Tully Davidson

From: HM-Plans <HM-Plans@tdem.texas.gov>
Sent: Tuesday, November 8, 2022 2:09 PM
To: Tully Davidson
Cc: Jim Guin; Mark LeMense
Subject: *EXTERNAL EMAIL* Wood County HMAP
Attachments: 2-APA-WoodCo-TX-SIGNED.pdf; 2-QC-WoodCo-TX.docx

Importance: High

Follow Up Flag: Flag for follow up
Flag Status: Flagged

EXTERNAL EMAIL USE CAUTION

Greetings Mr. Davidson,

This is to inform you that the Wood County HMAP has been granted Approvable Pending Adoption status.

Congratulations,

James Copelin
Hazard Mitigation Specialist
Texas Division of Emergency Management
(512) 520-6751

U.S. Department of Homeland Security
FEMA Region 6
800 N. Loop 288
Denton, TX 76209

FEMA

November 8, 2022

Jasper Cooke, Hazard Mitigation Section Chief
Texas Division of Emergency Management
P.O. Box 15467
Austin, TX 78761

RE: Approvable Pending Adoption of the Wood County, Texas Multi-Jurisdiction Hazard Mitigation Plan

Dear Mr. Cooke:

This office has concluded its review of the referenced plan, in conformance with the Final Rule on Mitigation Planning (44 CFR § 201.6). Formal approval of this plan is contingent upon the adoption by the participants on Enclosure A, as well as the receipt of the final draft of the plan containing all plan components.

Adopting resolutions must be submitted to this agency for review and approval no later than one year from the date of this letter. Failure to submit these resolutions in a timely manner could lead to a required update of the plan prior to FEMA approval.

Once this final requirement has been met, a letter of official approval will be generated. The Local Hazard Mitigation Planning Tool, with the reviewer's comments has been enclosed to further assist the jurisdictions in complying with planning requirements.

Sincerely,

Ronald C. Wanhanen
Chief, Risk Analysis Branch

Enclosures

Enclosure A

Attached is the list of participating local governments included in the November 8, 2022 review of the referenced Hazard Mitigation plan.

	Community Name
1)	Alba town
2)	Hawkins city
3)	Mineola city
4)	Quitman city
5)	Winnsboro city
6)	Wood County
7)	Yantis town

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF YANTIS, TEXAS, ADOPTING THE REVISED 2022 WOOD COUNTY HAZARD MITIGATION ACTION PLAN, AND VESTING RELATED AUTHORITY AND RESPONSIBILITY

WHEREAS, certain areas of the City of Yantis, Texas, are subject to periodic flooding and other natural and man-caused hazards with the potential to cause damages to people and property within the area; and

WHEREAS, the City of Yantis desires to be prepared for and to mitigate losses caused by such circumstances; and

WHEREAS, under the Disaster Mitigation Act of 2000, the United States Federal Emergency Management Agency (FEMA) requires that local jurisdictions have in place a FEMA-Approved Hazard Mitigation Action Plan as a condition of receipt of certain Federal mitigation funding; and

WHEREAS, all such approved plans must be revised at least once every five (5) years; and

WHEREAS, the 2009 Wood County Hazard Mitigation Action Plan was previously adopted by the City of Yantis on March 15, 2010;

WHEREAS, the 2009 Wood County Hazard Mitigation Action Plan has now been revised and updated for 2022, in accordance with FEMA guidelines;

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF YANTIS, TEXAS, that:

Section 1. The revised 2022 Wood County Hazard Mitigation Action Plan is hereby adopted.

Section 2. The Mayor of the City of Yantis is hereby vested with the responsibility, authority, and the means to:

(a) Inform all concerned parties of this action.

(b) Develop an Addendum to this Hazard Mitigation Action Plan if such addendum is warranted.

Section 3. The Mayor of the City of Yantis is appointed to assure that the Hazard Mitigation Action Plan be reviewed at least annually, and that any needed adjustment to the City of Yantis's Addendum to the Plan be developed and presented to the Yantis City Council for consideration.

Section 4. The City of Yantis hereby agrees to take such other official action as may be reasonably necessary to carry out the objectives of the Hazard Mitigation Action Plan.

Passed, approved and adopted this _____ day of _____, 2022.

City of Yantis, Texas

BY: _____
Mayor

ATTEST:

_____

City Secretary

RESOLUTION #_____
CITY OF WINNSBORO, TEXAS

A RESOLUTION OF THE WINNSBORO CITY COUNCIL, ADOPTING THE REVISED 2022 WOOD COUNTY HAZARD MITIGATION ACTION PLAN.

WHEREAS, certain areas of the City of Winnsboro, Texas, are subject to periodic flooding and other natural and man-caused hazards with the potential to cause damages to people and property within the area; and

WHEREAS, the City of Winnsboro desires to be prepared for and to mitigate losses caused by such circumstances; and

WHEREAS, under the Disaster Mitigation Act of 2000, the United States Federal Emergency Management Agency (FEMA) requires that local jurisdictions have in place a FEMA-Approved Hazard Mitigation Action Plan as a condition of receipt of certain Federal mitigation funding; and

WHEREAS, all such approved plans must be revised at least once every five (5) years; and

WHEREAS, the Wood County Hazard Mitigation Action Plan was previously adopted by the City of Winnsboro on May 11, 2010;

WHEREAS, the 2009 Wood County Hazard Mitigation Action Plan has now been revised and updated for 2022, in accordance with FEMA guidelines;

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF WINNSBORO, TEXAS, that:

Section 1. The revised 2022 Wood County Hazard Mitigation Action Plan is hereby adopted.

Section 2. The Mayor of the City of Winnsboro is hereby vested with the responsibility, authority, and the means to:

(a) Inform all concerned parties of this action.

(b) Develop an Addendum to this Hazard Mitigation Action Plan if such addendum is warranted.

Section 3. The Mayor of the City of Winnsboro is appointed to assure that the Hazard Mitigation Action Plan be reviewed at least annually, and that any needed adjustment to the City of Winnsboro's Addendum to the Plan be developed and presented to the Winnsboro City Council for consideration.

Section 4. The City of Winnsboro hereby agrees to take such other official action as may be reasonably necessary to carry out the objectives of the Hazard Mitigation Action Plan.

Passed, approved and adopted this _____ day of _____, 2022.

City of Winnsboro, Texas

BY: _____
Mayor

ATTEST:

_____
City Administrator / Secretary

CITY OF MINEOLA, TEXAS

A RESOLUTION OF THE MINEOLA CITY COUNCIL, ADOPTING THE REVISED 2022 WOOD COUNTY HAZARD MITIGATION ACTION PLAN

WHEREAS, certain areas of the City of Mineola, Texas, are subject to periodic flooding and other natural and man-caused hazards with the potential to cause damages to people and property within the area; and

WHEREAS, the City of Mineola desires to be prepared for and to mitigate losses caused by such circumstances; and

WHEREAS, under the Disaster Mitigation Act of 2000, the United States Federal Emergency Management Agency (FEMA) requires that local jurisdictions have in place a FEMA-Approved Hazard Mitigation Action Plan as a condition of receipt of certain Federal mitigation funding; and

WHEREAS, all such approved plans must be revised at least once every five (5) years; and

WHEREAS, the Wood County Hazard Mitigation Action Plan was previously adopted by the City of Mineola on September 28, 2009;

WHEREAS, the 2009 Wood County Hazard Mitigation Action Plan has now been revised and updated for 2022, in accordance with FEMA guidelines;

NOW, THEREFORE, BE IT RESOLVED that the Mineola City Council hereby:

Section 1. Adopts the revised 2022 Wood County Hazard Mitigation Action Plan.

Section 2. Vests the Mayor of the City of Mineola with the responsibility, authority, and the means to:

(a) Inform all concerned parties of this action.

(b) Develop an Addendum to this Hazard Mitigation Action Plan if such addendum is warranted.

Section 3. Agrees to take such other official action as may be reasonably necessary to carry out the objectives of the Hazard Mitigation Action Plan.

Passed, approved and adopted this _____ day of_____, 2022.

City of Mineola, Texas

BY: _____

Mayor

ATTEST:

_____

City Administrator / Secretary

HAZARD MITIGATION PLAN
RESOLUTION #_____

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF QUITMAN, TEXAS, ADOPTING THE REVISED 2022 WOOD COUNTY HAZARD MITIGATION ACTION PLAN, AND VESTING RELATED AUTHORITY AND RESPONSIBILITY

WHEREAS, certain areas of the City of Quitman, Texas, are subject to periodic flooding and other natural and man-caused hazards with the potential to cause damages to people and property within the area; and

WHEREAS, the City of Quitman desires to be prepared for and to mitigate losses caused by such circumstances; and

WHEREAS, under the Disaster Mitigation Act of 2000, the United States Federal Emergency Management Agency (FEMA) requires that local jurisdictions have in place a FEMA-Approved Hazard Mitigation Action Plan as a condition of receipt of certain Federal mitigation funding; and

WHEREAS, all such approved plans must be revised at least once every five (5) years; and

WHEREAS, the Wood County Hazard Mitigation Action Plan was previously adopted by the City of Quitman on November 19, 2009;

WHEREAS, the 2009 Wood County Hazard Mitigation Action Plan has now been revised and updated for 2022, in accordance with FEMA guidelines;

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF QUITMAN, TEXAS, that:

Section 1. The revised 2022 Wood County Hazard Mitigation Action Plan is hereby adopted.

Section 2. The Mayor of the City of Quitman is hereby vested with the responsibility, authority, and the means to:
(a) Inform all concerned parties of this action.
(b) Develop an Addendum to this Hazard Mitigation Action Plan if such addendum is warranted.

Section 3. The Mayor of the City of Quitman is appointed to assure that the Hazard Mitigation Action Plan be reviewed at least annually, and that any needed adjustment to the City of Quitman's Addendum to the Plan be developed and presented to the Quitman City Council for consideration.

Section 4. The City of Quitman hereby agrees to take such other official action as may be reasonably necessary to carry out the objectives of the Hazard Mitigation Action Plan.

Passed, approved and adopted this _____ day of _____, 2022.

City of Quitman, Texas

BY: _____
Mayor

ATTEST:

_____
City Administrator / Secretary

CITY OF ALBA, TEXAS

A RESOLUTION OF THE ALBA CITY COUNCIL, ADOPTING THE REVISED 2022 WOOD COUNTY HAZARD MITIGATION ACTION PLAN

WHEREAS, certain areas of the City of Alba, Texas, are subject to periodic flooding and other natural and man-caused hazards with the potential to cause damages to people and property within the area; and

WHEREAS, the City of Alba desires to be prepared for and to mitigate losses caused by such circumstances; and

WHEREAS, under the Disaster Mitigation Act of 2000, the United States Federal Emergency Management Agency (FEMA) requires that local jurisdictions have in place a FEMA-Approved Hazard Mitigation Action Plan as a condition of receipt of certain Federal mitigation funding; and

WHEREAS, all such approved plans must be revised at least once every five (5) years; and

WHEREAS, the Wood County Hazard Mitigation Action Plan was previously adopted by the City of Alba on October 5, 2009;

WHEREAS, the 2009 Wood County Hazard Mitigation Action Plan has now been revised and updated for 2022, in accordance with FEMA guidelines;

NOW, THEREFORE, BE IT RESOLVED that the Alba City Council hereby:

Section 1. Adopts the revised 2022 Wood County Hazard Mitigation Action Plan.

Section 2. Vests the Mayor of the City of Alba with the responsibility, authority, and the means to:

(a) Inform all concerned parties of this action.

(b) Develop an Addendum to this Hazard Mitigation Action Plan if such addendum is warranted.

Section 3. Agrees to take such other official action as may be reasonably necessary to carry out the objectives of the Hazard Mitigation Action Plan.

Passed, approved and adopted this _____ day of_____, 2022.

City of Alba, Texas

BY: _____
Mayor

ATTEST:

_____
City Secretary

CITY OF HAWKINS, TEXAS

A RESOLUTION OF THE HAWKINS CITY COUNCIL, ADOPTING THE REVISED 2022 WOOD COUNTY HAZARD MITIGATION ACTION PLAN

WHEREAS, certain areas of the City of Hawkins, Texas, are subject to periodic flooding and other natural and man-caused hazards with the potential to cause damages to people and property within the area; and

WHEREAS, the City of Hawkins desires to be prepared for and to mitigate losses caused by such circumstances; and

WHEREAS, under the Disaster Mitigation Act of 2000, the United States Federal Emergency Management Agency (FEMA) requires that local jurisdictions have in place a FEMA-Approved Hazard Mitigation Action Plan as a condition of receipt of certain Federal mitigation funding; and

WHEREAS, all such approved plans must be revised at least once every five (5) years; and

WHEREAS, the Wood County Hazard Mitigation Action Plan was previously adopted by the City of Hawkins on April 19, 2010;

WHEREAS, the 2009 Wood County Hazard Mitigation Action Plan has now been revised and updated for 2022, in accordance with FEMA guidelines;

NOW, THEREFORE, BE IT RESOLVED that the Hawkins City Council hereby:

Section 1. Adopts the revised 2022 Wood County Hazard Mitigation Action Plan.

Section 2. Vests the Mayor of the City of Hawkins with the responsibility, authority, and the means to:

(a) Inform all concerned parties of this action.

(b) Develop an Addendum to this Hazard Mitigation Action Plan if such addendum is warranted.

Section 3. Agrees to take such other official action as may be reasonably necessary to carry out the objectives of the Hazard Mitigation Action Plan.

Passed, approved and adopted this _____ day of_____, 2022.

City of Hawkins

ATTEST:

BY: _____
Mayor of Hawkins, Texas

_____

City Secretary

Cindy Karch

From: Tully Davidson <tdavidson@mywoodcounty.com>
Sent: Wednesday, November 9, 2022 8:27 AM
To: yantistn@peoplescom.net; mlyons@winnsborotexas.com; rkieke@quitmantx.org; Cindy Karch; mandy@hawkinstx.org; albacity@peoplescom.net; 'City of Alba City of Alba'
Subject: Hazard Mitigation to adopt at next agenda please
Attachments: Wood County HMP 11-07-2022 Revision.docx; Haz Mit Email 11-09-2022.pdf

We have our initial approval pending adoption by all the cities in the County for our Hazard Mitigation plan. It's the same plan and actions we had 5 years ago that we all adopted with a few updates to the dates of events and such. Please put this on your next council agenda for adoption and if you have any questions please feel free to contact me anytime. I will not be able to make all the meetings as some are on the same nights I have other meetings already scheduled with the school and other organizations. You can always reach me by phone if anyone has any questions anytime, I can always step outside and take a call that night if needed. Thank you for your assistance in getting this passed. If you will send me the signed resolution when it's passed I'll compile them and get them to the State who turns them into FEMA for us. If you will just pick out your respective City from the PDF file for your records.

Thank you,

Tully Davidson

Wood County Fire Marshal/EMC

903-569-7327

Wood County,

City of Alba, Hawkins, Mineola, Quitman, Winnsboro, and Yantis

Wood County, Texas

DEVELOPED BY THE WOOD COUNTY HAZARD MITIGATION ACTION TEAM

October 2022

Record of Changes

Change Number and Change	Date of Change	Initials and Date Entered
1. Update entire Hazard Mitigation Plan	03-16-2022	TD, 03-16-2022
2. Updated year to reflect current year	09-01-2022	TD, 09-01-2022
3.		

Table of Contents

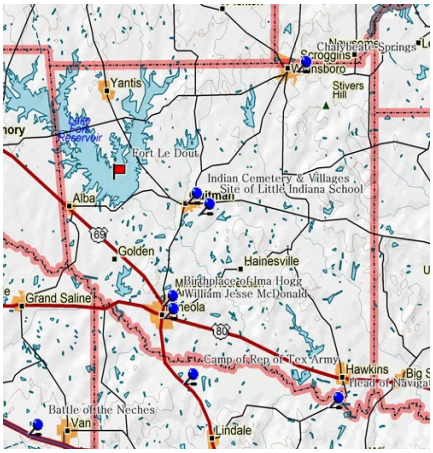
Contents

County Overview and Demographics Overview:

WOOD COUNTY Wood County is located in northeast Texas, between Interstate Highways 20 and 30. Quitman, the county seat, is eighty miles east of Dallas and thirty miles north of Tyler. The geographic center of the county is located at 95°20' north latitude and 32°45' west longitude. Wood County includes 689 square miles of east Texas timberlands with an elevation of 250 to 600 feet above sea level.

The following six cities lie within Wood County: Alba, Hawkins, Mineola, Quitman, Winnsboro, and Yantis. No jurisdiction within Wood County is designated for special consideration because of minority or economically disadvantaged population.

Demographics



According to the 2021 census, the population of Wood County is 45,875 (estimated as of July 1, 2021).

Wood County has a slightly lower percentage of females (50.0%) than the State of Texas as a whole (50.1%).

The following table shows the population change of each Wood County city, from 2010 to 2021, with the rate of growth or decline, as compared to that of the county and state as a whole, from the 2010 census to the 2021 census. According to the Wood County Profile provided by Texas Association of Counties, the last census occurred in 2021. The information provided below is the most current available.

	2010	2016	2021	Rate of change 2010 - 2021
Alba	504	514	590	9.80%
Hawkins	1,279	1,299	1641	9.84%
Mineola	4,515	4,719	4764	9.56%
Quitman	1,809	1,843	2310	9.81%
Winnsboro	3,434	2,639	3330	9.64%
Yantis	388	398	348	-1.3%
Wood County	41,961	44,227	45875	9.48%

Data from: https://www.census.gov/quickfacts/fact/table/woodcountytexas,TX/PST045217

Approximately 20% of the residents of Wood County are under the age of 18, compared

to 26.8% of all Texans; approximately 25.7% of Wood County residents are 65 years old or older, compared to 10.9% of all Texans.

The following table shows the age distribution found in Wood County and its six cities:

Age	Alba	Hawkins	Mineola	Quitman	Winnsboro	Yantis	Wood County	State of Texas
<5 yrs	7.7%	7%	6.5%	6.6%	6.5%	6.2%	5.2%	7.7%
5-9 yrs	7.9%	7.4%	6.8%	5.8%	7.4%	5.9%	5.6%	7.7%
10-14	8.7%	8.4%	5.9%	5.3%	5.2%	11.3%	6%	7.5%
15-19	6.2%	7.2%	6.5%	6%	5.8%	6.7%	5.9%	7.5%
20-24	4.4%	5.3%	5.7%	6.3%	7.6%	5.4%	4.9%	7.2%
25-34	13.1%	10.7%	11.1%	10.3%	11.9%	11.6%	8.9%	14.4%
35-44	10.4%	12.7%	10.1%	11.3%	11.5%	12.6%	10.2%	13.7%
45-54	11.4%	12.7%	11.8%	13%	12.2%	11.9%	13.6%	13.7%
55-59	7.5%	6%	6.4%	5.1%	5.6%	6.4%	7.3%	5.7%
60-64	5%	5.7%	5.2%	5.4%	5.6%	5.7%	8.1%	4.7%
65-74	11.3%	9%	11.3%	11.5%	8.8%	9.1%	14.4%	5.9%
75-84	4.6%	5.4%	8.2%	9%	7.6%	5.2%	7.3%	3.3%
85 & ↑	2%	2.3%	4.3%	4.5%	4.3%	2.1%	2.4%	1.2%
Median age	**37.2 years**	**38.5 years**	**42.4 years**	**44.1 years**	**39.8 years**	**38 years**	**47.5 years**	**33.6 years**

Data from: ***http://quickfacts.census.gov/qfd/states/48/48499.html***

Climate

The climate in Wood County is subtropical, moist and mild. The average annual temperature is 64° F. Temperatures in January range from an average low of 32° F to an average high of 54° F, and July temperatures range from an average low of 71° F to an average high of 95° F. The average annual precipitation is 43 inches, and the growing season averages 246 days per year.

Data from: ***Handbook of Texas – Online***
http://www.tshaonline.org/handbook/online/articles/hcw15

Topography, Soils, Vegetation, and Mineral Resources

Western Wood County has level to undulating terrain with sandy surfaces over clay subsoil. Central Wood County has gently rolling to hilly terrain and reddish soils with

loamy surfaces, over very deep clay subsoil. Eastern Wood County is nearly level and has sandy to loamy surface soils over very deep subsoil.

The western and central parts of Wood County, in the Post Oak Savannah vegetation area, produce post oak and blackjack oak trees and tall grasses, while the eastern portion, in the Piney Woods vegetation area, has softwoods such as loblolly, shortleaf, longleaf, and slash pines, and hardwoods such as oak, hickory and maple.

The Sabine River drains the southern part of the county and forms its southern boundary, and a tributary, Lake Fork Creek, drains the central portion of the county. Coffee Creek drains the northwestern part of Wood County before it empties into Lake Fork Creek. Big Sandy Creek drains the eastern part of the county, and one of its tributaries, Indian Creek, drains the northeastern part.

Mineral resources of Wood County include oil, natural gas, sand, gravel and clays.

Data from: ***Handbook of Texas – Online***
http://www.tshaonline.org/handbook/online/articles/hcw15

Document Organization

Provided below is brief explanation on the lay-out and content of this document. The sections included in this plan are:

Adoption
This plan will be formally adopted by Wood County, the City of Alba, Hawkins, Mineola, Quitman, Winnsboro, and Yantis after the document had been reviewed by both the Texas Division of Emergency Management (TDEM) and the Federal Emergency Management Agency (FEMA) to ensure it met current state and federal guidelines governing local MAPs.

Authorities
This section provides a description of the legal authorities under which this plan was developed.

Purpose
This section explains why the plan was written and identifies the benefits to the participating jurisdictions within the Wood County area of having a current Hazard Mitigation Plan.

Element A – The Planning Process
This section explains how the plan was organized and the process followed in developing this document, including:

- Establishing the Mitigation Action Team: Identifies the process Wood County and the plan participants followed in establishing their mitigation action team.
- Establishing an Open Public Process: Identifies the planning team's efforts to encourage public participation during the development of this plan.

Element B– Hazard Identification and Risk Assessment
This section identifies and analyzes the hazards that affect Wood County-and their impacts on the County' jurisdictions

Hazards – Describes the hazards that impact Wood County and the plan participants.

History of Local Hazards – Provides historical and statistical data related to the specific hazards that have impacted the jurisdictions within Wood County.

Risk Summary – Community priorities on specific hazards.

Vulnerability Worksheets – Provides a graphical representation of each jurisdiction's vulnerability to the identified hazards.

Loss Estimates – Provides an estimate of the impact each hazard would have on the critical infrastructure located within the County and its Cities.

Past Mitigation – Provides a summary view of previous mitigation efforts undertaken by the jurisdictions within Wood County.

Development Trends – Provides an analysis of a growth trends within the County which were considered in developing the mitigation strategies discussed in Element C.

Element C– Mitigation Strategies

- Mitigation Goals and Objectives – Provides the framework for the development of the long- term and short-term strategies identified with the Mitigation Actions.
- Mitigation Actions – Describes the actions that each participating jurisdictions proposes to undertake in order to mitigate the impact of future hazard events.

Element D – Plan Review, Evaluation and Implementation

- Utilizing development patterns and new hazard or risk information; jurisdictions will evaluate progress on the action items and make changes based on new findings.
- Jurisdiction will resubmit plan for approval within 5 years.

Element E– Plan Adoption

- Plans will be adopted by each jurisdiction through their appropriate governing body. This adoption takes place after plan draft has been approved by state and FEMA for applicable content

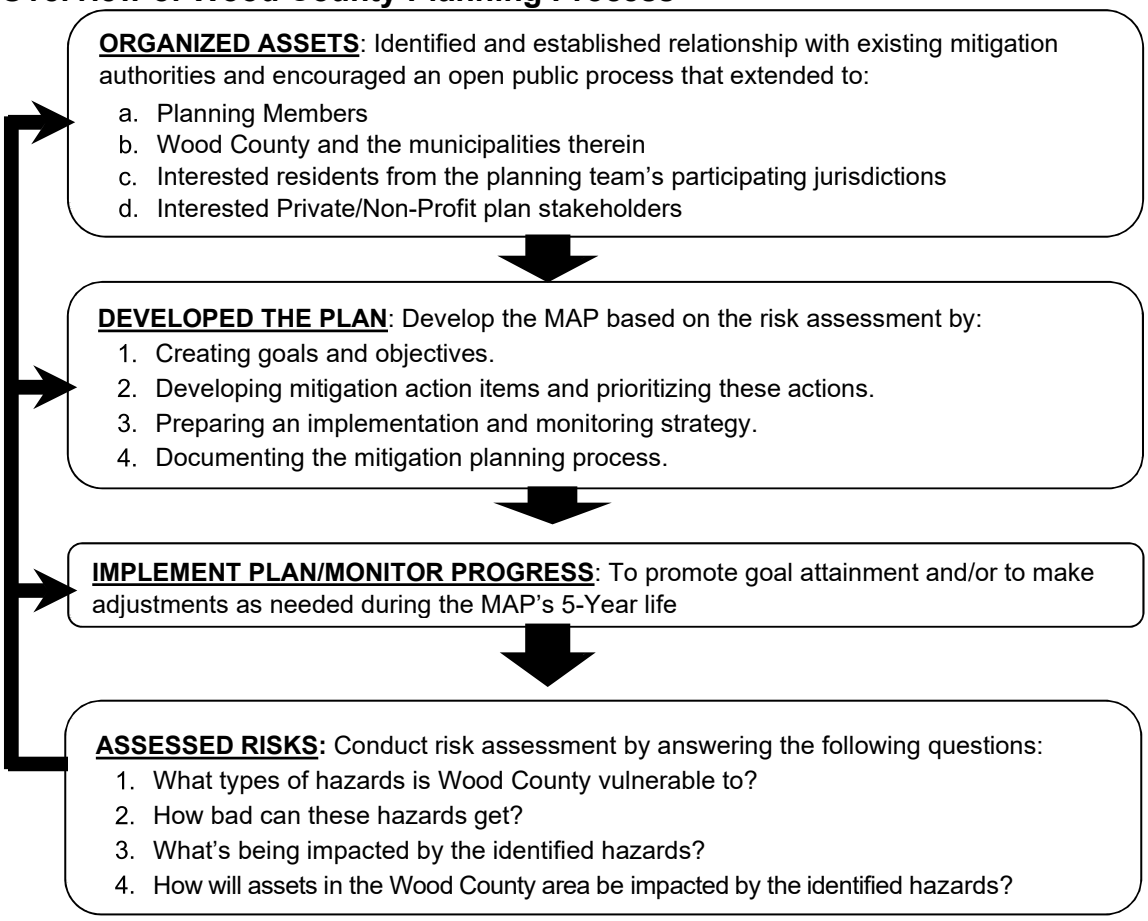
Element A - Planning Process

Plan Preparation (A1)

The Hazard Mitigation Plan was developed through the active participation of representatives of Wood County and the plan participants. Through their expertise in emergency management, engineering, administrative, public works, building and road maintenance, their contributions were critical in the plan development. The team also included stakeholders such as: local business owners, industry representatives, neighboring jurisdictions, regional and state partners. The list of mitigation team members is located on page 13.

This graphic below illustrates the steps taken by the Wood County planning team in developing this document.

Overview of Wood County Planning Process



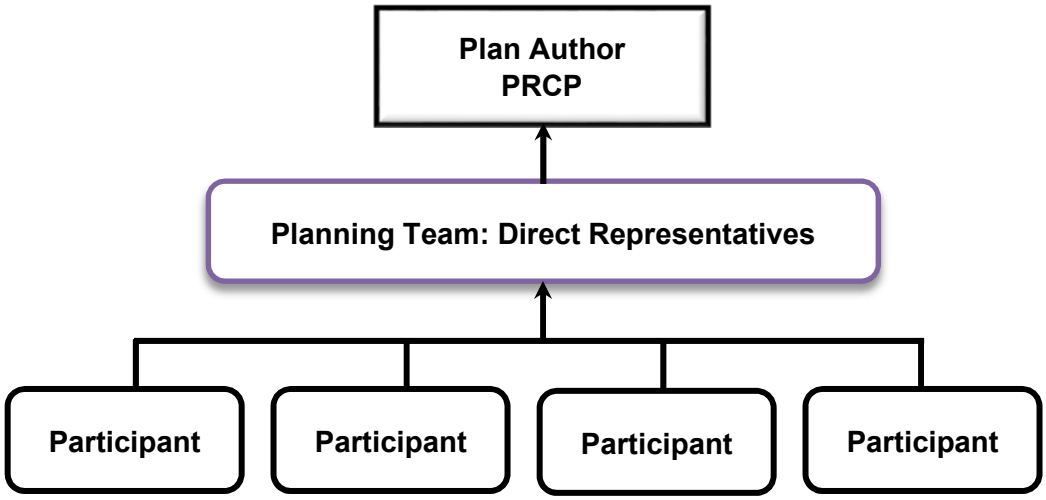
Planning Process

Date	Activity Description	Invitee/Attendees
	Outreach Training Class	Wood County EMC
	Outreach Training G-318 Class	Wood County EMC
09-01-2022	Initial invitation for planning team participation	Local government leaders, EMC's & State Partners
	FEMA Review of Hazard Mitigation Plan	Wood County, State Partners
08-24-2022	Technical Assistance and Plan development review	Wood County, State Partners
09-06-2022 & 09-22-2022	Public meeting draft stage.	Local government leaders, Municipal department heads, ISD Superintendents, Responder group leaders, Stake Holders, Regional and State Partners & Neighboring counties
09-12-2022	Continue developing Actions and prioritize hazards	Local government leaders, Municipal department heads, ISD Superintendents, Responder group leaders, Stake Holders, Regional and State Partners, Public & Neighboring counties
09-22-2022	Conference Call with EMC's about priorities	City EMC's, State partners
Meetings were posted 72 hours in advanced at the County Courthouse. Invitations were sent out via email. The public was invited to attend through County Courthouse/City Hall information board. Sign-in sheets were utilized and agendas were available at each meeting.		

Establishing the Mitigation Action Team (A2)

The ***first*** Wood County Hazard Mitigation Plan was approved on November 15, 2006. In 2021, the mitigation team chairman began the process of updating the plan. This process included reviewing previous mitigation strategies and determining the status of each action. In addition, due to turnover, the chairman began to actively recruit new members to begin the update process.

Wood County Mitigation Action Team Hierarchy



At the outset of the planning process, the Wood County Judge mailed a solicitation to the other jurisdictions and plan stakeholder groups in their County; inviting their participation on the Wood County planning team. In addition, the planning team meetings were all well-advertised and the meeting postings encouraged and welcomed the public's participation.

WC EMC followed up by sending an email to each of the agencies/ organizations in the planning area that had been contacted by the Judge and thought to have a direct stake or interest in the MAP update process to encourage them to participate or be represented at the initial planning team meeting.

Each of the participating jurisdictions made an effort to elicit involvement on the planning team from the various groups within their jurisdiction and neighboring communities. Particular focus was placed on inviting participation by the local school districts and neighboring counties. Overall, the list of agencies / organizations thought to have a direct stake or interest in this MAP update process or that could somehow inform the planning process included:

Mitigation Action Team – Participating Jurisdictions

Mitigation Action Team Members		
	Agency and Position	**Potential Stake, Interest or Contribution**
Wood County	County Judge County Commissioners	County officials would have a stake in any mitigation actions undertaken by the County and would ultimately be responsible for recommending the update's adoption by the Commissioners' Court
	County Administrator's Office County Flood Plain *Administrator*	The FPA could inform the planning team on matters related to SFHAs in Wood County and have an interest in flood mitigation actions proposed for the County
	County Road & Bridge *Superintendent*	R&B could inform the planning team on the impacts of natural hazards on the County's road system and have input on the development of proposed mitigation actions
	Sheriff's Office County Sheriff	SO could inform the MAT on public safety issues related to natural hazards and have input on the development of proposed mitigation actions
	County Appraisal District *Chief Appraiser*	The Appraisal District could inform loss value determinations made by the planning team
	Office of Emergency Mgmt. *County EMC*	The OEM could provide mitigation ideas and presumably, would be charged with carrying a number of the mitigation actions out
	Hospital District *Hospital CEO*	The Department could both inform and have a direct interest in the MAP's mitigation measures, particularly those that apply to mass casualties.
City of Alba, Hawkins, Mineola, Quitman, Winnsboro, Yantis	Elected Officials *Mayor*	City Officials would have a stake in any mitigation actions undertaken by the City and would ultimately be responsible for recommending the update's adoption by the City Council
	City Administration *City Managers*	City Administration would have a stake in any mitigation actions undertaken by the City and would ultimately be responsible for recommending the update's adoption by the City Council
	Public Works *Public Works Director*	Could provide detail on how hazards and proposed mitigation actions could impact the City's utility systems

	Fire Department *Fire Chief*	The Department could both inform and have a direct interest in the planning team mitigation measures, particularly those that apply to wildfires
	Office of Emergency Mgmt. *EMC*	The OEM could provide mitigation ideas and presumably, would be charged with carrying a number of the mitigation actions out

Stakeholders		
	Agency and Position	**Potential Stake, Interest or Contribution**
Local Partners and Industry	Economic Development Corp. *EDC Executive Director*	The EDC resources could inform future economic development trends in the City
	Texas AgriLife Extension Wood County Extension Agent	AgriLife could inform some of the decisions that might impact area farmers/ranchers and help in promoting certain mitigation actions.
	Industry	Industry in the planning area would have a direct stake and interest in the outcome of this planning process
	THE PUBLIC	The residents of the planning area would have a direct stake and interest in the outcome of this planning process
	Neighboring Communities: Van Zandt, Smith, Upshur, Camp, Franklin, Hopkins & Rains County EMC's	Jurisdictions that border the planning area have an interest in the outcome of this planning process and could contribute to the development of hazard profiling.
Regional, State & Federal Partners	Shreveport Office of the National Weather Service (NWS) *Warning Coordinator Meteorologist*	The NWS could provide regionalized data with regard to past/forecasted weather trends that could inform the formation of mitigation actions
	Texas Forest Service (TFS) *Regional Fire Coord.*	TFS resources could inform the MAT's development of wildfire mitigation actions
	Parks and Wildlife Meredith Director	TFS resources could inform the MAT's development of wildfire mitigation actions
	Army Corps of Engineers (ACE) *SW Div.,Fort Worth, TX*	ACE resources could inform local flood control efforts with streambed/wetland data
	Texas State Data Center (TSDC) *On-line Resources*	TSDC resources could provide data to forecast future population growth in the Wood County Planning area
	Texas Water Development Board (TWDB) *On-line Resources*	TWDB resources could provide the Cities and County with severe repetitive loss data and inform actions focused on drought contingencies

In some form or fashion, all the participating jurisdictions/stakeholders listed above played a part in the MAP update process. State and federal agency participation was primarily obtained through the use of their websites. Information was gleaned from their sites to develop the hazard profiles found later in this document, to estimate future hazard impacts, for projecting future growth and development and for identifying potential actions that could be employed in mitigating the impacts of future hazard events in the planning area.

The MAT planning process was open throughout and with participation from the public in the meetings. The Household Natural/ Hazards Preparedness Survey and the attitudes and opinions reflected by the resident responses were considered as the mitigation actions in this MAP update were being developed. Each participant was able to enter their zip code to separate results by jurisdiction.

In following FEMA's Local Mitigation Planning Handbook suggestions, the individuals invited to participate on the MAT brought certain skill sets or experiences to the process that helped to ensure the overall relevance of the plan. The types of MAT member contributions included:

- Emergency managers/first responders – had direct experience with past hazard events and existing preparedness measures, and/or had a direct line of communication with the State emergency management agency.
- Local community planners – were able to assist the planning team in understanding current, and future community development trends, the policies or activities that affect development, and the relationship between hazards and development.
- Mapping specialists – were able to analyze and interpret map data to support the planning process and communicate complex information, such as the locations of assets at risk in threat- or hazard-prone areas and estimates of damage for a particular disaster scenario.
- Public works/engineering staff – were able to identify current or projected problems for the community's infrastructure that could be addressed through capital improvements supported by the mitigation plan.
- Elected and executive officials – were familiar with the total needs of their jurisdiction and were able to communicate how the mitigation plan could support other social, economic, or environmental goals locally.
- Floodplain administrators – were able to provide information on local flood hazard maps, floodplain ordinance and actions that could be undertaken to support the goals of the National Flood Insurance Program and help reduce flood losses.
- Code Enforcement Officials – were able to help the team understand how local codes can be used in support of the Wood County plan's mitigation

goals.

- State/Federal Partners – were able to serve as a data resource; providing the MAT with relevant statistics, historical account, etc. that could be used to inform the planning process.

The table below lists the current membership of the MAT and describes the contributions each member made with the development of this document.

Wood County Planning Team and Contributions		
TITLE	**JURISDICTION**	**CONTRIBUTION**
EMC/Planning Team Chairperson	Wood County Office of Emergency Mgmt.	*Emergency Manager*; coordinated the planning team meetings, obtained data to profile hazards, provided background on past mitigation actions in the planning area; identified potential mitigation actions
City Administrator	City of Mineola, Quitman & Winnsboro	*Executive official*; helped the MAT in discerning the "P" (political) element in the assessments of potential mitigation actions and with the development of mitigation actions
Mayor	City of Alba, Hawkins, Mineola, Quitman, Winnsboro & Yantis	*Executive official*; helped the MAT in quantifying the "L" (legal) element of the assessments and with the development of mitigation actions
Director Public Works	City of Alba, Hawkins, Mineola, Quitman, Winnsboro & Yantis	*Public works/engineering*; assisted the MAT in understanding some of the technical implications of proposed mitigation actions; particularly as they applied to key City infrastructure
Fire Chief	City of Alba, Hawkins, Mineola, Quitman, Winnsboro & Yantis	*First responder*; assisted with gathering wildfire data and identification of potential wildfire mitigation actions

Wood County Mitigation Action Team and Contributions		
TITLE	**JURISDICTION**	**CONTRIBUTION**
County Judge	Wood County	*Elected official*; assisted with the development of mitigation actions for the County and presented the MAP to the Commissioners' Court for adoption
Sheriff's Office	Wood County	*Law Enforcement*; familiarized the MAT with the County's law enforcement prevention activities and assisted with the development of mitigation actions
Chief Appraiser County Appraisal District	Wood County	The Appraiser could develop loss value determinations made by the MAT
Emergency Planner	North East Texas Public Health District	*Local community planner*, assisted the MAT Team leader with public communications; served as an interface with TDEM/FEMA as the MAP was being reviewed

Establishing an Open Public Process (A3)

As previously noted, the development of this plan followed the requirements set out by FEMA under 44 CFR §201.6. One of the foundational pieces of those requirements calls for the public to be given ample opportunity to observe, if not participate, in the planning process. §201.6(b)(1) required the County to provide, *"(1) An opportunity for the public to comment on the plan during the drafting stage and prior to plan approval;*".

To that end, meetings were scheduled to involve the public in the planning process and during plan development. These meetings were posted at the county courthouse at least 72 hours prior to the meeting. The following information is an excerpt from the invitation:

The Wood County Mitigation Action Team has scheduled a meeting on September 6, 2022, at 10:00AM, at the Wood County EMC office located at 213 West Bermuda Street, Quitman, TX 75783. The Wood County Hazard Mitigation Plan is being updated. When completed, it will serve as a guide for implementing mitigation strategies which are intended to help reduce the human, economic, and environmental costs of natural disasters. The public is invited to attend. For more information, please contact Tully Davidson, with the Wood County OEM, at (903) 569-7327.

The draft was made available for public comment in the Wood County EMC Office, 72 hours in advance of the governing bodies meetings. The final draft will be discussed in open session during those meetings, with a call for public comment, before the adopting resolutions are considered and passed.

NOTICE TO THE PUBLIC

These adoption meetings were preceded with a different Notice to the Public which generally read as follows:

NOTICE OF A PUBLIC HEARING ON THE ADOPTION OF THE WOOD COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN

Wood County Commissioners Court will conduct a public hearing before considering final adoption of the recently completed 2022 Wood County Hazard Mitigation Plan Update on (date), at (time), in the (meeting room) of the Wood County Courthouse located at the 100 S Main St., Ste 211, Quitman, TX 75783. This plan incorporates mitigation actions intended to minimize the impacts of certain natural hazards on the residents of the planning area.

A copy of the plan is now available for review in the Wood County Courthouse during normal business hours.

The meeting is open to the public and interested residents are encouraged to attend to offer feedback and comment.

Wood County posted the notice above for each of the plan participants in the County Courthouse giving their residents the date/time on which their governing body would consider the plan adoption along with a location at which the plan could be physically reviewed locally.

The Wood County Hazard Mitigation Plan will remain available to the public until it's replaced by the next 5-year update. The public will also be notified of and invited to the meetings when the planning team gathers to conduct its annual review of the MAP.

Existing Document Reviewed for Plan Development (A4)

Documents and Databases	
State of Texas Hazard Mitigation Plan	Texas Water Development Board
Wood County EOP 2017	Natural Disasters & Weather Extremes
Texas Association of Counties Profiles	FEMA Disaster Declarations
Texas A&M Forest Service Fire Reports	Texas Almanac
US Census American Fact Finder	National Drought Mitigation Center (NDMC)
NOAA Storm Event Database	Legacy
FEMA Flood Map Center	CoCoRaHS
StormerSite	Vaisala
Sabine River Authority	

Continued Public Participation Process (A5)

The planning team will conduct annual public mitigation action strategy update presentations during the 5 year period. Wood County will host a local workshop and invite the plan participants as well as the public residing in each of their jurisdictions. A press release will be issued to the Wood County Monitor. Annual meetings held locally will ensure public participation with the focus being on their own strategies. County and City residents will be given a forum to submit any additional identified areas of concern to possibly vet out action items in the future. Two years prior to the expiration; the mitigation team will convene to update the existing plan with actions gleaned from the local meetings.

The MAP will be available in the County Courthouse, which will allow the public to access the document during operational business hours. Wood County OEM will be responsible for ensuring the contact list stays current.

Monitoring (A6)

Wood County and plan participants will be responsible for evaluating the plan annually for updates to jurisdictional goals, objectives, and action items. If needed, these participants will coordinate through the planning team Chairperson, Wood County EMC, to integrate these updates into the Plan. A record of those changes will be maintained in the plan. The planning team Chairman will be responsible for monitoring the overall plan for updates on an annual basis.

Monitoring and evaluation involves the ongoing process of compiling information on the outcomes from the implementation of the hazard mitigation objectives. The goal is to determine whether the planning area's vulnerability has decreased as a result of the plan. When vulnerability has decreased as a result of identified mitigation actions, the plan participants will determine why and will implement successful mitigation actions in other locations. Where vulnerability has increased, or remained constant, the plan participants will identify if other potential mitigation strategies may be more successful.

Method and Schedule for Keeping Plan Current

Method and Schedule for Keeping Plan Current			
	How	**When**	**By Whom**
Monitoring/Evaluate	The plan and action items will be evaluated on an annual basis to determine effectiveness of the programs. **Element A**: Continue to recruit members for the mitigation team members. Evaluate public satisfaction with the outreach method and level of input they were allowed to provide through an annual survey. **Element B**: Participants will provide any new development of hazard history that may impact changes in priorities. Monitor new information from the NWS and TFS Wildfire Risk for new maps and history. Monitor new versions of CHAMPS for new data. **Element C:** Existing strategies will be evaluated and priorities adjusted based on hazard history. Lead agency/departments will continually monitor action items as they are implemented. Through the Mitigation Action Item Monitoring Form, they will inform the planning team of the status of the action and target completion date. **Element D:** Monitor the status for existing strategies. Identify how the plan was utilized to recognize new projects or to re- prioritize existing strategies. As development changes occur they will be incorporated in to the plan and strategies can be adjusted according to the increase or decrease in growth. Review of the overall goals and using the scoring criteria – will provide clear measurement of the actions.	Quarterly updates and upon completion	Responsible Departments identified for each action for each jurisdiction. Participating Jurisdictions, Responsible Departments, MAT Members

Update	The planning team will update this plan every 5 years. However, through the annual evaluation, each participating jurisdiction will provide any changes to the existing plan to the planning team Chairmen. Two years prior to the expiration, all participating jurisdictions will begin the formal update process. The Formal process will begin with a county-wide meeting which will include all participating jurisdictions. Tasks will be established for each jurisdiction: 1) to review prior mitigation action items and 2) document hazards that have occurred in the last several years. Each participating jurisdiction will hold "jurisdictional" meetings to solicit feedback from the public during this process. Surveys will be extended to the entire county to determine changes in mitigation planning at the resident level. This process will culminate in the several meetings to review the information gleaned and to formally update plan. Plan will be submitted to the State for review and to FEMA for approval.	Every 5 years	Participating Jurisdictions, Responsible Departments, Planning Team Members

The planning team will conduct an annual meeting intended for all plan participants for the purpose of monitoring and evaluating the progress being made in fulfilling the MAP's goals, objectives, and Mitigation Actions. The objectives of the annual planning team review will be:

- to identify mitigation activities that are in progress, have been deferred or been completed;
- to assess whether the MAP's current mitigations goals and objectives continue to address existing (at the time of the review) and expected conditions;
- to determine whether or not the nature and/or magnitude of each plan participant's risks have changed; and
- to determine, by plan participant, if resources are available and appropriate for implementing prioritized actions in the coming year.

Any changes made during the annual review process(es) will be noted on the Record of Changes found page 2 of this document. As part of the monitoring of the mitigation actions, responsible parties will be provided the form below to update the planning team on the progress of strategies that have been implemented.

Sample Mitigation Action Item Monitor Form

Mitigation Action Item Monitoring Form (Sample)	
Date Submitted	**Dept. Responsible**
Mitigation Action	**Installation of Additional Early Warning Sirens**
Objectives	Provide early warning sirens to warn citizens of approaching weather dangers.
Target	Erect 2 multidirectional sirens within the city limits
Progress	1 multidirectional siren has been erected and tested in SW Main at the corner of Goode St and Main. The second siren is delayed due to a lack of funding source

Element B – Hazard Identification and Risk Assessment

The purpose of hazard mitigation is to reduce potential losses from future natural disasters. The intent of mitigation planning, therefore, is to maintain a process that leads to hazard mitigation actions. This mitigation plan will identify only natural hazards that impact our community and identify actions to reduce losses from those hazards and establish a coordinated process to implement the plan.

Throughout the plan, each hazard addressed will be considered in light of its history, likelihood of future events, extent, jurisdictional vulnerability, location and impact. **Likelihood of Future Events** is measured based on a hazard's expected frequency of occurrence in light of its previous frequency. Each hazard's likelihood of future events will be considered using the following standardized parameters:

- **Highly likely** – event probable in the next year
- **Likely** – event probable in the next three years
- **Occasional** – event possible in the next five years
- **Unlikely** – event possible in the next 10 years

Given this plan's five-year duration, hazards likely to occur during that period will be given priority when selecting and prioritizing mitigation actions.

Hazards Analysis

Early in the update process, the committee completed an analysis of the plan and decided that much of the contents on hazard analysis remained relevant. As with the original plan, the committee for this update found the following natural hazards continue to be present and could have an effect to the planning area.

Natural Hazards		
Flood	Tornado	Winter Storm/Ice Storm
Drought	Wildfire	
Thunderstorm/Lightning/Hail	Windstorms	

The mitigation team studied the entire list of possible natural hazards that could affect the jurisdiction and found that while some hazards could be considered, historical data did not support the need to include the following hazards. Data of the following hazards found that the possibility of a future event would have less than a 1.5% chance of occurring in the next 65 years, therefore, the risk is negligible, or that history has never recorded any such event for the jurisdiction and the event is not likely to occur in the next 5 years.

- Earthquake-1.5% chance of occurring in next 65 years.
- Extreme Heat
- Hurricanes/Tropical Storms
- Coastal Erosion
- Expansive Soils
- Dam Failure

- Land subsidence

Some of these hazards are interconnected (e.g., lightning striking transformers starting wildfires) while some hazards could be characterized as elements of a broader hazard agent. For example, hail and severe winds can be produced by thunderstorms and they may all occur during a single thunderstorm event. It should also be noted that some hazards, such as severe winter storms, may impact a large area and cause little damage, while other hazards, such as a tornadoes, may impact a small area but cause extensive damage.

Four categories were developed to define the impact (magnitude or severity) of each hazard:

Substantial
- Multiple deaths;
- Complete shutdown of facilities for 30 days or more;
- More than 50% of property destroyed or with major damage.

Major
- Injuries result in permanent disability;
- Complete shutdown of critical facilities for at least two weeks;
- More than 25% of property destroyed or with major damage.

Minor
- Injuries do not result in permanent disability ;
- Complete shutdown of facilities for more than one week;
- More than 10% of property destroyed or with major damage.

Limited
- Injuries treatable with first aid;
- Minor quality of life lost;
- Shutdown of critical facilities and services for 24 hours or less;
- Less than 10% of property destroyed or with major damage.

FLOOD

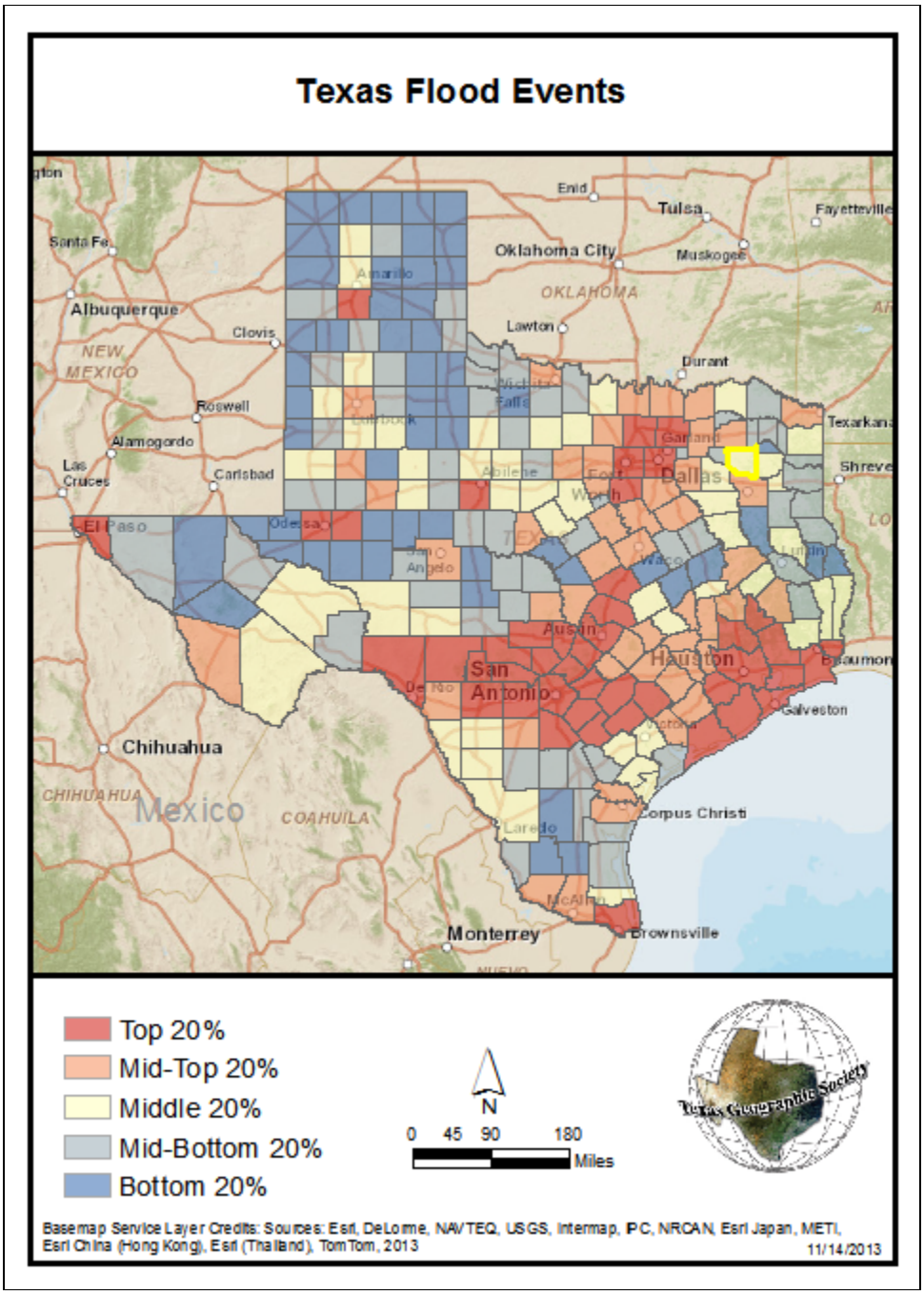
Description

Flooding is the most frequent and costly natural hazard in the United States, causing more than 10,000 deaths in the past century. Historically, nearly 90% of presidential disaster declarations have resulted from floods. Floods are generally caused by excessive precipitation, and can be broadly classified as general or flash floods. General floods are defined as precipitation over a given river basin, while flash floods are the product of heavy, localized precipitation falling in a short time period. The severity of a flood event is determined by a combination of stream and river basin topography and physiographic; precipitation and weather patterns; recent soil moisture conditions; and the degree of vegetative clearing.

Location

The maps provided above shows areas in Wood County that have a one-percent or greater likelihood of flooding in any given year (the 1% annual flood risk zones). Streams and watershed boundaries are also shown. Normally after receiving 1 inch or more of rain County Road 2100 Alba, Texas floods over.

The map below displays the number of flood events between 1960 and 2010 for all Texas counties. Wood is ranked in the Middle 20% of Texas counties, based on the 18 flood events that have been reported over the period.



The table below includes a list of up to twenty of the most significant flood events in Wood that occurred between 1960 and 2010. These are listed in order of the reported property damage (adjusted to 2012 dollars).

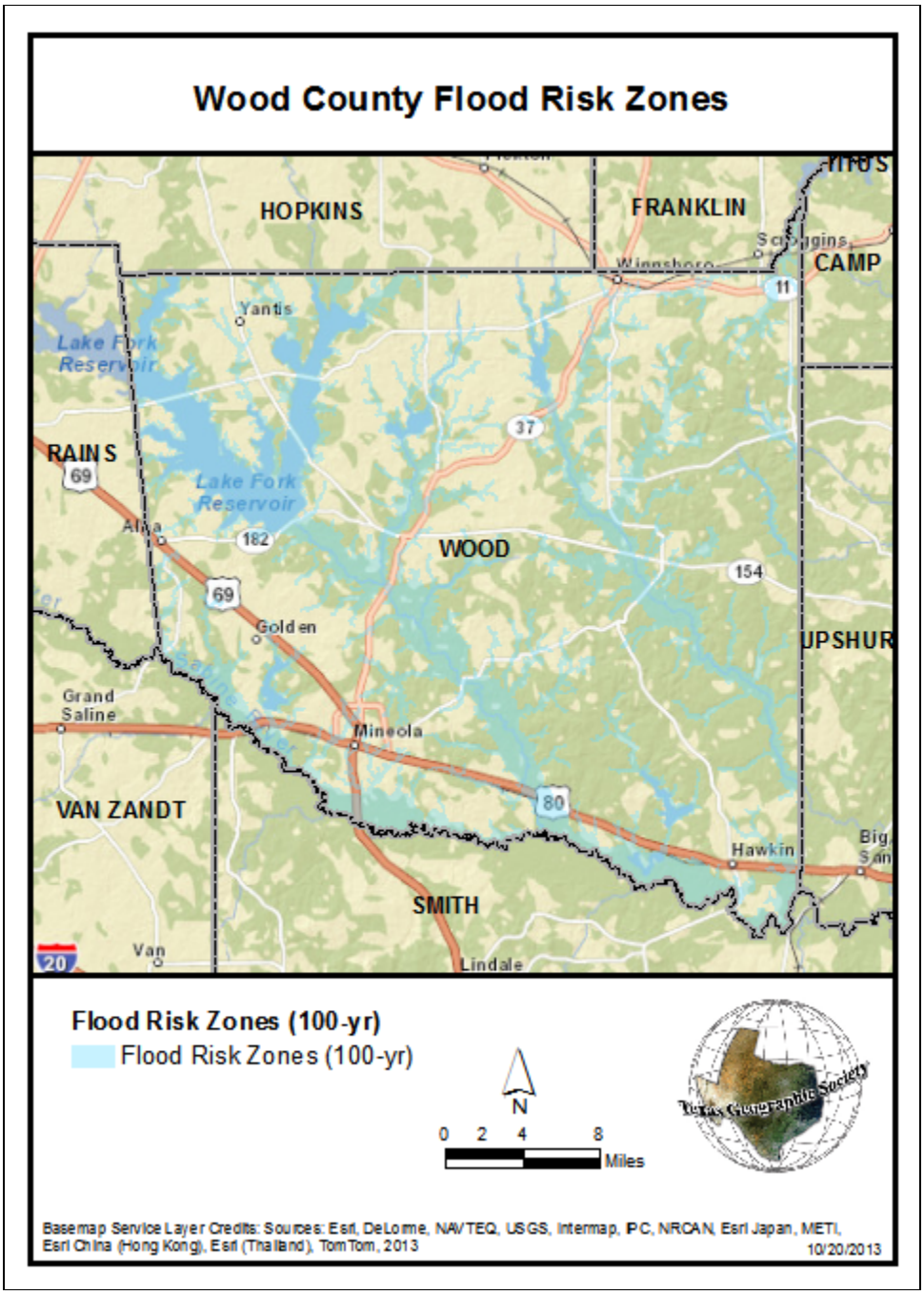
Flood Events Table

Wood County Top Flood Events Table				
Date	Fatalities	Injuries	Property Damage (2012 Dollars)	Crop Damage (2012 Dollars)
4/22/1966	0	0	$636,364	$63,636
2/14/2001	0	0	$172,407	$0
10/13/2009	0	0	$107,143	$0
5/4/1990	0	0	$75,431	$0
5/2/2009	0	0	$64,286	$0
2/16/2001	0	0	$15,556	$0
5/8/1995	0	0	$15,000	$0
5/3/2009	0	0	$10,714	$0
10/20/1983	0	0	$9,839	$0
5/1/1990	0	0	$7,543	$0
2/1/1992	0	0	$7,072	$0
4/21/1974	0	0	$4,227	$0
3/1/1970	0	0	$3,692	$0
9/14/2009	0	0	$2,143	$0
7/7/1997	0	0	$1,419	$0
1/4/1993	0	0	$133	$0
6/4/1985	0	0	$0	$0
9/14/2009	1	0	$0	$0
				11/14/2013

***Source**: This table was produced from data collected from several national sources, but primarily from NOAA's National Climatic Data Center (NCDC). The data used here is compiled and distributed by the Hazards and Vulnerability Research Institute [SHELDUS dataset v.9], University of South Carolina.*

Wood County Flood Frequency & Historical Losses				
NUMBER OF EVENTS	**FATALITIES**	**INJURIES**	**FREQUENCY: RETURN PERIOD (YRS)**	**FREQUENCY: ANNUAL CHANCE (%)**
18	1	0	2.94	34
PROPERTY DAMAGE	**CROP DAMAGE**	**PROPERTY DAMAGE (ADJUSTED 2012)**	**CROP DAMAGE (ADJUSTED 2012)**	**ANNUALIZED DAMAGE (2012 DOLLARS)**
$476,584	$9,091	$1,132,969	$63,636	$22,577
				11/2/2013

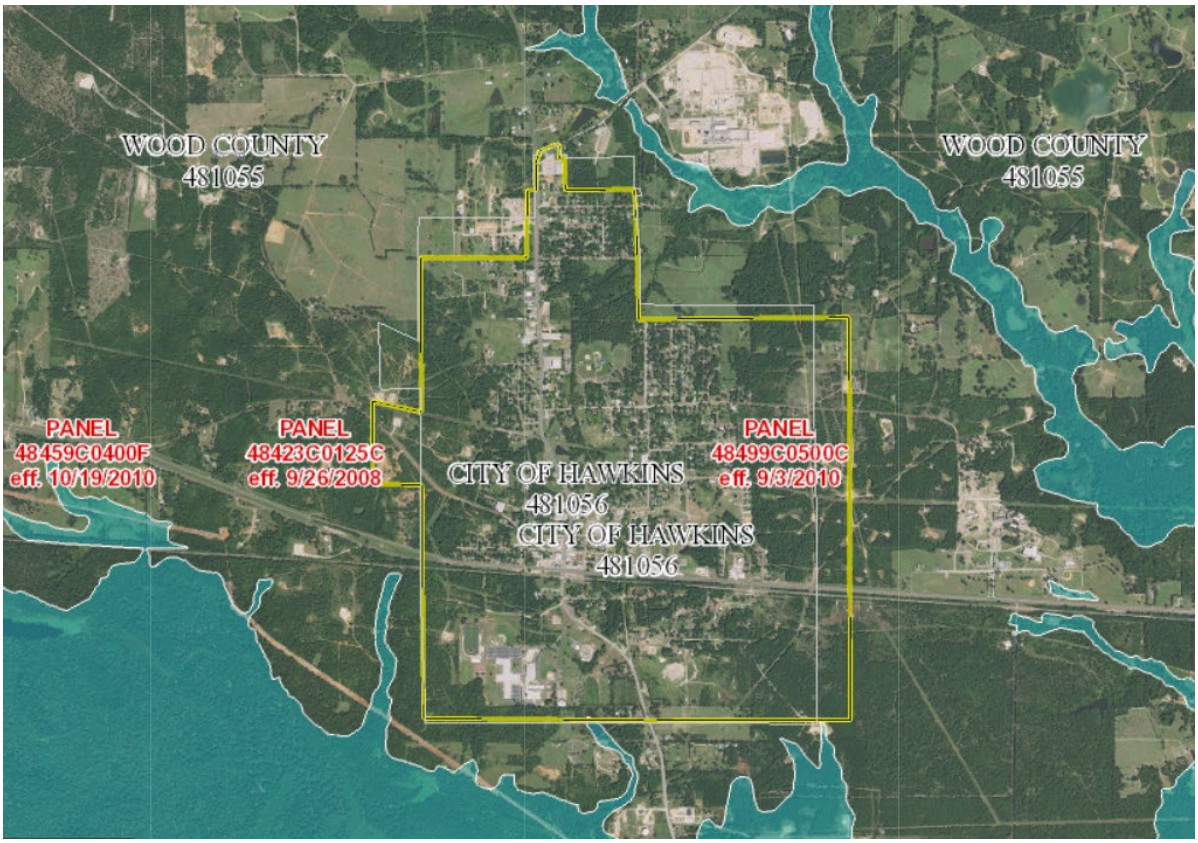
Source: *This table was produced from data collected from several national sources, but primarily from NOAA's National Climatic Data Center (NCDC). The data used here is compiled and distributed by the Hazards and Vulnerability Research Institute [SHELDUS dataset v.9], University of South Carolina*



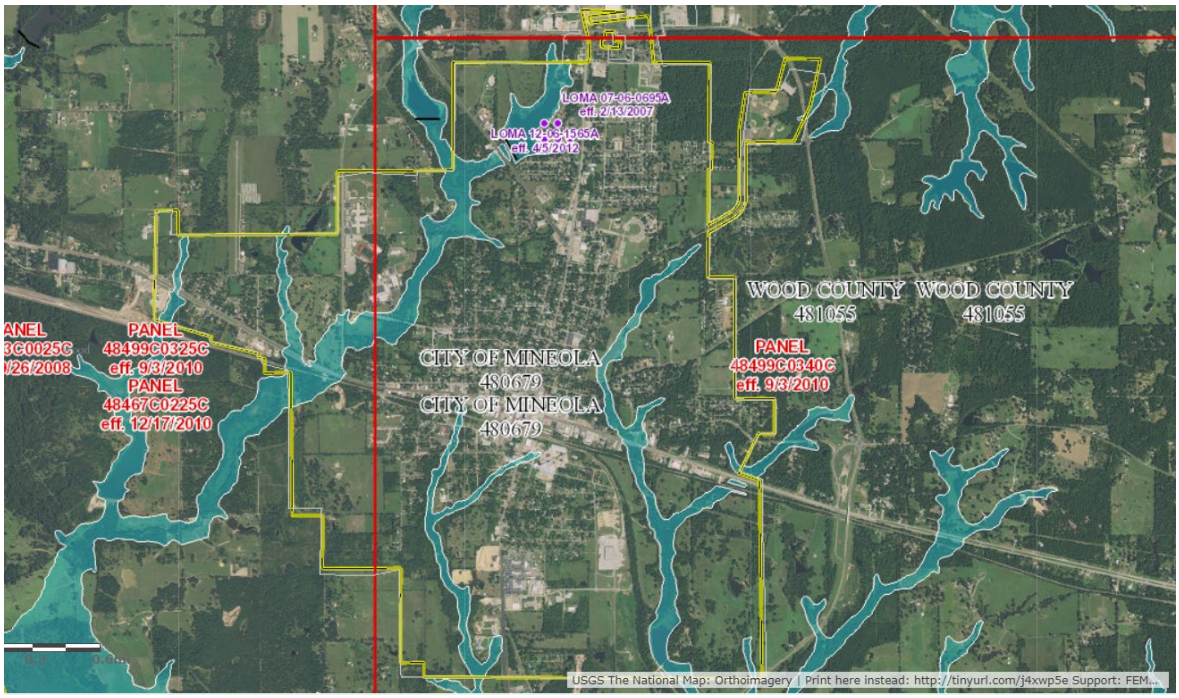
Source: *Flood risk zones delineated on this map were produced by FEMA as Q3 Data.*

CITY OF ALBA

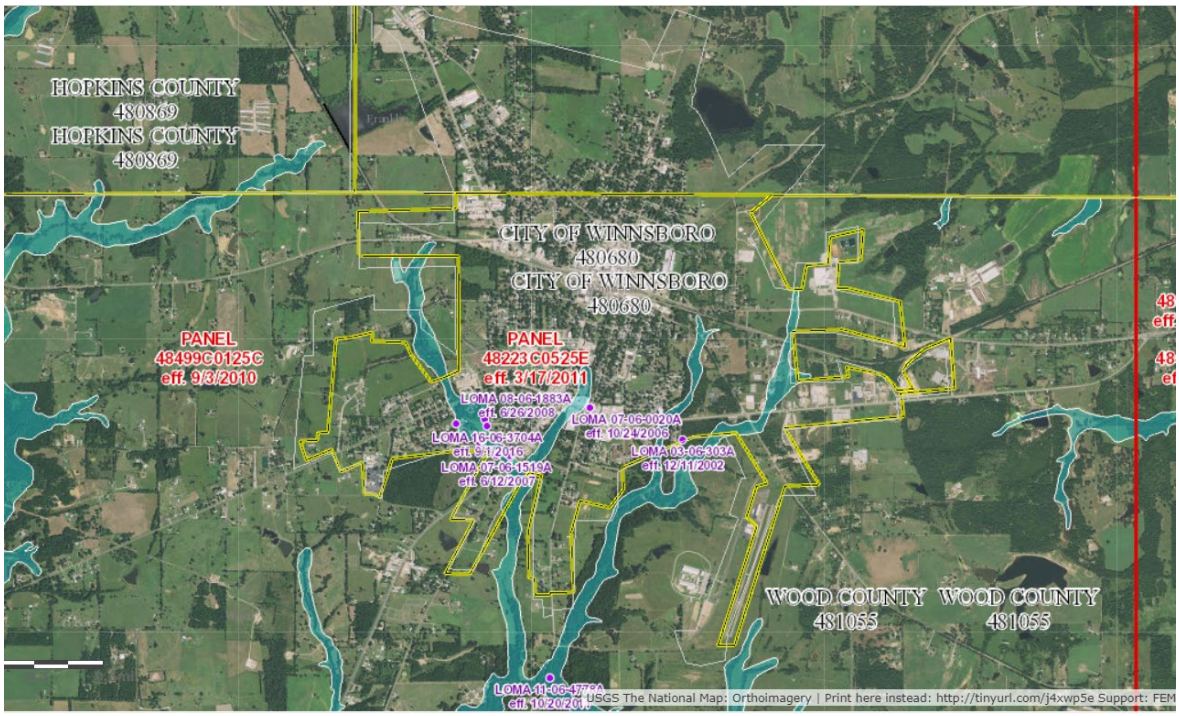
CITY OF HAWKINS



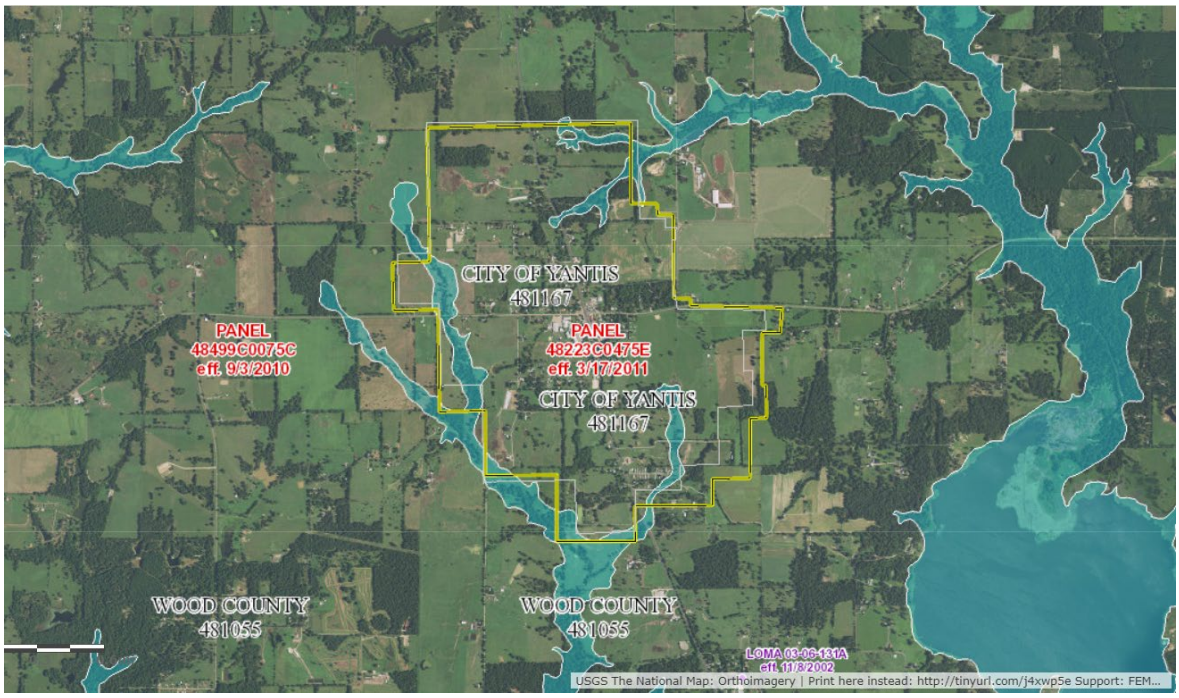
CITY OF MINEOLA



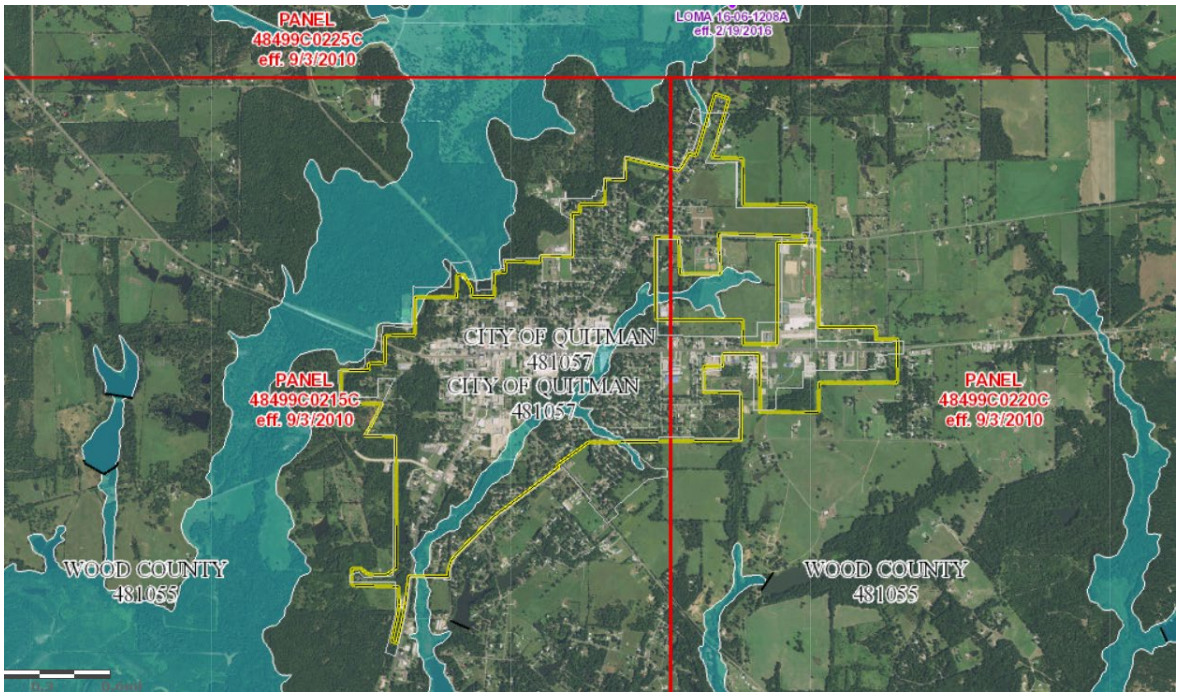
CITY OF WINNSBORO



CITY OF YANTIS



CITY OF QUITMAN



Source: FEMA's National Flood Hazard Layer Map (Official)
https://fema.maps.arcgis.com/home/webmap/viewer.html?webmap=cbe088e7c8704464aa0fc34eb99e7f30

3) Extent

Throughout Wood County and the participating jurisdictions, the worst flood events have been associated with major riverine flooding. The National Weather Service (NWS) has produced flood scenarios5 that identify infrastructure vulnerable to flooding as local rivers and creeks enter the flood stage. The primary source of flooding, the Guadalupe River, enters the flood stage at 31', the moderate flood stage at 37', and the major flood stage at 43'.

The worst flooding events in Wood County and the participating jurisdictions have inflicted as high as $636,364 in property damages. Crop damages during the worst flooding in Wood County and the participating jurisdictions have been as high as $63,636 with a combined total of $700,000. The worst flood events in Wood County and the participating jurisdictions have caused one (1) fatality and no injuries. The worst flooding throughout the County and the participating jurisdictions occurred when 20 to 26 inches of rain fell in portions of Wood, Smith, Morris, Upshur, Gregg, Marion and Harrison counties. Nineteen persons drowned in the rampaging rivers and creeks that swept away bridges, roads and dams, and caused estimated $12 million damage with only one person in Wood County amongst the 19 drowned.

According the Wood County's NFIP Participation, no elevation is determined. Therefore Wood County can expect to fall in the Below Flood Stage category and receive up to 15 ft of water.

SEVERITY	DEPTH (in feet)	DESCRIPTION
BELOW FLOOD STAGE	0 to 15	Water begins to exceed low sections of banks and the lowest sections of the floodplain.
ACTION STAGE	16 to 23	Flow is well into the floodplain, minor lowland flooding reaches low areas of the floodplain. Livestock should be moved from low lying areas.
FLOOD STAGE	24 to 28	Homes are threatened and properties downstream of river flows or in low lying areas begin to flood.
MODERATE FLOOD STAGE	29 to 32	At this stage the lowest homes downstream flood. Roads and bridges in the floodplain flood severely and are dangerous to motorists.

MAJOR FLOOD STAGE	33 and above	Major flooding approaches homes in the floodplain. Primary and secondary roads and bridges are severely flooded and very dangerous. Major flooding extends well into the floodplain, destroying property, equipment, and livestock.

Probability

In the case of the FEMA 100-year floodplain, there's a 1% annual chance, and in the 500-year floodplain it's a 0.02% annual chance. The likelihood of a 100-year flood event is therefore occasional. The likelihood of a 500-year flood event is therefore unlikely.

However, based on the frequency of previous flood events, every jurisdiction can expect to experience some type of flooding that may or may not meet the definition of a 100-year or 500-year event on a more regular basis.

In the Cities of Alba, Mineola, Hawkins, Quitman, Winnsboro, and Yantis, previous flood history indicates that a future flood event is unlikely.

Historical patterns are assumed to be a dominant factor in determining future flood events. Based upon the historical instances of flood events that have occurred in the area during the last 52 years, the annual probability of occurrence for these events was estimated as follows.

Since 1966, multiple flood events occurred in the planning area in 52 years. Based on this data, the planning team estimates the probability for multiple floods in any given year to be over 34%. The probability of flooding in Wood County is occasional.

Probability of Future Events	Years in Record Span 1966-2017	No. of Events in the Span	Computation	Future Probability of 1 or more events year
Planning Area	52	18	(18/52) * 100=	34%
All other jurisdictions within the planning area can be equally affected. The probability of future occurrence can be anticipated to impact all jurisdictions significantly at once every year.				

Impact

The impact of a FEMA 100-year flood event will vary depending on the specific location, size of the affected area, and number of structures affected. Parts of the community may temporarily lose power due to downed power lines. Motorists and residents may be left stranded and needing rescue. Affected structures may be flooded, damaged by flood borne contaminants, damaged by debris flow, or even completely washed away. Estimated damage totals to vulnerable parcels affected during a 100-year flood event may meet or exceed the totals outlined in the Flood Events Table above.

Despite the unlikely probability of a so-called 500-year flood, 0.02% in any given year, the danger isn't negligible. Moreover, the relatively limited information on the 500-year flood zone should not be interpreted to mean that a 500-year flood will only occur in the areas depicted in the 500-year flood zone. Parts of the community may temporarily lose power due to downed power lines. Motorists and residents may be left stranded and needing rescue. Affected structures may be flooded, damaged by flood borne contaminants, damaged by debris flow, or even completely washed away. A 500-year flood event is expected to affect a larger area and more structures than a 100-year flood. Estimated damage totals to vulnerable parcels affected during a 500-year flood event may meet or exceed the totals outlined in the Flood Events Table above.

The planning team analyzed storm history events as reported by the National Climatic Data Center and used information from personal past experience to profile flooding, and determined that the potential severity of impact for flash flooding is limited.

Jurisdiction	Vulnerabilities
Unincorporated Area Wood County	• Critical county facilities to include County Courthouse, Sheriff's Office, County Jail. • Power lines, transformers, transformer banks and power stations. • County Radio tower, communications system. • Impassable county roads due to flooding. • Stranded motorists. • All remaining critical facilities. Electrical outages.
Cities of Alba, Mineola, Hawkins, Quitman, Winnsboro, and Yantis	• Critical facilities; city hall, library, fire department, designated shelter facilities, electrical outages. • Power lines, transmission lines, transformers, transformer bank • U.S Highway 80 - possible road closures; runs through Mineola and Hawkins

Previous Occurrences

The table below summarizes the flood events recorded for the planning area between the years 1966 and 2022. During that 52-year span, the planning area witnessed more than 18 separate flood events. Only county level information is available however, flood events do not consider boundary lines therefore the entire planning area is equally susceptible and county data can be used to reflect city possible impacts.

Flood Highlights for the Planning Area: 1966 - 2022

Report Year	No. of Events	Prevalent Impact
1966	1	$636,364 in property damage; $63,636 in crop damage
1970	1	$3,692 in property damage
1974	1	$4,227 in property damage
1983	1	$9,839 in property damage
1985	1	$0 in damage
1990	2	$82,974 in property damage
1992	1	$7,072 in property damage
1993	1	$133 in property damage
1995	1	$15,000 in property damage
1997	1	$1,419 in property damage
2001	2	$187,963 in property damage
2009	5	$184,286 in property damage

NFIP Insured Structures and Severe Repetitive Loss (B4):

Through the Severe Repetitive Loss (SRL) Grant Program FEMA provides federal funding to assist to states and communities in implementing mitigation measures to reduce or eliminate the long- term risk of flood damage to severe repetitive loss residential structures insured under the National Flood Insurance Program (NFIP). The TWDB administers the SRL grant program for the State of Texas.

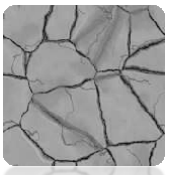
Severe Repetitive Loss properties are defined as residential properties that are:

a) covered under the NFIP and have at least four (4) flood related damage claim payments (building and contents) over $5,000.00 each, and the cumulative amount of such claims payments exceed $20,000; or

b) for which at least two (2) separate claim payments (building payments only) have been made with the cumulative amount of the building portion of such claims exceeding the market value of the building.

According to the NFIP, between 1966 and 2022, there have been a total of 0 flood damage claims and no history or repetitive loss properties in the planning area.

DROUGHT



Description

A **Drought** is, "*a period of unusually dry weather that persists long enough to cause environmental or economic problems, such as crop damage and water supply shortages."* Extreme weather such as heat waves, heavy downpours and droughts are expected to accompanying climate change.

Drought is a frequent hazard encountered in Wood County, damaging the local economy through destruction of agricultural products. The standard severities of impact categories do not accurately measure the impact of drought on a rural economy.

Droughts are frequently classified as one of following four types:
Meteorological – Drought defined by the level of "dryness" when compared to an average, or normal amount of precipitation over a given period of time.
Agricultural - Agricultural droughts relate common characteristics of drought to their specific agricultural-related impacts. Emphasis tends to be placed on factors such as soil water deficits, water needs based on differing stages of crop development, and water reservoir levels.

Anticipating the range of future droughts that could impact the entire planning are, the planning team then considered the effects those events might have. The table below describes the impacts the various stages of drought could potentially have on the planning area.

Drought Severity Classification

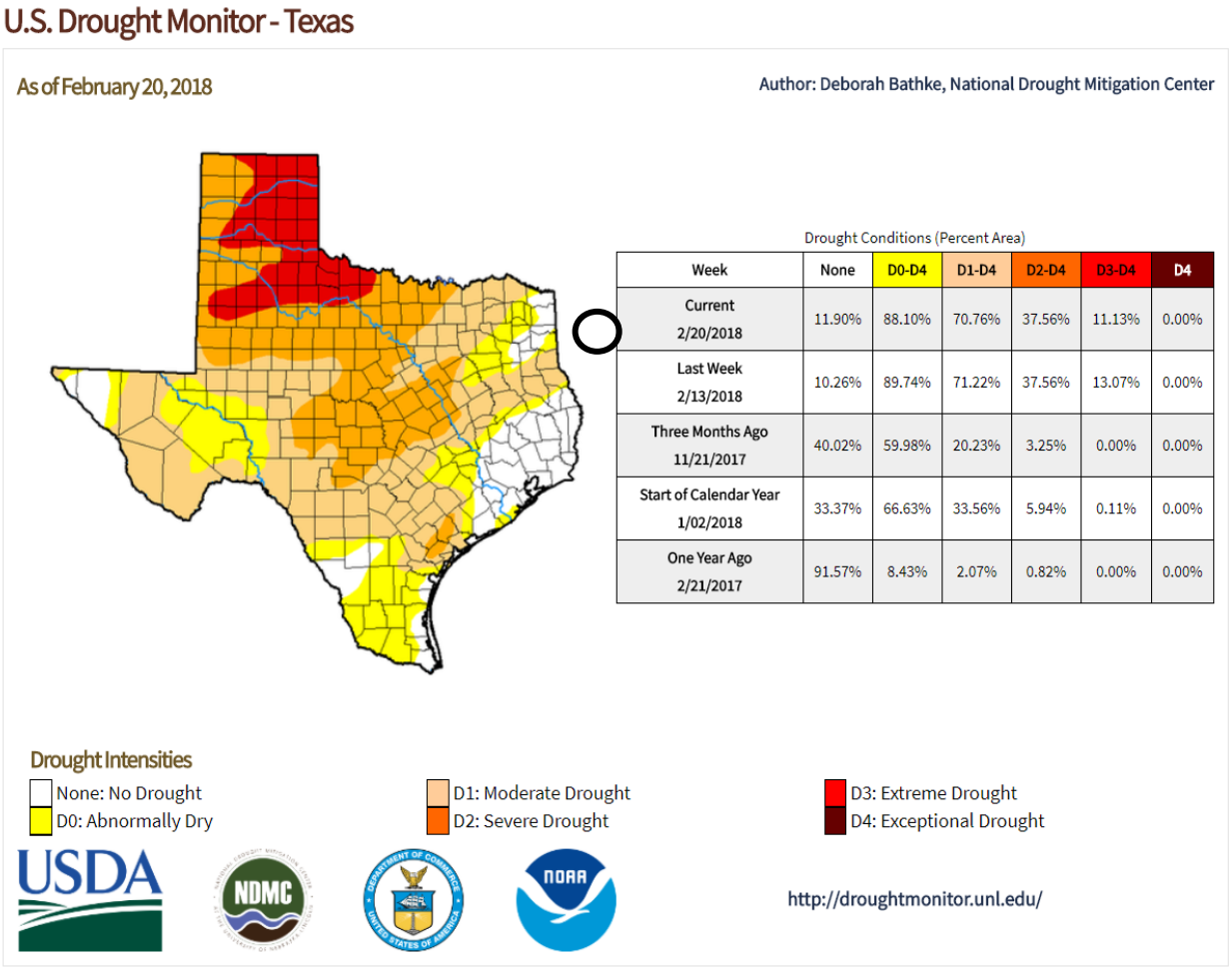
Drought Severity	Return Period (years)	Description of Possible Impacts	Drought Monitoring Indices		
			Standardized Precipitation Index (SPI)	NDMC* Drought Category	Palmer Drought Index
Minor Drought	3 to 4	Going into drought; short-term dryness slowing growth of crops or pastures; fire risk above average. Coming out of drought; some lingering water deficits; pastures or crops not fully recovered.	-0.5 to -0.7	D0	-1.0 to -1.9
Moderate Drought	5 to 9	Some damage to crops or pastures; fire risk high; streams, reservoirs, or wells low, some water shortages developing or imminent, voluntary water use restrictions requested.	-0.8 to -1.2	D1	-2.0 to -2.9
Severe Drought	10 to 17	Crop or pasture losses likely; fire risk very high; water shortages common; water restrictions imposed.	-1.3 to -1.5	D2	-3.0 to -3.9
Extreme Drought	18 to 43	Major crop and pasture losses; extreme fire danger; widespread water shortages or restrictions.	-1.6 to -1.9	D3	-4.0 to -4.9
Exceptional Drought	44+	Exceptional and widespread crop and pasture losses; exceptional fire risk; shortages of water in reservoirs, streams, and wells creating water emergencies.	less than -2	D4	-5.0 or less

*NDMC - National Drought Mitigation Center

Location

The graphic below depicts drought conditions comparison across Texas. Wood County has been experiencing drought conditions with a rating of D0. At the current path, Wood County could be at the D4 level by summer of 2022.
Drought conditions can affect the entire planning area equally.

See graphic below for Wood County and plan participant's drought conditions.



Extent and Previous Occurrences

Wood County and the plan participants can expect to see drought conditions up to a rating of D4. In the past, only three (3) events have been recorded for Wood County and the plan participants.

See table below for more information on those events. The table pictured below only shows events up to 2013. Based on empirical data from the planning team and the public, additional events have occurred and are expanded upon in the Impacts portion of this hazard.

Wood County Top Drought Events Table				
Date	Fatalities	Injuries	Property Damage (2012 Dollars)	Crop Damage (2012 Dollars)
10/1/1975	0	0	$1,810	$1,810,345
5/1/1996	0	0	$0	$324,074
6/1/1998	0	0	$0	$10,000,000
				11/14/2013

Probability of Future Events

Historical patterns are assumed to be a dominant factor in determining future drought events. Probability estimates will be 0.07%%.

Years in the Record Span 1975-2022	No. of times in the Span in which the Event occurred	Computation	Future Probability of 1 or more events per Year
43	3	(3/43) * 100 =	0.07%

Impacts

Drought has been a hazard that East Texas has become familiar with. Droughts are one of the most complex natural hazards to identify because it is difficult to determine their precise beginning or end. In addition, droughts can lead to other hazards such as extreme heat and wildfires. Their impact on wildlife and area farming is enormous, often killing crops, grazing land, edible plants and even in severe cases, trees. A secondary hazard to drought is wildfire because dying vegetation serves as a prime ignition source. Therefore, a heat wave combined with a drought is a very dangerous situation. Below is a list of impacts Wood County has experienced based off drought conditions in the past 7 years.

- Pastures and hay meadows in East Texas were going dormant
- The shortage of hay in East Texas and persistent drought has kept hay prices steady
- East Texas trees stressed by drought
- Grass regrowth poor in East Texas

- 90-day burn bans in August 2015
- Livestock receiving supplemental feed in East Texas
- Cattle thefts continued in Texas 2011-2014

Jurisdiction	Vulnerabilities & Impact
Unincorporated Area	• All residents/homes/property are vulnerable to the secondary impacts of drought which is wildfire. In extreme drought conditions grass land is more susceptible to catch on fire from sparks from railcars, cigarette butts and transformer malfunctions with little to limited structures to stop the spread. • Crops & Agricultural accounts/economy: crop damage is likely to occur in the event of a drought. Decreased cattle profits due to increased supplemental feed due to loss of grasses.
City of Alba, Hawkins, Mineola, Quitman, Winnsboro, and Yantis	• Vegetation – Landscape/lawn/garden: Around city hall and the parks. • Damage landscape and lawns to residential homes. • Landscape: is vulnerable to dry conditions and lack of water. The impact of drought is increased water use to maintain the existing landscape. • Experience water shortage due to wells in the country. Farmers increase their water usage, thus shortage in the aquifer.

THUNDERSTORM

Description

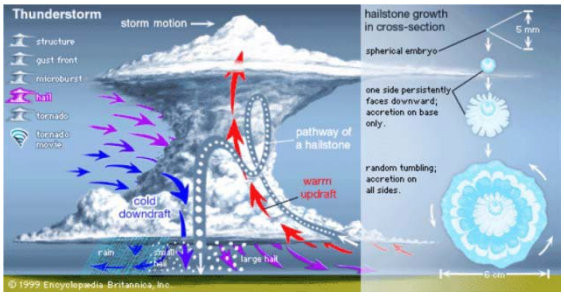
Thunderstorms may occur year round; however, the peak season is in the spring of each year, is expected to occur at least once a year, and can occur anywhere in Wood County and the Cities in the planning area. They occur most often between the hours of noon and 10:00 PM. Thunderstorms are associated with lightning and hail. There is not a separate record of lightning and hail for Wood County; however, about 80% of the severe thunderstorms that occur in Wood County include lightning and hail. Additional events associated with severe thunderstorms are tornadoes, flood, and high wind, which are profiled separately.

Hail is a form of solid precipitation. It consists of balls or irregular lumps of ice, each of which is called a hailstone. A **Hailstorm** is, "*any storm that produces hailstones that reach the ground*." Hail is produced by ice crystals that form in a low pressure front due to the rapid rising of warm air into the upper atmosphere and subsequent cooling of the air mass. Hail usually falls as shaped masses of ice greater than 0.25 inches in diameter. The size of the hail can be directly correlated with the size of the thunderstorm.

Lightning events are generated by atmospheric imbalance and turbulence due to the combination of the following conditions: unstable warm air rising rapidly into the atmosphere; sufficient moisture to form clouds and rain; and upward lift of air currents caused by colliding cold and warm weather fronts, sea breezes or mountains. Lightning is generated by the buildup of charged ions in a thundercloud, and the discharge of a lightning bolt interacts with the best conducting object or surface on the ground. The air channel of a lightning strike reaches temperatures higher than 50,000 degrees Fahrenheit.

Dry lightning is lightning that occurs without rain nearby. The NOAA Storm Prediction Center routinely forecasts dry lightning because this kind is more likely to cause wildfires.

Hailstorms are an outgrowth of severe thunderstorms. People outdoors would be the most likely victims during a hailstorm, but the biggest threat would come from large hailstones and damage they would cause to property.



The table below provides definition to the various sizes or categories of hail and the potential damage that can be caused by hail of that size.

NWS/TORRO Hail Scale

Combined NOAA/TORRO Hailstorm Intensity Scales				
Size Code	**Intensity Category**	**Typical Hail Diameter (inches)**	**Approximate Size**	**Typical Damage Impacts**
H0	Hard Hail	up to 0.33	Pea	No damage
H1	Potentially Damaging	0.33-0.60	Marble or Mothball	Slight damage to plants, crops
H2	Potentially Damaging	0.60-0.80	Dime or grape	Significant damage to fruit, crops, vegetation
H3	Severe	0.80-1.20	Nickel to Quarter	Severe damage to fruit and crops, damage to glass and plastic structures, paint and wood scored
H4	Severe	1.2-1.6	Half Dollar to Ping Pong Ball	Widespread glass damage, vehicle bodywork damage
H5	Destructive	1.6-2.0	Silver dollar to Golf Ball	Wholesale destruction of glass, damage to tiled roofs, significant risk of injuries
H6	Destructive	2.0-2.4	Lime or Egg	Aircraft bodywork dented, brick walls pitted
H7	Very destructive	2.4-3.0	Tennis ball	Severe roof damage, risk of serious injuries
H8	Very destructive	3.0-3.5	Baseball to Orange	Severe damage to aircraft bodywork
H9	Super Hailstorms	3.5-4.0	Grapefruit	Extensive structural damage. Risk of severe or even fatal injuries to persons caught in the open
H10	Super Hailstorms	4+	Softball and up	Extensive structural damage. Risk of severe/fatal injuries to persons in the open

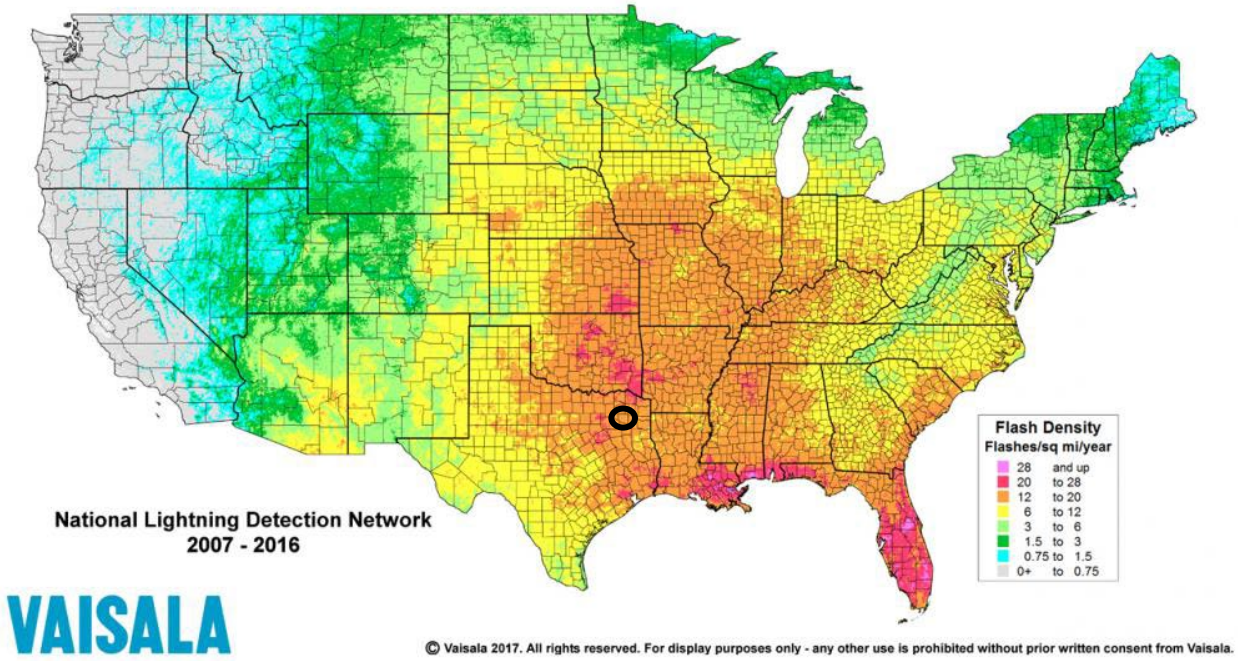
Source: www.noaa.gov and www.torro.org

Extent

Lightning affects the entire county and can occur anywhere. Based on the frequency of lightning in the planning area, it falls under a scale of LAL4 in the Lightning Activity Level scale, meaning it is anticipated to experience 11-15 cloud to ground strikes in a 5 minute period.

Lightning Activity Level (LAL)
Is a scale which describes lightning activity. Values are labeled 1-6:

LAL 1	No thunderstorms
LAL 2	Isolated thunderstorms. Light rain will occasionally reach the ground. Lightning is very infrequent, 1 to 5 cloud to ground strikes in a five minute period.
LAL 3	Widely scattered thunderstorms. Light to moderate rain will reach the ground. Lightning is infrequent, 6 to 10 cloud to ground strikes in a 5 minute period.
LAL 4	Scattered thunderstorms. Moderate rain is commonly produced Lightning is frequent, 11 to 15 cloud to ground strikes in a 5 minute period.
LAL 5	Numerous thunderstorms. Rainfall is moderate to heavy. Lightning is frequent and intense, greater then 15 cloud to ground strikes in a 5 minute period.
LAL 6	Dry lightning (same as LAL 3 but without rain). This type of lightning has the potential for extreme fire activity and is normally highlighted in fire weather forecasts with a Red Flag Warning.



Location
The entire planning area is uniformly exposed to lightning which strikes in very small, specific geographic areas.

The entire planning area can anticipate frequent hailstorms that can contribute to property and crop damage.

Extent
While the average size of hail encountered throughout the planning area, measured by the diameter, is 2.36", there have been many occurrences when the diameter measured 0.75" and as high as 2.75" a range of H2-H7 on the combined NOAA/TORRO Hailstorm Intensity Scale. Therefore, the entire planning area can experience up to a H7, with hail diameter of up to 3.0".

Impact
Thunderstorms and hail can cause considerable damage to crops and property. Injuries and deaths can occur as direct result both to people and to livestock who are not under shelter especially in the rural county area. Hail damage to both vehicles and buildings (glass) can be costly and increase insurance premiums. Glass repairs can cause a significant reduction in workforce as employees are

without transportation to go to work due to reparation of vehicles or waiting for contractors to conduct home repairs, schools could be forced to relocate their students into other rooms if damage to classroom windows is severely damaged.

Jurisdiction	Vulnerabilities
Unincorporated Area Of Wood County	• The communication tower and /or county communications system not covered or shielded, impact could be loss/interruption of communications • Damage to the County Courthouse and county barns. • Windshield and body damage to school buses and vehicles on school property. Impacts of damaged windshields could cause accidents and put the driver and passenger lives at risk. • Damage to buildings and homes include roof windows and HVAC systems. • Crop damage. Impact would be economic loss to farmers. • Possible damage to show stock.
Cities of Alba, Hawkins, Mineola, Quitman, Winnsboro, and Yantis	• Critical Facility – roof and glass windows for City hall, library, community building, fire and EMS buildings and designated emergency shelters. HVAC units. Impact from shattered glass could lead to injuries and/or work stoppage. • Vehicle body and glass Windows: Specifically damage to emergency response vehicles and public works vehicles and machinery required to respond to calls during hailstorm events. • Economic impact.

Probability of Future Events

Specific damage loss numbers as reported by NOAA Storm Events Database were used to produce the data for the estimation of future loss. It is important to understand that the true financial impact due to hailstorms is difficult to state. Property damage information for residents who make insurance claims to home insurance or vehicle insurance are typically not included in the Storm Event data. Therefore, you can make the conclusion that the property damage is probably double the reported range.

Statewide Texas has a significant exposure to thunderstorms and lightning. Overall, lightning is the most constant and widespread threat to people and property during the thunderstorm season. The recurrence of lightning is high. Dry lightning has the likelihood of being the spark for large fires in the county. Reporting of lightning strikes to the weather service is very limited. A history based on repairs to government systems was used to develop the probability of future events and to also populate the previous occurrences.

Probability of a lightning event occurring anywhere in the planning area is 100% probable in the next 5 years.

Probability of Future Events	Years in Record Span 2013-2022	No. of Events in the Span	Computation	Future Probability of 1 or more events year
Unincorporated Area of Wood County	5	11	(11/5) * 100=	220.00%
Mineola	5	11	(11/5) * 100=	220.00%
Yantis	5	9	(9/5) * 100=	180.00%
Quitman	5	9	(9/5) * 100=	180%
Winnsboro	5	6	(6/5) * 100 =	120.00%

Previous Occurrences

Wood County Top Hail Events Table				
Date	Fatalities	Injuries	Property Damage (2012 Dollars)	Crop Damage (2012 Dollars)
1/26/1994	0	0	$12,352,941	$0
4/5/1990	0	0	$1,316,372	$0
1/18/1995	0	0	$202,500	$0
10/18/1993	0	0	$79,545	$0
5/5/1978	0	0	$17,500	$0
1/18/1995	0	0	$15,000	$0
1/26/1994	0	0	$7,721	$0
4/19/1995	0	0	$7,500	$0
11/7/1996	0	0	$5,833	$0
4/22/1995	2	0	$0	$0
				11/14/2013

Wood County Top Lightning Events Table				
Date	Fatalities	Injuries	Property Damage (2012 Dollars)	Crop Damage (2012 Dollars)
6/28/2011	0	0	$152,913	$0
4/28/1966	0	0	$35,000	$0
5/30/2004	0	0	$6,034	$0
4/22/1995	2	0	$0	$0
6/4/1989	1	0	$0	$0
6/14/1965	0	1	$0	$0
				11/14/2013

HAIL REPORTS NEAR QUITMAN, TEXAS

01/21/2018 Hail Reports

	Date	Size	City	County	State
Details	01/21/2018 8:00 P	1.75 Inches	Yantis	Wood	TX
Details	01/21/2018 8:00 P	1.75 Inches	Yantis	Wood	TX
Public Reports Large Hail Via Kltv Facebook... 2 Miles South Of The Intersection Of State Hwy 154 And Fm Road 515. (Shv)					

02/27/2017 Hail Reports

	Date	Size	City	County	State
Details	02/27/2017 4:53 P	1.75 Inches	Yantis	Wood	TX
Golf Ball Size Reported By Fisherman On Lake Fork (Shv)					

05/31/2016 Hail Reports

	Date	Size	City	County	State
Details	05/31/2016 5:31 P	1.00 Inches	Quitman	Wood	TX
Sheriff Deputy Reports Quarter Size Hail Near The Intersection Of Hwy 154 And Fm Road 14. (Shv)					

04/11/2016 Hail Reports

	Date	Size	City	County	State
Details	04/11/2016 5:40 P	1.75 Inches	Winnsboro	Wood	TX
Public Post Photo Of Golfball Size Hail Near Lake Winnsboro On Kltv Facebook Page. (Shv)					
Details	04/11/2016 7:25 P	1.25 Inches	Golden	Wood	TX
A Picture Was Posted To Kltv Facebook Page Of Half Dollar Size Hail In The Golden Community. (Shv)					
Details	04/11/2016 7:26 P	1.00 Inches	Golden	Wood	TX
Public Post Picture Of Quarter Size Hail Near Lake Holbrook On Kltv Facebook Page. (Shv)					

04/16/2015 Hail Reports

	Date	Size	City	County	State
Details	04/16/2015 6:22 P	1.75 Inches	Yantis	Wood	TX
Details	04/16/2015 6:22 P	1.75 Inches	Yantis	Wood	TX

04/27/2014 Hail Reports

	Date	Size	City	County	State
Details	04/27/2014 6:43 P	1.75 Inches	Quitman	Wood	TX
Hail Damaged Vehicles (Shv)					
Details	04/27/2014 6:41 P	1.25 Inches	Quitman	Wood	TX
Photos From Kltv Facebook Verified Hail Reports (Shv)					

10/24/2010 Hail Reports

	Date	Size	City	County	State
Details	10/24/2010 2:12 P	1.00 Inches	Yantis	Wood	TX
Quarter Size Hail At The Dollar General. (Shv)					
Details	10/24/2010 6:50 P	1.75 Inches	Yantis	Wood	TX
Golfball Size Hail Fell On The Highway 154 Bridge Over Lake Fork. (Shv)					

03/13/2008 Hail Reports

	Date	Size	City	County	State
Details	03/13/2008 11:38 P	0.75 Inches	Quitman	Wood	TX

05/23/2007 Hail Reports

	Date	Size	City	County	State
Details	05/23/2007 8:37 P	0.88 Inches	Mineola	Wood	TX
Reported By Mineola Pd (Shv)					

04/13/2007 Hail Reports

	Date	Size	City	County	State
Details	04/13/2007 9:35 P	1.75 Inches	Quitman	Wood	TX
Golfball Size Hail In Quitman Tx (Shv)					

05/14/2006 Hail Reports

	Date	Size	City	County	State
Details	05/14/2006 1:55 A	1.00 Inches	Mineola	Wood	TX
Details	05/14/2006 5:45 A	0.75 Inches	Mineola	Wood	TX
Lasting 10 Min (Shv)					

Wood County, Texas (population: 41964) had 1 hail reports within 10 miles of the city center located at (32.78346, -95.38356) on 02/27/2017. The largest report of hail on 02/27/2017 near Wood County was 1.75 inches about 11 months ago. The zip code with the highest number of damaging hail reports near Wood County on 02/27/2017 is 75497, with 1 report.

Wood County, Texas (population: 41964) had 5 hail reports within 10 miles of the city center located at (32.78346, -95.38356) in 2016. The largest report of hail in 2016 near Wood County was 2.75 inches about a year ago. The zip code with the highest number

of damaging hail reports near Wood County in 2016 is 75494, with 4 reports.

Mineola, Texas (population: 4515) had 8 hail reports within 10 miles of the city center located at (32.66319, -95.48829). The largest report of hail near Mineola was 1.75 inches about approximately 3 years ago in 2015. The zip code with the highest number of damaging hail reports near Mineola is 75773, with 3 reports.

Quitman, Texas (population: 1809) had 18 hail reports within 10 miles of the city center located at (32.79596, -95.45106). The largest report of hail near Quitman was 1.75 inches about a month ago. The zip code with the highest number of damaging hail reports near Quitman is 75497, with 7 reports.

Winnsboro, Texas (population: 3434) had 10 hail reports within 10 miles of the city center located at (32.95734, -95.29022). The largest report of hail near Winnsboro was 2.75 inches about a year ago. The zip code with the highest number of damaging hail reports near Winnsboro is 75494, with 6 reports.

No reported data is available for the remaining jurisdictions. Empirical data supports the lack of published data and concludes no other hail events occurred in these areas.

Jurisdiction	Vulnerabilities
Unincorporated Area of Wood County	• Power lines, transformers, transformer banks and power stations, to include power surges generated by a lightning strike, resulting in loss of electricity for critical systems such as the County 911 system, • County Radio tower, County communications system to include the disruption of emergency 911 systems • HVAC – damage of electronic control systems and sensitive electronic computer equipment. Loss of data, records damage
Cities of Alba, Hawkins, Mineola, Quitman, Winnsboro, and Yantis	• Electrical surges for computer and other sensitive office equipment at City Hall, library, bank. Damage to City water and sewer control systems. HVAC units. • Power lines, transformers & transformer banks and several power stations. • Serious injury of death to those not in a sheltered area by electrocution.

Previous Occurrences

A lightning strike impacting one of the participants has occurred in every jurisdiction at least each year to date. As stated in the vulnerability chart, the municipal well systems are to be most affected.

Probability of Future Events

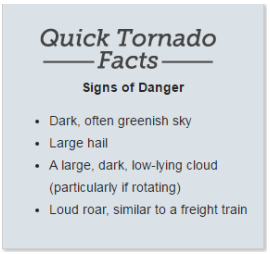
Statewide Texas has a significant exposure to thunderstorms and lightning. Overall, lightning is the most constant and widespread threat to people and property during the thunderstorm season. The recurrence of lightning is high. Dry lightning has the likelihood of being the spark for large fires in the county. Reporting of lightning strikes to the weather service is very limited. A history based on repairs to government systems was used to develop the probability of future events and to also populate the previous occurrences.

Probability of a lightning event occurring anywhere in the planning area is 100% probable in the next 5 years.

Tornado

Description

A **tornado** appears as a rotating, funnel-shaped cloud that extends from a thunderstorm to the ground with whirling winds that can reach 300 miles per hour. Damage paths can be in excess of one mile wide and 50 miles long. Some tornadoes are clearly visible, while rain or nearby low-hanging clouds obscure others. Occasionally, tornadoes develop so rapidly that little, if any, advance warning is possible.



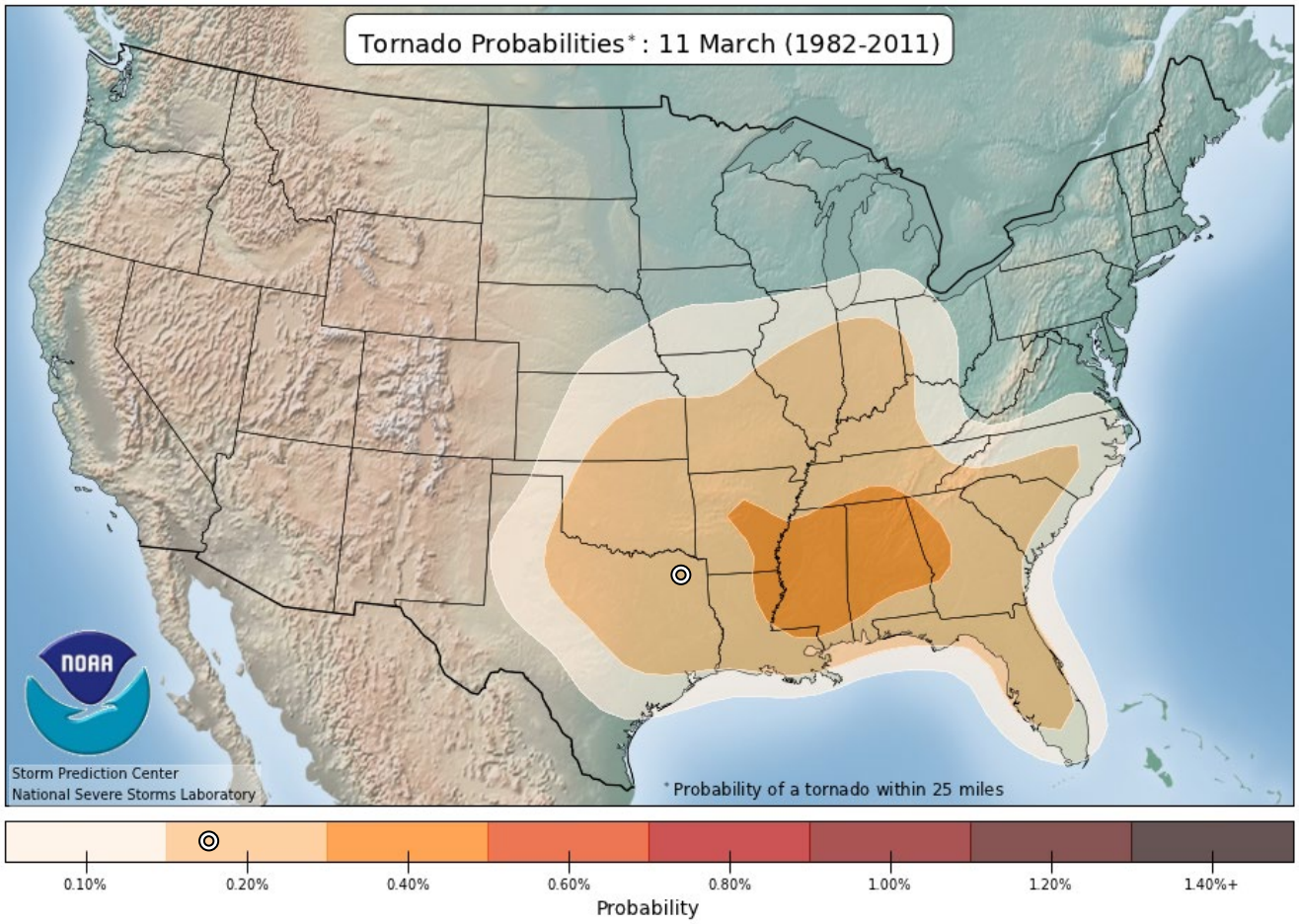
Each year, an average of over 1,000 tornadoes is reported nationwide, resulting in an average of 80 deaths and 1,500 injuries. They are more likely to occur during the spring and early summer months of March through June and can occur at any time of day, but are likely to form in the late afternoon and early evening.

The Enhanced Fujita (EF) Scale for tornadoes was developed to measure tornado strength and associated damages; it is divided into six categories from zero to five representing increasing degrees of damage. Overall, most tornadoes (around 77 percent) in the U.S. are considered weak (EF0 or EF1) and about 95 percent of all U.S. tornadoes are below EF3 intensity. The remaining small percentage of tornadoes are categorized as violent (EF3 and above).

Enhanced Fujita (EF) Scale

Enhanced Fujita (EF) Scale		
Enhanced Fujita Category	**Wind Speed (mph)**	**Potential Damage**
EF0	65-85	**Light damage** Peels surface off some roofs; some damage to gutters or siding; branches broken off trees; shallow-rooted trees pushed over.
EF1	86-110	**Moderate damage** Roofs severely stripped; mobile homes overturned or badly damaged; loss of exterior doors; windows and other glass broken.
EF2	111-135	**Considerable damage** Roofs torn off well-constructed houses; foundations of frame homes shifted; mobile homes completely destroyed; large trees snapped or uprooted; light- object missiles generated; cars lifted off ground.

EF3	136-165	**Severe damage** Entire stories of well-constructed houses destroyed; severe damage to large buildings such as shopping malls; trains overturned; trees debarked; heavy cars lifted off the ground and thrown; structures with weak foundations blown away some distance.
EF4	166-200	**Devastating damage** Well-constructed houses and whole frame houses completely leveled; cars thrown and small missiles generated.
EF5	>200	**Incredible damage** Strong frame houses leveled off foundations and swept away; automobile- sized missiles fly through the air in excess of 100 m (109 yd.); high-rise buildings have significant structural deformation; incredible phenomena will occur.



*These probability values were estimated from a 30-year period of severe weather reports from 1982-2011. The procedure to create the maps is as follows:

1. Reports for each day are put onto a grid 80 km x 80 km.
2. If one or more reports occur in a grid box, that box is assigned the value "1" for the day. If no reports occur, it's a zero.
3. The raw frequency for each day at each grid location is found for the period (number of "1" values divided by number of years) to get a raw annual cycle.
4. The raw annual cycle at each point is smoothed in time, using a Gaussian filter with a standard deviation of 15 days.
5. The smoothed time series are then smoothed in space with a 2-D Gaussian filter (SD = 120 km in each direction).

Location

Experiences one F0-F1 tornado nearly every other year.

Extent

Although the unincorporated area has only experienced F0-F1 tornados, neighboring jurisdictions have experienced F3-F4 tornados. The entire planning area may experience up to an F5.

Impact

Recorded EF1 tornados in surrounding counties have destroyed mobile homes, heavily damaged vehicles, fences and power poles; while the EF2 tornados have snapped power poles, lifted vehicles, moved large fuel tanks and stripped trees.

Tornado impacts on basic services can be devastating. Damage to businesses and residents can be immense, but a significant vulnerability can be the loss of basic services and a safe environment following a tornado.
Examples of potential losses are:

- Damage to infrastructure (e.g., storage tanks, hydrants, residential plumbing fixtures, distribution system) from a tornadic event can result in loss of service and/or reduced pressure throughout the system
- Restricted access to the facility due to debris and damaged roads
- Loss of power and communication lines
- Potential contamination due to chemical leaks from ruptured containers
- Severe water and pressure loss due to ruptured service lines in damaged buildings and broken fire hydrants from airborne debris

Jurisdiction	Vulnerabilities
Unincorporated Wood County	• Critical city facilities to include Courthouse, Jail, Sheriff's Office and Precinct barns. Precinct and other county owned vehicles. • The communication tower located at the County road and /or county communications system not covered or shielded, impact could be loss/interruption of communications • Power lines, transformers, transformer banks, substations and power stations. • Damage to (3) homes located on the school grounds include roof windows. • Windshield and body damage to school buses and vehicles on school property. Impacts of damaged windshields could cause accidents and put the driver and passenger lives at risk. • Possible damage to show stock. • Crop damage. Impact would be economic loss to farmers.

City of Alba, Hawkins, Mineola, Quitman, Winnsboro and Yantis	• City owned above ground water wells, water towers and HVAC units. • Critical city hall, library, community building, city barn, fire department and EMS building and designated shelters. • City Vehicles to include: responder services and public works vehicles and machinery. • Power lines, transmission lines, transformers, transformer bank

Probability of Future Events

Historical patterns are assumed to be a dominate factor in determining future tornado events. Based upon the historical instances of tornado events that have occurred with the planning area during the last 62 years, the annual probability of occurrence for these events and vulnerability are depicted below. The entire planning area lies in a low risk zone for tornados.

Probability of Future Events	Years in Record Span 1954-2016	No. of Events in the Span	Computation	Future Probability of 1 or more events year
Wood County Unincorporated Area	62	41	(41/62) * 100=	66.00%
City of Alba, Hawkins, Mineola, Quitman, Winnsboro and Yantis	All other jurisdictions within the planning area can be equally affected as tornadoes can go anywhere. The probability of future occurrence can be anticipated to impact all jurisdictions significantly.			

Previous Occurrences

Date(s) (yyyy-mm-dd)	Tornadoes	Fatalities	Highest Fatalities	Injuries	Highest Injuries	Longest Path	Widest Path
1954-02-19 - 2016-04-29	41	0 people	0 people	19 people	8 people	54.4 miles	3221 yards

Wildfire

Description

A **Wildfire** is "*An uncontrolled fire burning in an area of vegetative fuels such as grasslands, brush, or woodlands. Heavy fuels with high continuity, steep slopes, high temperatures, low humidity, low rainfall, and high winds all work together to increase risk of loss*."

Wildfires are part of the natural management of the Earth's ecosystems, but may also be caused by human factors. Wildfires may be described as follows:

- Wildfire - A fire occurring in a wildland area (e.g., grasslands, forests, brush lands). An exception to this definition is a prescribed burn.
- Prescription Burning ("Controlled Burning") – The process of igniting fires under selected conditions, in accordance with strict parameters. For example, this fire may be undertaken by land management agencies is.

Fire probability depends on local weather conditions, outdoor activities such as camping, debris burning, and construction, and the degree of public cooperation with fire prevention measures. Drought conditions and other natural disasters (e.g., tornadoes, hurricanes, etc.) increase the probability of wildfires by producing fuel in both urban and rural settings. Fire probability may be determined by using the Keetch-Byram Drought Index (KBDI)

The result of this system is a drought index number ranging from 0 to 800 that accurately describes the amount of moisture that is missing. A rating of zero defines the point where there is no moisture deficiency and 800 is the maximum drought possible.

Keetch-Byram Drought Index

Keetch-Byram Drought Index	
Drought Index #	**Potential Fire Behavior**
0 - 200	Soil and fuel moisture are high. Most fuels will not readily ignite or burn. However, with sufficient sunlight and wind, cured grasses and some light surface fuels will burn in spots and patches.
200 - 400	Fires more readily burn and will carry across an area with no gaps. Heavier fuels will still not readily ignite and burn. Also, expect smoldering and the resulting smoke to carry into and possibly through the night.
400 - 600	Fire intensity begins to significantly increase. Fires will readily burn in all directions exposing mineral soils in some locations. Larger fuels may burn or smolder for several days creating possible smoke and control problems.
600 - 800	Fires will burn to mineral soil. Stumps will burn to the end of underground roots and spotting will be a major problem. Fires will burn thorough the night and heavier fuels will actively burn and contribute to fire intensity.

Source: http://www.wfas.us/content/view/32/49/

Location

The Wildfire Threat for Wood County and the participants within is significant. The entire planning area can be affected by wildfires.

As with Tornadoes, borders do not stop fires and many fires begin in the open areas of the counties to the west, where the wind quickly blows them into the planning area. .

In addition to the Threat Map the Wildland Urban Interface Map shown below, indicates in yellow the vulnerability for the entire planning area and its neighbors. The maps below show the wildfire risk (yellow).

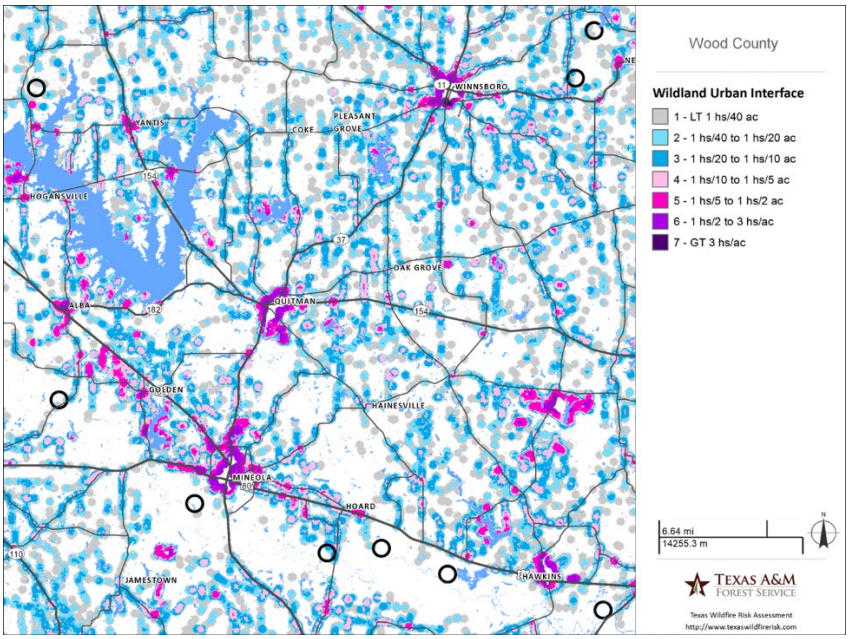
Characteristic Fire Intensity Scale

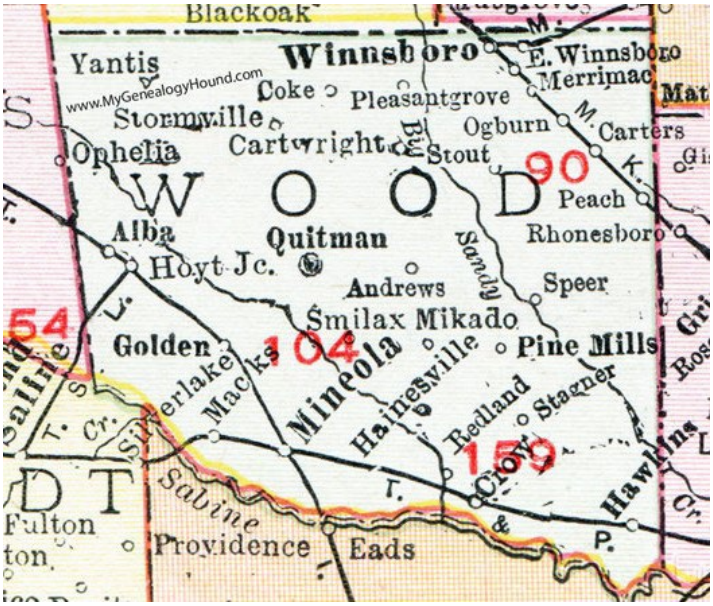
Extent
Previous wildfires in the county have ranged from small 1 acre fires to over 100 acres. Due to the high winds and dense vegetation, these fires can swiftly grow to

sizes that make it very difficult to control even with air support. The Fire Intensity Chart below provides the extent of fire risk. The following pages provide risk details for the both the county and cities.

	1	Lowest Intensity	Very small, discontinuous flames, usually less than 1 foot in length; very low rate of spread; no spotting. Fires are typically easy to suppress by firefighters with basic training and non-specialized equipment.
	1.5		
	2	Lowest Intensity	Small flames, usually less than two feet long; small amount of very short range spotting possible. Fires are easy to suppress by trained firefighters with protective equipment and specialized tools.
	2.5		
	3	Moderate	Flames up to 8 feet in length; short-range spotting is possible. Trained firefighters will find these fires difficult to suppress without support from aircraft or engines, but dozer and plows are generally effective. Increasing potential for harm or damage to life and property.
	3.5		
	4	High	Large Flames, up to 30 feet in length; short-range spotting common; medium range spotting possible. Direct attack by trained firefighters, engines, and dozers is generally ineffective, indirect attack may be effective. Significant potential for harm or damage to life and property.
	4.5		
	5	Highest	Very large flames up to 150 feet in length; profuse short-range spotting, frequent long-range spotting; strong fire-induced winds. Indirect attack marginally effective at the head of the fire. Great potential for harm or damage to life and property.

Populated areas in Wood County are at extreme risk due to the fire spread with Wildland/Urban interface.





Heavy fuels in the neighboring counties and hazardous terrain which limit the ability to stop forward movement also put the cities at risk. Seasonal strong winds traditionally blow from the west or southwest.

All participants can experience wildfires that could possible exceed 100 acres before being contained.

Vulnerability and Impact

The impact of a wildfire is typically in direct relationship to weather conditions. Extreme winds that tend to be prevalent in the planning area plus dry fire fuels can escalate the size of a wildfire in minutes. Even with well-trained firefighters and mutual aid – winds can move the fire at over 30 MPH. The damage caused by these fires is typically in open range lands, but can easily consume cattle, fencing and rural homesteads.

Due to the similar characteristics of each participating jurisdiction, the entire planning are can be impacted in the following ways:

- Loss of power and communication lines
- Severe water and pressure loss due to high use of water resources.
- Loss of cattle and miles of fencing.
- Highway dangers due to blowing smoke
- Death and injuries to responder due to fast moving fire or changing winds.

Jurisdiction	Vulnerabilities
Wood County Unincorporated Areas	• Critical city facilities to include Courthouse, Jail, Sheriff's Office and Precinct barns. Precinct and other county owned vehicles. • Critical school buildings HVAC units, small backup generators and other vehicles on the property. • Power lines, transformers, transformer banks and power stations have the ability to spark with high winds – thus being the igniter of grass fires. • Wildfire event could cause emergency evacuations of students/faculty and in the process possible injury/panic.
City of Alba, Hawkins, Mineola, Quitman, Winnsboro and Yantis	• Water towers, water wells, controls for wells. • Critical city hall, library, community building, city barn, fire hall, ambulance bay. • City vehicles, HVAC units and emergency vehicles could obtain severe damage and lead to loss of documents/ damaged equipment in the event of sprinkler system being triggered. • Power lines, transmission lines, transformers, transformer bank

Probability of Future Events

Wildfires occur with high frequency in the planning area. This vulnerability and the annual probability of occurrence for these events are estimated as follows.

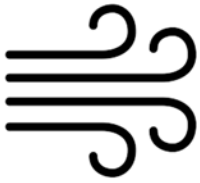
Probability of Future Events	Years in Record Span 2010-2017	No. of Events in the Span	Computation	Future Probability of 1 or more events year
Wood County Unincorporated Areas	7	40	(40/7) * 100=	571.00%
City of Alba, Hawkins, Mineola, Quitman, Winnsboro and Yantis	A wildfire event threatening any of the incorporated cities is probable to occur once on any given year.			

Previous Occurrences

Incorporated cities within the planning area are at risk for fast moving wildfires, but in the last 7 years have had a zero history of occurrence. However, the unincorporated area of Wood County has since 2020 experienced over 40 wildfires. Property damage was localized to grasses and fences, but could easily have spread to the incorporated areas.

Windstorms

Description



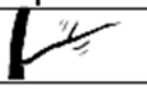
Winds begin with differences in air pressures. Pressure that is higher at one place than another sets up a force, pushing from high pressure towards low pressure. The greater the difference in pressures, the stronger the force. Wind is used to describe the prevailing direction from which the wind is

blowing with the speed given usually in miles per hour or knots. A Wind Advisory is issued when winds are forecast to be sustained at 25 to 39 mph and/or gusts to 57 mph.

Windstorms may present themselves in many forms such as high winds or downbursts. A major concern of a wind storm is wind speed and duration. It may be a 2 minute average speed or an instantaneous speed. The problems that windstorms create can be damaged roof top equipment, broken windows, and down power lines.

The **Beaufort Scale** is a system for estimating wind strengths based on the effects wind has on the physical environment. This scale is provided below.

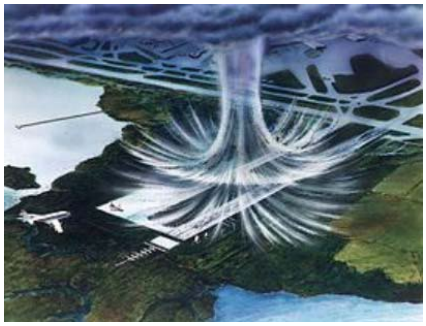
Beaufort Scale

Beaufort number	Wind Speed (mph)	Seaman's term		Effects on Land
0	Under 1	Calm		Calm; smoke rises vertically.
1	1-3	Light Air		Smoke drift indicates wind direction; vanes do not move.
2	4-7	Light Breeze		Wind felt on face; leaves rustle; vanes begin to move.
3	8-12	Gentle Breeze		Leaves, small twigs in constant motion; light flags extended.
4	13-18	Moderate Breeze		Dust, leaves and loose paper raised up; small branches move.
5	19-24	Fresh Breeze		Small trees begin to sway.
6	25-31	Strong Breeze		Large branches of trees in motion; whistling heard in wires.
7	32-38	Moderate Gale		Whole trees in motion; resistance felt in walking against the wind.
8	39-46	Fresh Gale		Twigs and small branches broken off trees.
9	47-54	Strong Gale		Slight structural damage occurs; slate blown from roofs.
10	55-63	Whole Gale		Seldom experienced on land; trees broken; structural damage occurs.
11	64-72	Storm		Very rarely experienced on land; usually with widespread damage.
12	73 or higher	Hurricane Force		Violence and destruction.

In addition to the windstorms derived from thunderstorms or sustained high winds due to other conditions, the following specific wind activities could also occur.

Macroburst is a convections downdraft with an affected outflow area of at least 2.5 miles wide and peak winds lasting between 5 to 20 minutes. Macro burst may cause tornado-force damage of up to EF3 intensity.

Microburst is a convective downdraft with an affected outflow are of less than 2.5 miles wide and peak winds lasting less than 5 minutes. Microbursts may induce dangerous horizontal/vertical wind shears, which can adversely affect aircraft performance and cause property damage.



Burst Swaths can range from about 50 to 150 yards in length. The damage they produce may resemble that caused by a tornado.

Red Flag Warnings are frequently issued in the planning area when the conditions are ideal for wildland fire combustion, and rapid spread. These warnings are typically sent out when the conditions stated are coupled with high or erratic winds. The Red Flag Warning becomes a critical statement for firefighting agencies.

Location

Wood County's proximity to mountainous areas to the west, contribute to development of low pressure systems near the area in fall, winter and spring months. This leads to very windy periods during this time frame, and it is not uncommon to have wind gusts of 45 to 55 mph associated with low pressure systems in advance of and/or behind cold fronts. In most extreme cases, winds have gusted to 60-70 mph. These windy conditions combined with dry conditions in the area can help spark rapidly moving wild fires in the region especially during dry and drought years.

It cannot be predicted when or where a windstorm will occur, but the entire planning area can be impacted.

Extent

All participating jurisdictions in the planning area can anticipate winds in excess of 50 mph several times during the year which is an ten or higher on the Beaufort scale.

Impact

Wind can cause considerable damage to property. Injuries and deaths can occur as direct result both to people due to flying debris. High Winds can cause severe visibility issues on highways, contributing to deadly vehicle accidents. Damage to roof mounted equipment including communications equipment can put the jurisdiction at risk due to inability to reach public services.

With the type of force that can be applied, as described from the Beaufort Scale, homes

and the mobile homes will always be the first to sustain damage, and possible injury from loose debris such as sheet metal or fallen trees. Since critical facilities are constructed to withstand at least medium forces, damage would be to roof mounted equipment, roof and landscaping to some degree.

Since the intensity of the various types of windstorms can generate the damage force of a F3 tornado, this would cause considerable damage. Roofs would be torn off well-constructed houses; older foundations of frame homes would shift; mobile homes would be completely destroyed; large trees would be snapped or uprooted; light object missiles would be generated; and cars lifted off the ground.

Jurisdiction	Vulnerabilities
Wood County Unincorporated Areas	• Critical city facilities to include Courthouse, Jail, Sheriff's Office. Damage could include roof, siding and HVAC. • Power lines, transformers, transformer banks and power stations. • County Radio tower, communications system tower. • Critical school facilities to include 2 main buildings, 6 auxiliary buildings and 3 homes roof, siding and (8) HVAC. • Bus barns and buses, vans and vehicles roof and siding damage
City of Alba, Hawkins, Mineola, Quitman, Winnsboro and Yantis	• Above ground water wells, Above ground storage tank and water towers • Critical city hall, other facilities, primarily roof, siding and HVAC damage/removal leaving staff exposed to the elements • Power lines, transmission lines, transformers, transformer bank • Radio towers and communications system at the fire department.

Probability of Future Events

Since 2007, the planning area has experienced at several significant wind events every year. As significant winds impact the entire county the probability is over 100% that the entire planning area will experience a wind event exceeding 50 MPH.

Probability of Future Events	**Years in Record Span 2007-2017**	**No. of Events in the Span**	**Computation**	**Future Probability of 1 or more events year**
Entire Planning Area	10	44	(44/10) * 100=	440.00%

Previous Occurrences

In the past 10 years the planning area has had 6 extremely significant high wind events with property damage over $114K. Those events are included in the 44 referenced above.

Winter Storm

Description

A **Winter Storm** is, "…*an event in which the varieties of precipitation are formed that only occur at low temperatures, such as snow or sleet, or a rainstorm where ground temperatures are low enough to allow ice to form (i.e. freezing rain). In temperate continental climates, these storms are not necessarily restricted to the winter season, but may occur in the late autumn and early spring as well*." The difference between a blizzard and winter storms lies in the presence and strength of winds. Blizzards are massive snow storms with strong winds.

The chart below distinguishes a number of the chief characteristics of both types of storms.

Comparison of Blizzard to a Winter Storm

	BLIZZARD	WINTER STORM
Occurrence:	Winter	Winter, spring, autumn
Characteristics:	Severe storm with strong winds and heavy snow.	Cold storm with low temperature, sleet, snow, rain and ice formations can be seen throughout the planning area
Economic impact:	Blizzards harm local economies and cause paralysis of normal life for days.	Infections due to frostbites, death from hypothermia, power outage, car accidents on slippery roads, fires, carbon monoxide poisoning etc. lead to disruption of life until conditions improve.
Effect:	Blizzard gives rise to a white out with minimum visibility.	Avalanches, cornices and spring flooding are common in winter storms.
Types:	Traditional and ground blizzards	Snow storm, Freezing rain storm or wintry mixes.
Forms of precipitation:	Snow	Snow, rime, ice pellets, rain, graupel (snow pellets)

Source: http://www.diffen.com/difference/Blizzard_vs_Winter_Storm

Winter storms that impact the planning area can include:

Freezing Rain - Rain that falls on a surface with a temperature below freezing, forming a glaze of ice. Even small accumulations of ice can cause a significant

hazard, especially on power lines and trees.
Heavy Snow Snowfall accumulating to 4" or more in depth in 12 hours or less; or snowfall accumulating to 6" or more in depth in 24 hours or less
Blizzard Conditions- Considerable falling or blowing snow with winds in excess of 25 mph and visibilities of less than ¼ for at least 3 hours.

The SPIA index chart allow for a community to prepare for a winter or an ice storm event. These events are infrequent but can cause damage. The primary areas of concern are on bridges, roadways and utility infrastructure including electric and natural gas supply lines.

Sperry-Piltz Ice Accumulation Index

The Sperry-Piltz Ice Accumulation Index, or "SPIA Index" – Copyright, February, 2009

ICE DAMAGE INDEX	DAMAGE AND IMPACT DESCRIPTIONS
0	Minimal risk of damage to exposed utility systems; no alerts or advisories needed for crews, few outages.
1	Some isolated or localized utility interruptions are possible, typically lasting only a few hours. Roads and bridges may become slick and hazardous.
2	Scattered utility interruptions expected, typically lasting 12 to 24 hours. Roads and travel conditions may be extremely hazardous due to ice accumulation.
3	Numerous utility interruptions with some damage to main feeder lines and equipment expected. Tree limb damage is excessive. Outages lasting 1 – 5 days.
4	Prolonged & widespread utility interruptions with extensive damage to main distribution feeder lines & some high voltage transmission lines/structures. Outages lasting 5 – 10 days.
5	Catastrophic damage to entire exposed utility systems, including both distribution and transmission networks. Outages could last several weeks in some areas. Shelters needed.

(Categories of damage are based upon combinations of precipitation totals, temperatures and wind speeds/directions.)

ation

ter storms can affect the re planning area often and enough severity to be a at to people and property. ierally, the winter storm son runs from late ember to mid- March, ough severe winter ither has occurred as early October and as late as in some locations.

Extent

The entire planning area can be impacted by extreme icing and snow. Ice accumulations on power lines and trees can exceed 1" and result in millions of dollars to the electrical coops. Snow accumulations can reach 1 feet overall.

Impact

Due to high winds that frequently blow over 30 MPH with gusts exceeding 50 MPH, residents are a risk for frequent electrical outages due to lines down or transformer damage – roads are greatly impacted with freezing ice and blowing snow.

Jurisdiction	Vulnerabilities
Wood County Unincorporated Areas	• Critical county facilities to include County Courthouse, Sheriff's Office, County Jail. Roof loss due to heavy snow, electrical outage. • Power lines, transformers, transformer banks and power stations damage due to ice. • County Radio tower, communications system damage due to ice. • Impassable county roads due to snow or ice. • Stranded motorists. • Critical school facilities buildings. Roof damage, bus accidents. School closures due to electrical outages.
City of Alba, Hawkins, Mineola, Quitman, Winnsboro and Yantis	• Critical facilities; city hall, library, fire department, ambulance bay city barn roof damage, designated shelter facilities, electrical outages. • Power lines, transmission lines, transformers, transformer bank

Probability of Future Events

Historical patterns are assumed to be a dominant factor in determining future winter storm events. Based upon the historical instances of winter storm events that have occurred in the area during the last 10 years, the annual probability of occurrence for these events was estimated as follows.

Since 2007, only three winter storms occurred in the planning area in the 10 years. Based on this data, the MAT estimates the probability for multiple winter storms in any given year to be 30%.

Probability of Future Events	**Years in Record Span 2007-2022**	**No. of Events in the Span**	**Computation**	**Future Probability of 1 or more events year**
Planning Area	11	3	(3/10) * 100=	30.00%
All other jurisdictions within the planning area can be equally affected. The probability of future occurrence can be anticipated to impact all jurisdictions.				

Previous Occurrences

The table below summarizes the winter storm events recorded for the planning area between the years 2007 and 2017. During that 10-year span, the planning area witnessed more than 33 separate severe winter storm events. Only county level information is available however, winter storms do not consider boundary lines therefore the entire planning area is equally susceptible and county data can be used to reflect city and ISD possible impacts.

Severe Winter Storm Highlights for the Planning Area: 2007 - 2017

Report Year	No. of Events	Prevalent Impact
2007	1	1-2" of ice and snow.
2008	0	Minimal winter weather impact
2009	0	Minimal winter weather impact
2010	0	Minimal winter weather impact
2011	0	Minimal winter weather impact
2012	0	Minimal winter weather impact
2013	0	Minimal winter weather impact
2014	0	Minimal winter weather impact
2015	0	Minimal winter weather impact
2016	0	Minimal winter weather impact
2017	1	1-2” of ice and snow.
2018	0	Minimal winter weather impact
2019	0	Minimal winter weather impact
2020	0	Minimal winter weather impact
2021	1	2-3” of ice and snow.
2022	0	Minimal winter weather impact

Element C – Mitigation Strategy

Existing Authorities, Policies, Programs and Resources (C1):

Existing Plans and Ordinances

Jurisdiction	Building Code	Zoning Ordinance	Subdivision Ordinance or regulation	Special purpose ordinances (floodplain management, storm water management, drainage, wildfire	Site Plan review requirements	A capital improvements plan	An economic development plan	An emergency response plan	A post-disaster recovery plan	A post-disaster recovery ordinance	Other: Annual Budget Review
Wood County	N	N	N	Y	N	N	N	Y	Y	N	Y
City of Alba	Y	Y	N	NA	N	N	Y	Y	Y	N	Y
City of Hawkins	Y	Y	N	NA	N	N	Y	Y	Y	N	Y
City of Quitman	Y	Y	N	Y	N	Y	Y	Y	Y	N	Y
City of Mineola	Y	Y	N	Y	Y	Y	Y	Y	Y	N	Y
City of Winnsboro	Y	Y	N	Y	Y	Y	Y	Y	Y	N	Y
City of Yantis	Y	Y	N	Y	N	Y	Y	Y	Y	N	Y

This table summarizes the current authorities and capabilities that could support each jurisdiction's efforts to implement the mitigation actions they've identified in this document. The matrix lists common planning tools/mechanisms which FEMA suggests as being contributive to local mitigation activities.

The most powerful mechanism available to them is motivating the public by improving their understanding of the natural hazards they face and by providing them with practical, cost-effective, actions that can be self-implemented to reduce their risks to those hazards should be one of the most effective tools each can use in achieving their mitigation goals in their jurisdiction.

Although funding to create or expand code and zoning enforcement positions may be limited, each jurisdiction can still utilize the table above to discuss methods on implementing no or low cost strategies for planning mechanisms such as formal capital improvement or comprehensive plans.

The Plan is tailored specifically for participating jurisdictions within Wood County and plan participants including Planning Team members, stakeholders, and the general public who participated in the Plan development process. The Plan complies with all requirements promulgated by the Texas Division of Emergency Management (TDEM) and all applicable provisions of the Robert T. Stafford Disaster Relief and Emergency Assistance Act, Section 104 of the Disaster Mitigation Act of 2000 (DMA 2000) (P.L. 106-390), and the Bunning-Bereuter-Blumenauer Flood Insurance Reform Act of 2004 (P.L. 108–264), which amended the National Flood Insurance Act (NFIA) of 1968 (42 U.S.C. 4001, et al). Additionally, the Plan complies with the Interim Final Rules for the Hazard Mitigation Planning and Hazard Mitigation Grant Program (44 CFR, Part 201), which specify the criteria for approval of mitigation plans required in Section 322 of the DMA 2000 and standards found in FEMA's "Local Mitigation Plan Review Guide" (October 2011), and the "Local Mitigation Planning Handbook" (March 2013). Additionally, the Plan is developed in accordance with FEMA's Community Rating System (CRS) Floodplain Management Plan standards and policies.

The ability for each jurisdiction to **expand** on the capabilities they currently have will be addressed in the council and commissioners court.

The **unincorporated area (County)** will continue to develop strong programs to mitigate wildfires and to educate the public on wildfire dangers. With the cooperation of area fire departments, the county will continue to control fuels to prevent fires. County Commissioners will discuss the development of a formal capital improvement plan.

The **City of Alba** the city council will review existing ordinances and make changes based on hazard identification and new development. City will consider the addition of post-disaster recovery ordinances to aid in the recovery process. The City Council will discuss the development of a formal capital improvement plan.

The **City of Hawkins** will discuss the development of a formal capital improvement plan. This document will aid in establishing improvements that will promote mitigation strategies to minimize loss of life of property.

The **City of Mineola** will discuss the development of a post disaster recovery ordinance. This document will aid in establishing improvements that will promote mitigation strategies to minimize loss of life of property.

The **City of Quitman** will discuss the development of a special purpose ordinance. This document will aid in establishing improvements that will promote mitigation strategies to minimize loss of life of property.

The **City of Winnsboro** will discuss the development of a subdivision ordinance or regulatory guidance. This document will aid in establishing improvements that will promote mitigation strategies to minimize loss of life of property.

The **City of Yantis** will discuss identifying and incorporating new site plan review requirements. This document will aid in establishing improvements that will promote mitigation strategies to minimize loss of life of property.

National Flood Insurance Program (NFIP) (C2)

All of the jurisdictions within the planning area participate in the NFIP. The Texas Water Development Board (TWDB) maintains a current list of County Flood Plain Administrators (FPA). The FPA list below is current as of February of 2022.

County Flood Plan Administrators

CID	Community	Status	Firm Status	Map Date	Flood Plain Adminr. (FPA) & Title
481055	Wood County	Participating	Mapped	09/03/10	CEO Lucy Hebron FPA Tully Davidson
481090	City of Alba	Participating	Participating	09/03/10	CEO Preston Hass FPA Tully Davidson
481056	City of Hawkins	Participating	Participating	09/03/10	CEO Stephen Lucas FPA Tully Davidson
480679	City of Mineola	Participating	Mapped	09/03/10	CEO Jayne Lankford FPA Tully Davidson
480680	City of Winnsboro	Participating	Mapped	NSFHA	CEO Andrea Newsom FPA Tully Davidson
481057	City of Quitman	Participating	Mapped	09/03/10	CEO Randy Dunn FPA Tully Davidson
481167	City of Yantis	Participating	Mapped	09/03/10	CEO John Norris FPA Tully Davidson

Wood County
Wood County currently participates in the NFIP program. Over the life of this plan they will review participation of the additional plan participants and assist with their future participation.

Each participating jurisdiction has adopted a floodplain ordinance and can regulate development in the floodplain and each has a floodplain manager.

Goals to Reduce/Avoid Long –Term Vulnerabilities (C3)

The goals and objectives of this MAP reflect goals similar to those found in the State of Texas Mitigation Plan and the National Flood Insurance Program.

The planning team began the development of the updated MAP by agreeing to a common set of goals and objectives, flexible enough they could be used to formulate customized mitigation actions for local implementation. The goals and objectives of the planning area are provided below.

Goal 1: Protect public health and safety

Objective 1.1: Advise the public about health and safety precautions to guard against injury and loss of life from hazards.

Objective 1.2: Maximize the use of modern technology to provide adequate warning, communication, and mitigation of hazards events.

Objective 1.3: Reduce the danger to, and enhance protection of, dangerous areas during hazard events.

Objective 1.4: Protect critical infrastructure facilities and critical services.

Goal 2: Protect existing and new properties

Objective 2.1: Use the most cost-effective approaches to protect existing and new building and public infrastructure from hazards.

Objective 2.2: Work to develop local guidance to ensure that development will not inadvertently endanger the public or increase threats to existing and new properties.

Goal 3*:* Increase public understanding, support, and demand for hazard mitigation

Objective 3.1: Increase public awareness of the full range of natural and man-made hazards they face.

Objective 3.2: Educate the public on actions they can take to prevent or reduce the loss of life or property from all hazards.

Objective 3.3: Publicize and encourage the adoption of appropriate hazard mitigation measures.

Objective 3.4: Encourage public policy to promote mitigation activities among the local jurisdictions.

Goal 4: Promote growth in a sustainable manner.

Objective 4.1: Incorporate hazard mitigation into the long-range planning and development activities

Objective 4.2: Encourage developers to voluntarily use codes and standards that will help to prevent the creation of future hazards to life and property

Goal 5: Maximize the use of outside sources of funding

Objective 5.1: Maximize the use of outside sources of funding

Objective 5.2: Maximize participation of residents in protecting their welfare and their properties

Objective 5.3: Maximize insurance coverage to provide financial protection against hazard events

Criteria for Prioritizing Actions

Considering detailed benefit/cost or cost-effectiveness analysis for every possible mitigation activity can be time consuming and may not always be practical. In using the criteria and scoring below, the planning team was able to consistently score each action as High, Medium or Low.

Evaluation Worksheet		
Rank each of the criteria with a -1, 0, or 1 using the following scale: • 1 = Highly effective or feasible • 0 = Neutral • -1 = Ineffective or not feasible		
Score	**Criteria**	**Description**
	Life Safety	How effective will the action be at protecting lives and preventing injuries?
	Property Protection	How significant will the action be at eliminating or reducing damage to structures and infrastructure?
	Technical	Is the mitigation action technical feasible? Is it a long-term solution?
	Political	Is there overall public support for the mitigation action? Is there the political will to support it?
	Legal	Does the community have the authority to implement the action?
	Environmental	What are the potential environmental impacts of the action? Will it comply with environmental regulations
	Social	Will the proposed action adversely affect one segment of the population?
	Administrative	Does the community have the personnel and administrative capabilities to implement the action and maintain it?
	Local Champion	Is there a strong advocate for the action or project among local departments and agencies that will support the action's implementation?
	Other Community Objectives	Does the action advance other community objectives, such as capital improvements, economic development, environmental quality, or open space preservation?
	Total Score	
Score Key High = 6-10 Medium = 3-5 Low = <3		

Hazards Assessed and two Action Items per Jurisdiction

Hazards Addressed	**Floods, Wildfire, Tornado, Drought, Thunderstorms, Severe Winter Storms, Windstorms**
Educate the public on mitigation strategies for all hazards.	
Participating Jurisdiction/s	*Wood County, City of Alba, City of Hawkins, City of Mineola, City of Quitman, City of Winnsboro, City of Yantis*
Priority (High, Medium, Low):	High
Estimated Cost:	$3,100
Potential Funding Source(s):	Local budget, Grant funds, Volunteer Hours, Business Donations
Lead Agency/Department Responsible:	County EMC, City EMC's
Implementation Schedule:	Throughout the 5-year update period
Cost Effectiveness: Outreach activities are very cost effective; they can be used to engage the public at-large by educating them on the risks associated with the hazards and the actions they can take to reduce/avoid those risks.	
Discussion: Safety brochures, signs at parks, and educating school children can all help increase public knowledge of mitigation strategies.	

Hazards Addressed	**Thunderstorms/Lightning**
Purchase and install lightning protection equipment in critical facilities and infrastructure to prevent lighting damage	
Participating Jurisdiction	*Wood County, City of Alba, City of Hawkins, City of Mineola, City of Quitman, City of Winnsboro, City of Yantis*
Priority (High, Medium, Low):	Medium
Estimated Cost:	$35,000
Potential Funding Source(s):	Grant fund, Local budget, Volunteer Hours, Business Donations
Lead Agency/Department Responsible:	County EMC, City Managers
Implementation Schedule:	Within 24months of securing the necessary funding
Cost Effectiveness: *Cost is low compared to the purchase of equipment*	
Discussion: *Installing lightning protection devices such as lightning rods and grounding as well as surge protection on all city/county equipment and infrastructure is one of the best ways to protect against lightning*	

Hazard/s Addressed	**Tornados**
Adopt building codes that require construction of safe rooms in new buildings; and assist where possible, with retrofitting new/existing buildings with shelters	
Participating Jurisdiction/s	*Wood County, City of Alba, City of Hawkins, City of Mineola, City of Quitman, City of Winnsboro, City of Yantis*
Priority (High, Medium, Low):	Medium
Estimated Cost:	$750,000 per building
Potential Funding Source(s):	Grant fund, Local budget, Volunteer Hours, Business Donations
Lead Agency/Department Responsible:	County EMC, City Managers
Implementation Schedule:	Upon approval of funds
Cost Effectiveness: Cities and County can incorporate multi-purpose safe rooms into new/retrofit projects so that they can be used to provide shelter as needed but also support everyday activities; in effect, the investment will return daily benefits.	
Discussion: *Installing multi-purpose safe rooms will protect life in the event of an emergency.*	

Hazards Addressed	**Floods**
Acquisition and management strategies of land to preserve open space for flood mitigation and water quality in the floodplain.	
Participating Jurisdiction	*Wood County, City of Alba, City of Hawkins, City of Mineola, City of Quitman, City of Winnsboro, City of Yantis*
Priority (High, Medium, Low):	Medium
Estimated Cost:	Fair land value
Potential Funding Source(s):	Grant fund, Local budget, Volunteer Hours, Business Donations
Lead Agency/Department Responsible:	County EMC, City Managers
Implementation Schedule:	Within 24months of securing the necessary funding
Cost Effectiveness: *Cost is low compared to insurance claims*	
Discussion: Purchasing land will enable homes to not be flooded in case of flooding.	

Hazards Addressed	**Drought**
Install landscaping with drought resistant plants and trees for shading around County and City facilities to reduce exposure from extreme heat.	
Participating Jurisdiction	*Wood County, City of Alba, City of Hawkins, City of Mineola, City of Quitman, City of Winnsboro, City of Yantis*
Priority (High, Medium, Low):	Low
Estimated Cost:	$1,000
Potential Funding Source(s):	Grant fund, Local budget, Volunteer Hours, Business Donations
Lead Agency/Department Responsible:	County EMC, City Managers
Implementation Schedule:	Within 6 months of securing the necessary funding
Cost Effectiveness: *Cost is low compared to having to purchase new equipment.*	
Discussion: Reducing energy cost due to natural shading will lower our need to consume more resources when times call for cutbacks.	

Hazard/s Addressed	**Thunderstorms, Tornados, Windstorms, Wildfire, Severe Winter Storm**
Install emergency generators at critical county and city facilities	
Participating Jurisdiction	*Wood County, City of Alba, City of Hawkins, City of Mineola, City of Quitman, City of Winnsboro, City of Yantis*
Priority (High, Medium, Low):	High
Estimated Cost:	~$250,000
Potential Funding Source(s):	Grant fund, Local budget, Volunteer Hours, Business Donations
Lead Agency/Department Responsible:	County EMC, City Managers
Implementation Schedule:	Within 6 months of securing the necessary funding
Cost Effectiveness: Ensuring that critical infrastructure is available to the County and cities and its citizens makes the cost irrelevant.	
Discussion: Installation of emergency generators at the County and city's critical infrastructures will ensure that water can still be treated and delivered without power, heat can be provided, along with keeping critical facilities open during recovery.	

Hazard/s Addressed	**Windstorm, Tornado**
Expand the outdoor warning system for new development.	
Participating Jurisdiction	*Wood County, City of Alba, City of Hawkins, City of Mineola, City of Quitman, City of Winnsboro, City of Yantis*
Priority (High, Medium, Low):	High
Estimated Cost:	$27,500 per siren
Potential Funding Source(s):	Grant fund, Local budget, Volunteer Hours, Business Donations
Lead Agency/Department Responsible:	County EMC, City Managers
Implementation Schedule:	Within 6 months of securing the necessary funding
Cost Effectiveness: Although costly, outdoor warning systems are an essential part of the City's public alerting/warning system and are effective in warning the public. For the most part, residents in this part of the State associate a siren tone with a tornado so sirens are particularly effective with tornado events.	
Discussion: Adding more sirens in areas where coverage is currently lean and improving and updating aging warning sirens would save lives/reduce injuries in a hazard event by providing proper and easily recognizable warning to residents.	

Hazard/s Addressed	**Wildfire, Windstorms**
Establish & maintain a fire-safe defensible space around critical facilities	
Participating Jurisdiction/s	*Wood County, City of Alba, City of Hawkins, City of Mineola, City of Quitman, City of Winnsboro, City of Yantis*
Priority (High, Medium, Low):	Medium
Estimated Cost:	$5,000 in annual costs
Potential Funding Source(s):	Local budget
Lead Agency/Department Responsible:	County Facilities Maintenance /County EMC, City EMC, VFD, FD
Implementation Schedule:	Within 12 months
Cost Effectiveness: Establishing and maintaining a fire-safe defensible space around critical facilities is an easy, low-cost way to create a buffer zone and limit the potential for wildfire damages.	

Discussion: Establishing and maintaining fire-safe defensible space will reduce the likelihood that a critical facility, such as a fire station, will be affected by this type of hazard event. This will also reduce the potential threat of this type of hazard on people inside the facility and increase the jurisdiction's ability to adequately respond event during this type of hazard.

Integrating Mitigation Plan In To Other Planning Mechanisms (C6)

When integrating change Wood County and all plan participants will follow the steps outlined below:

1. Change is proposed by an elected official or other interested party.

2. Proposal is placed on the local agenda of the governing body.

3. Agenda is published at least 3 days in advance of the meeting at which it will be discussed, so members of the public have an opportunity to attend the discussion meeting. Publication is made by posting the agenda on a public bulletin board in the respective City Hall or Wood County Courthouse and by posting on the agency's website. Notice may also be printed in the local newspaper.

4. Proposal is discussed at the public meeting, including any comments by members of the public in attendance.

5. Proposal is voted on by the governing body.

6. If the proposal is passed, the change is implemented by the appropriate local authority.

Wood County and Participating Cities

All of the 2018 mitigation action items were either completed or incorporated as ongoing projects. By utilizing the 2018 Hazard Mitigation Plan; the County Judge, EMC, Commissioners and City Leadership were able to prioritize mitigation projects within the county by referring to historical weather data and county vulnerabilities. These actions were assigned to the EMC to coordinate.

The new mitigation action items that were developed for Wood County and all participating jurisdictions within this plan will be used in long term development of county and city improvement projects. While the County does not have a formal comprehensive plan or capital improvement plan – the County Commissioners can integrate this plan and the hazard assessments to provide the necessary data for future development planning whether it be in an unincorporated community or new/expanded industry. In addition, the Hazard Mitigation Plan will be cited as a technical reference and data source for any updates or future planning processes.

The Hazard Mitigation plan and its actions have been integrated into the EOP. The county has appointed a full-time County EMC to assist in emergency preparedness and response within the unincorporated area. It is their job to maintain the Interjurisdictional Emergency Operation Plan and implement mitigation strategies that have already been identified and seek out new strategies as they present themselves.

Element D – Plan Review, Evaluation and Implementation

Development Trends (D1/3)

Wood County
Wood County still remains primarily rural farm land. While the county has seen little growth, they are still more vulnerable to hazards due to current dry conditions and an aging volunteer fire response.

City of Alba
A slight population increase in the community has been seen over the years. With an older population there has been a decline in responder volunteers which has made the additional growth made the City of Alba more vulnerable to identified hazards.

City of Hawkins
Hawkins has seen a slight increase in population over the last several years. New businesses have opened to include: a restaurant and coffee shop.
The population and business increase has made the city more vulnerable to identified hazards.

City of Mineola
Mineola has seen continued growth of Tractor Supply and Oreilly Auto parts. The growth of businesses makes the City more vulnerable to identified hazards.

City of Quitman
Quitman has seen a slight increase in population over the last several years. The population moving in makes the City more vulnerable to identified hazards.

City of Winnsboro
Winnsboro has seen a slight increase in population over the last several years. New businesses have opened to include: a Tractor Supply and coffee shop.
The business increase has made the city more vulnerable to identified hazards.

City of Yantis
Yantis has seen a slight decrease in population over the last several years. New businesses have opened to include: a Meat market.
The business increase has made the city more vulnerable to identified hazards.

Participating Jurisdictions
During the life of this MAP update, the participating jurisdictions will work to ensure that as new developments occur, it meets the appropriate standards in existence at the time of construction, that the development will not aggravate or contribute to hazard conditions in the area and that to extent possible, the new development will support the goals and objectives of this update. The goals and objectives from the previous plan have changed slightly to ensure better mitigation action coverage's for

the participating jurisdictions.

Mitigation Strategy Implementation

Through the involvement of this planning process, each jurisdiction was able to review existing mechanisms for identifying their existing status and hopes for the future. Although each jurisdiction has an informal process that can be related to a comprehensive plan or a capital improvement plan – through this planning process, they have become more focused on developing more formal plans. This document and the mitigation strategies that were conceived in this plan will be a guiding factor for the jurisdiction's improvement.

The following pages show the mitigation actions that were generated in 2000. This was the planning area's first hazard mitigation plan. The jurisdictions were able to identify which strategies were actually implemented over the last 18 years. While many of the strategies were prudent; through the plan review and a better understanding of this plans goals – jurisdictions were able to prioritize incomplete actions and move in the 2022 plan and eliminated those that did not have high value for mitigation.

2022 Mitigation Actions (D2)
Mitigation Actions for the Wood County

Hazard	Action	Completed, Deleted or Deferred
Thunderstorm	Enhance strategies for debris management by establishing specific locations throughout the county and city which can house debris until it can be disposed of properly	Deleted, considered recovery
Thunderstorm	Map and publicize locations around the County that have the highest incidence of extreme thunderstorm and windstorm events.	Deleted, not considered mitigation efforts
Lightning	Stress the importance of NOAA Weather Radios that automatically alert the public when a watch or warning is issued for an area as well as train people to serve as weather spotters. Public Service Announcements could be used for this type of information dissemination.	Completed with a partnership between ETCOG and Wood County for weather warnings through RAVE
Lightning	Encourage cities to pass ordinances requiring buried power lines. This offers the security of uninterrupted power during and after storms. Utility companies should be encouraged to bury lines where appropriate.	Deleted, change of priority
Hail	Educate the public on strengthening roofs through the use of specific building materials, such as concrete tiles. This can lessen the long-term damage from hailstorms and protect private property utilizing informational pamphlets.	Deleted, change of priority
Hail	Stress the importance of purchasing NOAA Weather Radios for homes and	Completed, RAVE red weather warning

	businesses which automatically alert the public when a watch or warning is issued for an area.	system implemented
Tornados	Incorporate the design of shelters in the construction of new critical facilities.	Deleted, change of priority
Tornados	Retrofit or add shelters to existing facilities that offer adequate protection.	Deleted, change of priority
Wildfire	Increase training opportunities, dispatching capabilities, communication capabilities, and necessary equipment in order to reduce damage that could occur as a result of inadequate resources.	Deleted, change of priority
Wildfire	Enhance response capabilities in the County by working with local fire departments by assisting with funding to increase training and upgrade equipment. (Evaluate whether additional resources are needed for particular types of fires, structural, forestry, grass fires, petroleum, etc.)	Deleted, duplication of efforts
Drought	Distribute public awareness information regarding droughts to encourage citizens to lower their water use during drought periods.	Deleted, change of priorities
Drought	Distribute public awareness information regarding crop insurance which includes importance of insurance and how to go about purchasing insurance.	Deleted, change of priorities

Flood	Evaluate the location of existing lift stations to determine if mitigation measures to a higher elevation are in order to prevent storm water runoff from overflowing the WWTP, where appropriate.	Deleted, change of priority
Flood	Take action to flood-proof public buildings, where appropriate.	Deleted, change of priority
Winter Storm	Enhance strategies for debris management after storms.	Deleted, considered recovery
Winter Storm	Enhance weather monitoring to attain earlier severe storm warning.	Completed, RAVE red weather warning system implemented
Hazardous Materials	As development occurs, evaluate and implement more logical alternative hazardous material (HAZMAT) routes, especially for areas, in which hazardous materials are passing by high or critical populations.	Deleted, change in priorities
Hazardous Materials	Develop a plan to handle evacuated residents from surrounding areas.	Deleted, change in priorities
Disease	Increase ability to vaccinate and spay/neuter animals.	Deleted, change in priorities
Disease	Create a County Emergency Action Plan for mass public vaccination.	Deleted, change in priorities
Dam Failure	Create a county wide mapping system that includes: Locate all dams on a map. Survey areas located below these dams that contain homes or business that would be impacted by a dam breach.	Deleted, change of priority

	Establish an inventory of these structures.	
Dam Failure	Work with land/property owners that would be impacted by a dam breach to inform them of the risk of the hazard and options for prevention.	Deleted, change of priority

Mitigation Actions for the City of Alba

Hazard	Action	Completed, Deleted or Deferred
Thunderstorm	Increase public awareness of thunderstorm and windstorm mitigation activities, such as to secure loose objects, trimming tree limbs near power lines, etc.	Deleted, change of priority
Thunderstorm	Evaluate the need for early storm warning notification systems for those communities that currently have none or need upgrades.	Deleted, change of priority
Lightning	Pass ordinance requiring buried power lines. This offers the security of uninterrupted power during and after storms. Utility companies should be encouraged to bury lines where appropriate.	Deleted, change of priority

Lightning	Pass ordinances to require public and private buildings to be designed with lightning rods, structural bracing, shutters, laminated glass in window panes, and hail resistant roof shingles or flashing to minimize damage.	Deleted, change of priority
Hail	Stress the importance of purchasing NOAA Weather Radios for homes and businesses which automatically alerts the public when a watch or warning is issued for an area. These notices will be distributed in water bills.	Deleted, change of priority
Hail	Educate the public on strengthening roofs through the use of specific building materials, such as concrete tiles, this can lessen the long-term damage from hailstorms and protect private property.	Deleted, change of priority
Tornados	Encourage the adoption of the most current edition of a model building codes and engineering standards that provide greater protection against high winds.	Deleted, change of priority

Tornados	Obtain a current inventory of all buildings and their wind ratings, and recommend any necessary modifications.	Deleted, change of priority
Wildfire	Continue efforts to reduce fire fuel load on developed and undeveloped lots by removing debris.	Deleted, change of priority
Wildfire	Enhance response capabilities by the volunteer fire department by increasing training and upgrading equipment. (Evaluate whether additional resources are needed for particular types of fires, structural, forestry, grass fires, petroleum, etc.).	Deleted, change of priority
Drought	Distribute public awareness information regarding droughts to encourage citizens to lower their water use during drought periods.	Deleted, change of priority
Drought	Implement phased water rationing when necessary to ensure efficient water usage.	Deleted, change of priority
Flood	Encourage development of acquisition and management strategies to preserve open space for flood mitigation and water quality in the floodplain.	Deferred

Flood	Improve maintenance of storm gutters and storm sewers.	Deleted, change of priority
Winter Storm	Enhance strategies for debris management.	Deleted, change of priority
Winter Storm	Develop and implement programs to coordinate maintenance and mitigation activities to reduce risk to public infrastructure.	Deleted, change of priority
Hazardous Materials	Continue efforts to collect information regarding the location of hazardous materials and distribute information to emergency response crews.	Deleted, change of priority
Hazardous Materials	As development occurs, evaluate and implement more logical alternative hazardous material (HAZMAT) routes, especially for areas, in which hazardous materials are passing by high or critical populations.	Deleted, change of priority
Disease	Increase ability to vaccinate and spay/neuter animals.	Deleted, change of priority

Disease	Take measures to reduce fear associated with bio-terrorist threats by distributing accurate, non-biased information.	Deleted, change of priority
Dam Failure	Work with County to create a mapping system that includes: Locate all dams on a map. Survey areas located below these dams that contain homes or business that would be impacted by a dam breach. Establish an inventory of these structures.	Deleted, change of priority
Dam Failure	Work with land/property owners that would be impacted by a dam breach to inform them of the risk of the hazard and options for prevention.	Deleted, change of priority

Mitigation Actions for the City of Hawkins

Hazard	Action	Completed, Deleted or Deferred
Thunderstorm	Encourage electrical utilities to use underground construction methods where possible to reduce power outages from thunderstorms and windstorms.	Deleted, change of priority
Thunderstorm	Increase public awareness of thunderstorm and windstorm mitigation activities, such as to secure loose objects, trimming tree limbs near power lines, etc.	Deleted, change of priority
Lightning	Pass ordinance requiring buried power lines. This offer the security of uninterrupted power during and after storms. Utility companies should be encouraged to bury lines where appropriate.	Deleted, change of priority
Lightning	Require public and private buildings to be designed with lightning rods, structural bracing, shutters, laminated glass in window panes, and hail resistant roof shingles or flashing to minimize damage.	Deleted, change of priority
Hail	Reduce the adverse impacts by preparing individuals and buildings with materials that will withstand hail storms. Encourage citizens to purchase storm windows and doors to protect private property and provide adequate shelter within the home or business.	Deleted, change of priority
Hail	Produce pamphlets describing to the general public the actions necessary to protect life and	Deleted, change of priority

	property *prior* to a hail storm. These actions would include bringing property such as cars and 158 pets into a sheltered area, seeking adequate shelter if humans are outside, when a hailstorm is imminent.	
Tornados	Ensure that all public building have a designated "safe haven."	Deleted, change of priority
Tornados	Require critical facilities, such as schools and daycare centers, to determine the best location for occupants during a storm, and provide directions to the designated "safe haven."	Deleted, change of priority
Wildfire	Identify alternative methods of water supply to fight fires.	Deleted, change of priority
Wildfire	Continue efforts to reduce fire fuel load on developed and undeveloped lots by removing debris.	Deleted, change of priority
Drought	Distribute public awareness information regarding droughts to encourage citizens to lower their water use during drought periods.	Deleted, change of priority
Drought	Implement phased water rationing when necessary to ensure efficient water usage.	Deleted, change of priority

Flood	Develop and/or obtain data necessary to develop floodplain regulations.	Deleted, change of priority
Flood	Adopt measures to control runoff from developing areas outside the floodplain	Deleted, change of priority
Winter Storm	Enhance weather monitoring to attain earlier severe storm warning.	Deleted, change of priority
Winter Storm	Enhance strategies for debris management.	Deleted, change of priority
Hazardous Materials	Develop a plan to handle evacuated residents from surrounding areas.	Deleted, change of priority
Hazardous Materials	Continue efforts to collect information regarding the location of hazardous materials and distribute information to emergency response crews.	Deleted, change of priority
Disease	Encourage hospital/clinics to increase oxygen stock in order to have an adequate quantity to refill tanks for citizens that are dependent on power to run breathing machines. (tank capacity -four hour limit).	Deleted, change of priority
Disease	Designate a climate-controlled area for Disease-related supplies.	Deleted, change of priority

Dam Failure	Create a county wide mapping system that includes: Locate all dams on a map. Survey areas located below these dams that contain homes or business that would be impacted by a dam breach. Establish an inventory of these structures.	Deleted, change of priority
Dam Failure	Work with land/property owners that would be impacted by a dam breach to inform them of the risk of the hazard and options for prevention.	Deleted, change of priority

Mitigation Actions for the City of Quitman

Hazard	Action	Completed, Deleted or Deferred
Thunderstorm	Increase public awareness of thunderstorm and windstorm mitigation activities, such as to secure loose objects, trimming tree limbs near power lines, etc.	Deleted, change of priority
Thunderstorm	Evaluate the need for early storm warning notification systems for those communities that currently have none or need upgrades.	Deleted, change of priority
Lightning	Pass ordinance requiring buried power lines. This offers the security of uninterrupted power during and after storms. Utility companies should be encouraged to bury lines where appropriate.	Deleted, change of priority
Lightning	Pass ordinances to require public and private buitdings to be designed with lightning rods, structural bracing, shutters, laminated glass in window panes, and hail resistant roof shingles or flashing to minimize damage.	Deleted, change of priority
Hail	Stress the importance of purchasing NOAA Weather Radios for homes and businesses which automatically alerts the public when a watch or warning is issued for an area. These notices will be distributed in water bills.	Deleted, change of priority

Hail	Educate the public on strengthening roofs through the use of specific building materials, such as concrete tiles, this can lessen the long-term damage from hailstorms and protect private property.	Deleted, change of priority
Tornados	Encourage the adoption of the most current edition of a model building codes and engineering standards that provide greater protection against high winds.	Deleted, change of priority
Tornados	Obtain a current inventory of all buildings and their wind ratings, and recommend any necessary modifications.	Deleted, change of priority
Wildfire	Continue efforts to reduce fire fuel load on developed and undeveloped lots by removing debris.	Deleted, change of priority
Wildfire	Enhance response capabilities by the volunteer fire department by increasing training and upgrading equipment. (Evaluate whether additional resources are needed for particular types of fires, structural, forestry, grass fires, petroleum, etc.).	Deleted, change of priority
Drought	Distribute public awareness information regarding droughts to encourage citizens to lower their water use during drought periods.	Deleted, change of priority

Drought	Implement phased water rationing when necessary to ensure efficient water usage.	Deleted, change of priority
Flood	Encourage development of acquisition and management strategies to preserve open space for flood mitigation and water quality in the floodplain.	Deleted, change of priority
Flood	Improve maintenance of storm gutters and storm sewers.	Deleted, change of priority
Winter Storm	Enhance strategies for debris management.	Deleted, change of priority
Winter Storm	Develop and implement programs to coordinate maintenance and mitigation activities to reduce risk to public infrastructure.	Deleted, change of priority
Hazardous Materials	Continue efforts to collect information regarding the location of hazardous materials and distribute information to emergency response crews.	Deleted, change of priority
Hazardous Materials	As development occurs, evaluate and implement more logical alternative hazardous material (HAZMAT) routes, especially for areas, in which hazardous materials are passing by high or critical populations.	Deleted, change of priority

Disease	Increase ability to vaccinate and spay/neuter animals.	Deleted, change of priority
Disease	Take measures to reduce fear associated with bio-terrorist threats by distributing accurate, nonbiased information.	Deleted, change of priority
Dam Failure	Work with County to create a mapping system that includes: Locate all dams on a map. Survey areas located below these dams that contain homes or business that would be impacted by a dam breach. Establish an inventory of these structures.	Deleted, change of priority
Dam Failure	Work with land/property owners that would be impacted by a dam breach to inform them of the risk of the hazard and options for prevention.	Deleted, change of priority

Mitigation Actions for the City of Mineola

Hazard	Action	Completed, Deleted or Deferred
Thunderstorm	Enhance strategies for debris management by establishing specific locations throughout the city which can house debris until it can be deposed of properly.	Deleted, change of priority
Thunderstorm	Map and publicize locations around the City that have the highest incidence of extreme thunderstorm and windstorm events.	Deleted, change of priority
Lightning	Require Public and private buildings to be designed with lightning rods, structural bracing, shutters, laminated glass in window panes, and hail resistant roof shingles or flashing to minimize damage.	Deleted, change of priority
Lightning	Stress the importance of NOAA Weather Radios that automatically alert the public when a watch or warning is issued for an area as well as train people to serve as weather spotters.	Deleted, change of priority
Hail	Stress the importance of purchasing NOAA Weather Radios for homes and businesses which automatically alerts the public when a watch or warning is issued for an area.	Deleted, change of priority
Hail	Educate the public on strengthening roofs through the use of specific building materials, such as concrete tiles, this can lessen the long-term damage from hailstorms and protect private property.	Deleted, change of priority

Tornados	Encourage critical facilities, such as schools and daycare centers, to determine the best location for occupants during a storm, and provide directions to the designated "safe haven."	Deleted, change of priority
Tornados	Continue efforts to keep up-to-date list of addresses of shelters, to assist non-local emergency response agencies in checking after a tornado to see if people are trapped inside.	Deleted, change of priority
Wildfire	Utilize resources of the Texas Forest Service for fire prevention and suppression.	Deleted, change of priority
Wildfire	Continue efforts to develop maps to assist emergency services during response.	Deleted, change of priority
Drought	Distribute public awareness information regarding droughts to encourage citizens to lower their water use during drought periods.	Deleted, change of priority
Drought	Distribute public awareness information regarding crop insurance which includes importance of insurance and how to go about purchasing insurance.	Deleted, change of priority
Flood	Conduct hydrology studies and surveys of flood-prone areas and identify feasible mitigation options.	Deleted, change of priority

Flood	Take action to flood-proof public buildings, where appropriate.	Deleted, change of priority
Winter Storm	Develop and implement programs to coordinate maintenance and mitigation activities to reduce risk to public infrastructure.	Deleted, change of priority
Winter Storm	Increase public awareness of severe winter storm mitigation activities.	Deleted, change of priority
Hazardous Materials	As development occurs, evaluate and implement more logical alternative hazardous material {HAZMAT) routes, especially for areas, in which hazardous materials are passing by high or critical populations.	Deleted, change of priority
Hazardous Materials	Increase response capabilities by review HAZMAT evacuation plans and develop mitigation measures to increase capabilities-possibly forming a HAZMAT team, obtaining specialized training and equipment to meet HAZMAT needs.	Deleted, change of priority
Disease	Continue to pursue state and federal funding for health department to treat citizens of the community who may not have the opportunity to seek healthcare in a hospital due to insurance restrictions.	Deleted, change of priority
Disease	Continue to identify individuals with special needs and publicize existing programs to improve the County's inventory of any medical needs that might need to be addressed prior to, during, or after a hazard event, especially in the event of a power outage.	Deleted, change of priority

Dam Failure	Create a county wide mapping system that includes: Locate all dams on a map. Survey areas located below these dams that contain homes or business that would be impacted by a dam breach. Establish an inventory of these structures.	Deleted, change of priority
Dam Failure	Work with land/property owners that would be impacted by a dam breach to inform them of the risk of the hazard and options for prevention.	Deleted, change of priority

Mitigation Actions for the City of Winnsboro

Hazard	Action	Completed, Deleted or Deferred
Thunderstorm	Enhance strategies for debris management by establishing specific locations throughout the city which can house debris until it can be deposed of properly.	Deleted, change of priority
Thunderstorm	Map and publicize locations around the area that have the highest incidence of extreme thunderstorm and windstorm events.	Deleted, change of priority
Lightning	Public and private buildings should be designed with lightning rods, structural bracing, shutters, laminated glass in window panes, and hail resistant roof shingles or flashing to minimize damage.	Deleted, change of priority
Lightning	Stress the importance of NOAA Weather Radios that automatically alert the public when a watch or warning is issued for an area as well as train people to serve as weather spotters.	Deleted, change of priority
Hail	Stress the importance of purchasing NOAA Weather Radios for homes and businesses which automatically alerts the public when a watch or warning is issued for an area.	Deleted, change of priority
Hail	Educate the public on strengthening roofs through the use of specific building materials, such as	Deleted, change of priority

	concrete tiles, this can lessen the long-term damage from hailstorms and protect private property.	
Tornados	Encourage critical facilities, such as schools and daycare centers, to determine the best location for occupants during a storm, and provide directions to the designated "safe haven."	Deleted, change of priority
Tornados	Continue efforts to keep up-to-date list of addresses of shelters, to assist non-local emergency response agencies in checking after a tornado to see if people are trapped inside.	Deleted, change of priority
Wildfire	Utilize resources of the Texas Forest Service for fire prevention and suppression.	Deleted, change of priority
Wildfire	Continue efforts to develop maps to assist emergency services during response.	Deleted, change of priority
Drought	Distribute public awareness information regarding droughts to encourage citizens to lower their water use during drought periods.	Deleted, change of priority
Drought	Distribute public awareness information regarding crop insurance which includes importance of insurance and how to go about purchasing insurance.	Deleted, change of priority
Flood	Conduct hydrology studies and surveys of flood-prone areas and identify feasible mitigation options.	Deleted, change of priority

Flood	Take action to flood-proof public buildings, where appropriate.	Deleted, change of priority
Winter Storm	Develop and implement programs to coordinate maintenance and mitigation activities to reduce risk to public infrastructure.	Deleted, change of priority
Winter Storm	Increase public awareness of severe winter storm mitigation activities.	Deleted, change of priority
Hazardous Materials	As development occurs, evaluate and implement more logical alternative hazardous material (HAZMAT) routes, especially for areas, in which hazardous materials are passing by high or critical populations.	Deleted, change of priority
Hazardous Materials	Increase response capabilities by review HAZMAT evacuation plans and develop mitigation measures to increase capabilities-possibly forming a HAZMAT team, obtaining specialized training and equipment to meet HAZMAT needs.	Deleted, change of priority
Disease	Continue to pursue state and federal funding for health department to treat citizens of the community who may not have the opportunity to seek healthcare in a hospital due to insurance restrictions.	Deleted, change of priority
Disease	Continue to identify individuals with special needs and publicize existing programs to improve the County's inventory of any medical needs that might need to be addressed prior to, during, or after a hazard event, especially in the event of a power outage.	Deleted, change of priority

Dam Failure	Create a county wide mapping system that includes: Locate all dams on a map. Survey areas located below these dams that contain homes or business that would be impacted by a dam breach. Establish an inventory of these structures.	Deleted, change of priority
Dam Failure	Work with land/property owners that would be impacted by a dam breach to inform them of the risk of the hazard and options for prevention.	Deleted, change of priority

Mitigation Actions for the City of Yantis

Hazard	Action	Completed, Deleted or Deferred
Thunderstorm	Encourage electrical utilities to use underground construction methods where possible to reduce power outages from thunderstorms and windstorms.	Deleted, change of priority
Thunderstorm	Increase public awareness of thunderstorm and windstorm mitigation activities, such as to secure loose objects, trimming tree limbs near power lines, etc.	Deleted, change of priority
Lightning	Pass ordinance requiring buried power lines. This offer the security of uninterrupted power during and after storms. Utility companies should be encouraged to bury lines where appropriate.	Deleted, change of priority

Lightning	Require public and private buildings to be designed with lightning rods, structural bracing, shutters, laminated glass in window panes, and hail resistant roof shingles or flashing to minimize damage.	Deleted, change of priority
Hail	Reduce the adverse impacts by preparing individuals and buildings with materials that will withstand hail storms. Encourage citizens to purchase storm windows and doors to protect private property and provide adequate shelter within the home or business.	Deleted, change of priority
Hail	Produce pamphlets describing to the general public the actions necessary to protect life and property *prior* to a hail storm. These actions would include bringing property such as cars and pets into a sheltered area, seeking adequate shelter if humans are outside, when a hailstorm is imminent.	Deleted, change of priority
Tornados	Ensure that all public building have a designated "safe haven."	Deleted, change of priority
Tornados	Require critical facilities, such as schools and daycare centers, to determine the best location for occupants during a storm, and provide directions to the designated "safe haven."	Deleted, change of priority
Wildfire	Identify alternative methods of water supply to fight fires.	Deleted, change of priority
Wildfire	Continue efforts to reduce fire fuel load on developed and undeveloped lots by removing debris.	Deleted, change of priority

Drought	Distribute public awareness information regarding droughts to encourage citizens to lower their water use during drought periods.	Deleted, change of priority
Drought	Implement phased water rationing when necessary to ensure efficient water usage.	Deleted, change of priority
Flood	Develop and/or obtain data necessary to develop floodplain regulations.	Deleted, change of priority
Flood	Adopt measures to control runoff from developing areas outside the floodplain	Deleted, change of priority
Winter Storm	Enhance weather monitoring to attain earlier severe storm warning.	Deleted, change of priority
Winter Storm	Enhance strategies for debris management.	Deleted, change of priority
Hazardous Materials	Develop a plan to handle evacuated residents from surrounding areas.	Deleted, change of priority
Hazardous Materials	Continue efforts to collect information regarding the location of hazardous materials and distribute information to emergency response crews.	Deleted, change of priority

Disease	Encourage hospital/clinics to increase oxygen stock in order to have an adequate quantity to refill tanks for citizens that are dependent on power to run breathing machines. (tank capacity -four hour limit).	Deleted, change of priority
Disease	Designate a climate-controlled area for Disease-related supplies.	Deleted, change of priority
Dam Failure	Create a county wide mapping system that includes: Locate all dams on a map. Survey areas located below these dams that contain homes or business that would be impacted by a dam breach. Establish an inventory of these structures.	Deleted, change of priority
Dam Failure	Work with land/property owners that would be impacted by a dam breach to inform them of the risk of the hazard and options for prevention.	Deleted, change of priority

While Wood County has had a slight increase in population our overall threats have remained the same and our goals have not been able to be completed completely due to the last few years of COVID. We have noted our winter storms could be an ongoing issue and will work to build our infrastructure to handle these events although during the last winter storm our County never lost power or water. Our focus is to continue with the plan mostly as is and complete our goals during the next 5 year period.

Element E – Plan Adoption (E1)

Plan Adoption Summary

Plan Adoption

This plan was formally adopted by Wood County and the plan participants, after the document had been reviewed by both the Texas Division of Emergency Management (TDEM) and the Federal Emergency Management Agency (FEMA) to ensure it met current state and federal guidelines governing local MAPs.

The evidence of local adoption was sent to both agencies; essentially marking the conclusion of the planning process and the start of the plan's implementation phase. The plan was finally adopted as of the dates shown below.

FEMA Approval	Resolution Number	Adoption Date
Wood County		
City of Alba		
City of Hawkins		
City of Mineola		
City of Quitman		
City of Winnsboro		
City of Yantis		

RESOLUTION NO.

A RESOLUTION OF WOOD COUNTY, TEXAS, ADOPTING THE REVISED 2022 WOOD COUNTY HAZARD MITIGATION ACTION PLAN

WHEREAS, certain areas of Wood County, Texas, are subject to periodic flooding and other natural and man-caused hazards with the potential to cause damages to people and property within the area; and

WHEREAS, Wood County desires to be prepared for and to mitigate losses caused by such circumstances; and

WHEREAS, under the Disaster Mitigation Act of 2000, the United States Federal Emergency Management Agency (FEMA) requires that local jurisdictions have in place a FEMA-Approved Hazard Mitigation Action Plan as a condition of receipt of certain Federal mitigation funding; and

WHEREAS, all such approved plans must be revised at least once every five (5) years; and

WHEREAS, the Wood County Hazard Mitigation Action Plan was previously adopted by Wood County on October 2, 2009;

WHEREAS, the 2009 Wood County Hazard Mitigation Action Plan has now been revised and updated for 2022, in accordance with FEMA guidelines;

NOW, THEREFORE, BE IT RESOLVED that the Wood County Commissioners Court hereby:

Section 1. Adopts the revised 2022 Wood County Hazard Mitigation Action Plan.

Section 2. Vests the County Judge of Wood County with the responsibility, authority, and the means to:

(a) Inform all concerned parties of this action.

(b) Develop an Addendum to this Hazard Mitigation Action Plan if such addendum is warranted.

Section 3. Agrees to take such other official action as may be reasonably necessary to carry out the objectives of the Hazard Mitigation Action Plan.

RESOLUTION NO.

A RESOLUTION OF WOOD COUNTY, TEXAS, ADOPTING THE REVISED 2022 WOOD COUNTY HAZARD MITIGATION ACTION PLAN

Passed, approved and adopted this _____ day of_____, 2022.

Wood County Judge

_____
Lucy Hebron

Commissioner, Precinct #1

_____
Virgil Holland

Commissioner, Precinct #2

_____
Jerry Gaskill

Commissioner, Precinct #3

_____
Mike Simmons

Commissioner, Precinct #4

_____
Russell Acker

ATTEST:
County Clerk

_____
Kelley Price

CITY OF ALBA, TEXAS

A RESOLUTION OF THE ALBA CITY COUNCIL, ADOPTING THE REVISED 2022 WOOD COUNTY HAZARD MITIGATION ACTION PLAN

WHEREAS, certain areas of the City of Alba, Texas, are subject to periodic flooding and other natural and man-caused hazards with the potential to cause damages to people and property within the area; and

WHEREAS, the City of Alba desires to be prepared for and to mitigate losses caused by such circumstances; and

WHEREAS, under the Disaster Mitigation Act of 2000, the United States Federal Emergency Management Agency (FEMA) requires that local jurisdictions have in place a FEMA-Approved Hazard Mitigation Action Plan as a condition of receipt of certain Federal mitigation funding; and

WHEREAS, all such approved plans must be revised at least once every five (5) years; and

WHEREAS, the Wood County Hazard Mitigation Action Plan was previously adopted by the City of Alba on October 5, 2009;

WHEREAS, the 2009 Wood County Hazard Mitigation Action Plan has now been revised and updated for 2022, in accordance with FEMA guidelines;

NOW, THEREFORE, BE IT RESOLVED that the Alba City Council hereby:

Section 1. Adopts the revised 2022 Wood County Hazard Mitigation Action Plan.

Section 2. Vests the Mayor of the City of Alba with the responsibility, authority, and the means to:

(a) Inform all concerned parties of this action.

(b) Develop an Addendum to this Hazard Mitigation Action Plan if such addendum is warranted.

Section 3. Agrees to take such other official action as may be reasonably necessary to carry out the objectives of the Hazard Mitigation Action Plan.

Passed, approved and adopted this _____ day of_____, 2022.

City of Alba, Texas

BY: _____
Mayor

ATTEST:

_____
City Secretary

CITY OF HAWKINS, TEXAS

A RESOLUTION OF THE HAWKINS CITY COUNCIL, ADOPTING THE REVISED 2022 WOOD COUNTY HAZARD MITIGATION ACTION PLAN

WHEREAS, certain areas of the City of Hawkins, Texas, are subject to periodic flooding and other natural and man-caused hazards with the potential to cause damages to people and property within the area; and

WHEREAS, the City of Hawkins desires to be prepared for and to mitigate losses caused by such circumstances; and

WHEREAS, under the Disaster Mitigation Act of 2000, the United States Federal Emergency Management Agency (FEMA) requires that local jurisdictions have in place a FEMA-Approved Hazard Mitigation Action Plan as a condition of receipt of certain Federal mitigation funding; and

WHEREAS, all such approved plans must be revised at least once every five (5) years; and

WHEREAS, the Wood County Hazard Mitigation Action Plan was previously adopted by the City of Hawkins on April 19, 2010;

WHEREAS, the 2009 Wood County Hazard Mitigation Action Plan has now been revised and updated for 2022, in accordance with FEMA guidelines;

NOW, THEREFORE, BE IT RESOLVED that the Hawkins City Council hereby:

Section 1. Adopts the revised 2022 Wood County Hazard Mitigation Action Plan.

Section 2. Vests the Mayor of the City of Hawkins with the responsibility, authority, and the means to:

(a) Inform all concerned parties of this action.

(b) Develop an Addendum to this Hazard Mitigation Action Plan if such addendum is warranted.

Section 3. Agrees to take such other official action as may be reasonably necessary to carry out the objectives of the Hazard Mitigation Action Plan.

Passed, approved and adopted this _____ day of_____, 2022.

City of Hawkins

ATTEST:

BY: _____
Mayor of Hawkins, Texas

_____

City Secretary

CITY OF MINEOLA, TEXAS

A RESOLUTION OF THE MINEOLA CITY COUNCIL, ADOPTING THE REVISED 2022 WOOD COUNTY HAZARD MITIGATION ACTION PLAN

WHEREAS, certain areas of the City of Mineola, Texas, are subject to periodic flooding and other natural and man-caused hazards with the potential to cause damages to people and property within the area; and

WHEREAS, the City of Mineola desires to be prepared for and to mitigate losses caused by such circumstances; and

WHEREAS, under the Disaster Mitigation Act of 2000, the United States Federal Emergency Management Agency (FEMA) requires that local jurisdictions have in place a FEMA-Approved Hazard Mitigation Action Plan as a condition of receipt of certain Federal mitigation funding; and

WHEREAS, all such approved plans must be revised at least once every five (5) years; and

WHEREAS, the Wood County Hazard Mitigation Action Plan was previously adopted by the City of Mineola on September 28, 2009;

WHEREAS, the 2009 Wood County Hazard Mitigation Action Plan has now been revised and updated for 2022, in accordance with FEMA guidelines;

NOW, THEREFORE, BE IT RESOLVED that the Mineola City Council hereby:

Section 1. Adopts the revised 2022 Wood County Hazard Mitigation Action Plan.

Section 2. Vests the Mayor of the City of Mineola with the responsibility, authority, and the means to:

(a) Inform all concerned parties of this action.

(b) Develop an Addendum to this Hazard Mitigation Action Plan if such addendum is warranted.

Section 3. Agrees to take such other official action as may be reasonably necessary to carry out the objectives of the Hazard Mitigation Action Plan.

Passed, approved and adopted this _____ day of_____, 2022.

City of Mineola, Texas

BY: _____
Mayor

ATTEST:

_____
City Administrator / Secretary

HAZARD MITIGATION PLAN
RESOLUTION #_____

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF QUITMAN, TEXAS, ADOPTING THE REVISED 2022 WOOD COUNTY HAZARD MITIGATION ACTION PLAN, AND VESTING RELATED AUTHORITY AND RESPONSIBILITY

WHEREAS, certain areas of the City of Quitman, Texas, are subject to periodic flooding and other natural and man-caused hazards with the potential to cause damages to people and property within the area; and

WHEREAS, the City of Quitman desires to be prepared for and to mitigate losses caused by such circumstances; and

WHEREAS, under the Disaster Mitigation Act of 2000, the United States Federal Emergency Management Agency (FEMA) requires that local jurisdictions have in place a FEMA-Approved Hazard Mitigation Action Plan as a condition of receipt of certain Federal mitigation funding; and

WHEREAS, all such approved plans must be revised at least once every five (5) years; and

WHEREAS, the Wood County Hazard Mitigation Action Plan was previously adopted by the City of Quitman on November 19, 2009;

WHEREAS, the 2009 Wood County Hazard Mitigation Action Plan has now been revised and updated for 2022, in accordance with FEMA guidelines;

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF QUITMAN, TEXAS, that:

Section 1. The revised 2022 Wood County Hazard Mitigation Action Plan is hereby adopted.

Section 2. The Mayor of the City of Quitman is hereby vested with the responsibility, authority, and the means to:
(a) Inform all concerned parties of this action.
(b) Develop an Addendum to this Hazard Mitigation Action Plan if such addendum is warranted.

Section 3. The Mayor of the City of Quitman is appointed to assure that the Hazard Mitigation Action Plan be reviewed at least annually, and that any needed adjustment to the City of Quitman's Addendum to the Plan be developed and presented to the Quitman City Council for consideration.

Section 4. The City of Quitman hereby agrees to take such other official action as may be reasonably necessary to carry out the objectives of the Hazard Mitigation Action Plan.

Passed, approved and adopted this _____ day of _____, 2022.

City of Quitman, Texas

BY: _____
Mayor

ATTEST:

_____
City Administrator / Secretary

RESOLUTION #_____
CITY OF WINNSBORO, TEXAS

A RESOLUTION OF THE WINNSBORO CITY COUNCIL, ADOPTING THE REVISED 2022 WOOD COUNTY HAZARD MITIGATION ACTION PLAN.

WHEREAS, certain areas of the City of Winnsboro, Texas, are subject to periodic flooding and other natural and man-caused hazards with the potential to cause damages to people and property within the area; and

WHEREAS, the City of Winnsboro desires to be prepared for and to mitigate losses caused by such circumstances; and

WHEREAS, under the Disaster Mitigation Act of 2000, the United States Federal Emergency Management Agency (FEMA) requires that local jurisdictions have in place a FEMA-Approved Hazard Mitigation Action Plan as a condition of receipt of certain Federal mitigation funding; and

WHEREAS, all such approved plans must be revised at least once every five (5) years; and

WHEREAS, the Wood County Hazard Mitigation Action Plan was previously adopted by the City of Winnsboro on May 11, 2010;

WHEREAS, the 2009 Wood County Hazard Mitigation Action Plan has now been revised and updated for 2022, in accordance with FEMA guidelines;

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF WINNSBORO, TEXAS, that:

Section 1. The revised 2022 Wood County Hazard Mitigation Action Plan is hereby adopted.

Section 2. The Mayor of the City of Winnsboro is hereby vested with the responsibility, authority, and the means to:
(a) Inform all concerned parties of this action.
(b) Develop an Addendum to this Hazard Mitigation Action Plan if such addendum is warranted.

Section 3. The Mayor of the City of Winnsboro is appointed to assure that the Hazard Mitigation Action Plan be reviewed at least annually, and that any needed adjustment to the City of Winnsboro's Addendum to the Plan be developed and presented to the Winnsboro City Council for consideration.

Section 4. The City of Winnsboro hereby agrees to take such other official action as may be reasonably necessary to carry out the objectives of the Hazard Mitigation Action Plan.

Passed, approved and adopted this _____ day of _____, 2022.

City of Winnsboro, Texas

BY: _____
Mayor

ATTEST:

_____
City Administrator / Secretary

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF YANTIS, TEXAS, ADOPTING THE REVISED 2022 WOOD COUNTY HAZARD MITIGATION ACTION PLAN, AND VESTING RELATED AUTHORITY AND RESPONSIBILITY

WHEREAS, certain areas of the City of Yantis, Texas, are subject to periodic flooding and other natural and man-caused hazards with the potential to cause damages to people and property within the area; and

WHEREAS, the City of Yantis desires to be prepared for and to mitigate losses caused by such circumstances; and

WHEREAS, under the Disaster Mitigation Act of 2000, the United States Federal Emergency Management Agency (FEMA) requires that local jurisdictions have in place a FEMA-Approved Hazard Mitigation Action Plan as a condition of receipt of certain Federal mitigation funding; and

WHEREAS, all such approved plans must be revised at least once every five (5) years; and

WHEREAS, the 2009 Wood County Hazard Mitigation Action Plan was previously adopted by the City of Yantis on March 15, 2010;

WHEREAS, the 2009 Wood County Hazard Mitigation Action Plan has now been revised and updated for 2022, in accordance with FEMA guidelines;

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF YANTIS, TEXAS, that:

Section 1. The revised 2022 Wood County Hazard Mitigation Action Plan is hereby adopted.

Section 2. The Mayor of the City of Yantis is hereby vested with the responsibility, authority, and the means to:

(a) Inform all concerned parties of this action.

(b) Develop an Addendum to this Hazard Mitigation Action Plan if such addendum is warranted.

Section 3. The Mayor of the City of Yantis is appointed to assure that the Hazard Mitigation Action Plan be reviewed at least annually, and that any needed adjustment to the City of Yantis's Addendum to the Plan be developed and presented to the Yantis City Council for consideration.

Section 4. The City of Yantis hereby agrees to take such other official action as may be reasonably necessary to carry out the objectives of the Hazard Mitigation Action Plan.

Passed, approved and adopted this _____ day of _____, 2022.

City of Yantis, Texas

BY: _____
Mayor

ATTEST:

_____

City Secretary


THE STATE OF TEXAS
WOOD COUNTY