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City of Dripping Springs Annex Section 1: Organize and Review

This section contains a brief description of the City of Dripping Springs and its jurisdictional features. In addition, Section 1 contains the following details regarding Dripping Springs':

- participation in the Hays County HMP Update process,
- stakeholder engagement,
- public outreach strategy,
- incorporation efforts, and
- plan maintenance procedures.

Figure DS.1, City of Dripping Springs

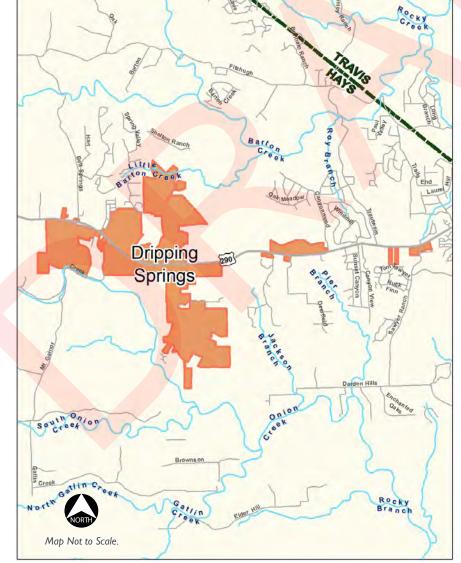
*Population :	2,032
Size of Community:	6.2 sq. miles
*Population over 65 years old	262
*Population under 16 years old	584
*Economically Disadvantaged Population (\$0-\$20k)	41
Dripping Springs is serviced by the following responders:	
Fire - North Hays County Fire Rescue	
EMS - San Marcos Hays County EMS	
Law Enforcement - Hays County Sheriff's Office	

^{*}HAZUS-MH 3.2 Updated Census 2010 Population Estimates



When planning, it is important to take into account the characteristics that make a community unique. Consideration of unique needs when it comes to mitigating or recovering from natural hazards ensures that all members of the community and their needs are addressed.

Dripping Springs lies about 25 miles west of Austin. Although the population is small within the City limits, the community has experienced a large surge of development in their Extraterritorial Jurisdiction areas with over 30,000 residents. There have been 2 recent annexations, 1 of which was residential and another that was commercial. At present, the greatest rate of growth is east of the City limits, but new subdivisions have been added west and northwest recently, and several have requested annexation before construction has even begun. This expansion of the City limits is expected to continue well past 2020 and will impact hazard mitigation planning.



Incorporated in 1981 and known as the "Gateway to the Hill Country", Dripping Springs is served by Dripping Springs ISD.

Dripping Springs is a Type A General Law City governed by a Mayor and 4 Council members. Dripping Springs' major employers are shown in Table DS.1. Main utility providers are shown in Table DS.2.

Table DS.1, Major Employers



Business Type	Name of Employer		
Government	Dripping Springs ISD		
Retail	Home Depot		
Retail	HEB		
Construction	Patriot Erectors		

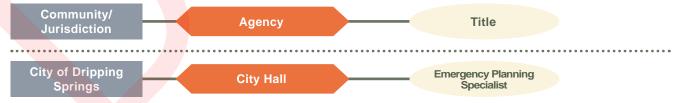
Table DS.2, Utility Providers

Туре	Provider	
Electric	Pedernales Electric Cooperative (PEC)	
Natural Gas	Texas Gas Service	
Water	Dripping Springs Water Supply Corporation	
Cable	Spectrum	

Planning Committee

Planners who represented Dripping Springs in the update process are collectively known as the Dripping Springs Mitigation Planning Committee (MPC) and are shown in Figure DS.2.

Figure DS.2, Planning Committee Membership



Community Planning Involvement

MPC planning activities for the Hays County Hazard Mitigation Plan (HMP) Update are captured in Figure DS.3, which utilizes check-marks to indicate each of the activities that were completed by the Dripping Springs MPC.

Figure DS.3, City of Dripping Springs Plan Participation

Meetings



- ✓ Kick-Off
- Risk Assessment
- Mitigation Strategy

Data Submission



- ✓ Planner's Survey Data Collection Spreadsheet/ **GIS Data**
- ✓ Planning Worksheets
- ✓ Phone Interview

Public Involvement



City Council/Commissioner's Court Agenda Items

✓ Public Survey Posting/ Collection



Stakeholders

During the Phase 1 Kick-Off Meeting, planners were provided with a Planner/Stakeholder worksheet, referred to in Chapter 1, the Plan Process portion of the Hays County HMP Update. This document allowed planners to identify stakeholders for inclusion in the Risk Assessment and Mitigation Strategy Meetings. Table DS.3 identifies the stakeholders that were invited to participate by the following email:

Good Morning,

You or your organization has been identified by a local community planner as a stakeholder (interested/affected party) for the Hays County Hazard Mitigation Plan Update process. The planning team, made up of community officials from throughout Hays County, is working to update this plan that identifies actions for reducing and mitigating the risk from natural hazards (flood, tornado, severe winter, etc...) affecting Hays County and the communities within it. If your schedule allows, your insight would be valuable at a meeting being held on Thursday, January 12, 2017, from 1 p.m. to 4 p.m. at

Wimberley Community Center

14068 Ranch Road 12 Wimberley, TX 78676

Please register for the Hazard Mitigation Plan Update- Risk Assessment Meeting. https://www.eventbrite.com/e/hays-county-hazardmitigation-plan-update-risk-assessment-meeting-registration-30892049953

If unable to complete registration on the Eventbrite site, please reply to this email and indicate who will attend from your organization so that the meeting facility can be prepared for the proper number of attendees.

JWSA and Halff Associates are providing coordination and facilitation support for this process for Hays County and participating communities utilizing FEMA mitigation grant funding. Any questions regarding this meeting can be directed to Paloma Alaniz at palaniz@halff.com.

Thank you.



Table DS.3, Plan Stakeholders

Jurisdiction	Agency	Title
City of Dripping Springs	Legal	City Attorney
City of Dripping Springs	Public Works and Development/ Planning/Transportation/Streets	Director
City of Dripping Springs	Public Works and Development	Code Enforcement Manager and Building Official
City of Dripping Springs	Parks and Recreation	Manager
City of Dripping Springs	Sanitation	Deputy City Administrator
City of Dripping Springs	Government	City Administrator
City of Dripping Springs	Government	Constable
City of Dripping Springs	Planning Commission	Chair
City of Dripping Springs	Government	Mayor
Dripping Springs Chamber of Commerce	Non-Profit	Director
Dripping Springs HEB	Industry	Store Manager
Dripping Springs Home Depot	Industry	Store Manager
Dripping Springs ISD	School District	Superintendent
Dripping Springs ISD	School District	Emergency Management Coordinator
Dripping Springs Patriot Erectors	Industry	HR/Accounts Payable
Dripping Springs Water Supply	Water <mark>Co</mark> mpany	General Manager

Outreach Strategy

The City of Dripping Springs was very active in their outreach activities used to request public participation in the Hays County HMP Update.

Public Survey Promotion

Dripping Springs advertised the Hays County HMP Update Public Survey on the City Facebook page, local newspaper and other local social media platforms.

As of March 10, 2017, Dripping Springs had 36 residents respond to the public survey. A copy of the survey questions can be found in Appendix A of the Hays County HMP Update. Details on how the survey data was directly incorporated into the Risk Ranking process for hazards is included in Chapter 2, the Risk Assessment portion of the Hays County HMP Update.

Plan Phase Newsletters

Dripping Springs MPC utilized newsletters for each phase of the planning process in order to share updates on the planning process with stakeholders, elected officials, City staff and the public. Copies of the newsletters can be found in Plan Appendix A of the Hays County HMP Update.

Plan Draft Public Review and Comment Period

The draft Hays County HMP Update was posted on the City of Dripping Springs website from July 12, 2017 to July 26, 2017. A hard copy was placed in the Dripping Springs City Hall. Comments were collected via

Incorporation of Sources

In addition to stakeholder and public input, the MPC also reviewed other planning resources that could provide useful information to the plan update process. Table DS.4 lists the documents reviewed and how they were considered for incorporation in the updated plan.

Table DS.4, Review/Incorporation of Sources

Name of Document	Туре	How Incorporated
2013 State of Texas HMP	Plan	Utilized hazard definitions and hazard classification names.
Flood Insurance Study	Study	Incorporated best available hydraulic and hydrologic study results for flood hazard profile.
City Code of Ordinances	Regulations	Reviewed all ordinances for possible incorporation opportunities. (City of Dripping Springs , 2017)
Parks, Recreation and Open Space Master Plan	Regulations	Incorporated concept of "Natural Resource Park" when considering action items. (Luck Design Team, 2015)
Tax Increment Reinvestment Zone Plan	Plan	Reviewed for incorporation of Mitigation Actions. • Old Fitzhugh Rd. Street & Drainage Improvements • Ramirez Lane Street & Drainage Improvements (City of Dripping Springs, 2016)
Dripping Springs City-Wide Trails Plan	Plan	Reviewed for incorporation of mitigation activities. (none found) (City of Dripping Springs, 2015)
2010 Comprehensive Plan Implementation Guide	Plan	Reviewed for consideration or incorporation of mitigation activities Goal L2: Develop a Plan for the Triangle Property Action: Develop plan for landscaping, lighting, parking and other improvements with cost-estimates within limitations of location within 100 year floodplain (flood focus). Goal L3 Develop conceptual plan for road, drainage, and lighting improvements along Old Fitzhugh (flood focus). Goal L8: Ensure appropriate development standards to protect water quality of the springs and other area water bodies (drought and flood focus). Goal I1: Incorporate Water Reuse Ordinance into revision process (focus). Goal I2: Explore new options for wastewater reuse, including potable reuse (drought focus). Goal I3: Review Hays County plan to identify equipment and facilities needed in Dripping Springs for Emergency Management (all hazards needs focus, generator needs worked into this goal). Goal I5: Ensure new development connects to existing development and develop additional connectivity where feasible in existing development (evacuation focus). Goal I6: Continue to support rainwater harvesting, xeriscaping, wastewater, and other conservation efforts (drought and land subsidence focus). Goal P2: Develop City Water Quality and Drainage Plan (flood focus). (City of Dripping Springs, 2016)
City of Dripping Springs Fee Schedule Ordinance 1070.63	Regulations	Reviewed fees to search for fees that could be directed toward mitigation, such as a floodplain development permit fee or drainage. Did not locate such fee. (City of Dripping Springs, 2014)
City of Dripping Springs Residential Building Permit Application	Form	Reviewed permit to find Floodplain Management reference or review fields, did not locate mention to floodplain on form. (City of Dripping Springs, 2017) Also reviewed Residential Plan Review Checklist.

Continued Public Participation in Maintenance Process

The strategy for updates at the local level for the City will include opportunities for public involvement, as shown in Table DS.5.

Table DS.5, Public Involvement for Updates

Activity	Public Involvement	Method Available
Monitoring	The public will be given notice when items will be reviewed and receive the opportunity to review the notes from any notable developments.	Newspaper/Social Media
Evaluation	The public will be given a means to voice their opinion on the completed actions.	SurveyMonkey/Paper Survey
Updates	Once updates are made, the changes will be recorded in a public revision history document.	Newspaper/Social Media/ Council Meeting Announcements/ SurveyMonkey



Table DS.6 lists the method, schedule, and responsible agent for the monitoring, evaluation, and updating of the adopted 2017 HMP within the Plan's 5-year update cycle.

Table DS.6, Hays County HMP Maintenance Schedule, City of Dripping Springs

Task	Scope	Method	Schedule	Responsible Agent
Monitoring	Review mitigation action items using Mitigation Action Progress Report Worksheets (Appendix C of the Hays County HMP Update).		Every 12 months	City of Dripping Springs, Emergency Planning Department, Emergency Planning Coordinator
Evaluation	Jurisdictional	Complete Online Planner Survey (using		City of Dripping Springs, Emergency Planning Department, Emergency Planning Coordinator
Updates	Jurisdictional	Perform updates to Mitigation Strategy to edit/add/omit actions identified during monitoring activities. Conduct post-disaster review of community annex in order to update for significant occurrences, construction of new critical infrastructure or facilities, changes in jurisdictional boundaries and development. Participate in MPC for 5 year HMP update process.	As needed	City of Dripping Springs, Emergency Planning Department, Emergency Planning Coordinator



Section 2: Risk Assessment

City of Dripping Springs Jurisdictional Hazards

This section contains Dripping Springs' hazard profiles for each natural hazard included in the Hays County HMP Update. Profiles include:

- Location the area where the hazard is known to occur
- Previous Occurrences a history of reported events for the hazard
- Significant Previous Occurrences (when applicable) notable hazard events within the community
- Extent the strength or magnitude of the hazard
- Probability the likelihood of the hazard event occurring in the future
- Impact the consequence or effect (or possible effect) of hazard events
- Vulnerability Summary identification of structures, systems, populations or assets susceptible to loss or damage

Hazard descriptions and extent scales for hazard magnitudes, are found in Chapter 2, the Risk Assessment portion of the Hays County HMP Update.

When available, data specific to Dripping Springs was used for hazard analysis. When no instances were reported specifically for the jurisdiction for regional hazards, County-level data was applied.

State and national datasets were used to determine occurrence, extent, and the respective probabilities, rather than verbal testimonies, in an effort to retain data consistency. For some hazards, the National Oceanic and Atmospheric Administration (NOAA) Storm Events Database was used as the most comprehensive data available for hazards. As a result, fatality, injury and damage amounts shown for previous hazard occurrences do not always reflect the most recent totals. The Previous Occurrences paragraph identifies instances in which this may occur. Verbal testimony, when available, was integrated into impact or vulnerability summaries.

Hazards profiled within the Risk Assessment include:

Drought

Extreme Heat

Severe Winter Storms

Lightning

Hailstorms

Windstorms

Tornadoes

Expansive Soils

Floods

Land Subsidence

Hurricanes/Tropical Storms

Earthquakes

Dam/Levee Failure

Wildfires





Drought

Drought: Location

Drought occurs on a regional scale, therefore, all of the City of Dripping Springs is equally at risk as it can occur anywhere in the jurisdiction.

Drought: Previous Occurrences

NOAA Storm Events Database documents 27 drought events for Hays County since the year 1996 (see Table DS.7). Although there were no drought events reported specifically for Dripping Springs, the jurisdiction would have been affected by the events that were reported for the surrounding County area.

, injury and damage amounts are shown in Table DS.7, per the NOAA Storm Events Database. Community testimony indicates that these amounts do not reflect the most recent totals, however NOAA data is being used as the best source of information available for the record period.

Table DS.7, Reported Drought Occurrence, Hays County

Location	Date	Туре	Fatalities	Injuries	Property Damage	Crop Damage
HAYS (ZONE)	4/1/1996	Drought	0	0	0.00	0.00
HAYS (ZONE)	5/1/1996	Drought	0	0	0.00	0.00
HAYS (ZONE)	6/1/1996	Drought	0	0	0.00	0.00
HAYS (ZONE)	7/1/1996	Drought	0	0	0.00	0.00
HAYS (ZONE)	8/1/1996	Drought	0	0	0.00	0.00
HAYS (ZONE)	7/1/2000	Drought	0	0	0.00	0.00
HAYS (ZONE)	8/1/2000	Drought	0	0	0.00	0.00
HAYS (ZONE)	9/1/2000	Drought	0	0	0.00	0.00
HAYS (ZONE)	10/1/2000	Drought	0	0	0.00	0.00
HAYS (ZONE)	5/1/2011	Drought	0	0	0.00	0.00
HAYS (ZONE)	6/1/2011	Drought	0	0	0.00	0.00
HAYS (ZONE)	7/1/2011	Drought	0	0	0.00	0.00
HAYS (ZONE)	8/1/2011	Drought	0	0	0.00	0.00
HAYS (ZONE)	9/1/2011	Drought	0	0	0.00	0.00
HAYS (ZONE)	10/1/2011	Drought	0	0	0.00	0.00
HAYS (ZONE)	11/1/2011	Drought	0	0	0.00	0.00
HAYS (ZONE)	12/1/2011	Drought	0	0	0.00	0.00
HAYS (ZONE)	1/1/2012	Drought	0	0	0.00	0.00
HAYS (ZONE)	6/1/ <mark>201</mark> 2	Drought	0	0	0.00	0.00
HAYS (ZONE)	12/1/2012	Drought	0	0	0.00	0.00
HAYS (ZONE)	2/1/2013	Drought	0	0	0.00	0.00
HAYS (ZONE)	3/1/2013	Drought	0	0	0.00	0.00
HAYS (ZONE)	4/1/2013	Drought	0	0	0.00	0.00
HAYS (ZONE)	6/1/2013	Drought	0	0	0.00	0.00
HAYS (ZONE)	7/1/2013	Drought	0	0	0.00	0.00
HAYS (ZONE)	8/1/2013	Drought	0	0	0.00	0.00
HAYS (ZONE)	8/1/2014	Drought	0	0	0.00	0.00
Total					\$0.00	\$0.00



Drought: Significant Past Events

Several significant regional drought events have previously impacted the City. Refer to the *Drought: Significant Past Events* paragraph within Section 2, the Risk Assessment portion of the Hays County Annex for narratives discussing these events.

Drought: Extent

The US Drought Monitor Drought Intensity scale classifies drought by 5 categories, D0 through D4. According to the reported previous drought occurrences in the jurisdiction, the maximum drought extent experienced is a Category D4 drought. Refer to Chapter 2, the Risk Assessment portion of the Hays County HMP Update, for a description of the US Drought Monitor Drought Intensity Index.

Drought: Probability

Based on 6 years with reported drought events from the NOAA Storm Events Database within 20 years, a drought event occurs approximately once every 3 years on average in Hays County. Since drought events can happen anywhere throughout the HMP update area and occur on a regional scale, the City of Dripping Springs' future probability is assumed to be similar to the surrounding County areas, and therefore can expect a drought event approximately once every 3 years on average, with up to a Category D4 Drought.

Number of Years with Reported Event (Drought Year)	Number of Years in Dataset	Probability
6	20	0.30

Drought: Impact

Table DS.8 and DS.9 list the impact of drought from the years 1996 to 2016 for Hays County according to the Drought Impact Reporter. The DIR is the nation's first comprehensive database of drought impacts. This database contains information from multiple Federal agencies, such as NOAA and United States Geological Survey (USGS), related to drought impacts from a national to city level by category and extent of impact. While there are no impacts reported specifically for the City of Dripping Springs, the effects of drought are not confined to jurisdictional boundaries and occur on a regional scale. Impacts reported at the Hays County level are applicable in illustrating impact to Dripping Springs.

Table DS.8, Reported Drought Impacts, Hays County

Hays County Drought Impacts 1996-2016					
Category	# of Incidents Reported				
Agriculture	45				
Business & Industry	3				
Energy	2				
Fire	24				
Plants & Wildlife	33				
Relief, Response & Restrictions	48				
Society & Public Health	7				
Tourism & Recreation	3				
Water Supply & Quality	53				

Table DS.9, Reported Drought Impacts, Dripping Springs

Dripping Springs Drought Impacts 1996- 2016							
Category	# of Incidents Reported						
Agriculture	0						
Business & Industry	0						
Energy	0						
Fire	0						
Plants & Wildlife	0						
Relief, Response & Restrictions	0						
Society & Public Health	0						
Tourism & Recreation	0						
Water Supply & Quality	1						

(University of Nebraska-Lincoln, 2016)

(University of Nebraska-Lincoln, 2016)





Drought: Vulnerability Summary

The majority of the City of Dripping Springs uses the Dripping Springs Water Supply Corporation as its source of water, which has 4 wells in the area. Most residents in Eastern Dripping Springs receive their water from the West Travis County Utility District. The utility district utilizes water from the Lower Colorado River Authority.

The wells have been consistent with water availability and maintain good water pressure. Drought is a concern but not a predominant 1 for Dripping Springs. A significant drought (Category D5) could put a strain on wells that had not previously experienced shortages.





Extreme Heat

Extreme Heat: Location

Extreme heat occurs on a regional scale; therefore, all of the City of Dripping Springs is equally at risk as it can occur anywhere in the jurisdiction.

Extreme Heat: Previous Occurrences

NOAA's Online Weather Data (NOWData) provides temperature data ranging from 2000 to 2016. NOAA's National Weather Service (NWS) Heat Index (located in Chapter 2, the Risk Assessment portion of the Hays County HMP Update) indicates that temperatures meeting or exceeding 90°F are designated with an "Extreme Caution" or greater warning classification. According to Canyon Dam Station, the closest local weather data collection center with comprehensive data, the mean number of days with a daily max temperature equal or greater to 90°F is 94 days. Currently, the greatest number of days during which the jurisdiction experienced extreme heat is 119 in 2008 while the highest temperature experienced was 109°F in August 2011 (a "Danger" NWS Heat Index classification). Canyon Dam Station is the closest reporting NOWData station to the jurisdiction and applies equally to the City of Dripping Springs due to the regional nature of extreme heat occurrence.

Extreme Heat: Extent

Extreme heat extent is classified by temperatures, as well as event level designations, within the NWS Heat Index. The extent of extreme heat that the City of Dripping Springs has experienced can be derived from the data provided from NOWData at Canyon Dam Station since the year 2000. The highest daily mean temperature experienced was 109°F in August 2011. This event is classified by the NWS Heat Index as "Danger". Refer to Chapter 2, the Risk Assessment portion of the Hays County HMP Update, for a description of heat extent scale, NOAA's NWS Heat Index.



The probability of future events can be determined by assessing historical averages. Since extreme heat events occur on a regional scale, the City of Dripping Springs' future probability is assumed to be similar to the area surrounding Canyon Dam Station. Based on NOWData, the City can expect, on average, approximately 94 days a year with temperatures equal or greater to 90°F, and up to a "Danger" warning classification per the NOAA NWS Heat Index. As extreme heat events have occurred every year since 2000, the probability of extreme heat affecting the community is 100% in any given year.

Extreme Heat: Impact

Extreme heat has physical impacts on the public and the infrastructure that supports them. According to the Texas Health Care Information Collection and Trauma Registry from the Texas Department of State Health Services' Injury Epidemiology & Surveillance Branch, the following number of patients were received in Hays County medical facilities for Heat Related Injuries and Trauma, as shown in Tables DS.10 and DS.11.

Table DS. 10, Hays County Hospital Inpatient Data, Extreme Heat

Description	2010	2011	2012	2013	2014
Accidents caused by excessive heat due to weather conditions	1	3	5	0	0
Accidents due to excessive heat of unspecified origin	1	0	0	0	0

(Texas Department of State Health Services- Injury Epidemiology & Surveillance Branch, 2017)



Table DS.11, Hays County Trauma Data, Extreme Heat

Description	2010	2011	2012	2013	2014
Accidents due to excessive heat of unspecified origin	0	1	0	0	0

(Texas Department of State Health Services- Injury Epidemiology & Surveillance Branch, 2017)



In addition to the physical impacts, an excessive heat event can also be the cause of cascading incidents. Electrical outages could occur due to the high demands of electricity needed to power cooling systems. A loss of critical resources, such as power, has significant impact on the entire population, with higher impacts to those with vulnerabilities to such conditions. The following portion of the City of Dripping Springs' population, according to HAZUS-MH 3.2 updated Census 2010 population estimates, would be greatly impacted by the severe temperatures

related to excessive heat and/or the loss of electrical energy in their dwellings.

Population over 65 years old 262
Population under 16 years old 584
Economically Disadvantaged Population (\$0-\$20k) 41



An organization called Inside Energy (http://insideenergy.org) provided a compiled database outlining 15 years of power outages across the United States from annual data available at the Department of Energy. Within the database, the following excessive heat events affected electrical availability in the areas in or near Hays County (shown in Table DS.12).

Table DS.12, Extreme Heat Affecting Electrical Availability

Event Description	Year	Start Date	Start Time	End Date	Respondent	Location	Customers Affected
Declared Energy Emergency Alert2/Heat Wave	2007	8/14/2007	2:00 p.m.	8/14/2007	American Electric Power (CSWS)	CSWS Control Area of Southwest Power Pool Parts of Oklahoma, Texas, Louisiana, Arkansas	N/A

(Wirfs-Brock, 2014)

Extreme Heat: Vulnerability Summary

Dripping Springs does not have a cooling station plan for the community but does have locations available in order to do so, such as school buildings and Central Fire Station. These structures have backup generator power that would be used in the event that power is disrupted. City Hall is an additional option for a cooling center location, however it does not have a backup generator.







Severe Winter Storms: Location

Severe winter storms occur on a regional scale; therefore, all of the City of Dripping Springs is equally at risk.

Severe Winter Storms: Previous Occurrences

NOAA Storm Events Database documents 13 winter storm events for Hays County since the year 1996 (see Table DS.13). Although there were no winter storm events

reported specifically for the City of Dripping Springs, the jurisdiction would have been affected by the events that were reported for the surrounding County area.

Fatality, injury and damage amounts are shown in Table DS.13, per the NOAA Storm Events Database. Community testimony indicates that these amounts do not reflect the most recent totals, however NOAA data is being used as the best source of information available for the record period.

Table DS.13, Winter Weather Occurrences, Hays County

Location	Date	Туре	Fatalities	Injuries	Property Damage	Crop Damage
HAYS (ZONE)	2/1/1996	Winter Storm	0	0	0.00	0.00
HAYS (ZONE)	1/7/1997	Winter Storm	0	0	0.00	0.00
HAYS (ZONE)	1/11/1997	Winter Storm	0	0	0.00	0.00
HAYS (ZONE)	12/23/1998	Winter Storm	0	0	0.00	0.00
HAYS (ZONE)	12/12/2000	Winter Storm	0	0	0.00	0.00
HAYS (ZONE)	11/28/2001	Winter Storm	0	0	0.00	0.00
HAYS (ZONE)	2/24/2003	Winter Storm	0	0	0.00	0.00
HAYS (ZONE)	12/7/2005	Winter Storm	0	0	0.00	0.00
HAYS (ZONE)	1/15/2007	Winter Storm	0	0	125,000.00	0.00
HAYS (ZONE)	2/3/2011	Winter Storm	0	0	0.00	0.00
HAYS (ZONE)	11/26/2013	Winter Weather	0	0	0.00	0.00
HAYS (ZONE)	1/23/2015	Winter Weather	0	0	0.00	0.00
HAYS (ZONE)	2/16/2015	Winter Weather	0	0	0.00	0.00
	Total		0	0	\$125,000.00	\$0.00

(National Oceanic and Atmospheric Administration Storm Event Database, 2016)

Severe Winter Storms: Significant Past Events

Regionally, there were significant winter weather events that may have impacted the City reported as Hays (Zone) in Table DS.13. Refer to the *Severe Winter Storms: Significant Past Events* section within the Hays County Annex for narratives discussing these events.

Severe Winter Storms: Extent

Ice accumulation is captured and measured with the Regional Snowfall Index (RSI) and the Sperry-Piltz Ice Accumulation (SPIA) Index, as detailed in Chapter 2, the Risk Assessment portion of the Hays County HMP Update. According to the reported previous winter weather occurrences in the jurisdiction, the maximum winter weather extent experienced is a RSI Category 1 snowfall event or SPIA Ice Index Category 2 ice event. Refer to Chapter 2, the Risk Assessment portion of the Hays County HMP Update, for a description of winter weather extent scales.



Severe Winter Storms: Probability

Based on 13 reported events from the NOAA Storm Events Database in 20 years, a winter weather event occurs approximately every 2 years on average in Hays County. There were no events reported specifically for the City of Dripping Springs. Since these events can happen anywhere throughout the HMP update area and occur on a regional scale, the City's future probability is assumed to be similar to the surrounding County areas. The jurisdiction can expect a winter weather event approximately once every 2 years on average in the future, with up to a RSI Category 1 snowfall event or SPIA Ice Index Category 2 ice event.

Number of Reported Events	Number of Years in Dataset	Probability
13	20	0.65

Severe Winter Storms: Impact

Severe winter weather has physical impacts upon the public and the infrastructure that supports them. According to the Texas Health Care Information Collection and Trauma Registry from the Texas Department of State Health Services' Injury Epidemiology & Surveillance Branch, the following number of patients were received in Hays County medical facilities for Cold Related Injuries and Trauma (shown in Table DS.14 & DS.15).

Table DS.14, Hays County Hospital Inpatient Data, Severe Winter Storms

Description	2010	2011	2012	2013	2014
Accidents caused by excessive cold due to weather conditions	2	0	0	0	0
Accidents due to excessive cold of	1	0	0	0	1

(Texas Department of State Health Services- Injury Epidemiology & Surveillance Branch, 2017)

Table DS.15, Hays County Trauma Data, Severe Winter Storms

Description	2010	2011	2012	2013	2014
Accidents due to excessive cold due to weather conditions	1	0	0	0	0

(Texas Department of State Health Services-Injury Epidemiology & Surveillance Branch, 2017)

In addition to the physical impacts, a severe winter storm event can also be the cause of cascading incidents. Electrical outages could occur due to the high demands of electricity needed to power heating systems. A loss of critical resources, such as power, has significant impact on the entire population, with higher impacts to those with vulnerabilities to such conditions. The following portion of Dripping Springs' population, according to HAZUS-MH 3.2 updated Census 2010 population estimates, would be greatly impacted by the extreme temperature conditions related to severe winter storms and/or the loss of electrical energy in their dwellings.

Population over 65 years old 262
Population under 16 years old 584
Economically Disadvantaged Population (\$0-\$20k) 41





An organization called Inside Energy (http://insideenergy.org) provided a compiled database outlining 15 years of power outages across the United States from annual data available at the Department of Energy. Within the database, the following winter storm events affected electrical availability in the areas in or near Hays County (shown in Table DS.16).

Table DS.16, Severe Winter Storms Affecting Electrical Availability

Event Description	Year	Start Date	Start Time	End Date	Respondent	Location	Customers Affected
Cold Weather Event	2011	2/9/2011	4:30 PM	2/10/2011	ERCOT ISO	Texas	N/A
Public Appeal due to Severe Weather - Cold	2014	1/6/2014	7:01 AM	1/7/2014	ERCOT	Texas	N/A
Public Appeal due to Severe Weather - Cold	2014	3/2/2014	7:00 PM	3/4/2014	ERCOT	ERCOT Region Texas	N/A

^{*}Electrical Reliability Council of Texas (ERCOT)

(Wirfs-Brock, 2014)

In addition, severe winter storms and the icy roads that accompany them lead to dangerous driving conditions. City level data available from the Texas Department of Transportation's Crash Records Information System shows that between the years of 2010 and May 2017, Dripping Springs experienced 5 crashes related to sleet/hail conditions (shown in Table DS.17). There were no reported injuries sustained from these crash events.

Table DS.17, Severe Winter Storms, Vehicle Accidents, City of Dripping Springs

City	Fatality	Incapacitating Injury	Non- Incapacitating	Possible Injury	Crash Year	Street Name	Surface Condition	Weather Condition
Dripping Springs	0	0	0	0	2014	US0290	Wet	Sleet/Hail
Dripping Springs	0	0	0	0	2014	US0290	Wet	Sleet/Hail
Dripping Springs	0	0	0	0	2014	RM0012	Ice	Sleet/Hail
Dripping Springs	0	0	0	0	2014	RM0012	Ice	Sleet/Hail
Dripping Springs	0	0	0	0	2015	RM0012	Wet	Sleet/Hail

Crash Rec<mark>ords Inform</mark>ation System Query for Accidents in Dripping Springs from 2010-2017 from non-Clear Weather Conditions (Texas Department of Transportation, 2017)





Severe Winter Storms: Vulnerability Summary

Dripping Springs has 100% surface powerlines, outside of brand new subdivisions. This poses a vulnerability to homes and business during cold temperatures when an accumulation of ice and snow and branches could fall on powerlines. According to community testimony, there was a winter storm in the 1990's that resulted in a power outage that left residents without power for 4 days.

There are no sand spreaders or systems for ice-removal or prevention. No Cityowned streets department or vehicles are designated to help with these efforts. If significant sanding was needed, it would be contracted.







Lightning

Lightning: Location

The entire extent of the City of Dripping Springs is exposed to some degree of lightning hazard. Since lightning can occur at any location, lightning events could be experienced anywhere within the jurisdiction.

Lightning: Previous Occurrences

Figure DS.4 reflects the City of Dripping Springs within the area that was calculated to receive approximately 12 to 15 lightning strikes per square mile per year according to NLDN data for the years 1997 to 2012. There were no lightning events reported specifically for the jurisdiction in the NOAA Storm Events Database.

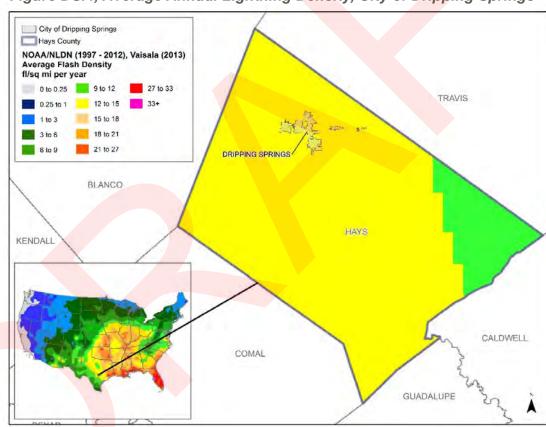


Figure DS.4, Average Annual Lightning Density, City of Dripping Springs

(Vaisala NLDN, 2016)



Lightning: Extent

Due to the lack of reported occurrences, there is not sufficient data to determine the maximum Lightning Activity Level (LAL) for the jurisdiction (refer to Chapter 2, the Risk Assessment portion of the Hays County HMP Update, for a description of the lightning extent scale LAL Grids). However, with the data available, the extent of lightning events that the City of Dripping Springs has experienced can be derived from the NOAA/NLDL data in Figure DS.4, up to 12 to 15 strikes per square mile per year where the City is approximately 6.22 square miles.

Lightning: Probability

Since lightning can occur at any location, lightning events could be experienced anywhere within the jurisdiction. Based on the data provided in Figure DS.4, the City of Dripping Springs can expect future events to fall in line with NLDN data from previous years with an average occurrence of up to approximately 12 to 15 lightning strikes per square mile per year.

Lightning: Impact

The National Lightning Detection Network (NLDN) reported 217 lightning fatalities within the State between the years of 1959 and 2013. According to the Texas Health Care Information Collection and Trauma Registry from the Texas Department of State Health Services' Injury Epidemiology & Surveillance Branch, the 2 patients were received in Hays County medical facilities for Lightning Related Trauma between the years of 2010 and 2014 (shown in Table DS.18).

Table DS.18, Hays County Trauma Registry Data, Lightning Events

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E-Code	Description	2010	2011	2012	2013	2014
907.0	Accidents due to lightning	0	1	0	0	1

(Texas Department of State Health Services-Injury Epidemiology & Surveillance Branch, 2017)

In addition to the physical impacts, lightning events can also be the cause of additional cascading incidents, such as electrical outage events, due to the impact that lightning strikes can have on electrical utility infrastructure. A loss of critical resources such as power has significant impact on the entire population, with higher impacts to those with vulnerabilities to such conditions. The following portion of the City of Dripping Springs' population, according to HAZUS-MH 3.2 updated Census 2010 population estimates, would be greatly impacted by the loss of electrical energy in their dwellings.

Population over 65 years old 262
Population under 16 years old 584
Economically Disadvantaged Population (\$0-\$20k) 41

An organization called Inside Energy (http://insideenergy.org) provided a compiled database outlining 15 years of power outages across the United States from annual data available at the Department of Energy. Within the database, the following thunderstorm/severe storm events affected electrical availability in the areas in or near Hays County (shown in Table DS.19).

Table DS.19, Lightning Affecting Electrical Availability

Event Description	Year	Start Date	Start Time	End Date	Respondent	Location	Customers Affected
Severe Weather	2008	4/9/2008	4:00 p.m.	4/13/2008	Oncor Electric Delivery Company LLC	North, Central and East Texas	488,689
Severe Thunderstorms	2008	6/17/2008	9:01 a.m.	6/19/2008	Oncor Electric Delivery Company LLC	North, Central and East Texas	234,393
Severe Thunderstorms	2008	8/3/2008	1:30 a.m.	8/3/2008	Entergy Corporation	Mississippi, Louisiana, Texas	59,500
Severe Storms	2009	6/10/2009	6:00 p.m.	6/14/2009	Oncor Electric Delivery Company, LLC	North and Central Texas	800,000
Thunderstorms	2010	6/8/2010	11:00 a.m.	6/8/2010	Centerpoint Energy	Southeastern Texas	79,741

(Wirfs-Brock, 2014)



Lightning strikes can also cause wildfire ignitions. According to the National Fire Protection Association (NFPA), "during 2007-2011, U.S. local fire departments responded to an average of 22,600 fires per year that were started by lightning. These fires caused an average of 9 civilian deaths, 53 civilian injuries and \$451 million in direct property damage per year." The source also cites that the fires are more common in June through August and in the late afternoon and evening.

Lightning: Vulnerability Summary

There are multiple cell towers in Dripping Springs that could be greatly impacted if struck by lightning. Lightning has also been the source of structure fires in Dripping Springs in the past (according to community testimony).



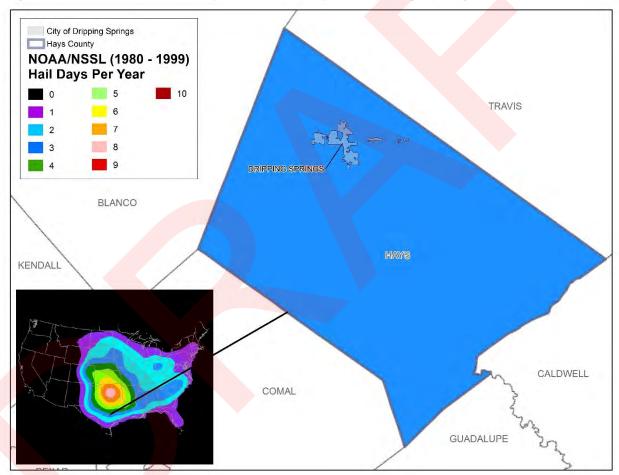
Hailstorms

Hailstorms: Location

The entire extent of the City of Dripping Springs is exposed to some degree of hail hazard. Since hail can occur at any location, hail events could be experienced anywhere within the jurisdiction. NOAA's National Severe Storms Laboratory used historical data from 1980 to 1999 to estimate the daily probability of hail occurrences, of at least 0.75-inch diameter hail across the U.S. Figure DS.5 shows the average number of hail days per year determined from this analysis and the

corresponding location of Dripping Springs. The density of hail days per year in the map's legend indicates the probable number of hail days for each 25-square-mile cell within the contoured zone that can be expected per year. It should be noted that the density number does not indicate the number of events that can be expected within each cell, rather the average number of days per year with 1 or more event occurring within each cell.

Figure DS.5, National Hail Days Per Year, City of Dripping Springs



(National Severe Storms Laboratory, 2016)

Hailstorms: Previous Occurrences

According to the NOAA Storm Events Database, there were 6 documented hail events listed for the City of Dripping Springs and 57 documented events listed for Hays County and its unincorporated jurisdictions from year 1967. While NOAA Storm Events Database lists events since the year 1967 for the City of Dripping Springs, events were not documented per jurisdiction until 1993. The hail events reported for the City of Dripping Springs are shown in the Table DS.20.

Fatality, injury and damage amounts are shown in Table DS.20, per the NOAA Storm Events Database. Community testimony indicates that these amounts do not reflect the most recent totals, however NOAA data is being used as the best source of information available for the record period.



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Table DS.20, Hail Occurrences, City of Dripping Springs

Location	Date	Туре	Extent (mm)	Fatalities	Injuries	Property Damage	Crop Damage
Dripping Springs	3/25/1993	Hail	19.05	0	0	0.00	0.00
Dripping Springs	5/24/1999	Hail	44.45	0	0	0.00	0.00
Dripping Springs	4/7/2000	Hail	25.4	0	0	100,000.00	0.00
Dripping Springs	5/6/2001	Hail	44.45	0	0	0.00	0.00
Dripping Springs	10/13/2004	Hail	25.4	0	0	0.00	0.00
Dripping Springs	4/18/2015	Hail	50.8	0	0	0.00	0.00
	Total			0	0	100,000.00	0.00

(National Oceanic and Atmospheric Administration Storm Event Database, 2016)

Hailstorms: Extent

The Tornado and Storm Research Organization (TORRO) created a hail extent index to measure hail called the Hailstorm Intensity Scale. According to the reported previous hail occurrences in the jurisdiction, the maximum hail extent experienced is hail up to 2 in., or 50.8 mm. in diameter, corresponding to a TORRO Hailstorm Intensity Scale classification of "Destructive." Refer to Chapter 2, the Risk Assessment portion of the Hays County HMP Update, for hail extent scale descriptions.

Hailstorms: Probability

Figure DS.5 reports 3 hail days per year as a result of NLDN's nationwide analysis. Since this calculation is based on national data, a more specific calculation based on local-level NOAA reports was utilized to calculate probability. Based on 6 reported events in 23 years, the City of Dripping Springs can expect a hail event approximately once every 4 years on average in the future with hail up to 2 in., or 50.8 mm. in diameter, corresponding to a TORRO Hailstorm Intensity Scale classification of Destructive."

Number of Reported Events	Number of Years in Dataset	Probability	
6	23	0.26	

Hailstorms: Impact

Hail events in the area have been reported to cause up to \$100,000 in property damages as seen in the NOAA reports for the City. Additional potential impacts can be determined based on the maximum hail extent experienced (50.8 mm), where the TORRO Hailstorm Intensity Scale (found in Chapter 2, the Risk Assessment portion of the Hays County HMP Update) indicates that impact can be expected to include any of the following:

- Varying degrees of damage to vegetation and crops
- Damage to plastic structures
- Varying degrees of damage to glass
- Paint and wood scored
- Vehicle bodywork damage
- Tile roof damage
- Significant risk of injuries
- Varying degrees of aircraft damage
- Brick walls pitted
- Severe roof damage
- Risk of serious injuries

Hailstorms: Vulnerability Summary

The roof types on the City structures could be susceptible to hail. There is not a dedicated sheltering structure for protecting critical City equipment or vehicles, however the livestock arena could be used.





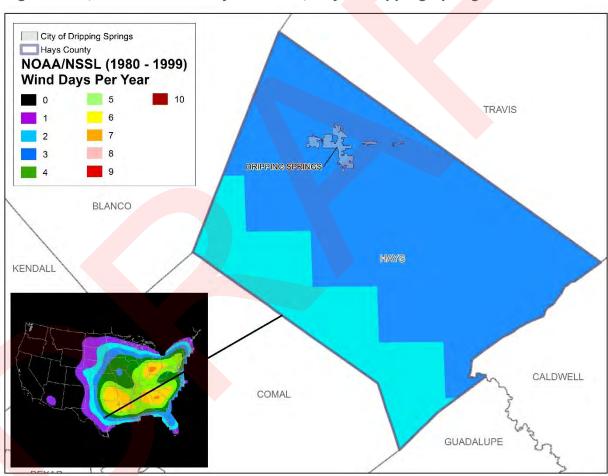
Windstorms

Windstorms: Location

The entire extent of the City of Dripping Springs is exposed to some degree of wind hazard. Since wind can occur at any location, wind events could be experienced anywhere within the jurisdiction. NOAA's National Severe Storms Laboratory used historical data from 1980 - 1999 to estimate the daily probability of wind occurrences across the U.S., with gusts of at least 58 mph. Figure DS.6 shows the estimates for wind days determined from this analysis and the corresponding

location of Dripping Springs. The density of wind days per year in the map's legend indicates the probable number of wind days for each 25-square-mile cell within the contoured zone that can be expected per year. It should be noted that the density number does not indicate the number of events that can be expected within each cell, rather the average number of days per year with 1 or more events occurring within each cell.

Figure DS.6, National Wind Days Per Year, City of Dripping Springs









Windstorms: Previous Occurrences

According to the NOAA Storm Events Database, there were 4 documented wind events listed for the City of Dripping Springs and 38 documented events listed for Hays County and its unincorporated jurisdictions since the year 1974. While NOAA Storm Events Database lists events since 1974 for the County, events were not documented per jurisdiction until 1994. The wind events reported for the City of Dripping Springs are shown in Table DS.21.

Fatality, injury and damage amounts are shown in Table DS.21, per the NOAA Storm Events Database. Community testimony indicates that these amounts do not reflect the most recent totals, however NOAA data is being used as the best source of information available for the record period.

Table DS.21, Reported Wind Events, City of Dripping Springs

Location	Date	Туре	Extent (knots)	Fatalities	Injuries	Property Damage	Crop Damage
Dripping Springs	3/26/2000	Thunderstorm Wind	NA	0	0	20,000.00	0.00
Dripping Springs	10/13/2004	Thunderstorm Wind	60 kts. EG	0	0	50,000.00	0.00
Dripping Springs	4/18/2006	Thunderstorm Wind	70 kts. EG	0	0	0.00	0.00
Dripping Springs	6/12/2014	Thunderstorm Wind	52 kts. EG	0	0	0.00	0.00
	To	otal	0	0	\$70,000.00	\$0.00	

^{*}NA - No data available EG = Estimated Gust

(National Oceanic and Atmospheric Administration Storm Event Database, 2016)

Windstorms: Extent

Wind is measured by the Beaufort Wind Scale that relates wind speed to observed conditions on land and sea. According to the reported previous windstorm occurrences in the jurisdiction, the maximum wind extent experienced was 70 knots (Beaufort Wind Scale Classification: Hurricane). Refer to Chapter 2, the Risk Assessment portion of the Hays County HMP Update, for a description of wind extent scales.

Windstorms: Probability

Based on 4 reported events in 22 years, the City of Dripping Springs can expect a wind event of up to 70 knots or 80.55 miles per hour (Beaufort Wind Scale Classification: Hurricane), approximately once every 5 to 6 years on average in the future.

Number of Reported Events	Number of Years in Dataset	Probability	
4	22	0.18	





Windstorms: Impact

Although there were no reports specifically for the City of Dripping Springs, data available from the Texas Department of Transportation's Crash Records Information System shows that between the years of 2010 and May 2017, rural Hays County experienced 5 crashes related to severe crosswind weather conditions. There were no injuries reported from these crash events. Since wind events occur on a regional scale, it is assumed that weather related crashes in the surrounding County areas would be similar to those experienced in these conditions within Dripping Springs.

Table DS.22, Windstorms, Vehicle Accidents, Hays County

City	Fatality	Incapacitating Injury	Non- Incapacitating	Possible Injury	Crash Year	Street Name	Surface Condition	Weather Condition
Rural Hays County	0	0	0	0	2010	LIME KILN RD	Dry	Severe Crosswinds
Rural Hays County	0	0	0	0	2014	IH0035	Dry	Severe Crosswinds
Rural Hays County	0	0	0	0	2014	IH0035	Dry	Severe Crosswinds
Rural Hays County	0	0	0	0	2014	IH0035	Dry	Severe Crosswinds
Rural Hays County	0	0	0	0	2017	US0290	Wet	Severe Crosswinds

(Texas Department of Transportation, 2017)

Windstorms: Vulnerability Summary

According to community testimony, for which there is no data available for analysis purposes, Dripping Springs experienced a wind storm event in 2012 during which a storm passed through the area diagonally and hit structures in Sunset Canyon. The potential for high wind activity is likely in the community and presently there are not actions being taken to reinforce public buildings.



Tornadoes

Tornadoes: Location

The entire extent of Dripping Springs is exposed to some degree of tornado hazard. Since tornadoes can occur at any location, tornado events could be experienced anywhere within the jurisdiction. NOAA's National Severe Storms Laboratory used historical data from 1980 to 1999 to estimate the daily probability of tornado occurrences across the U.S., regardless of tornado magnitude. Figure DS.7 shows

the average number of tornado days resulting from this analysis and the respective location of Dripping Springs. The density of average tornado days per year in the map's legend indicates the probable number of tornado days for each 25-square-mile cell within the contoured zone that can be expected per year. This density number does not indicate the number of events that can be expected within each cell, rather the average number of days per year with 1 or more events occurring within each cell.

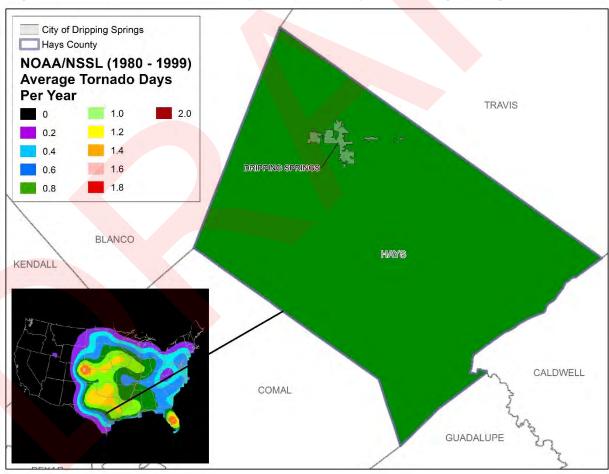


Figure DS.7, National Tornado Days Per Year, City of Dripping Springs

(National Severe Storms Laboratory, 2016)



Tornadoes: Previous Occurrences

According to the NOAA Storm Events Database, there was 1 documented tornado event listed for the City of Dripping Springs and 16 documented event listed for Hays County since the year 1953. While NOAA Storm Events Database lists events since 1953 for the County, events were not documented per jurisdiction until 1997. The tornado events reported for the City of Dripping Springs are listed in Table DS.23. Community testimony also indicates that a tornado also occurred in Dripping Springs in 2015.

Fatality, injury and damage amounts are shown in Table DS.23, per the NOAA Storm Events Database. Community testimony indicates that these amounts do not reflect the most recent totals, however NOAA data is being used as the best source of information available for the record period.

Table DS.23, Tornado Events, City of Dripping Springs

Location	Date	Type	Extent	Fa	talities	Injuries	Property Damage	Crop Damage
Dripping Springs	3/30/2007	Tornado	EF0		0	0	0.00	0.00

(National Oceanic and Atmospheric Administration Storm Event Database, 2016)

Tornadoes: Extent

Tornadoes are measured by severity on the Enhanced Fujita Scale, with a range from 0-6. According to the reported previous tornado occurrences in the jurisdiction, the maximum tornado extent experienced was a category EFO tornado in 1953. Refer to Chapter 2, the Risk Assessment portion of the Hays County HMP Update, for a description of tornado extent scales, Fujita (F) Scale and Operational Enhanced Fujita (EF) Scale.

Tornadoes: Probability

Figure DS.7 reports 0.8 tornado days per year as a result of NLDN's nationwide analysis. Since this calculation is based on national data, a more specific calculation based on local-level NOAA reports was utilized to calculate probability. Based on 1 reported event in 19 years, the City of Dripping Springs can expect a tornado event approximately once every 19 years on average in the future, with up to an EFO magnitude.

Number of Reported Events	Number of Years in Dataset	Probability	
1	19	0.05	

Tornadoes: Impact

Community testimony indicates that Dripping Springs experienced an EFO tornado on May 25, 2015. Most of the damage was in the extraterritorial jurisdiction (ETJ), but there was a small area within the City limits that had roof and tree damage. Gateway Estates, which is mentioned in the Vulnerability Summary, had several homes that received significant damage. There were no injuries reported. The wind speeds and debris caused by tornadoes can impact all residents in the community. The City of Dripping Springs has experienced a tornado at an EFO level in the past. If similar events were to happen in the future in the City, the type of impacts that the jurisdiction could expect associated with that magnitude would include:

• Light Damage - Broken branches; shallow rooted trees pushed over; some chimney damage. Wind speeds between 65 to 85 mph.

(Tornado Facts, 2016)

Additional impacts from tornado events could include downed utility poles, communication towers, street signals, and debris created from residential and urban property.



Critical infrastructure could be disrupted, resulting in periods of impact to service due to the lack of back-up utility resources. See Lightning: Impact section within this annex for more information on utility interruption.



Tornadoes: Vulnerability Summary

There is only 1 manufactured home community, called Gateway Estates, in Dripping Springs. Those residing in Gateway Estates have higher vulnerability to tornadoes. The community has no identified emergency sheltering nor does it have outdoor warning sirens.





Expansive Soils

Expansive Soils: Location

Areas within the City of Dripping Springs with structures that are underlain by soils containing clays with swelling potential are most affected by expansive soils. Figure 2.4 within Chapter 2 (the Risk Assessment portion of the Hays County HMP Update) shows the location of expansive soil areas for the City.

Expansive Soils: Previous Occurrences

There was no documentation of site-specific past events for structural damage due to expansive soils from local, state, or national datasets found.

Expansive soils cannot be documented as a time-specific event, except when they lead to structural and infrastructure damage. There are no specific damage reports or historical records of events in the City, however future events can occur.

Expansive Soils: Extent

According to the USGS Expansive Soils Regions, Figure 2.4 in Chapter 2 (the Risk Assessment portion of the Hays County HMP Update) the western edge of the City is underlain with soils with little to no clays with swelling potential. The rest of the jurisdiction has less than 50% of the area underlain with soils with clays of high swelling potential and is the area with the highest magnitude of expansive soil potential within the City.

Expansive Soils: Probability

Due to the minimal amount of swelling potential and the lack of reported events, the probability of a future event is low, (unlikely in next 10 years) for the jurisdiction.

Expansive Soils: Impact

The western edge of the City has the least expansive soils (see Expansive Soils Location) and can expect less impact than the rest of the City. If an event were to occur, foundation issues for slab buildings and road base pads for mobile homes would be the most likely visible infrastructure damage. While older homes built with less stringent building codes are more likely to experience foundation issues, recent residential developments within the community have increased the overall number of structures exposed to an event.

Expansive Soils: Vulnerability Summary

Parts of the City of Dripping Springs are located in the USGS Expansive Soil Region that is characterized by less than 50 percent of the area being underlain by soils with clays of high swelling potential. The rest of the City is located in a region that is underlain by soils with little to no clays with swelling potential. As there are no instances of specific Expansive Soil impacts, the probability of the expansive soils affecting Dripping Springs is relatively low. The general lack of past occurrences leads to a lack of concern that could lessen the amount of home-owner level mitigation actions to lessen the impact of expansive soils.





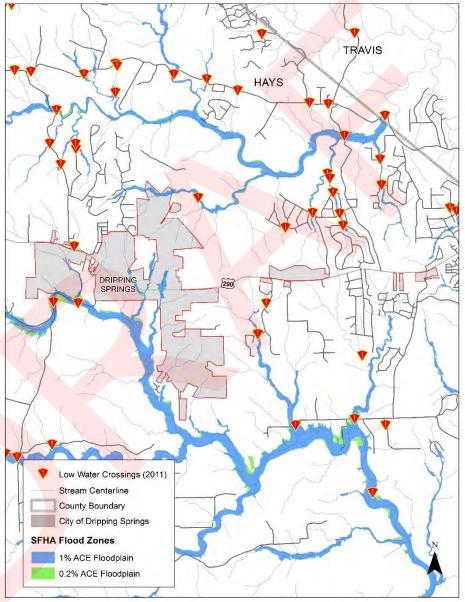
Floods

Floods: Location

The location of low water crossings as well as the 1% (100 year) and 0.2% (500 year) Annual Chance Event (ACE) floodplains for the City of Dripping Springs are shown in Figure DS.8 and are the locations within the jurisdiction that are most affected by flooding. This figure is based upon newly developed hydrologic and hydraulic analysis and is the best information available to date. Table DS.24

provides the total acreage in the jurisdiction that is located in the 1% and 0.2% floodplains.

Figure DS.8, Special Flood Hazard Areas and Low Water Crossings, City of Dripping Springs



(Texas Natural Resources Information System, 2011)

Table DS.24, City of Dripping Springs Floodplain Acreage

Jurisdiction	100yr (1%) Floodplain Acres (Includes Floodway)	500yr (0.2%) Floodplain ac (Includes 100yr)
City of Dripping Springs	110	125





Floods: Previous Occurrences

The County received 3 disaster declarations for flooding since October of 2013. According to the NOAA Storm Events Database, there were 5 documented flood events listed for the City of Dripping Springs and 69 documented events listed for Hays County from the year 1997. While NOAA Storm Events Database lists events since 1997 for the County, events were not documented per jurisdiction until 2004. The flood events reported for the City of Dripping Springs are shown in Table DS.25.

Fatality, injury and damage amounts are shown in Table DS.25, per the NOAA Storm Events Database. Community testimony indicates that these amounts do not reflect the most recent totals, however NOAA data is being used as the best source of information available for the record period.

Table DS.25, Flood Events, City of Dripping Springs

Location	Date	Туре	Fatalities	Injuries	Property Damage	Crop Damage
Dripping Springs	7/20/2007	Flash Flood	0	0	100,000.00	0.00
Dripping Springs	7/21/2007	Flash Flood	0	0	0.00	0.00
Dripping Springs	8/16/2007	Flash Flood	0	0	0.00	0.00
Dripping Springs	10/13/2013	Flash Flood	0	0	0.00	0.00
Dripping Springs	5/12/2014	Flash Flood	0	0	0.00	0.00
	Total		0	0	\$100,000.00	\$0.00

(National Oceanic and Atmospheric Administration Storm Event Database, 2016)



Floods: Significant Past Events

According to the NOAA Storm Events Database, the combination of rich Gulf moisture, an upper level low pressure system, and a strong, slow moving Pacific cold front came together to produce a line of showers and thunderstorms that moved across South Central Texas on the evening of May 12 and the early morning of May 13 of 2014.

According to the NOAA Storm Events Database, in October of 2013, an upper level trough caused southwesterly winds aloft that transported tropical moisture from the Pacific across Mexico into Texas. Surface flow from the southeast brought in low level Gulf moisture. A cold front dropped through Central Texas and provided a focus for showers and thunderstorms that produced heavy rainfall leading to flash flooding. Numerous roads were closed due to flooding around Wimberley, Driftwood, Dripping Springs, Kyle, and Buda.

Floods: Extent

Flood extent is described by a combination of ground elevation, river heights, 100-year water surface elevation and HAZUS depth grids. An example of flooding within the jurisdiction can be found in areas along Onion Creek as these are exposed to the greatest extent of an event. Communities along Onion Creek have an approximate overbank ground elevation of 1090-1095 feet with an intersecting 100-year Water Surface Elevations of 1091 feet. For a 100 year event, water depth of approximately 1 feet can be expected within this area. A further analysis of the Onion Creek is described below.

With Onion Creek having an approximate average normal in-channel elevation of 1075 feet (per Light Detection and Ranging [LiDAR] data) flood depths based on the Water Surface Elevation, are approximately 16 feet. Such an event is categorized as a 'Moderate Flood Stage' Category. Refer to the Water Depth Extent Scale in Chapter 2 Flood Impact Section for further description.





Floods: Probability

Probability has been calculated on the basis of NOAA reported events, as a standard, consistent calculation method for all hazards profiled within the Hays County HMP. Based on 5 reported events in 12 years, the City of Dripping Springs can expect a flood event approximately once every 2 years on average in the future, with flood water depths in the category of a "Moderate Flood Stage."

Number of Reported Events	Number of Years in Dataset	Probability
5	12	0.42

Floods: Impact

The following describes the inventory counts and building replacement values for the jurisdictional area.

Dripping Springs Building Counts Within the Floodplain							
Residential	Commercial	Other	Total				
743	59	35	837				

Dripping Springs Bu	Dripping Springs Building Replacement Value Within the Floodplain						
Building (\$)	Content (\$)	Total (\$)					
295,507,305	175,139,448	470,646,752					

A Probabilistic 100-year Return Period HAZUS-MH 3.2 analysis was run on the participating community. HAZUS results are calculated to census blocks. This analysis utilized the best available LiDAR (COA 2012 and CAPCOG 2008) and Depth Grids. These blocks where then intersected with the participating community to run a weighted area analysis to get jurisdictional results. The following describes results of the 100-year Return (1% Annual Chance Event) weighted area analysis.

HAZUS-MH Results

General Building Stock Damage

HAZUS estimates that about 1 building will be at least moderately damaged in the City of Dripping Springs. 'At least moderately damaged' is defined by HAZUS as greater than 10% damage to a building. For this scenario, only 1 residential building was at least moderately damaged.

Residential Buildings	Commerci	ial Buildings	Other Buildings	Total Buildings
1		0	0	1

Building-Related Losses

Exposed Value is the total building and content values for structures within the community. The exposed value for the community is \$ 470,646,752. The total building-related losses were \$260,033 for this scenario. This represents 0.1% of the total replacement value of the community. Loss values are divided into building and content loss dollars. There were no building interruption losses.

Building Loss (\$)	Content Loss (\$)	Total Loss (\$)	
170,460	89,573	260,033	

Essential Facility Damage

HAZUS does not estimate any critical facilities or infrastructure to be out of service for more than 1 day on the day of the event. Additionally, the model estimates that 100% of available hospital beds are ready for use by patients already in the hospital and for those injured by an event.





Debris Generation

HAZUS estimates the amount of debris that will be generated in this scenario. The model estimates that a total of 64 tons of debris will be generated. If the building debris tonnage is converted to an estimated number of truckloads, it will require 3 truckloads (with 1 to 25 tons per truck) to remove the building debris generated in this scenario.

Shelter Requirements

HAZUS estimates the number of households that are expected to be displaced from their homes due to the flood and the associated potential evacuation. HAZUS also estimates those people displaced that will require accommodations in temporary public shelters. The model estimates 2 people will be displaced due to the flood. Displacement includes households evacuated from within or very near to the inundated area. Of these, no people are estimated to seek temporary shelter in public shelters.

Floods: Vulnerability Summary

Both Dripping Springs Elementary School and Dripping Springs High School are located in the 100-year (1%) Floodplain. This creates a vulnerability due to the number of people that would have to be evacuated, the number of children at the elementary school dependent on adults for transportation, and the number of young adults at the high school driving through flooding conditions. Specifically, Ranch Road 12 (RR12) becomes inundated and cuts off access to the school for fire/EMS/school transportation. Not only does RR12 affect school access but this road also serves as the main route to the entire area North of Dripping Springs. According to available data from community submission and from TNRIS low water crossing data, there are 4 low water crossings within or adjacent to the jurisdictional boundaries of Dripping Springs.

National Flood Insurance Program Repetitive Loss

The City of Dripping Springs is a current participant in the National Flood Insurance Program (NFIP).

As of September of 2016, the City does not have any listed Repetitive Loss (RL) or Severe Repetitive Loss (SRL) properties according to FEMA RL/SRL data.





Land Subsidence

Land Subsidence: Location

Karst features are a landscape formed from the dissolution of soluble rocks, such as limestone, that can cause sinkholes and caves. Locations within Dripping Springs that are underlain by karst features or that are experiencing extensive groundwater depletion, are most at risk. Figures DS.9 and DS.10 illustrate the jurisdiction's location in conjunction with the karst regions of Texas and USGS Groundwater Depletion Zones. According to Figure DS.9, Dripping Springs is located within the

Isolated Edwards Group Outliers Zone.

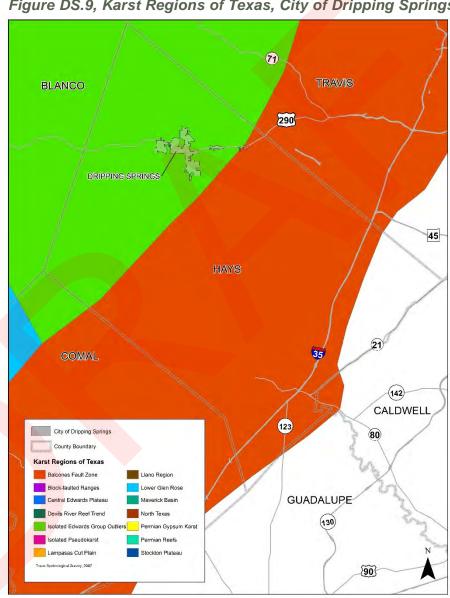
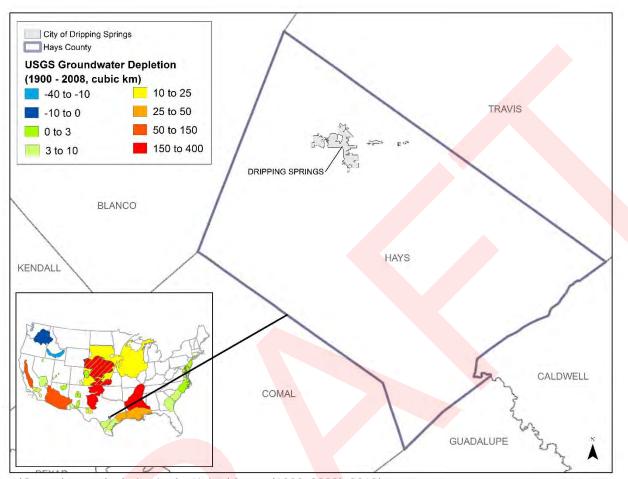


Figure DS.9, Karst Regions of Texas, City of Dripping Springs

(Texas Speleological Survey, 2007)

Figure DS.10, Groundwater Depletion Zones, City of Dripping Springs



(Groundwater depletion in the United States (1900–2008), 2013)

Land Subsidence: Previous Occurrences



There were no sinkhole or land subsidence events documented specifically for the City of Dripping Springs. As the data displayed in Figure DS.10 illustrates, the HMP update area does not have a significant history of groundwater depletion.

However, land subsidence can occur in the Central Texas Hill County areas.

Recently, a small event occurred in Travis County (located ~ 20 miles north of the study area) when a 25-foot-wide and 12-foot-deep sinkhole opened up at a Costco parking lot in Austin, Texas (Mashhood, 2012), Shopping center sinkhole provides

chance to study runoff, www.statesman.com). The update area could potentially experience an event of similar depths, widths, and impact as the event described above, but conditions would vary depending on the location and geography of the event. Since future events cannot be predicted, the estimated extents previously described are hypothetical.

Land Subsidence: Extent

Due to the lack of reported occurrences, there is not sufficient data to determine the maximum extent of land subsidence for the jurisdiction. However, if a future event were to occur, it can be assumed it would be similar in extent to previous events in the area. This includes the aforementioned sinkhole in Austin, Texas measuring 25-feet-wide and 12-feet-deep.



Land Subsidence: Probability

The occurrence of subsidence is an ongoing process resulting from natural and human-induced causes. As seen in Figure DS.9, the majority of the City of Dripping Springs is located within a known karst region, the Balcones Fault Zone. However, with no documented history of subsidence, the probability of a future land subsidence event for the City is low (unlikely in next 10 years). If a future event were to occur, however unlikely, it can be assumed that it would be similar in extent to previous events in the area. This includes the previously mentioned sinkhole documented in Austin, Texas.

Land Subsidence: Impact

When considering the impact of land subsidence, it is important to note that many areas within the karst zone have structures and infrastructure that could be affected by a collapsed area. The possible impact of isolated incidents within the karst region could include damage to any, but not all, of the 853 structures located in the karst zone in the unlikely event of a future occurrence. All structures are cumulatively valued at approximately \$470,646,752 based on HAZUS building and content values.

Land Subsidence: Vulnerability Summary

The Isolated Edwards Group Outliers Zone karst region of Texas is made up of more karst landscapes at higher altitudes. This is characterized by areas that are composed of soluble rock such as limestone, where dissolution can cause subsurface voids. As periods of droughts continue to occur and groundwater is depleted, instances of land subsidence may increase, impacting structures and infrastructure.



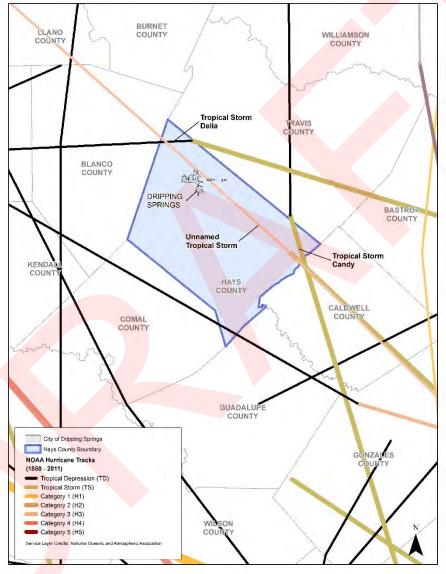




Hurricanes/Tropical Storms: Location

Due to the regional nature of a hurricane or tropical storm event, the entire extent of the City of Dripping Springs is equally exposed to a hurricane or tropical storm. Figure DS.11 illustrates the location of the jurisdiction with historical hurricane and tropical storm paths documented by NOAA's Hurricane Tracker from 1850 to 2011.

Figure DS.11, Historical Hurricane/Tropical Storm Paths, City of Dripping Springs



(National Oceanic and Atmospheric Administration, 2016)

Hurricanes/Tropical Storms: Previous Occurrences

Previous events are listed below from NOAA Storm Events Database for Tropical Storm Hermine and NOAA Hurricane Tracker for all other events. By the time most hurricanes reach the County, they are tropical storms, depressions or thunderstorms. Because hurricane and tropical storm events occur on a regional scale, all events listed for Hays County have been included as they would impact the City of Dripping Springs.

July 13 to July 22, 1909 – An unnamed storm made landfall near Freeport, as a Category 3 Hurricane. This storm impacted Hays County and participating communities as a tropical depression with wind



speeds between up to 30 knots. No significant damages, injuries, or fatalities were reported for the City.

June 22 to June 26, 1968 – Tropical Storm Candy made landfall near Port Aransas. This storm impacted Hays County and participating communities as a tropical storm with wind speeds slowing to 30 knots as a tropical depression just after leaving the County. No significant damages, injuries, or fatalities were reported for the jurisdiction.

September 1 to September 7, 1973 – Tropical Storm Delia made landfall near the border of Brazoria and Matagorda Counties. This storm impacted Hays County and participating communities as a tropical storm with wind speeds slowing to 30 knots as a tropical depression just after leaving the County. No significant damages, injuries, or fatalities were reported for the HMP update area.

September 6 to September 8, 2010 – According to the NOAA Storm Events Database, Tropical Storm Hermine made landfall near the Texas/Mexico border on the night of September 6. South Central Texas was hit very hard with widespread rains of 8-12 inches across much of the IH-35 corridor from Austin down to San Antonio.

Hurricanes/Tropical Storms: Extent

The Saffir-Simpson Scale measures pressure, wind speed, and storm surge in 5 categories. According to the reported previous hurricane occurrences in the jurisdiction, the maximum hurricane extent experienced was categorized as a Tropical Storm. Refer to Chapter 2, the Risk Assessment portion of the Hays County HMP, for a description of storm extents.

Hurricanes/Tropical Storms: Probability

Based on 4 reported events in 107 years, a hurricane or tropical storm event occurs approximately every 27 years on average in Hays County. Since hurricane and tropical storm events can happen anywhere throughout the HMP update area, the City of Dripping Springs' future probability is assumed to be similar to the surrounding County areas. In the future, the City can expect an event approximately once every 27 years on average, of up to a magnitude of a Tropical Storm based on historical extents for the jurisdiction.

Number of Events Reported Number of Years in Dataset		Probability	100yr Max Wind Speed (mph)	
4	107	0.04	68	

Hurricanes/Tropical Storms Impact

A Probabilistic 100-year Return Period HAZUS-MH 3.2 analysis was run on the participating community. The following describes the results of this analysis.





HAZUS-MH Results

General Building Stock Damage

The total property damage losses were \$59,554. The majority of damage can be expected to impact residential areas (98%). The remaining damages (2%) are for commercial, industrial, agricultural and religious buildings. While some building damage is experienced, it is estimated that no buildings will be completely destroyed or experience severe damage. Exposed Value is the total building and

content values for structures within the community. Loss values are divided separately for building and content loss in dollars.

Exposed Value (\$) (Building + Content)	Building Loss (\$)	Content Loss (\$)	Total Loss (\$)	
470,646,752	59,554	0	59,554	

Essential Facility Damage

HAZUS does not estimate any critical facilities or infrastructure to be out of service for more than 1 day on the day of the event. Additionally, the model estimates that 100.0% of available hospital beds are ready for use by patients already in the hospital and for those injured by the hurricane.

Debris Generation



HAZUS estimates the amount of debris that will be generated by the hurricane at a total of 2 tons. Of the total amount, Brick/Wood comprises 100% of the total. If the building debris tonnage is converted to an estimated number of truckloads, it will require 1 truckload (with 1 to 25 tons per truck) to remove the building debris generated by the hurricane.

Shelter Requirements

HAZUS estimates the number of households that are expected to be displaced from their homes due to the hurricane and the number of displaced people that will require accommodations in temporary public shelters. The model estimates no households to be displaced due to the hurricane. While there is an estimation of over \$59,000 in property damages expected, it is aforementioned that "no buildings would be completely destroyed or experience severe damage." Residents would likely remain in their homes as damages were repaired, therefore it is estimated that no temporary shelter is needed.

Hurricane/Tropical Storms: Vulnerability Summary

Similar to the impacts of windstorms, hailstorms, and lightning, Dripping Springs can expect to be impacted with debris and possible utility interruptions of critical infrastructure. In addition, the community's proximity to IH-35 could lead to traffic delays caused by major evacuation efforts if the highway is used as an evacuation route for coastal residents.



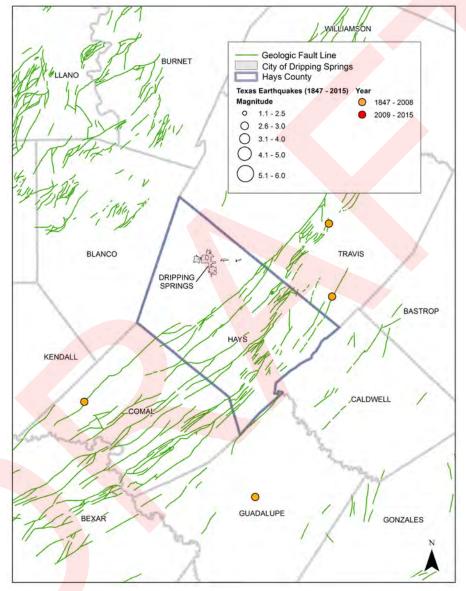
Earthquakes



Earthquakes: Location

Figure DS.12 shows no notable locations of USGS documented earthquake events in Texas between the years of 1847 to 2015 and the respective location of the City of Dripping Springs.

Figure DS.12, Texas Earthquakes, 1847 – 2015, City of Dripping Springs



(USGS Earthquake Hazard Program, 2015)

Earthquakes: Previous Occurrences

There have been no documented earthquake events for the City of Dripping Springs according to USGS 1847-2015 data as illustrated in Figure DS.12.

Earthquakes: Extent

Earthquakes are measured by Peak Ground Acceleration (PGA). The HAZUS Max Peak Ground Acceleration (PGA) for the jurisdiction is 1.56% (see City of Dripping Springs Earthquakes: Impact Section for a description of the HAZUS Analysis). This corresponds to the Modified Mercalli Scale Category IV, with



light perceived shaking and no potential structure damage. HAZUS measures PGA on a census tract level. Cities within more than 1 census tract were assigned the highest PGA level to reflect the maximum possible extent. Refer to Chapter 2, the Risk Assessment portion of the Hays HMP Update, for PGA and extent scale descriptions.

Earthquakes: Probability

As there have been no recorded previous occurrences of earthquakes for the City of Dripping Springs and the PGA is less than 2% for the area, the probability of an earthquake for the City in the future is low (unlikely within the next 10 years).

Number of Events Reported	Number of Years in Dataset	500yr PGA
0	170	1.56

Earthquakes: Impact

The FEMA How-To Guidance, Understanding Your Risks (FEMA 386-2, page 1-7), suggests the earthquake hazard should be profiled if the PGA is greater than 3%g, where PGA is measured in the acceleration of gravity (g). The City's PGA is less than 3%g (0.03) and there have been no recorded earthquakes in or near the update area. Therefore, only a minimum level-1 HAZUS analysis was profiled using the 500-year probability event scenario. The HAZUS analysis produced a PGA of 1.56%. HAZUS also produced \$0 in building damages (Residential, Commercial, Agriculture, Religious and Government) from an event. Critical facilities and Infrastructure did not experience any loss of service. There were no critical facilities or infrastructure that experienced moderate to complete damage. No debris was generated from this event and no people or households required temporary housing. There were no moderate, extensive or completely damaged buildings by this event. HAZUS estimates no households are expected to be displaced from their homes or will require accommodations in temporary public shelters due to the earthquake. Additionally, there were no causalities or fatalities from this event.

Earthquakes: Vulnerability Summary

While the probability of an earthquake in Dripping Springs is low, with no significant prior events on file, there are fault lines within proximity to the community that could cause impact if there were to be an increase in seismic activity in the area. The closest fault line to the jurisdiction according to USGS data is approximately 5.5 miles southeast of the City limits. If an event were to incapacitate a roadway, emergency responders would be hindered from responding, thus leaving the residents who were affected at risk. The adjacent fault line crosses RM 150 which acts as a thoroughfare and ingress and egress into the City.







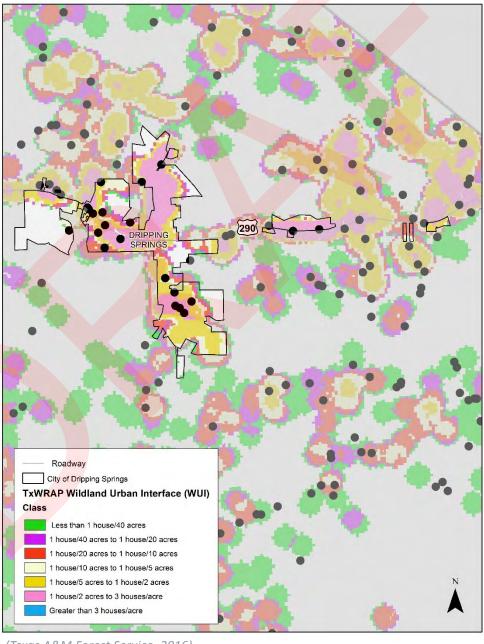
Wildfires

Wildfires: Location

The Texas A&M Forest Service's Texas Wildfire Risk Assessment Portal (TxWRAP), can be used to help communities understand their wildfire risk. Figure DS.15 below shows the location of TxWRAP's documented wildfire occurrences with Wildland Urban Interface (WUI) classifications within the City of Dripping Springs. The WUI illustrates areas of development that are abutting natural areas. Here, communities

and the built environment have an increased vulnerability to a wildfire event. Wildfires can be ignited from a variety of sources including lightning or human activity such as campfires, smoking, arson, or equipment use.

Figure DS.15, Wildland Urban Interface (WUI) and Reported Wildfire Ignitions, City of Dripping Springs



(Texas A&M Forest Service, 2016)



Wildfires: Previous Occurrences



Table DS.27 shows the reported wildfire ignitions within the City of Dripping Springs according to TxWRAP and USGS Federal Fire Occurrence data from the years 1980 to 2015.

Table DS.27, Wildfire Ignitions, City of Dripping Springs

, , ,	Tone, end of Emplang optinge	
FPA ID	Date	Fire Size (Acres)
SFO-TX0482-127741	12/31/2007	0.25
SFO-TX0482-120140	1/9/2007	0.25
SFO-TX0482-126857	11/29/2007	1
SFO-TX0482-126868	11/26/2007	1
SFO-TX0482-127736	12/31/2007	0.5
SFO-TX0482-130404	2/8/2008	0.5
SFO-TX0482-120764	2/24/2007	0.5
SFO-TX02240706-54941	6/2/2006	1
SFO-TX02240706-44687	4/10/2006	1
TFS-TXFD2011-337780	8/12/2011	1
SFO-TX0482-126614	10/24/2007	1
SFO-TX02240705-6874	4/3/2005	1
SFO-TX02240705-6875	4/23/2005	1
SFO-TX02240705-10491	10/23/2005	1
SFO-TX02240706-53049	5/19/2 <mark>006</mark>	1
SFO-TX02240 <mark>705-69</mark> 98	8/13/2005	1
SFO-TX02240705-4635	7/4/2005	1
SFO-TX0482-126615	10/26/2007	1
SFO-TX02240705-8011	8/30/2005	1
SFO-TX02240705-4637	7/4/2005	2
TFS-TXFD2009-212648	7/4/2009	2
SFO-TX0482-127791	1/9/2008	3
SFO-TX02240705-6941	6/23/2005	3
SFO-TX0482-120653	2/18/2007	10
TFS-TX2011-79039	8/12/2011	21

Wildfires: Extent

Table DS.28 lists the Fire Intensity Acreage for the City according to the Texas A&M Forest Service TxWRAP Community Summary Report. Refer to Chapter 2, the Risk Assessment portion of the Hays HMP Update, for a description of the Characteristic Fire Intensity Scale (FIS).





Table DS.28, TxWRAP Fire Intensity Acreage – City of Dripping Springs

Class	Acres	Percent
Non-Burnable	937	26.40%
1 (Very Low)	20	0.60%
1.5	94	2.70%
2 (Low)	57	1.60%
2.5	39	1.10%
3 (Moderate)	753	21.20%
3.5	548	15.40%
4 (High)	552	15.50%
4.5	555	15.60%
5 (Very High)	0	0.00%
Total	3,554	100.00%

Wildfires: Probability

Based on 25 reported events in 35 years, the City of Dripping Springs can expect a wildfire event approximately once every 1 to 2 years on average in the future, with up to a potential fire intensity of 4.5, or "High" classification on the TxWRAP Characteristic Fire Intensity Scale.

Number of Reported Events	Number of Years in Dataset	Probability
25	35	0.71

Wildfires: Impact

Impact on the community can be measured using TxWRAP Housing Density levels within the WUI. Areas with a higher housing and population density would be affected to a greater extent than more rural areas, and especially areas near burnable fuels. Table DS.29 below lists the population, percent of total population, WUI acreage and percent of WUI acreage for the City of Dripping Springs, according to the Texas A&M Forest Service TxWRAP Community Summary Report. See Figure DS.15 for the location of WUI areas within the jurisdiction.

Table DS.29, WUI Acreage, City of Dripping Springs

ŀ	Housing Density	WUI Population	Percent of WUI Population	WUI Acres	Percent of WUI Acres
	LT 1hs/40ac	0	0.0 %	105	3.7 %
	1hs/40ac to 1hs/20ac	11	0.3 %	147	5.1 %
	1hs/20ac to 1hs/10ac	44	1.2 %	309	10.8 %
	1hs/10ac to 1hs/5ac	110	3.1 %	436	15.3 %
	1hs/5ac to 1hs/2ac	699	19.8 %	876	30.7 %
	1hs/2ac to 3hs/1ac	2,672	75.6 %	979	34.3 %
	GT 3hs/1ac	0	0.0 %	0	0.0 %
	Total	3,536	100.0 %	2,852	100.0 %





Wildfires: Vulnerability Summary

Fire and Emergency Services are provided to the 2,032 residents of Dripping Springs and surrounding North Hays County areas by Emergency Services District #6. The nearest station is located within Dripping Springs and has an average response time of approximately 8 minutes. Dripping Springs has recently experienced a large amount of residential development in the extraterritorial jurisdiction (ETJ). This rate of growth in an already large response area increases the need of mitigating wildfire

risk. In addition, Dripping Springs has a limited number of fire breaks and lacks a brush clean-up program for residents.



Risk Ranking Result

On January 12, 2017, planning representatives from the City of Dripping Springs completed a questionnaire as part of the plan update process. The questions covered the risk associated with the hazards that affect each community based on the level of concern over each profiled hazard, the hazards' impact on health and safety as well as property damage and business continuity. The answers from this questionnaire were combined with public survey results on perception of risk, and the values from both sources were analyzed using the Halff Risk Ranking Tool (details regarding the Risk Ranking Tool are in Chapter 2, the Risk Assessment portion of the Hays County HMP Update). The results provided a quantified ranking of risk with values ranging from 0 to 100. The results for Dripping Springs are shown below (hazard values are shown from highest to lowest risk):

Ranking Order	Hazard	Risk Ranking Value	
1	Wildfire	98.5	
2	Floods	96.5	
3	Drought	95.0	
4	Tornadoes	72.7	
5	Extreme Heat	72.0	
6	Wind Storms	72.0 (same value as extreme heat)	
7	Severe Winte <mark>r Storms</mark>	71.6	
8	Lightning	55.5	
9	Hail Storms	45.9	
10	Land Subsidence	39.4	
11	Expansive Soils	39.2	
12	Earthquakes	35.1	
13	Hurricanes/Tropical Storms	30.0	
14	Dam/Levee Failure	6.0	

Section 3: Mitigation Strategy

This section examines the community's ability to perform mitigation (review of existing capabilities, shown in Table DS.30) and identifies specific actions to address vulnerabilities for each hazard profiled in the Hays County HMP Update. The mitigation strategy is the application of actions into an approach for performing structural and non-structural mitigation efforts within the jurisdiction. Actions are also prioritized and considered for incorporation into other community programs, regulations, projects or plans.

Completed and canceled actions are also included in a separate section for future reference.

Table DS.30, Existing Capabilities

Capabilities Name	Resource Type	How it can Accomplish Mitigation
Mayor	Elected Official	Political support and funding for mitigation actions/ Management of City-level HMP updates/Responsibility for continued participation in the NFIP.
City Secretary	City Staff	Support for implementation of mitigation actions.
Engineer	Staff - Consultant	Expertise in structural mitigation projects. compliance with flood damage preventation ordinance.
Emergency Planning Specialist/ Floodplain Administrator	City Staff	Coordination of plan update and evaluation./Documents and tracks compliance with flood damage preventation ordinance.
Emergency Management Coordinator	Staff - Contract	Evaluation of mitigation projects, coordination of implementation.
Sales Tax	Funding	Provides potential funding for Hazard Mitigation items
Property Tax	Funding	Provides potential funding for Hazard Mitigation items
Permitting and Licensing Fees	Funding	Provides potential funding for Hazard Mitigation items
Chapter 211 of the Local Government Code: Zoning	Authority	Authorizes the City to regulate Zoning .
Chapter 213 of the Local Government Code: Municipal Comprehensive Plans	Authority	Authorizes the City to adopt a comprehensive plan for the long-range development of the City
Chapter 214 of the Local Government Code	Authority	Authorizes the City to have regulatory authority as it related to building code (such as structural integrity and plumbing)
City of Dripping Springs Fee Schedule Ordinance 1070.63	Regulations	Availability of fees that can be used toward mitigation. (City of Dripping Springs, 2014)
City of Dripping Springs Chapter 8: Fire Prevention and Protection Ordinance	Regulations	Adopts International Fire Code and regulates for fire protection. (Franklin Legal Publishing, 2014)
City of Dripping Springs Chapter 14: Offenses and Additional Provisions	Regulations	Ability to take action against violations (Franklin Legal Publishing, 2004)
City of Dripping Springs Chapter 22: General Regulations (Building and Development Title II)	Regulations	Ability to regulate development (Franklin Legal Publishing, 2005)



National Flood Insurance Program Participation

Dripping Springs employs a Certified Floodplain Manager, who administers the requirements of the Dripping Springs Flood Damage Prevention Ordinance and manages a flood safety public education program. The current Flood Damage Prevention Ordinance does not employ higher standards, beyond the minimum FEMA and State minimum requirements for floodplain management. Dripping Springs does not participate in the Community Rating System. The City will continue to consider options for higher standards. As of June 2016, Dripping Springs has 5 NFIP policies in force, with \$1,090,000 of insurance coverage. There are no repetitive loss properties in Dripping Springs.

Mitigation Goals

The plan-level Mitigation Goals can be found in Chapter 3, the Mitigation Strategy portion of the Hays County HMP Update. These goals apply to each community and were mutually decided upon as the guiding goals for the development of actions in each jurisdiction.

Mitigation Actions

Risk Focus is defined as:



^{*}F= Actions reducing risk to new development and redevelopment

Number/Title	Hazard	Item Description		Implementation Agency	
1 Flood Insurance Information Campaign (previously action 1 in 2011 plan, modified)	Floods	Promote the flood insurance program to lessen the number of structures uninsured from flood loss by providing citizens access to brochures about the NFIP at the local City Hall and links to resources on website.		Dripping Springs Emergency Planning	
Cost Estimate/Funding			Schedule	Status as of 2017	*Risk Focus:
Existing City staff and free NFIP materials from FEMA publication warehouse			3 months	Not started	N/A
Cost and Benefit Considerations					

This project would indirectly benefit residents who need information about the hazard at little cost.



Number/Title	Hazard	Item Description		Implementation Agenc	
Plood Ordinance Higher Standards (previously action 2 in 2011 plan, modified)	Floods	Create higher standards to increase protection of development in/near the floodplain.		Dripping Springs City e Council	
Cost Estimate/Funding		Schedule	Status as of 2017	*Risk Focus:	
Existing City staff			3 months	In progress	E/F
Cost and Benefit Considerations					

This project would be a low-cost method of ensuring that new development and substantial improvements are done with less risk for flood damage.

Number/Title	Hazard	Item	Description	Impleme	ntation Agency
Attend Local Floodplain Management Courses to Receive Certification (previously action 3 in 2011 plan, modified)	Floods	Send additional members of the staff or elected officials to training in order to become a Certified Floodplain Manager. Send existing Floodplain Administrator to advanced floodplain management courses.			prings Emergency Planning
Cost Estimate/Funding		Schedule	Status as of 2017	*Risk Focus:	

Cost Estimate/Funding	Schedule	Status as of 2017	*Risk Focus:
Existing Staff, cost of accommodations for course attendance and CFM testing session, when applicable.	6 months	Not started	E/F

Cost and Benefit Considerations

If attending the course at the Emergency Management Institute, the cost of the course would be very low. The benefit of an continuing education for the floodplain administrator would help both new and existing residents through guidance on how to mitigate flood damages to development.

Number/Title	Hazard	Item	Description	Impleme	ntation Agency
4 Improve Emergency Communication/ Warning Systems (previously action 4 in 2011 plan)	All Hazards except Expansive Soils and Land Subsidence	for/follow social i	nunity members register media and calling tree in he ability to contact them		prings Emergency Planning
Cost E	Cost Estimate/Funding		Schedule	Status as of 2017	*Risk Focus:
Existing Staff Resources			6 months	Not started	N/A
		Cost and Bene	efit Considerations		

This low-cost activity provides the ability for the local community to make rapid contact to provide their citizens messaging when hazard conditions are dangerous. This would benefit all citizens in the community.



Number/Title	Hazard Item D		Description	Implementation Agency			
5 StormReady Designation for Dripping Springs (previously action 6 in 2011 plan)	Windstorm, Hailstorm, Severe Winter Storms, Lightning, Hurricanes/ Tropical Storms, Tornadoes, Floods	Application preparation and submission for StormReady designation from the National Weather Service that attests to the community's level of preparedness for severe winter.		submission for StormReady designation from the National Weather Service that attests to the community's level of			prings Emergency Planning
Cos	Schedule	Status as of 2017	*Risk Focus:				
Existing Staff			12 months	Delayed	N/A		
Cost and Benefit Considerations							
This free application would benefit all members of the community of Dripping Springs in increasing the preparedness of the local government.							

preparedness of the local government.

Number/Title	Hazard	Item Description		Item Description Implementation Agend		
6 Fans and Bottled Water Distribution (previously action 7 in 2011 plan, modified)	Extreme Heat	organizations to provide electric fans and bottled water to residents whose homes		Partner with appropriate local organizations to provide electric fans and bottled water to residents whose homes are not air-conditioned. Dripping Springs Emplanning- with part from Home Depot, Citizens Activity Conditioned. Friends Foundation, Hands and H.E.		with partnership ne Depot, Senior Activity Center, undation, Helping
Cost E	Cost Estimate/Funding			Status as of 2017	*Risk Focus:	
Existing Staff, Donations			3 months (coordination/ preparation for summer months)	Not started	N/A	
Cost and Benefit Considerations						
Beside the staff hours, this donation based activities serves a vulnerable population of the community at little						

cost.



Number/Title	Hazard	Item Description		Implementation Agency			
7 Increase Public Awareness of Hazards (previously action 9 in 2011 plan)	All <mark>Haz</mark> ards	promote existing hazard information about		at the individual level. Provide link to			
Cost E	Cost Estimate/Funding			Status as of 2017	*Risk Focus:		
Existing staff	Existing staff			Ongoing	N/A		
Cost and Benefit Considerations							
This free enhancemen	This free enhancement to the City's existing website would benefit all with internet access at little to no cost,						

except the staff resources required to do so.

Number/Title	Hazard	Item	Description	Implement	ation Agency		
Adopt Firewise Hazard Information from Hays County for Mitigation Activities (previously action 10 in 2011 plan, modified)	Wildfire	maps and data fo	of Hays County Firewise r the purposes of planning ate against wildfire risk.	1	ng Springs cy Planning		
Cost Est	imate/Fundin	g	Schedule	Status as of 2017	*Risk Focus:		
Existing staff			6 months	Not started	F		
Cost and Benefit Considerations							
Building upon an existing	Building upon an existing and funded County level project, the community can take action to adopt Wildfire maps						

Number/Title	Hazard	Item Description		Impleme	ntation Agency	
9 Adding Water Conservation to Ordinances (previously actions 12 and 21 in 2011 plan, modified)	Drought, Land Subsidence	Adding drought conservation levels to ordinance to increase resiliency to drought conditions and also provide a method for monitoring drought trends on a local, regional and state level.		F	prings Emergency Planning	
Cost Estimate/Funding				Schedule	Status as of 2017	*Risk Focus:
Existing staff				6 months	Not started	E/F

and data at no cost.

Cost and Benefit Considerations

With the sole cost of writing and adopting new ordinance language and publication of the Drought Monitor on the website, all citizens in the City would benefit from actions that would reduce the impact of drought and in turn reduce the impact of land subsidence that is caused by the depletion of groundwater.

	Number/Title	Hazard	Item	Description	Impleme	ntation Agency
	Cooling Plan for Reducing the Impacts of Extreme Heat to Vulnerable Populations (previously action 10 in 2011 plan, modified)	Extreme Heat	Developing plans for providing a cool location for vulnerable populations to seek cool conditions during times of extreme heat.		vulnerable populations possible partnership Senior Citizens Activity	
	Cost Estimate/Funding			Schedule	Status as of 2017	*Risk Focus:
	Existing Staff			9 months	Not Started	N/A
ſ		Coo	t and Banafit	Conciderations		

Cost and Benefit Considerations

Creation of this type of plan would benefit not only vulnerable populations, but also any other population that becomes vulnerable during circumstances that accompany extreme heat, such as power outage. This would be a low-cost project that would benefit many.



Number/Title	Hazard	Item	Description	Impleme	ntation Agency		
Sanding Contract Research/ Plan Development (previously action 13 in 2011 plan)	Severe Winter Weather		n that provides established regotiated service es for sanding.	Dripping Springs Emergency Planning			
Cost Estimate/Funding			Schedule	Status as of 2017	*Risk Focus:		
Existing Staff	Existing Staff			Not Started	N/A		
Cost and Benefit Considerations							
By setting rates for sanding for extreme cases of icy weather, the whole community could save money on potential price increases.							

Number/Title	Hazard	Item	Description	Impleme	ntation Agency			
12 Fire Mitigation Ordinance Enhancements (previously action 15 in 2011 plan, modified)	Wildfire	resistant building			orings City Council			
Cost Estimate/Funding		Schedule	Status as of 2017	*Risk Focus:				
Existing Staff			12 months	Not Started	E/F			
	Cost and Benefit Considerations							

Researching and instituting ordinances that require fire mitigation measures would be low-cost efforts that would benefit all future development and the structures that surround it.

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Number/Title	Hazard	Item	Description	Implementation Agency			
Continue work to repair Little Barton Creek Dam (previously action 18 in 2011 plan, modified)	Dam/Levee Failure, Flood		with FEMA on project e Barton Creek Dam to ty from flooding.		prings Emergency Planning		
Cost E	Cost Estimate/Funding			Status as of 2017	*Risk Focus:		
Grant funded through	n FEMA		12 months	Ongoing	Е		
Cost and Benefit Considerations							
Grant funding for this project is already obtained. The project was found to be Benefit Cost Effective.							

Mitigation Strategy

Hays County Hazard Mitigation Plan, City of Dripping Springs Annex

Number/Title	Hazard	Item Description Implementation Agency					
Evacuation Plans/ Alternate road consideration (previously action 19 in 2011 plan, modified)	Hurricanes/ Tropical Storms, Floods, Dam/ Levee Failure, Wildfire	Documentation of that includes multi- community. Curronly have 1 access requirements for	ng Springs cy Planning				
Cost Est	imate/Fundin	g	Schedule	Status as of 2017	*Risk Focus:		
Existing staff, possible cost of buy out for an easement of land to develop an additional emergency exit for the community Not started							
Cost and Benefit Considerations							
It is more cost effective to establish additional evacuation routes than other mitigation alternatives.							

Number/Title	Hazard	Item	Description	Impleme	ntation Agency				
Conversion to Rainwater Collection Systems (previously action 20 in 2011 plan, modified)	Drought, Land Subsidence	Converting existing water systems into rainwater collection systems to reduce dependence on underground and piped in sources of water in public facilities. Also creation of tax incentives for citizens to create their own rainwater collection systems.							
Cost E	Cost Estimate/Funding Schedule Status as of 2017 *Risk Focus:								
Varies, depending on size of system 18 months Not started E/F									
	Cost and Benefit Considerations								

Number/Title	Hazard Item Description Implementation Agency								
Campaign to Encourage Drought Resistant Vegetation and Xeriscaping	Drought, Land Subsidence	Lessen the amount of water utilized in the care of non-drought resistant plants by providing financial incentives within developer agreements and ordinances.							
Cost E	Cost Estimate/Funding Schedule Status as of 2017 *Risk Focus:								
Existing Staff 12 months Not started N/A									
Cost and Benefit Considerations									

Incentivizing the use of drought-resistant plants may reduce the amount of revenue in the community, however the conservation of water weighs out the cost.



Number/Title	Hazard	Item	Description	Impleme	ntation Agency		
17 Flash Flood Risk Awareness Campaign	Floods	products that det	tion of Hays County map cail flood risk areas and egs for distribution to the	Dripping Springs Emergency Planning			
Cost E	stimate/Fund	ing	Schedule	Status as of 2017	*Risk Focus:		
\$500 for printing (grants), existing staff 12 months Not started							
Cost and Benefit Considerations							
The low cost of printi	The low cost of printing and distributing these documents will provide all residents with decreased risk against						

The low cost of printing and distributing these documents will provide all residents with decreased risk against high risk areas when traveling through the community.

Number/Title	Hazard	Item	Description	Impleme	ntation Agency		
Signage at High Risk Roadway Flood Areas	Floods	Placement of warning signs at all locations designated as low water crossings. Include gates at high traffic locations, if not already in place. Hays County Office of Emergency Services					
Cost E	stimate/Fund	ing	Schedule	Status as of 2017	*Risk Focus:		
\$100,000 from grants	and agency op	erating funds	24 months	Not started	N/A		
	Cost and Benefit Considerations						
Those signs will reduc	There signs will reduce the risk of loss of life to sitizons and visitors who could otherwise be injured during flood						

These signs will reduce the risk of loss of life to citizens and visitors who could otherwise be injured during flood events.

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Number/Title	Hazard	Item	Description	Implementation Age		
Expansive Soil Information Sheet	Expansive Soils	sheet regarding edevelopment per developers and community. The sinformation abourecommendation	viding an information xpansive soils in the mit packet given to itizens building in the sheet will provide risk t the hazard and provide s for soil compaction and dations, especially for nones.		oripping Springs ency Planning	
Cost E	stimate/Fund	ing	Schedule	Status as of 2017	*Risk Focus:	
Existing Staff, \$100 cost of printing 3 months Not started E/F						
Cost and Benefit Considerations						
This free effort would	This free effort would provide awareness and public information that will benefit those looking to perform new					

development and those who are improving or repairing existing property.

Capabilities Assessment

Evaluation/Prioritization of Actions

Each action added to the plan was developed using the Mitigation Action Summary Worksheet shown in Figure DS.16. Non-cost effective projects were not included in prioritization activity.

Figure DS.16, Mitigation Action Summary Worksheet



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Table DS.31, Mitigation Action Prioritization (with Hazards in order of highest priority to lowest)

Table D5.31, Witigation Action Pri	OIIL	izatioi	1 (001	и па	zarus	S III O	ruer (or mg	Jiiest	ριτοιτ	ιγ το 10	west)
Mitigation Action	Life Safety	Property Protection	Technical	Political	Legal	Environmental	Social	Administrative	Local Champion	Other Community	Risk Ranking Score	Total Score
8. Adopt Firewise hazard information from Hays County for mitigation activities	1	1	1	1	0	1	1	1	1	1	99	108
7. Increase Public Awareness of Hazards	1	1	1	1	0	1	1	1	0	1	99	107
13. Continue work to repair Little Barton Creek Dam	1	1	1	1	1	1	1	1	1	1	97	107
4. Improve emergency communication/ warning systems	1	0	1	1	1	0	1	1	0	1	99	106
14. Evacuation Plans/Alternate road consideration	1	0	1	1	1	0	1	1	0	1	99	106
17. Flash Flood Risk Awareness Campaign	1	0	1	1	1	0	1	1	1	1	97	105
18. Signage at High Risk Roadway Flood Areas	1	0	1	1	1	0	1	1	1	1	97	105
5. StormReady Designation for Dripping Springs	1	0	1	1	0	0	1	1	0	1	97	103
9. Adding Water Conservation to Ordinances/institution of Drought Monitor as part of operations	1	0	1	1	0	1	1	1	1	1	95	103
16. Campaign to encourage drought resistant vegetation and xeriscaping	0	1	1	1	0	1	1	1	1	1	95	103
15. Conversion to rainwater collection systems where feasible for public facilities	0	0	1	1	0	1	1	1	1	1	95	102
1. Flood Insurance Information Campaign	0	0	1	1	0	0	1	1	0	0	97	101
3. Attend Local Floodplain Management Courses to receive certification	1	1	1	0	0	0	0	1	0	0	97	101
12. Fire Mitigation Ordinance Enhancements	1	1	1	-1	0	-1	-1	1	0	1	99	101
2. Flood Ordinance Higher Standards	1	1	1	-1	0	1	-1	1	0	0	97	100
6. Fans and Bottled Water Distribution	1	0	1	1	0	0	1	1	1	1	72	79
10. Cooling Plan for Reducing the Impacts of Extreme Heat to Vulnerable Populations	1	0	1	1	-1	0	1	1	1	1	72	78
11. Sanding Contract Research/ Plan Development	1	0	1	1	1	0	1	1	0	0	72	78
19. Expansive Soil Information Sheet	0	1	1	0	0	0	1	1	0	1	39	44

Mitigation Actions by Hazard

The mitigation actions in Table DS.32 are shown with the hazards that they mitigate.

Table DS.32, Mitigation Action Impact, City of Dripping Springs

Action Number	Drought	Extreme Heat	Severe Winter Storms	Lightning	Hailstorms	Windstorms	Tornadoes	Expansive Soils	Floods	Land Subsidence	Hurricanes/ Tropical Storms	Earthquakes	Dam/ Levee Failure	Wildfire
								S		Ö	o,			
1									Х					
2									Х					
3									Х					
4	Х	Х	Х	Х	Х	Х	Х		Х		Х	Х	X	Х
5			Х	Х	X	Х	Х		Х		Х			
6		Х												
7	Х	Х	Х	Х	Х	Х	Х	Х	Х	X	Х	Х	X	Х
8														Χ
9	Х									X				
10		Х												
11			X											
12														Х
13									Х				X	
14									Х		Х		Х	Х
15	Х									Х				
16	Х									Х				
17									Х					
18									Х					
19								Х						



Integration Efforts

Table DS.33 captures ways that the Risk Assessment, Goals and Actions developed in the HMP can be integrated into other City of Dripping Springs documents, programs and regulations.

Table DS.33, Plan Integration Efforts, City of Dripping Springs

Name of Document	Туре	Item Type	Opportunity for Integration
Dripping Springs Flood Damage Prevention Ordinance	Regulation	Action	Integrate higher standards into Flood Damage Prevention Ordinance, per Mitigation Action 2.
Dripping Springs Adopted Budget 2017 (City of Dripping Springs, Texas, 2016)	Document	Action	Obligate funding for Floodplain Management training, certification testing into existing Training Budget line item to support Mitigation Action 3.
City of Dripping Springs Website (City Sponsored Events)	Website	Action	Add Fan And Bottled Water Collection to City Sponsored Events on Dripping Springs Website
City of Dripping Springs Website (City Maps & Master Plans page)	Website	Goals	Add HMP to City Maps & Master Plans page.
Zoning	Process	Risk Assessment	Hazard area consideration and Mitigation Planner involvement in community zoning activities to implement community risk assessment information for hazard areas and risk.
Senior Citizens Activity Center	Programs	Goals	Engage volunteers from the Senior Citizens Activity Center to provide feedback and insight on mitigation actions needed to serve the elderly demographic. Include representatives as stakeholders for future planning activities.
Parks, Recreation and Open Space Master Plan	Plan	Action	Work with Parks planners to encourage rainwater collection systems where feasible (Action 15) and the use of drought resistant vegetation and xeriscaping (Action 16).
HaysInformed.com	Program	Action	Coordinate with Hays County Emergency Management for co-marketing Flash Flood Risk Awareness Campaign by linking to each website and collaborating on map products and distribution efforts (Action 17).
Hays County Flood Warning Signs	Plan	Action	Collaborate with existing Hays County Mitigation Action to increase the warning signs and barricades placed at high velocity areas in Hays County.
TWDB Flood Protection Planning (FPP) Grant	Funding	Action	Identify actions that can be funded through new and existing grant awards.
TWDB Clean Water State Revolving Fund (CWSRF)	Funding	Action	Identify actions that can be funded through new and existing grant awards.
Texas Water Development Fund (DFund)	Funding	Action	Identify actions that can be funded through new and existing loans.
TWDB Flood Protection Planning (FPP) Grant	Funding	Action	Identify actions that can be funded through new and existing grant awards.
TWDB Clean Water State Revolving Fund (CWSRF)	Funding	Action	Identify actions that can be funded through new and existing grant awards.
Texas Water Development Fund (DFund)	Funding	Action	Identify actions that can be funded through new and existing loans.



Section 4: Finalize Plan Update (Review, Evaluation, and Implementation)

Changes in Development

Since the 2011 planning period, the City of Dripping Springs has had significant residential growth in their ETJ. Estimates show that their ETJ population is nearing or surpassing 30,000 residents. Still operating as a small town within the City limits, the City offices may be the next entity to experience a surge of growth to accommodate the needs of many newcomers in both residential and commercial aspects.

Past Mitigation Action Progress Reports Summary - Completed and Canceled

2011 Action Number	Hazard	Item D	Description	Lead Department			
2	Flood	Flood Dan	gher Stan <mark>dard</mark> nage Prevent <mark>ion</mark> dinances	City of Dripping Springs			
Cost Estimate/Funding			Schedule	Status as of 2017			
Cost and Funding: Existin	ing staff resources, no cost		Complete	Completed			
Cost Effectiveness							
Not independently cost-effective							

2011 Action Number	Hazard	Item	Description	Lead Department	
5	All Hazards	Developmen <mark>t and</mark> maintenance of Countywid <mark>e and</mark> individual community HAZMAP plans		City of Dripping Springs	
Cost Estimate/Funding			Schedule	Status as of 2017	
Existing staff resources			Original plan adopted on April 20, 2004	Completed	
Cost Effectiveness					
Not independently cost-effective					



2011 Action Number	Hazard	Item	Description	Lead Department	
8	Flood	Promote Flood Insurance		City of Dripping Springs	
Cost Estimate/Funding			Schedule	Status as of 2017	
\$2,000			Ongoing	Canceled. Was combined with item 1, to increase NFIP policy coverage.	
Cost Effectiveness					
Not independently cost-effective, but the initial step in identifying appropriate mitigation actions.					

2011 Action Number	Hazard	Item D	Item Description			Lead Department
11	Drought	Monitor Dr	Monitor Drought Conditions		City of Dripping Springs	
Cost Estimate/Funding			5	Schedule	Status as of 2017	
No additional cost- uses existing staff resources				Ongoing	Canceled. Combined with Water Conservation Action (current action 9)	
Cost Effectiveness						
Not independently cost-effective						
2011 Action Number	Hazard		Item Description			Lead Department
16	Tornadoes, Thunderstor Wind, Winte Storm, Hai	m, er Upgra	Upgrades to At-Risk Structures		ctures	City of Dripping Springs
Cost Estimate/Funding			Schedule		Status as of 2017	
Varies depending on measure. Funding from General Fund or FEMA grant programs				TBD based on study		Canceled. Effort was replaced by more feasible ordinance actions.
Cost Effectiveness						
Cost-effectiveness will vary with level of risk and project cost.						

2011 Action Number	Hazard	Item Description		Lead Department	
17	Tornadoes, Thunderstorm, Wind, Winter Storm, Hail	Structural/Engineering Study		City of Dripping Springs	
Cost Estimate/Funding			Schedule	Status as of 2017	
To be determined, but if initiated probably from General Fund			Not yet established-to be commenced only if funding is available	Canceled. Replaced with more financially feasible actions	
Cost Effectiveness					
Not independently cost-effective, but the initial step in identifying appropriate mitigation actions.					



Changes in Priorities

As with many of the other communities in Hays County, the priorities for Dripping Springs changed with the recent occurrence of tragic wildfire and flooding disasters that claimed lives and property. The Bastrop Complex Fire of 2011 brought about great concern regarding wildfires and the Halloween Floods of 2015 raised awareness and attention for the needs for flood mitigation in the community.

In addition to the priorities changed by natural hazards, there has been a change initiated by the growth of the community and movement of new citizens into their ETJ. This recent surge brings with it concern for the resources available to all who reside in Dripping Springs, most notably water. For this reason, water conservation and drought mitigation measures have also become a priority to the community and those who live there.



Section 5: Approval and Adoption

Approval and Adoption Procedure

Table DS.34, Municipal Jurisdiction Adoption Date

Municipality	APA Date	Adoption Date
Dripping Springs		



Jurisdiction Adoption Documentation Placeholder

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