Wise County Hazard Mitigation Plan 2024







Executive Summary

The strength and occurrence of hazards cannot be prevented, but we can save lives and reduce property damage by understanding the risks and taking action to address those risks. In the process, we can increase resilience in our community, environment, and economy. Wise County and the cities of Bridgeport, Chico, Decatur, Rhome, and Runaway Bay are dedicated to the protection of residents and staff, their property, and to the improvement of the quality of life for all.

Mitigation has been defined as "sustained action to reduce or eliminate long-term risk to human life and property from natural, human-caused, and technological hazards." It is fundamentally a loss-prevention function characterized by planned, long-term alteration of the built environment to ensure resilience against natural and human-caused hazards.

The benefits of mitigation planning go beyond reducing hazard vulnerability. Success in a 21st-century economy requires serious, sustained leadership on infrastructure and asset investment at all levels of government.

Mitigation planning offers many benefits, including:

- Saving lives and property;
- Saving money;
- Reducing future damages from hazards;
- Expediting recovery following disasters;
- Reducing future vulnerability through wise development and post-disaster recovery and reconstruction;
- Expediting the receipt of pre-disaster and post-disaster grant funding; and
- Demonstrating a firm commitment to improving community health and safety.

With development support from NCTCOG, the Wise County Hazard Mitigation Plan (HMP) identifies potential hazards, vulnerabilities to these hazards, and mitigation strategies to reduce future damages. The plan fulfills the requirements of the Federal Disaster Mitigation Act as administered by the Texas Division of Emergency Management (TDEM) and the Federal Emergency Management Agency (FEMA).

Emphasis has been placed on the identification and prioritization of possible mitigation actions that will assist participating jurisdictions in becoming less vulnerable to the damaging forces of natural hazards while improving the economic, social, and environmental health of the County.

This plan is not legally binding but is a tool for the participating jurisdictions to use to become more resilient to hazards. Mitigation actions will be implemented as capabilities and funding allow.

Common Acronyms

EMC- Emergency Management Coordinator

EOC- Emergency Operations Center

FEMA- Federal Emergency Management Agency

HMP- Hazard Mitigation Plan

HMPT- Hazard Mitigation Planning Team

LPT- Local Planning Team

N/A- Not Applicable

NCEI- National Centers for Environmental Information

NCTCOG- North Central Texas Council of Governments

NFIP- National Flood Insurance Program

NFPA- National Fire Protection Association

NWS- National Weather Service

OWS- Outdoor Warning Siren

RLP- Repetitive Loss Properties

SRLP- Severe Repetitive Loss Properties

TCEQ- Texas Commission on Environmental Quality

TDEM- Texas Division of Emergency Management

TFS- Texas A&M Forest Service

TPW- Texas Parks & Wildlife Department

TxDOT- Texas Department of Transportation

USACE- United States Army Corps of Engineers

UTA- University of Texas at Arlington

WUI- Wildland-Urban Interface

Contents

Executive Summary	1
Common Acronyms	2
Chapter 1: Introduction	6
1.1 Overview	6
1.2 Authority	6
1.3 Planning Area	7
Chapter 2: Planning Process	9
2.1 Collaborative Process	9
2.1.1 Points of Contacts	9
2.1.2 Stakeholders	10
2.1.3 Public Involvement	11
2.2 Existing Data and Plans	12
2.3 Timeframe & Planning Meetings	13
Chapter 3: Hazard Identification and Risk Assessment	15
3.1 Major Disaster Declarations	15
3.2 Natural Hazard Profiles	16
3.2.1 Drought	19
3.2.2 Earthquakes	23
3.2.3 Expansive Soils	28
3.2.4 Extreme Heat	30
3.2.5 Flooding	32
3.2.6 Thunderstorms	5
3.2.7 Tornadoes	10
3.2.8 Wildfires	15
3.2.9 Winter Storms	33
3.3 Assets	38
3.3.1 Built Environment	38
3.3.2 People	17
3.3.3 Fconomy	18

3.3.4 Natural Environment	20
3.4 Changes in Development	23
3.5 Vulnerability	27
3.5.1 Factors that Increase Vulnerabilities	27
3.5.2 Factors that Decrease Vulnerabilities	36
3.5.3 Greatest Vulnerabilities	41
3.6. Risk Index	42
3.6.1 Hazard Type Risk Index	44
Chapter 4: Mitigation Strategy	45
4.1 Mitigation Goals	45
4.2 Mitigation Strategy	46
4.3 Mitigation Action Items	47
City of Bridgeport Mitigation Action Items	49
City of Chico Mitigation Action Items	55
City of Decatur Mitigation Action Items	61
City of Rhome Mitigation Action Items	68
City of Runaway Bay Mitigation Action Items	76
Wise County Unincorporated Mitigation Action Items	81
4.4 Plan Maintenance	92
4.4.1 Schedule	92
4.4.2 Continued Public Participation	92
4.4.3 Integration into Existing Planning Mechanisms	93
Chapter 5: Conclusion	95
Appendix A: Capabilities Assessment	96
A.1 NFIP Assessment	96
A.2 Capability Assessments	101
A.2.1 Results	101
A.2.2 Gaps & Improvements	172
Appendix B: Public Survey	174
Part 1: Survey Announcement	174
Part 2: Results	175
Annendix C: Local Planning Teams	180

Appendix D: Adoption	183
Appendix E: FOUO	191

Chapter 1: Introduction

1.1 Overview

The Wise County Hazard Mitigation Plan (HMP) was previously referred to as the Hazard Mitigation Action Plan (HazMAP) but will be referred to as an HMP moving forward. This plan fulfills the requirements of the Disaster Mitigation Act of 2000 (DMA 2000), which is administered by the Federal Emergency Management Agency (FEMA). The Disaster Mitigation Act provides federal assistance to state and local emergency management entities to mitigate the effects of disasters. The HMP also encourages cooperation among various organizations across political subdivisions.

With each update, new challenges are identified, new strategies proposed, and when incorporated, the updated plan grows in complexity, but not necessarily in utility. This HMP is an update of the 2015 FEMA-approved HMP and includes data collected from 2015 through 2021.

With a growing emphasis from the federal government on hazard mitigation, participating jurisdictions prioritized the update of this plan in order to remain eligible for non-disaster funds. They plan on focusing on more disaster resilient methods in future operations of local government and future development.

Participating jurisdictions understand that they are not liable to complete the actions identified in their mitigation strategy. These actions will be implemented as capabilities and priorities allow.

Upon receipt of FEMA's "Approvable Pending Adoption" notice, each participating jurisdiction will take the HMP to their governing body for final public comment and local adoption.

Once approved by FEMA, a copy of the approval letter and the adoption resolutions from all participating jurisdictions will be inserted in Appendix D and held on file at the North Central Texas Council of Governments.

1.2 Authority

The Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act), as amended by the Disaster Mitigation Act of 2000, provides the legal basis for state, tribal, and local governments to undertake risk-based approaches to reducing natural hazard risks through mitigation planning. Specifically, the Stafford Act requires state, tribal, and local governments to develop and adopt FEMA-approved hazard mitigation plans as a condition for receiving certain types of non-emergency disaster assistance.

The Stafford Act authorizes the following grant programs:

- Hazard Mitigation Grant Program (HMGP), which helps communities implement hazard mitigation measures following a Presidential major disaster declaration. This program also funds development and update of hazard mitigation plans.
- Pre-Disaster Mitigation Grant Program (PDM), which awards planning and project grants to assist states, territories, federally-recognized tribes, and local communities in implementing sustained pre-disaster natural hazard mitigation programs. Such efforts may include development or update of hazard mitigation plans.

- Public Assistance Grant Program (PA), which provides assistance to state, tribal, and local
 governments, and certain types of private nonprofit organizations so that communities can
 quickly respond to and recover from major disasters or emergencies declared by the President.
- Fire Management Assistance Grant Program (FMAG), which provides assistance to state, tribal, and local governments for the mitigation, management, and control of fires on publicly or privately-owned forests or grasslands that threaten such destruction as would constitute a major disaster.

Title 44, Chapter 1, Part 201 (44 CFR Part 201) of the Code of Federal Regulations (CFR) contains requirements and procedures to implement the hazard mitigation planning provisions of the Stafford Act.

The purpose of the Stafford Act, as amended by the Disaster Mitigation Act of 2000, is "to reduce the loss of life and property, human suffering, economic disruption, and disaster assistance costs resulting from natural disasters." Chapter 322 of the act specifically addresses mitigation planning and requires state and local governments to prepare multi-hazard mitigation plans as a precondition for receiving FEMA mitigation grants.

This Wise County Hazard Mitigation Plan was developed by the Wise County Hazard Mitigation Planning Team (HMPT) under the direction and guidance of the North Central Texas Council of Governments (NCTCOG) Emergency Preparedness Department. The plan represents collective efforts of citizens, elected and appointed government officials, business leaders, non-profit organizations, and other stakeholders. This plan, and updating the plan, and timely future updates of this plan, will allow Wise County and participating jurisdictions to comply with the Disaster Mitigation Act of 2000 and its implementation regulations, 44 CFR Part 201.6, thus resulting in eligibility to apply for federal aid for technical assistance and post-disaster hazard mitigation project funding. The update will also prioritize potential risks and vulnerabilities in an effort to minimize the effects of disasters in the participating communities.

1.3 Planning Area

This plan identifies natural hazards that could threaten life and property in the participating jurisdictions and describes long-term mitigation strategies to mitigate the hazards. The participating jurisdictions that make up the planning area include the following:

- City of Bridgeport
- City of Chico
- City of Decatur*
- City of Rhome*
- City of Runaway Bay
- Wise County Unincorporated

These jurisdictions were participants in the 2015 plan except for Decatur and Rhome. Decatur had their own plan in 2015. The following map shows a more detailed look of the county.



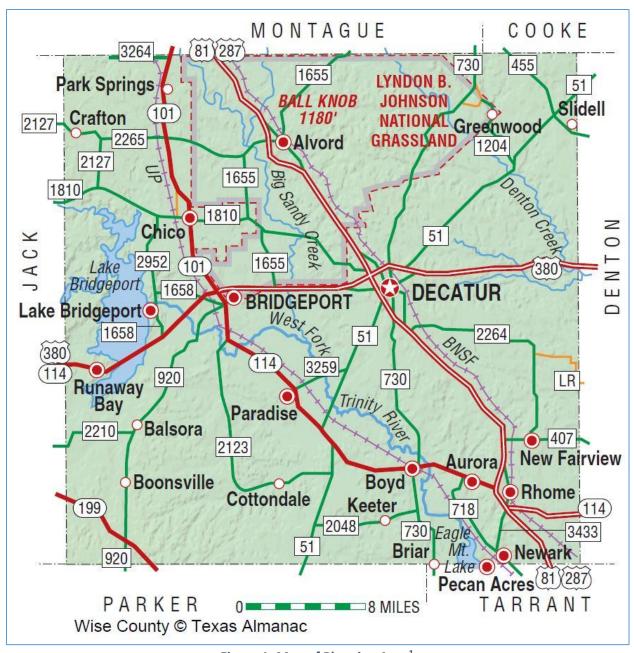


Figure 1: Map of Planning Area¹

¹ Wise County (tshaonline.org)

Chapter 2: Planning Process

Requirement	
§201.6(b)	An open public involvement process is essential to the development of an effective plan. In order to develop a more comprehensive approach to reducing the effects of natural disasters, the planning process shall include:
§201.6(b)(1)	An opportunity for the public to comment on the plan during the drafting stage and prior to plan approval;
§201.6(b)(2)	An opportunity for neighboring communities, local and regional agencies involved in hazard mitigation activities, and agencies that have the authority to regulate development, as well as businesses, academia and other private and non-profit interests to be involved in the planning process; and
§201.6(b)(3)	Review and incorporation, if appropriate, of existing plans, studies, reports, and technical information.
§201.6(c)(1)	[The plan shall document] the planning process used to develop the plan, including how it was prepared, who was involved in the process, and how the public was involved.
§201.6(c)(4)(i)	[The plan maintenance process shall include a] section describing the method and schedule of monitoring, evaluating, and updating the mitigation plan within a five-year cycle
§201.6(c)(4)(iii)	[The plan maintenance process shall include a] discussion on how the community will continue public participation in the plan maintenance process.

2.1 Collaborative Process

A comprehensive county approach was taken in developing the plan. An open public involvement process was established for the public, neighboring communities, regional agencies, businesses, academia, etc. to provide opportunities for everyone to become involved in the planning process and to make their views known. The meetings were advertised with notices in public places and city websites and social media pages.

Each participating jurisdiction gathered their information using a Local Planning Team (LTP), comprised of local staff that could contribute to development of this mitigation plan. The leaders of each of these LPT's comprised the Wise County Hazard Mitigation Planning Team (HMPT) and other relevant agencies. The HMPT met regularly with the North Central Texas Council of Governments in order to submit individual assessments and data into one multi-jurisdictional mitigation plan.

Stakeholders were invited to participate, via email, by participating jurisdictions.

The North Central Texas Council of Governments was responsible for plan facilitation and coordination with Wise County HMPT members and stakeholders throughout the process.

2.1.1 Points of Contacts

The following are members of the Wise County Hazard Mitigation Planning Team (HMPT). These HMPT members were also the point(s) of contact for their respective jurisdiction during this plan update.

Table 1: Wise County HMPT Members

Jurisdiction	Job Title	Role in the HMPT	
Pridanart	Police Chief	Jurisdictional information and LPT	
Bridgeport	Folice Ciliei	Lead	
Chico	City Administrator	Jurisdictional information and LPT	
Chico City Administrator		Lead	
Decatur Fire Chief	Fire Chief	Jurisdictional information and LPT	
	Fire Chief	Lead	
Rhome Police Chief	Police Chief	Jurisdictional information and LPT	
	Folice Ciliei	Lead	
Runaway Bay	City Administrator	Jurisdictional information and LPT	
		Lead	
Wise County	Emergency Management	Jurisdictional information and LPT	
Unincorporated	Coordinator	Lead	

Each HMPT member led a Local Planning Team (LPT) in their respective jurisdictions. The LPT members are listed in Appendix C.

2.1.2 Stakeholders

The following stakeholders were invited to participate in the planning process, via email, and included local and regional agencies involved in hazard mitigation activities, agencies that have the authority to regulate development, and neighboring communities. While these stakeholders did not respond to our invitations, the Planning Team collected data from these agencies' websites.

Table 2: Stakeholders

Organization Represented	Position	
Denton County	Emergency Management Coordinator	
Parker County	Emergency Management Coordinator	
Tarrant County	Emergency Management Coordinator	
U.S. Army Corps of Engineers	Director – Civil Works	
Texas A&M Forest Service	WUI Specialist	
Independent School Districts of Participating Jurisdictions	Superintendents	
Texas Department of Transportation	Emergency Operations	
Utility Providers	Emergency Operations	
Local Emergency Planning Committee	Emergency Management Coordinator	
Texas Division of Emergency Management	Hazard Mitigation Planner	
State Fire Marshal's Office	District 6, Inspector	
National Weather Service – Fort Worth	Warning & Coordination Meteorologist	
NCTCOG's Emergency Preparedness Planning Council	Chair	
NCTCOG's Regional Emergency Preparedness Advisory	Chair	
Council	Citali	
Local City Councils	Local elected officials	
Brazos River Authority	Project Manager	

Organization Represented	Position
Texas Water Development Board	Regional Representative
Rotary Club of Decatur	Administration
Wise Area Relief Mission	Administration
Wise County Veterans Groups	Administration
Wise County Committee on Aging	Administration

2.1.3 Public Involvement

In order to meet the needs of the whole community, the Hazard Mitigation Planning Team (HMPT) used public involvement as an opportunity to educate the public about hazards and risks in the community, types of activities to mitigate those risks, and how these activities impact them. Feedback from the public was used by the HMPT in their decision-making process and draft review.

The Wise County Commissioners Court was one method used to reach active members of the community and all development meetings were open to the public. Participation was highly encouraged.

A virtual survey was also used as a way for the public to participate. This survey was the most equitable outreach capability available, as the survey could also be translated to Spanish by survey respondents, when needed, and removed the physical, social, temporal, and accessible barriers typically associated with a whole community outreach strategy.

The link to the survey was shared via jurisdiction's official websites and social media platforms (Figure 2).

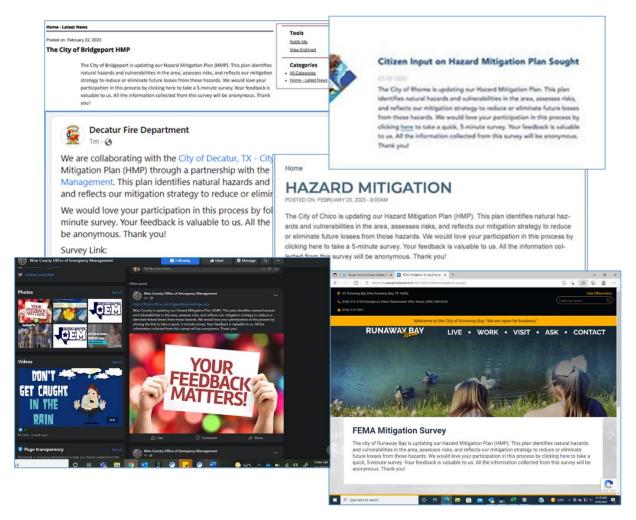


Figure 2: Survey Announcements

The public was also given an opportunity to review the final draft of this plan. The planning team carefully considered their feedback and made edits to the draft as necessary.

The HMPT with look for more outreach strategies to use when maintaining this plan, once adopted, and pre-plan their strategy for the next update in order to garner more valuable feedback and reach more socially vulnerable populations and underserved communities that are identified further on in this plan.

2.2 Existing Data and Plans

Existing hazard mitigation information and other relevant hazard mitigation plans were reviewed during the development of this plan. Data was gathered through numerous sources, including Geographic Information Systems (GIS). The intent of reviewing existing material was to identify existing data and information, shared objectives, and past and ongoing activities that can help inform the mitigation plan. It also helps identify the existing capabilities and planning mechanisms to implement the mitigation strategy. The table below outlines the sources used to collect data for the plan.

Table 3: Data Sources Used

Data Source	Data Incorporation	Purpose
County appraisal data, census data, city land use	Population and	Population counts, parcel
data	demographics	data, and land use data
National Centers for Environmental Information (NCEI)	Hazard occurrences	Previous event occurrences and mapping for hazards
Texas A&M Forest Service/Texas Wildfire Risk Assessment Summary Report	Wildfire threat and urban interface	Mapping and wildfire vulnerability
U.S. Army Corps of Engineers National Dam Inventory	Dam information	Dam list
Federal Emergency Management Agency (FEMA) Digital Flood Insurance Rate Map (DFIRM) Flood Zones, National Flood Insurance Program (NFIP) studies	Flood zone maps and NFIP information	GIS mapping of flood zones and NFIP data
October 2017 NFIP Flood Insurance Manual Change Package	NFIP Information	Repetitive Loss Properties and Community Rating System (CRS) ratings
State of Texas Hazard Mitigation Plan, 2018	Hazards and mitigation strategy	Support the goals of the state
Previous Wise County HMP	All Chapters	This is an update of that plan
Hazard Mitigation: Integrating Best Practices into Planning	Planning process	Use proven techniques in developing the HMP
Environmental Protection Agency (EPA) Superfund National Priority List	Protected sites	Risk assessment- identify critical areas
National Register of Historic Places	Historic districts	Risk assessment
Texas Parks & Wildlife List of Rare Species	Endangered or protected species	Risk assessment
Texas Water Development Board	Lake information	Vulnerabilities
U.S. Department of Agriculture	Soil type	Expansive Soils description
TxDOT Annual Reports	Roads & Bridges	Vulnerabilities

2.3 Timeframe & Planning Meetings

The planning process for the update of the Wise County Hazard Mitigation Plan took approximately two years (see Table 4).

Table 4: Planning Timeframe

Activity	Time Period
Kickoff meeting	July 2021
Created planning teams	July 2021
Conduct capability assessments	September 2021

Activity	Time Period
Conduct risk assessments	September 2021
Update mitigation strategy	February 2022
Create and review HMP Draft	March 2022
Send HMP to TDEM/make revisions as needed	May 2022-January 2024*
Send to FEMA/ make revisions as needed	To be determined
Adaption & signatures	Once "Approved Pending Adoption" designated
Adoption & signatures	received.

^{*}Please note that due to staff changes and miscommunication between NCTCOG and TDEM, the Draft had to be sent back and updated to meet the new 2023 FEMA Local Mitigation Planning Policy Guide.

These activities were completed in order to update every section of the 2015 HMP with current information, address current priorities, and to meet FEMA planning requirements. The public was invited to participate in every activity.

The mitigation plan shall be viewed as an evolving, dynamic document.

Chapter 3: Hazard Identification and Risk Assessment

Requirement	
§201.6(c)(2)(i)	[The risk assessment shall include a] description of the type, location and extent of all natural hazards that can affect the jurisdiction. The plan shall include information on previous occurrences of hazard events and on the probability of future hazard events.
§201.6(c)(2)(ii)	[The risk assessment shall include a] description of the jurisdiction's vulnerability to the hazards described in paragraph (c)(2)(i) of this section. This description shall include an overall summary of each hazard and its impact on the community. All plans approved after October 1, 2008 must also address NFIP [National Flood Insurance Program] insured structures that have been repetitively damaged by floods. The plan should describe vulnerability in terms of:
§201.6(c)(2)(ii)(A)	The types and numbers of existing and future buildings, infrastructure, and critical facilities located in the identified hazard areas;
§201.6(c)(2)(ii)(B)	An estimate of the potential dollar losses to vulnerable structures identified in this section and a description of the methodology used to prepare the estimate.
\$201.6(c)(2)(ii)(C)	Providing a general description of land uses and development trends within the community so that mitigation options can be considered in future land use decisions.
§201.6(c)(2)(iii)	For multi-jurisdictional plans, the risk assessment section must assess each jurisdiction's risks where they vary from the risks facing the entire planning area.

3.1 Major Disaster Declarations

The following table lists the major <u>disaster declarations</u> that have occurred in Texas since the approval of the previous HMP, beginning with most recent. Rows in red signify that the County qualified for Individual Assistance for the disaster, and those in <u>orange</u> would signify that the County qualified for Public Assistance for the disaster. Yellow would mean that the County qualified for both.

Table 5: Major Disaster Declarations

Disaster	Event	Incident Period	Declared
DR-4586	Texas Severe Winter Storms	February 11-21, 2021	February 19, 2021
DR-4572	Texas Hurricane Laura	August 23-27, 2020	December 9, 2020
DR-4485	Texas Covid-19 Pandemic	January 20, 2020 and continuing	March 25, 2020
DR-4466	Texas Tropical Storm Imeda	September 17-23, 2019	October 04, 2019
DR-4454	Texas Severe Storms and Flooding	June 24-25, 2019	July 17, 2019

Disaster	Event	Incident Period	Declared
DR-4416	Texas Severe Storms and Flooding	September 10-November 02, 2018	February 25, 2019
DR-4377	Texas Severe Storms and Flooding	June 19- July 13,2018	July 06, 2018
DR-4332	Texas Hurricane Harvey	August 23- September 15, 2017	August 25, 2017
DR-4272	Texas Severe Storms and Flooding	May 22- June 24, 2016	June 11, 2016
DR-4269	Texas Severe Storms and Flooding	April 17-30, 2016	April 25, 2016
DR-4266	Texas Severe Storms, Tornadoes, and Flooding	March 07-29, 2016	March 19, 2016
DR-4255	Texas Severe Winter Storms, Tornadoes, Straight-line Winds, and Flooding	December 26- January 21, 2016	February 09, 2016
DR-4245	Texas Severe Storms, Tornadoes, Straight-line Winds, and Flooding	October 22-31, 2015	November 25, 2015
DR-4223	Texas Severe Storms, Tornadoes, Straight-line Winds, and Flooding	May 04- June 22, 2015	May 29, 2015
DR-4159	Texas Severe Storms and Flooding	October 30-31, 2013	December 20, 2013
DR-4136	Texas Explosion	April 17-20, 2013	August 02, 2013

Source: FEMA

3.2 Natural Hazard Profiles

Through an assessment of previous federally declared disasters in Texas, the State of Texas Hazard Mitigation Plan, historical and potential events in Wise County, and a review of available local mitigation plans, it was determined that this Hazard Mitigation Plan (HMP) will address the risks associated with the following nine natural hazards:

- Drought
- Earthquakes
- Expansive Soils
- > Extreme Heat
- Flooding (including dam failure)
- Thunderstorms (including hail, wind, and lightning)
- > Tornadoes
- Wildfires
- Winter Storms

Each of these hazards has impacted, or can potentially impact, all participating jurisdictions and there are no natural hazards unique to any one jurisdiction.

Due to the low probability and history of occurrence of coastal erosion, land subsidence, and hurricane/tropical storm, they will not be profiled in this plan.

Since the adoption of the 2015 HMP, the definition of a thunderstorm now includes hail, high winds, and lightning. These individual hazards within a thunderstorm will not be listed nor categorized separately.

Around 2013, areas of North Central Texas began experiencing earthquakes. It is suspected that dormant fault lines have been disturbed. Earthquakes have been added to the list of natural hazards profiled in this update for jurisdictions that feel they could be potentially impacted by them.

For this HMP, dam failure is considered a technological hazard and the effects of dam failure will be addressed in the flooding portion of this plan when applicable. Dam failure is an accidental or unintentional collapse, breach, or other failure of an impoundment structure that results in downstream flooding.

Along with a general description and historical occurrences, each participating jurisdiction described the location, probability of a future event, and the maximum probable extent of each hazard using the terms identified in **Table 6** below.

Table 6: Hazard Summary Descriptions

Location: Location is the geographic area within the planning area that is affected by the hazard. The planning area refers to individual jurisdictions. Planning area refers to the size of the participating jurisdiction providing the description.

- Negligible- Less than 10% of planning area would be impacted by a single event.
- Limited- 10 to 25% of planning area would be impacted by a single event.
- **Significant** 26 to 99% of planning area would be impacted by a single event.
- **Extensive** 100% of planning area would be impacted by a single event, or the event has no boundary and could occur anywhere within the planning area.

Probability of Future Events: This information was based on historic events and changing climate.

- Unlikely- Less than 1% annual probability.
- Possible- Between 1 and 10% annual probability.
- Likely- Between 10 and 100% annual probability.
- Highly Likely- 100% annual probability.

Level of Possible Damage: Based on historic events and future probability.

- **Minor** Only minor property damage and minimal disruption of life. Temporary shutdown of critical facilities. Very few injuries, if any.
- **Limited** More than 10% of property in affected area damaged/destroyed. Complete shutdown of critical facilities for more than one day. Minor injuries possible.
- **Critical** More than 25% of property in affected area damaged/destroyed. Complete shutdown of critical facilities for more than one week. Multiple deaths/injuries.
- Catastrophic- More than 50% of property in affected area damaged/destroyed. Complete shutdown of critical facilities for 30 days or more. High number of deaths/injuries possible.

Maximum Probable Extent: Based on historic events and future probability.

- Minor- Minor classification on the scientific scale.
- **Medium** Medium classification on the scientific scale.
- Major- Major classification on the scientific scale.

Hazard & Scale	Maximum Probable Extent
	Minor: D0
Drought (National Drought Mitigation Center)	Medium: D1
	Major: D2-D4
Footh and to Annual Code	Minor: I-IV; 3-4.9 magnitude
Earthquakes (Modified Mercalli Intensity Scale; Richter Scale)	Medium: V-VII; 5-6.9 magnitude
Nicitei Scale)	Major: VIII-X; >7.0 magnitude
	Minor: El 0-50
Expansive Soils (Expansion Index Test)	Medium: El 51-90
	Major: El >91
	Minor: Heat Index <91°F
Extreme Heat (NWS Heat Index)	Medium: Heat Index 91-103°F
	 Major: Heat Index > 103°F
	Minor: < 2 feet
Flooding & Dam Failure Flooding (Estimated Base Flood Elevation)	Medium: 3-5 feet
Flood Elevation)	Major: > 5 feet
The standard of the Martha Martha Martha	Minor: TS1
Thunderstorms (Extreme Weather Madness Chart)	Medium: TS2-TS3
Charty	Major: Moderate-High, TS4-5
	Minor: EF0-EF1
Tornadoes (Enhanced Fujita (EF) Scale)	Medium: EF2-EF3
	Major: EF4-EF5
	Minor: FIS Class 1-2
Wildfires (Fire Intensity Scale (FIS))	Medium: FIS Class 3
	Major: FIS Class 4-5
Minton Champs (Minton Champs Constituted	Minor: WSSI Minor, SPIA 0-1
Winter Storms (Winter Storm Severity Index (WSSI); SPIA Index)	Medium: WSSI Moderate, SPIA 2-3
(WSSIJ, SEIA IIIUEX)	Major: WSSI Major-Extreme, SPIA 4-5

In this chapter, historical events are analyzed. The National Centers for Environmental Information (NCEI) receives storm data from the National Weather Service (NWS). NWS receives their information from a variety of sources, which include but are not limited to: county, state and federal emergency management officials, local law enforcement officials, SkyWarn spotters, NWS damage surveys, newspaper clipping services, the insurance industry, and the general public, among others. NWS Storm Data are geographically categorized by county or by NWS Forecast Zone. Localized events such as a tornado, thunderstorm winds, flash floods, and hail are categorized using the *Wise Co.* (County) designation. More widespread events that can impact the entire county equally, such as heat, cold, drought, floods, and winter weather, are categorized using the *Wise (Zone)*.

Below is an overview of the total historical dollar losses from the severe weather events within the participating jurisdictions collected by NWS since the previous hazard mitigation plan.

Table 7: Summary of Historical Events and Dollar Losses

Historical Dollar Losses, 2012-2021					
Hazard	# of Events	Property Loss	Crop Loss	Total	
Drought	39	\$10,000	\$66,000	\$76,000	
Extreme Heat	2	-	-	-	
Flooding	16	\$205,000	-	\$205,000	
Thunderstorms (hail,	69	\$644,000	-	\$644,000	
wind, lightning)					
Tornadoes	1	\$500,000	-	\$500,000	
Winter Storms	7	\$2,900,000	-	\$2,900,000	
Total Damage Costs \$4,325,000					

Not all events have been reported to NWS. Based on the information in the chart above, an increase in climate change, and increasing populations, it is expected that the same level of damage experienced in the past will occur in the future, if not more, for each event.

Below are the hazard summaries, in alphabetical order, for each hazard that impacts all the participating jurisdiction.

3.2.1 Drought

Drought can be defined as a water shortage caused by the natural reduction in the amount of precipitation expected over an extended period of time, usually a season or more in length. It can be aggravated by other factors such as high temperatures, high winds, and low relative humidity. The county's climate is characterized by hot and dry summers, which can lead to water scarcity and increased wildfire risk. This type of hazard has no geographic boundaries.

Wise County is part of the Region C Water Planning Group (RCWPG), one of 16 regional water planning groups created by the Texas Water Development Board (TWDB) to help develop a comprehensive water plan for Texas through 2070. The RCWPG is made up of voting members representing a variety of interest groups, including agriculture, counties, electric-generating utilities, environment, groundwater management areas, industry, municipalities, public, river authorities, small business, water districts and water utilities. The RCWPG adopted a 2021 Regional Water Plan that provides regional information and data into the 2022 State Water Plan.

In addition to the TWDB regulating state water planning, the Tarrant Regional Water District (TRWD) provides raw water to more than 30 wholesale customers in 11 North Texas counties, including Wise County. Wise County follows water restrictions identified in the TRWD Water Conservation and Drought Contingency Plan and the City of Bridgeport and City of Runaway Bay both have Drought Contingency Plans in their Code of Ordinance. All drought contingency plans are consistent with the Texas Commission on Environmental Quality (TCEQ) rules.

Intensity

Figure 3 describes the drought monitoring indices and a description of the possible impacts of the severity of drought.

	Return		Drought Monitoring Indices			
Drought Severity	Period (years)	Description of Possible Impacts	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.		D1	-2.0 to -2.9	
Sévere 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

Figure 3: Drought Intensity Scale

Impacts

Participating jurisdictions rely on water from Lake Bridgeport, Walnut Creek SUD, the Trinity Aquifer, and Paluxy Aquifer that are highly susceptible to the impact of drought.

Drought can impact the economy, environment, and society by limiting food and drinking water, destroying habitat, and triggering health and safety problems due to poor water quality and increased wildfires. Drought can also have a major impact on the environment, as it can lead to the loss of vegetation and wildlife habitat and increase the risk of wildfires.

Besides major crop damage, these extreme drought conditions have the potential to put Wise County in extreme fire danger and could cause widespread water shortage and restrictions, creating a water emergency. In Texas, local governments are empowered to take action on behalf of those they serve. When drought conditions exist, a burn ban can be put in place by a county judge or county Commissioners Court, prohibiting or restricting outdoor burning for public safety.²

Prolonged drought can also lead to increased food prices, as well as other economic impacts such as job losses and reduced tax revenues.

² Fire Danger: Texas Burn Bans. Texas A&M Forest Service. 2018.

http://texasforestservice.tamu.edu/TexasBurnBans/

Historical Events

As shown in the following graph from the <u>United States Drought Monitor</u>, the years 2014-2015 had the greatest severity and longest time period of extreme drought conditions in Wise County. During this time period, the value of cattle decreased dramatically due to low cattle weight caused by drought impact on feed lots. Cattle had to be shipped to Oklahoma and farmers had to buy hay to feed cattle instead of growing it themselves.

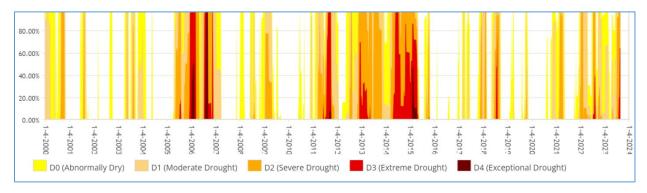


Figure 4: Historical Events- Drought

Future Events

Due to the nature of drought, the Texas climate, and the effects of climate change, drought is expected to be a continual threat to the planning area.

The Long-Term Multi-Indicator Drought Index (MIDI) approximates drought impacts from changes in precipitation and moisture over a long-term timeframe (up to 5 years), such as impacts to irrigated agriculture, groundwater, and reservoir levels. Reflected in Figure 5 below, drought is predicted to have a lasting effect on Wise County.

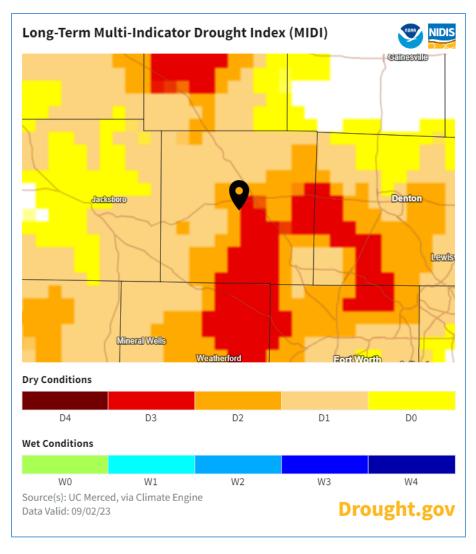


Figure 5: Long-Term MIDI

Hazard Summary

The following table reflects the profile summary for drought within the planning area.

Table 8: Drought Profile Summary

Drought				
Jurisdiction	Location	Probability of Future Events	Level of Possible Damage	Maximum Probable Extent/Strength
Bridgeport	Extensive	Highly Likely	Minor	Major
Chico	Extensive	Highly Likely	Minor	Major
Decatur	Extensive	Highly Likely	Minor	Major
Rhome	Extensive	Highly Likely	Critical	Major
Runaway Bay	Extensive	Highly Likely	Minor	Major

Drought						
Jurisdiction	Location	Probability of Future Events	Level of Possible Damage	Maximum Probable Extent/Strength		
Wise County Unincorporated	Extensive	Highly Likely	Minor	Medium		

3.2.2 Earthquakes

An earthquake is a sudden motion or trembling of the earth, either caused by an abrupt release of accumulated strain on the tectonic plates that comprise the earth's crust or from human activities. Scientific studies have tied the quakes in North Central Texas to the disposal of wastewater from oil and gas production.

Intensity

Earthquakes are measured by both magnitude and intensity.

Magnitude measures the energy released at the source of the earthquake and is determined from measurements on seismographs, as represented in Figure 6. From 1935 until 1970, the earthquake magnitude scale was the Richter scale. Today, earthquake magnitude measurement is based on the Moment Magnitude Scale (MMS). MMS measures the movement of rock along the fault. It accurately measures larger earthquakes, which can last for minutes, affect a much larger area, and cause more damage.

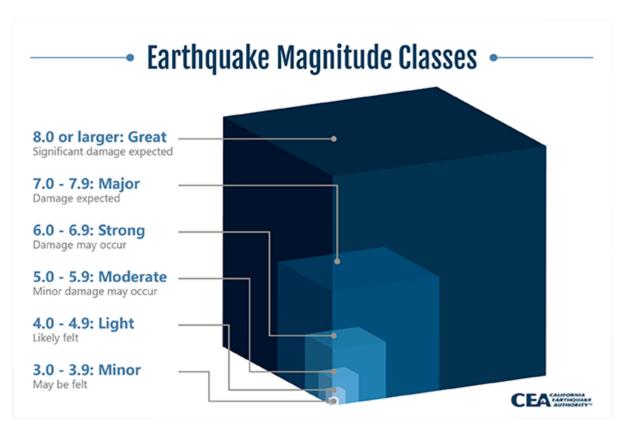


Figure 6: Earthquake Magnitude Classes.3

Intensity is determined from on-the-ground description and the effects on people and the environment. An earthquake intensity scale consists of a series of key responses that includes people awakening, movement of furniture, damage to chimneys and total destruction. The Modified Mercalli Intensity Scale (see Figure 7) classifies earthquakes by the amount of damage inflicted.

³ How are Earthquakes Measured? Magnitude & Intensity Scales | CEA (earthquakeauthority.com)

Intensity	Shaking	Description/Damage
1	Not felt	Not felt except by a very few under especially favorable conditions.
II	Weak	Felt only by a few persons at rest, especially on upper floors of buildings.
Ш	Weak	Felt quite noticeably by persons indoors, especially on upper floors of buildings. Many people do not recognize it as an earthquake. Standing motor cars may rock slightly. Vibrations similar to the passing of a truck. Duration estimated.
IV	Light	Felt indoors by many, outdoors by few during the day. At night, some awakened. Dishes, windows, doors disturbed; walls make cracking sound. Sensation like heavy truck striking building. Standing motor cars rocked noticeably.
V	Moderate	Felt by nearly everyone; many awakened. Some dishes, windows broken. Unstable objects overturned. Pendulum clocks may stop.
VI	Strong	Felt by all, many frightened. Some heavy furniture moved; a few instances of fallen plaster. Damage slight.
VII	Very strong	Damage negligible in buildings of good design and construction; slight to moderate in well-built ordinary structures; considerable damage in poorly built or badly designed structures; some chimneys broken.
VIII	Severe	Damage slight in specially designed structures; considerable damage in ordinary substantial buildings with partial collapse. Damage great in poorly built structures. Fall of chimneys, factory stacks, columns, monuments, walls. Heavy furniture overturned.
IX	Violent	Damage considerable in specially designed structures; well-designed frame structures thrown out of plumb. Damage great in substantial buildings, with partial collapse. Buildings shifted off foundations.
Х	Extreme	Some well-built wooden structures destroyed; most masonry and frame structures destroyed with foundations. Rails bent.

Figure 7: Modified Mercalli Intensity Scale⁴

Impacts

Earthquakes can have a significant impact on the local economy. They can cause extensive damage to property and infrastructure, as well as loss of life. They can lead to reduced productivity and increased absenteeism, as well as increased demand for emergency services and disaster relief. Additionally, earthquakes can lead to power outages, landslides, and fires.

Historical Events

According to the United States Geological Survey (USGS) <u>Earthquake Catalog</u>, in 2018 there was a 2.7 magnitude earthquake near the City of Chico due to a quarry blast. No injuries or damage were reported. Figure 8 provides a visual of the intensity of this blast.

⁴ The Modified Mercalli Intensity Scale | U.S. Geological Survey (usgs.gov)

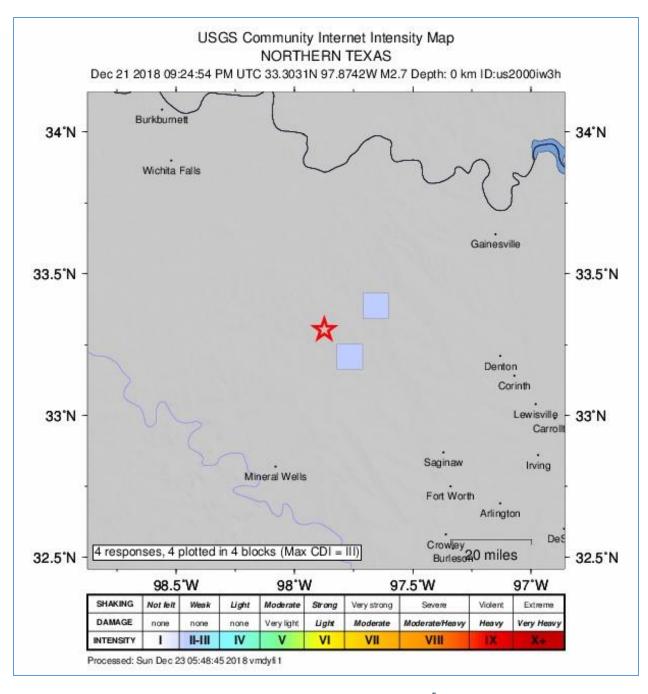


Figure 8: Quarry Blast Intensity Map.5

Future Events

The map in Figure 9 shows how often scientists expect damaging earthquake shaking around the U.S. over the next 10,000 years; in which Wise County is in the blue-grey area. According to the <u>U.S. Geological Survey (USGS)</u>, damaging shaking is possible in all fifty states. The cooler color areas, like grey, are low hazard but not *no* hazard.

⁵ M 2.7 Quarry Blast - 7 km W of Chico, Texas (usgs.gov)

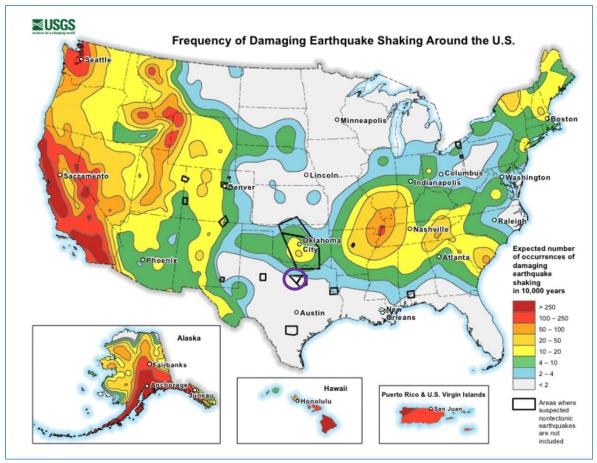


Figure 9: Future Probability Map- Wise County

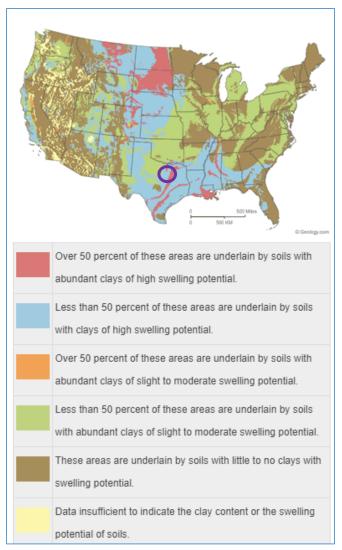
Hazard Summary

The following table reflects the profile summary for earthquakes within the planning area.

Table 9: Earthquake Profile Summary

Earthquakes					
Jurisdiction	Location	Probability of Future Events	Level of Possible Damage	Maximum Probable Extent/Strength	
Bridgeport	Extensive	Unlikely	Minor	Minor	
Chico	Extensive	Unlikely	Minor	Minor	
Decatur	Extensive	Unlikely	Limited	Minor	
Rhome	Extensive	Unlikely	Minor	Minor	
Runaway Bay	Extensive	Unlikely	Minor	Minor	
Wise County Unincorporated	Limited	Unlikely	Minor	Minor	

3.2.3 Expansive Soils



Expansive soils are soils that expand when water is added and shrink when they dry out. It contains large percentages of swelling clays that may experience volume changes of up to 40% in the absence or presence of water. This continuous change in soil volume can cause homes built on this soil to move unevenly and crack.

According to the Expansive Soils Map (Figure 10), the Wise County area is underlain with clays of high swelling potential.

The Expansive Soils Map (Figure 10) is based upon "Swelling Clays Map of the Conterminous United States" by W. Olive, A. Chleborad, C. Frahme, J. Shlocker, R. Schneider and R. Schuster. It was published in 1989 as Map I-1940 in the USGS Miscellaneous Investigations Series. This map was generalized for display on the web by Bradley Cole of Geology.com using a base map licensed from MapResources.

Figure 10: Expansive Soils Map

Intensity

Both the International Building Code and International Residential code adopted the Expansion Index (EI) test (see Table 10) to identify expansive soils and its swilling potential.⁶

Table 10: Expansion Potential Based on Expansion Index

Expansion Index (EI)	El Potential Expansion
0-20	Very Low
21-50	Low
51-90	Medium
91-130	High

⁶ Soil expansion index chart. (n.d.). Bing.

https://www.bing.com/search?q=soil+expansion+index+chart&FORM=HDRSC1

Expansion Index (EI)	El Potential Expansion	
>130	Very High	

Impacts

The county's climate is characterized by hot and dry summers, which can lead to changes in moisture content and cause the soil to expand and contract, leading to damage.

Expansive soils can lead to increased flooding and landslides as well as other environmental hazards. Because of this swelling and shrinking behavior, expansive soils may also cause the following problems in structures or construction projects:

- Structural damage to lightweight structures such as sidewalks and driveways
- Lifting of buildings, damage to basements, and building settlement
- Cracks in walls and ceilings
- Damage to pipelines and other public utilities
- Lateral movement of foundations and retaining walls due to pressure exerted on vertical walls
- Loss of residual shear strength causing instability of slopes, etc.

Damage to these structures can lead to costly repairs and can cause major disruptions to transportation and communication. Therefore, it is essential to check for the presence of expansive soil and a suitable treatment method should be adopted before commencing any construction projects. In some cases, postconstruction treatment of expansive soil may be required if the situation has not been dealt with before construction.

Historical Events

While cracks in land, roads, and foundations are present, due to the slow moving nature of expansive soils effects, there is no method of tracking damages within the county.

Future Events

Due to the nature of expansive soils, existing soil type in the planning area, and the current methods of engineering and structure development, expansive soils is expected to be a continual threat to the planning area.

Hazard Summary

The following table reflects the profile summary for expansive soils within the planning area.

Table 11: Expansive Soils Profile Summary

Expansive Soils					
Jurisdiction	Location	Probability of Future Events	Level of Possible Damage	Maximum Probable Extent/Strength	
Bridgeport	Extensive	Highly Likely	Minor	Medium	
Chico	Extensive	Highly Likely	Minor	Medium	
Decatur	Extensive	Highly Likely	Minor	Medium	

Expansive Soils					
Jurisdiction	Location	Probability of Future Events	Level of Possible Damage	Maximum Probable Extent/Strength	
Rhome	Extensive	Highly Likely	Minor	Medium	
Runaway Bay	Extensive	Highly Likely	Minor	Medium	
Wise County Unincorporated	Extensive	Highly Likely	Minor	Medium	

3.2.4 Extreme Heat

Extreme heat is characterized by a combination of very high temperatures and exceptionally humid conditions. When persisting over a period of time, it is called a heat wave.

Intensity

The National Weather Service (NWS) measure how hot weather feels on the body by utilizing the Heat Index values (Figure 11). The values in this index are for SHADE only. You can add up to 15°F to these values if you are in direct sunlight.

To read the NWS Heat Index, look for the temperature across the top, then find the relative humidity on the left. The point where they intersect on the chart tells you the Heat Index, color-coded by likelihood of a heat disorder. For example, look at an air temperature of 100°F and Relative Humidity of 40%. The chart shows the Heat Index (how hot it feels) as 109°F, which is in the orange range for DANGER.

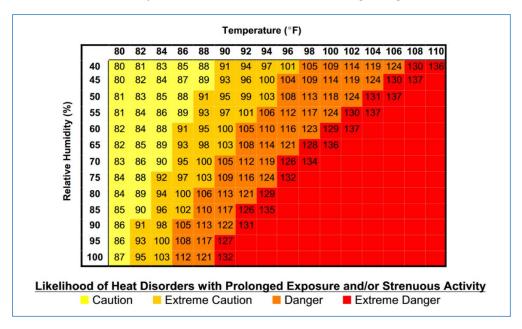


Figure 11: NWS Heat Index

Impacts

Extreme heat also can have a significant impact on the local economy. It can lead to reduced productivity and increased absenteeism, as well as increased demand for cooling and energy services. This can lead to increased costs for businesses and residents. Extreme heat can also lead to increased wildfire risk, which can lead to significant damage to property and loss of life.

Extreme heat can be a factor that drastically impacts drought conditions, as high temperatures lead to an increased rate of evaporation. The total number of days per year with maximum temperature above various thresholds is an indicator of how often very hot conditions occur. Depending upon humidity, wind, and physical workload, people who work outdoors or don't have access to air conditioning may feel very uncomfortable or experience heat stress or illness on very hot days. Hot days also stress plants, animals, and human infrastructure such as roads, railroads, and electric lines. Increased demand for electricity to cool homes and buildings can place additional stress on energy infrastructure.

Historical Events

Throughout the summer there are various sporting events, festivals, and park activities held outside throughout the planning area, which can make attendees vulnerable to the effects of extreme heat. Luckily there have been no reports of heat casualties up to this point.

The following table lists excessive heat events and impacts from 2012-2021 recorded by the National Weather Service.

Table 12: Historical Events- Extreme Heat

Location	Date	Туре	Mag	Dth	Inj	PrD	CrD
WISE (ZONE)	06/20/2019	Excessive Heat		0	0	0.00K	0.00K
WISE (ZONE)	08/13/2020	Excessive Heat		0	0	0.00К	0.00K
Totals:				0	0	0.00K	0.00K

Source: NOAA National Centers for Environmental Information

Future Events

According to <u>Headwater Economics</u>, Wise County is expected to experience a 6% increase in extremely hot days within five years in a higher emissions scenario.

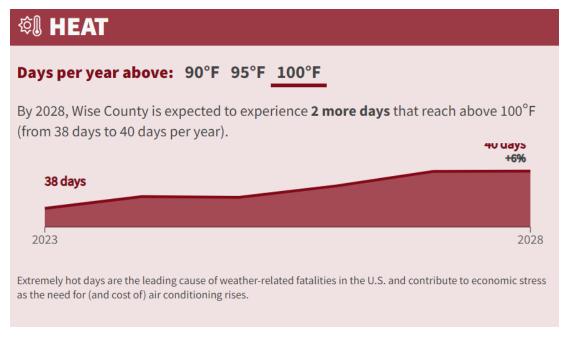


Figure 12: Extreme Heat Predictions

Hazard Summary

The following table reflects the profile summary for extreme heat within the planning area.

Extreme Heat Maximum **Probability of Level of Possible** Jurisdiction Location Probable **Future Events** Damage Extent/Strength Bridgeport Extensive **Highly Likely** Minor Major Chico **Highly Likely** Extensive Minor Major Decatur Extensive **Highly Likely** Minor Major Rhome Extensive **Highly Likely** Minor Major Runaway Bay Extensive **Highly Likely** Minor Major Wise County Extensive **Highly Likely** Minor Major Unincorporated

Table 13: Extreme Heat Profile Summary

3.2.5 Flooding

Flooding is defined as the accumulation of water within a water body and the overflow of excess water onto adjacent floodplain lands. A floodplain (or flood zone) is the land adjoining the channel of a river, stream, ocean, lake, or other watercourse or water body that is susceptible to flooding. The statistical meaning of terms like "100-year flood" can be confusing. Simply stated, a floodplain can be located anywhere; it just depends on how large and how often a flood event occurs. Floodplains are those areas that are subject to inundation from flooding. Floods and the floodplains associated with them are often described in terms of the percent chance of a flood event happening in any given year.

As a community management or planning term, "floodplain" or "flood zone" most often refers to an area that is subject to inundation by a flood that has a 1% chance of occurring in any given year (commonly referred to as the 100-year floodplain).

Flooding can occur anywhere with low-lying areas, clogged drains, and/or intense rain.

A **flash flood** is a rapid flood that inundates low-lying areas in less than six hours. This is caused by intense rainfall from a thunderstorm or several thunderstorms. Flash floods can also occur from the collapse of a man-made structure or ice dam. Construction and development can change the natural drainage and create brand new flood risks as the concrete that comes with new buildings, parking lots, and roads create less land that can absorb excess precipitation from heavy rains. Flash floods are a high-risk hazard since they can tear out trees and destroy buildings and bridges.

The following questions address the overall flooding issues within the participating jurisdictions.

Table 14: Flooding-Related Questions

What rivers, creeks, and/or lakes are in your jurisdiction?

Bridgeport: Trinity River, Turkey Creek, Lake Bridgeport

Chico: Unknown
Decatur: Unknown
Rhome: None

Runaway Bay: Trinity River, Jasper Creek, Lake Bridgeport

Wise County Unincorporated: Lake Bridgeport, Trinity River/watershed, Eagle Mountain Lake, Turkey

Creek, Denton Creek, Big Sandy Creek

Name any streets or intersections that experience flooding or flash flooding:

Bridgeport: Turkey Creek Trail, Hovey, Halsell, Cates, Hwy 380, 17th Street, Mockingbird Street

Chico: Area around the rock quaries.

Decatur: Unknown **Rhome:** N/A

Runaway Bay: CR 1700/ HWY 380 Bridge Wise County Unincorporated: Unknown

What critical facilities or infrastructure (airports, dams, water treatment facilities, wastewater treatment facilities, schools, hospitals, fire stations, and police stations) are located in the 100-year floodplain?

100% of dams and 100% wastewater treatment facilities are at risk from the 100-year flood event. Many of these structures are designed to traverse or be located within the floodplain due to unavoidable circumstances. Additionally, treated wastewater is typically discharged towards streams, which makes portions of wastewater treatment facilities likely to be located within the floodplain.

In the event of a wildfire, will flooding and erosion be an issue in restoring destroyed forested slopes?

Dam failure flooding is flooding from an accidental or unintentional collapse, breach, or other failure of an impoundment structure that results in downstream flooding. Dam failure is a technological/man-made hazard that leads to a natural hazard, flooding. According to the Association of State Dam Safety Officials, dam failures are most likely to happen for one of five reasons:

- **1. Overtopping** caused by water spilling over the top of a dam. Overtopping of a dam is often a precursor of dam failure. The occasional overtopping of the spillway from major rainfall is the main cause of flooding from dam failure within North Central Texas.
- 2. Foundation Defects, including settlement and slope instability.
- **3. Cracking** caused by movements like the natural settling of a dam.
- 4. Inadequate maintenance and upkeep.
- **5. Piping** is internal erosion caused by seepage of soil particles that continue to progress and form sink holes in the dam. Seepage often occurs around hydraulic structures, such as pipes and spillways; through animal burrows; around roots of woody vegetation; and through cracks in dams, dam appurtenances, and dam foundations.

Maps of the flooding areas are available in Appendix E and is for official use only.

The Flood Hazard Boundary Map (FHBM) and Flood Insurance Rate Map (FIRM) show Flood Insurance Risk Zones that indicate the magnitude of the flood hazard in specific areas of a community. Wise County jurisdictions are primarily in zones A, AE, and X. The zone categories are below:

Table 15: Flood Insurance Risk Zones

High Risk Area	Description				
In communities that participate in the NFIP, mandatory flood insurance purchase requirements apply to all of these zones.					
Zone A	Special flood hazard areas inundated by the 100-year flood; base flood elevations are not determined. Areas with a 1% annual chance of flooding and a 26% chance of flooding over the life of a 30-year mortgage. Because detailed analyses are not performed for such areas; no depths or base flood elevations are shown within these zones.				
Zone AE	Special flood hazard areas inundated by the 100-year flood; base flood elevations are determined. The base floodplain where base flood elevations are provided. AE Zones are now used on new format FIRMs instead of A1-A30 Zones.				
Zone A1-30	Special flood hazard areas inundated by the 100-year flood; base flood elevations are determined. These are known as numbered A Zones (e.g., A7 or A14). This is the base floodplain where the FIRM shows a BFE (old format).				
Zone AO	Special flood hazard areas inundated by the 100-year flood; with flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. River or stream flood hazard areas, and areas with a 1% or greater chance of shallow flooding each year, usually in the form of sheet flow, with an average depth ranging from 1 to 3 feet. These areas have a 26% chance of flooding over the life of a 30-year mortgage. Average flood depths derived from detailed analyses are shown within these zones.				
Zone AH	Special flood hazard areas inundated by the 100-year flood; flood depths of 1 to 3 feet (usually areas of ponding); base flood elevations are determined. Areas with a 1% annual chance of shallow flooding, usually in the form of a pond, with an average depth ranging from 1 to 3 feet. These areas have a 26% chance of flooding over the life of a 30-year mortgage. Base flood elevations derived from detailed analyses are shown at selected intervals within these zones.				
Zone A99	Special flood hazard areas inundated by the 100-year flood to be protected from the 100-year flood by a Federal flood protection system under construction; no base flood elevations are determined.				

High Risk Area	Description				
In communities that participate in the NFIP, mandatory flood insurance purchase requirements apply to all of these zones.					
	Areas with a 1% annual chance of flooding that will be protected by a Federal flood control system where construction has reached specified legal requirements. No depths or base flood elevations are shown within these zones.				
Moderate to Low Risk Area	Description				
In communities that participate in the NFIP, flood insurance is available to all property owners and renters in these zones.					
Zone B and Zone X (shaded)	Areas of 500-year flood; areas subject to the 100-year flood with average depths of less than 1 foot or with contributing drainage area less than 1 square mile; and areas protected by levees from the base flood. Area of moderate flood hazard, usually the area between the limits of the 100- year and 500-year floods. B Zones are also used to designate base floodplains of lesser hazards, such as areas protected by levees from 100-year flood, or shallow flooding areas with average depths of less than one foot or drainage areas less than 1 square mile.				
Zone C and Zone X (un-shaded)	Areas determined to be outside the 500-year floodplain. Area of minimal flood hazard usually depicted on FIRMs as above the 500-year flood level. Zone C may have ponding and local drainage problems that don't warrant a detailed study or designation as base floodplain. Zone X is the area determined to be outside the 500-year flood and protected by levee from 100- year flood.				
Undetermined Risk Area	Description				
Zone D	Areas with possible but undetermined flood hazards. No flood hazard analysis has been conducted. Flood insurance rates are commensurate with the uncertainty of the flood risk.				

Dams have three different levels of classification from low to high potential. The following descriptions of these classifications are provided by the Texas Commission on Environmental Quality (TCEQ), the state regulating agency in Texas.

Dam Classifications:7

• Low:

- No loss of life expected (based off surrounding populated area)
- Minimal economic impact

Significant

- o Loss of life possible (1-2 homes based off surrounding populated area)
- o Appreciable economic impact

High

- Loss of life expected (>3 homes based off surrounding populated area)
- o Excessive economic impact

⁷ Session. "2022 Dam Safety Workshop." *Texas.gov*, https://www.tceq.texas.gov/downloads/compliance/enforcement/dam-safety/workshop-session-1.pdf.

According to the U.S. Army Corps of Engineers (USACE) National Inventory of Dams (NID), there are 25 high-hazard potential dams (HHPDs) in Wise County, as identified by yellow dots in Figure 13 and listed, in detail, in Table 16.

The HHPDs in Wise County, which are all earth-type dams, are all regulated by TCEQ.

HHPDs are required to have Emergency Actions Plans (EAPs), which include log sheets of changes, annual review checklists, plan review and update pages, and training records. The EAP should be the go-to document during a dam emergency.

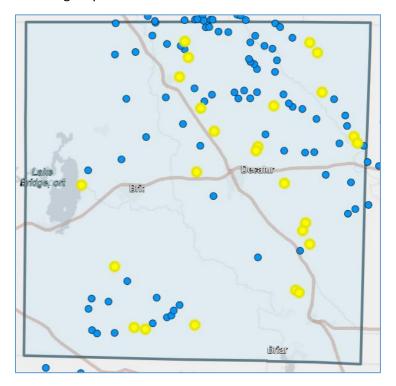


Figure 13: HHPDs in Wise County

Table 16: HHPDs in Wise County

Dam Name	NID ID	City	River or Stream Name	Dam Height (Ft)	Dam Length (Ft)	Volume (Cubic Yards)	Max Storage (Acre-Ft)	Drainage Area (Sq Miles)
Big Sandy Creek WS SCS Site 24d Dam	TX06842	ALVORD	TR-DRY HOLLOW CREEK	38	1366	81610	416.2	1.29
Salt Creek & Laterals WS SCS Site 5 Dam	TX01492		TR-SALT CREEK	53	1100	102640	1420	2.55
Salt Creek & Laterals WS SCS Site 10 Dam	TX01486		COTTOWOOD CREEK	45	1004	63165	618	1.3
Salt Creek & Laterals WS SCS Site 6 Dam	TX01480		GONZOLLAS CREEK	47	1650	0	2419	6.53
Salt Creek & Laterals WS SCS Site 15 Dam	TX04721	BOYD	SOUTH FORK RUSH CREEK	45	2520	220270	3404	7.57
Big Sandy Creek WS SCS Site 24b Dam	TX05834		DRY HOLLOW	33	1550	78470	614	1.25
Big Sandy Creek WS NRCS Site 35 Dam	TX07204		TR-WATSON BRANCH	46	1035	133675	711	1.52
Big Sandy Creek WS SCS Site 26 Dam	TX06844		TR-BIG SANDY CREEK	23	1630	0	402	0.65
Big Sandy Creek WS SCS Site 37 Dam	TX06905		ROSEBUD BRANCH	28.5	1197	5699	400	0.74
Big Sandy Creek WS SCS Site 32 Dam	TX06846		WALKER BRANCH	43.5	1500	111476	652	1.21
Big Sandy Creek WS SCS Site 43 Dam	TX05062		BLUE CREEK	48	1435	129220	1280	3.24
Big Sandy Creek WS SCS Site 44 Dam	TX05065		TR-BLUE CREEK	39	1463	125770	729	2
Denton Creek WS SCS Site 21d Dam	TX01532		TR-DENTON CREEK	37	705	45400	369	0.93
Denton Creek WS SCS Site 30 Dam	TX01478		LONG BRANCH	46	1590	125650	1846	3.97

Dam Name	NID ID	City	River or Stream Name	Dam Height (Ft)	Dam Length (Ft)	Volume (Cubic Yards)	Max Storage (Acre-Ft)	Drainage Area (Sq Miles)
Denton Creek WS SCS Site 20 Dam	TX01526		TR-HARTS CREEK	47	3800	211247	2063	4.57
Denton Creek WS SCS Site 29 Dam	TX01477		OLIVER CREEK	60	2490	188360	5628	12.27
Denton Creek WS SCS Site 18j Dam	TX01508		TR-BLACK CREEK	51	1000	99255	414	0.87
Denton Creek WS SCS Site 31 Dam	TX01479		TEETER BRANCH	34	1900	127480	1588	3.42
Nautilus Dam	TX07408		UNNAMED TRIBUTARY OF DENTON CREEK	23	510		88	0.25
Bridgeport Dam	TX01496	BRIDGEPORT	WEST FORK TRINITY RIVER	130	2040		923814	1111
Denton Creek WS SCS Site 23a Dam	TX01509		CATLETT CREEK	53	1910	148670	2274	5.42
Denton Creek WS SCS Site 17a Dam	TX01537	GREENWOOD	MILLER CREEK	55	782	96100	1468	3.59
Denton Creek WS SCS Site 24 Dam	TX01488		SWEETWATER CREEK	63	1745	192760	2595	6
Denton Creek WS SCS Site 23b Dam	TX01510		TR-CATLETT CREEK	50	2120	145000	1969	4.04
Denton Creek WS SCS Site 17 Dam	TX01536	GREENWOOD	HARTS CREEK	50	1200	158540	1861	4.1

Intensity

To determine the maximum intensity of a flood event within the planning area, the Local Planning Team reviewed the FEMA Estimated Base Flood Elevation. According to FEMA, this is the estimated elevation of flood water during 1% annual chance storm event (also referred to as a 100-year flood). Structures below the estimated water surface elevation may experience flooding.

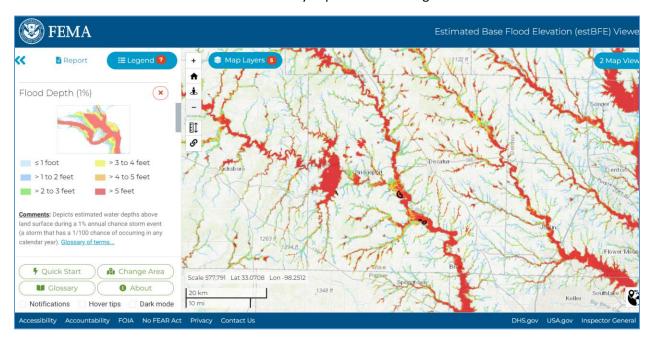


Figure 14: Estimated Base Flood Elevation

According to the map, multiple jurisdictions could receive over 5 feet of flood water while others could receive less than one. The deepest depths are associated with lakes and the rock quarries within the planning area.

Impacts

Floodwater can disguise many dangerous obstacles, like uncovered manholes or debris that can cause someone to fall over. Standing water, or water that isn't flowing, can also become a breeding ground for insects that can make people very ill. Another risk can be downed power lines which may still be live.

The following locations have been identified as having elevated flood-related concerns in the Wise County Transportation Plan due to their persistent issues and their high impact on the overall transportation system during instances of flood-related emergencies. Especially problematic locations are listed in geographical order from south to north and identified in Figure 15.

- 1. FM 4757 near FM 4756
- 2. CR 4668 near FM 730
- 3. FM 730 near Abel Road
- 4. FM 730 near CR 4470
- 5. FM 3259 between SH 114 & FM 51
- 6. US 380 at Lake Bridgeport
- 7. FM 920 near CR 3424 16. SH 101 South of Montague County Line

- 8. FM 3225 near FM 3241
- 9. FM 2123 near Industrial Blvd
- 10. Cates Street near 8th Street
- 11. FM 920 & FM 3519
- 12. FM 1810 from Maginnis Road to CR 1340
- 13. FM 2535 near FM 2425
- 14. FM 1810 & PR 1262
- 15. FM 1655 near FM 2265

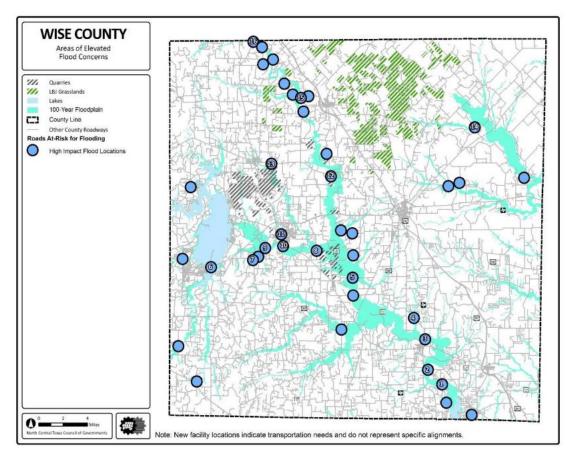


Figure 15: Areas of Elevated Flood Concern

Potential impacts from dam failure flooding include property and crop damage, transportation delays, and injury or death within the inundation zone. The inundation zone is the drainage area (by square miles) listed in the HHPD table. Only the City of Bridgeport and Wise County Unincorporated could be impacted by dam failure flooding from any of the 25 HHPDs in the county.

Historical Events

The following table lists the historical flood events and impacts from 2012-2021 recorded by the National Weather Service, in order of participating jurisdiction.

Table 17: Historical Events- Flooding

Location	Date	Туре	Mag	Dth	lnj	PrD	CrD
<u>BRIDGEPORT</u>	05/19/2015	Flash Flood		0	0	180.00K	0.00K
<u>BRIDGEPORT</u>	05/20/2015	Flash Flood		0	0	5.00K	0.00K
BRIDGEPORT	05/20/2015	Flash Flood		0	0	20.00K	0.00K
BRIDGEPORT	03/07/2016	Flash Flood		0	0	500.00K	0.00K
BRIDGEPORT	04/17/2017	Flood		0	0	0.00K	0.00K
BRIDGEPORT MUNI ARPT	04/17/2017	Flood		0	0	0.00K	0.00K
<u>CHICO</u>	05/20/2015	Flash Flood		0	0	0.00K	0.00K
<u>CHICO</u>	06/17/2015	Flash Flood		0	0	50.00K	0.00K
<u>CHICO</u>	05/01/2019	Flash Flood		0	0	0.00K	0.00K
<u>CHICO</u>	03/07/2016	Flood		0	0	200.00K	0.00K
<u>CHICO</u>	08/18/2021	Flood		0	0	5.00K	0.00K
<u>DECATUR</u>	07/17/2014	Flash Flood		0	0	0.00K	0.00K
DECATUR	05/10/2015	Flash Flood		0	0	0.00K	0.00K
DECATUR	01/10/2020	Flood		0	0	0.00K	0.00K
DECATUR MUNI ARPT	05/10/2015	Flash Flood		0	0	0.00K	0.00K
LAKE BRIDGEPORT	05/19/2015	Flash Flood		0	0	5.00K	0.00K
Total Flash Floods:				0	0	1.627M	0.00K
Total Floods:				0	0	205.00K	0.00K

Source: NOAA National Centers for Environmental Information

There have been no reports of dam failure flooding.

Future Events

According to <u>Headwater Economics</u>, Wise County is predicted to experience a 1% increase in 1 inch precipitation by 2028 and a 26% increase in 4 inches of precipitation.

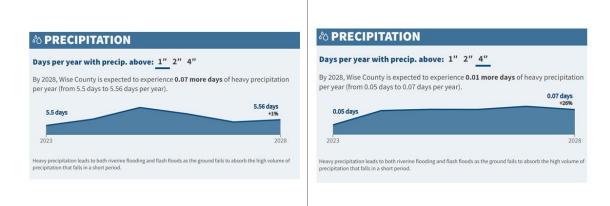


Figure 16: Predicted Precipitation Comparison

It can be expected that flooding will continue to be a threat to the planning area as it has been in the past.

With no past dam failures recorded in Wise County, there is no future prediction of flooding from a dam failure in the next five years. The USACE and TCEQ conduct extensive dam failure training on a regular basis for jurisdictional staff, with a required tabletop exercise every five years, which helps prepare local officials and reduces the impact of flooding from a dam failure to the jurisdictions.

Hazard Summary

The following tables reflects the profile summary for flooding and dam failure flooding within the planning area.

Flooding Maximum **Probability of Level of Possible Jurisdiction** Location **Probable Future Events** Damage Extent/Strength Bridgeport Significant Limited Medium **Highly Likely** Chico Significant Likely Limited Major Decatur Limited **Highly Likely** Minor Limited Rhome Limited Limited Minor Likely Runaway Bay Significant **Highly Likely** Limited Major Wise County Significant Likely Limited Major Unincorporated

Table 18: Flooding Profile Summary

Table 19: Flooding Profile Summary

Dam Failure Flooding							
Jurisdiction	Location	Probability of Future Events	Level of Possible Damage	Maximum Probable Extent/Strength			
Bridgeport	Negligible	Unlikely	Minor	Minor			
Wise County Unincorporated	Negligible	Unlikely	Minor	Minor			

3.2.6 Thunderstorms

A thunderstorm is a storm that consists of rain-bearing clouds and has the potential to produce hail, high winds, and lightning.

- ➤ Hail: Hail occurs when, at the outgrowth of a severe thunderstorm, balls or irregularly shaped lumps of ice greater than 19.05 mm (0.75 inches) in diameter fall with rain. Evidence indicates maximum hailstone size is the most important parameter relating to structural damage, especially towards the more severe end of the scale. It must be noted that hailstone shapes are also an important feature, especially as the "effective" diameter of non-spheroidal specimens should ideally be an average of the coordinates. Spiked or jagged hail can also increase some aspects of damage.
- ➤ Wind: Straight-line winds are often responsible for the wind damage associated with a thunderstorm. Downbursts or micro-bursts are examples of damaging straight-line winds. A downburst is a small area of rapidly descending rain and rain-cooled air beneath a thunderstorm that produces a violent, localized downdraft covering 2.5 miles or less. Wind speeds in some of the stronger downbursts can reach 100 to 150 miles per hour, which is similar to that of a strong tornado. The winds produced from a downburst often occur in one direction and the worst damage is usually on the forward side of the downburst.
- Lightning: Lightning results from the buildup and discharge of electrical energy between positively and negatively charged areas within thunderstorms. A "bolt" or brilliant flash of light is created when the buildup becomes strong enough. These bolts of lightning can be seen in cloud-to-cloud or cloud-to-ground strikes. Bolts of lightning can reach temperatures approaching 50,000°F.

Thunderstorms are not confined by geographic boundaries and can occur anywhere in the county.

Intensity

The Thunderstorm Criteria in the Extreme Weather Madness Chart (Figure 17), created by Senior Meteorologist Henry Margusity, describes the rainfall, maximum wind gust, hail size, and lightning frequency. This chart was used by the Local Planning Team to determine the maximum probably intensity in the planning area.

T-1 – Weak thunderstorms or Thundershowers T-2 – Moderate Thunderstorms.	.0310	< 25 MPH	None	None	(5 min Intervals) Only a few strikes
	.10"25"				during the storm.
		25-40 MPH	None	None	Occasional 1-10
T-3 – Heavy Thunderstorms 1. Singular or lines of storms.	.25"-,55"	40-57 MPH	1/4 " to ¾"	EF0	Occasional to Frequent 10-20
T-4 - Intense Thunderstorms 1. Weaker supercells 2. Bow Echos or lines of Storms	.55" – 1.25"	58 to 70 MPH	1" to 1.5"	EF0 to EF2	Frequent 20-30
T-5 - Extreme Thunderstorms 1. Supercells with familty of tornadoes. 2. Derecho Windstorms Copyright 2010 AccuWeather.	1.25" – 4"	Over 70 Mph	Over 1.5" to 4"	EF3 to EF5	Frequent to Continuous. > 30

Figure 17: Extreme Weather Madness Chart-Thunderstorm Criteria

Impacts

Thousands of homes and vehicles can be damaged by high winds, hail, and lightning in a single storm, causing millions of dollars in damage.

Direct lightning strikes have the power to cause significant damage to buildings, critical facilities, infrastructure, and the ignition of wildfires which can result in widespread damage to property and persons. Lightning is the most significant natural contributor to fires affecting the built environment.

Severe thunderstorms can have a significant impact on the local economy. It can lead to reduced productivity and increased absenteeism, as well as increased demand for emergency services and disaster relief. Damage from wind, hail, and lightning can lead to the loss of property and infrastructure and can disrupt transportation and communication infrastructure. Additionally, thunderstorms can lead to power outages and can create hazardous conditions for outdoor activities.

Historical Events

The following table lists the historical thunderstorm events and impacts from 2012-2021 recorded by the National Weather Service, in order of participating jurisdiction. Hail, lightning, and thunderstorm wind events were compiled.

Table 20: Historical Events- Thunderstorms

Location	Date	Туре	Mag	Dth	Inj	PrD	CrD
BRIDGEPORT	03/19/2012	Hail	0.88 in.	0	0	0.00К	0.00K
BRIDGEPORT	03/09/2013	Hail	1.00 in.	0	0	0.00K	0.00К
BRIDGEPORT	04/03/2014	Hail	0.88 in.	0	0	0.00К	0.00K
BRIDGEPORT	03/17/2016	Hail	1.00 in.	0	0	0.00K	0.00K
BRIDGEPORT	04/26/2016	Hail	0.75 in.	0	0	0.00K	0.00K
BRIDGEPORT	07/15/2016	Hail	0.75 in.	0	0	0.00K	0.00K
BRIDGEPORT	03/26/2017	Hail	1.00 in.	0	0	0.00K	0.00K
BRIDGEPORT	08/12/2012	Thunderstorm Wind	52 kts. EG	0	0	5.00K	0.00K
BRIDGEPORT	03/18/2020	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
BRIDGEPORT	05/22/2020	Thunderstorm Wind	61 kts. EG	0	0	0.00K	0.00K
BRIDGEPORT	07/27/2021	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
BRIDGEPORT	07/27/2021	Thunderstorm Wind	70 kts. EG	0	0	75.00K	0.00K
BRIDGEPORT MUNI ARPT	05/11/2016	Hail	0.75 in.	0	0	0.00K	0.00K
BRIDGEPORT MUNI ARPT	03/26/2017	Hail	1.75 in.	0	0	5.00K	0.00K
BRIDGEPORT MUNI ARPT	11/30/2018	Hail	1.00 in.	0	0	0.00К	0.00K
BRIDGEPORT MUNI ARPT	05/12/2014	Lightning		0	0	4.00K	0.00K
BRIDGEPORT MUNI ARPT	08/12/2012	Thunderstorm Wind	52 kts. EG	0	0	30.00K	0.00K
BRIDGEPORT MUNI ARPT	05/07/2015	Thunderstorm Wind	50 kts. EG	0	0	1.00K	0.00K
CHICO	03/09/2013	Hail	1.00 in.	0	0	0.00K	0.00K
CHICO	03/09/2013	Hail	0.88 in.	0	0	0.00K	0.00K
<u>CHICO</u>	04/17/2019	Hail	2.00 in.	0	0	10.00K	0.00К
<u>CHICO</u>	04/17/2019	Hail	1.00 in.	0	0	0.00K	0.00К
<u>CHICO</u>	03/18/2020	Thunderstorm Wind	64 kts. EG	0	0	3.00K	0.00K
<u>CHICO</u>	05/28/2021	Thunderstorm Wind	74 kts. EG	0	0	500.00K	0.00K
<u>DECATUR</u>	03/19/2012	Hail	0.75 in.	0	0	0.00K	0.00K
DECATUR	01/29/2013	Hail	1.00 in.	0	0	0.00K	0.00К
<u>DECATUR</u>	01/29/2013	Hail	0.88 in.	0	0	0.00K	0.00K

Location	Date	Туре	Mag	Dth	Inj	PrD	CrD
DECATUR	03/09/2013	Hail	0.75 in.	0	0	0.00К	0.00K
DECATUR	04/03/2014	Hail	0.88 in.	0	0	0.00К	0.00K
DECATUR	04/03/2014	Hail	1.25 in.	0	0	0.00К	0.00K
DECATUR	04/03/2014	Hail	1.00 in.	0	0	0.00K	0.00K
DECATUR	04/03/2014	Hail	1.50 in.	0	0	2.00K	0.00K
DECATUR	04/03/2014	Hail	0.75 in.	0	0	0.00К	0.00K
DECATUR	04/27/2014	Hail	1.00 in.	0	0	0.00Κ	0.00K
DECATUR	05/12/2014	Hail	0.75 in.	0	0	0.00K	0.00K
DECATUR	10/02/2014	Hail	0.88 in.	0	0	0.00Κ	0.00K
DECATUR	10/02/2014	Hail	0.88 in.	0	0	0.00К	0.00K
<u>DECATUR</u>	11/05/2015	Hail	1.00 in.	0	0	0.00K	0.00K
DECATUR	11/05/2015	Hail	1.75 in.	0	0	0.00K	0.00K
<u>DECATUR</u>	11/05/2015	Hail	2.75 in.	0	0	20.00K	0.00K
<u>DECATUR</u>	11/05/2015	Hail	2.00 in.	0	0	0.00K	0.00K
DECATUR	03/26/2017	Hail	1.50 in.	0	0	0.00К	0.00K
DECATUR	03/26/2017	Hail	0.88 in.	0	0	0.00K	0.00K
DECATUR	03/26/2017	Hail	2.00 in.	0	0	75.00K	0.00K
<u>DECATUR</u>	06/11/2012	Thunderstorm Wind	56 kts. MG	0	0	2.00K	0.00K
<u>DECATUR</u>	06/11/2012	Thunderstorm Wind	56 kts. EG	0	0	2.00K	0.00K
<u>DECATUR</u>	11/05/2015	Thunderstorm Wind	50 kts. EG	0	0	0.00К	0.00K
<u>DECATUR</u>	07/15/2016	Thunderstorm Wind	52 kts. EG	0	0	0.00К	0.00K
<u>DECATUR</u>	07/15/2016	Thunderstorm Wind	52 kts. EG	0	0	0.00К	0.00K
DECATUR MUNI ARPT	03/09/2013	Hail	1.75 in.	0	0	2.00K	0.00K
DECATUR MUNI ARPT	03/09/2013	Hail	2.00 in.	0	0	5.00K	0.00K
DECATUR MUNI ARPT	03/09/2013	Hail	2.75 in.	0	0	0.00K	0.00K
DECATUR MUNI ARPT	04/27/2014	Hail	1.00 in.	0	0	0.00К	0.00K
DECATUR MUNI ARPT	04/28/2020	Hail	1.50 in.	0	0	0.00К	0.00K
DECATUR MUNI ARPT	08/12/2012	Thunderstorm Wind	57 kts. EG	0	0	5.00K	0.00K
DECATUR MUNI ARPT	05/21/2013	Thunderstorm Wind	55 kts. MG	0	0	10.00K	0.00K
DECATUR MUNI ARPT	07/27/2021	Thunderstorm Wind	66 kts. MG	0	0	0.00K	0.00K
LAKE BRIDGEPORT	06/06/2012	Hail	1.00 in.	0	0	0.00K	0.00K
LAKE BRIDGEPORT	10/26/2013	Hail	1.50 in.	0	0	5.00K	0.00K

Location	Date	Туре	Mag	Dth	Inj	PrD	CrD
LAKE BRIDGEPORT	05/29/2016	Hail	0.75 in.	0	0	0.00K	0.00K
LAKE BRIDGEPORT	04/28/2020	Hail	1.00 in.	0	0	0.00K	0.00K
LAKE BRIDGEPORT	05/29/2016	Thunderstorm Wind	61 kts. EG	0	0	10.00K	0.00K
RHOME	10/26/2013	Hail	1.00 in.	0	0	0.00K	0.00K
RHOME	04/03/2014	Hail	0.88 in.	0	0	0.00K	0.00K
RHOME	04/13/2018	Hail	0.88 in.	0	0	0.00K	0.00K
RHOME	04/11/2020	Hail	0.88 in.	0	0	0.00K	0.00K
RHOME	05/03/2021	Hail	1.75 in.	0	0	100.00K	0.00K
RHOME	05/03/2021	Hail	1.00 in.	0	0	0.00K	0.00K
RHOME	10/13/2014	Thunderstorm Wind	50 kts. EG	0	0	1.00K	0.00K
Total Hail:				0	0	214.00K	0.00K
Total Lightning:				0	0	4.00K	0.00K
Total Thunderstorm Wind:						644.00K	0.00K

Source: NOAA National Centers for Environmental Information

Future Events

Due to the history of thunderstorms and the presence of climate change, thunderstorms are expected to be a continual threat to the planning area.

Hazard Summary

The following table reflects the profile summary for thunderstorms within the planning area.

Table 21: Thunderstorm Profile Summary

Thunderstorms							
Jurisdiction	Location	Probability of Future Events	Level of Possible Damage	Maximum Probable Extent/Strength			
Bridgeport	Extensive	Highly Likely	Limited	Major			
Chico	Extensive	Highly Likely	Limited	Major			
Decatur	Extensive	Highly Likely	Critical	Major			
Rhome	Extensive	Highly Likely	Limited	Major			
Runaway Bay	Extensive	Highly Likely	Limited	Major			
Wise County Unincorporated	Extensive	Highly Likely	Limited	Major			

3.2.7 Tornadoes

A tornado is a narrow, violently rotating column of air that makes contact with the ground. A tornado can either be suspended from, or occur underneath, a cumuliform cloud. It is often, but not always, visible as a condensation funnel.

As part of "Tornado Alley," which encompasses much of northern Texas northward through Oklahoma, Kansas, Nebraska and parts of New Mexico, South Dakota, Iowa, and eastern Colorado, Wise County faces a high potential for tornado development. It's important to keep in mind that tornadoes are not confimed by geographic boundaries and can occure anywhere in the country.

Figure 18 shows the map of Tornado Alley and the averal annual frequency of tornadoes in the United States between 1950-1995.

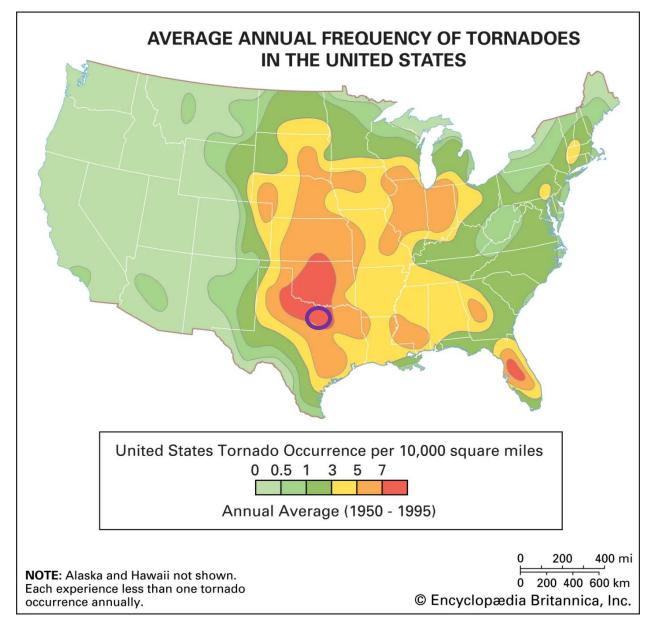


Figure 18: Average Annual Frequency of Tornadoes

Intensity

The Enhanced Fujita (EF) Scale (Table 22) is used by the National Weather Service to determine the highest wind speed that occurred within the damage path. The NWS is the only federal agency with authority to provide 'official' tornado EF Scale ratings.

Table 22: EF Scale

FUJITA SCALE			DERIVED	EF SCALE	OPERATIONAL EF SCALE		
F Number	Fastest 1/4-	3 Second	EF Number	3 Second	EF Number	3 Second	
	mile (mph)	Gust (mph)		Gust (mph)		Gust (mph)	
0	40-72	45-78	0	65-85	0	65-85	

	FUJITA SCALE			EF SCALE	OPERATIONAL EF SCALE		
1	73-112	79-117	1	86-109	1	86-110	
2	113-157	118-161	2	110-137	2	111-135	
3	158-207	162-209	3	138-167	3	136-165	
4	208-260	210-261	4	168-199	4	166-200	
5	261-318	262-317	5	200-234	5	Over 200	

After the NWS evaluator matches the construction or description of the building with the appropriate damage indicator (Table 23).

Table 23: EF Scale Damage Indicators

NUMBER (Details Linked)	DAMAGE INDICATOR	ABBREVIATION
<u>1</u>	Small barns, farm outbuildings	SBO
<u>2</u>	One- or two-family residences	FR12
<u>3</u>	Single-wide mobile home (MHSW)	MHSW
<u>4</u>	Double-wide mobile home	MHDW
<u>5</u>	Apt, condo, townhouse (3 stories or less)	ACT
<u>6</u>	Motel	М
<u>7</u>	Masonry apt. or motel	MAM
<u>8</u>	Small retail bldg. (fast food)	SRB
<u>9</u>	Small professional (doctor office, branch bank)	SPB
<u>10</u>	Strip mall	SM
<u>11</u>	Large shopping mall	LSM
<u>12</u>	Large, isolated ("big box") retail bldg.	LIRB
<u>13</u>	Automobile showroom	ASR
<u>14</u>	Automotive service building	ASB
<u>15</u>	School - 1-story elementary (interior or exterior halls)	ES
<u>16</u>	School - jr. or sr. high school	JHSH
<u>17</u>	Low-rise (1-4 story) bldg.	LRB
<u>18</u>	Mid-rise (5-20 story) bldg.	MRB
<u>19</u>	High-rise (over 20 stories)	HRB
<u>20</u>	Institutional bldg. (hospital, govt. or university)	IB
<u>21</u>	Metal building system	MBS
<u>22</u>	Service station canopy	SSC
<u>23</u>	Warehouse (tilt-up walls or heavy timber)	WHB
<u>24</u>	Transmission line tower	TLT
<u>25</u>	Free-standing tower	FST
<u>26</u>	Free standing pole (light, flag, luminary)	FSP
<u>27</u>	Tree - hardwood	TH
<u>28</u>	Tree - softwood	TS

For each DI, there are eight degrees of damage (Table 24).

Table 24: Degree of Damage (DOD)

DOD	Damage Description	EXP	LB	UB
1	Threshold of visible damage	62	53	78
2	Loss of wood or metal roof panels	74	61	91
3	Collapse of doors	83	68	102
4	Major loss of roof panels	90	78	110
5	Uplift or collapse of roof structure	93	77	114
6	Collapse of walls	97	81	119
7	Overturning or sliding of entire structure	99	83	118
8	Total destruction of building	112	94	131

Impacts

As shown in the previous section, tornadoes can cause extensive damage to property and infrastructure, as well as loss of life, and a significant impact on the local economy. They can lead to reduced productivity and increased absenteeism, as well as increased demand for emergency services and disaster relief. Additionally, tornadoes can lead to power outages and can create hazardous conditions for outdoor activities.

While a tornado's path is often limited to a few miles, the resources needed to respond to such an event impact an entire community.

Historical Events

Since 2012, the National Weather Service has reported EF0-EF2 tornadoes in jurisdictions in Wise County, but none of those jurisdictions are participants in this plan.

The following figures from the <u>National Weather Service (NWS) Fort Worth Tornado Climatology</u> page reflect historical tornado events in the county.

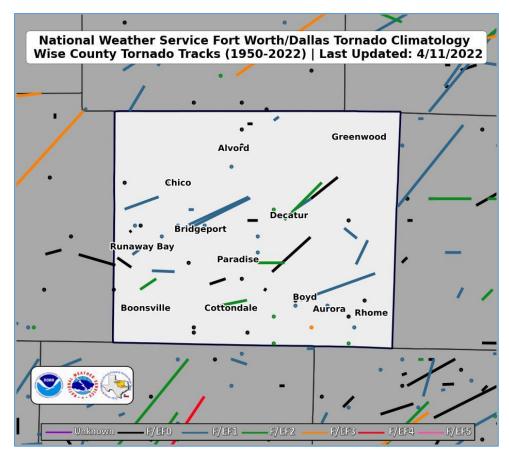


Figure 19: Wise County Tornado Paths from 1950-2022

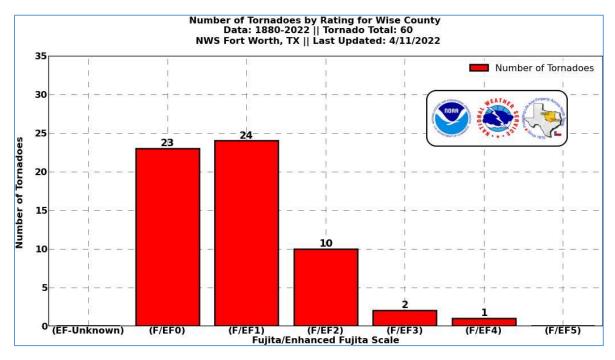


Figure 20: Number of Tornadoes, by Rating, from 1880-2022

Future Events

Due to the history of tornadoes and the effects of climate change, tornadoes are expected to be a continual threat to the planning area.

Hazard Summary

The following table reflects the profile summary for tornadoes within the planning area.

Table 25: Tornadoes Profile Summary

Tornadoes					
Jurisdiction	Location	Probability of Future Events	Level of Possible Damage	Maximum Probable Extent/Strength	
Bridgeport	Limited	Likely	Catastrophic	Major	
Chico	Limited	Likely	Catastrophic	Major	
Decatur	Limited	Likely	Catastrophic	Major	
Rhome	Limited	Likely	Catastrophic	Major	
Runaway Bay	Limited	Likely	Catastrophic	Major	
Wise County Unincorporated	Limited	Likely	Catastrophic	Major	

3.2.8 Wildfires

Wildfire, or wildland fire, is any fire occurring on grassland, forest, or prairie, regardless of ignition source, damages, or benefits. Wildfires are fueled almost exclusively by natural vegetation. Interface or intermix fires are urban/wildland fires in which vegetation and the built environment provide fuel. The following table shows the vegetation, and thus the amount of fuel sources, in Wise County. Grassland is the most common class compared to other vegetation classes and it can be used for grazing.

Table 26: Wise County Vegetation

Class	Description	Acres	Percent
Open Water	All areas of open water, generally with < 25% cover of vegetation or soil	14,955	2.5 %
Developed Open Space	Impervious surfaces account for < 20% of total cover (i.e. golf courses, parks, etc)	34,886	5.8 %
Developed Low Intensity	Impervious surfaces account for 20-49% of total cover	23,104	3.8 %
Developed Medium Intensity	Impervious surfaces account for 50-79% of total cover	2,883	0.5 %
Developed High Intensity	Impervious surfaces account for 80-100% of total cover	699	0.1 %
Barren Land (Rock/Sand/Clay)	Vegetation generally accounts for <15% of total cover	4,074	0.7 %
Cultivated Crops	Areas used for the production of annual crops, includes land being actively tilled	25,916	4.3 %
Pasture/Hay	Areas of grasses and/or legumes planted for livestock grazing or hay production	59,641	9.9 %
Grassland/Herbaceous	Areas dominated (> 80%) by grammanoid or herbaceous vegetation, can be grazed	343,923	57.1 %

Class	Description	Acres	Percent
Marsh	Low wet areas dominated (>80%) by herbaceous vegetation	244	0.0 %
Shrub/Scrub	Areas dominated by shrubs/trees < 5 meters tall, shrub canopy > than 20% of total vegetation	653	0.1 %
Floodplain Forest	> 20% tree cover, the soil is periodically covered or saturated with water	0	0.0 %
Deciduous Forest	> 20% tree cover, >75% of tree species shed leaves in response to seasonal change	89,780	14.9 %
Live Oak Forest	> 20% tree cover, live oak species represent >75% of the total tree cover	622	0.1 %
Live Oak/Deciduous Forest	> 20% tree cover, neither live oak or deciduous species represent >75% of the total tree cover	0	0.0 %
Juniper or Juniper/Live Oak Forest	> 20% tree cover, juniper or juniper/live oak species represent > 75% of the total tree cover	146	0.0 %
Juniper/Deciduous Forest	> 20% tree cover, neither juniper or deciduous species represent > 75% of the total tree cover	963	0.2 %
Pinyon/Juniper Forest	> 20% tree cover, pinyon or juniper species represent > 75% of the total tree cover	0	0.0 %
Eastern Redcedar Forest	> 20% tree cover, eastern redcedar represents > 75% of the total tree cover	0	0.0 %
Eastern Redcedar/Deciduous Forest	> 20% tree cover, neither eastern redcedar or deciduous species represent > 75% of the total tree cover	0	0.0 %
Pine Forest	> 20% tree cover, pine species represent > 75% of the total tree cover	0	0.0 %
Pine Regeneration	Areas of pine forest in an early successional or transitional stage	0	0.0 %
Pine/Deciduous Forest	> 20% tree cover, neither pine or deciduous species represent > 75% of the total tree cover	0	0.0 %
Pine/Deciduous Regeneration	Areas of pine or pine/deciduous forest in an early successional or transitional stage	0	0.0 %
Total		602,489	100.0 %

Source: Texas Wildfire Risk Assessment Portal Professional Viewer.

Common practices to minimize the spread of wildfire are fuel breaks and fire breaks. A **fuel break** is the thinning of vegetation, or fuels, over a specific area of land. They are most commonly used to surround a community and slow the spread of a wildfire. By decreasing the amount of vegetation that the fire must travel through, the risk of extreme fire behavior greatly depreciates.

Types of fuel breaks include:

• Mechanical Treatments- A mechanical treatment removes fuels by cutting shrubs, small trees and ladder fuels that make up the understory of a forested area. Materials are either taken from the site or chipped into smaller pieces. Fuels are selected for removal based on how they would contribute to a wildfire. For example, a thick patch of cedar could readily ignite and release significant heat and embers. This fuel type contributes to the rapid spread of a wildfire and would need to be removed.

The objective of mechanical treatment is to reduce the intensity of wildfire. If there is less fuel to burn the fire stays low to the ground giving firefighters a safer condition in which to work.

Mulching- A mulching operation is intended to break fuels into smaller pieces and spread them
within the fuel break. While the smaller pieces will still carry fire, they will significantly reduce the
intensity of it. The goal is to reduce ladder fuels like tall brush that could carry a ground fire into
the top of a tree.

Mulching equipment is classified as either traditional mowers or mulchers that grind the material. Heavy duty mowers are useful when fuels are small enough to be pushed over. However, for sites with an established woody mid-story, or ladder fuels, other equipment may be needed.

• **Herbicide Treatment**- Herbicides are used to control invasive species of plants that will "take over" an area. Invasive plant species can also be reduced with mechanical thinning.

The effectiveness of herbicide treatments depends on existing vegetation, topography, and other local restrictions. Thick underbrush may require mechanical treatments prior to the use of herbicides.

- **Grazing** Removing fuels by grazing relies on the consumption of plants by animals. Various types of livestock are used in this way across the state, including Wise County.
- Prescribed Burning- Prescribed or controlled, burning is the most commonly used tool for managing hazardous fuel buildups because of its relatively low cost per acre. Prescribed fire improves natural habitats and reduces heavy fuels. It is important to use a certified prescribe burn manager to improve fire safety and reduce smoke management issues.

Fuel breaks are most effective when placed along a natural fire break like a road. Choosing a site along a road also allows easy access for equipment. Regular maintenance of breaks increases their effectiveness in preventing wildfires. To maintain a fuel break, the use of herbicides as a follow up treatment to mulching will help reduce the amount of weed sprouts. Grazing is also an option to maintain a fuel break.

When creating a fuel break, these tips should be used:

- Follow a natural fire break or contour lines.
- Prune large trees to 10 feet from ground.
- Remove ladder fuels such as tall brush and small trees.
- Thin trees to create a crown spacing of 25 to 30 feet.
- Break up thick areas of brush.
- Maintain a minimum width of 60 feet on flat land and 100 feet on slopes.

A **fire break** is a break in vegetation. In some cases, it may be a gravel road, a river, or a clearing made by a bulldozer. A 'green' fire break uses grasses with high moisture content, such as winter rye or winter wheat to provide a break in the continuity of the fuel. If wide enough, a fire break will stop the spread of direct flame. However, embers can still be lofted into the air and travel across the line.

Wildfire Threat is the likelihood of a wildfire occurring or burning into an area. Threat is derived by combining a number of landscape characteristics including surface fuels and canopy fuels, resultant fire behavior, historical fire occurrence, percentile weather derived from historical weather observations, and terrain conditions. These inputs are combined using analysis techniques based on established fire science.

To aid in the use of Wildfire Threat for planning activities, the output values are categorized into seven (7) classes. These are given general descriptions from Low to Very High threat.

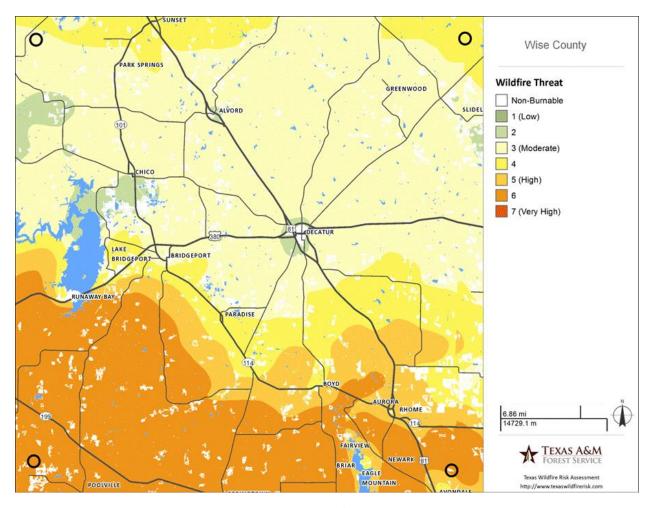


Figure 21: Wildfire Threat

The following maps show a more detailed outlook at the Wildfire Threat for each participating jurisdiction.

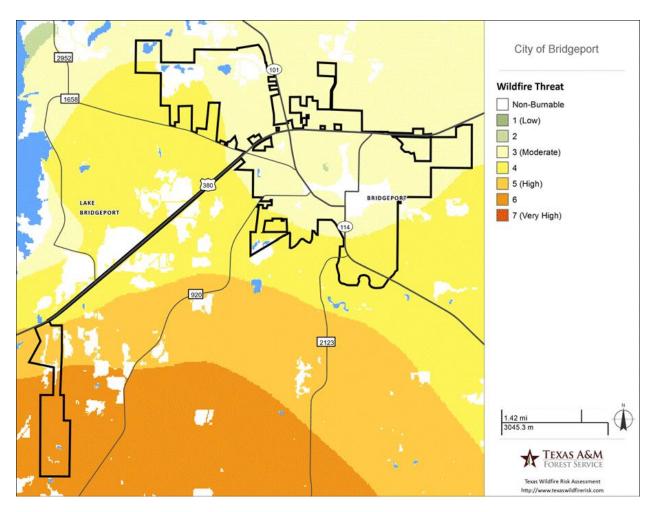


Figure 22: Bridgeport Wildfire Threat

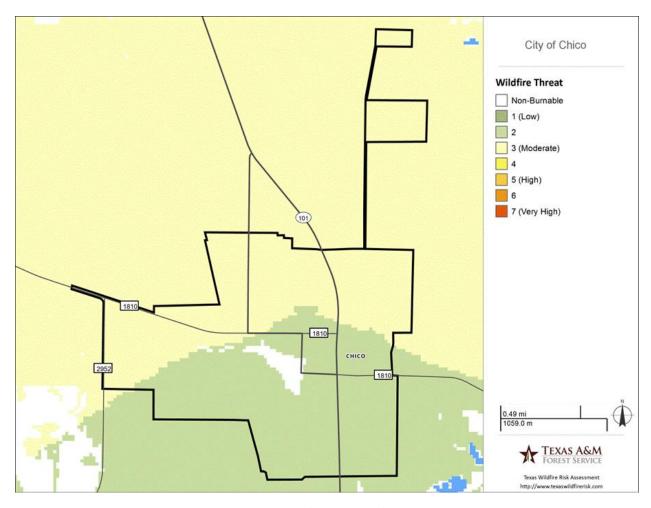


Figure 23: City of Chico Wildfire Threat

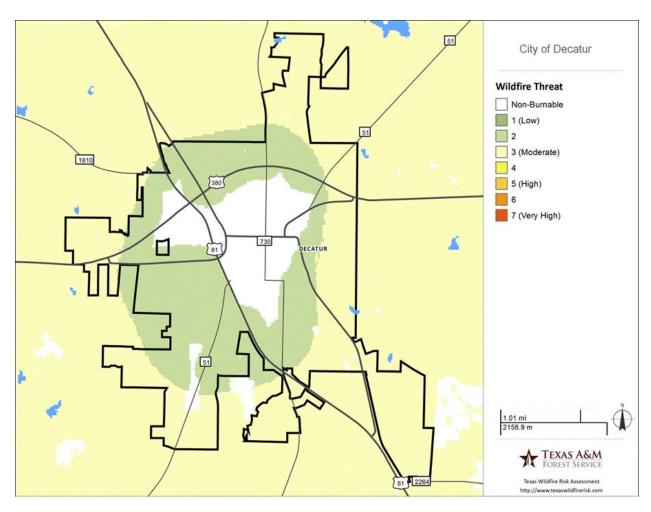


Figure 24: City of Decatur Wildfire Threat

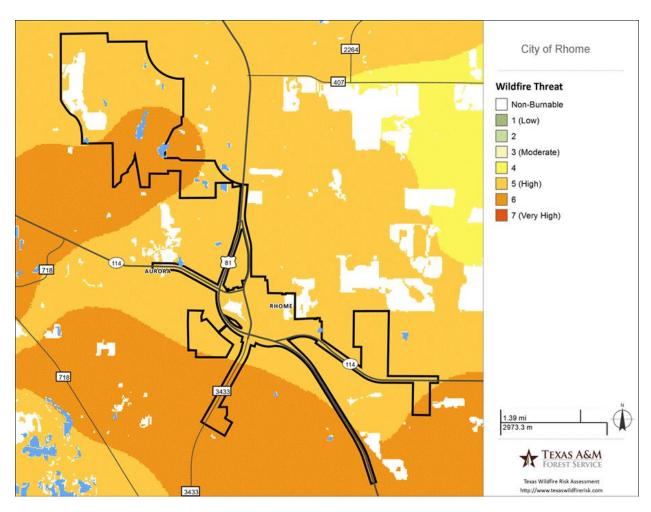


Figure 25: City of Rhome Wildfire Threat

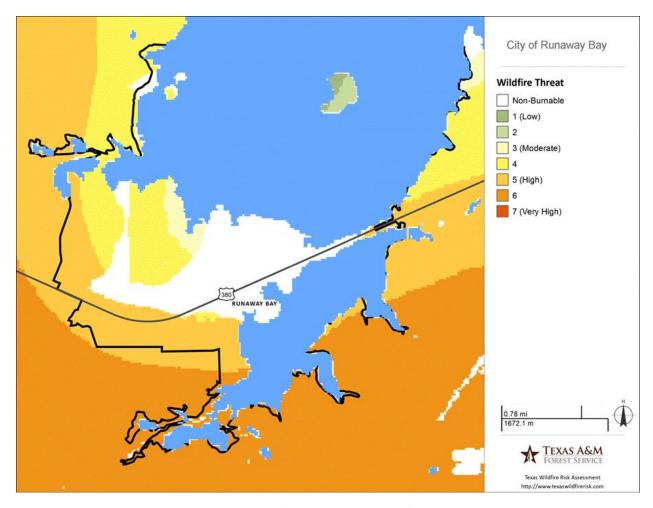


Figure 26: City of Runaway Bay Wildfire Threat

Intensity

The Characteristic Fire Intensity Scale (FIS) identifies areas where significant fuel hazards and associated dangerous fire behavior potential exist based on a weighted average of four percentile weather categories. Similar to the Richter scale for earthquakes, FIS provides a standard scale to measure potential wildfire intensity. FIS consists of 5 classes where the order of magnitude between classes is ten-fold. The minimum class, Class 1, represents very low wildfire intensities and the maximum class, Class 5, represents very high wildfire intensities. Refer to descriptions below.

- Class 1, Very Low: 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.
- Class 2, Low: 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.
- Class 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.
- Class 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.
- Class 5, Very High: 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.

The Characteristic FIS does not incorporate historical occurrence information. It only evaluates the potential fire behavior for an area, regardless if any fires have occurred there in the past. This additional information allows mitigation planners to quickly identify areas where dangerous fire behavior potential exists in relationship to nearby homes or other valued assets.

The FIS Map in Figure 27 shows that most of the county has an FIS score of Class 3-4.

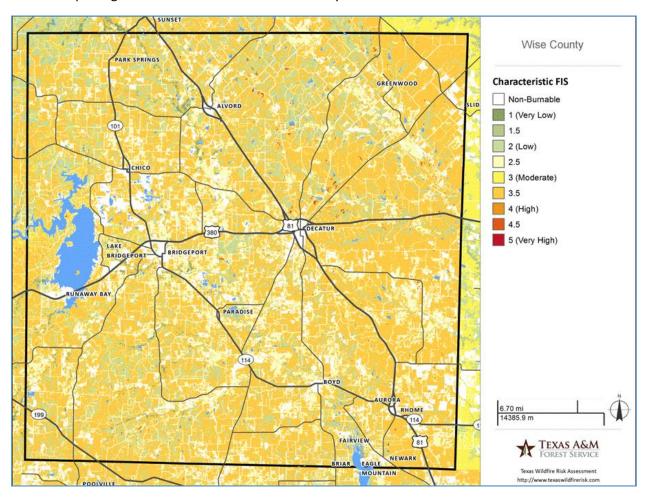


Figure 27: Fire Intensity Scale

The following graphs better reflect the FIS Class within each participating jurisdiction.

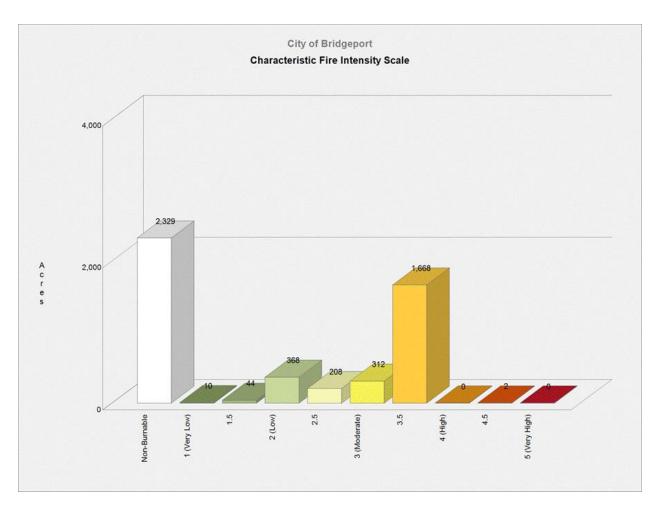


Figure 28: Bridgeport FIS

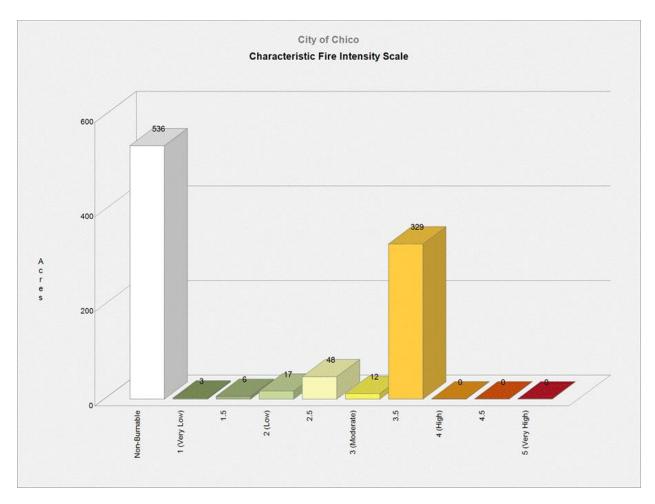


Figure 29: Chico FIS

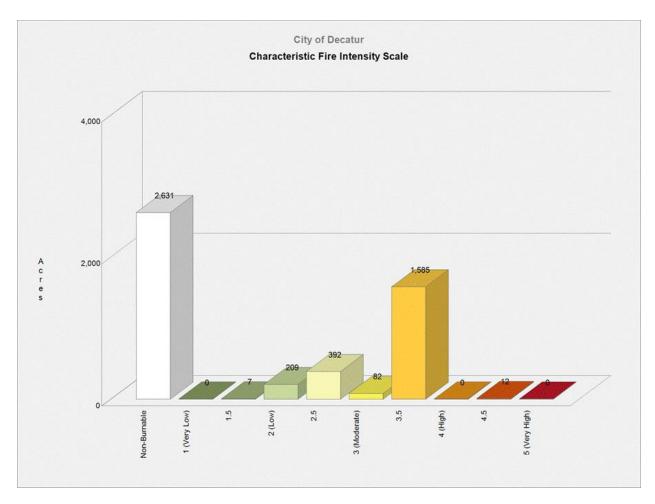


Figure 30: Decatur FIS

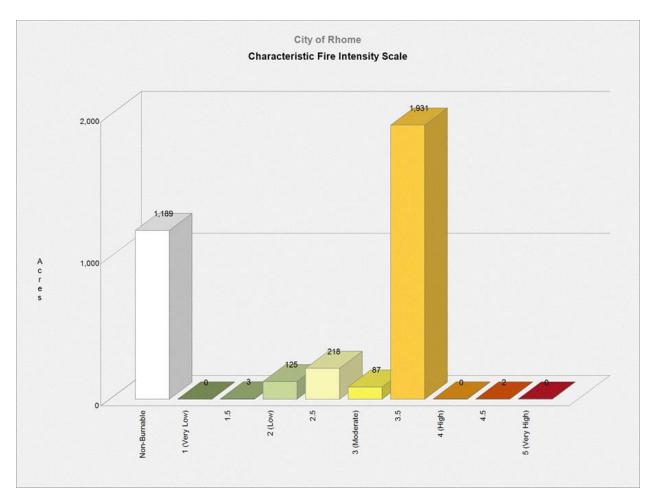


Figure 31: Rhome FIS

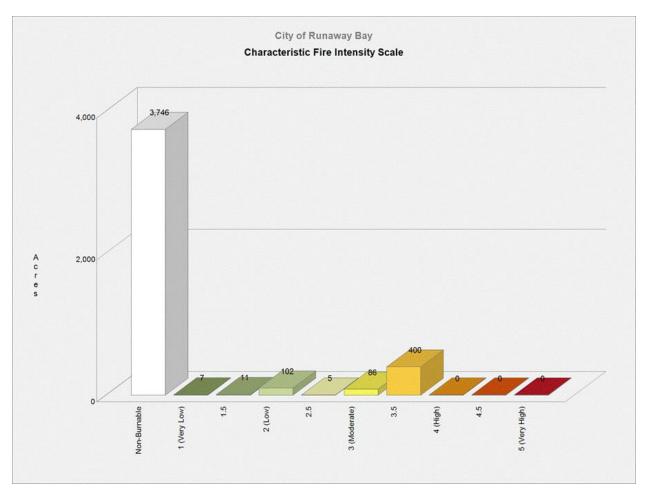


Figure 32: Runaway Bay FIS

Impacts

Wildfires can have a significant impact on the local economy. They can cause extensive damage to property and infrastructure, as well as loss of life. They can lead to reduced productivity and increased absenteeism, as well as increased demand for emergency services and disaster relief. Additionally, wildfires can lead to power outage, and can create hazardous conditions for outdoor activities.

According to <u>Headwater Economics</u>, 70% of homes in Wise County are exposed to wildfire from direct sources, such as adjacent flammable vegetation, and 30% of homes in Wise County are exposed to wildfire from indirect sources, such as embers or home-to-home ignition. The chart below reflects this data.

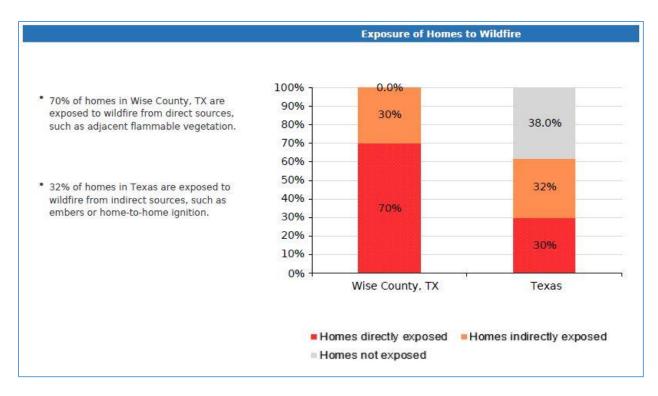


Figure 33: Exposure of Homes to Wildfire

One of the unique vulnerabilities to wildfires is the wildland-urban interface (WUI). The WUI is an area of development that is susceptible to wildfires due to the number of structures located in an area with vegetation that can act as fuel for a wildfire. Figure 34 shows the WUI areas within the planning area.

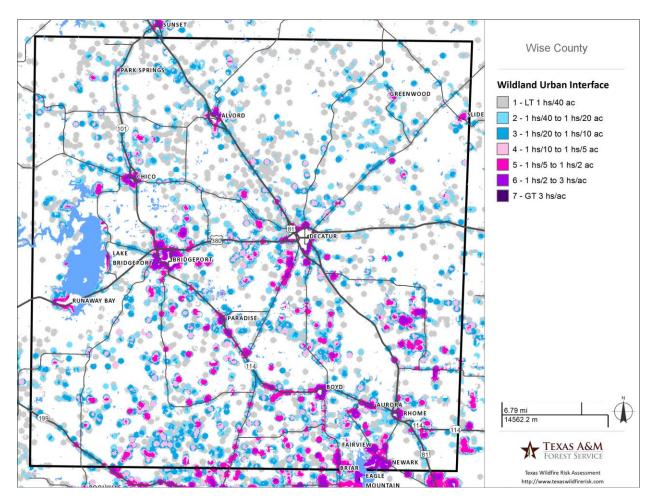


Figure 34: Wildland Urban Interface

Historical Events

The Texas A&M Forest Service Wildfire gathered 15 years of historic fire report data from state and local fire departments to create Figure 35. Debris burning, equipment use, and miscellaneous were the three highest causes of wildfires, with over 200 fires started by each.

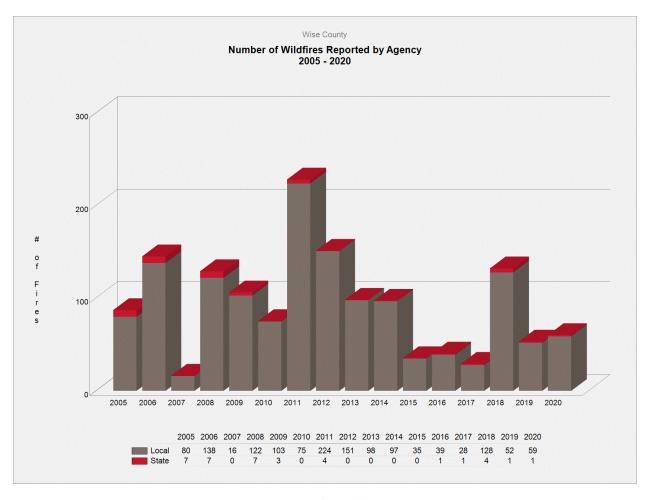


Figure 35: Number of Wildfires, 2005-2020

Future Events

Due to the history of wildfires, the increase of the WUI population, the consistent drought seasons, and the effects of climate change, wildfires are expected to be a continual threat to the planning area.

Hazard Summary

The following table reflects the profile summary for wildfires within the planning area.

Table 27: Wildfires Profile Summary

Wildfires						
Jurisdiction	Location	Probability of Future Events	Level of Possible Damage	Maximum Probable Extent/Strength		
Bridgeport	Significant	Likely	Critical	Major		
Chico	Limited	Likely	Critical	Medium		
Decatur	Limited	Likely	Critical	Major		
Rhome	Limited	Highly Likely	Critical	Major		
Runaway Bay	Limited	Likely	Critical	Medium		

Wildfires					
Jurisdiction	Location	Probability of Future Events	Level of Possible Damage	Maximum Probable Extent/Strength	
Wise County Unincorporated	Limited	Highly Likely	Critical	Major	

3.2.9 Winter Storms

Winter storms originate as mid-latitude depressions or cyclonic weather systems, sometimes following the path of the jet stream. A winter storm or blizzard combines heavy snowfall, high winds, extreme cold, and ice storms. Many winter depressions give rise to exceptionally heavy rain and widespread flooding and conditions worsen if the precipitation falls in the form of snow. The winter storm season varies widely, depending on latitude, altitude, and proximity to moderating influences. The time period of most winter weather is expected to be during the winter season, between November and March. Winter storms affect the entire planning area equally.

During periods of extreme cold and freezing temperatures, water pipes can freeze and crack, roads and bridges can become unpassable, and critical services could be paralyzed. Ice can build up, causing power lines to break under the weight or causing tree limbs to fall on the lines. These events can disrupt electric service for long periods of time.

Winter storms, dependent on climate, are not confined to geographical boundaries and can occur anywhere in the county.

The Public Utility Commission adopted a rule requiring power companies to use "best efforts" to ensure plants can operate in the winter following 2021 legislation requiring power plants to "weatherize" their facilities against extreme weather conditions."

Intensity

The National Weather Service now uses the Winter Storm Severity Index (WSSI) (Figure 36) to forecast potential impacts of winter storms in addition to the Sperry–Piltz Ice Accumulation Index, or SPIA® Index. The WSSI provides a classification of the overall expected severity of winter weather using the following terminology: "Minor," "Moderate," "Major," and "Extreme." The "Winter Weather Area" pertains to areas where winter weather conditions are expected, but are not anticipated to impact daily life. The WSSI consists of a series of component algorithms, each of which use meteorological and non-meteorological data to model predicted severity of six specific characteristics of winter weather. Each of the components produce a 0 to 5 output scale value that equates to the potential severity based on the winter weather hazards (0 = no winter weather, 1 = winter weather area, 2 = minor, 3 = moderate, 4 = major, and 5 = extreme).

⁸ Douglas, E. (2021, October 21). Power companies required to better prepare plants for winter in first phase of rule approved by Texas regulators. *The Texas Tribune*. https://www.texastribune.org/2021/10/21/texas-power-companies-winter-weather-rule/

The final WSSI value is the maximum value from all the sub-components. The 4 impact levels are given the following descriptors: Minor, Moderate, Major, and Extreme.

The six sub-components of the WSSI are:

Snow Load Index

 Indicates potential infrastructure impacts due to the weight of the snow. This index accounts for the land cover type. For example, more forested and urban areas will show increased severity versus the same snow conditions in grasslands.

Snow Amount Index

o Indicates potential impacts due to the total amount of snow or the snow accumulation rate. This index also normalizes for climatology, such that regions of the country that experience, on average, less snowfall will show a higher level of severity for the same amount of snow that is forecast across a region that experiences more snowfall on average. Designated urban areas are also weighted a little more than non-urban areas.

• Ice Accumulation

Indicates potential infrastructure impacts (e.g. roads/bridges) due to combined effects and severity of ice and wind. Designated urban areas are also weighted a little more than non-urban areas. Please note that not all NWS offices provide ice accumulation information into the National Digital Forecast Database (NDFD). In those areas, the ice accumulation is not calculated.

• Blowing Snow Index

 Indicates the potential disruption due to blowing and drifting snow. This index accounts for land use type. For example, more densely forested areas will show less blowing snow than open grassland areas.

• Flash Freeze Index

 Indicates the potential impacts of flash freezing (temperatures starting above freezing and quickly dropping below freezing) during or after precipitation events.

Ground Blizzard

o Indicates the potential travel-related impacts of strong winds interacting with pre-existing snow cover. This is the only sub-component that does not require snow to be forecast in order for calculations to be made. The NWS National Operational Hydrologic Remote Sensing Center (NOHRSC)snow cover data along with forecast winds are used to model the ground blizzard. Adjustments are made based upon the land cover type. For example, heavily forested areas will have a lower ground blizzard severity than the same conditions occurring across open areas.

Potential Winter Storm Impacts Winter Weather Area **Expect Winter Weather.** · Winter driving conditions. Drive carefully. Minor Impacts Expect a few inconveniences to daily life. · Winter driving conditions. Use caution while driving. Moderate Impacts Expect disruptions to daily life. · Hazardous driving conditions. Use extra caution while driving. Closures and disruptions to infrastructure may occur. Major Impacts Expect considerable disruptions to daily life. Dangerous or impossible driving conditions. Avoid travel if possible. · Widespread closures and disruptions to infrastructure may occur. Extreme Impacts Expect substantial disruptions to daily life. Extremely dangerous or impossible driving conditions. Travel is not advised. · Extensive and widespread closures and disruptions to infrastructure may occur. · Life-saving actions may be needed.

Figure 36: WSSI Impact Scale with Descriptions

Impacts

Winter storms can have a significant impact on the local economy. They can cause extensive damage to property and infrastructure, as well as loss of life. They can lead to reduced productivity and increased absenteeism, as well as increased demand for emergency services and disaster relief. Additionally, winter storms can lead to power outages and can create hazardous conditions for transportation.

It is important to understand the potential impact of winter storms on the community and take necessary actions to prepare and respond to them. This includes monitoring the weather conditions, providing education and resources to the community on how to stay safe during winter storms and how to recognize signs of winter storm risk, as well as having emergency plan in place for families and businesses. Having a stockpile of food, water, and other essentials can help people survive during a power outage. Also, having a plan to protect pipes from freezing, and having a generator or other backup power source can help keep people safe and warm during a winter storm.

An economic impact may occur due to increased consumption of heating fuel, which can lead to energy shortages and higher prices. Schools often close when severe winter weather is forecasted, and it becomes a logistical burden for parents who then have to miss work or find alternative childcare. House fires and resulting deaths tend to occur more frequently from increased and improper use of alternate heating sources. Fires during winter storms also present a greater danger because water supplies may freeze and impede firefighting efforts.

According to the Texas Tribune, "the 2021 February power outages...were primarily caused by the inability of power plants to operate in the extreme cold. It was the same problem that Texas faced during the 2011 winter storm." They go on to say, "But after the 2011 storm, recommendations made by federal regulators and experts to better prepare the Texas electricity grid for winter weather were never implemented by Texas leaders. When the February storm caused even bigger disruptions, state leaders were hammered publicly for ignoring the warnings of 2011.

The following article highlights the severe impacts of winter weather in North Central Texas.

National Weather Service: North Texas Snowfall Events

December 5-6, 2013

A winter storm affected much of North and Central Texas for an extended period from December 5th through the 10th. A combination of freezing rain, sleet, and a little snow began falling during the day on the 5th and continued through the morning hours of the 6th. As the ice and sleet settled on the 6th, a thick layer of ice paralyzed most of the area north of a line from Goldthwaite to Cleburne to

Chico to Sulphur Springs. In this area, accumulations of sleet and ice measured up to 5" with the highest amounts from Denton to Sherman to Bonham.

Temperatures remained below freezing until the 9th and 10th resulting in a prolonged winter event. Most residents were forced to remain at home for several days. A new term, coined "cobblestone ice," was used to describe the condition of the ice on the interstates and highways due to the compaction of ice and sleet.



NBC 5 News captured "cobblestone ice" on North Texas

South of this area, lighter amounts of icing occurred producing mainly icy bridges, overpasses, and elevated surfaces. As a result of the ice storm, significant tree damage occurred with thousands of tree branches falling under the weight of the ice. Power lines were also brought down, and at the peak of the storm, 275,000 customers were without power in the North Texas region. Most schools, especially in the hardest hit areas, were closed for several days. Some businesses were forced to close for a day or two also. Hundreds of injuries were reported due to falls on the ice but exact numbers were not available. Seven fatalities occurred during this event; 4 in vehicles, 2 from exposure, and 1 from a fall on the ice. Early estimates from the insurance council estimated \$30 million in residential insured loses. The estimate did not include damage to vehicles or roads. Many roads and bridges were damaged from the ice and/or from attempts by Texas Department of Transportation to remove the ice using plows and graders. Hundreds of people and semi-trucks were stranded for long periods on many of the main highways and interstates including I-35 from Fort Worth to the Oklahoma border and Interstate 20 from Fort Worth going west. The clean-up from this event took weeks and even a few months is some places.⁹

⁹ North Texas Snowfall Events 2013-1879, National Weather Service. https://www.weather.gov/fwd/snowevents

Historical Events

The following table lists the historical winter storm events and impacts from 2012-2021 recorded by the National Weather Service.

Table 28: Historical Events- Winter Storms

Location	Date	Туре	Mag	Dth	lnj	PrD	CrD
WISE (ZONE)	03/02/2014	Sleet		0	0	200.00K	0.00K
WISE (ZONE)	03/05/2015	Ice Storm		0	0	0.00K	0.00K
WISE (ZONE)	01/16/2018	Winter Weather		0	0	0.00K	0.00K
WISE (ZONE)	01/16/2018	Winter Weather		0	0	0.00K	0.00K
WISE (ZONE)	10/31/2019	Cold/wind Chill		0	0	0.00K	0.00K
WISE (ZONE)	02/13/2021	Winter Storm		0	0	0.00K	0.00K
WISE (ZONE)	02/15/2021	Extreme Cold/wind Chill		0	0	2.700M	0.00K
Totals:				0	0	2.900M	0.00K

Source: NOAA National Centers for Environmental Information

The 2021 event was a part of the FEMA-4586-DR declaration for Texas Severe Winter Storms that was declared February 19, 2021. All counties in Texas were designated areas. In Wise County, overnight lows were near or below 20°F almost all that week. The period of February 15-16th was the coldest with low temperatures between 6 and -6°F. The maximum temperature on the 15th was only around 15°F. Wind chill values during the 14th-16th were between 10 to -15°F most of the time. The cold temperatures resulted in an extreme amount of damage to pipes, infrastructure, and power.

The power issues across the state during DR-4586 resulted in lack of heat and lack of water, causing hypothermia and death in many vulnerable populations.

Future Events

Due to the history of winter storms, the ongoing vulnerability of our power grid, and the effect of climate change, winter storms are expected to be a continual threat to the planning area.

Hazard Summary

The following table reflects the profile summary for winter storms within the planning area.

Table 29: Winter Storms Profile Summary

Winter Storms							
Jurisdiction	Location	Probability of Future Events	Level of Possible Damage	Maximum Probable Extent/Strength			
Bridgeport	Extensive	Likely	Critical	Major			
Chico	Extensive	Likely	Critical	Major			
Decatur	Extensive	Likely	Critical	Major			
Rhome	Extensive	Likely	Critical	Major			

Winter Storms							
Jurisdiction	Location	Probability of Future Events	Level of Possible Damage	Maximum Probable Extent/Strength			
Runaway Bay	Extensive	Likely	Critical	Major			
Wise County Unincorporated	Extensive	Likely	Critical	Major			

3.3 Assets

The following information is an overview of assets within the planning that could be negatively impacted by the identified hazards, including the built environment, people, economic assets, and natural environment.

3.3.1 Built Environment

If earthquakes, expansive soils, floods, thunderstorms, tornadoes, or winter storms occur with the maximum intensity predicted, the entire built environment and all structures could be impacted.

Drought would impact all water-related infrastructure listed and wildfire would impact facilities closest to an ignition source.

The Wise County Appraisal District is responsible for appraising all real and business personal property within Wise County. The district appraises property according to the Texas Property Tax Code and the Uniform Standards of Professional Appraisal Practices (USPAP). We used the district to determine the structure values of structures in the participating cities. These values give local officials an idea of what the damages costs could be if all buildings were destroyed in a disaster.

roperty C	ount: 4,440	CBR - C	RTIFIED T ITY OF BRIDG RB Approved Total	EPORT	8/4/2	As of Certification 023 6:32:40Al
		State	Category Break	down		
State Code	Description	Count	Acres	New Value	Market Value	Taxable Valu
Α	SINGLE FAMILY RESIDENCE	1,541	621.2416	\$4,348,623	\$361,663,440	\$301,041,56
В	MULTIFAMILY RESIDENCE	52	19.5100	\$616	\$21,860,447	\$21,720,37
C1	VACANT LOTS AND LAND TRACTS	200	146.5514	\$0	\$9,682,797	\$9,682,79
D1	QUALIFIED OPEN-SPACE LAND	33	766.3597	\$0	\$12,314,850	\$45,66
D2	IMPROVEMENTS ON QUALIFIED OP	4		\$0	\$30,483	\$30,48
E	RURAL LAND, NON QUALIFIED OPE	45	515.6186	\$44,472	\$11,523,890	\$11,197,56
F1	COMMERCIAL REAL PROPERTY	396	611.3716	\$2,595,777	\$223,273,357	\$223,273,35
F2	INDUSTRIAL AND MANUFACTURIN	3	13.8490	\$0	\$4,085,900	\$4,085,90
G1	OIL AND GAS	790		\$0	\$2,518,817	\$2,518,81
J2	GAS DISTRIBUTION SYSTEM	1		\$0	\$2,214,608	\$2,214,60
J3	ELECTRIC COMPANY (INCLUDING C	2		\$0	\$903,241	\$903,24
J4	TELEPHONE COMPANY (INCLUDI	4		\$0	\$779,561	\$779,56
J5	RAILROAD	2		\$0	\$2,377,189	\$2,377,18
J6	PIPELAND COMPANY	38		\$0	\$1,300,014	\$1,300,01
J7 L1	CABLE TELEVISION COMPANY	200		\$0	\$141,410	\$141,41
L1 L2	COMMERCIAL PERSONAL PROPE INDUSTRIAL AND MANUFACTURIN	323 15		\$0 \$0	\$70,048,201 \$7,193,484	\$69,751,26 \$6,176,94
M1	TANGIBLE OTHER PERSONAL, MOB	78		\$4,956	\$3,674,260	\$5,175,94
O	RESIDENTIAL INVENTORY	5	1.0560	\$4,956 \$0	\$237.942	\$237.94
s	SPECIAL INVENTORY TAX	1	1.0000	\$0 \$0	\$0 \$0	φ237,94
X	TOTALLY EXEMPT PROPERTY	952	1,535.0772	\$3,449,407	\$158,317,378	
		Totals	4,230.6351	\$10,443,851	\$894,141,269	\$660,957,14

Figure 37: Bridgeport Certified Values

Property (20 Count: 889	ССН	RTIFIED T - CITY OF CHI RB Approved Totals	CO	8/4/20	As of Certificatio
		State 0	Category Break	lown		
State Cod	e Description	Count	Acres	New Value	Market Value	Taxable Valu
Α	SINGLE FAMILY RESIDENCE	368	233.5471	\$816,411	\$60,696,665	\$50,603,35
В	MULTIFAMILY RESIDENCE	2	1.3770	\$304,940	\$747,121	\$747,12
C1	VACANT LOTS AND LAND TRACTS	37	36.0010	\$0	\$1,138,457	\$1,138,45
D1	QUALIFIED OPEN-SPACE LAND	17	100.1020	\$0	\$1,582,315	\$6,77
D2	IMPROVEMENTS ON QUALIFIED OP	6		\$7,571	\$60,562	\$60,56
Е	RURAL LAND, NON QUALIFIED OPE	25	182.4462	\$0	\$3,177,904	\$3,071,45
F1	COMMERCIAL REAL PROPERTY	73	89.7690	\$7,680	\$20,573,845	\$20,573,84
G1	OIL AND GAS	39		\$0	\$85,340	\$85,34
J2	GAS DISTRIBUTION SYSTEM	1		\$0	\$685,902	\$685,90
J3	ELECTRIC COMPANY (INCLUDING C	2		\$0 \$0	\$375,900	\$375,90
J4 J5	TELEPHONE COMPANY (INCLUDI RAII ROAD	2			\$875,343	\$875,34
J5 J6	PIPELAND COMPANY	4		\$0 \$0	\$1,658,640 \$9,075	\$1,658,64 \$9,07
J7	CABLE TELEVISION COMPANY	1		\$0	\$13.664	\$13.66
11	COMMERCIAL PERSONAL PROPE	38		\$0	\$7,423,295	\$7,423,29
M1	TANGIBLE OTHER PERSONAL MOB	26		\$0	\$1,249,006	\$1,027,42
X	TOTALLY EXEMPT PROPERTY	263	133.3350	\$0	\$12,975,372	\$1,027,42
		Totals	776.5773	\$1,136,602	\$113,328,406	\$88,356,14

Figure 38: Chico Certified Values

VISE Co	unty 20	23 CE	RTIFIED 1	OTALS		As of Certification
		CDE -	CITY OF DEC	ATUR		
roperty (Count: 5,796	Α	RB Approved Total	s	8/4/2	2023 6:32:40AN
		State	Category Break	down		
State Cod	e Description	Count	Acres	New Value	Market Value	Taxable Value
Α	SINGLE FAMILY RESIDENCE	2,055	692.1269	\$6,061,091	\$569,227,099	\$493,680,950
В	MULTIFAMILY RESIDENCE	57	61.1060	\$6,325,383	\$48,469,605	\$48,469,60
C1	VACANT LOTS AND LAND TRACTS	153	100.9308	\$0	\$9,757,398	\$9,757,39
D1	QUALIFIED OPEN-SPACE LAND	105	1,744.7461	\$0	\$37,279,131	\$108,68
D2	IMPROVEMENTS ON QUALIFIED OP	13		\$0	\$161,072	\$161,07
E	RURAL LAND, NON QUALIFIED OPE	65	319.7605	\$0	\$22,922,864	\$22,500,21
F1	COMMERCIAL REAL PROPERTY	440	766.2952	\$11,782,594	\$445,810,726	\$445,612,03
F2	INDUSTRIAL AND MANUFACTURIN	2	61.5790	\$0	\$34,855,125	\$34,855,12
G1	OIL AND GAS	1,388		\$0	\$22,468,227	\$22,468,22
J2	GAS DISTRIBUTION SYSTEM	1		\$0	\$3,381,253	\$3,381,25
J3	ELECTRIC COMPANY (INCLUDING C	7	3.3500	\$0	\$12,410,218	\$12,410,21
J4	TELEPHONE COMPANY (INCLUDI	10	0.0920	\$0	\$6,149,575	\$6,149,57
J5	RAILROAD	2		\$0	\$3,093,406	\$3,093,40
J6	PIPELAND COMPANY	57		\$0	\$2,753,333	\$2,753,33
J7	CABLE TELEVISION COMPANY	1		\$0	\$285,999	\$285,99
L1	COMMERCIAL PERSONAL PROPE	526		\$0	\$100,818,054	\$95,593,20
L2	INDUSTRIAL AND MANUFACTURIN	27		\$0	\$42,515,354	\$21,458,40
M1	TANGIBLE OTHER PERSONAL, MOB	63		\$100,740	\$1,574,746	\$1,169,20
S	SPECIAL INVENTORY TAX	8		\$0	\$19,835,338	\$19,835,33
X	TOTALLY EXEMPT PROPERTY	876	1,142.4983	\$5,234,437	\$320,773,373	\$
		Totals	4.892.4848	\$29.504.245	\$1,704,541,896	\$1,243,743,24

Figure 39: Decatur Certified Values

/ISE Cour	1ty 20)23 CE	RTIFIED T	OTALS		As of Certification
roperty C	ount: 16,437		- CITY OF RHO RB Approved Totals		8/4/2	023 6:32:40AN
		State	Category Breakd	own		
State Code	Description	Count	Acres	New Value	Market Value	Taxable Value
Α	SINGLE FAMILY RESIDENCE	615	296.2193	\$785,447	\$177,404,364	\$146,872,185
В	MULTIFAMILY RESIDENCE	3	2.0600	\$0	\$773,413	\$773,413
C1	VACANT LOTS AND LAND TRACTS	38	25.6616	\$0	\$3,076,692	\$3,076,692
D1	QUALIFIED OPEN-SPACE LAND	104	1,336.4610	\$0	\$14,947,974	\$87,78
D2	IMPROVEMENTS ON QUALIFIED OP	4		\$0	\$81,708	\$81,708
E	RURAL LAND, NON QUALIFIED OPE	9	28.8500	\$0	\$4,588,605	\$4,588,60
F1	COMMERCIAL REAL PROPERTY	57	215.7640	\$0	\$52,174,060	\$51,943,273
G1	OIL AND GAS	14,369		\$0	\$46,693,451	\$46,693,45
J2	GAS DISTRIBUTION SYSTEM	1		\$0	\$887,906	\$887,90
J3	ELECTRIC COMPANY (INCLUDING C	3		\$0	\$1,684,212	\$1,684,212
J4	TELEPHONE COMPANY (INCLUDI	4	0.0590	\$0	\$770,245	\$770,24
J5	RAILROAD	2		\$0	\$943,573	\$943,573
J6	PIPELAND COMPANY	14		\$0	\$268,222	\$268,222
L1	COMMERCIAL PERSONAL PROPE	74		\$0	\$16,040,433	\$16,040,433
L2	INDUSTRIAL AND MANUFACTURIN	6		\$0	\$430,199	\$430,199
M1	TANGIBLE OTHER PERSONAL, MOB	4		\$0	\$436,840	\$409,173
S	SPECIAL INVENTORY TAX	4		\$0	\$2,042,834	\$2,042,834
X	TOTALLY EXEMPT PROPERTY	1,140	199.8840	\$0	\$10,877,673	\$(
		Totals	2.104.9589	\$785,447	\$334,122,404	\$277,593,909

Figure 40: Rhome Certified Values

/ISE Co	20		RTIFIED T	0		As of Certification
roperty (Count: 2,381		RB Approved Total		8/4/2	023 6:32:40AN
		State	Category Break	down		
State Cod	de Description	Count	Acres	New Value	Market Value	Taxable Value
Α	SINGLE FAMILY RESIDENCE	985	373.2150	\$14,766,431	\$268,615,887	\$238,089,265
В	MULTIFAMILY RESIDENCE	8	0.9933	\$525,456	\$2,925,995	\$2,925,99
C1	VACANT LOTS AND LAND TRACTS	892	317.4708	\$7,800	\$24,353,420	\$24,321,92
Е	RURAL LAND, NON QUALIFIED OPE	1		\$0	\$883	\$88
F1	COMMERCIAL REAL PROPERTY	17	203.5882	\$0	\$9,813,989	\$9,813,98
G1	OIL AND GAS	75		\$0	\$895,740	\$895,74
J1	WATER SYSTEMS	1	0.2400	\$0	\$16,800	\$16,80
J2	GAS DISTRIBUTION SYSTEM			\$0	\$176,858	\$176,85
J3 J4	ELECTRIC COMPANY (INCLUDING C			\$0 \$0	\$1,244,250	\$1,244,25
J4 J6	TELEPHONE COMPANY (INCLUDI PIPELAND COMPANY	19		\$0 \$0	\$71,103 \$4.070	\$71,100 \$4.07
.17	CABLE TELEVISION COMPANY	19		\$0 \$0	\$4,070 \$15.554	\$4,070 \$15,55
11	COMMERCIAL PERSONAL PROPE	21		\$0 \$0	\$979,742	\$979.74
L2	INDUSTRIAL AND MANUFACTURIN	1		\$0	\$76,902	\$76.90
0	RESIDENTIAL INVENTORY	289	84.2604	\$0	\$6,266,190	\$6,266,19
X	TOTALLY EXEMPT PROPERTY	100	111.3943	\$0	\$5,148,694	\$(
		Totals	1.091.1620	\$15,299,687	\$320,606,077	\$284,899,26

Figure 41: Runaway Bay Certified Values

Critical and Vulnerable Facilities

The following tables, created by the jurisdictions, list the critical and vulnerable facilities in the participating jurisdictions. These facilities could be impacted by all hazards listed in this plan except for drought and dam failure flooding.

Maps generated by FEMA's Resilience Analysis and Planning Tool (RAPT) locate the critical facilities within the jurisdictions in comparison to flood risks.

The tables and figures did not use the same lists, thus facilities mapped and listed on the tables vary.

Table 30: City of Bridgeport Local Inventory of Critical and Vulnerable Facilities

Category	Name or Description	Address
Apartments	Bridgewood Apartment Homes	1709 Edgewood Dr
Apartments	Henderson Terrace	1205 Henderson St
Apartments	Creekside	401 Turkey Creek Trail
Apartments	Estates of Bridgeport	1481 Senior Place Rd
Apartments	Atrium Gardens	1304 Halsell St
Bank	First State Bank	1709 9th St St 104
Bank	The Community Bank	507 US Hwy 380
Bank	First Financial Bank	909 Stevens St
College	Wise County College	5180 US 380
Duplex	Hidden Hollow Duplexes	116 PR 3230
EMS	Wise County EMS Station 2	1007 13th St
Fire Department	Boonsville/Balsora Station 1	230 CR 3743
Fire Department	Bridgeport	708 Hovey St
Fire Department	Lake Bridgeport	306 S Main St
Fueling Station	West Fork Enterprises Inc	259 CR 1510

Category	Name or Description	Address
Fueling Station	Shell	101 US 380
Fueling Station	Diamond W Truck Stop	101 US 380
Government Facilities	Wise County Courthouse Annex JP4	1007 13th St #109
Government Facilities	Wise County Precinct 4	811 Hwy 380 W
Grocery Stores	Brookshires	1203 US 380
Grocery Stores	Lowes Market	1501 Halsell St
Hotel	La Quinta	2000 10th St
Hotel	Econo Lodge	905 US Hwy 380
Hotel	Greystone Inn	1810 US380
Hotel	Hometown Suites	2302 10th St
Major Employer	BKV Barnett	1209 CR 1304
Major Employer	Enlink	415 PR 3502
Pharmacy	Valu-Rite Pharmacy	709 Woodrow Wilson Ray Cir
Pharmacy	Gail's Pharmacy	810 Woodrow Wilson Ray Cir
Pharmacy	Brookshires	1203 US380
Police	Bridgeport PD	1000 Thompson St
Power Plant	Bridgeport Gas Processing Plant/Devon	415 PR 3502
Retirement/Nursing Homes	Stagecoach Rehab	2108 15 St
Retirement/Nursing Homes	Bridgeport Medical Lodge	2106 15th St
RV Park	Bay Landing RV Campground	2305 Hwy 380 W
Schools	Bridgeport High School	1 Maroon Dr
Schools	Bridgeport Middle	702 17th St
Schools	Bridgeport Intermediate	1400 Hwy 380
Schools	Bridgeport Elementary	1408 Elementary Dr
Schools	Wise County Special Ed Cooperative	2105 16th St
Transportation Services	Bridgeport Municipal Airport	299 L V Selz Rd
Vet	Bridgeport Animal Hospital	709 US 380

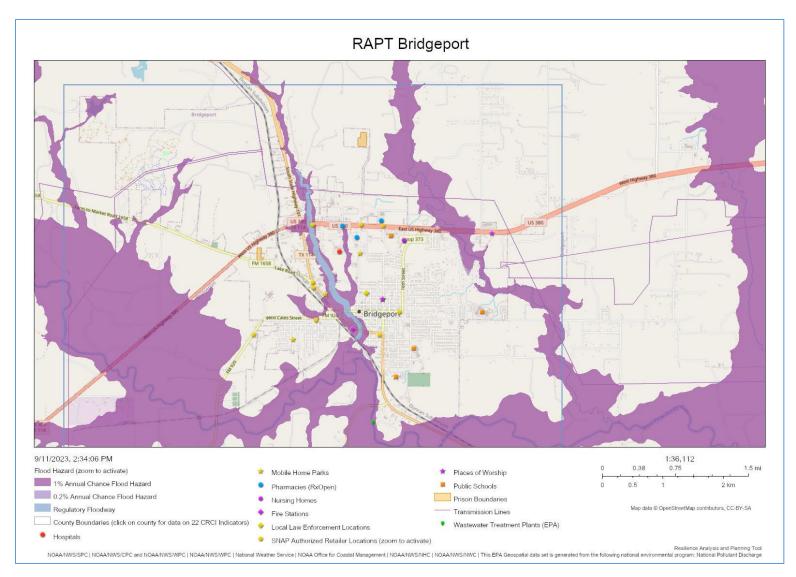


Figure 42: RAPT Map of Bridgeport

Table 31: City of Chico Local Inventory of Critical and Vulnerable Facilities

Category	Name or Description	Address
Bank	First State Bank	201 S Weatherford St
Fire Department	Chico	102 S Weatherford St
Fire Department	Crafton	2526 FM 2127
Fire Department	Sand Flat	735 CR 1744
Grocery Stores	Lowes Market	100 E Maginnis St
Schools	Chico High School	W Hwy 1810
Schools	Chico Middle	400 S Hovey St
Schools	Chico Elementary	1120 Park Rd

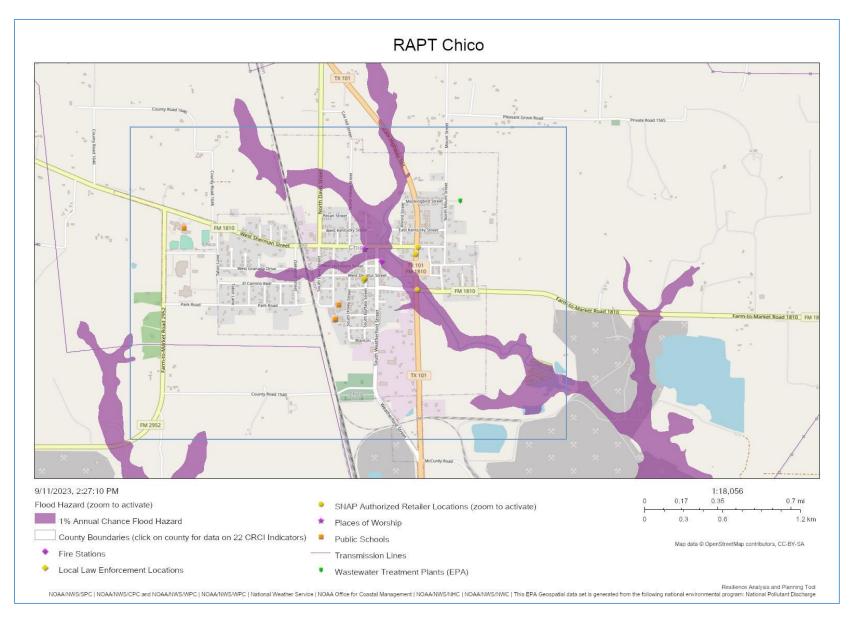


Figure 43: RAPT Map of Chico

Table 32: City of Decatur Local Inventory of Critical and Vulnerable Facilities

Category	Name or Description	Address
Apartments	Crestview Place	950 W Thompson St
Apartments	Quail Run	1906 S College Ave
Apartments	Eagle Ridge	1500 S State St
Apartments	Legacy Trails of Decatur	242 Buchanan Rd
Apartments	Eighter From Decatur Apartments	1208 US 287
Apartments	Decatur Housing Authority	500 N Cowan St
Bank	First Financial	608 W Hale Ave
Bank	Legend Bank	1706 FM 51 South
Bank	Wells Fargo	1409 FM 51
Bank	First State Bank	661 W Thompson Dr
Bank	Pilgrim Bank	1405 US 380 BUS
Cell Phone Tower	At&t	7944 N FM 51
Convention Center	Decatur Convention Center	2010 US 380
EMS	Wise County EMS Station 1	1101 W Rose Ave
Fire Department	Decatur Station 1	1705 S State St
Fire Department	East Wise	107 CR 4421
Fire Department	Greenwood/Slidell Station 1	CR 2820
Fire Department	Greenwood/Slidell Station 2	CR 2640
Fire Department	Greenwood/Slidell Station 3	CR 2821
Fueling Station	Exxon	1105 US 287
Fueling Station	Valero	1500 S State St
Fueling Station	ALON	1401 Hwy 287, US 81
Fueling Station	Conoco Phillips	408 Park W Ct
Government Facilities	TX DPS	2000 S Trinity St
Government Facilities	Wise County Courthouse	101 N Trinity St
Government Facilities	Wise County Courthouse Annex JP2-Law Enforcement Center	200 Rook Ramsey Dr
Government Facilities	Wise County Courthouse Annex JP1	101 N State St
Government Facilities	911 Adressing/Public Works	2901 FM 51 Bldg 100
Government Facilities	Adult Probation	105 E Walnut St
Government Facilities	Elections	200 S Trinity St
Government Facilities	Juvenile Services	401 Rook Ramsey Dr
Government Facilities	Records Office Building	200 N Trinity St
Government Facilities	Tax/Auto Registration Office	404 W Walnut St
Government Facilities	Financial Building	207 N Church St

Category	Name or Description	Address
Government Facilities	AgriLife	206 S State St
Government Facilities	WARM	300 N Trinity
Government Facilities	Chamber Building	308 W Main St
Government Facilities	Wise County Animal Shelter	119 PR 4195
Government Facilities	Asset Control	400 W Walnut St
Government Facilities	Wise County Precinct 1	1151 FM 51 N
Grocery Stores	Walmart	800 US 287
Grocery Stores	Lowes Market	1202 FM 51
Hospital	Wise Regional-East Campus	609 Medical Center Dr
Hospital	Wise Regional-West Campus	2000 FM 51
Hotel	Hampton Inn & Suites	110 US287
Hotel	Baymont by Wyndham	600 W Hale Ave
Hotel	Fairfield Inn & Suites	1910 US380
Hotel	Rodeway Inn by Choice Hotels	1507 US287
Hotel	Candlewood Suites	601 W Thompson St
Hotel	Lone Star Inn	1600 US 287
Hotel	Holiday Inn Express	1051 N Hwy81/287
Hotel	Best Western	1801 S US 287
Hotel	LaQuinta	1405 US287
Hotel	Econo Lodge	1709 US287
Hotel	Motel 6	1900 S Trinity St
Jail	Wise County Jail	200 Rook Ramsey Dr
Major Employer	Poco Graphite	300 Old Greenwood Rd
Major Employer	Imperial Fabrication	2188 US 380 E
Pharmacy	Walmart	800 US287
Pharmacy	S&J Medical Center Pharmacy	1101 W Eagle Dr C
Pharmacy	Best Value Renshaw Drug	800 Medical Center Dr
Pharmacy	Solaris Pharmacy	1308 E Old Chico Rd
Pharmacy	CVS	805 W Hwy 380
Police	Decatur PD	1601 S State St
Railroad	BNSF Railway Company	100 US-81
Retirement/Nursing Homes	Governors Ridge	300 E Devereaux Dt
Retirement/Nursing Homes	Heritage Place	605 W Mulberry St
Retirement/Nursing Homes	The Hills	201 E Thompson
RV Park	Decatur RV Park	114 CR 3198
RV Park	Brushy Creek RV Park	1502 CR 2175
RV Park	Double Duty RV Park	221 Double Duty Dr
RV Park	Meadowlake Village	1100 E Bus 380

Category	Name or Description	Address
Schools	Decatur High School	750 E Eagle Summit Dr
Schools	Decatur Middle	1201 W Thompson St
Schools	Carson Elementary	2100 Bus 81 287 South
Schools	Rann Elementary	1300 Deer Park Rd
Schools	Decatur Intermediate	1200 Eagle Dr
Sheriff	Wise Co SO	200 Rook Ramsey Dr
Transportation Services	Decatur Municipal Airport	351 Airport Dr
Vet	Wise County Animal Clinic	1000 E Bus 380
Vet	Decatur Vet Clinic	2101 S College Ave
Vet	Heritage Vet Clinic	4392 S FM 51
Vet	Plumcreek Animal Clinic	138 FM 1810

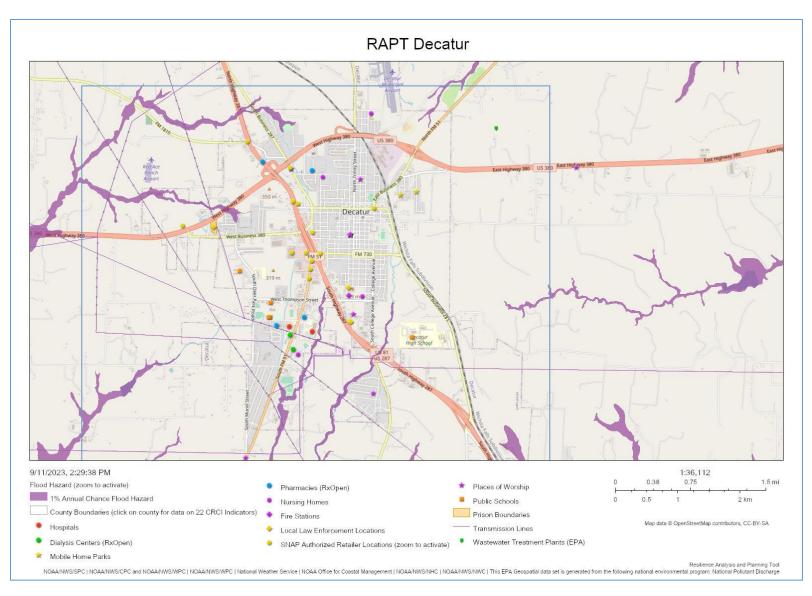


Figure 44: RAPT Map of Decatur

Table 33: City of Rhome Local Inventory of Critical and Vulnerable Facilities

Category	Name or Description	Address
Apartments	Rhome Apartments	175 Logan Ct
Bank	Pinnacle Bank	800 US 287 Ste A
Fire Department	Rhome Fire Station	261 School Rd
Fueling Station	Gas Station	10326 US 287
Fueling Station	Pilot	8221 US 287
Fueling Station	Valero	2000 Illinois St
Fueling Station	Loves Travel Stop	4800 E TX 114
Fueling Station	Phillips 66	100 N Main St
Fueling Station	Pilot Travel Center	8221 US 287
Fueling Station	Big Z Travel Center	405 B. C. Rhome Ave
Fueling Station	Seven Hills Market	10326 US 287
Government Facilities	Main Pump Station and Storage tank	FM 3433 WATER TOWER
Pharmacy	Best Value Rhome Pharmacy	400 S Main St
Police	Rhome PD	400 BC Rhome Ave

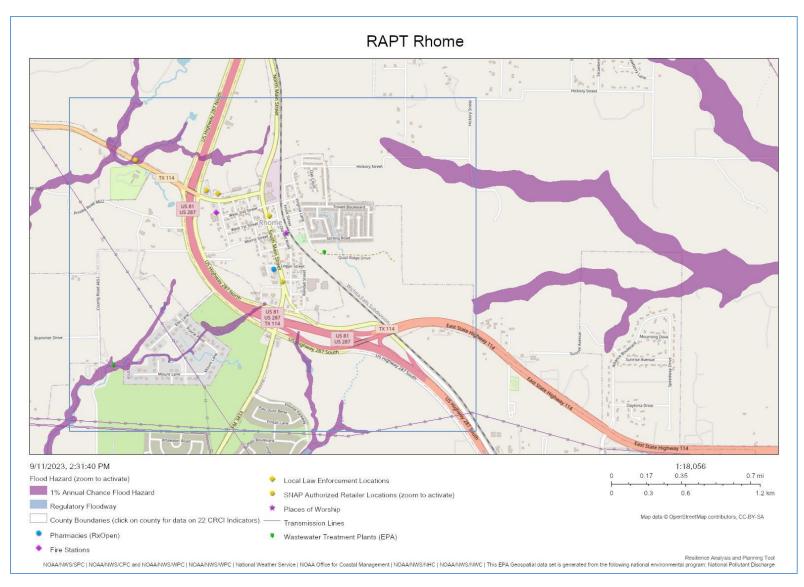


Figure 45: RAPT Map of Rhome

Table 34: City of Runaway Bay Local Inventory of Critical and Vulnerable Facilities

Category	Name or Description	Address
Bank	First State Bank	102 Port O Call Dr
Bank	Prosperity Bank	1055 Hwy 380 W
Fire Department	Runaway Bay Fire Station	101 Runaway Bay Dr

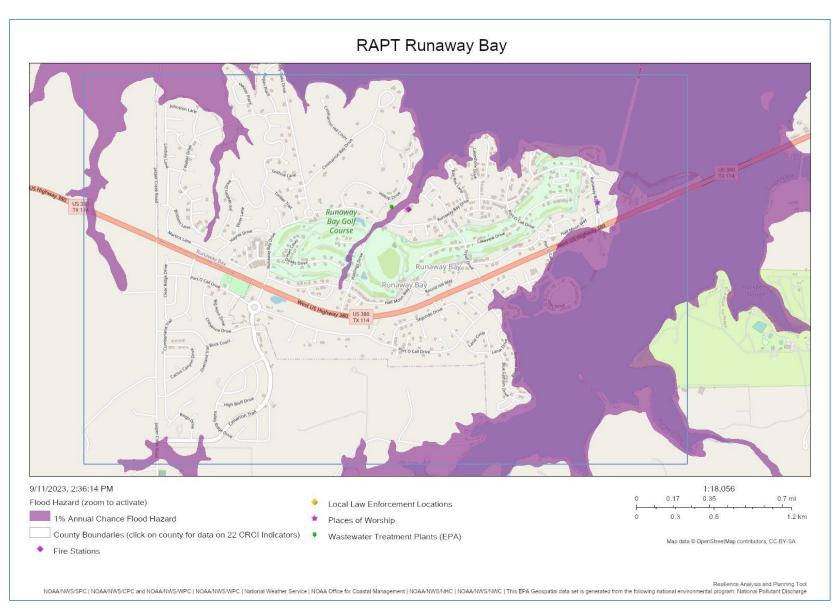


Figure 46: RAPT Map of Runaway Bay

Table 35: Wise County Local Inventory of Critical and Vulnerable Facilities

Category	Name or Description	Address	City
Apartments	Hilltop	229 PR 4573	Boyd
Apartments	Newark Beach Estates	629 Central Ave	Newark
Bank	First Financial Bank	609 Rock Island Ave	Boyd
EMS	Wise County EMS Station 3	545 S Allen St	Boyd
Fire Department	Alvord Fire Station	108 N Trappier St	Alvord
Fire Department	Boyd Fire Station	545 S Allen St	Boyd
Fire Department	Newark Fire Station	406 Houston St	Newark
Fire Department	Cottondale Fire Station	2852 CR 3555	Paradise
Fire Department	Paradise Fire Station	303 Main St	Paradise
Fire Department	Salt Creek Fire Station	567 Big Salty Ln	Springtown
Fueling Station	Shell	5985 N US 287	Alvord
Fueling Station	Shell	806 W State St	Alvord
Fueling Station	Valero	812 W State St	Alvord
Fueling Station	Texaco	213 Rock Island Ave	Boyd
Fueling Station	ALON	490 W Rock Island Ave	Boyd
Fueling Station	Phillips 66	213 S Hitt St	Boyd
Fueling Station	Valero	108 S Allen St	Boyd
Fueling Station	Boyd Kwik Stop	213 Rock Island Ave	Boyd
Fueling Station	Allsups	490 W Rock Island Ave	Boyd
Government Facilities	Wise County Precinct 2	197 FM 1655	Alvord
Government Facilities	Wise County Courthouse Annex JP3	125 FM 730	Boyd
Government Facilities	Wise County Precinct 3	125 FM 730 N	Boyd
Grocery Stores	Lowes Market	303 W Franklin	Alvord
Grocery Stores	Lowes Market	200 W Rock Island Ave	Boyd
Pharmacy	Boyd Medicine Store	417 W Rock Island Ave	Boyd
Police	Boyd PD	731 E Rock Island Ave	Boyd
Power Plant	Wise County Power LLC	800 Boons Creek Lane	Poolville
Railroad	Union Pacific Railroad Company	441 E Hickory St	Denton
RV Park	A+ RV Park	667 E Franklin St	Alvord
RV Park	Creekside RV Park	4491 Hwy 287	Alvord
RV Park	Alvord Oaks RV Park	4491 US 287	Alvord
RV Park	Kountry Meadows	2540 E State Hwy 114	Boyd

Category	Name or Description	Address	City
RV Park	Creekside RV Community	9292 S FM 51	Boyd
RV Park	Boyd RV Park	538 Rock Island Ave	Boyd
RV Park	Back Home RV Park	791 Ross Lane	Boyd
RV Park	Eagles Nest RV Resort	1599 CR 4757	Boyd
RV Park	The Ranch at Rhome	387 CR 4840	Haslet
RV Park	Avondale RV Park 2	252 CR 4838	Haslet
RV Park	Newark RV Park	156 CR 4879	Newark
RV Park	Over the Hill RV Park	4677 W Hwy 114	Paradise
RV Park	Paradise RV Park	835 CR 3342	Paradise
RV Park	Pair of Dice RV Park	7019 S FM 51	Paradise
RV Park	Jaybird Lane Acres	200 Jay Bird Cut Off Rd	Springtown
Schools	Alvord High School	1049 W Bypass 287	Alvord
Schools	Alvord Middle School	328 FM 1655	Alvord
Schools	Alvord Elementary	711 W Stadium Dr	Alvord
Schools	Boyd High School	700 Knox Ave	Boyd
Schools	Boyd Intermediate	650 Knox Ave	Boyd
Schools	Boyd Middle	550 Knox Ave	Boyd
Schools	Boyd Elementary	500 E Morton Ave	Boyd
Schools	Paradise High School	Hwy 114 and loop 444	Paradise
Schools	Paradise Intermediate	338 Schoolhouse Rd	Paradise
Schools	Paradise Middle	338 Schoolhouse Rd	Paradise
Schools	Paradise Elementary	338 Schoolhouse Rd	Paradise
Schools	Slidell ISD	1 Greyhound Lane	Slidell

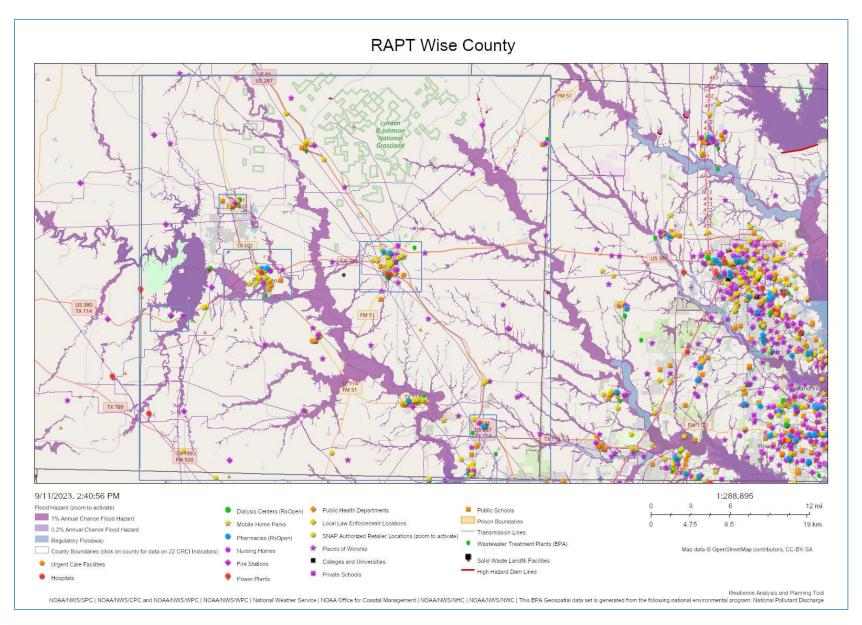


Figure 47: RAPT Map of Wise County

Critical Infrastructure

Collapsed bridges, unsafe power grids, interrupted water supply- weak infrastructure can turn natural hazards into disasters. Critical infrastructure provides services and functions essential to a community, especially during and after a disaster. For a critical facility to function, building systems and equipment must remain operational. Furthermore, it must be supplied with essential utilities (typically power, water, waste disposal, and communications, but occasionally natural gas and steam). When critical infrastructure fails, it becomes nearly impossible to aid those who lack the means of evacuating on their own. This results in rescue operations that take longer to plan and execute and pose increased risks to first responders and residents due to the lack of information on the number of affected residents or the location of those who need additional assistance.

Dams

Dams provide a range of economic, environmental, and social benefits, including recreation, flood control, water supply, hydroelectric power, waste management, river navigation, and wildlife habitat.

Local emergency management is only responsible for the *impact* of flooding from dam failure on surrounding areas. The responsibility for maintaining a safe dam rests with its owner. Dam owners are:

- responsible for maintaining safety at and around their dam.
- the only ones who can directly maintain the dams and implement mitigation and safety measures on the structures.
- responsible for ensuring that their dam is in compliance with the Texas Commission on Environmental Quality's (TCEQ) regulations regarding emergency action plans.

Additionally, each dam owner required to have an emergency action plan must know and be prepared to take the actions outlined in their emergency action plan, should their dam begin to fail.

Table 36: Dam Safety Activities Per Responsible Party

Responsible Parties	Dam Related Safety Activities
	Identification of emergency at dam
Dam Owners/Operators	Initial notifications
Dam Owners/Operators	Implementation of repairs
	Security and technical assistance on site
	Public warning
	Possible evacuation
Local Emergency Management and Local	Shelter plan activated
Responders	Rescue and recovery
	State of Emergency declaration
	Termination of emergency status
	Aid affected area when requested
State Emergency Management	Coordinate specialized assistance
State Lineigency Management	Notify appropriate state agencies
	Determine who does what in an emergency

According to USACE, there are 99 total dams within Wise County and. The inundation maps of these dams are located in the Emergency Action Plan (EAP) of each dam. EAPs can be requested from the dam owners.

The following table is a list of the dams in Wise County provided by the United States Army Corps of Engineers. Those without a city name can be presumed to be located in the unincorporated County. The list reflects the most current 2018 National Inventory of Dams (NID) database. More details than provided on the following list is available on the National Inventory of Dams <u>website</u>.

Table 37: Dams in Wise County

Dam Name	NID ID	Owner Names	City	Primary Purpose	EAP Prepared
Di C. I C. I MCMDCCCII 24 D	TX072	TARRANT REGIONAL WATER DISTRICT; WISE COUNTY; WISE		Flood Risk	Not
Big Sandy Creek WS NRCS Site 24c Dam	25	COUNTY WCID; WISE SWCD		Reduction	Required
Big Sandy Creek WS NRCS Site 35 Dam	TX072	TARRANT REGIONAL WATER DISTRICT; WISE COUNTY; WISE	NONE	Flood Risk	Yes
big Salidy Creek WS NACS Site 35 Daili	04	COUNTY WCID; WISE SWCD	NONE	Reduction	res
Salt Creek & Laterals WS SCS Site 5 Dam	TX014	TARRANT REGIONAL WATER DISTRICT; WISE COUNTY; WISE	NONE	Flood Risk	Yes
Sait Creek & Laterals W3 3C3 Site 3 Daili	92	COUNTY WCID; WISE SWCD	NONE	Reduction	163
Salt Creek & Laterals WS SCS Site 4 Dam	TX014	TARRANT REGIONAL WATER DISTRICT; WISE COUNTY; WISE	NONE	Flood Risk	Not
Sait Creek & Laterals W3 3C3 Site 4 Daili	91	COUNTY WCID; WISE SWCD	NONE	Reduction	Required
Salt Creek & Laterals WS SCS Site 21 Dam	TX014	TARRANT REGIONAL WATER DISTRICT; WISE COUNTY; WISE	NONE	Flood Risk	Not
Sait Creek & Laterals W3 3e3 Site 21 Daili	87	COUNTY WCID; WISE SWCD	NONE	Reduction	Required
Salt Creek & Laterals WS SCS Site 12 Dam	TX014	TARRANT REGIONAL WATER DISTRICT; WISE COUNTY; WISE	NONE	Flood Risk	Not
Suit creek & Ediciuis W3 3e3 Site 12 Buill	94	COUNTY WCID; WISE SWCD	110112	Reduction	Required
Salt Creek & Laterals WS SCS Site 10 Dam	TX014	TARRANT REGIONAL WATER DISTRICT; WISE COUNTY; WISE	NONE	Flood Risk	Yes
Sait Creek & Laterals W3 3e3 Site 10 Daili	86	COUNTY WCID; WISE SWCD	NONE	Reduction	
Salt Creek & Laterals WS SCS Site 8 Dam	TX014	TARRANT REGIONAL WATER DISTRICT; WISE COUNTY; WISE	NONE	Flood Risk	Not
Sait Creek & Eaterals W3 3e3 3ite 6 Daili	82	COUNTY WCID; WISE SWCD	NONE	Reduction	Required
Salt Creek & Laterals WS SCS Site 15 Dam	TX047	TARRANT REGIONAL WATER DISTRICT; WISE COUNTY; WISE	BOYD	Flood Risk	Yes
Salt creek & Laterals W5 505 Site 15 Balli	21	COUNTY WCID; WISE SWCD		Reduction	
Big Sandy Creek WS SCS Site 27 Dam	TX070	TARRANT REGIONAL WATER DISTRICT; WISE COUNTY; WISE	NONE	Other	Not
Dig Sanay Creek WS 363 Site 27 Bann	07	COUNTY WCID; WISE SWCD	110112		Required
Big Sandy Creek WS SCS Site 25a Dam	TX068	TARRANT REGIONAL WATER DISTRICT; WISE COUNTY; WISE	NONE	Flood Risk	Not
Dig Sanay Creek WS Ses Site 23a Bani	43	COUNTY WCID; WISE SWCD	110112	Reduction	Required
Big Sandy Creek WS SCS Site 14 Dam	TX014	TARRANT REGIONAL WATER DISTRICT; WISE COUNTY; WISE	NONE	Flood Risk	Not
Dig Sandy Creek WS Ses Site 17 Bann	98	COUNTY WCID;WISE SWCD	110112	Reduction	Required
Big Sandy Creek WS SCS Gss 125a	TX068	TARRANT REGIONAL WATER DISTRICT; WISE COUNTY; WISE	NONE	Other	Not
	48	COUNTY WCID;WISE SWCD			Required
Salt Creek & Laterals WS SCS Site 9 Dam	TX014	TARRANT REGIONAL WATER DISTRICT; WISE COUNTY; WISE	NONE	Flood Risk	Not
	85	COUNTY WCID;WISE SWCD		Reduction	Required
Big Sandy Creek WS SCS Site 36 Dam	TX058	TARRANT REGIONAL WATER DISTRICT; WISE COUNTY; WISE	NONE	Flood Risk	Not
	35	COUNTY WCID;WISE SWCD		Reduction	Required
Salt Creek & Laterals WS SCS Site 13 Dam	TX014	TARRANT REGIONAL WATER DISTRICT; WISE COUNTY; WISE	NONE	Flood Risk	Not
	93	COUNTY WCID; WISE SWCD		Reduction	Required
Salt Creek & Laterals WS SCS Site 7 Dam	TX014	TARRANT REGIONAL WATER DISTRICT; WISE COUNTY; WISE	NONE	Flood Risk	Not
	81	COUNTY WCID; WISE SWCD		Reduction	Required
Big Sandy Creek WS SCS Site 24a Dam	TX068	TARRANT REGIONAL WATER DISTRICT; WISE COUNTY; WISE	NONE	Flood Risk	Not
	41	COUNTY WCID; WISE SWCD		Reduction	Required

Dam Name	NID ID	Owner Names	City	Primary Purpose	EAP Prepared
Calt Creak & Laterala MC CCC Cita Ob Dava	TX014	TARRANT REGIONAL WATER DISTRICT; WISE COUNTY; WISE	NONE	Flood Risk	Not
Salt Creek & Laterals WS SCS Site 8b Dam	84	COUNTY WCID; WISE SWCD	NONE	Reduction	Required
Pig Sandy Crook WS SCS Site 29 Dam	TX068	TARRANT REGIONAL WATER DISTRICT; WISE COUNTY; WISE	NONE	Flood Risk	Not
Big Sandy Creek WS SCS Site 28 Dam	45	COUNTY WCID; WISE SWCD	NONE	Reduction	Required
Salt Creek & Laterals WS SCS Site 2 Dam	TX014	TARRANT REGIONAL WATER DISTRICT; WISE COUNTY; WISE	NONE	Flood Risk	Not
Sait Creek & Laterals W3 3C3 Site 2 Daili	90	COUNTY WCID; WISE SWCD	INOINE	Reduction	Required
Big Sandy Creek WS NRCS Dam No 33	TX071	TARRANT REGIONAL WATER DISTRICT; WISE COUNTY; WISE	NONE	Flood Risk	Not
Big Salidy Creek WS INCS Dall NO 33	99	COUNTY WCID; WISE SWCD	INOINE	Reduction	Required
Salt Creek & Laterals WS SCS Site 6 Dam	TX014	TARRANT REGIONAL WATER DISTRICT; WISE COUNTY; WISE	NONE	Flood Risk	Yes
Sait Creek & Laterals W3 3C3 Site 6 Daili	80	COUNTY WCID; WISE SWCD	NONE	Reduction	res
Salt Creek & Laterals WS SCS Site 8a Dam	TX014	TARRANT REGIONAL WATER DISTRICT; WISE COUNTY; WISE	NONE	Flood Risk	Not
Sait Creek & Laterals WS 3CS Site on Daili	83	COUNTY WCID; WISE SWCD	NONL	Reduction	Required
Big Sandy Creek WS SCS Site 24d Dam	TX068	TARRANT REGIONAL WATER DISTRICT; WISE COUNTY; WISE	ALVORD	Flood Risk	No
big Sandy Creek W3 3C3 Site 24d Dam	42	COUNTY WCID; WISE SWCD	ALVORD	Reduction	140
Big Sandy Creek WS SCS Site 23a Dam	TX068	TARRANT REGIONAL WATER DISTRICT; WISE COUNTY; WISE	NONE	Flood Risk	Not
big Sandy Creek W3 3C3 Site 23a Dain	40	COUNTY WCID; WISE SWCD	NONE	Reduction	Required
Pig Sandy Crook WS SCS Sita 1/12 Dam	TX070	TARRANT REGIONAL WATER DISTRICT; WISE COUNTY; WISE	NONE	Flood Risk	Not
Big Sandy Creek WS SCS Site 14a Dam	08	COUNTY WCID;WISE SWCD	NONL	Reduction	Required
Big Sandy Creek WS SCS Gss 110	TX068	TARRANT REGIONAL WATER DISTRICT; WISE COUNTY; WISE	NONE	Other	Not Required
big Sandy Creek W3 3C3 G33 110	47	COUNTY WCID; WISE SWCD	NONE	Other	
Big Sandy Creek WS SCS Site 24b Dam	TX058	TARRANT REGIONAL WATER DISTRICT; WISE COUNTY; WISE	NONE	Flood Risk	Yes
big Sandy Creek W3 3C3 Site 24b Dam	34	COUNTY WCID; WISE SWCD	NONE	Reduction	163
Salt Creek & Laterals WS SCS Site 14 Dam	TX047	TARRANT REGIONAL WATER DISTRICT; WISE COUNTY; WISE	BOYD	Flood Risk	Yes
Sait Creek & Laterals WS SCS Site 14 Daili	20	COUNTY WCID; WISE SWCD	воть	Reduction	163
Salt Creek & Laterals WS SCS Site 22 Dam	TX014	TARRANT REGIONAL WATER DISTRICT; WISE COUNTY; WISE	NONE	Flood Risk	Not
Sait Creek & Laterals WS 3CS Site 22 Daili	95	COUNTY WCID; WISE SWCD	NONE	Reduction	Required
Big Sandy Creek WS SCS Site 26 Dam	TX068	TARRANT REGIONAL WATER DISTRICT; WISE COUNTY; WISE	NONE	Flood Risk	Yes
big Salidy Creek W3 3C3 Site 20 Daili	44	COUNTY WCID; WISE SWCD	NONL	Reduction	163
Denton Creek WS SCS Sed Cont Str 14-161	TX045	WISE SWCD		Other	Not
Deliton creek W3 3C3 3eu Cont 3ti 14-101	50	WISE SWCD		Other	Required
Denton Creek WS SCS Site 21d Dam	TX015	WISE COUNTY;WISE COUNTY WCID 1;WISE SWCD	NONE	Flood Risk	Yes
Denton Creek W3 3C3 Site 21d Dain	32	WISE COUNTY, WISE COUNTY WCID 1, WISE SWCD	NONE	Reduction	res
Salt Creek & Laterals WS SCS Site 1 Dam	TX014	TARRANT REGIONAL WATER DISTRICT; WISE COUNTY; WISE	NONE	Flood Risk	Not
Sait Cleek & Laterals WS SCS Site 1 Ddill	89	COUNTY WCID;WISE SWCD	INOINE	Reduction	Required
Pig Sandy Crook M/S SCS Sita 27 Dam	TX069	TARRANT REGIONAL WATER DISTRICT; WISE COUNTY; WISE	NONE	Flood Risk	Yes
Big Sandy Creek WS SCS Site 37 Dam	05	COUNTY WCID 1; WISE SWCD	INUINE	Reduction	162
Denton Creek WS SCS Site 23b Dam	TX015	WISE COUNTY; WISE SWCD	NONE	Flood Risk	Yes
Deliton Creek M2 2C2 2lfe 520 Daly	10	WISE COUNTT, WISE SWCD	INOINE	Reduction Ye	res

Dam Name	NID ID	Owner Names	City	Primary Purpose	EAP Prepared
Denton Creek WS SCS Site 23d Dam	TX015 11	WISE COUNTY; WISE SWCD	NONE	Flood Risk Reduction	Yes
Denton Creek WS SCS Site 25a Dam	TX014 75	WISE COUNTY; WISE SWCD	NONE	Flood Risk Reduction	Not Required
Denton Creek WS SCS Site 26 Dam	TX014 73	WISE COUNTY; WISE SWCD	NONE	Flood Risk Reduction	Not Required
Big Sandy Creek WS NRCS Site 32	TX068 46	WISE SWCD AND WISE COUNTY WCID	NONE		Yes
Denton Creek WS SCS Site 23a Dam	TX015 09	WISE COUNTY; WISE SWCD	NONE	Flood Risk Reduction	Yes
Denton Creek WS SCS Site 30 Dam	TX014 78	WISE COUNTY; WISE SWCD	NONE	Flood Risk Reduction	Yes
Denton Creek WS SCS Site 10c Dam	TX015 17	WISE COUNTY; WISE SWCD	NONE	Flood Risk Reduction	Not Required
Denton Creek WS SCS Site 18h Dam	TX015 05	WISE COUNTY; WISE SWCD	NONE	Flood Risk Reduction	Not Required
Denton Creek WS SCS Site 17a Dam	TX015 37	WISE COUNTY; WISE SWCD	GREENW OOD	Flood Risk Reduction	Yes
Denton Creek WS SCS Site 24 Dam	TX014 88	WISE COUNTY; WISE SWCD	NONE	Flood Risk Reduction	Yes
Denton Creek WS SCS Site 23e Dam	TX015 12	WISE COUNTY; WISE SWCD	NONE	Flood Risk Reduction	Not Required
Denton Creek WS SCS Site 10d Dam	TX015 18	WISE COUNTY; WISE SWCD	NONE	Flood Risk Reduction	Not Required
Denton Creek WS SCS Site 12 Dam	TX015 21	WISE COUNTY; WISE SWCD	NONE	Flood Risk Reduction	Not Required
Denton Creek WS SCS Site 10b Dam	TX015 16	WISE COUNTY; WISE SWCD	NONE	Flood Risk Reduction	Not Required
Denton Creek WS SCS Site 18d Dam	TX015 03	WISE COUNTY; WISE SWCD	NONE	Flood Risk Reduction	Not Required
Denton Creek WS SCS Site 27a Dam	TX014 76	WISE COUNTY; WISE SWCD	NONE	Flood Risk Reduction	Not Required
Denton Creek WS SCS Site 21 Dam	TX015 28	WISE COUNTY; WISE SWCD	NONE	Flood Risk Reduction	Not Required
Denton Creek WS SCS Site 12c Dam	TX015 22	WISE COUNTY; WISE SWCD	NONE	Flood Risk Reduction	Not Required
Denton Creek WS SCS Site 11g Dam	TX015 20	WISE COUNTY; WISE SWCD	NONE	Flood Risk Reduction	Not Required

Dam Name	NID ID	Owner Names	City	Primary Purpose	EAP Prepared
Big Sandy Creek WS SCS Site 44 Dam	TX050 65	TARRANT REGIONAL WATER DISTRICT;WISE COUNTY;WISE COUNTY WCID;WISE SWCD	NONE	Flood Risk Reduction	Yes
Denton Creek WS SCS Site 11d Dam	TX015 13	WISE COUNTY; WISE SWCD	NONE	Flood Risk Reduction	Not Required
Denton Creek WS SCS Site 20 Dam	TX015 26	WISE COUNTY; WISE SWCD	NONE	Flood Risk Reduction	Yes
Denton Creek WS SCS Site 12d Dam	TX014 99	WISE COUNTY; WISE SWCD	NONE	Flood Risk Reduction	Not Required
Denton Creek WS SCS Site 21a Dam	TX015 29	WISE COUNTY; WISE SWCD	NONE	Flood Risk Reduction	Not Required
Denton Creek WS SCS Site 18a-1 Dam	TX015 00	WISE COUNTY; WISE SWCD	NONE	Flood Risk Reduction	Not Required
Denton Creek WS SCS Site 25 Dam	TX015 35	WISE COUNTY; WISE SWCD	NONE	Flood Risk Reduction	Not Required
Denton Creek WS SCS Site 11e Dam	TX015 14	WISE COUNTY; WISE SWCD	NONE	Flood Risk Reduction	Not Required
Denton Creek WS SCS Site 29 Dam	TX014 77	WISE COUNTY; WISE SWCD	NONE	Flood Risk Reduction	Yes
Denton Creek WS SCS Site 18i Dam	TX015 07	WISE COUNTY; WISE SWCD	NONE	Flood Risk Reduction	Not Required
Denton Creek WS SCS Site 24a Dam	TX015 34	WISE COUNTY; WISE SWCD	NONE	Flood Risk Reduction	Not Required
Denton Creek WS SCS Site 18j Dam	TX015 08	WISE COUNTY; WISE SWCD	NONE	Flood Risk Reduction	Yes
Denton Creek WS SCS Site 31 Dam	TX014 79	WISE COUNTY; WISE SWCD	NONE	Flood Risk Reduction	Yes
Denton Creek WS SCS Site 21c Dam	TX015 31	WISE COUNTY; WISE SWCD	NONE	Flood Risk Reduction	Not Required
Denton Creek WS SCS Site 24b Dam	TX014 74	WISE COUNTY; WISE SWCD	NONE	Flood Risk Reduction	Not Required
Denton Creek WS SCS Site 20a Dam	TX015 27	WISE COUNTY; WISE SWCD	NONE	Flood Risk Reduction	Not Required
Denton Creek WS SCS Site 18e Dam	TX015 25	WISE COUNTY; WISE SWCD	NONE	Flood Risk Reduction	Not Required
Big Sandy Creek WS SCS Site 43 Dam	TX050 62	TARRANT REGIONAL WATER DISTRICT; WISE COUNTY; WISE COUNTY WCID; WISE SWCD	NONE	Flood Risk Reduction	Yes
Denton Creek WS SCS Site 23 Dam	TX015 33	WISE COUNTY; WISE SWCD	NONE	Flood Risk Reduction	Not Required

Dam Name	NID ID	Owner Names	City	Primary Purpose	EAP Prepared
	TX015			Flood Risk	Not
Denton Creek WS SCS Site 18b Dam	01	WISE COUNTY; WISE SWCD	NONE	Reduction	Required
	TX015		_	Flood Risk	Not
Denton Creek WS SCS Site 16 Dam	24	WISE COUNTY; WISE SWCD	NONE	Reduction	Required
Double Creek MC CCC Cite 12 Doub	TX015	MICE COLINITY MICE CMCD	NONE	Flood Risk	Not
Denton Creek WS SCS Site 13 Dam	23	WISE COUNTY; WISE SWCD	NONE	Reduction	Required
Denton Creek WS SCS Site 18g Dam	TX015	WISE COUNTY; WISE SWCD	NONE	Flood Risk	Yes
Defitor Creek W3 3C3 Site Tog Dairi	04	WISE COUNTY, WISE SWCD	NONL	Reduction	res
Denton Creek WS SCS Site 18f Dam	TX015	WISE COUNTY; WISE SWCD	NONE	Flood Risk	Not
Benton creek W3 363 31te 101 Buill	06	WISE COOKET, WISE SWED	IVOIVE	Reduction	Required
Denton Creek WS SCS Site 18c Dam	TX015	WISE COUNTY; WISE SWCD	NONE	Flood Risk	Not
	02	,		Reduction	Required
Denton Creek WS SCS Site 11f Dam	TX015	WISE COUNTY; WISE SWCD	NONE	Flood Risk	Not
	19	, , , , , , , , , , , , , , , , , , ,		Reduction	Required
Denton Creek WS SCS Site 11a Dam	TX015	WISE COUNTY; WISE SWCD	NONE	Flood Risk	Not
	15 TY015			Reduction	Required
Denton Creek WS SCS Site 21b Dam	TX015 30	WISE COUNTY; WISE SWCD	NONE	Flood Risk Reduction	Not
	TX093			Flood Risk	Required Not
Big Sandy Creek WS SCS Gss 123	11	WISE SWCD		Reduction	Required
	TX093			Flood Risk	Not
Big Sandy Creek WS SCS Gss 118	09	WISE SWCD	ALVORD	Reduction	Required
	TX093			Flood Risk	Not
Big Sandy Creek WS SCS Gss 122	10	WISE SWCD		Reduction	Required
	TX069			Flood Risk	Not
Big Sandy Creek WS SCS Gss 129	06	WISE SWCD		Reduction	Required
Poster Const. MC CCC City 47 Post	TX015	CALIDED LAND HOLDINGS LITD WISE COUNTY WISE CINCD	GREENW	Flood Risk	
Denton Creek WS SCS Site 17 Dam	36	SAUDER LAND HOLDINGS I LTD; WISE COUNTY; WISE SWCD	OOD	Reduction	Yes
Nautilus Dans	TX074	EDIC CARDENTED DETER MACD MAICE COUNTY		Other	Vac
Nautilus Dam	08	ERIC CARPENTER;PETER NASR;WISE COUNTY		Other	Yes
Lone Star Industries Dam	TX043	PIONEER CONCRETE OF TEXAS INC		Other	Not
Lone Star Industries Dam	92	PIONEER CONCRETE OF TEXASTING		Other	Required
Denton Creek WS Land Stabilization Treatment	TX097	WISE COUNTY		Other	Not
Area Site No 15-3	15	WISE COOKET		Julei	Required
Hr Thompson Dam 2	TX068	HR THOMPSON		Irrigation	Not
The Monipson Dain 2	63	THE HIGHI SON		ii i gation	Required
Denton Creek WS SCS Sed Cont Str 15 1	TX045	UNITED STATES FOREST SERVICE		Other	Not
	49			J	Required

Dam Name	NID ID	Owner Names	City	Primary Purpose	EAP Prepared
Lattiner Dam	TX067 70	FOREST LATTINER	NONE	Other	Not Required
Haynes Gss	TX062 93	JE HAYNES	NONE	Other	Not Required
Perch Hill Plant Dam	TX014 97	GIFFORD-HILL & COMPANY INC		Other	Not Required
Bridgeport Dam	TX014 96	TARRANT REGIONAL WATER DISTRICT	BRIDGEPO RT	Flood Risk Reduction	Yes
Elna Reservoir Dam	TX014 72	DAN MAYERS		Recreation	Not Required

Source: <u>USACE National Inventory of Dams</u>

^{*} An Emergency Action Plan (EAP) is a formal document that identifies potential emergency conditions at a dam and specifies actions to be followed to minimize loss of life and property damage.

Transportation Infrastructure

Roads make a crucial contribution to economic development and growth and bring important social benefits. They are of vital importance to make a community grow and develop. In addition, providing access to employment, social, health and education services makes a road network crucial in fighting against poverty. Roads open more areas and stimulate economic and social development. For those reasons, road infrastructure is the most important of all public assets.

Bridges are also immensely important to everyday travel. Bridges allow safe passage where previously it was not possible or much more difficult. Bridges allow people go to school, seek medical help, and go to work without having to negotiate a busy road, a dangerous railway line, or a fast-flowing river. As extreme weather events become more common, transport infrastructure is increasingly being tested by these events.

The following map is a comprehensive representation of all recommendations made in the Wise County Transportation Plan. It combines the long-term roadway classifications, flood issues, safety issues, and the priority corridors for an aggregated view of the final recommendations. ¹⁰

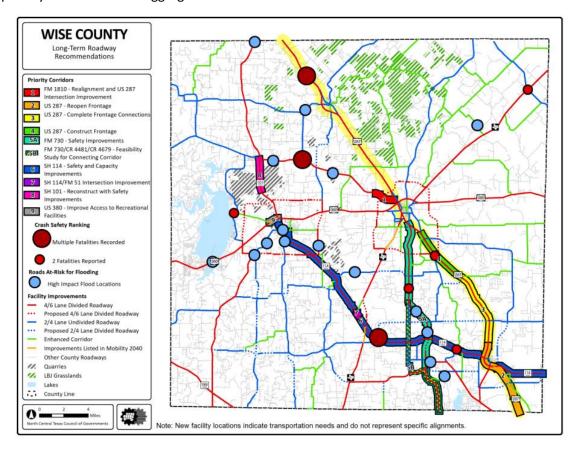


Figure 48: Long-Term Roadway Recommendations

103

¹⁰ Transportation Policy Committee. *WISE COUNTY TRANSPORTATION PLAN*. Dec. 2018, https://kentico-admin.nctcog.org/nctcg/media/Transportation/DocsMaps/Plan/Roadway/Wise-County-Master-Thoroughfare-Plan-%e2%80%93-2017-Amendment.pdf.

Roads and bridges that are not owned by local government fall under the responsibility of the Texas Department of Transportation (TxDOT). TxDOT Roadway Data Tables can be found at the following URL: https://www.txdot.gov/inside-txdot/division/transportation-planning/roadway-inventory.html. The following figure reflects the miles of TxDOT roads in Wise County, the 249th county in their report.

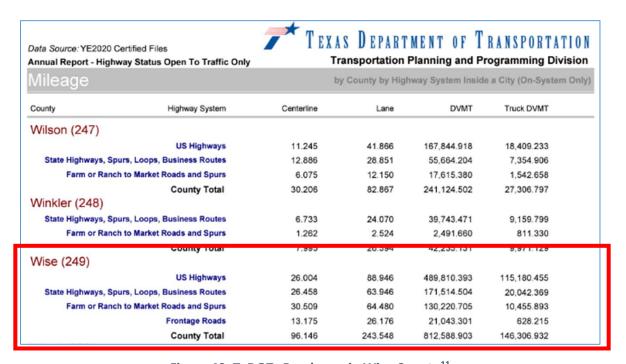


Figure 49: TxDOTs Roadways in Wise County.11

TxDOT uses the following terminology when describing their roadways.

- **On-System**: Under the jurisdiction of TxDOT.
- Off-System: Not under the jurisdiction of TxDOT.
- Centerline Mileage: Mileage of a segment of roadway, regardless of the number of through lanes.
 Unless otherwise specified, "mileage" in this document is by default centerline mileage.
 Centerline mileage for mainlanes is calculated separately from centerline mileage for frontage roads, which are considered distinct roadways. For instance, a 1-mile segment of highway with left and right roadbeds, each with four lanes, would be represented as 1 centerline mile. If that segment contained right and left frontage roads, the mainlanes and frontage roads would be represented in the data as 3 unique roadways, 1 centerline mile each, for a total of 3 miles.
- Lane Mileage: Mileage of all through lanes of a segment of roadway. For instance, a 1-mile segment of highway with left and right roadbeds, each with four through lanes, would be represented as 8 lane miles. As with centerline mileage, frontage road lane mileage is calculated separately from the lane mileage of mainlanes.

¹¹ Texas Department of Transportation. *Roadway Inventory Annual Reports*. 2020, https://ftp.txdot.gov/pub/txdot-info/tpp/roadway-inventory/2020.pdf.

- Daily Vehicle Miles of Travel (DVMT): Daily number of miles traveled by all vehicles. Inclusive of Truck DVMT.
- Truck Daily Vehicle Miles of Travel (Truck DVMT): Daily number of miles traveled by trucks only.
 Unlike other data types, Truck DVMT values are not rounded before aggregation. Therefore, aggregating Truck DVMT by different combinations of subtotal values may result in a negligible discrepancy from the Statewide Total, especially regarding Rural / Urban subtotals. Roadway Data Tables: The data for many of these reports are also available in tabular format in the Multi-Year.

According to TxDOT's Report on Texas Bridges 2020, TxDOT manages 257 on & off system bridges open to public traffic within the County.

- **On-system bridges** are located on the designated state highway system, are maintained by TxDOT, and are typically funded with a combination of federal and state or state-only funds.
- Off-system bridges are not part of the designated state highway system and are under the direct jurisdiction of the local government such as a county, city, other political subdivision of the state, or special district with authority to finance a highway improvement project.

Utilizing an assortment of funding sources and programs, TxDOT is continuously developing improvement projects for public bridges throughout the year. Most funds available for bridge projects are allocated towards Category 6 of TxDOT's Unified Transportation Program (UTP). Within Category 6 are several programs with the goal of improving the condition of Texas bridges. Most notable are 1) the Highway Bridge Program (HBP) which focuses on replacement projects; and 2) the Bridge Maintenance and Improvement Program (BMIP) which focuses on bridge preservation projects. Recently, TxDOT has developed the Bridge System Safety Program (BSSP), intended to upgrade safety features on bridges that are otherwise in good condition. ¹²

Historic Buildings and Districts

Historic landmarks and districts are important to consider when evaluating vulnerabilities to hazards. What is historic, and worth saving, varies with the beholder. "Historic" applies to a building that is part of a community's tangible past. Due to the advanced age of these structures, they are highly susceptible to cracking, leaning, and total destruction caused by any of the hazards.

Historic buildings and structures, artwork, monuments, family heirlooms, and historic documents are often irreplaceable, and may be lost forever in a disaster if not considered in the mitigation planning process. The loss of these resources is all the more painful because of how often residents rely on their presence after a disaster, to reinforce connections with neighbors and the larger community, and to seek comfort in the aftermath of a disaster.

Historic properties and cultural resources are also valuable economic assets that increase property values and attract businesses and tourists. Far from being at odds with economic development, preservation of these assets is often an important catalyst for economic development (e.g., historic downtown revitalization programs leading to growth in heritage tourism).

¹² TxDOT Bridge Division. *Report on Texas Bridges*. FY2020, https://ftp.txdot.gov/pub/txdot-info/library/reports/gov/bridge/fy20.pdf.

According to the Texas Historic Sites Atlas, there are 5 national register properties, 4 courthouses, 124 cemeteries, 2 museums, and 107 historical markers throughout Wise County. 13

Wise County Texas has five places on the National Register of Historic Places including two places of Statewide significance. Significant places, described below, include Waggoner Mansion and Wise County Courthouse, Administration Building, Decatur Baptist College, Brown, J. T., Hotel and Texas Tourist Camp.¹⁴



Figure 50: Administration Building, Decatur Baptist College (added 1971 - - #71000973): 1602 S. Trinity St., Decatur. Picture by Renelibrary, CC BY-SA 4.0, via Wikimedia Commons

Historic Significance: Event, Architecture/Engineering

Architect, builder, or engineer: Unknown

Architectural Style: No Style Listed

Area of Significance: Education, Architecture

Period of Significance: 1875-1899

¹³"Home - Atlas: Texas Historical Commission." State.Tx.Us, https://atlas.thc.state.tx.us/. Accessed 7 Sept. 2023.

¹⁴ "National Register of Historic Places - Texas (TX), Wise County." *Nationalregisterofhistoricplaces.com*, https://nationalregisterofhistoricplaces.com/tx/wise/state.html. Accessed 7 Sept. 2023.

Owner: Private

Historic Function: Education, Religion

Historic Sub-function: College, Religious Structure

Current Function: Work in Progress



Figure 51: Brown, J. T., Hotel (added 1979 - - #79003026): E. Decatur St., Chico. Picture by Renelibrary, CC BY-SA 4.0, via Wikimedia Commons

Historic Significance: Event, Architecture/Engineering

Architect, builder, or engineer: Brown, J.T.

Architectural Style: Late Victorian

Area of Significance: Architecture, Social History

Period of Significance: 1875-1899

Owner: Private

Historic Sub-function: Hotel

Current Function: Education, Recreation and Culture, Social

Current Sub-function: Civic, Library, Museum



Figure 52: Texas Tourist Camp (added 1997 - - #97000477): 900--904 S US 81/287, Decatur. Picture by Renelibrary, CC BY-SA 4.0, via Wikimedia Commons

Historic Significance: Event, Architecture/Engineering

Architect, builder, or engineer: Boydston, Nolan, Boydston, E.F.

Architectural Style: Other

Area of Significance: Commerce, Architecture

Period of Significance: 1950-1974, 1925-1949

Owner: Private

Historic Function: Commerce/Trade, Domestic

Historic Sub-function: Hotel

Current Function: Commerce/Trade, Domestic

Current Sub-function: Hotel



Figure 53: Waggoner Mansion (added 1974 - - #74002098): 1003 E. Main, Decatur. Picture by Renelibrary, CC BY-SA 4.0, via Wikimedia Commons

Historic Significance: Architecture/Engineering

Architect, builder, or engineer: Unknown

Architectural Style: Late Victorian

Area of Significance: Architecture

Period of Significance: 1875-1899

Owner: Private

Historic Function: Domestic

Historic Sub-function: Single Dwelling

Current Function: Domestic

Current Sub-function: Single Dwelling



Figure 54: Wise County Courthouse (added 1976 - - #76002085): Public Sq. , Decatur. Picture by Renelibrary, CC BY-SA 4.0, via Wikimedia Commons

Historic Significance: Architecture/Engineering

Architect, builder, or engineer: Gordon, J. Riely

Architectural Style: Romanesque

Area of Significance: Architecture

Period of Significance: 1875-1899

Owner: Local

Historic Function: Government

Historic Sub-function: Courthouse

Current Function: Government

Current Sub-function: Courthouse

The <u>Wise County Historical Commission</u> is responsible for identifying and preserving Wise County's historic resources. The Historical Commission assists in the development of tourism by helping the county's citizens become aware of the economic benefits derived from the preservation and promotion of Wise County's historical sites, areas, and resources.

The continued presence of historic properties in Wise County enhances the quality life, helps to establish sense of place, and defines the very character of the community. The Historical Commission focuses on conserving each of Wise County 's cities' historic resources and promoting civic awareness of the communities' history.

3.3.2 People

According to the US Census, in 2021, Wise County had 71,714 people residing within its 904.4 square miles. The following figure further breaks out the demographics of the County.



Figure 55: Wise County Demographics

The table below reflects the demographics within the participating cities.

Table 38: City Demographics

			Sex		Race & Ethnicity							
Jurisdiction	2021 Population	Median Age	Male	Female	White	Black	Native	Asian	Islander	Other	Two	Hispanic
Bridgeport	5,781	34.1	54%	46%	54%	4%	1%+	0%	0%	0%	3%+	39%
Chico	1,283	30.6	49%	51%	85%	0%	0%	0%	0%	0%	2%+	13%+
Decatur	6,557	36	40%	60%	64%	3%+	0%+	1%+	0%	0%	1%+	30%+
Rhome	1,774	33.6	52%	48%	83%+	0%+	1%+	1%+	0%	0%	2%+	14%+
Runaway Bay	1,611	53.7	53%	47%	93%+	1%+	0%	0%+	0%+	0%	2%+	4%+

⁺ Margin of error is at least 10 percent of the total value.

3.3.3 Economy

Runaway Bay

Mining, quarrying, and oil/gas extraction are the primary basic industries within the Wise County economy. According to the Texas Railroad Commission, there are just over 12,500 oil and gas wells that have been drilled within Wise County.

The average income in the County is \$34,241 and an estimated 10.9% of the population live below the poverty line, as displayed in Figure 56.

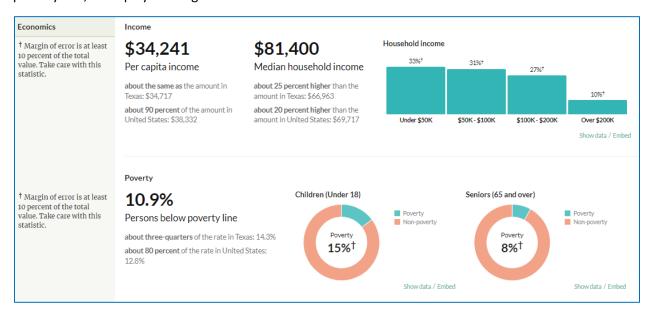


Figure 56: Wise County Economics

The table below reflects the economic profile of the participating cities.

 Jurisdiction
 Per Capita Income
 Persons Below Poverty Line

 Bridgeport
 24,141
 13%

 Chico
 \$24,436
 11.2%

 Decatur
 \$38,428
 4.3%

 Rhome
 \$31,817
 10.2%

6.5%

\$42,602

Table 39: City Economics

Comprehensive Economic Development Strategy SWOT Analysis

Being a member of the NCTCOG Region, Wise County participated in the Regional Comprehensive Economic Development Strategy, in which the 16-country region broke up into clusters to conduct a Strength, Weakness, Opportunities, and Threats (SWOT) Analysis. Reviewing this SWOT Analysis helps the Planning Team better align with goals and vision of the two planning documents.

SWOT ANALYSIS BY CLUSTER — CLUSTER 1

Cluster 1 includes the following counties: WISE, PALO PINTO, and PARKER

STRENGTHS

- Major Thoroughfares: HWY 287, HWY 380, HWY 180, HWY 281, I-35W, HWY I20, HWY 114, HWY730, HWY 199, FM 2264, FM 51
- Regional Health System
- Education
- Oil and gas (infrastructure is in place)
- Quarries
- Tourism and Recreation: (state parks, trails, lakes, cultural tourism, historical tourism, grasslands)
- Available and affordable land
- Workforce (strong workforce, experienced, skills in demand)
- Cowboy culture (sustainable culture)
- Rich history (oil & gas, stagecoach capital, Chisholm Trails)
- Cities are established
- Highly competitive location
- Low cost of living
- Extensive downtown revitalization
- Residential subdivision growth
- Long-range plans and planning
- Industrial infrastructure
- Shovel ready sites in place
- Strong family roots/generational ties
- Weatherford College: university partnerships
- Competitive location
- Proximity to airports and the Metroplex
- Regional Health care hub
- Volunteerism: rich in nonprofit organizations and services)
- Livability: quality of life

WEAKNESS

- Rising appraisal values of land
- Broadband infrastructure
- Transportation infrastructure funding
- Limitations to industrial infrastructure
- Online shopping
- Shortage of affordable housing for young families
- Lack of local online shopping opportunities
- Competitive pay issues due to proximity to Metroplex

• Development limitations due to pipelines

OPPORTUNITIES

- More outdoor opportunities are needed for younger families
- Opportunity for local online shopping options
- Opportunity for broadband developers
- Opportunity for educational expansion and creativity
- Capitalization of natural attributes
- Increase industrial investment in job creation
- Infrastructure investment
- Increased quality of life opportunities
- Potential for younger demographic growth

THREATS

- Online retail
- Fluctuating lake levels
- · Gaps in affordable housing
- Impact of growth on schools and local government services
- Water demand (cities and counties; water wells and surface water)
- Gaps in affordable housing gentrification
- Overloaded/failing infrastructure
- Potential housing bubble
- Potential loss of community character
- Growing pains

3.3.4 Natural Environment

Along with vulnerable populations, there are natural assets that are more vulnerable to natural disasters than others.

Under Chapter 12.0011 of the Texas Parks and Wildlife Code, Texas Parks and Wildlife Department (TPWD) is charged with "providing recommendations that will protect fish and wildlife resources to local, state, and federal agencies that approve, permit, license, or construct developmental projects" and "providing information on fish and wildlife resources to any local, state, and federal agencies or private organizations that make decisions affecting those resources."

TPWD is the steward of the <u>Texas Conservation Action Plan</u>, a conservation plan for species most at risk with a primary purpose to bring people together to realize conservation benefits, prevent species listings, and preserve our natural heritage for future generations.

The Cross Timbers <u>Handbook</u> contains information on Species of Greatest Conservation Need, regionally important habitats, local conservation goals and projects, regional and statewide activities, contact information for conservation partners, and maps that could help County officials better protect and improve its natural assets.¹⁵

TPWD documented 48 species of greatest conservation need within Wise County (see Table 40). All species on the county list are tracked in the <u>Texas Natural Diversity Database (TXNDD)</u>.

Table 40: Species of Greatest Conservation Need (SGCN)

State Conservation Ranks	Amphibians	Arachnids	Birds	Crustaceans	Fish	Insects	Mammals	Mollusks	Plants	Reptiles
S1 (Critically Imperiled)			1				1	3	2	1
S2 (Imperiled)			6				2		3	3
S3 (Vulnerable)	1		3				3		2	5
S4 (Apparently Secure)			2				2			2
S5 (Secure)							4			
SH/SU (Possibly Extirpated)	1									
SNR (Unranked)						1				
SNA (Not Applicable)										

When it comes to bodies of water, such as lakes, reservoirs, and rivers, they are susceptible to severe weather and natural hazards, as drought and heavy rainfall have a dramatic effect on water levels. Wise County is in the Region C planning area for the Texas Water Development Board and a part of the Trinity River Basin, in which the Bridgeport Reservoir monitored. The table and figure below provide detailed information about Bridgeport Reservoir.

Table 41: Bridgeport Reservoir Information

Additional Information							
Impoundment date	1931-01-01						
Gauge	<u>USGS:08043000</u>						
Service spillway crest elevation	819.52 ft above NAVD88						
Top of flood gate elevation	841.52 ft above NAVD88						
Emergency spillway crest elevation	866.00 ft above NAVD88						
Flood pool elevation	851.00 ft above NAVD88						
Maximum design elevation	871.22 ft above NAVD88						
Top of dam elevation	874.00 ft above NAVD88						

¹⁵ Texas Conservation Action Plan. Texas Parks & Wildlife.

https://tpwd.texas.gov/huntwild/wild/wildlife_diversity/nongame/tcap/

Additional Information								
Conservation pool elevation	836 00 ft above NGVD30							
End date: 1969-02-01	836.00 ft above NGVD29							
Conservation pool elevation	840.00 ft above NGVD29							
Start date to end date: 1969-02-01 to 1971-02-01	840.00 It above NGVD29							
Conservation pool elevation	836.00 ft above NAVD88							
Start date: 1971-02-01	650.00 It above NAVD66							

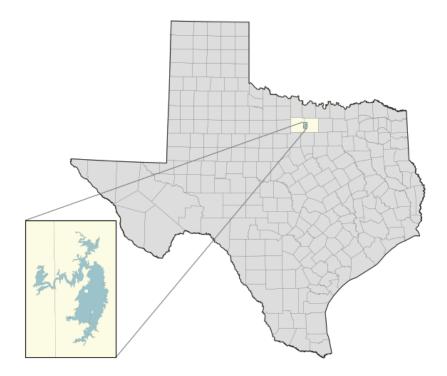


Figure 57: Bridgeport Reservoir

Popular with fisherman, most of Lake Bridgeport's 170-mile shoreline is good bass habitat, with 7 miles of rip-rap, 90 miles of boulders, and many coves and points. There are submerged gravel piles that were deposited when the West Fork Trinity River flowed free and uncontrolled. These piles provide excellent habitat for white bass and black basses.

The following table lists additional community fishing lakes as identified by TPWD.

Table 42: Community Fishing Lakes. 16

County	Lake Name	Location	Acres
Wise	Beckley Pond	In LBJ National Grasslands north of Decatur	5
Wise	Black Creek Lake	In LBJ National Grasslands north of Decatur	33
Wise	Chicken Lake	In LBJ National Grasslands north of Decatur	8
Wise	Clear Lake	In LBJ National Grasslands north of Decatur	23

¹⁶ "Community Fishing Lakes, Prairies & Lakes Region." *Texas.gov*, <u>https://tpwd.texas.gov/fishboat/fish/recreational/lakes/cfl_r2.phtml?r=2</u>. Accessed 8 Sept. 2023.

County	Lake Name	Location	Acres
Wise	Cottonwood Lake	In LBJ National Grasslands north of Decatur	46
Wise	Dan's Lake	In LBJ National Grasslands north of Decatur	18
Wise	Hopewell Pond	In LBJ National Grasslands north of Decatur	4
Wise	Little Cottonwood	In LBJ National Grasslands north of Decatur	9
	Lake		
Wise	Mesa Pond	In LBJ National Grasslands north of Decatur	2
Wise	Pond 123	In LBJ National Grasslands north of Decatur	3.40
Wise	Pond 38-1	In LBJ National Grasslands north of Decatur. South of Old	0.75
		Decatur Road about 3 mi southeast of Alvord.	
Wise	Rhodes Lake	In LBJ National Grasslands north of Decatur	18
Wise	Rutcher Lake	In LBJ National Grasslands north of Decatur	15
Wise	Unit 12, Site 1		0.50
Wise	Unit 14, Site 2		2
	Northwest		
Wise	Unit 14, Site 2		1
	Southwest		
Wise	Unit 15, Site 1 East		0.50
Wise	Unit 15, Site 1		0.50
	South		
Wise	Unit 27, FS Pond		3
Wise	Unit 29E, New		2
	Pond		
Wise	Unit 29E, Old Pond		0.25
Wise	Unit 29W, Site 5		4
Wise	Unit 43, FS Pond		2
Wise	Unit 45, Site 1		1.50
Wise	Unit 76, Site 1		0.50
Wise	Unit 8, Site 1 East		0.50
Wise	Unit 8, Site 1,		0.25
	Mideast		
Wise	Unit 8, Site 2		0.50
Wise	Windmill Lake	In LBJ National Grasslands, northwest of Decatur	30

3.4 Changes in Development

FEMA's defines changes in development as "recent development, potential development, or conditions that may affect the risks and vulnerabilities of the jurisdictions (for example, climate change, declining populations or projected increases in population, or foreclosures) or shifts in the needs of underserved communities or gaps in social equity. This can also include changes in local policies, standards, codes, regulations, land use regulations and other conditions."

New development in hazard-prone areas increases the risk of damage and injury from that hazard. All future development is vulnerable to severe weather events. Local planning mechanisms have identified planned development projects, such as road expansions, downtown revitalizations, and capital improvement projects in the participating jurisdictions that could be impacted by hazards.

The following future land use or zoning maps were included in the comprehensive plans for the cities of Bridgeport, Decatur, Rhome, and Runaway Bay. Development in these areas could be impacted by the natural hazards identified in this plan. The City of Chico and Wise County Unincorporated did not have future land use maps for their communities.

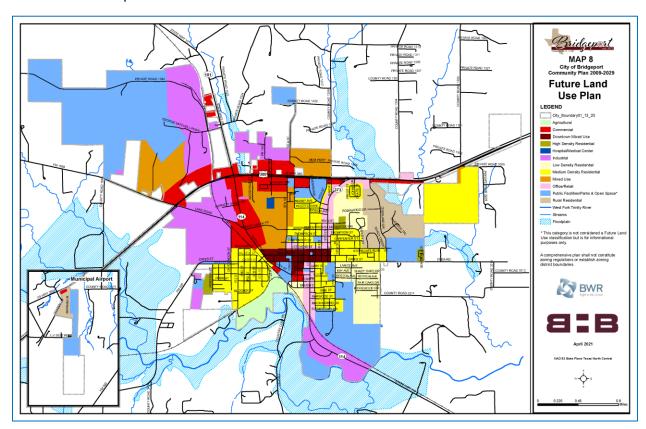


Figure 58: Bridgeport Future Land Use Map

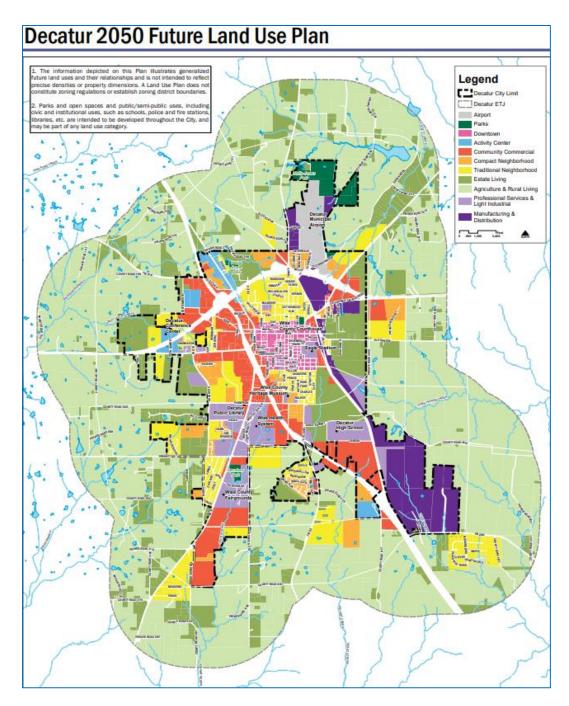


Figure 59: Decatur Future Land Use Map

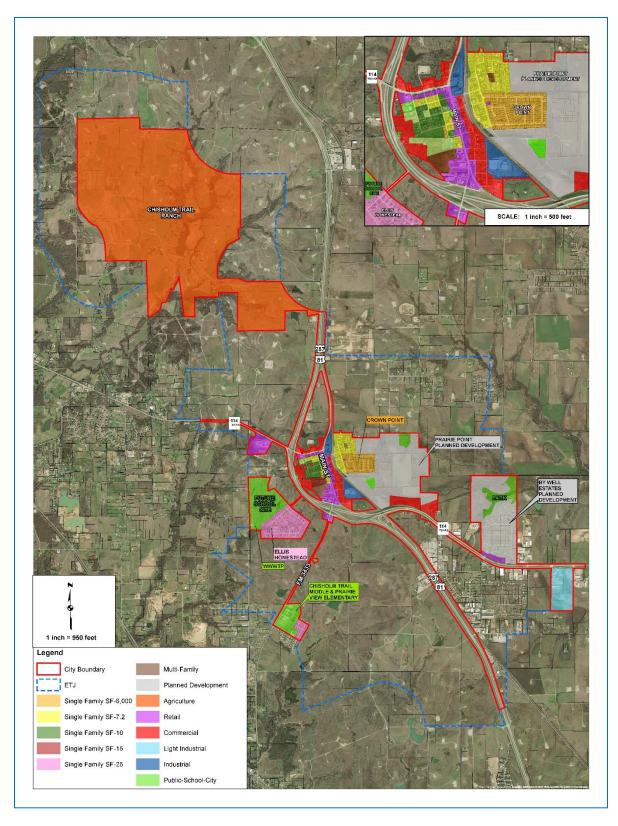


Figure 60: Rhome Final Zoning Map

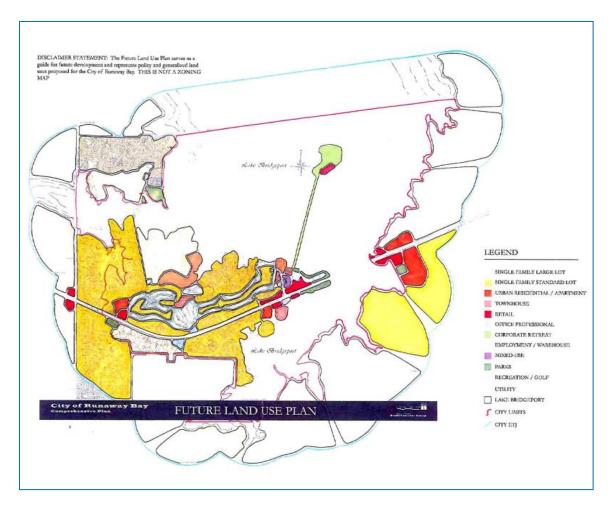


Figure 61: Runaway Bay Future Land Use Map

3.5 Vulnerability

3.5.1 Factors that Increase Vulnerabilities

Factors that increase local vulnerabilities and the impact of hazards include climate change, population increase, repetitive loss properties, aging infrastructure, and wildland-urban interface.

Climate Change

A key factor to an increase in vulnerability is climate change. According to the United States Environmental Protection Agency (EPA),

Texas's climate is changing. Most of the state has warmed between one-half and one-degree Fahrenheit (°F) in the past century. In the eastern two-thirds of the state, average annual rainfall is increasing, yet the soil is becoming drier. Rainstorms are becoming more intense, and floods are becoming more severe... In the coming decades, storms are likely to become more severe, deserts may expand, and summers are likely to become increasingly hot and dry, creating problems for agriculture and possibly human health. Our climate is changing because the earth is warming. People have increased the amount of carbon dioxide in the air by 40% since the late 1700s. Other heat-trapping greenhouse gases are also increasing. These gases have warmed the surface and lower atmosphere of our planet about one degree during the last 50 years.

Evaporation increases as the atmosphere warms, which increases humidity, average rainfall, and the frequency of heavy rainstorms in many places—but contributes to drought in others...¹⁷

Using data from the NOAA Regional Climate Centers and other reliable sources, <u>The Climate Explorer</u> created the graph in Figure 62 as a visual representation of the expected number of days with a maximum temperature over 105°F per year in Wise County in the future.

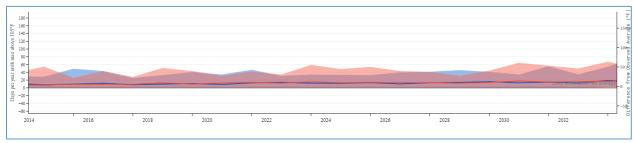


Figure 62: Predicted Number of Days with a Maximum Temperature Over 105°F in Wise County. 18

- The red band (higher emissions) shows projections for 2006–2100 based on a future in which global emissions of heat-trapping gases continue increasing through 2100. The top edge of the band represents the maximum value modeled at each time step; the bottom edge of the band represents the minimum. The red line shows the weighted mean of all projections for higher emissions. In 2030, it is predicted that 16.9 days will be over 105°F in the higher emissions scenario.
- The blue band (lower emissions) shows projections for 2006–2100 based on a future in which humans stop increasing global emissions of heat-trapping gases by 2040 and then dramatically reduce them through 2100. The top edge of the band represents the maximum value modeled at each time step; the bottom edge of the band represents the minimum. The darker blue line shows the weighted mean of projections for lower emissions. In 2030, it is predicted that 15.6 days will be over 105°F in the lower emissions scenario.

Climate change is projected to cause changes in precipitation patterns and increase temperatures, which can lead to more frequent and prolonged periods of drought. These changes will have a significant impact on the agriculture and water resources of the county. Reduced water availability can lead to crop failure, reduced crop yields, and can lead to water scarcity for the residents.

Using data from the NOAA Regional Climate Centers and other reliable sources, <u>The Climate Explorer</u> created the graph in Figure 63 as a visual representation of the expected number of dry days per year in Wise County in the future.

¹⁷ What Climate Change Means for Texas. August 2016. EPA 430-F-16-045. United States Environmental Protection Agency. https://archive.epa.gov/epa/sites/production/files/2016-09/documents/climate-change-tx.pdf

¹⁸ Climate Explorer. (n.d.). Nemac.org. Retrieved August 31, 2023, from https://crt-climate-explorer.nemac.org/

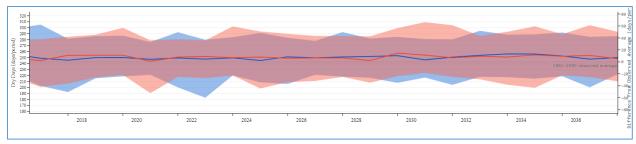


Figure 63: Predicted Number of Dry Days in Wise County

- The red band (higher emissions): In 2030, it is predicted that there will be 252.6 dry days in the higher emissions scenario.
- The blue band (lower emissions): In 2030, it is predicted there will be 252.1 dry days in the lower emissions scenario.

The impact of climate change on existing natural hazards is described by Anna Kuchment in her Dallas News article, "Climate change to bring North Texas longer droughts, heavy rains, 120-degree temps within 25 years":

"Climate change to bring North Texas longer droughts, heavy rains, 120-degree temps within 25 years"

- Kuchment, Anna. 2018. The Dallas News.

Heat

More record-setting heat in North Texas is a virtual certainty. Already, we are living through the warmest period in the history of modern civilization, the federal report found, and that warming will accelerate.

Climate science contrarians often attack the models on which climate projections are based. Myron Ebell, who led President Donald Trump's transition team at the Environmental Protection Agency, accepts that humans are most likely responsible for warming, but he says models have exaggerated the outcome. Ebell is director of the Center for Energy and Environment at the Competitive Enterprise Institute, a libertarian advocacy group based in Washington, D.C. He acknowledges that he is not a scientist.

In fact, researchers have used models to predict global temperature changes for more than 50 years, and the models' projections have been fairly accurate over the long term. In the early 21st century, a discrepancy appeared between observed and modeled temperatures-a period dubbed the "global warming slowdown" or "hiatus."

Scientists have published scores of studies on the mismatch and tied it to several factors that contributed to lower-than-expected observed temperatures. Those factors include a series of small volcanic eruptions, the cooling effects of which scientists had underestimated, and lower than expected solar output.

Findings from those studies are helping to improve climate model simulations and helping scientists better understand why there are differences between simulations and observations in

the early 21stcentury, said Ben Santer, a climate scientist at the Lawrence Livermore National Laboratory.

Global average temperatures increased about 1.8 degrees Fahrenheit in the last 115 years. In Dallas, they climbed from about 65 °F during the early part of the 20th century to 68 °F during the most recent decade. If nothing is done to reduce emissions of carbon dioxide and other greenhouse gases, average temperatures in the city may reach the low 70s by 2050 and surpass 75°F by the end of the century.

Earlier this year, Amir Jina and colleagues published a study in the journal *Science* that estimated economic damage from climate change in each county of the United States.

Once temperatures reach the high 90s, equal to or above body temperature, fatality rates go up.

Besides people, heat also affects roads. A 2015 study by the University of Texas at Arlington (UTA) that focused on the impact of climate change on transportation predicted "an increase in wildfires along paved highways, heat-induced stress on bridges and railroads, air-conditioning problems in public transport vehicles and heat-related accidents by failure of individual vehicles and heat-related stress."

The study concluded, "These impacts can be translated into substantial mobility and economic loss."

Drought

Along with heat will come stronger drought, which "has profound economic impacts," said Hayhoe.

The prediction that North Texas will have longer and more severe droughts is based on multiple factors, including the relationship between high temperatures and soil dryness and the presence of more frequent and longer lasting high-pressure systems in summer that suppress rainfall and deflect storms away from our area.

Hayhoe points to Texas' 2010-2013 drought as a probable sign of things to come. Although this drought occurred naturally, as a result of a strong La Niña event that typically brings dry conditions to our area, it was exacerbated by extreme heat. That event created severe hay shortages for cattle farmers and led some ranchers to prematurely slaughter their herds or export them out of state.

"Cotton can be drought-resistant, but not cattle," said Hayhoe.

The 2015 UTA study predicts a reduction in soil moisture of 10% to 15% in all seasons by 2050, which can also lead to cracked pavement and the premature loss of roads, railways, and other infrastructure.

Heat and drought also pose a problem for drinking water supplies, which North Texas sources from surface reservoirs that will be increasingly prone to evaporation. Hayhoe says some water managers are considering pumping the reservoirs underground during exceptionally hot and dry conditions or covering them with polymer "blankets."

The blankets are an invisible layer of organic molecules that can help reduce evaporation.

Floods

While it's not likely that annual precipitation totals will change in North Texas, rainfall patterns likely will. Hayhoe and Nielsen-Gammon both say we will likely see enhanced "feast or famine" cycles with torrential rainstorms in the spring followed by longer than usual dry periods.

These predictions carry a high degree of certainty, because climatologists have already recorded this trend playing out.

"Rainfall becoming more extreme is something we expect because we've observed this not just in North Texas but throughout the United States, and models consistently predict it will continue to happen," said Nielsen-Gammon.

Severe rainstorms, the UTA scientists predict, will have the capacity to flood highway exit and service roads in the Federal Emergency Management Agency (FEMA) 100-year floodplain.

"While the state highway system was built above flooding levels, the connector roads may be easily flooded," said Arne Winguth, a climate scientist at UTA who co-authored the report.

Tornadoes and hail

Two events climate scientists cannot reliably project are hailstorms and tornadoes. "A lot of the things we care about are too small-scale to predict with more confidence," said Nielsen-Gammon. "The historical record is not large enough for longer-term forecasts."

There is some evidence that tornadoes, like rainstorms, are becoming more concentrated on fewer days and that their season has become less predictable.

The same is true with hail. "One thing we expect to happen with a warming climate is that the average humidity in the lower atmosphere may decrease, and if that happens it's easier for hail to stay frozen," said Nielsen-Gammon. "That factor might increase hailstorms, but that's just one of many factors that do affect hail."

Economy

Jina of the University of Chicago predicted in his study that climate change would decrease Dallas County's annual income by 10% to 20% in the coming decades unless emissions are reduced. "North Texas is one of the worst-affected places in the country," he said. Much of the loss comes from higher mortality rates, soaring air-conditioning costs, and reduced labor productivity.

To track labor productivity, Jina and his colleagues examined national time-use surveys, diaries kept by thousands of volunteers across the country, and compared them with local weather data. He found that on extremely hot days, people tended to stop working about 30 minutes early.

"There's direct evidence that people concentrate less well, make more mistakes and their brain just functions less efficiently if it's too hot," he said. Heat also disrupts sleep. "The general lack of productivity leads to them saying, 'No more work today."

The good news is that many climate-change effects are manageable. They do require local and federal authorities to plan ahead and take action, said Smith of the National Oceanic and Atmospheric Administration.

"It is important," he said, "to address where we build, how we build and also to build protections for populations already exposed in vulnerable areas." ¹⁹

All participating jurisdictions are experiencing the effects of climate change.

Population Increase

Table 43 reflects the **estimated** changes in the participating jurisdictions' 2010 and 2020 populations. In the table, population estimates for Wise County refers to the entire county, not just the unincorporated portion. The total population in Wise County increased by 16.1% within ten years.

Table 43: Population Changes

Jurisdiction	2010 Population Estimate	2020 Population Estimate
Bridgeport	5,976	5,923
Chico	1,002	1,283
Decatur	6,042	6,538
Rhome	1,522	1,774
Runaway Bay	1,286	1,611
Wise County	59,127	68,632

Source: US Census Bureau

Population growth and distribution, especially increased population density and urbanization, increases vulnerability to disasters.

Socially Vulnerable Populations

Socially Vulnerable Populations include those who have special needs, such as, but not limited to, people without vehicles, people with disabilities, older adults, and people with limited English proficiency. For these populations, emergency response failures can have catastrophic consequences, including loss of the ability to work or live independently, permanent injury, and death. Without appropriate preparation, vulnerable individuals may not be able to evacuate as instructed, reach points of distribution for medical countermeasures, understand written or verbal communications during an emergency, or find suitable housing if their residences are destroyed during a disaster.

To help public health officials and emergency response planners meet the needs of socially vulnerable populations in emergency response and recovery efforts, the Geospatial Research, Analysis, and Services Program (GRASP) created and maintains the CDC/ATSDR Social Vulnerability Index (CDC/ATSDR SVI).

The CDC/ATSDR SVI uses U.S. Census data to determine the social vulnerability of every census tract. Census tracts are subdivisions of counties for which the Census collects statistical data. The SVI ranks each tract on 16 social factors, including poverty, lack of vehicle access, and crowded housing, and groups them into four related themes. Maps of the four themes and overall SVI are shown in Figure 64 on the following page.

¹⁹ Climate change to bring North Texas longer droughts, heavy rains, 120-degree temps within 25 years. Kuchment, Anna. 2018, February 15. https://www.dallasnews.com/news/climate-change-1/2018/02/15/climate-change-to-bring-texas-longer-droughts-heavy-rains-120-temps-august-within-25-years

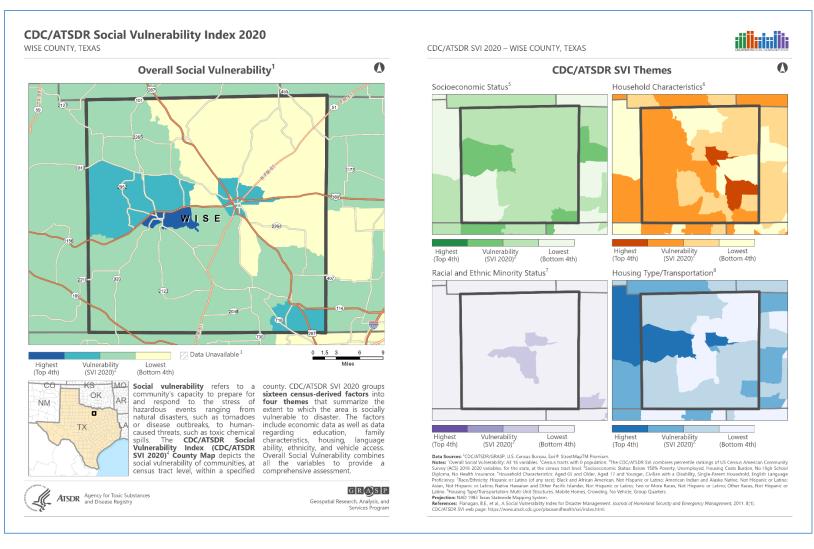


Figure 64: CDC /ATSDR Social Vulnerability Index of Wise County

Aging Structure and Infrastructure

The age of this infrastructure ties into its level of vulnerability. The older the infrastructure, the more likely it is to fail due to the impacting hazards.

The participating jurisdictions provided an inventory of critical facilities and infrastructure that did not list the age of the facilities. This deficiency will be included as a mitigation action item in each jurisdiction.

NFIP Repetitive Loss and Severe Repetitive Loss Properties

Among the National Flood Insurance Policy (NFIP) policyholders are thousands whose properties have flooded multiple times. Called "repetitive loss properties" (RL), these are buildings and/or contents for which the NFIP has paid at least two claims of more than \$1,000 in any 10-year period since 1978. "Severe repetitive loss properties" (SRL) are those for which the program has either made at least four payments for buildings and/or contents of more than \$5,000 or at least two building-only payments that exceeded the value of the property.

These two kinds of properties are the biggest draw on the NFIP Fund. They not only increase the NFIP's annual losses and the need for borrowing; but they drain funds needed to prepare for catastrophic events. Community leaders and residents should also be concerned with the Repetitive Loss problem because residents' lives are disrupted and may be threatened by continual flooding.

The primary objective of identifying these properties is to eliminate or reduce the damage to property and the disruption to life caused by repeated flooding of the same properties.

With information provided by FEMA, Table 44 describes the RL/SRL properties in the participating jurisdictions. More details about the properties are not available to the public.

Table 44: NFIP RL/SRL Properties

Address City	Mitigated	NFIP Insured	Date Of Loss 1	Occupancy	Currently Mapped Flood Zone	Rated Flood Zone 1	Post Firm 1	Building Payment 1	Contents Payment 1	Building Value	Date Of Loss 2	Rated Flood Zone 2	Post Firm 2	Building Payment 2	Contents Payment 2
BRIDGEPORT	NO	NO	4/26/1990	SINGLE FMLY (OLD METHODOLOGY)		А	N	\$3,647.78	\$0.00	\$80,000.00	5/24/1986		N	\$16,364.48	\$0.00
BRIDGEPORT	NO	YES	11/22/2011	BUSI-NONRES (OLD METHODOLOGY)	AE	Х	N	\$13,751.07	\$0.00	\$688,800.00	5/9/2007	Х	N	\$43,742.82	\$0.00
BRIDGEPORT	YES	NO	5/24/1995	SINGLE FMLY (OLD METHODOLOGY)		А	N	\$2,291.47	\$0.00	\$360,000.00	12/23/1991	Α	N	\$1,568.67	\$1,282.27
RUNAWAY BAY	NO	NO	4/20/2016	SINGLE FMLY (OLD METHODOLOGY)	х	Х	Υ	\$5,884.02	\$0.00	\$226,728.00	5/30/2015	Х	Υ	\$6,622.61	\$2,039.47
BRIDGEPORT	NO	YES	4/20/2016	SINGLE FMLY (OLD METHODOLOGY)	А	А	Υ	\$22,995.35	\$8,740.40	\$291,011.00	5/30/2015	Α	Υ	\$27,749.63	\$12,503.71
DECATUR	NO	YES	5/2/2019	OTHR-NONRES (OLD METHODOLOGY)	х	Х	Υ	\$13,713.55	\$50,072.86	\$98,368.00	6/18/2015	Х	Υ	\$0.00	\$50,000.00

Wildland-Urban Interface

Wildfires can cause significant damage to property and threaten the lives of people who are unable to evacuate the wildland-urban interface (WUI). All improved property, critical facilities, and critical structures and infrastructure located in these wildfire-prone areas are considered vulnerable and can be exposed to this hazard. The following map reflects the WUI areas in Wise County.

The WUI Map (Figure 65) reflects housing density depicting where humans and their structures meet or intermix with wildland fuels.

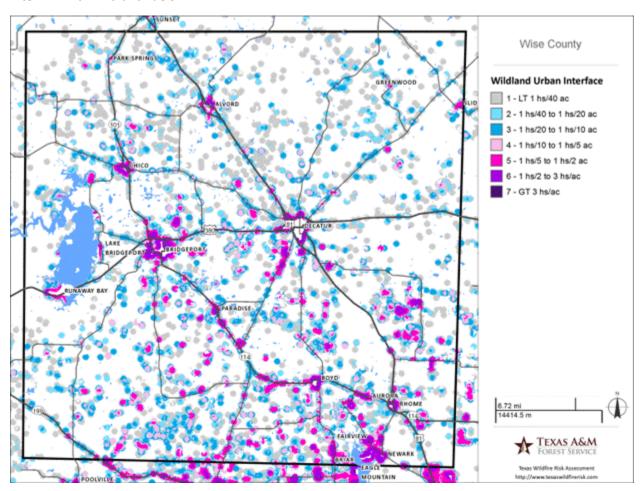


Figure 65: WUI Map

WUI housing density is categorized based on the standard Federal Register and United States Forest Service (USFS) Silvis data set categories. The number of housing density categories is extended to provide a better gradation of housing distribution to meet specific requirements of the states for their fire protection planning activities. While units of the data set are in houses per square kilometer, which is consistent with other data such as USFS SILVIS, the data is presented as the number of houses per acre to aid with interpretation and use in Texas.

3.5.2 Factors that Decrease Vulnerabilities

Factors that decrease vulnerabilities and the impact of hazards include completed mitigation actions, adoption of federal policies and program, and participation in regional projects.

Local Mitigation Activities

While the participating jurisdictions have not boasted about their mitigation actions, according to FEMA's Open Dataset, Wise Electric Co-Op Inc. received a \$200,000 Project Amount through HMGP in 2001 for the Texas Severe Winter Storm (DR-1356-TX).

Table 45: Hazard Mitigation Assistance Projects

Program Area	Disaster Number	Project Type	Subrecipient	Project Amount	Federal Share Obligated	Subrecipien t Admin Cost Amt
HMGP	1356	602.1: Other Equipment Purchase and Installation	WISE ELECTRIC CO-OP INC	\$200,000	\$148,719	\$3,686

Planned mitigation actions are listed in detail in Chapter 4.

Federal Policies & Programs

On October 5, 2018, President Trump signed the Disaster Recovery Reform Act of 2018 (DRRA) into law as part of the Federal Aviation Administration Reauthorization Act of 2018. These reforms acknowledge the shared responsibility of disaster response and recovery, aim to reduce the complexity of FEMA and build the nation's capacity for the next catastrophic event. The law contains more than 50 provisions that require FEMA policy or regulation changes for full implementation, as they amend the Robert T. Stafford Disaster Relief and Emergency Assistance Act. It has yet to be seen how the DRRA will be implemented and how it will impact state and local agencies, but highlights from the DRRA include:

Highlights from the DRRA include:

- Greater investment in mitigation, before a disaster: Authorizing the National Public
 Infrastructure Pre-Disaster Hazard Mitigation Grant Program, which will be funded through the
 Disaster Relief Fund as a six percent set aside from disaster expenses.
 - This program will focus on funding public infrastructure projects that increase community resilience before a disaster occurs.
 - Previously, funding for pre-disaster mitigation grants relied on congressional appropriations which varied from year to year. Now, with a reliable stream of sufficient funding, communities will be able to plan and execute mitigation programs to reduce disaster risk nationwide.
 - According to a 2017 National Institute of Building Sciences report, the nation saves six dollars in future disaster costs for every one dollar invested in mitigation activities.
- Reducing risk from future disasters after fire: Providing hazard mitigation grant funding in areas
 that received Fire Management Assistance Grants as a result of wildfire. Adding fourteen new
 mitigation project types associated with wildfires and windstorms.
- Increasing state capacity to manage disaster recovery: Allowing for higher rates of reimbursement to state, local and tribal partners for their administrative costs when implementing public assistance (12 percent) and hazard mitigation projects (15 percent). Additionally, the legislation provides flexibility for states and tribes to administer their own postdisaster housing missions, while encouraging the development of disaster housing strategies.

- States, tribes, territories and local governments bear significant administrative costs implementing disaster recovery programs. Often these costs can be high and substantially burdensome for the impacted entity to meet. Increasing the funding for administrative costs will enable faster, more effective delivery of vital recovery programs to communities.
- State and tribal officials have the best understanding of the temporary housing needs for survivors in their communities. This provision incentivizes innovation, cost containment and prudent management by providing general eligibility requirements while allowing them the flexibility to design their own programs.
- Providing greater flexibility to survivors with disabilities: Increasing the amount of assistance
 available to individuals and households affected by disasters, including allowing accessibility
 repairs for people with disabilities, without counting those repairs against their maximum disaster
 assistance grant award.
- Retaining skilled response and recovery personnel: Authorizing FEMA to appoint certain types
 of temporary employees who have been with the agency for three continuous years to full time
 positions in the same manner as federal employees with competitive status. This allows the
 agency to retain and promote talented, experienced emergency managers.

In 2021, President Biden approved more than \$3.46 billion to increase resilience to the potential impacts of climate change nationwide. This significant investment will be available for natural hazard mitigation measures across the 59 major disaster declarations issued due to the COVID-19 global pandemic.

With the growing climate change crisis facing the nation, FEMA's Hazard Mitigation Grant Program will provide funding to states, tribes, and territories for mitigation projects to reduce the potential impacts of climate change. Every state, tribe, and territory that received a major disaster declaration in response to the COVID-19 pandemic will be eligible to receive 4% of those disaster costs to invest in mitigation projects that reduce risks from natural disasters.

This influx of funding will help communities prioritize mitigation needs for a more resilient future, including underserved communities that are most vulnerable to the potential impacts of climate change. These projects can help address the effects of climate change and other unmet mitigation needs, including using funds to promote equitable outcomes in underserved communities.

As dollar losses increase along with the number of disaster declarations, it is expected that national policy will continue playing a huge part in community resilience.

National Flood Insurance Program



The National Flood Insurance Program (NFIP) aims to reduce the impact of flooding on private and public structures. It does so by providing affordable insurance to property owners, renters and businesses and by encouraging communities to adopt and enforce floodplain management regulations. These efforts help mitigate the effects of flooding on new and improved structures. Overall, the program reduces the socio-economic impact of disasters by promoting the purchase and retention

of general risk insurance, but also of flood insurance, specifically. When a community participates in the NFIP, it participates in one of two phases: the Emergency Program or the Regular Program.

Emergency Program: Entry-level participation phase.

- Limited coverage
- Flat rates
- Basic Flood Hazard Boundary Map (FHBM)*

Regular Program: Most participating communities are in this phase.

- Full participation
- Detailed Flood Insurance Rate Map (FIRM)
- NFIP's full limits of insurance

Table 46 below lists plan participants participating in the NFIP.

Table 46: NFIP Status

CID	Community Name	County	Init FHBM Identified	Init FIRM Identified	Curr Eff Map Date	Reg-Emer Date Init	Tribal
480677#	BRIDGEPORT, CITY OF	WISE COUNTY	06/14/74	03/19/90	12/16/11(M)	08/01/87	No
481053#	CHICO, CITY OF	WISE COUNTY	08/13/76	03/19/90	12/16/11(M)	09/01/87	No
480678#	DECATUR, CITY OF	WISE COUNTY	02/15/74	03/19/90	12/16/11(M)	08/16/77	No
481054#	RHOME, CITY OF	WISE COUNTY		03/19/90	12/16/11(M)	03/31/10	No
481618#	RUNAWAY BAY, CITY OF	WISE COUNTY		03/19/90	12/16/11(M)	05/10/90	No
481051#	WISE COUNTY*	WISE COUNTY	06/07/77	03/19/90	12/16/11	03/19/90	No

Community Rating System

The Community Rating System (CRS) is a voluntary program for communities that participate in the National Flood Insurance Program (NFIP). The goals of the CRS are to reduce flood damages to insurable property, strengthen and support the insurance aspects of the NFIP, and encourage a comprehensive approach to floodplain management. The CRS has been developed to provide incentives in the form of premium discounts for communities to go beyond the minimum floodplain management requirements to develop extra measures to provide protection from flooding. For a community to be eligible, it must be in full compliance with the NFIP.

All communities start out with a Class 10 rating, which provides no discount. There are 10 CRS classes: Class 1 requires the most credit points and gives the greatest premium discount; Class 10 identifies a community that does not apply for the CRS or does not obtain a minimum number of credit points and receives no discount. There are 18 activities recognized as measures for eliminating exposure to floods. Credit points are assigned to each activity. The activities are organized under four main categories:

Public Information

^{*}Initial flood hazard identification

- Mapping and Regulation
- Flood Damage Reduction
- Flood Preparedness

Premium discounts ranging from 5% to a maximum of 45% are applied to eligible policies written in a community as recognition of the floodplain management activities instituted.

All CRS communities must maintain completed FEMA elevation and floodproofing certificates for all new and substantially improved construction in the Special Flood Hazard Area (SFHA) after the date of application for CRS classification. These certificates must be available upon request. Therefore, in writing a policy, an agent/producer should be able to get these certificates from any CRS community. In addition, some CRS communities receive credit for having completed certificates for Post-Flood Insurance Rate Map (FIRM) buildings constructed prior to the CRS application date. If they do receive this credit, these certificates should also be available to agents/producers writing flood insurance.

According to the <u>April 2022 Community Rating System Eligible Communities Report</u>, there are no CRS communities amongst the plan participants in Wise County.

State Programs

Along with national programs, like the NFIP, state programs can increase the resiliency of communities in Texas. The **Hazard Mitigation Section** of the Texas Division of Emergency Management (TDEM) supports Texas communities as they reduce their risk and increase their resilience. The section is comprised of two units, the Plans Unit and the Grants Unit. The two units provide a comprehensive program to support local jurisdictions as they assess the risks they face, plan to mitigate them, and fund those plans to implement mitigation projects that reduce risk across the state.

Regional Projects

Wise County is a member of the North Central Texas Council of Governments (NCTCOG), which is a voluntary association established to assist in regional planning. NCTCOG consists of many departments that implement programs and projects that address the mitigation goals of the participating jurisdictions.

The Environment & Development Department at NCTCOG plays a major role in regional coordination and management of reports and projects that improve regional resilience to natural hazards through the following programs:

- The Corridor Development Certificate (CDC) The CDC process aims to stabilize flood risk along the Trinity River. The CDC process does not prohibit floodplain development but ensures that any development that does occur in the floodplain will not raise flood water levels or reduce flood storage capacity. A CDC permit is required to develop land within a specific area of the Trinity floodplain called the Regulatory Zone, which is similar to the 100-year floodplain.
 - Under the CDC process, local governments retain ultimate control over floodplain permitting decisions, but other communities along the Trinity River Corridor are given the opportunity to review and comment on projects in their neighbor's jurisdiction. As the Metroplex economy continues to grow and develop, the CDC process will prevent increased flood risks.

- NCTCOG-OneRain Contrail Flood Warning Software- Contrail software that delivers automated real-time data collection, processing, validation, analysis, archiving and visualization of hydrometeorological and environmental sensor data.
- The integrated Stormwater Management (iSWM) Program. The iSWM™ Program for Construction and Development is a cooperative initiative that assists cities and counties to achieve their goals of water quality protection, streambank protection, and flood mitigation, while also helping communities meet their construction and post-construction obligations under state stormwater permits.
 - Development and redevelopment by their nature increase the amount of imperviousness in our surrounding environment. This increased imperviousness translates into loss of natural areas, more sources for pollution in runoff, and heightened flooding risks. To help mitigate these impacts, more than 60 local governments are cooperating to proactively create sound stormwater management guidance for the region through the *integrated* Stormwater Management (iSWM) Program.
- **16-County Watershed Management Initiative** Communities from across the region come together to collaborate on how to reduce the risks of flooding in their communities.
- Texas Smartscape- Texas SmartScape™ is a landscape program crafted to be "smart" for North Central Texas. Based on water-efficient landscape principles, it promotes the use of plants suited to our region's soil, climate, and precipitation that don't require much—if any—additional irrigation, pesticides, fertilizer, or herbicides to thrive.
 - The two main goals of the program are to:
 - Improve stormwater runoff quality
 - Conserve local water supplies

The Transportation Department promotes the following programs:

- Bicycle-Pedestrian- The passage of the 1991 Intermodal Surface Transportation Efficiency Act
 prompted NCTCOG to include non-motorized transportation network improvements in regional
 planning efforts. NCTCOG established the Bicycle and Pedestrian program in 1992 to address the
 various activities related to implementing bicycle and pedestrian facilities as an alternative mode
 of regional transportation.
- Sustainable Development- As land uses influence regional travel patterns and demand on the
 transportation system, and transportation connects land uses and provides access to
 developments, both need to be planned in conjunction with one another. NCTCOG supports
 Sustainable Development: mixed-use, infill, and transit-oriented developments that reduce
 vehicle miles traveled, enable the use of alternative modes of transportation, promote economic
 development, and improve air quality.

3.5.3 Greatest Vulnerabilities

The overall vulnerability level of the participants has remained the same since the previous mitigation plan, yet can increase with the aging infrastructure, increase in population, and presence of climate change.

The participating jurisdictions listed their greatest vulnerabilities, in relation to natural hazards, in the following table.

Table 47: Greatest Vulnerabilities

Jurisdiction	Vulnerability
Bridgeport	 Any substantial event would be devastating to the financial capabilities of the city. Any major event would overwhelm the local resources. Volunteer fire department lacks staffing and resources to respond to any disaster quickly.
Chico	 Any substantial event would be devastating to the financial capabilities of the city. Any major event would overwhelm the local resources. Volunteer fire department lacks staffing and resources to respond to any disaster quickly.
Decatur	 Any substantial event would be devastating to the financial capabilities of the city. Any major event would overwhelm the local resources. Volunteer fire department lacks staffing and resources to respond to any disaster quickly.
Rhome	 Any substantial event would be devastating to the financial capabilities of the city. Any major event would overwhelm the local resources. Volunteer fire department lacks staffing and resources to respond to any disaster quickly.
Runaway Bay	 Any substantial event would be devastating to the financial capabilities of the city. Any major event would overwhelm the local resources. Volunteer fire department lacks staffing and resources to respond to any disaster quickly.
Wise County Unincorporated	 Any major event would overwhelm the local resources. The little authority county government has to enforce building codes and various regulations makes county residents vulnerable to hazards.

3.6. Risk Index

According to FEMA's National Risk Index, the Risk Index rating is **relatively low** for Wise County, TX when compared to the rest of the U.S. The Risk Index leverages available source data for natural hazard and community risk factors to develop a baseline risk measurement for each United States county and Census tract.

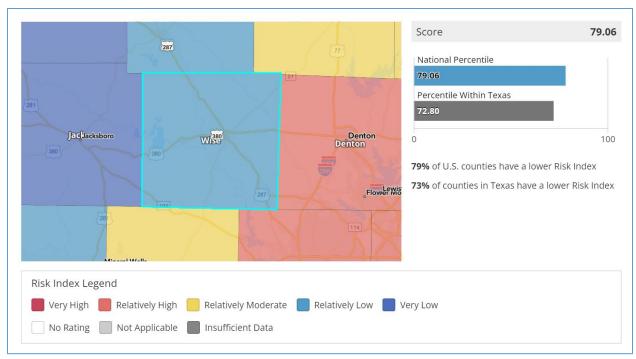


Figure 66: Risk Index Comparison



Figure 67: Risk Index Summary

The risk equation behind the Risk Index includes three components: a natural hazards component (Expected Annual Loss), a consequence enhancing component (Social Vulnerability), and a consequence reduction component (Community Resilience). The dataset supporting the natural hazards component provides estimates measured in 2022 U.S. dollars. The datasets supporting the consequence enhancing and consequence reduction component have been standardized using a minimum-maximum normalization approach prior to being incorporated into the National Risk Index risk calculation.

Using these three components, composite Risk Index values and hazard type Risk Index values are calculated for each community (county and Census tract) included in the Index.

3.6.1 Hazard Type Risk Index

Hazard Type Risk Index Scores (see Table 48) are calculated using data for only a single hazard type and reflect a community's Expected Annual Loss (EAL) value, community risk factors, and the adjustment factor used to calculate the risk value. Please note that the hazards identified in this National Risk Index are slightly different from how the hazards are identified in this hazard mitigation plan.

Table 48: Hazard Type Risk Index Scores

Hazard Type	EAL Value	Social Vulnerability	Community Resilience	Risk Value	Score
Wildfire	\$6,375,444	Relatively Moderate	Relatively Low	\$7,526,150	97.1
Tornado	\$2,780,435	Relatively Moderate	Relatively Low	\$3,455,985	78.1
Heat Wave	\$1,976,954	Relatively Moderate	Relatively Low	\$2,438,161	95.2
Riverine Flooding	\$1,482,500	Relatively Moderate	Relatively Low	\$1,937,611	80.3
Hail	\$1,372,029	Relatively Moderate	Relatively Low	\$1,720,040	93.5
Strong Wind	\$714,529	Relatively Moderate	Relatively Low	\$887,058	76.7
Winter Weather	\$249,308	Relatively Moderate	Relatively Low	\$310,265	86.5
Cold Wave	\$212,987	Relatively Moderate	Relatively Low	\$260,457	73.5
Lightning	\$124,223	Relatively Moderate	Relatively Low	\$154,248	62.1
Earthquake	\$117,131	Relatively Moderate	Relatively Low	\$147,662	49.4
Ice Storm	\$85,019	Relatively Moderate	Relatively Low	\$104,365	59
Drought	\$10,636	Relatively Moderate	Relatively Low	\$11,983	41

Chapter 4: Mitigation Strategy

Requirement	
§201.6(c)(3)	[The plan shall include the following:] A mitigation strategy that provides the jurisdiction's blueprint for reducing the potential losses identified in the risk assessment, based on existing authorities, policies, programs, and resources, and its ability to expand on and improve these existing tools.
§201.6(c)(3)(i)	[The hazard mitigation strategy shall include a] description of mitigation goals to reduce or avoid long-term vulnerabilities to the identified hazards.
§201.6(c)(3)(iii)	[The hazard mitigation strategy shall include a] section that identifies and analyzes a comprehensive range of specific mitigation actions and projects being considered to reduce the effects of each hazard, with particular emphasis on new and existing buildings and infrastructure. All plans approved by FEMA [Federal Emergency Management Agency] after October 1, 2008, must also address the jurisdiction's participation in the NFIP [National Flood Insurance Program], and continued compliance with NFIP requirements, as appropriate.
§201.6(c)(3)(iv)	[The hazard mitigation strategy shall include an] action plan, describing how the action identified in paragraph (c)(3)(ii) of this section will be prioritized, implemented, and administered by the local jurisdiction. Prioritization shall include a special emphasis on the extent to which benefits are maximized according to a cost benefit review of the proposed projects and their associated costs.
§201.6(c)(4)(ii)	For multi-jurisdictional plans, there must be identifiable action items specific to the jurisdiction requesting FEMA approval or credit of the plan. [The plan shall include a] process by which local governments incorporate the requirements of the mitigation plan into other planning mechanisms such as comprehensive or capital improvements, when appropriate.

4.1 Mitigation Goals

The goals from the previous plan are listed in the following box.

2015 Mitigation Goals and Objectives

- Goal 1 Reduce or eliminate loss of life and property damage resulting from severe weather events.
 - Objective 1-A Provide adequate warning and communication before, during, and after a hazard event.
 - o Objective 1-B Expand and coordinate Early Warning Systems currently in use.
 - Objective 1-C Reduce or eliminate loss of life and property damage from tornados through the construction and use of safe rooms or shelter areas.
- Goal 2 Protect existing and new properties from the effects of all natural hazards.
 - o Objective 2-A Conduct studies to determine hazard and vulnerability threat assessment for

all natural hazards.

- Objective 2-B Rehabilitate or retrofit identified high hazard critical infrastructure.
- Objective 2-C Enact and enforce regulatory measures that enforce hazard mitigation measures.
- Objective 2-D Construct enhancements or additions to current and new facilities which mitigate the effects of natural hazards.
- Objective 2-E Maintain NFIP compliance, storm water management, and implement drainage projects.
- Goal 3 Reduce losses and repetitive damages for chronic hazard events while promoting insurance coverage for catastrophic hazards.
 - Objective 3-A Conduct a hazard/vulnerability assessment of personal properties and structures located in flood zones within Wise County.
 - Objective 3-B Develop and implement a buyout program for those personal properties and structures located in high hazard flood zones starting with those that are most vulnerable to life and property loss.
 - Objective 3-C Develop and execute new programs which identify and reduce threats from natural hazards.
- Goal 4 Develop Public Education Campaigns to educate the public on what actions they can take to mitigate the effects of loss of life or property damage resulting from all natural hazards.
 - o Objective 4-A Educate the public on risks, threats, and vulnerability from all natural hazards.
 - Objective 4-B Educate the public on actions they can take to prevent or reduce the loss of life or property from all natural hazards.
 - Objective 4-C Develop and implement a community education campaign to heighten public awareness about chronic flooding and options for insurance coverage to protect their personal properties as well as long term benefits from a buyout program.

The Wise County Hazard Mitigation Planning Team reviewed the previous Wise County mitigation goals and unanimously agreed to forego these goals and adopt the following hazard mitigation goals:

Goal 1: Protect lives and reduce bodily harm from hazards.

Goal 2: Lessen the impacts of hazards on property and the community.

Every mitigation action listed in this strategy supports these goals.

4.2 Mitigation Strategy

The mitigation strategy serves as the long-term blueprint for reducing the potential losses identified in the risk assessment. The Stafford Act directs hazard mitigation plans to describe hazard mitigation actions and establish a strategy to implement those actions. Therefore, each participating jurisdiction in this plan recommended strategies and actions that would support the mitigation goals, then went through a ranking process to determine which actions they would prioritize for completion.

The existing capabilities identified in Appendix A can be used to optimize and support the mitigation strategy in a variety of ways, including the addition of mitigation actions into the planning mechanisms and education programs, adding external funding sources to the financial capabilities, and development of ordinances and regulations to minimize disaster impacts.

4.3 Mitigation Action Items

Participating jurisdictions reviewed the status of their action items in the 2015 Wise County HMP and created new actions to mitigate the identified hazards. Most of the actions were not completed due to lack of capabilities and have been deferred to this HMP.

FEMA launched the Community Lifelines Framework in 2019 to help communities better monitor disruptions to critical services and systems following a disaster and reduce cascading impacts across government and business functions. The new actions have been identified with the Community Lifelines (see Figure 68) that they primarily impact, though an action could impact multiple lifelines. When applying for FEMA BRIC funding, this tool could be especially useful.



Figure 68: Community Lifelines and Lifeline Components

Numerous actions can be taken, and hazard mitigation interventions put in place, to minimize the impacts of natural hazards and reduce the overall risk of disasters, while also increasing community resilience. Some actions cut across multiple hazards; others are uniquely designed to address a single hazard. The types of actions include:

- Locals plans and regulations
- Structure and infrastructure projects
- Natural systems protection
- Education and awareness programs

These actions will be implemented as time, staffing, funding, and community support allow.

Estimated Benefits

During the capabilities assessment and hazard analysis, previously impacted assets and populations were analyzed to determine the highest probability of damage and potential of loss of life per hazard. To determine the estimated benefit of each action item, data from the 2017 Interim Report was used to develop a cost-benefit analysis [Estimated Cost x 6 = Estimated Benefit], as it reports that \$1 spent in mitigation saves a community an average of \$6 in recovery.²⁰

Priorities

The actions are listed in order of priority. Priority went towards projects with the highest positive impact on community resilience and ease of implementation.

Potential Funding Sources

As necessary, participating jurisdictions will seek outside funding sources, such as FEMA's Hazard Mitigation Assistance grants and other funding sources listed in the Texas State Hazard Mitigation Plan, to implement mitigation projects in both the pre-disaster and post-disaster environments.

The following tables list the new and previous action items for each participating jurisdiction.

²⁰ Natural Hazard Mitigation Saves: 2017 Interim Report. National Institute of Building Science.

< https://www.nibs.org/page/mitigationsaves>

City of Bridgeport Mitigation Action Items

STATUS	2015 MITIGATION ACTIONS
Deferred	Improve early warning and public information capabilities by purchasing and
	implementing a telephone-based mass notification system.
Deferred	Implement the Texas Individual Tornado Safe Room Rebate Program.
Deferred	Purchase and install additional outdoor early warning sirens in areas of new
	development.
Deferred	Develop and implement a tree-trimming program to minimize debris generated
	during severe weather events.
Deferred	Adopt and enforce the most recent version of International Residential Building
	Code requirements for all new property developments to raise current code
	standards.
Deferred	Construct Bridge at Low-Water Crossing on Turkey Creek Trail.
Deferred	Rebuild Turkey Creek Trail from 9th Street to State Highway 114.
Deferred	West Bridgeport Creek Channelization and Drainage Project.
Deferred	Adopt and enforce water conservation codes for drought events.
Deferred	Purchase and install a CASA WX Weather Radar System.



2015 Action: Improve early warning and public information capabilities by purchasing and implementing a telephone-based mass notification system.

Participating Jurisdiction	City of Bridgeport
Priority:	1
Estimated Cost:	\$15,000
Estimated Benefit:	\$90,000
Potential Funding Source(s):	General Fund, HMGP
Lead Agency/Department Responsible:	Police Department
Implementation Schedule:	12 months



Hazard(s) Addressed: Tornadoes

2015 Action: Implement the Texas Individual Tornado Safe Room Rebate Program.

Participating Jurisdiction	City of Bridgeport
Priority:	2
Estimated Cost:	\$15,000
Estimated Benefit:	\$90,000
Potential Funding Source(s):	General Fund, HMGP
Lead Agency/Department Responsible:	Emergency Management/City Building Inspections
Implementation Schedule:	24 months



Hazard(s) Addressed: Earthquakes, Thunderstorms, Tornadoes

2015 Action: Purchase and install additional outdoor early warning sirens in areas of new development.

Participating Jurisdiction	City of Bridgeport
Priority:	3
Estimated Cost:	\$40,000
Estimated Benefit:	\$240,000
Potential Funding Source(s):	General Fund, HMGP
Lead Agency/Department Responsible:	Emergency Management
Implementation Schedule:	24 months



Hazard(s) Addressed: Earthquakes, Flooding, Thunderstorms, Tornadoes, Wildfires, Winter Storms

2015 Action: Develop and implement a tree-trimming program to minimize amount of debris generated during severe weather events.

Participating Jurisdiction	City of Bridgeport
Priority:	4
Estimated Cost:	\$150,000
Estimated Benefit:	\$900,000
Potential Funding Source(s):	General Fund, HMGP
Lead Agency/Department Responsible:	City Electric Department
Implementation Schedule:	24 months



Hazard(s) Addressed: Flooding

2015 Action: Adopt and enforce the most recent version of International Residential Building Code requirements for all new property developments to raise current code standards.

Participating Jurisdiction	City of Bridgeport
Priority:	5
Estimated Cost:	\$150,000
Estimated Benefit:	\$900,000
Potential Funding Source(s):	General Fund, HMGP
Lead Agency/Department Responsible:	Building and Code Inspections
Implementation Schedule:	24 months



Hazard(s) Addressed: Flooding

2015 Action: Construct bridge at low-water crossing on Turkey Creek Trail.

Participating Jurisdiction	City of Bridgeport
Priority:	6
Estimated Cost:	\$250,000
Estimated Benefit:	\$1.5M
Potential Funding Source(s):	General Fund, HMGP
Lead Agency/Department Responsible:	City Engineer/Public Works
Implementation Schedule:	24 months



Hazard(s) Addressed: Expansive Soils, Flooding

2015 Action: Upgrade and improve Turkey Creek Trail and surrounding area from 9th Street to State Highway 114 to mitigate damages from expansive soils and flooding.

Participating Jurisdiction	City of Bridgeport
Priority:	7
Estimated Cost:	\$1.25M
Estimated Benefit:	\$7.5M
Potential Funding Source(s):	General Fund, HMGP
Lead Agency/Department Responsible:	City Engineer/Public Works
Implementation Schedule:	24 months



Hazard(s) Addressed: Drought

2015 Action: Design and implement a West Bridgeport creek channelization and drainage project.

Participating Jurisdiction	City of Bridgeport
Priority:	8
Estimated Cost:	\$150,000
Estimated Benefit:	\$900,000
Potential Funding Source(s):	General Fund, HMGP
Lead Agency/Department Responsible:	City Engineer/Public Works
Implementation Schedule:	24 months



Hazard(s) Addressed: Drought

2015 Action: Adopt and enforce water conservation codes for drought events.

Participating Jurisdiction	City of Bridgeport
Priority:	9
Estimated Cost:	\$15,000
Estimated Benefit:	\$90,000
Potential Funding Source(s):	General Fund
Lead Agency/Department Responsible:	City Engineer/Public Works
Implementation Schedule:	12 months



Hazard(s) Addressed: Flooding, Thunderstorms, Tornadoes

2015 Action: Purchase and install a CASA WX Weather Radar System.

Participating Jurisdiction	City of Bridgeport
Priority:	10
Estimated Cost:	\$2.5M
Estimated Benefit:	\$15M
Potential Funding Source(s):	General Fund
Lead Agency/Department Responsible:	Emergency Management
Implementation Schedule:	24 months



Hazard(s) Addressed: Thunderstorms, Tornadoes, Winter Storms

Action: Build covered parking to protect critical vehicles and equipment from severe weather.

Participating Jurisdiction	City of Bridgeport
Priority:	11
Estimated Cost:	\$100,000
Estimated Benefit:	\$600,000
Potential Funding Source(s):	General Fund, HMGP
Lead Agency/Department Responsible:	Emergency Management/City Building Inspections
Implementation Schedule:	12 months



Hazard(s) Addressed: Earthquakes, Thunderstorms, Tornadoes

Action: Install a tornado safe room in existing and future critical facilities to protect facility staff from severe weather.

Participating Jurisdiction	City of Bridgeport
Priority:	12
Estimated Cost:	\$300,000
Estimated Benefit:	\$900,000
Potential Funding Source(s):	General Fund, HMGP
Lead Agency/Department Responsible:	Emergency Management
Implementation Schedule:	36 months



Hazard(s) Addressed: Flooding

Action: After conducting a study, implement flood mitigation measures that are selected based on the unique needs and capabilities present for each flood-prone location and dam inundation zone.

Participating Jurisdiction	City of Bridgeport
Priority:	13
Estimated Cost:	\$500,000
Estimated Benefit:	\$3M
Potential Funding Source(s):	General Fund, HMGP
Lead Agency/Department Responsible:	Emergency Management
Implementation Schedule:	12 months



Hazard(s) Addressed: All Hazards

Action: Address gaps in capabilities and obtain missing information before the next plan update.

Participating Jurisdiction	City of Bridgeport
Priority:	14
Estimated Cost:	\$5,000
Estimated Benefit:	\$30,000
Potential Funding Source(s):	General Fund, HMGP
Lead Agency/Department Responsible:	Emergency Management
Implementation Schedule:	12 months



Hazard(s) Addressed: All Hazards

Action: Develop an inventory list of the individual age and replacement value of all government owned or operated facilities.

Participating Jurisdiction	City of Bridgeport
Priority:	15
Estimated Cost:	\$2,000
Estimated Benefit:	\$12,000
Potential Funding Source(s):	General Fund, HMGP
Lead Agency/Department Responsible:	City Administration
Implementation Schedule:	12 months

City of Chico Mitigation Action Items

2015 MITIGATION ACTIONS	
Develop and implement a comprehensive public education program for	
presentation to residents and civic groups.	
Purchase and install early warning sirens in areas of new development.	
Create cooling centers and warming centers to allow citizens, especially	
vulnerable populations, to seek refuge from extreme hot and cold temperatures.	
Distribute information to downstream property owners educating homeowners	
about the National Flood Insurance Program.	
Install a community safe room at Chico City Hall that will be open to the staff	
and public.	
Purchase four generators to ensure continued operation of critical infrastructure	
during and after severe weather events and other disasters.	
Increase ability of Chico residents to receive early warning and special	
information about natural hazards by purchasing and distributing NOAA All	
Hazard Radios to each household and business in Chico.	
Implement the Texas Individual Tornado Safe Room Rebate Program.	
Harden and retrofit the current fire station to serve as the city EOC.	
Protect citizens from heat by building covered patios in public parks.	
Enact and enforce water restriction ordinances.	
Structure improvements - North Weatherford Street in front of fire station and	
Oakwood Street between Granada and El Camino.	
City will acquire property and structures in the flood zone along Dry Creek and	
its tributaries and remove structures to prevent loss of life and property during	
flooding events.	



Hazard(s) Addressed: All Hazards

2015 Action: Develop and implement a comprehensive public education program for presentation to residents and civic groups.

Participating Jurisdiction	City of Chico
Priority:	1
Estimated Cost:	\$2,000
Estimated Benefit:	\$12,000
Potential Funding Source(s):	Grants, general fund
Lead Agency/Department Responsible:	Public Works
Implementation Schedule:	12 months



Hazard(s) Addressed: Flooding, Thunderstorms, Tornadoes, Wildfires, Winter Storms

2015 Action: Purchase and install early warning sirens in areas of new development.

Participating Jurisdiction	City of Chico
Priority:	2
Estimated Cost:	\$10,000
Estimated Benefit:	\$60,000
Potential Funding Source(s):	HGMP, city budget
Lead Agency/Department Responsible:	Emergency Management
Implementation Schedule:	12 months



Hazard(s) Addressed: Extreme Heat, Winter Storms

2015 Action: Create cooling centers and warming centers to allow citizens, especially vulnerable populations, to seek refuge from extreme hot and cold temperatures.

Participating Jurisdiction	City of Chico
Priority:	3
Estimated Cost:	\$10,000
Estimated Benefit:	\$60,000
Potential Funding Source(s):	HGMP, city budget
Lead Agency/Department Responsible:	Emergency Management
Implementation Schedule:	12 months



Hazard(s) Addressed: Flooding

2015 Action: Distribute information to downstream property owners educating homeowners about the National Flood Insurance Program.

Participating Jurisdiction	City of Chico
Priority:	4
Estimated Cost:	\$2,000
Estimated Benefit:	\$12,000
Potential Funding Source(s):	HGMP, city budget
Lead Agency/Department Responsible:	Code Enforcement
Implementation Schedule:	12 months



Hazard(s) Addressed: Earthquakes, Thunderstorms, Tornadoes

2015 Action: Install a community safe room at Chico City Hall that will be open to the staff and public.

Participating Jurisdiction	City of Chico
Priority:	5
Estimated Cost:	\$50,000
Estimated Benefit:	\$300,000
Potential Funding Source(s):	HGMP, city budget
Lead Agency/Department Responsible:	Emergency Management
Implementation Schedule:	12 months



Hazard(s) Addressed: All Hazards

2015 Action: Purchase four generators to ensure continued operation of critical infrastructure during and after severe weather events and other disasters.

Participating Jurisdiction	City of Chico
Priority:	6
Estimated Cost:	\$250,000
Estimated Benefit:	\$1.5M
Potential Funding Source(s):	HGMP, city budget
Lead Agency/Department Responsible:	Public Works
Implementation Schedule:	24 months



Hazard(s) Addressed: All Hazards

2015 Action: Increase ability of Chico residents to receive early warning and special information about natural hazards by purchasing and distributing NOAA All Hazard Radios to each household and business in Chico.

Participating Jurisdiction	City of Chico
Priority:	7
Estimated Cost:	\$25,000
Estimated Benefit:	\$150,000
Potential Funding Source(s):	HGMP, city budget
Lead Agency/Department Responsible:	Emergency Management
Implementation Schedule:	24 months



Hazard(s) Addressed: Tornadoes

2015 Action: Implement the Texas Individual Tornado Safe Room Rebate Program.

Participating Jurisdiction	City of Chico
Priority:	8
Estimated Cost:	\$500,000
Estimated Benefit:	\$3M
Potential Funding Source(s):	HGMP, city budget
Lead Agency/Department Responsible:	Emergency Management
Implementation Schedule:	24 months



Hazard(s) Addressed: All Hazards

2015 Action: Harden and retrofit the current fire station to serve as the city EOC.

Participating Jurisdiction	City of Chico
Priority:	9
Estimated Cost:	\$60,000
Estimated Benefit:	\$360,000
Potential Funding Source(s):	HGMP, city budget
Lead Agency/Department Responsible:	Emergency Management
Implementation Schedule:	24 months



Hazard(s) Addressed: Extreme Heat

2015 Action: Protect citizens from heat by building covered patios in public parks.

Participating Jurisdiction	City of Chico
Priority:	10
Estimated Cost:	\$60,000
Estimated Benefit:	\$360,000
Potential Funding Source(s):	HGMP, city budget
Lead Agency/Department Responsible:	Parks/ Public Works
Implementation Schedule:	24 months



Hazard(s) Addressed: Drought, Expansive Soils, Extreme Heat

2015 Action: Enact and enforce water restriction ordinances.

Participating Jurisdiction	City of Chico
Priority:	11
Estimated Cost:	\$500
Estimated Benefit:	\$3,000
Potential Funding Source(s):	City budget
Lead Agency/Department Responsible:	Code Enforcement
Implementation Schedule:	12 months



Hazard(s) Addressed: All

2015 Action: Upgrade North Weatherford Street in front of fire station and Oakwood Street, between Granada and El Camino, to mitigate road damages from hazards and improve motorist visibility and evacuation safety during severe weather.

Participating Jurisdiction	City of Chico
Priority:	12
Estimated Cost:	\$200,000
Estimated Benefit:	\$1.2M
Potential Funding Source(s):	HGMP, city budget
Lead Agency/Department Responsible:	Public Works
Implementation Schedule:	24 months



Hazard(s) Addressed: Flooding

2015 Action: By utilizing buy-out programs or other means, the City will acquire property and structures in the flood zone along Dry Creek and its tributaries and remove structures to prevent loss of life and property during flooding and dam failure events.

Participating Jurisdiction	City of Chico
Priority:	13
Estimated Cost:	\$350,000
Estimated Benefit:	\$2.1M
Potential Funding Source(s):	HGMP, city budget
Lead Agency/Department Responsible:	Public Works
Implementation Schedule:	24 months



Action: Educate the public on their risks to local hazards, and mitigation actions to take, using various outreach methods.

Participating Jurisdiction	City of Chico
Priority:	14
Estimated Cost:	\$5,000
Estimated Benefit:	\$30,000
Potential Funding Source(s):	Grants, general fund
Lead Agency/Department Responsible:	Public Works/ Emergency Management
Implementation Schedule:	36 months



Hazard(s) Addressed: All Hazards

Action: Address gaps in capabilities and obtain missing information before the next plan update.

Participating Jurisdiction	City of Chico
Priority:	15
Estimated Cost:	\$5,000
Estimated Benefit:	\$30,000
Potential Funding Source(s):	General fund, HMGP
Lead Agency/Department Responsible:	Emergency Management
Implementation Schedule:	12 months



Hazard(s) Addressed: All Hazards

Action: Develop an inventory list of the individual age and replacement value of all government owned or operated facilities.

Participating Jurisdiction	City of Chico
Priority:	16
Estimated Cost:	\$2,000
Estimated Benefit:	\$12,000
Potential Funding Source(s):	General Fund, HMGP
Lead Agency/Department Responsible:	City Administration
Implementation Schedule:	12 months

City of Decatur Mitigation Action Items

STATUS	CITY OF DECATUR HMP 2016 MITIGATION ACTIONS	
Deferred	Develop and implement a comprehensive public education program that includes	
Deferred	recommended actions to mitigate the impacts of each identified hazard.	
Deferred	Conduct an earthquake assessment study to determine threat, risk, and potential	
Deletteu	impacts of earthquakes in Decatur.	
Deferred	Develop and implement an ordinance requiring all new subdivisions to install	
Deletteu	outdoor warning sirens to cover new populations.	
Deferred	Implement FEMA's Individual Safe Room Rebate Program.	
Deferred	Expand NOAA Weather Radio distribution to new homes/facilities with vulnerable	
Deferred	populations and new businesses in Decatur.	
Deferred	Install surge/lightning protection devices on wastewater treatment plant and	
Deferred	lightning detection/warning devices at local schools.	
Deleted	Provide generators to vulnerable populations who may require life-saving	
Deleted	emergency power, and to critical facilities not covered by back-up power.	

Hazard(s) Addressed: All Hazards Safety and Security	
Action: Assist homeowners with application and implementation of residential mitigation projects.	
Participating Jurisdiction	City of Decatur
Priority:	1
Estimated Cost:	\$5,000
Estimated Benefit:	\$30,000
Potential Funding Source(s):	Grants, general fund
Lead Agency/Department Responsible:	Public Works
Implementation Schedule:	36 months



Hazard(s) Addressed: Flooding

Action: Improve capabilities in the National Flood Insurance Program (NFIP).

Participating Jurisdiction	City of Decatur
Priority:	2
Estimated Cost:	\$5,000
Estimated Benefit:	\$30,000
Potential Funding Source(s):	Grants, general fund
Lead Agency/Department Responsible:	Public Works
Implementation Schedule:	36 months



Hazard(s) Addressed: All Hazards

Action: Acquire and install generators, the generator connections/infrastructure, proper mounting system, security barriers, and fuel reservoir for existing and future critical facilities to prevent power failure in the event of a disaster and to continue essential duties.

Participating Jurisdiction	City of Decatur
Priority:	3
Estimated Cost:	\$1M
Estimated Benefit:	\$6M
Potential Funding Source(s):	Grants, general fund
Lead Agency/Department Responsible:	Public Works
Implementation Schedule:	36 months



Hazard(s) Addressed: Earthquakes, Expansive Soils, Flooding, Tornadoes, Wildfires

Action: Update land use planning, using zoning maps & regulations, to prevent future residential development in floodplains and other hazard-prone areas and place requirements on development methods.

Participating Jurisdiction	City of Decatur
Priority:	4
Estimated Cost:	\$2,000
Estimated Benefit:	\$12,000
Potential Funding Source(s):	Grants, general fund
Lead Agency/Department Responsible:	Public Works
Implementation Schedule:	36 months



Action: Maintain fuel on-site or have multiple ways to obtain fuel for maintaining power during a power outage from an event.

Participating Jurisdiction	City of Decatur
Priority:	5
Estimated Cost:	\$10,000
Estimated Benefit:	\$60,000
Potential Funding Source(s):	Grants, general fund
Lead Agency/Department Responsible:	Public Works
Implementation Schedule:	36 months



Hazard(s) Addressed: All Hazards

Action: Adopt and enforce most current building codes.

Participating Jurisdiction	City of Decatur
Priority:	6
Estimated Cost:	\$500
Estimated Benefit:	\$3,000
Potential Funding Source(s):	Grants, general fund
Lead Agency/Department Responsible:	Public Works
Implementation Schedule:	36 months



Hazard(s) Addressed: All Hazards

Action: Update codes, policies, and regulations to address risks and vulnerabilities to hazards.

Participating Jurisdiction	City of Decatur
Priority:	7
Estimated Cost:	\$500
Estimated Benefit:	\$3,000
Potential Funding Source(s):	Grants, general fund
Lead Agency/Department Responsible:	Public Works
Implementation Schedule:	36 months



Action: Retrofit existing government-owned facilities to withstand all hazards.

Participating Jurisdiction	City of Decatur
Priority:	8
Estimated Cost:	\$1M
Estimated Benefit:	\$6M
Potential Funding Source(s):	Grants, general fund
Lead Agency/Department Responsible:	Public Works
Implementation Schedule:	36 months



Hazard(s) Addressed: All Hazards

Action: Educate the public on their risks to our hazards, and mitigation actions to take, using various outreach methods.

Participating Jurisdiction	City of Decatur
Priority:	9
Estimated Cost:	\$5,000
Estimated Benefit:	\$30,000
Potential Funding Source(s):	Grants, general fund
Lead Agency/Department Responsible:	Public Works
Implementation Schedule:	36 months



Hazard(s) Addressed: Flooding

Action: Buyout or relocate SRL, RL, and other vulnerable structures within or near a floodplain or dam spillway.

Participating Jurisdiction	City of Decatur
Priority:	10
Estimated Cost:	\$500,000
Estimated Benefit:	\$3M
Potential Funding Source(s):	Grants, general fund
Lead Agency/Department Responsible:	Public Works
Implementation Schedule:	36 months



Hazard(s) Addressed: Flooding

Action: Educate the public on NFIP policies and their flood risks from various flood sources (bodies of water, dams, flash flooding).

Participating Jurisdiction	City of Decatur
Priority:	11
Estimated Cost:	\$500
Estimated Benefit:	\$3,000
Potential Funding Source(s):	Grants, general fund
Lead Agency/Department Responsible:	Public Works
Implementation Schedule:	36 months



Hazard(s) Addressed: All Hazards

Action: Incorporate nature-based, green infrastructure in all future development, where applicable.

Participating Jurisdiction	City of Decatur
Priority:	12
Estimated Cost:	\$20,000
Estimated Benefit:	\$1.2M
Potential Funding Source(s):	Grants, general fund
Lead Agency/Department Responsible:	Public Works
Implementation Schedule:	36 months



Hazard(s) Addressed: Wildfires

Action: Create defensible space around existing and future development in the WUI.

Participating Jurisdiction	City of Decatur
Priority:	13
Estimated Cost:	\$10,000
Estimated Benefit:	\$60,000
Potential Funding Source(s):	Grants, general fund
Lead Agency/Department Responsible:	Public Works
Implementation Schedule:	36 months



Action: Partner with neighboring communities on multi-jurisdictional mitigation projects and studies.

Participating Jurisdiction	City of Decatur
Priority:	14
Estimated Cost:	\$200,000
Estimated Benefit:	\$1.2M
Potential Funding Source(s):	Grants, general fund
Lead Agency/Department Responsible:	Public Works
Implementation Schedule:	36 months



Hazard(s) Addressed: All Hazards

Action: Conduct hazard studies to address data deficiencies and to update our risk assessment.

Participating Jurisdiction	City of Decatur
Priority:	15
Estimated Cost:	\$70,000
Estimated Benefit:	\$420,000
Potential Funding Source(s):	Grants, general fund
Lead Agency/Department Responsible:	Public Works
Implementation Schedule:	36 months



Hazard(s) Addressed: All Hazards

Action: Create a research method to address gaps in capabilities and missing information before the next plan update.

Participating Jurisdiction	City of Decatur
Priority:	16
Estimated Cost:	\$5,000
Estimated Benefit:	\$30,000
Potential Funding Source(s):	General fund, HMGP
Lead Agency/Department Responsible:	Emergency Management
Implementation Schedule:	12 months



Action: Develop an inventory list of the individual age and replacement value of all government owned or operated facilities.

Participating Jurisdiction	City of Decatur
Priority:	17
Estimated Cost:	\$2,000
Estimated Benefit:	\$12,000
Potential Funding Source(s):	General Fund, HMGP
Lead Agency/Department Responsible:	City Administration
Implementation Schedule:	12 months



Action: Assist homeowners with application and implementation of residential mitigation projects.

Participating Jurisdiction	City of Rhome
Priority:	1
Estimated Cost:	\$5,000
Estimated Benefit:	\$30,000
Potential Funding Source(s):	Grants, general fund
Lead Agency/Department Responsible:	Public Works
Implementation Schedule:	36 months



Hazard(s) Addressed: Flooding

Action: Improve participation in the National Flood Insurance Program (NFIP) with assistance from FEMA.

Participating Jurisdiction	City of Rhome
Priority:	2
Estimated Cost:	\$5,000
Estimated Benefit:	\$30,000
Potential Funding Source(s):	Grants, general fund
Lead Agency/Department Responsible:	Public Works
Implementation Schedule:	36 months



Hazard(s) Addressed: All Hazards

Action: Acquire and install generators, the generator connections/infrastructure, proper mounting system, security barriers, and fuel reservoir for existing and future critical facilities to prevent power failure in the event of a disaster and to continue essential duties.

Participating Jurisdiction	City of Rhome
Priority:	3
Estimated Cost:	\$1M
Estimated Benefit:	\$6M
Potential Funding Source(s):	Grants, general fund
Lead Agency/Department Responsible:	Public Works
Implementation Schedule:	36 months



Hazard(s) Addressed: Earthquakes, Expansive Soils, Flooding, Tornadoes, Wildfires

Action: Update land use planning, using zoning maps & regulations, to prevent future residential development in floodplains and other hazard-prone areas and place requirements on development methods.

Participating Jurisdiction	City of Rhome
Priority:	4
Estimated Cost:	\$2,000
Estimated Benefit:	\$12,000
Potential Funding Source(s):	Grants, general fund
Lead Agency/Department Responsible:	Public Works
Implementation Schedule:	36 months



Hazard(s) Addressed: All Hazards

Action: Create fuel storage to store fuel on site or have multiple ways to obtain fuel for maintaining power during a power outage from an event.

Participating Jurisdiction	City of Rhome
Priority:	5
Estimated Cost:	\$10,000
Estimated Benefit:	\$60,000
Potential Funding Source(s):	Grants, general fund
Lead Agency/Department Responsible:	Public Works
Implementation Schedule:	36 months



Hazard(s) Addressed: All Hazards

Action: Adopt and enforce most current building codes.

Participating Jurisdiction	City of Rhome
Priority:	6
Estimated Cost:	\$500
Estimated Benefit:	\$3,000
Potential Funding Source(s):	Grants, general fund
Lead Agency/Department Responsible:	Public Works
Implementation Schedule:	36 months



Action: Update codes, policies, and regulations to address risks and vulnerabilities to hazards.

Participating Jurisdiction	City of Rhome
Priority:	7
Estimated Cost:	\$500
Estimated Benefit:	\$3,000
Potential Funding Source(s):	Grants, general fund
Lead Agency/Department Responsible:	Public Works
Implementation Schedule:	36 months



Hazard(s) Addressed: All Hazards

Action: Retrofit existing government-owned facilities to withstand all hazards.

Participating Jurisdiction	City of Rhome
Priority:	8
Estimated Cost:	\$1M
Estimated Benefit:	\$6M
Potential Funding Source(s):	Grants, general fund
Lead Agency/Department Responsible:	Public Works
Implementation Schedule:	36 months



Hazard(s) Addressed: All Hazards

Action: Educate the public on their risks to our hazards, and mitigation actions to take, using various outreach methods.

Participating Jurisdiction	City of Rhome
Priority:	9
Estimated Cost:	\$5,000
Estimated Benefit:	\$30,000
Potential Funding Source(s):	Grants, general fund
Lead Agency/Department Responsible:	Public Works
Implementation Schedule:	36 months



Hazard(s) Addressed: Flooding

Action: Buyout or relocate SRL, RL, and other vulnerable structures within or near a floodplain or dam spillway.

Participating Jurisdiction	City of Rhome
Priority:	10
Estimated Cost:	\$500,000
Estimated Benefit:	\$3M
Potential Funding Source(s):	Grants, general fund
Lead Agency/Department Responsible:	Public Works
Implementation Schedule:	36 months



Hazard(s) Addressed: Flooding

Action: Educate the public on NFIP policies and their flood risks from various flood sources (bodies of water, dams, flash flooding).

Participating Jurisdiction	City of Rhome
Priority:	11
Estimated Cost:	\$500
Estimated Benefit:	\$3,000
Potential Funding Source(s):	Grants, general fund
Lead Agency/Department Responsible:	Public Works
Implementation Schedule:	36 months



Hazard(s) Addressed: All Hazards

Action: Incorporate nature-based, green infrastructure in future development, where applicable.

Participating Jurisdiction	City of Rhome
Priority:	12
Estimated Cost:	\$20,000
Estimated Benefit:	\$1.2M
Potential Funding Source(s):	Grants, general fund
Lead Agency/Department Responsible:	Public Works
Implementation Schedule:	36 months



Hazard(s) Addressed: Wildfires

Action: Create defensible space around existing and future development in the WUI.

Participating Jurisdiction	City of Rhome
Priority:	13
Estimated Cost:	\$10,000
Estimated Benefit:	\$60,000
Potential Funding Source(s):	Grants, general fund
Lead Agency/Department Responsible:	Public Works
Implementation Schedule:	36 months



Hazard(s) Addressed: All Hazards

Action: Partner with neighboring communities on multi-jurisdictional mitigation projects and studies.

Participating Jurisdiction	City of Rhome
Priority:	14
Estimated Cost:	\$200,000
Estimated Benefit:	\$1.2M
Potential Funding Source(s):	Grants, general fund
Lead Agency/Department Responsible:	Public Works
Implementation Schedule:	36 months



Hazard(s) Addressed: All Hazards

Action: Conduct hazard studies to address data deficiencies and to update our risk assessment.

Participating Jurisdiction	City of Rhome
Priority:	15
Estimated Cost:	\$70,000
Estimated Benefit:	\$420,000
Potential Funding Source(s):	Grants, general fund
Lead Agency/Department Responsible:	Public Works
Implementation Schedule:	36 months



Hazard(s) Addressed: Flooding

Action: Create and implement a Stormwater Management Plan.

Participating Jurisdiction	City of Rhome
Priority:	16
Estimated Cost:	\$30,000
Estimated Benefit:	\$180,000
Potential Funding Source(s):	Grants, general fund
Lead Agency/Department Responsible:	Public Works
Implementation Schedule:	36 months



Hazard(s) Addressed: Earthquakes, Thunderstorms, Tornadoes, Wildfires, Winter Storms

Action: Develop and implement a tree-trimming program to minimize debris generated during severe weather events.

Participating Jurisdiction	City of Rhome
Priority:	17
Estimated Cost:	\$50,000
Estimated Benefit:	\$300,000
Potential Funding Source(s):	Grants, general fund
Lead Agency/Department Responsible:	Public Works
Implementation Schedule:	36 months



Hazard(s) Addressed: All Hazards

Action: Improve early warning and public information capabilities by purchasing and implementing a phone-based mass notification system.

Participating Jurisdiction	City of Rhome
Priority:	18
Estimated Cost:	\$100,000
Estimated Benefit:	\$600,000
Potential Funding Source(s):	Grants, general fund
Lead Agency/Department Responsible:	Public Works
Implementation Schedule:	36 months



Action: Increase the ability of residents and businesses to receive early warning and hazard information from the National Weather Service through purchasing and distributing NOAA All Hazards Radios to households and businesses in the city.

Participating Jurisdiction	City of Rhome
Priority:	19
Estimated Cost:	\$30,000
Estimated Benefit:	\$180,000
Potential Funding Source(s):	Grants, general fund
Lead Agency/Department Responsible:	Public Works
Implementation Schedule:	36 months



Hazard(s) Addressed: Extreme Heat, Winter Storms

Action: Retrofit and stock select facilities with supplies (like blankets, air conditioners, water, food, chargers) for residents, especially vulnerable populations, to seek refuge from extreme hot and cold temperatures.

Participating Jurisdiction	City of Rhome
Priority:	20
Estimated Cost:	\$50,000
Estimated Benefit:	\$300,000
Potential Funding Source(s):	Grants, general fund
Lead Agency/Department Responsible:	Public Works
Implementation Schedule:	36 months



Hazard(s) Addressed: All Hazards

Action: Purchase and install additional outdoor early warning sirens in areas of new development.

Participating Jurisdiction	City of Rhome
Priority:	21
Estimated Cost:	\$100,000
Estimated Benefit:	\$600,000
Potential Funding Source(s):	Grants, general fund
Lead Agency/Department Responsible:	Public Works
Implementation Schedule:	36 months



Action: Address gaps in capabilities and obtain missing information before the next plan update.

Participating Jurisdiction	City of Rhome
Priority:	22
Estimated Cost:	\$5,000
Estimated Benefit:	\$30,000
Potential Funding Source(s):	General fund, HMGP
Lead Agency/Department Responsible:	Emergency Management
Implementation Schedule:	12 months



Hazard(s) Addressed: All Hazards

Action: Develop an inventory list of the individual age and replacement value of all government owned or operated facilities.

Participating Jurisdiction	City of Rhome
Priority:	23
Estimated Cost:	\$2,000
Estimated Benefit:	\$12,000
Potential Funding Source(s):	General Fund, HMGP
Lead Agency/Department Responsible:	City Administration
Implementation Schedule:	12 months

City of Runaway Bay Mitigation Action Items

STATUS	2015 MITIGATION ACTIONS
	Educate the public via newsletter articles on risks, threats, and vulnerability
Completed	from all natural hazards and include actions that can be taken to mitigate
	impacts.
Deferred	Develop and implement the Texas Individual Safe Room Rebate Program.
Completed	Adopt and enforce the most recent version of the International Residential
Completed	Code requirements for new construction to ensure higher building standards.
Deferred	Protect citizens from heat by building covered rest areas in public parks.
Develop and implement a tree-trimming program to minimize amount of de	
Deferred	generated during severe weather events.
Deferred	Structure improvements - Champion and Jim Walters.
Deferred	Adopt, implement and enforce water conservation measures.
Deferred	Participate in the Community Rating System program (CRS).



Hazard(s) Addressed: Earthquakes, Flooding, Thunderstorms, Tornadoes, Wildfires, Winter Storms

Action: Relocate Fire Department outside of floodplain and ensure structure confirms to FEMA standards for use as emergency operations center.

Participating Jurisdiction	City of Runaway Bay
Priority:	1
Estimated Cost:	\$2.5 million
Estimated Benefit:	\$15 million
Potential Funding Source(s):	Grants, donations, fire department fund
Lead Agency/Department Responsible:	Fire Department
Implementation Schedule:	24 months



Action: Acquire and install backup generators, the generator connections/infrastructure, proper mounting system, security barriers, and fuel reservoir for existing and future critical facilities to prevent power failure in the event of a disaster and to continue essential duties.

Participating Jurisdiction	City of Runaway Bay
Priority:	2
Estimated Cost:	\$150,000
Estimated Benefit:	\$900,000
Potential Funding Source(s):	Grants, general fund
Lead Agency/Department Responsible:	Public Works
Implementation Schedule:	36 months



Hazard(s) Addressed: Earthquakes, Thunderstorms, Tornadoes, Winter Storms

Action: Retrofit existing and future government-owned facilities.

Participating Jurisdiction	City of Runaway Bay
Priority:	3
Estimated Cost:	\$500,000
Estimated Benefit:	\$3 million
Potential Funding Source(s):	Grants, general fund
Lead Agency/Department Responsible:	Public Works
Implementation Schedule:	36 months



Hazard(s) Addressed: Drought

Action: Create and implement a water conservation plan.

Participating Jurisdiction	City of Runaway Bay
Priority:	4
Estimated Cost:	\$5,000
Estimated Benefit:	\$30,000
Potential Funding Source(s):	Grants, general fund
Lead Agency/Department Responsible:	Public Works
Implementation Schedule:	18 months



Hazard(s) Addressed: Extreme Heat, Thunderstorms, Winter Storms

Action: Install gazebos at public parks and beach area to prevent heat related emergencies and protect people from inclement weather.

Participating Jurisdiction	City of Runaway Bay
Priority:	5
Estimated Cost:	\$60,000
Estimated Benefit:	\$360,000
Potential Funding Source(s):	Grants, general fund, donations, volunteer labor
Lead Agency/Department Responsible:	Public Works
Implementation Schedule:	36 months



Hazard(s) Addressed: Earthquakes, Expansive Soils, Flooding, Thunderstorms, Tornadoes, Winter Storms

Action: Install shutoff valves on watermains to prevent pipe breaks.

Participating Jurisdiction	City of Runaway Bay
Priority:	6
Estimated Cost:	\$50,000
Estimated Benefit:	\$300,000
Potential Funding Source(s):	Grants, general fund, staff time
Lead Agency/Department Responsible:	Public Works
Implementation Schedule:	36 months



Hazard(s) Addressed: Flooding

Action: Improve compliance in the National Flood Insurance Program (NFIP).

Participating Jurisdiction	City of Runaway Bay
Priority:	7
Estimated Cost:	\$5,000
Estimated Benefit:	\$30,000
Potential Funding Source(s):	Grants, general fund
Lead Agency/Department Responsible:	City Hall
Implementation Schedule:	36 months



Hazard(s) Addressed: Wildfire

Action: Install additional fire hydrants in the Wildland Urban Interface (WUI).

Participating Jurisdiction	City of Runaway Bay
Priority:	8
Estimated Cost:	\$36,000
Estimated Benefit:	\$216,000
Potential Funding Source(s):	Grants, general fund, staff time
Lead Agency/Department Responsible:	Public Works
Implementation Schedule:	36 months



Hazard(s) Addressed: Flooding

Action: Create a Seasonal Drainage Management Program for all ditches, outlet ditches, subdrains and culverts to include but not limited to: scheduled cleaning, soil stabilization, debris removal, and replacement of ditches with subdrains wherever necessary.

Participating Jurisdiction	City of Runaway Bay
Priority:	9
Estimated Cost:	\$25,000
Estimated Benefit:	\$150,000
Potential Funding Source(s):	Grants, general fund, staff time
Lead Agency/Department Responsible:	Public Works
Implementation Schedule:	36 months



Hazard(s) Addressed: Flooding

Action: Educate the public on NFIP policies and their flood risks from various flood sources (bodies of water, dams, flash flooding).

Participating Jurisdiction	City of Runaway Bay
Priority:	10
Estimated Cost:	\$500
Estimated Benefit:	\$3,000
Potential Funding Source(s):	Grants, general fund
Lead Agency/Department Responsible:	Public Works
Implementation Schedule:	36 months



Action: Address gaps in capabilities and obtain missing information before the next plan update.

Participating Jurisdiction	City of Runaway Bay
Priority:	11
Estimated Cost:	\$5,000
Estimated Benefit:	\$30,000
Potential Funding Source(s):	General fund, HMGP
Lead Agency/Department Responsible:	Emergency Management
Implementation Schedule:	12 months



Hazard(s) Addressed: All Hazards

Action: Develop an inventory list of the individual age and replacement value of all government owned or operated facilities.

Participating Jurisdiction	City of Runaway Bay
Priority:	12
Estimated Cost:	\$2,000
Estimated Benefit:	\$12,000
Potential Funding Source(s):	General Fund, HMGP
Lead Agency/Department Responsible:	City Administration
Implementation Schedule:	12 months

Wise County Unincorporated Mitigation Action Items

STATUS	2015 MITIGATION ACTIONS	
Deferred	Develop and implement a comprehensive public education program for Wise County residents.	
Deferred	Retrofit an existing county structure to serve as a hardened county emergency operations center.	
Deferred	Increase the ability of residents and businesses to receive early warning and hazard information from the National Weather Service. This would be accomplished by purchasing and distributing NOAA All Hazard Radios to each household and business in the county.	
Deferred	Implement the Texas Individual Tornado Safe Room Rebate Program.	
Deferred	Harden county-owned structures that are identified as vulnerable to natural Hazards.	
Deferred	Develop and implement a tree-trimming program to minimize debris generated during severe weather events.	
Deferred	Develop an extreme temperature program that identifies both public and private safe locations for residents to go to during periods of extreme temperatures.	
Deferred	Partner with non-profit organizations for distribution of fans/air conditioner units/space heaters, checking on vulnerable residents, and notification of shelter locations.	
Deferred	Implement a targeted fuel load reduction campaign to reduce the potential for wildland-urban interface fires.	
Deferred	Develop a Community Wildfire Protection Plan.	
Deferred	Limit loss of property and life from wildfire by educating citizens in the WUI in regards to defensible space and buffer zones.	
Deferred	Create a Storm water Management Plan.	
Deferred	Develop a buyout program for repetitive flood loss areas within the county.	
Deferred	Retrofit drainage issues on identified low-water crossings.	
Deferred	Hire a consultant to complete a dam inundation study, safety study, and inventory of mitigation activities to implement for the county dams.	
Deferred	Educate downstream property owners in the benefits of participating in the National Flood Insurance Program.	



Hazard(s) Addressed: Flooding

Action: Install a high-water detection system.

Participating Jurisdiction	Wise County Unincorporated
Priority:	1
Estimated Cost:	\$1M
Estimated Benefit:	\$6M
Potential Funding Source(s):	Grants, general fund
Lead Agency/Department Responsible:	OEM
Implementation Schedule:	36 months



Hazard(s) Addressed: Flooding

Action: Construct bridges or bridge class culverts in low lying areas.

Participating Jurisdiction	Wise County Unincorporated
Priority:	2
Estimated Cost:	\$600,000
Estimated Benefit:	\$3.6M
Potential Funding Source(s):	Grants, general fund
Lead Agency/Department Responsible:	County Engineer
Implementation Schedule:	36 months



Hazard(s) Addressed: Earthquakes, Thunderstorms, Tornadoes, Wildfires, Winter Storms

2015 Action: Develop and implement a tree-trimming program (such as creating an SOP, creating a schedule, creating progress tracking tools, etc.) to minimize debris generated during severe weather events.

Participating Jurisdiction	Wise County Unincorporated
Priority:	3
Estimated Cost:	\$10,000
Estimated Benefit:	\$60,000
Potential Funding Source(s):	Grants, general fund
Lead Agency/Department Responsible:	Public Works
Implementation Schedule:	36 months



Hazard(s) Addressed: Flooding

Action: Hire a consultant to complete a dam inundation study, safety study, and inventory of mitigation activities to implement for HHPDs.

Participating Jurisdiction	Wise County Unincorporated
Priority:	4
Estimated Cost:	\$100,000
Estimated Benefit:	\$600,000
Potential Funding Source(s):	Grants, general fund
Lead Agency/Department Responsible:	OEM
Implementation Schedule:	36 months



Hazard(s) Addressed: Thunderstorms, Tornadoes

Action: Implement the Texas Individual Tornado Safe Room Rebate Program.

Participating Jurisdiction	Wise County Unincorporated
Priority:	5
Estimated Cost:	\$500,000
Estimated Benefit:	\$3M
Potential Funding Source(s):	Grants, general fund
Lead Agency/Department Responsible:	OEM
Implementation Schedule:	36 months



Hazard(s) Addressed: Extreme Heat, Thunderstorms, Winter Storms

Action: Build new or retrofit existing structures, including covered parking or storage, that will provide protections for county owned vehicles and equipment.

Participating Jurisdiction	Wise County Unincorporated
Priority:	6
Estimated Cost:	\$100,000
Estimated Benefit:	\$600,000
Potential Funding Source(s):	Grants, general fund
Lead Agency/Department Responsible:	OEM
Implementation Schedule:	36 months



Action: Build a storage facility for personal protective equipment (PPE).

Participating Jurisdiction	Wise County Unincorporated
Priority:	7
Estimated Cost:	\$50,000
Estimated Benefit:	\$300,000
Potential Funding Source(s):	Grants, general fund
Lead Agency/Department Responsible:	OEM
Implementation Schedule:	36 months



Hazard(s) Addressed: Wildfire

Action: Acquire equipment to monitor air quality and create a method to alert the public on unsafe pollution levels during and after a wildfire.

Participating Jurisdiction	Wise County Unincorporated
Priority:	8
Estimated Cost:	\$50,000
Estimated Benefit:	\$300,000
Potential Funding Source(s):	Grants, general fund
Lead Agency/Department Responsible:	OEM
Implementation Schedule:	36 months



Hazard(s) Addressed: Wildfires

2015 Action: Implement a targeted fuel load reduction campaign to reduce the potential for fires in the wildland-urban interface.

Participating Jurisdiction	Wise County Unincorporated
Priority:	9
Estimated Cost:	\$90,000
Estimated Benefit:	\$540,000
Potential Funding Source(s):	Grants, general fund
Lead Agency/Department Responsible:	OEM
Implementation Schedule:	36 months



Hazard(s) Addressed: Wildfires

2015 Action: Develop a Community Wildfire Protection Plan.

Participating Jurisdiction	Wise County Unincorporated
Priority:	10
Estimated Cost:	\$5,000
Estimated Benefit:	\$30,000
Potential Funding Source(s):	Grants, general fund
Lead Agency/Department Responsible:	OEM
Implementation Schedule:	12 months



Hazard(s) Addressed: Wildfires

2015 Action: Limit loss of property and life from wildfire by educating citizens in the WUI on mitigation practices, including defensible space and buffer zones.

Participating Jurisdiction	Wise County Unincorporated
Priority:	11
Estimated Cost:	\$5,000
Estimated Benefit:	\$30,000
Potential Funding Source(s):	Grants, general fund
Lead Agency/Department Responsible:	OEM
Implementation Schedule:	12 months



Hazard(s) Addressed: Flooding

2015 Action: Develop a buyout program for repetitive flood loss areas within the county.

Participating Jurisdiction	Wise County Unincorporated
Priority:	12
Estimated Cost:	\$1M
Estimated Benefit:	\$6M
Potential Funding Source(s):	Grants, general fund
Lead Agency/Department Responsible:	OEM
Implementation Schedule:	36 months



Hazard(s) Addressed: Flooding

2015 Action: Retrofit drainage issues on identified low-water crossings.

Participating Jurisdiction	Wise County Unincorporated
Priority:	13
Estimated Cost:	\$100,000
Estimated Benefit:	\$600,000
Potential Funding Source(s):	Grants, general fund
Lead Agency/Department Responsible:	OEM
Implementation Schedule:	36 months



Hazard(s) Addressed: Extreme Heat, Thunderstorms, Tornadoes, Winter Storms

Action: Install or upgrade severe weather proofing at county owned or operated buildings.

Participating Jurisdiction	Wise County Unincorporated
Priority:	14
Estimated Cost:	\$600,000
Estimated Benefit:	\$3.6M
Potential Funding Source(s):	Grants, general fund
Lead Agency/Department Responsible:	OEM
Implementation Schedule:	36 months



Hazard(s) Addressed: Extreme Heat, Thunderstorms, Tornadoes, Winter Storms

Action: Assist business owners with severe weather proofing their businesses.

Participating Jurisdiction	Wise County Unincorporated
Priority:	15
Estimated Cost:	\$100,000
Estimated Benefit:	\$600,000
Potential Funding Source(s):	Grants, general fund
Lead Agency/Department Responsible:	OEM
Implementation Schedule:	36 months



Hazard(s) Addressed: Flooding

Action: Purchase right-of-way (ROW) for flood control dams.

Participating Jurisdiction	Wise County Unincorporated
Priority:	16
Estimated Cost:	\$60,000
Estimated Benefit:	\$360,000
Potential Funding Source(s):	Grants, general fund
Lead Agency/Department Responsible:	OEM
Implementation Schedule:	36 months



Hazard(s) Addressed: Extreme Heat, Thunderstorms, Tornadoes, Winter Storms

Action: Upgrade or install weather alert system for all county buildings.

Participating Jurisdiction	Wise County Unincorporated
Priority:	17
Estimated Cost:	\$20,000
Estimated Benefit:	\$120,000
Potential Funding Source(s):	Grants, general fund
Lead Agency/Department Responsible:	OEM
Implementation Schedule:	12 months



Hazard(s) Addressed: Extreme Heat, Winter Storms

2015 Action: Partner with non-profit organizations for distribution of fans/air conditioner units/space heaters, checking on vulnerable residents, and notification of shelter locations.

Participating Jurisdiction	Wise County Unincorporated
Priority:	18
Estimated Cost:	\$20,000
Estimated Benefit:	\$120,000
Potential Funding Source(s):	Grants, general fund
Lead Agency/Department Responsible:	OEM
Implementation Schedule:	24 months



Hazard(s) Addressed: All Hazards

2015 Action: Develop and implement a comprehensive public education program for Wise County residents.

Participating Jurisdiction	Wise County Unincorporated
Priority:	19
Estimated Cost:	\$5,000
Estimated Benefit:	\$30,000
Potential Funding Source(s):	Grants, general fund
Lead Agency/Department Responsible:	OEM
Implementation Schedule:	24 months



Hazard(s) Addressed: All Hazards

2015 Action: Increase the ability of residents and businesses to receive early warning and hazard information from the National Weather Service by purchasing and distributing NOAA All Hazard Radios to each household and business in the county.

Participating Jurisdiction	Wise County Unincorporated
Priority:	20
Estimated Cost:	\$40,000
Estimated Benefit:	\$240,000
Potential Funding Source(s):	Grants, general fund
Lead Agency/Department Responsible:	OEM
Implementation Schedule:	24 months



Hazard(s) Addressed: All Hazards

2015 Action: Harden county-owned structures that are identified as vulnerable to natural hazards.

Participating Jurisdiction	Wise County Unincorporated
Priority:	21
Estimated Cost:	\$1M
Estimated Benefit:	\$6M
Potential Funding Source(s):	Grants, general fund
Lead Agency/Department Responsible:	OEM
Implementation Schedule:	36 months



Hazard(s) Addressed: Extreme Heat, Winter Storms

2015 Action: Develop an Extreme Temperature Program that identifies both public and private safe locations for residents to go to during periods of extreme temperatures.

Participating Jurisdiction	Wise County Unincorporated
Priority:	22
Estimated Cost:	\$10,000
Estimated Benefit:	\$60,000
Potential Funding Source(s):	Grants, general fund
Lead Agency/Department Responsible:	OEM
Implementation Schedule:	12 months



Hazard(s) Addressed: Flooding

2015 Action: Create a Stormwater Management Plan.

Participating Jurisdiction	Wise County Unincorporated
Priority:	23
Estimated Cost:	\$20,000
Estimated Benefit:	\$120,000
Potential Funding Source(s):	Grants, general fund
Lead Agency/Department Responsible:	OEM
Implementation Schedule:	12 months



Hazard(s) Addressed: Flooding

2015 Action: Educate downstream property owners on the benefits of participating in the National Flood Insurance Program.

Participating Jurisdiction	Wise County Unincorporated
Priority:	24
Estimated Cost:	\$5,000
Estimated Benefit:	\$30,000
Potential Funding Source(s):	Grants, general fund
Lead Agency/Department Responsible:	OEM
Implementation Schedule:	12 months



Hazard(s) Addressed: Flooding, Thunderstorms, Tornadoes

Action: Purchase and install a CASA WX Weather Radar System for better severe weather detection and to provide more accurate severe weather notifications.

Participating Jurisdiction	Wise County Unincorporated
Priority:	25
Estimated Cost:	\$2.5M
Estimated Benefit:	\$12M
Potential Funding Source(s):	Grants, general fund
Lead Agency/Department Responsible:	OEM
Implementation Schedule:	24 months



Hazard(s) Addressed: All Hazards

Action: Purchase generators to ensure continued operation of critical infrastructure during and after severe weather events and other disasters.

Participating Jurisdiction	Wise County Unincorporated
Priority:	26
Estimated Cost:	\$250,000
Estimated Benefit:	\$1.5M
Potential Funding Source(s):	HGMP, city budget
Lead Agency/Department Responsible:	Public Works, OEM
Implementation Schedule:	24 months



Hazard(s) Addressed: All Hazards

Action: Install renewable or alternative energy sources in all current and future county-owned facilities to ensure continuous power supplies for critical services.

Participating Jurisdiction	Wise County Unincorporated
Priority:	27
Estimated Cost:	\$1M
Estimated Benefit:	\$6M
Potential Funding Source(s):	Grants, general fund
Lead Agency/Department Responsible:	OEM
Implementation Schedule:	36 months



Hazard(s) Addressed: All Hazards

Action: Address gaps in capabilities and obtain missing information before the next plan update.

Participating Jurisdiction	Wise County Unincorporated
Priority:	28
Estimated Cost:	\$5,000
Estimated Benefit:	\$30,000
Potential Funding Source(s):	General fund, HMGP
Lead Agency/Department Responsible:	OEM
Implementation Schedule:	12 months



Hazard(s) Addressed: All Hazards

Action: Develop an inventory list of the individual age and replacement value of all government owned or operated facilities.

Participating Jurisdiction	Wise County Unincorporated
Priority:	29
Estimated Cost:	\$2,000
Estimated Benefit:	\$12,000
Potential Funding Source(s):	General Fund, HMGP
Lead Agency/Department Responsible:	City Administration
Implementation Schedule:	12 months

4.4 Plan Maintenance

The Wise County Emergency Management Coordinator (EMC), or their designee, is responsible for ensuring the HMP and its components are monitored, evaluated, and reviewed on a regular basis.

Members of the Hazard Mitigation Planning Team (HMPT) are responsible for ensuring the mitigation strategies of participating jurisdictions are monitored, evaluated, and reviewed on a regular basis. This will be accomplished by the Wise County EMC calling an annual meeting of the HMPT, whose members will assist in plan review, evaluation, updates, and monitoring.

4.4.1 Schedule

Maintenance tasks will take place according to the following table. The Wise County EMC will use email to request the maintenance task noted below be implemented and changes documented.

Responsible Personnel Update Schedule Tasks Monitor Plan: integrate into existing mechanisms; track implementation of action items, changes to Twice a year risk assessment, changes to Local Planning Team (LPT), changes to capabilities, and plan Wise County EMC integrations. Evaluate Plan during HMP Maintenance Meeting. Annually **Update Plan** by reviewing and revising the plan to Once every five meet requirements. years

Table 49: Maintenance Schedule of Tasks

To annually evaluate the HMP, the Wise County EMC will host a HMP Maintenance Meeting. During this meeting, the members will provide information and updates on the implementation status of each action item included in the plan. The team will assess whether goals address current and expected conditions, whether the nature and/or magnitude of the risks have changed, if there has been a change in local capabilities, if current resources are appropriate for implementing the HMP, whether outcomes have occurred as expected, and if other agencies and partners have information to input.

The Disaster Mitigation Act of 2000 requires that the Wise County Hazard Mitigation Plan be updated at least once every five years. During this process, the entire plan will be updated with current information, current analyses of risks and capabilities, and new and/or modified mitigation strategies. Public meetings will be hosted for the HMPT and the public to address each section of the plan. The revised plan will be submitted for state and federal review after local public review and presented for approval to the Wise County Commissioners Court and the respective councils of incorporated cities included in this HMP.

Following formal adoption by the Wise County's Commissioners Court and the governing council of each participating jurisdiction, the actions outlined in the HMP will be implemented as local capabilities allow.

4.4.2 Continued Public Participation

Public participation will remain an active component of this plan, even after adoption, to ensure all residents understand what the local government is doing on their behalf, and to provide a chance for input on community vulnerabilities and mitigation activities.

With assistance from NCTCOG, and as local capabilities improve, the HMPT will assess their capabilities and pre-plan their outreach strategy for the next update in order to garner more valuable feedback and reach more socially vulnerable populations and underserved communities.

The HMPT with look for more equitable outreach strategies to use when maintaining this plan, once adopted, including periodic presentations on the plan's progress to elected officials, schools, or other community groups; lunch-n-learns; virtual questionnaires and surveys; public meetings; and postings on social media and interactive websites.

4.4.3 Integration into Existing Planning Mechanisms

The ideas, information and/or strategy of this hazard mitigation plan (HMP) should be integrated into existing planning mechanisms to help ensure the mechanisms support the goals of the Wise County HMP and will not contribute to increased hazards in the affected jurisdiction(s).

In the 2015 HMP the following mechanisms were listed by all participants:

- Budget Meetings
- Emergency Action Plan Updates
- Floodplain Ordinances
- Drought contingency plans

With limited staffing at the time, integration was not completed. The Hazard Mitigation Planning Team will be focus on plan integration during the plan maintenance process of this plan by providing a copy of the Wise County HMP to the responsible departments of each planning mechanism listed in Table 50 and instruct them to reference the HMP during their planning process.

Table 50: Local Planning Mechanisms

Jurisdiction	Type of Plan or Activity	Department Responsible	Update Schedule
Bridgeport	Capital Improvement Plan	City Administration	Every 10 years
Bridgeport	Comprehensive Plan	City Administration and Public Works Departments	Every 5 years
Chico	Annual Operating Budget	Finance Department	Annually
Chico	New Residential Plan Requirements	City Council	As Needed
Decatur	Local Emergency Operations Plan	Fire Department	Every 5 years
Decatur	Comprehensive Plan	City Administration	Every 5 years
Rhome	Master Parks Plan	City Administration and Parks and Recreation Board	Every 5 years
Rhome	Comprehensive Plan	City Administration and Public Works Departments	Every 5 years
Runaway Bay	Local Emergency Operations Plan	Police Department	Every 5 years

Jurisdiction	Type of Plan or Activity	Department Responsible	Update Schedule
Runaway	Comprehensive Plan	City Administration and Public Works	Every 5 years
Bay	Comprehensive Flan	Departments	Every 5 years
Wise County	Development Rules &	Commissioners Court	As Needed
wise county	Regulations Guide	Commissioners Court	As Needed
Wise County	Transportation Plan	Transportation Policy Committee	As Needed
Wise County	Emergency Operations Plan	OEM	5 years

Chapter 5: Conclusion

Through the development of this plan, the participating jurisdictions in Wise County are better prepared to identify and mitigate the threats facing their communities. While not a binding document, this plan is meant to be a blueprint for future resiliency.

This plan will continue to evolve as necessary to properly represent the threats and vulnerabilities affecting Wise County. Public participation will continue through the ongoing multijurisdictional hazard mitigation process.

Appendix A: Capabilities Assessment

A.1 NFIP Assessment

The following tables describe local policy statistics and NFIP compliance within the participating jurisdictions.

Table 51: NFIP Policy Information as of 04/30/2022

Community Name (Number)	Policies in Force	Total Coverage	Total Written Premium + FPF*
Bridgeport, City of (480677)	14	\$3,914,100	\$39,717
Chico, City of (481053)	2	\$1,002,300	\$12,524
Decatur, City of (480678)	10	\$3,580,000	\$7,262
Rhome, City of (481054)	1	\$250,000	\$1,968
Runaway Bay, City of (481618)	60	\$7,650,600	\$59,244
Unknown (Unknown)	17	\$2,337,000	\$10,815
Wise County* (481051)	110	\$30,485,200	\$142,659

Source: Flood Insurance Data and Analytics

^{*}FPF (Federal Policy Fee) - A flat charge that the policyholder must pay on each new or renewal policy to defray certain administrative expenses incurred in carrying out the NFIP.

Adoption of NFIP minimum floodplain management criteria via local regulation.		
Community	Description	
Bridgeport	Preliminary plat applications must include a general plan for drainage to include calculation of one hundred (100) year storm for any stream, creek, or channel and the limits of any floodplain designated by FEMA or limits as determined by the owner's civil engineer. (Drainage plan includes a topographical map, preliminary plans for drainage improvements, and calculations relation to the design of the drainage plan and its impact downstream.)	
	A site inventory analysis including a scale drawing of existing vegetation, natural water courses, creeks or bodies of water, and an analysis of planned changes in such natural features as a result of the development. This should include a delineation of any flood prone areas.	
Chico	The Flood Plain District is designed to provide for the appropriate use of land which has a history of inundation or is determined to be subject to flood hazard, and to promote the general welfare and provide protection from flooding portions of certain districts. Such areas are designated with a Flood Plain Prefix, FP.	
	Permitted Uses The permitted uses in that portion of any district having a Flood Plain (FP) prefix shall be limited to the following:	

Adoption of NFIP minimum floodplain management criteria via local regulation.

Community

Description

- Agricultural activities, including the ordinary cultivation or grazing of land and legal types of animal husbandry but excluding construction of barns or other outbuildings.
- Off-street parking incidental to any adjacent main use permitted in the district however parking should be limited to areas where the depth of flow of storm water during a 25-year storm would be less than or equal to .50 feet.
- All types of local utilities including those requiring specific use permits.
- Parks, playgrounds, public golf courses (no structures). and other recreational areas.
- Private open space as part of a Planned Residential Development.
- Structures, installations, and facilities installed, operated, and maintained by public agencies for flood control purposes.
- Bridle trail, bicycle, or nature trial.

City Council Approval Required

No structure, including above ground utility poles, shall be erected in that portion of any district designated with a Flood Plain, FP, prefix until and unless such structure has been approved by the City Council after engineering studies have been made and it is ascertained that such building or structure is not subject to damage by flooding and would not constitute an encroachment, hazard, or obstacle to the movement of flood waters and that such construction would not endanger the value and safety of other property or public health and welfare.

The identification, location, and approximate dimensions of all existing water courses, ponds, detention ponds, ditches, channels, floodway and floodplain boundaries, storm water improvements, or similar natural or man-made drainage facilities or features located on the property or within 200 feet of the boundaries of the development that do or will affect or impact storm water drainage on or across the site.

Decatur

The identification and location of all proposed drainage improvements and proposed floodplain/floodway revisions and any proposed easements associated with such drainage improvements.

In situations where a floodplain or existing water course is proposed to remain in an existing or natural state, identification and location of any proposed drainage easements required to contain the 100 year storm based on ultimate development of the watershed.

A Preliminary Drainage Study performed by a registered engineer is required with the submission of a preliminary plat unless one of the following conditions is met. Developments that are excepted from the preliminary drainage study requirement

Adoption of NFIP minimum floodplain management criteria via local regulation. Community Description are still required to provide sufficient drainage information at the final plat stage as required by the Drainage Criteria Manual to support proper sizing of any required or proposed drainage improvements or easements. The proposed development, lot or lots in combination with any upstream drainage area is less than three acres. The preliminary plat is for a single-family lot of five acres or more that does not contain a drainage course outside of a floodplain (Zone AE, A, AO, or shaded X) on the city's Flood Insurance Rate Map. At a minimum, a preliminary drainage study shall contain the following components. A drainage area map at a 1"=200' scale or larger showing all proposed onsite and existing offsite drainage areas with points of concentration/discharge and contours at two foot intervals identified, proposed zoning of each drainage area, existing and proposed drainage features and systems, existing and proposed streets and alleys, proposed crests, sags, and street intersections with proposed flow arrows, existing and proposed floodplains and floodways on or adjacent to the site, any proposed topographic changes that are over 1000 square feet and will include cuts or fills of 2 or more feet, and a north arrow Subdivision Regulations for Final Plat Reviews include: Adequate drainage and elevations meeting requirements of the flood plain map. **Rhome** Location of existing watercourses and other similar drainage features, flood prone land, railroads, highways, and other transportation features. Section 10. Minimum Building Elevation Base flood elevation is established at 844.5 mean sea level. No building permits shall **Runaway Bay** be issued for construction at or below 844.5 msl, except for fences and gazebos. (Ord 464, 5-20-08) Lots located within or adjacent to the 100-year flood plain shall be clearly labeled with the minimum recommended finished floor elevation which shall be no less than 2-foot above the 100-year flood plain elevation. In addition, the plat shall contain a notice which states that no house shall be built in a 100-year flood plain, unless it is in compliance with the minimum finished floor elevation requirements. Prior to any Wise County* construction within the floodplain, a Floodplain Development Permit shall be obtained from the Wise County Floodplain Administrator. No building shall be built in a 100-year flood plain unless the minimum recommended finished floor elevation is complied with. In no case shall the minimum finished floor elevation be less than 2-foot above the 100-year flood plain elevation. Prior to any

Adoption of NFIP minimum floodplain management criteria via local regulation.		
Community	Community Description	
	construction within the floodplain, a Floodplain Development Permit must be obtained from the Wise County Floodplain Administrator.	

Adoption of the latest effective Flood Insurance Rate Map (FIRM), if applicable.		
CID	Community Name	Current Effective Map Date
480677#	BRIDGEPORT, CITY OF	12/16/11(M)
481053#	CHICO, CITY OF	12/16/11(M)
480678#	DECATUR, CITY OF	12/16/11(M)
481054#	RHOME, CITY OF	12/16/11(M)
481618#	RUNAWAY BAY, CITY OF	12/16/11(M)
481051#	WISE COUNTY*	12/16/11

Appointment of a designee or agency to implement the addressed commitments and requirements of the NFIP.

Community	Floodplain Administrator Title
Bridgeport	Analyst, Building Department
Chico	Public Works Director
Decatur	City Engineer
Rhome	Public Works Director
Runaway Bay	City Secretary
Wise County*	Engineer

Implementation and enforcement of local floodplain management regulations to regulate and permit development in SFHAs.

The local floodplain administrators (FPAs) in Wise County serve as the local FPA in addition to their primary position in their respective communities.

When acting as the FPA, duties mainly consist of reviewing permit applications for development in the floodplain to ensure the development will not negatively impact the community's floodplain. They are also responsible for addressing code violations related to the flood damage prevention ordinance and coordinating recovery efforts after a major disaster.

Description of how participants implement the substantial improvement/substantial damage provisions of their floodplain management regulations after an event.

For communities participating in the National Flood Insurance Program (NFIP), structures located in the Special Flood Hazard Area (SFHA) that are substantially modified (either damaged or improved) more than 50 percent are required to comply with local building and floodplain requirements. Local community officials (typically floodplain administrators) are responsible for substantial damage and improvement (SI/SD) determinations. These determinations are required to be in compliance for participation in the NFIP.

How a community and FEMA assess the structure owner's compliance with these requirements is part of the process referred to as Substantial Improvement (SI) and Substantial Damage (SD). After a disaster, communities are required to complete damage assessments for structures in the SFHA.

The following describes the responsibilities that specifically apply to administering the SI/SD requirements, as determined by FEMA and implemented by the communities. The local FPAs seek help from the County and State FPA in implementation due to their lack of experience and the overwhelming events during a disaster:

- Review permit applications to determine whether improvements or repairs of buildings in SFHAs constitute substantial improvement or repair of substantial damage.
- Review descriptions of proposed work submitted by applicants to ensure that all requirements are addressed.
- Review cost estimates of the proposed work submitted by applicants and determine if the
 costs are reasonable for the proposed work or use other acceptable methods to estimate the
 costs.
- Decide the method to determine market value (including which method to use after an event that damages many buildings) and identify the buildings most likely to have sustained substantial damage.
- Review market value appraisals, if submitted by applicants, to determine if the appraisals
 reasonably represent the characteristics of the building and the market value of the structures
 (excluding land value).
- Determine if proposed improvements are substantial improvements based on the costs of the proposed work compared to the market value of the building.
- Determine if damaged buildings are substantially damaged based on cost estimates for repairs compared to the market value of the building before the damage occurred.
- Issue a letter to the property owner to convey the SI/SD determination.
- Retain all versions of the Flood Insurance Rate Maps (FIRMs) and allow citizens to access the maps.
- Maintain in the permit file specific information on all development that occurs within the SFHA and make this information available for public inspection. The documentation includes

Description of how participants implement the substantial improvement/substantial damage provisions of their floodplain management regulations after an event.

the lowest floor elevations, other pertinent elevations such as for machinery and equipment, and flood protection designs.

- Conduct periodic field inspections during construction to ensure that development complies
 with issued permits, work with builders and property owners to correct deficiencies and
 violations, and check for unpermitted development.
- Perform assessments after events that cause damage, inform property owners of the requirement to obtain permits for repairs, and determine whether the damage qualifies as substantial damage.
- Coordinate with property owners and insurance adjusters regarding NFIP flood insurance claims and ICC coverage.

A.2 Capability Assessments

As FEMA states, reviewing each participant's capabilities helps the planning team find and evaluate resources they can use to reduce disaster losses now or in the future. Each Assessment is organized into four types of mitigation capabilities:

- 1. **Planning and Regulatory:** Plans, policies, statutes or regulations that could affect resilience to future natural hazard events and other future conditions, including the potential effects of climate change.
- 2. **Administrative and Technical:** Staff, skills, and tools that can reduce the risk of hazards in the planning area.
- 3. **Financial:** Potential funding resources to support hazard mitigation. These may be local funds and programs, FEMA or other federal programs, and private and non-profit resources.
- 4. **Education and Outreach:** Existing programs that support mitigation and communicate risk. These could include technical assistance, training and education, and awareness campaigns that build capacity.

A.2.1 Results

The following capability assessments required the Local Planning Team of each jurisdiction to examine the ability of their jurisdiction to implement and manage a comprehensive mitigation strategy. The capabilities identified are available pre- and post-disaster to mitigate damages.

City of Bridgeport Assessment *Planning and Regulatory Assessment*

Planning and regulatory capabilities are the plans, policies, codes, and ordinances that prevent and reduce the impacts of natural hazards.

Type of Plans	Have capability?	Level	If Yes	
		∑Local ☐County ☐Region	Does the plan address natural hazards?	□Yes ⊠No
Comprehensive or Master Plan	⊠Yes □No □N/A		Does the plan identify projects to include in the mitigation strategy?	□Yes ⊠No
			Can the plan be used to implement mitigation actions?	⊠Yes □No
Capital Improvement Plan (CIP)	⊠Yes □No □N/A	□ Local □ County □ Region	Does the plan address natural hazards?	⊠Yes □No
			Does the plan identify projects to include in the mitigation strategy?	□Yes ⊠No
			Can the plan be used to implement mitigation actions?	⊠Yes □No
	□Yes ⊠No □N/A		Does the plan address natural hazards?	□Yes □No
Economic Development Plan		Local County Region	Does the plan identify projects to include in the mitigation strategy?	□Yes □No
	,		Can the plan be used to implement mitigation actions?	□Yes □No
Local Emergency	⊠Yes □No	☐Local	Does the plan address natural hazards?	⊠Yes □No
Operations Plan	□N/A	Region	Does the plan identify projects to include in the mitigation strategy?	⊠Yes □No

Type of Plans	Have capability?	Level	If Yes	
			Can the plan be used to implement mitigation actions?	⊠Yes □No
			Does the plan address natural hazards?	⊠Yes □No
Continuity of Operations Plan		☐ Local ☐ County ☐ Region	Does the plan identify projects to include in the mitigation strategy?	☐Yes ⊠No
			Can the plan be used to implement mitigation actions?	⊠Yes □No
			Does the plan address natural hazards?	⊠Yes □No
Transportation Plan	⊠Yes □No □N/A	☐Local ☐County ☐Region	Does the plan identify projects to include in the mitigation strategy?	⊠Yes □No
			Can the plan be used to implement mitigation actions?	⊠Yes □No
			Does the plan address natural hazards?	☐Yes ☐No
Stormwater Management Plan	∐Yes ⊠No ∏N/A	Local County Region	Does the plan identify projects to include in the mitigation strategy?	☐Yes ☐No
			Can the plan be used to implement mitigation actions?	☐Yes ☐No
			Does the plan address natural hazards?	☐Yes ☐No
Community Wildfire Protection Plan		Local County Region	Does the plan identify projects to include in the mitigation strategy?	☐Yes ☐No
			Can the plan be used to implement mitigation actions?	☐Yes ☐No

Type of Plans	Hav cap	e ability?	Leve	l	If Yes			
					Does the plan address natural hazards?	☐Yes ☐No		
Green Infrastructure Plan		☐Yes ☑No	□C ₀	Local County Region	Does the plan identify projects to include in the mitigation strategy?	☐Yes ☐No		
	□N/A			281011	Can the plan be used to implement mitigation actions?	□Yes □No		
					Does the plan address natural hazards?	□Yes ⊠No		
Parks or Open Space Plan		'es No N/A		ounty	Does the plan identify projects to include in the mitigation strategy?	□Yes ⊠No		
		7	Region		Писвіон		Can the plan be used to implement mitigation actions?	⊠Yes □No
					Does the plan address natural hazards?	⊠Yes □No		
Hazard Mitigation Plan	⊠Yes □No □N/A		∐Lo	Does the plan identity	⊠Yes □No			
		7			Can the plan be used to implement mitigation actions?	⊠Yes □No		
Land Use Planning and								
Ordinances		Have capabi	lity?	If Yes				
Zoning Ordinance		meas impac Is the		ordinance an effective ure for reducing hazard cts?	⊠Yes □No			
				ordinance adequately nistered and enforced?	⊠Yes □No			
Subdivision Ordinance		⊠Yes □No			ordinance an effective ure for reducing hazard cts?	⊠Yes □No		

	□N/A	Is the ordinance a		⊠Yes □No
		Is the FIRM adequates administered and		⊠Yes □No
	⊠Yes	Is the ordinance a measure for redu impacts?		□Yes □No
Floodplain Ordinance	∐No □N/A	Is the ordinance a	• •	□Yes □No
Flood Insurance Rate Maps	⊠Yes □No	Is the FIRM an eff for reducing haza		□Yes ⊠No
(FIRM)	□N/A	Is the FIRM adequately administered and enforced?		⊠Yes □No
Natural Hazard Specific Ordinance (e.g., stormwater,	□Yes ☑No □N/A	Is the ordinance an effective measure for reducing hazard impacts?		□Yes □No
wildfire)		Is the ordinance a		□Yes □No
Acquisition of land for open space and public recreation	□Yes ⊠No	Is the ordinance a measure for redu impacts?		□Yes □No
uses	□N/A	Is the ordinance a	•	☐Yes ☐No
		T	T	
Building Code, Permitting, and	d Inspections	Have capability?		
Building Code		⊠Yes □No □N/A	Version/Year: 2015	
Building Code Effectiveness Grading Schedule (BGEGS) Score		□Yes □No ⊠N/A	Score:	

Building Code, Permitting, and Inspections	Have capability?	
Fire Department ISO Rating	⊠Yes □No □N/A	Rating: 4
Site Plan Review Requirements	⊠Yes □No □N/A	Review method: Contact

Administrative and Technical Assessment

Administrative and technical capabilities include staff and their skills and tools that can be used for mitigation planning and to implement specific mitigation actions.

Have capability?	If Yes
⊠Yes □No □N/A	Describe capability: Planning & Zoning Commission, consisting of five members, oversees the city's physical development while ensuring the community's safety and welfare through a combination of quality development review and long-range planning
⊠Yes	Describe capability: Identifies hazards, conducts a risk and vulnerability assessment, and creates and monitors mitigation actions.
⊠Yes □No □N/A	Describe capability: Contract tree trimming business to mitigate brush from Municipal electric system.
⊠Yes □No □N/A	Describe capability: MUA with Wise County for law enforcement services and OEM.

Staff	Have capability? FT/PT*	If Yes				
*Full-time (FT) or part-time (PT)	*Full-time (FT) or part-time (PT) position					
Chief Building Official	☐Yes-FT	Is staffing adequate to enforce regulations?	⊠ Yes			

Staff	Have capability? FT/PT*	If Yes	
*Full-time (FT) or part-time (PT)	position		
	⊠Yes- PT ☐No		□No
	□N/A	Is staff trained on natural hazards and mitigation?	∑ Yes □No
Parks and Recreation Director	☐Yes-FT ☐Yes- PT	Is staffing adequate to enforce regulations?	Yes
Parks and Recreation Director	⊠No □N/A	Is staff trained on natural hazards and mitigation?	Yes
	☐Yes-FT ☐Yes- PT ☐No ☐N/A	Is staffing adequate to enforce regulations?	☐ Yes ☑No
Emergency Manager		Is staff trained on natural hazards and mitigation?	⊠ Yes □No
Community Planner	☐Yes-FT ☐Yes- PT	Is staffing adequate to enforce regulations?	Yes
Community Flame	⊠No □N/A	Is staff trained on natural hazards and mitigation?	Yes
Civil Engineer	⊠Yes-FT □Yes- PT	Is staffing adequate to enforce regulations?	∑ Yes □No
Civil Engineer	□No □N/A	Is staff trained on natural hazards and mitigation?	Yes

Staff	Have capability? FT/PT*	If Yes	
*Full-time (FT) or part-time (PT) position		
	⊠Yes-FT □Yes- PT	Is staffing adequate to enforce regulations?	⊠ Yes □No
GIS Coordinator	□No □N/A	Is staff trained on natural hazards and mitigation?	⊠ Yes □No
Public Works Director		Is staffing adequate to enforce regulations?	☐ Yes ⊠No
		Is staff trained on natural hazards and mitigation?	⊠ Yes □No
Fire Chief		Is staffing adequate to enforce regulations? Full Time Position is vacant	☐ Yes ☑No
Fire Chief		Is staff trained on natural hazards and mitigation?	⊠ Yes □No
Environmental Director	□Yes-FT □Yes- PT ☑No □N/A	Is staffing adequate to enforce regulations?	Yes
		Is staff trained on natural hazards and mitigation?	Yes

Technical	Have capability?	If Yes
Warning Systems/Services	⊠Yes	Describe capability: City wide outdoor warning signal; Alert notification

Technical	Have capability?	If Yes		
(e.g., Reverse 911, outdoor warning signals)	□No □N/A	Has capability been used to assess or mitigate risk in the past?	⊠Yes □No	
		If yes, for what type of hazard event? Severe West Tornado, Severe Thunderstorm	ather,	
	⊠Yes	Describe capability: Floodplain administrator, pub and GIS uses flood data to complete projects.	olic works,	
Hazard data and information	□No □N/A	Has capability been used to assess or mitigate risk in the past?	⊠Yes □No	
		If yes, for what type of hazard event? Flooding		
	⊠Yes	Describe capability: limited to less extensive grant applications.		
Grant writing	□No □N/A	Has capability been used to assess or mitigate risk in the past?	⊠Yes □No	
		If yes, for what type of hazard event? Stormwate	r flooding	
HaZUS analysis or GIS		Describe capability: The City of Bridgeport currently has a personal Geographic Information System (GIS) but with limited functionality and outdated, inaccurate, or non-existing data. The city has requested a bid for data acquisition and system upgrade implementation.		
software	 □N/A	Has capability been used to assess or mitigate risk in the past?	□Yes ⊠No	
		If yes, for what type of hazard event?		

Education and Outreach Assessment

Education and outreach programs and methods can be used to implement mitigation activities and communicate hazard-related information.

Program or Organization	Have capability?	If Yes	
Local citizen groups or non- profit organizations focused	⊠Yes	Could the program or organization help implement future mitigation activities?	⊠ Yes

Program or Organization	Have capability?	If Yes	
on environmental protection, emergency preparedness,	□No □N/A		No
access and functional needs populations, etc.		Describe program or organization and how it rel to disaster resilience and mitigation: Red Cross, Salvation Army	
Ongoing public education or information program (e.g., responsible water use, fire safety, household	⊠Yes □No	Could the program or organization help implement future mitigation activities?	Yes No
preparedness, environmental education)	□N/A	Describe program or organization and how it rel to disaster resilience and mitigation: Post notice City Hall; Flyers at City Hall	
Natural disaster or safety related school programs	⊠Yes □No □N/A	Could the program or organization help implement future mitigation activities?	Yes No
related serioor programs		Describe program or organization and how it rel to disaster resilience and mitigation: Tornado, F Active Shooter and Shelter in place Programs	
Public/private partnership initiatives addressing disaster-related issues	∐Yes ⊠No	implement future mitigation activities?	Yes No
disuster related issues	∐N/A	Describe program or organization and how it related to disaster resilience and mitigation:	lates
StormReady certification	□Yes ☑No □N/A		
Firewise Communities Certification	□Yes ⊠No □N/A		

Financial Assessment

Identify whether your jurisdiction has access to or is eligible to use the following funding resources for hazard mitigation.

Funding Resources	Have capability?	If Yes	
Capital Improvements Project funding	⊠Yes	Could the resource be used to fund future mitigation activities?	Yes
	□No □N/A	Has the funding resource been used in past for mitigation activities?	☐ Yes ⊠No
		If yes, for what type of mitigation activities?	
	⊠Yes	Could the resource be used to fund future mitigation activities?	Yes
Authority to levy taxes for specific purposes	□No □N/A	Has the funding resource been used in past for mitigation activities?	Yes
		If yes, for what type of mitigation activities?	⊠No
	⊠Yes □No □N/A	Could the resource be used to fund future mitigation activities?	Yes
Fees for water, sewer, gas, and/or electric services		Has the funding resource been used in past for mitigation activities for mitigation activities?	☐ Yes ⊠No
		If yes, for what type of mitigation activities?	
Impact fees for new development	□Yes ⊠No □N/A	Could the resource be used to fund future mitigation activities?	Yes
		Has the funding resource been used in past for mitigation activities?	Yes
		If yes, for what type of mitigation activities?	
Stormwater utility fee	☐Yes	Could the resource be used to fund future mitigation activities?	Yes

Funding Resources	Have capability?	If Yes	
	⊠No		□No
	□N/A	Has the funding resource been used in past for mitigation activities?	Yes
		If yes, for what type of mitigation activities?	
Incurrence of debt through general obligation	⊠Yes	Could the resource be used to fund future mitigation activities?	Yes
bonds and/or special tax bonds	□No □N/A	Has the funding resource been used in past for mitigation activities?	Yes
		If yes, for what type of mitigation activities?	⊠No
		if yes, for what type of finingation activities:	
Incur debt through private activities	□Yes ⊠No □N/A	Could the resource be used to fund future mitigation activities?	Yes No
		Has the funding resource been used in past for mitigation activities?	Yes
		If yes, for what type of mitigation activities?	
	□Yes ☑No □N/A	Could the resource be used to fund future mitigation activities?	Yes
Community Development Block Grant		Has the funding resource been used in past for mitigation activities?	Yes
		If yes, for what type of mitigation activities? Wastewater system improvements	ater and
Other federal funding	⊠Yes	Could the resource be used to fund future mitigation activities?	Yes
programs (e.g. FEMA mitigation grants)	□No □N/A	Has the funding resource been used in past for mitigation activities?	Yes No

Funding Resources	Have capability?	If Yes
		If yes, for what type of mitigation activities? Drainage, Water and Wastewater after flooding
State funding programs	☐Yes	Could the resource be used to fund future yes intigation activities?
	□No ⊠N/A	Has the funding resource been used in past for mitigation activities?
		If yes, for what type of mitigation activities?

City of Chico Assessment

Planning and Regulatory Assessment

Planning and regulatory capabilities are the plans, policies, codes, and ordinances that prevent and reduce the impacts of natural hazards.

Type of Plans	Have capability?	Level	If Yes	
			Does the plan address natural hazards?	☐Yes ☐No
Comprehensive or Master Plan	∐Yes ⊠No □N/A	Local County Region	Does the plan identify projects to include in the mitigation strategy?	☐Yes ☐No
			Can the plan be used to implement mitigation actions?	□Yes □No
			Does the plan address natural hazards?	□Yes □No
Capital Improvement Plan (CIP)	∐Yes □No ⊠N/A	☐ Local ☐ County ☐ Region	Does the plan identify projects to include in the mitigation strategy?	□Yes □No
			Can the plan be used to implement mitigation actions?	□Yes □No
	□Yes □No ⊠N/A		Does the plan address natural hazards?	□Yes □No
Economic Development Plan		☐ Local ☐ County ☐ Region	Does the plan identify projects to include in the mitigation strategy?	☐Yes ☐No
		Licelon	Can the plan be used to implement mitigation actions?	□Yes □No
Local Emergency	⊠Yes	Local	Does the plan address natural hazards?	□Yes ⊠No
Operations Plan	□No □N/A	⊠County □Region	Does the plan identify projects to include in the mitigation strategy?	□Yes ⊠No

Type of Plans	Have capability?	Level	If Yes	
			Can the plan be used to implement mitigation actions?	□Yes ⊠No
			Does the plan address natural hazards?	□Yes □No
Continuity of Operations Plan	∐Yes ⊠No □N/A	Local County Region	Does the plan identify projects to include in the mitigation strategy?	□Yes □No
			Can the plan be used to implement mitigation actions?	□Yes □No
Transportation Plan	□Yes ⊠No □N/A	☐Local☐County☐Region☐	Does the plan address natural hazards?	□Yes □No
			Does the plan identify projects to include in the mitigation strategy?	□Yes □No
			Can the plan be used to implement mitigation actions?	□Yes □No
	□Yes ⊠No □N/A	☐Local ☐County ☐Region	Does the plan address natural hazards?	□Yes □No
Stormwater Management Plan			Does the plan identify projects to include in the mitigation strategy?	□Yes □No
			Can the plan be used to implement mitigation actions?	□Yes □No
Community Wildfire Protection Plan	□Yes ⊠No □N/A		Does the plan address natural hazards?	□Yes □No
		Local County Region	Does the plan identify projects to include in the mitigation strategy?	□Yes □No
			Can the plan be used to implement mitigation actions?	□Yes □No

Type of Plans	Have capability?	Leve	l	If Yes	
				Does the plan address natural hazards?	□Yes □No
Green Infrastructure Plan			ocal ounty egion	Does the plan identify projects to include in the mitigation strategy?	☐Yes ☐No
			561011	Can the plan be used to implement mitigation actions?	□Yes □No
				Does the plan address natural hazards?	□Yes □No
Parks or Open Space Plan			Local County Region	Does the plan identify projects to include in the mitigation strategy?	☐Yes ☐No
			561011	Can the plan be used to implement mitigation actions?	☐Yes ☐No
				Does the plan address natural hazards?	⊠Yes □No
Hazard Mitigation Plan	⊠Yes □No □N/A		ocal ounty egion	Does the plan identify projects to include in the mitigation strategy?	⊠Yes □No
	∐N/A [Can the plan be used to implement mitigation actions?	⊠Yes □No
Land Use Planning and Ordinances	Have capab	ility?	If Yes.		
Zoning Ordinance	⊠Yes □No		Is the ordinance an effective measure for reducing hazard impacts?		⊠Yes □No
Lonning Ordinance	□N/A			ordinance adequately nistered and enforced?	⊠Yes □No

 \boxtimes Yes

□No

Subdivision Ordinance

Is the ordinance an effective

measure for reducing hazard

impacts?

Yes

⊠No

Land Use Planning and Ordinances	Have capability?	If Yes		
	□N/A	Is the ordinance a administered and	•	∑Yes □No
Floodplain Ordinance	⊠Yes □No	Is the ordinance an effective measure for reducing hazard impacts?		□Yes ⊠No
riooupiain Orumance	□N/A	Is the ordinance a administered and	•	⊠Yes □No
Flood Insurance Rate Maps	⊠Yes □No	Is the FIRM an eff for reducing haza		□Yes ⊠No
(FIRM)	□N/A	Is the FIRM adequ administered and		⊠Yes □No
Natural nazaru specific —	□Yes ⊠No	Is the ordinance an effective measure for reducing hazard impacts?		☐Yes ☐No
wildfire)	□N/A	Is the ordinance adequately administered and enforced?		☐Yes ☐No
Acquisition of land for open space and public recreation	⊠Yes □No □N/A	Is the ordinance an effective measure for reducing hazard impacts?		□Yes □No
uses		Is the ordinance adequately administered and enforced?		□Yes □No
		Have		
Building Code, Permitting, and	d Inspections	capability?		
Building Code		⊠Yes □No □N/A	Version/Year: 2015	
Building Code Effectiveness Grading Schedule (BGEGS) Score		☐Yes ☐No Score: ☑N/A		
Fire Department ISO Rating		⊠Yes	Rating: 8	

Building Code, Permitting, and Inspections	Have capability?	
	□No	
	□N/A	
Site Plan Review Requirements	□Yes □No ☑N/A	Review method:

Administrative and Technical Assessment

Administrative and technical capabilities include staff and their skills and tools that can be used for mitigation planning and to implement specific mitigation actions.

Administration	Have capability?	If Yes
Planning Commission	□Yes ☑No □N/A	Describe capability:
Mitigation Planning Committee	⊠Yes	Describe capability: Identifies hazards, conducts a risk and vulnerability assessment, and creates and monitors mitigation actions.
Maintenance programs to reduce risk (e.g., tree trimming, clearing drainage systems)	⊠Yes □No □N/A	Describe capability: Public Works maintains streets and easement landscaping.
Mutual Aid Agreements	⊠Yes □No □N/A	Describe capability: Have various response MAAs with neighboring communities.

Staff	Have capability? FT/PT*	If Yes	
*Full-time (FT) or part-time (PT) position		
Chief Building Official	⊠Yes-FT □Yes- PT	Is staffing adequate to enforce regulations?	⊠ Yes □No

	□No □N/A	Is staff trained on natural hazards and mitigation?	☐ Yes ☑No
Clandalain Administrator	□Yes-FT ☑Yes- PT	Is staffing adequate to enforce regulations?	⊠ Yes □No
Floodplain Administrator	□No □N/A	Is staff trained on natural hazards and mitigation?	⊠ Yes □No
Emorgoney Managor	☐Yes-FT ☐Yes- PT	Is staffing adequate to enforce regulations?	Yes
Emergency Manager	⊠No □N/A	Is staff trained on natural hazards and mitigation?	Yes
	☐Yes-FT ☐Yes- PT ☐No ☑N/A	Is staffing adequate to enforce regulations?	Yes
Community Planner		Is staff trained on natural hazards and mitigation?	Yes
Civil Engineer	☐Yes-FT ☐Yes- PT	Is staffing adequate to enforce regulations?	Yes
Civil Engineer	⊠No □N/A	Is staff trained on natural hazards and mitigation?	Yes
	☐Yes-FT ☐Yes- PT	Is staffing adequate to enforce regulations?	Yes
GIS Coordinator	□No ⊠N/A	Is staff trained on natural hazards and mitigation?	Yes

Public Works Director	☐Yes-FT ☑Yes- PT ☐No ☐N/A	Is staffing adequate to enforce regulations?	Yes
		Is staff trained on natural hazards and mitigation?	Yes
Fire Chief	☐Yes-FT ☑Yes- PT ☐No ☐N/A	Is staffing adequate to enforce regulations?	Yes
		Is staff trained on natural hazards and mitigation?	Yes
Environmental Director	□Yes-FT □Yes- PT □No □N/A	Is staffing adequate to enforce regulations?	Yes
		Is staff trained on natural hazards and mitigation?	Yes
Technical	Have	If Yes	
Warning Systems/Services (e.g., Reverse 911, outdoor warning signals)	capability?		
	□Yes □No ☑N/A	Describe capability: Has capability been used to assess of mitigate risk in the past?	r Yes
		If yes, for what type of hazard event	?
Hazard data and information	□Yes ⊠No □N/A	Describe capability:	
		Has capability been used to assess of mitigate risk in the past?	r Yes

Technical	Have capability?	If Yes
		If yes, for what type of hazard event?
Grant writing	⊠Yes □No □N/A	Describe capability: Can contract with a third-party grant writer.
		Has capability been used to assess or mitigate risk in the past? No
		If yes, for what type of hazard event?
HaZUS analysis or GIS software	□Yes □No ⊠N/A	Describe capability:
		Has capability been used to assess or mitigate risk in the past? No
		If yes, for what type of hazard event?

Education and Outreach Assessment

Education and outreach programs and methods can be used to implement mitigation activities and communicate hazard-related information.

Program or Organization	Have capability?	If Yes
Local citizen groups or non- profit organizations focused on environmental protection, emergency preparedness, access and functional needs	□Yes ⊠No □N/A	Could the program or organization help implement future mitigation activities? Describe program or organization and how it relates
populations, etc.		to disaster resilience and mitigation:
Ongoing public education or information program (e.g., responsible water use, fire safety, household	□Yes ⊠No □N/A	Could the program or organization help implement future mitigation activities? No

Program or Organization	Have capability?	If Yes	
preparedness, environmental education)		Describe program or organization and how it related to disaster resilience and mitigation:	ates
Natural disaster or safety related school programs	□Yes ⊠No	Could the program or organization help implement future mitigation activities?	Yes No
	□N/A	Describe program or organization and how it related to disaster resilience and mitigation:	ates
Public/private partnership initiatives addressing disaster-related issues	□Yes ⊠No □N/A	Could the program or organization help implement future mitigation activities?	Yes No
disaster related issues		Describe program or organization and how it related to disaster resilience and mitigation:	ates
StormReady certification	□Yes ☑No □N/A		
Firewise Communities Certification	□Yes ☑No □N/A		

Financial Assessment

Identify whether your jurisdiction has access to or is eligible to use the following funding resources for hazard mitigation.

Funding Resources	Have capabilit y?	If Yes	
Capital Improvements	□Yes ⊠No	Could the resource be used to fund future mitigation activities?	☐Yes ☐No
Project funding	⊠NO □N/A	Has the funding resource been used in past for mitigation activities?	☐Yes ☐No

Funding Resources	Have capabilit y?	If Yes			
	•	If yes, for what type of mitigation activities?			
Authority to levy taxes for specific purposes	Yes	Could the resource be used to fund future mitigation activities?	☐Yes ☐No		
	⊠No □N/A	Has the funding resource been used in past for mitigation activities?	☐Yes ☐No		
		If yes, for what type of mitigation activities?	T		
Fees for water, sewer, gas,	⊠Yes	Could the resource be used to fund future mitigation activities?	☐Yes ⊠No		
and/or electric services	□No □N/A	Has the funding resource been used in past for mitigation activities for mitigation activities?	☐Yes ⊠No		
		If yes, for what type of mitigation activities?			
Impact fees for new development	□Yes □No ⊠N/A	Could the resource be used to fund future mitigation activities?	☐Yes ☐No		
		Has the funding resource been used in past for mitigation activities?	☐Yes ☐No		
		If yes, for what type of mitigation activities?			
	□Yes □No ⊠N/A	Could the resource be used to fund future mitigation activities?	☐Yes ☐No		
Stormwater utility fee		Has the funding resource been used in past for mitigation activities?	☐Yes ☐No		
		If yes, for what type of mitigation activities?			
Incurrence of debt through	Yes	Could the resource be used to fund future mitigation activities?	☐Yes ☐No		
general obligation bonds and/or special tax bonds	□No ⊠N/A	Has the funding resource been used in past for mitigation activities?	☐Yes ☐No		
		If yes, for what type of mitigation activities?			
Incur debt through private activities	☐Yes	Could the resource be used to fund future mitigation activities?	☐Yes ☐No		
	⊠No □N/A	Has the funding resource been used in past for mitigation activities?	☐Yes ☐No		

Funding Resources	Have capabilit y?	If Yes	
		If yes, for what type of mitigation activities?	
Community Development	Yes	Could the resource be used to fund future mitigation activities?	□Yes □No
Block Grant	⊠No □N/A	Has the funding resource been used in past for mitigation activities?	☐Yes ☐No
		If yes, for what type of mitigation activities?	
Other federal funding programs (e.g. FEMA mitigation grants)	□Yes ☑No □N/A	Could the resource be used to fund future mitigation activities?	☐Yes ☐No
		Has the funding resource been used in past for mitigation activities?	☐Yes ☐No
		If yes, for what type of mitigation activities?	
	□Yes ⊠No □N/A	Could the resource be used to fund future mitigation activities?	☐Yes ☐No
State funding programs		Has the funding resource been used in past for mitigation activities?	☐Yes ☐No
		If yes, for what type of mitigation activities?	

City of Decatur Assessment

Planning and Regulatory Assessment

Planning and regulatory capabilities are the plans, policies, codes, and ordinances that prevent and reduce the impacts of natural hazards.

Type of Plans	Have capability?	Level	If Yes	
		_	Does the plan address natural hazards?	□Yes ⊠No
Comprehensive or Master Plan	⊠Yes □No □N/A		Does the plan identify projects to include in the mitigation strategy?	□Yes ⊠No
			Can the plan be used to implement mitigation actions?	□Yes ⊠No
			Does the plan address natural hazards?	☐Yes ☐No
Capital Improvement Plan (CIP)	∐Yes ⊠No □N/A	Local County Region	Does the plan identify projects to include in the mitigation strategy?	□Yes □No
]	Can the plan be used to implement mitigation actions?	□Yes □No
	□Yes ☑No □N/A		Does the plan address natural hazards?	□Yes □No
Economic Development Plan		Local County Region	Does the plan identify projects to include in the mitigation strategy?	□Yes □No
			Can the plan be used to implement mitigation actions?	□Yes □No
Local Emergency	⊠Yes □No □N/A	Local	Does the plan address natural hazards?	⊠Yes □No
Operations Plan		☐ County☐ Region	Does the plan identify projects to include in the mitigation strategy?	⊠Yes □No

Type of Plans	Have capability?	Level	If Yes	
			Can the plan be used to implement mitigation actions?	⊠Yes □No
			Does the plan address natural hazards?	□Yes □No
Continuity of Operations Plan	∐Yes ⊠No □N/A	Local County Region	Does the plan identify projects to include in the mitigation strategy?	□Yes □No
		Linegion	Can the plan be used to implement mitigation actions?	□Yes □No
	Does the plan address natural hazards?		⊠Yes □No	
Transportation Plan	⊠Yes □No □N/A	∐Local ☐County ☐Region	Does the plan identify projects to include in the mitigation strategy?	⊠Yes □No
			Can the plan be used to implement mitigation actions?	⊠Yes □No
	□Yes ⊠No □N/A	☐Local☐County☐Region☐	Does the plan address natural hazards?	□Yes □No
Stormwater Management Plan			Does the plan identify projects to include in the mitigation strategy?	□Yes □No
			Can the plan be used to implement mitigation actions?	□Yes □No
Community Wildfire Protection Plan (Expired)	□Yes ⊠No □N/A		Does the plan address natural hazards?	□Yes □No
		Local County Region	Does the plan identify projects to include in the mitigation strategy?	□Yes □No
		I/CESIOII	Can the plan be used to implement mitigation actions?	□Yes □No

Type of Plans	Have capability?	Leve	l	If Yes	
	_			Does the plan address natural hazards?	☐Yes ☐No
Green Infrastructure Plan			☐ Local ☐ County ☐ Region	Does the plan identify projects to include in the mitigation strategy?	□Yes □No
			zgioni	Can the plan be used to implement mitigation actions?	□Yes □No
				Does the plan address natural hazards?	☐Yes ☐No
Parks or Open Space Plan			ocal ounty egion	Does the plan identify projects to include in the mitigation strategy?	☐Yes ☐No
			-6.0	Can the plan be used to implement mitigation actions?	☐Yes ☐No
				Does the plan address natural hazards?	⊠Yes □No
Hazard Mitigation Plan	⊠Yes □No □N/A		ocal ounty egion	Does the plan identify projects to include in the mitigation strategy?	⊠Yes □No
	∐N/A		28.0	Can the plan be used to implement mitigation actions?	⊠Yes □No
			I		
Land Use Planning and Ordinances	Have capab	ility?	If Yes.		
Zoning Ordinance	⊠Yes			ordinance an effective ure for reducing hazard cts?	□Yes ⊠No
Zonnig Oraniance	□NO □N/A			ordinance adequately nistered and enforced?	□Yes ⊠No

⊠Yes

□No

Subdivision Ordinance

Is the ordinance an effective

measure for reducing hazard

impacts?

⊠Yes

□No

Land Use Planning and Ordinances	Have capability?	If Yes		
	□N/A	Is the ordinance a administered and	• •	⊠Yes □No
	⊠Yes □No	Is the ordinance an effective measure for reducing hazard impacts?		□Yes ⊠No
Floodplain Ordinance	□N/A	Is the ordinance a administered and	• •	□Yes ⊠No
Flood Insurance Rate Maps	⊠Yes □No	Is the FIRM an effective measure for reducing hazard impacts?		⊠Yes □No
(FIRM)	□N/A	Is the FIRM adequ administered and	•	⊠Yes □No
Natural Hazard Specific Ordinance (e.g., stormwater,	□Yes ⊠No	Is the ordinance an effective measure for reducing hazard impacts?		☐Yes ☐No
wildfire)	□N/A	Is the ordinance adequately administered and enforced?		☐Yes ☐No
Acquisition of land for open space and public recreation	⊠Yes □No	Is the ordinance an effective measure for reducing hazard impacts?		⊠Yes □No
uses	□N/A	Is the ordinance adequately administered and enforced?		⊠Yes □No
		Have		
Building Code, Permitting, and	d Inspections	capability?		
Building Code		⊠Yes □No □N/A	Version/Year: 2	018 IBC
Building Code Effectiveness Gr (BGEGS) Score	ading Schedule	□Yes ☑No □N/A	Score:	
Fire Department ISO Rating		∑Yes	Rating: 3 / 3Y	

	□No □N/A	
Site Plan Review Requirements	⊠Yes □No □N/A	Review method: In house / contracted

Administrative and Technical Assessment

Administrative and technical capabilities include staff and their skills and tools that can be used for mitigation planning and to implement specific mitigation actions.

Administration	Have capability?	If Yes
Planning Commission	⊠Yes □No □N/A	Describe capability: Planning & Zoning is comprised of six commissioners and a chairman appointed by the City Council. The P&Z acts as an advisory board to the City Council in matters relating to zoning; public improvements; civic improvements; City planning; traffic patterns; public utilities; development of regulatory ordinances; annexations; and such other matters related to City improvements as the Commission and Council may deem beneficial to the City.
Mitigation Planning Committee	⊠Yes	Describe capability: Identifies hazards, conducts a risk and vulnerability assessment, and creates and monitors mitigation actions.
Maintenance programs to reduce risk (e.g., tree trimming, clearing drainage systems)	⊠Yes □No □N/A	Describe capability: City employees continually perform maintenance throughout the City of Decatur to decrease vulnerability.
Mutual Aid Agreements	⊠Yes □No □N/A	Describe capability: Various MAA's with response agencies.
Staff	Have capability? FT/PT*	If Yes
*Full-time (FT) or part-time (PT) position	
Chief Building Official	⊠Yes-FT	Is staffing adequate to enforce regulations? Yes

Staff	Have capability? FT/PT*	If Yes	
*Full-time (FT) or part-time (PT) position		
	☐Yes- PT ☐No		⊠No
	□N/A	Is staff trained on natural hazards and mitigation?	⊠ Yes □No
Floodplain Administrator	☐Yes-FT ☐Yes- PT	Is staffing adequate to enforce regulations?	Yes
Tioodpiain Administrator	⊠No □N/A	Is staff trained on natural hazards and mitigation?	Yes
Emergency Manager	□Yes-FT □Yes- PT ☑No □N/A	Is staffing adequate to enforce regulations?	Yes
*Fire Chief fills this role also since funding isn't available		Is staff trained on natural hazards and mitigation?	Yes
Community Planner	⊠Yes-FT □Yes- PT	Is staffing adequate to enforce regulations? The City is growing rapidly, need more staff	☐ Yes ⊠No
	□No □N/A	Is staff trained on natural hazards and mitigation?	⊠ Yes □No
Civil Engineer	⊠Yes-FT □Yes- PT	Is staffing adequate to enforce regulations? The City is growing rapidly, need more staff	☐ Yes ⊠No
	□no □n/a	Is staff trained on natural hazards and mitigation?	⊠ Yes □No

Staff		Have capabi FT/PT*	-	If Yes		
*Full-time (FT) or part-ti	me (PT)					
GIS Coordinator				Is staffing adequate to enforce regulations? The City is growing rapidly, need more staff Is staff trained on natural hazards and mitigation?	☐ Yes ☑No ☑ Yes ☐No	
Public Works Director Public Works Director No N/A			Is staffing adequate to enforce regulations? The City is growing rapidly, need more staff	☐ Yes ⊠No		
				Is staff trained on natural hazards and mitigation?	Yes	
Fire Chief		∑Yes-FT □Yes- PT		Is staffing adequate to enforce regulations? The City is growing rapidly, need more staff	Yes	
		∐No ∐N/A		Is staff trained on natural hazards and mitigation?	⊠ Yes □No	
Environmental Director		☐Yes-FT ☐Yes- PT		Is staffing adequate to enforce regulations?	Yes	
No □N/A			Is staff trained on natural hazards and mitigation?	Yes		
Technical	Have capabi	ility?	If Yes			
Warning Systems/Services	⊠Yes	es Describe capability: Outdoor warning siren				

Technical	Have capability?	If Yes			
(e.g., Reverse 911, outdoor warning signals)	□No □N/A	Has capability been used to assess or mitigate risk in the past?	⊠Yes □No		
		If yes, for what type of hazard event? Various weather events			
	⊠Yes	Describe capability: Identify repetitive damages a vulnerable areas after storms.	nd locate		
Hazard data and information	□No □N/A	Has capability been used to assess or mitigate risk in the past?	⊠Yes □No		
		If yes, for what type of hazard event? Severe weather			
	□Yes ☑No □N/A	Describe capability:			
Grant writing		Has capability been used to assess or mitigate risk in the past?	☐Yes ☐No		
		If yes, for what type of hazard event?			
HaZUS analysis or GIS	⊠Yes □No □N/A	Describe capability: The GIS Section of Planning & Development creates and maintains geographic data used to provide data analysis and mapping services in support of citywide project implementation			
software		Has capability been used to assess or mitigate risk in the past?	☐Yes ⊠No		
		If yes, for what type of hazard event?			

Education and Outreach Assessment

Education and outreach programs and methods can be used to implement mitigation activities and communicate hazard-related information.

Program or Organization	Have capability?	If Yes	
Local citizen groups or non- profit organizations focused	Yes	Could the program or organization help implement future mitigation activities?	Yes

Program or Organization	Have capability?	If Yes
on environmental protection, emergency preparedness, access and functional needs populations, etc.	No □N/A	Describe program or organization and how it relates to disaster resilience and mitigation:
Ongoing public education or information program (e.g., responsible water use, fire safety, household	⊠Yes □No	Could the program or organization help implement future mitigation activities?
preparedness, environmental education)	□N/A	Describe program or organization and how it relates to disaster resilience and mitigation: Utilities Department provides regular water quality report.
Natural disaster or safety related school programs	⊠Yes □No □N/A	Could the program or organization help implement future mitigation activities? No
		Describe program or organization and how it relates to disaster resilience and mitigation: School staff hold regular severe weather drills.
Public/private partnership initiatives addressing disaster-related issues	□Yes ⊠No □N/A	Could the program or organization help implement future mitigation activities? No
		Describe program or organization and how it relates to disaster resilience and mitigation:
StormReady certification	⊠Yes □No □N/A	StormReady communities are better prepared to save lives from the onslaught of severe weather through advanced planning, education and awareness. To be officially StormReady, a community must: • Establish a 24-hour warning point and emergency operations center; • Have more than one way to receive severe weather warnings and forecasts and to alert the public; • Create a system that monitors weather conditions locally;

Program or Organization	Have capability?	If Yes
		Promote the importance of public
		readiness through community seminars;
		and
		 Develop a formal hazardous weather plan,
		which includes training severe weather spotters
		and holding emergency exercises.
	□Yes	
Firewise Communities Certification	⊠No	
Certification	□N/A	

Financial Assessment

Identify whether your jurisdiction has access to or is eligible to use the following funding resources for hazard mitigation.

Funding Resources	Have capability?	If Yes			
Capital Improvements Project funding	□Yes ⊠No □N/A	Could the resource be used to fund future mitigation activities?	Yes		
		Has the funding resource been used in past			
		If yes, for what type of mitigation activities?			
Authority to levy taxes for specific purposes	□Yes ☑No □N/A	Could the resource be used to fund future mitigation activities?	Yes		
		Has the funding resource been used in past for mitigation activities?	Yes		
		If yes, for what type of mitigation activities?			
Fees for water, sewer, gas, and/or electric services	⊠Yes □No	Could the resource be used to fund future mitigation activities?	☐ Yes ☑No		

Funding Resources	Have capability?	If Yes	
	□N/A	Has the funding resource been used in past for mitigation activities for mitigation activities?	Yes
		If yes, for what type of mitigation activities?	
Impact fees for new	⊠Yes	Could the resource be used to fund future mitigation activities? Possibly - not likely	⊠ Yes □No
development	□No □N/A	Has the funding resource been used in past for mitigation activities?	☐ Yes ⊠No
		If yes, for what type of mitigation activities?	
Stormwater utility fee	□Yes ⊠No □N/A	Could the resource be used to fund future mitigation activities?	Yes
		Has the funding resource been used in past for mitigation activities?	Yes
		If yes, for what type of mitigation activities?	
Incurrence of debt through	⊠Yes □No □N/A	Could the resource be used to fund future mitigation activities? Possibly- not likely	⊠ Yes □No
general obligation bonds and/or special tax bonds		Has the funding resource been used in past for mitigation activities?	Yes
		If yes, for what type of mitigation activities?	
Incur debt through private activities	□Yes ⊠No □N/A	Could the resource be used to fund future mitigation activities?	Yes
		Has the funding resource been used in past for mitigation activities?	Yes
		If yes, for what type of mitigation activities?	
Community Development Block Grant	□Yes	Could the resource be used to fund future mitigation activities?	Yes

Funding Resources	Have capability?	If Yes	
	⊠No		No
	□N/A	Has the funding resource been used in past for mitigation activities?	Yes
		If yes, for what type of mitigation activities?	
Other federal funding programs (e.g. FEMA mitigation grants)	⊠Yes	Could the resource be used to fund future mitigation activities?	Yes
	□No □N/A	Has the funding resource been used in past for mitigation activities?	☐ Yes ⊠No
		If yes, for what type of mitigation activities?	
State funding programs No N/A	⊠Yes	Could the resource be used to fund future mitigation activities?	Yes
		Has the funding resource been used in past for mitigation activities?	☐ Yes ☑No
		If yes, for what type of mitigation activities?	

City of Rhome Assessment

Planning and Regulatory Assessment

Planning and regulatory capabilities are the plans, policies, codes, and ordinances that prevent and reduce the impacts of natural hazards.

Type of Plans	Have capability?	Level	If Yes	
			Does the plan address natural hazards?	□Yes ⊠No
Comprehensive or Master Plan	⊠Yes □No □N/A		Does the plan identify projects to include in the mitigation strategy?	⊠Yes □No
			Can the plan be used to implement mitigation actions?	⊠Yes □No
			Does the plan address natural hazards?	☐Yes ☐No
Capital Improvement Plan (CIP)	∐Yes ⊠No ∐N/A	Local County Region	Does the plan identify projects to include in the mitigation strategy?	□Yes □No
			Can the plan be used to implement mitigation actions?	□Yes □No
	□Yes ⊠No □N/A]	Does the plan address natural hazards?	□Yes □No
Economic Development Plan		Local County Region	Does the plan identify projects to include in the mitigation strategy?	□Yes □No
			Can the plan be used to implement mitigation actions?	□Yes □No
Local Emergency Operations Plan	⊠Yes □No □N/A	□Local ☑County □Region	Does the plan address natural hazards?	⊠Yes □No
			Does the plan identify projects to include in the mitigation strategy?	⊠Yes □No

Type of Plans	Have capability?	Level	If Yes	
			Can the plan be used to implement mitigation actions?	⊠Yes □No
			Does the plan address natural hazards?	□Yes □No
Continuity of Operations Plan	∐Yes ⊠No □N/A	Local County Region	Does the plan identify projects to include in the mitigation strategy?	□Yes □No
	LIN/A	incgion	Can the plan be used to implement mitigation actions?	□Yes □No
Transportation Plan	⊠Yes □No □N/A	☐Local ☐County ☐Region	Does the plan address natural hazards?	□Yes ⊠No
			Does the plan identify projects to include in the mitigation strategy?	□Yes ⊠No
			Can the plan be used to implement mitigation actions?	□Yes ⊠No
	□Yes ⊠No □N/A	☐Local ☐County ☐Region	Does the plan address natural hazards?	□Yes □No
Stormwater Management Plan			Does the plan identify projects to include in the mitigation strategy?	□Yes □No
			Can the plan be used to implement mitigation actions?	□Yes □No
Community Wildfire Protection Plan	□Yes ⊠No □N/A		Does the plan address natural hazards?	□Yes □No
		Local County Region	Does the plan identify projects to include in the mitigation strategy?	□Yes □No
		negion -	Can the plan be used to implement mitigation actions?	□Yes □No

Type of Plans	Have capa	e ability?	Level		If Yes		
				Does the plan address natural hazards?	☐Yes ☐No		
Green Infrastructure Plan		∐Yes ⊠No	Cou	Local County Region		Does the plan identify projects to include in the mitigation strategy?	☐Yes ☐No
		□N/A		561011	Can the plan be used to implement mitigation actions?	□Yes □No	
					Does the plan address natural hazards?	□Yes ⊠No	
Parks or Open Space Plan	⊠Yes □No □N/A			ocal ounty egion	Does the plan identify projects to include in the mitigation strategy?	□Yes ⊠No	
					Can the plan be used to implement mitigation actions?	□Yes ⊠No	
					Does the plan address natural hazards?	⊠Yes □No	
Hazard Mitigation Plan		⊠Yes □No □N/A		ocal ounty egion	Does the plan identify projects to include in the mitigation strategy?	⊠Yes □No	
				28.011	Can the plan be used to implement mitigation actions?	⊠Yes □No	
Land Use Planning and Ordinances		Have capabil		If Yes.			
Zoning Ordinance		⊠Yes □No			ordinance an effective ure for reducing hazard cts?	⊠Yes □No	
		_		Is the ordinance adequately		⊠Yes	

administered and enforced?

Is the ordinance an effective

measure for reducing hazard

impacts?

□N/A

 \boxtimes Yes

□No

Subdivision Ordinance

□No

 \boxtimes Yes

□No

Land Use Planning and Ordinances	Have capability?	If Yes		
	□N/A	Is the ordinance a	• •	⊠Yes □No
Floodplain Ordinance	⊠Yes □No	Is the ordinance an effective measure for reducing hazard impacts?		⊠Yes □No
Tiooupiaiii Oruiliance	□N/A	Is the ordinance a administered and	• •	⊠Yes □No
Flood Insurance Rate Maps	⊠Yes □No	Is the FIRM an eff for reducing haza		□Yes ⊠No
(FIRM)	□N/A	Is the FIRM adequadequade	•	⊠Yes □No
Natural Hazard Specific	□Yes ⊠No	Is the ordinance an effective measure for reducing hazard impacts?		□Yes □No
Ordinance (e.g., stormwater, wildfire)		Is the ordinance adequately administered and enforced?		□Yes □No
Acquisition of land for open space and public recreation	⊠Yes	Is the ordinance an effective measure for reducing hazard impacts?		⊠Yes □No
uses	∐No □N/A	Is the ordinance adequately administered and enforced?		⊠Yes □No
		ı		
Building Code, Permitting, and	d Inspections	Have capability?		
Building Code				FC 2015
Building Code Effectiveness Grading Schedule (BGEGS) Score		□Yes ☑No □N/A	Score:	
Fire Department ISO Rating		⊠Yes	Rating: 4/4X	

	□No	
	□N/A	
	⊠Yes	
Site Plan Review Requirements	□No	Review method: DRC
	□N/A	

Administrative and Technical Assessment

Administrative and technical capabilities include staff and their skills and tools that can be used for mitigation planning and to implement specific mitigation actions.

Administration	Have capability?	If Yes
Planning Commission	⊠Yes □No □N/A	Describe capability: Planning & Zoning Commission regular meet to help in the regulation and control of design, quality of materials, land use, building use and location of residential and commercial development within the City.
Mitigation Planning Committee	⊠Yes	Describe capability: Identifies hazards, conducts a risk and vulnerability assessment, and creates and monitors mitigation actions.
Maintenance programs to reduce risk (e.g., tree trimming, clearing drainage systems)	⊠Yes □No □N/A	Describe capability: Public Works provides maintenance for City's infrastructure including parks, water, sewer, street maintenance, and construction inspection.
Mutual Aid Agreements	⊠Yes □No □N/A	Describe capability: Various response MAAs with neighboring communities and agencies.

Staff	Have capability? FT/PT*	If Yes	
*Full-time (FT) or part-time (PT) position		
Chief Building Official	∑Yes-FT □Yes- PT	Is staffing adequate to enforce regulations?	
	∐No □N/A	Is staff trained on natural hazards and mitigation?	⊠ Yes

Staff	Have capability? FT/PT*	If Yes		
*Full-time (FT) or part-time (PT) position				
			No	
	Yes-FT	Is staffing adequate to enforce regulations?	☐ Yes ☐No	
Floodplain Administrator	⊠No □N/A	Is staff trained on natural hazards and mitigation?	Yes	
Emergency Manager	□Yes-FT ☑Yes- PT	Is staffing adequate to enforce regulations?	⊠ Yes □No	
Emergency ividilager	□No □N/A	Is staff trained on natural hazards and mitigation?	⊠ Yes □No	
Community Planner	⊠Yes-FT ☐Yes- PT ☐No ☐N/A	Is staffing adequate to enforce regulations?	⊠ Yes □No	
Community Flamer		Is staff trained on natural hazards and mitigation?	⊠ Yes □No	
Civil Engineer	⊠Yes-FT □Yes- PT	Is staffing adequate to enforce regulations?	⊠ Yes □No	
Civil Engineer	□No □N/A	Is staff trained on natural hazards and mitigation?	Yes	
GIS Coordinator	□Yes-FT ☑Yes- PT	Is staffing adequate to enforce regulations?	⊠ Yes □No	

Staff	Have capability? FT/PT*	If Yes			
*Full-time (FT) or part-time (PT) position					
	□No □N/A	Is staff trained on natural hazards and mitigation?	⊠ Yes □No		
Public Works Director	∑Yes-FT □Yes- PT	Is staffing adequate to enforce regulations?	⊠ Yes □No		
rubiic works birector	□No □N/A	Is staff trained on natural hazards and mitigation?	⊠ Yes □No		
Fire Chief	☐Yes-FT ☑Yes- PT ☐No ☐N/A	Is staffing adequate to enforce regulations?	⊠ Yes □No		
		Is staff trained on natural hazards and mitigation?	⊠ Yes □No		
Environmental Director	□Yes-FT □Yes- PT □No □N/A	Is staffing adequate to enforce regulations?	☐ Yes ☐No		
Environmental pirector		Is staff trained on natural hazards and mitigation?	Yes		
	Have				
Technical	capability?	If Yes			
	⊠Yes	Describe capability: Outdoor warning sir	en		
Warning Systems/Services (e.g., Reverse 911, outdoor warning signals)	⊠Yes ☐No ☐N/A	Has capability been used to assess or mitigate risk in the past?	Yes No		

Technical	Have capability?	If Yes	
		If yes, for what type of hazard event? Se weather	evere
		Describe capability:	
Hazard data and information	□Yes ☑No □N/A	Has capability been used to assess or mitigate risk in the past?	Yes No
		If yes, for what type of hazard event?	
Grant writing		Describe capability:	
	□Yes ⊠No □N/A	Has capability been used to assess or mitigate risk in the past?	Yes No
		If yes, for what type of hazard event?	
		Describe capability:	
HaZUS analysis or GIS software	□Yes ⊠No □N/A	Has capability been used to assess or mitigate risk in the past?	Yes No
		If yes, for what type of hazard event?	

Education and Outreach Assessment

Education and outreach programs and methods can be used to implement mitigation activities and communicate hazard-related information.

Program or Organization	Have capability?	If Yes	
Local citizen groups or non- profit organizations focused on environmental protection, emergency preparedness,	□Yes ⊠No □N/A	Could the program or organization help implement future mitigation activities?	Yes No

Program or Organization	Have capability?	If Yes
access and functional needs populations, etc.		Describe program or organization and how it relates to disaster resilience and mitigation:
Ongoing public education or information program (e.g., responsible water use, fire safety, household	⊠Yes □No	Could the program or organization help implement future mitigation activities?
preparedness, environmental education)	□N/A	Describe program or organization and how it relates to disaster resilience and mitigation: fire prevention
Natural disaster or safety	⊠Yes	Could the program or organization help implement future mitigation activities? No
Natural disaster or safety related school programs	□No □N/A	Describe program or organization and how it relates to disaster resilience and mitigation: Fire Prevention and Community Risk Reduction identifies strengths along with weaknesses and addresses through implementation and education.
Public/private partnership initiatives addressing disaster-related issues	□Yes ⊠No	Could the program or organization help implement future mitigation activities? No
uisastei relatea issues	∐N/A	Describe program or organization and how it relates to disaster resilience and mitigation:
StormReady certification	□Yes □No □N/A	
Firewise Communities Certification	☐Yes ☑No ☐N/A	

Financial Assessment

Identify whether your jurisdiction has access to or is eligible to use the following funding resources for hazard mitigation.

Funding Resources	Have capability?	If Yes	
Capital Improvements Project funding	□Yes ⊠No □N/A	Could the resource be used to fund future mitigation activities?	Yes No
		Has the funding resource been used in past for mitigation activities?	Yes No
		If yes, for what type of mitigation activities?	
Authority to levy taxes for specific purposes	□Yes ⊠No □N/A	Could the resource be used to fund future mitigation activities?	Yes No
		Has the funding resource been used in past for mitigation activities?	Yes No
		If yes, for what type of mitigation activities?	
Fees for water, sewer, gas, and/or electric services	□Yes ⊠No □N/A	Could the resource be used to fund future mitigation activities?	Yes No
		Has the funding resource been used in past for mitigation activities for mitigation activities?	Yes No
		If yes, for what type of mitigation activities?	
Impact fees for new development	⊠Yes □No □N/A	Could the resource be used to fund future mitigation activities? Potentially	Yes No

Funding Resources	Have capability?	If Yes	
		Has the funding resource been used in past for mitigation activities?	Yes No
		If yes, for what type of mitigation activities?	•
	□Yes ⊠No □N/A	Could the resource be used to fund future mitigation activities?	Yes No
Stormwater utility fee		Has the funding resource been used in past for mitigation activities?	Yes No
		If yes, for what type of mitigation activities?	Ī
Incurrence of debt through general obligation bonds and/or special tax bonds	⊠Yes □No □N/A	Could the resource be used to fund future mitigation activities? potentially	Yes No
		Has the funding resource been used in past for mitigation activities?	Yes No
		If yes, for what type of mitigation activities?	
Incur debt through private activities	□Yes ⊠No □N/A	Could the resource be used to fund future mitigation activities?	Yes No
		Has the funding resource been used in past for mitigation activities?	Yes No
		If yes, for what type of mitigation activities?	
Community Development Block Grant	⊠Yes	Could the resource be used to fund future mitigation activities? In the future	⊠ Yes

Funding Resources	Have capability?	If Yes	
	□No □N/A		No
		Has the funding resource been used in past for mitigation activities?	Yes No
		If yes, for what type of mitigation activities?	
programs (e.g. FEMA	∐Yes	Could the resource be used to fund future mitigation activities?	Yes No
	⊠No □N/A	Has the funding resource been used in past for mitigation activities?	Yes No
		If yes, for what type of mitigation activities?	
	□Yes	Could the resource be used to fund future mitigation activities?	Yes No
State funding programs	⊠No □N/A	Has the funding resource been used in past for mitigation activities?	Yes No
	i	If yes, for what type of mitigation activities?	

City of Runaway Bay Assessment Planning and Regulatory Assessment

Planning and regulatory capabilities are the plans, policies, codes, and ordinances that prevent and reduce the impacts of natural hazards.

Type of Plans	Have capability?	Level	If Yes	
			Does the plan address natural hazards?	□Yes ⊠No
Comprehensive or Master Plan	⊠Yes □No □N/A		Does the plan identify projects to include in the mitigation strategy?	□Yes ⊠No
			Can the plan be used to implement mitigation actions?	⊠Yes □No
			Does the plan address natural hazards?	□Yes □No
Capital Improvement Plan (CIP)	∐Yes ⊠No ∐N/A	Local County Region	Does the plan identify projects to include in the mitigation strategy?	□Yes □No
			Can the plan be used to implement mitigation actions?	□Yes □No
			Does the plan address natural hazards?	□Yes □No
Economic Development Plan	∐Yes ⊠No ∐N/A	Local County Region	Does the plan identify projects to include in the mitigation strategy?	□Yes □No
		Linegion	Can the plan be used to implement mitigation actions?	□Yes □No
Local Emergency	⊠Yes □No		Does the plan address natural hazards?	⊠Yes □No
Operations Plan	□N/A	Region	Does the plan identify projects to include in the mitigation strategy?	□Yes ⊠No

Type of Plans	Have capability?	Level	If Yes	
			Can the plan be used to implement mitigation actions?	⊠Yes □No
			Does the plan address natural hazards?	□Yes □No
Continuity of Operations Plan	∐Yes ⊠No □N/A	Local County Region	Does the plan identify projects to include in the mitigation strategy?	□Yes □No
			Can the plan be used to implement mitigation actions?	□Yes □No
Transportation Plan	□Yes ☑No □N/A	☐Local☐County☐Region☐	Does the plan address natural hazards?	☐Yes ☐No
			Does the plan identify projects to include in the mitigation strategy?	☐Yes ☐No
			Can the plan be used to implement mitigation actions?	☐Yes ☐No
	□Yes ⊠No □N/A	☐Local ☐County ☐Region	Does the plan address natural hazards?	☐Yes ☐No
Stormwater Management Plan			Does the plan identify projects to include in the mitigation strategy?	□Yes □No
			Can the plan be used to implement mitigation actions?	□Yes □No
	□Yes ⊠No □N/A		Does the plan address natural hazards?	□Yes □No
Community Wildfire Protection Plan		Local County Region	Does the plan identify projects to include in the mitigation strategy?	□Yes □No
			Can the plan be used to implement mitigation actions?	□Yes □No

Type of Plans	Hav cap	e ability?	Leve	l	If Yes	
					Does the plan address natural hazards?	☐Yes ☐No
Green Infrastructure Plan	□Yes □No	□ Local □ County □ Region		Does the plan identify projects to include in the mitigation strategy?	□Yes □No	
		□N/A		gion	Can the plan be used to implement mitigation actions?	☐Yes ☐No
	Parks or Open Space Plan Yes No N/A				Does the plan address natural hazards?	☐Yes ☐No
' '			Col	ocal	Does the plan identify projects to include in the mitigation strategy?	☐Yes ☐No
			Region		Can the plan be used to implement mitigation actions?	☐Yes ☐No
					Does the plan address natural hazards?	⊠Yes □No
Hazard Mitigation Plan	⊠Yes □No □N/A			ocal ounty egion	Does the plan identify projects to include in the mitigation strategy?	⊠Yes □No
				-B	Can the plan be used to implement mitigation actions?	⊠Yes □No
Land Use Planning and Ordinances Have capabi		ility?	If Yes			
Zoning Ordinanco		⊠Yes □No □N/A			ordinance an effective ure for reducing hazard cts?	⊠Yes □No
Zoning Ordinance					ordinance adequately nistered and enforced?	⊠Yes

 \boxtimes Yes

□No

Subdivision Ordinance

Is the ordinance an effective

measure for reducing hazard

impacts?

 \boxtimes Yes

□No

Land Use Planning and Ordinances	Have capability?	If Yes		
	□N/A	Is the ordinance a		⊠Yes □No
	⊠Yes	Is the ordinance a measure for redu impacts?		∑Yes □No
Floodplain Ordinance	□No □N/A	Is the ordinance a administered and	• •	⊠Yes □No
Flood Insurance Rate Maps	Flood Insurance Rate Maps		ective measure rd impacts?	□Yes ⊠No
(FIRM)	□N/A	Is the FIRM adequadequade	•	⊠Yes □No
Natural Hazard Specific Ordinance (e.g., stormwater, wildfire) □Yes □No □N/A		Is the ordinance a measure for redu impacts?		□Yes □No
		Is the ordinance a	•	□Yes □No
Acquisition of land for open space and public recreation	□Yes ⊠No	Is the ordinance a measure for redu impacts?		□Yes □No
uses	□N/A	Is the ordinance a	•	□Yes □No
		Have		
Building Code, Permitting, and Inspections		capability?		
Building Code		⊠Yes □No □N/A	Version/Year: IFC 2015	
Building Code Effectiveness Grading Schedule (BGEGS) Score		□Yes □No ⊠N/A	Score:	
Fire Department ISO Rating		⊠Yes	Rating: 4/4X	

	□No □N/A	
Site Plan Review Requirements	⊠Yes □No □N/A	Review method: DRC

Administrative and Technical Assessment

Administrative and technical capabilities include staff and their skills and tools that can be used for mitigation planning and to implement specific mitigation actions.

Administration	Have capability?	If Yes
Planning Commission	□Yes ☑No □N/A	Describe capability: The Planning & Zoning Department plans, creates, manages, and applies the standards for development.
Mitigation Planning Committee	⊠Yes	Describe capability: Identifies hazards, conducts a risk and vulnerability assessment, and creates and monitors mitigation actions.
Maintenance programs to reduce risk (e.g., tree trimming, clearing drainage systems)	⊠Yes □No □N/A	Describe capability: Have regular street and vegetation maintenance schedules.
Mutual Aid Agreements	⊠Yes □No □N/A	Describe capability: Have multiple MAA's with various response organizations.

Staff	Have capability? FT/PT*	If Yes	
*Full-time (FT) or part-time (PT)) position		
☐Yes-FT ☐Yes- PT ☐No ☐N/A		Is staffing adequate to enforce regulations?	Yes No
	Is staff trained on natural hazards and mitigation?	Yes	

Staff	Have capability? FT/PT*	If Yes	
*Full-time (FT) or part-time (PT) position		
Floodplain Administrator	☐Yes-FT ☐Yes- PT ☑No ☐N/A	Is staffing adequate to enforce regulations?	Yes
		Is staff trained on natural hazards and mitigation?	Yes
Emergency Manager	⊠Yes-FT □Yes- PT	Is staffing adequate to enforce regulations?	⊠ Yes □No
	□No □N/A	Is staff trained on natural hazards and mitigation?	⊠ Yes □No
Community Planner	□Yes-FT □Yes- PT □No □N/A	Is staffing adequate to enforce regulations?	Yes
		Is staff trained on natural hazards and mitigation?	Yes
Civil Engineer	☐Yes-FT ☐Yes- PT	Is staffing adequate to enforce regulations?	Yes
Civil Engineer	⊠No □N/A	Is staff trained on natural hazards and mitigation?	Yes
GIS Coordinator	☐Yes-FT ☐Yes- PT	Is staffing adequate to enforce regulations?	Yes
	⊠No □N/A	Is staff trained on natural hazards and mitigation?	Yes

Staff	Have capability? FT/PT*	If Yes	
*Full-time (FT) or part-time (PT)			
Public Works Director	☐Yes-FT ☐Yes- PT ☐No ☐N/A	Is staffing adequate to enforce regulations?	⊠ Yes □No
		Is staff trained on natural hazards and mitigation?	Yes
Fire Chief	□Yes-FT ☑Yes- PT	Is staffing adequate to enforce regulations?	⊠ Yes □No
Fire Chief	□No □N/A	Is staff trained on natural hazards and mitigation?	⊠ Yes □No
Environmental Director	□Yes-FT □Yes- PT □No □N/A	Is staffing adequate to enforce regulations?	Yes
		Is staff trained on natural hazards and mitigation?	Yes
Technical	Have capability?	If Yes	
		Describe capability: Have outdoor warni sirens.	ng
Warning Systems/Services (e.g., Reverse 911, outdoor warning signals)	⊠Yes □No □N/A	Has capability been used to assess or mitigate risk in the past?	Yes No
		If yes, for what type of hazard event? S weather	evere

Hazard data and information

Yes

Describe capability:

Technical	Have capability?	If Yes	
	⊠No □N/A	Has capability been used to assess or mitigate risk in the past?	Yes No
		If yes, for what type of hazard event?	
		Describe capability:	
Grant writing	□Yes ⊠No □N/A	Has capability been used to assess or mitigate risk in the past?	Yes No
		If yes, for what type of hazard event?	
		Describe capability:	
HaZUS analysis or GIS software	□Yes ⊠No □N/A	Has capability been used to assess or mitigate risk in the past?	Yes No
		If yes, for what type of hazard event?	

Education and Outreach Assessment

Education and outreach programs and methods can be used to implement mitigation activities and communicate hazard-related information.

Program or Organization	Have capability?	If Yes	
Local citizen groups or non- profit organizations focused on environmental protection, emergency preparedness,	ocal citizen groups or non- rofit organizations focused n environmental protection, mergency preparedness, ccess and functional needs	Could the program or organization help implement future mitigation activities?	Yes No
access and functional needs populations, etc.		Describe program or organization and how it to disaster resilience and mitigation:	relates

Program or Organization	Have capability?	If Yes
Ongoing public education or information program (e.g., responsible water use, fire safety, household	□Yes ⊠No □N/A	Could the program or organization help implement future mitigation activities? No
preparedness, environmental education)		Describe program or organization and how it relates to disaster resilience and mitigation: fire prevention
Natural disaster or safety related school programs	□Yes ⊠No □N/A	Could the program or organization help implement future mitigation activities?
		Describe program or organization and how it relates to disaster resilience and mitigation: Fire Prevention and Community Risk Reduction identifies strengths along with weaknesses and addresses through implementation and education.
Public/private partnership initiatives addressing disaster-related issues	□Yes ⊠No □N/A	Could the program or organization help implement future mitigation activities? No
		Describe program or organization and how it relates to disaster resilience and mitigation:
StormReady certification	□Yes □No □N/A	
Firewise Communities Certification	□Yes ⊠No □N/A	

Financial Assessment

Identify whether your jurisdiction has access to or is eligible to use the following funding resources for hazard mitigation.

Funding Resources	Have capability?	If Yes	
Capital Improvements Project funding	□Yes ⊠No □N/A	Could the resource be used to fund future mitigation activities?	Yes No
		Has the funding resource been used in past for mitigation activities?	Yes No
		If yes, for what type of mitigation activities?	
Authority to levy taxes for specific purposes	□Yes ⊠No □N/A	Could the resource be used to fund future mitigation activities?	Yes No
		Has the funding resource been used in past for mitigation activities?	Yes No
		If yes, for what type of mitigation activities?	
Food for water cower gas	□Yes ⊠No □N/A	Could the resource be used to fund future mitigation activities?	Yes No
Fees for water, sewer, gas, and/or electric services		Has the funding resource been used in past for mitigation activities for mitigation activities?	Yes No
		If yes, for what type of mitigation activities?	
Impact fees for new development	□Yes ⊠No □N/A	Could the resource be used to fund future mitigation activities? Potentially	Yes No

Funding Resources	Have capability?	If Yes		
		Has the funding resource been used in past for mitigation activities?	Yes No	
		If yes, for what type of mitigation activities?		
	∐Yes	Could the resource be used to fund future mitigation activities?	Yes No	
Stormwater utility fee	⊠No □N/A	Has the funding resource been used in past for mitigation activities?	Yes No	
		If yes, for what type of mitigation activities?		
Incurrence of debt through	□Yes	Could the resource be used to fund future mitigation activities? potentially	Yes No	
incurrence of debt through -	⊠No □N/A	Has the funding resource been used in past for mitigation activities?	Yes No	
		If yes, for what type of mitigation activities?		
	□Yes	Could the resource be used to fund future mitigation activities?	Yes No	
Incur debt through private activities Community Development	No □N/A	Has the funding resource been used in past for mitigation activities?	Yes No	
		If yes, for what type of mitigation activities?		
Community Development Block Grant	Yes	Could the resource be used to fund future mitigation activities? In the future	Yes	

Funding Resources	Have capability?	If Yes	
	⊠No □N/A		No
		Has the funding resource been used in past for mitigation activities?	Yes No
		If yes, for what type of mitigation activities?	
Other federal funding programs (e.g. FEMA mitigation grants)	⊠Yes □No □N/A	Could the resource be used to fund future mitigation activities?	Yes No
		Has the funding resource been used in past for mitigation activities?	Yes No
		If yes, for what type of mitigation activities?	
	□Yes	Could the resource be used to fund future mitigation activities?	Yes No
State funding programs	⊠No □N/A	Has the funding resource been used in past for mitigation activities?	Yes No
		If yes, for what type of mitigation activities?	

Wise County Assessment

Planning and Regulatory Assessment

Planning and regulatory capabilities are the plans, policies, codes, and ordinances that prevent and reduce the impacts of natural hazards.

Type of Plans	Have capability?	Level	If Yes	
Comprehensive or Master Plan		_	Does the plan address natural hazards?	□Yes □No
		Local County Region	Does the plan identify projects to include in the mitigation strategy?	□Yes □No
			Can the plan be used to implement mitigation actions?	□Yes □No
			Does the plan address natural hazards?	□Yes □No
Capital Improvement Plan (CIP)	∐Yes □No ⊠N/A	Local County Region	Does the plan identify projects to include in the mitigation strategy?	□Yes □No
			Can the plan be used to implement mitigation actions?	□Yes □No
			Does the plan address natural hazards?	□Yes □No
Economic Development Plan	∐Yes □No ⊠N/A	Local County Region	Does the plan identify projects to include in the mitigation strategy?	□Yes □No
			Can the plan be used to implement mitigation actions?	□Yes □No
Local Emergency	⊠Yes □No	☐Local	Does the plan address natural hazards?	⊠Yes □No
Operations Plan	□N/A	Region	Does the plan identify projects to include in the mitigation strategy?	⊠Yes □No

Type of Plans	Have capability?	Level	If Yes	
			Can the plan be used to implement mitigation actions?	⊠Yes □No
			Does the plan address natural hazards?	□Yes □No
Continuity of Operations Plan	∐Yes ⊠No □N/A	Local County Region	Does the plan identify projects to include in the mitigation strategy?	□Yes □No
		Linegion	Can the plan be used to implement mitigation actions?	□Yes □No
			Does the plan address natural hazards?	⊠Yes □No
Transportation Plan	⊠Yes □No □N/A	☐Local ☐County ☐Region	Does the plan identify projects to include in the mitigation strategy?	⊠Yes □No
			Can the plan be used to implement mitigation actions?	⊠Yes □No
			Does the plan address natural hazards?	□Yes □No
Stormwater Management Plan	∐Yes ⊠No ∏N/A	Local County Region	Does the plan identify projects to include in the mitigation strategy?	□Yes □No
			Can the plan be used to implement mitigation actions?	□Yes □No
			Does the plan address natural hazards?	□Yes □No
Community Wildfire Protection Plan		Local County Region	Does the plan identify projects to include in the mitigation strategy?	□Yes □No
			Can the plan be used to implement mitigation actions?	□Yes □No

Type of Plans	Hav capa	e ability?	Level	l	If Yes			
					Does the plan address natural hazards?	☐Yes ☐No		
Green Infrastructure Plan		☐Yes ☑No		ocal ounty egion	Does the plan identify projects to include in the mitigation strategy?	□Yes □No		
	'ال	V/ A		zgioii	Can the plan be used to implement mitigation actions?	☐Yes ☐No		
					Does the plan address natural hazards?	☐Yes ☐No		
Parks or Open Space Plan	□Yes ⊠No □N/A		Со	ocal ounty egion	Does the plan identify projects to include in the mitigation strategy?	☐Yes ☐No		
					Can the plan be used to implement mitigation actions?	☐Yes ☐No		
					Does the plan address natural hazards?	⊠Yes □No		
Hazard Mitigation Plan	⊠Yes □No □N/A			ocal ounty egion	Does the plan identify projects to include in the mitigation strategy?	⊠Yes □No		
							Can the plan be used to implement mitigation actions?	⊠Yes □No
Land Use Planning and Ordinances		Have capabi	lity?	If Yes				
Zoning Ordinance SNO			Is the ordinance an effective measure for reducing hazard impacts?		☐Yes ☐No			
				Is the ordinance adequately administered and enforced?		☐Yes ☐No		
Subdivision Ordinance		⊠Yes □No			ordinance an effective ure for reducing hazard	⊠Yes □No		

Land Use Planning and Ordinances	Have capability?	If Yes		
	□N/A	Is the ordinance a	•	⊠Yes □No
Floodplain Ordinance	⊠Yes	Is the ordinance an effective measure for reducing hazard impacts?		⊠Yes □No
Tiooupiaiii Oruiliance	□No □N/A	Is the ordinance a administered and	• •	⊠Yes □No
Flood Insurance Rate Maps	Flood Insurance Rate Maps No Is the FIRM an effective for reducing hazard in			□Yes ⊠No
(FIRM)	□N/A	Is the FIRM adequadequade	•	⊠Yes □No
Natural Hazard Specific Ordinance (e.g., stormwater, wildfire)	□Yes ☑No □N/A	Is the ordinance an effective measure for reducing hazard impacts?		□Yes □No
		Is the ordinance adequately administered and enforced?		□Yes □No
Acquisition of land for open space and public recreation	⊠Yes □No	Is the ordinance a measure for redu impacts?		□Yes □No
uses	□N/A	Is the ordinance adequately administered and enforced?		□Yes □No
Building Code, Permitting, and	d Inspections	Have capability?		
Building Code		□Yes ☑No □N/A	Version/Year:	
Building Code Effectiveness Gr (BGEGS) Score	ading Schedule	□Yes ☑No □N/A	Score:	
Fire Department ISO Rating		⊠Yes	Rating: 3-10	

Building Code, Permitting, and	Inspections	Have capability?		
		□ No		
		□N/A		
		⊠Yes		
Site Plan Review Requirements		□No	Review method:	
·		□N/A		
		1	1	
Administrative and Technical Asse	essment			
Administrative and technical capa mitigation planning and to implen			tools that can be use	d for
Administration	Have capability?	If Yes		
	Yes	Describe capability	/ :	
Planning Commission	No			
	□N/A			
			: Identifies hazards, c	
Mitigation Planning Committee	⊠Yes	a risk and vulnerab and monitors mitig	ility assessment, and	creates
Maintenance programs to	N	Describe capability		
reduce risk (e.g., tree	⊠Yes			
trimming, clearing drainage	No	Tree trimming, etc	•	
systems)	□N/A			
	⊠Yes		: Various MAA's inclu	_
Mutual Aid Agreements	□No	police, Elvis, public	works, cities, state, e	tc.
	□N/A			
Staff	Have capability?	If Yes		
F +ima (FT) an mant +ima (PT)	FT/PT			
*Full-time (FT) or part-time (PT)	position			
Chief Duibling Official	Yes-FT	Is staffing adequate	to enforce	Yes
Chief Building Official		regulations?		163

regulations?

Yes- PT

□No

Staff	Have capability? FT/PT*	If Yes	
*Full-time (FT) or part-time (PT) position		
	⊠No □N/A	Is staff trained on natural hazards and mitigation?	Yes
		Is staffing adequate to enforce regulations?	☐ Yes ⊠No
Tioodpiain Administrator	□No □N/A	Is staff trained on natural hazards and mitigation?	⊠ Yes □No
Emergency Manager	⊠Yes-FT □Yes- PT □No □N/A	Is staffing adequate to enforce regulations?	☐ Yes ☑No
Emergency Manager		Is staff trained on natural hazards and mitigation?	⊠ Yes □No
Community Planner	☐Yes-FT ☐Yes- PT	Is staffing adequate to enforce regulations?	Yes
Community Flamer	□No ⊠N/A	Is staff trained on natural hazards and mitigation?	☐ Yes ☐No
Civil Engineer	⊠Yes-FT □Yes- PT	Is staffing adequate to enforce regulations?	⊠ Yes □No
Civil Engineer No N/A		Is staff trained on natural hazards and mitigation?	⊠ Yes □No
GIS Coordinator	⊠Yes-FT □Yes- PT	Is staffing adequate to enforce regulations?	⊠ Yes □No

Staff	Have capability? FT/PT*	If Yes	
*Full-time (FT) or part-time (PT)	position		
	□No □N/A	Is staff trained on natural hazards and mitigation?	Yes
Public Works Director	⊠Yes-FT □Yes- PT	Is staffing adequate to enforce regulations?	Yes
Public Works Director	□No □N/A	Is staff trained on natural hazards and mitigation?	⊠ Yes □No
☐Yes-FT ☐Yes- PT		Is staffing adequate to enforce regulations?	Yes
Fire Chief	□No ⊠N/A	Is staff trained on natural hazards and mitigation?	Yes
Environmental Director	⊠Yes-FT □Yes- PT	Is staffing adequate to enforce regulations?	☐ Yes ⊠No
Environmental Director	□No □N/A	Is staff trained on natural hazards and mitigation?	⊠ Yes □No
Technical	Have capability?	If Yes	
	∏Yes	Describe capability:	
Warning Systems/Services (e.g., Reverse 911, outdoor warning signals)	No □N/A	Has capability been used to assess or mitigate risk in the past?	Yes No

Technical	Have capability?	If Yes		
		If yes, for what type of hazard event?		
		Describe capability: Recently created maps using drone and GIS technology. Track damages from past events.		
Hazard data and information	⊠Yes □No □N/A	Has capability been used to assess or mitigate risk in the past? No		
		If yes, for what type of hazard event? All		
Grant writing	⊠Yes □No □N/A	Describe capability: Have personnel tasked to complete applications.		
		Has capability been used to assess or mitigate risk in the past? No		
		If yes, for what type of hazard event? Hazards tied to HMGP funding		
		Describe capability: Use GIS software.		
HaZUS analysis or GIS software	⊠Yes □No □N/A	Has capability been used to assess or mitigate risk in the past?		
		If yes, for what type of hazard event? All		

Education and Outreach Assessment

Education and outreach programs and methods can be used to implement mitigation activities and communicate hazard-related information.

Program or Organization	Have capability?	If Yes	
Local citizen groups or non- profit organizations focused on environmental protection, emergency	⊠Yes □No	Could the program or organization help implement future mitigation activities?	
preparedness, access and functional needs populations, etc.	□N/A	Describe program or organization and how it relates to disaster resilience and mitigation: Wise County Historical Commission identifies historical properties in the area that should be protected from hazards.	
Ongoing public education or information program (e.g., responsible water use, fire safety, household	⊠Yes □No □N/A	Could the program or organization help implement future mitigation activities?	
preparedness, environmental education)		Describe program or organization and how it relates to disaster resilience and mitigation: OEM hosts emergency preparedness workshops.	5
Natural disaster or safety related school programs	☐Yes ☑No	Could the program or organization help implement future mitigation activities? No	
	∐N/A	Describe program or organization and how it relates to disaster resilience and mitigation:	3
Public/private partnership initiatives addressing disaster-related issues	□Yes ⊠No □N/A	Could the program or organization help implement future mitigation activities? No	
uisastei-reiateu issues		Describe program or organization and how it relates to disaster resilience and mitigation:	5
StormReady certification	⊠Yes □No □N/A	StormReady communities are better prepared to save lives from the onslaught of severe weather through advanced planning, education and awareness. To be officially StormReady, a community must:	

Program or Organization	Have capability?	If Yes
		 Establish a 24-hour warning point and
		emergency operations center;
		 Have more than one way to receive
		severe weather warnings and forecasts
		and to alert the public;
		Create a system that monitors weather
		conditions locally;
		Promote the importance of public
		readiness through community seminars;
		and
		Develop a formal hazardous weather plan,
		which includes training severe weather spotters and holding emergency exercises.
		and notuing emergency exercises.
Firewise Communities	Yes	
Certification	⊠No	
	□N/A	

Financial Assessment

Identify whether your jurisdiction has access to or is eligible to use the following funding resources for hazard mitigation.

Funding Resources	Have capability?	If Yes		
Capital Improvements Project funding	⊠Yes	Could the resource be used to fund future mitigation activities?	∑ Yes □No	
	□No □N/A	Has the funding resource been used in past for mitigation activities?	☐ Yes ⊠No	
		If yes, for what type of mitigation activities?		
Authority to levy taxes for specific purposes Yes No N/A		Could the resource be used to fund future mitigation activities?	Yes	
	Has the funding resource been used in past for mitigation activities?	Yes		

Funding Resources	Have capability?	If Yes		
			No	
		If yes, for what type of mitigation activities?		
	Yes	Could the resource be used to fund future mitigation activities?	Yes	
Fees for water, sewer, gas, and/or electric services	⊠No □N/A	Has the funding resource been used in past for mitigation activities for mitigation activities?	Yes	
		If yes, for what type of mitigation activities?		
Impact fees for new	∐Yes	Could the resource be used to fund future mitigation activities?	Yes No	
development	⊠No □N/A	Has the funding resource been used in past for mitigation activities?	Yes	
		If yes, for what type of mitigation activities?		
	□Yes ⊠No □N/A	Could the resource be used to fund future mitigation activities?	Yes	
Stormwater utility fee		Has the funding resource been used in past for mitigation activities?	Yes	
		If yes, for what type of mitigation activities?		
Incurrence of debt through general obligation bonds and/or special tax bonds	⊠Yes □No □N/A	Could the resource be used to fund future mitigation activities?	☐ Yes ⊠No	
		Has the funding resource been used in past for mitigation activities?	☐ Yes ⊠No	
		If yes, for what type of mitigation activities?		
Incur debt through private activities	□Yes ⊠No	Could the resource be used to fund future mitigation activities?	Yes	

Funding Resources	Have capability?	If Yes	
	□N/A	Has the funding resource been used in past for mitigation activities?	Yes
		If yes, for what type of mitigation activities?	
Community Development	∐Yes	Could the resource be used to fund future mitigation activities?	Yes
Block Grant	⊠No □N/A	Has the funding resource been used in past for mitigation activities?	Yes
		If yes, for what type of mitigation activities?	
Other federal funding	⊠Yes	Could the resource be used to fund future mitigation activities?	⊠ Yes □No
programs (e.g. FEMA mitigation grants)	rams (e.g. FEMA	Has the funding resource been used in past for mitigation activities?	☐ Yes ⊠No
		If yes, for what type of mitigation activities?	_
	⊠Yes	Could the resource be used to fund future mitigation activities?	Yes
State funding programs	□No □N/A	Has the funding resource been used in past for mitigation activities?	Yes
		If yes, for what type of mitigation activities?	

A.2.2 Gaps & Improvements

After completing the assessments, the Local Planning Teams realized that they each have a few gaps in each type of mitigation capability.

To expand on planning and regulatory capabilities and reduce future risks, jurisdictions could budget and pass policies and procedures for mitigation actions, create more land use ordinances, add mitigation strategies to existing plans and create new plans related to hazard mitigation.

To expand on administrative and technical capabilities, approving the hiring and training of staff for mitigation activities, acquiring data-collecting software, and tracking inventory of assets.

To expand on financial capabilities, jurisdictions could use existing funding resources to implement mitigation activities and work with grant writers to apply to grants.

To expand on education and outreach capabilities, the Local Planning Team can work with local citizen groups and schools to educate residents on risks and mitigation measures.

Appendix B: Public Survey

Part 1: Survey Announcement

In addition to public planning meetings, the Planning Team distributed a public survey for residents to provide input on the risks and vulnerabilities to hazards in the areas. The team advertised the survey on their jurisdiction's websites and social media pages, as shown in Figure 69. This method allowed residents to participate in the planning process without leaving their homes.

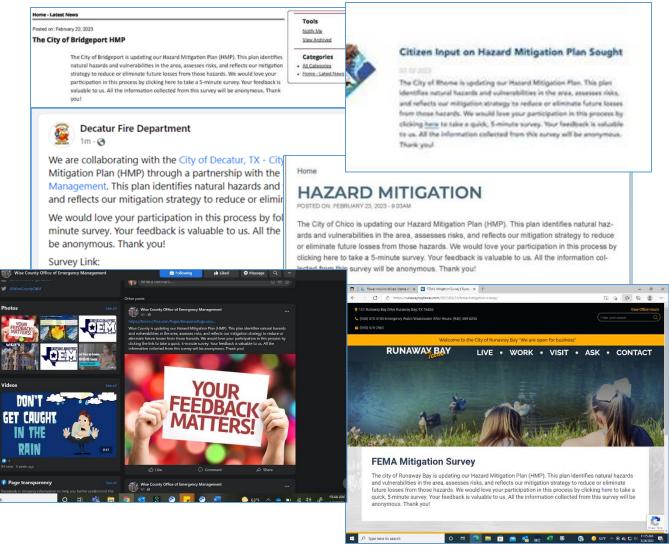
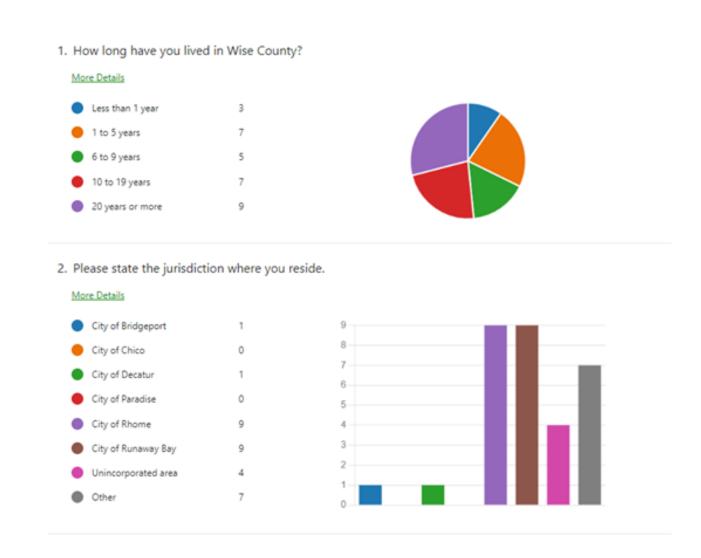


Figure 69: Survey Announcements

Part 2: Results

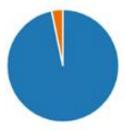
The results of the county-wide survey are below. Responses were taken into consideration when developing the mitigation strategy.



3. Are you responding on behalf of a residential or commercial property?

More Details

- Residential Commercial
- 30



4. Please select the one hazard you think is the highest threat to your neighborhood:

More Details

- Dam Failure
- Drought
- Earthquake
- Extreme Heat
- Flood
- Thunderstorm
- Wildfire

- 0 4 0 1
- 4

Ō

0

3

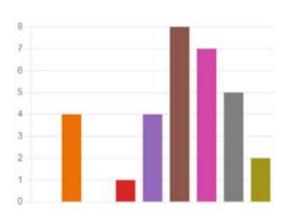
5

4

3

5

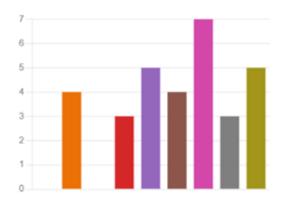
- Tomado 5
- Winter Storm



5. Please select the one hazard you think is the second highest threat to your neighborhood:

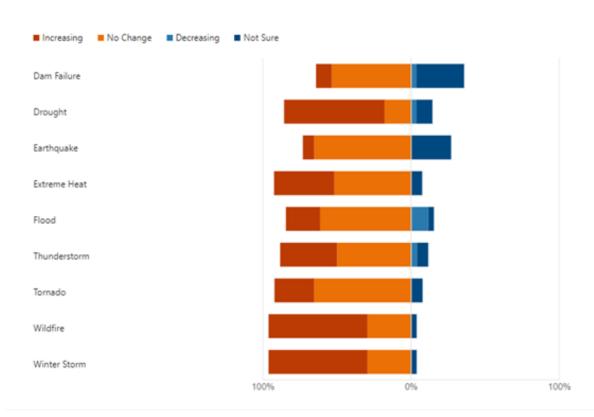
More Details

- Dam Failure
- Drought
- Earthquake
- Extreme Heat
- Thunderstorm
- Wildfire
- Winter Storm

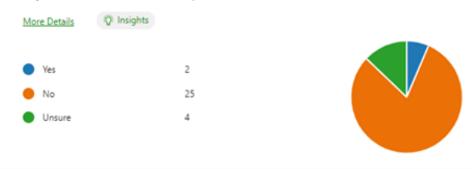


6. Over the last 10 years, have you noticed an increase or decrease in the occurrences or intensity of any of the following hazards?

More Details



7. Is your home located in a floodplain?



8. Do you have flood insurance?



9. Have you taken any actions to make your home or neighborhood resilient to hazards?



10. If you have taken any actions, please describe:

Backup communication plans, bug out bags, plans for meeting and routes in case of disaster.
Building up low lying areas with more dirt to help drainage
Energy efficient windows installation. Keeping lot next door mowed. Trimming trees and bushes.
Keep all areas well cut, watered, metal siding and roof on all buildings
Keep place clean
Making sure the lot drains as well as possible. No trees too close to house.
No growth around home, keep grass watered to be a block toward grass fires.
Removed vegetation that could impact structures and vehicles on the property
Storm shelter
watering

11. Are you interested in making your home or neighborhood resilient to hazards?



12. If a major disaster affected Wise County, do you expect FEMA to help?



13. If you expect FEMA to help, please explain:

2015 tornado Red Cross here, do not remember FEMA. 2015 flood my property was elevated to building code requirements and was in no danger.

As I understand that is what FEMA was created for.

Coordination of disaster relief resources.

Help with whatever the city needs to get homes up and running

I would hope they would work with the other agencies in the county, IE: Red Cross, United Way, Warm etc., to supply what the county needs. This would include but not limited to water, food, shelter, clothes and any other needs.

supplies, manpower, replace essential utilities water electric etc.

Appendix C: Local Planning Teams

The following tables identify the members of the Local Planning Team (LPT) from each participating jurisdiction.

Table 52: Bridgeport Local Planning Team

City of Bridgeport		
Agency/Organization	Position	Role in LPT
City Council	Mayor	General oversight hazard identification, and plan development
City Manager's Office	City Manager	Hazard identification and plan
Only Manager & Onlo	Oity Manager	development
Emergency Management	EM Director	Hazard identification and plan
Lineigency Management Livi I		development
City Manager's Office	Asst. City Manager	Hazard identification and plan
City Manager's Office	Asst. City Manager	development
Public Works	Director of Public Works	Hazard identification and plan
Public Works Director of Po	Director of Public Works	development
Floatrical Convince	Flooring Commonst	Hazard identification and plan
Electrical Services	Electric Support	development

Table 53: Chico Local Planning Team

City of Chico		
Agency/Organization	Position	Role in LPT
City Council	Mayor	General oversight hazard identification, and plan development
Mayor's Office	Public Works Director	Hazard identification and plan development
Mayor's Office	Code Enforcement	Hazard identification and plan development
Mayor's Office	Building Inspector	Hazard identification and plan development
Mayor's Office	Street Department	Help identify and plan develop with street planning.
Mayor's Office	Animal Control	Hazard Identification and Plan Development

Table 54: Decatur Local Planning Team

City of Decatur			
Agency/Organization	Position	Role in LPT	
Fire Department	EMC	General oversight hazard identification, and plan development	
Public Works	Public Works Director	Hazard identification and plan development	

City of Decatur			
Agency/Organization	Position	Role in LPT	
Police Department	Codo Enforcer	Hazard identification and plan	
Police Department	Code Enforcer	development	
Police Department	Police Chief	Hazard identification and plan	
		development	
Fire Department	Fire Chief	Help identify and plan development	
Fraincer	City Engineer	Hazard Identification and Plan	
Engineer	City Engineer	Development	

Table 55: Rhome Local Planning Team

City of Rhome		
Agency/Organization	Position	Role in LPT
City Admin	City Administrator	General oversight hazard identification, and plan development
Fire Department	Fire Chief	Hazard identification and plan development
Public Works	PW Director	Hazard identification and plan development
Police Department	Police Chief	Hazard identification and plan development
Fire Department	Emergency Manager Coordinator	Hazard identification and plan development

Table 56: Runaway Bay Local Planning Team

City of Runaway Bay		
Agency/Organization	Position	Role in LPT
Police Department	Director	General oversight hazard identification, and plan development
City Hall	City Mayor	General oversight hazard identification, and plan development
Fire Department	Chief	Hazard identification and plan development
City Hall	Mayor	Plan development
Police Department	Emergency Management Coordinator	General oversight hazard identification, and plan development
Public Works	Director	Hazard identification and plan development

Table 57: Wise County Local Planning Team

Wise County Unincorporated			
Agency/Organization	Position	Role in LPT	
Emergency Management	EMC	General oversight hazard identification, and plan development	
Emergency Management	OEM-Admin	Plan development	

Wise County Unincorporated		
Agency/Organization	Position	Role in LPT
Police Department	Director 911 Addressing	Hazard identification and plan
		development
Public Works	Watershed Ops/Maint	Hazard identification and plan
		development
City Hall	Engineer	Hazard identification and plan
		development
Public Works	Buildings/Maint	Hazard identification and plan
		development
City Hall	Judge	General oversight hazard identification,
		and plan development

Appendix D: Adoption

A copy of the FEMA approval letter and the adoption resolutions from all participating jurisdictions are provided in this appendix.

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



June 13, 2024

Jennifer Charlton-Faia, Deputy State Hazard Mitigation Officer Texas Division of Emergency Management P.O. Box 285 Del Valle, TX 78617-9998

RE: Approval of the Wise County, Texas Multi-Jurisdiction Hazard Mitigation Plan Funding Source: PDM; PDMC-PL-06-TX-2019-008

Dear Jennifer Charlton-Faia:

This office has concluded its review of the referenced plan and we are pleased to provide our approval of this plan in meeting the criteria set forth by 44 CFR § 201.6. By receiving this approval, eligibility for the Hazard Mitigation Assistance Grants will be ensured for five years from the date of this letter, expiring on June 12, 2029.

This approval does not demonstrate approval of projects contained in the plan. This office has provided the enclosed Local Hazard Mitigation Planning Tool with reviewer's comments, to further assist the community in refining the plan going forward. Please advise the referenced community of this approval.

If you have any questions, please contact David Freeborn, HM Community Planner, at (940) 898-5323.

Sincerely,

Ronald C. Wanhanen

Chief, Risk Analysis Branch

Enclosure: Approved Participants

cc: Anne Lehnick

{Placeholder for Bridgeport Adoption Resolution}

{Placeholder for Chico Adoption Resolution}

RESOLUTION NO. R2024-05-10

A RESOLUTION OF THE CITY OF DECATUR, TEXAS ADOPTING THE 2024 WISE COUNTY HAZARD MITIGATION PLAN.

WHEREAS, the City of Decatur recognizes the threat that natural hazrds pose to people and property within Wise County; and

WHEREAS, on February 13, 2023, the City of Decatur approved a Resolution of Support for the Reserve at Decatur, related to its application to the Texas Department of Housing and Community Affairs for 2023 Competitive 9% Housing Tax Credits.

WHEREAS, Wise County has prepared a multi-jurisdictional, multi-hazard mitigation plan, hereby known as the 2024 Wise County Hazard Mitigation Plan in accordance with the Disaster Mitigation Act of 2000; and

WHEREAS, the 2024 Wise County Hazard Mitigation Plan identifies mitigation goals and actions to reduce or eliminate long-term risk to people and property in the City of Decatur from the impacts of future hazards and disasters; and

WHEREAS, the plan is not legally binding and mitigation actions identified can be implemented as funding and capabilities allow; and

WHEREAS, adoption by City of Decatur demonstrates their commitment to hazard mitigation and achieving the goals outlined in the 2024 Wise County Hazard Mitigation Plan.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF DECATUR, TEXAS THAT:

Section 1. In accordance with The Decatur Home Rule Charter the City of Decatur, City Council adopts the 2024 Wise County Hazard Mitigation Plan.

Approved this 28th day of May 2024 at a regular meeting of the City Council of the City of Decatur, Texas.

Mike McQuiston, Mayor

ATTEST:

Asucena Delgado, TRMC, City Secretary

{Placeholder for Rhome Adoption Resolution}

CITY OF RUNAWAY BAY, TEXAS

RESOLUTION NO. 376

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF RUNAWAY BAY, TEXAS, ADOPTING THE 2024 WISE COUNTY HAZARD MITIGATION PLAN; MAKING FINDINGS; AND PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, the City of Runaway Bay, Texas, recognizes the threat that natural hazards pose to people and property within Wise County; and

WHEREAS, Wise County has prepared a multi-jurisdictional, multi-hazard mitigation plan, hereby known as the 2024 Wise County Hazard Mitigation Plan, in accordance with the Disaster Mitigation Act of 2000; and

WHEREAS, the 2024 Wise County Hazard Mitigation Plan identifies mitigation goals and actions to reduce or eliminate long-term risk to people and property in the City of Runaway Bay from the impacts of future hazards and disasters; and

WHEREAS, the plan is not legally binding and mitigation actions identified can be implemented as funding and capabilities allow; and

WHEREAS, adoption by the City of Runaway Bay demonstrates its commitment to hazard mitigation and achieving the goals outlined in the 2024 Wise County Hazard Mitigation Plan.

NOW, THEREFORE, BE IT RESOLVED BY THE COUNCIL OF THE CITY OF RUNAWAY BAY, TEXAS, THAT:

SECTION 1

All of the above premises are hereby found to be true and correct legislative and factual findings of the City of Runaway Bay, Texas, and they are hereby approved and incorporated into the body of this Resolution as if copied in their entirety.

SECTION 2

The City of Runaway Bay, Texas, hereby adopts the 2024 Wise County Hazard Mitigation Plan.

SECTION 3

This Resolution shall become effective immediately upon its passage as required by law.

PASSED, APPROVED AND ADOPTED by the City Council of the City of Runaway Bay, Texas, on this the 15th day of October, 2024.

Han When

Herman White, Mayor

ATTEST:

Misty Choate, City Secretary



Wise County Office of Emergency Management 205 N. State Street, Decatur, Texas 76234 Office: (940) 627-5870 oem@co.wise.tx.us



Wise County, Texas

A RESOLUTION OF THE County of Wise ADOPTING THE 2024 WISE COUNTY HAZARD MITIGATION PLAN

WHEREAS the County recognizes the threat that natural hazards pose to people and property within Wise County; and

WHEREAS Wise County has prepared a multi-jurisdictional, multi-hazard mitigation plan, hereby known as the 2024 Wise County Hazard Mitigation Plan in accordance with the Disaster Mitigation Act of 2000; and

WHEREAS the 2024 Wise County Hazard Mitigation Plan identifies mitigation goals and actions to reduce or eliminate long-term risk to people and property in the County from the impacts of future hazards and disasters; and

WHEREAS the plan is not legally binding and mitigation actions identified can be implemented as funding and capabilities allow; and

WHEREAS adoption by **Wise County** demonstrates their commitment to hazard mitigation and achieving the goals outlined in the 2024 Wise County Hazard Mitigation Plan.

NOWTHEREFORE, BE IT RESOLVED BY THE Wise County Court of Commissioners, TEXAS, THAT:

Wise County adopts the 2024 Wise County Hazard Mitigation Plan.

ADOPTED by a vote of fin favor and against, and abstaining, this 28 day of

J.D. Clark

County Judge, Wise County

Blanca Tuma

Ex-Officio Clerk of Commissioners Court

County Clerk, Wise County

