Appendix D

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Grayson County
Mitigation Goals and Actions

Developing Mitigation Goals and Actions for Grayson County Hazard Mitigation Plan (HMP)

Goals are general guidelines that explain what you want to achieve. They are usually broad policy-type statements, long term, and represent global visions. The following **Goals** appear in the State of Texas Mitigation Plan and are suggested for the Grayson County HMP:

- Reduce or eliminate hazardous conditions that cause loss of life
- Reduce or eliminate hazardous conditions that inflict injuries
- Reduce or eliminate hazardous conditions that cause property damage
- Reduce or eliminate hazardous conditions that degrade important natural resources

Mitigation Actions are specific actions that help you achieve your goals. **At least two actions needs to be recorded per each hazard identified in the Risk Assessment.**

Examples:
Elevate three historic structures located in the downtown district
Sponsor a community fair to promote wildfire defensible space
Retrofit the police department to withstand high wind damage

***Note:** Please include mitigation actions in the HMP that may be eligible for FEMA funding.*

Priority Ranking, please indicate your "vote". **(Low, Medium, High)**

Questions to consider when ranking mitigation actions:
- Is the proposed action socially acceptable and will all citizens be treated fairly?
- Is the action compatible with present and future community values?
- Is the action technically feasible and will it move the community towards its goal?
- Does the City have the legal authority to implement the action?
- Does the City have the technical capability to implement the action?

***Note:** Funding is often a constraint; at this time, do not allow that to influence your indication of priorities. One purpose of the plan is to help support efforts to secure funding for implementation.*

Please fill out the sections in the following tables.

Mitigation Action Table	
Jurisdiction	Grayson County
Hazard	Tornado
Priority (High, Medium, Low)	Low
Description of Mitigation Action	Work with high risk communities to apply for a Community Safe Room Project.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Facility cost is significant but potential benefit is reduced loss of lives and reduced injuries during an event.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	High (PDM Grant)
Responsible Party *(Position or Title)*	EMC
Implementation Schedule *(1 to 5 years timeframe)*	3 to 5 years
Effects on New Buildings	none
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	Grayson County
Hazard	Tornado
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Work with local jurisdictions to apply for a Multi-Jurisdictional FEMA Safe Room Rebate program.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Application cost is low and potential benefit to communities is great.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	High (PDM Grant)
Responsible Party *(Position or Title)*	EMC
Implementation Schedule *(1 to 5 years timeframe)*	1 to 3 years
Effects on New Buildings	none
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	Grayson County
Hazard	Tornado
Priority (High, Medium, Low)	High
Description of Mitigation Action	Develop a community outreach program with a focus on Web 2.0 products and public presentations to promote severe weather awareness. Work with local media to publish and air public safety information prior to storm peak season on how to be prepared.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Cost is relatively low compared to benefits of reduction in lost lives and injuries
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (Budget)
Responsible Party *(Position or Title)*	EMC
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	May increase awareness of builders in use of proper standards for tornado protection when expanding or modifying building for future growth.
Effect on Existing Buildings	May lead to appropriate building modifications to better protect individuals.

Mitigation Action Table	
Jurisdiction	Grayson County
Hazard	Tornado
Priority (High, Medium, Low)	High
Description of Mitigation Action	Continuation of the Grayson County CERT program. Work with local businesses to encourage employee participation to strengthen private sector preparedness.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Fairly low cost and potential high benefits to local businesses
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (CCP)
Responsible Party *(Position or Title)*	EMC
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	May increase awareness of builders in use of proper standards for tornado protection when expanding or modifying building for future growth.
Effect on Existing Buildings	May lead to appropriate building modifications to better protect individuals.

Mitigation Action Table	
Jurisdiction	Grayson County
Hazard	Tornado
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Educate local residents on the importance of NOAA weather radios in homes and offices and how to properly use them. Research into funding opportunities to provide NOAA weather radios free or at a reduced rate to vulnerable and limited income populations.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Very low cost and potentially high benefit.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Medium (Grant, Budget, & Donations)
Responsible Party *(Position or Title)*	EMC & VFDs
Implementation Schedule *(1 to 5 years timeframe)*	1 to 3 years
Effects on New Buildings	May increase awareness of builders in use of proper standards for tornado protection when expanding or modifying building for future growth.
Effect on Existing Buildings	May lead to appropriate building modifications to better protect individuals.

Mitigation Action Table	
Jurisdiction	Grayson County
Hazard	Hailstorms
Priority (High, Medium, Low)	High
Description of Mitigation Action	Develop a community outreach program to promote severe weather awareness. Work with local media to publish and air public safety information prior to storm peak season on how to be prepared.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Relatively low cost and potentially large benefits.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (Budget)
Responsible Party *(Position or Title)*	EMC
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	May increase awareness of builders in use of proper standards for hailstorm protection when expanding or modifying building for future growth.
Effect on Existing Buildings	May lead to appropriate building modifications to better protect individuals.

Mitigation Action Table	
Jurisdiction	Grayson County
Hazard	Hailstorms
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Educate local residents on the importance of NOAA weather radios in homes and offices and how to properly use them. Research into funding opportunities to provide NOAA weather radios free or at a reduced rate to vulnerable and limited income populations.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Relatively low cost and potentially large benefits.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Medium (Grant, Budget, & Donations)
Responsible Party *(Position or Title)*	EMC
Implementation Schedule *(1 to 5 years timeframe)*	1 to 3 years
Effects on New Buildings	May increase awareness of builders in use of proper standards for hailstorm protection when expanding or modifying building for future growth.
Effect on Existing Buildings	May lead to appropriate building modifications to better protect individuals.

Mitigation Action Table	
Jurisdiction	Grayson County
Hazard	Hailstorms
Priority (High, Medium, Low)	High
Description of Mitigation Action	Work with local, crop, auto, business, & residential insurance agents to educate the community on the importance of hail coverage. The agents would also encourage policy holders to evaluate current policies to ensure proper. This could help prevent economic hardship resulting from a major weather event.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Relatively low cost and potentially large benefits.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (Local Insurance Agents)
Responsible Party *(Position or Title)*	County Extension Agent & Farm Service Agency
Implementation Schedule *(1 to 5 years timeframe)*	1 to 3 years
Effects on New Buildings	May increase awareness of builders in use of proper standards for hailstorm protection when expanding or modifying building for future growth.
Effect on Existing Buildings	May lead to appropriate building modifications to better protect individuals.

Mitigation Action Table	
Jurisdiction	Grayson County
Hazard	Extreme Heat
Priority (High, Medium, Low)	High
Description of Mitigation Action	Assist the regional 211 to distribute fans to those who are in need of relief from the Texas heat.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Relatively low cost and potentially large benefits.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (Donations)
Responsible Party *(Position or Title)*	EMC
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	none
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	Grayson County
Hazard	Extreme Heat
Priority (High, Medium, Low)	High
Description of Mitigation Action	Notify current residents of utility assistance programs at TCOG.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Relatively low cost and potentially large benefits.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (Budget)
Responsible Party *(Position or Title)*	EMC
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	none
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	Grayson County
Hazard	Extreme Heat
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Work with local Churches and public building officials to set up a cooling center for in extreme heat events.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Very low cost and potentially high benefit.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (Budget)
Responsible Party *(Position or Title)*	EMC
Implementation Schedule *(1 to 5 years timeframe)*	1 to 3 years
Effects on New Buildings	none
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	Grayson County
Hazard	Droughts
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Educate local producers of the availability of insurance for hay & pasture loss from the local Farm Service Agency. Encourage local producers to report yearly hay production in normal rainfall years to assist in a more accurate loss calculation in drought years.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Low cost and good benefit potential.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (Budget)
Responsible Party *(Position or Title)*	County Extension Agent & Farm Service Agency
Implementation Schedule *(1 to 5 years timeframe)*	3 to 5 years
Effects on New Buildings	none
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	Grayson County
Hazard	Droughts
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Work with County Extension Agent and local nurseries on the education of the general public on using drought resistance vegetation in landscaping.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Very low cost and potentially high benefit.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (Budget)
Responsible Party *(Position or Title)*	EMC
Implementation Schedule *(1 to 5 years timeframe)*	3 to 5 years
Effects on New Buildings	May impact future landscaping provisions.
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	Grayson County
Hazard	Droughts
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Work with Grayson County Groundwater Conservation Committee to develop stringent water usage policies.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Relatively low cost and potentially large benefits.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (Budget)
Responsible Party *(Position or Title)*	County Commissioners
Implementation Schedule *(1 to 5 years timeframe)*	1 to 3 years
Effects on New Buildings	May impact landscaping provisions.
Effect on Existing Buildings	May impact landscaping provisions.

Mitigation Action Table	
Jurisdiction	Grayson County
Hazard	Floods
Priority (High, Medium, Low)	High
Description of Mitigation Action	· Better inform residents for all of Grayson County of mitigation activities that they can implement in their homes such as elevation of appliances above expected flood levels. The information would be provided by publications and booths at community events and would be made available to all jurisdictions which participate in the NFIP.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Very low cost and potentially high benefit.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (Budget)
Responsible Party *(Position or Title)*	EMC & Floodplain Manager
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	Could have major effect.
Effect on Existing Buildings	Could have major effect.

Mitigation Action Table	
Jurisdiction	Grayson County
Hazard	Floods
Priority (High, Medium, Low)	High
Description of Mitigation Action	Education of the public throughout Grayson County on the importance of Flood Insurance. Most homeowners are unaware that their homeowner policy does not provide coverage for this event. Work with local insurance agents to notify homeowners located within jurisdictions participating in the NFIP.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Very low cost and potentially high benefit.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (Budget)
Responsible Party *(Position or Title)*	EMC & Floodplain Manager
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	Could have major effect.
Effect on Existing Buildings	Could have major effect.

Mitigation Action Table	
Jurisdiction	Grayson County
Hazard	Floods
Priority (High, Medium, Low)	High
Description of Mitigation Action	Work with local jurisdiction in the buyout of repetitive flood properties. This includes any structures found to be located in flood areas that are in incorporated and unincorporated areas. (NFIP)
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Relatively high cost but can result in future long term benefits related to annual cost of flood damages in the community.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	High (HMGP)
Responsible Party *(Position or Title)*	EMC
Implementation Schedule *(1 to 5 years timeframe)*	1 to 3 years
Effects on New Buildings	May increase awareness of builders in use of proper standards for flood protection when expanding or modifying building for future growth.
Effect on Existing Buildings	Could remove many existing buildings.

Mitigation Action Table	
Jurisdiction	Grayson County
Hazard	Floods
Priority (High, Medium, Low)	High
Description of Mitigation Action	Turn Around Don't Drown Campaign. This is a campaign that would be aired through the media to educate people on the dangers of driving through flood waters. Obtain additional barricades with special signage linked to Turn Around Don't Drown logo.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Moderate cost that can lead to saved lives.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (Budget)
Responsible Party *(Position or Title)*	EMC
Implementation Schedule *(1 to 5 years timeframe)*	3 to 5 years
Effects on New Buildings	none
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	Grayson County
Hazard	Floods
Priority (High, Medium, Low)	High
Description of Mitigation Action	Better inform residents of mitigation activities that they can implement in their homes such as elevation of appliances above expected flood levels. The information would be provided by, publications, & booths at community events. (NFIP)
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Fairly low cost and potential to reduce flood damages.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (Budget)
Responsible Party *(Position or Title)*	EMC
Implementation Schedule *(1 to 5 years timeframe)*	3 to 5 years
Effects on New Buildings	none
Effect on Existing Buildings	limited but useful

Mitigation Action Table	
Jurisdiction	Grayson County
Hazard	Floods
Priority (High, Medium, Low)	High
Description of Mitigation Action	Education of the public on the importance of Flood Insurance. Most homeowners are unaware that their homeowner policy does not provide coverage for this event. Work with local insurance agents to notify homeowners. (NFIP)
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Fairly low cost and potential to reduce flood damages.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (Budget & Insurance Agents)
Responsible Party *(Position or Title)*	EMC & Floodplain Manager
Implementation Schedule *(1 to 5 years timeframe)*	1 to 3 years
Effects on New Buildings	May encourage better use of NFIP for new homes.
Effect on Existing Buildings	May encourage better use of NFIP for existing homes.

Mitigation Action Table	
Jurisdiction	Grayson County
Hazard	Expansive Soils
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Review city street standards and ensure that methods to reduce soil expansion are used in areas with extremely expansive soils. These methods such as kneading the soil, extreme compacting, and treating of soils with non-swell additives will extend the life of the roadways.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Fairly low cost and potential to reduce street damages.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Medium (Budget)
Responsible Party *(Position or Title)*	Commissioners
Implementation Schedule *(1 to 5 years timeframe)*	1 to 3 years
Effects on New Buildings	May increase awareness of contractors in use of proper standards for expansive soil protection when expanding or modifying roadways for future growth.
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	Grayson County
Hazard	Wind & Thunderstorms
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Work with local jurisdictions to apply for a Multi-Jurisdictional FEMA Safe Room Rebate program.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Application cost is low and potential benefit to communities is great.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	High (PDM Grant)
Responsible Party *(Position or Title)*	EMC
Implementation Schedule *(1 to 5 years timeframe)*	1 to 3 years
Effects on New Buildings	none
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	Grayson County
Hazard	Wind & Thunderstorms
Priority (High, Medium, Low)	High
Description of Mitigation Action	Develop a community outreach program to promote severe weather awareness. Work with local media to publish and air public safety information prior to storm peak season on how to be prepared.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Relatively low cost and potentially large benefits.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (Budget)
Responsible Party *(Position or Title)*	EMC
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	May increase awareness of builders in use of proper standards for tornado protection when expanding or modifying building for future growth.
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	Grayson County
Hazard	Wind & Thunderstorms
Priority (High, Medium, Low)	High
Description of Mitigation Action	Continuation of the Grayson County CERT program. Work with local businesses to encourage employee participation. Explore possible donation sources for CERT supplies.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Relatively low cost and potentially large benefits.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (CCP)
Responsible Party *(Position or Title)*	EMC & Volunteer Coordinator
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	
Effect on Existing Buildings	

Mitigation Action Table	
Jurisdiction	Grayson County
Hazard	Wind & Thunderstorms
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Educate local residents on the importance of NOAA weather radios in homes and offices and how to properly use them. Research into funding opportunities to provide NOAA weather radios free or at a reduced rate to vulnerable and limited income populations. Encourage enrollment in existing telephone emergency notification system.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Very low cost and potentially high benefit.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Medium (Grant, Budget, & Donations)
Responsible Party *(Position or Title)*	EMC & FDs
Implementation Schedule *(1 to 5 years timeframe)*	1 to 3 years
Effects on New Buildings	May increase awareness of builders in use of proper standards for wind and thunderstormn protection when expanding or modifying building for future growth.
Effect on Existing Buildings	

Mitigation Action Table	
Jurisdiction	Grayson County
Hazard	Winter Storm
Priority (High, Medium, Low)	High
Description of Mitigation Action	Continuation of the Grayson County CERT program. Work with local businesses to encourage employee participation. Explore possible donation sources for CERT supplies.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Fairly low cost and potential high benefits to local businesses
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (CCP)
Responsible Party *(Position or Title)*	EMC
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	none
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	Grayson County
Hazard	Winter Storm
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Educate local residents on the importance of NOAA weather radios in homes and offices and how to properly use them. Research into funding opportunities to provide NOAA weather radios free or at a reduced rate to vulnerable and limited income populations.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Very low cost and potentially high benefit.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Medium (Grant, Budget, & Donations)
Responsible Party *(Position or Title)*	EMC & VFDs
Implementation Schedule *(1 to 5 years timeframe)*	1 to 3 years
Effects on New Buildings	none
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	Grayson County
Hazard	Winter Storm
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Develop a plan for emergency shelters setup in the event of a winter storm. This plan would include the search for funds to provide an adequate back up power supply for the shelter.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Very low cost and potentially high benefit.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	High (Grant, Budget, & Donations)
Responsible Party *(Position or Title)*	EMC
Implementation Schedule *(1 to 5 years timeframe)*	1 to 3 years
Effects on New Buildings	none
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	Grayson County
Hazard	Wildfire
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Apply for federal and state grants to enhance the fire fighting capability of the local volunteer fire departments. This would include equipment, water supply, and dry hydrants.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Very low cost and potentially high benefit.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	High (SAFER & AFG)
Responsible Party *(Position or Title)*	EMC & VFDs
Implementation Schedule *(1 to 5 years timeframe)*	1 to 3 years
Effects on New Buildings	Could benefit future homes.
Effect on Existing Buildings	Could benefit existing homes.

Mitigation Action Table	
Jurisdiction	Grayson County
Hazard	Wildfire
Priority (High, Medium, Low)	High
Description of Mitigation Action	Work with local volunteer fire departments to ensure that countywide NIMS compliancy.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Very low cost and potentially high benefit.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (Budget)
Responsible Party *(Position or Title)*	EMC
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	Could benefit future homes.
Effect on Existing Buildings	Could benefit existing homes.

Mitigation Action Table	
Jurisdiction	Grayson County
Hazard	Wildfire
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Educate community on the Fire Wise Program & how to protect your home by establishing a defensible space and fuel reduction management.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Very low cost and potentially high benefit.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (Forestry)
Responsible Party *(Position or Title)*	EMC & VFDs
Implementation Schedule *(1 to 5 years timeframe)*	1 to 3 years
Effects on New Buildings	Could benefit future homes.
Effect on Existing Buildings	Could benefit existing homes.

Mitigation Action Table	
Jurisdiction	Grayson County
Hazard	Wildfire
Priority (High, Medium, Low)	High
Description of Mitigation Action	Develop a method using the media and the internet to notify county residents of the burn ban status and the enforcement of the ban when in place.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Very low cost and potentially high benefit.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (Budget)
Responsible Party *(Position or Title)*	EMC & VFDs
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	Could benefit future homes.
Effect on Existing Buildings	Could benefit existing homes.

Mitigation Action Table	
Jurisdiction	Grayson County
Hazard	Dam Failure
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Educate property owners near high hazard dams of the potential of a dam failure. Inform them of signs to watch for that might signal a weakening of the dam and who to contact if suspicious activity is spotted.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Very low cost and potentially high benefit.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (Budget)
Responsible Party *(Position or Title)*	EMC
Implementation Schedule *(1 to 5 years timeframe)*	1 to 3 years
Effects on New Buildings	Could benefit future homes.
Effect on Existing Buildings	Could benefit existing homes.

Mitigation Action Table	
Jurisdiction	Grayson County
Hazard	Dam Failure
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Work with local resident and County Commissioners to ensure that if roadways are lost due to a dam failure that properties owners are not isolated.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Relatively low cost and low benefit but improves public safety.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Medium (Budget)
Responsible Party *(Position or Title)*	EMC
Implementation Schedule *(1 to 5 years timeframe)*	1 to 3 years
Effects on New Buildings	none
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	Grayson County
Hazard	Dam Failure
Priority (High, Medium, Low)	High
Description of Mitigation Action	Develop printed materials, utilize existing materials, conduct workshops, and encourage residents to have family disaster plans that include emergency evacuation procedures & shelter-in-place emergency guidelines.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Very low cost and potentially high benefit.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (Budget)
Responsible Party *(Position or Title)*	EMC
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	none
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	Grayson County
Hazard	Dam Failure
Priority (High, Medium, Low)	High
Description of Mitigation Action	Determine owners of all high and significant hazard dams in Grayson County and obtain copies of all EAPs submitted to TCEQ for these dames. Review inundation mapping and disseminate copies to appropriate jurisdictions for incorporation into the Hazard Mitigation Plan.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Low cost and very high benefit.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (Budget)
Responsible Party *(Position or Title)*	EMC
Implementation Schedule *(1 to 5 years timeframe)*	1 to 3 years
Effects on New Buildings	Could benefit future homes.
Effect on Existing Buildings	Could benefit existing homes.

Mitigation Action Table	
Jurisdiction	Grayson County
Hazard	Dam Failure
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Obtain necessary dam failure impact data for determining the most appropriate mitigation approach that would achieve compliance with the State's TCEQ regulations for all high and sigmficant impat dams which are lacking necessary data.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Relatively low cost and low benefit but improves public safety.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (Budget)
Responsible Party *(Position or Title)*	EMC
Implementation Schedule *(1 to 5 years timeframe)*	1 to 3 years
Effects on New Buildings	Could benefit future homes.
Effect on Existing Buildings	Could benefit existing homes.

Mitigation Action Table	
Jurisdiction	Grayson County
Hazard	Earthquake
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Work with local resident and County Commissioners to ensure that if roadways are loss due to a dam failure that properties owners are not isolated.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Relatively low cost and low benefit but improves public safety.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Medium (Budget)
Responsible Party *(Position or Title)*	EMC
Implementation Schedule *(1 to 5 years timeframe)*	1 to 3 years
Effects on New Buildings	none
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	Grayson County
Hazard	Earthquake
Priority (High, Medium, Low)	High
Description of Mitigation Action	Develop printed materials, utilize existing materials, conduct workshops, and encourage residents to have family disaster plans that include emergency evacuation procedures & shelter-in-place emergency guidelines.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Very low cost and potentially high benefit.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (Budget)
Responsible Party *(Position or Title)*	EMC
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	none
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	Grayson County
Hazard	Earthquake
Priority (High, Medium, Low)	High
Description of Mitigation Action	Continuation of the Grayson County CERT program. Work with local businesses to encourage employee participation and encourage private sector coordination.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Very low cost and potentially high benefit.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (CCP)
Responsible Party *(Position or Title)*	EMC
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	none
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	Grayson County
Hazard	Terrorism
Priority (High, Medium, Low)	High
Description of Mitigation Action	Develop printed materials, utilize existing materials, conduct workshops, and encourage residents to have family disaster plans that include emergency evacuation procedures & shelter-in-place emergency guidelines.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Very low cost and potentially high benefit.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (Budget)
Responsible Party *(Position or Title)*	EMC
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	none
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	Grayson County
Hazard	Terrorism
Priority (High, Medium, Low)	High
Description of Mitigation Action	Continuation of the Grayson County CERT program. Work with local businesses to encourage employee participation. Explore possible donation sources for CERT supplies.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Very low cost and potentially high benefit.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (CCP)
Responsible Party *(Position or Title)*	EMC
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	none
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	Grayson County
Hazard	Terrorism
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Use disaster anniversaries such as 9/11 to remind the public on safety & security measures.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Very low cost and potentially high benefit.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (Budget)
Responsible Party *(Position or Title)*	EMC
Implementation Schedule *(1 to 5 years timeframe)*	1 to 3 years
Effects on New Buildings	none
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	Grayson County
Hazard	Hazardous Materials
Priority (High, Medium, Low)	High
Description of Mitigation Action	Continuation of the Grayson County CERT program. Work with local businesses to encourage employee participation. Explore possible donation sources for CERT supplies.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Very low cost and potentially high benefit.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (CCP)
Responsible Party *(Position or Title)*	EMC
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	none
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	Grayson County
Hazard	Hazardous Materials
Priority (High, Medium, Low)	High
Description of Mitigation Action	Develop printed materials, utilize existing materials, conduct workshops, and encourage residents to have family disaster plans that include emergency evacuation procedures & shelter-in-place emergency guidelines.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Very low cost and potentially high benefit.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (Budget)
Responsible Party *(Position or Title)*	EMC
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	none
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	Grayson County
Hazard	Hazardous Materials
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Work with TxDOT to ensure that Hazardous Cargo routes are away from heaviest populated areas.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Very low cost and potentially high benefit.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (Budget)
Responsible Party *(Position or Title)*	EMC & Commissioners
Implementation Schedule *(1 to 5 years timeframe)*	1 to 3 years
Effects on New Buildings	Could benefit future homes.
Effect on Existing Buildings	Could benefit existing homes.

Mitigation Action Table	
Jurisdiction	Grayson County
Hazard	General
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Obtain available projections for future growth trends and anticipated land uses within Grayson County for purposes of evaluating whether new or special building codes or land development regulations should be considered by the County or any of the other participating jurisdictions in order to reduce potential damages from the hazards evaluated in this plan.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Fairly low cost to acquire data and could improve HMP in the future
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (Budget)
Responsible Party *(Position or Title)*	EMC
Implementation Schedule *(1 to 5 years timeframe)*	1 to 3 years
Effects on New Buildings	Could have major effect.
Effect on Existing Buildings	Limited if any effect.

Mitigation Action Table	
Jurisdiction	Grayson County
Hazard	Expansive Soils
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Meet with local insurance agents and foundation contractors to determine the historical level of claims and the extent of problems occurring in Grayson County. Determine whether additional action items are possible to further reduce these damage levels.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Fairly low cost to acquire data and could improve HMP in the future
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (Budget)
Responsible Party *(Position or Title)*	EMC
Implementation Schedule *(1 to 5 years timeframe)*	1 to 3 years
Effects on New Buildings	Could have major effect.
Effect on Existing Buildings	Limited if any effect.

Mitigation Action Table	
Jurisdiction	Grayson County
Hazard	Landslides
Priority (High, Medium, Low)	Low
Description of Mitigation Action	Obtain additional data to further evaluate the hazards associated with landslides during the next planning cycle, should data become available.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Fairly low cost to acquire data and could improve HMP in the future
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (Budget)
Responsible Party *(Position or Title)*	EMC
Implementation Schedule *(1 to 5 years timeframe)*	3 to 5 years
Effects on New Buildings	Could benefit future homes.
Effect on Existing Buildings	Limited if any effect.

Mitigation Action Table	
Jurisdiction	Grayson County
Hazard	Land subsidence
Priority (High, Medium, Low)	Low
Description of Mitigation Action	Obtain additional data to further evaluate the hazards associated with land subsidence during the next planning cycle, should data become available.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Fairly low cost to acquire data and could improve HMP in the future
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (Budget)
Responsible Party *(Position or Title)*	EMC
Implementation Schedule *(1 to 5 years timeframe)*	3 to 5 years
Effects on New Buildings	Could benefit future homes.
Effect on Existing Buildings	Limited if any effect.

Mitigation Action Table	
Jurisdiction	Grayson County
Hazard	Land subsidence
Priority (High, Medium, Low)	Low
Description of Mitigation Action	Determine probability of future events, their location, extent and impact, and extablish appropriate mitigation actions based on findings in the next planning cycle.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Fairly low cost to acquire data and could improve HMP in the future
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (Budget)
Responsible Party *(Position or Title)*	EMC
Implementation Schedule *(1 to 5 years timeframe)*	3 to 5 years
Effects on New Buildings	Could benefit future homes.
Effect on Existing Buildings	Limited if any effect.

City of Bells

Mitigation Goals and Actions

Developing Mitigation Goals and Actions for Grayson County Hazard Mitigation Plan (HMP)

Goals are general guidelines that explain what you want to achieve. They are usually broad policy-type statements, long term, and represent global visions. The following **Goals** appear in the State of Texas Mitigation Plan and are suggested for the Grayson County HMP:

- Reduce or eliminate hazardous conditions that cause loss of life
- Reduce or eliminate hazardous conditions that inflict injuries
- Reduce or eliminate hazardous conditions that cause property damage
- Reduce or eliminate hazardous conditions that degrade important natural resources

Mitigation Actions are specific actions that help you achieve your goals. **At least two actions needs to be recorded per each hazard identified in the Risk Assessment.**

Examples:
Elevate three historic structures located in the downtown district
Sponsor a community fair to promote wildfire defensible space
Retrofit the police department to withstand high wind damage

***Note:** Please include mitigation actions in the HMP that may be eligible for FEMA funding.*

Priority Ranking, please indicate your "vote". **(Low, Medium, High)**

Questions to consider when ranking mitigation actions:
- Is the proposed action socially acceptable and will all citizens be treated fairly?
- Is the action compatible with present and future community values?
- Is the action technically feasible and will it move the community towards its goal?
- Does the City have the legal authority to implement the action?
- Does the City have the technical capability to implement the action?

***Note:** Funding is often a constraint; at this time, do not allow that to influence your indication of priorities. One purpose of the plan is to help support efforts to secure funding for implementation.*

Please fill out the sections in the following tables.

Mitigation Action Table	
Jurisdiction	Bells
Hazard	Tornado
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Currently the city has no outdoor warning sirens. Grant funding would be needed to fund even one siren due to the cost of approximately $30K.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Moderate cost but could save multiple lives.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	High (HMGP)
Responsible Party *(Position or Title)*	City Clerk & Elected Officials
Implementation Schedule *(1 to 5 years timeframe)*	1 to 3 years
Effects on New Buildings	None
Effect on Existing Buildings	None

Mitigation Action Table	
Jurisdiction	Bells
Hazard	Tornado
Priority (High, Medium, Low)	High
Description of Mitigation Action	Continue to recruit, educate, and train volunteer fire department members to serve as storm spotters.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Fairly low cost and provides for better public safety.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (Budget)
Responsible Party *(Position or Title)*	VFD
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	None
Effect on Existing Buildings	None

Mitigation Action Table	
Jurisdiction	Bells
Hazard	Tornado
Priority (High, Medium, Low)	High
Description of Mitigation Action	Insure that all critical instruments at City Hall have generator backup.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Moderate cost but could improve ability recovery ability after event..
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (Budget)
Responsible Party *(Position or Title)*	City Clerk & Elected Officials
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	None
Effect on Existing Buildings	None

Mitigation Action Table	
Jurisdiction	Bells
Hazard	Tornado
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Maintain cell phone signal booster antenna at City Hall to provide for redundant communications.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Moderate cost but could improve recovery ability after event.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (Budget)
Responsible Party *(Position or Title)*	City Clerk & Elected Officials
Implementation Schedule *(1 to 5 years timeframe)*	3 to 5 years
Effects on New Buildings	None
Effect on Existing Buildings	None

Mitigation Action Table	
Jurisdiction	Bells
Hazard	Tornado
Priority (High, Medium, Low)	High
Description of Mitigation Action	Yearly updating of building codes and continual education of the public, realtors, and home inspectors on the dangers associated with substandard construction.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Very low cost but provides substantial preventative benefits.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (Budget)
Responsible Party *(Position or Title)*	City Clerk & Elected Officials
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	Major
Effect on Existing Buildings	Major

Mitigation Action Table	
Jurisdiction	Bells
Hazard	Tornado
Priority (High, Medium, Low)	Low
Description of Mitigation Action	Work with Grayson County and other local jurisdictions to apply for a county wide Safe Room Rebate Program.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Application cost is low and potential benefit to communities is great.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	High (PDM)
Responsible Party *(Position or Title)*	County EMC & Elected Officials
Implementation Schedule *(1 to 5 years timeframe)*	3 to 5 years
Effects on New Buildings	None
Effect on Existing Buildings	None

Mitigation Action Table	
Jurisdiction	Bells
Hazard	Hailstorms
Priority (High, Medium, Low)	High
Description of Mitigation Action	Continue to recruit, educate, and train volunteer fire department members to serve as storm spotters.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Fairly low cost and provides for better public safety.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (Budget)
Responsible Party *(Position or Title)*	FVD
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	None
Effect on Existing Buildings	None

Mitigation Action Table	
Jurisdiction	Bells
Hazard	Hailstorms
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Bells has no outdoor warning siren. Grant funding would be needed to fund this project due to the cost of approximately $30K.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Moderate cost but could save multiple lives.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	High (HMGP)
Responsible Party *(Position or Title)*	City Clerk & Elected Officials
Implementation Schedule *(1 to 5 years timeframe)*	1 to 3 years
Effects on New Buildings	None
Effect on Existing Buildings	None

Mitigation Action Table	
Jurisdiction	Bells
Hazard	Hailstorms
Priority (High, Medium, Low)	High
Description of Mitigation Action	Yearly updating of building codes and continual education of the public, realtors, and home inspectors on the dangers associated with substandard construction.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Very low cost but provides substantial preventative benefits.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (Budget)
Responsible Party *(Position or Title)*	City Clerk & Elected Officials
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	Major
Effect on Existing Buildings	Major

Mitigation Action Table	
Jurisdiction	Bells
Hazard	Extreme Heat
Priority (High, Medium, Low)	High
Description of Mitigation Action	Establish and educate residents on "Cooling Shelter" locations.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Very low cost but provides substantial preventative benefits.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (Budget)
Responsible Party *(Position or Title)*	City Clerk & Elected Officials
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	None
Effect on Existing Buildings	None

Mitigation Action Table	
Jurisdiction	Bells
Hazard	Extreme Heat
Priority (High, Medium, Low)	High
Description of Mitigation Action	Annual update of Drought Contingency Plan.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Very low cost but provides substantial preventative benefits.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (Budget)
Responsible Party *(Position or Title)*	City Clerk & Elected Officials
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	None
Effect on Existing Buildings	None

Mitigation Action Table	
Jurisdiction	Bells
Hazard	Extreme Heat
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Develop a plan to reduce water consumption and implement a water conservation awareness program. Develop a method to detect and stop unauthorized water use by other entities.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Very low cost but provides substantial preventative benefits.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Medium (Budget)
Responsible Party *(Position or Title)*	City Clerk & Elected Officials
Implementation Schedule *(1 to 5 years timeframe)*	1 to 3 years
Effects on New Buildings	Some potential improvement to future building safety.
Effect on Existing Buildings	Some potential improvement to existing building safety.

Mitigation Action Table	
Jurisdiction	Bells
Hazard	Droughts
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Develop a plan to reduce water consumption and implement a water conservation awareness program. Develop a method to detect and stop unauthorized water use by other entities.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Very low cost but provides substantial preventative benefits.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Medium (Budget)
Responsible Party *(Position or Title)*	City Clerk & Elected Officials
Implementation Schedule *(1 to 5 years timeframe)*	1 to 3 years
Effects on New Buildings	Some potential improvement to future building safety.
Effect on Existing Buildings	Some potential improvement to existing building safety.

Mitigation Action Table	
Jurisdiction	Bells
Hazard	Droughts
Priority (High, Medium, Low)	High
Description of Mitigation Action	Annual update of Drought Contingency Plan.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Very low cost but provides substantial preventative benefits.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (Budget)
Responsible Party *(Position or Title)*	City Clerk & Elected Officials
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	Some potential improvement to future building safety.
Effect on Existing Buildings	Some potential improvement to existing building safety.

Mitigation Action Table	
Jurisdiction	Bells
Hazard	Droughts
Priority (High, Medium, Low)	High
Description of Mitigation Action	Maintain and implement the adopted "Fire Plan" for the local school district. This includes installing a well, fire line, & a 500 gpm pump.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Moderate cost but provides substantial benefit and protection of the public.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (Budget)
Responsible Party *(Position or Title)*	City Clerk & Elected Officials
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	Major
Effect on Existing Buildings	Major

Mitigation Action Table	
Jurisdiction	Bells
Hazard	Floods
Priority (High, Medium, Low)	High
Description of Mitigation Action	· Pursue adoption of required ordinances and approval to participate in NFIP.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Very low cost and very high benefit..
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (Budget)
Responsible Party *(Position or Title)*	City Clerk & Elected Officials
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	Major
Effect on Existing Buildings	Major

Mitigation Action Table	
Jurisdiction	Bells
Hazard	Floods
Priority (High, Medium, Low)	High
Description of Mitigation Action	Work with engineers to develop a storm drainage system and seek funding for help with cost of instillation.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Moderate cost but provides substantial benefit and protection of the public.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	High (CDBG)
Responsible Party *(Position or Title)*	City Clerk & Elected Officials
Implementation Schedule *(1 to 5 years timeframe)*	3 to 5 years
Effects on New Buildings	Major
Effect on Existing Buildings	Major

Mitigation Action Table	
Jurisdiction	Bells
Hazard	Floods
Priority (High, Medium, Low)	High
Description of Mitigation Action	Educate local residents on the participation of the city in the NFIP program and the importance of purchasing flood insurance. (NFIP)
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Very low cost and could improve ability for recovery after flood event.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (Budget)
Responsible Party *(Position or Title)*	City Clerk & Elected Officials
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	Major
Effect on Existing Buildings	Major

Mitigation Action Table	
Jurisdiction	Bells
Hazard	Wind & Thunderstorms
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Bells has no outdoor warning siren. Grant funding would be needed to fund this project due to the cost of approximately $30K per siren.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Moderate cost but could save multiple lives.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	High (HMGP)
Responsible Party *(Position or Title)*	City Clerk & Elected Officials
Implementation Schedule *(1 to 5 years timeframe)*	1 to 3 years
Effects on New Buildings	None
Effect on Existing Buildings	None

Mitigation Action Table	
Jurisdiction	Bells
Hazard	Wind & Thunderstorms
Priority (High, Medium, Low)	High
Description of Mitigation Action	Continue to recruit, educate, and train volunteer fire department members to serve as storm spotters.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Fairly low cost and provides for better public safety.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (Budget)
Responsible Party *(Position or Title)*	VFD
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	None
Effect on Existing Buildings	None

Mitigation Action Table	
Jurisdiction	Bells
Hazard	Wind & Thunderstorms
Priority (High, Medium, Low)	High
Description of Mitigation Action	Yearly updating of building codes and continual education of the public, realtors, and home inspectors on the dangers associated with substandard construction.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Very low cost but provides substantial preventative benefits.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (Budget)
Responsible Party *(Position or Title)*	City Clerk & Elected Officials
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	Major
Effect on Existing Buildings	Major

Mitigation Action Table	
Jurisdiction	Bells
Hazard	Winter Storm
Priority (High, Medium, Low)	Low
Description of Mitigation Action	Seek funding sources for the purchasing of a mobile generator for utility service or other critical infrastructure.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Moderate cost but could improve recovery ability after event.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	High (HMGP)
Responsible Party *(Position or Title)*	City Clerk & Elected Officials
Implementation Schedule *(1 to 5 years timeframe)*	3 to 5 years
Effects on New Buildings	None
Effect on Existing Buildings	None

Mitigation Action Table	
Jurisdiction	Bells
Hazard	Winter Storm
Priority (High, Medium, Low)	High
Description of Mitigation Action	Educate residents on shelter-in-place planning and increase awareness that no public shelter is established in the City of Bells. Explore possibility of establishing public shelter.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Fairly low cost and provides for better public safety.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (Budget)
Responsible Party *(Position or Title)*	City Clerk & Elected Officials
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	None
Effect on Existing Buildings	None

Mitigation Action Table	
Jurisdiction	Bells
Hazard	Wildfire
Priority (High, Medium, Low)	High
Description of Mitigation Action	Develop an enhanced Fire Plan for the local school district including equipping the District with any additional items necessary to implement the Plan.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Moderate cost but provides substantial benefit and protection of the public.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (Budget)
Responsible Party *(Position or Title)*	VFD, School Admin, & Elected Officials
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	Major
Effect on Existing Buildings	Major

Mitigation Action Table	
Jurisdiction	Bells
Hazard	Wildfire
Priority (High, Medium, Low)	High
Description of Mitigation Action	Develop and maintain mutual aid agreements with neighboring jurisdictions.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Very low cost and high potential for benefits to the community.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (Budget)
Responsible Party *(Position or Title)*	VFD
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	Significant safety improvements possible.
Effect on Existing Buildings	Significant safety improvements possible.

Mitigation Action Table	
Jurisdiction	Bells
Hazard	Wildfire
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Educate the community on the evacuation routes from and through the City of Bells and the school campuses.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Fairly low cost and provides for better public safety.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Medium(Budget)
Responsible Party *(Position or Title)*	VFD, City Clerk & Elected Officials
Implementation Schedule *(1 to 5 years timeframe)*	1 to 3 years
Effects on New Buildings	None
Effect on Existing Buildings	None

Mitigation Action Table	
Jurisdiction	Bells
Hazard	Wildfire
Priority (High, Medium, Low)	High
Description of Mitigation Action	Follow plan to ensure that new staff members meet NIMS compliance. as soon as possible.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Fairly low cost and provides for better public safety.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (Budget)
Responsible Party *(Position or Title)*	City Clerk & Elected Officials
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	None
Effect on Existing Buildings	None

Mitigation Action Table	
Jurisdiction	Bells
Hazard	Earthquake
Priority (High, Medium, Low)	High
Description of Mitigation Action	Yearly updating of building codes and continual education of the public, realtors, and home inspectors on the dangers associated with substandard construction.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Very low cost but provides substantial preventative benefits.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (Budget)
Responsible Party *(Position or Title)*	City Clerk & Elected Officials
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	Significant safety improvements possible.
Effect on Existing Buildings	Significant safety improvements possible.

Mitigation Action Table	
Jurisdiction	Bells
Hazard	Earthquake
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Educate the community on the evacuation routes from and through the City of Bells and the school campuses.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Fairly low cost and provides for better public safety.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Medium(Budget)
Responsible Party *(Position or Title)*	VFD
Implementation Schedule *(1 to 5 years timeframe)*	1 to 3 years
Effects on New Buildings	None
Effect on Existing Buildings	None

Mitigation Action Table	
Jurisdiction	Bells
Hazard	Terrorism
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Educate the community on the evacuation routes from and through the City of Bells and the school campuses.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Fairly low cost and provides for better public safety.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Medium(Budget)
Responsible Party *(Position or Title)*	City Clerk & Elected Officials
Implementation Schedule *(1 to 5 years timeframe)*	1 to 3 years
Effects on New Buildings	None
Effect on Existing Buildings	None

Mitigation Action Table	
Jurisdiction	Bells
Hazard	Terrorism
Priority (High, Medium, Low)	High
Description of Mitigation Action	Follow plan to ensure that new staff members meet NIMS compliance. as soon as possible.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Fairly low cost and provides for better public safety.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (Budget)
Responsible Party *(Position or Title)*	VFD, City Clerk & Elected Officials
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	None
Effect on Existing Buildings	None

Mitigation Action Table	
Jurisdiction	Bells
Hazard	Hazardous Materials
Priority (High, Medium, Low)	High
Description of Mitigation Action	Develop plan and process to report to Grayson County & TCEQ authorities all known illegal dumping as soon as it is reported.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Fairly low cost and provides for better public safety.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (Budget)
Responsible Party *(Position or Title)*	City Clerk & Elected Officials
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	None
Effect on Existing Buildings	None

Mitigation Action Table	
Jurisdiction	Bells
Hazard	Hazardous Materials
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Educate the community on the evacuation routes from and through the City of Bells and the school campuses.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Fairly low cost and provides for better public safety.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Medium(Budget)
Responsible Party *(Position or Title)*	VFD
Implementation Schedule *(1 to 5 years timeframe)*	1 to 3 years
Effects on New Buildings	None
Effect on Existing Buildings	None

Mitigation Action Table	
Jurisdiction	Bells
Hazard	Hazardous Materials
Priority (High, Medium, Low)	High
Description of Mitigation Action	Follow plan to ensure that new staff members meet NIMS compliance. as soon as possible.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Fairly low cost and provides for better public safety.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (Budget)
Responsible Party *(Position or Title)*	VFD, City Clerk & Elected Officials
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	None
Effect on Existing Buildings	None

City of Collinsville
Mitigation Goals and Actions

Developing Mitigation Goals and Actions for Grayson County Hazard Mitigation Plan (HMP)

Goals are general guidelines that explain what you want to achieve. They are usually broad policy-type statements, long term, and represent global visions. The following **Goals** appear in the State of Texas Mitigation Plan and are suggested for the Grayson County HMP:

- Reduce or eliminate hazardous conditions that cause loss of life
- Reduce or eliminate hazardous conditions that inflict injuries
- Reduce or eliminate hazardous conditions that cause property damage
- Reduce or eliminate hazardous conditions that degrade important natural resources

Mitigation Actions are specific actions that help you achieve your goals. **At least two actions needs to be recorded per each hazard identified in the Risk Assessment.**

Examples:
Elevate three historic structures located in the downtown district
Sponsor a community fair to promote wildfire defensible space
Retrofit the police department to withstand high wind damage

***Note:** Please include mitigation actions in the HMP that may be eligible for FEMA funding.*

Priority Ranking, please indicate your "vote". **(Low, Medium, High)**

Questions to consider when ranking mitigation actions:
- Is the proposed action socially acceptable and will all citizens be treated fairly?
- Is the action compatible with present and future community values?
- Is the action technically feasible and will it move the community towards its goal?
- Does the City have the legal authority to implement the action?
- Does the City have the technical capability to implement the action?

***Note:** Funding is often a constraint; at this time, do not allow that to influence your indication of priorities. One purpose of the plan is to help support efforts to secure funding for implementation.*

Please fill out the sections in the following tables.

Mitigation Action Table	
Jurisdiction	Collinsville
Hazard	Flooding
Priority (High, Medium, Low)	High
Description of Mitigation Action	Take advantage of County-provided educational material on the NFIP and actively promote city residents to participate in the NFIP.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Low cost and very high benefit.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (Budget)
Responsible Party *(Position or Title)*	Mayor and Public Works Director
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	Could benefit future homes.
Effect on Existing Buildings	Could benefit existing homes.

Mitigation Action Table	
Jurisdiction	Collinsville
Hazard	Flooding
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Improve drainage in southeast section of city by cleaning ditches and installing larger culverts.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Will require significant expense including staff time, machinery & cost of larger culverts. Will reduce potential flooding for residential and commercial property.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal General Fund.
Responsible Party *(Position or Title)*	Mayor & Public Works Director.
Implementation Schedule *(1 to 5 years timeframe)*	On going.
Effects on New Buildings	Eliminates potential flooding of new buildings.
Effect on Existing Buildings	Eliminates potential flooding of existing buildings.

Mitigation Action Table	
Jurisdiction	Collinsville
Hazard	Flooding
Priority (High, Medium, Low)	Low
Description of Mitigation Action	Educate rand encourage residents to refrain from raking leaves into ditches
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Minimal staff time. Benefit will include faster drainage during heavy rains.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal general funds
Responsible Party *(Position or Title)*	Public Works Director
Implementation Schedule *(1 to 5 years timeframe)*	On going
Effects on New Buildings	Eliminates potential flooding
Effect on Existing Buildings	Eliminates potential flooding

Mitigation Action Table	
Jurisdiction	Collinsville
Hazard	Landslide
Priority (High, Medium, Low)	Low
Description of Mitigation Action	Based on the topography of the City of Collinsville, landslides are not considered a potential hazard.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	
Responsible Party *(Position or Title)*	
Implementation Schedule *(1 to 5 years timeframe)*	
Effects on New Buildings	
Effect on Existing Buildings	

Mitigation Action Table	
Jurisdiction	Collinsville
Hazard	Wildfires
Priority (High, Medium, Low)	Low
Description of Mitigation Action	Based on the topography of the City of Collinsville, wildfires are not considered a potential hazard.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	
Responsible Party *(Position or Title)*	
Implementation Schedule *(1 to 5 years timeframe)*	
Effects on New Buildings	
Effect on Existing Buildings	

Mitigation Action Table	
Jurisdiction	Collinsville
Hazard	Lightning
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Retrofit water facilities with alternative power source in the event of power loss or equipment damage associated with severe lightning.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Significant expense for generators. Benefits include capability of providing water service and continue regulatory compliance.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal, loan funds or grant funds.
Responsible Party *(Position or Title)*	Mayor, Public Works Director.
Implementation Schedule *(1 to 5 years timeframe)*	Due to anticipated cost, project will need to be completed in stages unless a grant is received. Expect to complete in 5 years.
Effects on New Buildings	Positive effect by ensuring water supply after a lighting event.
Effect on Existing Buildings	Positive effect by ensuring water supply after a lighting event.

Mitigation Action Table	
Jurisdiction	Collinsville
Hazard	Lightning
Priority (High, Medium, Low)	Low
Description of Mitigation Action	Installed generator at wastewater plant. Provide a portable generator capable of operating a lift station.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Significant expense for equipment and staff time. Provide sewage service in the event of power loss and comply with regulatory requirements.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal funds and loan funds.
Responsible Party *(Position or Title)*	Public Works Director.
Implementation Schedule *(1 to 5 years timeframe)*	Completed.
Effects on New Buildings	Positive effect based on ability to continue providing service.
Effect on Existing Buildings	Positive effect based on ability to continue providing service.

Mitigation Action Table	
Jurisdiction	Collinsville
Hazard	Land Subsidence
Priority (High, Medium, Low)	Low
Description of Mitigation Action	Based on the geological formations underlying the City of Collinsville, land subsidence is not considered a potential hazard.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	
Responsible Party *(Position or Title)*	
Implementation Schedule *(1 to 5 years timeframe)*	
Effects on New Buildings	
Effect on Existing Buildings	

Mitigation Action Table	
Jurisdiction	Collinsville
Hazard	Expansive Soils
Priority (High, Medium, Low)	Low
Description of Mitigation Action	Based on the geological location of the City of Collinsville, expansive soil is not considered a potential hazard.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	
Responsible Party *(Position or Title)*	
Implementation Schedule *(1 to 5 years timeframe)*	
Effects on New Buildings	
Effect on Existing Buildings	

Mitigation Action Table	
Jurisdiction	Collinsville
Hazard	Dam and Levee Failure
Priority (High, Medium, Low)	Low
Description of Mitigation Action	There are no dams or levees in the Collinsville area.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	
Responsible Party *(Position or Title)*	
Implementation Schedule *(1 to 5 years timeframe)*	
Effects on New Buildings	
Effect on Existing Buildings	

Mitigation Action Table	
Jurisdiction	Collinsville
Hazard	Wind Storm
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Inspect overhanging tree limbs on aerial power line routes to eliminate loss of power due to broken limbs. Report any potential problem areas to power company.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Minimal staff time. Benefit includes reduced power loss due to lines pulled down by falling limbs.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal General Funds.
Responsible Party *(Position or Title)*	Public Works Director.
Implementation Schedule *(1 to 5 years timeframe)*	On going.
Effects on New Buildings	Positive effect based on ability to continue providing service.
Effect on Existing Buildings	Positive effect based on ability to continue providing service.

Mitigation Action Table	
Jurisdiction	Collinsville
Hazard	Wind Storm/Hail storm
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Encourage citizens to inspect tree limbs on their property and report potential problems to power company.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Minimal staff time. Benefit includes reduced power loss from falling limbs.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal General Fund.
Responsible Party *(Position or Title)*	Public Works Director.
Implementation Schedule *(1 to 5 years timeframe)*	On going.
Effects on New Buildings	Positive effect based on ability to continue providing service.
Effect on Existing Buildings	Positive effect based on ability to continue providing service.

Mitigation Action Table	
Jurisdiction	Collinsville
Hazard	Tornado
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	• Provide storm spotters in several locations enabling the warning sirens to be activated giving ample time to seek shelter. • Open community building for an emergency shelter.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Minimal staff time. Benefits in early detection of storms with potential of saving lives.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal General Funds.
Responsible Party *(Position or Title)*	Fire and Police Chief
Implementation Schedule *(1 to 5 years timeframe)*	Continuous
Effects on New Buildings	No effect expected on new buildings. The measure benefits the occupants of new buildings.
Effect on Existing Buildings	No effect expected on existing buildings. The measure benefits the occupants of existing buildings.

Mitigation Action Table	
Jurisdiction	Collinsville
Hazard	Tornado
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Educate residents on actions to take when sirens are activated
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Minimal staff time. Benefits in early detection of storms with potential of saving lives.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal General Funds.
Responsible Party *(Position or Title)*	Fire and Police Chief
Implementation Schedule *(1 to 5 years timeframe)*	Continuous
Effects on New Buildings	No effect expected on new buildings. The measure benefits the occupants of new buildings.
Effect on Existing Buildings	No effect expected on existing buildings. The measure benefits the occupants of existing buildings.

Mitigation Action Table	
Jurisdiction	Collinsville
Hazard	Severe Winter Storm
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Retrofit water facilities with alternative power sources in the event of power loss.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Significant expense for generators. Ability to continue providing water in the event of a power loss associated with a severe winter storm.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal, loan funds or grant funds.
Responsible Party *(Position or Title)*	Mayor & Public Works Director.
Implementation Schedule *(1 to 5 years timeframe)*	Due to anticipated cost, project will need to be completed in stages unless a grant is received. Expect to complete in 5 years.
Effects on New Buildings	Positive effect based on ability to continue providing service.
Effect on Existing Buildings	Positive effect based on ability to continue providing service.

Mitigation Action Table	
Jurisdiction	Collinsville
Hazard	Severe Winter Storm
Priority (High, Medium, Low)	Low
Description of Mitigation Action	Installed generator at wastewater plant. Provide a portable generator capable of operating a lift station.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Significant expense for equipment and staff time.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal General Funds.
Responsible Party *(Position or Title)*	Public Works Director.
Implementation Schedule *(1 to 5 years timeframe)*	Complete.
Effects on New Buildings	Positive effect based on ability to continue providing service.
Effect on Existing Buildings	Positive effect based on ability to continue providing service.

Mitigation Action Table	
Jurisdiction	Collinsville
Hazard	Hailstorm
Priority (High, Medium, Low)	Low
Description of Mitigation Action	Protect City owned vehicles and other equipment in the event of a hailstorm.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Limited staff time. Reduce damage to city assets.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal General Funds.
Responsible Party *(Position or Title)*	Public Works Director.
Implementation Schedule *(1 to 5 years timeframe)*	Completed.
Effects on New Buildings	No effect on new buildings.
Effect on Existing Buildings	No effect on existing buildings.

Mitigation Action Table	
Jurisdiction	Collinsville
Hazard	Extreme Temperatures
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Maintain a routine vehicle and equipment maintenance schedule.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Limited staff time. Vehicles & equipment are available for use when needed.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal General Funds.
Responsible Party *(Position or Title)*	Public Works Director.
Implementation Schedule *(1 to 5 years timeframe)*	On going.
Effects on New Buildings	No effect.
Effect on Existing Buildings	No effect.

Mitigation Action Table	
Jurisdiction	Collinsville
Hazard	Drought
Priority (High, Medium, Low)	Low
Description of Mitigation Action	No crop producing entities located within the city limits of Collinsville. Drought conditions are not considered a potential hazard.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	
Responsible Party *(Position or Title)*	
Implementation Schedule *(1 to 5 years timeframe)*	
Effects on New Buildings	
Effect on Existing Buildings	

Mitigation Action Table	
Jurisdiction	Collinsville
Hazard	Earthquake
Priority (High, Medium, Low)	Low
Description of Mitigation Action	Based on historical data, earthquakes are not considered a potential hazard in Collinsville.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	
Responsible Party *(Position or Title)*	
Implementation Schedule *(1 to 5 years timeframe)*	
Effects on New Buildings	
Effect on Existing Buildings	

Mitigation Action Table	
Jurisdiction	Collinsville
Hazard	Extreme Temperatures
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Encourage the elderly and those with medical problems to remain indoors during extreme hot or cold temperatures. Will also make a community building available if necessary
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Minimal staff time. The benefit is assurance that the residents have a cool or warm place to stay if needed
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal
Responsible Party *(Position or Title)*	City Mayor and Police Chief
Implementation Schedule *(1 to 5 years timeframe)*	On going
Effects on New Buildings	No effect
Effect on Existing Buildings	No effect

Mitigation Action Table	
Jurisdiction	Collinsville
Hazard	Tornado
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Protect City owned vehicles and other equipment in the event of a hailstorm.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Limited staff time. Reduce damage to city assets.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal General Funds.
Responsible Party *(Position or Title)*	Public Works Director.
Implementation Schedule *(1 to 5 years timeframe)*	Completed.
Effects on New Buildings	No effect on new buildings.
Effect on Existing Buildings	No effect on existing buildings.

City of Denison

Mitigation Goals and Actions

Developing Mitigation Goals and Actions for Grayson County Hazard Mitigation Plan (HMP)

Goals are general guidelines that explain what you want to achieve. They are usually broad policy-type statements, long term, and represent global visions. The following **Goals** appear in the State of Texas Mitigation Plan and are suggested for the Grayson County HMP:

- Reduce or eliminate hazardous conditions that cause loss of life
- Reduce or eliminate hazardous conditions that inflict injuries
- Reduce or eliminate hazardous conditions that cause property damage
- Reduce or eliminate hazardous conditions that degrade important natural resources

Mitigation Actions are specific actions that help you achieve your goals. **At least two actions needs to be recorded per each hazard identified in the Risk Assessment.**

Examples:
Elevate three historic structures located in the downtown district
Sponsor a community fair to promote wildfire defensible space
Retrofit the police department to withstand high wind damage

***Note:** Please include mitigation actions in the HMP that may be eligible for FEMA funding.*

Priority Ranking, please indicate your "vote". **(Low, Medium, High)**

Questions to consider when ranking mitigation actions:
- Is the proposed action socially acceptable and will all citizens be treated fairly?
- Is the action compatible with present and future community values?
- Is the action technically feasible and will it move the community towards its goal?
- Does the City have the legal authority to implement the action?
- Does the City have the technical capability to implement the action?

***Note:** Funding is often a constraint; at this time, do not allow that to influence your indication of priorities. One purpose of the plan is to help support efforts to secure funding for implementation.*

Please fill out the sections in the following tables.

Mitigation Action Table	
Jurisdiction	Denison
Hazard	Tornado
Priority (High, Medium, Low)	High
Description of Mitigation Action	Work with local media to publish and air public safety information prior to storm peak season on how to be prepared.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Very low cost activity which can provide a high benefit for public safety.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (Budget)
Responsible Party *(Position or Title)*	EMC & Local Staff
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	none
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	Denison
Hazard	Tornado
Priority (High, Medium, Low)	High
Description of Mitigation Action	Update communications and storm tracking capabilities of the Mobile Communications Trailer.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Moderate cost and good potential to benefit public safety.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Medium (HMGP)
Responsible Party *(Position or Title)*	EMC & Local Staff
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	none
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	Denison
Hazard	Tornado
Priority (High, Medium, Low)	High
Description of Mitigation Action	Work with local jurisdictions to increase Wi-Fi and cellular signal ranges for Public Safety personnel. This would include updating, adding, and replacing radios.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Moderate cost and good potential to benefit public safety.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	High (HMGP)
Responsible Party *(Position or Title)*	EMC & Local Staff
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	none
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	Denison
Hazard	Tornado
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Work towards modernizing our government access channel to include real-time alerts and the ability to remotely post information from the Emergency Operations Center during an event.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Moderate cost and good potential to benefit public safety.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	High (Budget)
Responsible Party *(Position or Title)*	EMC & Local Staff
Implementation Schedule *(1 to 5 years timeframe)*	1 to 3 years
Effects on New Buildings	none
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	Denison
Hazard	Tornado
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Develop a program to provide NOAA weather radios to limited-income residents that live in high risk areas such a mobile home parks.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Significant cost but benefits a segment of the population that is especially vulnerable during tornadic activity.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Medium (HMGP)
Responsible Party *(Position or Title)*	EMC & Local Staff
Implementation Schedule *(1 to 5 years timeframe)*	1 to 3 years
Effects on New Buildings	none
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	Denison
Hazard	Tornado
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Explore the benefits of being certified as a NWS StormREADY Community.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Very low cost activity which can provide a high benefit for public safety.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (Budget)
Responsible Party *(Position or Title)*	EMC & Local Staff
Implementation Schedule *(1 to 5 years timeframe)*	1 to 3 years
Effects on New Buildings	none
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	Denison
Hazard	Tornado
Priority (High, Medium, Low)	Low
Description of Mitigation Action	Work with Grayson County to apply for a Multi-Jurisdictional FEMA Safe Room Rebate program.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Application cost is low and potential benefit to communities is great.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	High (PDM Grant)
Responsible Party *(Position or Title)*	EMC & Local Staff
Implementation Schedule *(1 to 5 years timeframe)*	3 to 5 years
Effects on New Buildings	none
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	Denison
Hazard	Tornado
Priority (High, Medium, Low)	Low
Description of Mitigation Action	Work towards the implementation and maintenance of a Citizens Fire Academy for community education. Explore possible donation sources for supplies.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Very low cost activity which can provide a high benefit for public safety and improve recovery operations.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Medium (Budget and private funding)
Responsible Party *(Position or Title)*	EMC & Local Staff
Implementation Schedule *(1 to 5 years timeframe)*	3 to 5 years
Effects on New Buildings	none
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	Denison
Hazard	Hailstorms
Priority (High, Medium, Low)	High
Description of Mitigation Action	Enhance and add local outdoor warning sirens to ensure adequate coverage in all areas of the community and educate residents on the importance of NOAA weather radios in homes and businesses. Promote enrollment of all residents in existing telephone emerg
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Cost is relatively low compared to benefits of reduction in lost lives and injuries
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Medium (HMGP)
Responsible Party *(Position or Title)*	EMC & Local Staff
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	none
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	Denison
Hazard	Hailstorms
Priority (High, Medium, Low)	High
Description of Mitigation Action	Distribute emergency preparedness information related to weather hazards.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Very low cost activity which can provide a high benefit for public safety.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (Budget)
Responsible Party *(Position or Title)*	EMC & Local Staff
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	May increase awareness of builders in use of proper standards for weather protection when expanding or modifying buildings for future growth.
Effect on Existing Buildings	May increase awareness of builders in use of proper standards for weather protection when expanding or modifying existing buildings.

Mitigation Action Table	
Jurisdiction	Denison
Hazard	Hailstorms
Priority (High, Medium, Low)	High
Description of Mitigation Action	Update communications and storm tracking capabilities of the Mobile Command Center.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Moderate cost and good potential to benefit public safety.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Medium (HMGP)
Responsible Party *(Position or Title)*	EMC & Local Staff
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	none
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	Denison
Hazard	Hailstorms
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Work towards the implementation and maintenance of a Citizens Fire Academy for community education. Explore possible donation sources for supplies.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Moderate cost and good potential to benefit public safety.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Medium (Budget and private funding)
Responsible Party *(Position or Title)*	EMC & Local Staff
Implementation Schedule *(1 to 5 years timeframe)*	1 to 3 years
Effects on New Buildings	none
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	Denison
Hazard	Extreme Heat
Priority (High, Medium, Low)	High
Description of Mitigation Action	Work with neighboring communities to facilitate mutual agreements between jurisdictions for emergency backup water sources.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Very low cost activity which can provide a high benefit for public safety and improve recovery operations.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (Budget)
Responsible Party *(Position or Title)*	EMC & Local Staff
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	none
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	Denison
Hazard	Extreme Heat
Priority (High, Medium, Low)	High
Description of Mitigation Action	Assist the regional 211 to distribute fans to those who are in need of relief from the extreme heat.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Relatively low cost and potentially large benefits.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (Donations)
Responsible Party *(Position or Title)*	EMC & Local Staff
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	none
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	Denison
Hazard	Extreme Heat
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Work towards the implementation and maintenance of a Citizens Fire Academy for community education. Explore possible donation sources for supplies.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Relatively low cost and potentially large benefits.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Medium (Budget and private funding)
Responsible Party *(Position or Title)*	EMC & Local Staff
Implementation Schedule *(1 to 5 years timeframe)*	1 to 3 years
Effects on New Buildings	Could encourage use of better building materials and home preparedness.
Effect on Existing Buildings	Could encourage retrofits to better equip homes for extreme temperatures.

Mitigation Action Table	
Jurisdiction	Denison
Hazard	Extreme Heat
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Work with local service organizations to host a local fan drive as their community service project. These fans would be kept on the local level for quicker distribution.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Very low cost activity which can provide a high benefit for public safety.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (Donations)
Responsible Party *(Position or Title)*	EMC & Local Staff
Implementation Schedule *(1 to 5 years timeframe)*	1 to 3 years
Effects on New Buildings	none
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	Denison
Hazard	Extreme Heat
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Work with local non-profits, faith based organizations and schools to set up cooling centers for extreme heat events.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Very low cost activity which can provide a high benefit for public safety.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (Budget)
Responsible Party *(Position or Title)*	EMC & Local Staff
Implementation Schedule *(1 to 5 years timeframe)*	1 to 3 years
Effects on New Buildings	none
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	Denison
Hazard	Droughts
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Work with Grayson County in the formation of a groundwater conservation education program.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Relatively low cost and potentially large benefits.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (Budget)
Responsible Party *(Position or Title)*	EMC & Local Staff
Implementation Schedule *(1 to 5 years timeframe)*	1 to 3 years
Effects on New Buildings	May impact future landscaping provisions.
Effect on Existing Buildings	May impact existing landscaping provisions.

Mitigation Action Table	
Jurisdiction	Denison
Hazard	Droughts
Priority (High, Medium, Low)	High
Description of Mitigation Action	Regularly update and maintain drought contingency plan.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Relatively low cost and potentially large benefits.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (Budget)
Responsible Party *(Position or Title)*	EMC & Local Staff
Implementation Schedule *(1 to 5 years timeframe)*	1 to 3 years
Effects on New Buildings	May impact future landscaping provisions.
Effect on Existing Buildings	May impact existing landscaping provisions.

Mitigation Action Table	
Jurisdiction	Denison
Hazard	Floods
Priority (High, Medium, Low)	High
Description of Mitigation Action	Take advantage of County-provided educational material on the NFIP and actively promote city residents to participate in the NFIP.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Very low cost activity which can provide a high benefit.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (Budget)
Responsible Party *(Position or Title)*	EMC & Local Staff
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	Can be significant
Effect on Existing Buildings	Can be significant

Mitigation Action Table	
Jurisdiction	Denison
Hazard	Floods
Priority (High, Medium, Low)	High
Description of Mitigation Action	Work with local jurisdictions to increase Wi-Fi and cellular signal ranges for Public Safety personnel.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Moderate cost and good potential to benefit public safety.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	High (HMGP)
Responsible Party *(Position or Title)*	EMC & Local Staff
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	May reduce emergency response times for new buildings
Effect on Existing Buildings	May reduce emergency response times for exisitng buildings

Mitigation Action Table	
Jurisdiction	Denison
Hazard	Floods
Priority (High, Medium, Low)	High
Description of Mitigation Action	Update communications and storm tracking capabilities of the Mobile Command Center.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Moderate cost and good potential to benefit public safety.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Medium (HMGP)
Responsible Party *(Position or Title)*	EMC & Local Staff
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	May reduce emergency response times for new buildings
Effect on Existing Buildings	May reduce emergency response times for exisitng buildings

Mitigation Action Table	
Jurisdiction	Denison
Hazard	Floods
Priority (High, Medium, Low)	High
Description of Mitigation Action	Turn Around Don't Drown Campaign. This is a campaign that would be aired through the media to educate people on the dangers of driving through flood waters. Obtain additional barricades, including automatic, permanently-fixed barricade systems tied to f
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Can be significant cost but has the greatest potential to benefit public safety and reduce the loss of lives due to low-water crossings.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (Budget)
Responsible Party *(Position or Title)*	EMC & Local Staff
Implementation Schedule *(1 to 5 years timeframe)*	1 to 3 years
Effects on New Buildings	none
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	Denison
Hazard	Floods
Priority (High, Medium, Low)	High
Description of Mitigation Action	Bi-annual storm drainage cleaning program to be implemented to keep debris from hampering drainage.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Relatively low cost and potentially large benefits.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Medium (Budget)
Responsible Party *(Position or Title)*	Public Works
Implementation Schedule *(1 to 5 years timeframe)*	1 to 3 years
Effects on New Buildings	Should be limited.
Effect on Existing Buildings	Can be significant factor to reduce nuisance flooding in some neighborhoods.

Mitigation Action Table	
Jurisdiction	Denison
Hazard	Floods
Priority (High, Medium, Low)	High
Description of Mitigation Action	Better inform residents of mitigation activities that they can implement in their homes such as elevation of appliances above expected flood levels. The information would be provided by publications, & booths at community events.(NFIP)
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Relatively low cost and fairly small benefits but meaningful for those properties at risk.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (Budget)
Responsible Party *(Position or Title)*	Floodplain Manager & Building Inspector
Implementation Schedule *(1 to 5 years timeframe)*	1 to 3 years
Effects on New Buildings	limited
Effect on Existing Buildings	Can be helpful in some neighborhoods.

Mitigation Action Table	
Jurisdiction	Denison
Hazard	Expansive Soils
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Review county roadstandards and ensure that methods to reduce soil expansion are used in areas with extremely expansive soils. These methods such as kneading the soil, extreme compacting, and treating of soils with non-swell additives will extend the lif
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Moderate cost to implement but reduces annual cost of repairs by significant amount.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Medium (Budget)
Responsible Party *(Position or Title)*	Public Works
Implementation Schedule *(1 to 5 years timeframe)*	1 to 3 years
Effects on New Buildings	none
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	Denison
Hazard	Wind & Thunderstorms
Priority (High, Medium, Low)	High
Description of Mitigation Action	Educate residents on the importance of NOAA weather radios in school, homes and businesses and how to operate them properly.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Relatively low cost and potentially large benefits for public safety.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (Budget)
Responsible Party *(Position or Title)*	EMC & Local Staff
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	none
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	Denison
Hazard	Wind & Thunderstorms
Priority (High, Medium, Low)	High
Description of Mitigation Action	Update communications and storm tracking capabilities of the Mobile Communications Center.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Moderate cost and good potential to benefit public safety.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Medium (HMGP)
Responsible Party *(Position or Title)*	EMC & Local Staff
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	May reduce emergency response times for new buildings
Effect on Existing Buildings	May reduce emergency response times for exisitng buildings

Mitigation Action Table	
Jurisdiction	Denison
Hazard	Wind & Thunderstorms
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Enhance and increase number of local outdoor warning sirens to ensure adequate coverage is all areas of the community.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Moderate cost and good potential to benefit public safety.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Medium (HMGP)
Responsible Party *(Position or Title)*	EMC & Local Staff
Implementation Schedule *(1 to 5 years timeframe)*	1 to 3 years
Effects on New Buildings	none
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	Denison
Hazard	Wind & Thunderstorms
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Pursue designation as a NWS StormREADY community.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Relatively low cost and potentially large benefits for public safety.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (Budget)
Responsible Party *(Position or Title)*	EMC & Local Staff
Implementation Schedule *(1 to 5 years timeframe)*	1 to 3 years
Effects on New Buildings	none
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	Denison
Hazard	Wind & Thunderstorms
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Install lightning grade surge protection devices for city computer systems.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Moderate cost but will provide significant benefits to reduce damages and maintain public safety after major storm events.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Medium (Budget)
Responsible Party *(Position or Title)*	IT
Implementation Schedule *(1 to 5 years timeframe)*	1 to 3 years
Effects on New Buildings	Can be significant improvement.
Effect on Existing Buildings	Available for existing buildings as well.

Mitigation Action Table	
Jurisdiction	Denison
Hazard	Wind & Thunderstorms
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Citywide brush & debris disposal to encourage proper trimming and disposal of vegetation.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Moderate cost but will provide significant benefits to reduce damages and maintain public safety after major storm events.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Medium
Responsible Party *(Position or Title)*	Public Works & Sanitation;
Implementation Schedule *(1 to 5 years timeframe)*	1 to 3 years
Effects on New Buildings	Can be significant improvement.
Effect on Existing Buildings	Can be significant improvement.

Mitigation Action Table	
Jurisdiction	Denison
Hazard	Winter Storm
Priority (High, Medium, Low)	High
Description of Mitigation Action	Notify residents of utility assistance programs at TCOG.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Relatively low cost and potentially large benefits for public safety.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (Budget)
Responsible Party *(Position or Title)*	EMC & Local Staff
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	Can be significant.
Effect on Existing Buildings	Can be significant.

Mitigation Action Table	
Jurisdiction	Denison
Hazard	Winter Storm
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Work towards the implementation and maintenance of a Citizens Fire Academy for community education. Explore possible donation sources for supplies.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Very low cost activity which can provide a high benefit for public safety and improve recovery operations.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Medium (Budget and private funding)
Responsible Party *(Position or Title)*	EMC & Local Staff
Implementation Schedule *(1 to 5 years timeframe)*	1 to 3 years
Effects on New Buildings	none
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	Denison
Hazard	Winter Storm
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Apply for funding to purchase auxiliary power sources for critical facilities. This would include the purchase of mobile generators for use as needed throughout the city.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Significant cost associated with this action item but long-term benefits are substantial
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Medium (PDM Grant)
Responsible Party *(Position or Title)*	EMC & Local Staff
Implementation Schedule *(1 to 5 years timeframe)*	1 to 3 years
Effects on New Buildings	Can reduce damages by allowing maintenenace of power so that utilities remain functional during severe storms.
Effect on Existing Buildings	Can reduce damages by allowing maintenenace of power so that utilities remain functional during severe storms.

Mitigation Action Table	
Jurisdiction	Denison
Hazard	Wildfire
Priority (High, Medium, Low)	High
Description of Mitigation Action	Educate & empower residents about the importance of having an Emergency Preparedness Kit. Education will inform the public on what is needed in the kit and on how to shelter in place.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Relatively low cost and potentially large benefits for public safety.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (Homeland Security)
Responsible Party *(Position or Title)*	EMC & Local Staff
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	limited
Effect on Existing Buildings	limited

Mitigation Action Table	
Jurisdiction	Denison
Hazard	Wildfire
Priority (High, Medium, Low)	High
Description of Mitigation Action	Work with local jurisdictions to increase Wi-Fi and cellular signal ranges for Public Safety personnel.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Relatively low cost and potentially large benefits for public safety.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	High (HMGP)
Responsible Party *(Position or Title)*	EMC & Local Staff
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	May reduce emergency response times for new buildings
Effect on Existing Buildings	May reduce emergency response times for exisitng buildings

Mitigation Action Table	
Jurisdiction	Denison
Hazard	Wildfire
Priority (High, Medium, Low)	High
Description of Mitigation Action	Update communications and storm tracking capabilities of the Mobile Communications Center.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Very low cost activity which can provide a high benefit for public safety.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Medium (HMGP)
Responsible Party *(Position or Title)*	EMC & Local Staff
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	May reduce emergency response times for new buildings
Effect on Existing Buildings	May reduce emergency response times for exisitng buildings

Mitigation Action Table	
Jurisdiction	Denison
Hazard	Wildfire
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Work towards the implementation and maintenance of a Citizens Fire Academy for community education. Explore possible donation sources for supplies.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Very low cost activity which can provide a high benefit for public safety and improve recovery operations.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Medium (Budget and private funding)
Responsible Party *(Position or Title)*	EMC & Local Staff
Implementation Schedule *(1 to 5 years timeframe)*	1 to 3 years
Effects on New Buildings	none
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	Denison
Hazard	Wildfire
Priority (High, Medium, Low)	Low
Description of Mitigation Action	Develop a coordinated approach between the Fire Department and the Public Services Department to identify needed improvements to the water distribution system.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Relatively low cost and potentially large benefits for public safety.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (Budget)
Responsible Party *(Position or Title)*	EMC & Local Staff
Implementation Schedule *(1 to 5 years timeframe)*	3 to 5 years
Effects on New Buildings	May reduce emergency response times for new buildings
Effect on Existing Buildings	May reduce emergency response times for exisitng buildings

Mitigation Action Table	
Jurisdiction	Denison
Hazard	Wildfire
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Establish a Critical Facility Contingency Plan and apply for funding to purchase auxiliary power sources for critical facilities. This would include the purchase of mobile generators to be where needed though out the city.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Moderate cost and good potential to benefit public safety.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Medium (PDM Grant)
Responsible Party *(Position or Title)*	EMC & Local Staff
Implementation Schedule *(1 to 5 years timeframe)*	1 to 3 years
Effects on New Buildings	May reduce emergency response times for new buildings
Effect on Existing Buildings	May reduce emergency response times for exisitng buildings

Mitigation Action Table	
Jurisdiction	Denison
Hazard	Wildfire
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Ensure all dead-end segments of roads in high fire hazard areas have a turn-around sufficient for fire equipment.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Moderate cost and good potential to benefit public safety.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	High (Budget)
Responsible Party *(Position or Title)*	EMC & local staff
Implementation Schedule *(1 to 5 years timeframe)*	1 to 3 years
Effects on New Buildings	May reduce emergency response times for new buildings
Effect on Existing Buildings	May reduce emergency response times for exisitng buildings

Mitigation Action Table	
Jurisdiction	Denison
Hazard	Wildfire
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Apply for federal and state grants to enhance the capability of the local fire department.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Very low cost activity which can provide a high benefit for public safety.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	High (SAFER & AFG)
Responsible Party *(Position or Title)*	EMC & Local Staff
Implementation Schedule *(1 to 5 years timeframe)*	1 to 3 years
Effects on New Buildings	Significant
Effect on Existing Buildings	Significant

Mitigation Action Table	
Jurisdiction	Denison
Hazard	Dam Failure
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Educate property owners near high hazard dams of the potential of a dam failure. Inform them of signs to watch for that might signal a weakening of the dam and who to contact if suspicious activity is spotted.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Very low cost activity which can provide a high benefit for public safety.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (Budget)
Responsible Party *(Position or Title)*	EMC & Local Staff
Implementation Schedule *(1 to 5 years timeframe)*	1 to 3 years
Effects on New Buildings	none
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	Denison
Hazard	Dam Failure
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	· Determine ownership of the one high hazard dam and one significant hazard dam located within or near the city. Evaluate the owner's dam safety program, emergency action plan, and compliance with state dam safety regulations. If needed, apply for
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Moderate cost and good potential to benefit public safety.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	High (NDSP)
Responsible Party *(Position or Title)*	EMC & Local Staff
Implementation Schedule *(1 to 5 years timeframe)*	1 to 3 years
Effects on New Buildings	none
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	Denison
Hazard	Dam Failure
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Work with residents in fire district areas of responsibility and County Commissioners to ensure that if roadways are loss due to a dam failure that properties owners are not isolated.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Relatively low cost and potentially large benefits for public safety.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Medium (Budget)
Responsible Party *(Position or Title)*	EMC & Local Staff
Implementation Schedule *(1 to 5 years timeframe)*	1 to 3 years
Effects on New Buildings	none
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	Denison
Hazard	Earthquake
Priority (High, Medium, Low)	High
Description of Mitigation Action	Educate & empower residents about the importance of having an Emergency Preparedness Kit.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Very low cost activity which can provide a high benefit for public safety.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (CCP)
Responsible Party *(Position or Title)*	EMC & Local Staff
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	Can be significant
Effect on Existing Buildings	Can be significant

Mitigation Action Table	
Jurisdiction	Denison
Hazard	Winter Storm
Priority (High, Medium, Low)	High
Description of Mitigation Action	Update communications and storm tracking capabilities of the Mobile Communications Center.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Moderate cost and good potential to benefit public safety.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Medium (HMGP)
Responsible Party *(Position or Title)*	EMC & Local Staff
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	none
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	Denison
Hazard	Winter Storm
Priority (High, Medium, Low)	High
Description of Mitigation Action	Notify residents of utility assistance programs at TCOG.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Relatively low cost and potentially large benefits.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (Budget)
Responsible Party *(Position or Title)*	EMC & Local Staff
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	none
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	Denison
Hazard	Terrorism
Priority (High, Medium, Low)	High
Description of Mitigation Action	Develop printed materials, utilize existing materials, conduct workshops, and encourage residents to have family disaster plans that include emergency evacuation procedures & shelter-in-place emergency guidelines.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Relatively low cost and potentially large benefits.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (Budget)
Responsible Party *(Position or Title)*	EMC & Local Staff
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	none
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	Denison
Hazard	Terrorism
Priority (High, Medium, Low)	High
Description of Mitigation Action	Update communications capabilities of the Mobile Communications Center.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Relatively low cost and potentially large benefits.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Medium (HMGP)
Responsible Party *(Position or Title)*	EMC & Local Staff
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	none
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	Denison
Hazard	Terrorism
Priority (High, Medium, Low)	High
Description of Mitigation Action	Protect water and wastewater infrastructure from unauthorized entry. This will be done by regular police monitoring and high fences.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Relatively low cost and potentially large benefits.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Medium
Responsible Party *(Position or Title)*	EMC & Local Staff
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	none
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	Denison
Hazard	Terrorism
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Educate residents on the Seven Signs of Terrorism.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Relatively low cost and potentially large benefits.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (Budget)
Responsible Party *(Position or Title)*	EMC & Local Staff
Implementation Schedule *(1 to 5 years timeframe)*	1 to 3 years
Effects on New Buildings	Can be significant
Effect on Existing Buildings	Can be significant

Mitigation Action Table	
Jurisdiction	Denison
Hazard	Hazardous Materials
Priority (High, Medium, Low)	High
Description of Mitigation Action	Develop printed materials, utilize existing materials, conduct workshops, and encourage residents to have family disaster plans that include emergency evacuation procedures & shelter-in-place emergency guidelines.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Relatively low cost and potentially large benefits.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (Budget)
Responsible Party *(Position or Title)*	EMC & Local Staff
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	none
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	Denison
Hazard	Hazardous Materials
Priority (High, Medium, Low)	High
Description of Mitigation Action	Publicize TCOGs' annual Household Hazardous Waste Collection.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Relatively low cost and potentially large benefits.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (Budget)
Responsible Party *(Position or Title)*	EMC & Local Staff
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	none
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	Denison
Hazard	Hazardous Materials
Priority (High, Medium, Low)	High
Description of Mitigation Action	Work with TXDOT to develop a notification of hazardous cargo being transported near critical infrastructures.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Relatively low cost and potentially large benefits.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Unknown
Responsible Party *(Position or Title)*	EMC & Local Staff
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	none
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	Denison
Hazard	Hazardous Materials
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Educate the public about Hazardous Materials to which they are most frequently exposed.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Relatively low cost and potentially large benefits.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (Budget)
Responsible Party *(Position or Title)*	EMC & Local Staff
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	none
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	Denison
Hazard	Tornado
Priority (High, Medium, Low)	High
Description of Mitigation Action	Work with local media to publish and air public safety information prior to storm peak season on how to be prepared.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (Budget)
Responsible Party *(Position or Title)*	EMC & Local Staff
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	none
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	Denison
Hazard	Tornado
Priority (High, Medium, Low)	High
Description of Mitigation Action	Update communications and storm tracking capabilities of the Mobile Communications Trailer.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Medium (HMGP)
Responsible Party *(Position or Title)*	EMC & Local Staff
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	none
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	Denison
Hazard	Tornado
Priority (High, Medium, Low)	High
Description of Mitigation Action	Work with local jurisdictions to increase Wi-Fi and cellular signal ranges for Public Safety personnel. This would include updating, adding, and replacing radios.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	High (HMGP)
Responsible Party *(Position or Title)*	EMC & Local Staff
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	none
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	Denison
Hazard	Tornado
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Work towards modernizing our government access channel to include real-time alerts and the ability to remotely post information from the Emergency Operations Center during an event.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	High (Budget)
Responsible Party *(Position or Title)*	EMC & Local Staff
Implementation Schedule *(1 to 5 years timeframe)*	1 to 3 years
Effects on New Buildings	none
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	Denison
Hazard	Tornado
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Develop a program to provide NOAA weather radios to limited-income residents that live in high risk areas such a mobile home parks.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Medium (HMGP)
Responsible Party *(Position or Title)*	EMC & Local Staff
Implementation Schedule *(1 to 5 years timeframe)*	1 to 3 years
Effects on New Buildings	none
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	Denison
Hazard	Tornado
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Explore the benefits of being certified as a NWS StormREADY Community.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (Budget)
Responsible Party *(Position or Title)*	EMC & Local Staff
Implementation Schedule *(1 to 5 years timeframe)*	1 to 3 years
Effects on New Buildings	none
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	Denison
Hazard	Tornado
Priority (High, Medium, Low)	Low
Description of Mitigation Action	Work with Grayson County to apply for a Multi-Jurisdictional FEMA Safe Room Rebate program.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	High (PDM Grant)
Responsible Party *(Position or Title)*	EMC & Local Staff
Implementation Schedule *(1 to 5 years timeframe)*	3 to 5 years
Effects on New Buildings	none
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	Denison
Hazard	Tornado
Priority (High, Medium, Low)	Low
Description of Mitigation Action	Work towards the implementation and maintenance of a Citizens Fire Academy for community education. Explore possible donation sources for supplies.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Medium (Budget and private funding)
Responsible Party *(Position or Title)*	EMC & Local Staff
Implementation Schedule *(1 to 5 years timeframe)*	3 to 5 years
Effects on New Buildings	none
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	Denison
Hazard	Hailstorms
Priority (High, Medium, Low)	High
Description of Mitigation Action	Enhance and add local outdoor warning sirens to ensure adequate coverage in all areas of the community and educate residents on the importance of NOAA weather radios in homes and businesses. Promote enrollment of all residents in existing telephone emerg
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Medium (HMGP)
Responsible Party *(Position or Title)*	EMC & Local Staff
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	none
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	Denison
Hazard	Hailstorms
Priority (High, Medium, Low)	High
Description of Mitigation Action	Distribute emergency preparedness information related to weather hazards.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (Budget)
Responsible Party *(Position or Title)*	EMC & Local Staff
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	May increase awareness of builders in use of proper standards for weather protection when expanding or modifying buildings for future growth.
Effect on Existing Buildings	May increase awareness of builders in use of proper standards for weather protection when expanding or modifying existing buildings.

Mitigation Action Table	
Jurisdiction	Denison
Hazard	Hailstorms
Priority (High, Medium, Low)	High
Description of Mitigation Action	Update communications and storm tracking capabilities of the Mobile Command Center.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Medium (HMGP)
Responsible Party *(Position or Title)*	EMC & Local Staff
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	none
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	Denison
Hazard	Hailstorms
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Work towards the implementation and maintenance of a Citizens Fire Academy for community education. Explore possible donation sources for supplies.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Medium (Budget and private funding)
Responsible Party *(Position or Title)*	EMC & Local Staff
Implementation Schedule *(1 to 5 years timeframe)*	1 to 3 years
Effects on New Buildings	none
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	Denison
Hazard	Extreme Heat
Priority (High, Medium, Low)	High
Description of Mitigation Action	Work with neighboring communities to facilitate mutual agreements between jurisdictions for emergency backup water sources.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (Budget)
Responsible Party *(Position or Title)*	EMC & Local Staff
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	none
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	Denison
Hazard	Extreme Heat
Priority (High, Medium, Low)	High
Description of Mitigation Action	Assist the regional 211 to distribute fans to those who are in need of relief from the extreme heat.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (Donations)
Responsible Party *(Position or Title)*	EMC & Local Staff
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	none
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	Denison
Hazard	Extreme Heat
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Work towards the implementation and maintenance of a Citizens Fire Academy for community education. Explore possible donation sources for supplies.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Medium (Budget and private funding)
Responsible Party *(Position or Title)*	EMC & Local Staff
Implementation Schedule *(1 to 5 years timeframe)*	1 to 3 years
Effects on New Buildings	Could encourage use of better building materials and home preparedness.
Effect on Existing Buildings	Could encourage retrofits to better equip homes for extreme temperatures.

Mitigation Action Table	
Jurisdiction	Denison
Hazard	Extreme Heat
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Work with local service organizations to host a local fan drive as their community service project. These fans would be kept on the local level for quicker distribution.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (Donations)
Responsible Party *(Position or Title)*	EMC & Local Staff
Implementation Schedule *(1 to 5 years timeframe)*	1 to 3 years
Effects on New Buildings	none
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	Denison
Hazard	Extreme Heat
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Work with local non-profits, faith based organizations and schools to set up cooling centers for extreme heat events.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (Budget)
Responsible Party *(Position or Title)*	EMC & Local Staff
Implementation Schedule *(1 to 5 years timeframe)*	1 to 3 years
Effects on New Buildings	none
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	Denison
Hazard	Droughts
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Work with Grayson County in the formation of a groundwater conservation education program.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (Budget)
Responsible Party *(Position or Title)*	EMC & Local Staff
Implementation Schedule *(1 to 5 years timeframe)*	1 to 3 years
Effects on New Buildings	May impact future landscaping provisions.
Effect on Existing Buildings	May impact existing landscaping provisions.

Mitigation Action Table	
Jurisdiction	Denison
Hazard	Droughts
Priority (High, Medium, Low)	High
Description of Mitigation Action	Regularly update and maintain drought contingency plan.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (Budget)
Responsible Party *(Position or Title)*	EMC & Local Staff
Implementation Schedule *(1 to 5 years timeframe)*	1 to 3 years
Effects on New Buildings	May impact future landscaping provisions.
Effect on Existing Buildings	May impact existing landscaping provisions.

Mitigation Action Table	
Jurisdiction	Denison
Hazard	Floods
Priority (High, Medium, Low)	High
Description of Mitigation Action	Take advantage of County-provided educational material on the NFIP and actively promote city residents to participate in the NFIP.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (Budget)
Responsible Party *(Position or Title)*	EMC & Local Staff
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	Can be significant
Effect on Existing Buildings	Can be significant

Mitigation Action Table	
Jurisdiction	Denison
Hazard	Floods
Priority (High, Medium, Low)	High
Description of Mitigation Action	Work with local jurisdictions to increase Wi-Fi and cellular signal ranges for Public Safety personnel.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	High (HMGP)
Responsible Party *(Position or Title)*	EMC & Local Staff
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	May reduce emergency response times for new buildings
Effect on Existing Buildings	May reduce emergency response times for exisitng buildings

Mitigation Action Table	
Jurisdiction	Denison
Hazard	Floods
Priority (High, Medium, Low)	High
Description of Mitigation Action	Update communications and storm tracking capabilities of the Mobile Command Center.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Medium (HMGP)
Responsible Party *(Position or Title)*	EMC & Local Staff
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	May reduce emergency response times for new buildings
Effect on Existing Buildings	May reduce emergency response times for exisitng buildings

Mitigation Action Table	
Jurisdiction	Denison
Hazard	Floods
Priority (High, Medium, Low)	High
Description of Mitigation Action	Turn Around Don't Drown Campaign. This is a campaign that would be aired through the media to educate people on the dangers of driving through flood waters. Obtain additional barricades, including automatic, permanently-fixed barricade systems tied to f
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (Budget)
Responsible Party *(Position or Title)*	EMC & Local Staff
Implementation Schedule *(1 to 5 years timeframe)*	1 to 3 years
Effects on New Buildings	none
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	Denison
Hazard	Floods
Priority (High, Medium, Low)	High
Description of Mitigation Action	Bi-annual storm drainage cleaning program to be implemented to keep debris from hampering drainage.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Medium (Budget)
Responsible Party *(Position or Title)*	Public Works
Implementation Schedule *(1 to 5 years timeframe)*	1 to 3 years
Effects on New Buildings	Should be limited.
Effect on Existing Buildings	Can be significant factor to reduce nuisance flooding in some neighborhoods.

Mitigation Action Table	
Jurisdiction	Denison
Hazard	Floods
Priority (High, Medium, Low)	High
Description of Mitigation Action	Better inform residents of mitigation activities that they can implement in their homes such as elevation of appliances above expected flood levels. The information would be provided by publications, & booths at community events.(NFIP)
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (Budget)
Responsible Party *(Position or Title)*	Floodplain Manager & Building Inspector
Implementation Schedule *(1 to 5 years timeframe)*	1 to 3 years
Effects on New Buildings	limited
Effect on Existing Buildings	Can be helpful in some neighborhoods.

Mitigation Action Table	
Jurisdiction	Denison
Hazard	Expansive Soils
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Review county roadstandards and ensure that methods to reduce soil expansion are used in areas with extremely expansive soils. These methods such as kneading the soil, extreme compacting, and treating of soils with non-swell additives will extend the lif
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Medium (Budget)
Responsible Party *(Position or Title)*	Public Works
Implementation Schedule *(1 to 5 years timeframe)*	1 to 3 years
Effects on New Buildings	none
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	Denison
Hazard	Wind & Thunderstorms
Priority (High, Medium, Low)	High
Description of Mitigation Action	Educate residents on the importance of NOAA weather radios in school, homes and businesses and how to operate them properly.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (Budget)
Responsible Party *(Position or Title)*	EMC & Local Staff
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	none
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	Denison
Hazard	Wind & Thunderstorms
Priority (High, Medium, Low)	High
Description of Mitigation Action	Update communications and storm tracking capabilities of the Mobile Communications Center.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Medium (HMGP)
Responsible Party *(Position or Title)*	EMC & Local Staff
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	May reduce emergency response times for new buildings
Effect on Existing Buildings	May reduce emergency response times for exisitng buildings

Mitigation Action Table	
Jurisdiction	Denison
Hazard	Wind & Thunderstorms
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Enhance and increase number of local outdoor warning sirens to ensure adequate coverage is all areas of the community.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Medium (HMGP)
Responsible Party *(Position or Title)*	EMC & Local Staff
Implementation Schedule *(1 to 5 years timeframe)*	1 to 3 years
Effects on New Buildings	none
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	Denison
Hazard	Wind & Thunderstorms
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Pursue designation as a NWS StormREADY community.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (Budget)
Responsible Party *(Position or Title)*	EMC & Local Staff
Implementation Schedule *(1 to 5 years timeframe)*	1 to 3 years
Effects on New Buildings	none
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	Denison
Hazard	Wind & Thunderstorms
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Install lightning grade surge protection devices for city computer systems.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Medium (Budget)
Responsible Party *(Position or Title)*	IT
Implementation Schedule *(1 to 5 years timeframe)*	1 to 3 years
Effects on New Buildings	Can be significant improvement.
Effect on Existing Buildings	Available for existing buildings as well.

Mitigation Action Table	
Jurisdiction	Denison
Hazard	Wind & Thunderstorms
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Citywide brush & debris disposal to encourage proper trimming and disposal of vegetation.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Medium
Responsible Party *(Position or Title)*	Public Works & Sanitation;
Implementation Schedule *(1 to 5 years timeframe)*	1 to 3 years
Effects on New Buildings	Can be significant improvement.
Effect on Existing Buildings	Can be significant improvement.

Mitigation Action Table	
Jurisdiction	Denison
Hazard	Winter Storm
Priority (High, Medium, Low)	High
Description of Mitigation Action	Notify residents of utility assistance programs at TCOG.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (Budget)
Responsible Party *(Position or Title)*	EMC & Local Staff
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	Can be significant.
Effect on Existing Buildings	Can be significant.

Mitigation Action Table	
Jurisdiction	Denison
Hazard	Winter Storm
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Work towards the implementation and maintenance of a Citizens Fire Academy for community education. Explore possible donation sources for supplies.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Medium (Budget and private funding)
Responsible Party *(Position or Title)*	EMC & Local Staff
Implementation Schedule *(1 to 5 years timeframe)*	1 to 3 years
Effects on New Buildings	none
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	Denison
Hazard	Winter Storm
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Apply for funding to purchase auxiliary power sources for critical facilities. This would include the purchase of mobile generators for use as needed throughout the city.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Medium (PDM Grant)
Responsible Party *(Position or Title)*	EMC & Local Staff
Implementation Schedule *(1 to 5 years timeframe)*	1 to 3 years
Effects on New Buildings	Can reduce damages by allowing maintenenace of power so that utilities remain functional during severe storms.
Effect on Existing Buildings	Can reduce damages by allowing maintenenace of power so that utilities remain functional during severe storms.

Mitigation Action Table	
Jurisdiction	Denison
Hazard	Wildfire
Priority (High, Medium, Low)	High
Description of Mitigation Action	Educate & empower residents about the importance of having an Emergency Preparedness Kit. Education will inform the public on what is needed in the kit and on how to shelter in place.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (Homeland Security)
Responsible Party *(Position or Title)*	EMC & Local Staff
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	limited
Effect on Existing Buildings	limited

Mitigation Action Table	
Jurisdiction	Denison
Hazard	Wildfire
Priority (High, Medium, Low)	High
Description of Mitigation Action	Work with local jurisdictions to increase Wi-Fi and cellular signal ranges for Public Safety personnel.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	High (HMGP)
Responsible Party *(Position or Title)*	EMC & Local Staff
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	May reduce emergency response times for new buildings
Effect on Existing Buildings	May reduce emergency response times for exisitng buildings

Mitigation Action Table	
Jurisdiction	Denison
Hazard	Wildfire
Priority (High, Medium, Low)	High
Description of Mitigation Action	Update communications and storm tracking capabilities of the Mobile Communications Center.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Medium (HMGP)
Responsible Party *(Position or Title)*	EMC & Local Staff
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	May reduce emergency response times for new buildings
Effect on Existing Buildings	May reduce emergency response times for exisitng buildings

Mitigation Action Table	
Jurisdiction	Denison
Hazard	Wildfire
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Work towards the implementation and maintenance of a Citizens Fire Academy for community education. Explore possible donation sources for supplies.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Medium (Budget and private funding)
Responsible Party *(Position or Title)*	EMC & Local Staff
Implementation Schedule *(1 to 5 years timeframe)*	1 to 3 years
Effects on New Buildings	none
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	Denison
Hazard	Wildfire
Priority (High, Medium, Low)	Low
Description of Mitigation Action	Develop a coordinated approach between the Fire Department and the Public Services Department to identify needed improvements to the water distribution system.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (Budget)
Responsible Party *(Position or Title)*	EMC & Local Staff
Implementation Schedule *(1 to 5 years timeframe)*	3 to 5 years
Effects on New Buildings	May reduce emergency response times for new buildings
Effect on Existing Buildings	May reduce emergency response times for exisitng buildings

Mitigation Action Table	
Jurisdiction	Denison
Hazard	Wildfire
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Establish a Critical Facility Contingency Plan and apply for funding to purchase auxiliary power sources for critical facilities. This would include the purchase of mobile generators to be where needed though out the city.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Medium (PDM Grant)
Responsible Party *(Position or Title)*	EMC & Local Staff
Implementation Schedule *(1 to 5 years timeframe)*	1 to 3 years
Effects on New Buildings	May reduce emergency response times for new buildings
Effect on Existing Buildings	May reduce emergency response times for exisitng buildings

Mitigation Action Table	
Jurisdiction	Denison
Hazard	Wildfire
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Ensure all dead-end segments of roads in high fire hazard areas have a turn-around sufficient for fire equipment.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	High (Budget)
Responsible Party *(Position or Title)*	EMC & local staff
Implementation Schedule *(1 to 5 years timeframe)*	1 to 3 years
Effects on New Buildings	May reduce emergency response times for new buildings
Effect on Existing Buildings	May reduce emergency response times for exisitng buildings

Mitigation Action Table	
Jurisdiction	Denison
Hazard	Wildfire
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Apply for federal and state grants to enhance the capability of the local fire department.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	High (SAFER & AFG)
Responsible Party *(Position or Title)*	EMC & Local Staff
Implementation Schedule *(1 to 5 years timeframe)*	1 to 3 years
Effects on New Buildings	Significant
Effect on Existing Buildings	Significant

Mitigation Action Table	
Jurisdiction	Denison
Hazard	Dam Failure
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Educate property owners near high hazard dams of the potential of a dam failure. Inform them of signs to watch for that might signal a weakening of the dam and who to contact if suspicious activity is spotted.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (Budget)
Responsible Party *(Position or Title)*	EMC & Local Staff
Implementation Schedule *(1 to 5 years timeframe)*	1 to 3 years
Effects on New Buildings	none
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	Denison
Hazard	Dam Failure
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	· Determine ownership of the one high hazard dam and one significant hazard dam located within or near the city. Evaluate the owner's dam safety program, emergency action plan, and compliance with state dam safety regulations. If needed, apply for
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	High (NDSP)
Responsible Party *(Position or Title)*	EMC & Local Staff
Implementation Schedule *(1 to 5 years timeframe)*	1 to 3 years
Effects on New Buildings	none
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	Denison
Hazard	Dam Failure
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Work with residents in fire district areas of responsibility and County Commissioners to ensure that if roadways are loss due to a dam failure that properties owners are not isolated.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Medium (Budget)
Responsible Party *(Position or Title)*	EMC & Local Staff
Implementation Schedule *(1 to 5 years timeframe)*	1 to 3 years
Effects on New Buildings	none
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	Denison
Hazard	Earthquake
Priority (High, Medium, Low)	High
Description of Mitigation Action	Educate & empower residents about the importance of having an Emergency Preparedness Kit.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (CCP)
Responsible Party *(Position or Title)*	EMC & Local Staff
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	Can be significant
Effect on Existing Buildings	Can be significant

Mitigation Action Table	
Jurisdiction	Denison
Hazard	Winter Storm
Priority (High, Medium, Low)	High
Description of Mitigation Action	Update communications and storm tracking capabilities of the Mobile Communications Center.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Medium (HMGP)
Responsible Party *(Position or Title)*	EMC & Local Staff
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	none
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	Denison
Hazard	Winter Storm
Priority (High, Medium, Low)	High
Description of Mitigation Action	Notify residents of utility assistance programs at TCOG.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (Budget)
Responsible Party *(Position or Title)*	EMC & Local Staff
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	none
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	Denison
Hazard	Terrorism
Priority (High, Medium, Low)	High
Description of Mitigation Action	Develop printed materials, utilize existing materials, conduct workshops, and encourage residents to have family disaster plans that include emergency evacuation procedures & shelter-in-place emergency guidelines.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (Budget)
Responsible Party *(Position or Title)*	EMC & Local Staff
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	none
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	Denison
Hazard	Terrorism
Priority (High, Medium, Low)	High
Description of Mitigation Action	Update communications capabilities of the Mobile Communications Center.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Medium (HMGP)
Responsible Party *(Position or Title)*	EMC & Local Staff
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	none
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	Denison
Hazard	Terrorism
Priority (High, Medium, Low)	High
Description of Mitigation Action	Protect water and wastewater infrastructure from unauthorized entry. This will be done by regular police monitoring and high fences.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Medium
Responsible Party *(Position or Title)*	EMC & Local Staff
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	none
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	Denison
Hazard	Terrorism
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Educate residents on the Seven Signs of Terrorism.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (Budget)
Responsible Party *(Position or Title)*	EMC & Local Staff
Implementation Schedule *(1 to 5 years timeframe)*	1 to 3 years
Effects on New Buildings	Can be significant
Effect on Existing Buildings	Can be significant

Mitigation Action Table	
Jurisdiction	Denison
Hazard	Hazardous Materials
Priority (High, Medium, Low)	High
Description of Mitigation Action	Develop printed materials, utilize existing materials, conduct workshops, and encourage residents to have family disaster plans that include emergency evacuation procedures & shelter-in-place emergency guidelines.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (Budget)
Responsible Party *(Position or Title)*	EMC & Local Staff
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	none
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	Denison
Hazard	Hazardous Materials
Priority (High, Medium, Low)	High
Description of Mitigation Action	Publicize TCOGs' annual Household Hazardous Waste Collection.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (Budget)
Responsible Party *(Position or Title)*	EMC & Local Staff
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	none
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	Denison
Hazard	Hazardous Materials
Priority (High, Medium, Low)	High
Description of Mitigation Action	Work with TXDOT to develop a notification of hazardous cargo being transported near critical infrastructures.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Unknown
Responsible Party *(Position or Title)*	EMC & Local Staff
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	none
Effect on Existing Buildings	none

City of Dorchester
Mitigation Goals and Actions

Developing Mitigation Goals and Actions for Grayson County Hazard Mitigation Plan (HMP)

Goals are general guidelines that explain what you want to achieve. They are usually broad policy-type statements, long term, and represent global visions. The following **Goals** appear in the State of Texas Mitigation Plan and are suggested for the Grayson County HMP:

- Reduce or eliminate hazardous conditions that cause loss of life
- Reduce or eliminate hazardous conditions that inflict injuries
- Reduce or eliminate hazardous conditions that cause property damage
- Reduce or eliminate hazardous conditions that degrade important natural resources

Mitigation Actions are specific actions that help you achieve your goals. **At least two actions needs to be recorded per each hazard identified in the Risk Assessment.**

Examples:
Elevate three historic structures located in the downtown district
Sponsor a community fair to promote wildfire defensible space
Retrofit the police department to withstand high wind damage

***Note:** Please include mitigation actions in the HMP that may be eligible for FEMA funding.*

Priority Ranking, please indicate your "vote". **(Low, Medium, High)**

Questions to consider when ranking mitigation actions:
- Is the proposed action socially acceptable and will all citizens be treated fairly?
- Is the action compatible with present and future community values?
- Is the action technically feasible and will it move the community towards its goal?
- Does the City have the legal authority to implement the action?
- Does the City have the technical capability to implement the action?

***Note:** Funding is often a constraint; at this time, do not allow that to influence your indication of priorities. One purpose of the plan is to help support efforts to secure funding for implementation.*

Please fill out the sections in the following tables.

Mitigation Action Table	
Jurisdiction	Dorchester
Hazard	Flooding
Priority (High, Medium, Low)	High
Description of Mitigation Action	Pursue fulfillment of requirement for city to participate in NFIP.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Low cost and very high benefit.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (Budget)
Responsible Party *(Position or Title)*	Mayor and Public Works Director
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	Significant benefit to new homes
Effect on Existing Buildings	Significant benefit to existing homes

Mitigation Action Table	
Jurisdiction	Dorchester
Hazard	Flooding
Priority (High, Medium, Low)	High
Description of Mitigation Action	Enforce application of flooding regulation for new construction by conducting regular inspections to new development in the City.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Extra staff, legal, and inspector costs with the benefit of long-term property and personal safety/loss of life.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal funds along with development permits and developer engineer fees.
Responsible Party *(Position or Title)*	Mayor and City Attorney
Implementation Schedule *(1 to 5 years timeframe)*	Immediate implementation to continue permantly.
Effects on New Buildings	Eliminates potential flooding of new buildings in developments.
Effect on Existing Buildings	Eliminates potential flooding of existing buildings from new development/construction.

Mitigation Action Table	
Jurisdiction	Dorchester
Hazard	Flooding
Priority (High, Medium, Low)	High
Description of Mitigation Action	As development and construction continue keep waterways clean and clear of obstruction for proper flow. Continued upkeep for erosion control and water flow.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Will require major times of expense, offset by continued flood control for property and human safety.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal funds, loan funds and/or grant funds.
Responsible Party *(Position or Title)*	City Mayor
Implementation Schedule *(1 to 5 years timeframe)*	Stages of need and completion over at least the next three years.
Effects on New Buildings	Eliminates potential flooding of new buildings along and in general area of project area.
Effect on Existing Buildings	Eliminates potential flooding of new buildings along and in general area of project area.

Mitigation Action Table	
Jurisdiction	Dorchester
Hazard	Landslide
Priority (High, Medium, Low)	Low
Description of Mitigation Action	Based on topography of the City of Dorchester, landslides are not considered a potential hazard.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	
Responsible Party *(Position or Title)*	
Implementation Schedule *(1 to 5 years timeframe)*	
Effects on New Buildings	
Effect on Existing Buildings	

Mitigation Action Table	
Jurisdiction	Dorchester
Hazard	Wildfires
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Provide community wide education programs to help reduce the risk of wildfire.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Limited staff time necessary to conduct education program(s) in relation to the potential benefit of reduced number of wildfires.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal funds budgeted for fire department.
Responsible Party *(Position or Title)*	Mayor and City employees.
Implementation Schedule *(1 to 5 years timeframe)*	Within 2 years.
Effects on New Buildings	Potential to save buildings from wildfires.
Effect on Existing Buildings	Potential to save buildings from wildfires.

Mitigation Action Table	
Jurisdiction	Dorchester
Hazard	Wildfires
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Scout for overgrowth of brush or a large number of acres not being cultivated that would allow a wildfire to get out of control.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Limited staff time necessary to conduct education program(s) in relation to the potential benefit of reduced number of wildfires.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal funds budgeted for fire department.
Responsible Party *(Position or Title)*	Mayor and City employees.
Implementation Schedule *(1 to 5 years timeframe)*	Within 2 years.
Effects on New Buildings	Potential to save buildings from wildfires.
Effect on Existing Buildings	Potential to save buildings from wildfires.

Mitigation Action Table	
Jurisdiction	Dorchester
Hazard	Lightning
Priority (High, Medium, Low)	High
Description of Mitigation Action	We have lightning protection on equipment. If direct hit happens, we have a two area water system that can be connected from either area for emergency supply until repairs are made. Water systems would be connected by opening connecting valves.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Significant expense for repairs, water system designed for interaction for any equipment failure at any pump station.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Repairs – Municipal funds, loan funds, and/or grant funds.
Responsible Party *(Position or Title)*	Water Department
Implementation Schedule *(1 to 5 years timeframe)*	Continuing schedule, implement any new stations added.
Effects on New Buildings	Continued water supply.
Effect on Existing Buildings	Continued water supply.

Mitigation Action Table	
Jurisdiction	Dorchester
Hazard	Lightning
Priority (High, Medium, Low)	High
Description of Mitigation Action	Lightning protection on electronic equipment. Computers are backed up on a regular interval.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Equipment repair not as drastic, information retrieval not drastic.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal funds.
Responsible Party *(Position or Title)*	Mayor, city employees.
Implementation Schedule *(1 to 5 years timeframe)*	Continuing schedule, protection.
Effects on New Buildings	Positive
Effect on Existing Buildings	Positive

Mitigation Action Table	
Jurisdiction	Dorchester
Hazard	Land Subsidence
Priority (High, Medium, Low)	Low
Description of Mitigation Action	Based on the geological formations underlying the City of Dorchester, land subsidence is not considered a potential hazard.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	
Responsible Party *(Position or Title)*	
Implementation Schedule *(1 to 5 years timeframe)*	
Effects on New Buildings	
Effect on Existing Buildings	

Mitigation Action Table	
Jurisdiction	Dorchester
Hazard	Expansive Soils
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Provide soil stabilization methods prior to construction or reconstruction of city roadways.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Additional preparation costs (i.e. lime stabilization) necessary for road construction off-sets the expense of future road rehabilitation costs if appropriate pre-construction measures are not taken. Benefit includes providing for a better, more durable road.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal general funds, loan funds and/or grant funds.
Responsible Party *(Position or Title)*	Mayor
Implementation Schedule *(1 to 5 years timeframe)*	On going on an as needed basis.
Effects on New Buildings	Positive effect on new buildings.
Effect on Existing Buildings	Positive effect on existing buildings.

Mitigation Action Table	
Jurisdiction	Dorchester
Hazard	Expansive Soils
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Provide soil stabilization methods prior to construction of residences and/or commercial facilities.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Additional preparation costs (i.e. lime stabilization) necessary for building foundations off-sets the expense of future leveling costs if appropriate pre-construction measures are not taken. Benefit includes providing for a better, more stable building foundation.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Private sources unless the building is municipal owned.
Responsible Party *(Position or Title)*	Building Inspector
Implementation Schedule *(1 to 5 years timeframe)*	On going on an as needed basis.
Effects on New Buildings	Positive effect on new buildings.
Effect on Existing Buildings	Positive effect on existing buildings.

Mitigation Action Table	
Jurisdiction	Dorchester
Hazard	Dam and Levee Failure
Priority (High, Medium, Low)	Low
Description of Mitigation Action	There are no dams or levees in the Dorchester area that would create a hazard if they were to fail.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	
Responsible Party *(Position or Title)*	
Implementation Schedule *(1 to 5 years timeframe)*	
Effects on New Buildings	
Effect on Existing Buildings	

Mitigation Action Table	
Jurisdiction	Dorchester
Hazard	Wind Storm
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Inspect overhanging tress limbs on all aerial power line routes to eliminate loss of power due to broken limbs pulling down power lines during windstorms. Report any identified potential problem areas to local power company for mitigation.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Minimal staff time required. Benefit includes reduced opportunity for temporary power loss due to power transmission lines being pulled down by falling tree limbs.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal general funds
Responsible Party *(Position or Title)*	Public Works Director
Implementation Schedule *(1 to 5 years timeframe)*	On going
Effects on New Buildings	Positive effect on new buildings.
Effect on Existing Buildings	Positive effect on existing buildings.

Mitigation Action Table	
Jurisdiction	Dorchester
Hazard	Wind Storm
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Educate the public to inspect overhanging tress limbs on all aerial power line routes to eliminate loss of power due to broken limbs pulling down power lines during windstorms. Report any identified potential problem areas to local power company for mitigation.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Minimal staff time required. Benefit includes reduced opportunity for temporary power loss due to power transmission lines being pulled down by falling tree limbs.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal general funds
Responsible Party *(Position or Title)*	Mayor, City Employees
Implementation Schedule *(1 to 5 years timeframe)*	On going
Effects on New Buildings	Positive effect on new buildings.
Effect on Existing Buildings	Positive effect on existing buildings.

Mitigation Action Table	
Jurisdiction	Dorchester
Hazard	Tornado
Priority (High, Medium, Low)	High
Description of Mitigation Action	We have a two area water system that can be connected from either area for emergency supply until repairs are made. The systems would be connected by opening the connector valves.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Significant expense for repairs, water system designed for interaction for any equipment failure at any pump station.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal funds, loan funds and/or grant funds.
Responsible Party *(Position or Title)*	Mayor, Water system director
Implementation Schedule *(1 to 5 years timeframe)*	Ongoing
Effects on New Buildings	Ongoing water supply
Effect on Existing Buildings	Ongoing water supply

Mitigation Action Table	
Jurisdiction	Dorchester
Hazard	Tornado
Priority (High, Medium, Low)	High
Description of Mitigation Action	Increase citizen advanced warning/notification capabilities.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Code Red and Weather Warning implemented.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	First year grant funds/ after possible grant and/or Municipal funds
Responsible Party *(Position or Title)*	Mayor
Implementation Schedule *(1 to 5 years timeframe)*	Ongoing
Effects on New Buildings	Positive
Effect on Existing Buildings	Positive

Mitigation Action Table	
Jurisdiction	Dorchester
Hazard	Severe Winter Storm
Priority (High, Medium, Low)	High
Description of Mitigation Action	We have a two area water system that can be connected from either area for emergency supply until repairs are made. The systems would be connected by opening the connector valves.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Significant expense for repairs, water system designed for interaction for any equipment failure at any pump station.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal funds, loan funds and/or grant funds.
Responsible Party *(Position or Title)*	Mayor, Water Manager
Implementation Schedule *(1 to 5 years timeframe)*	Ongoing
Effects on New Buildings	Positive
Effect on Existing Buildings	Positive

Mitigation Action Table	
Jurisdiction	Dorchester
Hazard	Severe Winter Storm
Priority (High, Medium, Low)	High
Description of Mitigation Action	Inspect overhanging tress limbs on all aerial power line routes to eliminate loss of power due to broken limbs pulling down power lines during windstorms. Report any identified potential problem areas to local power company for mitigation.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Minimal staff time required. Benefit includes reduced opportunity for temporary power loss due to power transmission lines being pulled down by falling tree limbs.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal Funds
Responsible Party *(Position or Title)*	Mayor, all city employees
Implementation Schedule *(1 to 5 years timeframe)*	ongoing
Effects on New Buildings	Eliminate damage and loss of physical damage.
Effect on Existing Buildings	Eliminate damage and loss of physical damage.

Mitigation Action Table	
Jurisdiction	Dorchester
Hazard	Extreme Temperatures
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Fit necessary water system plumbing with insulation.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Prevent damage to equipment.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal funds.
Responsible Party *(Position or Title)*	Water manager
Implementation Schedule *(1 to 5 years timeframe)*	Ongoing
Effects on New Buildings	Consistent water supply.
Effect on Existing Buildings	Consistent water supply.

Mitigation Action Table	
Jurisdiction	Dorchester
Hazard	Extreme Temperatures
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Educate Public on dangers of dehydration in high tempuratures.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Personal safety.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal funds.
Responsible Party *(Position or Title)*	Water manager
Implementation Schedule *(1 to 5 years timeframe)*	Ongoing
Effects on New Buildings	Positive
Effect on Existing Buildings	Positive

Mitigation Action Table	
Jurisdiction	Dorchester
Hazard	Drought
Priority (High, Medium, Low)	High
Description of Mitigation Action	Multi – Phase Drought Contigency plan for water system.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Reduced water revenues, continued water supply.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal funds.
Responsible Party *(Position or Title)*	Water Director
Implementation Schedule *(1 to 5 years timeframe)*	Ongoing
Effects on New Buildings	Positive
Effect on Existing Buildings	Positive

Mitigation Action Table	
Jurisdiction	Dorchester
Hazard	Drought
Priority (High, Medium, Low)	High
Description of Mitigation Action	Increase public awareness of drought contingency plan.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Reduced water revenues, continued water supply.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal funds.
Responsible Party *(Position or Title)*	Water Director
Implementation Schedule *(1 to 5 years timeframe)*	Ongoing
Effects on New Buildings	Positive
Effect on Existing Buildings	Positive

Mitigation Action Table	
Jurisdiction	Dorchester
Hazard	Earthquake
Priority (High, Medium, Low)	Low
Description of Mitigation Action	Based on historical data, earthquakes are not considered a potential hazard in Dorchester.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	
Responsible Party *(Position or Title)*	
Implementation Schedule *(1 to 5 years timeframe)*	
Effects on New Buildings	
Effect on Existing Buildings	

Mitigation Action Table	
Jurisdiction	Dorchester
Hazard	Hail Storm
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	We have a two area water system that can be connected from either area for emergency supply until repairs are made. The systems would be connected by opening the connector valves.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Significant expense for repairs, water system designed for interaction for any equipment failure at any pump station.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal funds, loan funds and/or grant funds.
Responsible Party *(Position or Title)*	Mayor, Water system director
Implementation Schedule *(1 to 5 years timeframe)*	Ongoing
Effects on New Buildings	Ongoing water supply
Effect on Existing Buildings	Ongoing water supply

Mitigation Action Table	
Jurisdiction	Dorchester
Hazard	Hail Storm
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Increase citizen advanced warning/notification capabilities.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Code Red and Weather Warning implemented.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	First year grant funds/ after possible grant and/or Municipal funds
Responsible Party *(Position or Title)*	Mayor
Implementation Schedule *(1 to 5 years timeframe)*	Ongoing
Effects on New Buildings	Positive
Effect on Existing Buildings	Positive

City of Gunter

Mitigation Goals and Actions

Developing Mitigation Goals and Actions for Grayson County Hazard Mitigation Plan (HMP)

Goals are general guidelines that explain what you want to achieve. They are usually broad policy-type statements, long term, and represent global visions. The following **Goals** appear in the State of Texas Mitigation Plan and are suggested for the Grayson County HMP:

- Reduce or eliminate hazardous conditions that cause loss of life
- Reduce or eliminate hazardous conditions that inflict injuries
- Reduce or eliminate hazardous conditions that cause property damage
- Reduce or eliminate hazardous conditions that degrade important natural resources

Mitigation Actions are specific actions that help you achieve your goals. **At least two actions needs to be recorded per each hazard identified in the Risk Assessment.**

Examples:
Elevate three historic structures located in the downtown district
Sponsor a community fair to promote wildfire defensible space
Retrofit the police department to withstand high wind damage

***Note:** Please include mitigation actions in the HMP that may be eligible for FEMA funding.*

Priority Ranking, please indicate your "vote". **(Low, Medium, High)**

Questions to consider when ranking mitigation actions:
- Is the proposed action socially acceptable and will all citizens be treated fairly?
- Is the action compatible with present and future community values?
- Is the action technically feasible and will it move the community towards its goal?
- Does the City have the legal authority to implement the action?
- Does the City have the technical capability to implement the action?

***Note:** Funding is often a constraint; at this time, do not allow that to influence your indication of priorities. One purpose of the plan is to help support efforts to secure funding for implementation.*

Please fill out the sections in the following tables.

Mitigation Action Table	
Jurisdiction	Gunter
Hazard	Floods
Priority (High, Medium, Low)	High
Description of Mitigation Action	Take advantage of County-provided educational material on the NFIP and actively promote city residents to participate in the NFIP.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Very low cost activity which can provide a high benefit.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (Budget)
Responsible Party *(Position or Title)*	City Supervisor
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	Can be significant
Effect on Existing Buildings	Can be significant

Mitigation Action Table	
Jurisdiction	Gunter
Hazard	Flooding
Priority (High, Medium, Low)	High
Description of Mitigation Action	Clearing and re-channelization of two (2) feeder creeks that flow from East to West through town to feeder creek by 2nd street. Areas impacted include College Street, Cedar Street, Seventh Street. And privately owned properties along a general line from. The top of college street down by cedar and 7th through town to FM 121 South West of Gunter.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Will require significant infrastructure expense including engineering and construction costs. Resulting benefit expected to reduce potential for residential and commercial property loss and reduce or eliminate injuries and loss of life.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal general funds, loan funds and/or grant funds.
Responsible Party *(Position or Title)*	City Supervisor.
Implementation Schedule *(1 to 5 years timeframe)*	Due to size and anticipated cost, project will need to be completed in stages unless a grant of sufficient size is received to cover entire project. Each phase of project is expected to last one year with a five year schedule expected to complete entire project.
Effects on New Buildings	Eliminates potential flooding of new buildings located along project area.
Effect on Existing Buildings	Eliminates potential flooding of existing buildings located along project area.

Mitigation Action Table	
Jurisdiction	Gunter
Hazard	Flooding
Priority (High, Medium, Low)	High
Description of Mitigation Action	Improve drainage for storm water run-off along State Highway 289 where it is curb and gutter form North to South through Gunter.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Will require significant infrastructure expense including engineering and construction costs. Resulting benefit expected to reduce potential for residential and commercial property loss and reduce or eliminate injuries and loss of life.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal general funds, loan funds and/or grant funds.
Responsible Party *(Position or Title)*	City Supervisor.
Implementation Schedule *(1 to 5 years timeframe)*	Due to size and anticipated cost, project will need to be completed in stages unless a grant of sufficient size is received to cover entire project. Each phase of project is expected to last one year with a five year schedule expected to complete entire project.
Effects on New Buildings	Eliminates potential flooding of new buildings located along project area.
Effect on Existing Buildings	Eliminates potential flooding of existing buildings located along project area.

Mitigation Action Table	
Jurisdiction	Gunter
Hazard	Landslide
Priority (High, Medium, Low)	Low
Description of Mitigation Action	Based on the topography of the City of Gunter, landslides are not considered a potential hazard.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	
Responsible Party *(Position or Title)*	
Implementation Schedule *(1 to 5 years timeframe)*	
Effects on New Buildings	
Effect on Existing Buildings	

Mitigation Action Table	
Jurisdiction	Gunter
Hazard	Landslide
Priority (High, Medium, Low)	Low
Description of Mitigation Action	Based on the topography of the City of Gunter, landslides are not considered a potential hazard.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	
Responsible Party *(Position or Title)*	
Implementation Schedule *(1 to 5 years timeframe)*	
Effects on New Buildings	
Effect on Existing Buildings	

Mitigation Action Table	
Jurisdiction	Gunter
Hazard	Wildfires
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Provide community wide education programs to help reduce the risk of wildfires. Educate the community on the importance of the quick use of the 911 system to get sufficient help as soon as possible to keep the wildfire from spreading to a minimum.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Limited staff time necessary to conduct education program(s) in relation to the potential benefit of reduced number of wildfires.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal general funds
Responsible Party *(Position or Title)*	Fire Chief
Implementation Schedule *(1 to 5 years timeframe)*	Within two year
Effects on New Buildings	Potential to save new buildings from wildfires.
Effect on Existing Buildings	Potential to save existing buildings from wildfires.

Mitigation Action Table	
Jurisdiction	Gunter
Hazard	Wildfires
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Develop printed educational materials to help reduce risk of wildfires. Promote an active mowing program to keep the vegetation heights to a minimum.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Limited staff time and publishing/copying expense necessary to prepare and print educational materials in relation to the potential benefit of reduced number of wildfires.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal general funds budgeted for fire department.
Responsible Party *(Position or Title)*	Fire Chief
Implementation Schedule *(1 to 5 years timeframe)*	Within two year
Effects on New Buildings	Potential to save new buildings from wildfires.
Effect on Existing Buildings	Potential to save existing buildings from wildfires.

Mitigation Action Table	
Jurisdiction	Gunter
Hazard	Lightning
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Retrofit wastewater facilities including plant and lift stations with alternative power source in the event of lightning strikes. Includes generators and hard wiring of equipment to prepare for power outage.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Significant expense for equipment (generators) and staff time for installation offset by ability to continue treating sewerage in the event of a power loss. Benefits also include continued regulatory compliance and environmental controls.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal general funds, loan funds and/or grant funds.
Responsible Party *(Position or Title)*	City Supervisor.
Implementation Schedule *(1 to 5 years timeframe)*	One to two years
Effects on New Buildings	Positive effect based on continued ability to except sewerage from new buildings.
Effect on Existing Buildings	Positive effect based on continued ability to except sewerage from existing buildings.

Mitigation Action Table	
Jurisdiction	Gunter
Hazard	Lightning
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Retrofit water facilities including well sites, pump stations, SCADA system and storage facilities with alternative power source in the event of lightning strikes. Includes generators and hard wiring of equipment to prepare for power outage.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Significant expense for equipment (generators) and staff time for installation offset by ability to continue providing water in the event of a power loss. Additional benefit includes continued regulatory compliance.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal general funds, loan funds and/or grant funds.
Responsible Party *(Position or Title)*	City Supervisor.
Implementation Schedule *(1 to 5 years timeframe)*	One to two years
Effects on New Buildings	Positive effect based on continued ability to except sewerage from new buildings.
Effect on Existing Buildings	Positive effect based on continued ability to except sewerage from new buildings.

Mitigation Action Table	
Jurisdiction	Gunter
Hazard	Land Subsidence
Priority (High, Medium, Low)	Low
Description of Mitigation Action	Based on the geological formations underlying the City of Gunter, land subsidence is not considered a potential hazard.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	
Responsible Party *(Position or Title)*	
Implementation Schedule *(1 to 5 years timeframe)*	
Effects on New Buildings	
Effect on Existing Buildings	

Mitigation Action Table	
Jurisdiction	Gunter
Hazard	Land Subsidence
Priority (High, Medium, Low)	Low
Description of Mitigation Action	Based on the geological formations underlying the City of Gunter, land subsidence is not considered a potential hazard.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	
Responsible Party *(Position or Title)*	
Implementation Schedule *(1 to 5 years timeframe)*	
Effects on New Buildings	
Effect on Existing Buildings	

Mitigation Action Table	
Jurisdiction	Gunter
Hazard	Expansive Soils
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Provide soil stabilization methods prior to construction or reconstruction of city roadways within the south western areas of the city based on the existence of Crockett-Urban soil type which has low strength and high shrink-swell ratings.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Additional preparation costs (i.e. lime stabilization) necessary for road construction off-sets the expense of future road rehabilitation costs if appropriate pre-construction measures are not taken. Benefit includes providing for a better, more durable road.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal general funds, loan funds and/or grant funds.
Responsible Party *(Position or Title)*	City Supervisor.
Implementation Schedule *(1 to 5 years timeframe)*	On going on an as needed basis.
Effects on New Buildings	Positive effect on new buildings.
Effect on Existing Buildings	Positive effect on existing buildings.

Mitigation Action Table	
Jurisdiction	Gunter
Hazard	Expansive Soils
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Provide soil stabilization methods prior to construction of residences and/or commercial facilities within the south western areas of the city based on the existence of Crockett-Urban soil type which has low strength and high shrink-swell ratings.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Additional preparation costs (i.e. lime stabilization) necessary for building foundations off-sets the expense of future leveling costs if appropriate pre-construction measures are not taken. Benefit includes providing for a better, more stable building foundation.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Private sources unless the building is municipal owned.
Responsible Party *(Position or Title)*	City Supervisor.
Implementation Schedule *(1 to 5 years timeframe)*	On going on an as needed basis.
Effects on New Buildings	Positive effect on new buildings.
Effect on Existing Buildings	Positive effect on existing buildings.

Mitigation Action Table	
Jurisdiction	Gunter
Hazard	Dam and Levee Failure
Priority (High, Medium, Low)	Low
Description of Mitigation Action	There are no dams or levees in the Gunter area that would create a hazard if they were to fail.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	
Responsible Party *(Position or Title)*	
Implementation Schedule *(1 to 5 years timeframe)*	
Effects on New Buildings	
Effect on Existing Buildings	

Mitigation Action Table	
Jurisdiction	Gunter
Hazard	Dam and Levee Failure
Priority (High, Medium, Low)	Low
Description of Mitigation Action	There are no dams or levees in the Gunter area that would create a hazard if they were to fail.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	
Responsible Party *(Position or Title)*	
Implementation Schedule *(1 to 5 years timeframe)*	
Effects on New Buildings	
Effect on Existing Buildings	

Mitigation Action Table	
Jurisdiction	Gunter
Hazard	Wind Storm
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Inspect overhanging tress limbs on all aerial power line routes to eliminate loss of power due to broken limbs pulling down power lines during windstorms. Report any identified potential problem areas to local power company for mitigation.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Minimal staff time required. Benefit includes reduced opportunity for temporary power loss due to power transmission lines being pulled down by falling tree limbs.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal general funds
Responsible Party *(Position or Title)*	City Supervisor
Implementation Schedule *(1 to 5 years timeframe)*	1 to 2 Year Projected Project
Effects on New Buildings	Positive effect on new buildings.
Effect on Existing Buildings	Positive effect on existing buildings.

Mitigation Action Table	
Jurisdiction	Gunter
Hazard	Wind Storm
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Sponsor a citizen education program to inform public of the benefits of inspecting their property for overhanging tress limbs on aerial power lines and reporting potential problems to power company to avoid loss of power due to broken limbs pulling down power lines during windstorms.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Minimal staff time required. Benefit includes reduced opportunity for temporary power loss due to power transmission lines being pulled down by falling tree limbs.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal general funds
Responsible Party *(Position or Title)*	City Supervisor
Implementation Schedule *(1 to 5 years timeframe)*	1 to 2 Year Projected Project
Effects on New Buildings	Positive effect on new buildings.
Effect on Existing Buildings	Positive effect on existing buildings.

Mitigation Action Table	
Jurisdiction	Gunter
Hazard	Tornado
Priority (High, Medium, Low)	High
Description of Mitigation Action	Retrofit water and wastewater facilities with alternative power sources in the event of a tornado. Includes generators and hard wiring of equipment to prepare for power outage.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Significant expense for equipment (generators) and staff time for installation offset by ability to continue treating sewerage and providing water in the event of a power loss. Benefits also include continued regulatory compliance and environmental controls.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal general funds, loan funds and/or grant funds.
Responsible Party *(Position or Title)*	City Supervisor.
Implementation Schedule *(1 to 5 years timeframe)*	Due to size and anticipated cost, project will need to be completed in stages unless a grant of sufficient size is received to cover entire project. Each phase of project is expected to last one year with a five year schedule expected to complete entire project.
Effects on New Buildings	Positive effect based on continued ability to except sewerage from and provide water to new buildings.
Effect on Existing Buildings	Positive effect based on continued ability to except sewerage from and provide water to new buildings.

Mitigation Action Table	
Jurisdiction	Gunter
Hazard	Tornado
Priority (High, Medium, Low)	High
Description of Mitigation Action	Increase citizen advanced warning/notification capabilities.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Some capital improvement money required to increase the number of outdoor warning sirens in the city and expand coverage of existing siren and cost to participate in automated warning notification systems such as Code Red and Weather Warning program. Benefits will include expanded coverage for outdoor sirens and earlier warning capabilities.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal general funds, loan funds and/or grant funds.
Responsible Party *(Position or Title)*	City Supervisor, Fire Chief, Police Chief
Implementation Schedule *(1 to 5 years timeframe)*	Under way for advanced notification systems. On going for outdoor warning siren coverage area expansion with completion goal of five years.
Effects on New Buildings	Positive effect on new buildings.
Effect on Existing Buildings	Positive effect on existing buildings.

Mitigation Action Table	
Jurisdiction	Gunter
Hazard	Severe Winter Storm
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Retrofit water and wastewater facilities with alternative power sources in the event of a severe winter storm including power loss. Includes generators and hard wiring of equipment to prepare for power outage.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Significant expense for equipment (generators) and staff time for installation offset by ability to continue treating sewerage and providing water in the event of a power loss associated with a severe winter storm. Benefits also include continued regulatory compliance and environmental controls.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal general funds, loan funds and/or grant funds.
Responsible Party *(Position or Title)*	City Supervisor.
Implementation Schedule *(1 to 5 years timeframe)*	Due to size and anticipated cost, project will need to be completed in stages unless a grant of sufficient size is received to cover entire project. Each phase of project is expected to last one year with a five year schedule expected to complete entire project.
Effects on New Buildings	Positive effect on new buildings.
Effect on Existing Buildings	Positive effect on existing buildings.

Mitigation Action Table	
Jurisdiction	Gunter
Hazard	Severe Winter Storm
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Inspect overhanging tress limbs on all aerial power line routes to eliminate loss of power due to broken limbs pulling down power lines during severe winter storms. Report any identified potential problem areas to local power company for mitigation.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Minimal staff time required. Benefit includes reduced opportunity for temporary power loss due to power transmission lines being pulled down by falling tree limbs.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal general funds
Responsible Party *(Position or Title)*	City Supervisor
Implementation Schedule *(1 to 5 years timeframe)*	On going
Effects on New Buildings	Positive effect on new buildings.
Effect on Existing Buildings	Positive effect on existing buildings.

Mitigation Action Table	
Jurisdiction	Gunter
Hazard	Hailstorm
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Protect city-owned vehicles and other assets in the event of a hailstorm by locating them in covered parking areas.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Some capital expenditures and staff time required to construct covered parking areas for police and maintenance vehicles. Benefit of reduced damages to city assets out-weigh the cost to provide protective coverings.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal general funds
Responsible Party *(Position or Title)*	City Supervisor.
Implementation Schedule *(1 to 5 years timeframe)*	Two to Five years depending on funding availability.
Effects on New Buildings	Positive effect on new buildings.
Effect on Existing Buildings	Positive effect on existing buildings.

Mitigation Action Table	
Jurisdiction	Gunter
Hazard	Hailstorm
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Retrofit water and wastewater facilities with alternative power sources in the event of power loss during a hailstorm. Includes generators and hard wiring of equipment to prepare for power outage.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Significant expense for equipment (generators) and staff time for installation offset by ability to continue treating sewerage and providing water in the event of a power loss associated with a hailstorm. Benefits also include continued regulatory compliance and environmental controls.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal general funds, loan funds and/or grant funds.
Responsible Party *(Position or Title)*	City Supervisor.
Implementation Schedule *(1 to 5 years timeframe)*	Due to size and anticipated cost, project will need to be completed in stages unless a grant of sufficient size is received to cover entire project. Each phase of project is expected to last one year with a five year schedule expected to complete entire project.
Effects on New Buildings	Positive effect on new buildings.
Effect on Existing Buildings	Positive effect on existing buildings.

Mitigation Action Table	
Jurisdiction	Gunter
Hazard	Extreme Temperatures
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Initiate a routine vehicle and equipment maintenance schedule to insure city-owned property is capable of withstanding extreme temperature changes.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Limited staff time required with little actual expenditure of funds. Benefit includes fleet of vehicles which are capable of withstanding extreme temperature changes.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal general funds.
Responsible Party *(Position or Title)*	City Supervisor
Implementation Schedule *(1 to 5 years timeframe)*	On going
Effects on New Buildings	No effect on new buildings.
Effect on Existing Buildings	No effect on existing buildings.

Mitigation Action Table	
Jurisdiction	Gunter
Hazard	Extreme Temperatures
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Provide public information materials to citizens including helpful safety tips, public assistance availability from governmental agencies and other services which may be available to handle extreme temperature situations.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Limited staff time and publishing/copying expense necessary to prepare and print educational materials in relation to the potential benefit of providing useful, potentially life-saving information to the public.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal general funds
Responsible Party *(Position or Title)*	City Supervisor
Implementation Schedule *(1 to 5 years timeframe)*	Within one year
Effects on New Buildings	No effect on new buildings.
Effect on Existing Buildings	No effect on existing buildings.

Mitigation Action Table	
Jurisdiction	Gunter
Hazard	Drought
Priority (High, Medium, Low)	Low
Description of Mitigation Action	There are no crop producing agricultural entities located within the city limits of Gunter therefore drought conditions are not considered a potential hazard.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	
Responsible Party *(Position or Title)*	
Implementation Schedule *(1 to 5 years timeframe)*	
Effects on New Buildings	
Effect on Existing Buildings	

Mitigation Action Table	
Jurisdiction	Gunter
Hazard	Drought
Priority (High, Medium, Low)	Low
Description of Mitigation Action	There are no crop producing agricultural entities located within the city limits of Gunter therefore drought conditions are not considered a potential hazard.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	
Responsible Party *(Position or Title)*	
Implementation Schedule *(1 to 5 years timeframe)*	
Effects on New Buildings	
Effect on Existing Buildings	

Mitigation Action Table	
Jurisdiction	Gunter
Hazard	Earthquake
Priority (High, Medium, Low)	Low
Description of Mitigation Action	Based on historical data, earthquakes are not considered a potential hazard in Gunter.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	
Responsible Party *(Position or Title)*	
Implementation Schedule *(1 to 5 years timeframe)*	
Effects on New Buildings	
Effect on Existing Buildings	

Mitigation Action Table	
Jurisdiction	Gunter
Hazard	Earthquake
Priority (High, Medium, Low)	Low
Description of Mitigation Action	Based on historical data, earthquakes are not considered a potential hazard in Gunter.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	
Responsible Party *(Position or Title)*	
Implementation Schedule *(1 to 5 years timeframe)*	
Effects on New Buildings	
Effect on Existing Buildings	

City of Howe

Mitigation Goals and Actions

Developing Mitigation Goals and Actions for Grayson County Hazard Mitigation Plan (HMP)

Goals are general guidelines that explain what you want to achieve. They are usually broad policy-type statements, long term, and represent global visions. The following **Goals** appear in the State of Texas Mitigation Plan and are suggested for the Grayson County HMP:

- Reduce or eliminate hazardous conditions that cause loss of life
- Reduce or eliminate hazardous conditions that inflict injuries
- Reduce or eliminate hazardous conditions that cause property damage
- Reduce or eliminate hazardous conditions that degrade important natural resources

Mitigation Actions are specific actions that help you achieve your goals. **At least two actions needs to be recorded per each hazard identified in the Risk Assessment.**

Examples:
Elevate three historic structures located in the downtown district
Sponsor a community fair to promote wildfire defensible space
Retrofit the police department to withstand high wind damage

***Note:** Please include mitigation actions in the HMP that may be eligible for FEMA funding.*

Priority Ranking, please indicate your "vote". **(Low, Medium, High)**

Questions to consider when ranking mitigation actions:
- Is the proposed action socially acceptable and will all citizens be treated fairly?
- Is the action compatible with present and future community values?
- Is the action technically feasible and will it move the community towards its goal?
- Does the City have the legal authority to implement the action?
- Does the City have the technical capability to implement the action?

***Note:** Funding is often a constraint; at this time, do not allow that to influence your indication of priorities. One purpose of the plan is to help support efforts to secure funding for implementation.*

Please fill out the sections in the following tables.

Mitigation Action Table	
Jurisdiction	Howe
Hazard	Floods
Priority (High, Medium, Low)	High
Description of Mitigation Action	Take advantage of County-provided educational material on the NFIP and actively promote city residents to participate in the NFIP.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Very low cost activity which can provide a high benefit.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (Budget)
Responsible Party *(Position or Title)*	Mayor
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	Can be significant
Effect on Existing Buildings	Can be significant

Mitigation Action Table	
Jurisdiction	Howe
Hazard	Flooding
Priority (High, Medium, Low)	High
Description of Mitigation Action	Incorporate the procedures for tracking high water marks following a flood into emergency response plans
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Cost is minimal compared to the benefits obtained from identifying response plans in case of flooding.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal funds or grants
Responsible Party *(Position or Title)*	Mayor
Implementation Schedule *(1 to 5 years timeframe)*	1 Year
Effects on New Buildings	Identification of areas prone to flooding will allow for appropriate design for new buildings.
Effect on Existing Buildings	Identification of areas prone to flooding will allow for incorporation of measures to prevent flooding to existing buildings.

Mitigation Action Table	
Jurisdiction	Howe
Hazard	Flooding
Priority (High, Medium, Low)	High
Description of Mitigation Action	Retain thick vegetative cover on public lands flanking river
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Will provide a buffer to stabilize water and reduce damages cause by flooding.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Grants, Municipal Funds
Responsible Party *(Position or Title)*	Mayor
Implementation Schedule *(1 to 5 years timeframe)*	1 Year
Effects on New Buildings	Stabilization of streams near new buildings will decrease the probability of flooding and erosion near new buildings.
Effect on Existing Buildings	Stabilization of streams near new buildings will decrease the probability of flooding and erosion near existing buildings.

Mitigation Action Table	
Jurisdiction	Howe
Hazard	Landslide
Priority (High, Medium, Low)	Low
Description of Mitigation Action	Conduct a detailed slope analysis of the jurisdiction to identify most suitable land uses / development patterns
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	The cost is low compared with the benefit of identified landside prone areas within the City
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Grants
Responsible Party *(Position or Title)*	Mayor
Implementation Schedule *(1 to 5 years timeframe)*	One to two years
Effects on New Buildings	Identification of areas prone to landslide will allow for appropriate design for new buildings.
Effect on Existing Buildings	Identification of areas prone to landslide will allow for incorporation of measures to prevent landslide existing buildings.

Mitigation Action Table	
Jurisdiction	Howe
Hazard	Landslide
Priority (High, Medium, Low)	Low
Description of Mitigation Action	Prohibit/restrict grading and hillside development in identified landslide hazard areas
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	The cost is low compared with the benefit of identified landside prone areas within the City
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Grants
Responsible Party *(Position or Title)*	Mayor
Implementation Schedule *(1 to 5 years timeframe)*	One to two years
Effects on New Buildings	Identification of areas prone to landslide will allow for appropriate design for new buildings.
Effect on Existing Buildings	Identification of areas prone to landslide will allow for incorporation of measures to prevent landslide existing buildings.

Mitigation Action Table	
Jurisdiction	Howe
Hazard	Landslide
Priority (High, Medium, Low)	Low
Description of Mitigation Action	Require specific land treatments to reduce landslide hazards (e.g. slope stabilization, landscape design, etc.) Plant soil-stabilizing vegetation on steep publicly owned slopes
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	The cost is low compared with the benefit of preventing landslides from happening in landslide-prone areas.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Grants
Responsible Party *(Position or Title)*	Mayor
Implementation Schedule *(1 to 5 years timeframe)*	One to two years
Effects on New Buildings	Best practices for the treatment of landslide hazards will allow for appropriate design for new buildings.
Effect on Existing Buildings	Best practices for the treatment of landslide hazards will allow the incorporation of measures to prevent landslide existing buildings.

Mitigation Action Table	
Jurisdiction	Howe
Hazard	Wildfires
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Routinely inspect the functioning of fire hydrants
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	The cost is low compared to the benefits of having means to respond to wildfires appropriately.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal funds
Responsible Party *(Position or Title)*	Mayor Fire Department
Implementation Schedule *(1 to 5 years timeframe)*	One year
Effects on New Buildings	New buildings better protected from wildfires by ensuring that fire-responding equipment is working properly
Effect on Existing Buildings	Existing buildings better protected from wildfires by ensuring that fire-responding equipment is working properly

Mitigation Action Table	
Jurisdiction	Howe
Hazard	Wildfires
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Require and maintain safe access for fire apparatus to wildland/urban interface neighborhoods/properties
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Moderate maintenance cost. The benefit would be to be prepared to respond to a wildfire to prevent further impacts from the hazard event.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	City funds
Responsible Party *(Position or Title)*	Mayor Fire Department
Implementation Schedule *(1 to 5 years timeframe)*	Two to three years
Effects on New Buildings	Increased fire safety conditions for new buildings near wildland/urban interface areas.
Effect on Existing Buildings	Increased fire safety conditions for existing buildings near wildland/urban interface areas.

Mitigation Action Table	
Jurisdiction	Howe
Hazard	Wildfires
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Develop a Vegetation Management Plan
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Minimal cost compared to the benefit obtained by increasing fire safety with good vegetation management practices.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Grant
Responsible Party *(Position or Title)*	Mayor Fire Department
Implementation Schedule *(1 to 5 years timeframe)*	Two to three years
Effects on New Buildings	Increased fire safety conditions for new buildings near wildland/urban interface areas.
Effect on Existing Buildings	Increased fire safety conditions for existing buildings near wildland/urban interface areas.

Mitigation Action Table	
Jurisdiction	Howe
Hazard	Lightning
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Set up safe facility for public access/shelter from pending danger
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Extensive capital cost needed for implementation of this action may be offset by maximum benefits achieved by increasing the safety of population.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Grants
Responsible Party *(Position or Title)*	Mayor
Implementation Schedule *(1 to 5 years timeframe)*	3 – 5 years
Effects on New Buildings	None
Effect on Existing Buildings	None

Mitigation Action Table	
Jurisdiction	
Hazard	Lightning
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Notify public to seek shelter of pending threat
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Cost will involve setting up a mechanism in place for public notification. Cost will be offset by the benefit of increasing safety during lightning events
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Grants
Responsible Party *(Position or Title)*	Mayor
Implementation Schedule *(1 to 5 years timeframe)*	One to two years
Effects on New Buildings	None
Effect on Existing Buildings	None

Mitigation Action Table	
Jurisdiction	Howe
Hazard	Land Subsidence
Priority (High, Medium, Low)	Low
Description of Mitigation Action	*Based on the geological formations underlying Howe, land subsidence is not considered a potential hazard.*
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	N/A
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	N/A
Responsible Party *(Position or Title)*	N/A
Implementation Schedule *(1 to 5 years timeframe)*	N/A
Effects on New Buildings	N/A
Effect on Existing Buildings	N/A

Mitigation Action Table	
Jurisdiction	Howe
Hazard	Expansive Soils
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Provide soil stabilization methods prior to construction or reconstruction of City roadways.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Additional preparation costs (i.e. lime stabilization) necessary for road construction off-sets the expense of future road rehabilitation costs if appropriate pre-construction measures are not taken. Benefit includes providing for a better, more durable road.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal general funds, loan funds and/or grant funds.
Responsible Party *(Position or Title)*	Mayor
Implementation Schedule *(1 to 5 years timeframe)*	One to three years
Effects on New Buildings	Positive effect on new buildings by minimizing repair work for longer lasting roads.
Effect on Existing Buildings	Positive effect on existing buildings by minimizing repair work for longer lasting roads.

Mitigation Action Table	
Jurisdiction	Howe
Hazard	Expansive Soils
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Control the design and construction of the foundation and foundation spaces for all buildings.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Cost - Time required on the revision of existing ordinances and city codes to require specific foundation requirements to minimize effects from expansive soils. Benefit – minimization of the effects on buildings from expansive soils
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal funds
Responsible Party *(Position or Title)*	Mayor
Implementation Schedule *(1 to 5 years timeframe)*	Two to three years
Effects on New Buildings	Positive effect on new buildings by minimizing foundation problems in structures.
Effect on Existing Buildings	Positive effect on existing buildings by minimizing foundation problems in structures.

Mitigation Action Table	
Jurisdiction	Howe
Hazard	Dam and Levee Failure
Priority (High, Medium, Low)	Low
Description of Mitigation Action	*There are no dams or levees in the Howe area that would create a hazard if they were to fail.*
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	N/A
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	N/A
Responsible Party *(Position or Title)*	N/A
Implementation Schedule *(1 to 5 years timeframe)*	N/A
Effects on New Buildings	N/A
Effect on Existing Buildings	N/A

Mitigation Action Table	
Jurisdiction	Howe
Hazard	Wind Storm
Priority (High, Medium, Low)	High
Description of Mitigation Action	Set up safe facility for public access/shelter from pending danger
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Extensive capital cost needed for implementation of this action may be offset by maximum benefits achieved by increasing the safety of population.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Grants
Responsible Party *(Position or Title)*	Mayor
Implementation Schedule *(1 to 5 years timeframe)*	3 – 5 years
Effects on New Buildings	None
Effect on Existing Buildings	None

Mitigation Action Table	
Jurisdiction	Howe
Hazard	Wind Storm
Priority (High, Medium, Low)	High
Description of Mitigation Action	Notify public to seek shelter of pending threat
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Cost will involve setting up a mechanism in place for public notification. Cost will be offset by the benefit of increasing safety during lightning events
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Grants
Responsible Party *(Position or Title)*	Mayor
Implementation Schedule *(1 to 5 years timeframe)*	One to two years
Effects on New Buildings	None
Effect on Existing Buildings	None

Mitigation Action Table	
Jurisdiction	Howe
Hazard	Tornado
Priority (High, Medium, Low)	High
Description of Mitigation Action	Establish Early Warning System for Public Notification
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Cost - Staff time needed to establish a plan for installing an developing action plans for public notification. The cost would be moderate but would be offset by increasing the preparedness of the public to respond to emergencies
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal funds and grants
Responsible Party *(Position or Title)*	Mayor
Implementation Schedule *(1 to 5 years timeframe)*	Two to three years
Effects on New Buildings	No effect on new buildings
Effect on Existing Buildings	No effect on existing buildings

Mitigation Action Table	
Jurisdiction	Howe
Hazard	Tornado
Priority (High, Medium, Low)	High
Description of Mitigation Action	Set up Inter-Local support agreements with neighboring communities
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Minimal cost. Cost will be offset by taking advantage of regional planning and more advantageous use of common resources among the communities
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Grants
Responsible Party *(Position or Title)*	Mayor
Implementation Schedule *(1 to 5 years timeframe)*	Two to three years
Effects on New Buildings	None
Effect on Existing Buildings	None

Mitigation Action Table	
Jurisdiction	Howe
Hazard	Severe Winter Storm
Priority (High, Medium, Low)	High
Description of Mitigation Action	Set up safe facility for public access/shelter from pending danger
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Extensive capital cost needed for implementation of this action may be offset by maximum benefits achieved by increasing the safety of population.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Grants
Responsible Party *(Position or Title)*	Mayor
Implementation Schedule *(1 to 5 years timeframe)*	3 – 5 years
Effects on New Buildings	None
Effect on Existing Buildings	None

Mitigation Action Table	
Jurisdiction	Howe
Hazard	Severe Winter Storm
Priority (High, Medium, Low)	High
Description of Mitigation Action	Notify public to seek shelter of pending threat
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Cost will involve setting up a mechanism in place for public notification. Cost will be offset by the benefit of increasing safety during lightning events
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Grants
Responsible Party *(Position or Title)*	Mayor
Implementation Schedule *(1 to 5 years timeframe)*	One to two years
Effects on New Buildings	None
Effect on Existing Buildings	None

Mitigation Action Table	
Jurisdiction	Howe
Hazard	Hailstorm
Priority (High, Medium, Low)	High
Description of Mitigation Action	Implement ordinances prohibiting price gouging during emergency situations
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Minimal cost involved in revising and modifying existing ordinances
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	City funds
Responsible Party *(Position or Title)*	Mayor
Implementation Schedule *(1 to 5 years timeframe)*	One to two years
Effects on New Buildings	None
Effect on Existing Buildings	None

Mitigation Action Table	
Jurisdiction	Howe
Hazard	Hailstorm
Priority (High, Medium, Low)	High
Description of Mitigation Action	Notify emergency management agencies of disaster
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Minimal cost
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal funding
Responsible Party *(Position or Title)*	Mayor
Implementation Schedule *(1 to 5 years timeframe)*	One year
Effects on New Buildings	None
Effect on Existing Buildings	None

Mitigation Action Table	
Jurisdiction	Howe
Hazard	Extreme Temperatures
Priority (High, Medium, Low)	High
Description of Mitigation Action	Notify Emergency Service Agencies of needs of elderly needs
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Minimal cost
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal funding
Responsible Party *(Position or Title)*	Mayor
Implementation Schedule *(1 to 5 years timeframe)*	One year
Effects on New Buildings	None
Effect on Existing Buildings	None

Mitigation Action Table	
Jurisdiction	Howe
Hazard	Extreme Temperatures
Priority (High, Medium, Low)	High
Description of Mitigation Action	Notify public of pending danger
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Cost will involve setting up a mechanism in place for public notification. Cost will be offset by the benefit of increasing safety during lightning events
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Grants
Responsible Party *(Position or Title)*	Mayor
Implementation Schedule *(1 to 5 years timeframe)*	One to two years
Effects on New Buildings	None
Effect on Existing Buildings	None

Mitigation Action Table	
Jurisdiction	Howe
Hazard	Drought
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Incorporate drought tolerant or xeriscape practices into landscape ordinances to reduce dependence on irrigation
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Cost will involve setting up a mechanism in place for public notification. Cost will be offset by the benefit of increasing safety during lightning events
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Grants
Responsible Party *(Position or Title)*	Mayor
Implementation Schedule *(1 to 5 years timeframe)*	One to two years
Effects on New Buildings	None
Effect on Existing Buildings	None

Mitigation Action Table	
Jurisdiction	Howe
Hazard	Drought
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Enforce mandatory water usage restrictions
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Minimal cost with great benefits by reducing the water use during drought events.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Local funds
Responsible Party *(Position or Title)*	Mayor
Implementation Schedule *(1 to 5 years timeframe)*	One to three years
Effects on New Buildings	None
Effect on Existing Buildings	None

Mitigation Action Table	
Jurisdiction	Howe
Hazard	Drought
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Educate Public in water conservation
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Minimal cost with great benefits by educating people on ways to reduce water use especially during drought events.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Local funds
Responsible Party *(Position or Title)*	Mayor
Implementation Schedule *(1 to 5 years timeframe)*	One to two years
Effects on New Buildings	None
Effect on Existing Buildings	None

Mitigation Action Table	
Jurisdiction	Howe
Hazard	Earthquake
Priority (High, Medium, Low)	Low
Description of Mitigation Action	Use flexible piping when extending water, sewer, or natural gas service
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Cost will be justified by the construction of public utilities that can withstand earthquake events.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Grants
Responsible Party *(Position or Title)*	Mayor
Implementation Schedule *(1 to 5 years timeframe)*	Three to five years
Effects on New Buildings	Improved utilities network to supply new buildings
Effect on Existing Buildings	Improved utilities network to supply existing buildings

Mitigation Action Table	
Jurisdiction	Howe
Hazard	Earthquake
Priority (High, Medium, Low)	Low
Description of Mitigation Action	Require bracing of generators, elevators and other vital equipment in hospitals
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Capital costs will be offset by protecting infrastructure in the event of an earthquake
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Grants
Responsible Party *(Position or Title)*	Mayor
Implementation Schedule *(1 to 5 years timeframe)*	Three to five years
Effects on New Buildings	Improved equipment for new buildings
Effect on Existing Buildings	Improved equipment for existing buildings

Mitigation Action Table	
Jurisdiction	Howe
Hazard	Earthquake
Priority (High, Medium, Low)	Low
Description of Mitigation Action	Conduct seismic retrofitting for critical public facilities most at risk to earthquakes
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Capital costs will be offset by protecting infrastructure in the event of an earthquake
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Grants
Responsible Party *(Position or Title)*	Mayor
Implementation Schedule *(1 to 5 years timeframe)*	Three to five years
Effects on New Buildings	Improved equipment for new buildings
Effect on Existing Buildings	Improved equipment for existing buildings

Mitigation Action Table	
Jurisdiction	Howe
Hazard	Earthquake
Priority (High, Medium, Low)	Low
Description of Mitigation Action	Install shutoff valves and emergency connector hoses where water mains cross fault lines
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Cost will be justified by the construction of public utilities that can withstand earthquake events.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Grants
Responsible Party *(Position or Title)*	Mayor
Implementation Schedule *(1 to 5 years timeframe)*	Three to five years
Effects on New Buildings	Improved utilities network to supply new buildings
Effect on Existing Buildings	Improved utilities network to supply existing buildings

City of Knollwood
Mitigation Goals and Actions

The City of Knollwood, TX
Mitigation Goals and Actions for
Grayson County Hazard Mitigation Plan (HMP)

Goals are general guidelines that explain what you want to achieve. They are usually broad policy-type statements, long term, and represent global visions. The following **Goals** appear in the State of Texas Mitigation Plan and are suggested for the Grayson County HMP:

- Reduce or eliminate hazardous conditions that cause loss of life
- Reduce or eliminate hazardous conditions that inflict injuries
- Reduce or eliminate hazardous conditions that cause property damage
- Reduce or eliminate hazardous conditions that degrade important natural resources

Mitigation Actions are specific actions that help you achieve your goals. **At least two actions needs to be recorded per each hazard identified in the Risk Assessment.**

Examples:
Elevate three historic structures located in the downtown district
Sponsor a community fair to promote wildfire defensible space
Retrofit the police department to withstand high wind damage

***Note:** Please include mitigation actions in the HMP that may be eligible for FEMA funding.*

Priority Ranking, please indicate your "vote". **(Low, Medium, High)**

Questions to consider when ranking mitigation actions:
- Is the proposed action socially acceptable and will all citizens be treated fairly?
- Is the action compatible with present and future community values?
- Is the action technically feasible and will it move the community towards its goal?
- Does the City have the legal authority to implement the action?
- Does the City have the technical capability to implement the action?

***Note:** Funding is often a constraint; at this time, do not allow that to influence your indication of priorities. One purpose of the plan is to help support efforts to secure funding for implementation.*

Please fill out the sections in the following tables.

Mitigation Action Table	
Jurisdiction	Knollwood
Hazard	Expansive Soils
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	· Meet with local insurance agents and foundation contractors to determine the historical level of claims and the extent of problems occurring in Grayson County. Determine whether additional action items are possible to further reduce these damage levels.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Fairly low cost to acquire data and could improve HMP in the future
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (Budget)
Responsible Party *(Position or Title)*	Mayor Roelke, Director of Emergency Management
Implementation Schedule *(1 to 5 years timeframe)*	1 to 3 years
Effects on New Buildings	Could benefit future homes.
Effect on Existing Buildings	Limited if any effect.

Mitigation Action Table	
Jurisdiction	Knollwood
Hazard	Expansive Soils
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Review city street standards and ensure that methods to reduce soil expansion are used in areas with extremely expansive soils. These methods such as kneading the soil, extreme compacting, and treating of soils with non-swell additives will extend the life of the roadways.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Fairly low cost to acquire data and could improve HMP in the future
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (Budget)
Responsible Party *(Position or Title)*	Mayor Roelke, Director of Emergency Management
Implementation Schedule *(1 to 5 years timeframe)*	1 to 3 years
Effects on New Buildings	Could benefit future homes.
Effect on Existing Buildings	Limited if any effect.

Mitigation Action Table	
Jurisdiction	City of Knollwood
Hazard	Flooding
Priority (High, Medium, Low)	Low
Description of Mitigation Action	**EMERGENCY SHELTER:** • Build Shelter • Retrofit community center. • Build out safe room. • Install generator(s) for electrical back-up. • Install solar panels (backup for fuel burning generator). • Acquire required infrastructure and equipment (communication devices, heavy equipment to clear up debris, siren warning system, search and rescue equipment, barricades) to prevent/respond to emergency
Cost Effectiveness (Cost vs. Benefits)	Extensive capital cost needed for implementation of this action may be offset by maximum benefits achieved by increasing the safety of population.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Grants
Responsible Party *(Position or Title)*	Mayor, Director of Emergency Management
Implementation Schedule *(1 to 5 years timeframe)*	3 – 5 years
Effects on New Buildings	Provide back-up power sources for new buildings
Effect on Existing Buildings	Provide back-up power sources for existing buildings. Retrofitting of existing community center.

Mitigation Action Table	
Jurisdiction	City of Knollwood
Hazard	Flooding
Priority (High, Medium, Low)	Low
Description of Mitigation Action	Acquire required infrastructure and equipment (communication devices, heavy equipment to clear up debris, siren warning system, search and rescue equipment, barricades) to prevent/respond to emergency.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, act) Cost/Benefit (narrative of benefit expected from investment)*	Cost of purchasing equipment and installing new sirens would be offset by the ability to prepare and respond to such a hazard reducing the damages overall.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Grants
Responsible Party *(Position or Title)*	Mayor, The Director of Emergency Management
Implementation Schedule *(1 to 5 years timeframe)*	2 – 3 years
Effects on New Buildings	None
Effect on Existing Buildings	None

Mitigation Action Table	
Jurisdiction	City of Knollwood
Hazard	Landslide
Priority (High, Medium, Low)	Low
Description of Mitigation Action	*Based on the topography of the City of Knollwood, landslides are not considered a potential hazard.*
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, act) Cost/Benefit (narrative of benefit expected from investment)*	N/A
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	N/A
Responsible Party *(Position or Title)*	N/A
Implementation Schedule *(1 to 5 years timeframe)*	N/A
Effects on New Buildings	N/A
Effect on Existing Buildings	N/A

Mitigation Action Table	
Jurisdiction	City of Knollwood
Hazard	Wildfires
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	• Build shelter. • Retrofit community center. • Build out safe room. • Install generator(s) for electrical back-up.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, act) Cost/Benefit (narrative of benefit expected from investment)*	Extensive capital cost needed for implementation of this action may be offset by maximum benefits achieved by increasing the safety of population.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Grants
Responsible Party *(Position or Title)*	Mayor, The Director of Emergency Management
Implementation Schedule *(1 to 5 years timeframe)*	3 – 5 years
Effects on New Buildings	Provide back-up power sources for new buildings
Effect on Existing Buildings	Provide back-up power sources for existing buildings. Retrofitting of existing community center.

Mitigation Action Table	
Jurisdiction	City of Knollwood
Hazard	Wildfires
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	• Install warning sirens. • Improve signage, addressing and other route finding conditions to improve access to emergency vehicles. •##Enforce all burn bans enacted by Grayson County. • Conduct annual fire drill. • Sponsor a community fair to promote wildfire safety.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, act) Cost/Benefit (narrative of benefit expected from investment)*	Costs are not significant compared to the increase in safety and preparedness to respond to emergencies. The enforcement of burn bans and a community fair would provide tools to prevent fires from happening.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Grants and municipal funds
Responsible Party *(Position or Title)*	Mayor, The Director of Emergency Management
Implementation Schedule *(1 to 5 years timeframe)*	2 – 3 years
Effects on New Buildings	Protect new buildings from wildfires
Effect on Existing Buildings	Protect new buildings from wildfires

Mitigation Action Table	
Jurisdiction	City of Knollwood
Hazard	Wildfires
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Hire expert to assess wildfire prevention techniques (wind break-berms, walls, landscaping, etc).
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, act) Cost/Benefit (narrative of benefit expected from investment)*	Minimal costs, maximum benefits.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Grants and municipal funds.
Responsible Party *(Position or Title)*	Mayor, The Director of Emergency Management
Implementation Schedule *(1 to 5 years timeframe)*	1 year
Effects on New Buildings	Reduce potential impacts of wildfires on new buildings
Effect on Existing Buildings	Reduce potential impacts of wildfires on existing buildings

Mitigation Action Table	
Jurisdiction	City of Knollwood
Hazard	Lightning (page 1 of 2)
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	• Install generator(s) for electrical back-up. • Install solar panels for back-up.. • Inspect and manage large trees and landscape concerns. • Replace existing telephone poles with safer models.
Cost Effectiveness (Cost vs. Benefits)	Capital cost needed for implementation of this action may be offset by maximum benefits
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Grants and municipal funds.
Responsible Party *(Position or Title)*	Mayor, The Director of Emergency Management
Implementation Schedule *(1 to 5 years timeframe)*	2 – 3 years
Effects on New Buildings	Provide back-up power for new buildings
Effect on Existing Buildings	Provide back-up power for exissting buildings

Mitigation Action Table	
Jurisdiction	City of Knollwood
Hazard	Lightning (page 2 of 2)
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	• Sponsor a community fair to promote lightning safety. • Distribute information via website and newsletters. • Provide training for city officials.
Cost Effectiveness (Cost vs. Benefits)	Minimal costs, maximum benefits.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal funds.
Responsible Party *(Position or Title)*	Mayor, The Director of Emergency Management
Implementation Schedule *(1 to 5 years timeframe)*	1 year
Effects on New Buildings	none
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	City of Knollwood
Hazard	Land Subsidence
Priority (High, Medium, Low)	Low
Description of Mitigation Action	*Based on the geological formations underlying the City of Knollwood, land subsidence is not considered a potential hazard.*
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, act) Cost/Benefit (narrative of benefit expected from investment)*	N/A
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	N/A
Responsible Party *(Position or Title)*	N/A
Implementation Schedule *(1 to 5 years timeframe)*	N/A
Effects on New Buildings	N/A
Effect on Existing Buildings	N/A

Mitigation Action Table	
Jurisdiction	City of Knollwood
Hazard	Expansive Soils
Priority (High, Medium, Low)	N/A Priority Unknown
Description of Mitigation Action	*Based on the soil types underlying the City of Knollwood, expansive soils are not considered a potential hazard.*
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, act) Cost/Benefit (narrative of benefit expected from investment)*	N/A
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	N/A
Responsible Party *(Position or Title)*	N/A
Implementation Schedule *(1 to 5 years timeframe)*	N/A
Effects on New Buildings	N/A
Effect on Existing Buildings	N/A

Mitigation Action Table	
Jurisdiction	City of Knollwood
Hazard	Dam and Levee Failure
Priority (High, Medium, Low)	Low
Description of Mitigation Action	*Dam and levee failures are not expected in Knollwood.*
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, act) Cost/Benefit (narrative of benefit expected from investment)*	N/A
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	N/A
Responsible Party *(Position or Title)*	N/A
Implementation Schedule *(1 to 5 years timeframe)*	N/A
Effects on New Buildings	N/A
Effect on Existing Buildings	N/A

Mitigation Action Table	
Jurisdiction	City of Knollwood
Hazard	Wind Storm (pg 1of 2)
Priority (High, Medium, Low)	High
Description of Mitigation Action	• Inspect and manage large trees and landscape concerns. • Require all mobile homes to be anchored and properly tied down and inspect when located within the city.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, act) Cost/Benefit (narrative of benefit expected from investment)*	Minimal costs, maximum benefits.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Grants and municipal funds.
Responsible Party *(Position or Title)*	Mayor, The Director of Emergency Management
Implementation Schedule *(1 to 5 years timeframe)*	1 year
Effects on New Buildings	none
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	City of Knollwood
Hazard	Wind Storm (Page 2 of 2)
Priority (High, Medium, Low)	High
Description of Mitigation Action	• Sponsor a community fair to promote safety. Distribute information via website and newsletters. • Acquire required infrastructure and equipment (communication devices, heavy equipment to clear up debris, siren warning system, search and rescue equipment, barricades) to prevent/respond to emergency
Cost Effectiveness (Cost vs. Benefits)	Capital cost will include the acquisition of communication devices, heavy equipment to clear up debris, siren warning system, search and rescue equipment and barricades. The cost will be offset by the increase in emergency preparedness and response.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Grants and municipal funds.
Responsible Party *(Position or Title)*	Mayor, The Director of Emergency Management
Implementation Schedule *(1 to 5 years timeframe)*	1 – 2 years
Effects on New Buildings	none
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	City of Knollwood
Hazard	Tornado
Priority (High, Medium, Low)	High
Description of Mitigation Action	• Build shelter. • Retrofit community center. • Build out safe room. • Inspect and manage large trees and landscape concerns. • Acquire required infrastructure and equipment (communication devices, heavy equipment to clear up debris, siren warning system, search and rescue equipment, barricades) to prevent/respond to emergency.
Cost Effectiveness (Cost vs. Benefits)	Extensive capital cost needed for implementation of this action may be offset by maximum benefits achieved by increasing the safety of population.
Potential Funding Source	Grants
Responsible Party *(Position or Title)*	Mayor, Director of Emergency Management
Implementation Schedule *(1 to 5 years timeframe)*	3 – 5 years
Effects on New Buildings	Provide back-up power sources for new buildings
Effect on Existing Buildings	Provide back-up power sources for existing buildings. Retrofitting of existing community center.

Mitigation Action Table	
Jurisdiction	City of Knollwood
Hazard	Tornado
Priority (High, Medium, Low)	High
Description of Mitigation Action	• Sponsor a community fair to promote Tornado safety. • Distribute information via website and newsletters.
Cost Effectiveness (Cost vs. Benefits)	Minimal costs, maximum benefits.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Grants and municipal funds.
Responsible Party *(Position or Title)*	Mayor, The Director of Emergency Management
Implementation Schedule *(1 to 5 years timeframe)*	1 year
Effects on New Buildings	none
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	City of Knollwood
Hazard	Severe Winter Storm
Priority (High, Medium, Low)	High
Description of Mitigation Action	• Build shelter. • Retrofit community center. • Build out safe room. • Install generator(s) for electrical back-up • Install solar panels (backup for fuel burning generator).
Cost Effectiveness (Cost vs. Benefits)	Extensive capital cost needed for implementation of this action may be offset by maximum benefits achieved by increasing the safety of population.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Grants
Responsible Party *(Position or Title)*	Mayor, Director of Emergency Management
Implementation Schedule *(1 to 5 years timeframe)*	3 – 5 years
Effects on New Buildings	Provide back-up power sources for new buildings
Effect on Existing Buildings	Provide back-up power sources for existing buildings. Retrofitting of existing community center.

Mitigation Action Table	
Jurisdiction	City of Knollwood
Hazard	Severe Winter Storm
Priority (High, Medium, Low)	High
Description of Mitigation Action	• Inspect and manage large trees and landscape concerns. • Acquire required infrastructure and equipment (communication devices, heavy equipment to clear up debris, siren warning system, search and rescue equipment, barricades) to prevent/respond to emergency
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, etc) Cost/Benefit (narrative of benefit expected from investment)*	Capital cost will include the acquisition of communication devices, heavy equipment to clear up debris, siren warning system, search and rescue equipment and barricades. The cost will be offset by the increase in emergency preparedness and response.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Grants and municipal funds.
Responsible Party *(Position or Title)*	Mayor, The Director of Emergency Management
Implementation Schedule *(1 to 5 years timeframe)*	2 – 3 yeara
Effects on New Buildings	Protect new buildings from damage during winter storms
Effect on Existing Buildings	Protect existing buildings from damage during winter storms

Mitigation Action Table	
Jurisdiction	City of Knollwood
Hazard	Hailstorm
Priority (High, Medium, Low)	High
Description of Mitigation Action	**l.EMERGENCY SHELTER:** • Build shelter. • Retrofit community center. • Build out safe room.
Cost Effectiveness (Cost vs. Benefits)	Extensive capital cost needed for implementation of this action may be offset by maximum benefits achieved by increasing the safety of population.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Grants
Responsible Party *(Position or Title)*	Mayor, Director of Emergency Management
Implementation Schedule *(1 to 5 years timeframe)*	3 – 5 years
Effects on New Buildings	None
Effect on Existing Buildings	None

Mitigation Action Table	
Jurisdiction	City of Knollwood
Hazard	Hailstorm
Priority (High, Medium, Low)	High
Description of Mitigation Action	• Inspect and manage large trees and landscape concerns. • Acquire required infrastructure and equipment (communication devices, heavy equipment to clear up debris, siren warning system, search and rescue equipment, barricades) to prevent/respond to emergency
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, act) Cost/Benefit (narrative of benefit expected from investment)*	Capital cost will include the acquisition of communication devices, heavy equipment to clear up debris, siren warning system, search and rescue equipment and barricades. The cost will be offset by the increase in emergency preparedness and response.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Grants and municipal funds.
Responsible Party *(Position or Title)*	Mayor, The Director of Emergency Management
Implementation Schedule *(1 to 5 years timeframe)*	2 – 3 yeara
Effects on New Buildings	Protect new buildings from damage during winter storms
Effect on Existing Buildings	Protect existing buildings from damage during winter storms

Mitigation Action Table	
Jurisdiction	City of Knollwood
Hazard	Hailstorm
Priority (High, Medium, Low)	High
Description of Mitigation Action	• Provide training for city officials • Distribute information via website and newsletters.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, act) Cost/Benefit (narrative of benefit expected from investment)*	Minimal costs, maximum benefits.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Grants and municipal funds.
Responsible Party *(Position or Title)*	Mayor, The Director of Emergency Management
Implementation Schedule *(1 to 5 years timeframe)*	1 year
Effects on New Buildings	none
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	City of Knollwood
Hazard	Extreme Temperatures
Priority (High, Medium, Low)	High
Description of Mitigation Action	• Initiate a routine vehicle and equipment maintenance schedule to insure city-owned property is capable of withstanding extreme temperature changes.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, act) Cost/Benefit (narrative of benefit expected from investment)*	Minimal costs, maximum benefits.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Grants and municipal funds.
Responsible Party *(Position or Title)*	Mayor, The Director of Emergency Management
Implementation Schedule *(1 to 5 years timeframe)*	1 year
Effects on New Buildings	none
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	City of Knollwood
Hazard	Extreme Temperatures
Priority (High, Medium, Low)	High
Description of Mitigation Action	Provide public information materials to citizens including helpful safety tips, public assistance availability from governmental agencies and other services which may be available to handle extreme temperature situations.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, act) Cost/Benefit (narrative of benefit expected from investment)*	Minimal costs, maximum benefits.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Grants and municipal funds.
Responsible Party *(Position or Title)*	Mayor, The Director of Emergency Management
Implementation Schedule *(1 to 5 years timeframe)*	1 year
Effects on New Buildings	none
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	City of Knollwood
Hazard	Drought
Priority (High, Medium, Low)	Low
Description of Mitigation Action	• Build shelter. • Retrofit community center.
Cost Effectiveness (Cost vs. Benefits)	Extensive capital cost needed for implementation of this action may be offset by maximum benefits achieved by increasing the safety of population.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Grants
Responsible Party *(Position or Title)*	Mayor, Director of Emergency Management
Implementation Schedule *(1 to 5 years timeframe)*	3 – 5 years
Effects on New Buildings	None
Effect on Existing Buildings	Retrofitting of existing community center.

Mitigation Action Table	
Jurisdiction	City of Knollwood
Hazard	Drought
Priority (High, Medium, Low)	Low
Description of Mitigation Action	• Provide a rainwater catchment system • Acquire required infrastructure and equipment (communication devices, heavy equipment to clear up debris, siren warning system, search and rescue equipment, barricades) to prevent/respond to emergency
Cost Effectiveness (Cost vs. Benefits)	Cost will be justified by providing relief before and during drought and increasing safety during emergencies
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Grants and municipal funds.
Responsible Party *(Position or Title)*	Mayor, The Director of Emergency Management
Implementation Schedule *(1 to 5 years timeframe)*	2 – 3 years
Effects on New Buildings	none
Effect on Existing Buildings	None

Mitigation Action Table	
Jurisdiction	City of Knollwood
Hazard	Earthquake
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	• Build shelter. • Retrofit community center. • Build out safe room. • Install generator(s) for electrical back-up • Install solar panels (backup for fuel burning generator).
Cost Effectiveness (Cost vs. Benefits)	Extensive capital cost needed for implementation of this action may be offset by maximum benefits achieved by increasing the safety of population.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Grants
Responsible Party *(Position or Title)*	Mayor, Director of Emergency Management
Implementation Schedule *(1 to 5 years timeframe)*	3 – 5 years
Effects on New Buildings	Provide back-up power sources for new buildings
Effect on Existing Buildings	Provide back-up power sources for existing buildings. Retrofitting of existing community center.

Mitigation Action Table	
Jurisdiction	City of Knollwood
Hazard	Earthquake
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Acquire required infrastructure and equipment (communication devices, heavy equipment to clear up debris, siren warning system, search and rescue equipment, barricades) to prevent/respond to emergency.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, act) Cost/Benefit (narrative of benefit expected from investment)*	Capital cost will include the acquisition of communication devices, heavy equipment to clear up debris, siren warning system, search and rescue equipment and barricades. The cost will be offset by the increase in emergency preparedness and response.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Grants and municipal funds.
Responsible Party *(Position or Title)*	Mayor, The Director of Emergency Management
Implementation Schedule *(1 to 5 years timeframe)*	1 – 2 years
Effects on New Buildings	none
Effect on Existing Buildings	none

City of Pottsboro
Mitigation Goals and Actions

Developing Mitigation Goals and Actions for Grayson County Hazard Mitigation Plan (HMP)

Goals are general guidelines that explain what you want to achieve. They are usually broad policy-type statements, long term, and represent global visions. The following **Goals** appear in the State of Texas Mitigation Plan and are suggested for the Grayson County HMP:

- Reduce or eliminate hazardous conditions that cause loss of life
- Reduce or eliminate hazardous conditions that inflict injuries
- Reduce or eliminate hazardous conditions that cause property damage
- Reduce or eliminate hazardous conditions that degrade important natural resources

Mitigation Actions are specific actions that help you achieve your goals. **At least two actions needs to be recorded per each hazard identified in the Risk Assessment.**

Examples:
Elevate three historic structures located in the downtown district
Sponsor a community fair to promote wildfire defensible space
Retrofit the police department to withstand high wind damage

***Note:** Please include mitigation actions in the HMP that may be eligible for FEMA funding.*

Priority Ranking, please indicate your "vote". **(Low, Medium, High)**

Questions to consider when ranking mitigation actions:
- Is the proposed action socially acceptable and will all citizens be treated fairly?
- Is the action compatible with present and future community values?
- Is the action technically feasible and will it move the community towards its goal?
- Does the City have the legal authority to implement the action?
- Does the City have the technical capability to implement the action?

***Note:** Funding is often a constraint; at this time, do not allow that to influence your indication of priorities. One purpose of the plan is to help support efforts to secure funding for implementation.*

Please fill out the sections in the following tables.

Mitigation Action Table	
Jurisdiction	Pottsboro
Hazard	Floods
Priority (High, Medium, Low)	High
Description of Mitigation Action	Take advantage of County-provided educational material on the NFIP and actively promote city residents to participate in the NFIP.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Very low cost activity which can provide a high benefit.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (Budget)
Responsible Party *(Position or Title)*	City Manager, Public Works Director
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	Can be significant
Effect on Existing Buildings	Can be significant

Mitigation Action Table	
Jurisdiction	Pottsboro
Hazard	Flooding
Priority (High, Medium, Low)	High
Description of Mitigation Action	Clearing and re-channelization of two (2) existing feeder creeks that flow from South to North through town to Little Mineral Creek. Areas impacted include Elm Creek subdivision and privately owned properties along a general line from Front Street along Thompson/Houston Streets to FM Highway 120.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Will require significant infrastructure expense including engineering and construction costs. Resulting benefit expected to reduce potential for residential and commercial property loss and reduce or eliminate injuries and loss of life.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal general funds, loan funds and/or grant funds.
Responsible Party *(Position or Title)*	City Manager, Public Works Director
Implementation Schedule *(1 to 5 years timeframe)*	Due to size and anticipated cost, project will need to be completed in stages unless a grant of sufficient size is received to cover entire project. Each phase of project is expected to last one year with a five year schedule expected to complete entire project.
Effects on New Buildings	Eliminates potential flooding of new buildings located along project area.
Effect on Existing Buildings	Eliminates potential flooding of existing buildings located along project area.

Mitigation Action Table	
Jurisdiction	Pottsboro
Hazard	Flooding
Priority (High, Medium, Low)	High
Description of Mitigation Action	Improve drainage for storm water run-off along Pearce Drive, Preston Drive and in Texoma Ranch Estate subdivision.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Will require significant infrastructure expense including engineering and construction costs. Resulting benefit expected to reduce potential for residential and commercial property loss and reduce or eliminate injuries and loss of life.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal general funds, loan funds and/or grant funds.
Responsible Party *(Position or Title)*	City Manager, Public Works Director
Implementation Schedule *(1 to 5 years timeframe)*	Due to size and anticipated cost, project will need to be completed in stages unless a grant of sufficient size is received to cover entire project. Each phase of project is expected to last one year with a five year schedule expected to complete entire project.
Effects on New Buildings	Eliminates potential flooding of new buildings located along project area.
Effect on Existing Buildings	Eliminates potential flooding of existing buildings located along project area.

Mitigation Action Table	
Jurisdiction	Pottsboro
Hazard	Landslide
Priority (High, Medium, Low)	Low
Description of Mitigation Action	Based on the topography of the City of Pottsboro, landslides are not considered a potential hazard.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	
Responsible Party *(Position or Title)*	
Implementation Schedule *(1 to 5 years timeframe)*	
Effects on New Buildings	
Effect on Existing Buildings	

Mitigation Action Table	
Jurisdiction	Pottsboro
Hazard	Landslide
Priority (High, Medium, Low)	Low
Description of Mitigation Action	Based on the topography of the City of Pottsboro, landslides are not considered a potential hazard.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	
Responsible Party *(Position or Title)*	
Implementation Schedule *(1 to 5 years timeframe)*	
Effects on New Buildings	
Effect on Existing Buildings	

Mitigation Action Table	
Jurisdiction	Pottsboro
Hazard	Wildfires
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Provide community wide education programs to help reduce the risk of wildfires.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Limited staff time necessary to conduct education program(s) in relation to the potential benefit of reduced number of wildfires.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal general funds budgeted for fire department
Responsible Party *(Position or Title)*	Fire Chief
Implementation Schedule *(1 to 5 years timeframe)*	Within one year
Effects on New Buildings	Potential to save new buildings from wildfires.
Effect on Existing Buildings	Potential to save existing buildings from wildfires.

Mitigation Action Table	
Jurisdiction	Pottsboro
Hazard	Wildfires
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Develop printed educational materials to help reduce risk of wildfires.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Limited staff time and publishing/copying expense necessary to prepare and print educational materials in relation to the potential benefit of reduced number of wildfires.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal general funds budgeted for fire department.
Responsible Party *(Position or Title)*	Fire Chief
Implementation Schedule *(1 to 5 years timeframe)*	Within one year
Effects on New Buildings	Potential to save new buildings from wildfires.
Effect on Existing Buildings	Potential to save existing buildings from wildfires.

Mitigation Action Table	
Jurisdiction	Pottsboro
Hazard	Lightning
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Retrofit wastewater facilities including plant and lift stations with alternative power source in the event of lightning strikes. Includes generators and hard wiring of equipment to prepare for power outage.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Significant expense for equipment (generators) and staff time for installation offset by ability to continue treating sewerage in the event of a power loss. Benefits also include continued regulatory compliance and environmental controls.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal general funds, loan funds and/or grant funds.
Responsible Party *(Position or Title)*	City Manager, Public Works Director
Implementation Schedule *(1 to 5 years timeframe)*	One to two years
Effects on New Buildings	Positive effect based on continued ability to except sewerage from new buildings.
Effect on Existing Buildings	Positive effect based on continued ability to except sewerage from existing buildings.

Mitigation Action Table	
Jurisdiction	Pottsboro
Hazard	Lightning
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Retrofit water facilities including well sites, pump stations, SCADA system and storage facilities with alternative power source in the event of lightning strikes. Includes generators and hard wiring of equipment to prepare for power outage.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Significant expense for equipment (generators) and staff time for installation offset by ability to continue providing water in the event of a power loss. Additional benefit includes continued regulatory compliance.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal general funds, loan funds and/or grant funds.
Responsible Party *(Position or Title)*	City Manager, Public Works Director
Implementation Schedule *(1 to 5 years timeframe)*	One to two years
Effects on New Buildings	Positive effect based on continued ability to except sewerage from new buildings.
Effect on Existing Buildings	Positive effect based on continued ability to except sewerage from new buildings.

Mitigation Action Table	
Jurisdiction	Pottsboro
Hazard	Land Subsidence
Priority (High, Medium, Low)	Low
Description of Mitigation Action	Based on the geological formations underlying the City of Pottsboro, land subsidence is not considered a potential hazard.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	
Responsible Party *(Position or Title)*	
Implementation Schedule *(1 to 5 years timeframe)*	
Effects on New Buildings	
Effect on Existing Buildings	

Mitigation Action Table	
Jurisdiction	Pottsboro
Hazard	Land Subsidence
Priority (High, Medium, Low)	Low
Description of Mitigation Action	Based on the geological formations underlying the City of Pottsboro, land subsidence is not considered a potential hazard.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	
Responsible Party *(Position or Title)*	
Implementation Schedule *(1 to 5 years timeframe)*	
Effects on New Buildings	
Effect on Existing Buildings	

Mitigation Action Table	
Jurisdiction	Pottsboro
Hazard	Expansive Soils
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Provide soil stabilization methods prior to construction or reconstruction of city roadways within the south western areas of the city based on the existence of Crockett-Urban soil type which has low strength and high shrink-swell ratings.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Additional preparation costs (i.e. lime stabilization) necessary for road construction off-sets the expense of future road rehabilitation costs if appropriate pre-construction measures are not taken. Benefit includes providing for a better, more durable road.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal general funds, loan funds and/or grant funds.
Responsible Party *(Position or Title)*	City Manager, Public Works Director
Implementation Schedule *(1 to 5 years timeframe)*	On going on an as needed basis.
Effects on New Buildings	Positive effect on new buildings.
Effect on Existing Buildings	Positive effect on existing buildings.

Mitigation Action Table	
Jurisdiction	Pottsboro
Hazard	Expansive Soils
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Provide soil stabilization methods prior to construction of residences and/or commercial facilities within the south western areas of the city based on the existence of Crockett-Urban soil type which has low strength and high shrink-swell ratings.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Additional preparation costs (i.e. lime stabilization) necessary for building foundations off-sets the expense of future leveling costs if appropriate pre-construction measures are not taken. Benefit includes providing for a better, more stable building foundation.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Private sources unless the building is municipal owned.
Responsible Party *(Position or Title)*	City Manager, Public Works Director, Building Inspector
Implementation Schedule *(1 to 5 years timeframe)*	On going on an as needed basis.
Effects on New Buildings	Positive effect on new buildings.
Effect on Existing Buildings	Positive effect on existing buildings.

Mitigation Action Table	
Jurisdiction	Pottsboro
Hazard	Dam and Levee Failure
Priority (High, Medium, Low)	Low
Description of Mitigation Action	There are no dams or levees in the Pottsboro area that would create a hazard if they were to fail.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	
Responsible Party *(Position or Title)*	
Implementation Schedule *(1 to 5 years timeframe)*	
Effects on New Buildings	
Effect on Existing Buildings	

Mitigation Action Table	
Jurisdiction	Pottsboro
Hazard	Dam and Levee Failure
Priority (High, Medium, Low)	Low
Description of Mitigation Action	There are no dams or levees in the Pottsboro area that would create a hazard if they were to fail.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	
Responsible Party *(Position or Title)*	
Implementation Schedule *(1 to 5 years timeframe)*	
Effects on New Buildings	
Effect on Existing Buildings	

Mitigation Action Table	
Jurisdiction	Pottsboro
Hazard	Wind Storm
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Inspect overhanging tress limbs on all aerial power line routes to eliminate loss of power due to broken limbs pulling down power lines during windstorms. Report any identified potential problem areas to local power company for mitigation.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Minimal staff time required. Benefit includes reduced opportunity for temporary power loss due to power transmission lines being pulled down by falling tree limbs.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal general funds
Responsible Party *(Position or Title)*	Public Works Director
Implementation Schedule *(1 to 5 years timeframe)*	On going
Effects on New Buildings	Positive effect on new buildings.
Effect on Existing Buildings	Positive effect on existing buildings.

Mitigation Action Table	
Jurisdiction	Pottsboro
Hazard	Wind Storm
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Sponsor a citizen education program to inform public of the benefits of inspecting their property for overhanging tress limbs on aerial power lines and reporting potential problems to power company to avoid loss of power due to broken limbs pulling down power lines during windstorms.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Minimal staff time required. Benefit includes reduced opportunity for temporary power loss due to power transmission lines being pulled down by falling tree limbs.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal general funds
Responsible Party *(Position or Title)*	Public Works Director
Implementation Schedule *(1 to 5 years timeframe)*	On going
Effects on New Buildings	Positive effect on new buildings.
Effect on Existing Buildings	Positive effect on existing buildings.

Mitigation Action Table	
Jurisdiction	Pottsboro
Hazard	Tornado
Priority (High, Medium, Low)	High
Description of Mitigation Action	Retrofit water and wastewater facilities with alternative power sources in the event of a tornado. Includes generators and hard wiring of equipment to prepare for power outage.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Significant expense for equipment (generators) and staff time for installation offset by ability to continue treating sewerage and providing water in the event of a power loss. Benefits also include continued regulatory compliance and environmental controls.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal general funds, loan funds and/or grant funds.
Responsible Party *(Position or Title)*	City Manager, Public Works Director
Implementation Schedule *(1 to 5 years timeframe)*	Due to size and anticipated cost, project will need to be completed in stages unless a grant of sufficient size is received to cover entire project. Each phase of project is expected to last one year with a five year schedule expected to complete entire project.
Effects on New Buildings	Positive effect based on continued ability to except sewerage from and provide water to new buildings.
Effect on Existing Buildings	Positive effect based on continued ability to except sewerage from and provide water to new buildings.

Mitigation Action Table	
Jurisdiction	Pottsboro
Hazard	Tornado
Priority (High, Medium, Low)	High
Description of Mitigation Action	Increase citizen advanced warning/notification capabilities.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Some capital improvement money required to increase the number of outdoor warning sirens in the city and expand coverage of existing three sirens and cost to participate in automated warning notification systems such as Code Red and Weather Warning program. Benefits will include expanded coverage for outdoor sirens and earlier warning capabilities.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal general funds, loan funds and/or grant funds.
Responsible Party *(Position or Title)*	City Manager, Public Works Director, Fire Chief, Police Chief
Implementation Schedule *(1 to 5 years timeframe)*	Under way for advanced notification systems. On going for outdoor warning siren coverage area expansion with completion goal of two years.
Effects on New Buildings	Positive effect on new buildings.
Effect on Existing Buildings	Positive effect on existing buildings.

Mitigation Action Table	
Jurisdiction	Pottsboro
Hazard	Severe Winter Storm
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Retrofit water and wastewater facilities with alternative power sources in the event of a severe winter storm including power loss. Includes generators and hard wiring of equipment to prepare for power outage.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Significant expense for equipment (generators) and staff time for installation offset by ability to continue treating sewerage and providing water in the event of a power loss associated with a severe winter storm. Benefits also include continued regulatory compliance and environmental controls.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal general funds, loan funds and/or grant funds.
Responsible Party *(Position or Title)*	City Manager, Public Works Director
Implementation Schedule *(1 to 5 years timeframe)*	Due to size and anticipated cost, project will need to be completed in stages unless a grant of sufficient size is received to cover entire project. Each phase of project is expected to last one year with a five year schedule expected to complete entire project.
Effects on New Buildings	Positive effect on new buildings.
Effect on Existing Buildings	Positive effect on existing buildings.

Mitigation Action Table	
Jurisdiction	Pottsboro
Hazard	Severe Winter Storm
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Inspect overhanging tress limbs on all aerial power line routes to eliminate loss of power due to broken limbs pulling down power lines during severe winter storms. Report any identified potential problem areas to local power company for mitigation.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Minimal staff time required. Benefit includes reduced opportunity for temporary power loss due to power transmission lines being pulled down by falling tree limbs.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal general funds
Responsible Party *(Position or Title)*	Public Works Director
Implementation Schedule *(1 to 5 years timeframe)*	On going
Effects on New Buildings	Positive effect on new buildings.
Effect on Existing Buildings	Positive effect on existing buildings.

Mitigation Action Table	
Jurisdiction	Pottsboro
Hazard	Hailstorm
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Protect city-owned vehicles and other assets in the event of a hailstorm.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Some capital expenditures and staff time required to construct covered parking areas for police and maintenance vehicles. Benefit of reduced damages to city assets out-weigh the cost to provide protective coverings.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal general funds
Responsible Party *(Position or Title)*	City Manager, Public Works Director
Implementation Schedule *(1 to 5 years timeframe)*	One to two years depending on funding availability.
Effects on New Buildings	Positive effect on new buildings.
Effect on Existing Buildings	Positive effect on existing buildings.

Mitigation Action Table	
Jurisdiction	Pottsboro
Hazard	Hailstorm
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Retrofit water and wastewater facilities with alternative power sources in the event of power loss during a hailstorm. Includes generators and hard wiring of equipment to prepare for power outage.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Significant expense for equipment (generators) and staff time for installation offset by ability to continue treating sewerage and providing water in the event of a power loss associated with a hailstorm. Benefits also include continued regulatory compliance and environmental controls.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal general funds, loan funds and/or grant funds.
Responsible Party *(Position or Title)*	City Manager, Public Works Director
Implementation Schedule *(1 to 5 years timeframe)*	Due to size and anticipated cost, project will need to be completed in stages unless a grant of sufficient size is received to cover entire project. Each phase of project is expected to last one year with a five year schedule expected to complete entire project.
Effects on New Buildings	Positive effect on new buildings.
Effect on Existing Buildings	Positive effect on existing buildings.

Mitigation Action Table	
Jurisdiction	Pottsboro
Hazard	Extreme Temperatures
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Initiate a routine vehicle and equipment maintenance schedule to insure city-owned property is capable of withstanding extreme temperature changes.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Limited staff time required with little actual expenditure of funds. Benefit includes fleet of vehicles which are capable of withstanding extreme temperature changes.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal general funds.
Responsible Party *(Position or Title)*	Public Works Director
Implementation Schedule *(1 to 5 years timeframe)*	On going
Effects on New Buildings	No effect on new buildings.
Effect on Existing Buildings	No effect on existing buildings.

Mitigation Action Table	
Jurisdiction	Pottsboro
Hazard	Extreme Temperatures
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Provide public information materials to citizens including helpful safety tips, public assistance availability from governmental agencies and other services which may be available to handle extreme temperature situations.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Limited staff time and publishing/copying expense necessary to prepare and print educational materials in relation to the potential benefit of providing useful, potentially life-saving information to the public.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal general funds
Responsible Party *(Position or Title)*	City Manager
Implementation Schedule *(1 to 5 years timeframe)*	Within one year
Effects on New Buildings	No effect on new buildings.
Effect on Existing Buildings	No effect on existing buildings.

Mitigation Action Table	
Jurisdiction	Pottsboro
Hazard	Drought
Priority (High, Medium, Low)	Low
Description of Mitigation Action	There are no crop producing agricultural entities located within the city limits of Pottsboro therefore drought conditions are not considered a potential hazard.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	
Responsible Party *(Position or Title)*	
Implementation Schedule *(1 to 5 years timeframe)*	
Effects on New Buildings	
Effect on Existing Buildings	

Mitigation Action Table	
Jurisdiction	Pottsboro
Hazard	Drought
Priority (High, Medium, Low)	Low
Description of Mitigation Action	There are no crop producing agricultural entities located within the city limits of Pottsboro therefore drought conditions are not considered a potential hazard.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	
Responsible Party *(Position or Title)*	
Implementation Schedule *(1 to 5 years timeframe)*	
Effects on New Buildings	
Effect on Existing Buildings	

Mitigation Action Table	
Jurisdiction	Pottsboro
Hazard	Earthquake
Priority (High, Medium, Low)	Low
Description of Mitigation Action	Based on historical data, earthquakes are not considered a potential hazard in Pottsboro.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	
Responsible Party *(Position or Title)*	
Implementation Schedule *(1 to 5 years timeframe)*	
Effects on New Buildings	
Effect on Existing Buildings	

Mitigation Action Table	
Jurisdiction	Pottsboro
Hazard	Earthquake
Priority (High, Medium, Low)	Low
Description of Mitigation Action	Based on historical data, earthquakes are not considered a potential hazard in Pottsboro.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	
Responsible Party *(Position or Title)*	
Implementation Schedule *(1 to 5 years timeframe)*	
Effects on New Buildings	
Effect on Existing Buildings	

City of Sadler

Mitigation Goals and Actions

Developing Mitigation Goals and Actions for Grayson County Hazard Mitigation Plan (HMP)

Goals are general guidelines that explain what you want to achieve. They are usually broad policy-type statements, long term, and represent global visions. The following **Goals** appear in the State of Texas Mitigation Plan and are suggested for the Grayson County HMP:

- Reduce or eliminate hazardous conditions that cause loss of life
- Reduce or eliminate hazardous conditions that inflict injuries
- Reduce or eliminate hazardous conditions that cause property damage
- Reduce or eliminate hazardous conditions that degrade important natural resources

Mitigation Actions are specific actions that help you achieve your goals. **At least two actions needs to be recorded per each hazard identified in the Risk Assessment.**

Examples:
Elevate three historic structures located in the downtown district
Sponsor a community fair to promote wildfire defensible space
Retrofit the police department to withstand high wind damage

***Note:** Please include mitigation actions in the HMP that may be eligible for FEMA funding.*

Priority Ranking, please indicate your "vote". **(Low, Medium, High)**

Questions to consider when ranking mitigation actions:
- Is the proposed action socially acceptable and will all citizens be treated fairly?
- Is the action compatible with present and future community values?
- Is the action technically feasible and will it move the community towards its goal?
- Does the City have the legal authority to implement the action?
- Does the City have the technical capability to implement the action?

***Note:** Funding is often a constraint; at this time, do not allow that to influence your indication of priorities. One purpose of the plan is to help support efforts to secure funding for implementation.*

Please fill out the sections in the following tables.

Mitigation Action Table	
Jurisdiction	Sadler
Hazard	Flooding
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Raise electrical panels and connections on lift stations above expected flood levels in flood prone areas.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Will not have costs of upkeep or replacement due to flooding.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Grants and municipal funds.
Responsible Party *(Position or Title)*	City of Sadler Water Wastewater Operator
Implementation Schedule *(1 to 5 years timeframe)*	5 years
Effects on New Buildings	Maintain Sewers
Effect on Existing Buildings	Will not flood

Mitigation Action Table	
Jurisdiction	Sadler
Hazard	Flooding
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	In flood prone areas encourage homeowners to install backflow valves to prevent reversal flow conditions within the city Sewerage system. Provide valving component.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Prevent major flooding of homes.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Grants, Municipal Funds
Responsible Party *(Position or Title)*	City of Sadler Mayor and City Council
Implementation Schedule *(1 to 5 years timeframe)*	5 yrs
Effects on New Buildings	Will not flood in heavy rains
Effect on Existing Buildings	Will not flood.

Mitigation Action Table	
Jurisdiction	Sadler
Hazard	Landslide
Priority (High, Medium, Low)	Low
Description of Mitigation Action	Not really an issue within the city due to terrain. Based on topography within the city, landsides are not considered a potential hazard.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	
Responsible Party *(Position or Title)*	
Implementation Schedule *(1 to 5 years timeframe)*	
Effects on New Buildings	
Effect on Existing Buildings	

Mitigation Action Table	
Jurisdiction	Sadler
Hazard	Wildfires
Priority (High, Medium, Low)	High
Description of Mitigation Action	Encourage residents to remove limbs and high grass (by mowing) to reduce fore hazards by providing the community educational program to help reduce the risk of wildfires.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Better insurance costs
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal funds and or grants.
Responsible Party *(Position or Title)*	City with cooperation of local fire department and possibly contractors along right of ways.
Implementation Schedule *(1 to 5 years timeframe)*	1 year
Effects on New Buildings	Potential to save new buildings from wildfires
Effect on Existing Buildings	Potential to lower risk that exists for existing buildings.

Mitigation Action Table	
Jurisdiction	Sadler
Hazard	Wildfires
Priority (High, Medium, Low)	High
Description of Mitigation Action	Initiate and maintain a contract for fire response within the city limits and provide water for fighting said fires.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Encourage homeowner insurance.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Grants and Loans
Responsible Party *(Position or Title)*	City of Sadler City Council with help from Fire Department
Implementation Schedule *(1 to 5 years timeframe)*	1 year
Effects on New Buildings	Encourage sprinkler systems in all new structures.
Effect on Existing Buildings	Work with fire department to maintain vegetative control.

Mitigation Action Table	
Jurisdiction	Sadler
Hazard	Lightning
Priority (High, Medium, Low)	Low
Description of Mitigation Action	Adopt NEC to enforce bonding grounds on electrical system with utility provider.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Less power outages and disruption of service
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Grants and municipal funds.
Responsible Party *(Position or Title)*	City of Sadler Building Inspector
Implementation Schedule *(1 to 5 years timeframe)*	1-5 years
Effects on New Buildings	Safer Buildings
Effect on Existing Buildings	Safer Buildings

Mitigation Action Table	
Jurisdiction	Sadler
Hazard	Lightning
Priority (High, Medium, Low)	Low
Description of Mitigation Action	Install lighting arrestors on all panels at lift stations, wells, and WWTP.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Reduce potential risks to city property.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Grants, FEMA
Responsible Party *(Position or Title)*	City of Sadler Building Inspector
Implementation Schedule *(1 to 5 years timeframe)*	1 year
Effects on New Buildings	Improve safety conditions
Effect on Existing Buildings	Positive effect on continues ability to manage sewer system.

Mitigation Action Table	
Jurisdiction	Sadler
Hazard	Lightning
Priority (High, Medium, Low)	Low
Description of Mitigation Action	Wire all infrastructures to accept connection of a locally owned generator. Purchase city generator.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Significant expense for equipment.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Grants
Responsible Party *(Position or Title)*	City Council and Building Inspector
Implementation Schedule *(1 to 5 years timeframe)*	1 -2 years
Effects on New Buildings	Positive effect for continued service in case of power outage.
Effect on Existing Buildings	Positive effect to continue service in emergencies.

Mitigation Action Table	
Jurisdiction	Sadler
Hazard	Land Subsidence
Priority (High, Medium, Low)	Low
Description of Mitigation Action	Upon discussing with persons in this area land subsidence is not historically a threat with in the City of Sadler and not considered a real potential hazard.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	
Responsible Party *(Position or Title)*	
Implementation Schedule *(1 to 5 years timeframe)*	
Effects on New Buildings	
Effect on Existing Buildings	

Mitigation Action Table	
Jurisdiction	Sadler
Hazard	Expansive Soils
Priority (High, Medium, Low)	High
Description of Mitigation Action	Using codes for construction of structures. Ensure new structures being built are limited in risk due to expansion on clay soil base in the City of Sadler.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Code enforcement activities, minimal staff, expenses related to starting a code program at this time would be a burden on the City of Sadler. Potential to save lives.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Loans or grants.
Responsible Party *(Position or Title)*	City Staff Building Inspector
Implementation Schedule *(1 to 5 years timeframe)*	5 years
Effects on New Buildings	Potential effect to ensure better building structures.
Effect on Existing Buildings	As buildings renovate then fall subject to code changes.

Mitigation Action Table	
Jurisdiction	Sadler
Hazard	Expansive Soils
Priority (High, Medium, Low)	High
Description of Mitigation Action	Encourage soil stabilization methods during inspections of new or existing structures. Soil in this area has low strength levels.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Additional preparation at time of foundation will benefit in later years for leveling costs.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Private sources.
Responsible Party *(Position or Title)*	City Inspector
Implementation Schedule *(1 to 5 years timeframe)*	Ongoing as needed.
Effects on New Buildings	Positive effect on long range safety.
Effect on Existing Buildings	Positive effect on existing buildings.

Mitigation Action Table	
Jurisdiction	Sadler
Hazard	Dam and Levee Failure
Priority (High, Medium, Low)	Low
Description of Mitigation Action	None in jurisdiction of city except WWTP ponds. Maintain pond structure through best practices to extend service life of system. No hazards present.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	
Responsible Party *(Position or Title)*	
Implementation Schedule *(1 to 5 years timeframe)*	
Effects on New Buildings	
Effect on Existing Buildings	

Mitigation Action Table	
Jurisdiction	Sadler
Hazard	Wind Storm
Priority (High, Medium, Low)	High
Description of Mitigation Action	Require all mobile homes to be anchored and properly tied down and inspect when located within the city.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Save buildings and lives.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Grant and Funds.
Responsible Party *(Position or Title)*	City of Sadler Building Inspector
Implementation Schedule *(1 to 5 years timeframe)*	1 year.
Effects on New Buildings	Safer Structures.
Effect on Existing Buildings	Safer Structures.

Mitigation Action Table	
Jurisdiction	High
Hazard	Wind Storm
Priority (High, Medium, Low)	High
Description of Mitigation Action	Trim trees from infrastructures of lift stations and wells. Require utility providers and right of ways to inspect for same within the city.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Less power outages and buildings damages.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Grant local funding.
Responsible Party *(Position or Title)*	City of Sadler City Council /Water Wastewater Operator
Implementation Schedule *(1 to 5 years timeframe)*	1-5 years
Effects on New Buildings	Less damage from weather changes
Effect on Existing Buildings	Less damage from weather changes.

Mitigation Action Table	
Jurisdiction	Sadler
Hazard	Tornado
Priority (High, Medium, Low)	High
Description of Mitigation Action	Repair emergency warning siren and test operation. Contact community about county code red program. Review current alert and warning procedures and update/modify. Inform citizens.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Save lives.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Grants and funds
Responsible Party *(Position or Title)*	City of Sadler and Local Fire Department
Implementation Schedule *(1 to 5 years timeframe)*	1 year
Effects on New Buildings	No effect on new Buildings
Effect on Existing Buildings	No effect expected on existing buildings.

Mitigation Action Table	
Jurisdiction	Sadler
Hazard	Tornado
Priority (High, Medium, Low)	High
Description of Mitigation Action	Coordinate response with area schools and first response in simulated event.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Saves lives.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Grants, local funds
Responsible Party *(Position or Title)*	City of Sadler, Fire Department
Implementation Schedule *(1 to 5 years timeframe)*	1 year
Effects on New Buildings	Positive effect on new buildings
Effect on Existing Buildings	Positive effect on new buildings

Mitigation Action Table	
Jurisdiction	Sadler
Hazard	Severe Winter Storm
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Maintain and make available a listing of emergency and local hotels for travelers, elderly, etc.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Save lives and make people more comfortable.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Grants and local funds.
Responsible Party *(Position or Title)*	City Council / City Secretary
Implementation Schedule *(1 to 5 years timeframe)*	1 year.
Effects on New Buildings	Make sure new buildings are built to code.
Effect on Existing Buildings	Positive Effect for displaced residents.

Mitigation Action Table	
Jurisdiction	Sadler
Hazard	Severe Winter Storm
Priority (High, Medium, Low)	Low
Description of Mitigation Action	Install connections for power generators and obtain generator for all main infrastructures.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Continuing service to all infrastructures.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Grants and local funds.
Responsible Party *(Position or Title)*	City Council , Mayor
Implementation Schedule *(1 to 5 years timeframe)*	5 years.
Effects on New Buildings	Positive effect to continue service.
Effect on Existing Buildings	Positive effect to continue service.

Mitigation Action Table	
Jurisdiction	Sadler
Hazard	Hailstorm
Priority (High, Medium, Low)	High
Description of Mitigation Action	Educate citizens to prepare an emergency kit for weather changes.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Save property.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Grants and local funds
Responsible Party *(Position or Title)*	City Council / Mayor
Implementation Schedule *(1 to 5 years timeframe)*	2 years
Effects on New Buildings	Safer buildings and less damage
Effect on Existing Buildings	Safer buildings and less damage

Mitigation Action Table	
Jurisdiction	Sadler
Hazard	Hailstorm
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Replacing roofs on city buildings with metal roofing materials.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Prolonged Values and safer structures. Cost to repair or replace less expense.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Grants and local funds
Responsible Party *(Position or Title)*	City Council / Mayor
Implementation Schedule *(1 to 5 years timeframe)*	5 years.
Effects on New Buildings	Less cost replacement due to damage to city property.
Effect on Existing Buildings	Less cost replacement due to damaged property.

Mitigation Action Table	
Jurisdiction	Sadler
Hazard	Extreme Temperatures
Priority (High, Medium, Low)	Low
Description of Mitigation Action	Temperatures in this area are normally moderate and rarely extreme unless due to drought and or winter storm. This is not a extreme hazard. Provide public information materials with safety tips and government agencies which may be available.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Provide lifesaving information to the citizens.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Local Funds
Responsible Party *(Position or Title)*	Mayor / City Secretary
Implementation Schedule *(1 to 5 years timeframe)*	1 year
Effects on New Buildings	No Effect on new Buildings

Mitigation Action Table	
Jurisdiction	Sadler
Hazard	Extreme Temperatures
Priority (High, Medium, Low)	low
Description of Mitigation Action	Check city infrastructures to maintain uninterrupted service.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Maintain continous service and possible save lives.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Local Funds
Responsible Party *(Position or Title)*	Water Waster operator
Implementation Schedule *(1 to 5 years timeframe)*	When needed
Effects on New Buildings	No Effects
Effect on Existing Buildings	No Effects

Mitigation Action Table	
Jurisdiction	Sadler
Hazard	Drought
Priority (High, Medium, Low)	High
Description of Mitigation Action	Initiate water supply rationing and storage procedures.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Save lives and maintain the health and safety of our citizens.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Grants and funds
Responsible Party *(Position or Title)*	City of Sadler Mayor/ Water Operator
Implementation Schedule *(1 to 5 years timeframe)*	3 years
Effects on New Buildings	Structure Damage.
Effect on Existing Buildings	Structure damage

Mitigation Action Table	
Jurisdiction	Sadler
Hazard	Drought
Priority (High, Medium, Low)	High
Description of Mitigation Action	Drill new water well for second water source.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Major expense to the City even with grants.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Grants
Responsible Party *(Position or Title)*	Mayor / City Council
Implementation Schedule *(1 to 5 years timeframe)*	5 years
Effects on New Buildings	No effect on new buildings.
Effect on Existing Buildings	No effect on existing buildings.

Mitigation Action Table	
Jurisdiction	Sadler
Hazard	Earthquake
Priority (High, Medium, Low)	
Description of Mitigation Action	In consideration of historic facts earth quakes are not a potential hazard to the City of Sadler.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	
Responsible Party *(Position or Title)*	
Implementation Schedule *(1 to 5 years timeframe)*	
Effects on New Buildings	
Effect on Existing Buildings	

City of Sherman
Mitigation Goals and Actions

Developing Mitigation Goals and Actions for Grayson County Hazard Mitigation Plan (HMP)

Goals are general guidelines that explain what you want to achieve. They are usually broad policy-type statements, long term, and represent global visions. The following **Goals** appear in the State of Texas Mitigation Plan and are suggested for the Grayson County HMP:

- Reduce or eliminate hazardous conditions that cause loss of life
- Reduce or eliminate hazardous conditions that inflict injuries
- Reduce or eliminate hazardous conditions that cause property damage
- Reduce or eliminate hazardous conditions that degrade important natural resources

Mitigation Actions are specific actions that help you achieve your goals. **At least two actions needs to be recorded per each hazard identified in the Risk Assessment.**

Examples:
Elevate three historic structures located in the downtown district
Sponsor a community fair to promote wildfire defensible space
Retrofit the police department to withstand high wind damage

***Note:** Please include mitigation actions in the HMP that may be eligible for FEMA funding.*

Priority Ranking, please indicate your "vote". **(Low, Medium, High)**

Questions to consider when ranking mitigation actions:
- Is the proposed action socially acceptable and will all citizens be treated fairly?
- Is the action compatible with present and future community values?
- Is the action technically feasible and will it move the community towards its goal?
- Does the City have the legal authority to implement the action?
- Does the City have the technical capability to implement the action?

***Note:** Funding is often a constraint; at this time, do not allow that to influence your indication of priorities. One purpose of the plan is to help support efforts to secure funding for implementation.*

Please fill out the sections in the following tables.

Mitigation Action Table	
Jurisdiction	Sherman
Hazard	Hailstorms
Priority (High, Medium, Low)	High
Description of Mitigation Action	Maintain and operate Early Alert System- an outdoor warning system composed of nine sirens throughout the City.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Moderate cost and good potential to benefit public safety.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Medium (HMPG and municipal funds)
Responsible Party *(Position or Title)*	Police Department Emergency Management
Implementation Schedule *(1 to 5 years timeframe)*	1 to 3 years
Effects on New Buildings	none
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	Sherman
Hazard	Hailstorms
Priority (High, Medium, Low)	High
Description of Mitigation Action	Maintain severe winter weather warnings and advisories.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Relatively low cost and potentially large benefits for public safety.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (municipal general funds)
Responsible Party *(Position or Title)*	Police Department Emergency Management
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	May increase awareness of builders in use of proper standards for hailstorm protection when expanding or modifying building for future growth.
Effect on Existing Buildings	May lead to appropriate building modifications to better protect properties.

Mitigation Action Table	
Jurisdiction	Sherman
Hazard	Hailstorms
Priority (High, Medium, Low)	High
Description of Mitigation Action	Sponsor annual SKY Warn training program for citizens.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Relatively low cost and potentially large benefits for public safety.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (municipal general funds)
Responsible Party *(Position or Title)*	Police Department Emergency Management
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	none
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	Sherman
Hazard	Drought
Priority (High, Medium, Low)	High
Description of Mitigation Action	Study the need of water restriction plans and ordinances.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Relatively low cost and potentially large benefits for public safety.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Medium (water rates)
Responsible Party *(Position or Title)*	Police Department Emergency Management
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	none
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	Sherman
Hazard	Drought
Priority (High, Medium, Low)	High
Description of Mitigation Action	Maintain strict compliance with the State of Texas Regional Water Conservation Plan and the development of dual water supply capability; that which being Wells Field and Lake Texoma.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	High cost and reasonable benefits.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	High (water rates)
Responsible Party *(Position or Title)*	Police Department Emergency Management
Implementation Schedule *(1 to 5 years timeframe)*	3 to 5 years
Effects on New Buildings	none
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	Sherman
Hazard	Flooding
Priority (High, Medium, Low)	High
Description of Mitigation Action	Provide for land use planning and strict enforcement of ordinances and building codes on new development sites.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Moderate cost and excellent potential benefits.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Medium (municipal budget funds)
Responsible Party *(Position or Title)*	Public Works Public Information Officer Police Department Emergency Management
Implementation Schedule *(1 to 5 years timeframe)*	1 to 3 years
Effects on New Buildings	Will reduce future construction within floodplains
Effect on Existing Buildings	Should reduce re-building homes in high flood hazard areas.

Mitigation Action Table	
Jurisdiction	Sherman
Hazard	Flooding
Priority (High, Medium, Low)	High
Description of Mitigation Action	Provide for removal of debris from creeks and streams.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Moderate cost and good potential to reduce damages in some neighborhoods.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Medium (municipal budget funds)
Responsible Party *(Position or Title)*	Public Works Public Information Officer Police Department Emergency Management
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	Could reduce flood levels in future subdivisions.
Effect on Existing Buildings	Can reduce flood levels that were influenced by loss of conveyance capacity due to debris.

Mitigation Action Table	
Jurisdiction	Sherman
Hazard	Flooding
Priority (High, Medium, Low)	High
Description of Mitigation Action	Maintain participation in NFIP.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Limited cost and maximum benefits.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (municipal general funds)
Responsible Party *(Position or Title)*	Public Works Public Information Officer Police Department Emergency Management
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	Will be highly beneficial in many different ways.
Effect on Existing Buildings	Could encourage better planning and use of flood-proofing techniques. Could also allow floodplain buyout programs to be implemented in the future.

Mitigation Action Table	
Jurisdiction	Sherman
Hazard	Flooding
Priority (High, Medium, Low)	High
Description of Mitigation Action	Maintain and operate Early Alert System- an outdoor warning system composed of nine sirens throughout the City.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Moderate cost and good potential to benefit public safety.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Medium (HMPG and municipal funds)
Responsible Party *(Position or Title)*	Public Works Public Information Officer Police Department Emergency Management
Implementation Schedule *(1 to 5 years timeframe)*	1 to 3 years
Effects on New Buildings	none
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	Sherman
Hazard	Flooding
Priority (High, Medium, Low)	High
Description of Mitigation Action	Provide public announcements through reverse telephonic system as well through broadcasting local cable channels.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Moderate cost and good potential to benefit public safety.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Medium (HMPG and municipal funds)
Responsible Party *(Position or Title)*	Public Works Public Information Officer Police Department Emergency Management
Implementation Schedule *(1 to 5 years timeframe)*	3 to 5 years
Effects on New Buildings	none
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	Sherman
Hazard	Flooding
Priority (High, Medium, Low)	High
Description of Mitigation Action	Provide for public awareness through community outreach/education programs.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Very low costs and can result in reasonable benefits
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (municipal general funds)
Responsible Party *(Position or Title)*	Public Works Public Information Officer Police Department Emergency Management
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	May increase awareness of builders in use of proper standards for flood protection when expanding or modifying building for future growth.
Effect on Existing Buildings	Could encourage better planning and use of flood-proofing techniques. Could also allow floodplain buyout programs to be implemented in the future.

Mitigation Action Table	
Jurisdiction	Sherman
Hazard	Flooding
Priority (High, Medium, Low)	High
Description of Mitigation Action	Maintain current flood control lakes. Maintain the three flood water retention sites to the west and to the north of Sherman.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Minimal cost to maintain with identifiable benefits to the immediate downstream areas.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Medium (HMPG and municipal funds)
Responsible Party *(Position or Title)*	Public Works Public Information Officer Police Department Emergency Management
Implementation Schedule *(1 to 5 years timeframe)*	1 to 3 years
Effects on New Buildings	Could keep floodplain areas from increasing in size.
Effect on Existing Buildings	Maintains flood risk at current levels.

Mitigation Action Table	
Jurisdiction	Sherman
Hazard	Flooding
Priority (High, Medium, Low)	High
Description of Mitigation Action	Sponsor Sky Warn Training program by the National Weather Service.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Limited cost and maximum benefits.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (municipal general funds)
Responsible Party *(Position or Title)*	Public Works Public Information Officer Police Department Emergency Management
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	none
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	Sherman
Hazard	Flooding
Priority (High, Medium, Low)	High
Description of Mitigation Action	Maintain accurate flood maps within the City.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Reasonable cost for the benefit of better flood risk definition to the public.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Medium (HMPG and municipal funds)
Responsible Party *(Position or Title)*	Public Works Public Information Officer Police Department Emergency Management
Implementation Schedule *(1 to 5 years timeframe)*	1 to 3 years
Effects on New Buildings	May increase awareness of subdivision developers in use of proper standards for flood protection when expanding or modifying subdivisions for future growth.
Effect on Existing Buildings	Could encourage better planning and use of flood-proofing techniques. Coul d also allow floodplain buyout programs to be implemented in the future.

Mitigation Action Table	
Jurisdiction	Sherman
Hazard	Flooding
Priority (High, Medium, Low)	High
Description of Mitigation Action	Re-assess the Choctaw Creek Watershed Plan to evaluate new land management and structural measures necessary to address flooding issues in the watershed.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Cost/benefit analysis needs to be conducted for this specific area.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Medium (HMPG and municipal funds)
Responsible Party *(Position or Title)*	Public Works Public Information Officer Police Department Emergency Management
Implementation Schedule *(1 to 5 years timeframe)*	1 to 3 years
Effects on New Buildings	May increase awareness of subdivision developers in use of proper standards for flood protection when expanding or modifying subdivisions for future growth.
Effect on Existing Buildings	Could encourage better planning and use of flood-proofing techniques. Could also allow floodplain buyout programs to be implemented in the future.

Mitigation Action Table	
Jurisdiction	Sherman
Hazard	Wildfires
Priority (High, Medium, Low)	High
Description of Mitigation Action	Support development of Grayson County mutual aid agreement with City's Fire Department.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Very low costs and can result in significant benefits for both parties.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (municipal general funds)
Responsible Party *(Position or Title)*	Fire Department Emergency Management
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	Could provide better and more robust protection for future homes.
Effect on Existing Buildings	Could provide better and more robust protection for existing homes.

Mitigation Action Table	
Jurisdiction	Sherman
Hazard	Wildfires
Priority (High, Medium, Low)	High
Description of Mitigation Action	Evaluate "Burn Ban" implementation and efforts to ensure public awareness of these periods and the activities that are prohibited.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Minimal cost to achieve likely identifiable benefits to the community.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (municipal general funds)
Responsible Party *(Position or Title)*	Fire Department Emergency Management
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	Could reduce frequency of future events.
Effect on Existing Buildings	Could reduce frequency of future events.

Mitigation Action Table	
Jurisdiction	Sherman
Hazard	Extreme Temperature
Priority (High, Medium, Low)	High
Description of Mitigation Action	Issue heat advisories when appropriate.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Low cost method to encourage the public to take appropriate precautions which could reduce potential risk to public.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (municipal general funds)
Responsible Party *(Position or Title)*	Police Department Emergency Management
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	none
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	Sherman
Hazard	Extreme Temperature
Priority (High, Medium, Low)	High
Description of Mitigation Action	Evaluate existing shelters and implement any necessary improvements.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Likely mimimal cost and may reduce stress and save lives for disadvantaged public.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Medium (municipal budget funds)
Responsible Party *(Position or Title)*	Police Department Emergency Management
Implementation Schedule *(1 to 5 years timeframe)*	3 to 5 years
Effects on New Buildings	none
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	Sherman
Hazard	Extreme Temperature
Priority (High, Medium, Low)	High
Description of Mitigation Action	Provide public service announcements and media advisories.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Likely mimimal cost and may reduce stress and save lives for disadvantaged public.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (municipal general funds)
Responsible Party *(Position or Title)*	Police Department Emergency Management
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	none
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	Sherman
Hazard	Extreme Temperature
Priority (High, Medium, Low)	High
Description of Mitigation Action	Develop action plans to train volunteer citizens to look after vulnerable populations such as the elderly.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Planning cost is low and benefit to public could be high.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (municipal general funds)
Responsible Party *(Position or Title)*	Police Department Emergency Management
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	none
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	Sherman
Hazard	Windstorm
Priority (High, Medium, Low)	High
Description of Mitigation Action	Sponsor Sky Warn Training program by the National Weather Service.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Limited cost and maximum benefits.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (municipal general funds)
Responsible Party *(Position or Title)*	Police Department Emergency Management
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	none
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	Sherman
Hazard	Windstorm
Priority (High, Medium, Low)	High
Description of Mitigation Action	Maintain and operate Early Alert System- an outdoor warning system composed of nine sirens throughout the City.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Moderate cost and good potential to benefit public safety.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Medium (HMPG and municipal funds)
Responsible Party *(Position or Title)*	Police Department Emergency Management
Implementation Schedule *(1 to 5 years timeframe)*	1 to 3 years
Effects on New Buildings	none
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	Sherman
Hazard	Lightning
Priority (High, Medium, Low)	High
Description of Mitigation Action	Sponsor SKY Warn training program by the National Weather Service.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Limited cost and maximum benefits.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (municipal general funds)
Responsible Party *(Position or Title)*	Police Department Emergency Management
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	none
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	Sherman
Hazard	Lightning
Priority (High, Medium, Low)	High
Description of Mitigation Action	Maintain and Operate Early Alert System- an outdoor warning system composed of nine sirens throughout the City.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Moderate cost and good potential to benefit public safety.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Medium (HMPG and municipal funds)
Responsible Party *(Position or Title)*	Police Department Emergency Management
Implementation Schedule *(1 to 5 years timeframe)*	1 to 3 years
Effects on New Buildings	none
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	Sherman
Hazard	Severe Winter Storm
Priority (High, Medium, Low)	Low
Description of Mitigation Action	Tree pruning around power lines to prevent power outages.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Moderate cost and good potential to reduce damages and benefit public safety by maintaining power during severe storms..
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Medium (municipal budget funds)
Responsible Party *(Position or Title)*	Utilities
Implementation Schedule *(1 to 5 years timeframe)*	1 to 3 years
Effects on New Buildings	Should increase safety by reducing power losses.
Effect on Existing Buildings	Should increase safety by reducing power losses.

Mitigation Action Table	
Jurisdiction	Sherman
Hazard	Severe Winter Storm
Priority (High, Medium, Low)	Low
Description of Mitigation Action	Severe winter weather warnings and advisories.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Limited cost and maximum benefits.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (municipal general funds)
Responsible Party *(Position or Title)*	Utilities
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	
Effect on Existing Buildings	

Mitigation Action Table	
Jurisdiction	Sherman
Hazard	Severe Winter Storm
Priority (High, Medium, Low)	Low
Description of Mitigation Action	Evaluate and implement necessary improvements to designated shelters for public use.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Likely mimimal cost and may reduce stress and save lives for disadvantaged public.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Medium (municipal budget funds)
Responsible Party *(Position or Title)*	Utilities
Implementation Schedule *(1 to 5 years timeframe)*	1 to 3 years
Effects on New Buildings	
Effect on Existing Buildings	

Mitigation Action Table	
Jurisdiction	Sherman
Hazard	Tornado
Priority (High, Medium, Low)	High
Description of Mitigation Action	Evaluate existing shelters and implement any necessary improvements.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Likely mimimal cost and may reduce stress and save lives for disadvantaged public.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Medium (municipal budget funds)
Responsible Party *(Position or Title)*	Police Department Emergency Management
Implementation Schedule *(1 to 5 years timeframe)*	1 to 3 years
Effects on New Buildings	
Effect on Existing Buildings	

Mitigation Action Table	
Jurisdiction	Sherman
Hazard	Tornado
Priority (High, Medium, Low)	High
Description of Mitigation Action	Maintain and operate Early Alert System- and outdoor warning systems composed of nine sirens throughout the City
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Moderate cost and good potential to benefit public safety.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Medium (HMPG and municipal funds)
Responsible Party *(Position or Title)*	Police Department Emergency Management
Implementation Schedule *(1 to 5 years timeframe)*	1 to 3 years
Effects on New Buildings	
Effect on Existing Buildings	

Mitigation Action Table	
Jurisdiction	Sherman
Hazard	Tornado
Priority (High, Medium, Low)	High
Description of Mitigation Action	Continue public awareness through media partnerships (Radio, Television)
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Limited cost and maximum benefits.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (municipal general funds)
Responsible Party *(Position or Title)*	Police Department Emergency Management
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	May increase awareness of builders in use of proper standards for tornado protection when expanding or modifying building for future growth.
Effect on Existing Buildings	May lead to appropriate building modifications to better protect properties.

Mitigation Action Table	
Jurisdiction	Sherman
Hazard	Tornado
Priority (High, Medium, Low)	High
Description of Mitigation Action	Sponsor Sky Warn Training program by the National Weather Service.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Limited cost and maximum benefits.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (municipal general funds)
Responsible Party *(Position or Title)*	Police Department Emergency Management
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	none
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	Sherman
Hazard	Dam & Levee Failure
Priority (High, Medium, Low)	High
Description of Mitigation Action	Continue to implement adopted program of scheduled inspections and maintenance of city owned facilities in coordination with the Natural Resources Conservation Service.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Moderate cost and good potential to benefit public safety.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Medium (municipal budget funds)
Responsible Party *(Position or Title)*	Police Department Emergency Management
Implementation Schedule *(1 to 5 years timeframe)*	1 to 3 years
Effects on New Buildings	May reduce the potential for unintentional breach and failure of the dams.
Effect on Existing Buildings	May reduce the potential for unintentional breach and failure of the dams.

Mitigation Action Table	
Jurisdiction	Sherman
Hazard	Dam & Levee Failure
Priority (High, Medium, Low)	High
Description of Mitigation Action	Continue the operation, monitoring, and maintenance of the three flood retention lakes and other dams throughout the City.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Moderate cost and good potential to benefit public safety.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Medium (municipal budget funds)
Responsible Party *(Position or Title)*	Police Department Emergency Management
Implementation Schedule *(1 to 5 years timeframe)*	1 to 3 years
Effects on New Buildings	Should reduce flood frequencies and resulting damages.
Effect on Existing Buildings	Should reduce flood frequencies and resulting damages.

Mitigation Action Table	
Jurisdiction	Sherman
Hazard	Expansive Soils
Priority (High, Medium, Low)	Low
Description of Mitigation Action	Review county roadstandards and ensure that methods to reduce soil expansion are used in areas with extremely expansive soils. These methods such as kneading the soil, extreme compacting, and treating of soils with non-swell additives will extend the lif
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Moderate capital cost and good potential to reduce maintenance costs and extedn the useful life of the roadways..
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Medium (municipal budget funds)
Responsible Party *(Position or Title)*	Public Works
Implementation Schedule *(1 to 5 years timeframe)*	1 to 3 years
Effects on New Buildings	May increase awareness of contractors in use of proper standards for expansive soil protection when expanding or modifying roadways for future growth.
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	Sherman
Hazard	Health Outbreak
Priority (High, Medium, Low)	High
Description of Mitigation Action	The city will collaborate with the Grayson County Health Department on educational programs that focus on illness prevention.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Low cost and good potential to benefit public safety and improve public health..
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (municipal general funds)
Responsible Party *(Position or Title)*	Health Department
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	none
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	Sherman
Hazard	Health Outbreak
Priority (High, Medium, Low)	High
Description of Mitigation Action	The city will develop and enhance partnerships with the local Chapter of the American Red Cross and local health care providers (which will include participation in health screening and inoculation programs). The city will identify at risk populations,
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Low cost and good potential to benefit public safety and improve public health..
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (municipal general funds)
Responsible Party *(Position or Title)*	Health Department
Implementation Schedule *(1 to 5 years timeframe)*	3 to 5 years
Effects on New Buildings	none
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	Sherman
Hazard	Nuclear/Radioactive Event
Priority (High, Medium, Low)	High
Description of Mitigation Action	Define safe hazardous materials traffic routes
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Low cost and good potential to benefit public safety and improve public health..
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (municipal general funds)
Responsible Party *(Position or Title)*	Police Department Emergency Management Public Works Utilities
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	Allow provision of better protection and safety.
Effect on Existing Buildings	Allow provision of better protection and safety.

Mitigation Action Table	
Jurisdiction	Sherman
Hazard	Nuclear/Radioactive Event
Priority (High, Medium, Low)	High
Description of Mitigation Action	Adopt and enforce local codes that define the proper disposal of hazardous materials
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Low cost and good potential to benefit public safety and improve public health..
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (municipal general funds)
Responsible Party *(Position or Title)*	Police Department Emergency Management Public Works Utilities
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	Allow provision of better protection and safety.
Effect on Existing Buildings	Allow provision of better protection and safety.

Mitigation Action Table	
Jurisdiction	Sherman
Hazard	Nuclear/Radioactive Event
Priority (High, Medium, Low)	High
Description of Mitigation Action	Develop community programs that provide education on the safe use and disposal of hazardous materials.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Low cost and good potential to benefit public safety and improve public health..
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (municipal general funds)
Responsible Party *(Position or Title)*	Police Department Emergency Management Public Works Utilities
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	Allow provision of better protection and safety.
Effect on Existing Buildings	Allow provision of better protection and safety.

Mitigation Action Table	
Jurisdiction	Sherman
Hazard	Significant Law Enforcement Event
Priority (High, Medium, Low)	High
Description of Mitigation Action	The City of Sherman Police Department has implemented a well-trained and well-equipped Intelligence office, which works closely with the North Central Texas Fusion Center.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Low cost and good potential to benefit public safety and improve public health..
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Medium (municipal budget funds)
Responsible Party *(Position or Title)*	Police Department
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	Allow provision of better protection and safety.
Effect on Existing Buildings	Allow provision of better protection and safety.

Mitigation Action Table	
Jurisdiction	Sherman
Hazard	Significant Law Enforcement Event
Priority (High, Medium, Low)	High
Description of Mitigation Action	The police department has also undertaken major improvements in their technological capabilities.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Moderate cost and good potential to benefit public safety and improve public health..
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Medium (municipal budget funds)
Responsible Party *(Position or Title)*	Police Department
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	Allow provision of better protection and safety.
Effect on Existing Buildings	Allow provision of better protection and safety.

Mitigation Action Table	
Jurisdiction	Sherman
Hazard	Significant Law Enforcement Event
Priority (High, Medium, Low)	High
Description of Mitigation Action	The police department has also established mutual aid agreements with all of the law enforcement agencies in Grayson County to help with response to a significant law enforcement event.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Low cost and good potential to benefit public safety and improve public health..
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (municipal general funds)
Responsible Party *(Position or Title)*	Police Department
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	Allow provision of better protection and safety.
Effect on Existing Buildings	Allow provision of better protection and safety.

Mitigation Action Table	
Jurisdiction	Sherman
Hazard	Hazardous materials events
Priority (High, Medium, Low)	Low
Description of Mitigation Action	Define safe hazardous materials routes,
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Low cost and good potential to benefit public safety and improve public health..
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (municipal general funds)
Responsible Party *(Position or Title)*	Fire Department Police Department Emergency Management Public Works
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	Allow provision of better protection and safety.
Effect on Existing Buildings	Allow provision of better protection and safety.

Mitigation Action Table	
Jurisdiction	Sherman
Hazard	Hazardous materials events
Priority (High, Medium, Low)	Low
Description of Mitigation Action	Adopt and enforce local codes that define the proper disposal of hazardous materials.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Low cost and good potential to benefit public safety and improve public health..
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (municipal general funds)
Responsible Party *(Position or Title)*	Fire Department Police Department Emergency Management Public Works
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	Allow provision of better protection and safety.
Effect on Existing Buildings	Allow provision of better protection and safety.

Mitigation Action Table	
Jurisdiction	Sherman
Hazard	Hazardous materials events
Priority (High, Medium, Low)	Low
Description of Mitigation Action	Develop community programs that provide education on safe use and disposal of hazardous materials.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Low cost and good potential to benefit public safety and improve public health..
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (municipal general funds)
Responsible Party *(Position or Title)*	Fire Department Police Department Emergency Management Public Works
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	Allow provision of better protection and safety.
Effect on Existing Buildings	Allow provision of better protection and safety.

Mitigation Action Table	
Jurisdiction	Sherman
Hazard	Major Urban Fires
Priority (High, Medium, Low)	Low
Description of Mitigation Action	Adopt and enforce local fire codes that include fire detection and suppression equipment.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Low cost and good potential to benefit public safety.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (municipal general funds)
Responsible Party *(Position or Title)*	Fire Department Emergency Management Public Works
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	Allow provision of better protection and safety.
Effect on Existing Buildings	Allow provision of better protection and safety.

Mitigation Action Table	
Jurisdiction	Sherman
Hazard	Major Urban Fires
Priority (High, Medium, Low)	Low
Description of Mitigation Action	Conduct fire safety inspections that identify potential fire risk and hazards.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Moderate cost and good potential to benefit public safety.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Medium (municipal budget funds)
Responsible Party *(Position or Title)*	Fire Department Emergency Management Public Works
Implementation Schedule *(1 to 5 years timeframe)*	1 to 3 years
Effects on New Buildings	Allow provision of better protection and safety.
Effect on Existing Buildings	Allow provision of better protection and safety.

Mitigation Action Table	
Jurisdiction	Sherman
Hazard	Major Urban Fires
Priority (High, Medium, Low)	Low
Description of Mitigation Action	Establish automatic and mutual aid agreements that provide for additional resources in the event of a major urban fire.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Low cost and good potential to benefit public safety and reduce property damages.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (municipal general funds)
Responsible Party *(Position or Title)*	Fire Department Emergency Management Public Works
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	Allow provision of better protection and safety.
Effect on Existing Buildings	Allow provision of better protection and safety.

Mitigation Action Table	
Jurisdiction	Sherman
Hazard	Catastrophic collisions
Priority (High, Medium, Low)	Low
Description of Mitigation Action	The City of Sherman Police Department has formed a Traffic Safety Unit.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Moderate cost and good potential to benefit public safety.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Medium (municipal budget funds)
Responsible Party *(Position or Title)*	Police Department Emergency Management Emergency Management
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	none
Effect on Existing Buildings	none

Mitigation Action Table	
Jurisdiction	Sherman
Hazard	Catastrophic collisions
Priority (High, Medium, Low)	Low
Description of Mitigation Action	The unit dramatically increases their traffic law enforcement efforts and is able to use traffic accident data to focus on areas with high accident rates. One major concern was the number of "Cross-over" accidents on US Hwy 75. Our fatal accident rate
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Low cost and high benefit to public safety.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Medium (municipal budget funds)
Responsible Party *(Position or Title)*	Police Department Emergency Management Public Works
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	none
Effect on Existing Buildings	none

City of Southmayd
Mitigation Goals and Actions

Developing Mitigation Goals and Actions for Grayson County Hazard Mitigation Plan (HMP)

Goals are general guidelines that explain what you want to achieve. They are usually broad policy-type statements, long term, and represent global visions. The following **Goals** appear in the State of Texas Mitigation Plan and are suggested for the Grayson County HMP:

- Reduce or eliminate hazardous conditions that cause loss of life
- Reduce or eliminate hazardous conditions that inflict injuries
- Reduce or eliminate hazardous conditions that cause property damage
- Reduce or eliminate hazardous conditions that degrade important natural resources

Mitigation Actions are specific actions that help you achieve your goals. **At least two actions needs to be recorded per each hazard identified in the Risk Assessment.**

Examples:
Elevate three historic structures located in the downtown district
Sponsor a community fair to promote wildfire defensible space
Retrofit the police department to withstand high wind damage

***Note:** Please include mitigation actions in the HMP that may be eligible for FEMA funding.*

Priority Ranking, please indicate your "vote". **(Low, Medium, High)**

Questions to consider when ranking mitigation actions:
- Is the proposed action socially acceptable and will all citizens be treated fairly?
- Is the action compatible with present and future community values?
- Is the action technically feasible and will it move the community towards its goal?
- Does the City have the legal authority to implement the action?
- Does the City have the technical capability to implement the action?

***Note:** Funding is often a constraint; at this time, do not allow that to influence your indication of priorities. One purpose of the plan is to help support efforts to secure funding for implementation.*

Please fill out the sections in the following tables.

Mitigation Action Table	
Jurisdiction	Southmayd
Hazard	Floods
Priority (High, Medium, Low)	High
Description of Mitigation Action	Take advantage of County-provided educational material on the NFIP and actively promote city residents to participate in the NFIP.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Very low cost activity which can provide a high benefit.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (Budget)
Responsible Party *(Position or Title)*	Mayor/City Council
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	Can be significant
Effect on Existing Buildings	Can be significant

Mitigation Action Table	
Jurisdiction	City of Southmayd
Hazard	Flooding
Priority (High, Medium, Low)	Low
Description of Mitigation Action	Increase the storm water detention capacity with the construction of structures such as Retention Pond / Damn/Flood Control Lakes Possible Sites: 1) South side of Hwy 56, West of Baze residence 2) Southmayd Road near Ruth Campbell residence 3) On Deaver where brick house is located in flood zone
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	This will help prevents some roadways from being closed during high rains. Also help prevent property damage and road damage from high water. The benefits expected from the proposed improvements justify the cost to implement these actions.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Grants
Responsible Party *(Position or Title)*	City Mayor
Implementation Schedule *(1 to 5 years timeframe)*	5 year
Effects on New Buildings	May have to purchase some land. It will be safer for future housing, etc. if the erosion can be prevented ahead of time.
Effect on Existing Buildings	It will protect current roadways, culverts, existing buildings etc. from damage from flooding events. Also help prevent Hwy. 56 from being blocked off like it has been in the past.

Mitigation Action Table	
Jurisdiction	City of Southmayd
Hazard	Flooding
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Develop a storm water drainage Study/Plan for known problem areas (or City-wide).
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, etc) Cost/Benefit (narrative of benefit expected from investment)*	This could help expose problems and help compile a plan for prevention and the future City development, including but not limited to possible retention ponds, damns, etc. It may also help the City obtain future grants.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Agriculture Department, Grants
Responsible Party *(Position or Title)*	City Mayor
Implementation Schedule *(1 to 5 years timeframe)*	
Effects on New Buildings	It should benefit in the long term by improving drainage and preventing future flooding events.
Effect on Existing Buildings	It should benefit in the long term by improving drainage and preventing future flooding events.

Mitigation Action Table	
Jurisdiction	City of Southmayd
Hazard	Flooding
Priority (High, Medium, Low)	High
Description of Mitigation Action	Develop a plan for the purchasing and installation of emergency barricades for temporary shut down of roads that have running water across them. Possibly a permanent barricade with censors for high water (esp. on Southmayd Road near Campbell residence). Also, other misc supplies (such as a small water rescue kit).
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, etc) Cost/Benefit (narrative of benefit expected from investment)*	Police & Fire Departments can put out temp. barricades when needed. If the city obtained a perm. barricade, we do have an electrician on staff for maintenance. Capital cost of purchasing the barricades and rescue kits and cost to operate the program is expected to be offset by the benefits obtained from improved safety conditions.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	General Fund, Police &/or Fire Dept. Funds, Grants
Responsible Party *(Position or Title)*	City Mayor
Implementation Schedule *(1 to 5 years timeframe)*	1 year (for the temp. version, not sure of perm)
Effects on New Buildings	It would not have much of an effect on buildings. This would be more of a preventative to help with driving safety.
Effect on Existing Buildings	It would not have much of an effect on buildings. This would be more of a preventative to help with driving safety.

Mitigation Action Table	
Jurisdiction	City of Southmayd
Hazard	Flooding
Priority (High, Medium, Low)	Low
Description of Mitigation Action	Routinely inspect and clear debris from drainage systems. To conduct clearing activities, the city would require purchasing/renting backhoe to help with drainage ditches, retention tanks, etc.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, etc) Cost/Benefit (narrative of benefit expected from investment)*	The City has a water maintenance person and a person to mow. They could become the operators for the equipment. Routinely clearing drainage systems could greatly improve conditions that prevent flooding of roadways and buildings.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	General Fund, Police &/or Fire Dept. Funds, Grants
Responsible Party *(Position or Title)*	City Mayor
Implementation Schedule *(1 to 5 years timeframe)*	1 year (for the temp. version, not sure of perm)
Effects on New Buildings	It would benefit new buildings by improving drainage and preventing future flooding events.
Effect on Existing Buildings	It would benefit new buildings by improving drainage and preventing future flooding events.

Mitigation Action Table	
Jurisdiction	City of Southmayd
Hazard	Landslide
Priority (High, Medium, Low)	Low
Description of Mitigation Action	Landslides do not seem to be much of an issue for Southmayd. The City is predominately flat land with some small creeks running throughout the area. For any scenarios close to this please refer to Levies/Damns or Flooding.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, etc) Cost/Benefit (narrative of benefit expected from investment)*	N/A
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	N/A
Responsible Party *(Position or Title)*	N/A
Implementation Schedule *(1 to 5 years timeframe)*	N/A
Effects on New Buildings	N/A
Effect on Existing Buildings	N/A

Mitigation Action Table	
Jurisdiction	City of Southmayd
Hazard	Wildfires
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Install an elevated storage water tank for filling firefighting equipment in an efficient way. Currently we have flush valves. The firefighters have to fill up the water tanks to take to the fires right now.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, etc) Cost/Benefit (narrative of benefit expected from investment)*	Once installed there should not be much in the way of staffing needed. Any maintenance can be done by our water maintenance man. Also, the Volunteer Fire Dept. can help maintain by checking hydrants regularly. This will help with our Fire Departments ability to protect our residents.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	General fund, grants.
Responsible Party *(Position or Title)*	City Mayor
Implementation Schedule *(1 to 5 years timeframe)*	3-5 years
Effects on New Buildings	Help with fire protection. Also, may help bring insurance rates down for the area.
Effect on Existing Buildings	Help with fire protection. Also, may help bring insurance rates down for the area.

Mitigation Action Table	
Jurisdiction	City of Southmayd
Hazard	Wildfires
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Develop/purchase additional water wells as firefighting supply. This *may* be wells that don't have to have drinkable water, but can be used for the purpose of fire protection only.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, etc) Cost/Benefit (narrative of benefit expected from investment)*	Water maintenance man can monitor and make repairs as needed. This will help expand the City's ability to cover for fire protection.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	General fund, grants
Responsible Party *(Position or Title)*	City Mayor
Implementation Schedule *(1 to 5 years timeframe)*	4-5 years
Effects on New Buildings	Help with fire protection. Also, may help bring insurance rates down for the area.
Effect on Existing Buildings	Help with fire protection. Also, may help bring insurance rates down for the area.

Mitigation Action Table	
Jurisdiction	City of Southmayd
Hazard	Wildfires
Priority (High, Medium, Low)	Medium/High
Description of Mitigation Action	Develop a fire breaks and debris removal program. The program could include the purchase of a wood chipper tomitigate the fire hazard by having yards well maintained.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, etc) Cost/Benefit (narrative of benefit expected from investment)*	Our water dept. maintenance man would be in charge of taking care of machine and use.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Grant
Responsible Party *(Position or Title)*	Water Dept Maintenance / City Council
Implementation Schedule *(1 to 5 years timeframe)*	1 year
Effects on New Buildings	This would help buildings to keep their yards maintained safely.
Effect on Existing Buildings	This would help buildings to keep their yards maintained safely.

Mitigation Action Table	
Jurisdiction	City of Southmayd
Hazard	Lightning
Priority (High, Medium, Low)	High
Description of Mitigation Action	Purchase & install manual transfer switch between the GCEC & TXU grids in case power went out to help restore the water system
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Costs involved includes the capital cost of purchasing the switch, and installation time. Having the power supply restored in a timely fashion would justify the cost of implementing this action.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Funds for Emergency Management
Responsible Party *(Position or Title)*	Water Dept Maintenance Man / City Council / Emergency Planning Team
Implementation Schedule *(1 to 5 years timeframe)*	2-3 years
Effects on New Buildings	This will restore power in some areas if power was cut off.
Effect on Existing Buildings	This will restore power in some areas if power was cut off.

Mitigation Action Table	
Jurisdiction	City of Southmayd
Hazard	Lightning
Priority (High, Medium, Low)	High
Description of Mitigation Action	Purchase an emergency power generator as a back up power if electric went off. This would help keep our water pumps working. At this time if the electric is out, our water system is down.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	The benefit expected from this mitigation action is to enable the City to provide water supply in case of a power outage.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Emergency Management Fund
Responsible Party *(Position or Title)*	Mayor, Police Dept, Fire Dept
Implementation Schedule *(1 to 5 years timeframe)*	2-3 years
Effects on New Buildings	Provide water service when electricity is down.
Effect on Existing Buildings	Provide water service when electricity is down.

Mitigation Action Table	
Jurisdiction	City of Southmayd
Hazard	Lightning
Priority (High, Medium, Low)	Low
Description of Mitigation Action	Ground power lines especially near the water department to help prevent lightning from generating power outages.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	No maintenance needed when done, but will need to hire someone to do for the city. The expected benefits would be a decrease in the power outages for critical facilities (water suppliers).
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	General fund, Emergency Fund, Grant
Responsible Party *(Position or Title)*	Mayor / City Council / Water Maintenance
Implementation Schedule *(1 to 5 years timeframe)*	5
Effects on New Buildings	Keep power running & prevent damage done by power surges.
Effect on Existing Buildings	Keep power running & prevent damage done by power surges.

Mitigation Action Table	
Jurisdiction	City of Southmayd
Hazard	Land Subsidence
Priority (High, Medium, Low)	Low
Description of Mitigation Action	*Based on the geological formations underlying Southmayd, land subsidence is not considered a potential hazard.*
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	N/A
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	N/A
Responsible Party *(Position or Title)*	N/A
Implementation Schedule *(1 to 5 years timeframe)*	N/A
Effects on New Buildings	N/A
Effect on Existing Buildings	N/A

Mitigation Action Table	
Jurisdiction	City of Southmayd
Hazard	Expansive Soils
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Provide soil stabilization methods prior to construction or reconstruction of City roadways.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Additional preparation costs (i.e. lime stabilization) necessary for road construction off-sets the expense of future road rehabilitation costs if appropriate pre-construction measures are not taken. Benefit includes providing for a better, more durable road.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal general funds, loan funds and/or grant funds.
Responsible Party *(Position or Title)*	City Mayor
Implementation Schedule *(1 to 5 years timeframe)*	One to three years
Effects on New Buildings	Positive effect on new buildings by minimizing repair work for longer lasting roads.
Effect on Existing Buildings	Positive effect on existing buildings by minimizing repair work for longer lasting roads.

Mitigation Action Table	
Jurisdiction	City of Southmayd
Hazard	Expansive Soils
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Control the design and construction of the foundation and foundation spaces for all buildings.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Cost - Time required on the revision of existing ordinances and city codes to require specific foundation requirements to minimize effects from expansive soils. Benefit – minimization of the effects on buildings from expansive soils
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal funds
Responsible Party *(Position or Title)*	City Mayor
Implementation Schedule *(1 to 5 years timeframe)*	Two to three years
Effects on New Buildings	Positive effect on new buildings by minimizing foundation problems in structures.
Effect on Existing Buildings	Positive effect on existing buildings by minimizing foundation problems in structures.

Mitigation Action Table	
Jurisdiction	City of Southmayd
Hazard	Dam and Levee Failure
Priority (High, Medium, Low)	High
Description of Mitigation Action	Improve conditions at the pond/dam located northeast of Donee Drive Options: 1) Move road upstream of dam to prevent the road from being affected in case of overflow. 2) Buy property downstream the dam and rise the damn embankment so that it is safer.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, etc) Cost/Benefit (narrative of benefit expected from investment)*	Repairs would have to be contracted with Grayson County. Improved safety conditions justify the cost of the proposed improvements.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Road Repair Funds, FEMA, Grants
Responsible Party *(Position or Title)*	Mayor / City Council
Implementation Schedule *(1 to 5 years timeframe)*	1-3 years
Effects on New Buildings	There is not much room there for new buildings, but it would make driving to the property safer.
Effect on Existing Buildings	It would make it safer to drive to the back properties. Also, cut back on continually doing road repairs for temporary fixes.

Mitigation Action Table	
Jurisdiction	City of Southmayd
Hazard	Dam and Levee Failure
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Improve conditions at the pond located east of Katie Rose Ln. Conduct a study to develop options to decrease the erosion and flooding potential at the roadway crossing.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Repairs would have to be contracted with Grayson County. Improved safety conditions justify the cost of the proposed improvements.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Road Repair Funds, FEMA, Grants
Responsible Party *(Position or Title)*	Mayor / City Council
Implementation Schedule *(1 to 5 years timeframe)*	3-5 years
Effects on New Buildings	New buildings constructed downstream would benefit from improved drainage and decreased flooding potential.
Effect on Existing Buildings	New buildings constructed downstream would benefit from improved drainage and decreased flooding potential.

Mitigation Action Table	
Jurisdiction	City of Southmayd
Hazard	Wind Storm
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Purchase and install (2-3) sirens for city to be located on Simpson Road, by Fire Dept / Police Dept / City Hall area and possibly another near or in the Village of Southmayd.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, etc) Cost/Benefit (narrative of benefit expected from investment)*	Once established, should need very little maintenance. May help prevent loss of life and possibly prevent some damage to buildings.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Emergency Fund, General Fund, Grant
Responsible Party *(Position or Title)*	Police and Fire Depts.
Implementation Schedule *(1 to 5 years timeframe)*	2-3 years
Effects on New Buildings	May help prevent loss of life and possibly prevent some damage to buildings.
Effect on Existing Buildings	May help prevent loss of life and possibly prevent some damage to buildings.

Mitigation Action Table	
Jurisdiction	City of Southmayd
Hazard	Wind Storm
Priority (High, Medium, Low)	High
Description of Mitigation Action	KTEN & Code Red early warning system maintenance.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, etc) Cost/Benefit (narrative of benefit expected from investment)*	Benefit – having in place a warning system to alert the population in case of a storm.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	General Fund, Emergency Management
Responsible Party *(Position or Title)*	City Secretary/Accountant
Implementation Schedule *(1 to 5 years timeframe)*	Current and in future
Effects on New Buildings	Helps prevent loss of life and property when residents know ahead of time there is going to be a storm coming.
Effect on Existing Buildings	Helps prevent loss of life and property when residents know ahead of time there is going to be a storm coming.

Mitigation Action Table	
Jurisdiction	City of Southmayd
Hazard	Tornado
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Purchase and install (2-3) sirens for city to be located on Simpson Road, by Fire Dept / Police Dept / City Hall area and possibly another near or in the Village of Southmayd.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Once established, should need very little maintenance. May help prevent loss of life and possibly prevent some damage to buildings.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Emergency Fund, General Fund, Grant
Responsible Party *(Position or Title)*	Police and Fire Depts.
Implementation Schedule *(1 to 5 years timeframe)*	2-3 years
Effects on New Buildings	May help prevent loss of life and possibly prevent some damage to buildings.
Effect on Existing Buildings	May help prevent loss of life and possibly prevent some damage to buildings.

Mitigation Action Table	
Jurisdiction	City of Southmayd
Hazard	Tornado
Priority (High, Medium, Low)	High
Description of Mitigation Action	KTEN & Code Red early warning system maintenance.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Benefit – having in place a warning system to alert the population in case of tornado..
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	General Fund, Emergency Management
Responsible Party *(Position or Title)*	City Secretary/Accountant
Implementation Schedule *(1 to 5 years timeframe)*	Current and in future
Effects on New Buildings	Helps prevent loss of life and property when residents know ahead of time there is going to be a storm coming.
Effect on Existing Buildings	Helps prevent loss of life and property when residents know ahead of time there is going to be a storm coming.

Mitigation Action Table	
Jurisdiction	City of Southmayd
Hazard	Tornado
Priority (High, Medium, Low)	Low
Description of Mitigation Action	Retrofit City facilities. This includes the Emergency Command Post and our water system.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, etc) Cost/Benefit (narrative of benefit expected from investment)*	This will help keep the city running during and after a storm. Help maintain the water supply during that time.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	General Fund, Emergency Management
Responsible Party *(Position or Title)*	Mayor/City Council/Police & Fire Dept.
Implementation Schedule *(1 to 5 years timeframe)*	5 years
Effects on New Buildings	Help maintain the water supply during that time.
Effect on Existing Buildings	Help maintain the water supply during that time.

Mitigation Action Table	
Jurisdiction	City of Southmayd
Hazard	Severe Winter Storm
Priority (High, Medium, Low)	High
Description of Mitigation Action	Purchase & install manual transfer switch to go between GCEC and TXU to restore the power for water system in case of a power outage.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	This will help restore power quicker to residents and keep the water system running.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Funds for Emergency Management
Responsible Party *(Position or Title)*	Water Dept Maintenance Man / City Council / Emergency Planning Team
Implementation Schedule *(1 to 5 years timeframe)*	2-3 years
Effects on New Buildings	This will restore power in some areas if power was cut off.
Effect on Existing Buildings	This will restore power in some areas if power was cut off.

Mitigation Action Table	
Jurisdiction	City of Southmayd
Hazard	Severe Winter Storm
Priority (High, Medium, Low)	High
Description of Mitigation Action	Purchase Generator for back up power if electric went off. This would help keep our water pumps working. At this time if the electric is out, our water system is down.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Cost- Cost of purchasing and installing a new generator. Benefit- of ensuring an ongoing water supply for citizens and to minimize the potential damaging effects that extreme cold weather may have on the water system in the event of a power outage.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Emergency Management Fund
Responsible Party *(Position or Title)*	Mayor, Police Dept, Fire Dept
Implementation Schedule *(1 to 5 years timeframe)*	2-3 years
Effects on New Buildings	Provide water service when electricity is down.
Effect on Existing Buildings	Provide water service when electricity is down.

Mitigation Action Table	
Jurisdiction	City of Southmayd
Hazard	Severe Winter Storm
Priority (High, Medium, Low)	Low
Description of Mitigation Action	Develop an action plan to spread sand or de-icing agents on roads and bridges after severe winter storms. The action plan could include the following options: 1. Purchase something (like a fertilizer spreader) to be pulled by the city tractor to spread sand on roads. 2. Develop a rental agreement with someone like United Rental to rent truck(s) during storm.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	This will help prevent wrecks and will potentially enable the City to continue activities after a severe winter storm.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	General fund, Emergency Fund, Grant
Responsible Party *(Position or Title)*	Water maintenance dept.
Implementation Schedule *(1 to 5 years timeframe)*	2-3 years
Effects on New Buildings	N/A
Effect on Existing Buildings	N/A

Mitigation Action Table	
Jurisdiction	City of Southmayd
Hazard	Hailstorm
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Add on Garage/Carport for Police and Fire Dept. to protect city vehicles.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, etc) Cost/Benefit (narrative of benefit expected from investment)*	This will help prevent city vehicles from getting hail damage. Cost is justified by the savings in property damage.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	General fund
Responsible Party *(Position or Title)*	City Mayor
Implementation Schedule *(1 to 5 years timeframe)*	2 - 3 years
Effects on New Buildings	N/A
Effect on Existing Buildings	N/A

Mitigation Action Table	
Jurisdiction	City of Southmayd
Hazard	Hailstorm
Priority (High, Medium, Low)	High
Description of Mitigation Action	Develop a debris removal plan that includes the purchase of debris removal equipment such as wood chippers.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, etc) Cost/Benefit (narrative of benefit expected from investment)*	Our water dept. maintenance man would be in charge of taking care of machine and use.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Grant
Responsible Party *(Position or Title)*	Water Dept Maintenance / City Council
Implementation Schedule *(1 to 5 years timeframe)*	1 year
Effects on New Buildings	This would help buildings to keep their yards maintained safely after a hailstorm event.
Effect on Existing Buildings	This would help buildings to keep their yards maintained safely after a hailstorm event.

Mitigation Action Table	
Jurisdiction	City of Southmayd
Hazard	Extreme Temperatures
Priority (High, Medium, Low)	High
Description of Mitigation Action	Extreme heat Purchase electric generator.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Emergency distribution of water if water source is not working.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Emergency Management Fund
Responsible Party *(Position or Title)*	Mayor, Police Dept, Fire Dept
Implementation Schedule *(1 to 5 years timeframe)*	2-3 years
Effects on New Buildings	Provide water service when electricity is down.
Effect on Existing Buildings	Provide water service when electricity is down.

Mitigation Action Table	
Jurisdiction	City of Southmayd
Hazard	Extreme Temperatures
Priority (High, Medium, Low)	Low
Description of Mitigation Action	Develop/purchase other water well for back up water supply.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, etc) Cost/Benefit (narrative of benefit expected from investment)*	Benefit – provide the water with an additional source of water supply
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Water funds, General funds, Emergency funds
Responsible Party *(Position or Title)*	Water Dept
Implementation Schedule *(1 to 5 years timeframe)*	4-5 years
Effects on New Buildings	Back up water supply.
Effect on Existing Buildings	Back up water supply.

Mitigation Action Table	
Jurisdiction	City of Southmayd
Hazard	Drought
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Develop and maintain a fire breaks and debris removal program, especially around acreage. May need to purchase or rent equipment to get breaks established and maintained. Also, keep debris removed so that there is less fuel for the fire.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, etc) Cost/Benefit (narrative of benefit expected from investment)*	Our water dept. maintenance man would be in charge of taking care of machine and use.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Grant
Responsible Party *(Position or Title)*	Fire Dept and Water Dept
Implementation Schedule *(1 to 5 years timeframe)*	4-5 years
Effects on New Buildings	Help prevent fires.
Effect on Existing Buildings	Help prevent fires.

Mitigation Action Table	
Jurisdiction	City of Southmayd
Hazard	Drought
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Develop/purchase additional water wells as additional firefighting supply. This *may* be wells that don't have to have drinkable water, but can be used for the purpose of fire protection only. (How about additional sources for firefighting water such as storm water from detention ponds if available, to serve flooding and firefighting purposes?)
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Water maintenance man can monitor and make repairs as needed. This will help expand the City's ability to cover for fire protection.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	General fund, grants
Responsible Party *(Position or Title)*	City Mayor
Implementation Schedule *(1 to 5 years timeframe)*	4-5 years
Effects on New Buildings	Help with fire protection. Also, may help bring insurance rates down for the area.
Effect on Existing Buildings	Help with fire protection. Also, may help bring insurance rates down for the area.

Mitigation Action Table	
Jurisdiction	City of Southmayd
Hazard	Drought
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Install elevated storage for water tank for filling firefighting equipment in an efficient way. Currently we have flush valves. The firefighters have to fill up the water tanks to take to the fires right now.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Once installed there should not be much in the way of staffing needed. Any maintenance can be done by our water maintenance man. Also, the Volunteer Fire Dept. can help maintain by checking hydrants regularly. This will help with our Fire Departments ability to protect our residents.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	General fund, grants.
Responsible Party *(Position or Title)*	City Mayor
Implementation Schedule *(1 to 5 years timeframe)*	3-5 years
Effects on New Buildings	Help with fire protection. Also, may help bring insurance rates down for the area.
Effect on Existing Buildings	Help with fire protection. Also, may help bring insurance rates down for the area.

Mitigation Action Table	
Jurisdiction	City of Southmayd
Hazard	Earthquake
Priority (High, Medium, Low)	Low
Description of Mitigation Action	This area does not seem to be at risk for Earthquakes.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	N/A
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	N/A
Responsible Party *(Position or Title)*	N/A
Implementation Schedule *(1 to 5 years timeframe)*	N/A
Effects on New Buildings	N/A
Effect on Existing Buildings	N/A

City of Tioga

Mitigation Goals and Actions

Developing Mitigation Goals and Actions for Grayson County Hazard Mitigation Plan (HMP)

Goals are general guidelines that explain what you want to achieve. They are usually broad policy-type statements, long term, and represent global visions. The following **Goals** appear in the State of Texas Mitigation Plan and are suggested for the Grayson County HMP:

- Reduce or eliminate hazardous conditions that cause loss of life
- Reduce or eliminate hazardous conditions that inflict injuries
- Reduce or eliminate hazardous conditions that cause property damage
- Reduce or eliminate hazardous conditions that degrade important natural resources

Mitigation Actions are specific actions that help you achieve your goals. **At least two actions needs to be recorded per each hazard identified in the Risk Assessment.**

Examples:
Elevate three historic structures located in the downtown district
Sponsor a community fair to promote wildfire defensible space
Retrofit the police department to withstand high wind damage

***Note:** Please include mitigation actions in the HMP that may be eligible for FEMA funding.*

Priority Ranking, please indicate your "vote". **(Low, Medium, High)**

Questions to consider when ranking mitigation actions:
- Is the proposed action socially acceptable and will all citizens be treated fairly?
- Is the action compatible with present and future community values?
- Is the action technically feasible and will it move the community towards its goal?
- Does the City have the legal authority to implement the action?
- Does the City have the technical capability to implement the action?

***Note:** Funding is often a constraint; at this time, do not allow that to influence your indication of priorities. One purpose of the plan is to help support efforts to secure funding for implementation.*

Please fill out the sections in the following tables.

Mitigation Action Table	
Jurisdiction	Tioga
Hazard	Floods
Priority (High, Medium, Low)	High
Description of Mitigation Action	Take advantage of County-provided educational material on the NFIP and actively promote city residents to participate in the NFIP.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Very low cost activity which can provide a high benefit.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (Budget)
Responsible Party *(Position or Title)*	Mayor/Public Works Director
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	Can be significant
Effect on Existing Buildings	Can be significant

Mitigation Action Table	
Jurisdiction	Tioga
Hazard	Flooding
Priority (High, Medium, Low)	High
Description of Mitigation Action	Clearing and re-channelization of water runoff from the Tejas North addition allowing it to drain south (east of Lamar) and under Lamar to existing ditch that ties into 377 culvert and on to Lake Ray Roberts
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Will require significant infrastructure expense including engineering and construction costs. Resulting benefit expected to reduce potential for residential and commercial property loss and reduce or eliminate injuries and loss of life.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal general funds, loan funds and/or grant funds.
Responsible Party *(Position or Title)*	Mayor, Public Works Director
Implementation Schedule *(1 to 5 years timeframe)*	Due to size and anticipated cost, project will need to be completed in stages unless a grant of sufficient size is received to cover entire project. Each phase of project is expected to last one year with a five year schedule expected to complete entire project.
Effects on New Buildings	Eliminates potential flooding of new buildings located along project area.
Effect on Existing Buildings	Eliminates potential flooding of existing buildings located along project area.

Mitigation Action Table	
Jurisdiction	Tioga
Hazard	Flooding
Priority (High, Medium, Low)	High
Description of Mitigation Action	Improve drainage for storm water run-off along Florence street south to Buck Creek Road and Lake Ray Roberts watershed area
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Will require significant infrastructure expense including engineering and construction costs. Resulting benefit expected to reduce potential for residential and commercial property loss and reduce or eliminate injuries and loss of life.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal general funds, loan funds and/or grant funds.
Responsible Party *(Position or Title)*	Mayor, Public Works Director
Implementation Schedule *(1 to 5 years timeframe)*	Due to size and anticipated cost, project will need to be completed in stages unless a grant of sufficient size is received to cover entire project. Each phase of project is expected to last one year with a five year schedule expected to complete entire project.
Effects on New Buildings	Eliminates potential flooding of new buildings located along project area.
Effect on Existing Buildings	Eliminates potential flooding of existing buildings located along project area.

Mitigation Action Table	
Jurisdiction	Tioga
Hazard	Landslide
Priority (High, Medium, Low)	Low
Description of Mitigation Action	Based on the topography of the City of Tioga, landslides are not considered a potential hazard.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	
Responsible Party *(Position or Title)*	
Implementation Schedule *(1 to 5 years timeframe)*	
Effects on New Buildings	
Effect on Existing Buildings	

Mitigation Action Table	
Jurisdiction	Tioga
Hazard	Landslide
Priority (High, Medium, Low)	Low
Description of Mitigation Action	Based on the topography of the City of Tioga, landslides are not considered a potential hazard.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	
Responsible Party *(Position or Title)*	
Implementation Schedule *(1 to 5 years timeframe)*	
Effects on New Buildings	
Effect on Existing Buildings	

Mitigation Action Table	
Jurisdiction	Tioga
Hazard	Wildfires
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Provide community wide education programs to help reduce the risk of wildfires.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Limited staff time necessary to conduct education program(s) in relation to the potential benefit of reduced number of wildfires.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal general funds budgeted for fire department
Responsible Party *(Position or Title)*	Fire Chief
Implementation Schedule *(1 to 5 years timeframe)*	Within one year
Effects on New Buildings	Potential to save new buildings from wildfires.
Effect on Existing Buildings	Potential to save existing buildings from wildfires.

Mitigation Action Table	
Jurisdiction	Tioga
Hazard	Wildfires
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Develop printed educational materials to help reduce risk of wildfires.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Limited staff time and publishing/copying expense necessary to prepare and print educational materials in relation to the potential benefit of reduced number of wildfires.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal general funds budgeted for fire department.
Responsible Party *(Position or Title)*	Fire Chief
Implementation Schedule *(1 to 5 years timeframe)*	Within one year
Effects on New Buildings	Potential to save new buildings from wildfires.
Effect on Existing Buildings	Potential to save existing buildings from wildfires.

Mitigation Action Table	
Jurisdiction	Tioga
Hazard	Lightning
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Retrofit wastewater facilities including plant and lift stations with alternative power source in the event of lightning strikes. Includes generators and hard wiring of equipment to prepare for power outage.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Significant expense for equipment (generators) and staff time for installation offset by ability to continue treating sewerage in the event of a power loss. Benefits also include continued regulatory compliance and environmental controls.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal general funds, loan funds and/or grant funds.
Responsible Party *(Position or Title)*	Mayor, Public Works Director
Implementation Schedule *(1 to 5 years timeframe)*	One to two years
Effects on New Buildings	Positive effect based on continued ability to except sewerage from new buildings.
Effect on Existing Buildings	Positive effect based on continued ability to except sewerage from existing buildings.

Mitigation Action Table	
Jurisdiction	Tioga
Hazard	Lightning
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Retrofit water facilities including well sites, pump stations, SCADA system and storage facilities with alternative power source in the event of lightning strikes. Includes generators and hard wiring of equipment to prepare for power outage.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Significant expense for equipment (generators) and staff time for installation offset by ability to continue providing water in the event of a power loss. Additional benefit includes continued regulatory compliance.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal general funds, loan funds and/or grant funds.
Responsible Party *(Position or Title)*	Mayor, Public Works Director
Implementation Schedule *(1 to 5 years timeframe)*	One to two years
Effects on New Buildings	Positive effect based on continued ability to except sewerage from new buildings.
Effect on Existing Buildings	Positive effect based on continued ability to except sewerage from new buildings.

Mitigation Action Table	
Jurisdiction	Tioga
Hazard	Land Subsidence
Priority (High, Medium, Low)	Low
Description of Mitigation Action	Based on the geological formations underlying the City of Tioga, land subsidence is not considered a potential hazard.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	
Responsible Party *(Position or Title)*	
Implementation Schedule *(1 to 5 years timeframe)*	
Effects on New Buildings	
Effect on Existing Buildings	

Mitigation Action Table	
Jurisdiction	Tioga
Hazard	Land Subsidence
Priority (High, Medium, Low)	Low
Description of Mitigation Action	Based on the geological formations underlying the City of Tioga, land subsidence is not considered a potential hazard.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	
Responsible Party *(Position or Title)*	
Implementation Schedule *(1 to 5 years timeframe)*	
Effects on New Buildings	
Effect on Existing Buildings	

Mitigation Action Table	
Jurisdiction	Tioga
Hazard	Expansive Soils
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Provide soil stabilization methods prior to construction or reconstruction of city roadways within the city limits area
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Additional preparation costs (i.e. lime stabilization) necessary for road construction off-sets the expense of future road rehabilitation costs if appropriate pre-construction measures are not taken. Benefit includes providing for a better, more durable road.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal general funds, loan funds and/or grant funds.
Responsible Party *(Position or Title)*	Mayor, Public Works Director
Implementation Schedule *(1 to 5 years timeframe)*	On going on an as needed basis.
Effects on New Buildings	Positive effect on new buildings.
Effect on Existing Buildings	Positive effect on existing buildings.

Mitigation Action Table	
Jurisdiction	Tioga
Hazard	Expansive Soils
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Provide soil stabilization methods prior to construction of residences and/or commercial facilities within city limits area.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Additional preparation costs (i.e. lime stabilization) necessary for building foundations off-sets the expense of future leveling costs if appropriate pre-construction measures are not taken. Benefit includes providing for a better, more stable building foundation.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Private sources unless the building is municipal owned.
Responsible Party *(Position or Title)*	Mayor, Public Works Director, Building Inspector
Implementation Schedule *(1 to 5 years timeframe)*	On going on an as needed basis.
Effects on New Buildings	Positive effect on new buildings.
Effect on Existing Buildings	Positive effect on existing buildings.

Mitigation Action Table	
Jurisdiction	Tioga
Hazard	Dam and Levee Failure
Priority (High, Medium, Low)	Low
Description of Mitigation Action	There is presently 1 dam in the city limits of Tioga that is subject to possible failure. Dam is privately owned and spillway is too high. Spillway needs to be lowered to promote better drainage in areas the feed the dammed up lake. Failure of dam will destroy adjacent roadway which is the only entrance and egress from several homes as well as Corps of Engineers access to Lake Ray Roberts.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Cost to perform this modification will be far less than subsequent reconstruction of roadway should dam fail completely
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Private sources, grants
Responsible Party *(Position or Title)*	Mayor, Public Works Director, Properly owner
Implementation Schedule *(1 to 5 years timeframe)*	As soon as possible
Effects on New Buildings	Positive effect of New Buildings

Mitigation Action Table	
Jurisdiction	Tioga
Hazard	Dam and Levee Failure
Priority (High, Medium, Low)	Low
Description of Mitigation Action	There are no dams or levees in the Tioga area that would create a hazard if they were to fail.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	
Responsible Party *(Position or Title)*	
Implementation Schedule *(1 to 5 years timeframe)*	
Effects on New Buildings	
Effect on Existing Buildings	

Mitigation Action Table	
Jurisdiction	Tioga
Hazard	Wind Storm
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Inspect overhanging tress limbs on all aerial power line routes to eliminate loss of power due to broken limbs pulling down power lines during windstorms. Report any identified potential problem areas to local power company for mitigation.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Minimal staff time required. Benefit includes reduced opportunity for temporary power loss due to power transmission lines being pulled down by falling tree limbs.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal general funds
Responsible Party *(Position or Title)*	Public Works Director
Implementation Schedule *(1 to 5 years timeframe)*	On going
Effects on New Buildings	Positive effect on new buildings.
Effect on Existing Buildings	Positive effect on existing buildings.

Mitigation Action Table	
Jurisdiction	Tioga
Hazard	Wind Storm
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Sponsor a citizen education program to inform public of the benefits of inspecting their property for overhanging tress limbs on aerial power lines and reporting potential problems to power company to avoid loss of power due to broken limbs pulling down power lines during windstorms.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Minimal staff time required. Benefit includes reduced opportunity for temporary power loss due to power transmission lines being pulled down by falling tree limbs.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal general funds
Responsible Party *(Position or Title)*	Public Works Director
Implementation Schedule *(1 to 5 years timeframe)*	On going
Effects on New Buildings	Positive effect on new buildings.
Effect on Existing Buildings	Positive effect on existing buildings.

Mitigation Action Table	
Jurisdiction	Tioga
Hazard	Tornado
Priority (High, Medium, Low)	High
Description of Mitigation Action	Retrofit water and wastewater facilities with alternative power sources in the event of a tornado. Includes generators and hard wiring of equipment to prepare for power outage.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Significant expense for equipment (generators) and staff time for installation offset by ability to continue treating sewerage and providing water in the event of a power loss. Benefits also include continued regulatory compliance and environmental controls.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal general funds, loan funds and/or grant funds.
Responsible Party *(Position or Title)*	Mayor, Public Works Director
Implementation Schedule *(1 to 5 years timeframe)*	Due to size and anticipated cost, project will need to be completed in stages unless a grant of sufficient size is received to cover entire project. Each phase of project is expected to last one year with a five year schedule expected to complete entire project.
Effects on New Buildings	Positive effect based on continued ability to except sewerage from and provide water to new buildings.
Effect on Existing Buildings	Positive effect based on continued ability to except sewerage from and provide water to new buildings.

Mitigation Action Table	
Jurisdiction	Tioga
Hazard	Tornado
Priority (High, Medium, Low)	High
Description of Mitigation Action	Increase citizen advanced warning/notification capabilities and interagency communications between fire and police departments as well as other county agencies.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Some capital improvement money required to increase the number of outdoor warning sirens in the city and expand coverage of existing three sirens and cost to participate in automated warning notification systems such as Code Red and Weather Warning program. Benefits will include expanded coverage for outdoor sirens and earlier warning capabilities.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal general funds, loan funds and/or grant funds.
Responsible Party *(Position or Title)*	Mayor, Public Works Director, Fire Chief, Police Chief
Implementation Schedule *(1 to 5 years timeframe)*	Under way for advanced notification systems. On going for outdoor warning siren coverage area expansion with completion goal of two years.
Effects on New Buildings	Positive effect on new buildings.
Effect on Existing Buildings	Positive effect on existing buildings.

Mitigation Action Table	
Jurisdiction	Tioga
Hazard	Severe Winter Storm
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Retrofit water and wastewater facilities with alternative power sources in the event of a severe winter storm including power loss. Includes generators and hard wiring of equipment to prepare for power outage.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Significant expense for equipment (generators) and staff time for installation offset by ability to continue treating sewerage and providing water in the event of a power loss associated with a severe winter storm. Benefits also include continued regulatory compliance and environmental controls.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal general funds, loan funds and/or grant funds.
Responsible Party *(Position or Title)*	Mayor, Public Works Director
Implementation Schedule *(1 to 5 years timeframe)*	Due to size and anticipated cost, project will need to be completed in stages unless a grant of sufficient size is received to cover entire project. Each phase of project is expected to last one year with a five year schedule expected to complete entire project.
Effects on New Buildings	Positive effect on new buildings.
Effect on Existing Buildings	Positive effect on existing buildings.

Mitigation Action Table	
Jurisdiction	Tioga
Hazard	Severe Winter Storm
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Inspect overhanging tress limbs on all aerial power line routes to eliminate loss of power due to broken limbs pulling down power lines during severe winter storms. Report any identified potential problem areas to local power company for mitigation.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Minimal staff time required. Benefit includes reduced opportunity for temporary power loss due to power transmission lines being pulled down by falling tree limbs.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal general funds
Responsible Party *(Position or Title)*	Public Works Director
Implementation Schedule *(1 to 5 years timeframe)*	On going
Effects on New Buildings	Positive effect on new buildings.
Effect on Existing Buildings	Positive effect on existing buildings.

Mitigation Action Table	
Jurisdiction	Tioga
Hazard	Hailstorm
Priority (High, Medium, Low)	High
Description of Mitigation Action	Protect city-owned vehicles and other assets in the event of a hailstorm.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Some capital expenditures and staff time required to construct covered parking areas for police and maintenance vehicles. Benefit of reduced damages to city assets out-weigh the cost to provide protective coverings.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal general funds
Responsible Party *(Position or Title)*	Mayor, Public Works Director
Implementation Schedule *(1 to 5 years timeframe)*	One to two years depending on funding availability.
Effects on New Buildings	Positive effect on new buildings.
Effect on Existing Buildings	Positive effect on existing buildings.

Mitigation Action Table	
Jurisdiction	Tioga
Hazard	Hailstorm
Priority (High, Medium, Low)	High
Description of Mitigation Action	Retrofit water and wastewater facilities with alternative power sources in the event of power loss during a hailstorm. Includes generators and hard wiring of equipment to prepare for power outage.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Significant expense for equipment (generators) and staff time for installation offset by ability to continue treating sewerage and providing water in the event of a power loss associated with a hailstorm. Benefits also include continued regulatory compliance and environmental controls.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal general funds, loan funds and/or grant funds.
Responsible Party *(Position or Title)*	Mayor, Public Works Director
Implementation Schedule *(1 to 5 years timeframe)*	Due to size and anticipated cost, project will need to be completed in stages unless a grant of sufficient size is received to cover entire project. Each phase of project is expected to last one year with a five year schedule expected to complete entire project.
Effects on New Buildings	Positive effect on new buildings.
Effect on Existing Buildings	Positive effect on existing buildings.

Mitigation Action Table	
Jurisdiction	Tioga
Hazard	Extreme Temperatures
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Initiate a routine vehicle and equipment maintenance schedule to insure city-owned property is capable of withstanding extreme temperature changes.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Limited staff time required with little actual expenditure of funds. Benefit includes fleet of vehicles which are capable of withstanding extreme temperature changes.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal general funds.
Responsible Party *(Position or Title)*	Public Works Director
Implementation Schedule *(1 to 5 years timeframe)*	On going
Effects on New Buildings	No effect on new buildings.
Effect on Existing Buildings	No effect on existing buildings.

Mitigation Action Table	
Jurisdiction	Tioga
Hazard	Extreme Temperatures
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Provide public information materials to citizens including helpful safety tips, public assistance availability from governmental agencies and other services which may be available to handle extreme temperature situations.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Limited staff time and publishing/copying expense necessary to prepare and print educational materials in relation to the potential benefit of providing useful, potentially life-saving information to the public.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal general funds
Responsible Party *(Position or Title)*	Mayor
Implementation Schedule *(1 to 5 years timeframe)*	Within one year
Effects on New Buildings	No effect on new buildings.
Effect on Existing Buildings	No effect on existing buildings.

Mitigation Action Table	
Jurisdiction	Tioga
Hazard	Drought
Priority (High, Medium, Low)	Low
Description of Mitigation Action	There are no crop producing agricultural entities located within the city limits of Tioga therefore drought conditions are not considered a potential hazard.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	
Responsible Party *(Position or Title)*	
Implementation Schedule *(1 to 5 years timeframe)*	
Effects on New Buildings	
Effect on Existing Buildings	

Mitigation Action Table	
Jurisdiction	Tioga
Hazard	Drought
Priority (High, Medium, Low)	Low
Description of Mitigation Action	There are no crop producing agricultural entities located within the city limits of Tioga therefore drought conditions are not considered a potential hazard.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	
Responsible Party *(Position or Title)*	
Implementation Schedule *(1 to 5 years timeframe)*	
Effects on New Buildings	
Effect on Existing Buildings	

Mitigation Action Table	
Jurisdiction	Tioga
Hazard	Earthquake
Priority (High, Medium, Low)	Low
Description of Mitigation Action	Based on historical data, earthquakes are not considered a potential hazard in Tioga.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	
Responsible Party *(Position or Title)*	
Implementation Schedule *(1 to 5 years timeframe)*	
Effects on New Buildings	
Effect on Existing Buildings	

Mitigation Action Table	
Jurisdiction	Tioga
Hazard	Earthquake
Priority (High, Medium, Low)	Low
Description of Mitigation Action	Based on historical data, earthquakes are not considered a potential hazard in Tioga.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	
Responsible Party *(Position or Title)*	
Implementation Schedule *(1 to 5 years timeframe)*	
Effects on New Buildings	
Effect on Existing Buildings	

City of Tom Bean
Mitigation Goals and Actions

Developing Mitigation Goals and Actions for Grayson County Hazard Mitigation Plan (HMP)

Goals are general guidelines that explain what you want to achieve. They are usually broad policy-type statements, long term, and represent global visions. The following **Goals** appear in the State of Texas Mitigation Plan and are suggested for the Grayson County HMP:

- Reduce or eliminate hazardous conditions that cause loss of life
- Reduce or eliminate hazardous conditions that inflict injuries
- Reduce or eliminate hazardous conditions that cause property damage
- Reduce or eliminate hazardous conditions that degrade important natural resources

Mitigation Actions are specific actions that help you achieve your goals. **At least two actions needs to be recorded per each hazard identified in the Risk Assessment.**

Examples:
Elevate three historic structures located in the downtown district
Sponsor a community fair to promote wildfire defensible space
Retrofit the police department to withstand high wind damage

***Note:** Please include mitigation actions in the HMP that may be eligible for FEMA funding.*

Priority Ranking, please indicate your "vote". **(Low, Medium, High)**

Questions to consider when ranking mitigation actions:
- Is the proposed action socially acceptable and will all citizens be treated fairly?
- Is the action compatible with present and future community values?
- Is the action technically feasible and will it move the community towards its goal?
- Does the City have the legal authority to implement the action?
- Does the City have the technical capability to implement the action?

***Note:** Funding is often a constraint; at this time, do not allow that to influence your indication of priorities. One purpose of the plan is to help support efforts to secure funding for implementation.*

Please fill out the sections in the following tables.

Mitigation Action Table	
Jurisdiction	Tom Bean
Hazard	Flooding
Priority (High, Medium, Low)	High
Description of Mitigation Action	Pursue fulfillment of requirement for city to participate in NFIP.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Low cost and very high benefit.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (Budget)
Responsible Party *(Position or Title)*	Mayor and Public Works Director
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	Significant benefit to new homes
Effect on Existing Buildings	Significant benefit to existing homes

Mitigation Action Table	
Jurisdiction	Tom Bean
Hazard	Flooding
Priority (High, Medium, Low)	Low
Description of Mitigation Action	• Coordinate local activities with federal, state, and regional programs; • Public Awareness of problem areas if any. Have a place for people to go in case of flooded house.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Cost for coordination and public awareness is low, Provision of a safety shelter involves high capital expense
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Public funds and grants
Responsible Party *(Position or Title)*	City Mayor
Implementation Schedule *(1 to 5 years timeframe)*	One to five years
Effects on New Buildings	No direct effect on new buildings
Effect on Existing Buildings	No direct effect on existing buildings

Mitigation Action Table	
Jurisdiction	Tom Bean
Hazard	Landslide
Priority (High, Medium, Low)	Low
Description of Mitigation Action	*Based on the topography of Tom Bean, landslides are not considered a potential hazard*
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	N/A
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	N/A
Responsible Party *(Position or Title)*	N/A
Implementation Schedule *(1 to 5 years timeframe)*	N/A
Effects on New Buildings	N/A
Effect on Existing Buildings	N/A

Mitigation Action Table	
Jurisdiction	Tom Bean
Hazard	Wildfires
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Public awareness of apparent fuel around private structures.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Fortunately, homeowners can reduce their risk through cost-effective mitigation measures. Ideally, these measures should be considered before your home is built. For example, potential homeowners should consider carefully the risks that they would face by moving to certain high-hazard areas before making the decision to buy or build. Also, when building your home, close attention should be paid to how your home is being constructed. Risks posed by all types of natural hazards may be reduced substantially by paying attention to building codes and by incorporating mitigation measures into the structure.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	City Funds
Responsible Party *(Position or Title)*	Mayor
Implementation Schedule *(1 to 5 years timeframe)*	Two to three years
Effects on New Buildings	Increased new building safety by reduction of potential fires
Effect on Existing Buildings	Increased existing building safety by reduction of potential fires

Mitigation Action Table

Jurisdiction	Tom Bean
Hazard	Wildfires
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Enforce all burn bans enacted by the County
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Cost includes enforcement of Grayson County burn bans. Cost is outweighed by prevention of wildfires
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	City Funds
Responsible Party *(Position or Title)*	Mayor
Implementation Schedule *(1 to 5 years timeframe)*	Two to three years
Effects on New Buildings	Increased new building safety by reduction of potential fires
Effect on Existing Buildings	Increased existing building safety by reduction of potential fires

Mitigation Action Table	
Jurisdiction	Tom Bean
Hazard	Lightning

Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Retrofit wastewater facilities including plant and lift stations with alternative power source in the event of lightning strikes. (includes generators and hard wiring of equipment to prepare for power outage).
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Significant expense for equipment (generators) and staff time for installation offset by ability to continue treating sewerage in the event of a power loss. Benefits also include continued regulatory compliance and environmental controls.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal general funds, loan funds and/or grant funds.
Responsible Party *(Position or Title)*	Mayor Public Works Director
Implementation Schedule *(1 to 5 years timeframe)*	Three to five years
Effects on New Buildings	Positive effect based on continued ability to except sewerage from new buildings.
Effect on Existing Buildings	Positive effect based on continued ability to except sewerage from existing buildings.

Mitigation Action Table	
Jurisdiction	Tom Bean
Hazard	Lightning
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Retrofit water facilities including well sites, pump stations, SCADA system, and storage facilities with alternative power source in the event of lightning strikes (includes generators and hard wiring of equipment to prepare for power outage).
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Significant expense for equipment (generators) and staff time for installation offset by ability to continue providing water in the event of a power loss. Additional benefit includes continued regulatory compliance.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal general funds, loan funds and/or grant funds.
Responsible Party *(Position or Title)*	Mayor Public Works Director
Implementation Schedule *(1 to 5 years timeframe)*	Three to five years
Effects on New Buildings	Positive effect based on continued ability to except sewerage from new buildings.
Effect on Existing Buildings	Positive effect based on continued ability to except sewerage from new buildings.

Mitigation Action Table	
Jurisdiction	Tom Bean
Hazard	Land Subsidence
Priority (High, Medium, Low)	Low
Description of Mitigation Action	*Based on geological formation underlying Tom Bean, land subsidence is not considered a potential hazard*
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	N/A
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	N/A
Responsible Party *(Position or Title)*	N/A
Implementation Schedule *(1 to 5 years timeframe)*	N/A
Effects on New Buildings	N/A
Effect on Existing Buildings	N/A

Mitigation Action Table	
Jurisdiction	Tom Bean
Hazard	Land Subsidence
Priority (High, Medium, Low)	Low
Description of Mitigation Action	*Based on the geological formations underlying Tom Bean, land subsidence is not considered a potential hazard.*
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	N/A
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	N/A
Responsible Party *(Position or Title)*	N/A
Implementation Schedule *(1 to 5 years timeframe)*	N/A
Effects on New Buildings	N/A
Effect on Existing Buildings	N/A

Mitigation Action Table	
Jurisdiction	Tom Bean
Hazard	Expansive Soils
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Provide soil stabilization methods prior to construction or reconstruction of City roadways.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Additional preparation costs (i.e. lime stabilization) necessary for road construction off-sets the expense of future road rehabilitation costs if appropriate pre-construction measures are not taken. Benefit includes providing for a better, more durable road.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal general funds, loan funds and/or grant funds.
Responsible Party *(Position or Title)*	Mayor
Implementation Schedule *(1 to 5 years timeframe)*	One to three years
Effects on New Buildings	Positive effect on new buildings by minimizing repair work for longer lasting roads.
Effect on Existing Buildings	Positive effect on existing buildings by minimizing repair work for longer lasting roads.

Mitigation Action Table	
Jurisdiction	Tom Bean
Hazard	Expansive Soils
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Control the design and construction of the foundation and foundation spaces for all buildings.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Cost - Time required on the revision of existing ordinances and city codes to require specific foundation requirements to minimize effects from expansive soils. Benefit – minimization of the effects on buildings from expansive soils
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal funds
Responsible Party *(Position or Title)*	Mayor
Implementation Schedule *(1 to 5 years timeframe)*	Two to three years
Effects on New Buildings	Positive effect on new buildings by minimizing foundation problems in structures.
Effect on Existing Buildings	Positive effect on existing buildings by minimizing foundation problems in structures.

Mitigation Action Table	
Jurisdiction	Tom Bean
Hazard	Dam and Levee Failure
Priority (High, Medium, Low)	Low
Description of Mitigation Action	*There are no dams or levees in the Tom Bean area that would create a hazard if they were to fail. NOT SURE IF THIS IS TRUE SINCE THERE ARE NOT DAMS IN TOM BEAN, BUT THE CITY IS SURROUNDED BY DAMS!!!!*
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	
Responsible Party *(Position or Title)*	
Implementation Schedule *(1 to 5 years timeframe)*	
Effects on New Buildings	
Effect on Existing Buildings	

Mitigation Action Table	
Jurisdiction	Tom Bean
Hazard	Wind Storm
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Inspect overhanging tress limbs on all aerial power line routes to eliminate loss of power due to broken limbs pulling down power lines during windstorms. Report any identified potential problem areas to local power company for mitigation.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Minimal staff time required. Benefit includes reduced opportunity for temporary power loss due to power transmission lines being pulled down by falling tree limbs.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal general funds
Responsible Party *(Position or Title)*	Mayor
Implementation Schedule *(1 to 5 years timeframe)*	One to three years
Effects on New Buildings	Positive effect on new buildings.
Effect on Existing Buildings	Positive effect on existing buildings.

Mitigation Action Table	
Jurisdiction	Tom Bean
Hazard	Wind Storm
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Sponsor a citizen education program to inform public of the benefits of inspecting their property for overhanging tress limbs on aerial power lines and reporting potential problems to power company to avoid loss of power due to broken limbs pulling down power lines during windstorms.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Minimal staff time required. Benefit includes reduced opportunity for temporary power loss due to power transmission lines being pulled down by falling tree limbs.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal general funds
Responsible Party *(Position or Title)*	Mayor
Implementation Schedule *(1 to 5 years timeframe)*	On going
Effects on New Buildings	Positive effect on new buildings.
Effect on Existing Buildings	Positive effect on existing buildings.

Mitigation Action Table	
Jurisdiction	Tom Bean
Hazard	Tornado
Priority (High, Medium, Low)	High
Description of Mitigation Action	Review and update current alert and warning procedures.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Cost - Staff time needed to review the existing procedures, preparation of alert plan and warning procedures. The cost would be moderate but would be offset by increasing the preparedness to respond to emergencies
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal funds and grants
Responsible Party *(Position or Title)*	Mayor
Implementation Schedule *(1 to 5 years timeframe)*	Two to three years
Effects on New Buildings	No effect on new buildings
Effect on Existing Buildings	No effect on existing buildings

Mitigation Action Table	
Jurisdiction	Tom Bean
Hazard	Tornado
Priority (High, Medium, Low)	High
Description of Mitigation Action	Increase citizen advanced warning/notification capabilities
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Some capital improvement money required to increase the number of outdoor warning sirens in the city and expand coverage of existing three sirens and cost to participate in automated warning notification systems such as Code Red and Weather Warning program. Benefits will include expanded coverage for outdoor sirens and earlier warning capabilities.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal general funds, loan funds and/or grant funds.
Responsible Party *(Position or Title)*	Mayor
Implementation Schedule *(1 to 5 years timeframe)*	Three to five years
Effects on New Buildings	Positive effect on new buildings.
Effect on Existing Buildings	Positive effect on existing buildings.

Mitigation Action Table	
Jurisdiction	Tom Bean
Hazard	Tornado
Priority (High, Medium, Low)	High
Description of Mitigation Action	Retrofit water and wastewater facilities with alternative power sources in the event of a tornado (includes generators and hard wiring of equipment to prepare for power outage).
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Significant expense for equipment (generators) and staff time for installation offset by ability to continue treating sewerage and providing water in the event of a power loss. Benefits also include continued regulatory compliance and environmental controls.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal general funds, loan funds and/or grant funds.
Responsible Party *(Position or Title)*	Mayor
Implementation Schedule *(1 to 5 years timeframe)*	Due to size and anticipated cost, project will need to be completed in stages unless a grant of sufficient size is received to cover entire project. Each phase of project is expected to last one year with a five year schedule expected to complete entire project.
Effects on New Buildings	Positive effect based on continued ability to except sewerage from and provide water to new buildings.
Effect on Existing Buildings	Positive effect based on continued ability to except sewerage from and provide water to new buildings.

Mitigation Action Table	
Jurisdiction	Tom Bean
Hazard	Severe Winter Storm
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Retrofit water and wastewater facilities with alternative power sources in the event of a severe winter storm including power loss (includes generators and hard wiring of equipment to prepare for power outage).
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Significant expense for equipment (generators) and staff time for installation offset by ability to continue treating sewerage and providing water in the event of a power loss. Benefits also include continued regulatory compliance and environmental controls.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal general funds, loan funds and/or grant funds.
Responsible Party *(Position or Title)*	Mayor
Implementation Schedule *(1 to 5 years timeframe)*	Due to size and anticipated cost, project will need to be completed in stages unless a grant of sufficient size is received to cover entire project. Each phase of project is expected to last one year with a five year schedule expected to complete entire project.
Effects on New Buildings	Positive effect based on continued ability to except sewerage from and provide water to new buildings.
Effect on Existing Buildings	Positive effect based on continued ability to except sewerage from and provide water to new buildings.

Mitigation Action Table	
Jurisdiction	Tom Bean
Hazard	Severe Winter Storm
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Inspect overhanging tress limbs on all aerial power line routes to eliminate loss of power due to broken limbs pulling down power lines during severe winter storms. Report any identified potential problem areas to local power company for mitigation
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Minimal staff time required. Benefit includes reduced opportunity for temporary power loss due to power transmission lines being pulled down by falling tree limbs.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal general funds
Responsible Party *(Position or Title)*	Mayor
Implementation Schedule *(1 to 5 years timeframe)*	On going
Effects on New Buildings	Positive effect on new buildings.
Effect on Existing Buildings	Positive effect on existing buildings.

Mitigation Action Table	
Jurisdiction	Tom Bean
Hazard	Hailstorm
Priority (High, Medium, Low)	High
Description of Mitigation Action	Protect city-owned vehicles and other assets in the event of a hailstorm by relocating vehicles to roofed areas and constructing additional parking areas for police cruisers.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Some capital expenditures and staff time required to construct covered parking areas for police and maintenance vehicles. Benefit of reduced damages to city assets out-weigh the cost to provide protective coverings.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal funds, other funds.
Responsible Party *(Position or Title)*	Mayor
Implementation Schedule *(1 to 5 years timeframe)*	One to two years depending on funding availability.
Effects on New Buildings	Positive effect on new buildings.
Effect on Existing Buildings	Positive effect on existing buildings.

Mitigation Action Table	
Jurisdiction	Tom Bean
Hazard	Hailstorm
Priority (High, Medium, Low)	High
Description of Mitigation Action	Retrofit water and wastewater facilities with alternative power sources in the event of power loss during a hailstorm (includes generators and hard wiring of equipment to prepare for power outage).
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Significant expense for equipment (generators) and staff time for installation offset by ability to continue treating sewerage and providing water in the event of a power loss associated with a hailstorm. Benefits also include continued regulatory compliance and environmental controls.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal general funds, loan funds and/or grant funds.
Responsible Party *(Position or Title)*	Mayor
Implementation Schedule *(1 to 5 years timeframe)*	Due to size and anticipated cost, project will need to be completed in stages unless a grant of sufficient size is received to cover entire project. Each phase of project is expected to last one year with a five year schedule expected to complete entire project.
Effects on New Buildings	Positive effect on new buildings.
Effect on Existing Buildings	Positive effect on existing buildings

Mitigation Action Table	
Jurisdiction	Tom Bean
Hazard	Extreme Temperatures
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Initiate a routine vehicle and equipment maintenance schedule to insure city-owned property is capable of withstanding extreme temperature changes.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Limited staff time required with little actual expenditure of funds. Benefit includes fleet of vehicles which are capable of withstanding extreme temperature changes.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal general funds.
Responsible Party *(Position or Title)*	Mayor
Implementation Schedule *(1 to 5 years timeframe)*	Two to four years
Effects on New Buildings	No effect on new buildings.
Effect on Existing Buildings	No effect on existing buildings.

Mitigation Action Table	
Jurisdiction	Tom Bean
Hazard	Extreme Temperatures
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Provide public information materials to citizens including helpful safety tips, public assistance availability from governmental agencies and other services which may be available to handle extreme temperature situations.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Limited staff time and publishing/copying expense necessary to prepare and print educational materials in relation to the potential benefit of providing useful, potentially life-saving information to the public.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal general funds
Responsible Party *(Position or Title)*	Mayor
Implementation Schedule *(1 to 5 years timeframe)*	Within one year
Effects on New Buildings	No effect on new buildings.
Effect on Existing Buildings	No effect on existing buildings.

Mitigation Action Table	
Jurisdiction	Tom Bean
Hazard	Drought
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Incorporate drought tolerant or xeriscape practices into landscape ordinances to reduce dependence on irrigation
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Cost associated with revising ordinances in place to require xeriscape practices for new development. Benefits expected in overall water conservation practices.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal funds
Responsible Party *(Position or Title)*	Mayor
Implementation Schedule *(1 to 5 years timeframe)*	Two to three years
Effects on New Buildings	No effects in new buildings
Effect on Existing Buildings	No effects in existing buildings

Mitigation Action Table	
Jurisdiction	Tom Bean
Hazard	Drought
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Enforce mandatory water usage restrictions. Educate public in water conservation
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Staff time to prepare and administer conservation plan, preparing and conducting public awareness campaigns, and revise ordinances to provide enforcement mechanism. Benefits include the ability to conserve water and to prevent further impacts from drought
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	General Fund, Grants, Loans
Responsible Party *(Position or Title)*	Mayor
Implementation Schedule *(1 to 5 years timeframe)*	Two to three years
Effects on New Buildings	Maintains essential water services during extreme conditions
Effect on Existing Buildings	Maintains essential water services during extreme conditions

Mitigation Action Table	
Jurisdiction	Tom Bean
Hazard	Earthquake
Priority (High, Medium, Low)	Low
Description of Mitigation Action	*Based on historical review, earthquakes are not considered a potential hazard in Tom Bean.*
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	N/A
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	N/A
Responsible Party *(Position or Title)*	N/A
Implementation Schedule *(1 to 5 years timeframe)*	N/A
Effects on New Buildings	N/A
Effect on Existing Buildings	N/A

City of Van Alstyne
Mitigation Goals and Actions

Developing Mitigation Goals and Actions for Grayson County Hazard Mitigation Plan (HMP)

Goals are general guidelines that explain what you want to achieve. They are usually broad policy-type statements, long term, and represent global visions. The following **Goals** appear in the State of Texas Mitigation Plan and are suggested for the Grayson County HMP:

- Reduce or eliminate hazardous conditions that cause loss of life
- Reduce or eliminate hazardous conditions that inflict injuries
- Reduce or eliminate hazardous conditions that cause property damage
- Reduce or eliminate hazardous conditions that degrade important natural resources

Mitigation Actions are specific actions that help you achieve your goals. **At least two actions needs to be recorded per each hazard identified in the Risk Assessment.**

Examples:
Elevate three historic structures located in the downtown district
Sponsor a community fair to promote wildfire defensible space
Retrofit the police department to withstand high wind damage

***Note:** Please include mitigation actions in the HMP that may be eligible for FEMA funding.*

Priority Ranking, please indicate your "vote". **(Low, Medium, High)**

Questions to consider when ranking mitigation actions:
- Is the proposed action socially acceptable and will all citizens be treated fairly?
- Is the action compatible with present and future community values?
- Is the action technically feasible and will it move the community towards its goal?
- Does the City have the legal authority to implement the action?
- Does the City have the technical capability to implement the action?

***Note:** Funding is often a constraint; at this time, do not allow that to influence your indication of priorities. One purpose of the plan is to help support efforts to secure funding for implementation.*

Please fill out the sections in the following tables.

Mitigation Action Table	
Jurisdiction	Van Alstyne
Hazard	Floods
Priority (High, Medium, Low)	High
Description of Mitigation Action	Take advantage of County-provided educational material on the NFIP and actively promote city residents to participate in the NFIP.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Very low cost activity which can provide a high benefit.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (Budget)
Responsible Party *(Position or Title)*	Mayor/Council
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	Can be significant
Effect on Existing Buildings	Can be significant

Mitigation Action Table	
Jurisdiction	Van Alstyne
Hazard	Flooding
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Van Alstyne will take necessary actions to participate in the NFIP and make flood insurance available for residents
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	NFIP participation expenses will be outweighed by the benefit of making insurance available for residents.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal funds, FEMA
Responsible Party *(Position or Title)*	Mayor/Council
Implementation Schedule *(1 to 5 years timeframe)*	Two to three years
Effects on New Buildings	New buildings will benefit by the possibility of acquiring flood insurance.
Effect on Existing Buildings	Existing buildings will benefit by the possibility of acquiring flood insurance.

Mitigation Action Table	
Jurisdiction	Van Alstyne
Hazard	Flooding
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Maintain, evaluate, and monitor city codes to reflect new flood provisions requirements
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Costs will be associated with revising/modifying city codes. Cost be outweighed by the benefit of reducing flooding risk
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal funds, FEMA
Responsible Party *(Position or Title)*	Mayor/Council
Implementation Schedule *(1 to 5 years timeframe)*	Two to three years
Effects on New Buildings	New buildings will benefit by the reducing flooding risk
Effect on Existing Buildings	Existing buildings will benefit by reducing flooding risk

Mitigation Action Table	
Jurisdiction	Van Alstyne
Hazard	Landslide
Priority (High, Medium, Low)	Low
Description of Mitigation Action	Based on the existing topography landslides are not considered a potential hazard in the community.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	N/A
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	N/A
Responsible Party *(Position or Title)*	N/A
Implementation Schedule *(1 to 5 years timeframe)*	N/A
Effects on New Buildings	N/A
Effect on Existing Buildings	

Mitigation Action Table	
Jurisdiction	Van Alstyne
Hazard	Wildfires
Priority (High, Medium, Low)	High
Description of Mitigation Action	Training Fire personnel as well as the public. Enforce burn bans enacted by the County. Acquire proper equipment. Continue the mutual aid taskforce with surrounding cities.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	The cost is less than the loss of property.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal, Texas Forestry, US Fire Grant.
Responsible Party *(Position or Title)*	Fire Chief
Implementation Schedule *(1 to 5 years timeframe)*	Two to three years 1. Training 2. Upgrade Equipment 3. Tanker Purchase 4. Funding
Effects on New Buildings	Reduction on potential loss
Effect on Existing Buildings	Reduction in potential loss.

Mitigation Action Table	
Jurisdiction	Van Alstyne
Hazard	Lightning
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	1. Grounding of facilities 2. Educate citizens on safe places to be during lightning events 3. Back-up power sources.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	National Weather Service Cost of equipment- capital cost is significant.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal funds, grants
Responsible Party *(Position or Title)*	Fire Chief
Implementation Schedule *(1 to 5 years timeframe)*	Continual progress
Effects on New Buildings	New buildings will not be directly benefited from this. The actions will help citizens allow power and water during lighting events.
Effect on Existing Buildings	Existing buildings will not be directly benefited from this. The actions will help citizens allow power and water during lighting events.

Mitigation Action Table	
Jurisdiction	Van Alstyne
Hazard	Land Subsidence
Priority (High, Medium, Low)	Low
Description of Mitigation Action	Based on Van Alstyne's geologic characteristics land subsidence is not considered a potential threat.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	N/A
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	N/A
Responsible Party *(Position or Title)*	N/A
Implementation Schedule *(1 to 5 years timeframe)*	N/A
Effects on New Buildings	N/A
Effect on Existing Buildings	N/A

Mitigation Action Table	
Jurisdiction	Van Alstyne
Hazard	Expansive Soils
Priority (High, Medium, Low)	Low
Description of Mitigation Action	Educate your public on watering your structures etc with equipment such as soaker hoses. Gutter homes. Foundation education.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Benefits outweigh the cost.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	None
Responsible Party *(Position or Title)*	Mayor
Implementation Schedule *(1 to 5 years timeframe)*	Implementation in on going with the addition of new rules and regulations.
Effects on New Buildings	Improvement of old codes will help new homes prevent effects of expansive soils.
Effect on Existing Buildings	Improvement of old codes will help existing homes prevent effects of expansive soils.

Mitigation Action Table	
Jurisdiction	Van Alstyne
Hazard	Expansive Soils
Priority (High, Medium, Low)	Low
Description of Mitigation Action	Provide with stabilization methods prior construction or reconstruction
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Additional preparation costs (i.e. lime stabilization) necessary for road construction off-sets the expense of future road rehabilitation costs if appropriate pre-construction measures are not taken. Benefit includes providing for a better, more durable road.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal general funds, loan funds and/or grant funds.
Responsible Party *(Position or Title)*	City Mayor
Implementation Schedule *(1 to 5 years timeframe)*	One to three years
Effects on New Buildings	Positive effect on new buildings by minimizing repair work for longer lasting roads.
Effect on Existing Buildings	Positive effect on existing buildings by minimizing repair work for longer lasting roads.

Mitigation Action Table	
Jurisdiction	Van Alstyne
Hazard	Dam and Levee Failure
Priority (High, Medium, Low)	Low
Description of Mitigation Action	There are no dams or levees in the Van Alstyne area that would create a hazard if they were to fail.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	N/A
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	N/A
Responsible Party *(Position or Title)*	N/A
Implementation Schedule *(1 to 5 years timeframe)*	N/A
Effects on New Buildings	N/A
Effect on Existing Buildings	N/A

Mitigation Action Table	
Jurisdiction	Van Alstyne
Hazard	Wind Storm
Priority (High, Medium, Low)	Low
Description of Mitigation Action	Inspect overhanging tress limbs on all aerial power line routes to eliminate loss of power due to broken limbs pulling down power lines during windstorms. Report any identified potential problem areas to local power company for mitigation.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Minimal staff time required. Benefit includes reduced opportunity for temporary power loss due to power transmission lines being pulled down by falling tree limbs.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal general funds
Responsible Party *(Position or Title)*	Mayor
Implementation Schedule *(1 to 5 years timeframe)*	Two to three years
Effects on New Buildings	Positive effect on new buildings.
Effect on Existing Buildings	Positive effect on existing buildings.

Mitigation Action Table	
Jurisdiction	Van Alstyne
Hazard	Wind Storm
Priority (High, Medium, Low)	Low
Description of Mitigation Action	Sponsor a citizen education program to inform public of the benefits of inspecting their property for overhanging tress limbs on aerial power lines and reporting potential problems to power company to avoid loss of power due to broken limbs pulling down power lines during windstorms.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, etc) Cost/Benefit (narrative of benefit expected from investment)*	Minimal staff time required. Benefit includes reduced opportunity for temporary power loss due to power transmission lines being pulled down by falling tree limbs.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal general funds
Responsible Party *(Position or Title)*	City Administrator and Electrical Superintendent
Implementation Schedule *(1 to 5 years timeframe)*	One to three years
Effects on New Buildings	Positive effect on new buildings by preventing power outages.
Effect on Existing Buildings	Positive effect on existing buildings by preventing power outages.

Mitigation Action Table	
Jurisdiction	Van Alstyne
Hazard	Tornado
Priority (High, Medium, Low)	High
Description of Mitigation Action	1. Training of City personnel and citizens. 2. Storm watches. 3. Early warning. 4. back-up equipment. 5. Safe houses. 6. Shelters. 7. Emergency Management Plan. 8. Mutual Aid Agreement. 9. Command Center. 10. EDC
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	What cost you invest on Mitigation is worth the cost on response time. Tornado events can cause large damages that justify expenses on investing in protecting citizens and property.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal funds, CD's, Grants, Loans
Responsible Party *(Position or Title)*	Mayor
Implementation Schedule *(1 to 5 years timeframe)*	1. Upgrade equipment 2. Warning system 3. Financing (saving) 4. Tech
Effects on New Buildings	New buildings have safe rooms
Effect on Existing Buildings	Warning systems by Code Red weather alert radio. Storm cellars.

Mitigation Action Table	
Jurisdiction	Van Alstyne
Hazard	Severe Winter Storm
Priority (High, Medium, Low)	Low
Description of Mitigation Action	Send for Radar Tree trimming Food & Water storage Generators (back up) List of elderly/handicapped Articles in newspaper
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Emergency funds will be used to cover expenses. Most significant cost includes the backup generator's capital cost.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal
Responsible Party *(Position or Title)*	Public Safety
Implementation Schedule *(1 to 5 years timeframe)*	Two to three years
Effects on New Buildings	New buildings will benefit by giving citizens warning on how to protect their buildings during a severe winter storm. Weather proof. Back-up energy sources.
Effect on Existing Buildings	Existing buildings will benefit by giving citizens warning on how to protect their buildings during a severe winter storm. Weather proof.

Mitigation Action Table	
Jurisdiction	Van Alstyne
Hazard	Hailstorm
Priority (High, Medium, Low)	Low
Description of Mitigation Action	Protect city-owned vehicles and other assets in the event of a hailstorm by relocating vehicles to roofed areas and constructing additional parking areas for police cruisers.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Limited staff time, investment in constructing roofed areas. Reduce damage to city assets.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal General Funds.
Responsible Party *(Position or Title)*	City Mayor
Implementation Schedule *(1 to 5 years timeframe)*	Two to three years
Effects on New Buildings	No effect on new buildings.
Effect on Existing Buildings	No effect on existing buildings.

Mitigation Action Table	
Jurisdiction	Van Alstyne
Hazard	Hailstorm
Priority (High, Medium, Low)	Low
Description of Mitigation Action	Encourage citizens to inspect and report tree limbs above their properties or over hanging close to power lines to avoid power outage during hailstorms.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Minimum cost associated with public awareness program. Benefits to reduce power outage caused by overhanging tree limbs.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal funds
Responsible Party *(Position or Title)*	City Administrator
Implementation Schedule *(1 to 5 years timeframe)*	Two to three years
Effects on New Buildings	Positive effect on new buildings by preventing power outages.
Effect on Existing Buildings	Positive effect on existing buildings by preventing power outages.

Mitigation Action Table	
Jurisdiction	Van Alstyne
Hazard	Extreme Temperatures
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Educate People through the use of news media and handouts. Local charities (donation/education through local charities). Enforce all burn bans enacted by the County. Water conservation.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Cost is greater than effectiveness.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal and Water revenues
Responsible Party *(Position or Title)*	City Mayor
Implementation Schedule *(1 to 5 years timeframe)*	
Effects on New Buildings	No direct impact on new buildings.- installation and energy efficient
Effect on Existing Buildings	No direct impact on existing buildings. Installation- energy

Mitigation Action Table	
Jurisdiction	Van Alstyne
Hazard	Drought
Priority (High, Medium, Low)	Low
Description of Mitigation Action	Water conservation plan Water storage Safe drinking water
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Cost is justified by the savings in water and protection of citizens
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Savings on water
Responsible Party *(Position or Title)*	City Manager
Implementation Schedule *(1 to 5 years timeframe)*	Under the City's Conservation Plan- Planning for the future
Effects on New Buildings	No direct impact on new buildings.
Effect on Existing Buildings	No direct impact on existing buildings.

Mitigation Action Table	
Jurisdiction	Van Alstyne
Hazard	Earthquake
Priority (High, Medium, Low)	Low
Description of Mitigation Action	No evidence of a serious threat exists
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	N/A
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	N/A
Responsible Party *(Position or Title)*	N/A
Implementation Schedule *(1 to 5 years timeframe)*	N/A
Effects on New Buildings	N/A
Effect on Existing Buildings	N/A

City of Whitesboro
Mitigation Goals and Actions

Developing Mitigation Goals and Actions for Grayson County Hazard Mitigation Plan (HMP)

Goals are general guidelines that explain what you want to achieve. They are usually broad policy-type statements, long term, and represent global visions. The following **Goals** appear in the State of Texas Mitigation Plan and are suggested for the Grayson County HMP:

- Reduce or eliminate hazardous conditions that cause loss of life
- Reduce or eliminate hazardous conditions that inflict injuries
- Reduce or eliminate hazardous conditions that cause property damage
- Reduce or eliminate hazardous conditions that degrade important natural resources

Mitigation Actions are specific actions that help you achieve your goals. **At least two actions needs to be recorded per each hazard identified in the Risk Assessment.**

Examples:
Elevate three historic structures located in the downtown district
Sponsor a community fair to promote wildfire defensible space
Retrofit the police department to withstand high wind damage

***Note:** Please include mitigation actions in the HMP that may be eligible for FEMA funding.*

Priority Ranking, please indicate your "vote". **(Low, Medium, High)**

Questions to consider when ranking mitigation actions:
- Is the proposed action socially acceptable and will all citizens be treated fairly?
- Is the action compatible with present and future community values?
- Is the action technically feasible and will it move the community towards its goal?
- Does the City have the legal authority to implement the action?
- Does the City have the technical capability to implement the action?

***Note:** Funding is often a constraint; at this time, do not allow that to influence your indication of priorities. One purpose of the plan is to help support efforts to secure funding for implementation.*

Please fill out the sections in the following tables.

Mitigation Action Table	
Jurisdiction	City of Whitesboro
Hazard	Flooding
Priority (High, Medium, Low)	Low
Description of Mitigation Action	Maintaining and clearing existing storm drainage infrastructure and waterways.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Requires personnel and equipment provided for in existing budget practices. Benefits are expected to yield effective removal of storm water.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	City budget.
Responsible Party *(Position or Title)*	City Administrator
Implementation Schedule *(1 to 5 years timeframe)*	Ongoing
Effects on New Buildings	Potentially prevents flooding in new buildings
Effect on Existing Buildings	Maintains positive drainage for existing structures

Mitigation Action Table	
Jurisdiction	City of Whitesboro
Hazard	Flooding
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Improve drainage for storm water runoff on West South street.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Requires minimal modifications to existing storm water runoff structures to better handle excessive rainfall events. Costs include materials and labor. Benefit Better control of runoff and potential for residential and commercial property damage.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	General Funds or grants
Responsible Party *(Position or Title)*	City Administrator
Implementation Schedule *(1 to 5 years timeframe)*	The project will be complete within next 2 years
Effects on New Buildings	N/A
Effect on Existing Buildings	Minimize existing potential for water intrusion into structures and property

Mitigation Action Table	
Jurisdiction	City of Whitesboro
Hazard	Flooding
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Extension of Fourth Street to improve traffic and drainage capabilities East of Union Street.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Will require considerable infrastructure expense including engineering and construction costs. Resulting benefit expected to reduce potential for residential and commercial property damage and improve access to Hwy 377
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Bonds, other loan funds, or grants
Responsible Party *(Position or Title)*	City Administrator
Implementation Schedule *(1 to 5 years timeframe)*	The engineering phase and partial drainage improvements can be performed over the next 4 years. Pavement and grade separations will fall under a 10 year plan.
Effects on New Buildings	Improved drainage will benefit new development in this area.
Effect on Existing Buildings	Improved drainage will benefit the North end of the Park Place Addition and Center Street Park.

Mitigation Action Table	
Jurisdiction	City of Whitesboro
Hazard	Landslide
Priority (High, Medium, Low)	Low
Description of Mitigation Action	Based on the existing topography landslides are not considered a potential hazard in the community.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	N/A
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	N/A
Responsible Party *(Position or Title)*	N/A
Implementation Schedule *(1 to 5 years timeframe)*	N/A
Effects on New Buildings	N/A
Effect on Existing Buildings	

Mitigation Action Table	
Jurisdiction	City of Whitesboro
Hazard	Wildfires
Priority (High, Medium, Low)	Low
Description of Mitigation Action	Enforcement of existing ordinances and building codes minimizes the potential for wildfire hazards within' the City of Whitesboro.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Staff time enforcing ordinances greatly reduces the adverse impacts of wildfires
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	General Fund
Responsible Party *(Position or Title)*	Code Enforcement, Building Inspector, Police Cheif
Implementation Schedule *(1 to 5 years timeframe)*	Ongoing
Effects on New Buildings	Minimizes Risk
Effect on Existing Buildings	Minimizes Risk

Mitigation Action Table	
Jurisdiction	City of Whitesboro
Hazard	Wildfires
Priority (High, Medium, Low)	Low
Description of Mitigation Action	Provide education programs to help reduce the risk of wildfires.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	The Volunteer Fire Department's donation of time greatly benefits the community in reducing the potential for wildfires.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	General Fund
Responsible Party *(Position or Title)*	Fire Cheif
Implementation Schedule *(1 to 5 years timeframe)*	One Year
Effects on New Buildings	Reduced risk to new structures
Effect on Existing Buildings	Reduced risk to existing structures

Mitigation Action Table	
Jurisdiction	City of Whitesboro
Hazard	Lightning
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Provide alternate sources of electrical power to critical infrastructure (i.e. Wells, Lift Stations, Public Safety Facilities)
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Significant expense to provide backup power is offset by the ability to function during adverse power events
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	General Funds, loans, grants
Responsible Party *(Position or Title)*	City Administrator
Implementation Schedule *(1 to 5 years timeframe)*	3-5 years to be fully implemented
Effects on New Buildings	Ability to service essential water and wastewater functions during power outages
Effect on Existing Buildings	Ability to service essential water and wastewater functions during power outages

Mitigation Action Table	
Jurisdiction	City of Whitesboro
Hazard	Lightning
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Promote grounding of electrical power lines for critical facilities and infrastructure.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Significant expense for equipment (and staff time for installation offset by ability to continue providing power during lightning events.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal general funds, loan funds and/or grant funds.
Responsible Party *(Position or Title)*	City Administrator
Implementation Schedule *(1 to 5 years timeframe)*	One to two years
Effects on New Buildings	Positive effect based on continued ability to provide power to new buildings.
Effect on Existing Buildings	Positive effect based on continued ability provide power to existing buildings.

Mitigation Action Table	
Jurisdiction	City of Whitesboro
Hazard	Land Subsidence
Priority (High, Medium, Low)	Low
Description of Mitigation Action	Based on Whitesboro's geologic characteristics land subsidence is not considered a potential threat.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	N/A
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	N/A
Responsible Party *(Position or Title)*	N/A
Implementation Schedule *(1 to 5 years timeframe)*	N/A
Effects on New Buildings	N/A
Effect on Existing Buildings	N/A

Mitigation Action Table	
Jurisdiction	City of Whitesboro
Hazard	Expansive Soils
Priority (High, Medium, Low)	High
Description of Mitigation Action	Materials analysis and sound engineering practices to minimize potential movement in all construction.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Initial engineering costs and construction practices that minimize potential sub-grade impacts on new construction are offset by extended service-life of the structure and reduced maintenance costs
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	General Fund, Loans, and Grants
Responsible Party *(Position or Title)*	City Administrator, City Engineer
Implementation Schedule *(1 to 5 years timeframe)*	Ongoing effort
Effects on New Buildings	Minimizes maintenance costs of the life of the structure.
Effect on Existing Buildings	Minimizes maintenance costs of the life of the structure.

Mitigation Action Table	
Jurisdiction	City of Whitesboro
Hazard	Expansive Soils
Priority (High, Medium, Low)	High
Description of Mitigation Action	Provide with stabilization methods prior construction or reconstruction
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Additional preparation costs (i.e. lime stabilization) necessary for road construction off-sets the expense of future road rehabilitation costs if appropriate pre-construction measures are not taken. Benefit includes providing for a better, more durable road.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal general funds, loan funds and/or grant funds.
Responsible Party *(Position or Title)*	City Administrator, City Engineer
Implementation Schedule *(1 to 5 years timeframe)*	One to three years
Effects on New Buildings	Positive effect on new buildings by minimizing repair work for longer lasting roads.
Effect on Existing Buildings	Positive effect on existing buildings by minimizing repair work for longer lasting roads.

Mitigation Action Table	
Jurisdiction	City of Whitesboro
Hazard	Dam and Levee Failure
Priority (High, Medium, Low)	Low
Description of Mitigation Action	No dam or levees, or dam or levees not located in hazard areas
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	N/A
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	N/A
Responsible Party *(Position or Title)*	N/A
Implementation Schedule *(1 to 5 years timeframe)*	N/A
Effects on New Buildings	N/A
Effect on Existing Buildings	N/A

Mitigation Action Table	
Jurisdiction	City of Whitesboro
Hazard	Wind Storm
Priority (High, Medium, Low)	High
Description of Mitigation Action	Proactive tree trimming and clearing program throughout the City of Whitesboro
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Substantial costs associated with line clearing and tee trimming. Benefits include more reliable electric system and reduced emergency manpower costs.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Proprietary Fund
Responsible Party *(Position or Title)*	City Administrator, Electrical Superintendent
Implementation Schedule *(1 to 5 years timeframe)*	Ongoing
Effects on New Buildings	Improved electricity reliability
Effect on Existing Buildings	Improved electricity reliability

Mitigation Action Table	
Jurisdiction	City of Whitesboro
Hazard	Wind Storm
Priority (High, Medium, Low)	High
Description of Mitigation Action	Sponsor a citizen education program to inform public of the benefits of inspecting their property for overhanging tress limbs on aerial power lines and reporting potential problems to power company to avoid loss of power due to broken limbs pulling down power lines during windstorms.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, etc) Cost/Benefit (narrative of benefit expected from investment)*	Minimal staff time required. Benefit includes reduced opportunity for temporary power loss due to power transmission lines being pulled down by falling tree limbs.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal general funds
Responsible Party *(Position or Title)*	City Administrator and Electrical Superintendent
Implementation Schedule *(1 to 5 years timeframe)*	One to three years
Effects on New Buildings	Positive effect on new buildings by preventing power outages.
Effect on Existing Buildings	Positive effect on existing buildings by preventing power outages.

Mitigation Action Table	
Jurisdiction	City of Whitesboro
Hazard	Tornado
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Expand warning and notification capabilities
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Cost to maintain and expand outdoor warning system and cost to participate in Code Red and Weather Warning program. Benefits include increased awareness and proactive response to deteriorating weather conditions
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	General Fund, grants
Responsible Party *(Position or Title)*	City Administrator, Chief of Police, Fire Cheif
Implementation Schedule *(1 to 5 years timeframe)*	Ongoing effort
Effects on New Buildings	Early warning for inhabitants
Effect on Existing Buildings	Early warning for inhabitants

Mitigation Action Table	
Jurisdiction	City of Whitesboro
Hazard	Tornado
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	• Retrofit water and wastewater facilities with alternative power sources in the event of a tornado. • Construct a shelter
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	High capital expenditure needed to implement. Large benefits expected from preventing power outages and providing shelter in case of tornado.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Grants
Responsible Party *(Position or Title)*	City Administrator
Implementation Schedule *(1 to 5 years timeframe)*	Four to five years
Effects on New Buildings	Positive effect by ensuring power supply to new buildings.
Effect on Existing Buildings	Positive effect by ensuring power supply to existing buildings.

Mitigation Action Table	
Jurisdiction	City of Whitesboro
Hazard	Severe Winter Storm
Priority (High, Medium, Low)	High
Description of Mitigation Action	Proactive tree trimming and clearing program throughout the City of Whitesboro
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Substantial costs associated with line clearing and tee trimming. Benefits include more reliable electric system and reduced emergency manpower costs.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Proprietary Fund
Responsible Party *(Position or Title)*	City Administrator, Electrical Superintendent
Implementation Schedule *(1 to 5 years timeframe)*	Ongoing
Effects on New Buildings	Improved electricity reliability
Effect on Existing Buildings	Improved electricity reliability

Mitigation Action Table	
Jurisdiction	City of Whitesboro
Hazard	Severe Winter Storm
Priority (High, Medium, Low)	High
Description of Mitigation Action	Precipitation clearing and granular material applications to primary road surfaces
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Manpower, equipment, and materials costs offset by the ability to deliver municipal services during a severe winter event.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	General Fund
Responsible Party *(Position or Title)*	City Administrator, Chief of Police, Street Superintendent
Implementation Schedule *(1 to 5 years timeframe)*	Ongoing policy as needed
Effects on New Buildings	N/A
Effect on Existing Buildings	N/A

Mitigation Action Table	
Jurisdiction	City of Whitesboro
Hazard	Severe Winter Storm
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Provide alternate sources of electrical power to critical infrastructure (i.e. Wells, Lift Stations, Public Safety Facilities)
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Significant expense to provide backup power is offset by the ability to function during extended power outages
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	General Funds, loans, grants
Responsible Party *(Position or Title)*	City Administrator
Implementation Schedule *(1 to 5 years timeframe)*	3-5 years to be fully implemented
Effects on New Buildings	Ability to service essential water and wastewater functions during extended power outages
Effect on Existing Buildings	Ability to service essential water and wastewater functions during extended power outages

Mitigation Action Table	
Jurisdiction	City of Whitesboro
Hazard	Hailstorm
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Preservation of equipment through the use and construction of roofed areas and safety of personnel during a hailstorm
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Cost to provide additional shelter to equipment is offset by availability of that equipment following a hailstorm event
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	General Fund
Responsible Party *(Position or Title)*	City Administrator, Department Heads
Implementation Schedule *(1 to 5 years timeframe)*	50% complete in 1 – 2 years, 100% complete 3- % years
Effects on New Buildings	N/A
Effect on Existing Buildings	N/A

Mitigation Action Table	
Jurisdiction	City of Whitesboro
Hazard	Hailstorm
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Require high quality metal roof systems on new City facilities and repairs when possible.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Initial cost increases are returned over time with roof service life, reduced insurance premiums and energy efficiency
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal Funs, Loans, Grants
Responsible Party *(Position or Title)*	City Administrator
Implementation Schedule *(1 to 5 years timeframe)*	Ongoing
Effects on New Buildings	Better return on investment, reduced maintenance costs
Effect on Existing Buildings	Better return on investment, reduced maintenance costs

Mitigation Action Table	
Jurisdiction	City of Whitesboro
Hazard	Extreme Temperatures
Priority (High, Medium, Low)	High
Description of Mitigation Action	Vehicles and equipment are maintained or conditioned for anticipated extreme weather conditions
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Budgeted expenditures are minimal. Benefits are readiness of all vehicles and equipment when needed and elimination of damages caused by extreme temperatures.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	General Fund
Responsible Party *(Position or Title)*	Mechanic, Department Heads
Implementation Schedule *(1 to 5 years timeframe)*	Ongoing
Effects on New Buildings	Elimination of damage caused by extreme temperatures (i.e. frozen pipes, pump damage) on City maintained property
Effect on Existing Buildings	Elimination of damage caused by extreme temperatures (i.e. frozen pipes, pump damage) on City maintained property

Mitigation Action Table	
Jurisdiction	City of Whitesboro
Hazard	Extreme Temperatures
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Provide public information materials to citizens including helpful safety tips, public assistance availability from governmental agencies and other services which may be available to handle extreme temperature situations.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Staff time and publishing/copying expense necessary to prepare and print educational materials in relation to the potential benefit of providing useful, potentially life-saving information to the public.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal general funds
Responsible Party *(Position or Title)*	City Administrator
Implementation Schedule *(1 to 5 years timeframe)*	Within one year
Effects on New Buildings	No effect on new buildings.
Effect on Existing Buildings	No effect on existing buildings.

Mitigation Action Table	
Jurisdiction	City of Whitesboro
Hazard	Drought
Priority (High, Medium, Low)	High
Description of Mitigation Action	Drought and water conservation plan
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Staff time to prepare and administer plan. Benefits include the ability to maintain precious resources when conditions require.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	General Fund, Grants, Loans
Responsible Party *(Position or Title)*	City Administrator
Implementation Schedule *(1 to 5 years timeframe)*	Ongoing
Effects on New Buildings	Maintains essential water services during extreme conditions
Effect on Existing Buildings	Maintains essential water services during extreme conditions

Mitigation Action Table	
Jurisdiction	City of Whitesboro
Hazard	Drought
Priority (High, Medium, Low)	High
Description of Mitigation Action	Incorporate drought tolerant or xeriscape practices into landscape ordinances to reduce dependence on irrigation
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Cost associated with revising ordinances in place to require xeriscape practices for new development. Benefits expected in overall water conservation practices.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal funds
Responsible Party *(Position or Title)*	City Administrator
Implementation Schedule *(1 to 5 years timeframe)*	Two to three years
Effects on New Buildings	No effects in new buildings
Effect on Existing Buildings	No effects in existing buildings

Mitigation Action Table	
Jurisdiction	City of Whitesboro
Hazard	Earthquake
Priority (High, Medium, Low)	Low
Description of Mitigation Action	No evidence of a serious threat exists
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	N/A
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	N/A
Responsible Party *(Position or Title)*	N/A
Implementation Schedule *(1 to 5 years timeframe)*	N/A
Effects on New Buildings	N/A
Effect on Existing Buildings	N/A

City of Whitewright
Mitigation Goals and Actions

Developing Mitigation Goals and Actions for Grayson County Hazard Mitigation Plan (HMP)

Goals are general guidelines that explain what you want to achieve. They are usually broad policy-type statements, long term, and represent global visions. The following **Goals** appear in the State of Texas Mitigation Plan and are suggested for the Grayson County HMP:

- Reduce or eliminate hazardous conditions that cause loss of life
- Reduce or eliminate hazardous conditions that inflict injuries
- Reduce or eliminate hazardous conditions that cause property damage
- Reduce or eliminate hazardous conditions that degrade important natural resources

Mitigation Actions are specific actions that help you achieve your goals. **At least two actions needs to be recorded per each hazard identified in the Risk Assessment.**

Examples:
Elevate three historic structures located in the downtown district
Sponsor a community fair to promote wildfire defensible space
Retrofit the police department to withstand high wind damage

***Note:** Please include mitigation actions in the HMP that may be eligible for FEMA funding.*

Priority Ranking, please indicate your "vote". **(Low, Medium, High)**

Questions to consider when ranking mitigation actions:
- Is the proposed action socially acceptable and will all citizens be treated fairly?
- Is the action compatible with present and future community values?
- Is the action technically feasible and will it move the community towards its goal?
- Does the City have the legal authority to implement the action?
- Does the City have the technical capability to implement the action?

***Note:** Funding is often a constraint; at this time, do not allow that to influence your indication of priorities. One purpose of the plan is to help support efforts to secure funding for implementation.*

Please fill out the sections in the following tables.

Mitigation Action Table	
Jurisdiction	Whitewright
Hazard	Floods
Priority (High, Medium, Low)	High
Description of Mitigation Action	Take advantage of County-provided educational material on the NFIP and actively promote city residents to participate in the NFIP.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Very low cost activity which can provide a high benefit.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Low (Budget)
Responsible Party *(Position or Title)*	City Mayor and Public Works Director
Implementation Schedule *(1 to 5 years timeframe)*	< 1 year
Effects on New Buildings	Can be significant
Effect on Existing Buildings	Can be significant

Mitigation Action Table	
Jurisdiction	Whitewright
Hazard	Flooding
Priority (High, Medium, Low)	High
Description of Mitigation Action	Clearing and re-channelization existing creeks that flow from west to east. Areas impacted include subdivision privately owned properties along a line from Highway 160 to Highway 11
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Will require significant infrastructure expense including engineering and construction costs. Resulting benefit expected to reduce potential for residential loss and reduce or eliminate injuries and loss of life.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal general funds, loan funds and/or grant funds.
Responsible Party *(Position or Title)*	City Mayor and Public Works Director
Implementation Schedule *(1 to 5 years timeframe)*	One to five years
Effects on New Buildings	Eliminates potential flooding of new buildings located along project area.
Effect on Existing Buildings	Eliminates potential flooding of existing buildings located along project area.

Mitigation Action Table	
Jurisdiction	Whitewright
Hazard	Flooding
Priority (High, Medium, Low)	High
Description of Mitigation Action	Continue efforts to apply for the NFIPs Community Rating System Program
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Cost is low compared to the benefit of participating in the program. Efforts are already underway
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal general funds
Responsible Party *(Position or Title)*	City Mayor
Implementation Schedule *(1 to 5 years timeframe)*	One year
Effects on New Buildings	Reduces potential flooding of new buildings located along project area by exceeding the minimum NFIP requirements.
Effect on Existing Buildings	Reduces potential flooding of existing buildings located along project area by exceeding the minimum NFIP requirements.

Mitigation Action Table	
Jurisdiction	Whitewright
Hazard	Landslide
Priority (High, Medium, Low)	Low
Description of Mitigation Action	Based on the topography of the City of Whitewright, landslides are not considered a potential hazard.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	
Responsible Party *(Position or Title)*	
Implementation Schedule *(1 to 5 years timeframe)*	
Effects on New Buildings	
Effect on Existing Buildings	

Mitigation Action Table	
Jurisdiction	Whitewright
Hazard	Wildfires
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Provide community wide education programs to help reduce the risk of wildfires.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Limited staff time necessary to conduct education program(s) in relation to the potential benefit of reduced number of wildfires.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal general funds, grants and budget from the fire department
Responsible Party *(Position or Title)*	City Mayor and Fire Chief
Implementation Schedule *(1 to 5 years timeframe)*	Within two years
Effects on New Buildings	Potential to save new buildings from wildfires.
Effect on Existing Buildings	Potential to save existing buildings from wildfires.

Mitigation Action Table	
Jurisdiction	Whitewright
Hazard	Wildfires
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Enforce burn bans enacted by the County.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Time required to review/modifying existing ordinances and enforcement efforts related to the enforcement of Grayson County burn bans. Cost is moderate.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal general funds
Responsible Party *(Position or Title)*	City Mayor and Fire Chief
Implementation Schedule *(1 to 5 years timeframe)*	One to three years
Effects on New Buildings	Potential to save new buildings from wildfires.
Effect on Existing Buildings	Potential to save existing buildings from wildfires.

Mitigation Action Table	
Jurisdiction	Whitewright
Hazard	Lightning
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Provide wastewater facilities including plant and lift stations with alternative power in the event of lightning strikes (generators)
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Cost - Very expensive for equipment generators and staff time needed for installation. Benefits – continued compliance and environmental controls
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal general funds, loan funds and/or grant funds.
Responsible Party *(Position or Title)*	City Mayor, Public Works Director
Implementation Schedule *(1 to 5 years timeframe)*	One to two years
Effects on New Buildings	Positive effect based on continued ability to except sewerage from new buildings.
Effect on Existing Buildings	Positive effect based on continued ability to except sewerage from existing buildings.

Mitigation Action Table	
Jurisdiction	Whitewright
Hazard	Lightning
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Promote grounding of electrical power lines for critical facilities and infrastructure.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Significant expense for equipment (and staff time for installation offset by ability to continue providing power during lightning events.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal general funds, loan funds and/or grant funds.
Responsible Party *(Position or Title)*	City Mayor, Public Works Director
Implementation Schedule *(1 to 5 years timeframe)*	One to two years
Effects on New Buildings	Positive effect based on continued ability to provide power to new buildings.
Effect on Existing Buildings	Positive effect based on continued ability provide power to existing buildings.

Mitigation Action Table	
Jurisdiction	Whitewright
Hazard	Land Subsidence
Priority (High, Medium, Low)	Low
Description of Mitigation Action	Based on the geological formations underlying Whitewright, land subsidence is not considered a potential hazard.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	
Responsible Party *(Position or Title)*	
Implementation Schedule *(1 to 5 years timeframe)*	
Effects on New Buildings	
Effect on Existing Buildings	

Mitigation Action Table	
Jurisdiction	Whitewright
Hazard	Expansive Soils
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Provide with lime stabilization for road construction
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Additional preparation costs (i.e. lime stabilization) necessary for road construction off-sets the expense of future road rehabilitation costs if appropriate pre-construction measures are not taken. Benefit includes providing for a better, more durable road.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal general funds, loan funds and/or grant funds.
Responsible Party *(Position or Title)*	City Mayor, Public Works Director
Implementation Schedule *(1 to 5 years timeframe)*	On going on an as needed basis.
Effects on New Buildings	Positive effect on new buildings by minimizing repair work for longer lasting roads.
Effect on Existing Buildings	Positive effect on existing buildings by minimizing repair work for longer lasting roads.

Mitigation Action Table	
Jurisdiction	Whitewright
Hazard	Expansive Soils
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Control the design and construction of the foundation and foundation spaces for all buildings.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Cost - Time required on the revision of existing ordinances and city codes to require specific foundation requirements to minimize effects from expansive soils. Benefit – minimization of the effects on buildings from expansive soils
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal funds
Responsible Party *(Position or Title)*	City Manager, Building Inspector
Implementation Schedule *(1 to 5 years timeframe)*	On going on an as needed basis.
Effects on New Buildings	Positive effect on new buildings by minimizing foundation problems in structures.
Effect on Existing Buildings	Positive effect on existing buildings by minimizing foundation problems in structures.

Mitigation Action Table	
Jurisdiction	Whitewright
Hazard	Dam and Levee Failure
Priority (High, Medium, Low)	Low
Description of Mitigation Action	There are no dams or levees in the Whitewright area that would create a hazard if they were to fail.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	
Responsible Party *(Position or Title)*	
Implementation Schedule *(1 to 5 years timeframe)*	
Effects on New Buildings	
Effect on Existing Buildings	

Mitigation Action Table	
Jurisdiction	Whitewright
Hazard	Wind Storm
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Overhanging trees on power lines. Report any identified potential problem areas to local power company for mitigation
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, etc) Cost/Benefit (narrative of benefit expected from investment)*	Cost – Staff time Benefit – reducing power outages from tree branches overhanging power lines
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal general funds and assistance from power company
Responsible Party *(Position or Title)*	City Mayor and Public Works Director
Implementation Schedule *(1 to 5 years timeframe)*	One year
Effects on New Buildings	Positive effect on new buildings by preventing power outage.
Effect on Existing Buildings	Positive effect on existing buildings by preventing power outage.

Mitigation Action Table	
Jurisdiction	Whitewright
Hazard	Wind Storm
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Sponsor a citizen education program to inform public of the benefits of inspecting their property for overhanging tress limbs on aerial power lines and reporting potential problems to power company to avoid loss of power due to broken limbs pulling down power lines during windstorms.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Minimal staff time required. Benefit includes reduced opportunity for temporary power loss due to power transmission lines being pulled down by falling tree limbs.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal general funds
Responsible Party *(Position or Title)*	City Mayor Public Works Director
Implementation Schedule *(1 to 5 years timeframe)*	On going
Effects on New Buildings	Positive effect on new buildings by preventing power outages.
Effect on Existing Buildings	Positive effect on existing buildings by preventing power outages.

Mitigation Action Table	
Jurisdiction	Whitewright
Hazard	Tornado
Priority (High, Medium, Low)	High
Description of Mitigation Action	Water and wastewater facilities with alternative power generators, hard wiring to prepare for power outage.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Cost - Very expensive for equipment generators and staff time needed for installation. Benefits – continued compliance and environmental controls
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal general funds, loan funds and/or grant funds.
Responsible Party *(Position or Title)*	City Manager, Public Works Director, Fire and Police Chiefs
Implementation Schedule *(1 to 5 years timeframe)*	Due to size and anticipated cost, project will need to be completed in stages with grants.
Effects on New Buildings	Positive effect based on continued ability to except sewerage from and provide water to new buildings.
Effect on Existing Buildings	Positive effect based on continued ability to except sewerage from and provide water to new buildings.

Mitigation Action Table	
Jurisdiction	Whitewright
Hazard	Tornado
Priority (High, Medium, Low)	High
Description of Mitigation Action	Review and update current alert and warning procedures and systems.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Some capital improvement money required to increase the number of outdoor warning sirens in the city and expand coverage of existing three sirens and cost to participate in automated warning notification systems such as Code Red and Weather Warning program. Benefits will include expanded coverage for outdoor sirens and earlier warning capabilities.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal general funds, loan funds and/or grant funds.
Responsible Party *(Position or Title)*	City Manager, Public Works Director, Fire Chief, Police Chief
Implementation Schedule *(1 to 5 years timeframe)*	Two to five years
Effects on New Buildings	No effects on new buildings.
Effect on Existing Buildings	No effects on existing buildings.

Mitigation Action Table	
Jurisdiction	Whitewright
Hazard	Severe Winter Storm
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Water and wastewater facility alternative power (generators).
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Significant expense for equipment (generators) and staff time for installation offset by ability to continue treating sewerage and providing water in the event of a power loss associated with a severe winter storm. Benefits also include continued regulatory compliance and environmental controls.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal general funds or grants.
Responsible Party *(Position or Title)*	City Mayor, Public Works Director
Implementation Schedule *(1 to 5 years timeframe)*	One to five years
Effects on New Buildings	Positive effect based on continued ability to except sewerage from and provide water to new buildings.
Effect on Existing Buildings	Positive effect based on continued ability to except sewerage from and provide water to new buildings.

Mitigation Action Table	
Jurisdiction	Whitewright
Hazard	Severe Winter Storm
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Inspect overhanging tress limbs on all aerial power line routes to eliminate loss of power due to broken limbs pulling down power lines during severe winter storms. Report any identified potential problem areas to local power company for mitigation.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Minimal staff time required. Benefit includes reduced opportunity for temporary power loss due to power transmission lines being pulled down by falling tree limbs.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal general funds
Responsible Party *(Position or Title)*	City Mayor, Public Works Director
Implementation Schedule *(1 to 5 years timeframe)*	One to three years
Effects on New Buildings	Positive effect on new buildings by ensuring power supply.
Effect on Existing Buildings	Positive effect on existing buildings by ensuring power supply.

Mitigation Action Table	
Jurisdiction	Whitewright
Hazard	Hailstorm
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Protect city-owned vehicles and other assets.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Cost - Some capital expenditures and staff time required to construct covered parking areas for police and maintenance vehicles. Benefit - reduced damages to city assets out-weigh the cost to provide protective coverings.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal general funds
Responsible Party *(Position or Title)*	City Mayor, Public Works Director
Implementation Schedule *(1 to 5 years timeframe)*	One to two years depending on funding availability.
Effects on New Buildings	No effect on new buildings
Effect on Existing Buildings	No effects on existing buildings.

Mitigation Action Table	
Jurisdiction	Whitewright
Hazard	Hailstorm
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Encourage citizens to inspect and report tree limbs above their properties or over hanging close to power lines to avoid power outage during hailstorms.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Cost - Minimum cost associated with public awareness program Benefit – reduction on power outages
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal general funds
Responsible Party *(Position or Title)*	City Mayor, Public Works Director
Implementation Schedule *(1 to 5 years timeframe)*	One to two years
Effects on New Buildings	Positive effect on new buildings by minimizing power outage.
Effect on Existing Buildings	Positive effect on existing buildings by minimizing power outage.

Mitigation Action Table	
Jurisdiction	Whitewright
Hazard	Extreme Temperatures
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Ensure that City-owned property (such as EMS vehicles) is capable of withstanding extreme temperature.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Limited staff time required with little actual expenditure of funds. Benefit includes fleet of vehicles which are capable of withstanding extreme temperature changes.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal general funds.
Responsible Party *(Position or Title)*	Public Works Director
Implementation Schedule *(1 to 5 years timeframe)*	On going
Effects on New Buildings	No effect on new buildings.
Effect on Existing Buildings	No effect on existing buildings.

Mitigation Action Table	
Jurisdiction	Whitewright
Hazard	Extreme Temperatures
Priority (High, Medium, Low)	Medium
Description of Mitigation Action	Provide public information materials to citizens including helpful safety tips, public assistance availability from governmental agencies and other services which may be available to handle extreme temperature situations.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	Limited staff time and publishing/copying expense necessary to prepare and print educational materials in relation to the potential benefit of providing useful, potentially life-saving information to the public.
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	Municipal general funds
Responsible Party *(Position or Title)*	City Manager
Implementation Schedule *(1 to 5 years timeframe)*	One to two years
Effects on New Buildings	No effect on new buildings.
Effect on Existing Buildings	No effect on existing buildings.

Mitigation Action Table	
Jurisdiction	Whitewright
Hazard	Drought
Priority (High, Medium, Low)	Low
Description of Mitigation Action	No agricultural entities located within Whitewright's limits
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	
Responsible Party *(Position or Title)*	
Implementation Schedule *(1 to 5 years timeframe)*	
Effects on New Buildings	
Effect on Existing Buildings	

Mitigation Action Table	
Jurisdiction	Whitewright
Hazard	Earthquake
Priority (High, Medium, Low)	Low
Description of Mitigation Action	Based on historical review, earthquakes are not considered a potential hazard in Whitewright.
Cost Effectiveness (Cost vs. Benefits) **Example: type of cost (capital, staff time, ect) Cost/Benefit (narrative of benefit expected from investment)*	
Potential Funding Source *(Municipal, Funds, Grants, etc.)*	
Responsible Party *(Position or Title)*	
Implementation Schedule *(1 to 5 years timeframe)*	
Effects on New Buildings	
Effect on Existing Buildings	

Implementation of National Flood Insurance Program

Implementation of National Flood Insurance Program (NFIP)

Requirement 201.6(c)(3)(ii): [The mitigation strategy] must also address the jurisdiction's participation in the NFIP, and continued compliance with NFIP requirements, as appropriate.

Participation in the NFIP is based on an agreement between communities and FEMA. Three basic aspects are:

- Floodplain identification and mapping
- Floodplain management
- Flood Insurance

Please fill out the following table and identify if you participate in the NFIP.

National Flood Insurance Program (NFIP)	
Jurisdiction	Bells
Participant? **"Yes" or "No"**	No
If "Yes" • Please describe how your jurisdiction participates in the NFIP *and* • Please analyze and prioritize actions related to continued compliance with NFIP **You may cite local floodplain regulations for participation (flood damage prevention ordinances, building codes, subdivision regulations)* **Actions could include requesting a Community Assistance Visit (CAV) from the TWDP NFIP Field Service Office, and/or applying for the NFIP's Community Rating System (CRS) Program*	
If "No" • Please describe why the community does not participate **Example: The community has not adopted the FEMA issued flood maps*	The Town of Bells is not currently a participant in the NFIP. Participation will be pursued as part of the mitigation actions to make flood insurance available to residents.

National Flood Insurance Program (NFIP)	
Jurisdiction	Collinsville
Participant? **"Yes" or "No"**	Yes
If "Yes" • Please describe how your jurisdiction participates in the NFIP *and* • Please analyze and prioritize actions related to continued compliance with NFIP **You may cite local floodplain regulations for participation (flood damage prevention ordinances, building codes, subdivision regulations)* **Actions could include requesting a Community Assistance Visit (CAV) from the TWDP NFIP Field Service Office, and/or applying for the NFIP's Community Rating System (CRS) Program*	The City has adopted FEMA Floodplain Mapping and floodplain management regulations are reflected in the building codes and subdivision development ordinances. City residents are eligible for the National Flood Insurance Program.
If "No" • Please describe why the community does not participate **Example: The community has not adopted the FEMA issued flood maps*	

National Flood Insurance Program (NFIP)	
Jurisdiction	Dorchester
Participant? **"Yes" or "No"**	No
If "Yes" • Please describe how your jurisdiction participates in the NFIP *and* • Please analyze and prioritize actions related to continued compliance with NFIP **You may cite local floodplain regulations for participation (flood damage prevention ordinances, building codes, subdivision regulations)* **Actions could include requesting a Community Assistance Visit (CAV) from the TWDP NFIP Field Service Office, and/or applying for the NFIP's Community Rating System (CRS) Program*	Subdivision regulations address flood areas, national flood maps used for reference in studying plats. Researching in the near future when City adopted FEMA flood maps.
If "No" • Please describe why the community does not participate **Example: The community has not adopted the FEMA issued flood maps*	

National Flood Insurance Program (NFIP)	
Jurisdiction	Gunter
Participant? "Yes" or "No"	Yes
If "Yes" • Please describe how your jurisdiction participates in the NFIP *and* • Please analyze and prioritize actions related to continued compliance with NFIP **You may cite local floodplain regulations for participation (flood damage prevention ordinances, building codes, subdivision regulations)* **Actions could include requesting a Community Assistance Visit (CAV) from the TWDP NFIP Field Service Office, and/or applying for the NFIP's Community Rating System (CRS) Program* --- ***If "No"*** • Please describe why the community does not participate **Example: The community has not adopted the FEMA issued flood maps*	The City of Gunter has an ordinance in place to implement actions to minimize losses from flooding. The ordinance is in compliance with the NFIP program and city residents are eligible for flood insurance

National Flood Insurance Program (NFIP)	
Jurisdiction	Howe
Participant? **"Yes" or "No"**	Yes
If "Yes" • Please describe how your jurisdiction participates in the NFIP *and* • Please analyze and prioritize actions related to continued compliance with NFIP **You may cite local floodplain regulations for participation (flood damage prevention ordinances, building codes, subdivision regulations)* **Actions could include requesting a Community Assistance Visit (CAV) from the TWDP NFIP Field Service Office, and/or applying for the NFIP's Community Rating System (CRS) Program* --- ***If "No"*** • Please describe why the community does not participate **Example: The community has not adopted the FEMA issued flood maps*	The City of Howe has an ordinance in place to implement actions to minimize losses from flooding. The ordinance is in compliance with the NFIP program an d city re sidents are el egible for flood insurance.

National Flood Insurance Program (NFIP)	
Jurisdiction	Knollwood
Participant? **"Yes" or "No"**	No
If "Yes" • Please describe how your jurisdiction participates in the NFIP *and* • Please analyze and prioritize actions related to continued compliance with NFIP **You may cite local floodplain regulations for participation (flood damage prevention ordinances, building codes, subdivision regulations)* **Actions could include requesting a Community Assistance Visit (CAV) from the TWDP NFIP Field Service Office, and/or applying for the NFIP's Community Rating System (CRS) Program*	
If "No" • Please describe why the community does not participate **Example: The community has not adopted the FEMA issued flood maps*	Based on experience of flooding issues, participation on the NFIP has not been considered a necessary action.

National Flood Insurance Program (NFIP)	
Jurisdiction	Pottsboro
Participant? "Yes" or "No"	Yes
If "Yes" • Please describe how your jurisdiction participates in the NFIP *and* • Please analyze and prioritize actions related to continued compliance with NFIP **You may cite local floodplain regulations for participation (flood damage prevention ordinances, building codes, subdivision regulations)* **Actions could include requesting a Community Assistance Visit (CAV) from the TWDP NFIP Field Service Office, and/or applying for the NFIP's Community Rating System (CRS) Program*	Code of Ordinances- Chapter 3 Article 3.1100- Flood Damage and Prevention Ordinance The City of Pottsboro has requested compliance review of existing ordinances by FEMA- the ordinance was founds to be in compliance for the next "couple of years."
If "No" • Please describe why the community does not participate **Example: The community has not adopted the FEMA issued flood maps*	

National Flood Insurance Program (NFIP)	
Jurisdiction	Sadler
Participant? **"Yes" or "No"**	No
If "Yes" • Please describe how your jurisdiction participates in the NFIP *and* • Please analyze and prioritize actions related to continued compliance with NFIP **You may cite local floodplain regulations for participation (flood damage prevention ordinances, building codes, subdivision regulations)* **Actions could include requesting a Community Assistance Visit (CAV) from the TWDP NFIP Field Service Office, and/or applying for the NFIP's Community Rating System (CRS) Program* ***If "No"*** • Please describe why the community does not participate **Example: The community has not adopted the FEMA issued flood maps*	Based on experience with flooding issues, participation in NFIP has not been necessary.

National Flood Insurance Program (NFIP)	
Jurisdiction	Sherman
Participant? "Yes" or "No"	Yes
If "Yes" • Please describe how your jurisdiction participates in the NFIP *and* • Please analyze and prioritize actions related to continued compliance with NFIP **You may cite local floodplain regulations for participation (flood damage prevention ordinances, building codes, subdivision regulations)* **Actions could include requesting a Community Assistance Visit (CAV) from the TWDP NFIP Field Service Office, and/or applying for the NFIP's Community Rating System (CRS) Program* ***If "No"*** • Please describe why the community does not participate **Example: The community has not adopted the FEMA issued flood maps*	The City of Sherman has adopted FEMA Floodplain Mapping. The City of Sherman has adopted Floodplain Management regulations that are reflected in the building codes and subdivision development ordinances. Residents of the City of Sherman are eligible for participation in the National Flood Insurance Program. The City of Sherman has requested restudies of areas know to be in error on the FEMA maps. The City of Sherman has requested FEMA Floodplain Mapping for additional areas of the city to reflect the impact of the city's new flood control lakes.

National Flood Insurance Program (NFIP)	
Jurisdiction	Southmayd
Participant? **"Yes" or "No"**	Yes
If "Yes" • Please describe how your jurisdiction participates in the NFIP *and* • Please analyze and prioritize actions related to continued compliance with NFIP **You may cite local floodplain regulations for participation (flood damage prevention ordinances, building codes, subdivision regulations)* **Actions could include requesting a Community Assistance Visit (CAV) from the TWDP NFIP Field Service Office, and/or applying for the NFIP's Community Rating System (CRS) Program*	In 2007, implementation of resolution was been set in place and approved by City members. Enforcement is through the Planning and Zoning department.
If "No" • Please describe why the community does not participate **Example: The community has not adopted the FEMA issued flood maps*	

National Flood Insurance Program (NFIP)	
Jurisdiction	Tioga
Participant? "Yes" or "No"	Yes
If "Yes" • Please describe how your jurisdiction participates in the NFIP *and* • Please analyze and prioritize actions related to continued compliance with NFIP **You may cite local floodplain regulations for participation (flood damage prevention ordinances, building codes, subdivision regulations)* **Actions could include requesting a Community Assistance Visit (CAV) from the TWDP NFIP Field Service Office, and/or applying for the NFIP's Community Rating System (CRS) Program*	The City of Tioga will continue to study the area and to use FEMA 100-yr floodplain maps to ensure that any necessary actions are pursued to minimize flood related damages. Consideration is being given to requesting a Community Assistance Visit (CAV) to ensure that any planned actions are appropriate.
If "No" • Please describe why the community does not participate **Example: The community has not adopted the FEMA issued flood maps*	

National Flood Insurance Program (NFIP)	
Jurisdiction	Tom Bean
Participant? **"Yes" or "No"**	No
If "Yes" • Please describe how your jurisdiction participates in the NFIP *and* • Please analyze and prioritize actions related to continued compliance with NFIP **You may cite local floodplain regulations for participation (flood damage prevention ordinances, building codes, subdivision regulations)* **Actions could include requesting a Community Assistance Visit (CAV) from the TWDP NFIP Field Service Office, and/or applying for the NFIP's Community Rating System (CRS) Program*	
If "No" • Please describe why the community does not participate **Example: The community has not adopted the FEMA issued flood maps*	The City of Tom Bean is not currently a participant in the NFIP. Participation will be pursued as part of the mitigation actions to make flood insurance available to residents.

National Flood Insurance Program (NFIP)	
Jurisdiction	Van Alstyne
Participant? "Yes" or "No"	Yes
If "Yes" • Please describe how your jurisdiction participates in the NFIP *and* • Please analyze and prioritize actions related to continued compliance with NFIP **You may cite local floodplain regulations for participation (flood damage prevention ordinances, building codes, subdivision regulations)* **Actions could include requesting a Community Assistance Visit (CAV) from the TWDP NFIP Field Service Office, and/or applying for the NFIP's Community Rating System (CRS) Program* ***If "No"*** • Please describe why the community does not participate **Example: The community has not adopted the FEMA issued flood maps*	The City of Van Alstyne has an ordinance in place to implement actions to minimize losses from flooding. The ordinance is in compliance with the NFIP program and city residents are eligible for flood insurance

National Flood Insurance Program (NFIP)	
Jurisdiction	Whitesboro
Participant? **"Yes" or "No"**	No
If "Yes" • Please describe how your jurisdiction participates in the NFIP *and* • Please analyze and prioritize actions related to continued compliance with NFIP **You may cite local floodplain regulations for participation (flood damage prevention ordinances, building codes, subdivision regulations)* **Actions could include requesting a Community Assistance Visit (CAV) from the TWDP NFIP Field Service Office, and/or applying for the NFIP's Community Rating System (CRS) Program*	
If "No" • Please describe why the community does not participate **Example: The community has not adopted the FEMA issued flood maps*	The City of Whitesboro is not prone to flooding. Flood zones within' the City Limits are minimal and located at the bottoms of intermittent creeks. The storm water issues the City of Whitesboro deals with are related to runoff water and not rising water.

National Flood Insurance Program (NFIP)	
Jurisdiction	Whitewright
Participant? **"Yes" or "No"**	Yes
If "Yes" • Please describe how your jurisdiction participates in the NFIP *and* • Please analyze and prioritize actions related to continued compliance with NFIP **You may cite local floodplain regulations for participation (flood damage prevention ordinances, building codes, subdivision regulations)* **Actions could include requesting a Community Assistance Visit (CAV) from the TWDP NFIP Field Service Office, and/or applying for the NFIP's Community Rating System (CRS) Program*	The City Council adopted Ordinance #459 Flood Damage Prevention to comply with Texas Water Code, Section 16.315, to help minimize flood losses. To review and update ordinance with state law and review areas in the City of Whitewright that have a potential hazard. Requesting assistance from TWDP-NFIP Field Service Office and/or applying for NFIP's Community Rating System Program
If "No" • Please describe why the community does not participate **Example: The community has not adopted the FEMA issued flood maps*	