75 in.	0/0	$0
COAHOMA CO.	8/14/1985	0.75 in.	0/0	$0
COAHOMA CO.	3/30/1989	0.75 in.	0/0	$0
COAHOMA CO.	5/8/1989	0.75 in.	0/0	$0
COAHOMA CO.	2/3/1990	0.80 in.	0/0	$0
COAHOMA CO.	5/20/1990	1.75 in.	0/0	$0
ROSEACRES	3/6/1996	0.75 in.	0/0	$77
STOVALL	6/5/1998	0.75 in.	0/0	$15
MOON LAKE	2/13/2000	2.75 in.	0/0	$10,463
DUBLIN	2/5/2008	0.75 in.	0/0	$1,116
SHERARD	4/22/2008	0.88 in.	0/0	$1,674
FARRELL	5/10/2008	0.75 in.	0/0	$1,116
BOBO	6/3/2009	0.88 in.	0/0	$0
BOBO	4/24/2010	0.75 in.	0/0	$0
BOBO	4/24/2010	0.75 in.	0/0	$0
FARRELL	4/26/2011	2.75 in.	0/0	$0
MOON LAKE	4/19/2015	1.75 in.	0/0	$0

Table A.20 contains events reported up to July 2021.
Source: National Climatic Data Center

PROBABILITY OF FUTURE OCCURRENCES

Based on historical occurrence information, it is assumed that the probability of future hail occurrences is highly likely (100 percent annual probability). Since hail is an atmospheric hazard, it is assumed that Coahoma County has equal exposure to this hazard. It can be expected that future hail events will continue to cause minor damage to property and vehicles throughout the county.

A.2.12 Hurricane and Tropical Storm

LOCATION AND SPATIAL EXTENT

Hurricanes and tropical storms threaten the entire Atlantic and Gulf seaboard of the United States. While coastal areas are most directly exposed to the brunt of landfalling storms, their impact is often felt hundreds of miles inland and they can affect Coahoma County. All areas jurisdictions in Coahoma County are equally susceptible to hurricane and tropical storms.

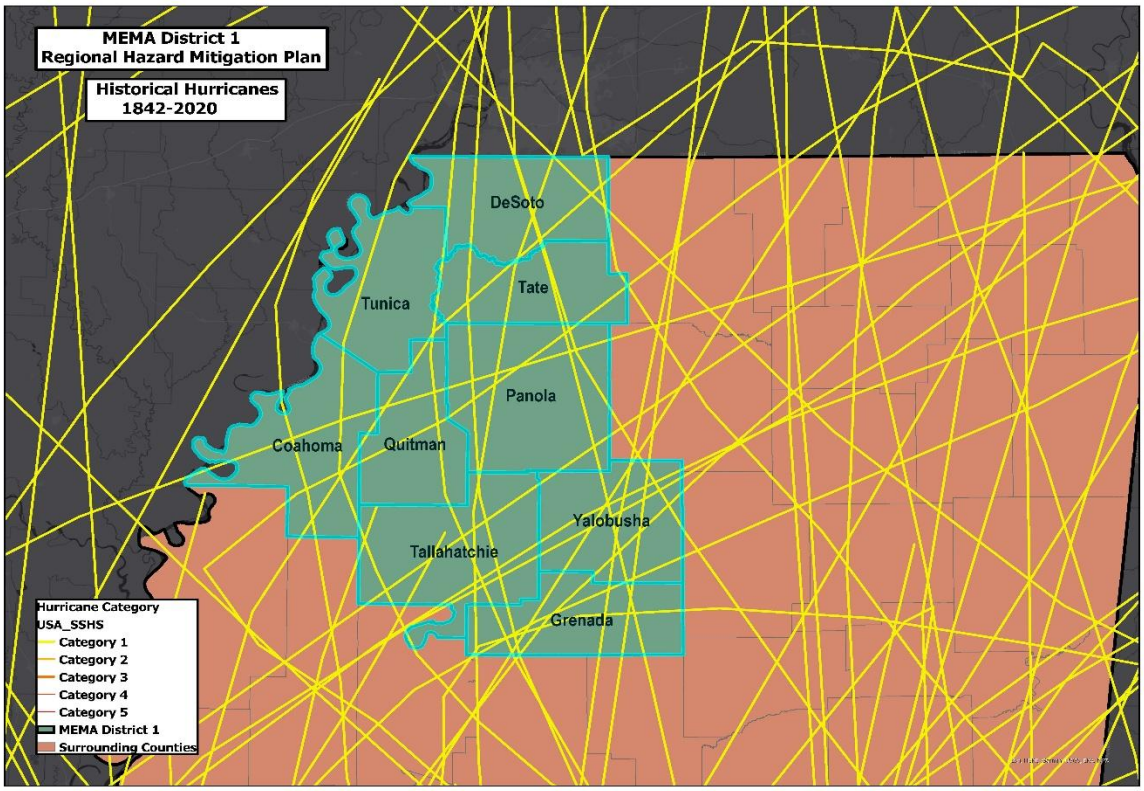
HISTORICAL OCCURRENCES

According to the National Hurricane Center's historical storm track records, 39 hurricane or tropical storm/depression tracks have passed within 75 miles of the MEMA District 1 Region since 1860.[9] This includes: 1 Category 1 hurricane, 17 tropical storms, and 21 tropical depressions.

A total of 20 tracks passed directly through the region as shown in **Figure A.10**. These events were all tropical storm or tropical depression strength at the time they traversed the region. **Table A.20** provides the date of occurrence, name (if applicable), maximum wind speed (as recorded within 75 miles of the MEMA District 1 Region) and category of the storm based on the Saffir-Simpson Scale for each event.

[9] These storm track statistics include tropical depressions, tropical storms, and hurricanes. Lesser events may still cause significant local impact in terms of rainfall and high winds.

FIGURE A.110: HISTORICAL HURRICANE STORM TRACKS WITHIN 75 MILES OF THE MEMA DISTRICT 1 REGION



Source: National Oceanic and Atmospheric Administration; National Hurricane Center

TABLE A.20: HISTORICAL STORM TRACKS WITHIN 75 MILES OF THE MEMA 1 DISTRICT REGION (1850–2021)

Date of Occurrence	Storm Name	Maximum Wind Speed (knots)	Storm Category
10/3/1860	UNNAMED	50	Tropical Storm
9/17/1862	NOT NAMED	--	Tropical Depression
10/7/1879	NOT NAMED	--	Tropical Depression
8/29/1881	UNNAMED	40	Tropical Storm
8/20/1888	UNNAMED	60	Tropical Storm
8/28/1890	UNNAMED	35	Tropical Storm
7/7/1891	UNNAMED	35	Tropical Storm
9/21/1898	UNNAMED	30	Tropical Depression
8/16/1901	UNNAMED	35	Tropical Storm
9/28/1906	UNNAMED	50	Tropical Storm
8/3/1908	UNNAMED	25	Tropical Depression
9/21/1909	UNNAMED	55	Tropical Storm
7/7/1916	UNNAMED	40	Tropical Storm
10/16/1923	UNNAMED	45	Tropical Storm

Date of Occurrence	Storm Name	Maximum Wind Speed (knots)	Storm Category
10/18/1923	UNNAMED	40	Tropical Storm
7/30/1926	UNNAMED	25	Tropical Depression
9/2/1932	UNNAMED	40	Tropical Storm
9/20/1932	UNNAMED	40	Tropical Storm
7/27/1933	UNNAMED	30	Tropical Depression
6/17/1934	UNNAMED	45	Tropical Storm
9/1/1937	UNNAMED	25	Tropical Depression
6/17/1939	UNNAMED	25	Tropical Depression
9/5/1948	UNNAMED	30	Tropical Depression
9/5/1949	UNNAMED	30	Tropical Depression
9/9/1950	EASY	20	Tropical Depression
6/28/1957	AUDREY	40	Tropical Storm
9/11/1965	BETSY	30	Tropical Depression
8/18/1969	CAMILLE	75	Category 1
7/12/1979	BOB	30	Tropical Depression
8/16/1985	DANNY	30	Tropical Depression
8/4/1995	ERIN	20	Tropical Depression
8/7/2001	BARRY	15	Tropical Depression
10/4/2002	LILI	30	Tropical Depression
7/11/2005	DENNIS	25	Tropical Depression
8/29/2005	KATRINA	50	Tropical Storm
8/30/2012	ISAAC	35	Tropical Storm
9/1/2017	HARVEY	30	Tropical Depression
10/26/19	OLGA	45	Tropical Depression
10/11/20	DELTA	25	Tropical Depression

Source: National Hurricane Center

Federal records indicate that one disaster declaration was made in 2005 (Hurricane Katrina) in Coahoma County.[10] Hurricane and tropical storm events can cause substantial damage in the area due to high winds and flooding.

The National Climatic Data Center also reported two hurricane or tropical storm events in Coahoma County since 2005.[11] These storms are listed in **Table A.181** and are generally representative of storms with the greatest impact on the county over that time period.

TABLE A.21: HISTORICAL HURRICANE/TROPICAL STORM OCCURRENCES IN COAHOMA COUNTY

Date of Occurrence	Storm Name	Deaths/Injuries	Property Damage (2021)	Annualized Property Losses
8/29/2005	Hurricane Katrina	0/0	$12,301	$1,118
9/25/2005	Hurricane Rita	0/0	$6,150	$559

Source: National Climatic Data Center

[10] A complete listing of historical disaster declarations can be found in Section 4: Hazard Identification.
[11] These hurricane events are only inclusive of those reported by the National Climatic Data Center (NCDC) from 1996 through May 2021. It is likely that additional occurrences have occurred and have gone unreported.

Flooding and high winds from hurricanes and tropical storms can cause damage throughout the county. Anecdotes are available from NCDC for the major storms that have impacted the county as found below:

Hurricane Katrina – August 29, 2005
Hurricane Katrina had weakened to tropical storm strength when it reached north Mississippi. Numerous trees and power lines along with some telephone poles were blown down. Some trees fell on cars, mobile homes and apartment buildings. Four to eight inches of rain fell in some parts of northeast Mississippi producing some flash flooding. Overall at least 100,000 customers lost power.

Hurricane Rita – September 25, 2005
Tropical depression Rita moved across northern Mississippi. A large tree was blown down in Clarksdale (Coahoma County) and some large tree limbs were blown down near Tunica Elementary School (Tunica County).

PROBABILITY OF FUTURE OCCURRENCES

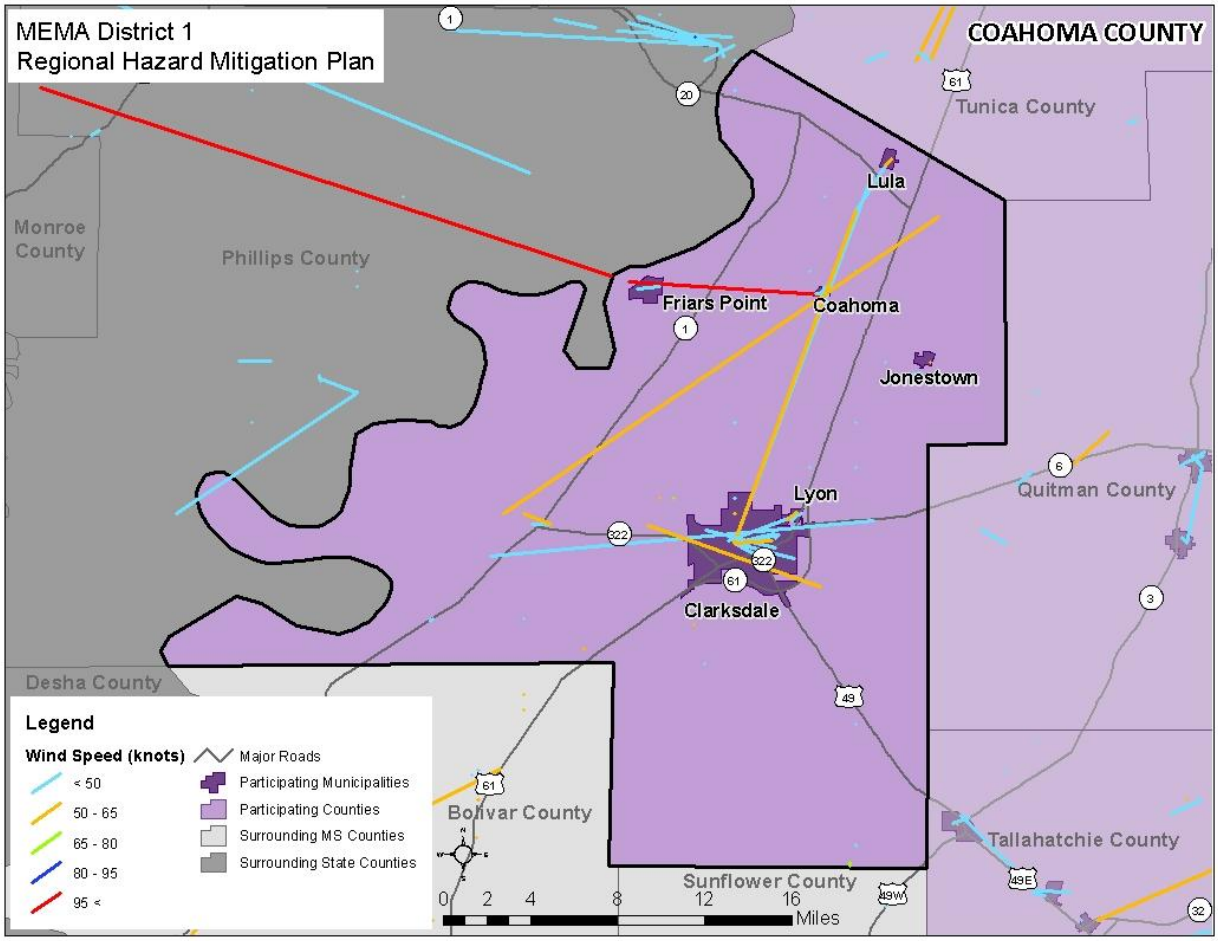
Given the inland location of the county, it is more likely to be affected by remnants of hurricane and tropical storm systems (as opposed to a major hurricane) which may result in flooding or high winds. The probability of being impacted is less than coastal areas, but still remains a real threat to Coahoma County due to induced events like flooding. Based on historical evidence, the probability level of future occurrence is possible (between 1 and 10 percent annual probability). Given the regional nature of the hazard, all areas in the county are equally exposed to this hazard. However, when the county is impacted, the damage could be catastrophic, threatening lives and property throughout the planning area.

A.2.13 Severe Thunderstorm/High Wind

LOCATION AND SPATIAL EXTENT

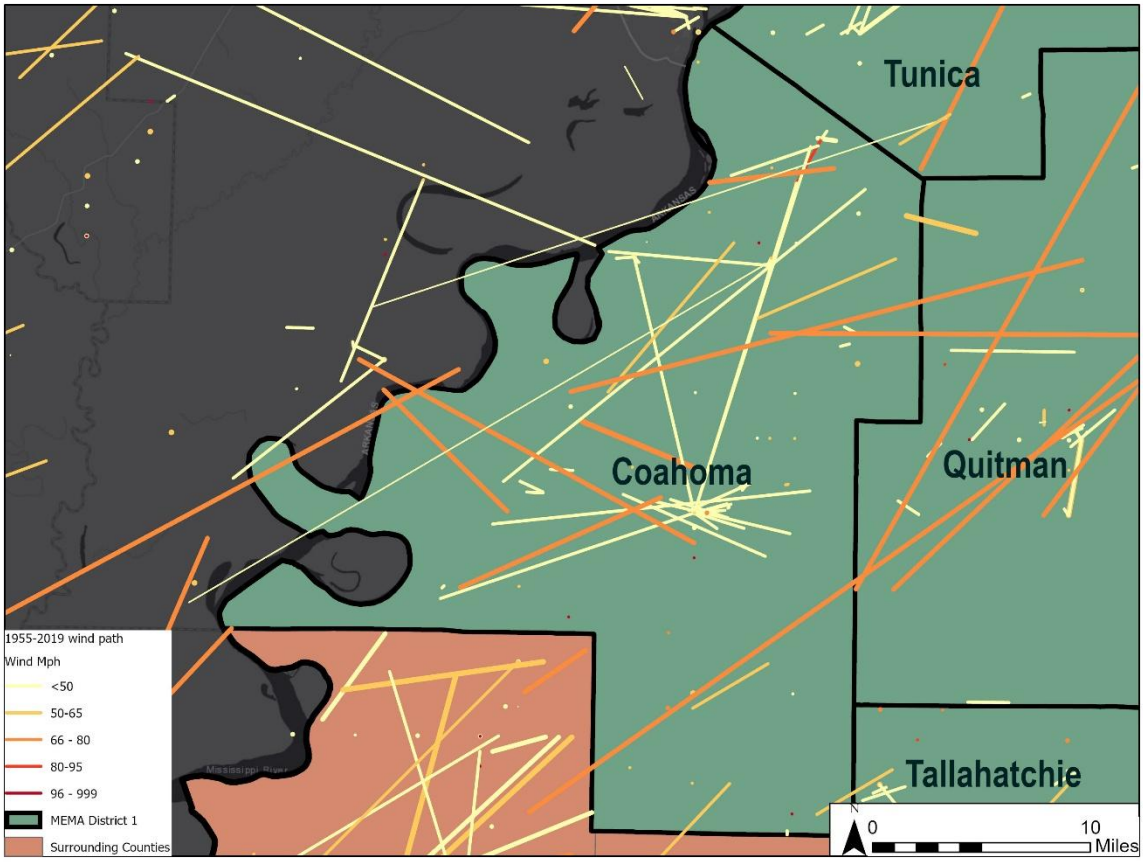
A thunderstorm event is an atmospheric hazard, and thus has no geographic boundaries. It is typically a widespread event that can occur in all regions of the United States. However, thunderstorms are most common in the central and southern states because atmospheric conditions in those regions are favorable for generating these powerful storms. It is assumed that all jurisdictions in Coahoma County have uniform exposure to an event and the spatial extent of an impact could be large. With that in mind, **Figure A.11** shows the location of wind events that have impacted the county between 1955 and 2015. **Figure A.11.1** shows the location of wind events that have impacted the county between 1955 and 2021.

FIGURE A.121: SEVERE THUNDERSTORM TRACKS IN COAHOMA COUNTY



Source: National Weather Service Storm Prediction Center

FIGURE A.131.1: SEVERE THUNDERSTORM TRACKS IN COAHOMA COUNTY



Source: National Weather Service Storm Prediction Center

HISTORICAL OCCURRENCES

Severe storms were at least partially responsible for ten disaster declarations in Coahoma County in 1990, twice in 1991, twice in 2001, 2011, twice in 2016, 2019, and 2020.[12] According to NCDC, there have been 125 reported thunderstorm and high wind events since 1959 in Coahoma County.[13] These events caused over $931,000 in property damages. There were also reports of one fatality and eight injuries. **Table A.192** summarizes this information. **Table A.203** presents detailed thunderstorm and high wind event reports including date, magnitude, and associated damages for each event.

[12] A complete listing of historical disaster declarations can be found in Section 4: *Hazard Identification*.
[13] These thunderstorm events are only inclusive of those reported by the National Climatic Data Center (NCDC) from 1955 through May 2021 and these high wind events are only inclusive of those reported by NCDC from 1996 through May 2021. It is likely that additional thunderstorm and high wind events have occurred in Coahoma County. As additional local data becomes available, this hazard profile will be amended.

TABLE A.182: SUMMARY OF THUNDERSTORM/HIGH WIND OCCURRENCES IN COAHOMA COUNTY

Location	Number of Occurrences	Deaths/Injuries	Property Damage (2021)	Annualized Property Losses
Clarksdale	33	0/2	$249,500	$3,838
Coahoma (town)	5	0/0	$64,500	$992
Friars Point	6	0/0	$7,000	$108
Jonestown	4	0/0	$11,000	$169
Lula	4	0/0	$31,000	$477
Lyon	3	0/0	$50,000	$769
Unincorporated Area	70	1/6	$518,000	$7,969
COAHOMA COUNTY TOTAL	**125**	**1/8**	**$931,000**	**$14,322**

Source: National Climatic Data Center

TABLE A.193: HISTORICAL THUNDERSTORM/HIGH WIND OCCURRENCES IN COAHOMA COUNTY

Location	Date	Type	Magnitude†	Deaths/Injuries	Property Damage
Clarksdale					
Clarksdale	7/4/1995	Thunderstorm Wind	0 kts.	0/0	$7,882
CLARKSDALE	5/27/1996	Thunderstorm Wind	--	0/0	$766
CLARKSDALE	5/28/1996	Thunderstorm Wind	--	0/0	$3,062
CLARKSDALE	5/27/1997	Thunderstorm Wind	--	0/0	$14,968
CLARKSDALE	6/5/1998	Thunderstorm Wind	--	0/0	$14,738
CLARKSDALE	4/26/1999	Thunderstorm Wind	--	0/1	$21,630
CLARKSDALE	5/12/2000	Thunderstorm Wind	--	0/0	$13,951
CLARKSDALE	7/20/2000	Thunderstorm Wind	--	0/1	$6,975
CLARKSDALE	4/14/2001	Thunderstorm Wind	--	0/0	$67,825
CLARKSDALE	5/30/2001	Thunderstorm Wind	--	0/0	$6,783
CLARKSDALE	7/11/2001	Thunderstorm Wind	--	0/0	$6,783
CLARKSDALE	5/5/2003	Thunderstorm Wind	55 kts. EG	0/0	$1,306
CLARKSDALE	8/20/2003	Thunderstorm Wind	50 kts. EG	0/0	$6,528
CLARKSDALE	9/25/2005	Thunderstorm Wind	50 kts. EG	0/0	$6,150
CLARKSDALE	3/9/2006	Thunderstorm Wind	60 kts. EG	0/0	$5,958
CLARKSDALE	5/10/2006	Thunderstorm Wind	50 kts. EG	0/0	$11,916
CLARKSDALE	2/24/2007	Thunderstorm Wind	50 kts. EG	0/0	$17,380
CLARKSDALE	8/18/2007	Thunderstorm Wind	50 kts. EG	0/0	$3,476
CLARKSDALE	8/18/2007	Thunderstorm Wind	50 kts. EG	0/0	$2,317
CLARKSDALE	2/5/2008	Thunderstorm Wind	50 kts. EG	0/0	$20,084
CLARKSDALE	6/1/2008	Thunderstorm Wind	50 kts. EG	0/0	$11,158
CLARKSDALE	6/12/2009	Thunderstorm Wind	50 kts. EG	0/0	$6,719
CLARKSDALE	6/14/2009	Thunderstorm Wind	50 kts. EG	0/0	$0
CLARKSDALE	4/24/2010	Thunderstorm Wind	50 kts. EG	0/0	$0
CLARKSDALE	6/24/2011	Thunderstorm Wind	50 kts. EG	0/0	$0
CLARKSDALE	8/8/2011	Thunderstorm Wind	50 kts. EG	0/0	$0
CLARKSDALE	1/22/2012	Thunderstorm Wind	61 kts. EG	0/0	$26,159

Location	Date	Type	Magnitude†	Deaths/Injuries	Property Damage
CLARKSDALE	1/22/2012	Thunderstorm Wind	65 kts. EG	0/0	$26,159
CLARKSDALE	2/1/2012	Thunderstorm Wind	50 kts. EG	0/0	$0
CLARKSDALE	5/30/2012	Thunderstorm Wind	52 kts. EG	0/0	$0
CLARKSDALE	7/23/2014	Thunderstorm Wind	61 kts. EG	0/0	$0
CLARKSDALE	4/14/2018	Thunderstorm Wind	50 kts. EG	0/0	$2,000
CLARKSDALE	4/12/2020	Thunderstorm Wind	78 kts. EG	0/0	$0
Coahoma (town)					
COAHOMA	3/6/1996	Thunderstorm Wind	--	0/0	$766
COAHOMA	10/17/2007	Thunderstorm Wind	50 kts. EG	0/0	$16,221
COAHOMA	5/10/2008	Thunderstorm Wind	96 kts. EG	0/0	$55,790
COAHOMA	4/7/2010	Thunderstorm Wind	50 kts. EG	0/0	$0
COAHOMA	5/16/2010	Thunderstorm Wind	50 kts. EG	0/0	$0
Friars Point					
FRIARS PT	10/23/2004	Thunderstorm Wind	50 kts. EG	0/0	$6,359
FRIARS PT	2/24/2007	Thunderstorm Wind	50 kts. EG	0/0	$2,317
FRIARS PT	2/1/2012	Thunderstorm Wind	50 kts. EG	0/0	$0
FRIARS PT	4/4/2014	Thunderstorm Wind	61 kts. EG	0/0	$0
FRIARS PT	4/19/2015	Thunderstorm Wind	50 kts. EG	0/0	$0
FRIARS PT	4/12/2020	Thunderstorm Wind	50 kts. EG	0/0	$0
Jonestown					
JONESTOWN	7/21/2001	Thunderstorm Wind	--	0/0	$6,783
JONESTOWN	3/7/2005	Thunderstorm Wind	60 kts. EG	0/0	$6,150
JONESTOWN	5/24/2010	Thunderstorm Wind	50 kts. EG	0/0	$0
JONESTOWN	4/14/2018	Thunderstorm Wind	50 kts. EG	0/0	1,000
Lula					
Lula	6/2/1995	Thunderstorm Wind	0 kts.	0/0	$7,882
LULA	5/17/2003	Thunderstorm Wind	60 kts. EG	0/0	$32,641
LULA	2/24/2007	Thunderstorm Wind	50 kts. EG	0/0	$1,159
LULA	5/10/2008	Thunderstorm Wind	52 kts. EG	0/0	$0
Lyon					
LYON	5/2/2008	Thunderstorm Wind	50 kts. EG	0/0	$55,790
LYON	5/10/2008	Thunderstorm Wind	52 kts. EG	0/0	$0
LYON	5/6/2009	Thunderstorm Wind	50 kts. EG	0/0	$0
Unincorporated Area					
COAHOMA CO.	5/22/1959	Thunderstorm Wind	0 kts.	0/0	$0
COAHOMA CO.	5/22/1959	Thunderstorm Wind	0 kts.	0/0	$0
COAHOMA CO.	5/6/1960	Thunderstorm Wind	0 kts.	0/0	$0
COAHOMA CO.	3/7/1961	Thunderstorm Wind	0 kts.	0/0	$0
COAHOMA CO.	3/16/1963	Thunderstorm Wind	0 kts.	0/0	$0
COAHOMA CO.	3/9/1964	Thunderstorm Wind	0 kts.	0/0	$0
COAHOMA CO.	6/29/1966	Thunderstorm Wind	0 kts.	0/0	$0
COAHOMA CO.	7/20/1966	Thunderstorm Wind	0 kts.	0/0	$0
COAHOMA CO.	3/20/1968	Thunderstorm Wind	0 kts.	0/0	$0
COAHOMA CO.	4/27/1969	Thunderstorm Wind	0 kts.	0/0	$0
COAHOMA CO.	7/27/1969	Thunderstorm Wind	0 kts.	0/0	$0

Location	Date	Type	Magnitude†	Deaths/Injuries	Property Damage
COAHOMA CO.	7/27/1969	Thunderstorm Wind	0 kts.	0/0	$0
COAHOMA CO.	7/27/1969	Thunderstorm Wind	0 kts.	0/0	$0
COAHOMA CO.	7/4/1970	Thunderstorm Wind	0 kts.	0/0	$0
COAHOMA CO.	6/9/1972	Thunderstorm Wind	0 kts.	0/0	$0
COAHOMA CO.	6/4/1973	Thunderstorm Wind	0 kts.	0/0	$0
COAHOMA CO.	11/24/1973	Thunderstorm Wind	0 kts.	0/0	$0
COAHOMA CO.	12/4/1973	Thunderstorm Wind	0 kts.	0/0	$0
COAHOMA CO.	3/12/1975	Thunderstorm Wind	0 kts.	0/0	$0
COAHOMA CO.	3/12/1975	Thunderstorm Wind	0 kts.	0/0	$0
COAHOMA CO.	5/26/1975	Thunderstorm Wind	0 kts.	0/0	$0
COAHOMA CO.	6/11/1975	Thunderstorm Wind	0 kts.	0/0	$0
COAHOMA CO.	7/7/1975	Thunderstorm Wind	0 kts.	0/0	$0
COAHOMA CO.	3/29/1976	Thunderstorm Wind	0 kts.	0/0	$0
COAHOMA CO.	4/24/1976	Thunderstorm Wind	0 kts.	0/0	$0
COAHOMA CO.	5/12/1978	Thunderstorm Wind	0 kts.	0/0	$0
COAHOMA CO.	12/3/1978	Thunderstorm Wind	0 kts.	0/0	$0
COAHOMA CO.	5/3/1979	Thunderstorm Wind	0 kts.	0/0	$0
COAHOMA CO.	5/3/1979	Thunderstorm Wind	0 kts.	0/0	$0
COAHOMA CO.	10/8/1979	Thunderstorm Wind	0 kts.	0/0	$0
COAHOMA CO.	4/8/1980	Thunderstorm Wind	0 kts.	0/0	$0
COAHOMA CO.	5/21/1983	Thunderstorm Wind	0 kts.	0/0	$0
COAHOMA CO.	3/27/1984	Thunderstorm Wind	0 kts.	0/0	$0
COAHOMA CO.	4/26/1984	Thunderstorm Wind	0 kts.	0/0	$0
COAHOMA CO.	4/5/1985	Thunderstorm Wind	0 kts.	0/0	$0
COAHOMA CO.	5/28/1985	Thunderstorm Wind	0 kts.	0/0	$0
COAHOMA CO.	5/28/1985	Thunderstorm Wind	0 kts.	0/0	$0
COAHOMA CO.	5/29/1985	Thunderstorm Wind	52 kts.	0/4	$0
COAHOMA CO.	5/29/1985	Thunderstorm Wind	0 kts.	0/0	$0
COAHOMA CO.	6/10/1985	Thunderstorm Wind	52 kts.	0/0	$0
COAHOMA CO.	6/17/1985	Thunderstorm Wind	52 kts.	0/0	$0
COAHOMA CO.	6/14/1987	Thunderstorm Wind	0 kts.	0/0	$0
COAHOMA CO.	6/30/1987	Thunderstorm Wind	0 kts.	0/0	$0
COAHOMA CO.	6/3/1988	Thunderstorm Wind	0 kts.	0/0	$0
COAHOMA CO.	11/19/1988	Thunderstorm Wind	0 kts.	0/0	$0
COAHOMA CO.	3/30/1989	Thunderstorm Wind	0 kts.	0/0	$0
COAHOMA CO.	4/4/1989	Thunderstorm Wind	0 kts.	0/0	$0
COAHOMA CO.	5/9/1989	Thunderstorm Wind	54 kts.	0/0	$0
COAHOMA CO.	5/9/1989	Thunderstorm Wind	0 kts.	0/0	$0
COAHOMA CO.	5/9/1989	Thunderstorm Wind	0 kts.	0/0	$0
COAHOMA CO.	7/15/1989	Thunderstorm Wind	0 kts.	0/0	$0
COAHOMA CO.	3/22/1991	Thunderstorm Wind	0 kts.	0/0	$0
COAHOMA CO.	6/6/1992	Thunderstorm Wind	0 kts.	0/0	$0
COAHOMA CO.	6/25/1992	Thunderstorm Wind	0 kts.	0/0	$0
COAHOMA CO.	6/29/1992	Thunderstorm Wind	0 kts.	0/0	$0
COAHOMA CO.	8/10/1992	Thunderstorm Wind	0 kts.	0/0	$0
COUNTYWIDE	4/8/1998	Thunderstorm Wind	--	0/0	$7,369

Location	Date	Type	Magnitude†	Deaths/Injuries	Property Damage
COAHOMA (ZONE)	6/29/1999	High Wind	--	0/0	$14,420
COAHOMA (ZONE)	9/26/2002	High Wind	35 kts. E	0/0	$6,677
BOBO	5/7/2003	Thunderstorm Wind	65 kts. EG	0/0	$13,056
COAHOMA (ZONE)	8/19/2004	Strong Wind	35 kts. EG	0/0	$12,718
COAHOMA (ZONE)	3/9/2006	Strong Wind	45 kts. EG	0/0	$17,875
COUNTYWIDE	5/10/2006	Thunderstorm Wind	67 kts. MG	0/1	$29,791
SHERARD	1/8/2008	Thunderstorm Wind	50 kts. EG	0/0	$1,116
COAHOMA (ZONE)	1/29/2008	High Wind	50 kts. EG	0/0	$55,790
SHERARD	4/22/2008	Thunderstorm Wind	52 kts. EG	0/0	$2,232
BAUGH	5/10/2008	Thunderstorm Wind	50 kts. EG	0/0	$5,579
MOON LAKE	6/13/2011	Thunderstorm Wind	61 kts. EG	0/0	$0
BEVERLY	6/11/2012	Thunderstorm Wind	61 kts. EG	0/0	$0
RENA LARA	10/17/2012	Thunderstorm Wind	50 kts. EG	0/0	$20,927
ROUNDAWAY	10/17/2012	Thunderstorm Wind	70 kts. EG	0/1	$156,953
SHERARD	12/21/2013	Thunderstorm Wind	60 kts. EG	0/0	$257,812
DELTA	2/20/2014	Thunderstorm Wind	50 kts. EG	0/0	$0
SHERARD	4/4/2014	Thunderstorm Wind	65 kts. EG	1/0	$30,444
CLAREMONT	1/11/2020	Thunderstorm Wind	56 kts. EG	0/0	$20,000
COAHOMA (ZONE)	2/12/2020	Strong Wind	43 kts. EG	0/0	$50,000

Table A.23 records events thru July 2021.
†E = estimated; EG = estimated gust; ES = estimated sustained; MG = measured gust; MS = measured sustained
Source: National Climatic Data Center

PROBABILITY OF FUTURE OCCURRENCES

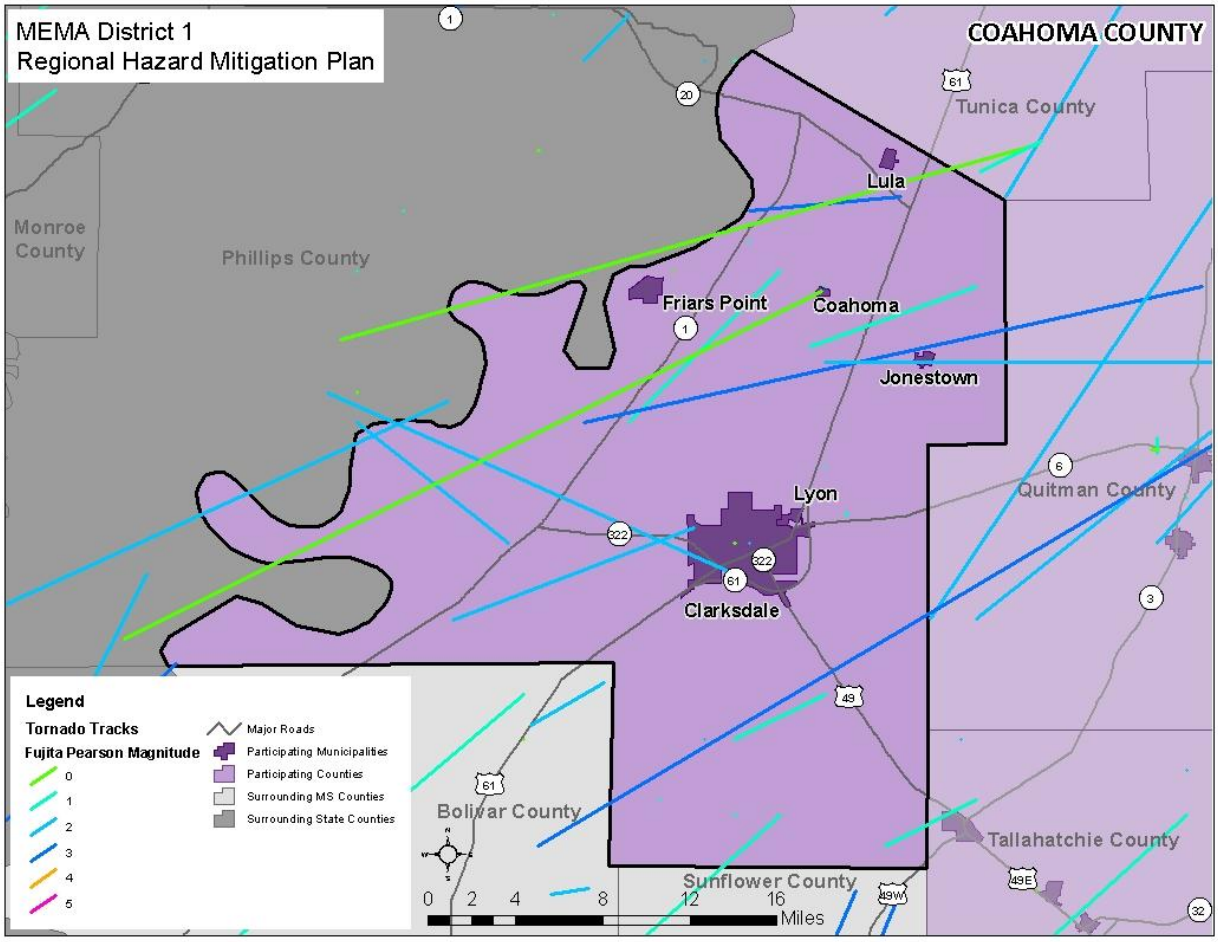
Given the high number of previous events, it is certain that thunderstorm events, including straight-line wind events, will occur in the future. This results in a probability level of highly likely (100 percent annual probability) for the entire county.

A.2.14 Tornado

LOCATION AND SPATIAL EXTENT

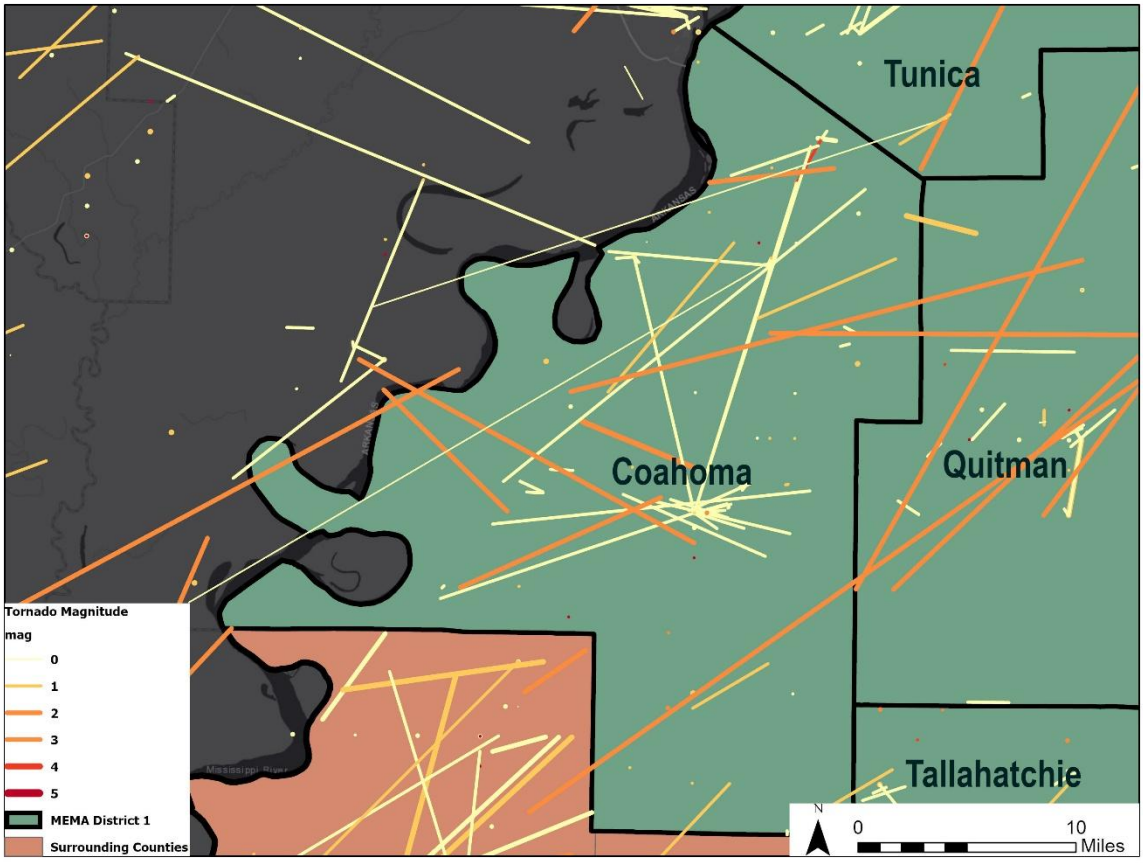
Tornadoes occur throughout the state of Mississippi, and thus in Coahoma County. Tornadoes typically impact a relatively small area, but damage may be extensive. Event locations are completely random and it is not possible to predict specific areas that are more susceptible to tornado strikes over time. Therefore, it is assumed that all jurisdictions in Coahoma County are uniformly exposed to this hazard. With that in mind, **Figure A.12** shows tornado track data for many of the major tornado events that have impacted the county between 1950 and 2015. **Figure A.12.1** shows tornado track data from 1950 and 2021. While no definitive pattern emerges from this data, some areas that have been impacted in the past may be potentially more susceptible in the future.

FIGURE A.142: HISTORICAL TORNADO TRACKS IN COAHOMA COUNTY



Source: National Weather Service Storm Prediction Center

FIGURE A.152.1: HISTORICAL TORNADO TRACKS IN COAHOMA COUNTY



Source: National Weather Service Storm Prediction Center

HISTORICAL OCCURRENCES

Tornadoes were at least partially responsible for ten disaster declarations in Coahoma County in 1973, 1990, 1991, twice in 2001, 2011, 2016, 2019, and twice in 2020.[14] According to the National Climatic Data Center, there have been a total of 29 recorded tornado events in Coahoma County since 1953 (**Table A.214**), resulting in over $33 million in property damages.[15] In addition, 9 fatalities and 59 injuries were reported. The magnitude of these tornadoes ranges from F0 to F3 and EF0 to EF3 in intensity, although an EF5 event is possible. Detailed information on historic tornado events can be found in **Table A.225**.

TABLE A.204: SUMMARY OF TORNADO OCCURRENCES IN COAHOMA COUNTY

Location	Number of Occurrences	Deaths/Injuries	Property Damage (2021)	Annualized Property Losses
Clarksdale	1	0/0	$500	$7

[14] A complete listing of historical disaster declarations can be found in Section 4: *Hazard Identification*.
[15] These tornado events are only inclusive of those reported by the National Climatic Data Center (NCDC) from 1950 through May 2021. It is likely that additional tornadoes have occurred in Coahoma County. As additional local data becomes available, this hazard profile will be amended.

Location	Number of Occurrences	Deaths/Injuries	Property Damage (2021)	Annualized Property Losses
Coahoma (town)	0	0/0	$0	$0
Friars Point	1	0/0	$50,000	$714
Jonestown	0	0/0	$0	$0
Lula	0	0/0	$0	$0
Lyon	1	0/0	$60,000	$857
Unincorporated Area	26	9/59	$33,650,000	$480,714
COAHOMA COUNTY TOTAL	**29**	**9/59**	**$33,760,500**	**$482,292**

Source: National Climatic Data Center

TABLE A.215: HISTORICAL TORNADO IMPACTS IN COAHOMA COUNTY

Location	Date	Magnitude	Deaths/ Injuries	Property Damage	Details
Clarksdale					
Clarksdale	6/9/1994	F0	0/0	$811	A small tornado briefly touched down in an open field near Clarksdale.
Coahoma (town)					
None Reported	--	--	--	--	--
Friars Point					
FRIARS PT	4/26/2011	EF0	0/0	$53,400	A weak tornado moved east-northeast out of Phillips County, Arkansas into the Friars Point area. Several homes sustained roof damage and one home was moved off of the block foundation. A commercial metal storage building had a large section of roof peeled off. The tornado continued east-northeast near Coahoma and Lula. A church a few miles south of Lula sustained roof damage. At least two homes in Coahoma sustained damage. Trees and power lines were knocked down all along the path. A few telephone poles were knocked down as well as a few road signs. The tornado continued east-northeast into Tunica County, Mississippi.
Jonestown					
None Reported	--	--	--	--	--
Lula					
None Reported	--	--	--	--	--
Lyon					
LYON	5/6/2009	EF1	0/0	$67,187	A tornado briefly touched down near Lyon. Trees were snapped in the area and one home received significant roof damage. Several other homes received minor roof damage.
Unincorporated Area					

Location	Date	Magnitude	Deaths/ Injuries	Property Damage	Details
COAHOMA CO.	3/21/1953	F1	0/0	$224,940	--
COAHOMA CO.	12/5/1953	F2	0/11	$224,940	--
COAHOMA CO.	10/28/1955	F2	0/1	$2,241,007	--
COAHOMA CO.	6/11/1959	F1	1/0	$206,388	--
COAHOMA CO.	4/29/1963	F3	5/10	$1,962,712	--
COAHOMA CO.	4/29/1963	F1	0/0	$0	--
COAHOMA CO.	11/19/1964	F2	0/0	$193,739	--
COAHOMA CO.	5/17/1969	F1	0/0	$0	--
COAHOMA CO.	6/27/1971	F1	0/0	$0	--
COAHOMA CO.	4/3/1972	F1	0/0	$143,682	--
COAHOMA CO.	7/16/1974	F2	0/0	$121,824	--
COAHOMA CO.	4/24/1976	F3	0/1	$1,055,518	--
COAHOMA CO.	5/12/1978	F2	0/0	$92,115,031	--
COAHOMA CO.	4/11/1979	F1	0/0	$82,726	--
COAHOMA CO.	4/29/1984	F1	0/2	$578,046	A small tornado touched down in northern Coahoma County damaging six mobile homes and six houses. A large grain elevator was destroyed. Two people were injured in vehicles that were overturned by the tornado. Most of the damage was in the Moon Lake and Lula areas.
COAHOMA CO.	5/2/1984	F1	0/13	$5,780,462	A small tornado touched down near Rudyard and the Handson Break Community. The tornado moved to the east northeast for about seven miles damaging or destroying eight homes and four mobile homes and a church. Thirteen people were injured.
COAHOMA CO.	5/2/1984	F1	0/0	$578,046	A tornado touched down briefly on the campus of Coahoma Junior College. Four temporary classrooms were destroyed. Many of the permanent brick structures on campus received major roof damage or had most of the windows blown out on the south side of the buildings.
COAHOMA CO.	11/19/1988	F1	0/0	$507,684	A tornado moved through southern Coahoma County. Several sheds and barns were destroyed. Several homes suffered roof damage.

Location	Date	Magnitude	Deaths/ Injuries	Property Damage	Details
COAHOMA CO.	4/19/1991	F0	0/0	$0	This tornado made a direct hit on a house, took the roof off, and then blew down a tree adjacent to the home.
ROUNDAWAY	11/24/2001	F1	0/0	$67,825	The tornado moved into southern Coahoma county from Sunflower county and moved northeast. Several homes were damaged or destroyed.
HILLHOUSE	7/30/2009	EF2	0/0	$2,239,576	A tornado crossed into the Jackson Point area from Phillips County, Arkansas and continued northeast. Several trees were snapped in the area. Approximately, 50-55 residences including mobile homes, houses, and hunting camps were damaged or destroyed. The tornado continued northeast crossing back into Phillips County, Arkansas.
GREEN GROVE	7/30/2009	EF2	0/0	$839,841	A tornado continued northeast crossing over from Phillips County, Arkansas into Coahoma County, Mississippi and weakened. The tornado produced EF-1 damage near Burke Landing. Two hunting cabins were heavily damaged due to trees falling. An additional three to four houses were damaged. Several trees were knocked down in the area as well. The tornado continued northeast crossing back into Phillips County, Arkansas.
HUMBER	4/26/2011	EF0	0/0	$5,340	A weak tornado moved east-northeast out of Phillips County, Arkansas into Coahoma County. Several trees and power lines were knocked down. The tornado continued to move east-northeast and moved back into Phillips County, Arkansas.
HILLHOUSE	4/26/2011	EF0	0/0	$74,760	A weak tornado traveled northeast out of Phillips County, Arkansas into Coahoma County. The tornado continued northeast toward the city of Coahoma where it eventually lifted. A church sustained roof damage, 3 miles southwest of Coahoma. Numerous trees were either uprooted or snapped. Scattered telephone poles were knocked down. A few road or advertisement signs were damaged as well. A few pivot irrigation systems were also toppled over.

Location	Date	Magnitude	Deaths/ Injuries	Property Damage	Details
RENA LARA	12/21/2013	EF2	1/2	$1,031,246	A tornado touched down in Rena Lara and tracked northeast. There was major damage to a mobile home where the fatality occurred. Two large garage sheds were completely destroyed. Two football light poles were bent and destroyed at the Coahoma County High School. There was roof and window damage to the elementary school on Bobo-Sharard Road. Several homes had minor roof damage and four homes had significant roof damage on County Road 332. Several trees were uprooted or snapped off along the path of the tornado. The tornado lifted just west of Clarksdale. The peak winds were estimated at 120 mph.
AFRICA	12/23/2015	EF3	2/19	$608,149	This tornado developed over Northern Bolivar County and moved into Coahoma County. It strengthened and produced EF-3 damage south and east of Clarksdale where the two fatalities occurred. Twelve homes and two businesses were destroyed. Two homes also suffered minor damage. Numerous trees were snapped or uprooted. The tornado continued into Quitman County.

Source: National Climatic Data Center

There have been several significant tornado events in Coahoma County. The text below describes one of the major events and associated impacts on the county.

From April 25 to 28, 2011, the largest tornado outbreak ever recorded affected the Southern, Midwestern, and Northeastern U.S., leaving catastrophic destruction in its wake, especially across the states of Alabama and Mississippi. On April 26, three EF0 tornadoes were reported in Coahoma County. Although these tornadoes were of low magnitude, it is notable that surrounding areas experienced much higher magnitude tornadoes and that these are possible in the county.

PROBABILITY OF FUTURE OCCURRENCES

According to historical information, tornado events pose a significant threat to Coahoma County. The probability of future tornado occurrences affecting Coahoma County is highly likely (100 percent annual probability).

A.2.15 Winter Storm and Freeze

LOCATION AND SPATIAL EXTENT

Nearly the entire continental United States is susceptible to winter storm and freeze events. Some ice and winter storms may be large enough to affect several states, while others might affect limited, localized areas. The degree of exposure typically depends on the normal expected severity of local winter weather. Coahoma County is not accustomed to severe winter weather conditions and seldom receives severe

winter weather, even during the winter months. Events tend to be mild in nature; however, this creates a situation where even relatively small accumulations of snow, ice, or other wintery precipitation can lead to losses and damage due to the fact that these events are not commonplace. Given the atmospheric nature of the hazard, all jurisdictions in Coahoma County have uniform exposure to a winter storm.

HISTORICAL OCCURRENCES

Winter weather has resulted in one disaster declaration in Coahoma County in 1994.[16] According to the National Climatic Data Center, there have been a total of 20 recorded winter storm events in Coahoma County since 1996 (**Table A.236**).[17] These events resulted in more than $22,000 in damages. Detailed information on the recorded winter storm events can be found in **Table A.247**.

TABLE A.226: SUMMARY OF WINTER STORM EVENTS IN COAHOMA COUNTY

Location	Number of Occurrences	Deaths/Injuries	Property Damage (2021)	Annualized Property Losses
Coahoma County	20	0/0	$22,000	$917

Source: National Climatic Data Center

TABLE A.237: HISTORICAL WINTER STORM IMPACTS IN COAHOMA COUNTY

Location	Date	Type	Deaths/Injuries	Property Damage
Clarksdale				
None Reported	--	--	--	--
Coahoma (town)				
None Reported	--	--	--	--
Friars Point				
None Reported	--	--	--	--
Jonestown				
None Reported	--	--	--	--
Lula				
None Reported	--	--	--	--
Lyon				
None Reported	--	--	--	--
Unincorporated Area				
COAHOMA (ZONE)	2/1/1996	Winter Storm	0/0	$30,623
COAHOMA (ZONE)	1/15/1998	Winter Storm	0/0	$0
COAHOMA (ZONE)	12/22/1998	Ice Storm	0/0	$7,369
COAHOMA (ZONE)	1/27/2000	Heavy Snow	0/0	$0
COAHOMA (ZONE)	12/13/2000	Ice Storm	0/0	$13,951
COAHOMA (ZONE)	12/22/2004	Winter Storm	0/0	$1,272
COAHOMA (ZONE)	2/18/2006	Winter Storm	0/0	$1,192
COAHOMA (ZONE)	2/1/2007	Winter Weather	0/0	$0
COAHOMA (ZONE)	1/25/2008	Winter Weather	0/0	$0

[16] A complete listing of historical disaster declarations can be found in Section 4: *Hazard Identification*.
[17] These ice and winter storm events are only inclusive of those reported by the National Climatic Data Center (NCDC) from 1996 through May 2021. It is likely that additional winter storm conditions have affected Coahoma County.

Location	Date	Type	Deaths/Injuries	Property Damage
COAHOMA (ZONE)	3/7/2008	Winter Storm	0/0	$0
COAHOMA (ZONE)	3/1/2009	Winter Weather	0/0	$0
COAHOMA (ZONE)	1/29/2010	Winter Weather	0/0	$0
COAHOMA (ZONE)	1/9/2011	Winter Storm	0/0	$0
COAHOMA (ZONE)	2/9/2011	Winter Storm	0/0	$0
COAHOMA (ZONE)	12/6/2013	Winter Weather	0/0	$0
COAHOMA (ZONE)	12/7/2013	Winter Weather	0/0	$0
COAHOMA (ZONE)	2/20/2015	Winter Weather	0/0	$0
COAHOMA (ZONE)	2/25/2015	Winter Storm	0/0	$0
COAHOMA (ZONE)	3/4/2015	Winter Storm	0/0	$0
COAHOMA (ZONE)	1/22/2016	Winter Storm	0/0	$0
COAHOMA (ZONE)	1/16/2018	Winter Weather	0/0	$0
COAHOMA (ZONE)	11/14/2018	Winter Weather	0/0	$0
COAHOMA (ZONE)	2/14/2021	Winter Storm	0/0	$0

Source: National Climatic Data Center

There have been several severe winter weather events in Coahoma County. The text below describes three of the major events and associated impacts on the county. Similar impacts can be expected with severe winter weather.

February 1994

A damaging ice storm with freezing rain accumulations of 3 to 6 inches occurred across north Mississippi from February 9-11. Most estimates calculate this storm as the worst on record since 1951 with damages occurring across parts of Arkansas, Tennessee, Alabama, Louisiana, and Texas, as well as 26 counties in Mississippi, which sustained damages of roughly $300 million. According to power companies, more than 200,000 homes were left without power at the height of the storm, and water provides estimate nearly 175,000 homes were without water during this time period. Agriculture also took an especially hard hit as nearly 5 percent of the state's pecan trees were destroyed. [18]

December 1998

Much of north Mississippi was hit with an ice storm. Most counties reported between 0.25 to 0.5 inches of ice on their roads with some locations in the southern part of the region reporting as much as 3 inches of ice. The ice caused numerous power outages and brought down many trees and power lines. Thousands of people in north Mississippi were without power, some for as long as one week. Christmas travel was severely hampered for several days with motorists stranded at airports, bus stations, and truck stops. Travel did not return to normal until after Christmas in some locations.

January 2000

A winter storm brought a swath of heavy snow across north central Mississippi. The snow began falling over western portions of the area during the early morning of the 27th and spread eastward during the day. The snow was heavy at times and did not end until the morning of the 28th. Snowfall amounts generally ranged from 4 to 10 inches. The heaviest amounts fell along the Highway 82 corridor from Greenville to Starkville where isolated snow depths of 12 inches were reported. Damage from the heavy snow was relatively minimal with reports limited to a few collapsed roofs and downed trees. Power

[18] Pfost, Russell L. Disastrous Mississippi Ice Storm of 1994. National Weather Service Forecast Office. Jackson, Mississippi.

outages were sporadic, but travelling was more than just an inconvenience as numerous reports of vehicles running off the road were received.

February 2021
The Press Register noted in article on February 18, 2021 that in Clarksdale six inches of snow fell on the community, stopping commerce, community events, and most of government services. The Sunflower River in Clarksdale was not only frozen over, but coated in a layer of snow after temperatures fell into the teens Sunday night and over 10-inches of snow fell through Thursday morning. Power outages were a problem due to ice throughout the Coahoma County area on Thursday.

Winter storms throughout the planning area have several negative externalities including hypothermia, cost of snow and debris cleanup, business and government service interruption, traffic accidents, and power outages. Furthermore, citizens may resort to using inappropriate heating devices that could cause a fire or an accumulation of toxic fumes.

PROBABILITY OF FUTURE OCCURRENCES

Winter storm events will continue to occur in Coahoma County. Based on historical information, the probability is likely (between 10 and 100 percent annual probability).

A.2.16 CORONAVIRUS (COVID-19)

A Major Disaster Declaration was declared on April 5, 2020 for the State of Mississippi. On April 1, 2020, Governor Tate Reeves issued a statewide stay-at-home order to take effect on April 3, and remain in effect until April 20, 2020, in an effort to clow the spread of the COVID-19. At the time of the announcement, there were 1,073 cases and 22 deaths statewide. As of October 12, 2019, the statewide positive cases total 496,851 and 9,900 deaths. New cases reported for October 12, 2021 were 719.

Cumulative of COVID-19 Cases and Deaths in Coahoma County as of Oct. 12, 2021

County	Total Cases	Total Deaths
Coahoma	4110	104

Source: Mississippi State Department of Health

The Mississippi Department of Health posts COVID-19 Guidance and Prevention for Individuals and the Community on their website. Various methods to contain the spread can "flatten the curve" of the outbreak to reduce the number of patients that would threaten to overwhelm health and medical resources. Current containment measures focus on preventing illness by "social distancing" that prevents close contact from individual-to-individual, thereby reducing the potential for infection through respiratory droplets produced when an infected person coughs or sneezes.

Avoid close contact with people who are sick

Cover your cough or sneeze with a tissue, then throw the tissue in the trash

Avoid touching your eyes, nose, and mouth

Clean and disinfect frequently touched objects and surfaces

Stay home when you are sick, except to get medical care

Washing your hands often with soap and water for at least 20 seconds

Utilize PPE and hand sanitizer

Free COVID-19 testing and local testing providers and vaccinations are available from MSDH sites around the state, and from local pharmacies and healthcare providers.

A.2.17 Conclusions on Hazard Risk

The hazard profiles presented in this subsection were developed using best available data and result in what may be considered principally a qualitative assessment as recommended by FEMA in its "How-to" guidance document titled *Understanding Your Risks: Identifying Hazards and Estimating Losses* (FEMA Publication 386-2). It relies heavily on historical and anecdotal data, stakeholder input, and professional and experienced judgment regarding observed and/or anticipated hazard impacts. It also carefully considers the findings in other relevant plans, studies, and technical reports.

HAZARD EXTENT

Table A.258 describes the extent of each natural hazard identified for Coahoma County. The extent of a hazard is defined as its severity or magnitude, as it relates to the planning area.

TABLE A.248: EXTENT OF COAHOMA COUNTY HAZARDS

Flood-related Hazards	
Dam and Levee Failure	Dam Failure extent is defined using the Mississippi Department of Environmental Quality criteria (Table 5.3). No dams are classified as high-hazard in Coahoma County. According to the 2018 National Inventory of Dams, Coahoma County has four (4) low hazard dams.
Erosion	The extent of erosion can be defined by the measurable rate of erosion that occurs. Data is limited on the extent and impact of erosion in Coahoma County. Some areas of minimal erosion have been identified by local coordinators, but no major areas of severe erosion were noted.
Flood	Flood extent can be measured by the amount of land and property in the floodplain as well as flood height and velocity. The amount of land in the floodplain accounts for 32.2 percent of the total land area in Coahoma County. Flood depth and velocity are recorded via United States Geological Survey stream gages throughout the region. While a gage does not exist for each participating jurisdiction, there is one at or near many areas. Since there is no gage available in Coahoma County, data for nearby Tunica County can be used for comparison. The greatest peak discharge recorded for the county was at the Coldwater River at Prichard on January 12, 1946. Water reached a discharge of 8,000 cubic feet per second. The highest stream gage height was also on the Coldwater River at Prichard with a height that was recorded at 32.00 feet on April 27, 1973.

Fire-related Hazards	
Drought	Drought extent is defined by the U.S. Drought Monitor Classifications which include Abnormally Dry, Moderate Drought, Severe Drought, Extreme Drought, and Exceptional Drought. According to the U.S. Drought Monitor Classifications, the most severe drought condition is Exceptional. Coahoma County has received this ranking once over the 22-year reporting period.
Lightning	According to the Vaisala's flash density map (Figure 5.8), Coahoma County is located in an area that experiences 4 to 12 lightning flashes per square kilometer per year. It should be noted that future lightning occurrences may exceed these figures.
Wildfire	Wildfire data was provided by the Mississippi Forestry Commission and is reported annually by county from 2012-2021. The greatest number of fires to occur in Coahoma County in any year was 2 in 2016. The greatest number of acres to burn in the county in a single year occurred in 2016 when 115 acres were burned. Although this data lists the extent that has occurred, larger and more frequent wildfires are possible throughout the county.
Geologic Hazards	
Earthquake	Earthquake extent can be measured by the Richter Scale (Table 5.15), the Modified Mercalli Intensity (MMI) scale (Table 5.16), and the distance of the epicenter from Coahoma County. According to data provided by the National Geophysical Data Center, the greatest earthquake to impact the county had a MMI of IV (moderate) and Richter Scale magnitude of 5.3 (reported on November 9, 1968). The epicenter of this earthquake was located 461.0 km away.
Landslide	As noted above in the landslide profile, there is no extensive history of landslides in Coahoma County and landslide events typically occur in isolated areas. This provides a challenge when trying to determine an accurate extent for the landslide hazard. However, when using USGS landslide susceptibility index, extent can be measured with incidence, which is low throughout the county. There is also low susceptibility throughout some of the county but there is an area of high susceptibility across the northwestern half.
Land Subsidence/ Sinkhole	The extent of land subsidence can be defined by the measurable rate of subsidence that occurs. There are no subsidence rate records located in Coahoma County nor is there any significant historical record of events. The largest potential event might be as a large as 10,000 cubic yards.
Wind-related Hazards	
Extreme Heat	The extent of extreme heat can be measured by the record high temperature recorded. Official long term temperature records are not kept for any areas in Coahoma County. However, the highest recorded temperature in Tunica (northeast of the county) was 106°F in 2000.
Hailstorm	Hail extent can be defined by the size of the hail stone. The largest hail stone reported in Coahoma County was 2.75 inches (last reported on March 31, 2015). It should be noted that future events may exceed this.
Hurricane and Tropical Storm	Hurricane extent is defined by the Saffir-Simpson Scale which classifies hurricanes into Category 1 through Category 5 (Table 5.23). The greatest classification of hurricane to traverse directly through Coahoma County was an Unnamed 1888 Storm which carried tropical force winds of 60 knots upon arrival in the county.

Severe Thunderstorm/ High Wind	Thunderstorm extent is defined by the number of thunder events and wind speeds reported. According to a 61-year history from the National Climatic Data Center, the strongest recorded wind event in Coahoma County was reported on May 10, 2008 at 96 knots (approximately 110 mph). It should be noted that future events may exceed these historical occurrences.
Tornado	Tornado hazard extent is measured by tornado occurrences in the US provided by FEMA (Figure 5.21) as well as the Fujita/Enhanced Fujita Scale (Tables 5.28 and 5.29). The greatest magnitude reported in Coahoma County was an F3 (last reported on April 24, 1976).
Winter Storm and Freeze	The extent of winter storms can be measured by the amount of snowfall received (in inches). Official long term snow records are not kept for any areas in Coahoma County. However, the greatest snowfall reported in Olive Branch (northeast of the county) was 14.3 inches in 1963. NCEI reported January 6, 1988 in Clarksdale 10.0 inches of snow. In February 2021 the local news reported that over 10 inches of snow fell in Clarksdale over a period of days.

PRIORITY RISK INDEX RESULTS

In order to draw some meaningful planning conclusions on hazard risk for Coahoma County, the results of the hazard profiling process were used to generate countywide hazard classifications according to a "Priority Risk Index" (PRI). More information on the PRI and how it was calculated can be found in Section 5.18.2.

Table A.269 summarizes the degree of risk assigned to each category for all initially identified hazards based on the application of the PRI. Assigned risk levels were based on the detailed hazard profiles developed for this subsection, as well as input from the Regional Hazard Mitigation Council. The results were then used in calculating PRI values and making final determinations for the risk assessment.

TABLE A.259: SUMMARY OF PRI RESULTS FOR COAHOMA COUNTY

Hazard	Category/Degree of Risk					
	Probability	Impact	Spatial Extent	Warning Time	Duration	PRI Score
Flood-related Hazards						
Dam Failure and Levee Failure	Unlikely	Critical	Large	Less than 6 hours	Less than 6 hours	**2.5**
Erosion	Likely	Minor	Small	More than 24 hours	More than 1 week	**2.1**
Flood	Highly Likely	Critical	Moderate	6 to 12 hours	Less than 24 hours	**3.2**
Fire-related Hazards						
Drought	Likely	Limited	Large	More than 24 hours	More than 1 week	**2.8**
Lightning	Highly Likely	Limited	Small	6 to 12 hours	Less than 6 hours	**2.6**
Wildfire	Highly Likely	Minor	Small	Less than 6 hours	Less than 1 week	**2.6**
Geologic Hazards						
Earthquake	Likely	Critical	Large	Less than 6 hours	Less than 6 hours	**3.1**
Landslide	Possible	Minor	Small	Less than 6 hours	Less than 24 hours	**1.9**
Land Subsidence/Sinkhole	Possible	Minor	Small	Less than 6 hours	Less than 24 hours	**1.9**
Wind-related Hazards						
Extreme Heat	Likely	Minor	Large	More than 24 hours	More than 1 week	**2.5**
Hailstorm	Highly Likely	Limited	Moderate	6 to 12 hours	Less than 6 hours	**2.8**
Hurricane and Tropical Storm	Possible	Limited	Large	More than 24 hours	Less than 24 hours	**2.3**
Severe Thunderstorm/High Wind	Highly Likely	Critical	Moderate	6 to 12 hours	Less than 6 hours	**3.1**
Tornado	Highly Likely	Catastrophic	Small	Less than 6 hours	Less than 6 hours	**3.3**
Winter Storm and Freeze	Likely	Limited	Moderate	More than 24 hours	Less than 1 week	**2.5**

A.2.17 Final Determinations on Hazard Risk

The conclusions drawn from the hazard profiling process for Coahoma County, including the PRI results and input from the Regional Hazard Mitigation Council, resulted in the classification of risk for each identified hazard according to three categories: High Risk, Moderate Risk, and Low Risk (**Table A.30**). For purposes of these classifications, risk is expressed in relative terms according to the estimated impact that a hazard will have on human life and property throughout all of Coahoma County. A more quantitative analysis to estimate potential dollar losses for each hazard has been performed separately, and is described in Section 6: *Vulnerability Assessment* and below in Section A.3. It should be noted that although some hazards are classified below as posing low risk, their occurrence of varying or unprecedented magnitudes is still possible in some cases and their assigned classification will continue to be evaluated during future plan updates. **Table A.30.1** summarizes the vulnerability of each jurisdiction to each hazard. Some hazards did not have a rating in the National Risk Index; therefore, **Table A.30.1** includes community and Mitigation Council feedback as well as NCDC data. Quantitative data does not always provide a total picture of hazard impacts, so results were presented to the District 1 Regional Mitigation Council for feedback on how each hazard affects their jurisdictions.

TABLE A.30: CONCLUSIONS ON HAZARD RISK FOR COAHOMA COUNTY

HIGH RISK	Tornado Flood Severe Thunderstorm/High Wind Earthquake
MODERATE RISK	Hailstorm Drought Lightning Wildfire Dam and Levee Failure Extreme Heat Winter Storm and Freeze
LOW RISK	Hurricane and Tropical Storm Erosion Landslide Land Subsidence/Sinkhole

TABLE A.30.1: SUMMARY OF HAZARD RANKING

Hazard	Clarksdale	Coahoma	Friars Point	Jonestown	Lula
Flood-related Hazards					
Dam and Levee Failure	Moderate	Moderate	Moderate	Moderate	Moderate
Erosion	Low	Low	Low	Low	Low
Flood (Riverine)	Very Low	Relatively High	Relatively High	Relatively High	Relatively High
Fire-related Hazards					
Drought	Very Low	Relatively Moderate	Relatively Moderate	Relatively Moderate	Relatively Moderate
Lightning	Relatively Low	Relatively High	Relatively High	Relatively High	Relatively High
Wildfire	No Rating	Very Low	Very Low	Very Low	Very Low
Geologic Hazards					
Earthquake	Relatively Moderate	Relatively Moderate	Relatively Moderate	Relatively Moderate	Relatively Moderate

Hazard	Clarksdale	Coahoma	Friars Point	Jonestown	Lula
Landslide	No Rating	Very Low	Very Low	Very Low	Very Low
Land Subsidence/Sinkhole	Low	Low	Low	Low	Low
Wind-related Hazards					
Extreme Heat	Relatively High	Very High	Very High	Very High	Very High
Hailstorm	Very Low	Relatively Moderate	Relatively Moderate	Relatively Moderate	Relatively Moderate
Hurricane & Tropical Storm	Very Low	Relatively Moderate	Relatively Moderate	Relatively Moderate	Relatively Moderate
Severe Thunderstorm/High Wind	Relatively Moderate	Relatively High	Relatively High	Relatively High	Relatively Moderate
Tornado	Relatively Moderate	Very High	Very High	Very High	Very High
Winter Storm & Freeze	Relatively Low	Relatively Low	Relatively Low	Relatively Low	Relatively Low

TABLE A.30.1: SUMMARY OF HAZARD RANKING (CONT.)

Hazard	Lyon	Unincorporated, Coahoma County
Flood-related Hazards		
Dam and Levee Failure	Moderate	Moderate
Erosion	Low	Low
Flood (Riverine)	Relatively Moderate	Relatively Moderate
Fire-related Hazards		
Drought	Relatively Moderate	Relatively Moderate
Lightning	Relatively Moderate	Relatively Moderate
Wildfire	No Rating	No Rating
Geologic Hazards		
Earthquake	Relatively Moderate	Relatively Moderate
Landslide	Very Low	Relatively Low
Land Subsidence/Sinkhole	Low	Low
Wind-related Hazards		

Hazard	Lyon	Unincorporated, Coahoma County
Extreme Heat	Relatively High	Relatively High
Hailstorm	Relatively Moderate	Relatively Moderate
Hurricane & Tropical Storm	Relatively Moderate	Relatively Low
Severe Thunderstorm/High Wind	Relatively Moderate	Relatively Moderate
Tornado	Very High	Relatively High
Winter Storm & Freeze	Relatively Low	Relatively Low

Source: FEMA National Risk Index, Mitigation Council

A.3 COAHOMA COUNTY VULNERABILITY ASSESSMENT

This subsection identifies and quantifies the vulnerability of Coahoma County to the significant hazards previously identified. This includes identifying and characterizing an inventory of assets in the county and assessing the potential impact and expected amounts of damages caused to these assets by each identified hazard event. More information on the methodology and data sources used to conduct this assessment can be found in Section 6: *Vulnerability Assessment*.

A.3.1 Asset Inventory

Table A.271 lists the estimated number of improved properties and the total value of improvements for Coahoma County and its participating jurisdictions (study area of vulnerability assessment). Because digital parcel data was not available for most communities, data obtained from Hazus-MH 3.1 inventory was utilized to complete the analysis.

TABLE A.31 IMPROVED PROPERTY IN COAHOMA COUNTY

Location	Counts of Improved Property	Total Value of Improvements
Clarksdale	6,741	$1,461,759,000
Coahoma (town)	131	$19,739,000
Friars Point	440	$89,931,000
Jonestown	446	$63,072,000
Lula	146	$38,153,000
Lyon	249	$70,246,000
Unincorporated Area	2,181	$442,928,000
COAHOMA COUNTY TOTAL	**10,085**	**$2,115,582,000**

Source: Hazus-MH 3.1

Table A.282 lists the fire stations, police stations, medical care facilities, emergency operations centers (EOCs), schools, shelters, government buildings, water/utility infrastructure, and other facilities located in

Coahoma County according to Hazus-MH Version 3.1 data that was reviewed and updated by local officials.

In addition, **Figure A.13** shows the locations of critical facilities in Coahoma County. **Table A.43**, at the end of this subsection, shows a complete list of the critical facilities by name, as well as the hazards that affect each facility. As noted previously, this list is not all-inclusive and only includes information provided through Hazus which was updated, as best as possible, with local knowledge.

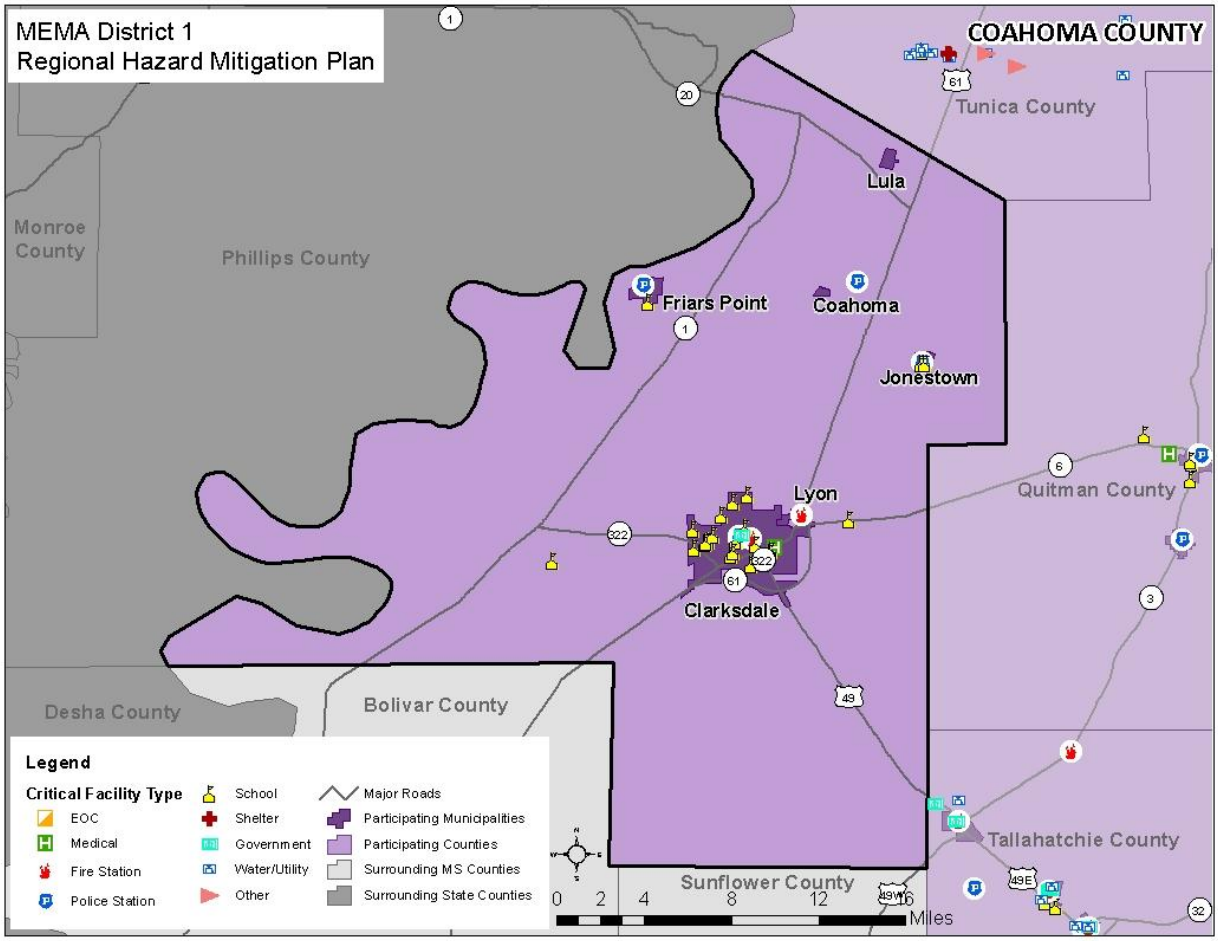
TABLE A.32: CRITICAL FACILITY INVENTORY IN COAHOMA COUNTY

Location	Fire Stations	Police Stations	Medical Care	EOC	Schools	Gov't*	Water/ Utility*	Shelter*	Other*
Clarksdale	1	2	1	1	17	1	0	0	0
Coahoma (town)	0	1	0	0	1	0	0	0	0
Friars Point	1	1	0	0	1	0	0	0	0
Jonestown	1	1	0	0	2	0	0	0	0
Lula	0	0	0	0	0	0	0	0	0
Lyon	1	0	0	0	1	0	0	0	0
Unincorporated Area	3	0	0	0	0	0	0	0	0
COAHOMA COUNTY TOTAL	**7**	**5**	**1**	**1**	**22**	**1**	**0**	**0**	**0**

*All counties were not able to attain information on these facility types, however, this should not imply that these counties do not have any of these types of facilities. Instead, it should be noted that as this information is collected, it will be incorporated in future updates of the plan.

Source: Hazus-MH 3.1, Local Officials

FIGURE A.163: CRITICAL FACILITY LOCATIONS IN COAHOMA COUNTY



Source: Hazus-MH 3.1, Local Officials

A.3.2 Social Vulnerability

In addition to identifying those assets potentially at risk to identified hazards, it is important to identify and assess those particular segments of the resident population in Coahoma County that are potentially at risk to these hazards.

Table A.293 lists the population by jurisdiction according to U.S. Census 2020 population estimates. The total population in Coahoma County according to Census data was 21,390 persons. Additional population estimates are presented above in Section A.1.

TABLE A.263: TOTAL POPULATION IN COAHOMA COUNTY

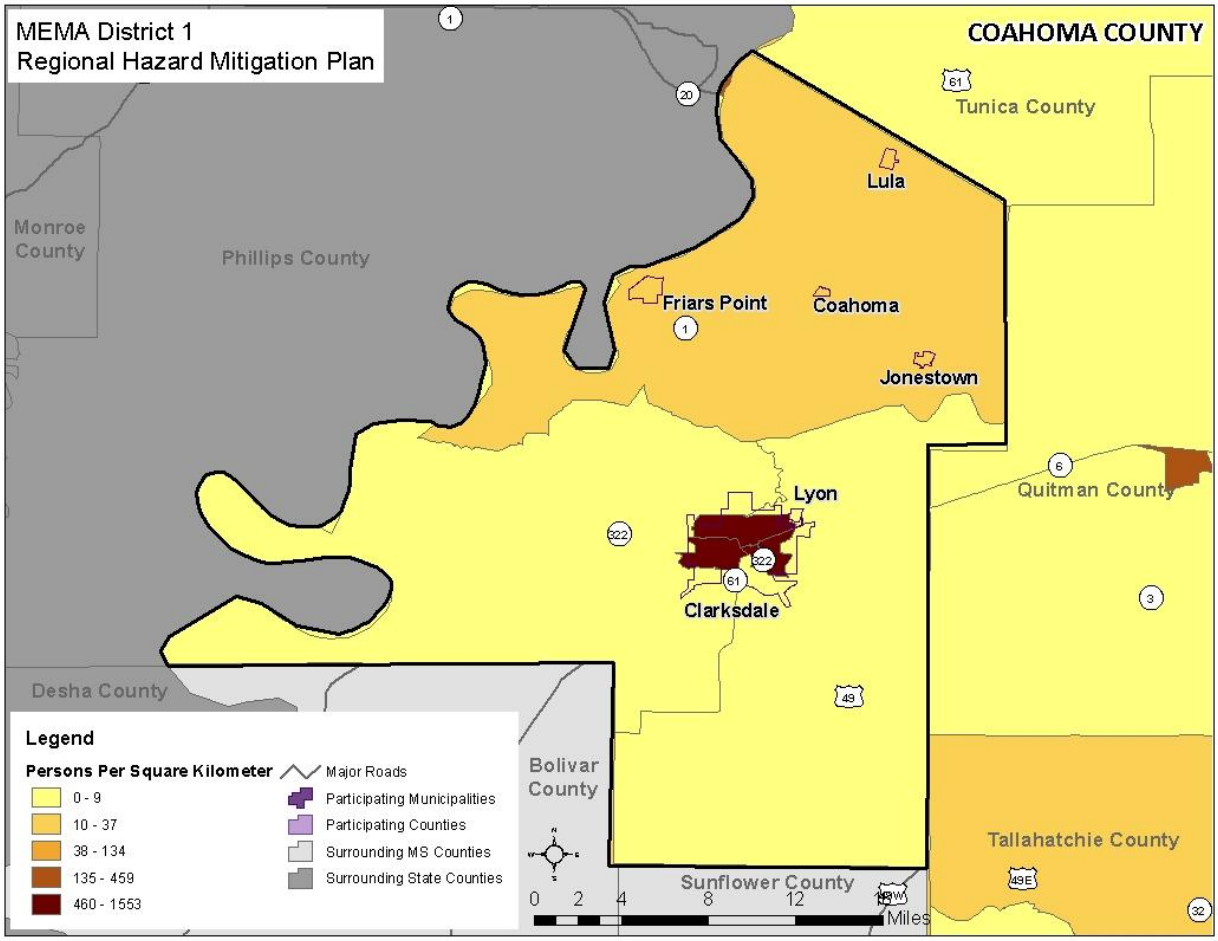
Location	Total 2020 Population
Clarksdale	14,903
Coahoma (town)	229
Friars Point	896
Jonestown	962
Lula	204

Location	Total 2020 Population
Lyon	296
Unincorporated Area	3,900
COAHOMA COUNTY TOTAL	**21,390**

Source: United States Census Bureau, 2020 Census

In addition, **Figure A.144** illustrates the population density per square kilometer by census tract as it was reported by the U.S. Census Bureau in 2010. As can be seen in the figure, the population is spread out with concentrations in large municipal areas such as Clarksdale and Lyon.

FIGURE A.174: POPULATION DENSITY IN COAHOMA COUNTY



Source: United States Census Bureau, 2010 Census

A.3.3 Development Trends and Changes in Vulnerability

Since the previous regional hazard mitigation plan was approved, Coahoma County has experienced limited growth and development. **Table A.34** shows the number of building units constructed since 2014 according to the U.S. Census American Community Survey.

TABLE A.274: BUILDING COUNTS FOR COAHOMA COUNTY

Jurisdiction	Total Housing Units (2014)	Total Housing Unit (2019)	% Building Stock Built
Clarksdale	7,214	5,847	-18.95%
Coahoma (town)	148	110	-25.68%
Friars Point	466	528	13.30%
Jonestown	492	514	4.47%
Lula	166	131	-21.08%
Lyon	144	236	63.89%
Unincorporated Area	2,144	3,345	56.02%
COAHOMA COUNTY TOTAL	**10,774**	**10,711**	**-0.58%**

Source: United States Census Bureau, 2010-2019 American Community Survey 5-Year Estimates

Table A.305 and **Table A.35.1** show population growth estimates for the county from 2010 to 2014 and 2015 to 2019 based on the U.S. Census American Community Survey.

TABLE A.285: POPULATION GROWTH FOR COAHOMA COUNTY

Jurisdiction	Population Estimates (as of July 1)					% Change 2010-2014
	2010	2011	2012	2013	2014	
Clarksdale	18,276	18,092	17,906	17,725	17,497	-4.26%
Coahoma (town)	351	466	415	425	408	16.24%
Friars Point	1,107	988	924	882	924	-16.53%
Jonestown	1,381	1,426	1,304	1,327	1,381	0.00%
Lula	286	347	382	339	348	21.68%
Lyon	483	492	360	319	308	-36.23%
Unincorporated Area	4,797	4,565	4,808	4,796	4,661	-2.84%
COAHOMA COUNTY TOTAL	**26,681**	**26,376**	**26,099**	**25,813**	**25,527**	**-4.33%**

Source: United States Census Bureau, 2006-2010, 2007-2011, 2008-2012, 2009-2013, and 2010-2014 American Community Survey 5-Year Estimates

Based on the data above, there has been an overall low rate of residential development since 2014 and a decrease in population growth in the county from 2010 to 2014. Several municipalities experienced population declines. However, it is notable that the Town of Lula experienced a slightly higher rate of development compared to the rest of the county, resulting in an increased number of structures that are vulnerable to the potential impacts of the identified hazards. Additionally, there was a substantial rate of population growth in the Town of Coahoma and the Town of Lula and significant reductions in population in the Town of Friars Point and the Town of Lyon. As a result, there are now greater numbers of people exposed to the identified hazards in some areas while there are fewer in other areas. Therefore, development and population growth did impacted the county's vulnerability, and there has been a slight increase in the overall vulnerability as well as a significant increase in certain areas and communities.

TABLE A.295.1: POPULATION GROWTH FOR COAHOMA COUNTY

Jurisdiction	Population Estimates					% Change 2015-2019
	2015	2016	2017	2018	2019	
Clarksdale	16,847	16,272	15,732	15,304	14,894	-11.59%
Coahoma (town)	390	352	369	356	322	-17.44
Friars Point	870	1,061	1,044	1,209	1,395	60.34%
Jonestown	1,436	1,427	1,349	1,124	1,047	-27.09%
Lula	292	287	248	243	245	-16.10%
Lyon	320	322	363	409	400	25%
Unincorporated Area	4,345	4,113	4,109	3,960	3,821	-12.06%
COAHOMA COUNTY TOTAL	**24,500**	**23,834**	**23,214**	**22,605**	**22,124**	**-1.53%**

Source: 2015-2019 American Community Survey 5-Year Estimates

Based on the 2019 housing totals and 2015-2019 ACS Survey 5-year Estimates, there has been an overall decrease in residential development and population growth in the county since 2014, and 5 of 7 jurisdictions have experienced population declines. However, it is notable that the Friars Point, Jonestown, Lyon, and Unincorporated Areas of Coahoma County have experienced an increase development, resulting in an increased number of structures that are vulnerable to the potential impacts of the identified hazards. Additionally, there was a substantial rate of population growth in the Town of Friars Point and the Town of Lula and significant reductions in population in the City of Clarksdale, Town of Coahoma, Town of Jonestown, Town of Lula, and Unincorporated Area of Coahoma County. As a result, there are now greater numbers of people exposed to the identified hazards in some areas while there are fewer in other areas. Therefore, development and population growth have impacted the county's vulnerability since the previous regional hazard mitigation plan was approved.

It is also important to note that as development increases in the future, greater populations and more structures and infrastructure will be exposed to potential hazards if development occurs in the floodplains, landside susceptibility areas, or high wildfire risk areas. Limiting public use of hazard prone areas is a long-term mitigation action available to local governments. With the adoption and enforcement of general development plans, land use plans, ordinances, building codes, and floodplain management requirements, Coahoma County jurisdictions seek to not have developments in hazard prone areas that increase or decrease vulnerability of each jurisdiction. Since the previous plan, the jurisdictions are not aware of any development that have occurred in hazard prone areas and increased or decreased vulnerability.

A.3.4 Vulnerability Assessment Results

As noted in Section 6: *Vulnerability Assessment*, only hazards with a specific geographic boundary, available modeling tool, or sufficient historical data allow for further analysis. Those results, specific to Coahoma County, are presented here. All other hazards are assumed to impact the entire planning region (drought, extreme heat, hailstorm, lightning, severe thunderstorm/high wind, tornado, and winter storm) or, due to lack of data, analysis would not lead to credible results (dam and levee failure, erosion, and land subsidence/sinkhole). The total county exposure, and thus risk to these hazards, was presented in **Table A.33**.

The hazards to be further analyzed in this subsection include: flood, landslide, wildfire, earthquake, and hurricane and tropical storm winds.

The annualized loss estimate for all hazards is presented near the end of this subsection in **Table A.42.**

FLOOD

Historical evidence indicates that Coahoma County is susceptible to flood events. A total of 23 flood events have been reported by the National Climatic Data Center resulting in $ 1,938,000 in property damages. On an annualized level, these damages amounted to $80,750 for Coahoma County.

In order to assess flood risk, a GIS-based analysis was used to estimate exposure to flood events using Digital Flood Insurance Rate Map (DFIRM) data in combination with improved property records for the county. The determination of value at-risk (exposure) was calculated using GIS analysis by summing the values for improved properties that were located within an identified floodplain. Due to a lack of digital parcel data in most counties, it was determined that an analysis using the inventory from Hazus-MH 3.1 would be used, though it should be noted that the data will merely be an estimation and may not reflect actual counts or values located in the floodplain. Indeed, in almost all cases, this analysis likely overestimates the amount of property at risk. **Table A.316** presents the potential at-risk property. Both the number of parcels and the approximate value are presented.

TABLE A.306: ESTIMATED EXPOSURE OF PROPERTY TO THE FLOOD HAZARD[19]

Location	1.0-percent ACF	
	Approx. Number of Improvements	Approx. Improved Value
Clarksdale	492	$135,197,000
Coahoma (town)	0	$0
Friars Point	5	$13,482,000
Jonestown	249	$36,037,000
Lula	43	$6,377,000
Lyon	31	$20,136,000
Unincorporated Area	763	$147,663,000
COAHOMA COUNTY TOTAL	**1,583**	**$358,892,000**

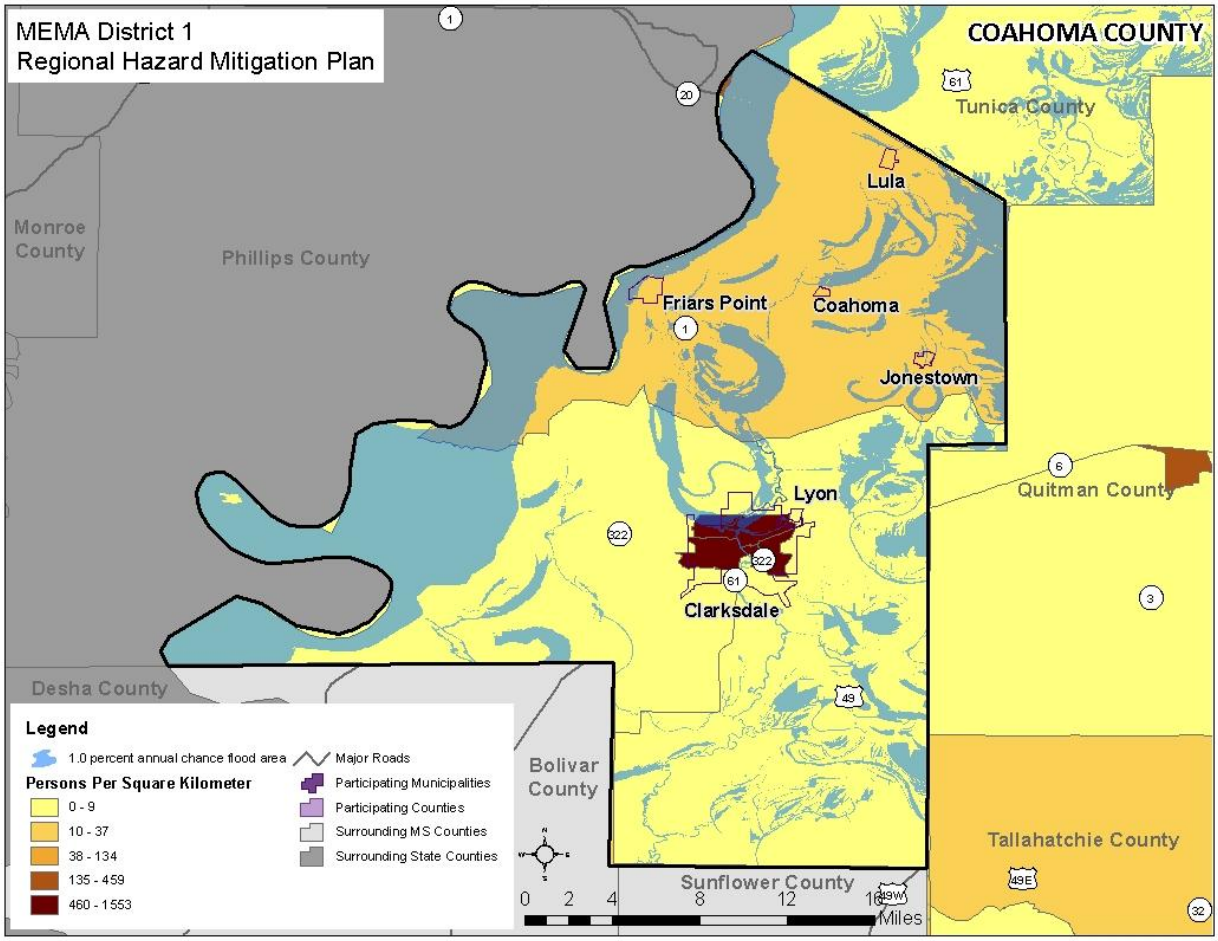
Source: Federal Emergency Management Agency DFIRM and Hazus MH 3.1

Social Vulnerability

Figure A.15 is presented to gain a better understanding of at-risk population by evaluating census tract level population data against mapped floodplains. There are areas of concern in several of the population centers. Indeed, nearly every incorporated municipality is potentially at risk of being impacted by flooding in some areas of its jurisdiction. Therefore, further investigation in these areas may be warranted.

[19] As noted in Section 6.4, no building-specific data, such as building footprints, was available to determine buildings at risk. As a result of this data limitation, at-risk census block building counts and values of the structures were used.

FIGURE A.185 : POPULATION DENSITY NEAR FLOODPLAINS IN COAHOMA COUNTY



Source: Federal Emergency Management Agency DFIRM, United States Census 2010

Critical Facilities

The critical facility analysis revealed that there is one critical facility located in the floodplain. (Please note, as previously indicated, this analysis does not consider building elevation, which may negate risk.) This facility is a school located in the 1.0 percent annual chance flood zone. A list of specific critical facilities and their associated risk can be found in **Table A.43** at the end of this subsection.

In conclusion, a flood has the potential to impact many existing and future buildings, facilities, and populations in Coahoma County, though some areas are at a higher risk than others. All types of structures in a floodplain are at-risk, though elevated structures will have a reduced risk. Such site-specific vulnerability determinations are outside the scope of this assessment but may be considered during future plan updates. Furthermore, areas subject to repetitive flooding should be analyzed for potential mitigation actions.

LANDSLIDE

Steeper topography in some areas of Coahoma County makes the planning area susceptible to landslides. Although no major landslide incidents have been reported in the county, it should be noted that United

States Geological Survey information on historic events is not well-documented so the data may be incomplete. There may be additional historical landslide occurrences that were not reported.

In order to complete the vulnerability assessment for landslides in Coahoma County, GIS analysis was used. The potential dollar value of exposed property can be determined using the USGS Landslide Susceptibility Index (detailed in Section 5: *Hazard Profiles*), census block data from Hazus or county-level tax parcel data, and GIS analysis. **Table A.327** presents the potential at-risk property where available. Only a portion of the region is identified as being in a moderate incidence/high susceptibility or low incidence/high susceptibility area by the USGS landslide data. These incidence levels were used to identify areas of concern for the analysis below.

TABLE A.317: TOTAL POTENTIAL AT-RISK PARCELS FOR THE LANDSLIDE HAZARD

Location	Low Incidence/ High Susceptibility Area		Moderate Incidence/ High Susceptibility Area	
	Approx. Number of Improvements	Approx. Improved Value	Approx. Number of Improvements	Approx. Improved Value
Clarksdale	5,742	$1,219,561,000	0	$0
Coahoma (town)	131	$19,739,000	0	$0
Friars Point	440	$89,931,000	0	$0
Jonestown	0	$0	0	$0
Lula	146	$38,153,000	0	$0
Lyon	34	$31,207,000	0	$0
Unincorporated Area	1,148	$237,045,000	0	$0
COAHOMA COUNTY TOTAL	**7,641**	**$1,635,636,000**	**0**	**$0**

Source: United States Geological Survey and Hazus-MH 3.1

Social Vulnerability

Given low incidence across the entire county, it is assumed that the total population is at relatively low risk.

Critical Facilities

Several critical facilities in the county are located in a low incidence/high susceptibility area. There are 23 critical facilities located in this zone. This includes 1 fire station, 4 police stations, 17 schools, and 1 government building. There are no critical facilities located in the moderate incidence/high susceptibility area. A list of specific critical facilities and their associated risk can be found in **Table A.43** at the end of this subsection.

In conclusion, a landslide has the potential to impact all existing and future buildings, critical facilities, and populations in Coahoma County. Specific vulnerabilities for Coahoma County assets will be greatly dependent on their individual design and the mitigation measures in place where appropriate. Such site-specific vulnerability determinations are outside the scope of this assessment but will be considered during future plan updates if data becomes available.

WILDFIRE

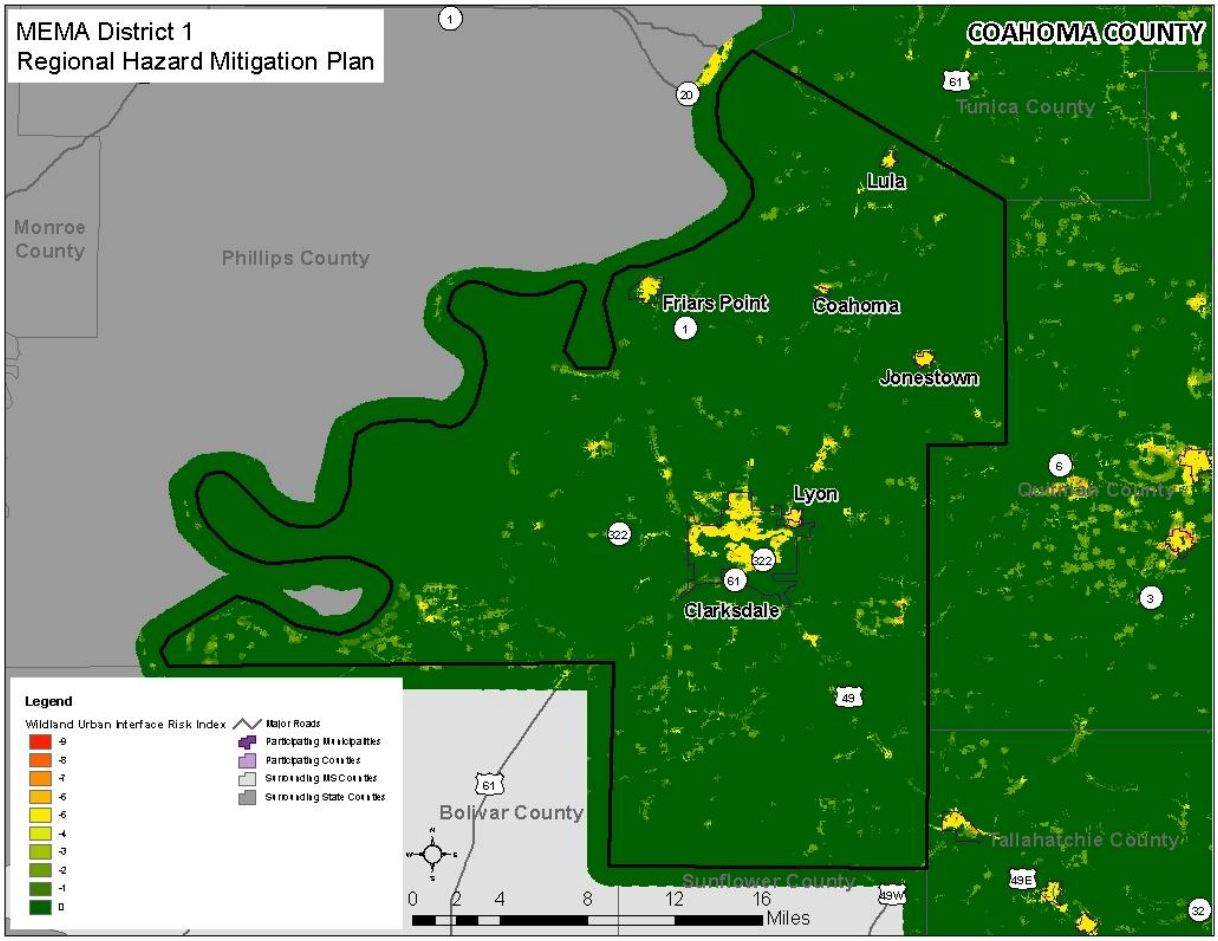
Although historical evidence indicates that Coahoma County is susceptible to wildfire events, there are few reports which include information on historic dollar losses. Therefore, it is difficult to calculate a reliable annualized loss figure. Annualized loss is considered negligible though it should be noted that a single event could result in significant damages throughout the county.

To estimate exposure to wildfire, building data was obtained from Hazus-MH 3.1 for most counties which includes information that has been aggregated at the census block level and which has been deemed useful for analyzing wildfire vulnerability. However, it should be noted that the accuracy of Hazus data is somewhat lower than that of parcel data. For the critical facility analysis, areas of concern were intersected with critical facility locations.

Figure A.16 shows the Wildland Urban Interface Risk Index (WUIRI) data, which is a data layer that shows a rating of the potential impact of a wildfire on people and their homes. The key input, Wildland Urban Interface (WUI), reflects housing density (houses per acre) consistent with Federal Register National standards. The location of people living in the WUI and rural areas is key information for defining potential wildfire impacts to people and homes. Initially provided as raster data, it was converted to a polygon to allow for analysis. The Wildland Urban Interface Risk Index data ranges from 0 to -9 with lower values being most severe (as noted previously, this is only a measure of relative risk). **Figure A.17** shows the areas of analysis where any grid cell is less than -5. Areas with a value below -5 were chosen to be displayed as areas of risk because this showed the upper echelon of the scale and the areas at highest risk.

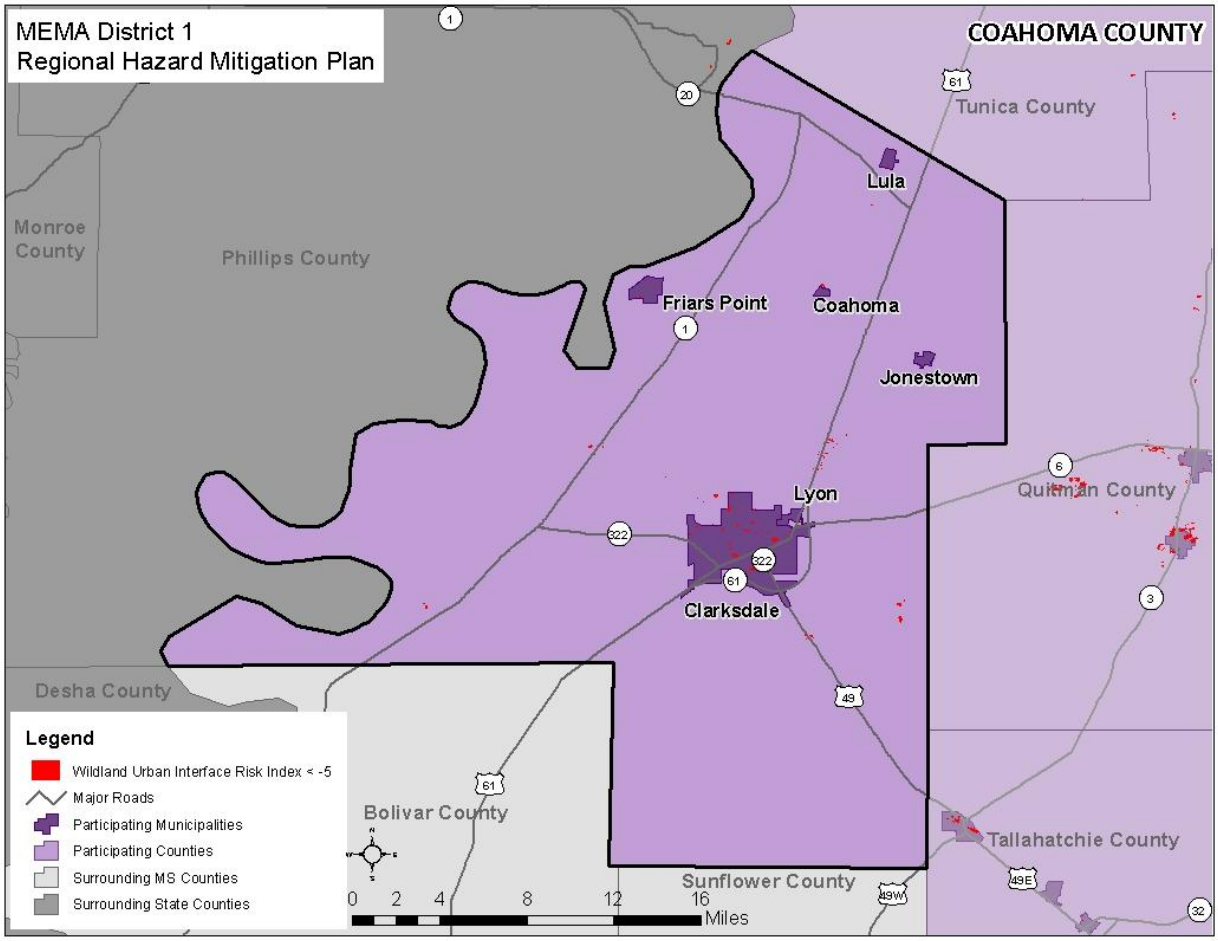
Table A.338 shows the results of the analysis.

FIGURE A.196: WUI RISK INDEX AREAS IN COAHOMA COUNTY



Source: Southern Wildfire Risk Assessment Data

FIGURE A.17: WILDFIRE RISK AREAS IN COAHOMA COUNTY



Source: Southern Wildfire Risk Assessment Data

TABLE A.328: EXPOSURE OF IMPROVED PROPERTY[20] TO WILDFIRE RISK AREAS

Location	Wildfire Risk	
	Approx. Number of Improvements	Approx. Improved Value
Clarksdale	1,236	$280,249,000
Coahoma (town)	0	$0
Friars Point	122	$17,575,000
Jonestown	87	$13,086,000
Lula	6	$765,000
Lyon	31	$21,335,000
Unincorporated Area	422	$68,126,000
COAHOMA COUNTY TOTAL	**1,904**	**$401,136,000**

Source: Southern Wildfire Risk Assessment and Hazus-MH 3.1

[20] Parcel/Building Footprint data was not available for Coahoma County. Therefore, building counts and values were pulled from Hazus-MH at the census block level and approximate improved value was calculated.

Social Vulnerability
Given some level of susceptibility across the entire county, it is assumed that the total population is at risk to the wildfire hazard. Determining the exact number of people in certain wildfire zones is difficult with existing data and could be misleading.

Critical Facilities
The critical facility analysis revealed that there is one critical facility located in wildfire areas of concern, a school. It should be noted that several factors could impact the spread of a wildfire putting all facilities at risk. A list of specific critical facilities and their associated risk can be found in **Table A.43** at the end of this subsection.

In conclusion, a wildfire event has the potential to impact many existing and future buildings, critical facilities, and populations in Coahoma County.

EARTHQUAKE

Data from the National Risk Index obtained from historical occurrences confirm, any significant earthquake activity in the area is likely to inflict moderate damage to the county. Estimated total annualized loss of $150,737 which includes buildings, contents, and inventory throughout the county.

The results of the analysis are generated at the census tract level and then aggregated to the county level. Since the scenario is annualized, no building counts are provided. Losses reported included losses due to structure failure, building loss, contents damage, and inventory loss. **Table A.39** summarizes the findings.

TABLE A.339: AVERAGE ANNUALIZED LOSS ESTIMATIONS FOR EARTHQUAKE HAZARD

Location	Building Value	Population Equivalence	Population Fatalities	Agriculture Value	Total Annualized Loss
Coahoma County	$108,128	$42,609	0.01	n/a	$150,737

Source: FEMA National Risk Index

Social Vulnerability
It can be assumed that all existing and future populations are at risk to the earthquake hazard.

Critical Facilities
The probabilistic analysis did not indicate that any critical facilities would sustain measurable damage in an earthquake event. However, all critical facilities should be considered at-risk to minor to moderate damage should an event occur. A list of specific critical facilities and their associated risk can be found in **Table A.43** at the end of this subsection.

In conclusion, an earthquake has the potential to impact all existing and future buildings, facilities, and populations in Coahoma County. Specific vulnerabilities for these assets will be greatly dependent on their individual design and the mitigation measures in place. Such site-specific vulnerability determinations are outside the scope of this assessment but may be considered during future plan updates. The scenario indicates that minimal to moderate damage is expected from an earthquake occurrence. While Coahoma

County may not experience a catastrophic earthquake (the greatest on record is a magnitude IV MMI), localized damage is possible with a moderate to larger scale occurrence.

HURRICANE AND TROPICAL STORM

Historical evidence indicates that Coahoma County has some risk to the hurricane and tropical storm hazard. There has been one disaster declaration due to hurricanes (Hurricane Katrina). Several tracks have come near or traversed through the county, as shown and discussed in Section A.2.12. National Risk Index estimates a total annualized loss of $39,609 which includes buildings, contents, and inventory throughout the county.

Hurricanes and tropical storms can cause damage through numerous additional hazards such as flooding, erosion, tornadoes, and high winds, thus it is difficult to estimate total potential losses from these cumulative effects. Annualized losses for the Coahoma County as shown below in **Table G.340.** Only losses to buildings, inventory, and contents are included in the results.

TABLE A.40: ANNUALIZED LOSS ESTIMATIONS FOR HURRICANE WIND HAZARD

Location	Building Value	Population Equivalence	Population Fatalities	Agriculture Value	Total Annualized Loss
Coahoma County	$18	$204	0.00	$37,387	$39,609

Source: FEMA National Risk Index

Social Vulnerability
Given some equal susceptibility across the entire county, it is assumed that the total population, both current and future, is at risk to the hurricane and tropical storm hazard.

Critical Facilities
Given equal vulnerability across Coahoma County, all critical facilities are considered to be at risk. Some buildings may perform better than others in the face of such an event due to construction and age, among factors. Determining individual building response is beyond the scope of this plan. However, this plan will consider mitigation action for especially vulnerable structures and/or critical facilities to mitigate against the effects of the hurricane hazard. A list of specific critical facilities can be found in **Table A.43** at the end of this subsection.

In conclusion, a hurricane event has the potential to impact many existing and future buildings, critical facilities, and populations in Coahoma County.

CONCLUSIONS ON HAZARD VULNERABILITY

Table A.41 presents a summary of the expected annualized loss for each hazard in Coahoma County using data from The National Risk Index. Due to the reporting of hazard damages primarily at the county level, it was difficult to determine an accurate expected annualized loss estimate for each municipality. Therefore, the expected annualized loss was determined through the damage reported through historical occurrences at the county level. These values should be used as an additional planning tool or measure risk for determining hazard mitigation strategies throughout the county.

TABLE A.41: EXPECTED ANNUALIZED LOSS FOR COAHOMA COUNTY

Hazard	Coahoma County
Dam and Levee Failure	Negligible
Erosion	Negligible
Flood (Riverine)	$0.28M
Drought	$0.25M
Lightning	$63K
Wildfire	$0.09
Earthquake	$0.97M
Landslide	$0.38K
Land Subsidence/Sinkhole	Negligible
Extreme Heat	$0.16M
Hailstorm	$66K
Hurricane & Tropical Storm	$0.16M
Severe Thunderstorm/High Wind	$0.17M
Tornado	$2.1M
Winter Storm & Freeze	$2.8K

Note: In this table, the term "Negligible" is used to indicate that no records of dollar losses for the particular hazard were recorded. This could be the case either because there were no events that caused dollar damage or because documentation of that particular type of event is not well kept.

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Table A.42 presents a summary of the expected annualized losses for each hazard for each jurisdiction in Coahoma County.

TABLE A.42: EXPECTED ANNUALIZED LOSSES FOR JURISDICTIONS IN COAHOMA COUNTY

Hazard	Clarksdale	Coahoma	Friars Point	Jonestown	Lula
Flood-related Hazards					
Dam and Levee Failure	Negligible	Negligible	Negligible	Negligible	Negligible
Erosion	Negligible	Negligible	Negligible	Negligible	Negligible
Flood (Riverine)	$1,315	$101,175	$101,175	$101,175	$101,175
Fire-related Hazards					
Drought	$21	$81,810	$81,810	$81,810	$81,810
Lightning	$2,825	$10,175	$10,175	$10,175	$10,175
Wildfire	$0	$0	$0	$0	$0
Geologic Hazards					
Earthquake	$98,922	$162,984	$162,984	$162,984	$162,984
Landslide	$0	$37	$37	$37	$37
Land Subsidence/Sinkhole	Negligible	Negligible	Negligible	Negligible	Negligible
Wind-related Hazards					
Extreme Heat	$24,719	$84,210	$84,210	$84,210	$84,210
Hailstorm	$574	$21,269	$21,269	$21,269	$21,269
Hurricane & Tropical Storm	$119	$47,124	$47,124	$47,124	$47,124
Severe Thunderstorm/High Wind	$9,164	$24,842	$24,842	$24,842	$24,842
Tornado	$103,480	$324,875	$324,875	$324,875	$324,875
Winter Storm & Freeze	$601	$1,847	$1,847	$1,847	$1,847

TABLE A.42: EXPECTED ANNUALIZED LOSSES FOR JURISDICTIONS IN COAHOMA COUNTY (CONT.)

Hazard	Lyon	Unincorporated, Coahoma County
Flood-related Hazards		
Dam and Levee Failure	Negligible	Negligible
Erosion	Negligible	Negligible
Flood (Riverine)	$88,137	$53,502
Fire-related Hazards		
Drought	$100,903	$62,852
Lightning	$7,865	$6,252
Wildfire	$0	$0
Geologic Hazards		
Earthquake	$119,679	$150,737
Landslide	$70	$271
Land Subsidence/Sinkhole	Negligible	Negligible
Wind-related Hazards		
Extreme Heat	$67,409	$55,115
Hailstorm	$22,777	$16,584
Hurricane & Tropical Storm	$70,137	$42,206
Severe Thunderstorm/High Wind	$21,758	$19,415
Tornado	$251,877	$216,685
Winter Storm & Freeze	$1,697	$1,464

Source: National Risk Index

NOTE: In this table, the term "Negligible" is used to indicate that no records of dollar losses for the particular hazard were recorded. This could be the case either because there were no events that caused dollar damage or because documentation of that particular type of event is not well kept.

TABLE A.343: AT-RISK CRITICAL FACILITIES IN COAHOMA COUNTY

As noted previously, all existing and future buildings and populations (including critical facilities) are vulnerable to atmospheric hazards including drought, lightning, extreme heat, hailstorm, hurricane and tropical storm, severe thunderstorm/high wind, tornado, and winter storm and freeze. Some buildings may be more vulnerable to these hazards based on other factors such as construction and building type. **Table A.353** shows the critical facilities vulnerable to the hazards analyzed in this section. The table lists those assets that are determined to be exposed to each of the identified hazards (marked with an "**X**").

		FLOOD-RELATED				FIRE-RELATED			GEOLOGIC				WIND-RELATED					
FACILITY NAME	FACILITY TYPE	Dam and Levee Failure[21]	Erosion	Flood – 100 yr	Flood – 500 yr	Drought	Lightning	Wildfire	Earthquake	Landslide – Mod/High	Landslide – Low/High	Land Subsidence/ Sinkhole	Extreme Heat	Hailstorm	Hurricane and Tropical Storm	Severe Thunderstorm/ High Wind	Tornado	Winter Storm and Freeze
Coahoma County																		
Clarksdale Fire Department	Fire Station	X	X			X	X		X		X	X	X	X	X	X	X	X
Coahoma County Fire Department	Fire Station	X	X			X	X		X			X	X	X	X	X	X	X
Bobo Fire Department	Fire Station	X	X			X	X		X			X	X	X	X	X	X	X
Jonestown Fire Department	Fire Station	X	X			X	X		X			X	X	X	X	X	X	X
Friars Point Fire Department	Fire Station	X	X			X	X		X			X	X	X	X	X	X	X
Dublin Fire Department	Fire Station	X	X			X	X		X			X	X	X	X	X	X	X
Rena Lara Fire Department	Fire Station	X	X			X	X		X			X	X	X	X	X	X	X

[21] As noted previously, these facilities could be at risk to dam failure if located in an inundation area. Data was not available to conduct such an analysis. There was no local knowledge of these facilities being at risk to dam failure. As additional data becomes available, more in-depth analysis will be conducted.

		FLOOD-RELATED				FIRE-RELATED			GEOLOGIC				WIND-RELATED					
FACILITY NAME	FACILITY TYPE	Dam and Levee Failure[21]	Erosion	Flood – 100 yr	Flood – 500 yr	Drought	Lightning	Wildfire	Earthquake	Landslide – Mod/High	Landslide – Low/High	Land Subsidence/ Sinkhole	Extreme Heat	Hailstorm	Hurricane and Tropical Storm	Severe Thunderstorm/ High Wind	Tornado	Winter Storm and Freeze
Coahoma County Courthouse	Government	X	X			X	X		X		X	X	X	X	X	X	X	X
Coahoma County Justice Center	Government	X	X			X	X		X		X	X	X	X	X	X	X	X
Clarksdale City Hall	Government	X	X			X	X		X			X	X	X	X	X	X	X
Delta Health Northwest Regional	Medical	X	X			X	X		X			X	X	X	X	X	X	X
Clarksdale Police Dept	Police Station	X	X			X	X		X		X	X	X	X	X	X	X	X
Coahoma Sheriff's Dept	Police Station	X	X			X	X		X		X	X	X	X	X	X	X	X
Coahoma Police Dept	Police Station	X	X			X	X		X		X	X	X	X	X	X	X	X
Friars Point Police Dept	Police Station	X	X			X	X		X		X	X	X	X	X	X	X	X
Jonestown Police Dept	Police Station	X	X			X	X		X		X	X	X	X	X	X	X	X

		FLOOD-RELATED				FIRE-RELATED			GEOLOGIC				WIND-RELATED					
FACILITY NAME	FACILITY TYPE	Dam and Levee Failure[30]	Erosion	Flood – 100 yr	Flood – 500 yr	Drought	Lightning	Wildfire	Earthquake	Landslide – Mod/High	Landslide – Low/High	Land Subsidence/ Sinkhole	Extreme Heat	Hailstorm	Hurricane and Tropical Storm	Severe Thunderstorm/ High Wind	Tornado	Winter Storm and Freeze
Jonestown Police Dept	Police Station	X	X			X	X		X			X	X	X	X	X	X	X
Clarksdale High School	School	X	X			X	X		X		X	X	X	X	X	X	X	X
Carl Keen Voc	School	X	X			X	X		X		X	X	X	X	X	X	X	X

		FLOOD-RELATED				FIRE-RELATED			GEOLOGIC				WIND-RELATED					
FACILITY NAME	FACILITY TYPE	Dam and Levee Failure[30]	Erosion	Flood – 100 yr	Flood – 500 yr	Drought	Lightning	Wildfire	Earthquake	Landslide – Mod/High	Landslide – Low/High	Land Subsidence/ Sinkhole	Extreme Heat	Hailstorm	Hurricane and Tropical Storm	Severe Thunderstorm/ High Wind	Tornado	Winter Storm and Freeze
Coahoma Early College High School	School	X	X			X	X		X		X	X	X	X	X	X	X	X
Sherard Elementary School	School	X	X			X	X		X		X	X	X	X	X	X	X	X
Lee Academy	School	X	X			X	X		X		X	X	X	X	X	X	X	X
St Elizabeth Elementary School	School	X	X			X	X		X		X	X	X	X	X	X	X	X
Presbyterian Day School	School	X	X			X	X		X		X	X	X	X	X	X	X	X
Clarksdale Collegiate Public Charter School	School	X	X			X	X		X		X	X	X	X	X	X	X	X
Heidelberg School	School	X	X			X	X		X		X	X	X	X	X	X	X	X
Coahoma County Jr/Sr High School	School	X	X			X	X		X		X	X	X	X	X	X	X	X
Kirkpatrick School	School	X	X			X	X		X		X	X	X	X	X	X	X	X
Oakhurst Middle School	School	X	X			X	X		X		X	X	X	X	X	X	X	X
Jerome W Stamply Elem School	School	X	X			X	X	X	X		X	X	X	X	X	X	X	X
Thomas Shaw School Of Excellence	School	X	X			X	X		X		X	X	X	X	X	X	X	X
Myrtle Hall Iv Elem School	School	X	X			X	X		X		X	X	X	X	X	X	X	X
Booker T Washington School	School	X	X			X	X		X		X	X	X	X	X	X	X	X
W A Higgins Middle School	School	X	X			X	X		X			X	X	X	X	X	X	X
George H Oliver Elem School	School	X	X			X	X		X			X	X	X	X	X	X	X
Friars Point Elementary School	School	X	X			X	X		X		X	X	X	X	X	X	X	X
Jonestown Elementary School	School	X	X			X	X		X			X	X	X	X	X	X	X
Jonestown Learning Center	School	X	X	X		X	X		X			X	X	X	X	X	X	X
Lyon Elementary School	School	X	X			X	X		X			X	X	X	X	X	X	X

		FLOOD-RELATED				FIRE-RELATED			GEOLOGIC				WIND-RELATED					
FACILITY NAME	FACILITY TYPE	Dam and Levee Failure[30]	Erosion	Flood – 100 yr	Flood – 500 yr	Drought	Lightning	Wildfire	Earthquake	Landslide – Mod/High	Landslide – Low/High	Land Subsidence/ Sinkhole	Extreme Heat	Hailstorm	Hurricane and Tropical Storm	Severe Thunderstorm/ High Wind	Tornado	Winter Storm and Freeze
Clarksdale Public Utilities	Generator Plant	X	X	X		X	X		X			X	X	X	X	X	X	X

A.4 COAHOMA COUNTY CAPABILITY ASSESSMENT

This subsection discusses the capability of Coahoma County to implement hazard mitigation activities. More information on the purpose and methodology used to conduct the assessment can be found in Section 7: *Capability Assessment*.

A.4.1 Planning and Regulatory Capability

Table A.364 provides a summary of the relevant local plans, ordinances, policies, and programs already in place or under development and available to accomplish hazard mitigation for Coahoma County. A checkmark (✓) indicates that the given item is currently in place and being implemented. An asterisk (*) indicates that the given item is currently being developed for future implementation. A dagger (†) indicates that the given item is administered for that municipality by the county. Each of these local plans, ordinances, and programs should be considered available mechanisms for incorporating the requirements of the MEMA District 1 Regional Hazard Mitigation Plan.

TABLE A.44: RELEVANT PLANS, ORDINANCES, AND PROGRAMS

Planning Tool/Regulatory Tool	Hazard Mitigation Plan	Threat and Hazard Identification and Risk Assessment (THIRA)	Comprehensive Land Use Plan	Floodplain Management Plan/Flood Mitigation Plan	Open Space Management Plan (Parks & Rec/Greenway Plan	Stormwater Management Plan/Ordinance	Natural Resource Protection Plan	Flood Response Plan	Emergency Operations Plan	Emergency Management Accreditation Program (EMAP Accreditation)	Continuity of Operations Plan	Evacuation Plan	Disaster Recovery Plan	Capital Improvements Plan	Economic Development Plan	Historic Preservation Plan	Flood Damage Prevention Ordinance	Zoning Ordinance	Subdivision Ordinance	Unified Development Ordinance	Post-Disaster Redevelopment/ Reconstruction Plan/ Ordinance	Building Code	Fire Code	National Flood Insurance Program (NFIP)	NFIP Community Rating System (CRS Program)
COAHOMA COUNTY	✓		✓												✓		✓	✓	✓					✓	
Clarksdale	†														†		✓	✓				✓	✓	✓	
Coahoma (town)	†														†		✓							✓	
Friars Point	†														†		✓	✓	✓					✓	
Jonestown	†														†		✓	✓	✓					✓	
Lula	†														†		✓							✓	
Lyon	†														†		✓							✓	

A more detailed discussion on the county's planning and regulatory capabilities follows.

EMERGENCY MANAGEMENT

Hazard Mitigation Plan
Coahoma County has previously adopted District 1 Regional Hazard Mitigation Plan. The City of Clarksdale, Town of Coahoma, Town of Friars Point, Town of Jonestown, Town of Lula, and Town of Lyon were also included in this plan.

GENERAL PLANNING

Comprehensive Land Use Plan
Coahoma County has adopted a county comprehensive plan.

Historic Preservation Plan
None of the jurisdictions in Coahoma County has a historic preservation plan. However, the City of Clarksdale has adopted a historic preservation ordinance.

Zoning Ordinance
Coahoma County, City of Clarksdale, Town of Friars Point, and Town of Jonestown have each adopted a zoning ordinance.

Subdivision Ordinance
Coahoma County, Town of Friars Point, and Town of Jonestown have each adopted a subdivision ordinance.

Building Codes, Permitting, and Inspections
The City of Clarksdale is the only jurisdiction in Coahoma County that has adopted a building code.

FLOODPLAIN MANAGEMENT

Table A.375 provides NFIP policy and claim information for each participating jurisdiction in Coahoma County.

TABLE A.45: NFIP POLICY AND CLAIM INFORMATION

Jurisdiction	Date Joined NFIP	Current Effective Map Date	NFIP Policies in Force	Insurance in Force	Closed Claims	Total Payments to Date
COAHOMA COUNTY†	02/01/80	02/02/12	124	$24,583,400	282	$4,935,684
Clarksdale	03/04/80	02/02/12	91	$20,013,600	52	$1,387,465
Coahoma (town)	02/02/12	02/02/12(M)	0	$0	0	$0
Friars Point	08/19/87	02/02/12	2	$255,000	0	$0
Jonestown	09/28/79	02/02/12	4	$305,000	5	$69,185
Lula	08/01/86	02/02/12(M)	1	$280,000	0	$0

Jurisdiction	Date Joined NFIP	Current Effective Map Date	NFIP Policies in Force	Insurance in Force	Closed Claims	Total Payments to Date
Lyon	06/25/76	02/02/12	2	$630,000	5	$162,782

†Includes unincorporated areas of county only
(M) – No Elevation Determined, All Zone A, C and X
Source: NFIP Community Status information as of 10/26/2021. NFIP claims and policy information as of 6/30/2016 is the latest available data for this 2021 plan update due to directive regarding sharing NFIP information.

All jurisdictions listed above that are participants in the NFIP will continue to comply with all required provisions of the program and will work to adequately comply in the future utilizing a number of strategies. For example, the jurisdictions will coordinate with MEMA and FEMA to develop maps and regulations related to special flood hazard areas within their jurisdictional boundaries and, through a consistent monitoring process, will design and improve their floodplain management program in a way that reduces the risk of flooding to people and property.

Flood Damage Prevention Ordinance
All communities participating in the NFIP are required to adopt a local flood damage prevention ordinance. Coahoma County, City of Clarksdale, Town of Coahoma, Town of Friars Point, Town of Jonestown, Town of Lula, and Town of Lyon all participate in the NFIP and have adopted flood damage prevention regulations.

A.4.2 Administrative and Technical Capability

Table A.386 provides a summary of the capability assessment results for Coahoma County with regard to relevant staff and personnel resources. A checkmark (✓) indicates the presence of a staff member(s) in that jurisdiction with the specified knowledge or skill. A dagger (†) indicates a county-level staff member(s) provides the specified knowledge or skill to that municipality.

TABLE A.46: RELEVANT STAFF/PERSONNEL RESOURCES

Staff/Personnel Resource	Planners with knowledge of land development/land management practices	Engineers or professionals trained in construction practices related to buildings and/or infrastructure	Planners or engineers with an understanding of natural and/or human-caused hazards	Emergency Manager	Floodplain Manager	Land Surveyors	Scientists familiar with the hazards of the community	Staff with education or expertise to assess the community' s vulnerability to hazards	Personnel skilled in GIS and/or Hazus	Resource development staff or grant writers
COAHOMA COUNTY	✓			✓	✓		✓	✓		✓

Staff/Personnel Resource	Planners with knowledge of land development/land management practices	Engineers or professionals trained in construction practices related to buildings and/or infrastructure	Planners or engineers with an understanding of natural and/or human-caused hazards	Emergency Manager	Floodplain Manager	Land Surveyors	Scientists familiar with the hazards of the community	Staff with education or expertise to assess the community's vulnerability to hazards	Personnel skilled in GIS and/or Hazus	Resource development staff or grant writers
Clarksdale	✓			†	✓		†	†		
Coahoma (town)				†	✓		†	†		
Friars Point				†	✓		†	†		
Jonestown				†	✓		†	†		
Lula				†	✓		†	†		
Lyon				†	✓		†	†		

Credit for having a floodplain manager was given to those jurisdictions that have a flood damage prevention ordinance, and therefore an appointed floodplain administrator, regardless of whether the appointee was dedicated solely to floodplain management. Credit was given for having a scientist familiar with the hazards of the community if a jurisdiction has a Cooperative Extension Service or Soil and Water Conservation Department. Credit was also given for having staff with education or expertise to assess the community's vulnerability to hazards if a staff member from the jurisdiction was a participant on the existing hazard mitigation plan's planning committee.

A.4.3 Fiscal Capability

Table A.397 provides a summary of the results for Coahoma County with regard to relevant fiscal resources. A checkmark (✓) indicates that the given fiscal resource has previously been used to implement hazard mitigation actions. A dagger (†) indicates that the given fiscal resource is locally available for hazard mitigation purposes (including match funds for state and federal mitigation grant funds).

TABLE A.47: RELEVANT FISCAL RESOURCES

Fiscal Tool/Resource	Capital Improvement Programming	Community Development Block Grants (CDBG)	Special Purpose Taxes (or taxing districts)	Gas/Electric Utility Fees	Water/Sewer Fees	Stormwater Utility Fees	Development Impact Fees	General Obligation, Revenue, and/or Special Tax Bonds	Partnering Arrangements or Intergovernmental Agreements	Other: HMGP, PDM, HMA, NFIP, SBA, Homeland Security Grants, and other Federal sources, etc.
COAHOMA COUNTY		†								†
Clarksdale		†								†
Coahoma (town)		†								†
Friars Point		†								†
Jonestown		†								†
Lula		†								†
Lyon		†								†

A.4.4 Political Capability

During the months immediately following a disaster, local public opinion in Coahoma County is more likely to shift in support of hazard mitigation efforts.

Table A.408 provides a summary of the results for Coahoma County with regard to political capability. A checkmark (✓) indicates the expected degree of political support by local elected officials in terms of adopting/funding information.

TABLE A.358: LOCAL POLITICAL SUPPORT

Political Support	Limited	Moderate	High
COAHOMA COUNTY		✓	
Clarksdale		✓	
Coahoma (town)		✓	

Political Support	Limited	Moderate	High
Friars Point		✓	
Jonestown		✓	
Lula		✓	
Lyon		✓	

A.4.5 Conclusions on Local Capability

Table A.49 shows the results of the capability assessment using the designed scoring methodology described in Section 7: *Capability Assessment*. The capability score is based solely on the information found in existing hazard mitigation plans and readily available on the jurisdictions' government websites. This information was reviewed by all jurisdictions and each jurisdiction provided feedback on the information included in the capability assessment. Local government input was vital to identifying capabilities. According to the assessment, the average local capability score for the county and its jurisdictions is 18.9, which falls into the limited capability ranking.

TABLE A.49: CAPABILITY ASSESSMENT RESULTS

Jurisdiction	Overall Capability Score	Overall Capability Rating
COAHOMA COUNTY	27	Moderate
Clarksdale	21	Limited
Coahoma (town)	16	Limited
Friars Point	18	Limited
Jonestown	18	Limited
Lula	16	Limited
Lyon	16	Limited

A.5 COAHOMA COUNTY MITIGATION STRATEGY

This subsection provides the blueprint for Coahoma County to follow in order to become less vulnerable to its identified hazards. It is based on general consensus of the District 1 Regional Hazard Mitigation Council and the findings and conclusions of the capability assessment and risk assessment. Additional Information can be found in Section 8: *Mitigation Strategy* and Section 9: *Mitigation Action Plan*.

A.5.1 Mitigation Goals

Coahoma County reaffirmed the previous goals and agreed to adding objectives to this plan update in coordination with the other participating MEMA District 1 Region jurisdictions. The regional mitigation plan goals and objectives are presented in **Table A.50**.

TABLE A.50: MEMA DISTRICT 1 REGIONAL MITIGATION GOALS AND OBJECTIVES

	Goals and Objectives
Goal #1	Promote the development, implementation, and maintenance of **local hazard mitigation plans** and encourage all sectors of the community to **work together to create a disaster resistant community**. Objectives: o Integrate the hazard mitigation needs into local land use planning. o Seek funding for hazard mitigation through programs, including the following, but not limited to: Hazard Mitigation Grant Program (HMGP), Flood Mitigation Assistance (FMA), Building Resilient Infrastructure and Communities (BRIC), National Flood Insurance Program (NFIP), Community Development Block Grant (CDBG), and Disaster Mitigation Loan by Small Business Administration. o Provide technical assistance to communities that are considering participating in the National Flood Insurance Program. o Develop process to support update of the regional hazard mitigation plan.
Goal #2	Reduce **risks and vulnerabilities of people and structures** in hazard prone areas. Objectives: o Advise the public of safety and health precautions to take against flooding and other hazards. o Identify and reduce the vulnerability of new and existing facilities and other infrastructure in hazard prone areas through the incorporation of appropriate hazard mitigation measures. o Assist local governments in identifying and reducing the vulnerability of people and structures in hazard prone areas through the support of Local Mitigation Strategy processes and prioritization and implementation of hazard mitigation projects. o Repair, removal, or structural/nonstructural rehabilitation of eligible infrastructure and systems. o Regulate building practices to reduce the vulnerability of structures through Mississippi building codes that focus on public safety and increases local enforcement powers. o Encourage communities to participate in the National Flood Insurance Program (NFIP) by promoting the benefits of the program and by providing technical assistance in meeting program requirements including the application process. o Encourage jurisdictions to adopt and enforce floodplain management requirements, including regulating all and substantially improved construction in Special Flood Hazard Areas (SFHAs). o Encourage floodplain identification and mapping, including any local requests for map updates and community assistance, if needed. o Promote and seek funding for State identified mitigation initiatives, such severe weather warning systems, saferooms, and storm shelters.

	Goals and Objectives
Goal #3	Promote **education, outreach, and development programs to improve the knowledge and awareness** among the citizens and industry about hazards they may face, their vulnerability to identified hazards, and hazard mitigation alternatives that can reduce their vulnerabilities. Objectives: o Identify public outreach and education programs with hazard identification, vulnerability assessments, preparedness, and hazard mitigation. o Identify and coordinate with potential partners for disaster and hazard mitigation information dissemination to the public and private sector.
Goal #4	Establish **priorities for reducing risks to the people and their property** with emphasis on **long-term maximum benefits to the public** rather than short-term benefit of special interests. Objectives: o Use existing planning processes, available scientific and engineering data, and resources in identifying mitigation opportunities. o Assess the vulnerability of facilities in hazard-prone areas. o Reduce potential damage to future buildings and infrastructure. o Encourage drainage system improvements that support mitigation opportunities that are compatible with maintaining function of natural system. o Promote land acquisition programs that support mitigation opportunities that are compatible with the protection of natural and cultural resources.
Goal #5	Protect the **health and safety of residents** through pre- and post-hazard mitigation processes. Objectives: o Provide adequate early warning systems (if necessary) to notify the public of potential risks as well as provide emergency instructions to be followed before, during, and after a disaster. o Protect emergency response services and critical facilities functions during and immediately after a disaster. This includes reestablishing operations after a disaster. o Provide resources, equipment, and supplies necessary to meet victim's health and safety needs immediately following a disaster.
Goal #6	Have the **capability to initiate and sustain emergency response operations** during and after a disaster. Objectives: o Designated evacuation routes will be located, retrofitted, or modified to remain open before, during, and after a disaster. o Designated evacuation shelters will be retrofitted or relocated to ensure their operability during and after disaster events. o Ensure that emergency shelters can be accessed in a timely manner and that the needs of the public are met, in the event of a natural hazard.

A.5.2 Mitigation Action Plan

The mitigation actions proposed by Coahoma County, City of Clarksdale, Town of Coahoma, Town of Friars Point, Town of Jonestown, Town of Lula, and Town of Lyon are listed in the following individual Mitigation Action Plans.

Coahoma County Mitigation Action Plan

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Implementation Schedule	Implementation Status (2021)
Prevention							
P-1	**Codes and Regulations:** • Adopt and implement uniform building codes, subdivision regulations, land use planning, and zoning ordinances that address new and existing building structures throughout the county. • Adopt and implement regulations and codes that address vulnerability to the hazards listed in the Hazard Mitigation Plan for existing critical infrastructure as defined in Action ES-3. • Adopt and implement regulations and codes for new infrastructure projects that address vulnerability to the hazards listed in the Hazard Mitigation Plan. **Ideas for Implementation:** Each participating jurisdiction will review existing codes and regulations for both existing buildings and infrastructure, and for new buildings and infrastructure to determine what changes need to be made to bring local regulations into compliance.	All	High	Board of Supervisors/ Board of Alderman	Local	2027	The action is ongoing. Since the last update, the Board has reviewed and adopted new building codes. However it is likely that the codes will need to be reviewed and potentially updated in the next 5 year period, so this action will remain in the plan.

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Implementation Schedule	Implementation Status (2021)
P-2	Ensure that existing drainage systems (i.e., pipes, culverts, channels) are adequate and functioning properly. **Ideas for Implementation:** Each participating jurisdiction will appoint personnel to check local drainage system conditions and take the necessary steps to bring inadequate systems into compliance. The cost involved to bring inadequate systems into compliance will vary from one place to the next.	Flood	High	County Administrator, Board of Supervisors/ Board of Aldermen	General Funds, CDBG, DRA	2027	This action is ongoing. The Coahoma County Road Department and municipalities have continually checked and maintained existing drainage systems to prevent flooding. This action will remain in the plan as it is anticipated that there will be future issues with drainage systems that will require repairs/action.
P-3	**Floodplain Management:** • Encourage communities to participate or continue participating in the National Flood Insurance Program (NFIP). • Encourage jurisdictions to adopt and enforce floodplain management requirements, including regulating all substantially improved construction in Special Flood Hazard areas (SFHAs). **Ideas for Implementation:** Promote the benefits of the NFIP program and floodplain management, and provide technical assistance in meeting program requirements including the application process.	All	High	Board of Supervisors/ Board of Aldermen, Emergency Management	Local	2027	This action is ongoing. All communities in Coahoma County are participants in the NFIP. This action will remain in the plan as communities will need to continue to implement floodplain management activities to maintain their participation in the NFIP.

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Implementation Schedule	Implementation Status (2021)
Property Protection							
PP-1	**Storm Shelters/Safe Rooms:** The county and all municipalities would like to increase the number of shelters and safe rooms available to citizens in the event of severe weather events such as tornadoes, especially in areas of high or vulnerable population concentration. **Ideas for Implementation:** • Identify key locations for constructing storm shelters/safe rooms. • Apply for grant funding to support construction/implementation.	All severe weather events	High	Emergency Management	FEMA, MEMA, Local	2027	This action is ongoing, awaiting availability of funding.
Natural Resource Protection							
NRP-1							
Structural Projects							
SP-1							

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Implementation Schedule	Implementation Status (2021)
Emergency Services							
ES-1	Provide residents with adequate warning of potential floods and other meteorological events. **Ideas for Implementation:** Each participating jurisdiction will assess the condition of their current warning systems and upgrade where necessary.	All severe weather events	High	Emergency Management	General Funds, MEMA, State Homeland Security Program	2027	This action is ongoing. The County Board of Supervisors and all municipalities have warning sirens in place. The county has also implemented an FM alert system and Reverse 911 system. Fire departments, public works employees, and law enforcement personnel are utilized to further notify citizens of potential flooding and other disasters. However, the county has determined that there will be a need to re-evaluate these systems and improve them in the future.
ES-2	Strengthen emergency services preparedness and response ability by purchasing equipment (i.e., generators and other supplies) to be used at key critical facilities around the county. **Ideas for Implementation:** Each participating jurisdiction will inventory current emergency supplies and identify items needed to improve response ability.	All	High	Emergency Management	General Funds, MEMA, State Homeland Security Program, USDA Rural Dev.	2027	This action is ongoing. Coahoma County has purchased three generators on wheels and hard-wired several wells within the county. Due to the evolving nature of this type of equipment and the fact that many improvements can still be made to improve preparedness, this action will remain in place.

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Implementation Schedule	Implementation Status (2021)
ES-3	Strengthen emergency services preparedness and response ability and strengthen hazard mitigation vulnerability assessment by mapping the locations of key government or public housing structures and buildings, especially vulnerable structures, critical infrastructure, and elderly and handicapped housing. Precise data will be gathered to identify weaknesses in preparedness for all hazards listed in the Hazard Mitigation Plan. **Ideas for Implementation:** Each participating jurisdiction will inventory its own structures, or may use the help of NDPDD, to map structures and assess their vulnerabilities. These data will be amended to the plan.	All	High	Emergency Management	General Funds	2027	This action is ongoing. During this update of the hazard mitigation plan, many critical facilities/infrastructure were mapped, but there will be a need to constantly evaluate/update this data and it should be noted that not all vulnerable populations or facilities were mapped, so additional work is already needed.
ES-4	Seek funding to provide the citizens of the county with a reasonable amount of physical protection from storms by installing one or more storm shelters in publicly known, publicly accessible places. **Ideas for Implementation:** Install one or more shelters in schools, churches, fire departments, or other government buildings.	Thunderstorm/ High Wind, Lightning, Hail, Severe Winter Storm, Tornado, Hurricane/ Tropical Storm	High	Board of Supervisors/ Board of Aldermen, Emergency Management, FEMA	FEMA, Local	2027	This action is ongoing. Some storm sheltering areas have been identified within the county, but additional facilities should be included to improve sheltering capacity.

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Implementation Schedule	Implementation Status (2021)
Public Education and Awareness							
PEA-1	Provide education opportunities for local officials to make sure they are well trained regarding natural hazards and appropriate prevention and mitigation activities. **Ideas for Implementation:** Elected officials in each participating jurisdiction will attend an educational program or seminar designed to increase awareness of natural hazards and ways to minimize their impact on the county.	All	High	Emergency Management	General Funds, MEMA	2027	This action is ongoing. Education opportunities are provided for all local elected officials through local emergency management and state programs. County officials have attended NIMS classes and Floodplain Management classes. Due to the constant need for additional training, this action will remain in place to ensure local officials are up to date.
PEA-2	Organize and conduct a public outreach program designed to make sure that residents and business owners are aware of the potential hazards associated with their environment and the ways they can protect themselves. **Ideas for Implementation:** Each participating jurisdiction will coordinate outreach events to educate the public of the risks of natural hazards and ways to reduce their vulnerability to such events.	All	High	Emergency Management	General Funds, MEMA	2027	Coahoma County EMA provides programs and public outreach materials to all its citizens. Key players in the community also take part in periodic exercises to assure constant awareness. This action will remain in the plan as public outreach needs to continue and improve as new outreach strategies are developed and employed to reach a broader audience.

City of Clarksdale Mitigation Action Plan

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Implementation Schedule	Implementation Status (2021)
Prevention							
P-1	**Codes and Regulations:** • Adopt and implement uniform building codes, subdivision regulations, land use planning, and zoning ordinances that address new and existing building structures throughout the county. • Adopt and implement regulations and codes that address vulnerability to the hazards listed in the Hazard Mitigation Plan for existing critical infrastructure as defined in Action ES-3. • Adopt and implement regulations and codes for new infrastructure projects that address vulnerability to the hazards listed in the Hazard Mitigation Plan. **Ideas for Implementation:** With assistance from NDPDD, each participating jurisdiction will review existing codes and regulations for both existing buildings and infrastructure, and for new buildings and infrastructure to determine what changes need to be made to bring local regulations into compliance.	All	High	Board of Supervisors/ Board of Alderman	Local	2027	This action is ongoing. Since the last update, the Board has reviewed and adopted new building codes. However it is likely that the codes will need to be reviewed and potentially updated in the next 5 year period, so this action will remain in the plan.

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Implementation Schedule	Implementation Status (2021)
P-2	Ensure that existing drainage systems (i.e., pipes, culverts, channels) are adequate and functioning properly. **Ideas for Implementation:** Each participating jurisdiction will appoint personnel to check local drainage system conditions and take the necessary steps to bring inadequate systems into compliance. The cost involved to bring inadequate systems into compliance will vary from one place to the next.	Flood	High	County Administrator, Board of Supervisors/ Board of Aldermen	General Funds, CDBG, DRA	2027	This action is ongoing. The Coahoma County Road Department and municipalities have continually checked and maintained existing drainage systems to prevent flooding. This action will remain in the plan as it is anticipated that there will be future issues with drainage systems that will require repairs/action.
P-3	**Floodplain Management:** • Encourage communities to participate or continue participating in the National Flood Insurance Program (NFIP). • Encourage jurisdictions to adopt and enforce floodplain management requirements, including regulating all substantially improved construction in Special Flood Hazard areas (SFHAs). **Ideas for Implementation:** Promote the benefits of the NFIP program and floodplain management, and provide technical assistance in meeting program requirements including the application process.	All	High	Board of Supervisors/ Board of Aldermen, Emergency Management	Local	2021	This action is ongoing. All communities in Coahoma County are participants in the NFIP. This action will remain in the plan as communities will need to continue to implement floodplain management activities to maintain their participation in the NFIP.

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Implementation Schedule	Implementation Status (2021)
Property Protection							
PP-1	**Storm Shelters/Safe Rooms:** The county and all municipalities would like to increase the number of shelters and safe rooms available to citizens in the event of severe weather events such as tornadoes, especially in areas of high or vulnerable population concentration. **Ideas for Implementation:** • Identify key locations for constructing storm shelters/safe rooms. • Apply for grant funding to support construction/implementation.	All severe weather events	High	Emergency Management	FEMA, MEMA, Local	2027	This action is ongoing, awaiting availability of funding.
Natural Resource Protection							
NRP-1							
Structural Projects							
SP-1							

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Implementation Schedule	Implementation Status (2021)
Emergency Services							
ES-1	Provide residents with adequate warning of potential floods and other meteorological events. **Ideas for Implementation:** Each participating jurisdiction will assess the condition of their current warning systems and upgrade where necessary.	All severe weather events	High	Emergency Management	General Funds, MEMA, State Homeland Security Program	2027	This action is ongoing. The County Board of Supervisors and all municipalities have warning sirens in place. The county has also implemented an FM alert system and Reverse 911 system. Fire departments, public work employees, and law enforcement personnel are utilized to further notify citizens of potential flooding and other disasters. However, the county has determined that there will be a need to re-evaluate these systems and improve them in the future.
ES-2	Strengthen emergency services preparedness and response ability by purchasing equipment (i.e., generators and other supplies) to be used at key critical facilities around the county. **Ideas for Implementation:** Each participating jurisdiction will inventory current emergency supplies and identify items needed to improve response ability.	All	High	Emergency Management	General Funds, MEMA, State Homeland Security Program, USDA Rural Dev.	2027	This action is ongoing. Coahoma County has purchased three generators on wheels and hard-wired several wells within the county. Due to the evolving nature of this type of equipment and the fact that many improvements can still be made to improve preparedness, this action will remain in place.

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Implementation Schedule	Implementation Status (2021)
ES-3	Strengthen emergency services preparedness and response ability and strengthen hazard mitigation vulnerability assessment by mapping the locations of key government or public housing structures and buildings, especially vulnerable structures, critical infrastructure, and elderly and handicapped housing. Precise data will be gathered to identify weaknesses in preparedness for all hazards listed in the Hazard Mitigation Plan. **Ideas for Implementation:** Each participating jurisdiction will inventory its own structures, or may use the help of NDPDD, to map structures and assess their vulnerabilities. These data will be amended to the plan.	All	High	Emergency Management	General Funds	2027	This action is ongoing. During this update of the hazard mitigation plan, many critical facilities/infrastructure were mapped, but there will be a need to constantly evaluate/update this data and it should be noted that not all vulnerable populations or facilities were mapped, so additional work is already needed.
ES-4	Seek funding to provide the citizens of the county with a reasonable amount of physical protection from storms by installing one or more storm shelters in publicly known, publicly accessible places. **Ideas for Implementation:** Install one or more shelters in schools, churches, fire departments, or other government buildings.	Thunderstorm/ High Wind, Lightning, Hail, Severe Winter Storm, Tornado, Hurricane/ Tropical Storm	High	Board of Supervisors/ Board of Aldermen, Emergency Management, FEMA	FEMA, Local	2027	This action is ongoing. Some storm sheltering areas have been identified within the county, but additional facilities should be included to improve sheltering capacity.

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Implementation Schedule	Implementation Status (2021)
Public Education and Awareness							
PEA-1	Provide education opportunities for local officials to make sure they are well trained regarding natural hazards and appropriate prevention and mitigation activities. **Ideas for Implementation:** Elected officials in each participating jurisdiction will attend an educational program or seminar designed to increase awareness of natural hazards and ways to minimize their impact on the county.	All	High	Emergency Management	General Funds, MEMA	2027	This action is ongoing. Education opportunities are provided for all local elected officials through local emergency management and state programs. County officials have attended NIMS classes and Floodplain Management classes. Due to the constant need for additional training, this action will remain in place to ensure local officials are up to date.
PEA-2	Organize and conduct a public outreach program designed to make sure that residents and business owners are aware of the potential hazards associated with their environment and the ways they can protect themselves. **Ideas for Implementation:** Each participating jurisdiction will coordinate outreach events to educate the public of the risks of natural hazards and ways to reduce their vulnerability to such events.	All	High	Emergency Management	General Funds, MEMA	2021	This action is ongoing. Coahoma County EMA provides programs and public outreach materials to all its citizens. Key players in the community also take part in periodic exercises to assure constant awareness. This action will remain in the plan as public outreach needs to continue and improve as new outreach strategies are developed and employed to reach a broader audience.

Town of Coahoma Mitigation Action Plan

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Implementation Schedule	Implementation Status (2021)
Prevention							
P-1	**Codes and Regulations:** • Adopt and implement uniform building codes, subdivision regulations, land use planning, and zoning ordinances that address new and existing building structures throughout the county. • Adopt and implement regulations and codes that address vulnerability to the hazards listed in the Hazard Mitigation Plan for existing critical infrastructure as defined in Action ES-3. • Adopt and implement regulations and codes for new infrastructure projects that address vulnerability to the hazards listed in the Hazard Mitigation Plan. **Ideas for Implementation:** With assistance from NDPDD, each participating jurisdiction will review existing codes and regulations for both existing buildings and infrastructure, and for new buildings and infrastructure to determine what changes need to be made to bring local regulations into compliance.	All	High	Board of Supervisors/ Board of Alderman	Local	2027	This action is ongoing. Since the last update, the Board has reviewed and adopted new building codes. However it is likely that the codes will need to be reviewed and potentially updated in the next 5 year period, so this action will remain in the plan.

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Implementation Schedule	Implementation Status (2021)
P-2	Ensure that existing drainage systems (i.e., pipes, culverts, channels) are adequate and functioning properly. **Ideas for Implementation:** Each participating jurisdiction will appoint personnel to check local drainage system conditions and take the necessary steps to bring inadequate systems into compliance. The cost involved to bring inadequate systems into compliance will vary from one place to the next.	Flood	High	County Administrator, Board of Supervisors/ Board of Aldermen	General Funds, CDBG, DRA	2027	This action is ongoing., The Coahoma County Road Department and municipalities have continually checked and maintained existing drainage systems to prevent flooding. This action will remain in the plan as it is anticipated that there will be future issues with drainage systems that will require repairs/action.
P-3	**Floodplain Management:** • Encourage communities to participate or continue participating in the National Flood Insurance Program (NFIP). • Encourage jurisdictions to adopt and enforce floodplain management requirements, including regulating all substantially improved construction in Special Flood Hazard areas (SFHAs). **Ideas for Implementation:** Promote the benefits of the NFIP program and floodplain management, and provide technical assistance in meeting program requirements including the application process.	All	High	Board of Supervisors/ Board of Aldermen, Emergency Management	Local	2027	This action is ongoing. All communities in Coahoma County are participants in the NFIP. This action will remain in the plan as communities will need to continue to implement floodplain management activities to maintain their participation in the NFIP.

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Implementation Schedule	Implementation Status (2021)
Property Protection							
PP-1	**Storm Shelters/Safe Rooms:** The county and all municipalities would like to increase the number of shelters and safe rooms available to citizens in the event of severe weather events such as tornadoes, especially in areas of high or vulnerable population concentration. **Ideas for Implementation:** • Identify key locations for constructing storm shelters/safe rooms. • Apply for grant funding to support construction/implementation.	All severe weather events	High	Emergency Management	FEMA, MEMA, Local	2024	This action is ongoing, awaiting availability of funding.
Natural Resource Protection							
NRP-1							
Structural Projects							
SP-1							

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Implementation Schedule	Implementation Status (2021)
Emergency Services							
ES-1	Provide residents with adequate warning of potential floods and other meteorological events. **Ideas for Implementation:** Each participating jurisdiction will assess the condition of their current warning systems and upgrade where necessary.	All severe weather events	High	Emergency Management	General Funds, MEMA, State Homeland Security Program	2027	This action is ongoing. The County Board of Supervisors and all municipalities have warning sirens in place. The county has also implemented an FM alert system and Reverse 911 system. Fire departments, public work employees, and law enforcement personnel are utilized to further notify citizens of potential flooding and other disasters. However, the county has determined that there will be a need to re-evaluate these systems and improve them in the future.
ES-2	Strengthen emergency services preparedness and response ability by purchasing equipment (i.e., generators and other supplies) to be used at key critical facilities around the county. **Ideas for Implementation:** Each participating jurisdiction will inventory current emergency supplies and identify items needed to improve response ability.	All	High	Emergency Management	General Funds, MEMA, State Homeland Security Program, USDA Rural Dev.	2027	Coahoma County has purchased three generators on wheels and hard-wired several wells within the county. Due to the evolving nature of this type of equipment and the fact that many improvements can still be made to improve preparedness, this action will remain in place

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Implementation Schedule	Implementation Status (2021)
ES-3	Strengthen emergency services preparedness and response ability and strengthen hazard mitigation vulnerability assessment by mapping the locations of key government or public housing structures and buildings, especially vulnerable structures, critical infrastructure, and elderly and handicapped housing. Precise data will be gathered to identify weaknesses in preparedness for all hazards listed in the Hazard Mitigation Plan. **Ideas for Implementation:** Each participating jurisdiction will inventory its own structures, or may use the help of NDPDD, to map structures and assess their vulnerabilities. These data will be amended to the plan.	All	High	Emergency Management	General Funds	2027	This action is ongoing. During this update of the hazard mitigation plan, many critical facilities/infrastructure were mapped, but there will be a need to constantly evaluate/update this data and it should be noted that not all vulnerable populations or facilities were mapped, so additional work is already needed.
ES-4	Seek funding to provide the citizens of the county with a reasonable amount of physical protection from storms by installing one or more storm shelters in publicly known, publicly accessible places. **Ideas for Implementation:** Install one or more shelters in schools, churches, fire departments, or other government buildings.	Thunderstorm/ High Wind, Lightning, Hail, Severe Winter Storm, Tornado, Hurricane/ Tropical Storm	High	Board of Supervisors/ Board of Aldermen, Emergency Management, FEMA	FEMA, Local	2027	This action is ongoing. Some storm sheltering areas have been identified within the county, but additional facilities should be included to improve sheltering capacity.

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Implementation Schedule	Implementation Status (2021)
Public Education and Awareness							
PEA-1	Provide education opportunities for local officials to make sure they are well trained regarding natural hazards and appropriate prevention and mitigation activities. **Ideas for Implementation:** Elected officials in each participating jurisdiction will attend an educational program or seminar designed to increase awareness of natural hazards and ways to minimize their impact on the county.	All	High	Emergency Management	General Funds, MEMA	2027	This action is ongoing. Education opportunities are provided for all local elected officials through local emergency management and state programs. County officials have attended NIMS classes and Floodplain Management classes. Due to the constant need for additional training, this action will remain in place to ensure local officials are up to date.
PEA-2	Organize and conduct a public outreach program designed to make sure that residents and business owners are aware of the potential hazards associated with their environment and the ways they can protect themselves. **Ideas for Implementation:** Each participating jurisdiction will coordinate outreach events to educate the public of the risks of natural hazards and ways to reduce their vulnerability to such events.	All	High	Emergency Management	General Funds, MEMA	2027	This action is ongoing. Coahoma County EMA provides programs and public outreach materials to all its citizens. Key players in the community also take part in periodic exercises to assure constant awareness. This action will remain in the plan as public outreach needs to continue and improve as new outreach strategies are developed and employed to reach a broader audience.

Town of Friars Point Mitigation Action Plan

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Implementation Schedule	Implementation Status (2021)
Prevention							
P-1	**Codes and Regulations:** • Adopt and implement uniform building codes, subdivision regulations, land use planning, and zoning ordinances that address new and existing building structures throughout the county. • Adopt and implement regulations and codes that address vulnerability to the hazards listed in the Hazard Mitigation Plan for existing critical infrastructure as defined in Action ES-3. • Adopt and implement regulations and codes for new infrastructure projects that address vulnerability to the hazards listed in the Hazard Mitigation Plan. **Ideas for Implementation:** With assistance from NDPDD, each participating jurisdiction will review existing codes and regulations for both existing buildings and infrastructure, and for new buildings and infrastructure to determine what changes need to be made to bring local regulations into compliance.	All	High	Board of Supervisors/ Board of Alderman	Local	2027	This action is ongoing. Since the last update, the Board has reviewed and adopted new building codes. However it is likely that the codes will need to be reviewed and potentially updated in the next 5 year period, so this action will remain in the plan.

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Implementation Schedule	Implementation Status (2021)
P-2	Ensure that existing drainage systems (i.e., pipes, culverts, channels) are adequate and functioning properly. **Ideas for Implementation:** Each participating jurisdiction will appoint personnel to check local drainage system conditions and take the necessary steps to bring inadequate systems into compliance. The cost involved to bring inadequate systems into compliance will vary from one place to the next.	Flood	High	County Administrator, Board of Supervisors/ Board of Aldermen	General Funds, CDBG, DRA	2027	This action is ongoing. The Coahoma County Road Department and municipalities have continually checked and maintained existing drainage systems to prevent flooding. This action will remain in the plan as it is anticipated that there will be future issues with drainage systems that will require repairs/action.
P-3	**Floodplain Management:** • Encourage communities to participate or continue participating in the National Flood Insurance Program (NFIP). • Encourage jurisdictions to adopt and enforce floodplain management requirements, including regulating all substantially improved construction in Special Flood Hazard areas (SFHAs). **Ideas for Implementation:** Promote the benefits of the NFIP program and floodplain management, and provide technical assistance in meeting program requirements including the application process.	All	High	Board of Supervisors/ Board of Aldermen, Emergency Management	Local	2027	This action is ongoing. All communities in Coahoma County are participants in the NFIP. This action will remain in the plan as communities will need to continue to implement floodplain management activities to maintain their participation in the NFIP.

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Implementation Schedule	Implementation Status (2021)
Property Protection							
PP-1	**Storm Shelters/Safe Rooms:** The county and all municipalities would like to increase the number of shelters and safe rooms available to citizens in the event of severe weather events such as tornadoes, especially in areas of high or vulnerable population concentration. **Ideas for Implementation:** • Identify key locations for constructing storm shelters/safe rooms. • Apply for grant funding to support construction/implementation.	All severe weather events	High	Emergency Management	FEMA, MEMA, Local	2027	This action is ongoing, awaiting availability of funding
Natural Resource Protection							
NRP-1							
Structural Projects							
SP-1							

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Implementation Schedule	Implementation Status (2021)
Emergency Services							
ES-1	Provide residents with adequate warning of potential floods and other meteorological events. **Ideas for Implementation:** Each participating jurisdiction will assess the condition of their current warning systems and upgrade where necessary.	All severe weather events	High	Emergency Management	General Funds, MEMA, State Homeland Security Program	2027	This action is ongoing. The County Board of Supervisors and all municipalities have warning sirens in place. The county has also implemented an FM alert system and Reverse 911 system. Fire departments, public work employees, and law enforcement personnel are utilized to further notify citizens of potential flooding and other disasters. However, the county has determined that there will be a need to re-evaluate these systems and improve them in the future.
ES-2	Strengthen emergency services preparedness and response ability by purchasing equipment (i.e., generators and other supplies) to be used at key critical facilities around the county. **Ideas for Implementation:** Each participating jurisdiction will inventory current emergency supplies and identify items needed to improve response ability.	All	High	Emergency Management	General Funds, MEMA, State Homeland Security Program, USDA Rural Dev.	2027	This action is ongoing. Coahoma County has purchased three generators on wheels and hard-wired several wells within the county. Due to the evolving nature of this type of equipment and the fact that many improvements can still be made to improve preparedness, this action will remain in place.

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Implementation Schedule	Implementation Status (2021)
ES-3	Strengthen emergency services preparedness and response ability and strengthen hazard mitigation vulnerability assessment by mapping the locations of key government or public housing structures and buildings, especially vulnerable structures, critical infrastructure, and elderly and handicapped housing. Precise data will be gathered to identify weaknesses in preparedness for all hazards listed in the Hazard Mitigation Plan. **Ideas for Implementation:** Each participating jurisdiction will inventory its own structures, or may use the help of NDPDD, to map structures and assess their vulnerabilities. These data will be amended to the plan.	All	High	Emergency Management	General Funds	2027	This action is ongoing. During this update of the hazard mitigation plan, many critical facilities/infrastructure were mapped, but there will be a need to constantly evaluate/update this data and it should be noted that not all vulnerable populations or facilities were mapped, so additional work is already needed.
ES-4	Seek funding to provide the citizens of the county with a reasonable amount of physical protection from storms by installing one or more storm shelters in publicly known, publicly accessible places. **Ideas for Implementation:** Install one or more shelters in schools, churches, fire departments, or other government buildings.	Thunderstorm/ High Wind, Lightning, Hail, Severe Winter Storm, Tornado, Hurricane/ Tropical Storm	High	Board of Supervisors/ Board of Aldermen, Emergency Management, FEMA	FEMA, Local	2027	This action is ongoing. Some storm sheltering areas have been identified within the county, but additional facilities should be included to improve sheltering capacity.

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Implementation Schedule	Implementation Status (2021)
Public Education and Awareness							
PEA-1	Provide education opportunities for local officials to make sure they are well trained regarding natural hazards and appropriate prevention and mitigation activities. **Ideas for Implementation:** Elected officials in each participating jurisdiction will attend an educational program or seminar designed to increase awareness of natural hazards and ways to minimize their impact on the county.	All	High	Emergency Management	General Funds, MEMA	2027	This action is ongoing. Education opportunities are provided for all local elected officials through local emergency management and state programs. County officials have attended NIMS classes and Floodplain Management classes. Due to the constant need for additional training, this action will remain in place to ensure local officials are up to date.
PEA-2	Organize and conduct a public outreach program designed to make sure that residents and business owners are aware of the potential hazards associated with their environment and the ways they can protect themselves. **Ideas for Implementation:** Each participating jurisdiction will coordinate outreach events to educate the public of the risks of natural hazards and ways to reduce their vulnerability to such events.	All	High	Emergency Management	General Funds, MEMA	2027	This action is ongoing. Coahoma County EMA provides programs and public outreach materials to all its citizens. Key players in the community also take part in periodic exercises to assure constant awareness. This action will remain in the plan as public outreach needs to continue and improve as new outreach strategies are developed and employed to reach a broader audience.

Town of Jonestown Mitigation Action Plan

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Implementation Schedule	Implementation Status (2021)
Prevention							
P-1	**Codes and Regulations:** • Adopt and implement uniform building codes, subdivision regulations, land use planning, and zoning ordinances that address new and existing building structures throughout the county. • Adopt and implement regulations and codes that address vulnerability to the hazards listed in the Hazard Mitigation Plan for existing critical infrastructure as defined in Action ES-3. • Adopt and implement regulations and codes for new infrastructure projects that address vulnerability to the hazards listed in the Hazard Mitigation Plan. **Ideas for Implementation:** Each participating jurisdiction will review existing codes and regulations for both existing buildings and infrastructure, and for new buildings and infrastructure to determine what changes need to be made to bring local regulations into compliance.	All	High	Board of Supervisors/ Board of Alderman	Local	2027	This action is ongoing. Since the last update, the Board has reviewed and adopted new building codes. However it is likely that the codes will need to be reviewed and potentially updated in the next 5 year period, so this action will remain in the plan.

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Implementation Schedule	Implementation Status (2021)
P-2	Ensure that existing drainage systems (i.e., pipes, culverts, channels) are adequate and functioning properly. **Ideas for Implementation:** Each participating jurisdiction will appoint personnel to check local drainage system conditions and take the necessary steps to bring inadequate systems into compliance. The cost involved to bring inadequate systems into compliance will vary from one place to the next.	Flood	High	County Administrator, Board of Supervisors/ Board of Aldermen	General Funds, CDBG, DRA	2027	This action is ongoing. The Coahoma County Road Department and municipalities have continually checked and maintained existing drainage systems to prevent flooding. This action will remain in the plan as it is anticipated that there will be future issues with drainage systems that will require repairs/action.
P-3	**Floodplain Management:** • Encourage communities to participate or continue participating in the National Flood Insurance Program (NFIP). • Encourage jurisdictions to adopt and enforce floodplain management requirements, including regulating all substantially improved construction in Special Flood Hazard areas (SFHAs). **Ideas for Implementation:** Promote the benefits of the NFIP program and floodplain management, and provide technical assistance in meeting program requirements including the application process.	All	High	Board of Supervisors/ Board of Aldermen, Emergency Management	Local	2027	This action is ongoing. All communities in Coahoma County are participants in the NFIP. This action will remain in the plan as communities will need to continue to implement floodplain management activities to maintain their participation in the NFIP.

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Implementation Schedule	Implementation Status (2021)
Property Protection							
PP-1	**Storm Shelters/Safe Rooms:** The county and all municipalities would like to increase the number of shelters and safe rooms available to citizens in the event of severe weather events such as tornadoes, especially in areas of high or vulnerable population concentration. **Ideas for Implementation:** • Identify key locations for constructing storm shelters/safe rooms. • Apply for grant funding to support construction/implementation.	All severe weather events	High	Emergency Management	FEMA, MEMA, Local	2027	This action is ongoing, awaiting availability of funding.
Natural Resource Protection							
NRP-1							
Structural Projects							
SP-1							

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Implementation Schedule	Implementation Status (2021)
Emergency Services							
ES-1	Provide residents with adequate warning of potential floods and other meteorological events. **Ideas for Implementation:** Each participating jurisdiction will assess the condition of their current warning systems and upgrade where necessary.	All severe weather events	High	Emergency Management	General Funds, MEMA, State Homeland Security Program	2027	This action is ongoing. The County Board of Supervisors and all municipalities have warning sirens in place. The county has also implemented an FM alert system and Reverse 911 system. Fire departments, public work employees, and law enforcement personnel are utilized to further notify citizens of potential flooding and other disasters. However, the county has determined that there will be a need to re-evaluate these systems and improve them in the future.
ES-2	Strengthen emergency services preparedness and response ability by purchasing equipment (i.e., generators and other supplies) to be used at key critical facilities around the county. **Ideas for Implementation:** Each participating jurisdiction will inventory current emergency supplies and identify items needed to improve response ability.	All	High	Emergency Management	General Funds, MEMA, State Homeland Security Program, USDA Rural Dev.	2027	This action is ongoing. Coahoma County has purchased three generators on wheels and hard-wired several wells within the county. Due to the evolving nature of this type of equipment and the fact that many improvements can still be made to improve preparedness, this action will remain in place.

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Implementation Schedule	Implementation Status (2021)
ES-3	Strengthen emergency services preparedness and response ability and strengthen hazard mitigation vulnerability assessment by mapping the locations of key government or public housing structures and buildings, especially vulnerable structures, critical infrastructure, and elderly and handicapped housing. Precise data will be gathered to identify weaknesses in preparedness for all hazards listed in the Hazard Mitigation Plan. **Ideas for Implementation:** Each participating jurisdiction will inventory its own structures, or may use the help of NDPDD, to map structures and assess their vulnerabilities. These data will be amended to the plan.	All	High	Emergency Management	General Funds	2027	This action is ongoing. During this update of the hazard mitigation plan, many critical facilities/infrastructure were mapped, but there will be a need to constantly evaluate/update this data and it should be noted that not all vulnerable populations or facilities were mapped, so additional work is already needed.
ES-4	Seek funding to provide the citizens of the county with a reasonable amount of physical protection from storms by installing one or more storm shelters in publicly known, publicly accessible places. **Ideas for Implementation:** Install one or more shelters in schools, churches, fire departments, or other government buildings.	Thunderstorm/ High Wind, Lightning, Hail, Severe Winter Storm, Tornado, Hurricane/ Tropical Storm	High	Board of Supervisors/ Board of Aldermen, Emergency Management, FEMA	FEMA, Local	2027	This action is ongoing. Some storm sheltering areas have been identified within the county, but additional facilities should be included to improve sheltering capacity.

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Implementation Schedule	Implementation Status (2021)
Public Education and Awareness							
PEA-1	Provide education opportunities for local officials to make sure they are well trained regarding natural hazards and appropriate prevention and mitigation activities. **Ideas for Implementation:** Elected officials in each participating jurisdiction will attend an educational program or seminar designed to increase awareness of natural hazards and ways to minimize their impact on the county.	All	High	Emergency Management	General Funds, MEMA	2027	This action is ongoing. Education opportunities are provided for all local elected officials through local emergency management and state programs. County officials have attended NIMS classes and Floodplain Management classes. Due to the constant need for additional training, this action will remain in place to ensure local officials are up to date.
PEA-2	Organize and conduct a public outreach program designed to make sure that residents and business owners are aware of the potential hazards associated with their environment and the ways they can protect themselves. **Ideas for Implementation:** Each participating jurisdiction will coordinate outreach events to educate the public of the risks of natural hazards and ways to reduce their vulnerability to such events.	All	High	Emergency Management	General Funds, MEMA	2027	This action is ongoing. Coahoma County EMA provides programs and public outreach materials to all its citizens. Key players in the community also take part in periodic exercises to assure constant awareness. This action will remain in the plan as public outreach needs to continue and improve as new outreach strategies are developed and employed to reach a broader audience.

Town of Lula Mitigation Action Plan

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Implementation Schedule	Implementation Status (2021)
Prevention							
P-1	**Codes and Regulations:** • Adopt and implement uniform building codes, subdivision regulations, land use planning, and zoning ordinances that address new and existing building structures throughout the county. • Adopt and implement regulations and codes that address vulnerability to the hazards listed in the Hazard Mitigation Plan for existing critical infrastructure as defined in Action ES-3. • Adopt and implement regulations and codes for new infrastructure projects that address vulnerability to the hazards listed in the Hazard Mitigation Plan. **Ideas for Implementation:** With assistance from NDPDD, each participating jurisdiction will review existing codes and regulations for both existing buildings and infrastructure, and for new buildings and infrastructure to determine what changes need to be made to bring local regulations into compliance.	All	High	Board of Supervisors/ Board of Alderman	Local	2027	This action is ongoing. Since the last update, the Board has reviewed and adopted new building codes. However it is likely that the codes will need to be reviewed and potentially updated in the next 5 year period, so this action will remain in the plan.

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Implementation Schedule	Implementation Status (2021)
P-2	Ensure that existing drainage systems (i.e., pipes, culverts, channels) are adequate and functioning properly. **Ideas for Implementation:** Each participating jurisdiction will appoint personnel to check local drainage system conditions and take the necessary steps to bring inadequate systems into compliance. The cost involved to bring inadequate systems into compliance will vary from one place to the next.	Flood	High	County Administrator, Board of Supervisors/ Board of Aldermen	General Funds, CDBG, DRA	2027	This action is ongoing. The Coahoma County Road Department and municipalities have continually checked and maintained existing drainage systems to prevent flooding. This action will remain in the plan as it is anticipated that there will be future issues with drainage systems that will require repairs/action.
P-3	**Floodplain Management:** • Encourage communities to participate or continue participating in the National Flood Insurance Program (NFIP). • Encourage jurisdictions to adopt and enforce floodplain management requirements, including regulating all substantially improved construction in Special Flood Hazard areas (SFHAs). **Ideas for Implementation:** Promote the benefits of the NFIP program and floodplain management, and provide technical assistance in meeting program requirements including the application process.	All	High	Board of Supervisors/ Board of Aldermen, Emergency Management	Local	2027	This action is ongoing. All communities in Coahoma County are participants in the NFIP. This action will remain in the plan as communities will need to continue to implement floodplain management activities to maintain their participation in the NFIP.

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Implementation Schedule	Implementation Status (2021)
Property Protection							
PP-1	**Storm Shelters/Safe Rooms:** The county and all municipalities would like to increase the number of shelters and safe rooms available to citizens in the event of severe weather events such as tornadoes, especially in areas of high or vulnerable population concentration. **Ideas for Implementation:** • Identify key locations for constructing storm shelters/safe rooms. • Apply for grant funding to support construction/implementation.	All severe weather events	High	Emergency Management	FEMA, MEMA, Local	2027	This action is ongoing, awaiting availability of funding
Natural Resource Protection							
NRP-1							
Structural Projects							
SP-1							

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Implementation Schedule	Implementation Status (2021)
Emergency Services							
ES-1	Provide residents with adequate warning of potential floods and other meteorological events. **Ideas for Implementation:** Each participating jurisdiction will assess the condition of their current warning systems and upgrade where necessary.	All severe weather events	High	Emergency Management	General Funds, MEMA, State Homeland Security Program	2027	This action is ongoing. The County Board of Supervisors and all municipalities have warning sirens in place. The county has also implemented an FM alert system and Reverse 911 system. Fire departments, public work employees, and law enforcement personnel are utilized to further notify citizens of potential flooding and other disasters. However, the county has determined that there will be a need to re-evaluate these systems and improve them in the future.
ES-2	Strengthen emergency services preparedness and response ability by purchasing equipment (i.e., generators and other supplies) to be used at key critical facilities around the county. **Ideas for Implementation:** Each participating jurisdiction will inventory current emergency supplies and identify items needed to improve response ability.	All	High	Emergency Management	General Funds, MEMA, State Homeland Security Program, USDA Rural Dev.	2027	This action is ongoing. Coahoma County has purchased three generators on wheels and hard-wired several wells within the county. Due to the evolving nature of this type of equipment and the fact that many improvements can still be made to improve preparedness, this action will remain in place.

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Implementation Schedule	Implementation Status (2021)
ES-3	Strengthen emergency services preparedness and response ability and strengthen hazard mitigation vulnerability assessment by mapping the locations of key government or public housing structures and buildings, especially vulnerable structures, critical infrastructure, and elderly and handicapped housing. Precise data will be gathered to identify weaknesses in preparedness for all hazards listed in the Hazard Mitigation Plan. **Ideas for Implementation:** Each participating jurisdiction will inventory its own structures, or may use the help of NDPDD, to map structures and assess their vulnerabilities. These data will be amended to the plan.	All	High	Emergency Management	General Funds	2027	This action is ongoing. During this update of the hazard mitigation plan, many critical facilities/infrastructure were mapped, but there will be a need to constantly evaluate/update this data and it should be noted that not all vulnerable populations or facilities were mapped, so additional work is already needed.
ES-4	Seek funding to provide the citizens of the county with a reasonable amount of physical protection from storms by installing one or more storm shelters in publicly known, publicly accessible places. **Ideas for Implementation:** Install one or more shelters in schools, churches, fire departments, or other government buildings.	Thunderstorm/ High Wind, Lightning, Hail, Severe Winter Storm, Tornado, Hurricane/ Tropical Storm	High	Board of Supervisors/ Board of Aldermen, Emergency Management, FEMA	FEMA, Local	2027	This action is ongoing. Some storm sheltering areas have been identified within the county, but additional facilities should be included to improve sheltering capacity.

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Implementation Schedule	Implementation Status (2021)
Public Education and Awareness							
PEA-1	Provide education opportunities for local officials to make sure they are well trained regarding natural hazards and appropriate prevention and mitigation activities. **Ideas for Implementation:** Elected officials in each participating jurisdiction will attend an educational program or seminar designed to increase awareness of natural hazards and ways to minimize their impact on the county.	All	High	Emergency Management	General Funds, MEMA	2027	This action is ongoing. Education opportunities are provided for all local elected officials through local emergency management and state programs. County officials have attended NIMS classes and Floodplain Management classes. Due to the constant need for additional training, this action will remain in place to ensure local officials are up to date.
PEA-2	Organize and conduct a public outreach program designed to make sure that residents and business owners are aware of the potential hazards associated with their environment and the ways they can protect themselves. **Ideas for Implementation:** Each participating jurisdiction will coordinate outreach events to educate the public of the risks of natural hazards and ways to reduce their vulnerability to such events.	All	High	Emergency Management	General Funds, MEMA	2027	This action is ongoing. Coahoma County EMA provides programs and public outreach materials to all its citizens. Key players in the community also take part in periodic exercises to assure constant awareness. This action will remain in the plan as public outreach needs to continue and improve as new outreach strategies are developed and employed to reach a broader audience.

Town of Lyon Mitigation Action Plan

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Implementation Schedule	Implementation Status (2021)
Prevention							
P-1	**Codes and Regulations:** • Adopt and implement uniform building codes, subdivision regulations, land use planning, and zoning ordinances that address new and existing building structures throughout the county. • Adopt and implement regulations and codes that address vulnerability to the hazards listed in the Hazard Mitigation Plan for existing critical infrastructure as defined in Action ES-3. • Adopt and implement regulations and codes for new infrastructure projects that address vulnerability to the hazards listed in the Hazard Mitigation Plan. **Ideas for Implementation:** With assistance from NDPDD, each participating jurisdiction will review existing codes and regulations for both existing buildings and infrastructure, and for new buildings and infrastructure to determine what changes need to be made to bring local regulations into compliance.	All	High	Board of Supervisors/ Board of Alderman	Local	2027	This action is ongoing. Since the last update, the Board has reviewed and adopted new building codes. However it is likely that the codes will need to be reviewed and potentially updated in the next 5 year period, so this action will remain in the plan.

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Implementation Schedule	Implementation Status (2021)
P-2	Ensure that existing drainage systems (i.e., pipes, culverts, channels) are adequate and functioning properly. **Ideas for Implementation:** Each participating jurisdiction will appoint personnel to check local drainage system conditions and take the necessary steps to bring inadequate systems into compliance. The cost involved to bring inadequate systems into compliance will vary from one place to the next.	Flood	High	County Administrator, Board of Supervisors/ Board of Aldermen	General Funds, CDBG, DRA	2027	This action is ongoing. The Coahoma County Road Department and municipalities have continually checked and maintained existing drainage systems to prevent flooding. This action will remain in the plan as it is anticipated that there will be future issues with drainage systems that will require repairs/action.
P-3	**Floodplain Management:** • Encourage communities to participate or continue participating in the National Flood Insurance Program (NFIP). • Encourage jurisdictions to adopt and enforce floodplain management requirements, including regulating all substantially improved construction in Special Flood Hazard areas (SFHAs). **Ideas for Implementation:** Promote the benefits of the NFIP program and floodplain management, and provide technical assistance in meeting program requirements including the application process.	All	High	Board of Supervisors/ Board of Aldermen, Emergency Management	Local	2027	This action is ongoing. All communities in Coahoma County are participants in the NFIP. This action will remain in the plan as communities will need to continue to implement floodplain management activities to maintain their participation in the NFIP.

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Implementation Schedule	Implementation Status (2021)
Property Protection							
PP-1	**Storm Shelters/Safe Rooms:** The county and all municipalities would like to increase the number of shelters and safe rooms available to citizens in the event of severe weather events such as tornadoes, especially in areas of high or vulnerable population concentration. **Ideas for Implementation:** • Identify key locations for constructing storm shelters/safe rooms. • Apply for grant funding to support construction/implementation.	All severe weather events	High	Emergency Management	FEMA, MEMA, Local	2027	This action is ongoing, awaiting availability of funding
Natural Resource Protection							
NRP-1							
Structural Projects							
SP-1							

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Implementation Schedule	Implementation Status (2021)
Emergency Services							
ES-1	Provide residents with adequate warning of potential floods and other meteorological events. **Ideas for Implementation:** Each participating jurisdiction will assess the condition of their current warning systems and upgrade where necessary.	All severe weather events	High	Emergency Management	General Funds, MEMA, State Homeland Security Program	2027	This action is ongoing. The County Board of Supervisors and all municipalities have warning sirens in place. The county has also implemented an FM alert system and Reverse 911 system. Fire departments, public work employees, and law enforcement personnel are utilized to further notify citizens of potential flooding and other disasters. However, the county has determined that there will be a need to re-evaluate these systems and improve them in the future.
ES-2	Strengthen emergency services preparedness and response ability by purchasing equipment (i.e., generators and other supplies) to be used at key critical facilities around the county. **Ideas for Implementation:** Each participating jurisdiction will inventory current emergency supplies and identify items needed to improve response ability.	All	High	Emergency Management	General Funds, MEMA, State Homeland Security Program, USDA Rural Dev.	2027	This action is ongoing. Coahoma County has purchased three generators on wheels and hard-wired several wells within the county. Due to the evolving nature of this type of equipment and the fact that many improvements can still be made to improve preparedness, this action will remain in place.

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Implementation Schedule	Implementation Status (2021)
ES-3	Strengthen emergency services preparedness and response ability and strengthen hazard mitigation vulnerability assessment by mapping the locations of key government or public housing structures and buildings, especially vulnerable structures, critical infrastructure, and elderly and handicapped housing. Precise data will be gathered to identify weaknesses in preparedness for all hazards listed in the Hazard Mitigation Plan. **Ideas for Implementation:** Each participating jurisdiction will inventory its own structures, or may use the help of NDPDD, to map structures and assess their vulnerabilities. These data will be amended to the plan.	All	High	Emergency Management	General Funds	2027	This action is ongoing. During this update of the hazard mitigation plan, many critical facilities/infrastructure were mapped, but there will be a need to constantly evaluate/update this data and it should be noted that not all vulnerable populations or facilities were mapped, so additional work is already needed.
ES-4	Seek funding to provide the citizens of the county with a reasonable amount of physical protection from storms by installing one or more storm shelters in publicly known, publicly accessible places. **Ideas for Implementation:** Install one or more shelters in schools, churches, fire departments, or other government buildings.	Thunderstorm/ High Wind, Lightning, Hail, Severe Winter Storm, Tornado, Hurricane/ Tropical Storm	High	Board of Supervisors/ Board of Aldermen, Emergency Management, FEMA	FEMA, Local	2027	This action is ongoing. Some storm sheltering areas have been identified within the county, but additional facilities should be included to improve sheltering capacity.

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Implementation Schedule	Implementation Status (2021)
Public Education and Awareness							
PEA-1	Provide education opportunities for local officials to make sure they are well trained regarding natural hazards and appropriate prevention and mitigation activities. **Ideas for Implementation:** Elected officials in each participating jurisdiction will attend an educational program or seminar designed to increase awareness of natural hazards and ways to minimize their impact on the county.	All	High	Emergency Management	General Funds, MEMA	2027	This action is ongoing. Education opportunities are provided for all local elected officials through local emergency management and state programs. County officials have attended NIMS classes and Floodplain Management classes. Due to the constant need for additional training, this action will remain in place to ensure local officials are up to date.
PEA-2	Organize and conduct a public outreach program designed to make sure that residents and business owners are aware of the potential hazards associated with their environment and the ways they can protect themselves. **Ideas for Implementation:** Each participating jurisdiction will coordinate outreach events to educate the public of the risks of natural hazards and ways to reduce their vulnerability to such events.	All	High	Emergency Management	General Funds, MEMA	2027	This action is ongoing. Coahoma County EMA provides programs and public outreach materials to all its citizens. Key players in the community also take part in periodic exercises to assure constant awareness. This action will remain in the plan as public outreach needs to continue and improve as new outreach strategies are developed and employed to reach a broader audience.