

HOUSTON-GALVESTON AREA COUNCIL

**REGIONAL HAZARD MITIGATION PLAN
2011 UPDATE**



September 4, 2012

HOUSTON-GALVESTON AREA COUNCIL
REGIONAL HAZARD MITIGATION PLAN – 2011 UPDATE

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1.0 Introduction

Background

The Houston-Galveston Area Council (H-GAC) region is vulnerable to a wide range of natural hazards, including flooding, tornadoes, tropical storms and hurricanes. It is also vulnerable to a variety of human-caused hazards, including chemical releases, terrorist attacks, and spills or explosions associated with the fixed storage or mobile transport of hazardous materials. These hazards threaten the safety of residents and have the potential to damage or destroy both public and private property, disrupt the local economy and impact the overall quality of life of individuals who live, work and play in the H-GAC region.

While we cannot eliminate natural and human-caused hazards, there is much we can do to lessen their potential impact upon our community and our citizens. The effective reduction of a hazard's impact can decrease the likelihood that such events will result in a disaster. The concept and practice of reducing risks to people and property from known hazards is generally referred to as hazard mitigation.

Hazard mitigation techniques include: structural measures, such as strengthening or protecting buildings and infrastructure from the destructive forces of potential hazards; and, non-structural measures, such as the adoption of sound land use policies or the creation of public awareness programs. Some of the most effective mitigation measures are implemented at the local government level where decisions on the regulation and control of development are made. A comprehensive mitigation strategy addresses hazard vulnerabilities that exist today and in the foreseeable future. Therefore it is essential that projected patterns of development are evaluated and considered in terms of how that growth will increase or decrease a community's overall hazard vulnerability.



One of the most effective tools a community can use to reduce hazard vulnerability is to develop, adopt, and update as needed, a local hazard mitigation plan. A hazard mitigation plan establishes the broad community vision and guiding principles for reducing hazard risk, including the development of specific mitigation actions designed to eliminate or reduce identified vulnerabilities.

Disaster Mitigation Act of 2000

In an effort to reduce the Nation's mounting natural disaster losses, the United States Congress passed the Disaster Mitigation Act of 2000 (DMA 2000). Section 322 of the Act emphasizes the need for state and local governments to coordinate mitigation planning activities. In addition, the Disaster Mitigation Act requires that states and local governments develop and adopt a hazard mitigation plan in order to be eligible for certain pre- and post-disaster funding by the Federal government. These funds include the Hazard Mitigation Grant Program (HMGP) and the Pre-Disaster Mitigation (PDM) program, both of which are administered by the Federal Emergency Management Agency (FEMA) under the U.S. Department of Homeland Security.

The H-GAC Regional Hazard Mitigation Plan

On April 28, 2006, FEMA and the Texas Division of Emergency Management approved the first H-GAC Regional Hazard Mitigation Plan (hereinafter "Hazard Mitigation Plan" or "Plan"). H-GAC prepared the Plan in coordination with FEMA and the Texas Division of Emergency Management to ensure that the Plan meets all applicable DMA 2000 and state Annex P¹ requirements. The

¹ Annex P requirements are hazard mitigation planning requirements established by the Texas Division of Emergency Management.

Plan included specific mitigation actions (Appendix A). A Local Mitigation Plan Crosswalk, found in Appendix B, provides a summary of federal and state minimum standards and notes the location where each requirement is met within the Plan.

H-GAC updated the Plan in 2011 to re-assess vulnerabilities and increase the number and diversity of mitigation action items. The Plan includes a more robust assessment of wildfire hazards and vulnerability and also revisits repetitive loss data and the lessons learned from the 2008 hurricane season.

Purpose

The purpose of this Hazard Mitigation Plan is essentially to:

- Protect life, safety and property by reducing the potential for future damages and economic losses that result from natural and human-caused hazards;
- Qualify for grant funding in both the pre-disaster and post-disaster environment;
- Speed recovery and redevelopment following future disaster events;
- Demonstrate a firm local commitment to hazard mitigation principles; and
- Comply with state and federal legislative requirements for local hazard mitigation plans.

Scope

The geographic scope of the Plan includes the 78 participating municipalities listed in **Table 1.1**.

The Plan will focus on the following hazards:

- Coastal Erosion
- Dam/Levee Failure
- Drought
- Energy Pipeline Failure
- Excessive Heat
- Flood (Riverine and Coastal)
- Hail
- Hurricanes and Tropical Storms
- Severe Thunderstorms
- Tornadoes
- Toxic Release/Hazardous Materials (HAZMAT)
- Wildfire
- Winter Storms

These hazards were determined to be “high and moderate risk” as determined from a hazard risk assessment conducted in the seven county area.² This enables those counties and cities participating in the Plan to prioritize mitigation actions based on a greater understanding of hazard risk and vulnerability.

² See Section 4: *Risk Assessment*, for a description of hazards, including a comparative ranking of their relative risk.

Table 1.1
Participating Jurisdictions

Jurisdiction		
Houston-Galveston Area Council	City of Quintana	City of Conroe
Austin County	City of Richwood	City of Cut and Shoot
City of Bellville	Village of Surfside Beach	City of Magnolia
City of Brazos Country	City of Sweeny	City of Montgomery
City of Industry	Velasco Drainage District	City of Oak Ridge North
Town of San Felipe	Chambers County	City of Panorama Village
City of Sealy	Chambers-Liberty Counties Navigation District	City of Patton Village
City of Wallis	City of Anahuac	Town of Roman Forest
Brazoria County	City of Beach City	City of Shenandoah
City of Alvin	City of Cove	City of Splendora
City of Angleton	City of Mont Belvieu	City of Stagecoach
City of Bailey's Prairie	City of Old River-Winfree	City of Willis
Village of Bonney	Trinity Bay Conservation District	City of Woodbranch Village
City of Brazoria	Liberty County	The Woodlands Township
City of Brookside Village	City of Ames	Town of Woodloch
City of Clute	City of Cleveland	Walker County
City of Danbury	City of Daisetta	City of Huntsville
City of Freeport	City of Dayton	City of New Waverly
City of Hillcrest Village	City of Dayton Lakes	City of Riverside
Town of Holiday Lakes	City of Devers	Waller County
City of Iowa Colony	City of Hardin	City of Brookshire
City of Jones Creek	City of Kenefick	City of Hempstead
City of Lake Jackson	City of Liberty	City of Pattison
City of Liverpool	City of North Cleveland	Town of Pine Island
City of Manvel	City of Plum Grove	City of Prairie View
City of Oyster Creek	Montgomery County	City of Waller

The Plan also includes 852 locally-specific mitigation actions from 78 participating jurisdictions. Galveston County and cities therein were included in the 2006 Plan; however, Galveston County is not included in the 2011 Plan and its projects are not included in this Plan update. The 2011 Plan update's locally-specific mitigation actions address the hazards mentioned in the Scope of this section but also include several "human-caused" hazards which are not identified elsewhere in the plan. Table 1.2 provides a county breakdown on the status of the 2006 mitigation actions as well as the new 2011 mitigation actions.

Table 1.2
Mitigation Actions from 2006 Plan and 2011 Plan Update

	2006 Mitigation Actions					Total 2006 Mitigation Actions	2011 Mitigation Actions	Total 2006 and 2011
	Complete	In Progress	No Longer Pursuing	Carry On	Carry On With Modification			
H-GAC	0	0	0	3	4	7	10	17
Austin	6	3	7	25	9	50	20	70
Brazoria	54	11	11	54	4	134	129	263
Chambers	6	0	2	5	3	16	32	48
Liberty	6	2	0	65	0	73	40	113
Montgomery	52	1	13	54	31	151	70	221
Walker	0	0	0	27	1	28	40	68
Waller	8	0	0	27	0	35	17	52
Total	132	17	33	257	48	494	358	852

Authority

The Plan, developed in accordance with current state and federal rules and regulations governing local hazard mitigation plans, will be adopted by the 78 participating jurisdictions. The Plan shall be routinely monitored and revised to maintain compliance with the following provisions, rules and legislation:

- Section 322, Mitigation Planning, of the Robert T. Stafford Disaster Relief and Emergency Assistance Act, as enacted by Section 104 of the Disaster Mitigation Act of 2000 (P.L. 106-390);
- FEMA's Interim Final Rule published in the Federal Register on February 26, 2002, at 44 CFR Part 201; and
- Texas Department of Public Safety, Division of Emergency Management; the State of Texas Hazard Analysis document; Annex P; and Checklist P.

2.0 Planning Process

This section includes a description of the process used by H-GAC, its consulting partners and local jurisdictions to develop the 2011 Update.

Overview of Hazard Mitigation Planning

Hazard mitigation planning can be described as the means to break the repetitive cycle of disaster loss. A core assumption of hazard mitigation is that pre-disaster investments will significantly reduce the demand for post-disaster assistance by alleviating the need for emergency response, repair, recovery and reconstruction.

Mitigation planning offers many benefits, including:

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

Hazard mitigation planning is the process of identifying natural hazards, understanding community capabilities and resources, identifying and assessing hazard vulnerability and risk, and determining how to minimize or manage those risks. The first big piece of the planning process is the assessment of hazards and how they can impact specific assets. After hazard identification, communities consider their vulnerability to the identified threats. The planning process culminates in a mitigation strategy, i.e. identification of specific mitigation actions, which when viewed as a whole, represents a comprehensive strategy to reduce the impact of hazards. Responsibility for each mitigation action is assigned to a specific individual, department or agency along with a schedule for its implementation. Mitigation actions are included in Appendix A of this document. *Plan Maintenance Procedures* (located in Section 7 of this Plan) establish procedures to monitor progress, including the regular evaluation and enhancement of the Plan. The maintenance procedures ensure that the Plan remains a dynamic and functional document over time.

Preparing the 2011 Update

H-GAC and its subcontractor completed the Hazard Mitigation Plan (HMP) 2011 Update in partnership with participating counties and cities. The 2011 H-GAC mitigation planning effort includes 78 participating jurisdictions. The participating counties include: Austin, Brazoria, Chambers, Liberty, Montgomery, Waller and Walker. Galveston County (included in the 2006 HMP) elected to complete a HMP independent of the H-GAC 2011 HMP Update, and is no longer part of the H-GAC regional effort. Appendix E contains detailed specific changes to the 2011 HMP Update.

The 2011 Update included:

- Reviewing all sections of the plan, with special emphasis on changes affecting the Hazards, Capabilities and Vulnerabilities sections of the plan;
- Meeting with emergency management coordinators and other staff from local jurisdictions to discuss and identify new individual action items to be included in Appendix A;

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- Increasing the level effort placed on assessing risk from wildfires;
- Assessing lessons learned from Hurricane Rita in 2005 and Hurricane Ike in 2008. Updating the status of individual mitigation action items included in Appendix A of the 2006 HMP; and,
- Providing 358 new individual mitigation actions.

H-GAC updated the Hazards Analysis (Section 4) to include the latest available information from the data sources utilized in the 2006 HMP. H-GAC completed the wildfire risk assessment using the Southern Wildfire Risk Assessment (SWRA) software which is managed by the Southern Group of State Foresters. This software is further explained in Section 4. The assessment included assigning a community risk rating to the participating jurisdictions and updating the jurisdictional Probability of Future Hazard Occurrence table with the respective likelihood of a wildfire (Table 4.3-33).

H-GAC's subcontractor updated the capability assessment portion of the plan (Section 5) through the completion of local capability assessment surveys. Communities were given the opportunity to review their capability assessment included in the 2006 HMP and make any necessary revisions. Communities were also asked to review their mitigation action plans that were included in the 2006 HMP and provide input on the status of each action. Section 6 contains a summary of collected data.

Input from Local Jurisdictions – 2011 Update

Input from local jurisdictions played a key role in the 2011 Update. In many cases throughout the region, cities and towns with small numbers of staff and/or elected officials with other full-time jobs in addition to their duties as elected officials have difficulty participating in meetings. In these cases, H-GAC coordinated with the county emergency management coordinators, county judges or commissioners representing those jurisdictions to relay information to the smaller cities and towns. The 78 jurisdictions in the 2011 Update will also continue participation through the adoption of the 2011 Update by resolution. The primary planning team members are listed in **Table 2.1**. During the 2011 Update planning process, H-GAC obtained mitigation actions and identified contacts for all of the participating 78 jurisdictions. Local points of contact for each of the 78 jurisdictions are available as Table 7.1 in Section 7.

Table 2.1
Primary Planning Team Members – 2011 Update

Representative Name	Organization/Company
Miles Arena	H-GAC
Amy Boyers	H-GAC
Chuck Wemple	H-GAC
The Hon. Carolyn Bilski	Austin County
Ray Chislett	Austin County
Kelly Hamby	Brazoria County
Glenn LaMont	Brazoria County
Don Brandon	Chambers County
Sarah Cerrone	Chambers County
Ryan Holzaepfel	Chambers County
Tom Branch	Liberty County
Nicky Kelly	Montgomery County
David Anderson	Walker County
Butch Davis	Walker County
Brian Cantrell	Waller County
ChiChung Chang	URS Corporation

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Representative Name	Organization/Company
Stephanie Guillot	URS Corporation
Anupriya Prabhuswamy	URS Corporation

H-GAC facilitated 14 meetings/workshops with groups of local jurisdictions throughout the planning process. At the beginning of the planning process, H-GAC held a regional meeting to reorient participants to the hazard mitigation process and participating counties and jurisdictions were asked to submit the status of the hazard mitigation action items presented in the 2006 HMP Appendix A along with updated hazard mitigation actions that were incorporated in Appendix A of the 2011 HMP Update.

In the H-GAC region, emergency management coordination is centralized at the county level. County emergency management coordinators serve as liaisons between H-GAC and the cities and towns. For this reason, H-GAC made direct contact through meetings, phone calls and e-mail with the seven county emergency management coordinators to engage participation both for the counties and the cities located within the counties.

The 14 meetings hosted by H-GAC are listed below. **Tables 2.2-2.15** contain participant attendance and are presented near the end of this section under “Meetings Attendance – Planning Meetings and Input Sessions – 2011 Update Planning Effort”. One hundred four individuals attended the 14 meetings.

- November 19, 2010, Regional Planning Session, H-GAC
- January 21, 2011, Mitigation Action Plan Meeting, Montgomery County
- January 26, 2011, Mitigation Action Plan Meeting, Walker County
- January 26, 2011, Mitigation Action Plan Meeting, Liberty County
- January 26, 2011, Mitigation Action Plan Meeting, Brazoria County
- April 14, 2011, Hazard Mitigation Plan Update Draft Review Meeting, H-GAC
- November 28, 2011 Hazard Mitigation Plan Update Mitigation Actions Meeting, Austin County
- December 7, 2011 Hazard Mitigation Plan Update Mitigation Actions Meeting, Liberty County
- December 7, 2011 Hazard Mitigation Plan Update Mitigation Actions Meeting, Chambers County
- December 9, 2011 Hazard Mitigation Plan Update Mitigation Actions Meeting, Brazoria County
- December 12, 2011 Hazard Mitigation Plan Update Mitigation Actions Meeting, Walker County
- December 12, 2011 Hazard Mitigation Plan Update Mitigation Actions Meeting, Montgomery County
- December 12, 2011 Hazard Mitigation Plan Update Mitigation Actions Meeting, Waller County
- January 31, 2012 Regional Hazard Mitigation Plan 2011 Update Public Hearing, H-GAC

H-GAC Regional Planning Session

H-GAC hosted an initial planning meeting on November 19, 2010 and invited all of the participating jurisdictions and community representatives (**Table 2.2**).

The following key items were presented to the meeting attendees:

- Scope of the Plan Update;
- Schedule of the Plan Update;
- Local involvement plan; and
- Identification of locally-specific elements in the 2006 HMP that required updating.

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Mitigation Action Plan Meetings

H-GAC held Mitigation Action Plan Meetings in four of the seven participating counties. At each meeting, H-GAC and its subcontractor presented the timeline for submitting the draft plan and information regarding eligible and ineligible activities under the program. Meeting attendees were also given mitigation action worksheets to complete and return to H-GAC for inclusion in the Plan. **Tables 2.3-2.6** provide a listing of attendees for each of the four mitigation action plan meetings.

Pre-Submittal HMP Update Review Session

H-GAC held a HMP Update draft review meeting on April 14, 2011 and invited all participating jurisdictions and community member were invited to attend. The review session allowed local community representatives an opportunity to comment on the 2011 HMP Update. **Table 2.7** provides attendees.

H-GAC conducted additional planning meetings after the 2011 plan update submittal to review submitted mitigation actions and solicit additional actions. H-GAC conducted seven meetings in November and December 2011. H-GAC staff contacted the seven county emergency management coordinators who notified their cities and towns regarding the meetings. The meetings were also included in H-GAC's monthly *Community and Environmental Planning Update* electronic newsletter, which has approximately 1,200 subscribers, for the month of December. H-GAC staff, county emergency management coordinators, and many city and town representatives attended. In many cases throughout the region, cities and towns with small numbers of staff and/or elected officials with other full-time jobs in addition to their duties as elected officials were not able to attend. In these cases, the county emergency management coordinator or county judge or commissioners represented those jurisdictions and conducted follow up phone calls and emails to discuss the revisions to the jurisdictions' mitigation actions so that all participating jurisdictions contributed a minimum of two valid mitigation actions and two actions that support NFIP compliance. **Tables 2.8–2.14** provide attendance from these meetings. H-GAC conducted additional one-on-one coordination with the county emergency management coordinators and several cities and towns following the November and December 2011 meetings.

Multi-Jurisdictional Participation – 2011 Update

County-level jurisdictions signed inter-local agreements stating their commitment to participate in the multi-jurisdictional planning process and accepted the role of coordinating participation and input from cities and towns within their counties. To satisfy multi-jurisdictional participation requirements, counties and local jurisdictions were required to perform the following tasks:

- Participate in mitigation planning workshops;
- Complete the *Local Capability Assessment Survey*;
- Identify completed mitigation projects, if applicable; and
- Develop and adopt the Regional Hazard Mitigation Plan, including county or municipal-level goals and mitigation actions.

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Each municipality participated in the planning process and developed locally-specific mitigation actions for their jurisdictions. Each jurisdiction will adopt the Regional Hazard Mitigation Plan to officially be included in the 2011 Update.

Participation with Other Entities – 2011 Update

Southern Fire Risk Assessment System (SFRAS) software developed by the Texas Forest Service and Sanborn Map Company was used to obtain the wildfire risk for the H-GAC region. Texas Forest Service which is an integral part of the Texas A&M University system provided the 2006 published Southern Wildfire Risk data and technical expertise to help determine the wildfire risk to various H-GAC communities. Sanborn Map Company provided the license to the SFRAS software. Curt Stripling and Joshua Young from the Texas Forest Service provided the necessary data and advice throughout the risk assessment process.

H-GAC staff also met to discuss hazard mitigation planning with members of Rice University's Severe Storm Prediction, Education, and Evacuation from Disasters (SSPEED) Center and University of Houston – Clear Lake's environmental management program staff. Future regional hazard mitigation plans may include collaborations with these organizations for expanded modeling of storm surge and dam failure inundation.

Input from the Public – 2011 Update

On January 31, 2012, H-GAC held a public hearing for review of the 2011 Plan Update. The meeting took place during a 15-day public comment period from January 25 through February 8, 2012. H-GAC placed notices in the region's newspaper with the largest number of subscribers, *The Houston Chronicle*, and three local newspapers: *The Brazoria County Facts*, *The Conroe Courier*, and *The Huntsville Item*. H-GAC distributed public notices to county judges and commissioners, county emergency management coordinators and city mayors and managers. H-GAC also contacted county emergency management coordinators to distribute the public notices to their respective cities, towns and villages and for placement in county courthouses. H-GAC staff also made announcements at the Gulf Coast Economic Development District meeting (regional economic development group), Solid Waste Management Committee (regional committee appointed by H-GAC Board of Directors) and the Coordinating Committee of the Consortium (25 government, non-profit and academia partners from the 13-county area), which oversees the work plan for the Housing and Urban Development Sustainable Communities grant. H-GAC also notified members of the regional academic community, specializing in national disasters, hazard mitigation and resiliency (Rice University and University of Houston-Clear Lake). **Table 2.15** presents the attendance. At the public hearing, H-GAC staff responded to questions from attendees and placed those responses online following the close of the public comment period.

Meeting Attendance – Planning Meetings and Input Sessions - 2011 Update Planning Effort

Table 2.2
November 19, 2010 Regional Planning Session
H-GAC

Organization	Name	Department	Title
H-GAC	Miles Arena	Community & Environmental Planning	Disaster Recovery Coordinator
H-GAC	Chuck Wemple	Community & Environmental Planning	Economic Development Program Manager
H-GAC	Christy D. Willhite	Transportation Planning	Chief Transportation Planner
Austin County	Ray Chislett	Office of Emergency Management	Emergency Management Coordinator

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Organization	Name	Department	Title
Brazoria County	Kelly Hamby	Floodplain Department and Building Permits	Floodplain Coordinator and 911 Administrator
Chambers County	Don Brandon	Engineering	County Engineer
Chambers County	Sarah Cerrone	Economic Development & Special Projects	Director
Chambers County	John D. Hobbs	Emergency Management	Asst. EMC
Chambers County	Ryan Holzaepfel	Emergency Management	Director of Emergency Management
Liberty County	Tom Branch	Emergency Management	Emergency Management Coordinator
Walker County	David Anderson	Office of Emergency Management	Deputy Emergency Management Coordinator
Walker County	A.L. "Butch" Davis	Sheriff's Department	Chief Deputy and Emergency Management Coordinator
URS Corporation	ChiChung Chang		Principal

Table 2.3
January 21, 2011 Mitigation Action Plan Meeting
Montgomery County

Organization	Name	Department	Title
H-GAC	Miles Arena	Community & Environmental Planning	Disaster Recovery Coordinator
ADR-ACTS Disaster Recovery, Inc.	Ann Carr		Principal
City of Conroe	Les McKay		
City of Conroe	Luis Nunez	Planning Department	City Planner
City of Conroe	Sami Randles	Fire Department	Office Manager
City of Cut and Shoot	Arnie Schulze	Cut and Shoot PD	
City of Oak Ridge North	A. Walters		Chief of Police/EMC
City of Panorama Village	Jim Green	Police Department	Chief of Police and Emergency Management Coordinator
City of Panorama Village	The Hon. Howard L. Kravetz	Mayor's Office	Mayor
Town of Roman Forest	JoNell Snider	Administration	City Secretary
City of Shenandoah	Ronnie Earnest	Shenandoah PD	
City of Stagecoach	Charles Thacker	Police Department	Police Chief and Emergency Management Coordinator
City of Willis	James Nowak	Police Department	Chief of Police and Emergency Management Coordinator

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Organization	Name	Department	Title
Montgomery County	Joanne Ducharme	Community Development Department	Community Development Director
Montgomery County	Gil Martinez		
Montgomery County	Scott Nichols	Environmental Health	
Texas A & M University	Michael E. Heimer	Texas Agrilife Extension Service, Montgomery County Extension Office	County Extension Agent, Agriculture/Natural Resources
The Woodlands Township	Miles McKinney		
The Woodlands Township	John Powers	Community Services	Assistant General Manager

Table 2.4
January 26, 2011 Mitigation Action Plan Meeting
Walker County

Organization	Name	Department	Title
H-GAC	Miles Arena	Community & Environmental Planning	Disaster Recovery Coordinator
City of Huntsville	Rose Kader		Planner
City of Huntsville	John Waldo		EMC
Walker County	David Anderson	Office of Emergency Management	Deputy Emergency Management Coordinator
Walker County	A.L. "Butch" Davis	Sheriff's Department	Chief Deputy and Emergency Management Coordinator
Walker County	Sherri Pegado		Admin. Assistant

Table 2.5
January 26, 2011 Mitigation Action Plan Meeting
Liberty County

Organization	Name	Department	Title
H-GAC	Miles Arena	Community & Environmental Planning	Disaster Recovery Coordinator
City of Ames	The Hon. John White	Mayor's Office	Mayor
City of Cleveland	John Davis	Development Services	Building Official / Code Enforcement
City of Cleveland	Steve Rasberry	Cleveland Fire	
City of Daisetta	Sandy Chandler		Utility Superintendent
City of Dayton	Dave Diaz		City Planner
City of Liberty	Brian Hurst	Fire Department	
Liberty County	Tom Branch	Emergency Management	Emergency Management Coordinator
Liberty County	Dennis Odell	County Judge's Office	County Judge's Liaison

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Table 2.6
January 26, 2011 Mitigation Action Plan Meeting
Brazoria County

Organization	Name	Department	Title
H-GAC	Miles Arena	Community & Environmental Planning	Disaster Recovery Coordinator
BC Info Systems	Denise Echols		
BC Info Systems	Hendrick		
Brazoria County	Michael Shannon, PE	Engineer's Office	Assistant County Engineer
Brazoria County	Eric W. Dyess	Engineering Department	GIS Data Technician
Brazoria County	Jason Fillip	Pct 2	
Brazoria County	Brandon M. Garsee	Commissioner Precinct 1	Road & Bridge Foreman
Brazoria County	Jimmy Greak	Pct 2	
Brazoria County	Kennard Hill	Commissioner Precinct 1	Road Superintendent
Brazoria County OEM	Glenn LaMont		
Brazoria Drainage District #4	John Genaro		Safety Director
Brazoria Drainage District #4	Michael Yost		Superintendent
Brazoria Drainage District #5	Cherwosky		
City of Alvin	David Kocurek	Public Services Division	Director of Public Services
City of Angleton	Robert Heinemeyer	Public Works Department	Director of Public Works
City of Angleton	Laurie Rodriguez	Administration	Assistant City Secretary
City of Brookside/Constable Pct 3	Charles "Buck" Stevens		
City of Clute	Doug Caffey	Building Codes & Inspections	Building Official
City of Iowa Colony	Dinh Ho		
City of Jones Creek	Linda Shephard	Administration	City Secretary
City of Jones Creek	William Tidwell	Police Department	Emergency Management Coordinator
City of Lake Jackson	Sal Aguirre	Engineering Department	City Engineer
City of Liverpool	Roller		
Village of Surfside Beach	Andy Moody	Administration	Code Enforcement Officer

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Table 2.7
April 14, 2011 Hazard Mitigation Plan Update Draft Review Meeting
H-GAC

Organization	Name	Department	Title
H-GAC	Miles Arena	Community & Environmental Planning	Disaster Recovery Coordinator
H-GAC	Stephan Gage	Public Services	Homeland Security Planner
Brazoria County	Kelly Hamby	Floodplain Department and Building Permits	Floodplain Coordinator and 911 Administrator
City of Huntsville	John Waldo (on phone)	Fire Department	Assistant Fire Chief and Emergency Management Coordinator
City of Roman Forest	JoNell Snider	Administration	City Secretary
Liberty County	Tom Branch (on phone)	Emergency Management	Emergency Management Coordinator
Montgomery County	Nicky Kelly	Office of Emergency Management	Emergency Management Coordinator
URS Corporation	ChiChung Chang		Principal
URS Corporation	Stephanie Guillot		
URS Corporation	Anu Prabhuswamy		

Table 2.8
November 28, 2011 Hazard Mitigation Plan Update Mitigation Actions Meeting
Austin County

Organization	Name	Department	Title
H-GAC	Amy Boyers	Community and Environmental Planning	Sr. Environmental Planner
H-GAC	Chuck Wemple	Community and Environmental Planning	Economic Development Program Manager
Austin County	The Hon. Carolyn Bilski	County Judge's Office	County Judge
Austin County	Ray Chislett	Austin County Emergency Management	Emergency Management Coordinator
City of Bellville	Larry Matthews	Police Department	Chief
City of Brazos Country	The Hon. Charles Kalkomey (via phone)	Administration	Mayor
City of Sealy	Fred Palmer	Police Department	
City of Wallis	Charles Hinze	Administration	City Administrator

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Table 2.9
December 7, 2011 Hazard Mitigation Plan Update Mitigation Actions Meeting
Liberty County

Organization	Name	Department	Title
H-GAC	Amy Boyers	Community and Environmental Planning	Sr. Environmental Planner
City of Liberty	Brian Hurst	Fire Department	
Liberty County	Tom Branch	OEM	Emergency Management Coordinator
Liberty County	Debbie Scott	OEM	Assistant Emergency Management Coordinator

Table 2.10
December 7, 2011 Hazard Mitigation Plan Update Mitigation Actions Meeting
Chambers County

Organization	Name	Department	Title
H-GAC	Amy Boyers	Community and Environmental Planning	Sr. Environmental Planner
City of Anahuac	Lance Nauman		
Chambers County	Robert Hall	Engineering	County Engineer
Chambers County	Debbie Nadal	Emergency Management	Assistant Emergency Management Coordinator
Chambers County	The Hon. David Abernathy	Precinct 2	Commissioner
Chambers County	Sarah Cerrone	Economic Development/Special Projects	Director
Chambers County	Ryan Holzaepfel	Office of Emergency Management/Fire Marshal's Office	Emergency Management Coordinator
Chambers County	The Hon. Rusty Senac	Precinct 4	Commissioner
Chambers-Liberty Counties Navigation District	Mary Beth Stengler		General Manager
Trinity Bay Conservation District	Jerry Shadden		General Manager

Table 2.11
December 9, 2011 Hazard Mitigation Plan Update Mitigation Actions Meeting
Brazoria County

Organization	Name	Department	Title
H-GAC	Amy Boyers	Community and Environmental Planning	Sr. Environmental Planner
City of Angleton	Katherine Davis	Police Department	Assistant Chief
City of Brazoria	Teresa Borders		City Manager
City of Brazoria	Marcus Rabren	Emergency Management	Emergency Management Coordinator

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Organization	Name	Department	Title
Brazoria County	Kelly Hamby		Floodplain Administrator
Brazoria County	Glenn LaMont	Emergency Management	Assistant Emergency Management Coordinator
Brazoria County	Steve Rosa	Emergency Management	Emergency Management Coordinator
City of Brookside Village	Buck Stevens		EMC
City of Clute	Pam Mahon	Police Department	
City of Clute	Mark Wicker	Police Department	
City of Freeport	Chris Motley		
City of Lake Jackson	Kim Knapp		
City of Lake Jackson	Bill Yenne		City Manager
City of Manvel	Aaron Bell		
City of Manvel	Dave Ferguson	EMS	
City of Quintana	The Hon. Jerry Masters	Emergency Management	Alderman, Emergency Management Coordinator
Village of Surfside Beach	Sandra Miller		
City of Sweeny	Cindy King		
Village of Surfside Beach	Sandra Miller		
Texas Division of Emergency Management	Mike Jones		District Coordinator, Sub 2A

Table 2.12
December 12, 2011 Hazard Mitigation Plan Update Mitigation Actions Meeting
Walker County

Organization	Name	Department	Title
H-GAC	Amy Boyers	Community and Environmental Planning	Sr. Environmental Planner
City of Huntsville	John Hobbs	Fire Department	
City of Huntsville	Rose Kader		Planner
City of Huntsville	John Waldo		Emergency Management Coordinator
Walker County	David Anderson	Walker County OEM	Assistant Emergency Management Coordinator
Walker County	Joe Connell	Walker County OEM	

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Table 2.13
December 12, 2011 Hazard Mitigation Plan Update Mitigation Actions Meeting
Montgomery County

Organization	Name	Department	Title
H-GAC	Amy Boyers	Community and Environmental Planning	Sr. Environmental Planner
City of Conroe	Ken Kreger	Fire Department/OEM	Fire Chief
City of Conroe	Sami Randles	Fire Department/OEM	
Montgomery County	Ann Carr		Chief of Staff
Montgomery County	Nicky Kelly	OEM	Emergency Management Coordinator
City of Panorama Village	The Hon. Howard Kravetz		Mayor
City of Panorama Village	Jim Green	Police Department	Chief
City of Shenandoah	Ronnie Earnest	Police Department	
The Woodlands Townships	Robert Moore	Fire Department	Battalion Chief
City of Woodloch	The Hon. Diane Lincoln		Mayor

Table 2.14
December 14, 2011 Hazard Mitigation Plan Update Mitigation Actions Meeting
Waller County

Organization	Name	Department	Title
H-GAC	Amy Boyers	Community and Environmental Planning	Sr. Environmental Planner
Waller County	The Hon. Glenn Beckendorff		County Judge
Waller County	Brian Cantrell	OEM	Emergency Management Coordinator

Table 2.15
January 31, 2012 Regional Hazard Mitigation Plan 2011 Update Public Hearing
H-GAC

Organization	Name	Title
H-GAC	Miles Arena	Disaster Recovery Coordinator
H-GAC	Amy Boyers	Sr. Environmental Planner
H-GAC	Chuck Wemple	Economic Development Program Manager
CivilTech Engineering	Jim Schachtschneider	Manager
<i>The Examiner</i>	Caroline Evans	Reporter
Rice University	Garrett Dolan	Director
University of Houston – Clear Lake	Kathleen Garland	Faculty
University of Houston – Clear Lake	Hank Hodde	Student

Review and Incorporation of Existing Information

The following provides a list of data sources and plans that were incorporated during the 2006 planning process and the 2011 plan update process.

Bureau of Economic Geology, Texas Gulf Shoreline Change Rates Through 2007. Website: http://www.beg.utexas.edu/coastal/presentations_reports/begTexasGulfShorelineReport2011_highRes.pdf Used as background information and data source for coastal erosion hazard.

Federal Emergency Management Agency (FEMA), Website: www.fema.gov Used for various photographs throughout HMP. Used as source of national toxic release information and repetitive flood loss property information. FEMA's HAZUS Model was used in the 2006 HMP and those results were incorporated into the 2011 HMP Update.

Houston-Galveston Area Council. Resource for regional information, including population forecasts, regional economies, infrastructure, land use, natural landscape, transportation facilities, watersheds and river basins. The H-GAC 2006 Regional Hazard Mitigation Plan was used as the foundation for the 2011 update.

National Climatic Data Center (NCDC), U.S. Department of Commerce, National Oceanic and Atmospheric Administration. Website: <http://lwf.ncdc.noaa.gov/oa/ncdc.html> Used as data source for excessive heat, flood, severe thunderstorms, tornadoes, winter storms, and hail in hazards section.

National Drought Mitigation Center, University of Nebraska-Lincoln. Website: <http://www.drought.unl.edu/>

National Integrated Drought Information System, U.S. Drought Portal. Website: www.drought.gov Used as data source for drought hazard in hazard section.

National Inventory of Dams, U.S. Army Corps of Engineers. Website: <http://nid.usace.army.mil> Used as a data source for dams/levees in hazard section.

National Hurricane Center, National Oceanic & Atmospheric Administration (NOAA). Website: <http://www.nhc.noaa.gov/> Used as data source for hurricanes and tropical storms hazard and provided background information on Saffir-Simpson Hurricane Wind Scale debate. Also used maximum storm surge inundation maps for Galveston, Chambers, Harris, and Brazoria counties affected by Hurricane Ike.

National Oceanic and Atmospheric Administration (NOAA), National Climatic Data Center (NCDC), Regional Climate Centers, Used as data source for excessive heat and winter storms hazards.

National Weather Service (NWS), U.S. Department of Commerce, National Oceanic and Atmospheric Administration. Website: www.nws.noaa.gov Used as data source for floods, hurricanes and tropical storms, tornadoes, severe thunderstorms and drought hazards

Office of Pipeline Safety, Pipeline and Hazardous Materials Safety Administration (PHMSA), Website: <http://primis.phmsa.dot.gov/comm/Index.htm?nocache=8835> Used as data source for energy pipeline hazard.

Storm Prediction Center (SPC), U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Weather Service. Website: www.spc.noaa.gov Used as data source for tornado hazard.

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Texas A&M University Press Release, TAMU Times, September 29, 2011

<http://tamutimes.tamu.edu/2011/09/29/terrible-news-texas-drought-could-last-until-2020/> Used as data source for drought hazard.

Texas General Land Office (GLO), Website: www.glo.state.tx.us Used as data source for coastal erosion hazard and regional electricity providers.

Texas Forest Service (TFS), Website: <http://txforests.tamu.edu/main/default.aspx> Used as data source for wildfire hazard.

Texas Forest Service (TFS), Southern Fire Risk Assessment System. Used model for wildfire hazard.

Texas Railroad Commission. Used as source for energy pipeline hazard.

Toxic Release Inventory, Environmental Protection Agency. Website: <http://www.epa.gov/triexplorer/trends.htm> Used as data source for toxic release/hazardous materials hazard .

United States Census Bureau www.census.gov. Used for demographic statistics.

United States Department of Agriculture, Natural Resource Conservation Service Used as data source for expansive soils information in drought hazard section.

The University of Texas at Austin, Bureau of Economic Geology (BEG). Used as data source for coastal erosion hazard.

Walker County Community Wildfire Protection Plan. Used as a source to support mitigation actions in Walker County.

3.0 Community Profile

Area at a Glance

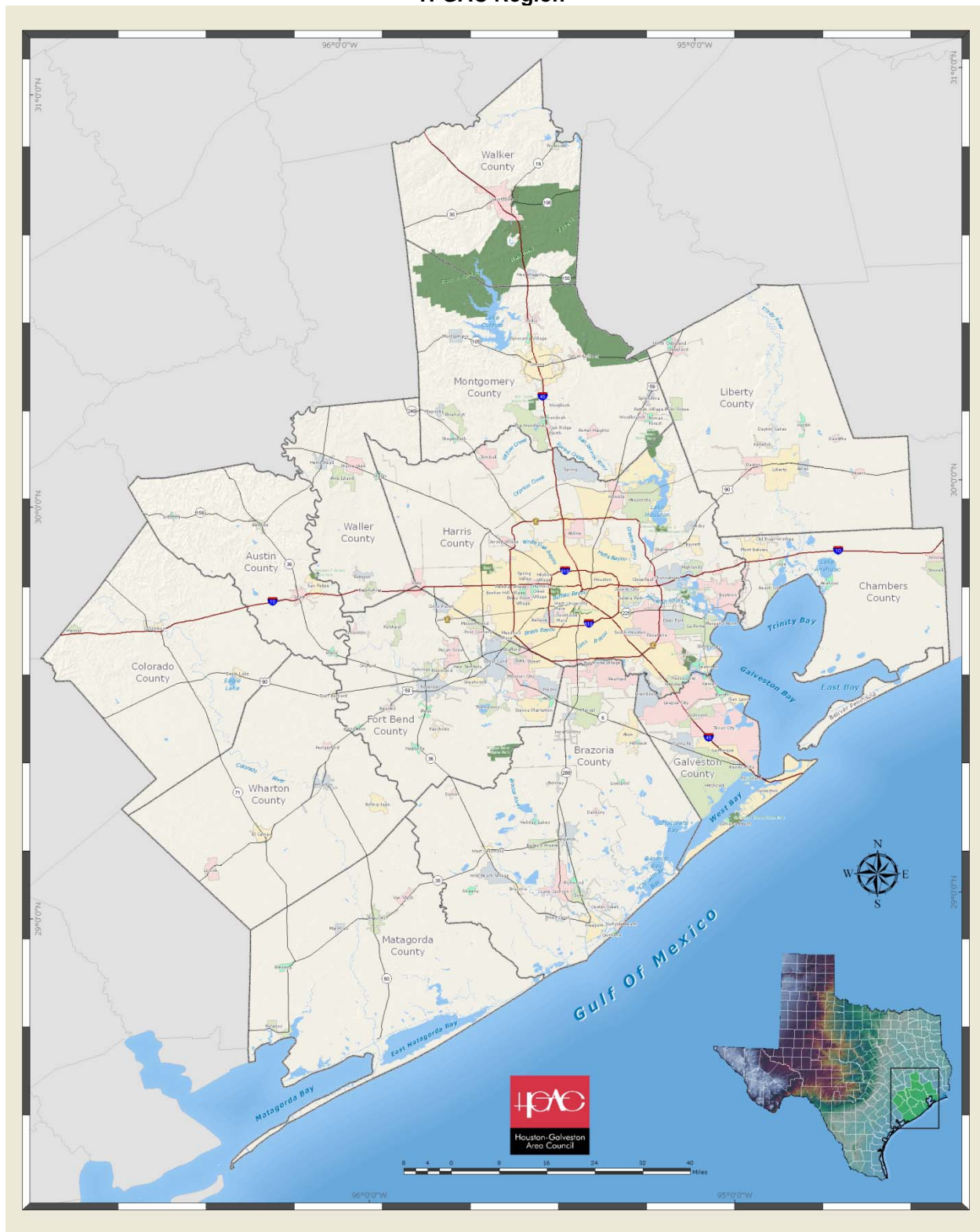
The Houston-Galveston Area Council (H-GAC) region consists of the 13-county region along the Gulf Coast of Texas. The region includes Austin, Brazoria, Chambers, Colorado, Fort Bend, Galveston, Harris, Liberty, Matagorda, Montgomery, Walker, Waller and Wharton counties, and represents over one-quarter of the state's population, covering nearly 12,300 square miles. A map of the H-GAC region is presented in **Figure 3.1**.

Larger entities with substantial capacity to complete hazard mitigation plans have developed independent plans separate from the regional effort. Examples of these counties and large cities include Harris County and the City of Houston. In addition, three of our western most counties are included in the Lower Colorado River Authority plan (i.e., Colorado, Wharton and Matagorda). The H-GAC Regional Hazard Mitigation Plan covers Austin, Brazoria, Chambers, Liberty, Montgomery, Walker, and Waller counties. The Houston Consolidated Metropolitan Statistical Area (CMSA) covers Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery, and Waller counties.

The region is anchored by the City of Houston, a hub of commerce, transportation, education, diversity, and culture. Houston is primarily located within Harris County, and is 168 miles from Austin, 197 miles from San Antonio, and 244 miles from Dallas.

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Figure 3.1 H-GAC Region



Geography

Land Area in Square Miles

Table 3.1
Land Area of H-GAC Region

County	Land Area (Square Miles)	County	Land Area (Square Miles)
Austin	653	Matagorda	1,114
Brazoria	1,386	Montgomery	1,044
Chambers	599	Walker	787
Colorado	963	Waller	514
Fort Bend	875	Wharton	1,090
Galveston	398	CMSA	7,705
Harris	1,729	13-County Region	12,312
Liberty	1,160	Source: U.S. Census	

The region's size contributes to its diverse geographic landscape, which includes prairie, grasslands, forests, and coastal wetlands. The largely forested northern and eastern areas contrast the southern and western grasslands and prairie, and the counties along the Gulf of Mexico are typical of grassland and sand-dominated topographies. The region is connected through a system of major waterways including the Brazos, Colorado, Trinity, and San Jacinto Rivers, as well as a group of river basins and watersheds. The region's reservoirs are presented in **Table 3.2**. The river basins are presented on **Figure 3.2** and the watersheds are presented on **Figure 3.3**.

Table 3.2
H-GAC Area Reservoirs

Addicks Reservoir
Barker Reservoir
Duck Lake
Galveston County Reservoir
Lake Houston
McCormack Reservoir
Mustang Lake
Sheldon Reservoir

Figure 3.2
H-GAC Region's River Basins

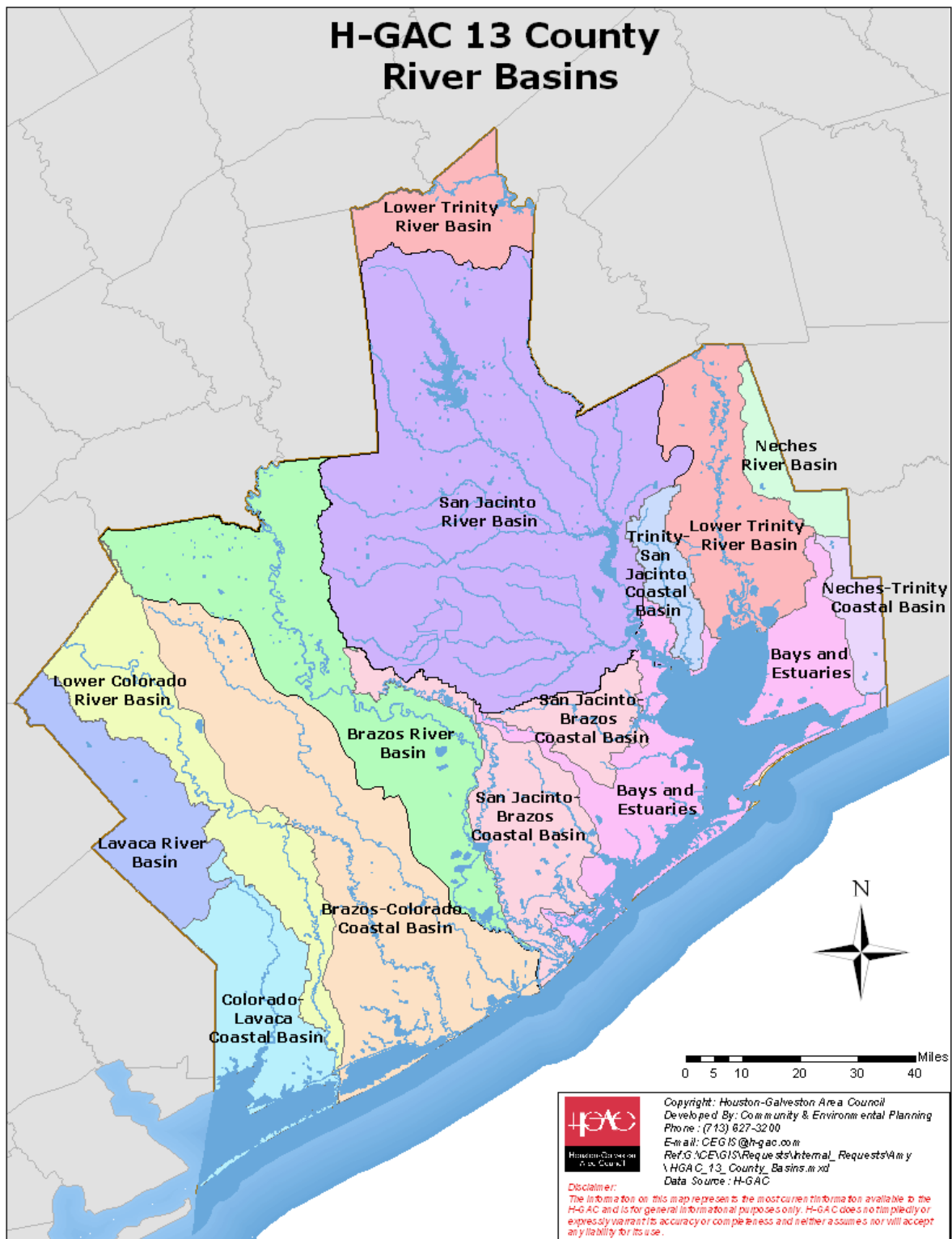
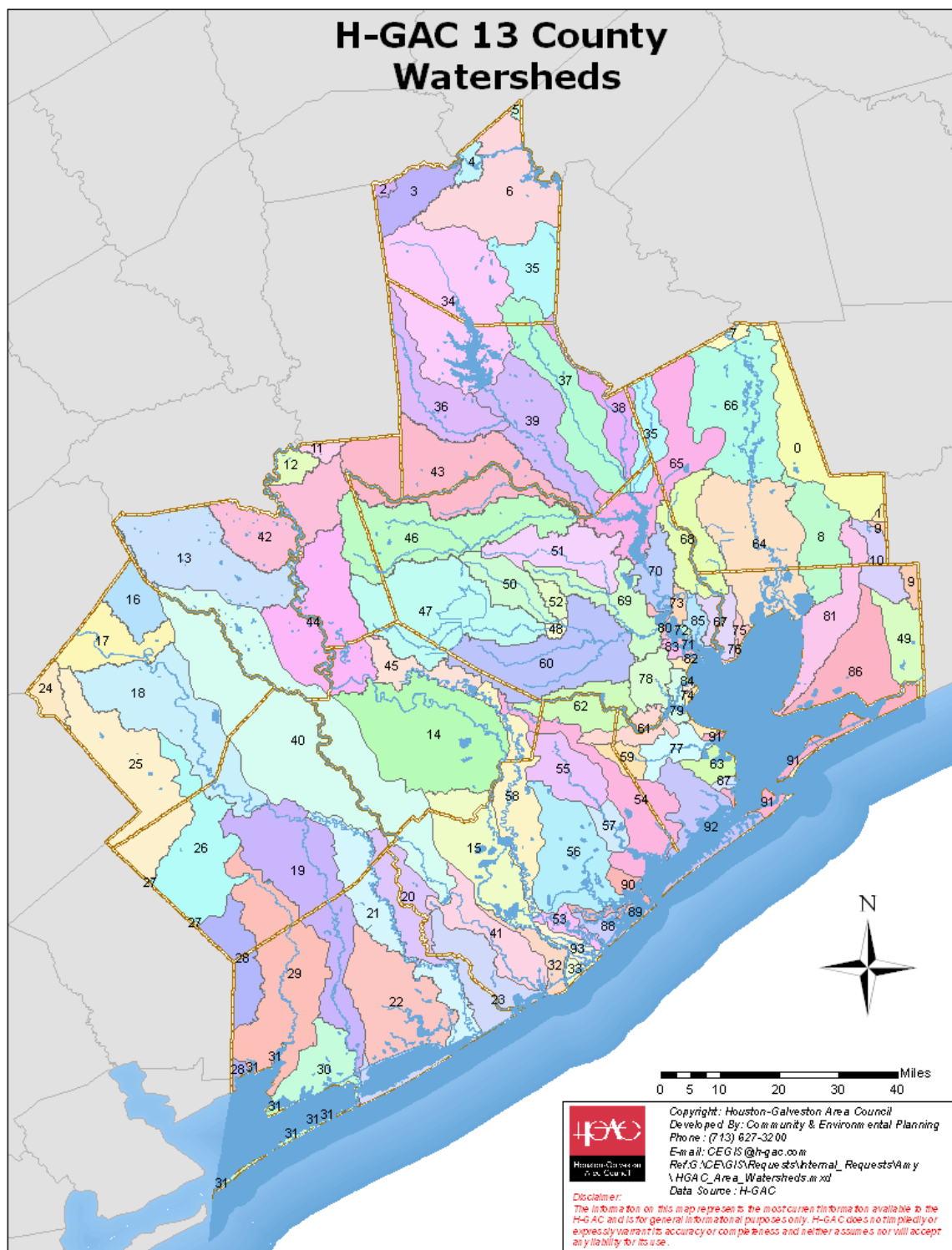


Figure 3.3
H-GAC Area Watersheds



A corresponding table indicating the names of the region's watersheds is found in **Table 3.3**.

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Table 3-3: H-GAC Region's Watersheds

ID	Watershed
0	Pine Island Bayou
1	Little Pine Island Bayou-Pine Island Bayou
2	Caney Creek-Bedias Creek
3	South Bedias Creek-Bedias Creek
4	Wright Creek-Trinity River
5	White Rock Creek
6	Nelson Creek-Lake Livingston
7	Menard Creek-Trinity River
8	Whites Bayou-Turtle Bayou
9	Lower Neches Valley Authority Canal-Taylor Bayou
10	Spindletop Bayou
11	Beason Creek-Brazos River
12	New Year Creek-Brazos River
13	Mill Creek-Brazos River
14	Big Creek-Brazos River
15	Dry Bayou-Brazos River
16	Clear Creek-Cummins Creek
17	Buckners Creek-Colorado River
18	Skull Creek-Colorado River
19	Jones Creek-Colorado River
20	Linnville Bayou
21	Water Hole Creek-Caney Creek
22	Peyton Creek-Live Oak Bayou
23	East Matagorda Bay
24	Headwaters Navidad River
25	West Sandy Creek-Sandy Creek
26	West Mustang Creek
27	Mustang Creek-Navidad River
28	East Carancahua Creek
29	Tres Palacios River
30	East Branch Mad Island Slough-Matagorda Bay
31	Matagorda Bay
32	Jones Creek
33	Lower Oyster Creek
34	Lake Conroe
35	East Fork San Jacinto River
36	Lake Creek
37	Caney Creek
38	Peach Creek
39	West Fork San Jacinto River
40	San Bernard River Above Tidal
41	San Bernard River Tidal
42	Clear Creek-Brazos River
43	Spring Creek
44	Bessies Creek-Brazos River
45	Upper Oyster Creek
46	Cypress Creek
47	Buffalo Bayou Above Tidal
48	Buffalo Bayou Tidal

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ID	Watershed
49	Spindletop Ditch
50	White Oak Bayou Above Tidal
51	Greens Bayou
52	Little White Oak Bayou
53	Oyster Creek Tidal
54	Chocolate Bay
55	Chocolate Bayou Above Tidal
56	Bastrop Bayou Tidal
57	Chocolate Bayou Tidal
58	Oyster Creek Above Tidal
59	Dickinson Bayou Above Tidal
60	HSC \ Buffalo Bayou
61	Clear Creek Tidal
62	Clear Creek Above Tidal
63	Moses Lake
64	Old River-Trinity River
65	Lake Houston
66	Davis Bayou-Trinity River
67	Cedar Bayou Tidal
68	Cedar Bayou Above Tidal
69	HSC \ San Jacinto River
70	San Jacinto River Tidal
71	Black Duck Bay
72	Scott Bay
73	Burnett Bay
74	Upper Galveston Bay
75	Cedar Bayou-Frontal Galveston Bay
76	Trinity Bay
77	Dickinson Bayou Tidal
78	Armand Bayou
79	Clear Lake
80	HSC/San Jacinto River Tidal
81	East Fork Double Bayou
82	Barbours Cut
83	San Jacinto Bay
84	Bayport Channel
85	Tabbs Bay
86	East Bay
87	Texas City Ship Channel
88	Drum Bay
89	Christmas Bay
90	Bastrop Bay/Oyster Lake
91	Lower Galveston Bay
92	West Bay
93	Old Brazos River Channel

Environment

Air Quality

Air pollution and smog continue to plague the City of Houston's air quality, but the region is continuing its effort to increase air quality in a number of areas. Programs are currently in place to reduce emissions from polluting vehicles, introduce clean burning fuels into government and transportation use, and improve regulation of industrial polluters. Clear Air Action, Clean Cities/Clean Vehicles, and Commute Solutions are a few of the organizations developing these clean air initiatives.

Water Quality

The major sources of freshwater drinking supply come from Lake Conroe in Montgomery County and Lake Houston in Harris County. Monitoring the quality of these and other water supplies has been important to the growth of the Houston-Galveston area, and has actively been modeled since 1971. Throughout this time, continued evaluation of the availability of the water supply to meet population growth and development has been done, along with the assessment of wastewater treatment, water quality protection, and identifying point and non-point water pollution.

Habitat

Falling within the Pineywoods, Prairies and Lakes, and Texas Gulf Coast regions, the natural habitat of the Houston-Galveston area varies. The Pineywoods region (Walker, Montgomery, and Liberty counties) is covered with pines and oaks, which build the heavily wooded area. The temperature and humidity are high and annual rainfall around 36 to 50 inches is normal. The Prairies and Lakes region (Austin and Colorado counties) includes the northwestern counties of the Houston-Galveston area and contains prairie grasslands, oak forests, and bottomland soil made up of clay. The average rainfall is about 28 to 40 inches per year. The Gulf Coast Region (Harris, Fort Bend, Galveston, Waller, Chambers, Brazoria, Matagorda and Wharton counties) primarily consists of counties bordering the Gulf of Mexico (excluding Waller and Fort Bend), and is made up of grasslands, sand, and the waterways that spill into the Gulf of Mexico. Galveston Bay is one of the nation's most productive estuaries and provides critical habitat for fisheries, migratory bird populations and coastal wetland plants.

Energy

Energy efficiency programs are available through a wide variety of agencies and programs through the region. Among those participating are programs for reducing electricity use in homes, increasing carpooling, increasing use of renewable energy, and increasing utility company competition.

Services

The infrastructure of the region is a highly developed network of civil service, healthcare, utility, education, and transportation facilities.

Police

H-GAC maintains a database that lists all police departments and constables' offices in the region. The information for regional police stations was obtained from the Texas Commission on Law Enforcement (TCLE) and the Houston Police Department. The data collected from the TCLE has not been altered in any way. A table was created from the information gathered from the Houston Police Department and added to the TCLE data. H-GAC, Houston Police Department, and the TCLE provide this data with no warranty and assume no liability for its use other than to support descriptive planning studies. To obtain a copy of this information, contact H-GAC.

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Fire Departments

H-GAC maintains a database of all fire departments, firehouses, and fire stations in the region. The information for the regional fire departments was obtained from the Texas Commission on Fire Protection (TCFP) and the Houston Fire Department. According to the TCFP Web site they have to keep up-to-date addresses for all paid fire departments and other entities that fall under mandatory commission regulations. Non-regulated entities, such as most volunteer fire departments, are not required by law to partake in any TCFP programs and therefore they do not need to keep their address information current with the TCFP. The TCFP maintains the addresses of the entities they regulate current to the best of their ability. H-GAC has added the Houston Fire Departments list of firehouses and ABI data for known fire stations around the CMSA to the list received from the TCFP. H-GAC and the TCFP provide this data with no warranty and assume no liability for its use other than to support descriptive planning studies. To obtain a copy of this information, contact H-GAC.

Prisons

H-GAC maintains a list of all prisons located in the region. The information for regional prisons was obtained from the Texas Department of Criminal Justice (TDJC). A table was created from the data gathered from the TDJC and some of the addresses were updated by telephone contact with the prison. H-GAC and TDJC provide this data with no warranty and assume no liability for its use other than to support descriptive planning studies. To obtain a copy of this information, contact H-GAC.

Utilities

The region is supplied by electricity from a suite of generating facilities that range from nuclear (South Texas Project in Matagorda County), to coal (Fort Bend County) and natural gas (the majority of plants within the region). Electricity providers operate in a deregulated market in Texas and numerous electrical providers provide extensive consumer choice. Two main companies service the electrical transmission grid within the H-GAC region – CenterPoint Energy and Entergy. Massive damage following Hurricane Rita in 2005 and Hurricane Ike in 2008 resulted in toppled power lines and large segments of the population without power for their homes and businesses.

H-GAC maintains a list of regional electricity providers according to the Texas General Land Office (TGLO). This information can be obtained by contacting H-GAC. **Table 3.4** lists electric providers for the area. H-GAC and the TGLO provide this data with no warranty and assume no liability for its use other than to support descriptive planning studies.

Table 3.4
Regional Electricity Providers

Blue Bonnet Electric	Gulf States Utilities
Center Point Energy	Jackson Electric
Central Power & Light	Mid South Electric
City of Bellville	Sam Houston Electric
City of Hempstead	San Bernard Electric
City of Liberty	Texas-New Mexico Power
Fayette Electric	Wharton County Electric

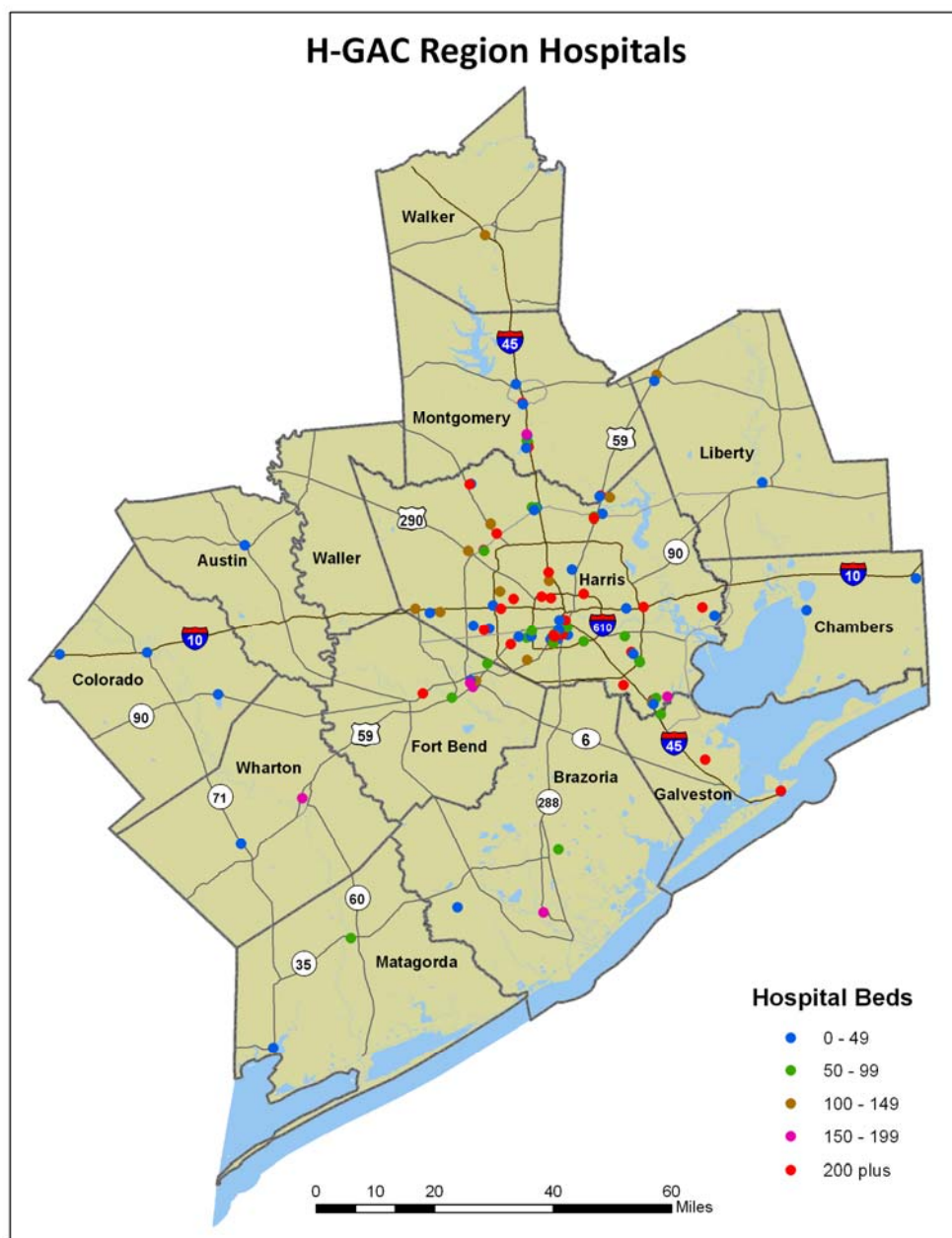
Hospitals

H-GAC maintains a hospitals table that includes acute care and psychiatric hospitals according to the Texas Department of State Health Services (TDSHS). **Figure 3.4** depicts acute care and psychiatric hospitals reported by TDSHS and Houston area specialty hospitals reported by the Houston Business Journal. The total number of facilities depicted on the map is 125.

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The TDH believes this information to be accurate and complete on all licensed hospitals in Texas. The TDH assumes no responsibility for any errors in the information. This information has not been altered since receiving it from TDSHS. H-GAC, TDSHS and the Houston Business Journal provide this data with no warranty and assume no liability for its use other than to support descriptive planning studies. An ArcGIS shapefile is available for this data set.

Figure 3.4
Regional Hospitals



Hazardous Materials (HAZMAT) Response Teams

There are seven Hazardous Materials (HAZMAT) response teams located within the 13-county region. Team members are solely from paid career fire department personnel with the exception of volunteer team members from one volunteer fire department in Fort Bend County. The paid career fire departments are located in the following four counties: Fort Bend, Galveston, Harris and Montgomery. There are no fully paid career fire departments in the following nine counties: Austin, Brazoria, Chambers, Colorado, Liberty, Matagorda, Walker, Waller and Wharton counties.

Technician-level HAZMAT response teams are on duty to respond to HAZMAT incidents in the four counties containing paid career fire departments. In all other counties, HAZMAT incident responses are coordinated through the Texas Commission on Environmental Quality (TCEQ).

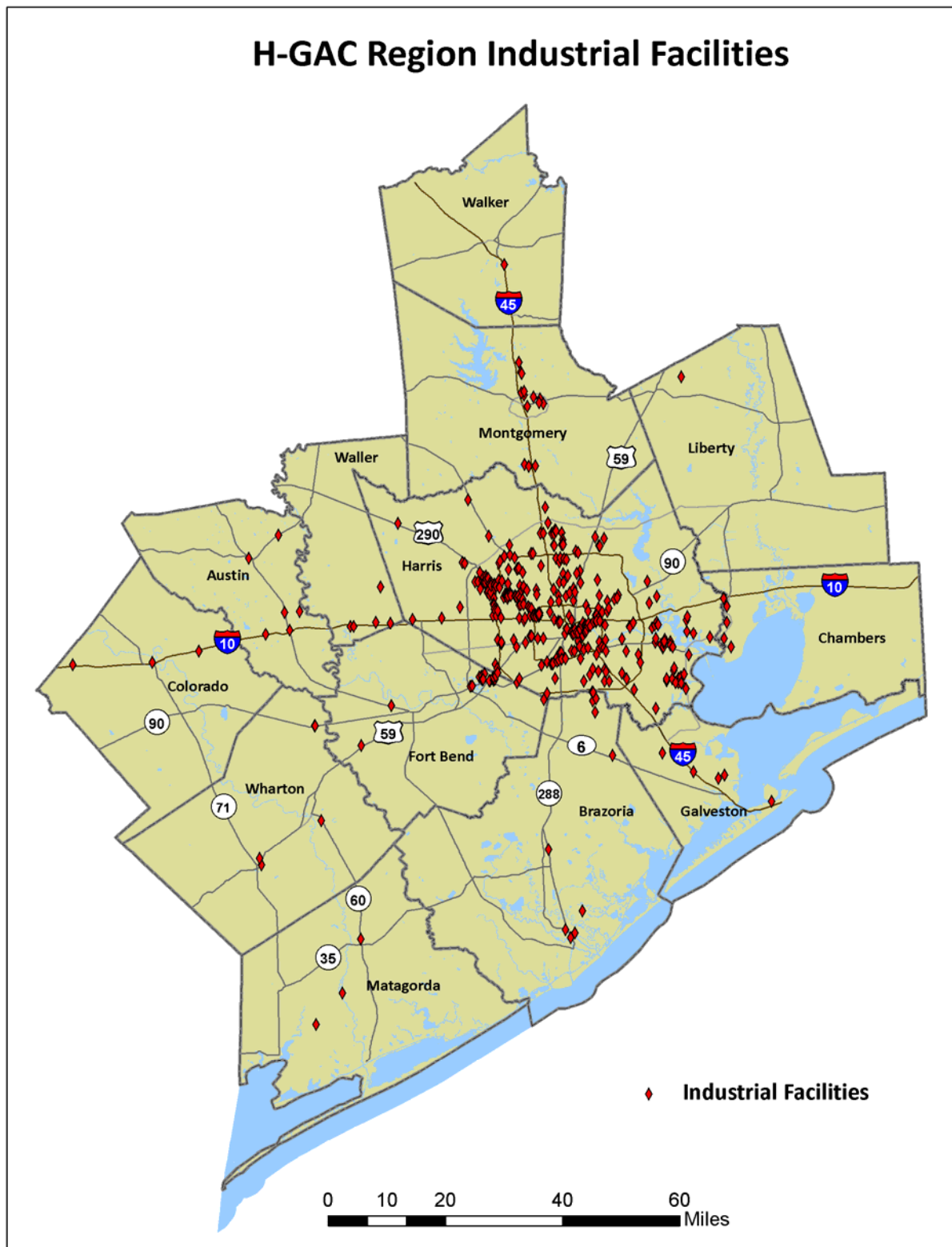
Counties containing only volunteer fire departments cannot feasibly create certified HAZMAT response teams. This is based on criteria relating to the number of training hours required throughout the course of each year to maintain “technician level” certifications for all team members.

The City of Baytown in east Harris County has a paid career fire department with 86 paid positions of which more than 20 have technician level certification. The primary obstacle preventing establishment of a distinct HAZMAT team in Baytown for incidents at all levels is the lack of equipment. Grant funding for this department would ensure creation of a major HAZMAT team capable of responding to incidents in adjacent cities and counties.

Figure 3.5 shows the geographic distribution of industrial facilities throughout the region that may factor into potential hazardous materials releases. The map includes industrial businesses that fall under the Environmental Protection Agency’s Toxic Release Inventory Resource Conservation and Recovery Act Information system with 100+ employees and that are located on industrial and/or warehouse land use types.

Table 3.5 provides a listing of regional HAZMAT response teams in the H-GAC area.

Figure 3.5
Regional Industrial Facilities



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Table 3.5
H-GAC Regional HAZMAT Response Teams

County	Disaster District	Team Location	Career-Paid Team	Volunteer Team
Austin	2c Sub			
Brazoria	2a			
Chambers	2b			
Colorado	2c Sub			
Fort Bend	2c Sub	East: Missouri City FD, Stafford FD, Sugar Land FD West: Richmond FD, Rosenberg FD, Pecan Grove VFD	2 Teams	Pecan Grove First Responders Are Volunteers
Galveston	2a	Texas City FD	1 Team	
Harris	2a	Houston FD	2 Teams	
Liberty	2b			
Matagorda	2c			
Montgomery	2c	Conroe FD Team The Woodlands FD Team	2 Teams	
Walker	2c			
Waller	2c			
Wharton	2c			
Total: 13			7 Teams	

Schools

Regional Colleges and Universities

H-GAC maintains a list of community colleges and universities in the region. This information was acquired from the Texas Higher Education Coordinating Board (THECB) and individual college websites. The table has information on the college or university address and telephone number for each campus.

The data gathered from the THECB has been updated to include additional community college campuses. The data for the update was supplied by each college's website and telephone contact. H-GAC and the THECB provide this data with no warranty and assume no liability for its use other than to support descriptive planning studies. An ArcGIS shapefile is available for this data set. Contact H-GAC to obtain this list.

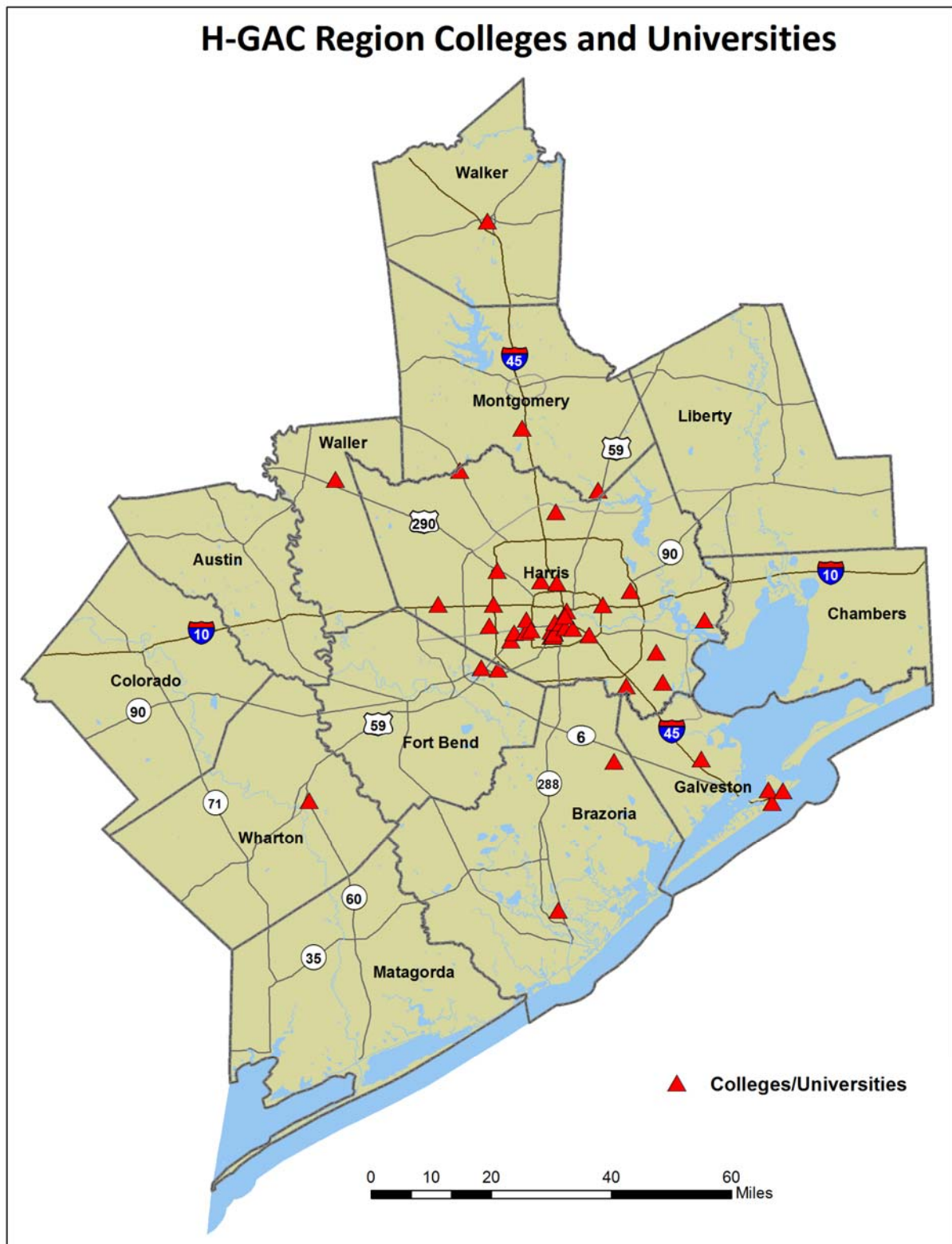
Table 3.6 briefly lists the major institutions of higher education within the H-GAC area. **Figure 3.6** shows the geographic distribution of colleges and universities within the region.

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Table 3.6
Major Institutions of Higher Education

Name of Institution	
Alvin Community College	San Jacinto College
Baylor College of Medicine	South Texas College of Law
Brazosport College	Texas A&M at Galveston
College of Biblical Studies	Texas Southern University
College of the Mainland	Texas Women's University
Galveston College	The Art Institute of Houston
Houston Baptist University	Tomball College
Houston Community College	University of Houston
Lee College	University of St Thomas
Lone Star College System	University of Texas Medical Branch Galveston
Prairie View A&M University	UT School of Health Science Center
Rice University	Wharton Junior College
Sam Houston State University	

Figure 3.6
Regional Colleges and Universities



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Regional Grade Schools

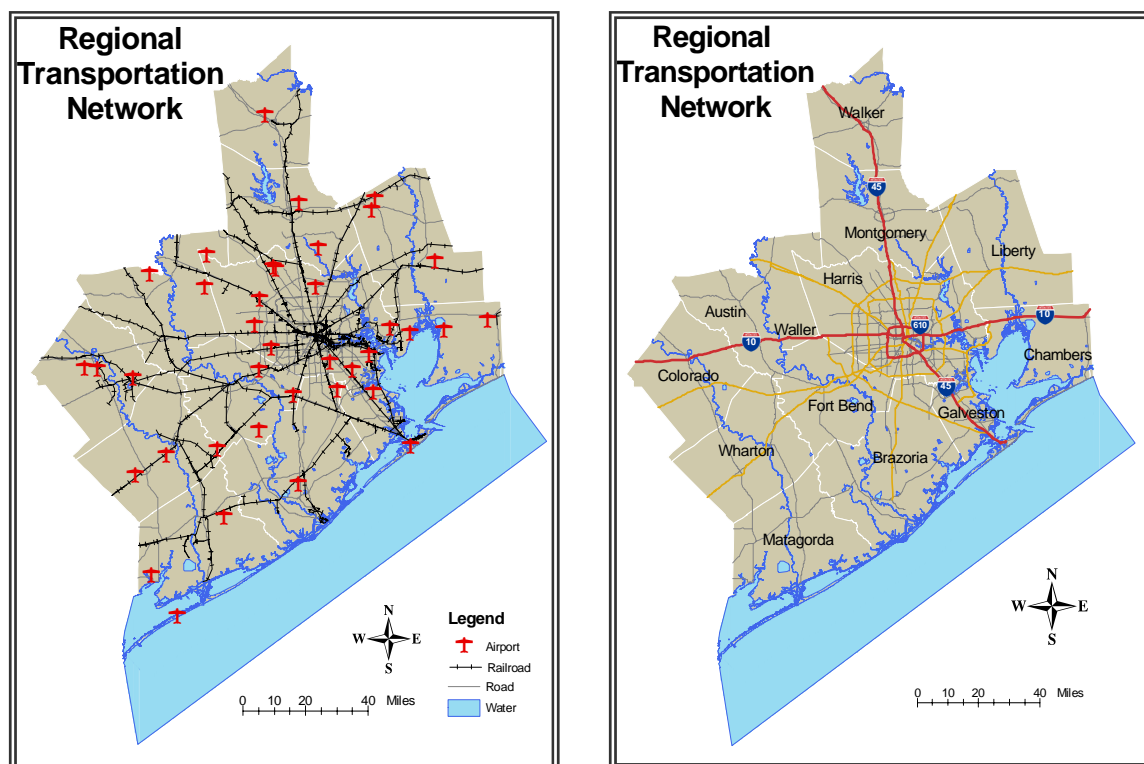
H-GAC maintains a list of grade schools in the region according to the Texas Education Agency (TEA). This table has information on each grade school's address, grade levels and school district.

The data reflects the information available directly from the TEA website. The information collected from the TEA website has not been altered in any way. H-GAC and TEA provide this data with no warranty and assume no liability for its use other than to support descriptive planning studies. An ArcGIS shapefile is available for this data set. Contact H-GAC to obtain this information.

Transportation

The Houston-Galveston transportation system is a network of roadways, highways, airports and waterways that provides for the movement of goods and people on an enormous scale. The area maintains three commercial airports: Hobby, Ellington Field and Bush-Intercontinental, which is the ninth largest airport in the United States by passenger volume. The Port of Houston is equally important to the transfer of goods, shipping and receiving over 185 million tons of cargo each year, making it the second largest port in the United States. Trucking and rail are also major components for the shipment of goods and materials in the region. The region's highway and roadway network handles millions of trips each year, and with a passenger volume this immense, it takes multiple organizations to handle the network. The Metropolitan Transit Authority handles mass transit in the Harris County area, while the Brazos Transit System deals with Montgomery, Liberty and Chambers counties. The Gulf Coast Center (GCC) directs travel in between Galveston and Brazoria, along with Island Transit. The preeminent group is the Houston TransStar Traffic Management Center, which is the home base for transportation disaster management for the greater Houston region.

Figure 3.7
Regional Transportation Network (Airports and Roadways)



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Demographics

This section presents the 2000 demographics that were included in the 2006 Hazard Mitigation Plan and updated 2010 Census demographics. At the time of analysis, only 2000 Census demographics were available. For this reason, the 2000 demographics were included in the Plan Update for Section 4.3. The available 2010 demographics are also presented in this section.

According to the 2010 Census, the Houston-Galveston area consists of 6 million people and represents a diverse ethnic and socioeconomic mix. Hispanics account for nearly one-third of the population in the 13-county region, a rate that is significantly larger than the national average (13 percent). Similarly, the CMSA contains more Asian and African-Americans than national averages (2000 Census).

Population

**Table 3.7
Total Population by Race (2000)**

	Total Population	Hispanic	White	African- American/ Black	Asian	Other
U.S.	281,421,906	35,305,818	194,552,774	33,947,837	10,123,169	7,492,308
Texas	20,851,820	6,669,666	10,933,313	2,364,255	554,445	330,141
13-County Region	4,854,454	1,389,915	2,348,844	809,631	227,755	78,309
CMSA	4,669,571	1,348,588	2,239,893	778,684	226,177	76,229
Austin	23,590	3,805	16,964	2,475	68	278
Brazoria	241,767	55,063	158,052	20,183	4,776	3,693
Chambers	26,031	2,810	20,210	2,525	172	314
Colorado	20,390	4,024	13,165	2,962	42	197
Fort Bend	354,452	74,871	163,788	69,579	39,545	6,669
Galveston	250,158	44,939	157,851	38,179	5,152	4,037
Harris	3,400,578	1,119,751	1,432,264	619,694	173,026	55,843
Liberty	70,154	7,660	52,289	8,952	218	1,035
Matagorda	37,957	11,898	19,900	4,778	891	490
Montgomery	293,768	37,150	239,150	10,076	3,167	4,225
Walker	61,758	8,712	37,090	14,672	464	820
Waller	32,663	6,344	16,289	9,496	121	413
Wharton	41,188	12,888	21,832	6,060	113	295
U.S. Census Bureau: 2000 Census SF1 P1, P4: Total Population, Hispanic or Latino, and Not Hispanic or Latino by Race						

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Table 3.8
Total Population by Race (2010)

	Total Population	Hispanic	White	African- American/ Black	Asian	Other
U.S.	308,745,538	Unavailable	Unavailable	Unavailable	Unavailable	Unavailable
Texas	25,145,561	9,460,921	11,397,345	2,886,825	948,426	452,044
13-County Region	6,087,133	2,062,892	2,429,516	1,023,683	385,915	105,027
CMSA	5,891,999	2,009,891	2,321,611	993,599	384,366	102,532
Austin	28,417	6,641	18,657	2,622	110	387
Brazoria	313,166	6,643	166,674	36,880	17,013	5,956
Chambers	35,096	6,635	24,767	2,817	326	551
Colorado	20,874	5,452	12,496	2,636	75	215
Fort Bend	585,375	138,967	211,680	123,267	98,762	12,699
Galveston	291,309	65,270	172,652	39,229	8,515	5,643
Harris	4,092,459	1,671,540	1,349,646	754,258	249,853	67,162
Liberty	75,643	13,602	52,321	8,074	337	1,309
Matagorda	36,702	14,074	17,400	4,060	693	475
Montgomery	455,746	94,698	324,611	18,537	9,347	8,553
Walker	67,861	11,389	39,671	15,098	617	1,086
Waller	43,205	12,536	19,260	10,537	213	659
Wharton	41,280	15,445	19,681	5,668	54	332
Source: U.S. Census Bureau, 2010 Census						

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Table 3.9
Percent Population by Race (2000)

	Hispanic	White	African-American/ Black	Asian	Other
U.S.	13%	96%	12%	4%	3%
Texas	32%	52%	11%	3%	2%
Austin	16%	72%	10%	0%	1%
Brazoria	23%	65%	8%	2%	2%
Chambers	11%	78%	10%	1%	1%
Colorado	20%	64%	15%	0%	1%
Fort Bend	21%	46%	20%	11%	2%
Galveston	18%	63%	15%	2%	2%
Harris	33%	42%	18%	5%	2%
Liberty	11%	75%	13%	0%	2%
Matagorda	31%	52%	13%	2%	1%
Montgomery	13%	81%	3%	1%	1%
Walker	14%	60%	24%	1%	1%
Waller	19%	50%	29%	0%	1%
Wharton	31%	53%	15%	0%	1%
U.S. Census Bureau: 2000 Census SF1 P1, P4: Total Population, Hispanic or Latino, and Not Hispanic or Latino by Race					

Table 3.10
Percent Population by Race (2010)

	Hispanic	White	African-American/ Black	Asian	Other
Texas	38%	45%	11%	4%	2%
Austin	23%	66%	9%	0%	1%
Brazoria	28%	53%	12%	5%	2%
Chambers	19%	71%	8%	1%	2%
Colorado	26%	60%	13%	0%	1%
Fort Bend	24%	36%	21%	17%	2%
Galveston	22%	59%	13%	3%	2%
Harris	41%	33%	18%	6%	2%
Liberty	18%	69%	11%	0%	2%
Matagorda	38%	47%	11%	2%	1%
Montgomery	21%	71%	4%	2%	2%
Walker	17%	58%	22%	1%	2%
Waller	29%	45%	24%	0%	2%
Wharton	37%	48%	14%	0%	1%

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Between 2000 and 2010 there was little change in the age breakdown of the total population. Walker County maintains a comparatively large “Age 18-64” population. There is a higher proportion of seniors in Austin, Colorado and Matagorda counties. The area’s age/population distribution is likely to change, leading to a higher “Under 18” and “Age 18-64” population due to increased future immigration.

Table 3.11
Age Breakdown of Total Population

County	2000			2010		
	Under 18	18-64	65+	Under 18	18-64	65+
Austin	27%	58%	15%	25%	59%	16%
Brazoria	29%	63%	9%	28%	63%	10%
Chambers	29%	62%	9%	29%	62%	9%
Colorado	26%	56%	19%	24%	57%	19%
Fort Bend	32%	62%	6%	30%	63%	7%
Galveston	27%	62%	11%	25%	63%	11%
Harris	29%	64%	7%	28%	64%	8%
Liberty	28%	62%	10%	26%	63%	11%
Matagorda	30%	58%	12%	26%	59%	14%
Montgomery	30%	62%	9%	28%	62%	10%
Walker	18%	73%	9%	17%	73%	10%
Waller	26%	65%	9%	25%	65%	10%
Wharton	29%	57%	14%	27%	59%	15%
Source: U.S. Census Bureau, 2000 and 2010 Census						

The area’s population is expected to reach more than 7.5 million in 2025 and over 8.8 million in 2035. As noted previously, the Houston-Galveston area is one of the most diverse communities in the United States and the current ethnic population balance is expected to change drastically with the influx of Hispanic immigrants. **Table 3.12** presents the population forecasts for the CMSA. H-GAC conducts its Regional Growth Forecast for the Houston CMSA 8-county region which includes Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery, and Waller counties. From 2010 to 2035, Montgomery and Waller counties’ populations will nearly double, and Brazoria, Fort Bend, and Liberty counties show significant growth.

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Table 3.12
Population Forecasts (Thousands)

	Population Forecasts						10 Year Growth Rate	
	2010	2015	2020	2025	2030	2035	2015-2025	2025-2035
Brazoria	313,166	348,000	384,000	420,000	458,000	496,000	21%	18%
Chambers	35,096	38,000	42,000	46,000	50,000	53,000	21%	15%
Fort Bend	585,375	597,000	684,000	775,000	868,000	958,000	30%	24%
Galveston	291,309	322,000	350,000	374,000	394,000	412,000	16%	10%
Harris	4,092,459	4,394,000	4,728,000	5,075,000	5,448,000	5,840,000	15%	15%
Liberty	75,643	96,000	104,000	113,000	122,000	131,000	18%	16%
Montgomery	455,746	515,000	595,000	680,000	771,000	865,000	32%	27%
Waller	43,205	51,000	57,000	64,000	72,000	80,000	25%	25%
Source: H-GAC 2035 Regional Growth Forecast, August 2006								

Housing

Housing data for the H-GAC region is presented in **Tables 3.13** through **3.21**. Note that “Household Population” excludes the special populations of inmates and residents of halfway houses and group homes.

Table 3.13
Households

County	2000	2010
Austin County	8,747	10,837
Brazoria County	81,954	106,589
Chambers County	9,139	11,952
Colorado County	7,641	8,182
Fort Bend County	110,915	187,384
Galveston County	94,782	108,969
Harris County	1,205,516	1,435,155
Liberty County	23,242	25,073
Matagorda County	13,901	13,894
Montgomery County	103,296	162,530
Walker County	18,303	20,969
Waller County	10,557	14,040
Wharton County	14,799	15,132
Source: U.S. Census 2000, 2010		

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Table 3.14
Household Population

County	2000	2010
Austin County	23,314	28,205
Brazoria County	230,806	302,607
Chambers County	25,797	34,867
Colorado County	19,541	20,546
Fort Bend County	348,154	579,439
Galveston County	246,002	287,012
Harris County	3,358,444	4,047,935
Liberty County	65,113	70,499
Matagorda County	37,482	36,302
Montgomery County	292,077	452,522
Walker County	44,667	51,153
Waller County	29,454	39,502
Wharton County	40,441	40,831
Source: U.S. Census 2000, 2010		

Table 3.15
Housing Units, 2000

	Total Housing Units	Occupied Housing Units	Vacant Housing Units	Occupancy Rate
Texas	8,157,575	7,393,354	764,221	91%
Austin	10,205	8,747	1,458	86%
Brazoria	90,628	81,954	8,674	90%
Chambers	10,336	9,139	1,197	88%
Colorado	9,431	7,641	1,790	81%
Fort Bend	115,991	110,915	5,076	96%
Galveston	111,733	94,782	16,951	85%
Harris	1,298,130	1,205,516	92,614	93%
Liberty	26,359	23,242	3,117	88%
Matagorda	18,611	13,901	4,710	75%
Montgomery	112,770	103,296	9,474	92%
Walker	21,099	18,303	2,796	87%
Waller	11,955	10,557	1,398	88%
Wharton	16,606	14,799	1,807	89%
Source: U.S. Census Bureau, 2000 Census				

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Table 3.16
Housing Units, 2010

Jurisdiction	Total Housing Units	Occupied Housing Units	Vacant Housing Units	Occupancy Rate
Texas	9,977,436	8,922,933	1,054,503	89%
Austin	2,926	10,837	2,089	84%
Brazoria	118,336	106,589	11,747	90%
Chambers	13,291	11,952	1,339	90%
Colorado	10,527	8,182	2,345	78%
Fort Bend	197,030	187,384	9,646	95%
Galveston	132,492	108,969	23,523	82%
Harris	1,598,698	1,435,155	163,543	90%
Liberty	28,759	25,073	3,686	87%
Matagorda	18,801	13,894	4,907	74%
Montgomery	177,647	162,530	15,117	91%
Walker	24,058	20,969	3,089	87%
Waller	15,839	14,040	1,799	89%
Wharton	17,127	15,132	1,995	88%
Source: U.S. Census Bureau, 2010 Census				

Table 3.17
Housing Units and Tenure (2000)

Jurisdiction	Owner-Occupied Housing Units	Renter-Occupied Housing Units	Owner-Occupied Unit Occupancy Rate
Austin County	6,754	1,993	77%
Brazoria County	60,674	21,280	74%
Chambers County	7,641	1,498	84%
Colorado County	5,857	1,784	77%
Fort Bend County	89,656	21,259	81%
Galveston County	62,742	32,040	66%
Harris County	666,940	538,576	55%
Liberty County	18,356	4,886	79%
Matagorda County	9,282	4,619	67%
Montgomery County	80,688	22,608	78%
Walker County	10,952	7,351	60%
Waller County	1,650	2,907	72%
Wharton County	10,179	4,620	69%
Source: U.S. Census Bureau, 2000 Census			

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Table 3.18
Housing Units and Tenure (2010)

Jurisdiction	Owner-Occupied Housing Units	Renter-Occupied Housing Units	Owner-Occupied Unit Occupancy Rate
Austin County	8,192	2,645	76%
Brazoria County	79,477	27,112	75%
Chambers County	10,190	1,762	85%
Colorado County	6,227	1,955	76%
Fort Bend County	149,749	37,635	80%
Galveston County	74,944	34,025	69%
Harris County	814,810	620,345	57%
Liberty County	19,341	5,732	77%
Matagorda County	9,248	4,646	67%
Montgomery County	120,007	42,523	74%
Walker County	11,720	9,249	56%
Waller County	9,713	4,327	69%
Wharton County	10,303	4,829	68%
Source: U.S. Census Bureau, 2010 Census			

Table 3.19
2000 Median Housing Unit Value

Jurisdiction	2000	2009
U.S.	\$111,800	\$185,400
Texas	\$77,800	\$118,900
Austin County	\$84,400	\$130,300
Brazoria County	\$81,000	\$135,200
Chambers County	\$71,100	\$123,200
Colorado County	\$60,200	\$87,400
Fort Bend County	\$110,800	\$168,600
Galveston County	\$81,900	\$132,500
Harris County	\$84,200	\$130,100
Liberty County	\$55,100	\$77,900
Matagorda County	\$56,700	\$74,200
Montgomery County	\$95,600	\$152,200
Walker County	\$67,700	\$97,500
Waller County	\$77,500	\$109,300
Wharton County	\$56,700	\$81,900
Source: 2000 U.S. Census, ACS 5-year estimate (2005-2009)		

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Table 3.20
Housing Tenure by Units in Structure, 2000

Jurisdiction	Single-Family	Duplex, Tri, Fourplex	Multi-Family	Mobile and Other	Total
US	70,695,314	9,371,883	17,918,189	7,494,715	105,480,101
Texas	5,025,908	397,675	1,348,619	621,152	7,393,354
Austin	6,284	303	501	1,659	8,747
Brazoria	58,181	2,237	9,165	12,371	81,954
Chambers	6,476	101	243	2,319	9,139
Colorado	5,858	187	272	1,324	7,641
Fort Bend	95,646	1,423	8,182	5,664	110,915
Galveston	68,537	4,813	15,332	6,100	94,782
Harris	743,620	58,542	367,193	36,161	1,205,516
Liberty	13,950	642	943	7,707	23,242
Matagorda	9,622	852	1,272	2,155	13,901
Montgomery	71,362	2,131	9,052	20,751	103,296
Walker	9,417	984	3,435	4,467	18,303
Waller	6,511	639	435	2,972	10,557
Wharton	11,450	485	1,087	1,777	14,799
Source: U.S. Census Bureau, 2000 Census					

Table 3.21
Housing Tenure by Units in Structure, 2009

Jurisdiction	Single-Family	Duplex, Tri, Fourplex	Multi-Family	Mobile and Other	Total
U.S.	85,899,738	10,785,635	22,272,065	8,742,274	127,699,712
Texas	6,384,168	510,197	1,781,577	731,750	9,407,692
Austin	8,208	372	433	1,730	10,866
Brazoria	81,851	2,452	13,664	14,249	112,518
Chambers	9,810	178	339	2,815	13,373
Colorado	7,319	215	348	1,560	9,743
Fort Bend	128,694	3,263	12,967	6,165	149,230
Galveston	94,770	5,732	21,624	7,278	130,739
Harris	932,015	78,005	490,800	42,797	1,534,652
Liberty	17,834	554	992	8,830	28,527
Matagorda	13,591	514	1,966	2,796	19,465
Montgomery	109,743	5,628	17,622	24,775	155,158
Walker	11,855	1,175	4,887	4,945	23,094
Waller	8,887	413	1,152	3,109	14,034
Wharton	13,426	410	1,505	1,973	17,398
Source: ACS 5-Year Estimates 2005-2009					

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Social Characteristics

For the 13-county area, all counties except Austin, Colorado and Wharton counties experienced increases between 2000 and 2009 in the percentage of people who speak a language other than English at home. **Table 3.22** shows the percentage of people over the age of five whose language spoken at home is not English. The region's diverse ethnic population and high immigration rates contributes greatly to this measure.

Table 3.22
Percentage of Population Over 5 Whose Language Spoken at Home is not English

Jurisdiction	Percent, 2000	Percent, 2009
US	18%	20%
Texas	31%	34%
CMSA	32%	36%
Austin	17%	17%
Brazoria	21%	24%
Chambers	12%	13%
Colorado	20%	18%
Fort Bend	31%	36%
Galveston	17%	19%
Harris	36%	41%
Liberty	12%	13%
Matagorda	27%	28%
Montgomery	14%	17%
Walker	14%	19%
Waller	18%	21%
Wharton	27%	26%
Source: US Census Bureau, 2000; ACS 5-year estimate (2005-2009)		

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As **Table 3.23** indicates the CMSA in 2000 and 2009 lags behind the national average regarding the proportion of adults who have a high school diploma. In 2000, Brazoria, Fort Bend, Galveston and Montgomery counties equal, or surpass, the nationwide average. In 2009, the region's counties that equaled or surpassed the nationwide average was reduced to Fort Bend, Galveston and Montgomery counties.

Table 3.23
Percentage of Population Over 25 With a High School Diploma

Jurisdiction	Percent, 2000	Percent, 2009
US	80%	85%
Texas	76%	79%
CMSA	76%	80%
Austin	75%	81%
Brazoria	80%	84%
Chambers	77%	83%
Colorado	69%	76%
Fort Bend	84%	88%
Galveston	81%	85%
Harris	75%	77%
Liberty	70%	72%
Matagorda	70%	75%
Montgomery	82%	85%
Walker	73%	79%
Waller	74%	79%
Wharton	70%	75%
Source: US Census Bureau, 2000; ACS 5-year estimate (2005-2009)		

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The CMSA carries a poverty rate consistent with national averages. Fort Bend and Chambers counties account for the least poverty-stricken areas. Matagorda and Walker counties account for the highest percentages above the national averages for 2009.

Table 3.24
Poverty Rate Among All Ages

Jurisdiction	Percent, 2000	Percent, 2009
U.S.	17%	14%
Texas	21%	17%
CMSA	18%	15%
Austin	14%	11%
Brazoria	13%	10%
Chambers	14%	9%
Colorado	21%	16%
Fort Bend	9%	8%
Galveston	18%	15%
Harris	20%	17%
Liberty	19%	18%
Matagorda	24%	21%
Montgomery	11%	11%
Walker	20%	23%
Waller	20%	19%
Wharton	19%	19%
Source: U.S. Census, 2000; SAIPE US Census, 2009		

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Economy

The Houston-Galveston area characterizes a diverse and leading economic environment representing a variety of industrial sectors. These sectors are highlighted by Houston's dominant oil and gas exploration, petroleum refining, and petrochemical production facilities that represent nearly one-half of the area's economy. The recent growth of the medical, technical, financial, and service-oriented industries, Houston has diversified its economic base and prospered, despite a contraction in the economy. **Table 3.25** presents the Houston area's largest employers based on 2010 employee data.

Table 3.25: Percent Employment by Industry Type

Region	Ag. Forestry, Fishing & Hunting	Mining	Utilities	Construction	Manufacturing	Wholesale Trade	Retail Trade	Transportation & Warehousing	Information	Finance & Insurance	Real Estate & Rental & Leasing	Professional Scientific, & Tech Svc	Management of Companies & Enterprises	Admin & Support & Waste Mgmt & Remediation Services	Education	Health Care	Arts, Entertainment, & Recreation	Accommodations & Food Svc	Other Svc	Public Admin
US	0.9%	0.5%	0.6%	4.8%	9.2%	4.3%	11.4%	3.9%	2.3%	4.4%	1.6%	5.9%	1.4%	5.6%	9.5%	13.8%	1.8%	8.7%	3.4%	5.8%
Texas	0.6%	2.0%	0.8%	6.2%	8.3%	4.9%	11.3%	4.2%	2.1%	4.4%	1.8%	5.6%	0.8%	6.1%	10.8%	12.8%	1.3%	8.8%	2.9%	4.4%
13-County Region	0.2%	3.7%	0.9%	7.5%	9.1%	5.7%	10.7%	4.3%	1.6%	3.6%	2.0%	7.3%	0.8%	6.7%	10.1%	11.0%	1.2%	7.7%	2.8%	2.9%
CMSA	0.1%	3.8%	0.9%	7.5%	9.1%	5.7%	10.7%	4.4%	1.6%	3.6%	2.1%	7.4%	0.8%	6.9%	10.0%	11.0%	1.2%	7.8%	2.8%	2.6%
Austin	0.6%	0.5%	0.8%	8.3%	31.9%	5.6%	11.8%	2.5%	0.7%	2.3%	0.6%	4.2%	0.3%	2.4%	9.3%	8.7%	0.9%	3.9%	1.8%	3.1%
Brazoria	0.5%	0.9%	0.3%	14.7%	15.2%	2.4%	12.8%	2.6%	0.8%	2.3%	1.4%	3.8%	0.1%	2.9%	13.2%	8.7%	1.5%	7.9%	2.7%	5.2%
Chambers	0.7%	3.4%	0.9%	5.7%	22.8%	3.2%	6.9%	3.6%	0.3%	1.6%	5.5%	2.8%	0.0%	4.4%	13.9%	5.8%	2.5%	6.3%	3.5%	4.9%
Colorado	3.1%	2.7%	0.8%	7.4%	17.0%	4.8%	12.5%	4.0%	0.5%	2.8%	0.8%	2.0%	0.0%	1.4%	9.7%	13.6%	2.0%	7.9%	3.4%	3.4%
Fort Bend	0.4%	1.7%	1.6%	8.4%	11.8%	4.4%	12.9%	1.7%	1.3%	3.1%	1.2%	5.4%	0.3%	5.1%	11.4%	12.4%	1.8%	8.4%	3.0%	3.6%
Galveston	0.0%	0.5%	0.7%	5.7%	7.4%	2.3%	10.5%	3.4%	0.9%	4.7%	2.1%	3.6%	0.2%	3.1%	25.1%	9.3%	2.5%	11.7%	2.6%	3.7%
Harris	0.1%	4.3%	0.8%	7.3%	8.7%	6.2%	10.2%	4.9%	1.8%	3.7%	2.2%	8.1%	1.0%	7.4%	8.8%	11.1%	1.1%	7.4%	2.8%	2.3%
Liberty	1.1%	3.4%	0.5%	6.5%	10.1%	2.6%	17.5%	2.5%	0.7%	2.1%	1.6%	1.8%	0.0%	1.9%	16.6%	13.1%	0.2%	7.2%	2.0%	8.6%
Matagorda	4.5%	2.4%	12.2%	8.2%	2.2%	1.8%	11.4%	1.9%	0.7%	1.9%	1.6%	3.9%	0.0%	5.0%	14.4%	11.3%	0.8%	8.6%	4.0%	3.3%
Montgomery	0.2%	2.3%	0.7%	7.1%	7.2%	4.6%	14.3%	1.5%	1.1%	4.2%	1.4%	5.2%	0.1%	6.5%	13.4%	11.1%	2.1%	10.6%	4.0%	2.4%
Walker	1.2%	0.2%	0.6%	2.8%	3.8%	1.2%	9.5%	0.8%	0.7%	1.5%	0.9%	2.7%	0.0%	1.1%	15.1%	9.0%	0.6%	7.4%	1.9%	39.2%
Waller	1.0%	0.7%	0.2%	6.6%	13.8%	6.7%	9.5%	11.4%	0.3%	0.7%	0.9%	2.9%	0.0%	1.3%	27.8%	7.6%	1.1%	4.0%	1.1%	2.4%
Wharton	10.8%	4.5%	0.7%	6.2%	10.6%	4.2%	11.9%	2.1%	0.9%	4.4%	1.1%	1.8%	0.0%	2.9%	14.9%	10.8%	0.5%	6.3%	2.4%	2.3%

Source: U.S. Census LEHD and BLS QCEW 2009

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Table 3.26
Houston Area's Largest Employers

Rank	Company	2010 Employees
1	Wal-Mart Stores	30,535
2	Memorial Hermann Healthcare System	20,990
3	Administaff	17,511
4	The University of Texas MD Anderson Cancer Center	17,295
5	Continental Airlines	16,643
6	Kroger Co.	15,117
7	Exxon Mobil Corp.	14,356
8	H-E-B Grocery Co.	13,575
9	The Methodist Hospital System	12,408
10	Shell Oil Co.	11,000
11	Baylor College of Medicine	9,023
12	CVS Caremark	8,425
13	HCA	8,233
14	University of Texas Medical Branch	8,116
15	The Dow Chemical Co.	7,935

Source: *Houston Chronicle* (accessed March 17, 2011) Greater Houston's Top 100 Employers

Table 3.27
Median Household Income in Dollars, 2009

Region	Value
U.S.	\$50,221
Texas	\$48,286
13-County Region	\$55,181
CMSA	\$55,683
Austin	\$50,558
Brazoria	\$66,516
Chambers	\$68,478
Colorado	\$41,073
Fort Bend	\$80,548
Galveston	\$55,883
Harris	\$50,577
Liberty	\$45,308
Matagorda	\$38,938
Montgomery	\$65,130
Walker	\$37,203
Waller	\$47,110
Wharton	\$36,980

Source: Small Area Income and Poverty Estimates, U.S. Census 2009

Table 3.28
Unemployment Rate, May 2011

Region	Rate
U.S.	8.7%
Texas	7.9%
13-County Region	8.2%
CMSA	8.2%
Austin	7.6%
Brazoria	8.8%
Chambers	9.6%
Colorado	7.3%
Fort Bend	7.6%
Galveston	9.2%
Harris	8.2%
Liberty	10.6%
Matagorda	11.5%
Montgomery	7.4%
Walker	7.7%
Waller	8.1%
Wharton	8.4%

Source: Texas Workforce Commission 2011

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Economic Growth

The Houston-Galveston area economy is expected to continue to expand throughout the next 20 years with the continued expansion of energy-related businesses and their respective increases in professional activities and services. The CMSA is anticipated to gain more than 1.5 million jobs from 2005 to 2035, with strong growth occurring in Harris, Montgomery, and Fort Bend counties.

Table 3.29
Employment Forecast (Thousands)

County	2005	2010	2015	2020	2025	2030	2035
CMSA	2,542	2,811	3,051	3,276	3,507	3,772	4,069
Brazoria	92	102	111	119	127	137	148
Chambers	8	9	10	10	11	12	13
Fort Bend	134	158	182	206	233	263	298
Galveston	106	117	127	136	146	157	169
Harris	2,060	2,260	2,434	2,593	2,754	2,939	3,145
Liberty	21	23	25	27	29	31	34
Montgomery	108	127	146	166	187	212	240
Waller	13	15	16	18	19	21	23
Source: H-GAC Regional Growth Forecast 2035							

Land Use/Development/Housing

The H-GAC region consists of a diverse assortment of land uses and determinations, including (but not limited to) heavy industry, commercial retail, residential and open space. The central portion of the region is occupied by Harris County, the hub of the heavily urbanized Houston metropolis. Harris County is not included in this plan. The majority of outlying counties, comprising most of the region are largely rural with a series of urban and industrial areas. Galveston Bay, the largest water body in the region, is bounded on the west by some of the nation's largest petrochemical complexes, shipping facilities and container port terminals, and the nation's fourth largest metropolis. The eastern portion of the Galveston Bay area (and eastern portion of our region) is largely rural, agricultural, and sparsely populated.

Forecasting conducted by H-GAC indicates that our region will undergo phenomenal population and employment growth over the next 25 years. Outside of the Houston metropolis, the majority of population and employment growth will likely take place in the northern central, western, and southern areas of our region. This growth will increase pressure on the natural resources of our region (i.e., open space, water quality, air quality, etc.) and increase exposure to potential hazards like flooding, hurricanes and other items addressed in this Plan.

Additional information pertaining to population and employment forecasting, and land cover for the Houston-Galveston region can be found at the following locations:

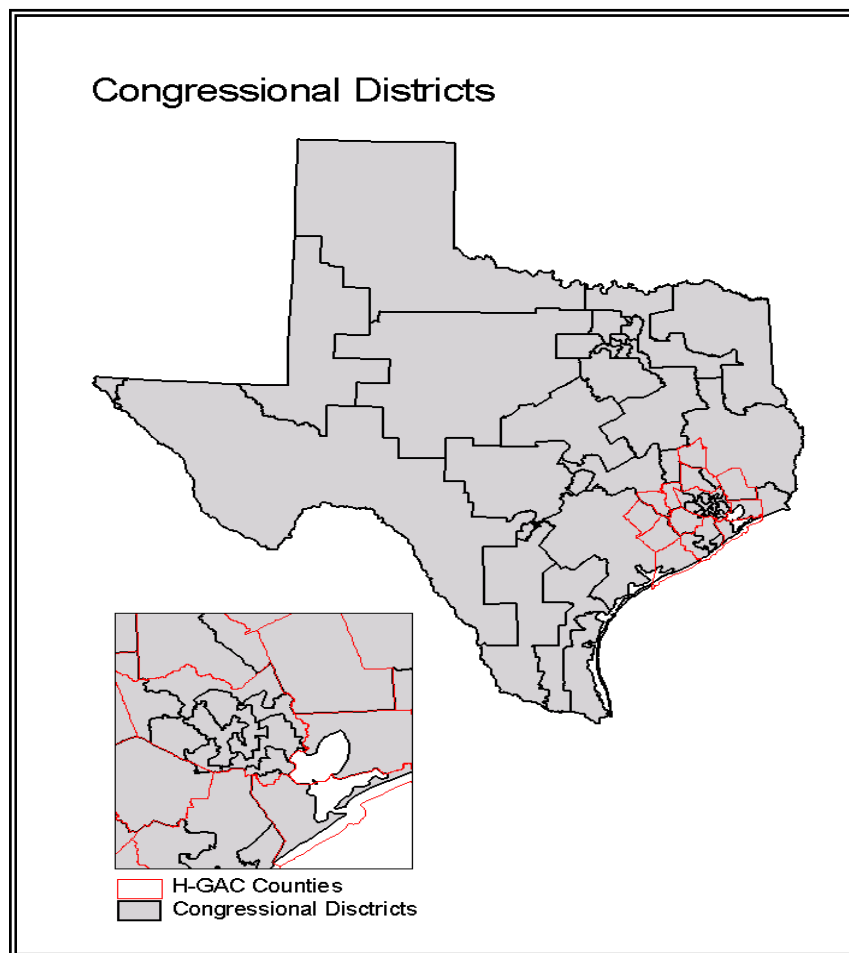
<http://www.h-gac.com/community/socioeconomic/forecasts/archive/2035.aspx>

<http://www.h-gac.com/HGAC/Programs/Clean+Rivers+Program/Landcover.htm>

Political Subdivisions

There are 11 congressional districts that fall in full or in part within the 13-county Houston-Galveston region. **Figure 3.31** shows the delineation of these districts throughout the H-GAC area.

Figure 3.31
Congressional Districts



Presidential and SBA Declared Disasters

There have been 111 presidential or Small Business Administration (SBA) declared disasters in the Houston-Galveston region since 1980. A more in-depth assessment of hazards, including their impact on the H-GAC region, can be found in Section 4.

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Table 3.30
Declared Disasters Summary

DEM Incident Type	Number of Declarations
Fire	3
Flood	54
Freeze	8
Hurricane	14
Rain/Salinity	3
Severe Storm/Tornado	7
Tornado	4
Tropical Storm	18
Total	111

Table 3.31
Presidential and SBA-Declared Disasters List (As of March 2011)

County	Year	Disaster Number	DEM Incident Type	Presidential Declaration	SBA Declaration
Austin	2008	1791 DR	Hurricane	Yes	Yes
Austin	2006	1624 DR	Extreme Wildfire Threat	Yes	No
Austin	2005	1606 DR	Hurricane	Yes	Yes
Austin	1998	1257 DR	Flood	Yes	Yes
Austin	1994	1041 DR	Flood	Yes	Yes
Austin	1991	930 DR	Flood	Yes	Yes
Austin	1981	1997	Flood	No	Yes
Brazoria	2008	1791 DR	Hurricane	Yes	Yes
Brazoria	2006	1624 DR	Extreme Wildfire Threat	Yes	No
Brazoria	2005	1606 DR	Hurricane	Yes	Yes
Brazoria	2003	DR 1479	Hurricane	Yes	Yes
Brazoria	2002	1434 DR	Tropical Storm	Yes	Yes
Brazoria	2002	1439 DR	Severe Storms, Tornadoes	Yes	Yes
Brazoria	2001	1379 DR	Tropical Storm	Yes	Yes
Brazoria	1998	1245 DR	Tropical Storm	Yes	Yes
Brazoria	1998	1257 DR	Flood	Yes	Yes
Brazoria	1994	1041 DR	Flood	Yes	Yes
Brazoria	1993	8013	Rain/Salinity	No	Yes
Brazoria	1991	900 DR	Flood	Yes	Yes
Brazoria	1991	930 DR	Flood	Yes	Yes

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County	Year	Disaster Number	DEM Incident Type	Presidential Declaration	SBA Declaration
Brazoria	1983	2115	Freeze	No	Yes
Brazoria	1983	689 DR	Hurricane	Yes	Yes
Brazoria	1980	627 DR	Hurricane	Yes	Yes
Chambers	2008	1791 DR	Hurricane	Yes	Yes
Chambers	2006	1624 DR	Extreme Wildfire Threat	Yes	No
Chambers	2005	1606 DR	Hurricane	Yes	Yes
Chambers	2001	1379 DR	Tropical Storm	Yes	Yes
Chambers	2000	3259	Flood	No	Yes
Chambers	1994	1041 DR	Flood	Yes	Yes
Chambers	1993	8013	Rain/Salinity	No	Yes
Chambers	1983	2115	Freeze	No	Yes
Chambers	1983	689 DR	Hurricane	Yes	Yes
Colorado	2006	1624 DR	Extreme Wildfire Threat	Yes	No
Colorado	2005	1606 DR	Hurricane	Yes	Yes
Colorado	1998	1257 DR	Flood	Yes	Yes
Colorado	1994	1041 DR	Flood	Yes	Yes
Fort Bend	2008	1791 DR	Hurricane	Yes	Yes
Fort Bend	2006	1624 DR	Extreme Wildfire Threat	Yes	No
Fort Bend	2005	1606 DR	Hurricane	Yes	Yes
Fort Bend	2002	1439 DR	Severe Storms, Tornadoes	Yes	Yes
Fort Bend	2001	1379 DR	Tropical Storm	Yes	Yes
Fort Bend	1998	1257 DR	Flood	Yes	Yes
Fort Bend	1994	1041 DR	Flood	Yes	Yes
Fort Bend	1991	930 DR	Flood	Yes	Yes
Fort Bend	1983	2115	Freeze	No	Yes
Fort Bend	1983	689 DR	Hurricane	Yes	Yes
Galveston	2008	1791 DR	Hurricane	Yes	Yes
Galveston	2006	1624 DR	Extreme Wildfire Threat	Yes	No
Galveston	2005	1606 DR	Hurricane	Yes	Yes
Galveston	2003	DR 1479	Hurricane	Yes	Yes
Galveston	2002	1434 DR	Tropical Storm	Yes	Yes
Galveston	2001	1379 DR	Tropical Storm	Yes	Yes
Galveston	1998	1245 DR	Tropical Storm	Yes	Yes
Galveston	1998	1257 DR	Flood	Yes	Yes

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County	Year	Disaster Number	DEM Incident Type	Presidential Declaration	SBA Declaration
Galveston	1994	1041 DR	Flood	Yes	Yes
Galveston	1993	8013	Rain/Salinity	No	Yes
Galveston	1983	2115	Freeze	No	Yes
Galveston	1983	689 DR	Hurricane	Yes	Yes
Harris	2008	1791 DR	Hurricane	Yes	Yes
Harris	2007	1730 DR	Tropical Storm	Yes	Yes
Harris	2006	1624 DR	Extreme Wildfire Threat	Yes	No
Harris	2005	1606 DR	Hurricane	Yes	Yes
Harris	2002	1439 DR	Severe Storms, Tornadoes	Yes	Yes
Harris	2001	1379 DR	Tropical Storm	Yes	Yes
Harris	2000	3259	Flood	No	Yes
Harris	1998	1245 DR	Tropical Storm	Yes	Yes
Harris	1998	1257 DR	Flood	Yes	Yes
Harris	1994	8253	Tornado	No	Yes
Harris	1994	1041 DR	Flood	Yes	Yes
Harris	1992	937 DR	Flood	Yes	Yes
Harris	1992	970 DR	Tornado	Yes	Yes
Harris	1989	828 DR	Flood	Yes	Yes
Harris	1989	836 DR	Hurricane	Yes	Yes
Harris	1986	2229	Tornado	No	Yes
Harris	1984	2179	Tornado	No	Yes
Harris	1984	727 DR	Flood	Yes	Yes
Harris	1983	2091	Flood	No	Yes
Harris	1983	2115	Freeze	No	Yes
Harris	1983	689 DR	Hurricane	Yes	Yes
Liberty	2008	1791 DR	Hurricane	Yes	Yes
Liberty	2007	1709 DR	Severe Storms, Tornadoes, and Flooding	Yes	Yes
Liberty	2006	1624 DR	Extreme Wildfire Threat	Yes	No
Liberty	2005	1606 DR	Hurricane	Yes	Yes
Liberty	2002	1439 DR	Severe Storms, Tornadoes	Yes	Yes
Liberty	2001	1379 DR	Tropical Storm	Yes	Yes
Liberty	2000	3259	Flood	No	Yes
Liberty	1998	1257 DR	Flood	Yes	Yes

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County	Year	Disaster Number	DEM Incident Type	Presidential Declaration	SBA Declaration
Liberty	1994	1041 DR	Flood	Yes	Yes
Liberty	1992	937 DR	Flood	Yes	Yes
Liberty	1991	930 DR	Flood	Yes	Yes
Liberty	1990	863 DR	Flood	Yes	Yes
Liberty	1989	828 DR	Flood	Yes	Yes
Liberty	1989	836 DR	Hurricane	Yes	Yes
Liberty	1983	2091	Flood	No	Yes
Liberty	1983	2115	Freeze	No	Yes
Liberty	1983	689 DR	Hurricane	Yes	Yes
Matagorda	2008	DR 1791	Hurricane	Yes	Yes
Matagorda	2006	DR 1624	Extreme Wildfire Threat	Yes	No
Matagorda	2005	1606 DR	Hurricane	Yes	Yes
Matagorda	2003	DR 1479	Hurricane	Yes	Yes
Matagorda	2002	1434 DR	Tropical Storm	Yes	Yes
Matagorda	1998	1245 DR	Tropical Storm	Yes	Yes
Matagorda	1998	1257 DR	Flood	Yes	Yes
Matagorda	1994	1041 DR	Flood	Yes	Yes
Matagorda	1991	930 DR	Flood	Yes	Yes
Matagorda	1983	689 DR	Hurricane	Yes	Yes
Montgomery	2008	1791 DR	Hurricane	Yes	Yes
Montgomery	2006	1624 DR	Extreme Wildfire Threat	Yes	No
Montgomery	2005	1606 DR	Hurricane	Yes	Yes
Montgomery	2002	1439 DR	Severe Storms, Tornadoes	Yes	Yes
Montgomery	2001	1379 DR	Tropical Storm	Yes	Yes
Montgomery	2000	3259	Flood	No	Yes
Montgomery	1998	1257 DR	Flood	Yes	Yes
Montgomery	1998	2234 FSA	Fire	Yes	No
Montgomery	1998	2242 FSA	Fire	Yes	No
Montgomery	1994	1041 DR	Flood	Yes	Yes
Montgomery	1989	828 DR	Flood	Yes	Yes
Montgomery	1986	2228	Flood	No	Yes
Montgomery	1983	2091	Flood	No	Yes
Montgomery	1983	2115	Freeze	No	Yes
Montgomery	1983	689 DR	Hurricane	Yes	Yes
Walker	2008	DR 1791	Hurricane	Yes	Yes

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County	Year	Disaster Number	DEM Incident Type	Presidential Declaration	SBA Declaration
Walker	2007	DR 1709	Severe Storms, Tornadoes, and Flooding	Yes	Yes
Walker	2006	DR 1624	Extreme Wildfire Threat	Yes	No
Walker	2005	1606 DR	Hurricane	Yes	Yes
Walker	2002	1439 DR	Severe Storms, Tornadoes	Yes	Yes
Walker	2001	1379 DR	Tropical Storm	Yes	Yes
Walker	1998	1257 DR	Flood	Yes	Yes
Walker	1994	1041 DR	Flood	Yes	Yes
Walker	1991	930 DR	Flood	Yes	Yes
Walker	1990	863 DR	Flood	Yes	Yes
Walker	1989	828 DR	Flood	Yes	Yes
Walker	1983	2115	Freeze	No	Yes
Waller	2008	1791 DR	Hurricane	Yes	Yes
Waller	2006	1624 DR	Extreme Wildfire Threat	Yes	No
Waller	2005	1606 DR	Hurricane	Yes	Yes
Waller	2001	1379 DR	Tropical Storm	Yes	Yes
Waller	1998	1257 DR	Flood	Yes	Yes
Waller	1994	1041 DR	Flood	Yes	Yes
Waller	1989	828 DR	Flood	Yes	Yes
Waller	1983	2091	Flood	No	Yes
Wharton	2008	1791 DR	Hurricane	Yes	Yes
Wharton	2006	1624 DR	Extreme Wildfire Threat	Yes	No
Wharton	2005	1606 DR	Hurricane	Yes	Yes
Wharton	2002	1434 DR	Tropical Storm	Yes	Yes
Wharton	1998	1257 DR	Flood	Yes	Yes
Wharton	1994	1041 DR	Flood	Yes	Yes
Wharton	1991	930 DR	Flood	Yes	Yes
Wharton	1990	863 DR	Flood	Yes	Yes
Source: Texas Division of Emergency Management					

Communities Designated for Special Consideration

In accordance with 44 CFR Section 201.2, this Plan must identify communities designated for special consideration because of minority or economically disadvantaged populations. FEMA defines such communities as those that have populations less than 3,000; must not be located within the boundaries of

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larger cities; and must be economically disadvantaged, with residents having an average per capita annual income not exceeding 80 percent of the national per capita income. According to the ACS 5-year estimates (American Community Survey 2005-2009), the per capita income of the United States was \$27,041, 80 percent of which is \$21,633. The communities must also have a local unemployment rate that exceeds by one percentage point or more the national unemployment rate of 7.2 (ACS 2005-2009).

Table 3.32 lists the jurisdictions whose population is less than 3,000 and whose per capita income is less than \$21,633.

Table 3.32
Communities Potentially Eligible for Special Consideration

Place	Population	Unemployment Rate	Per Capita Income
Ames (City)	1,187	11.05%	\$14,423
Barrett (CDP)	2,051	14.48%	\$16,428
Blessing (CDP)	754	14.02%	\$14,026
Cumings (CDP)	671	18.77%	\$7,862
Daisetta (City)	998	17.45%	\$14,046
Dayton Lakes (City)	68	27.50%	\$11,551
Devers (City)	455	11.03%	\$18,042
Liverpool (City)	357	12.50%	\$20,791
North Cleveland (City)	310	14.29%	\$12,388
Oyster Creek (City)	1,264	9.93%	\$18,074
Patton Village (City)	1,362	10.13%	\$13,520
Porter Heights (CDP)	1,731	14.80%	\$17,135
Sheldon (CDP)	2,076	16.31%	\$14,150
Splendora (City)	1,850	9.37%	\$17,715
Van Vleck (CDP)	1,446	13.40%	\$19,496
Wallis (City)	1,000	9.83%	\$19,703

4.1 Hazard Identification

The Houston-Galveston region is vulnerable to a wide array of natural hazards that threaten life and property. These hazards include:

- Flood (Riverine and Coastal)
- Hurricanes and Tropical Storms
- Severe Thunderstorms
- Tornadoes
- Wildfire
- Drought
- Expansive Soils
- Excessive Heat
- Winter Storms
- Hail
- Coastal Erosion
- Dam/Levee Failure

The following human-caused hazards are also addressed in this Plan:

- Toxic Release/Hazardous Materials (HAZMAT)
- Energy Pipeline Failures

Some hazards are interrelated (i.e., hurricanes can cause flooding and tornadoes), and some contain elements that are not listed separately (i.e., severe thunderstorms can cause lightning; hurricanes can cause coastal erosion). It should also be noted that some hazards, such as severe winter storms, may impact a large area yet cause little damage, while other hazards, such as a tornado, may impact a small area yet cause extensive damage. This section provides a general description of the hazards listed above, including a discussion of their destructive characteristics, written from a national perspective.

Flood

Flooding is the most frequent and costly natural hazard in the United States, causing more than 10,000 deaths since 1900. Historically, nearly 90 percent of presidential disaster declarations result from flood-related events. Floods are generally the result of excessive precipitation, and can be classified in two broad categories, including general and flash floods. General floods are defined as precipitation over a given river basin, while flash floods are the product of heavy localized precipitation falling in a short time period. The severity of a flood event is determined by the following characteristics: a combination of stream and river basin topography and physiography; precipitation and weather patterns; recent soil moisture conditions; and the degree of vegetative clearing.

The primary types of flooding include riverine and coastal flooding. **Riverine flooding** is a function of excessive precipitation levels and water runoff volumes within the watershed. It can include urban flooding which occurs when development has obstructed the natural flow of water and decreased the ability of the watershed to absorb and retain surface water runoff. **Coastal flooding** is typically a result of storm surge, wind-driven waves, and heavy rainfall produced by hurricanes, tropical storms, nor'easters, and other large coastal storms. Although storm surge does produce flooding, it can also cause structural damage from the forces of the surge. Storm surge is further described under "Hurricanes and Tropical Storms."

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The periodic flooding of lands adjacent to rivers, streams, and shorelines is a natural and inevitable occurrence that can be expected to take place based upon established recurrence intervals. The recurrence interval of a flood is defined as the average time interval, in years, expected between a flood event of a particular magnitude and an equal or larger flood. Flood magnitude increases with increasing recurrence interval.

Floodplains are designated by the frequency of the flood that is large enough to cover them. For example, the 10-year floodplain will be covered by the 10-year flood and the 100-year floodplain by the 100-year flood. Flood frequencies such as the 100-year flood are determined by plotting a graph of the size of all known floods for an area and determining how often floods of a particular size occur. Another way of expressing the flood frequency is the chance of occurrence in a given year, which is the percentage of the probability of flooding each year. For example, the 100-year flood has a 1 percent chance of occurring in any given year. **Table 4.1-1** shows flood damage values by fiscal year from a national perspective.

Table 4.1-1
National Flood Damage by Fiscal Year (Oct-Sep)

Fiscal Year	Damage (Thousands of Current Dollars)	Implicit Price Deflator	Damage (Millions of 1995 Dollars)	U.S. Population (Millions)	Damage Per Capita (1995 Dollars)
1960	111,168	0.22620	491	180.671	2.72
1961	147,680	0.22875	646	183.691	3.51
1962	86,574	0.23180	373	186.538	2.00
1963	179,496	0.23445	766	189.242	4.05
1964	194,512	0.23792	818	191.889	4.26
1965	1,221,903	0.24241	5041	194.303	25.94
1966	116,645	0.24934	468	196.560	2.38
1967	291,823	0.25698	1136	198.712	5.71
1968	443,251	0.26809	1653	200.706	8.24
1969	889,135	0.28124	3161	202.677	15.60
1970	173,803	0.29623	587	205.052	2.86
1971	323,427	0.31111	1040	207.661	5.01
1972	4,442,992	0.32436	13698	209.896	65.26
1973	1,805,284	0.34251	5271	211.909	24.87
1974	692,832	0.37329	1856	213.854	8.68
1975	1,348,834	0.40805	3306	215.973	15.31
1976	1,054,790	0.43119	2446	218.035	11.22
1977	988,350	0.45892	2154	220.239	9.78
1978	1,028,970	0.49164	2093	222.585	9.40
1979	3,626,030	0.53262	6808	225.055	30.25
1980	No data	0.58145	0	227.225	0.00
1981	No data	0.63578	0	229.466	0.00
1982	No data	0.67533	0	231.664	0.00
1983	3,693,572	0.70214	5260	233.792	22.50
1984	3,540,770	0.72824	4862	235.825	20.62
1985	379,303	0.75117	505	237.924	2.12
1986	5,939,994	0.76769	7737	240.133	32.22
1987	1,442,349	0.79083	1824	242.289	7.53
1988	214,297	0.81764	262	244.499	1.07
1989	1,080,814	0.84883	1273	246.819	5.16
1990	1,636,366	0.88186	1856	249.464	7.44
1991	1,698,765	0.91397	1859	252.153	7.37
1992	672,635	0.93619	718	255.030	2.82
1993	16,364,710	0.95872	17069	257.783	66.22
1994	1,120,149	0.97870	1145	260.327	4.40
1995	5,110,714	1.00000	5111	262.803	19.45
1996	6,121,753	1.01937	6005	265.229	22.64

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Fiscal Year	Damage (Thousands of Current Dollars)	Implicit Price Deflator	Damage (Millions of 1995 Dollars)	U.S. Population (Millions)	Damage Per Capita (1995 Dollars)
1997	8,934,923	1.03925	8597	267.784	32.11
1998	2,465,048	1.05199	2343	270.248	8.67
1999	5,450,375	1.06718	5107	272.691	18.73
2000	1,336,744	1.08960	1227	282.125	4.35
2001	7,158,700	1.11539	6418	284.797	22.54
2002	1,116,959	1.12854	990	287.974	3.44
2003	2,405,685	1.14730	2097	290.810	7.21

Source: National Weather Service

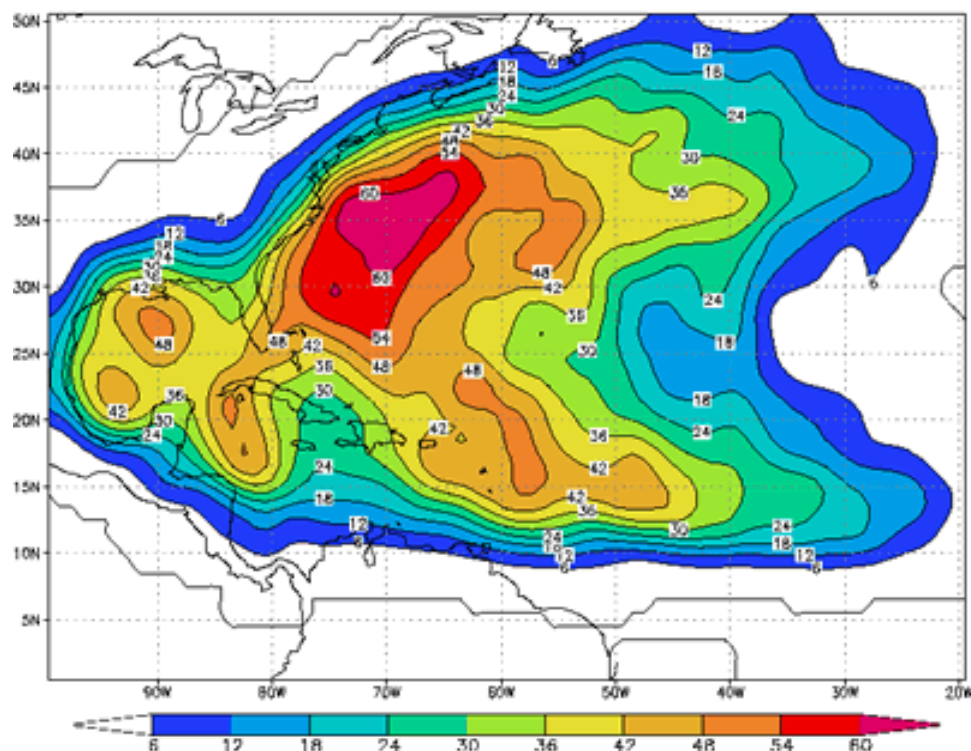
Hurricanes and Tropical Storms

Hurricanes, tropical storms, nor'easters and typhoons, also classified as cyclones, include any closed circulation developing around a low-pressure center in which the winds rotate counter-clockwise in the Northern Hemisphere (or clockwise in the Southern Hemisphere) and whose diameter averages 10 to 30 miles across. A tropical cyclone refers to any such circulation that develops over tropical waters. Tropical cyclones act as a "safety-valve," limiting the continued build-up of heat and energy in tropical regions by maintaining the atmospheric heat and moisture balance between the tropics and the pole-ward latitudes. The primary damaging forces associated with these storms are high-level sustained winds, heavy precipitation, and tornadoes. Coastal areas are also vulnerable to the additional forces of storm surge, wind-driven waves, and tidal flooding.

The key energy source for a tropical cyclone is the release of latent heat from the condensation of warm water. Their formation requires a low-pressure disturbance, warm sea surface temperature, rotational force from the spinning of the earth, and the absence of wind shear in the lowest 50,000 feet of the atmosphere. The majority of hurricanes and tropical storms form in the Atlantic Ocean, Caribbean Sea, and Gulf of Mexico during the Atlantic hurricane season, which encompasses the months of June through November. The peak of the Atlantic hurricane season is in early to mid-September. On average, approximately six (6) storms reach hurricane intensity per year.

Figure 4.1-1 shows the likelihood of a tropical storm or hurricane affecting the Atlantic and Gulf of Mexico during the Atlantic hurricane season. The figure was created by the National Oceanic and Atmospheric Administration's Hurricane Research Division using data from 1944 to 1999.

**Figure 4.1-1
Empirical Probability of a Named Storm**



Source: National Oceanic and Atmospheric Administration, Hurricane Research Division

As a hurricane develops, barometric pressure (measured in millibars or inches) at its center falls and winds increase. If the atmospheric and oceanic conditions are favorable, it can intensify into a tropical depression. When maximum sustained winds reach or exceed 39 miles per hour, the system is designated a tropical storm, given a name, and is closely monitored by the National Hurricane Center in Miami, Florida. When sustained winds reach or exceed 74 miles per hour, the storm is deemed a hurricane. Hurricane intensity is classified using the Saffir-Simpson Scale, which rates hurricane intensity on a scale of 1 to 5, with 5 being the most intense. The Saffir-Simpson Scale is shown in **Table 4.1-2**.

**Table 4.1-2
Saffir-Simpson Scale**

Category	Maximum Sustained Wind Speed (MPH)	Minimum Surface Pressure (Millibars)	Storm Surge (Feet)
1	74—95	Greater than 980	3—5
2	96—110	979—965	6—8
3	111—130	964—945	9—12
4	131—155	944—920	13—18
5	155+	Less than 920	19+

Source: National Hurricane Center

The Saffir-Simpson Scale categorizes hurricane intensity based upon maximum sustained winds, barometric pressure, and storm surge potential, which are combined to estimate potential damage.

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Categories 3, 4, and 5 are classified as “major” hurricanes, and while hurricanes within this range comprise only 20 percent of total tropical cyclone landfalls, they account for over 70 percent of the damage in the United States.

Many public comments were received by the National Weather Service (NWS) regarding the Saffir-Simpson Hurricane Wind Scale (Table 4.1-2). The public felt that the NWS should have a scale specific to storm surge impact. The effects of storm surge are unique to local factors that are not considered in the current scale, for example “if 2008’s Hurricane Ike had made landfall in Palm Beach, Florida, the resulting storm surge would have been only 8-feet, rather than the 20-feet that occurred where Ike actually made landfall on the upper Texas coast. These greatly differing surge impacts arise from differences in the local bathymetry (the shallow Gulf waters off of Texas enhance storm surge while the deep ocean depths off of southeastern Florida inhibit surge).” The National Hurricane Center agrees with the existing scale, but wants to have a better approach to convey the depth of inundation expected along the coast and inland (National Hurricane Center, February 2010).

Table 4.1-3 describes the damage that could be expected for each hurricane category.

**Table 4.1-3
Hurricane Damage Classification**

Category	Damage Level	Description
1	MINIMAL	No real damage to building structures. Damage primarily to unanchored mobile homes, shrubs, and trees. Also, some coastal flooding and minor pier damage.
2	MODERATE	Some roofing material, door, and window damage. Considerable damage to vegetation, mobile homes, etc. Flooding damages piers and small craft in unprotected moorings may break their moorings.
3	EXTENSIVE	Some structural damage to small residences and utility buildings, with a minor amount of curtainwall failures. Mobile homes are destroyed. Flooding near the coast destroys smaller structures with larger structures damaged by floating debris. Terrain may be flooded well inland.
4	EXTREME	More extensive curtainwall failures with some complete roof structure failure on small residences. Major erosion of beach areas. Terrain may be flooded well inland.
5	CATASTROPHIC	Complete roof failure on many residences and industrial buildings. Some complete building failures with small utility buildings blown over or away. Flooding causes major damage to lower floors of all structures near the shoreline. Massive evacuation of residential areas may be required.
<i>Source: National Hurricane Center</i>		

A storm surge is a large dome of water often 50 to 100 miles wide and rising from four to five feet in a Category 1 hurricane up to 20 feet in a Category 5 storm. The storm surge arrives ahead of the storm’s landfall, or the point at which the eye wall strikes land. As a hurricane increases in intensity, the storm surge tends to arrive earlier relative to landfall when compared to lower category storms. Water rise can be very rapid, posing a serious threat to those who have not yet evacuated flood-prone areas. A storm surge is a wave that has outrun its power generating source and become a long period swell. The surge is always highest in the right-front quadrant of the hurricane. As the storm approaches shore, the greatest storm surge forms to the north of the hurricane eye. The surge of high water topped by waves driven by hurricane force winds can be devastating to coastal regions, causing severe beach erosion and property damage.

Storm surge heights, and associated waves, are dependent upon the shape of the continental shelf (narrow or wide) and the depth of the ocean bottom (bathymetry). A narrow shelf, or one that drops steeply from the shoreline and subsequently produces deep water close to the shoreline, tends to produce a lower surge but higher and more powerful storm waves.

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Damage during hurricanes may also result from spawned tornadoes and inland flooding associated with heavy rainfall that usually accompanies these storms. Hurricane Floyd, for example, was at one time a Category 4 hurricane racing towards the North Carolina coast. However, Floyd made landfall as a Category 2 hurricane and will be remembered for causing the worst inland flooding disaster in North Carolina's history. Rainfall amounts reached in excess of 20 inches.

Similar to hurricanes, nor'easters are ocean storms capable of causing substantial damage to coastal areas in the Eastern United States due to their strong winds and heavy surf. Nor'easters are named for the winds that blow in from the northeast and drive the storm up the East Coast along the Gulf Stream, a band of warm water that lies off the Atlantic coast. They are caused by the interaction of the jet stream with horizontal temperature gradients and generally occur during the fall and winter months when moisture and cold air are plentiful.

Nor'easters are known for dumping heavy amounts of rain and snow, producing hurricane-force winds, and creating high surf that can cause severe beach erosion and coastal flooding. There are two main components to a nor'easter: (1) a Gulf Stream low-pressure system (counter-clockwise winds) generated off the southeastern U.S. coast, gathering warm air and moisture from the Atlantic, and pulled up the East Coast by strong northeasterly winds at the leading edge of the storm; and (2) an Arctic high-pressure system (clockwise winds) which meets the low-pressure system with cold, arctic air blowing down from Canada. When the two systems collide, the moisture and cold air produce a mix of precipitation and have the potential for creating dangerously high winds and heavy seas. As the low-pressure system deepens, the intensity of the winds and waves will increase, potentially causing serious damage to coastal areas as the storm moves northeast. **Table 4.1-4** shows an intensity scale proposed for nor'easters that is based upon levels of coastal degradation.

Table 4.1-4
Dolan-Davis Nor'easter Intensity Scale

Storm Class	Beach Erosion	Dune Erosion	Overwash	Property Damage
1 (Weak)	Minor changes	None	No	No
2 (Moderate)	Modest; mostly to lower beach	Minor	No	Modest
3 (Significant)	Erosion extends across beach	Can be significant	No	Loss of many structures at local level
4 (Severe)	Severe beach erosion and recession	Severe dune erosion or destruction	On low beaches	Loss of structures at community-scale
5 (Extreme)	Extreme beach erosion	Dunes destroyed over extensive areas	Massive in sheets and channels	Extensive at regional-scale; millions of dollars
Source: North Carolina Division of Emergency Management				

Severe Thunderstorms

According to the National Weather Service, more than 100,000 thunderstorms occur each year, though only about 10 percent of these storms are classified as "severe." Although thunderstorms generally affect a small area, they are very dangerous because of their ability to generate tornadoes, hailstorms, strong winds, flash flooding, and damaging lightning. While thunderstorms can occur in all regions of the United States, they are most common in the central and southern states because atmospheric conditions in those regions are most ideal for generating these powerful storms.

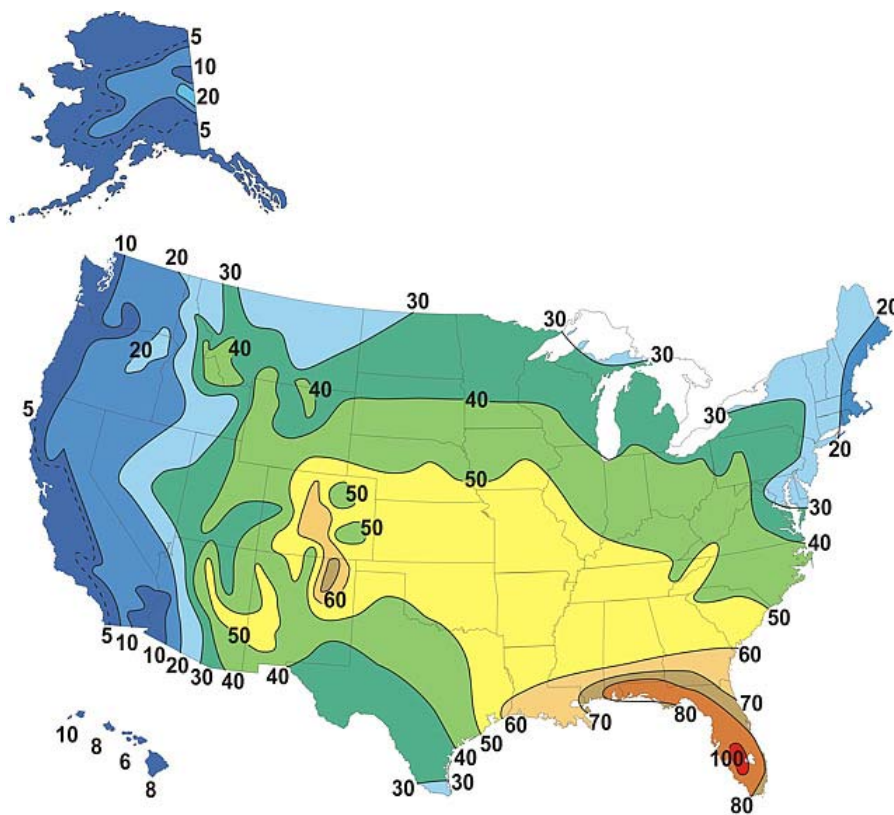
Thunderstorms are caused when air masses of varying temperatures meet. Rapidly rising warm moist air serves as the "engine" for thunderstorms. These storms can occur singularly, in lines, or in clusters. They can move through an area very quickly or linger for several hours.

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Lightning is the discharge of electrical energy resulting from the buildup of positive and negative charges within a thunderstorm, creating a “bolt” when the buildup of charges becomes strong enough. This flash of light usually occurs within the clouds or between the clouds and the ground. A bolt of lightning can reach temperatures approaching 50,000 degrees Fahrenheit. Lightning rapidly heats the sky as it flashes but the surrounding air cools following the bolt. This rapid heating and cooling of the surrounding air causes thunder. On average, 70 people are killed each year by lightning strikes in the United States.

According to the National Weather Service, an estimated number of 40,000 thunderstorms occur each day world-wide which translates to 14.6 million a year. The average number of thunderstorm days each year throughout the U.S is depicted in **Figure 4.1–2**.

Figure 4.1-2
Annual Average Number of Thunderstorm Days



Source: National Weather Service

Tornadoes

A tornado is a violent windstorm characterized by a twisting, funnel-shaped cloud extending to the ground. Tornadoes are most often generated by thunderstorm activity (but sometimes result from hurricanes and other coastal storms) when cool, dry air intersects and overrides a layer of warm, moist air forcing the warm air to rise rapidly. The damage caused by a tornado is a result of the high wind velocity and wind-blown debris. Lightning and large hail frequently accompany these windstorms. According to the National Weather Service, tornado wind speeds range from 40 to more than 300 miles per hour. The most violent tornadoes have rotating winds of 250 miles per hour or more and are capable of causing extreme destruction.

Each year, an average of over 800 tornadoes is reported nationwide. Tornadoes cause an average of 80 deaths and 1,500 injuries annually (NOAA, 2002). 125 deaths were caused in the year 2008 which is the

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deadliest since 1998, and the seventh deadliest since modern recordkeeping began in 1950 (NOAA, 2009). Tornadoes are more likely to occur during the spring and early summer months of March through June and can occur at any time of day, but are likely to form in the late afternoon and early evening. Most tornadoes are a few dozen yards wide and touch down briefly, but can inflict tremendous damage. Highly destructive tornadoes may carve out a path over a mile wide and several miles long.

Waterspouts are weak tornadoes that form over warm water and are most common along the Gulf Coast and southeastern states. Waterspouts occasionally move inland, becoming tornadoes that can cause damage and injury. However, most waterspouts dissipate over the open water, threatening marine and boating interests. Typically a waterspout is weak and short-lived, and because they are so common, most go unreported unless they cause damage.

The destruction caused by tornadoes ranges from light to inconceivable depending on the intensity, size, and duration of the storm. Typically, tornadoes cause the greatest damages to structures of light construction such as residential homes (particularly mobile homes). In 2007, the Enhanced Fujita Scale was adopted to address the weaknesses associated with the Fujita Scale:

- It is *subjective* based solely on the damage caused by a tornado
- No recognition in difference in construction
- Difficult to apply with no damage indicators
- Subject to bias
- Based on the worst damage (even if it is one building or house)
- Overestimates wind speeds greater than F3

The Enhanced Fujita Scale and a comparison to the old Fujita Scale are presented as **Table 4.1-5**.

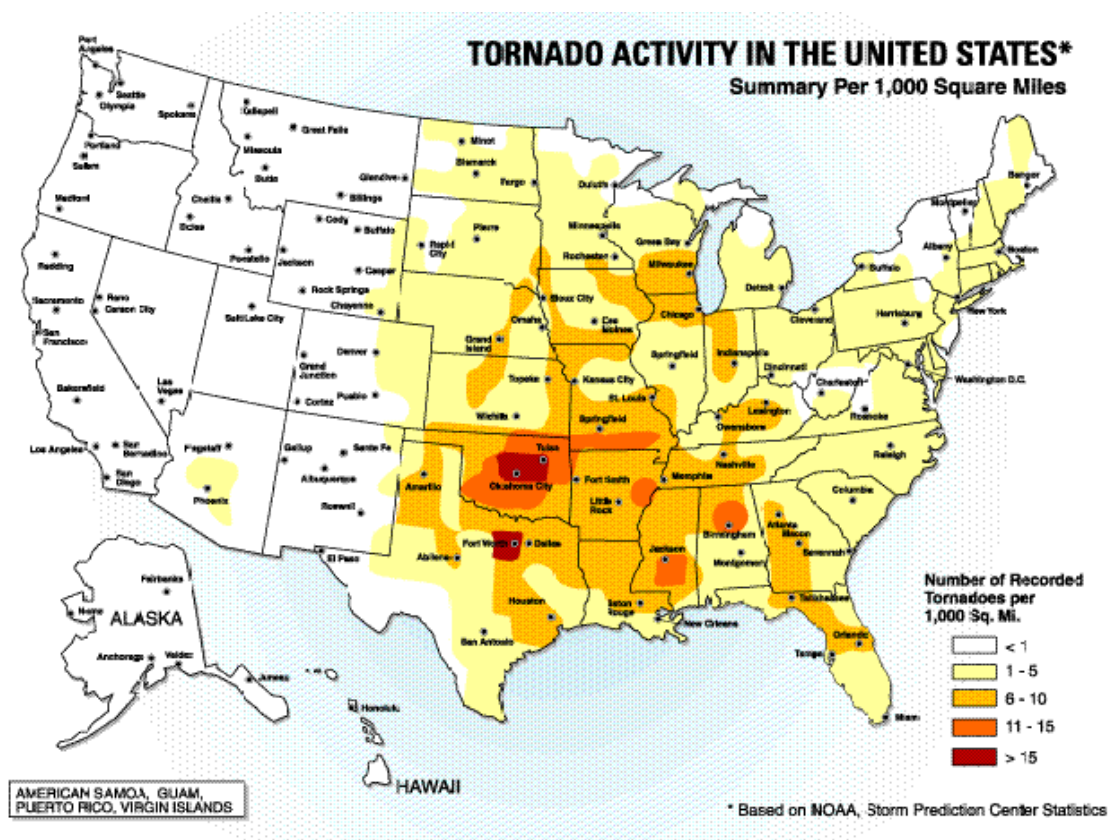
Table 4.1-5
Enhanced Fujita Scale and Fujita Scale for Tornadoes

EF-Scale:	Old F-Scale:	Typical Damage:
EF-0 (65-85 mph)	F0 (45-78 mph)	Some damage to chimneys; breaks branches off trees; pushes over shallow-rooted trees; damages to sign boards.
EF-1 (86-110 mph)	F1 (79-117 mph)	The lower limit is the beginning of hurricane wind speed; peels surface off roofs; mobile homes pushed off foundations or overturned; moving autos pushed off the roads; attached garages may be destroyed.
EF-2(111-135 mph)	F2 (118-161 mph)	Considerable damage. Roofs torn off frame houses; mobile homes demolished; boxcars pushed over; large trees snapped or uprooted; light object missiles generated.
EF-3 (136-165 mph)	F3 (162-209 mph)	Roof and some walls torn off well-constructed houses; trains overturned; most trees in forest uprooted.
EF-4 (166-200 mph)	F4 (210-261 mph)	Well-constructed houses leveled; structures with weak foundations blown off some distance; cars thrown and large missiles generated.
EF-5 (>200 mph)	F5 (261-318 mph)	Strong frame houses lifted off foundations and carried considerable distances to disintegrate; automobile sized missiles fly through the air in excess of 100 meters; trees debarked; steel re-enforced concrete structures badly damaged.

Source: NOAA Storm Prediction Center

According to the NOAA Storm Prediction Center (SPC), the highest concentration of tornadoes in the United States has been in Oklahoma, Texas, Kansas and Florida respectively. Although the Great Plains region of the Central United States does favor the development of the largest and most dangerous tornadoes (earning the designation of “tornado alley”), Florida experiences the greatest number of tornadoes per square mile of all U.S. states (SPC, 2002). **Figure 4.1-3** shows tornado activity in the United States based on the number of recorded tornadoes per 1,000 square miles.

Figure 4.1-3
Tornado Activity in the United States



Source: American Society of Civil Engineers

The tornadoes associated with tropical cyclones are most frequent in September and October when the incidence of tropical storm systems is greatest. This type of tornado usually occurs around the perimeter of the storm, and most often to the right and ahead of the storm path or the storm center as it comes ashore. These tornadoes commonly occur as part of large outbreaks and generally move in an easterly direction.

Figure 4.1-4 shows how the frequency and strength of extreme windstorms vary across the United States. The map was produced by the Federal Emergency Management Agency and is based on 40 years of tornado history and over 100 years of hurricane history. Zone IV, the darkest area on the map, has experienced both the greatest number of tornadoes and the strongest tornadoes. As shown by the map key, wind speeds in Zone IV can reach 250 miles per hour.

Figure 4.1-4
Wind Zones in the United States

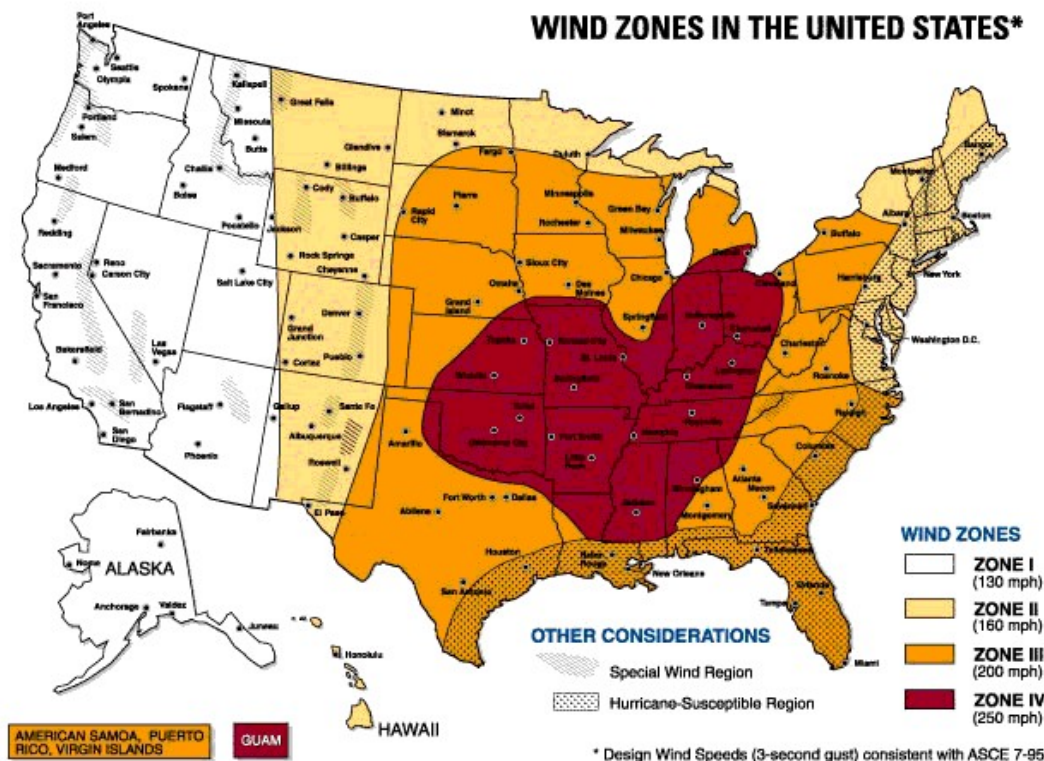


Figure 1.2 Wind zones in the United States

Source: Federal Emergency Management Agency

Wildfire

A wildfire is any fire occurring in a wildland area (i.e., grassland, forest, brush land) except for fire under prescription.¹ Wildfires are part of the natural management of the Earth's ecosystems, but may also be caused by natural or human factors. The Texas Division of Emergency Management estimates that 90 percent of forest fires are started by negligent human behavior such as smoking in wooded areas or improperly containing burning debris. The second most common cause for wildfire is lightning.

There are three classes of wildland fires: surface fire, ground fire, and crown fire. A surface fire is the most common of these three classes and burns along the floor of a forest, moving slowly and killing or damaging trees. A ground fire (muck fire) is usually started by lightning or human carelessness and burns on or below the forest floor. Crown fires spread rapidly by wind and move quickly by jumping along the tops of trees.

Population deconcentration in the U.S. has resulted in rapid development in the outlying fringe of metropolitan areas and in rural areas with attractive recreational and aesthetic amenities, especially forests. This demographic change is increasing the size of the wildland-urban interface (WUI), defined as the area where structures and other human development meet or intermingle with undeveloped wildland. The expansion of the WUI in recent decades has significant implications for wildfire management and impact. The WUI creates an environment in which fire can move readily between structural and vegetation fuels. Its expansion has increased the likelihood that wildfires will threaten structures and

¹ Prescribed burning, or a "controlled burn," undertaken by land management agencies is the process of igniting fires under selected conditions, in accordance with strict parameters.

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people (SILVIS Lab). The WUI presents additional risks which will be described in Section 4.3: Hazard Vulnerability.

State and local governments can impose fire safety regulations on home sites and developments to help curb wildfire. Land treatment measures such as fire access roads, water storage, helipads, safety zones, buffers, firebreaks, fuel breaks, and fuel management can be designed as part of an overall fire defense system to aid in fire control. Fuel management, prescribed burning, and cooperative land management planning can also be encouraged to reduce fire hazards.

Fire probability is dependent on various factors including: local weather conditions, land cover, outdoor activities such as camping, debris burning, construction, and the degree of public cooperation regarding the use of fire prevention measures. Additionally, the long growing season allows for wildfire fuel to grow rapidly. Drought conditions and other natural disasters (tornadoes, hurricanes, etc.) increase the probability of wildfires by producing fuel in both urban and rural settings. Forest damage from hurricanes and tornadoes may block interior access roads and fire breaks, down overhead power lines, or damage pavement and underground utilities.

Many individual homes and cabins, subdivisions, resorts, recreational areas, organizational camps, businesses, and industries are located within high fire hazard areas. Increasing recreational demands place more people in wildlands during holidays, weekends, and vacation periods.

Texas Forest Service assigns a high priority to year-round wildfire prevention activities that reduce risks to citizens and property. Because wildfires in Texas primarily result from the actions of people, wildfire prevention campaigns targeting people-caused wildfires can significantly reduce the number of wildfires and wildfire losses. Texas Forest Service prevention campaigns use radio, TV, print and web-based products along with local outreach programs to increase wildfire awareness and deliver fire safety messages keyed to local fire causes. Texas Forest Service also works with local and county officials to keep them informed of fire danger and the likelihood of large damaging wildfires.

Drought

Drought is a natural climatic condition caused by an extended period of limited rainfall beyond that which occurs naturally in a broad geographic area. High temperatures, high winds, and low humidity can worsen drought conditions, and can make areas more susceptible to wildfire. Human demands and actions can also hasten drought-related impacts. Droughts are frequently classified as one of four types:

- Meteorological,
- Agricultural,
- Hydrological, and
- Socio-economic.

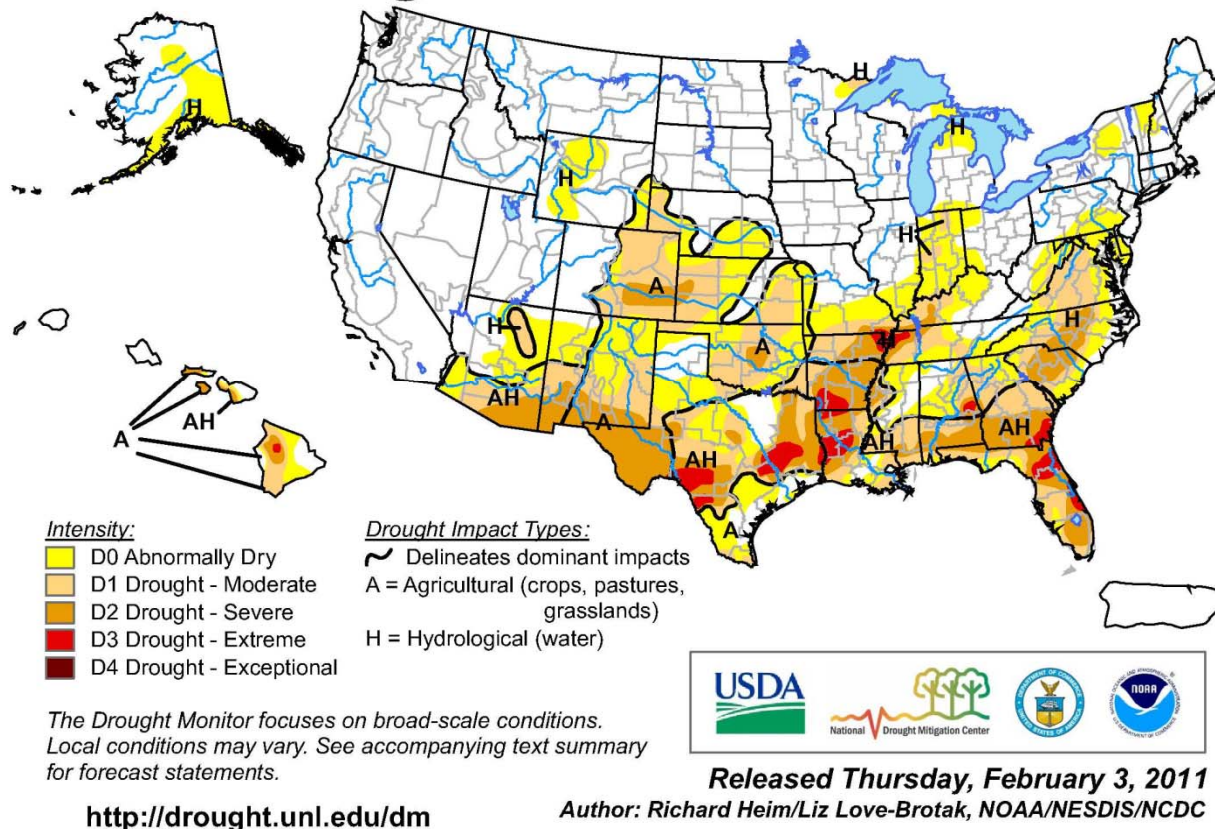
Meteorological droughts are typically defined by the level of “dryness” when compared to an average, or normal amount of precipitation over a given period of time. Agricultural droughts relate common characteristics of drought to their specific agricultural-related impacts. Emphasis tends to be placed on factors such as soil water deficits, water needs based on differing stages of crop development, and water reservoir levels. Hydrological drought is directly related to the effect of precipitation shortfalls on surface and groundwater supplies. Human factors, particularly changes in land use, can alter the hydrologic characteristics of a basin. Socio-economic drought is the result of water shortages that limit the ability to supply water-dependent products in the marketplace.

Figure 4.1-5 shows a U.S. Drought Monitor summary map from the United States Department of Agriculture for February 1, 2011. Drought Monitor summary maps identify general drought areas and label droughts by intensity, with D1 and D4 representing moderate and exceptional drought respectively.

Figure 4.1-5

U.S. Drought Monitor

February 1, 2011
Valid 7 a.m. EST



Maps, generated by the National Drought Mitigation Center, are updated weekly and may be obtained online at the following Web address: <http://drought.unl.edu/dm>.

Expansive Soils

Expansive soils are defined as soils and soft rock that tend to swell or shrink due to changes in moisture content. Changes in soil volume present a hazard primarily to structures built on top of expansive soils. In Texas, most expansive soils are located in a band 200 miles west from the coastline, stretching approximately from Beaumont down to Brownsville. These areas receive the most moisture and are also vulnerable to droughts, which can cause the soils to contract. In the H-GAC region, the problems associated with expansive soils typically occur during drought periods. Expansive soils (bentonite, smectite, or other reactive clays) expand when the soil particles attract water, and can shrink when the clay dries.

Excessive Heat

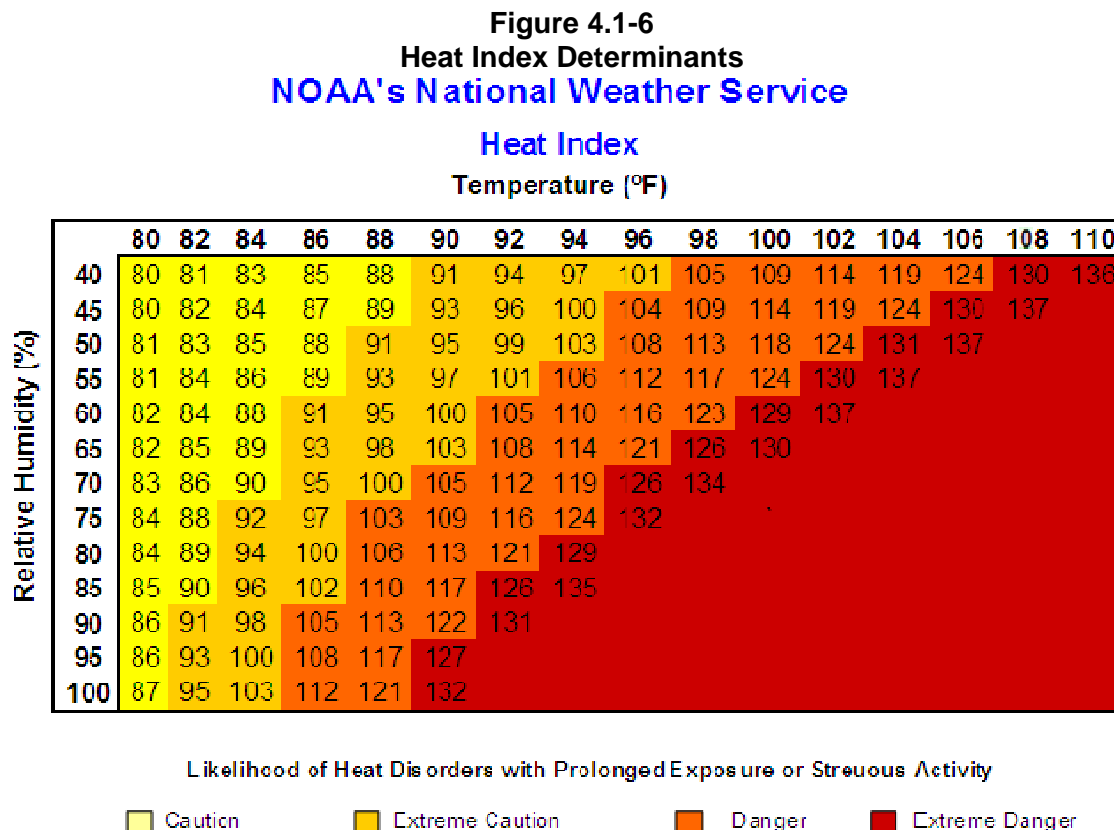
Excessive heat in urban areas can create health concerns when stagnant atmospheric conditions trap pollutants, thus adding unhealthy air to excessively hot temperatures. In addition, the "urban heat island effect" can produce significantly higher nighttime temperatures because asphalt and concrete (which store heat longer) gradually release heat at night.

Excessive heat can pose a significant risk to humans. Excessive heat can be defined as temperatures that hover 10 degrees or more above the average high temperature for the region, last for prolonged periods of time, and are often accompanied by high humidity. Under normal conditions, the human

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body's internal thermostat produces perspiration that evaporates and cools the body. However, in excessive heat and high humidity, evaporation is slowed and the body must work much harder to maintain a normal temperature. Elderly persons, young children, persons with respiratory difficulties, and those who are sick or overweight are more likely to become victims of excessive heat. Because men sweat more than women, they are more susceptible to heat-related illness because they become more quickly dehydrated. Studies have shown that a significant rise in heat-related illness occurs when extreme heat persists for more than two days. Spending at least two hours per day in air conditioning can significantly reduce the number of heat-related illnesses.

Figure 4.1-6 shows how heat index is determined using the relationship between relative humidity and temperature.



Since 1995 there have been 6 excessive heat events in the region recorded with the National Climatic Data Center. There were 38 deaths associated with these events and 200 injuries. There was no property damage recorded for these events, as is generally the case with excessive heat events.

The entire region and all of its participating jurisdictions are impacted by excessive heat on an annual basis. Therefore the excessive heat hazard area comprises the entire region.

Winter Storms

A winter storm can range from a moderate snow over a period of a few hours to blizzard conditions with blinding wind-driven snow that lasts for several days. Some winter storms may be large enough to affect several states, while others may affect only a single community. Many winter storms are accompanied by low temperatures and heavy and/or blowing snow, which can severely impair visibility.

Winter storms may include snow, sleet, freezing rain, or a mix of wintry precipitation. Sleet – raindrops that freeze into ice pellets before reaching the ground – usually bounce when hitting a surface and do not

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stick to objects. However, sleet can accumulate like snow, causing significant road hazards. Freezing rain is rain that falls onto a surface with a temperature below freezing, forming a glaze of ice. Even small accumulations of ice can cause a significant hazard, especially on power lines and trees. An ice storm occurs when freezing rain falls and freezes immediately upon impact. Communications and power can be disrupted for days, and even small accumulations of ice may cause extreme hazards to motorists and pedestrians.

A freeze is weather marked by low temperatures below thirty-two degrees Fahrenheit. Agricultural production is seriously affected when temperatures remain below the freezing point for an extended period of time. Areas unaccustomed to freezing temperatures are more susceptible to associated damages and threats to public health and safety.

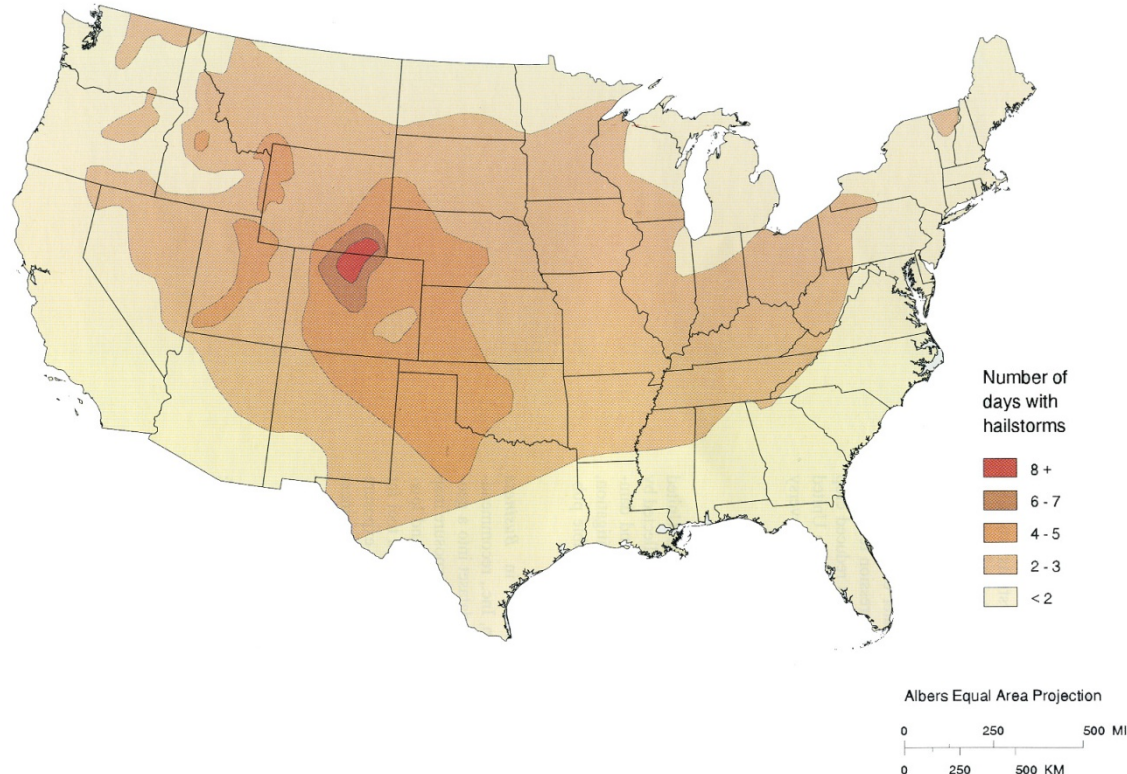
Hail

Hailstorms are an outgrowth of severe thunderstorms. Early in the developmental stages of a hailstorm, ice crystals form within a low-pressure front due to the rapid rising of warm air into the upper atmosphere and the subsequent cooling of the air mass. Frozen droplets gradually accumulate on the ice crystals until, having developed sufficient weight, they fall as precipitation — as balls or irregularly shaped masses of ice greater than 0.75 in. (1.91 cm) in diameter. The size of hailstones is a direct function of the size and severity of the storm. High velocity updraft winds are required to keep hail in suspension in thunderclouds. The strength of the updraft is a function of the intensity of heating at the Earth's surface. Higher temperature gradients relative to elevation above the surface result in increased suspension time and hailstone size. **Figure 4.1-7** shows the annual frequency of hailstorms in the United States.



Large hail collects on streets and grass during a severe thunderstorm. Larger stones appear to be nearly two to three inches in diameter. (NOAA Photo Library, NOAA Central Library; OAR/ERL/National Severe Storms Laboratory)

Figure 4.1-7
Annual Frequency of Hailstorms in the United States



Coastal Erosion

Erosion is the gradual breakdown and movement of land due to both physical and chemical processes of water, wind, and general meteorological conditions. Natural, or geologic, erosion has occurred since the Earth's formation and continues at a very slow and uniform rate each year. Soil erosion is comprised of two types: wind erosion and water erosion. Wind erosion can cause significant soil loss. Winds blowing across sparsely vegetated or disturbed land can pick up soil particles and carry them through the air, thus displacing them. Water erosion can occur over land or in streams and channels. Water erosion that takes place over land may result from raindrops, shallow sheets of water flowing off the land, or surface flow, which is concentrated in areas of lower elevation. Stream channel erosion may occur as the volume and velocity of water flow increases enough to cause movement of the streambed and bank soils. Major storms such as hurricanes may cause significant erosion by combining high winds with heavy surf and storm surge to significantly impact the rate of shoreline erosion.

An area's potential for erosion is determined by five factors: soil characteristics, vegetative cover, topography, climate or rainfall, and topography. Soils composed of a large percentage of silt and fine sand are most susceptible to erosion. As the clay and organic material content of these soils increases, the potential for erosion decreases. Well-drained and well-graded gravels and gravel-sand mixtures are the least likely to erode. Coarse gravel soils are highly permeable and have a good capacity for absorption, which can prevent or delay the amount of surface runoff. Vegetative cover can be very helpful in controlling erosion by shielding the soil surface from falling rain, absorbing water from the soil, and slowing the velocity of runoff. Runoff is also affected by the topography of the area including size, shape and slope. The greater the slope length and gradient, the more potential an area has for erosion. Climate can affect the amount of runoff, especially the frequency, intensity and duration of rainfall and storms. When rainstorms are frequent, intense, or of long duration, erosion risks are increased, all other factors held constant. Seasonal changes in temperature and rainfall amounts define the period of highest erosion risk.

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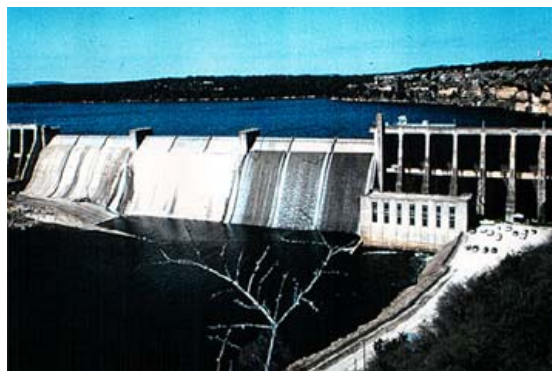
During the past 20 years, the importance of erosion control has gained the increased attention of the public. Implementation of erosion control measures consistent with sound agricultural and construction operations is needed to minimize the adverse effects associated with increasing settling out of the soil particles due to water or wind. The increase in government regulatory programs and public concern has resulted in a wide range of erosion control products, techniques, and analytical methodologies in the United States. The preferred method of erosion control in recent years has been the restoration of vegetation.

Dam/Levee Failure

Worldwide interest in dam and levee safety has risen significantly in recent years. Aging infrastructure, new hydrologic information, terrorist threats and population growth in floodplains downstream from dams and near levees have resulted in an increased emphasis on safety, operation and maintenance.

There are approximately 80,000 dams in the United States today, the majority of which are privately owned. Other owners include state and local authorities, public utilities, and federal agencies. The benefits of dams are numerous: they provide water for drinking, navigation, and agricultural irrigation. Dams also provide hydroelectric power, create lakes for fishing and recreation, and save lives by preventing or reducing floods.

Though dams have many benefits, they also can pose a risk to communities if not designed, operated, and maintained properly. In the event of a dam failure, the energy of the water stored behind even a small dam is capable of causing loss of life and significant property damage if development exists downstream. Flash flooding events can occur when a dam or levee fails, within minutes or hours of heavy amounts of rainfall. Flash flood waters move at very high speeds, uprooting trees, destroying buildings, and obliterating bridges and roads.



Dam failure can result from natural events, human-induced events, or a combination of the two. Failures due to natural events such as hurricanes, earthquakes or landslides are significant because there is generally little or no advance warning. The most common cause of dam failure is prolonged rainfall that produces flooding. (Photo: Michael Baker Corporation)

Toxic Release/Hazardous Materials (HAZMAT)

Hazardous materials (HAZMAT) incidents (including toxic releases) can apply to fixed facilities as well as mobile, or transportation-related accidents. Approximately 6,774 HAZMAT events occur each year, 5,517 of which are highway incidents, 991 are railroad incidents and 266 are due to other causes (FEMA, 1997). HAZMAT incidents consist of solid, liquid and/or gaseous contaminants that are released from fixed or mobile containers, due to an accident or intentional terrorist attack. A HAZMAT incident may last for hours, days, or longer, depending on the nature of the release. In addition to the primary release, explosions and/or fires can result from a release, and contaminants can be extended beyond the initial area by persons, vehicles, water, wind and wildlife.

HAZMAT incidents can also occur as a result of or in tandem with natural hazard events, such as floods, hurricanes, tornadoes and earthquakes, which in addition to causing incidents can also hinder response efforts. The following events caused severe problems because of hazardous material incidents:

- In the case of Hurricane Floyd in September 1999, communities along the Eastern United States were faced with flooded junkyards, disturbed cemeteries, deceased livestock, floating propane tanks, uncontrolled fertilizer spills and a variety of other environmental pollutants that caused widespread concern.

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- In the case of Hurricane Katrina in August 2005, communities in Louisiana and Mississippi were faced with 86 million cubic yards of debris, release of 7 million gallons of oil and hazardous substances were deposited in sediments by floodwaters. Additionally, 18 Superfund National Priority List sites and more than 400 industrial facilities that store or manage hazardous materials where in the path of Hurricane Katrina (EPA, 2006).
- In the case of Hurricane Ike in September 2008, communities in Texas and Louisiana were faced with environmental damage due to at least 500,000 gallons of crude oil spilled into the Gulf of Mexico, marshes, and bays. Additionally, communities were affected by air contaminants and hazardous debris, including paint cans and propane tanks, that was deposited by the storm.

Energy Pipeline Failures

The energy infrastructure of the United States is comprised of many components, including the physical network of pipes for oil and natural gas, electricity transmission lines, and other means for transporting energy to the Nation's consumers. This infrastructure includes facilities that convert raw natural resources into energy products, as well as rail networks, trucking lines and marine transportation. (U.S. Department of Energy, 2003) Much of this infrastructure is aging, and in addition to the challenges of keeping the infrastructure up-to-date with the latest technological advances and consumer needs, the potential for an energy pipeline failure must be considered.

The two million miles of oil pipelines in the United States are the principal mode for transporting oil and petroleum products such as gasoline. Virtually all natural gas in the United States is moved via pipeline as well. (DOE, 2003) Much of the oil pipeline infrastructure is old, requiring regular safety and environmental reviews to ensure its safety and reliability. The potential risk of pipeline accidents is a significant national concern.



Virtually all natural gas in the United States is moved via pipeline. (Photo courtesy of the Department of Energy)

The energy infrastructure is vulnerable to physical and cyber disruption, either of which could threaten its integrity and safety. (DOE, 2003) Disruptions could originate with natural events such as geomagnetic storms and earthquakes, or could result from accidents, equipment failures or deliberate interference. In addition, the nation's transportation and power infrastructures have grown increasingly complex and interdependent — consequently, any disruption could have far-reaching consequences.

Conclusion

Hazards that pose enough risk to the region to be addressed in this plan include the following:

- | | |
|---------------------------|----------------------------------|
| • Coastal Erosion | • Hail |
| • Dam Failure | • Hurricanes and Tropical Storms |
| • Drought | • Severe Thunderstorms |
| • Energy Pipeline Failure | • Tornado |
| • Excessive Heat | • Toxic Release/HAZMAT |
| • Expansive Soils | • Wildfire |
| • Flood | • Winter Storms |

4.2 Hazard Analysis

The *Hazard Analysis* section provides information on the following identified hazards – location, extent, historical occurrences and likelihood of future events in the Houston-Galveston Area Council (H-GAC) region¹:

- Flood
- Hurricanes and Tropical Storms
- Severe Thunderstorms
- Tornadoes
- Wildfire
- Drought
- Expansive Soils
- Excessive Heat
- Winter Storms
- Hail
- Coastal Erosion
- Dam/Levee Failure

Hazard analyses were also conducted for the following two human-caused hazards:

- Toxic Release/Hazardous Materials
- Energy Pipeline Failures

Flood

Numerous rivers and streams wind through the counties and jurisdictions in the region. This, combined with flat topography and clayey soils, sets the stage for potential flooding during heavy rain events. Flash flooding often develops quickly in the region, endangering life and property and requiring rescue.

Notable flood events recorded by the National Climatic Data Center for the period of October 1994 through October 2011 are listed in **Table 4.2-1**. The table describes which jurisdictions experienced the flooding and the nature and magnitude of flooding. **Table 4.2-2** list the highest magnitude floods for the plan update planning area.



This photo of Buffalo Bayou, looking upstream from Main Street in the Houston area, illustrates the extent of flooding from Tropical Storm Allison on June 9, 2001.

Detailed flood mapping for each county has been included in Section 4.3. These maps show the location of the flood hazard within each county.

¹ Jurisdiction-specific hazard characteristics are noted in table format, wherever applicable.

**Table 4.2-1
Recent Flood Events in the H-GAC Region (1994-2010)**

County	Date	Deaths	Property Damage	Details
Austin, Brazoria, Chambers, Colorado, Fort Bend, Galveston, Harris, Liberty, Matagorda, Montgomery, Walker, Waller, Wharton	10/16/1994-10/18/1994	17	\$900,000,000	Total rainfall generally ranged from 10 to 20 inches with Liberty recording 30.5 inches of rain during the storm. Over 13,000 people had to be evacuated during the floods and more than 22,000 homes were damaged.
Austin, Brazoria, Chambers, Colorado, Fort Bend, Harris, Liberty, Matagorda, Montgomery, Waller, Wharton	10/17/1998-10/18/1998	8	\$418,000	Many areas received in excess of 10 inches. Over 16 inches of rain fell along the Wharton/Colorado county line. Three hundred and fifty to 375 homes were impacted, four were destroyed, 143 sustained major damage, and 209 received minor damage. Hundreds of livestock were lost and 7,500 acres of crop land were damaged.
Austin, Brazoria, Colorado, Fort Bend, Harris, Liberty, Matagorda, Montgomery, Walker, Waller, Wharton	11/12/1998-11/14/1998	0	\$239,000	Rainfall amounts across the area averaged 5 to 7 inches with large areas receiving 7 to 9 inches. Isolated locations received more than 10 inches of rain. Homes flooded in several communities, including Plum Grove, Patton Village, Magnolia Gardens, Banana Bend, Highland Shores and Friendswood.
Brazoria, Fort Bend, Galveston, Harris	08/28/2001-08/31/2001	0	\$1,463,000	Heavy rainfall caused street flooding and water in some homes. Some roads were closed.
Harris	09/18/1996	0	\$1,500,000	Widespread street flooding in downtown Houston and Pasadena. Homes and businesses in Pasadena were flooded.
Harris	05/24/1997	0	\$250,000	Severe flooding in Houston. 50-75 homes received flood damage.
Harris	03/19/1999	0	\$300,000	Widespread flooding in southwest Houston. Numerous streets in the Alief and Bellaire areas were flooded. Several on ramps to US 59, Loop 610, and US 90, as well as the intersection of I-10 and Beltway 8, were impassable due to high water.
Harris, Liberty	05/19/2000	0	\$10,400,000	Major flooding on Greens, Airtex, Rankin, and Aldine-Westfield Roads in Harris County. Four homes were damaged. At least 262 homes, 42 businesses, and several schools were damaged in Liberty County.
Brazoria, Galveston, Harris	09/13/2000	0	\$350,000	Brazoria--Several roads and a railroad underpass were impassable in Freeport and Clute. Galveston--Street flooding in Galveston, League City and Texas City.
Liberty	10/22/2000	0	\$500,000	Several homes flooded in the Rye and Moss Hill areas. Part of FM 787 was washed out in Romayor. SH 146 flooded north of Moss Hill.
Walker	11/3/2000	0	\$500,000	FM 2989 closed. Major street flooding in Huntsville. Subdivisions flooded in Riverside area.
Brazoria	09/2/2001	0	\$80,000	Homes flooded in Danbury. Numerous streets flooded, including Highway 6 between Manvel and Alvin and Highway 36 in Damon.
Galveston	05/17/2002	0	\$150,000	Streets flooded with 2-3 feet of water, 50 homes and businesses flooded.
Brazoria, Galveston, Harris	08/15/2002	0	\$325,000	Several Brazoria County homes and roads around Alvin received high water. In Galveston County, flood waters inundated cars and businesses. Several streets were closed. Numerous roads in Harris County were flooded.

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County	Date	Deaths	Property Damage	Details
Matagorda, Brazoria	09/06/2002-09/07/2002	0	\$920,000	Matagorda County--Homes in Sargent were flooded. Brazoria County--Waist deep water and flooding in Sweeny. Homes flooded in Wharton.
Brazoria, Galveston, Harris	10/24/2002	0	\$250,000	In Brazoria County, flooding occurred in and around Pearland. Roads near I-45 throughout northern Galveston County flooded. Flooding occurred on Almeda, El Dorado and Beamer Roads.
Fort Bend, Harris, Liberty	10/28/2002	0	\$775,000	Flooding at Highway 36 and Highway 90 in Fort Bend County. Widespread flooding across Harris County, resulting in many streets becoming impassable. Countywide flooding occurred in Liberty County.
Entire region	11/17/2003	0	Unknown	As much as 9 inches of rain fell in the area causing several spots of localized flooding. There were also thirteen tornadoes reported.
Fort Bend	4/25/2004	0	\$250,000	Flooding in the Pecan Hill subdivision. Two feet of water in the worst flooded homes.
Wharton	11/21/2004	0	\$2,100,000	Widespread major flooding with evacuations in Louise. Numerous roads and bridges were flooded and impassable. Countywide, 59 homes sustained major damage and 225 homes received minor damage.
Harris	7/14/2005	0	\$115,000	Flash flooding along I-10 East in the Uvalde and Cloverleaf areas, in and around Downtown Houston, and the University of Houston area. Some rainfall amounts/rates measured by Harris County rainfall gages included: 0.75" in 5 minutes, 1.81" in 15 minutes and 2.64" in 30 minutes.
Harris	6/19/2006	0	\$3,300,000	Approximately 3,370 homes were flooded and some water rescues were conducted in the I-45 and Beltway 610 vicinity. Sections of Sims, Halls, and Hunting Bayous with Vogel and White Oak Creeks experienced significant flooding. Homes along these bayous and creeks were flooded with water from 2 to 8 inches to as high as 18 to 20 inches.
Brazoria, Galveston, Harris, Waller	10/16/2006	4	\$1,608,000	Approximately 115 homes and various roads flooded in several locations around the county including Pearland due to the combination of very deep tropical moisture with a slow-moving warm front and the approach of a strong upper level trough resulted in excessive rainfall across Harris and various surrounding counties. There were four directly related drowning fatalities during this episode.
Harris	5/10/2007	0	\$650,000	Brickhouse Gully exceeded its banks and resulted in house flooding upstream of US 290 in the Langwood Subdivision. The area flooded in northern Houston accounted for damage to 70 to 90 homes. Flooding was caused by bands of thunderstorms moving in from the southwest.
Brazoria, Colorado	5/28/2007	0	\$180,000	A series of upper level disturbances affected eastern Texas over the last week of the month. Numerous thunderstorms and heavy showers continually passed over the region's western and southwestern counties causing extreme flooding problems throughout these communities. Over 50 flooded homes were reported.

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County	Date	Deaths	Property Damage	Details
Harris	8/16/2007	3	\$750,000	Damage was caused by Tropical Storm Erin. Numerous roads in Harris County flooded and were impassable across the eastern half of the county. Residential and commercial flooding also occurred in Pasadena and La Porte. At least a dozen schools, majority of these being in East Houston, received water damage. Heavy rainfall collapsed a warehouse roof in Houston on Harrisburg Boulevard. There were three fatalities. Two men died (one at the scene, the other several hours later in a hospital) when heavy rainfall collapsed the roof of a grocery store in Clear Lake. A third fatality occurred when an eighteen wheeler was accidentally driven into a 26 foot deep flooded retention pond in La Porte. The driver drowned.
Austin	11/17/2007 - 11/18/2007	0	\$60,000	Strong, slow moving thunderstorms caused flooding in and around the intersection of Rinn Road and FM 109. Vehicles were swept off roadways and occupants had to be rescued. One home in the area suffered water damage.
Galveston, Harris	4/18/2009	5	\$7,500,000	Heavy rainfall from thunderstorms moving across the county produced road closures and widespread flooding of homes, with high water rescues being required in Dickinson.
Harris, Chambers, Galveston	4/24/2009	0	\$1,006,000	A series of thunderstorms produced heavy rainfall and strong winds across portions of Harris, Galveston, and Chambers counties leaving motorists stranded along several flooded area highways and causing damage to residential and commercial structures. Forty to fifty homes received water damage from this event, although this is only an estimated count as all of the homes flooded on the 24th were also flooded during the earlier event on April 18th.
Harris, Montgomery	4/28/2009	1	\$15,750,000	A large, slow moving thunderstorm produced widespread heavy rainfall across western portions of Harris County during the early morning hours. Many roads were impassable for most of the morning rush hour, with numerous cars becoming stranded by high water. One fatality occurred when a vehicle was swept into the drainage system near I-10 W and Beltway 8. In addition to the major disruption to the morning commute, over 2,100 homes received some amount of water intrusion from this event. This ranks as the fourth largest number of homes flooded in a single event for Harris County.
Brazoria	7/1/2010	0	\$1,800,000	Widespread showers and thunderstorms across southeast Texas caused widespread damage due to flash flooding. 30 to 35 homes in the town of Sweeny were damaged.
Harris	7/2/2010	0	\$1,800,000	The passage of Hurricane Alex through the Gulf of Mexico caused a surge of tropical moisture. The resulting showers and thunderstorms led to flash flooding in the Houston area. Approximately 40 homes were damaged along Halls, Hunting, and Little White Oak bayous.

**Table 4.2-2
Highest Magnitude Floods for Planning Area (1994-2011)**

Year	Forecast Point	County	Flood Stage (ft)	Crest (ft)
1994	Brazos River near Hempstead	Waller/Washington	50	51.3
1994	Brazos River near Rosharon	Fort Bend/Brazoria	43	51.7
1994	Brazos River near West Columbia	Brazoria	30	32
1994	East Fork San Jacinto River near Cleveland	Liberty	19	24.5
1994	East Fork San Jacinto River near New Caney	Harris/Montgomery	19	33
1994	Luce Bayou near Huffman	Liberty	22	35.1
1994	San Jacinto River near Conroe	Montgomery	20	32.8
1994	San Jacinto River near Humble	Harris/Montgomery	19	35.9
1994	Trinity River at Liberty	Liberty	24	30.8
1994	Trinity River near Moss Bluff	Liberty	13	17
1994	Trinity River near Romayor	Liberty	40	42.8
1995	Caney Creek near Splendora	Montgomery	13	21.2
1995	East Fork San Jacinto River near New Caney	Harris/Montgomery	19	20.5
1995	Peach Creek near Splendora	Montgomery	13	14.1
1995	San Bernard River near Sweeny	Brazoria	14	20.1
1995	San Jacinto River near Conroe	Montgomery	20	21.4
1995	San Jacinto River near Humble	Harris/Montgomery	19	20.3
1995	Trinity River at Liberty	Liberty	24	27.1
1995	Trinity River near Moss Bluff	Liberty	13	13.4
1996	Luce Bayou near Huffman	Liberty	22	24.7
1997	San Bernard River near Sweeny	Brazoria	14	20.8
1997	Trinity River at Liberty	Liberty	24	27.7
1997	Trinity River near Moss Bluff	Liberty	12	13.6
1998	Bedias Creek near Madisonville	Madison/Walker	19	22.5
1998	Brazos River near Rosharon	Fort Bend/Brazoria	43	48.8
1998	Caney Creek near Splendora	Montgomery	18	20.7
1998	East Fork San Jacinto River near Cleveland	Liberty	19	20.2
1998	East Fork San Jacinto River near New Caney	Harris/Montgomery	19	28.6
1998	Luce Bayou near Huffman	Liberty	22	31.4
1998	Menard Creek near Rye	Liberty	20	24.7
1998	San Bernard River near Sweeny	Brazoria	16	23.9
1998	San Jacinto River near Conroe	Montgomery	20	27.8
1998	San Jacinto River near Humble	Harris/Montgomery	19	29.6
1998	San Jacinto River near Porter	Montgomery	24	29
1998	Spring Creek near Spring	Harris/Montgomery	21	32.3
1998	Trinity River at Liberty	Liberty	24	29.3
1998	Trinity River near Moss Bluff	Liberty	12	14.4
1999	Bedias Creek near Madisonville	Madison/Walker	19	19.4
1999	East Fork San Jacinto River near New Caney	Harris/Montgomery	19	20.4
1999	Menard Creek near Rye	Liberty	20	31.4
1999	Trinity River at Liberty	Liberty	26	27.8
1999	Trinity River near Moss Bluff	Liberty	12	13.7
2000	Bedias Creek near Madisonville	Madison/Walker	19	20.3
2000	Peach Creek near Splendora	Montgomery	13	13.5
2001	Bedias Creek near Madisonville	Madison/Walker	19	21.4
2001	Caney Creek near Splendora	Montgomery	18	26.6

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Year	Forecast Point	County	Flood Stage (ft)	Crest (ft)
2001	East Fork San Jacinto River near Cleveland	Liberty	19	19.8
2001	East Fork San Jacinto River near New Caney	Harris/Montgomery	19	23.5
2001	Luce Bayou near Huffman	Liberty	22	23.3
2001	Menard Creek near Rye	Liberty	20	20.2
2001	Peach Creek near Splendora	Montgomery	13	18.1
2001	San Bernard River near Sweeny	Brazoria	16	23.5
2001	San Jacinto River near Conroe	Montgomery	20	23.3
2001	San Jacinto River near Humble	Harris/Montgomery	19	24.8
2001	San Jacinto River near Porter	Montgomery	24	32.2
2001	Spring Creek near Spring	Harris/Montgomery	21	29.6
2001	Trinity River at Liberty	Liberty	26	28.6
2001	Trinity River near Moss Bluff	Liberty	12	12.4
2002	Bedias Creek near Madisonville	Madison/Walker	19	25.7
2002	Brazos River near Rosharon	Fort Bend/Brazoria	43	47.3
2002	East Fork San Jacinto River near Cleveland	Liberty	19	19.6
2002	East Fork San Jacinto River near New Caney	Harris/Montgomery	19	23.7
2002	Luce Bayou near Huffman	Liberty	22	28.9
2002	Menard Creek near Rye	Liberty	20	23.8
2002	Peach Creek near Splendora	Montgomery	13	17.6
2002	San Bernard River near Sweeny	Brazoria	16	21.6
2002	San Jacinto River near Conroe	Montgomery	20	25.1
2002	San Jacinto River near Humble	Harris/Montgomery	19	25.3
2002	San Jacinto River near Porter	Montgomery	24	35
2002	Spring Creek near Spring	Harris/Montgomery	21	25.4
2002	Trinity River at Liberty	Liberty	26	28.8
2002	Trinity River near Moss Bluff	Liberty	15	17.2
2003	Bedias Creek near Madisonville	Madison/Walker	19	23.1
2003	Luce Bayou near Huffman	Liberty	22	22.3
2003	Peach Creek near Splendora	Montgomery	13	18.3
2003	San Bernard River near Sweeny	Brazoria	16	19.7
2003	Trinity River at Liberty	Liberty	26	26.5
2003	Trinity River near Moss Bluff	Liberty	15	17.2
2004	Bedias Creek near Madisonville	Madison/Walker	19	20.1
2004	Brazos River near Rosharon	Fort Bend/Brazoria	43	48.8
2004	East Fork San Jacinto River near New Caney	Harris/Montgomery	19	21.6
2004	Luce Bayou near Huffman	Liberty	22	23.9
2004	Menard Creek near Rye	Liberty	20	23.9
2004	Peach Creek near Splendora	Montgomery	13	17.4
2004	San Bernard River near Sweeny	Brazoria	16	22.4
2004	San Jacinto River near Conroe	Montgomery	20	20.4
2004	San Jacinto River near Humble	Harris/Montgomery	19	20.1
2004	San Jacinto River near Porter	Montgomery	24	28
2004	Trinity River at Liberty	Liberty	26	28.1
2004	Trinity River at Riverside	Walker/Trinity	134	135.7
2004	Trinity River near Moss Bluff	Liberty	15	17.6
2005	Bedias Creek near Madisonville	Madison/Walker	19	20
2005	Luce Bayou near Huffman	Liberty	22	22.5
2005	Peach Creek near Splendora	Montgomery	13	13.5
2005	Trinity River at Liberty	Liberty	26	27.1

Year	Forecast Point	County	Flood Stage (ft)	Crest (ft)
2005	Trinity River at Riverside	Walker/Trinity	134	135
2005	Trinity River near Moss Bluff	Liberty	15	16.8
2006	East Fork San Jacinto River near New Caney	Harris/Montgomery	19	21.4
2006	Luce Bayou near Huffman	Liberty	22	25.3
2006	Peach Creek near Splendora	Montgomery	13	17.8
2006	San Bernard River near Sweeny	Brazoria	16	20.5
2006	San Jacinto River near Humble	Harris/Montgomery	19	20.9
2006	San Jacinto River near Porter	Montgomery	24	27.3
2006	Trinity River near Moss Bluff	Liberty	15	15.3
2007	Bedias Creek near Madisonville	Madison/Walker	19	19.2
2007	Brazos River near Rosharon	Fort Bend/Brazoria	43	48.9
2007	San Bernard River near Sweeny	Brazoria	16	17.8
2007	San Jacinto River near Humble	Harris/Montgomery	19	19.6
2007	San Jacinto River near Porter	Montgomery	24	27.9
2007	Trinity River at Liberty	Liberty	26	28.8
2007	Trinity River at Riverside	Walker/Trinity	134	137.7
2007	Trinity River near Moss Bluff	Liberty	15	17.1
2008	Bedias Creek near Madisonville	Madison/Walker	19	19.3
2008	Luce Bayou near Huffman	Liberty	22	27.8
2008	Peach Creek near Splendora	Montgomery	13	18
2008	San Jacinto River near Humble	Harris/Montgomery	19	23.3
2008	San Jacinto River near Porter	Montgomery	24	29.9
2008	Spring Creek near Spring	Harris/Montgomery	21	25.6
2008	Trinity River at Riverside	Walker/Trinity	134	134.4
2008	Trinity River near Moss Bluff	Liberty	15	16
2009	Luce Bayou near Huffman	Liberty	22	23.4
2009	Menard Creek near Rye	Liberty	20	21.5
2009	Peach Creek near Splendora	Montgomery	13	15.5
2009	San Bernard River near Sweeny	Brazoria	16	16.8
2009	San Jacinto River near Humble	Harris/Montgomery	19	22.8
2009	San Jacinto River near Porter	Montgomery	24	27
2009	Spring Creek near Spring	Harris/Montgomery	21	22.6
2009	Trinity River at Liberty	Liberty	26	26.7
2009	Trinity River at Riverside	Walker/Trinity	134	135.1
2009	Trinity River near Moss Bluff	Liberty	15	17.4
2010	San Bernard River near Sweeny	Brazoria	16	23.4
2010	Trinity River at Liberty	Liberty	26	28.4
2010	Trinity River at Riverside	Walker/Trinity	134	135.5
2010	Trinity River near Moss Bluff	Liberty	15	17.2
2011	No events	N/A	N/A	N/A

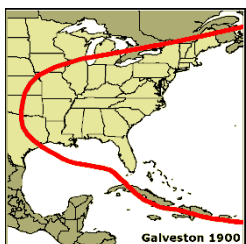
From 2000 to 2010, there were 26 flood events within the region, with an average of 2.36 flood events per year. The total amount of property damage from 2000 to 2010 was approximately \$53 million and the average was \$1.6 million. Thirteen deaths resulted from these 2000 to 2010 events. Given the past flooding history of the region, the presence of numerous rivers and stream, flat topography and clayey soils, the region has a 100 percent likelihood of flooding and could experience one or more flood events per year. The amount of property damages are expected to increase due to the anticipated population growth and increased impervious surfaces associated development. Impacts would include impassable roads and public and private property damage. Flooding amounts will vary across the region, as flooding involves several variables, such as intensity and duration of rainfall, soil types, and impervious surfaces,

and therefore it is difficult to regionally quantify the level of flooding based on rainfall amounts; however, based on the average feet above flood stage from 1994-2011 in Table 4.2-2, approximately 4 feet of flooding could be anticipated.

Hurricanes and Tropical Storms

Over the past 100 years, Southeast Texas has experienced numerous hurricane and tropical storm landfalls, and several have impacted the H-GAC region as described below.²

Galveston Hurricane 1900



This killer weather system was first detected over the tropical Atlantic on August 27, 1900. While the history of the track and intensity is not fully known, the system reached Cuba as a tropical storm on September 3 and

moved into the southeastern Gulf of Mexico on the 5th. A general west-northwestward motion occurred over the Gulf accompanied by rapid intensification. By the time the storm reached the Texas coast south of Galveston late on September 8, it was a Category 4 hurricane. After landfall, the cyclone turned northward through the Great Plains. The system became extratropical and turned east-northeastward on September 11, passing across the Great Lakes, New England, and southeastern Canada. It was last witnessed over the north Atlantic on September 15.

This hurricane was the deadliest weather disaster in United States history. Storm tides of eight to 15 feet inundated Galveston Island, as well as other portions of the nearby Texas coast. High tides were largely responsible for the 8,000 deaths (estimates range from 6,000 to 12,000) attributed to the storm. The damage to property was estimated at \$30 million.

Hurricane Carla 1961

Carla made landfall near Port Lavaca on September 14. Carla was among the largest hurricanes of historical record (number 2 behind the Great New England Hurricane of 1938). The storm produced numerous tornadoes, gusts reaching 175 MPH, torrential rains, and a 22 foot storm surge at Port O'Connor. Hurricane force wind gusts were seen along almost the entire Texas Coast. The path of devastation extended from Victoria to Dallas. A death toll of only 34 people in Texas can be attributed in part to what was the largest peace time evacuation of in U.S. history. A quarter million people fled the middle and upper Texas coasts, moving inland to safety.

Twenty-six tornadoes were spawned by Hurricane Carla, one of which damaged 120 buildings and killed six in Galveston. Structures located outside of the protective seawall were severely damaged by the storm surge.³ Texas City saw 90 percent of its homes flooded. Surfside, near Freeport, received extensive damage. The trail of destruction extended south to Point Isabel, where four to five foot storm surges were observed. Seventy-five percent of Port O'Connor was destroyed.

Hurricane Beulah 1967



The Galveston Hurricane caused extensive damage with its hurricane-force wind and storm surge, as illustrated in this photo of ruined homes. (NOAA Photo Library, NOAA Central Library; OAR/ERL/National Severe Storms Laboratory)

² Historic hurricane track graphics provided by the National Hurricane Center.

³ The Galveston Island seawall was constructed following the Galveston Hurricane of 1900.

At the time, Hurricane Beulah was the third largest hurricane on record, following Carla in 1961 and the Great New England Hurricane of 1938. Beulah, which struck the coast near Brownsville on September 20, 1967, turned to the southwest, paralleling the coastline.

Hurricane-force winds extended up the coast to Corpus Christi, which received gusts up to 86 MPH. Winds gusted to 110 MPH at the local Army Corp of Engineers office. The storm surge reached 20 feet along lower sections of Padre Island. Storm surge and wind-driven waves cut 31 new inlets through the island. Citrus fruit and tree damage totaled \$15 million in the Lower Rio Grande Valley.



Flooding along the Texas coast following the passage of Hurricane Beulah on September 20, 1967 caused significant damage to this business district. (NOAA Photo Library, NOAA Central Library; OAR/ERL/National Severe Storms Laboratory)

One hundred and fifteen tornadoes were spawned by the system, the most ever known to be generated by a tropical storm (five times the previous record set by Isabel in 1964). Most of the tornadoes were confined to the coast of Texas and were rather weak. One tornado touched down in Palacios on the morning of the 20th, killing four people and injuring six others. Fifteen people died in Texas during Beulah. Five were killed by a tornado and 10 died due to drowning. A total of 110 boats were damaged or destroyed by the storm. Damages were estimated conservatively at \$100 million.

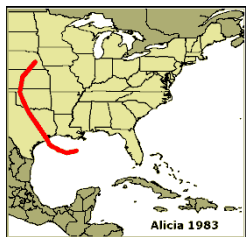
Hurricanes Fern and Edith 1971

Hurricane Fern paralleled the Texas coast and made landfall as a tropical storm on the 11th. Major flooding occurred along portions of the Frio, Lavaca, Nueces, San Antonio, Guadalupe, Mission, and Aransas Rivers. Wind gusts over 100 MPH blew away the anemometer at Port O'Connor on the 10th. Gusts exceeding 60 MPH were seen from Galveston down the coast south of Corpus Christi. Five tornadoes were generated by Fern. The highest recorded storm surge reached six feet at Freeport. Damages totaled \$30 million, \$5 million of which occurred in Sinton. Two people died during the storm.

Edith made landfall as a Category 2 hurricane on the 16th. A six foot storm surge overran Highway 87 between Sabine Pass and High Island. Galveston and Port Arthur reported wind gusts of 53 and 47 MPH respectively.

Tropical Storm Claudette 1979

Tropical Storm Claudette made landfall near Galveston and made a loop just after landfall, stalling over southeast Texas from July 24 to July 27. Winds gusted to 60 MPH. Tides in Chocolate Bayou reached five feet above normal. Rainfall amounts greater than 10 inches fell within 40 miles of the coast from Matagorda Bay to Sabine Pass. Twenty four hour rainfall totals reached 45 inches in Alvin, establishing a new U.S. rainfall record. This caused widespread and unprecedented flooding across the area. Most streams did not return to their banks until the 30th. Fifteen thousand homes and hundreds of businesses were flooded. The rice crop was beaten into the soil by the heavy rain. Six counties in southeast Texas were declared major disaster areas. In Austin, two inches of rain fell within an hour on the 27th and caused flash flooding. Claudette produced \$750 million in damages, putting it on the National Hurricane Center's list of history's most damaging tropical cyclones in the United States.



Hurricane Alicia 1983

Alicia formed over the north central Gulf of Mexico on August 15, 1983. It drifted slowly westward and northwestward while steadily strengthening on the 16th and 17th. This motion brought Alicia over the western end of Galveston Island as a Category 3 hurricane on August 18. Alicia moved northwestward into Oklahoma as a tropical depression on August 19, and then turned northward before dissipating over Nebraska on the 21st.

The Coast Guard cutter Buttonwood moored at Galveston reported sustained winds of 96 MPH with gusts reaching 125 MPH. Hobby Airport at Houston, Texas reported 94 MPH sustained winds with gusts to 107 MPH. Wind gusts of hurricane force in downtown Houston littered the streets with broken glass as windows broke in numerous high-rise buildings. Additionally, 23 tornadoes were reported from Alicia. Alicia was responsible for 21 deaths and \$2 billion in damages.

Tropical Storm Frances 1998

On September 10, 1998, Tropical Storm Frances formed in the western Gulf of Mexico approximately 250 miles south of Galveston. On September 12, Frances moved inland just southwest of Victoria and remained nearly stationary throughout the day, moving to the north northeast that evening. At 7 p.m. ET, Frances was downgraded to a Tropical Depression as it moved to the northeast of Victoria.

Most of the damage along the coast was attributed to the high tides that persisted for nearly two days. The high tides in Galveston Bay increased flooding problems experienced further inland by the heavy rains. Over four inches of rain fell over the Houston/ Galveston County Warning area. More than 10 inches of rain fell along the coastal counties of Matagorda, Brazoria, Galveston and Chambers. Inland counties, including Harris, Polk, San Jacinto and Washington received similar rainfall totals. With tides already running four to six feet above normal, rainfall runoff that normally drained into area bays, backed up, resulting in more widespread flooding of inland creeks and bayous. Galveston, Harris, Brazoria, and Matagorda Counties were declared disaster areas. Total damages exceeded \$286 million dollars. Most of this damage was along the coast and around Galveston Bay where high tides and winds destroyed dunes and personal property. Nearly 100 single family homes were destroyed along the upper Texas coast by the high tides and battering waves. Three deaths can be attributed to Tropical Storm Frances.

Tropical Storm Allison 2001



Tropical Storm Allison, which began as an area of disturbed weather over the northwestern Gulf of Mexico on June 5, 2001, rapidly developed into a tropical storm. The storm made landfall near Freeport, Texas later that day. Allison weakened to a depression on the 6th, while drifting northward. The storm then made a slow loop over southeastern Texas from the 7th to the 9th. The cyclone moved into the Gulf of Mexico on the 10th and acquired subtropical characteristics. It then moved east-northeastward over southeastern Louisiana on the 11th, where it re-intensified into a subtropical storm. Allison then weakened to a subtropical depression on the 12th while continuing east-northeastward. This track carried it to southeastern North Carolina by the 14th where it stalled. The cyclone then drifted northeastward on the 15th and 16th. This was followed by a faster northeastward motion on the 17th as the center emerged in the Atlantic. Allison regained subtropical storm strength later that day before becoming extratropical on the 18th southeast of Cape Cod. The system dissipated southeast of Nova Scotia the next day.

Allison brought tropical-storm-force winds and above normal tides to portions of the Texas and Louisiana coasts. However, the greatest damages sustained were due to the widespread heavy rains and resulting floods along the entire path of the cyclone. Houston, Texas, was the worst affected area, as the Port of Houston reported 37 inches of rain. Several other locations reported more than 30 inches. The storm also spawned 23 tornadoes. Allison was responsible for 41 deaths and at least \$5 billion in damage in the United States, making it the deadliest and costliest U.S. tropical storm of record.

Hurricane Rita 2005

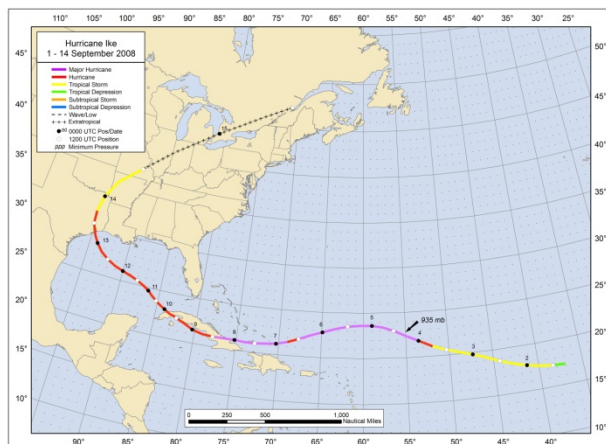


Hurricane Rita began as a tropical wave, combined with the remnants of an old front, on September 7, 2005. The system developed into a depression just east of the Turks and Caicos Islands late on the 17th. The following afternoon, it developed into a tropical storm. Maximum winds increased to 70 mph as Rita moved through the central Bahamas on the 19th. The storm went through rapid intensification on September 20 as it moved through the Straits of Florida and became a Category 2. The center of the storm passed about 50 miles south of Key West, Florida.

Upon entering the Gulf of Mexico, Rita intensified to a Category 5 within 24 hours. The maximum sustained winds reached 165 mph late on September 21, and the hurricane reached a peak intensity of 180 mph early on September 22. Weakening began later that day and continued until landfall the morning of the 24th just east of the Texas/Louisiana border between Sabine Pass and Johnson's Bayou. At that time, Rita was a Category 3 with maximum sustained winds of 115 mph. Weakening continued after landfall, but Rita remained a tropical storm until reaching northwestern Louisiana late on the 24th. The cyclone then turned northeastward and merged with a frontal system two days later. Rita brought hurricane conditions to southwestern Louisiana and southeastern Texas.

The hurricane caused storm-surge flooding of 10 to 15 feet above normal tide levels along the southwestern coast of Louisiana, Texas, and inundated portions of the New Orleans area previously flooded by Katrina. Rita was responsible for seven deaths, and it caused damage estimated at \$10 billion in the United States.

Hurricane Ike 2008



Ike originated from a tropical wave off the coast of Africa on August 28, 2008. Ike became a tropical depression on September 1 and turned into a tropical storm later that day. Ike became a hurricane on the 3rd, and reached an estimated peak intensity of 145 mph (Category 4) on September 4 when it was located 550 miles northeast of the Leeward Islands.

Ike moved across the Turks and Caicos Islands and the Great Inagua Island. The hurricane made landfall on the coast of Cuba on the 8th as a Category 4 storm. It moved into the Gulf of Mexico the next day.

Ike had a large wind field as it moved northwestward across the Gulf of Mexico for 3 days, with tropical-storm-force winds extending up to 275 miles from the center and hurricane-force winds extending up to 115 miles from the center. The hurricane gradually intensified as it moved across the Gulf toward the Texas coast. Ike made landfall over the north end of Galveston Island on the morning of September 13 as a Category 2 hurricane with maximum sustained winds of 110 mph. The hurricane weakened as it moved inland across eastern Texas and Arkansas and became extratropical over the middle Mississippi Valley on the 14th, and eventually moved into the Ohio valley and Canada.

Storm surges of 15 to 20 feet above normal tide levels occurred along the Bolivar Peninsula of Texas and in much of the Galveston Bay area, with surges of up to 10 feet above normal occurring as far east as south central Louisiana. Storm total rainfalls from Ike were as much as 19 inches in southeastern Texas and 14 inches in Cuba.

In its path through the Gulf of Mexico, Ike caused extensive damage and took many lives across the Caribbean and along the coast of Louisiana and Texas. Estimates have that 74 people were killed due to flooding and mud slides in Haiti and two in the Dominican Republic. Seven deaths were reported in Cuba.

Ike's storm surge destroyed the Bolivar Peninsula of Texas. Storm surge, winds, and flooding from heavy rains caused widespread damage in other areas of southeastern Texas, western Louisiana, and Arkansas. Twenty people were killed in these areas, with many others still missing. Property damage from Ike as a hurricane is estimated at \$19.3 billion. Additionally, as an extratropical system over the Ohio valley, Ike was directly or indirectly responsible for 28 deaths and more than \$1 billion in property damage.



The surge before the storm swamps Galveston Island, Texas, and a fire destroys homes along the beach as Hurricane Ike approaches Friday, Sept. 12, 2008. (AP Photo/David J. Phillip)

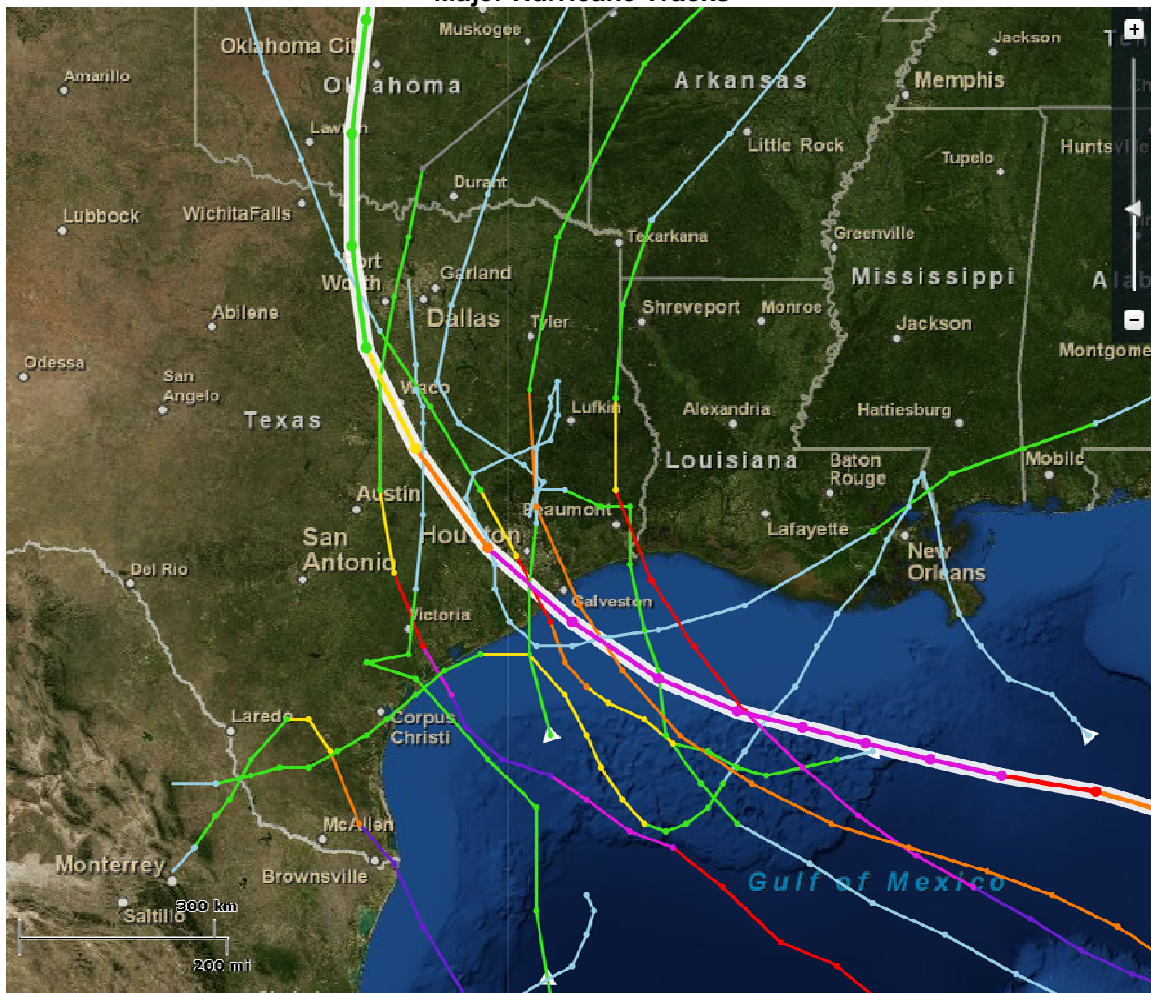
Table 4.2-3 summarizes hurricanes and tropical storms affecting the H-GAC region.

**Table 4.2-3
Hurricanes and Tropical Storms Affecting the H-GAC Region**

Name	Year	Category
Galveston Hurricane	1900	4
Hurricane Carla	1961	4
Hurricane Beulah	1967	4
Hurricane Fern	1971	1
Hurricane Edith	1971	2
TS Claudette	1979	Tropical Storm
Hurricane Alicia	1983	3
TS Frances	1998	Tropical Storm
TS Allison	2001	Tropical Storm
Hurricane Rita	2005	3
Hurricane Ike	2008	2

Figure 4.2-1 shows the tracks of the major hurricanes, discussed above, that have impacted the region. While the coastal portions of the region are more at risk to the effects of hurricanes than the other parts of the region, the entire region is in a hurricane hazard area and can be expected to experience hurricanes in the future.

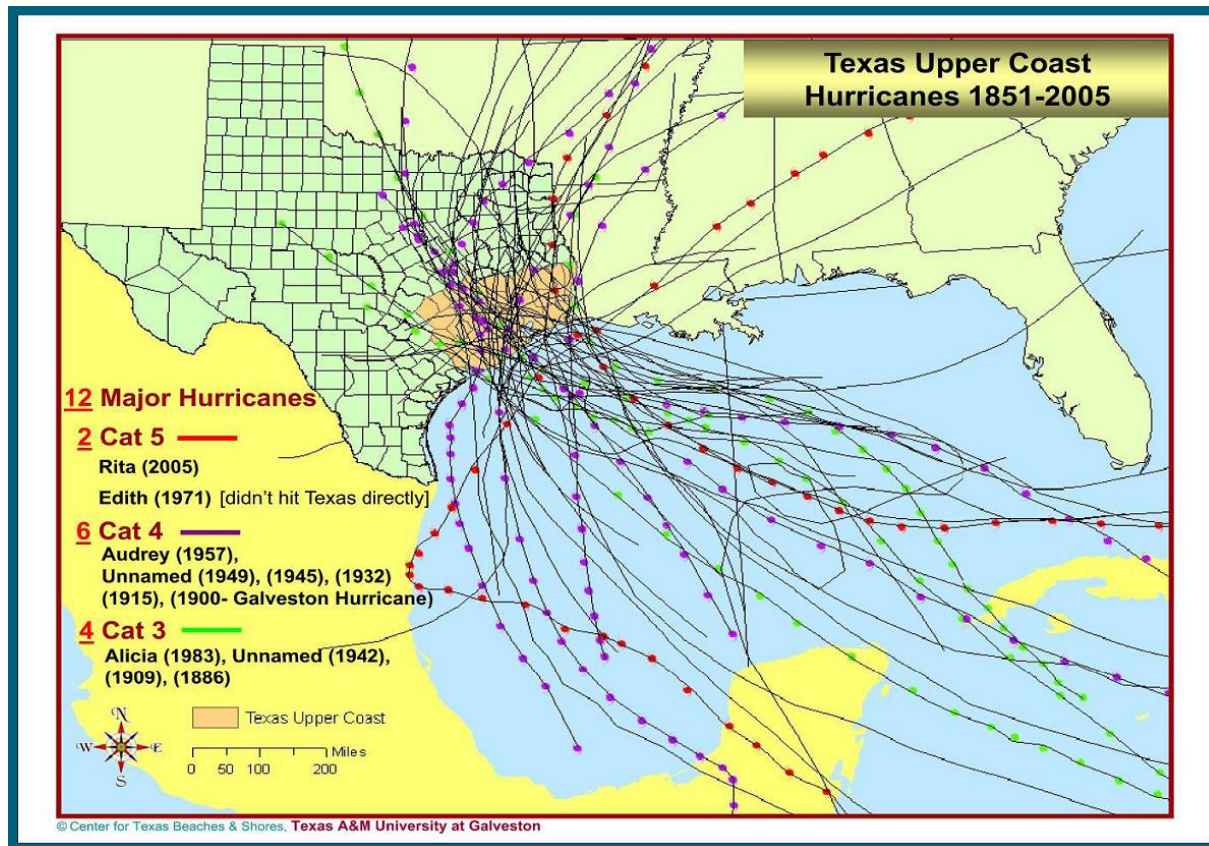
**Figure 4.2-1
Major Hurricane Tracks**



Source: National Hurricane Center

As shown in **Figure 4.2-2**, the possibility of a hurricane occurring along the upper coast of Texas is significant. Since the 16th century, 26 major storms have made landfall on the Southeast Texas coast. Damage totals for these 26 storms is estimated to be over \$80 billion in 2007 US dollars (Hurricane Ike Impact Report, December 2008).

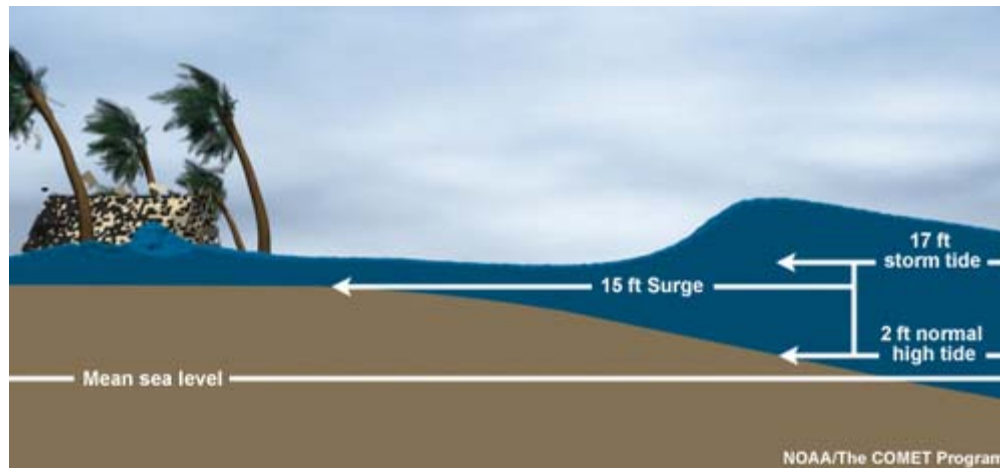
Figure 4.2-2
Texas Upper Coast Historic Hurricane Tracks



Storm Surge

Storm surge is typically caused by tropical systems although the resulting damage is from flooding. Storm surge is a significant rise of water caused by a storm that exceeds the normal tide fluctuations. Storm tide differs from storm surge because the storm tide defines the water level rise due to the combination of storm surge and astronomical tide. Storm surge can combine with the storm tide which can cause extreme inundation. **Figure 4.2-3** illustrates the difference between storm surge and storm tide.

Figure 4.2-3
Storm Surge vs. Storm Tide

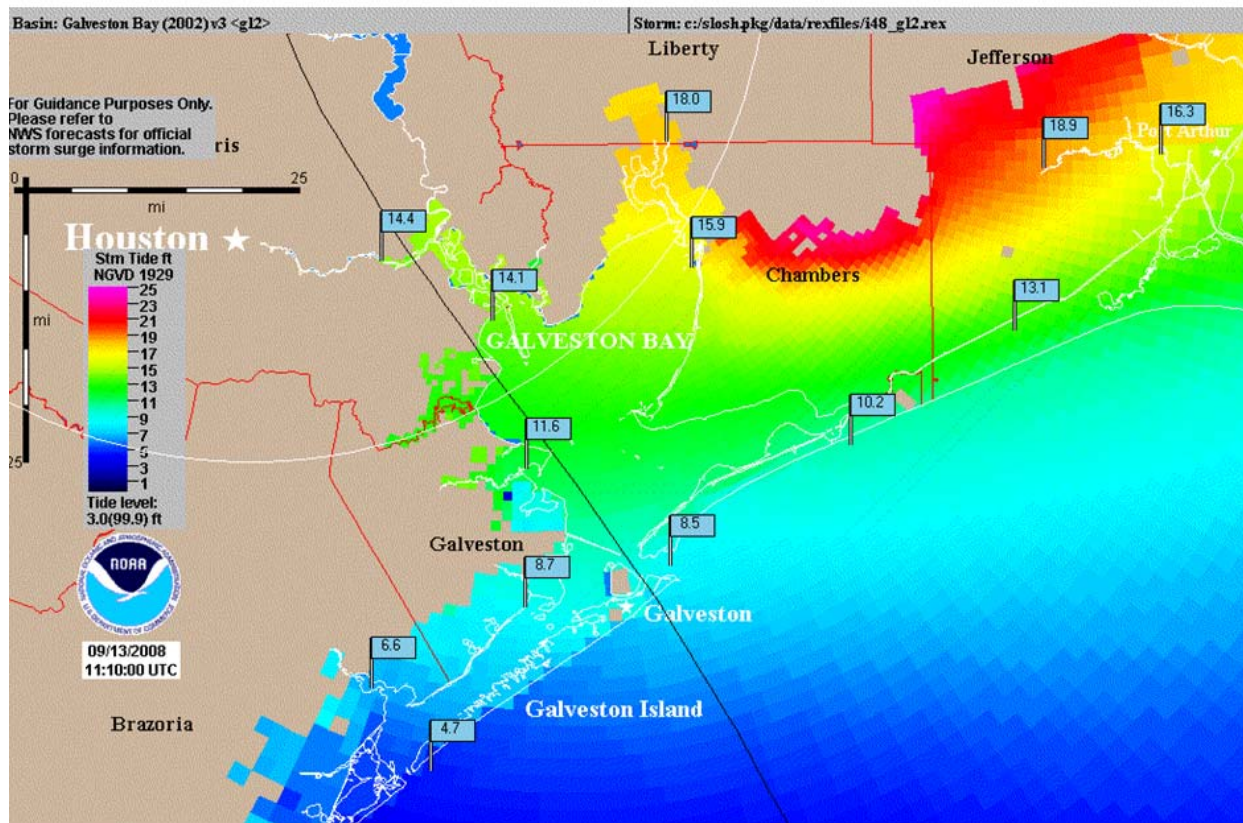


Source: <http://www.nhc.noaa.gov/ssurge/index.shtml>

Coastal areas have the highest *susceptibility* to storm surge and include the following counties in the H-GAC region: Matagorda, Brazoria, Galveston, Harris, and Chambers. In recent years, these counties suffered damage due to storm surge from Hurricane Katrina, Rita, Ike, Ida and Tropical Storm Edouard. Although some of these storms did not make landfall in the region, residual impacts were still made.

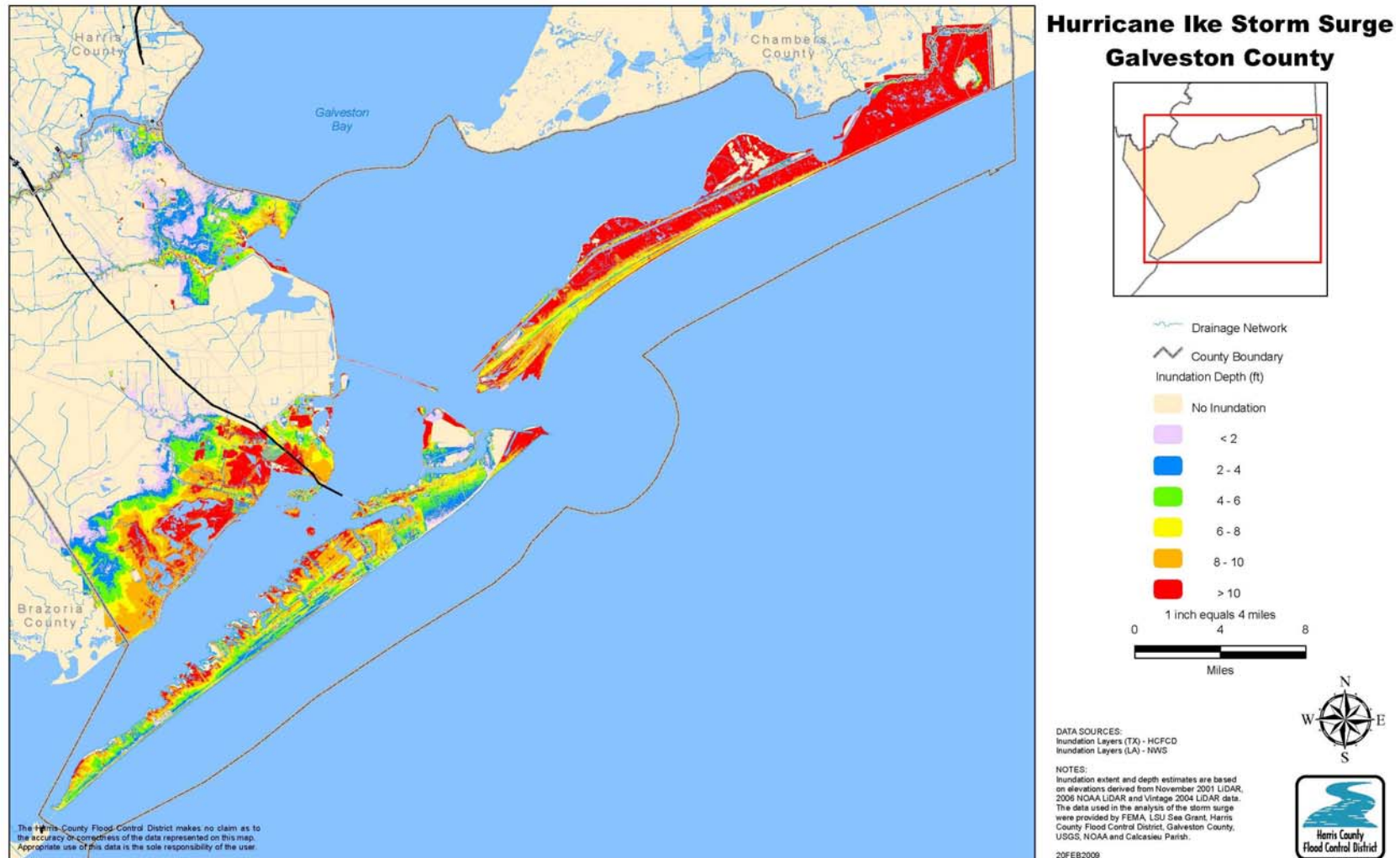
The amount of surge from storms is estimated using the NOAA's Sea, Lake and Overland Surges from Hurricanes (SLOSH) models. **Figure 4.2-4** illustrated the estimated storm surge predicted for Hurricane Ike. Some areas were predicted to receive over 20 feet of storm surge. **Figures 4.2-5, 4.2-6, 4.2-7 and 4.2-8** illustrate the actual storm surge for Galveston, Chambers, Harris, and Brazoria counties respectively.

Figure 4.2-4
Estimated Storm Surge for Hurricane Ike



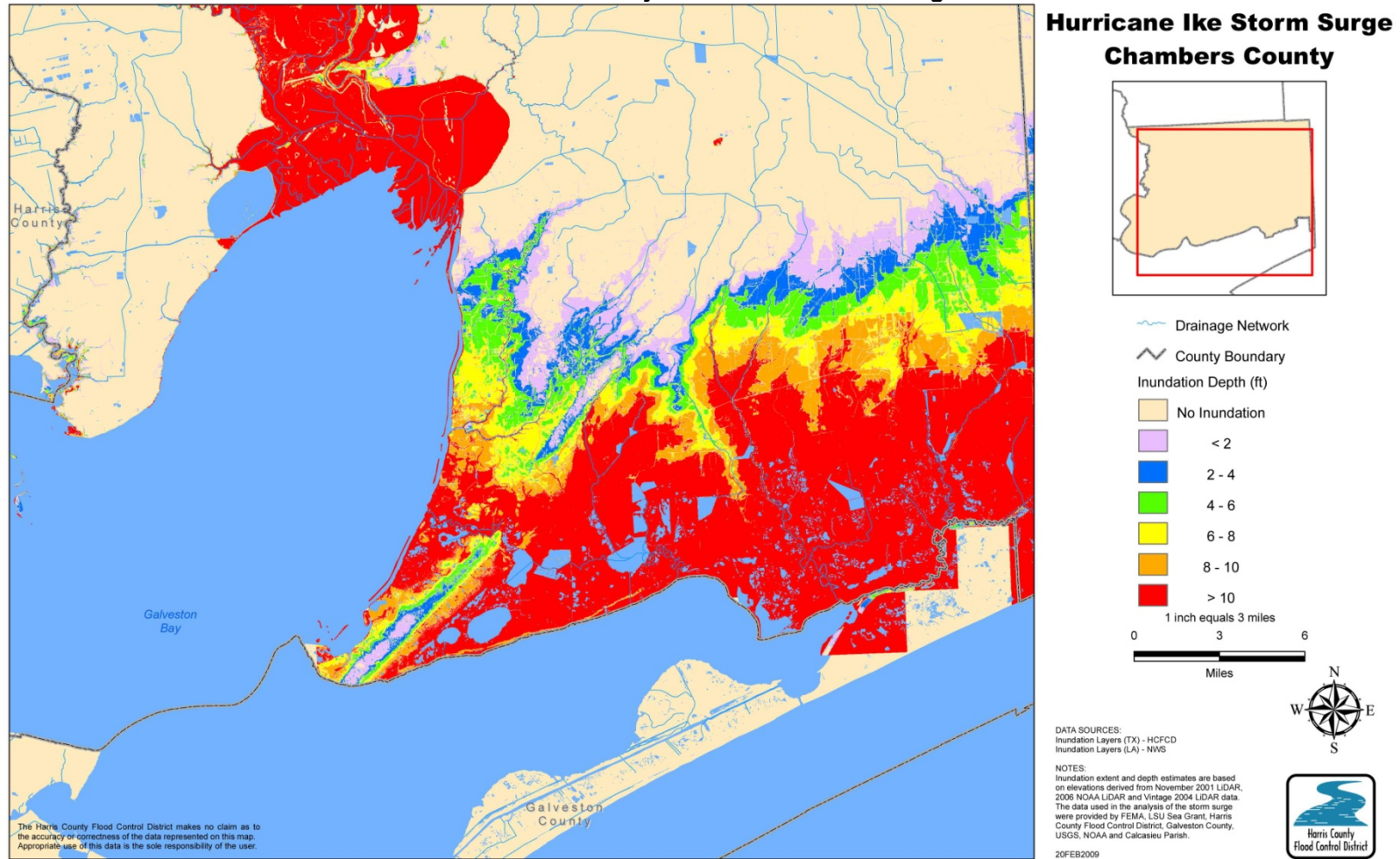
Source: NOAA, SLOSH Model

Figure 4.2-5
Galveston County Hurricane Ike Storm Surge



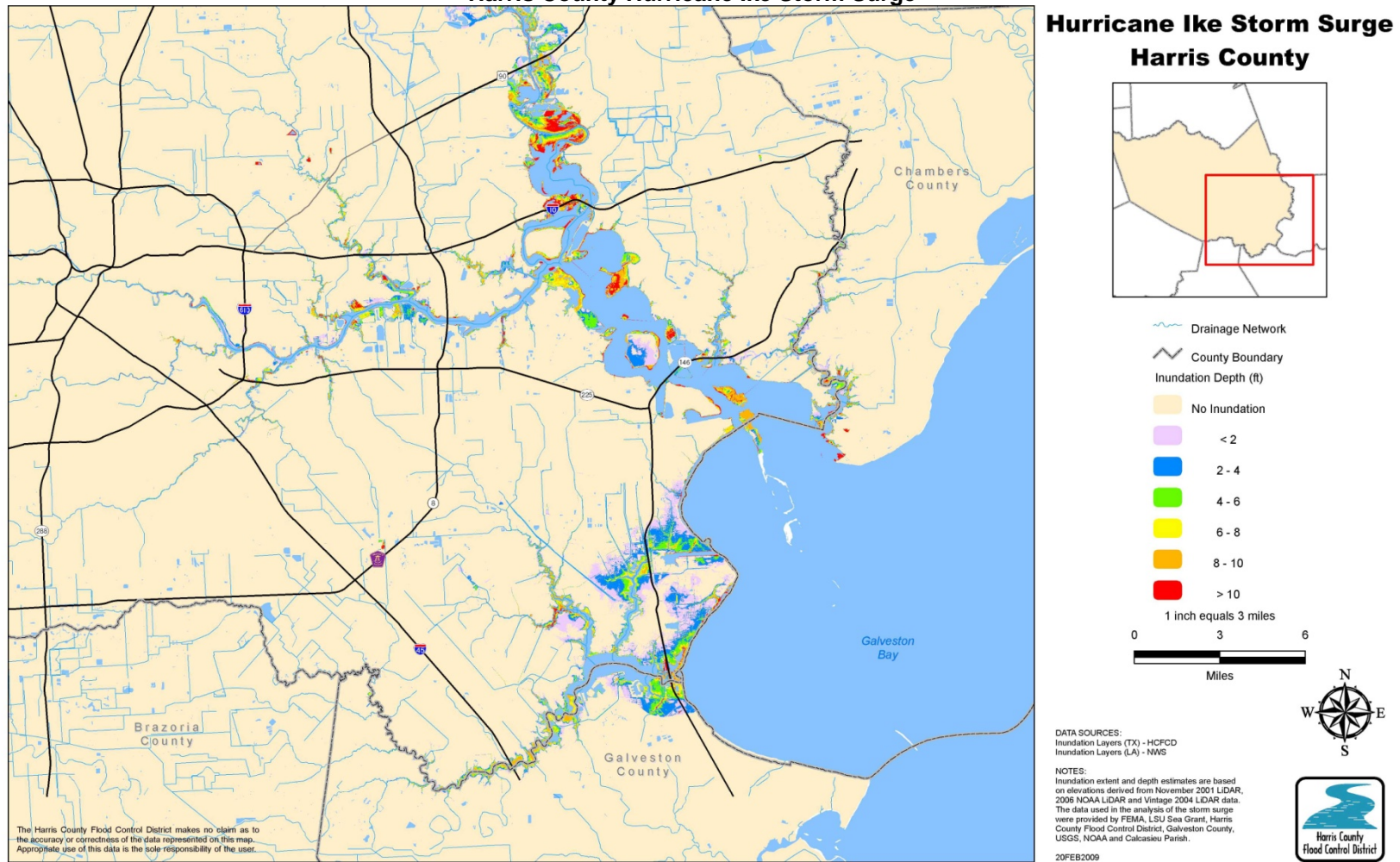
Maximum storm surge inundation levels (water depth) for Galveston County, Texas, including Galveston Island and the Bolivar Peninsula, during Hurricane Ike. Areas shaded in red indicate where the water depths exceeded 10 ft. Image courtesy of the Harris County Flood Control District. (NHC, 2009)

Figure 4.2-6
Chambers County Hurricane Ike Storm Surge



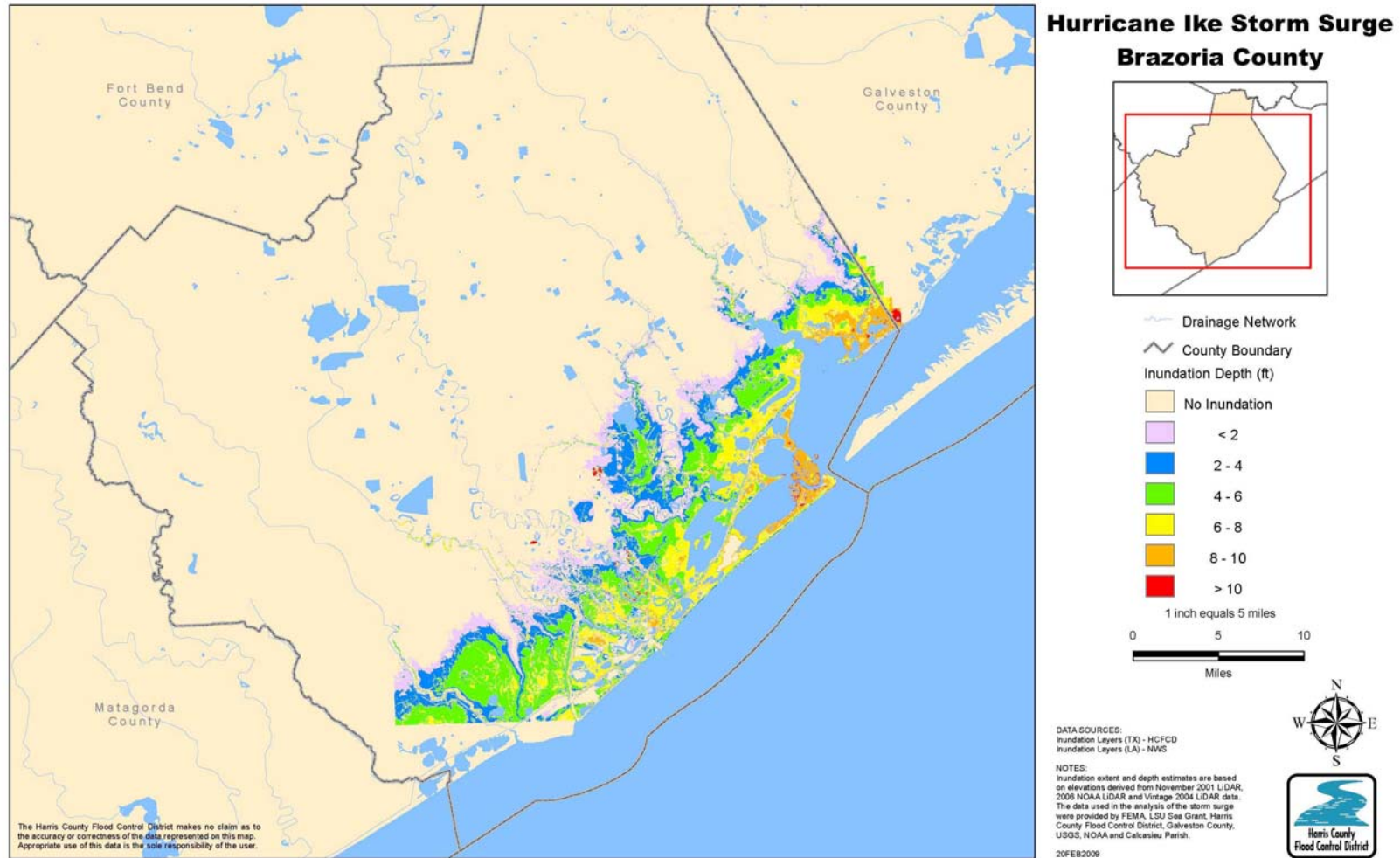
Maximum storm surge inundation levels (water depth) across Chambers County, Texas, during Hurricane Ike. Areas shaded in red indicate where the water depths exceeded 10 ft. Image courtesy of the Harris County Flood Control District. (NHC, 2009)

Figure 4.2-7
Harris County Hurricane Ike Storm Surge



Maximum storm surge inundation levels (water depth) across Harris County, Texas, during Hurricane Ike. Areas shaded in red indicate where the water depths exceeded 10 ft. Image courtesy of the Harris County Flood Control District. (NHC, 2009)

**Figure 4.2-8
Brazoria County Hurricane Ike Storm Surge**



Maximum storm surge inundation levels (water depth) across Chambers County, Texas, during Hurricane Ike. Areas shaded in red indicate where the water depths exceeded 10 ft. Image courtesy of the Harris County Flood Control District. (NHC, 2009)

Based on historical information, the region should anticipate landfall of a category 4 hurricane every ten years or less. The region should anticipate at least one tropical storm every ten years or less. Storm surge associated with these hurricanes is difficult to estimate. For example, Hurricane Ike was a category 2 hurricane according to wind speed, but storm surge was similar to that of a category 4 hurricane. The coastal counties of Matagorda, Brazoria, Galveston, Chambers and Harris would experience effects from storm surge that the more inland counties would not. Given historical costs of past storms, property damages would likely exceed \$1 billion.

Severe Thunderstorms

According to the National Climatic Data Center, the H-GAC planning area experienced 1,557 thunderstorm wind events from 1950 through October of 2010 (see **Table 4.2-4**). These events caused six deaths, 59 injuries, over \$150 million in property damage, and more than \$2 million in crop damage (NCDC, 2010).

Table 4.2-4
Thunderstorm Wind Activity in the H-GAC Region (1950-2010)

County	No. of Recorded Thunderstorms Wind Events 1950 – 10/31/2010	Total Property Damage Recorded	Total Crop Damage Recorded	Deaths	Injuries
Austin	60	\$1,102,000	\$250,000	0	0
Brazoria	122	\$3,134,000	\$5,000	0	5
Chambers	65	\$890,000	\$3,000	0	0
Colorado	56	\$114,000	\$0	0	4
Fort Bend	112	\$4,034,000	\$2,000,000	0	0
Galveston	173	\$53,004,000	\$0	0	7
Harris	472	\$86,030,000	\$100,000	3	25
Liberty	101	\$968,000	\$5,000	0	1
Matagorda	68	\$472,000	\$0	3	3
Montgomery	134	\$1,677,000	\$0	0	1
Walker	65	\$737,000	\$0	0	8
Waller	37	\$288,000	\$0	0	0
Wharton	92	\$1,638,000	\$20,000	0	5
TOTAL	1,557	\$154,088,000	\$2,383,000	6	59

Source: National Climatic Data Center

Figure 4.2-9
Historical Frequency of Thunderstorm Events by County

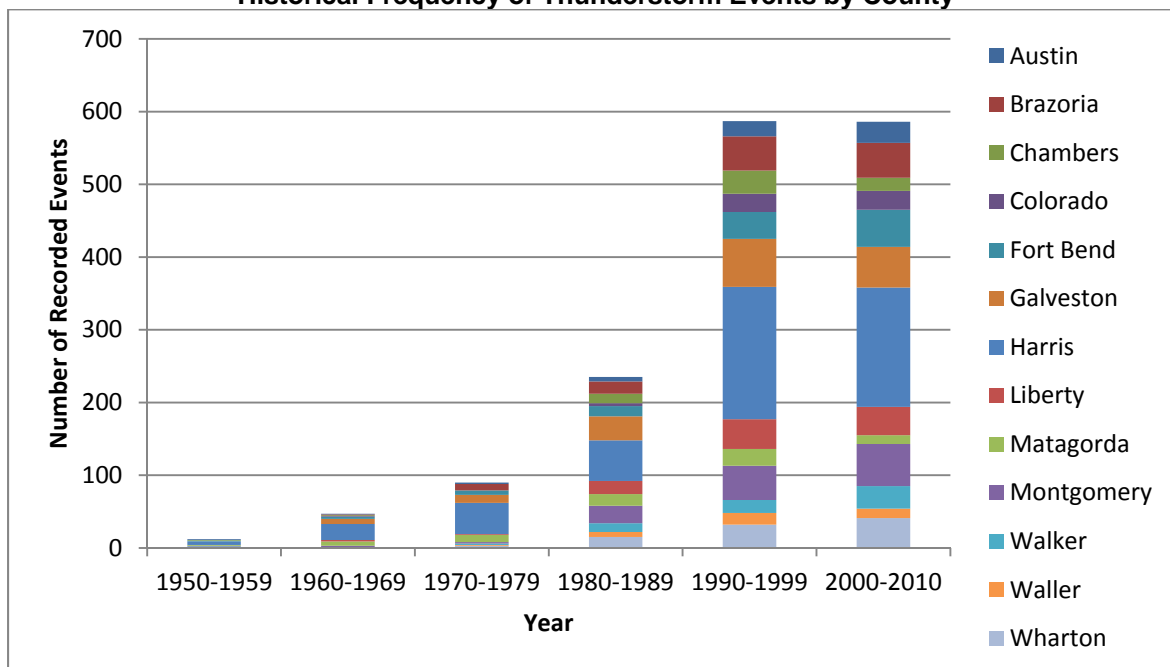
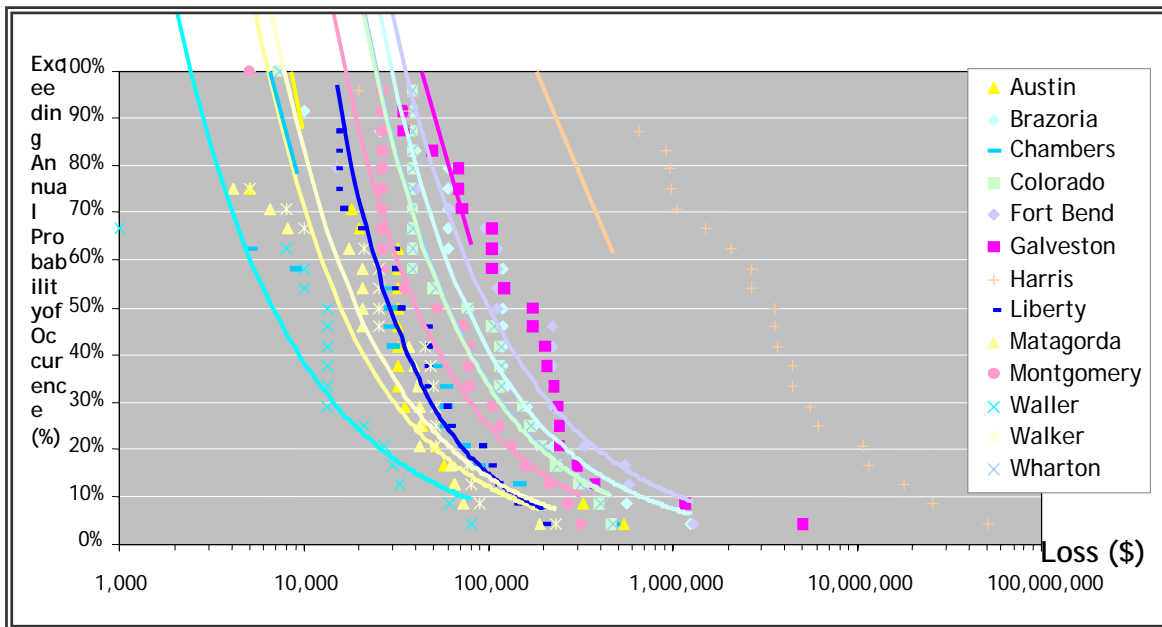


Figure 4.2-9 shows the historical frequency of events by county. No one portion of the region is more at risk to severe thunderstorms than any other part of the region; therefore the entire region is in a severe thunderstorm hazard area. Given the past frequency, and recent increased number of thunderstorms in the last two decades, it is likely that the region would continue to experience approximately 26 thunderstorms per year, with less than one per year severe enough to cause deaths and injuries.

Figure 4.2-10 shows the annual probability of thunderstorm wind occurrence and potential monetary damages for each county in the H-GAC planning area.

Figure 4.2-10
Probability of Thunderstorm Wind Occurrence and Potential Losses



Tornadoes

When compared with other states, Texas ranks number one in the number of tornado events; number one in tornado deaths; number one in tornado injuries; and number one in total damages. These rankings are based upon data collected for all states and territories for tornado events between 1950 and 1994 (SPC, 2003).

According to the National Climatic Data Center, the H-GAC region experienced 759 reported tornado events from 1950 through October of 2010 (See **Table 4.2-5**). These events caused 34 deaths, 822 injuries and approximately \$620 million in property damage (NCDC, 2010).



This Texas school was severely impacted by a tornado. (FEMA News Photo)

**Table 4.2-5
Tornado Activity in the H-GAC Region (1950-2010)**

County	No. of Recorded Tornadoes 1950 – 10/31/2010	Total Property Damage Recorded	Deaths	Injuries
Austin	26	\$8,033,000	0	7
Brazoria	69	\$6,448,000	0	45
Chambers	28	\$1,505,000	4	8
Colorado	29	\$25,614,000	1	12
Fort Bend	47	\$9,399,000	1	73
Galveston	110	\$34,216,000	9	242
Harris	214	\$504,791,000	12	319
Liberty	56	\$10,862,000	0	38
Matagorda	44	\$4,561,000	4	25
Montgomery	46	\$8,233,000	0	10
Walker	14	\$1,553,000	1	18
Waller	13	\$725,000	1	6
Wharton	63	\$2,435,000	1	19
TOTAL	759	\$618,375,000	34	822

Source: National Climatic Data Center

Notable Tornadoes

09/12/1961 Galveston County

An F4 tornado caused eight deaths and 200 injuries.

09/20/1967 Wharton and Matagorda Counties

Three tornadoes in Matagorda County (F0, F1 and F3) caused a total of \$25,000 in damage. The F3 tornado caused four deaths and seven injuries. In Wharton County, a tornado of unknown intensity caused one death, one injury, and \$25,000 in property damage.

03/08/1976 Brazoria County

An F3 tornado injured 18 people and caused \$2.5 million in property damages.

01/31/1983 Austin and Montgomery Counties

Several tornadoes (F1 and F2) caused four injuries and \$5 million in property damage.

05/20-21/1983 Austin, Liberty and Harris Counties

Twenty tornadoes, ranging from F0, F1 and F3, caused a total of three deaths and 14 injuries. Austin County property damages were estimated at over \$2.7 million; Liberty County property damages approximated \$5 million; and Harris County property damages were estimated at over \$5 million.

11/16/1987 Galveston and Harris Counties

Two F1 tornadoes caused four injuries and approximately \$5 million in property damages.

01/14/1991 Colorado County

An F1 tornado caused one death, eleven injuries, and approximately \$25 million in damage.

01/21/1992 Liberty, Harris, and Fort Bend Counties

Several tornadoes, ranging from F1 to F4, caused a total of 34 injuries (32 in Harris County). Harris County property damages were estimated at \$350 million; Liberty County property damages were estimated at \$5 million; and Fort Bend County damages approximated \$2.5 million.

11/17/2003 Harris County and surrounding areas

Thirteen tornadoes were reported as a bizarre storm blew through the region, which also inundated the region with as much as nine inches of rain.

8/30/2009 Galveston County

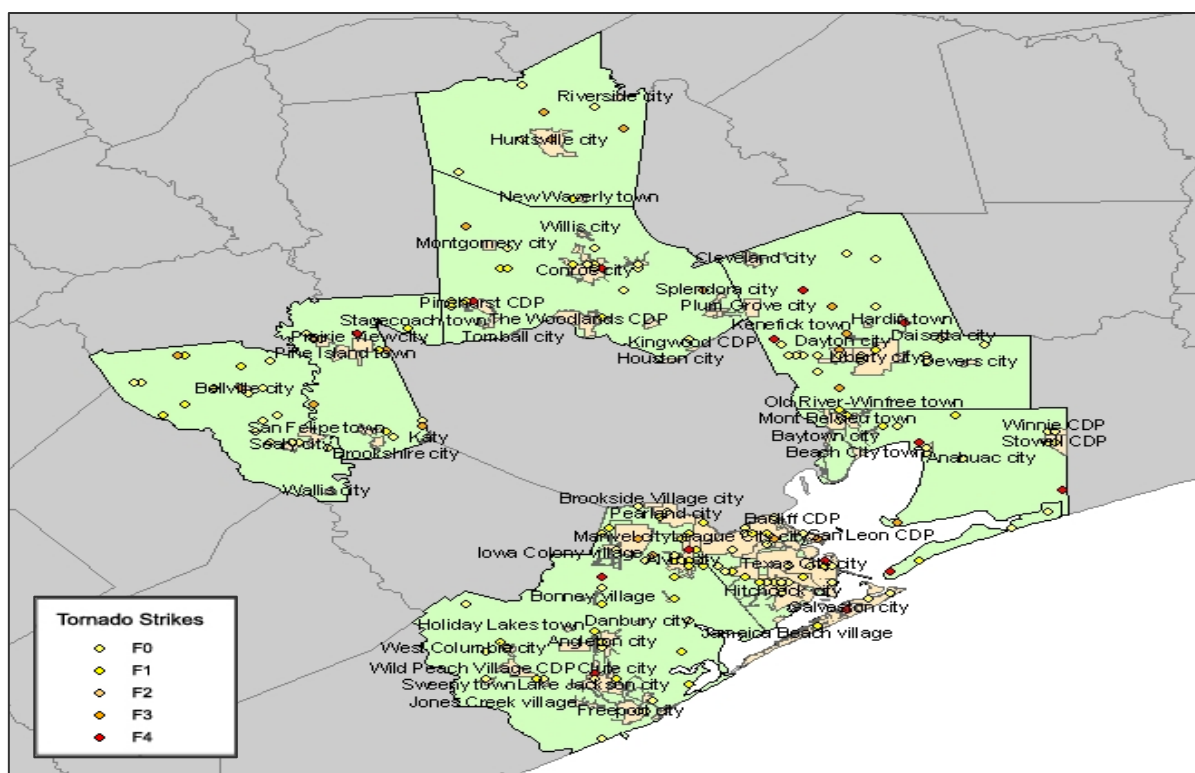
An EF1 tornado, which began as a waterspout, caused three injuries and \$0.5 million in property damage.

1/20/2010 Harris County

An EF3 tornado caused \$1.5 million in property damage.

Figure 4.2-11 and **Figure 4.2-12** show historical tornado occurrences and tornado frequency by county, with Harris County recording a high number relative to other counties in the last 60 years, followed by Galveston, Brazoria and Liberty counties.

Figure 4.2-11
Historical Tornado Occurrences



Source: National Climatic Data Center

Figure 4.2-12
Frequency of Tornado Events

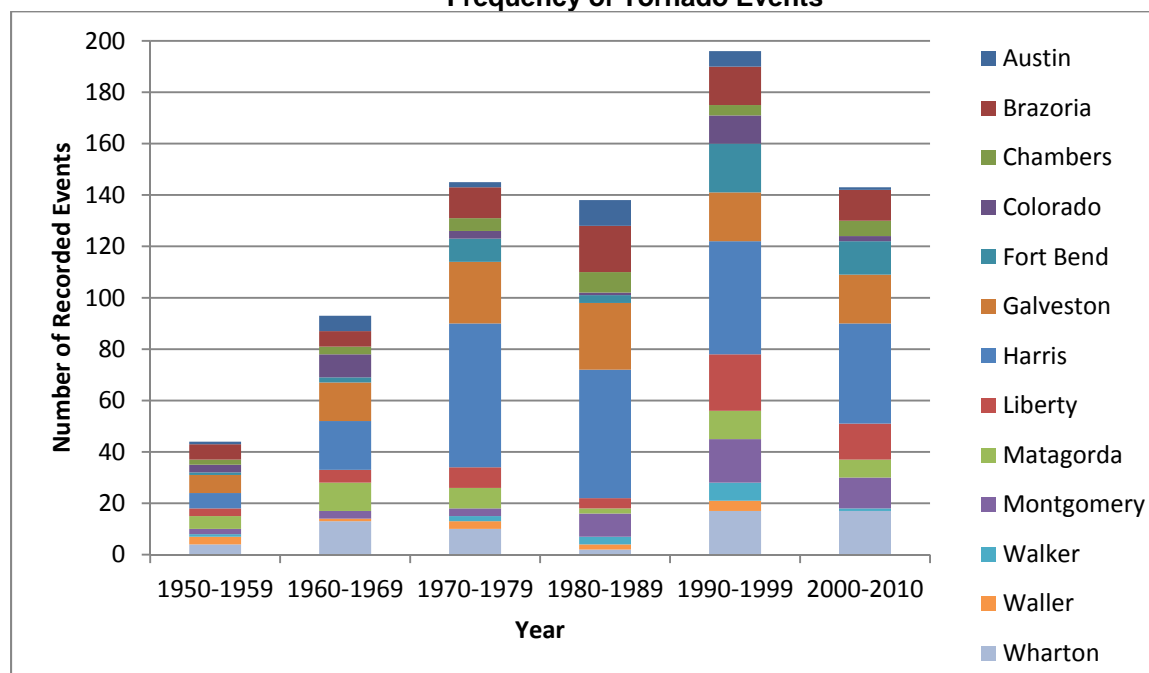
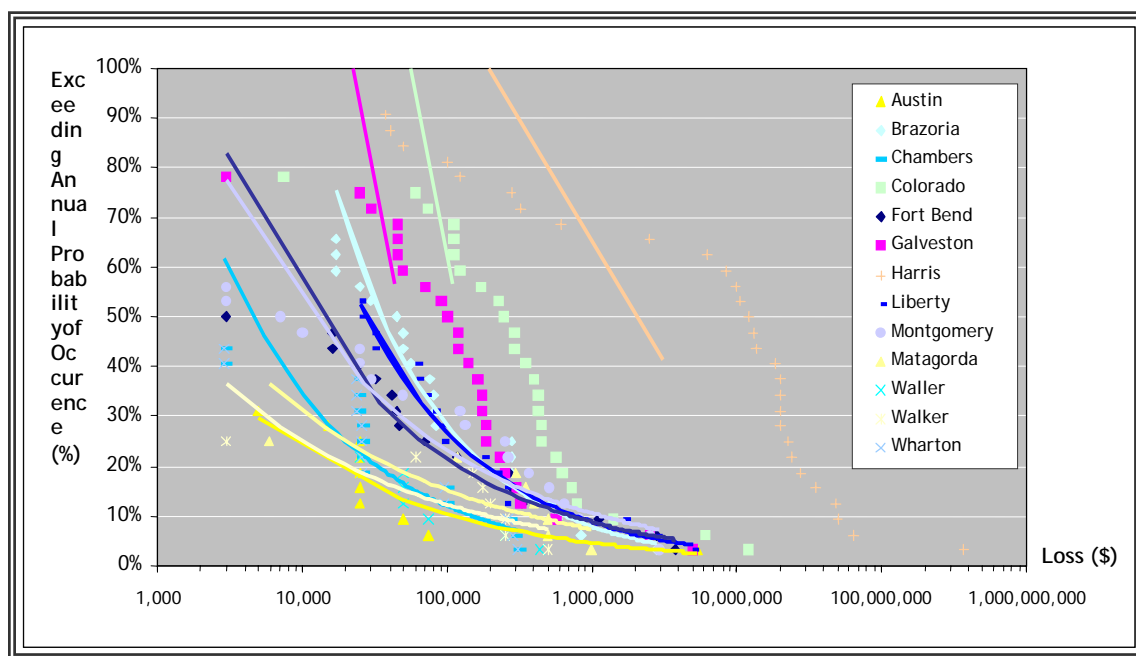


Figure 4.2-13 shows the probability of tornado occurrence and potential monetary damages for each county in the area.

Figure 4.2-13
Probability of Tornado Occurrence and Potential Monetary Damages*



Tornadoes can occur in any part of the region; therefore the entire region is in a tornado hazard area. Given the past frequency and range of tornadoes from EF1 to EF4, it is likely that the region would continue to experience approximately 13 tornadoes per year, ranging from EF1 to EF3, with roughly one

of them severe enough to cause death every other year. Because the Enhanced Fujita Scale is based largely on damage to structures, the number of recorded tornado events could increase due to the amount of population growth and associated development the region is anticipated to experience.

Wildfire

According to the Texas Forest Service, approximately 90 percent of all Texas wildfires are human-caused, due primarily to unchecked burning of debris. **Table 4.2–6** displays the number of wildfires suppressed by the Texas Forest Service and local fire departments, the causes and the acres burned.

Table 4.2-6
Number of Wildfires Suppressed by Texas Forest Service and/or Local Fire Departments

Year	County	Dispatch or VFD Name	Fire Name	Acres	Cause
2005	Montgomery	Grangerland VFD	2005-74357	1	Miscellaneous
2005	Montgomery	Grangerland VFD	05-75063	0.25	Miscellaneous
2005	Montgomery	Conroe	Conroe - 2	2	Debris burning
2005	Walker	Conroe	Conroe - 3	20	Debris burning
2005	Montgomery	Conroe	Conroe - 4	10	Debris burning
2005	Montgomery	Conroe	Conroe - 5	17	Incendiary
2005	Montgomery	Conroe	Conroe - 7	43	No data
2005	Liberty	Highway 321 VFD	Grass Fire	5	Miscellaneous
2005	Waller	Conroe	Conroe - 15	93	Debris burning
2005	Walker	Conroe	Conroe - 12	1	Debris burning
2005	Montgomery	Conroe	Conroe - 17	2	Debris burning
2005	Walker	Conroe	Conroe - 18	1	Miscellaneous
2005	Walker	Conroe	Conroe - 19	3	Debris burning
2005	Montgomery	Conroe	Conroe - 20	5	Debris burning
2005	Liberty	Conroe	Conroe - 21	4	Debris burning
2005	Montgomery	Conroe	Conroe - 23	1	Debris burning
2005	Walker	Conroe	Conroe - 24	5	Debris burning
2005	Montgomery	Conroe	Conroe - 26	4	Children
2005	Walker	Conroe	Conroe - 27	2	Miscellaneous
2005	Walker	Conroe	Conroe - 28	9	Debris burning
2005	Chambers	Winnie-Stowell VFD	5083	2	Smoking
2005	Liberty	Conroe	Conroe - 31	8	Debris burning
2005	Walker	Conroe	Conroe - 33	4	Debris burning
2005	Montgomery	Conroe	Conroe - 34	1	Debris burning
2005	Montgomery	Conroe	Conroe - 35	20	Incendiary
2005	Walker	Conroe	Conroe - 36	21	Debris burning
2005	Montgomery	Conroe	Conroe - 37	1	Debris burning
2005	Walker	Conroe	Conroe - 38	3	Debris burning
2005	Walker	Conroe	Conroe - 39	3	Debris burning
2005	Walker	Conroe	Conroe - 40	1	Equipment use
2005	Walker	Conroe	Conroe - 43	1	Lightning
2005	Montgomery	Conroe	Conroe - 44	1	Debris burning
2005	Montgomery	Conroe	Conroe - 46	2	Debris burning
2005	Montgomery	Conroe	Conroe - 51	4	Miscellaneous
2005	Montgomery	Conroe	Conroe - 50	4	Debris burning
2005	Walker	Conroe	Conroe - 52	118	Lightning
2005	Montgomery	Conroe	Conroe - 54	1	Debris burning
2005	Montgomery	Conroe	Conroe - 53	1	Debris burning

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Year	County	Dispatch or VFD Name	Fire Name	Acres	Cause
2005	Montgomery	Conroe	Conroe - 58	7	Debris burning
2005	Montgomery	Conroe	Conroe - 60	1	Debris burning
2005	Montgomery	Conroe	Conroe - 61	1	Miscellaneous
2005	Liberty	Conroe	Conroe - 62	1	Debris burning
2005	Montgomery	Conroe	Conroe - 65	5	Debris burning
2005	Montgomery	Conroe	Conroe - 63	1	Debris burning
2005	Montgomery	Conroe	Conroe - 67	1	Debris burning
2005	Walker	Conroe	Conroe - 68	5	Miscellaneous
2005	Montgomery	Richards VFD	WATSON LANE	4	Power Lines
2005	Montgomery	Conroe	Conroe - 70	30	Equipment use
2005	Montgomery	Conroe	Conroe - 69	1	Miscellaneous
2005	Montgomery	Conroe	Conroe - 71	10	Miscellaneous
2005	Walker	Conroe	Conroe - 75	116	Debris burning
2005	Walker	Conroe	Conroe - 78	10	Lightning
2005	Montgomery	Conroe	Conroe - 77	29	Equipment use
2005	Walker	Conroe	Conroe - 79	2	Debris burning
2005	Walker	Conroe	Conroe - 82	2	No data
2005	Montgomery	Conroe	Conroe - 81	4	Miscellaneous
2005	Montgomery	Richards VFD	WELCH RD.	1	Power Lines
2005	Montgomery	Conroe	Conroe - 88	4	Debris burning
2005	Montgomery	Conroe	Conroe - 89	1	Children
2005	Walker	Conroe	Conroe - 90	15	Debris burning
2005	Montgomery	Conroe	Conroe - 94	2	Debris burning
2005	Montgomery	Conroe	Conroe - 91	14	Debris burning
2005	Walker	Conroe	Conroe - 95	3	Debris burning
2005	Montgomery	Conroe	Conroe - 96	1	Debris burning
2005	Liberty	Kenefick VFD	Nancy Robinson	1	Debris burning
2005	Walker	Conroe	Conroe - 98	4	Children
2005	Montgomery	Conroe	Conroe - 101	2	Debris burning
2005	Montgomery	Conroe	Conroe - 100	5	Debris burning
2005	Montgomery	Conroe	Conroe - 102	15	Lightning
2005	Montgomery	Conroe	Conroe - 107	18	Debris burning
2005	Montgomery	Conroe	Conroe - 109	1	Debris burning
2005	Montgomery	Conroe	Conroe - 113	3	Debris burning
2005	Liberty	Kenefick VFD	Watson	1	Debris burning
2005	Walker	Conroe	Conroe - 121	5	Miscellaneous
2005	Liberty	Conroe	Conroe - 126	3	Incendiary
2005	Liberty	Conroe	Conroe - 123	7	Incendiary
2005	Liberty	Conroe	Conroe - 125	1	Incendiary
2005	Montgomery	Conroe	Conroe - 127	2	Smoking
2005	Montgomery	Conroe	Conroe - 128	3	Debris burning
2005	Montgomery	Conroe	Conroe - 129	250	Debris burning
2005	Montgomery	Conroe	Conroe - 131	1	Debris burning
2005	Liberty	Conroe	Conroe - 132	15	Debris burning
2005	Montgomery	Conroe	Conroe - 134	4	Incendiary
2005	Montgomery	Conroe	Conroe - 133	1	Debris burning
2005	Montgomery	Conroe	Conroe - 135	1	Debris burning
2005	Montgomery	Conroe	Conroe - 137	3	Smoking
2005	Montgomery	Conroe	Conroe - 136	1	Miscellaneous
2005	Montgomery	Conroe	Conroe - 138	3	Miscellaneous

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Year	County	Dispatch or VFD Name	Fire Name	Acres	Cause
2005	Liberty	Highway 321 VFD	Brush Fire	15	Debris burning
2005	Walker	Conroe	Conroe - 140	7	Debris burning
2005	Walker	Conroe	Conroe - 147	3	Debris burning
2005	Liberty	Kenefick VFD	Day	1	Debris burning
2005	Liberty	Kenefick VFD	Hendrix	2	Debris burning
2005	Liberty	Conroe	Conroe - 148	71	Campfire
2005	Montgomery	Conroe	Conroe - 151	10	Debris burning
2005	Montgomery	Conroe	Conroe - 153	2	Incendiary
2005	Liberty	Conroe	Conroe - 156	2	Debris burning
2005	Liberty	Conroe	Conroe - 157	290	Debris burning
2005	Liberty	Conroe	Conroe - 158	9	Debris burning
2005	Liberty	Conroe	Conroe - 162	7	Debris burning
2005	Walker	Conroe	Conroe - 155	3	Debris burning
2005	Waller	Conroe	Conroe - 161	250	Campfire
2005	Montgomery	Conroe	Conroe - 165	1	Debris burning
2005	Montgomery	Conroe	Conroe - 166	1	Incendiary
2005	Walker	Conroe	Conroe - 163	2	Debris burning
2005	Walker	Conroe	Conroe - 164	65	Debris burning
2005	Montgomery	Conroe	Conroe - 167	3	Debris burning
2005	Liberty	Kenefick VFD	Cleveland PD	1	Debris burning
2005	Montgomery	Conroe	Conroe - 171	2	Debris burning
2005	Montgomery	Conroe	Conroe - 173	1	Debris burning
2005	Liberty	Conroe	Conroe - 177	5	Incendiary
2005	Montgomery	Conroe	Conroe - 178	1	Debris burning
2005	Walker	Conroe	Conroe - 181	5	Debris burning
2005	Montgomery	Conroe	Conroe - 183	4	Children
2005	Liberty	Kenefick VFD	Greenlee	1	Debris burning
2005	Walker	Conroe	Conroe - 185	15	No data
2005	Liberty	Kenefick VFD	Peterson	1	Debris burning
2005	Montgomery	Conroe	Conroe - 187	2	Lightning
2005	Liberty	Kenefick VFD	COX	0.2	Debris burning
2005	Montgomery	Conroe	Conroe - 189	1	Miscellaneous
2005	Liberty	Kenefick VFD	KENEFICK PD	0.1	Debris burning
2005	Liberty	Kenefick VFD	WILLIAMS	0.1	Debris burning
2005	Liberty	Kenefick VFD	BLACK	0.05	Debris burning
2005	Liberty	Kenefick VFD	PROVENZANO	0.05	Debris burning
2005	Liberty	Kenefick VFD	PROVENZANO	0.05	Debris burning
2005	Walker	Conroe	Conroe - 193	1	Debris burning
2005	Montgomery	Conroe	Conroe - 195	2	Incendiary
2005	Montgomery	Conroe	Conroe - 197	2	Incendiary
2005	Montgomery	Conroe	Conroe - 196	2	Incendiary
2005	Montgomery	Conroe	Conroe - 199	6	Miscellaneous
2005	Liberty	Conroe	Woodville - 414	70	Miscellaneous
2005	Montgomery	Conroe	Conroe - 202	1	Debris burning
2005	Walker	Huntsville Fire Dept.	11 th street	0.12	Miscellaneous
2005	Walker	Conroe	Conroe - 203	5	Debris burning
2005	Montgomery	Conroe	Conroe - 206	5	Miscellaneous
2005	Walker	Conroe	Conroe - 208	1	Miscellaneous
2005	Liberty	Kenefick VFD	JONES	1	Debris burning
2005	Montgomery	Conroe	Conroe - 209	3	Campfire

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Year	County	Dispatch or VFD Name	Fire Name	Acres	Cause
2005	Liberty	Tarkington VFD	CR2213	0.25	Smoking
2005	Liberty	Tarkington VFD	CR2246	0.5	Debris burning
2005	Liberty	Tarkington VFD	CR2212	0.25	Smoking
2005	Liberty	Tarkington VFD	CR3017B	1.25	Debris burning
2005	Montgomery	Conroe	Conroe - 213	6	Debris burning
2005	Montgomery	Conroe	Conroe - 214	10	Campfire
2005	Liberty	Tarkington VFD	151 CR2295	2	Debris burning
2005	Liberty	Tarkington VFD	1670 FM2518	0.5	Debris burning
2005	Liberty	Conroe	Conroe - 215	8	Debris burning
2005	Liberty	Tarkington VFD	FM787	2	Debris burning
2005	Liberty	Tarkington VFD	CR3315	1.5	Debris burning
2005	Liberty	Kenefick VFD	MCWHORTER	0.1	Miscellaneous
2005	Liberty	Tarkington VFD	260 CR2283	0.25	Debris burning
2005	Liberty	Conroe	Conroe - 227	125	Incendiary
2005	Walker	Huntsville Fire Dept.	Robinson creek 1	2	Miscellaneous
2005	Montgomery	Conroe	Conroe - 229	7	Debris burning
2005	Montgomery	Conroe	Conroe - 230	6	Debris burning
2005	Walker	Huntsville Fire Dept.	Wire Rd	1	Miscellaneous
2005	Montgomery	Conroe	Conroe - 232	18	Debris burning
2005	Walker	Conroe	Conroe - 233	2	Miscellaneous
2005	Montgomery	North Montgomery County Volunteer Fire Department	05-0002063	1	Debris burning
2005	Walker	Bedias Volunteer Fire Dept.	Walker County	1	Debris burning
2005	Liberty	Tarkington VFD	SH321@CR303	0.1	Debris burning
2005	Walker	Conroe	Conroe - 234	5	Miscellaneous
2005	Walker	Huntsville Fire Dept.	Veterans Memorial	0.25	Miscellaneous
2005	Walker	Huntsville Fire Dept.	Robinson Creek	5	Miscellaneous
2005	Walker	Huntsville Fire Dept.	1791 @ bowden	7	Miscellaneous
2005	Walker	Huntsville Fire Dept.	Pine Hill	4	Miscellaneous
2005	Montgomery	Conroe	Conroe - 236	10	Debris burning
2005	Montgomery	Conroe	Conroe - 238	1	Miscellaneous
2005	Montgomery	Cut-N-Shoot VFD	05-0002294	0.25	Debris burning
2005	Liberty	Tarkington VFD	224 CR3141W	0.1	Debris burning
2006	Liberty	Conroe	Conroe - 1	5	Debris burning
2006	Montgomery	Cut-N-Shoot VFD	06-0002369	0.5	Debris burning
2006	Walker	Huntsville Fire Dept.	Collard	0.5	Miscellaneous
2006	Montgomery	Conroe	Conroe - 2	11	Equipment use
2006	Walker	Huntsville Fire Dept.	Bowden	0.25	Miscellaneous
2006	Walker	Riverside VFD	4509	1	Miscellaneous
2006	Walker	Riverside VFD	4511	0.05	Miscellaneous
2006	Montgomery	North Montgomery County Volunteer Fire Department	06-0002486	1	Miscellaneous
2006	Montgomery	Cut-N-Shoot VFD	06-0002469	1	Debris burning
2006	Liberty	Kenefick VFD	RUTLAND	1	Debris burning
2006	Liberty	Tarkington VFD	CR2219 Burn Ban	0.1	Debris burning
2006	Liberty	Tarkington VFD	CR2240	25	Debris burning
2006	Liberty	Tarkington VFD	SH321@CR306	0.1	Debris burning
2006	Chambers	Beach City VFD	Grass fire near Carlswood	3	Incendiary
2006	Montgomery	Conroe	Conroe - 6	35	Incendiary
2006	Liberty	Conroe	Conroe - 7	20	Equipment use

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Year	County	Dispatch or VFD Name	Fire Name	Acres	Cause
2006	Walker	Conroe	Conroe - 8	7	Debris burning
2006	Liberty	Tarkington VFD	CR2243	3	Debris burning
2006	Liberty	Tarkington VFD	CR331A	2	Miscellaneous
2006	Liberty	Tarkington VFD	CR2255	0.1	Debris burning
2006	Liberty	Kenefick VFD	MORGAN	0.1	Debris burning
2006	Walker	Riverside VFD	4513	10	Miscellaneous
2006	Walker	Huntsville Fire Dept.	Haas Rd.	0.25	Miscellaneous
2006	Liberty	Conroe	Conroe - 9	1	Miscellaneous
2006	Walker	Huntsville Fire Dept.	Rosenwall	0.5	Debris burning
2006	Montgomery	Cut-N-Shoot VFD	06-0002733	1.25	Miscellaneous
2006	Montgomery	Conroe	Conroe - 11	1	Miscellaneous
2006	Montgomery	Cut-N-Shoot VFD	06-0002839	1	Miscellaneous
2006	Liberty	Tarkington VFD	CR3017	0.25	Debris burning
2006	Walker	Huntsville Fire Dept.	Lessa Ln.	1	Miscellaneous
2006	Walker	Huntsville Fire Dept.	FM 3478	1	Debris burning
2006	Walker	Huntsville Fire Dept.	Lessa LN	0.5	Miscellaneous
2006	Walker	Riverside VFD	4519	10	Miscellaneous
2006	Montgomery	Cut-N-Shoot VFD	06-0002798	0.25	Debris burning
2006	Montgomery	Conroe	Conroe - 14	10	Incendiary
2006	Montgomery	Conroe	Conroe - 13	4	Debris burning
2006	Montgomery	Cut-N-Shoot VFD	06-0002926	3	Miscellaneous
2006	Montgomery	Conroe	Conroe - 19	1	Debris burning
2006	Liberty	Conroe	Conroe - 15	90	Miscellaneous
2006	Liberty	Kenefick VFD	VOTAW	0.25	Debris burning
2006	Liberty	Tarkington VFD	CR3018	0.25	Debris burning
2006	Montgomery	Cut-N-Shoot VFD	06-0003070	0.25	Debris burning
2006	Walker	Huntsville Fire Dept.	Horseshoe Lake	0.5	Debris burning
2006	Austin	Salem Volunteer Fire Dept	Hwy 36 // Sempronius Rd	30	Smoking
2006	Montgomery	Conroe	Conroe - 21	1	Debris burning
2006	Austin	South Branch	West Zone South - 18	138	Campfire
2006	Walker	Riverside VFD	4529	1	Miscellaneous
2006	Walker	Dodge VFD	1767 U.S. 190	1	Debris burning
2006	Chambers	Beach City VFD	West of Carlswood	0.5	Children
2006	Montgomery	Conroe	Conroe - 23	7	Miscellaneous
2006	Walker	Conroe	Conroe - 24	270	Miscellaneous
2006	Liberty	Tarkington VFD	CR308	0.25	Debris burning
2006	Montgomery	Cut-N-Shoot VFD	06-0003279	5	Miscellaneous
2006	Montgomery	North Montgomery County Volunteer Fire Department	06-0003335	1	Miscellaneous
2006	Walker	Dodge VFD	#12 Brandon Rd.	1	Debris burning
2006	Walker	Huntsville Fire Dept.	Lawrence Ln.	0.25	Debris burning
2006	Walker	Conroe	Conroe - 27	10	Miscellaneous
2006	Montgomery	Conroe	Conroe - 26	12	Debris burning
2006	Montgomery	Cut-N-Shoot VFD	06-0003474	15	Miscellaneous
2006	Montgomery	Cut-N-Shoot VFD	06-0003555	1	Miscellaneous
2006	Montgomery	Cut-N-Shoot VFD	06-0003654	2	Debris burning
2006	Montgomery	Grangerland VFD	2006-03637	2	Miscellaneous
2006	Montgomery	Cut-N-Shoot VFD	06-0003751	1	Children
2006	Montgomery	Conroe	Conroe - 29	1	Incendiary
2006	Montgomery	Cut-N-Shoot VFD	06-0004090	0.25	Debris burning

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Year	County	Dispatch or VFD Name	Fire Name	Acres	Cause
2006	Montgomery	North Montgomery County Volunteer Fire Department	06-0004187	1	Debris burning
2006	Montgomery	Cut-N-Shoot VFD	06-0004806	1	Miscellaneous
2006	Walker	Conroe	Conroe - 35	6	Debris burning
2006	Montgomery	Cut-N-Shoot VFD	06-0005139	4	Miscellaneous
2006	Montgomery	Cut-N-Shoot VFD	06-0005139	4	Miscellaneous
2006	Montgomery	Cut-N-Shoot VFD	06-0005193	1	Debris burning
2006	Montgomery	Conroe	Conroe - 37	2	Debris burning
2006	Walker	Huntsville Fire Dept.	Roy Webb	0.1	Miscellaneous
2006	Liberty	Conroe	Conroe - 40	15	Debris burning
2006	Chambers	Beach City VFD	Eagle Dr grass fire	1	Miscellaneous
2006	Montgomery	Conroe	Conroe - 44	9	Miscellaneous
2006	Austin	South Branch	West Zone South - 58	10	Debris burning
2006	Liberty	Tarkington VFD	CR3017A	0.1	Debris burning
2006	Montgomery	North Montgomery County Volunteer Fire Department	06-0005730	0.5	Miscellaneous
2006	Liberty	Tarkington VFD	CR315	0.1	Miscellaneous
2006	Liberty	Tarkington VFD	CR2229	0.1	Debris burning
2006	Montgomery	Conroe	Conroe - 45	1	Debris burning
2006	Liberty	Tarkington VFD	CR316	0.1	Debris burning
2006	Liberty	Kenefick VFD	BROWN	0.5	Miscellaneous
2006	Liberty	Conroe	mud bath	7	Children
2006	Liberty	Tarkington VFD	CR2298	0.1	Debris burning
2006	Liberty	Tarkington VFD	CR2283	0.1	Debris burning
2006	Liberty	Tarkington VFD	CR2219	0.25	Power Lines
2006	Walker	Riverside VFD	4558	1.5	Debris burning
2006	Montgomery	North Montgomery County Volunteer Fire Department	06-0006231	1	Miscellaneous
2006	Chambers	Beach City VFD	FM2354 at FM 3180	4	Equipment use
2006	Walker	Conroe	Conroe - 53	3	Smoking
2006	Liberty	Kenefick VFD	COX	0.37	Debris burning
2006	Montgomery	Conroe	Conroe - 55	16	Debris burning
2006	Montgomery	North Montgomery County Volunteer Fire Department	06-0006653	0.5	Debris burning
2006	Montgomery	Cut-N-Shoot VFD	06-0007287	5	Debris burning
2006	Montgomery	Cut-N-Shoot VFD	06-0007287	7	Debris burning
2006	Liberty	Tarkington VFD	28 CR2217	0.5	Debris burning
2006	Montgomery	Conroe	Conroe - 61	22	Debris burning
2006	Montgomery	North Montgomery County Volunteer Fire Department	06-0007536	0.25	Miscellaneous
2006	Liberty	Tarkington VFD	SH105 @ SH146	20	Miscellaneous
2006	Montgomery	Cut-N-Shoot VFD	06-0007638	4	Miscellaneous
2006	Montgomery	Conroe	Conroe - 62	3	Debris burning
2006	Walker	Conroe	Conroe - 63	1	Debris burning
2006	Montgomery	Cut-N-Shoot VFD	06-0007735	2	Debris burning
2006	Liberty	Tarkington VFD	11177 FM787	0.1	Debris burning
2006	Liberty	Tarkington VFD	CR2284-1	1	Debris burning
2006	Montgomery	North Montgomery County Volunteer Fire Department	06-0007707	0.5	Debris burning
2006	Montgomery	Conroe	Conroe - 64	1	Debris burning
2006	Walker	Conroe	Conroe - 65	10	Debris burning
2006	Montgomery	Conroe	Conroe - 69	25	Debris burning

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Year	County	Dispatch or VFD Name	Fire Name	Acres	Cause
2006	Montgomery	Conroe	Conroe - 70	10	Debris burning
2006	Montgomery	Conroe	Conroe - 71	4	Incendiary
2006	Montgomery	Grangerland VFD	2006-08023	1	Miscellaneous
2006	Montgomery	Cut-N-Shoot VFD	06-0008007	1	Miscellaneous
2006	Walker	Riverside VFD	4570	15	Debris burning
2006	Montgomery	Cut-N-Shoot VFD	06-0008057	3	Debris burning
2006	Liberty	Tarkington VFD	CR3141E	1	Debris burning
2006	Chambers	High Island VFD	Wildland fire	5	Incendiary
2006	Montgomery	Conroe	Conroe - 73	1	Debris burning
2006	Chambers	High Island VFD	Wildland fire	20	Incendiary
2006	Walker	Riverside VFD	4577	0.25	Debris burning
2006	Liberty	Tarkington VFD	CR3374	0.25	Miscellaneous
2006	Walker	Riverside VFD	4580	1	Debris burning
2006	Montgomery	Conroe	Conroe - 81	4	Debris burning
2006	Liberty	Tarkington VFD	CR312	0.25	Debris burning
2006	Liberty	Tarkington VFD	CR3141 #2	0.25	Debris burning
2006	Liberty	Tarkington VFD	FM1008	5	Equipment use
2006	Walker	Conroe	Conroe - 83	2	Debris burning
2006	Liberty	Conroe	Conroe - 87	2	Debris burning
2006	Montgomery	Conroe	Conroe - 85	1	Debris burning
2006	Liberty	Woodville	Woodville - 144	20	Debris burning
2006	Montgomery	Conroe	Conroe - 88	6	Miscellaneous
2006	Montgomery	Conroe	Conroe - 92	3	Miscellaneous
2006	Liberty	Tarkington VFD	25019 Hwy 321	0.25	Miscellaneous
2006	Montgomery	Conroe	Conroe - 93	1	Debris burning
2006	Chambers	Beach City VFD	14316 FM 2354	1	Debris burning
2006	Liberty	Tarkington VFD	CR2274	5	Debris burning
2006	Walker	Conroe	Conroe - 94	1	Debris burning
2006	Liberty	Tarkington VFD	CR301N 3/21	1	Miscellaneous
2006	Liberty	Tarkington VFD	Arnold's Mobile Home Park	1	Debris burning
2006	Montgomery	Conroe	Conroe - 95	10	Power Lines
2006	Liberty	Tarkington VFD	CR2313	1	Debris burning
2006	Montgomery	Conroe	Conroe - 96	2	Debris burning
2006	Montgomery	Conroe	Conroe - 97	4	Miscellaneous
2006	Walker	Conroe	Conroe - 099	4	Debris burning
2006	Montgomery	Conroe	Conroe - 101	2	Campfire
2006	Montgomery	Conroe	Conroe - 103	20	Equipment use
2006	Montgomery	Richards VFD	WATSON	0.5	Power Lines
2006	Montgomery	Conroe	Conroe - 105	2	Debris burning
2006	Walker	Riverside VFD	4596	5	Debris burning
2006	Walker	Riverside VFD	4598	0.5	Debris burning
2006	Montgomery	Conroe	Conroe - 108	5	Miscellaneous
2006	Montgomery	Conroe	Conroe - 110	4	Debris burning
2006	Montgomery	Conroe	Conroe - 109	6	Debris burning
2006	Walker	Riverside VFD	4600	1	Debris burning
2006	Montgomery	Conroe	Conroe - 111	2	Miscellaneous
2006	Montgomery	Conroe	Conroe - 112	3	Debris burning
2006	Walker	Conroe	Conroe - 113	20	Debris burning
2006	Montgomery	Conroe	Conroe - 114	7	Campfire
2006	Chambers	Woodville	Woodville - 219	30	Debris burning

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Year	County	Dispatch or VFD Name	Fire Name	Acres	Cause
2006	Walker	Riverside VFD	4601	1	Debris burning
2006	Walker	Riverside VFD	4602	8	Debris burning
2006	Walker	Riverside VFD	4629	20	Debris burning
2006	Walker	Shiro Volunteer Fire Department	neason	10	Equipment use
2006	Walker	Conroe	Conroe - 122	15	Miscellaneous
2006	Walker	Conroe	Conroe - 123	1	Miscellaneous
2006	Montgomery	Conroe	Conroe - 124	1	Debris burning
2006	Walker	Riverside VFD	4632	4	Debris burning
2006	Walker	Riverside VFD	4633	0.5	Debris burning
2006	Brazoria	South Branch	Camp Mohawk	560	Equipment use
2006	Waller	Conroe	Conroe - 128	9	Debris burning
2006	Liberty	Conroe	Conroe - 132	4	Debris burning
2006	Walker	Pine Prairie VFD	INDIAN LAKE FIRE	0.5	Miscellaneous
2006	Walker	Bedias Volunteer Fire Dept.	Dickie Loop & CR 158	1	Miscellaneous
2006	Walker	Conroe	Conroe - 133	5	Incendiary
2006	Montgomery	Conroe	Conroe - 136	10	Debris burning
2006	Montgomery	Conroe	Conroe - 139	7	Debris burning
2006	Walker	Conroe	Conroe - 140	253	Incendiary
2006	Montgomery	Conroe	Conroe - 141	3	Incendiary
2006	Montgomery	Conroe	Conroe - 146	3	Debris burning
2006	Montgomery	Conroe	Conroe - 148	2	Miscellaneous
2006	Montgomery	Conroe	Conroe - 149	3	Lightning
2006	Montgomery	Conroe	Conroe - 150	2	Miscellaneous
2006	Montgomery	Conroe	Conroe - 153	14	Lightning
2006	Walker	Thomas Lake Rd. VFD	Woodland Hills	0.5	Debris burning
2006	Walker	Conroe	Conroe - 155	1	Equipment use
2006	Walker	Conroe	Conroe - 156	10	Debris burning
2006	Walker	Conroe	Conroe - 161	15	Lightning
2006	Walker	Conroe	Mann Rd. Fire - 163	3	Debris burning
2006	Walker	Riverside VFD	4685	0.25	Debris burning
2006	Walker	Riverside VFD	4687	1	Equipment use
2006	Walker	Conroe	Conroe - 166	5	Miscellaneous
2006	Walker	Conroe	Conroe - 167	7	Debris burning
2006	Walker	Riverside VFD	4696	1.5	Debris burning
2006	Walker	Conroe	Conroe - 168	5	Debris burning
2006	Walker	Riverside VFD	4697	1.5	Debris burning
2006	Montgomery	Conroe	Conroe - 171	1	Miscellaneous
2006	Walker	Conroe	Fish Fry Fire	206	Power Lines
2006	Montgomery	Conroe	Conroe - 175	2	Miscellaneous
2006	Waller	Conroe	Conroe - 177	3	Miscellaneous
2006	Walker	Conroe	Conroe - 178	10	Debris burning
2006	Walker	Conroe	Conroe - 181	5	Miscellaneous
2006	Walker	Conroe	Conroe - 182	2	Power Lines
2006	Walker	Conroe	Conroe - 184	2	Railroads
2006	Walker	Conroe	Conroe - 185	50	Miscellaneous
2006	Montgomery	Conroe	Conroe - 186	3	Debris burning
2006	Walker	Riverside VFD	4713	1	Miscellaneous
2006	Montgomery	Conroe	Conroe - 190	1	Miscellaneous
2006	Montgomery	Conroe	Conroe - 195	12	Debris burning
2006	Montgomery	Conroe	Conroe - 196	1	Debris burning

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Year	County	Dispatch or VFD Name	Fire Name	Acres	Cause
2006	Montgomery	Conroe	Conroe - 199	2	Debris burning
2006	Walker	Thomas Lake Rd. VFD	Rogers	0.25	Equipment use
2006	Chambers	Beach City VFD	5200 McKinney	3	Miscellaneous
2006	Montgomery	Conroe	Conroe - 201	2	Debris burning
2006	Chambers	Beach City VFD	FM 1941 @ S.H. 65	3	Miscellaneous
2006	Montgomery	Richards VFD	Bay Chapel Road Grassfire	1	Miscellaneous
2006	Montgomery	Conroe	Conroe - 202	1	Power Lines
2006	Walker	Conroe	Conroe - 203	15	Debris burning
2006	Walker	Conroe	Conroe - 204	3	Debris burning
2006	Walker	Riverside VFD	4741	0.5	Miscellaneous
2006	Walker	Riverside VFD	4742	0.5	Miscellaneous
2006	Walker	Thomas Lake Rd. VFD	Forest Creek	3	Campfire
2006	Chambers	Beach City VFD	IH-10 @ S.H. 146	2	Campfire
2006	Montgomery	Conroe	Conroe - 205	20	Debris burning
2006	Liberty	Woodville	Woodville - 332	1	Debris burning
2006	Walker	Riverside VFD	4748	0.05	Debris burning
2006	Walker	Conroe	Conroe - 210	7	Power Lines
2006	Chambers	High Island VFD	Wildland Fire	20	Incendiary
2006	Walker	Oakhurst Volunteer Fire Department	Brush fire 39	1	Campfire
2006	Walker	Riverside VFD	4775	0.5	Debris burning
2006	Walker	Riverside VFD	4776	0.5	Debris burning
2006	Walker	Riverside VFD	4785	0.5	Debris burning
2006	Chambers	Beach City VFD	McCollum Park	0.01	Miscellaneous
2007	Chambers	Beach City VFD	S.H. 99 @ RR tracks 2007-13	1	Railroads
2007	Walker	Conroe	Conroe - 4	25	Debris burning
2007	Liberty	Conroe	Conroe - 5	2	Debris burning
2007	Chambers	Beach City VFD	4000 Cedar Blvd. 2007-14	1	Railroads
2007	Liberty	Woodville	Woodville - 49	70	Debris burning
2007	Walker	Riverside VFD	4832	1	Debris burning
2007	Austin	South Branch	Mound Road South Branch - 11	30	Miscellaneous
2007	Montgomery	Conroe	Conroe - 10	3	Debris burning
2007	Montgomery	Conroe	Conroe - 11	25	Miscellaneous
2007	Walker	Riverside VFD	4919	1.5	Debris burning
2007	Liberty	Conroe	Conroe - 13	1	Debris burning
2007	Walker	Riverside VFD	4925	10	Debris burning
2007	Chambers	Beach City VFD	203 Carroll	1	Debris burning
2007	Walker	Conroe	Conroe - 15	1	Debris burning
2007	Montgomery	Conroe	Conroe - 16	16	Debris burning
2007	Chambers	Beach City VFD	329 Gouhole	0.5	Debris burning
2007	Chambers	Beach City VFD	5003 Katies Creek	2	Debris burning
2007	Montgomery	Conroe	Conroe - 17	2	Debris burning
2007	Walker	Conroe	Conroe - 19	7	Debris burning
2007	Brazoria	Surfside Beach VFD	Stalman Park/Bluewater Hwy.	3	Smoking
2007	Chambers	Beach City VFD	127 Blueberry	1	Debris burning
2007	Chambers	Beach City VFD	6111 FM 3180	5	Debris burning
2007	Chambers	Beach City VFD	10012 Walker Ln.	0.1	Debris burning

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Year	County	Dispatch or VFD Name	Fire Name	Acres	Cause
2007	Liberty	Conroe	Conroe - 22	5	Smoking
2007	Walker	Conroe	Spell Bottom - 23	50	Incendiary
2007	Liberty	Highway 321 VFD	Grass Fire	1	Miscellaneous
2007	Chambers	Beach City VFD	9600 Warren Rd.	1	Children
2007	Walker	Riverside VFD	4952	10	Debris burning
2007	Walker	Conroe	Conroe - 26	10	Debris burning
2007	Walker	Conroe	Conroe - 27	20	Debris burning
2007	Walker	Conroe	Conroe - 29	2	Debris burning
2007	Montgomery	Conroe	Conroe - 30	20	Campfire
2007	Walker	Bedias Volunteer Fire Dept.	8008 CR 233	2	Debris burning
2007	Montgomery	Conroe	Conroe - 31	10	Debris burning
2007	Montgomery	Conroe	Conroe - 33	17	Miscellaneous
2007	Brazoria	Surfside Beach VFD	Access 2/Bluewater Hwy.	1.5	Miscellaneous
2007	Brazoria	Pearland Fire Department	Riley Road	0.1	Miscellaneous
2007	Brazoria	Surfside Beach VFD	Access 3/ Bluewater Hwy.	1	Miscellaneous
2007	Montgomery	Conroe	Conroe - 37	45	Incendiary
2008	Brazoria	Pearland Fire Department	Hastings/Firendswood	0.5	Debris burning
2008	Brazoria	Wild Peach VFD	Wild Peach VFD	1	Miscellaneous
2008	Walker	Conroe	Conroe - 01	25	Debris burning
2008	Walker	Conroe	Conroe - 02	1	Debris burning
2008	Walker	Conroe	Conroe - 03	7	Debris burning
2008	Brazoria	Surfside Beach VFD	Key Largo/CR 257	0.5	Debris burning
2008	Brazoria	Rivers End Fire Dept.	2611	1	Miscellaneous
2008	Walker	Riverside VFD	4985	0.5	Debris burning
2008	Walker	Conroe	Conroe - 7	8	Equipment use
2008	Liberty	Conroe	Conroe - 9	2	Miscellaneous
2008	Walker	Conroe	Conroe - 10	7	Debris burning
2008	Brazoria	Liverpool VFD	FM2004 Fire	100	Debris burning
2008	Montgomery	Conroe	Conroe - 11	1	Debris burning
2008	Liberty	Conroe	Conroe - 12	10	Miscellaneous
2008	Montgomery	Conroe	Conroe - 13	5	Debris burning
2008	Brazoria	Clute VFD	288B Service	0.5	Debris burning
2008	Montgomery	Richards VFD	GILES	10	Debris burning
2008	Liberty	Shepherd V. F. D.	FM 223 @ County Line	10	Debris burning
2008	Brazoria	Rivers End Fire Dept.	335	1	Debris burning
2008	Austin	Bellville Fire Dept.	Bellville/ stokes Rd	1	Debris burning
2008	Waller	Mt. Zion Community Volunteer Fire Fighting Assoc.	Fire:Grass	1	Miscellaneous
2008	Walker	Riverside VFD	RVFD	7	Miscellaneous
2008	Montgomery	Conroe	Conroe - 16	7	Debris burning
2008	Brazoria	Manvel VFD	GRASS FIRE	5	Debris burning
2008	Brazoria	Manvel VFD	GRASS FIRE	4	Debris burning
2008	Walker	Conroe	Conroe - 21	375	Incendiary
2008	Walker	Riverside VFD	5006	0.25	Debris burning
2008	Montgomery	Conroe	Conroe - 22	20	Debris burning
2008	Liberty	Conroe	Conroe - 24	30	Incendiary
2008	Walker	Conroe	Conroe - 27	2	Power Lines
2008	Brazoria	Surfside Beach VFD	Incendiary	1	Miscellaneous

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Year	County	Dispatch or VFD Name	Fire Name	Acres	Cause
			stand/Bluewater Hwy.		
2008	Walker	Riverside VFD	5022	4	Miscellaneous
2008	Walker	Conroe	Conroe - 29	3	Debris burning
2008	Liberty	Conroe	Conroe - 38	6	Debris burning
2008	Walker	Conroe	Conroe - 33	10	Debris burning
2008	Walker	Conroe	Conroe - 35	1	Debris burning
2008	Waller	Conroe	Conroe - 37	1	Campfire
2008	Montgomery	Conroe	Conroe - 39	5	Miscellaneous
2008	Liberty	Woodville	Woodville - 73	40	Debris burning
2008	Brazoria	Rosharon Volunteer Fire Dept.	China Grove	1	Debris burning
2008	Montgomery	Conroe	Conroe - 41	35	Debris burning
2008	Montgomery	Conroe	Conroe - 42	15	Miscellaneous
2008	Montgomery	Conroe	Conroe - Oak Ridge Road	1	Debris burning
2008	Brazoria	Manvel VFD	GRASS FIRE	1	Debris burning
2008	Brazoria	Manvel VFD	GRASS FIRE	1	Debris burning
2008	Chambers	Woodville	Big Tire Fire	1	Debris burning
2008	Brazoria	Manvel VFD	GRASS FIRE	1	Debris burning
2008	Montgomery	Conroe	Conroe - 53	30	Debris burning
2008	Walker	Bedias Volunteer Fire Dept.	Scales Ranch Rd	1.5	Miscellaneous
2008	Walker	Conroe	Conroe - 56	50	Power Lines
2008	Walker	Conroe	Conroe - 55	2	Power Lines
2008	Austin	South Branch	Hillboldt - 145	20	Campfire
2008	Liberty	Woodville	Woodville - 110	5	Debris burning
2008	Waller	Mt. Zion Community Volunteer Fire Fighting Assoc.	Fire:Grass	25	Smoking
2008	Waller	Mt. Zion Community Volunteer Fire Fighting Assoc.	Fire:Grass	1	Debris burning
2008	Montgomery	Conroe	Conroe - 59	80	Miscellaneous
2008	Montgomery	Conroe	Conroe - 62	5	Lightning
2008	Walker	Conroe	Conroe - 65	15	Debris burning
2008	Liberty	Conroe	Conroe - 66	1	Debris burning
2008	Montgomery	Conroe	Conroe - 67	12	Debris burning
2008	Chambers	Hamshire Vol Fire Dept.	Main Street Fire	2.5	Debris burning
2008	Brazoria	Manvel VFD	GRASS FIRE	2	Incendiary
2008	Brazoria	Manvel VFD	GRASS FIRE	1	Equipment use
2008	Montgomery	Conroe	Conroe - 68	5	Miscellaneous
2008	Montgomery	Conroe	Conroe - 69	40	Incendiary
2008	Brazoria	Manvel VFD	GRASS FIRE	10	Debris burning
2008	Walker	Bedias Volunteer Fire Dept.	Wier RD	15	Debris burning
2008	Walker	Conroe	Conroe - 72	415	Lightning
2008	Montgomery	Conroe	Conroe - 76	15	Lightning
2008	Montgomery	Conroe	Conroe - 77	10	Miscellaneous
2008	Brazoria	Manvel VFD	GRASS FIRE	2	Equipment use
2008	Liberty	Conroe	Conroe - 78	20	Incendiary
2008	Liberty	Conroe	Conroe - 81	5	Incendiary
2008	Liberty	Conroe	Conroe - 82	3	Incendiary
2008	Liberty	Conroe	Conroe - 79	10	Incendiary
2008	Montgomery	Conroe	Conroe - 86	6	Miscellaneous

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Year	County	Dispatch or VFD Name	Fire Name	Acres	Cause
2008	Liberty	Woodville	Woodville - 157	1	Lightning
2008	Montgomery	Conroe	Conroe - 90	4	Lightning
2008	Walker	Conroe	Conroe - 96	10	Miscellaneous
2008	Montgomery	Conroe	Conroe - 91	3	Debris burning
2008	Montgomery	Conroe	Conroe - 93	1	Debris burning
2008	Liberty	Woodville	Woodville - 168	20	Debris burning
2008	Montgomery	Conroe	Conroe - 97	60	Miscellaneous
2008	Walker	Conroe	Conroe - 98	1	Incendiary
2008	Brazoria	Manvel VFD	GRASS FIRE	1	Debris burning
2008	Walker	Conroe	Conroe - 103	300	Children
2008	Liberty	Woodville	Woodville - 177	6	Debris burning
2008	Montgomery	Conroe	Conroe - 104	5	Debris burning
2008	Montgomery	Conroe	Conroe - 105	3	Debris burning
2008	Walker	Conroe	Conroe - 106	117	Incendiary
2008	Walker	Riverside VFD	5141	0.25	Lightning
2008	Liberty	Conroe	Conroe - 109	9	Debris burning
2008	Liberty	Conroe	Conroe - 110	8	Debris burning
2008	Montgomery	Conroe	Conroe - 111	4	Debris burning
2008	Walker	Crabbs Prairie Fire Department	132 mm Interstate 45	1	Equipment use
2008	Montgomery	Conroe	Conroe - 116	8	Debris burning
2008	Walker	Conroe	Conroe - 118	20	Lightning
2008	Brazoria	Rosharon Volunteer Fire Dept.	CR 42 & FM 521	1	Debris burning
2008	Brazoria	Manvel VFD	GRASS FIRE	1	Equipment use
2008	Walker	Riverside VFD	5160	1	Miscellaneous
2008	Walker	Conroe	Conroe - 124	2	Debris burning
2008	Montgomery	Conroe	Conroe - 125	20	Debris burning
2008	Walker	Riverside VFD	5164	3	Miscellaneous
2008	Brazoria	Manvel VFD	GRASS FIRE	1	Miscellaneous
2008	Montgomery	Conroe	Conroe - 126	1	Debris burning
2008	Walker	Conroe	Conroe - 127	30	Debris burning
2008	Brazoria	Manvel VFD	GRASS FIRE	1	Debris burning
2008	Brazoria	Rosharon Volunteer Fire Dept.	914 Airline Place	1	Debris burning
2008	Brazoria	Rosharon Volunteer Fire Dept.	Pecan Grove	1	Power Lines
2008	Brazoria	Manvel VFD	GRASS FIRE	1	Debris burning
2008	Walker	Riverside VFD	5178	0.5	Power Lines
2008	Montgomery	Conroe	Conroe - 130	3	Debris burning
2008	Liberty	Woodville	Woodville - 220	7	Power Lines
2008	Brazoria	MANVEL VFD	grassfire	2	Debris burning
2008	Brazoria	MANVEL VFD	grass fire	1	Power Lines
2008	Liberty	Woodville	Woodville - 227	20	Incendiary
2008	Chambers	Conroe	Woodville - 229	30	Incendiary
2008	Chambers	South Branch	Woodville - 230	5	Miscellaneous
2008	Chambers	Woodville	Woodville - 231	20	Incendiary
2008	Brazoria	MANVEL VFD	grass fire	2	Debris burning
2008	Brazoria	Rosharon Volunteer Fire Dept.	16430 CR 897	1	Debris burning
2008	Brazoria	Rosharon Volunteer Fire Dept.	Ramsey I	1	Miscellaneous

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Year	County	Dispatch or VFD Name	Fire Name	Acres	Cause
2008	Walker	Crabbs Prairie Fire Department	462 FM 1696 W	2	Debris burning
2008	Chambers	South Branch	Woodville - 245	5	Debris burning
2008	Brazoria	Rosharon Volunteer Fire Dept.	FM 1462 & CR 528A	1	Debris burning
2008	Brazoria	Rosharon Volunteer Fire Dept.	7107 Ross Road	1	Debris burning
2008	Brazoria	Manvel VFD	GRASS FIRE	2	Debris burning
2008	Walker	Crabbs Prairie Fire Department	123 mm Interstate 45	1	Equipment use
2008	Chambers	South Branch	Woodville - 248	90	Debris burning
2008	Chambers	Woodville	Woodville - 249	7	Miscellaneous
2008	Chambers	Woodville	Woodville - 250	175	Incendiary
2008	Chambers	Woodville	Woodville - 251	45	Incendiary
2008	Walker	Crabbs Prairie Fire Department	130 mm Interstate 45	1	Equipment use
2008	Montgomery	Conroe	Conroe - 143	4	Debris burning
2008	Brazoria	Manvel VFD	GRASS FIRE	1	Debris burning
2008	Brazoria	Rosharon Volunteer Fire Dept.	16507 Sandy Meadow Drive	1	Debris burning
2008	Chambers	Woodville	Woodville - 266	80	Debris burning
2008	Chambers	Woodville	Woodville - 267	25	Debris burning
2008	Brazoria	Rosharon Volunteer Fire Dept.	CR 51 East	1	Debris burning
2008	Walker	Riverside VFD	5192	0.25	Debris burning
2008	Montgomery	Conroe	Conroe - 151	1	Debris burning
2008	Walker	Conroe	Conroe - 155	4	Debris burning
2008	Montgomery	Conroe	Conroe - 154	2	Debris burning
2008	Chambers	Woodville	Woodville - 271	1	Debris burning
2008	Brazoria	Rosharon Volunteer Fire Dept.	FM 1462 & CR 39	1	Debris burning
2008	Walker	Riverside VFD	5203	0.15	Debris burning
2008	Brazoria	Rosharon Volunteer Fire Dept.	Fm 1462 West 2206	1	Debris burning
2008	Liberty	South Branch	Woodville - 238	25	Debris burning
2008	Brazoria	Rosharon Volunteer Fire Dept.	Wing Tip Drive	1	Debris burning
2008	Brazoria	Wild Peach VFD	CR 347	2	Debris burning
2008	Brazoria	Wild Peach VFD	FM522	2	Debris burning
2008	Walker	Conroe	Conroe - 163	80	Equipment use
2008	Montgomery	Conroe	Conroe - 164	5	Debris burning
2008	Brazoria	Wild Peach VFD	CR 344	2	Debris burning
2008	Brazoria	Manvel VFD	GRASS FIRE	2	Debris burning
2008	Brazoria	Rosharon Volunteer Fire Dept.	Hwy 288 & CR 61	1	Miscellaneous
2008	Walker	Conroe	Conroe - 165	20	Debris burning
2008	Brazoria	Manvel VFD	GRASS FIRE	1	Debris burning
2008	Brazoria	Wild Peach VFD	3343 CR 344	2	Debris burning
2008	Brazoria	Manvel VFD	GRASS FIRE	1	Smoking
2008	Walker	Conroe	Conroe - 166	7	Debris burning
2008	Brazoria	Wild Peach VFD	CR 347	2	Debris burning
2008	Brazoria	Manvel VFD	GRASS FIRE	1	Debris burning
2008	Brazoria	Rosharon Volunteer Fire Dept.	16518 Mill Drive	1	Debris burning

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Year	County	Dispatch or VFD Name	Fire Name	Acres	Cause
2009	Brazoria	Angleton Fire Dept	Grass Fire	2	Railroads
2009	Brazoria	Manvel VFD	GRASS FIRE	2	Debris burning
2009	Brazoria	County Road 143 VFD	Cr 927	1	Debris burning
2009	Brazoria	Angleton Fire Dept	Grass Fire	1	Debris burning
2009	Austin	Sealy VFD	09-0000008	1	Equipment use
2009	Brazoria	Angleton Fire Dept	Grass Fire	2	Debris burning
2009	Austin	Sealy VFD	09-0000011	2	Miscellaneous
2009	Austin	Bellville Fire Dept.	BellvilleVFD	1	Debris burning
2009	Brazoria	County Road 143 VFD	Cr 98 & Cr 399	150	Miscellaneous
2009	Montgomery	Livingston	Livingston - 7	4	Power Lines
2009	Montgomery	Livingston	Livingston - 9	20	Debris burning
2009	Brazoria	County Road 143 VFD	Cr 98 & Cr 393	1	Miscellaneous
2009	Brazoria	Angleton Fire Dept	Trash Fire	1	Debris burning
2009	Austin	Bellville Fire Dept.	Bellville / Liza Mae	10	Debris burning
2009	Brazoria	Wild Peach VFD	CR 244	2	Debris burning
2009	Brazoria	Wild Peach VFD	CR 348	2	Debris burning
2009	Brazoria	Surfside Beach VFD	1st rd./Quintana bridge	10	Lightning
2009	Brazoria	Surfside Beach VFD	Bryan Beach	3	Lightning
2009	Brazoria	Surfside Beach VFD	Bryan beach	5	Lightning
2009	Chambers	Woodville	Woodville - 15	500	Incendiary
2009	Montgomery	Livingston	Livingston - 16	10	Power Lines
2009	Chambers	Woodville	Woodville - 19	25	Incendiary
2009	Brazoria	Rosharon Volunteer Fire Dept.	CR 121 & CR 60	40	Miscellaneous
2009	Brazoria	Rosharon Volunteer Fire Dept.	CR 38 & CR 184	30	Miscellaneous
2009	Austin	Sealy VFD	09-0000018	1	Miscellaneous
2009	Brazoria	Angleton Fire Dept	Grass Fire	60	Debris burning
2009	Brazoria	Manvel VFD	GRASS FIRE	60	Debris burning
2009	Brazoria	Manvel VFD	GRSS FIRE	60	Debris burning
2009	Brazoria	Manvel VFD	GRASS	60	Miscellaneous
2009	Montgomery	Livingston	Livingston - 19	5	Debris burning
2009	Montgomery	Livingston	Livingston - 20	2	Debris burning
2009	Brazoria	Angleton Fire Dept	Grass Fire	1	Miscellaneous
2009	Austin	Sealy VFD	09-0000020	1	Miscellaneous
2009	Brazoria	Rosharon Volunteer Fire Dept.	21838 CR 36	1	Debris burning
2009	Brazoria	Rosharon Volunteer Fire Dept.	15423 FM 521	1	Debris burning
2009	Brazoria	Wild Peach VFD	CR 244	2	Debris burning
2009	Brazoria	Angleton Fire Dept	Grass Fire	1	Debris burning
2009	Waller	Mt. Zion Community Volunteer Fire Fighting Assoc.	Trash Fire	0.25	Debris burning
2009	Brazoria	Angleton Fire Dept	Grass Fire	1	Debris burning
2009	Brazoria	Wild Peach VFD	CR 244	2	Debris burning
2009	Brazoria	Rosharon Volunteer Fire Dept.	1710 CR 62	1	Debris burning
2009	Brazoria	Rosharon Volunteer Fire Dept.	630 CR 52	1	Debris burning
2009	Montgomery	Livingston	Livingston - 28	2	Debris burning
2009	Brazoria	Rosharon Volunteer Fire	18110 Cedar	1	Debris burning

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Year	County	Dispatch or VFD Name	Fire Name	Acres	Cause
		Dept.			
2009	Brazoria	Angleton Fire Dept	Trash Fire	1	Debris burning
2009	Brazoria	County Road 143 VFD	Amoco	2	Debris burning
2009	Austin	Bellville Fire Dept.	BellvilleVFD/159 East	30	Debris burning
2009	Austin	Sealy VFD	09-0000025	1	Power Lines
2009	Brazoria	Rosharon Volunteer Fire Dept.	FM 521	5	Miscellaneous
2009	Brazoria	Angleton Fire Dept	Grass Fire	6	Incendiary
2009	Brazoria	Angleton Fire Dept	Grass Fire	2	Miscellaneous
2009	Brazoria	County Road 143 VFD	Cr 128	1	Miscellaneous
2009	Brazoria	County Road 143 VFD	Cr 128	1	Miscellaneous
2009	Montgomery	Livingston	Livingston - 31	4	Miscellaneous
2009	Brazoria	Rosharon Volunteer Fire Dept.	1462 @ Brazos River Bridge	1	Miscellaneous
2009	Walker	Livingston	Livingston - 32	3	Incendiary
2009	Brazoria	Angleton Fire Dept	Grass Fire	1	Equipment use
2009	Brazoria	Manvel VFD	GRASS FIRE	2	Debris burning
2009	Brazoria	Clute VFD	Mockingbird	1	Children
2009	Austin	Bellville Fire Dept.	Bellville VFD/ Loop Rd.	1	Smoking
2009	Montgomery	Livingston	Livingston - 33	51	Miscellaneous
2009	Chambers	Woodville	Woodville - 33	80	Debris burning
2009	Brazoria	Damon Fire Dept	2/1/2009	2	Debris burning
2009	Brazoria	Angleton Fire Dept	Grass Fire	2	Equipment use
2009	Montgomery	Livingston	Livingston - 37	8	Miscellaneous
2009	Brazoria	County Road 143 VFD	Veterans & Trent Cove	25	Miscellaneous
2009	Brazoria	Manvel VFD	GRASS FIRE	1	Debris burning
2009	Brazoria	Manvel VFD	GRASS FIRE	60	Debris burning
2009	Montgomery	Livingston	Livingston - 38	9	Miscellaneous
2009	Montgomery	Livingston	Livingston - 39	6	Miscellaneous
2009	Walker	Livingston	Livingston - 40	2	Debris burning
2009	Austin	Sealy VFD	09-0000035	1	Miscellaneous
2009	Brazoria	Angleton Fire Dept	Brush Fire	1	Debris burning
2009	Brazoria	Wild Peach VFD	Steven F Austin	100	Debris burning
2009	Brazoria	Rosharon Volunteer Fire Dept.	FM 521 17000	1	Debris burning
2009	Brazoria	Rosharon Volunteer Fire Dept.	6042 CR 42	10	Miscellaneous
2009	Brazoria	Rosharon Volunteer Fire Dept.	919 Paloma Drive	5	Debris burning
2009	Brazoria	Rosharon Volunteer Fire Dept.	12601 Wanda Way	1	Debris burning
2009	Brazoria	Rosharon Volunteer Fire Dept.	12713 Wanda Way	1	Debris burning
2009	Brazoria	Rosharon Volunteer Fire Dept.	CR 48 North of CR 60	1	Debris burning
2009	Brazoria	County Road 143 VFD	Mclean	1	Miscellaneous
2009	Montgomery	Livingston	Livingston - 43	3	Miscellaneous
2009	Austin	Bellville Fire Dept.	Bellville/ Leschper	0.5	Debris burning
2009	Montgomery	Livingston	Livingston - 44	2	Campfire
2009	Brazoria	Rosharon Volunteer Fire Dept.	FM 1462 @ CR 528	1	Debris burning
2009	Brazoria	Wild Peach VFD	CR 347	2	Debris burning

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Year	County	Dispatch or VFD Name	Fire Name	Acres	Cause
2009	Brazoria	Angleton Fire Dept	Brush Fire	2	Debris burning
2009	Brazoria	Angleton Fire Dept	Trash Fire	1	Debris burning
2009	Brazoria	Sweeny Fire and Rescue	2611 Wildland Fire	175	Miscellaneous
2009	Brazoria	South Branch	FM2611	175	Miscellaneous
2009	Brazoria	Wild Peach VFD	CR347	2	Debris burning
2009	Walker	Livingston	Livingston - 50	40	Campfire
2009	Brazoria	Manvel VFD	GRASS FIRE	2	Debris burning
2009	Walker	Riverside VFD	45	0.01	Miscellaneous
2009	Walker	Thomas Lake Rd. VFD	Water Tower Rd.	0.25	Miscellaneous
2009	Chambers	Hamshire Vol Fire Dept.	Hwy 65 grass fire	30	Debris burning
2009	Austin	Sealy VFD	09-0000041	75	Equipment use
2009	Brazoria	Angleton Fire Dept	Brush Fire	2	Debris burning
2009	Brazoria	Surfside Beach VFD	Ave.G/Levee rd.	7	Smoking
2009	Brazoria	Angleton Fire Dept	Brush Fire	1	Debris burning
2009	Brazoria	Wild Peach VFD	FM 522	2	Debris burning
2009	Liberty	Woodville	Woodville - 43	100	Miscellaneous
2009	Austin	South Branch	Orange Hill	30	Miscellaneous
2009	Walker	Livingston	Livingston - 56	3	Debris burning
2009	Brazoria	Angleton Fire Dept	Brush Fire	1	Debris burning
2009	Brazoria	Rosharon Volunteer Fire Dept.	914 Airline Place	1	Debris burning
2009	Brazoria	Rosharon Volunteer Fire Dept.	FM1462 East of 288	1	Debris burning
2009	Brazoria	Surfside Beach VFD	Tarpon Ln.	1	Debris burning
2009	Brazoria	Rosharon Volunteer Fire Dept.	12925 FM 521	1	Debris burning
2009	Walker	Riverside VFD	63	2.5	Debris burning
2009	Walker	Thomas Lake Rd. VFD	Newport Village #1	0.15	Miscellaneous
2009	Brazoria	Wild Peach VFD	CR 204	2	Campfire
2009	Walker	Livingston	Livingston - 63	10	Miscellaneous
2009	Brazoria	Angleton Fire Dept	Bursh Fire	1	Debris burning
2009	Austin	Bellville Fire Dept.	Bellville/ FM 1371	2	Power Lines
2009	Montgomery	Livingston	Livingston - 66	185	Debris burning
2009	Walker	Livingston	Livingston - 67	2	Miscellaneous
2009	Montgomery	Livingston	Livingston - 68	3	Incendiary
2009	Montgomery	Livingston	Livingston - 69	8	Incendiary
2009	Montgomery	Livingston	Livingston - 71	2	Incendiary
2009	Montgomery	Livingston	Livingston - 73	2	Power Lines
2009	Austin	Sealy VFD	09-0000050	1	Power Lines
2009	Brazoria	Clute VFD	Mammoth Lake	1	Campfire
2009	Walker	Livingston	Livingston - 74	5	Miscellaneous
2009	Montgomery	Livingston	Livingston - 75	15	Debris burning
2009	Brazoria	Manvel VFD	GRASS FIRE	1	Debris burning
2009	Brazoria	Rosharon Volunteer Fire Dept.	1010 Airline North	1	Debris burning
2009	Chambers	Woodville	Woodville - 61	20	Miscellaneous
2009	Chambers	Woodville	Woodville - 64	60	Incendiary
2009	Chambers	Woodville	Woodville - 65	65	Incendiary
2009	Chambers	Woodville	Woodville - 66	4	Debris burning
2009	Brazoria	Manvel VFD	GRASS FIRE	1	Smoking
2009	Brazoria	Manvel VFD	GRASS FIRE	1	Miscellaneous
2009	Brazoria	Wild Peach VFD	CR 344	2	Incendiary

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Year	County	Dispatch or VFD Name	Fire Name	Acres	Cause
2009	Chambers	Woodville	Woodville - 67	2	Debris burning
2009	Liberty	Woodville	Woodville - 69	26	Incendiary
2009	Brazoria	Angleton Fire Dept	Brush Fire	2	Debris burning
2009	Brazoria	Rosharon Volunteer Fire Dept.	Maple @ CR 39	1	Debris burning
2009	Chambers	High Island VFD	Wildland fire	5	Debris burning
2009	Brazoria	Angleton Fire Dept	Brush and Grass Fire	2	Debris burning
2009	Chambers	Woodville	Woodville - 77	100	Incendiary
2009	Walker	Thomas Lake Rd. VFD	Newport Village	0.15	Incendiary
2009	Walker	Thomas Lake Rd. VFD	TLR & BF Marina	0.15	Incendiary
2009	Walker	Livingston	Livingston - 78	4	Debris burning
2009	Montgomery	Livingston	Livingston - 79	9	Equipment use
2009	Montgomery	Livingston	Livingston - 81	4	Children
2009	Brazoria	Angleton Fire Dept	Grass Fire	1	Miscellaneous
2009	Montgomery	Livingston	Livingston - 84	3	Incendiary
2009	Brazoria	Wild Peach VFD	CR 517	3	Debris burning
2009	Brazoria	Manvel VFD	GRASS FIRE	1	Smoking
2009	Montgomery	Livingston	Livingston - 85	175	Incendiary
2009	Montgomery	Livingston	Livingston - 86	14	Incendiary
2009	Brazoria	Surfside Beach VFD	690 Turtle Cove	2	Smoking
2009	Chambers	Woodville	Woodville - 90	17	Debris burning
2009	Chambers	Woodville	Woodville - 91	60	Debris burning
2009	Brazoria	Rosharon Volunteer Fire Dept.	16235 CR 269 1 Street	1	Debris burning
2009	Austin	Bellville Fire Dept.	Bellville/ Centerhill	2	Debris burning
2009	Brazoria	Wild Peach VFD	Hwy 36	4	Debris burning
2009	Brazoria	Wild Peach VFD	CR 353	2	Miscellaneous
2009	Austin	Bellville Fire Dept.	Bellville/ OLD 36	30	Debris burning
2009	Brazoria	Rosharon Volunteer Fire Dept.	619 Wingtip Court	1	Equipment use
2009	Brazoria	Rosharon Volunteer Fire Dept.	CR 171	30	Debris burning
2009	Walker	Livingston	Livingston - 89	12	Miscellaneous
2009	Montgomery	Livingston	Livingston - 90	3	Miscellaneous
2009	Walker	Livingston	Livingston - 92	4	Debris burning
2009	Brazoria	Wild Peach VFD	CR 244A	2	Debris burning
2009	Brazoria	Rosharon Volunteer Fire Dept.	19301 Murrey Road	1	Debris burning
2009	Austin	Bellville Fire Dept.	Bellville/ Langberg	20	Debris burning
2009	Brazoria	Rosharon Volunteer Fire Dept.	17126 CR 39	3	Debris burning
2009	Walker	Livingston	Livingston - 94	50	Miscellaneous
2009	Waller	Mt. Zion Community Volunteer Fire Fighting Assoc.	Fire-Grass	1.5	Incendiary
2009	Chambers	Woodville	Woodville - 110	6	Incendiary
2009	Walker	Livingston	Livingston - 95	1	Debris burning
2009	Walker	Livingston	Livingston - 96	1	Debris burning
2009	Brazoria	Rosharon Volunteer Fire Dept.	16902 Hamil Drive	1	Debris burning
2009	Brazoria	Rosharon Volunteer Fire Dept.	17449 FM 521	1	Debris burning
2009	Brazoria	Rosharon Volunteer Fire Dept.	16510 CR 48	5	Debris burning

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Year	County	Dispatch or VFD Name	Fire Name	Acres	Cause
2009	Walker	Riverside VFD	98	1	Debris burning
2009	Brazoria	County Road 143 VFD	9028	1	Debris burning
2009	Brazoria	Wild Peach VFD	CR 342	2	Debris burning
2009	Walker	Thomas Lake Rd. VFD	Bullard St.	2	Debris burning
2009	Brazoria	Manvel VFD	GRASS FIRE	0.5	Miscellaneous
2009	Walker	Livingston	Livingston - 99	2	Debris burning
2009	Brazoria	County Road 143 VFD	9044	4	Debris burning
2009	Brazoria	Wild Peach VFD	CR 347	2	Debris burning
2009	Brazoria	County Road 143 VFD	9035	1	Debris burning
2009	Brazoria	County Road 143 VFD	9034	1	Miscellaneous
2009	Brazoria	Rosharon Volunteer Fire Dept.	1511 CR 382	1	Debris burning
2009	Brazoria	Manvel VFD	GRASS FIRE	0.5	Debris burning
2009	Brazoria	Manvel VFD	GRASS FIRE	0.1	Miscellaneous
2009	Brazoria	Manvel VFD	GRASS FIRE	0.1	Miscellaneous
2009	Brazoria	Manvel VFD	GRASS FIRE	0.8	Miscellaneous
2009	Brazoria	Rosharon Volunteer Fire Dept.	18510 Pecan Bayou	2	Debris burning
2009	Austin	Bellville Fire Dept.	Bellville / Kenny Hall	1	Debris burning
2009	Brazoria	Rosharon Volunteer Fire Dept.	7015 CR 865	3	Debris burning
2009	Brazoria	Holiday Lakes	wildland/grass	1	Debris burning
2009	Brazoria	Wild Peach VFD	CR 345	2	Debris burning
2009	Brazoria	Holiday Lakes	wildland/grass	1	Debris burning
2009	Brazoria	Rosharon Volunteer Fire Dept.	1103 CR 713b Airline	1	Debris burning
2009	Brazoria	Rosharon Volunteer Fire Dept.	6302 FM 1462	1	Debris burning
2009	Austin	Bellville Fire Dept.	Bellville / Leschper	2	Debris burning
2009	Austin	Bellville Fire Dept.	Bellville / Rocky	0.5	Debris burning
2009	Walker	Thomas Lake Rd. VFD	Werner	0.1	Debris burning
2009	Walker	Livingston	Livingston - 109	2	Debris burning
2009	Austin	Bellville Fire Dept.	Bellville/ Kenny hall	2	Debris burning
2009	Brazoria	Rosharon Volunteer Fire Dept.	Hwy 288 & CR 523	1	Debris burning
2009	Liberty	Livingston	Livingston - 110	3	Equipment use
2009	Austin	Bellville Fire Dept.	Bellville/ Bravenec	10	Debris burning
2009	Austin	Bellville Fire Dept.	Bellville/ Mimosa	10	Equipment use
2009	Walker	Thomas Lake Rd. VFD	Smith	0.5	Debris burning
2009	Montgomery	Livingston	Livingston - 112	8	Miscellaneous
2009	Walker	Livingston	Livingston - 115	10	Incendiary
2009	Montgomery	Livingston	Livingston - 117	102	Debris burning
2009	Brazoria	Rosharon Volunteer Fire Dept.	16400 Block CR 569	1	Debris burning
2009	Montgomery	Livingston	Livingston - 120	4	Debris burning
2009	Brazoria	Rosharon Volunteer Fire Dept.	Camp Mohawk Hwy 35 & CR 191	1	Miscellaneous
2009	Brazoria	County Road 143 VFD	9041	5	Miscellaneous
2009	Waller	Mt. Zion Community Volunteer Fire Fighting Assoc.	FIRE-GRASS	5	Debris burning
2009	Liberty	Livingston	Livingston - 122	1	Debris burning
2009	Brazoria	County Road 143 VFD	9042	20	Miscellaneous

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Year	County	Dispatch or VFD Name	Fire Name	Acres	Cause
2009	Walker	Livingston	Livingston - 125	2	Power Lines
2009	Walker	Livingston	Goose Paddle Fire	381	Incendiary
2009	Montgomery	Livingston	Livingston - 127	20	Debris burning
2009	Brazoria	County Road 143 VFD	9046	2	Debris burning
2009	Brazoria	Manvel VFD	GRASS FIRE	0.5	Children
2009	Brazoria	Wild Peach VFD	CR 586	2	Debris burning
2009	Montgomery	Livingston	Livingston - 133	2	Miscellaneous
2009	Walker	Livingston	Livingston - 134	1	Equipment use
2009	Montgomery	Livingston	Livingston - 135	15	Debris burning
2009	Montgomery	Livingston	Livingston - 138	3	Miscellaneous
2009	Montgomery	Livingston	Livingston - 140	5	Miscellaneous
2009	Montgomery	Livingston	Livingston - 143	5	Miscellaneous
2009	Walker	Thomas Lake Rd. VFD	Steamboat Rd.	0.25	Miscellaneous
2009	Walker	Livingston	Livingston - 144	1	Smoking
2009	Montgomery	Livingston	Livingston - 146	12	Debris burning
2009	Brazoria	County Road 143 VFD	9050	1	Lightning
2009	Brazoria	County Road 143 VFD	9051	1	Debris burning
2009	Liberty	Livingston	Livingston - 155	21	Lightning
2009	Brazoria	County Road 143 VFD	9054	20	Miscellaneous
2009	Brazoria	Wild Peach VFD	CR 310	2	Debris burning
2009	Montgomery	Livingston	Livingston - 160	41	Equipment use
2009	Montgomery	Livingston	Livingston - 161	3	Children
2009	Montgomery	Livingston	Livingston - 164	4	Incendiary
2009	Brazoria	Manvel VFD	GRASS FIRE	1	Power Lines
2009	Brazoria	Surfside Beach VFD	Intercoastal waterway	1	Miscellaneous
2009	Montgomery	Livingston	Livingston - 166	1	Incendiary
2009	Walker	Livingston	Livingston - 167	1	Miscellaneous
2009	Walker	Livingston	Livingston - 159	5	Debris burning
2009	Austin	Bellville Fire Dept.	Bellville/ School Rd	1	Debris burning
2009	Austin	Bellville Fire Dept.	Bellville	10	Equipment use
2009	Brazoria	Rosharon Volunteer Fire Dept.	1700 Block Brazos Ave.	1	Miscellaneous
2009	Austin	Bellville Fire Dept.	Bellville/ FM 529	2	Debris burning
2009	Walker	Livingston	Livingston - 169	1	Smoking
2009	Brazoria	Wild Peach VFD	CR 244F	2	Debris burning
2009	Walker	Livingston	Livingston - 171	1	Power Lines
2009	Walker	Livingston	ALAMO	102	Incendiary
2009	Chambers	Woodville	Woodville - 169	200	Equipment use
2009	Austin	Bellville Fire Dept.	Bellville/ Clens	3	Incendiary
2009	Brazoria	County Road 143 VFD	9059	1	Miscellaneous
2009	Waller	Chappell Hill Fire Department	Illegal Burning	0.5	Debris burning
2009	Montgomery	Livingston	Livingston - 179	5	Power Lines
2009	Brazoria	Rosharon Volunteer Fire Dept.	CR 42 305	1	Debris burning
2009	Brazoria	Rosharon Volunteer Fire Dept.	CR 48 22400	1	Debris burning
2009	Waller	Chappell Hill Fire Department	Grass Fire	0.5	Debris burning
2009	Walker	Livingston	Livingston - 181	2	Debris burning
2009	Walker	Livingston	Livingston - 182	2	Incendiary
2009	Brazoria	County Road 143 VFD	9062	30	Miscellaneous

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Year	County	Dispatch or VFD Name	Fire Name	Acres	Cause
2009	Montgomery	Livingston	Livingston - 185	1	Power Lines
2009	Brazoria	Wild Peach VFD	Pan America	2	Debris burning
2009	Liberty	Woodville	Woodville - 180	10	Lightning
2009	Liberty	Highway 321 VFD	Brush Fire	2	Debris burning
2009	Austin	Bellville Fire Dept.	Bellville/ HWY 36 south	5	Equipment use
2009	Walker	Livingston	Livingston - 203	8	Debris burning
2009	Walker	Livingston	Livingston - 204	18	Debris burning
2009	Austin	Bellville Fire Dept.	Bellville/ North HWY 36	1	Smoking
2009	Brazoria	Wild Peach VFD	CR 244	2	Debris burning
2009	Montgomery	Livingston	Livingston - 206	1	Debris burning
2009	Brazoria	Holiday Lakes	GRASS	1	Debris burning
2009	Liberty	Highway 321 VFD	Grass Fire	1	Railroads
2009	Liberty	Highway 321 VFD	Grass Fire	5	Debris burning
2009	Walker	Livingston	Davidson Fire	52	Incendiary
2009	Montgomery	Livingston	Livingston - 209	1	Debris burning
2009	Walker	Livingston	Livingston - 211	1	Debris burning
2009	Walker	Livingston	Livingston - 213	19	Incendiary
2009	Walker	Livingston	Livingston - 214	1	Incendiary
2009	Liberty	Highway 321 VFD	Brush Fire	10	Debris burning
2009	Liberty	Highway 321 VFD	Brush Fire	10	Debris burning
2009	Waller	Livingston	Livingston - 216	12	Equipment use
2009	Brazoria	Surfside Beach VFD	332/690	0.5	Smoking
2009	Walker	Livingston	Livingston - 223	3	Incendiary
2009	Brazoria	Manvel VFD	GRASS FIRE	1	Miscellaneous
2009	Brazoria	Manvel VFD	GRASS FIRE	1	Miscellaneous
2009	Walker	Livingston	Livingston - 224	5	Lightning
2009	Montgomery	Livingston	Livingston - 225	2	Debris burning
2009	Walker	Livingston	Livingston - 226	1	Power Lines
2009	Brazoria	Wild Peach VFD	CR 496	5	Debris burning
2009	Walker	Livingston	Livingston - 231	4	Incendiary
2009	Austin	Bellville Fire Dept.	Bellville/ KIDD	2	Equipment use
2009	Walker	Riverside VFD	221	10	Miscellaneous
2009	Walker	Livingston	Livingston - 237	4	Lightning
2009	Brazoria	Wild Peach VFD	CR 244	5	Debris burning
2009	Montgomery	Livingston	Livingston - 238	3	Debris burning
2009	Walker	Livingston	Livingston - 239	47	Incendiary
2009	Chambers	Woodville	Woodville - 219	52	Debris burning
2009	Brazoria	Wild Peach VFD	GSt. Paul	2	Debris burning
2009	Walker	Livingston	Livingston - 243	29	Equipment use
2009	Brazoria	Wild Peach VFD	CR 347	2	Debris burning
2009	Walker	Livingston	Livingston - 244	2	Incendiary
2009	Brazoria	Wild Peach VFD	GSt. Paul	2	Debris burning
2009	Brazoria	Wild Peach VFD	FM 522	2	Debris burning
2009	Austin	Bellville Fire Dept.	Bellville/ Burleson	1	Debris burning
2009	Austin	Bellville Fire Dept.	Bellville/ FM 949	1	Debris burning
2009	Austin	New Ulm VFD	Grass Fire	0.5	Debris burning
2009	Brazoria	Wild Peach VFD	East Washington Brazoria	2	Debris burning
2009	Austin	Bellville Fire Dept.	F Jasek	3	Miscellaneous

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Year	County	Dispatch or VFD Name	Fire Name	Acres	Cause
2010	Walker	Livingston	Livingston - 001	5	Debris burning
2010	Brazoria	Manvel VFD	grass fire	1	Debris burning
2010	Brazoria	County Road 143 VFD	Grass fire	6	Debris burning
2010	Liberty	Highway 321 VFD	Brush Fire	5	Debris burning
2010	Liberty	Highway 321 VFD	Brush fire	2	Debris burning
2010	Liberty	Highway 321 VFD	Brush Fire	3	Debris burning
2010	Walker	Livingston	Livingston - 6	5	Children
2010	Walker	Livingston	Livingston - 7	57	Debris burning
2010	Montgomery	Livingston	Livingston - 08	10	Debris burning
2010	Montgomery	Livingston	Livingston - 16	12	Campfire
2010	Liberty	Highway 321 VFD	Brush Fire	2	Debris burning
2010	Walker	Livingston	Livingston - 043	5	Debris burning
2010	Montgomery	Livingston	Livingston - 49	6	Miscellaneous
2010	Brazoria	Manvel VFD	grass fire	10	Miscellaneous
2010	Liberty	Livingston	Livingston - 52	13	Debris burning
2010	Liberty	Livingston	Livingston - 53	4	Debris burning
2010	Brazoria	Surfside Beach VFD	Swordfish	0.5	Debris burning
2010	Brazoria	Manvel VFD	grass fire	1	Debris burning
2010	Austin	Bellville Fire Dept.	Bellville/ Shell	0.5	Power Lines
2010	Brazoria	Surfside Beach VFD	Freeport	1	Power Lines
2010	Walker	Thomas Lake Rd. VFD	TLR/FM980	1	Miscellaneous
2010	Walker	Livingston	Livingston - 82	1	Debris burning
2010	Montgomery	Livingston	Livingston - 92	14	Equipment use
2010	Brazoria	Manvel VFD	grass fire	1	Equipment use
2010	Liberty	Livingston	Livingston - 128	80	Incendiary
2010	Liberty	Livingston	Livingston - 127	6	Debris burning
2010	Walker	Livingston	Livingston - 151	3	Debris burning
2010	Liberty	Livingston	Livingston - 154	20	Incendiary
2010	Montgomery	Livingston	Livingston - 156	5	Debris burning
2010	Liberty	Livingston	Livingston - 160	8	Incendiary
2010	Montgomery	Livingston	Livingston - 170	3	Debris burning
2010	Montgomery	Livingston	Livingston - 172	3	Incendiary
2010	Liberty	Livingston	Livingston - 178	1	Power Lines
2010	Brazoria	Manvel VFD	grass fire	1	Debris burning
2010	Austin	Bellville Fire Dept.	South Holland	2	Equipment use
2010	Montgomery	Livingston	Livingston - 200	4	Equipment use
2010	Montgomery	Livingston	Livingston - 204	3	Debris burning
2010	Walker	Livingston	Livingston - 205	1	Debris burning
2010	Walker	Livingston	Livingston - 221	2	Debris burning
2010	Brazoria	County Road 143 VFD	Grass fire	1	Debris burning
2010	Chambers	Livingston	Livingston - 226	190	Debris burning
2010	Chambers	Livingston	Livingston - 229	25	Equipment use
2010	Walker	Livingston	Livingston - 250	5	Debris burning
2010	Montgomery	Livingston	Livingston - 253	5	Children
2010	Walker	Richards VFD	MILLS	0.12	Equipment use
2010	Brazoria	Manvel VFD	grass fire	4	Debris burning
2010	Austin	Bellville Fire Dept.	Bellville/ Ignoskie	2	Incendiary
2010	Waller	Mt. Zion Community Volunteer Fire Fighting Assoc.	Fire-Grass	0.5	Debris burning
2010	Walker	Livingston	Livingston - 270	8	Debris burning

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Year	County	Dispatch or VFD Name	Fire Name	Acres	Cause
2010	Montgomery	Livingston	Livingston - 279	2	Debris burning
2010	Walker	Livingston	Livingston - 291	2.1	Debris burning
2010	Austin	Bellville Fire Dept.	Bellville/ School Rd.	2	Debris burning
2010	Walker	Livingston	Livingston - 293	1	Debris burning
2010	Montgomery	Livingston	Livingston - 294	5	Equipment use
2010	Montgomery	Livingston	Livingston - 297	2	Debris burning
2010	Walker	Livingston	Livingston - 296	2	Debris burning
2010	Waller	Mt. Zion Community Volunteer Fire Fighting Assoc.	Fire-Grass	1	Debris burning
2010	Montgomery	Livingston	Livingston - 306	4	Debris burning
2010	Walker	Livingston	Livingston - 307	1	Power Lines
2010	Walker	Livingston	Livingston - 309	101	Lightning
2010	Austin	Bellville Fire Dept.	Bellville/ Fisher Rd	1	Debris burning
2010	Montgomery	Richards VFD	Keisler 6796	2	Debris burning
2010	Walker	Livingston	Livingston - 315	1	Debris burning
2010	Walker	Riverside VFD	173	0.5	Debris burning
2010	Montgomery	Livingston	Livingston - 338	10	Debris burning
2010	Walker	Livingston	Livingston - 344	2	Debris burning
2010	Liberty	Livingston	Livingston - 345	7	Debris burning
2010	Walker	Livingston	Livingston - 346	1	Debris burning
2010	Liberty	Livingston	Livingston - 348	21	Incendiary
2010	Austin	Bellville Fire Dept.	N. Holland	1	Debris burning
2010	Montgomery	Livingston	Livingston - 355	15	Debris burning
2010	Montgomery	Livingston	Livingston - 356	5	Debris burning
2010	Montgomery	Livingston	Livingston - 364	2	Miscellaneous
2010	Walker	Livingston	Livingston - 385	1	Debris burning
2010	Montgomery	Livingston	Livingston - 387	3	Incendiary
2010	Walker	Livingston	Livingston - 389	8	Lightning
2010	Walker	Livingston	Livingston - 393	1	Debris burning
2010	Montgomery	Livingston	Livingston - 395	2	Debris burning
2010	Montgomery	Livingston	Livingston - 396	5.25	Power Lines
2010	Montgomery	Livingston	Livingston - 401	1	Debris burning
2010	Walker	Livingston	Livingston - 405	10.1	Debris burning
2010	Montgomery	Livingston	Livingston - 407	19	Debris burning
2010	Waller	Mt. Zion Community Volunteer Fire Fighting Assoc.	Fire-Grass	0.5	Debris burning
2010	Montgomery	Livingston	Livingston - 413	6	Debris burning
2010	Montgomery	Livingston	Livingston - 424	20	Debris burning
2010	Montgomery	Livingston	Livingston - 425	20	Miscellaneous
2010	Austin	Bellville Fire Dept.	Old Nelsonville	0.5	Incendiary
2010	Brazoria	Manvel VFD	grass fire	1	Debris burning
2010	Montgomery	Livingston	Livingston - 427	1	Debris burning
2010	Montgomery	Livingston	Livingston - 428	3	Miscellaneous
2010	Montgomery	Livingston	Livingston - 431	2	Children
2010	Montgomery	Livingston	Livingston - 433	7	Debris burning
2010	Montgomery	Livingston	Livingston - 443	1	Debris burning
2010	Montgomery	Livingston	Livingston - 444	1	Campfire
2010	Liberty	Livingston	Livingston - 445	1	Incendiary
2010	Montgomery	Livingston	Livingston - 449	5	Debris burning

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Year	County	Dispatch or VFD Name	Fire Name	Acres	Cause
2010	Montgomery	Livingston	Livingston - 451	2	Miscellaneous
2010	Walker	Livingston	Livingston - 458	1	Miscellaneous
2010	Montgomery	Livingston	Livingston - 461	4	Debris burning
2010	Montgomery	Livingston	Livingston - 462	2	Debris burning
2010	Austin	Bellville Fire Dept.	Plum	1	Power Lines
2010	Austin	Bellville Fire Dept.	Old Nelsonville	2	Power Lines
2010	Montgomery	Livingston	Livingston - 463	2	Debris burning
2010	Montgomery	Richards VFD	Ketkoski	6	Power Lines
2010	Liberty	Livingston	Livingston - 466	1	Lightning
2010	Liberty	Livingston	Livingston - 471	1	Debris burning
2010	Montgomery	Livingston	Livingston - 473	2	Debris burning
2010	Liberty	Livingston	Livingston - 474	10	Incendiary
2010	Walker	Livingston	Livingston - 476	1	Debris burning
2010	Montgomery	Livingston	Livingston - 478	1	Incendiary
2010	Austin	New Ulm VFD	Mutual Aid	0.5	Equipment use
2010	Austin	New Ulm VFD	Mutual Aid	2	Equipment use
2010	Brazoria	South Central Branch	Hide-A-way on the Gulf	150	Miscellaneous
2010	Austin	Bellville Fire Dept.	Bellville/ School Rd.	15	Power Lines
2010	Austin	Bellville Fire Dept.	Bellville/ Lynn Road	35	Debris burning
2010	Austin	Bellville Fire Dept.	Cat Spring/ Frontz	10	Debris burning
2010	Brazoria	Manvel VFD	grass fire	2	Debris burning
2010	Brazoria	Manvel VFD	grass fire	-1	Equipment use
2010	Walker	Livingston	Livingston - 494	2	Debris burning
2010	Liberty	Livingston	Livingston - 495	8	Incendiary
2010	Liberty	Livingston	Livingston - 500	26	Incendiary
2010	Waller	Mt. Zion Community Volunteer Fire Fighting Assoc.	Fire-Grass	0.5	Equipment use
2010	Montgomery	Livingston	Livingston - 510	3	Railroads
2010	Liberty	Livingston	Livingston - 512	30	Incendiary
2010	Walker	Riverside VFD	238	2	Debris burning
2010	Walker	Riverside VFD	240	0.5	Miscellaneous
2010	Montgomery	Livingston	Livingston - 524	1	Campfire
2010	Montgomery	Livingston	Livingston - 526	3	Children
2010	Walker	Thomas Lake Rd. VFD	Newport Village	1	Miscellaneous
2010	Brazoria	Freeport Fire Dept.	Texas Barge	0.25	Incendiary
2010	Brazoria	Damon Fire Dept	highway 36 12/27	100	Miscellaneous
2010	Walker	Riverside VFD	256	0.75	Miscellaneous
2011	Walker	Riverside VFD	1	0.5	Campfire
2011	Montgomery	Magnolia VFD	Hall Drive North	1	Debris burning
2011	Austin	Bellville Fire Dept.	Bellville/ FM 2754	5	Miscellaneous
2011	Austin	New Ulm VFD	Grass fire	0.05	Miscellaneous
2011	Walker	Dodge VFD	Tony Dowdy	1	Miscellaneous
2011	Walker	Livingston	Livingston - 2	2	Debris burning
2011	Walker	Livingston	Livingston - 1	3	Debris burning
2011	Montgomery	Livingston	Livingston - 3	25	Campfire
2011	Montgomery	Livingston	Livingston - 6	6	Equipment use
2011	Montgomery	Livingston	Livingston - 8	2	Debris burning
2011	Liberty	Hwy 321 VFD	Trash Fire	1	Debris burning
2011	Liberty	Hwy 321 VFD	Trash Fire	1	Debris burning

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Year	County	Dispatch or VFD Name	Fire Name	Acres	Cause
2011	Montgomery	Livingston	Livingston - 9	1	Miscellaneous
2011	Chambers	Hamshire Vol Fire Dept.	Broussard Rd Grass Fire	10	Debris burning
2011	Austin	New Ulm VFD	Grass Fire	25	Debris burning
2011	Austin	Cat Spring VFD	New Bremen	20	Miscellaneous
2011	Walker	Riverside VFD	11	0.5	Miscellaneous
2011	Montgomery	Magnolia VFD	Red Bird	1	Debris burning
2011	Walker	Livingston	Livingston - 16	1	Debris burning
2011	Brazoria	Rosharon Volunteer Fire Dept.	FM 521 N of Mammoet	1.5	Miscellaneous
2011	Austin	Cat Spring VFD	Schaffner	1	Debris burning
2011	Austin	Cat Spring VFD	Lakefield	3	Debris burning
2011	Austin	New Ulm VFD	Grass Fire (Mutual Aid)	20	Debris burning
2011	Austin	Bellville Fire Dept.	Bellville/ FM 2754	12	Debris burning
2011	Austin	Bellville Fire Dept.	Bellville/ Travis	5	Debris burning
2011	Austin	Bellville Fire Dept.	Bellville/Tesch	2	Debris burning
2011	Austin	Bellville Fire Dept.	Bellville/ Kenney Hall	2	Debris burning
2011	Walker	Livingston	Livingston - 17	35	Debris burning
2011	Walker	Thomas Lake Rd. VFD	2422 FM 980	0.5	Debris burning
2011	Liberty	Livingston	Livingston - 22	3	Debris burning
2011	Liberty	Hwy 321 VFD	Brush Fire	1	Debris burning
2011	Waller	Mt. Zion Community Volunteer Fire Fighting Assoc.	Fire-Grass	0.25	Debris burning
2011	Waller	Mt. Zion Community Volunteer Fire Fighting Assoc.	Pasture-Grass Fire	15	Miscellaneous
2011	Austin	Cat Spring VFD	Terrazas	3	Debris burning
2011	Brazoria	Rosharon Volunteer Fire Dept.	Hwy 288 1/4 S of CR 51	1	Miscellaneous
2011	Waller	Mt. Zion Community Volunteer Fire Fighting Assoc.	Fire	0.5	Debris burning
2011	Brazoria	County Road 143 VFD	Grass fire	0.5	Debris burning
2011	Walker	Livingston	Livingston - 27	8	Debris burning
2011	Brazoria	Manvel VFD	grass fire	0.5	Debris burning
2011	Liberty	Hwy 321 VFD	Woods and Brush Fire	20	Miscellaneous
2011	Liberty	Hwy 321 VFD	Wood Brush fire	1	Debris burning
2011	Liberty	Hwy 321 VFD	Wood and Brush fire	20	Debris burning
2011	Brazoria	Manvel VFD	grass fire	5	Children
2011	Austin	Bellville Fire Dept.	Bellville/ Arning	2	Debris burning
2011	Brazoria	Damon Fire Dept	hiway 36 grass fire	30	Debris burning
2011	Brazoria	Damon Fire Dept	County Road 4	20	Debris burning
2011	Brazoria	Manvel VFD	grass fire	1	Debris burning
2011	Liberty	Hwy 321 VFD	Brush Fire	1	Debris burning
2011	Liberty	Plum Grove VFD	Grass and Woods	0.5	Debris burning
2011	Walker	Thomas Lake Rd. VFD	W. Thomas Rd.	0.25	Debris burning
2011	Liberty	Livingston	Livingston - 43	30	Railroads
2011	Montgomery	Richards VFD	Dean Kiesler	15	Incendiary
2011	Brazoria	Rosharon Volunteer Fire Dept.	7077 CR 42	2	Debris burning
2011	Walker	Livingston	Livingston - 47	10	Debris burning

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Year	County	Dispatch or VFD Name	Fire Name	Acres	Cause
2011	Walker	Livingston	Livingston - 49	3	Debris burning
2011	Montgomery	Livingston	Livingston - 54	43	Debris burning
2011	Walker	Livingston	Livingston - 55	3	Power Lines
2011	Liberty	Livingston	Livingston - 60	50	Debris burning
2011	Brazoria	Rosharon Volunteer Fire Dept.	2720 CR 49	10	Debris burning
2011	Walker	Huntsville Fire Dept.	Walker Loop	5	Debris burning
2011	Walker	Dodge VFD	Dodge Oakhurst/FM 405	20	Debris burning
2011	Walker	Livingston	Livingston - 69	2	Power Lines
2011	Brazoria	Manvel VFD	grass fire	3	Equipment use
2011	Brazoria	County Road 143 VFD	mutual aid grass fire	1	Equipment use
2011	Montgomery	Livingston	Livingston - 70	1	Debris burning
2011	Liberty	Livingston	Livingston - 76	3	Miscellaneous
2011	Montgomery	Livingston	Livingston - 105	3	Campfire
2011	Brazoria	Manvel VFD	grass fire	10	Debris burning
2011	Montgomery	Livingston	Livingston - 110	90	Debris burning
2011	Walker	Riverside VFD	45	40	Debris burning
2011	Montgomery	Livingston	Livingston - 116	25	Debris burning
2011	Montgomery	River Plantation FD	14833 Creighton RD	0.25	Miscellaneous
2011	Walker	Livingston	Livingston - 119	18	Debris burning
2011	Montgomery	Livingston	Livingston - 121	8	Debris burning
2011	Montgomery	Livingston	Livingston - 123	3	Miscellaneous
2011	Liberty	Hwy 321 VFD	Grass Fire	1	Debris burning
2011	Montgomery	Livingston	Livingston - 125	2	Debris burning
2011	Austin	Bellville Fire Dept.	Bellville/ Oil Field	2	Equipment use
2011	Walker	Dodge VFD	Bob Williams	14	Debris burning
2011	Walker	Livingston	Livingston - 131	14	Incendiary
2011	Brazoria	County Road 143 VFD	mutual aid grass fire	1	Debris burning
2011	Liberty	Hwy 321 VFD	Brush Fire	3	Debris burning
2011	Walker	Dodge VFD	20 Harold Circle	1	Debris burning
2011	Austin	Cat Spring VFD	Jasek	18	Debris burning
2011	Liberty	Hwy 321 VFD	Woods Fire	3	Power Lines
2011	Walker	Livingston	Livingston - 170	9	Debris burning
2011	Montgomery	Livingston	Livingston - 172	1	Equipment use
2011	Brazoria	Freeport Fire Dept.	Levee Road	0.5	Smoking
2011	Montgomery	Livingston	Livingston - 175	9	Debris burning
2011	Walker	Livingston	Livingston - 177	7	Debris burning
2011	Montgomery	Livingston	Livingston - 180	1	Debris burning
2011	Liberty	Hwy 321 VFD	Woods fire	3	Debris burning
2011	Montgomery	NeedHam FD	woodhollow	1	Miscellaneous
2011	Montgomery	Livingston	Livingston - 201	2	Miscellaneous
2011	Walker	Livingston	Livingston - 208	1	Power Lines
2011	Walker	Livingston	Livingston - 209	85	Lightning
2011	Liberty	Livingston	Livingston - 211	8	Debris burning
2011	Montgomery	Livingston	Livingston - 212	2	Children
2011	Montgomery	Livingston	Livingston - 216	2	Children
2011	Chambers	Livingston	Livingston - 217	10	Debris burning
2011	Montgomery	Splendora VFD	2011-73069	0.25	Debris burning
2011	Montgomery	NeedHam FD	brookhollow	0.5	Debris burning
2011	Montgomery	NeedHam FD	silver crescent	10	Lightning

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Year	County	Dispatch or VFD Name	Fire Name	Acres	Cause
2011	Walker	Livingston	Livingston - 223	4.2	Power Lines
2011	Walker	Livingston	Livingston - 222	1	Power Lines
2011	Brazoria	Manvel VFD	grass fire	1	Equipment use
2011	Austin	Cat Spring VFD	Burger	2	Smoking
2011	Walker	Livingston	Livingston - 255	3	Miscellaneous
2011	Liberty	Livingston	Livingston - 266	30	Incendiary
2011	Montgomery	Livingston	Livingston - 265	3	Debris burning
2011	Liberty	Livingston	Livingston - 262	5	Miscellaneous
2011	Austin	Cat Spring VFD	Hwy 36	10	Equipment use
2011	Liberty	Shepherd V. F. D.	county rd 2183	5	Miscellaneous
2011	Montgomery	Livingston	Livingston - 273	3	Incendiary
2011	Walker	Livingston	Livingston - 280	1	Debris burning
2011	Walker	Livingston	Livingston - 281	79	Lightning
2011	Montgomery	Livingston	Livingston - 282	4	Children
2011	Austin	Bellville Fire Dept.	Bellville/ stokes rd.	3	Power Lines
2011	Montgomery	Livingston	Livingston - 287	4	Miscellaneous
2011	Montgomery	Livingston	Livingston - 291	30	Railroads
2011	Montgomery	Livingston	Livingston - 292	18	Debris burning
2011	Austin	Bellville Fire Dept.	Bellville/ Loop 497	10	Railroads
2011	Austin	Bellville Fire Dept.	Bellville/ Loop 497	12	Railroads
2011	Brazoria	Rosharon Volunteer Fire Dept.	FM 1462 1/4 E of FM 521	0.25	Miscellaneous
2011	Walker	Livingston	Livingston - 303	1	Equipment use
2011	Montgomery	NeedHam FD	white oak	0.5	Debris burning
2011	Montgomery	Livingston	Livingston - 317	17	Miscellaneous
2011	Liberty	Hwy 321 VFD	Brush Fire	5	Debris burning
2011	Austin	Cat Spring VFD	949	1	Smoking
2011	Montgomery	Livingston	Livingston - 326	6	Smoking
2011	Montgomery	NeedHam FD	sandy oak	0.1	Debris burning
2011	Montgomery	Livingston	Livingston - 337	6	Railroads
2011	Walker	Weldon VFD	Gibbs	10	Lightning
2011	Walker	Madisonville VFD	walker co	15	Miscellaneous
2011	Brazoria	Columbia Lakes VFD	Manor Lake	15	Miscellaneous
2011	Walker	Livingston	Livingston - 338	205	Lightning
2011	Montgomery	Livingston	Livingston - 339	8	Power Lines
2011	Montgomery	Livingston	Livingston - 342	8	Debris burning
2011	Chambers	Livingston	Livingston - 345	10	Power Lines
2011	Walker	Livingston	Livingston - 353	1	Power Lines
2011	Liberty	Hwy 321 VFD	Brush Fire	1	Power Lines
2011	Brazoria	County Road 143 VFD	Grass fire	1	Incendiary
2011	Montgomery	Livingston	Livingston - 358	3	Children
2011	Montgomery	NeedHam FD	SANDY OAKS	0.3	Debris burning
2011	Chambers	Livingston	Livingston - 360	63	Debris burning
2011	Brazoria	Manvel VFD	grass fire	1	Power Lines
2011	Montgomery	NeedHam FD	Fallen Timbers	1.5	Debris burning
2011	Walker	Livingston	Livingston - 361	10.2	Miscellaneous
2011	Liberty	Livingston	Livingston - 362	13	Equipment use
2011	Liberty	Livingston	Livingston - 364	10	Equipment use
2011	Brazoria	Manvel VFD	grass fire	1	Smoking
2011	Montgomery	Livingston	Livingston - 365	1	Equipment use
2011	Walker	Livingston	Livingston - 368	1	Power Lines

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Year	County	Dispatch or VFD Name	Fire Name	Acres	Cause
2011	Austin	Cat Spring VFD	Kveton	15	Equipment use
2011	Montgomery	NeedHam FD	Poeples Rd	1	Power Lines
2011	Montgomery	NeedHam FD	sleepy Hollow Rd	0.5	Debris burning
2011	Montgomery	NeedHam FD	Winchester	1.5	Debris burning
2011	Montgomery	River Plantation FD	12665 FM1314	1	Debris burning
2011	Montgomery	Livingston	Livingston - 385	8	Miscellaneous
2011	Chambers	Livingston	Livingston - 388	1	Equipment use
2011	Brazoria	County Road 143 VFD	Grass fire	1.5	Miscellaneous
2011	Montgomery	River Plantation FD	607 sycamore	0.25	Debris burning
2011	Austin	Cat Spring VFD	Zubicek	1	Debris burning
2011	Walker	Livingston	Scales Ranch Rd Fire	321	Lightning
2011	Montgomery	NeedHam FD	Big Oaks	1.5	Debris burning
2011	Montgomery	NeedHam FD	Lexington	1	Miscellaneous
2011	Brazoria	Rosharon Volunteer Fire Dept.	FM1462 @ CR 39	2	Miscellaneous
2011	Montgomery	Livingston	Duck Creek Rd Fire	183	Miscellaneous
2011	Brazoria	Rosharon Volunteer Fire Dept.	6430 CR 42	2	Debris burning
2011	Brazoria	Manvel VFD	grass fire	30	Debris burning
2011	Austin	Bellville Fire Dept.	Bellville/ 1456	1	Debris burning
2011	Liberty	Hwy 321 VFD	Woods fire	30	Debris burning
2011	Montgomery	NeedHam FD	Delores	1	Debris burning
2011	Montgomery	Livingston	Livingston - 428	1	Power Lines
2011	Liberty	Hwy 321 VFD	Woods Fire	50	Debris burning
2011	Montgomery	Livingston	Livingston - 437	10	Equipment use
2011	Brazoria	Freeport Fire Dept.	Dow	5	Debris burning
2011	Austin	Bellville Fire Dept.	Bellville/ Newsome	1	Debris burning
2011	Waller	Livingston	Bradbury Rd Fire	1	Debris burning
2011	Walker	Livingston	Livingston - 446	2	Miscellaneous
2011	Waller	Livingston	Forest Hills Fire	1	Debris burning
2011	Walker	Livingston	Livingston - 455	1	Lightning
2011	Austin	Cat Spring VFD	Streider	22	Power Lines
2011	Waller	Mt. Zion Community Volunteer Fire Fighting Assoc.	Brush Fire	0.5	Debris burning
2011	Liberty	Livingston	RYE Fire	612	Lightning
2011	Montgomery	Livingston	Livingston - 462	1	Lightning
2011	Montgomery	NeedHam FD	45 freeway	2	Debris burning
2011	Liberty	Livingston	Livingston - 478	80	Lightning
2011	Walker	Livingston	Koonce Fire	151	Lightning
2011	Liberty	Hwy 321 VFD	GGrass Fire	10	Debris burning
2011	Walker	Livingston	Livingston - 483	30	Lightning
2011	Waller	Livingston	Livingston - 484	1	Miscellaneous
2011	Montgomery	Livingston	Livingston - 486	10	Lightning
2011	Liberty	Woodville	Livingston - 491	72	Incendiary
2011	Liberty	Livingston	Livingston - 490	10	Lightning
2011	Liberty	Livingston	Livingston - 495	78	Lightning
2011	Montgomery	Livingston	Livingston - 501	1	Miscellaneous
2011	Montgomery	NeedHam FD	Tamina	1	Debris burning
2011	Montgomery	Livingston	Two County Fire	171	Incendiary
2011	Montgomery	NeedHam FD	Glen eagles	5	Debris burning

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Year	County	Dispatch or VFD Name	Fire Name	Acres	Cause
2011	Montgomery	Livingston	Livingston - 516	2	Children
2011	Liberty	Hwy 321 VFD	Brush Fire	2	Debris burning
2011	Austin	Cat Spring VFD	Kulow	18	Smoking
2011	Montgomery	Livingston	Livingston - 524	3	Children
2011	Liberty	Hwy 321 VFD	Brush Fire	1	Debris burning
2011	Walker	Livingston	Livingston - 531	5	Miscellaneous
2011	Walker	Livingston	Livingston - 539	15	Power Lines
2011	Liberty	Hwy 321 VFD	Brush Fire	1	Debris burning
2011	Montgomery	Livingston	Livingston - 549	1	Smoking
2011	Liberty	Livingston	Livingston - 552	1	Lightning
2011	Liberty	Hwy 321 VFD	Brush Fire	5	Debris burning
2011	Walker	Livingston	Livingston - 559	2	Miscellaneous
2011	Walker	Livingston	Midway / Cowboy Church Fire	2047	Miscellaneous
2011	Brazoria	Rosharon Volunteer Fire Dept.	CR 61 @ Hwy 288	5	Miscellaneous
2011	Liberty	Hwy 321 VFD	Brush Fire	5	Debris burning
2011	Liberty	Livingston	Livingston - 580	2	Power Lines
2011	Montgomery	Livingston	Livingston - 584	1	Miscellaneous
2011	Walker	Livingston	Livingston - 586	6	Power Lines
2011	Liberty	Hwy 321 VFD	Brush Fire	1	Debris burning
2011	Brazoria	Rosharon Volunteer Fire Dept.	431 Sunset Colony	20	Miscellaneous
2011	Brazoria	Rosharon Volunteer Fire Dept.	CR 48 1 mile N of CR 51	5	Debris burning
2011	Brazoria	County Road 143 VFD	mutual aid grass fire	3	Debris burning
2011	Walker	Livingston	Livingston - 592	3	Miscellaneous
2011	Austin	Bellville Fire Dept.	Bellville/ Oilfield	1	Equipment use
2011	Liberty	Livingston	Livingston - 595	27	Lightning
2011	Austin	Cat Spring VFD	Carols	0.5	Debris burning
2011	Austin	Cat Spring VFD	Roy Lane	1	Equipment use
2011	Liberty	Livingston	Livingston - 604	8	Lightning
2011	Chambers	Livingston	Livingston - 600	10	Equipment use
2011	Liberty	Hwy 321 VFD	Brush Fire	1	Debris burning
2011	Montgomery	River Plantation FD	FM 1314	0.5	Lightning
2011	Montgomery	Livingston	Livingston - 615	47	Lightning
2011	Liberty	Livingston	Livingston - 620	25	Lightning
2011	Montgomery	River Plantation FD	Bending oaks	1	Miscellaneous
2011	Montgomery	Montgomery County ESD # 6 (Porter Fire)	Needham Road	3	Incendiary
2011	Liberty	Hwy 321 VFD	Woods Fire	1	Debris burning
2011	Liberty	Hwy 321 VFD	Trash Dump Fire	5	Debris burning
2011	Brazoria	Freeport Fire Dept.	Shintech	20	Railroads
2011	Montgomery	Livingston	Livingston - 632	1	Debris burning
2011	Liberty	Livingston	Livingston - 636	14	Equipment use
2011	Liberty	Livingston	Livingston - 638	96	Lightning
2011	Liberty	Hwy 321 VFD	Trash Fire	1	Debris burning
2011	Liberty	Hwy 321 VFD	Trash Fire	1	Debris burning
2011	Liberty	Hwy 321 VFD	TRee Fire	1	Debris burning
2011	Walker	Livingston	Livingston - 645	2	Power Lines
2011	Chambers	Livingston	Livingston - 650	2	Debris burning
2011	Brazoria	Freeport Fire Dept.	Bryan Beach	1	Smoking

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Year	County	Dispatch or VFD Name	Fire Name	Acres	Cause
2011	Liberty	Hwy 321 VFD	Woods Fire	1	Debris burning
2011	Liberty	Hwy 321 VFD	Brush Fire	1	Debris burning
2011	Montgomery	Livingston	Livingston - 661	14	Lightning
2011	Montgomery	Livingston	Livingston - 662	1	Lightning
2011	Liberty	Livingston	Livingston - 663	5	Lightning
2011	Brazoria	Manvel VFD	grass fire	1	Power Lines
2011	Walker	Dodge VFD	110 Hilltop Lane	1	Debris burning
2011	Walker	Dodge VFD	Gordon Jerry Wilson	3	Debris burning
2011	Walker	Riverside VFD	1152054	0.25	Debris burning
2011	Liberty	Woodville	Livingston - 669	35	Debris burning
2011	Walker	Livingston	Livingston - 671	1	Power Lines
2011	Walker	Riverside VFD	128	20	Debris burning
2011	Walker	Livingston	Robinson Creek Fire	130	Smoking
2011	Austin	Cat Spring VFD	Jeffrey	1	Equipment use
2011	Montgomery	Lake Conroe Fire Dept.	Grand Lake Estates	3	Miscellaneous
2011	Montgomery	Livingston	Livingston - 699	5	Debris burning
2011	Austin	Bellville Fire Dept.	Bellville/ Glazear	5	Lightning
2011	Montgomery	Livingston	Livingston - 704	7	Debris burning
2011	Brazoria	Rosharon Volunteer Fire Dept.	FM1462 & CR 606	1	Miscellaneous
2011	Montgomery	Livingston	Livingston - 732	34	Children
2011	Montgomery	Livingston	Livingston - 736	6	Incendiary
2011	Brazoria	Rosharon Volunteer Fire Dept.	17102 FM 521	5	Smoking
2011	Montgomery	River Plantation FD	FM 3083	5	Miscellaneous
2011	Montgomery	Livingston	Livingston - 754	2	Lightning
2011	Montgomery	River Plantation FD	Old Humble Pipeline	2	Miscellaneous
2011	Walker	Dodge VFD	43A Gerome Drive	1	Debris burning
2011	Walker	Livingston	Livingston - 767	1	Lightning
2011	Montgomery	Livingston	Livingston - 771	7	Power Lines
2011	Liberty	Livingston	Livingston - 773	11	Lightning
2011	Walker	Livingston	Livingston - 778	1	Lightning
2011	Montgomery	Livingston	Livingston - 786	1	Power Lines
2011	Walker	Livingston	Livingston - 788	2	Lightning
2011	Austin	New Ulm VFD	Cat Spring VFD Mutual Aid	1	Equipment use
2011	Austin	Cat Spring VFD	Dahl	4	Equipment use
2011	Austin	Bellville Fire Dept.	Bellville/ neumann	1	Power Lines
2011	Brazoria	Rosharon Volunteer Fire Dept.	10507 CR 48	1	Miscellaneous
2011	Montgomery	Livingston	Livingston - 803	1	Incendiary
2011	Montgomery	Livingston	Livingston - 804	10	Miscellaneous
2011	Montgomery	Livingston	Livingston - 810	1	Incendiary
2011	Walker	Livingston	Livingston - 813	85	Miscellaneous
2011	Montgomery	Livingston	Livingston - 815	2	Children
2011	Walker	Livingston	Crabbs Prairie Fire	1008	Equipment use
2011	Montgomery	Livingston	Livingston - 818	1	Children
2011	Liberty	Woodville	Livingston - 819	57	Equipment use
2011	Montgomery	Livingston	Livingston - 820	11	Incendiary
2011	Brazoria	Manvel VFD	grass fire	1	Miscellaneous
2011	Walker	Riverside VFD	11520065	0.25	Power Lines
2011	Liberty	Livingston	Livingston - 826	4	Miscellaneous

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REGIONAL HAZARD MITIGATION PLAN – 2011 UPDATE

Year	County	Dispatch or VFD Name	Fire Name	Acres	Cause
2011	Austin	Bellville Fire Dept.	Bellville/ sealy	2	Power Lines
2011	Austin	Bellville Fire Dept.	cat Spring/ Pless	2	Power Lines
2011	Austin	Cat Spring VFD	Columbus Road	10	Debris burning
2011	Walker	Livingston	Livingston - 832	1	Power Lines
2011	Walker	Riverside VFD	1152066	2	Power Lines
2011	Walker	Livingston	Livingston - 838	1	Power Lines
2011	Walker	Livingston	Livingston - 844	5	Incendiary
2011	Walker	Livingston	Livingston - 846	4	Power Lines
2011	Walker	Livingston	Pinedale Fire	183	Equipment use
2011	Brazoria	Manvel VFD	grass fire	10	Equipment use
2011	Montgomery	Lake Conroe Fire Dept.	Woodforest Parkway North	2	Miscellaneous
2011	Montgomery	Livingston	Livingston - 845	3	Incendiary
2011	Montgomery	Livingston	Livingston - 849	9	Miscellaneous
2011	Montgomery	Livingston	Tamina Fire	77	Miscellaneous
2011	Montgomery	Livingston	Riley Road Fire	19960	Lightning
2011	Walker	Livingston	Hopewell Fire	1035	Miscellaneous
2011	Montgomery	Livingston	Livingston - 852	25	Equipment use
2011	Brazoria	Rosharon Volunteer Fire Dept.	CR 528 @ Old Coffee Lake Drive	5	Miscellaneous
2011	Waller	Navasota FD	Ceader Creek	10	Miscellaneous
2011	Montgomery	Livingston	Livingston - 855	5	Miscellaneous
2011	Austin	New Ulm VFD	Mutual Aid Given	2	Power Lines
2011	Austin	Bellville Fire Dept.	Bellville/ Oil Field	10	Power Lines
2011	Brazoria	Rosharon Volunteer Fire Dept.	2827 Pearce Lane	1.25	Miscellaneous
2011	Waller	Mt. Zion Community Volunteer Fire Fighting Assoc.	Brush Fire	2	Debris burning
2011	Montgomery	Livingston	Livingston - 872	4	Incendiary
2011	Brazoria	Manvel VFD	grass fire	0.5	Equipment use
2011	Brazoria	Manvel VFD	grass fire	0.75	Equipment use
2011	Austin	Bellville Fire Dept.	Bellville/ Reincke	10	Equipment use
2011	Montgomery	Livingston	Livingston - 882	1	Incendiary
2011	Montgomery	Livingston	Livingston - 891	1	Incendiary
2011	Brazoria	Freeport Fire Dept.	Port Freeport	0.25	Smoking
2011	Brazoria	Rosharon Volunteer Fire Dept.	Hwy 35 S @ CR 881	300	Miscellaneous
2011	Brazoria	Manvel VFD	grass fire	0.5	Miscellaneous
2011	Walker	Livingston	Third Fire	466	Lightning
2011	Montgomery	Livingston	Livingston - 901	5	Miscellaneous
2011	Brazoria	County Road 143 VFD	mutual aid grass fire	1	Power Lines
2011	Montgomery	River Plantation FD	Tower Glen	1	Miscellaneous
2011	Austin	Bellville Fire Dept.	Bellville/ Jasek	20	Equipment use
2011	Liberty	Livingston	Livingston - 903	3	Miscellaneous
2011	Montgomery	Livingston	Livingston - 915	1	Debris burning
2011	Walker	Livingston	Livingston - 916	1	Lightning
2011	Walker	Livingston	Livingston - 920	1	Lightning
2011	Walker	Livingston	Livingston - 921	1	Lightning
2011	Walker	Livingston	Livingston - 923	57	Lightning
2011	Montgomery	Livingston	Livingston - 922	2	Lightning
2011	Montgomery	Livingston	Livingston - 925	1	Lightning

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Year	County	Dispatch or VFD Name	Fire Name	Acres	Cause
2011	Montgomery	Livingston	Livingston - 929	1	Miscellaneous
2011	Walker	Livingston	Livingston - 932	1	Incendiary
2011	Walker	Livingston	Livingston - 940	1	Miscellaneous
2011	Waller	Mt. Zion Community Volunteer Fire Fighting Assoc.	Fire - Grass	1	Smoking
2011	Waller	Mt. Zion Community Volunteer Fire Fighting Assoc.	Fire-Grass	0.5	Lightning
2011	Walker	Livingston	Livingston - 947	20	Power Lines
2011	Montgomery	Livingston	Livingston - 950	1	Lightning
2011	Walker	Livingston	Livingston - 954	7	Lightning
2011	Liberty	Livingston	Livingston - 962	65	Lightning
2011	Walker	Livingston	Livingston - 961	13	Lightning
2011	Liberty	Livingston	Livingston - 964	1	Lightning
2011	Walker	Thomas Lake Rd. VFD	FM 980 @	0.1	Smoking
2011	Walker	Livingston	Livingston - 965	2	Miscellaneous
2011	Liberty	Woodville	Livingston - 967	1	Equipment use
2011	Walker	Dodge VFD	John Webb	2	Debris burning
2011	Walker	Livingston	Livingston - 999	2	Power Lines
2011	Walker	Dodge VFD	415 Paul Dixon	1	Debris burning
2011	Walker	Livingston	Livingston - 1010	5	Equipment use
2011	Walker	Livingston	Livingston - 1011	1	Lightning
2011	Montgomery	Livingston	Livingston - 1014	4	Miscellaneous
2011	Walker	Dodge VFD	45 Hickory Lane	1	Debris burning
2011	Austin	New Ulm VFD	Grass Fire (Industry VFD)	2	Debris burning
2011	Walker	Dodge VFD	Rafael Sagastizado	1	Debris burning
2011	Montgomery	Livingston	Livingston - 1023	1	Debris burning
2011	Walker	Dodge VFD	1931 US Hwy 190	1	Debris burning
2011	Montgomery	Livingston	Livingston - 1029	3	Debris burning
2011	Walker	Dodge VFD	Charles Wheeler	1	Debris burning
2011	Walker	Livingston	Livingston - 1030	1	Debris burning
2011	Brazoria	Angleton Fire Dept	2011-000488	0.5	Debris burning
2011	Walker	Bedias Volunteer Fire Dept.	Eubanks DR	1	Equipment use

Source: Texas Forest Service, August 2012

Table 4.2-7 through 4.2-9 summarize the wildfire data from Table 4.2-6 for each of the participating seven counties.

Table 4.2-7 Number of Wildfires by County from 2005-2011

County	2005	2006	2007	2008	2009	2010	2011	Total
Austin	0	3	1	2	35	14	43	98
Brazoria	0	1	4	51	149	16	47	268
Chambers	1	13	9	13	16	2	7	61
Liberty	44	45	5	20	11	20	62	207
Montgomery	80	92	8	33	45	44	109	411
Walker	43	78	12	41	53	32	92	351
Waller	2	2	0	4	6	4	11	29
Total	170	234	39	164	315	132	371	1425

Source: Texas Forest Service, August 2012

Table 4.2-8 Causes of Wildfires by County from 2005-2011

County	Camp-fire	Children	Debris burning	Equipment use	Incendiary	Lightning	Misc	Power Lines	Railroads	Smoking	Total
Austin	2	0	41	19	3	1	10	14	2	6	98
Brazoria	2	3	157	15	5	4	61	7	2	12	268
Chambers	1	2	28	5	14	0	7	1	2	1	61
Liberty	1	1	124	8	23	17	22	6	2	3	207
Montgomery	11	18	190	14	38	19	97	17	3	4	411
Walker	4	3	163	18	23	30	75	29	1	5	351
Waller	2	0	16	2	1	1	5	0	0	2	29
Total	23	27	719	81	107	72	277	74	12	33	1,425

Source: Texas Forest Service, August 2012

Table 4.2-9 Acres Burned by County from 2005-2011

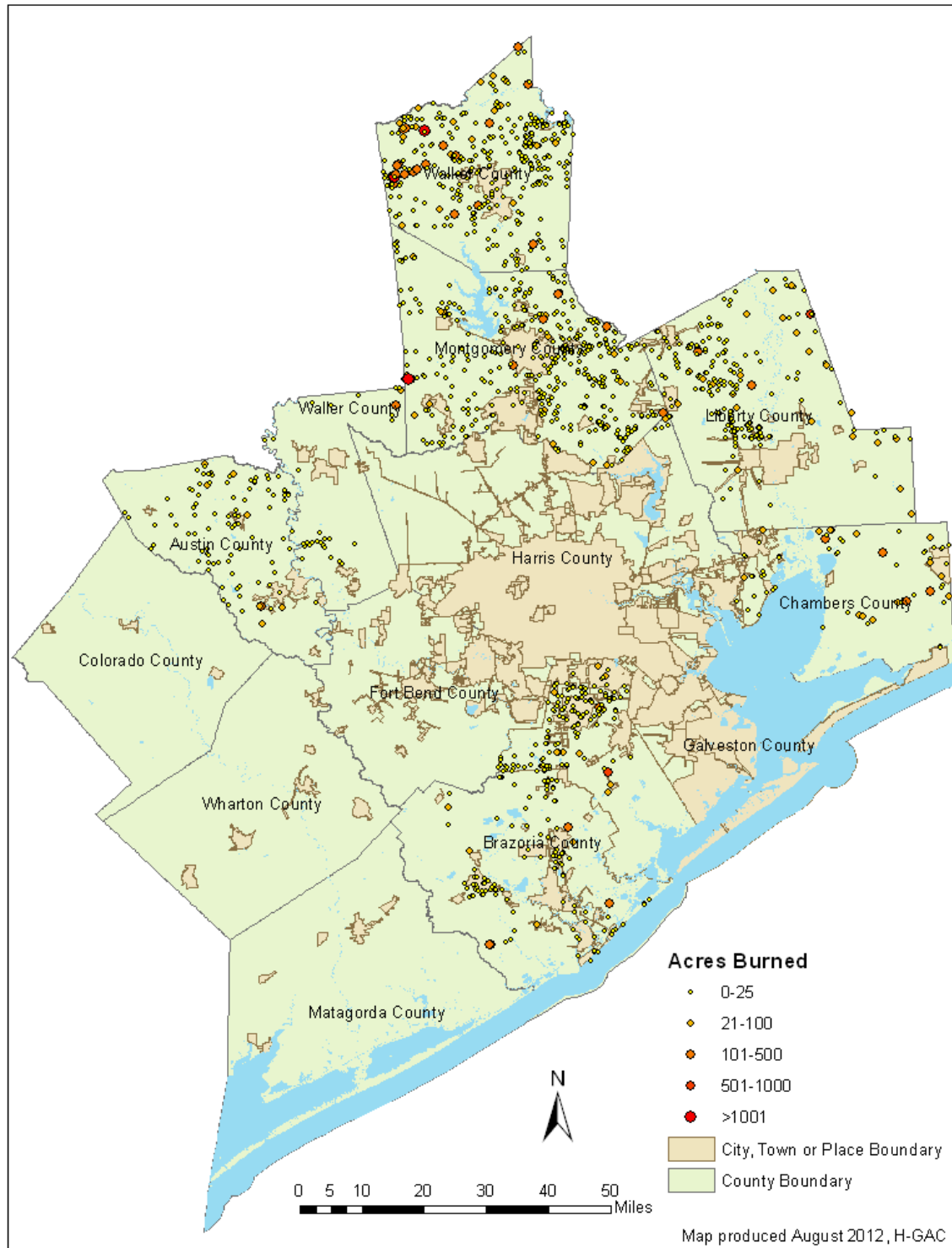
County	2005	2006	2007	2008	2009	2010	2011	Total
Austin	0	178	30	21	264.50	74.50	288.55	856.55
Brazoria	0	560	5.60	175.50	1,335	278.75	529.50	2,884.35
Chambers	2	92.51	12.60	486.50	1,226	215	106	2,140.61
Liberty	664.35	235.72	79	238	189	249	1,542.50	3,197.57
Montgomery	658.5	422.8	138	426	787	234.3	21,048.7	23,715.15
Walker	488.37	1,064.70	139.50	1,550.40	861.06	233.07	6,271.75	10,608.85
Waller	343	12	0	28	19.75	2.50	32.75	438
Total	4,161.22	4,571.68	2,411.70	4,933.40	6,691.31	3,297.07	31,830.70	43,841.08

Source: Texas Forest Service, August 2012

The wildfires in Austin County from 2005-2011 occurred predominantly in forested and cultivated areas. In Brazoria County, wildfires during this period occurred in a mix of grasslands, woody wetlands, herbaceous wetlands, cultivated areas, and developed areas. The wildfires in Chambers County during this period occurred in predominantly cultivated and grassland areas. In Liberty County, wildfires occurred predominantly in forested and woody wetland areas. The wildfires in Montgomery County occurred predominantly in forested areas. In Walker County, wildfires occurred predominantly in forested areas and some cultivated lands and grasslands. The wildfires occurred in Waller County in a mix of forested and cultivated lands.

Figure 4.2-14 depicts the wildfires reported to and suppressed by the Texas Forest Service and local fire departments.

Figure 4.2-14
2005 – 2011 Wildfire Locations Map

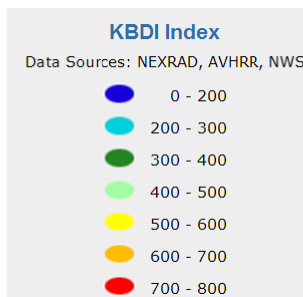


Source: Texas Forest Service

According to the previous occurrences data, Montgomery County has the highest occurrences of wildfires, relative to other counties, followed by Walker, Brazoria and Liberty counties.

Keetch-Byram Drought Index (KBDI) is an index used to determining forest fire potential. The drought index is based on a daily water balance, where a drought factor is balanced with precipitation and soil moisture (assumed to have a maximum storage capacity of 8 inches) and is expressed in hundredths of an inch of soil moisture depletion. **Figure 4.2-15** displays the KBDI legend. Each color on the map represents the drought index at that location. The drought index ranges from 0 to 800, where a drought index of 0 represents no moisture depletion, and an index of 800 represents absolutely dry conditions.

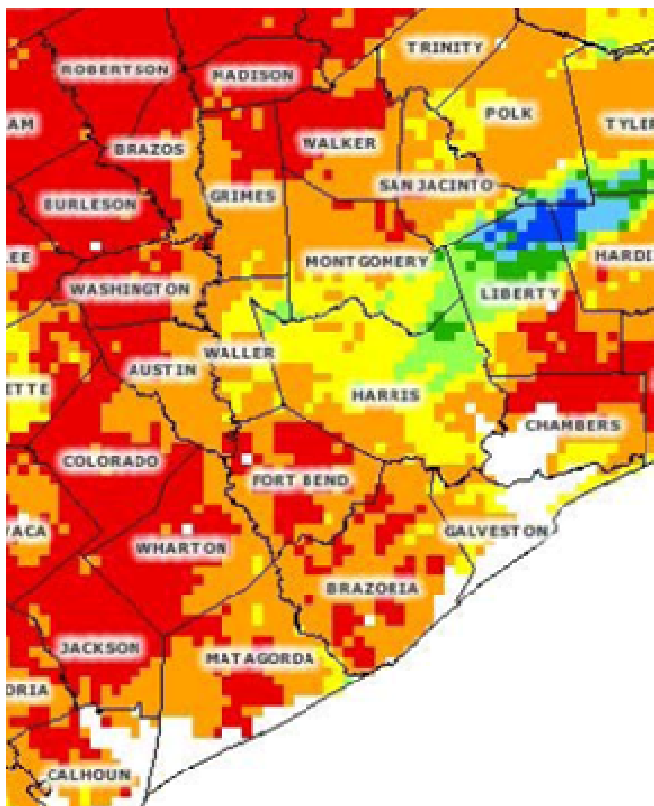
Figure 4.2-15
Keetch-Byram Drought Index (KBDI) Values



Source: Texas Weather Connection, Texas A&M University

The map in **Figure 4.2-16** represents the KBDI values for the region on November 15, 2011.

Figure 4.2-16
Keetch-Byram Drought Index (KBDI) Results for H-GAC Region, November 15, 2011



Source: Texas Weather Connection, Texas A&M University, November 15, 2011. <http://twc.tamu.edu/maps/kbdi>

Table 4.2-10 represents the KBDI values obtained for the region on November 15, 2011.

Table 4.2-10
Keetch-Byram Drought Index (KBDI) Values for H-GAC Region, November 15, 2011

County	KBDI Mean	KBDI Maximum	KBDI Minimum
Austin	671.7789	742	588
Brazoria	673.823	740	542
Chambers	677.2621	754	525
Liberty	526.6616	773	84
Montgomery	597.1648	714	380
Walker	695.4048	752	598
Waller	602.908	672	418

Source: Texas Weather Connection, Texas A&M University, November 15, 2011. <http://twc.tamu.edu/maps/kbdi>

Although local weather, vegetative cover and topographic conditions determine the incidence of wildfire, given the conditions in a historical drought year such as 2011, it is likely that the region's participating jurisdictions would continue to experience approximately 520 wildfires per year under similar drought and soil moisture conditions. The potential for wildfire occurrence is also increased by wind. In a year with typical rainfall amounts, the average number of fires to take place in the region's participating jurisdictions is estimated to be approximately 175, with an average of approximately 30 acres burned per wildfire. While the number of historical wildfire occurrences may be low for some areas, the threat is continuous.

Other types of data that can contribute to a fuller understanding of historical extent of wildfires include intensity of flames and type of wildfire (grassland, canopy). At the time of this plan update, these data were not available; however, obtaining more complete wildfire data has been added as one of H-GAC's specific mitigation actions.

The preliminary wildfire risk assessment conducted using the Southern Fire Risk Assessment System for the seven H-GAC counties covered under this plan are described in detail in Section 4.3.

Drought

Recent drought events which have affected the H-GAC region include:

Summer 1996

From April through June 1996, rainfall totals in the Houston area ran more than 10 inches below normal. Other areas to the west and north reported rainfall totals 75 percent below the normal for the first six months of the year. Damage from the extended drought began to reach record proportions as many crops were lost and livestock were sold due to the lack of available fodder. Property damages and agricultural losses reached \$10 million and \$100 million in southeast Texas respectively.

May – August 1998

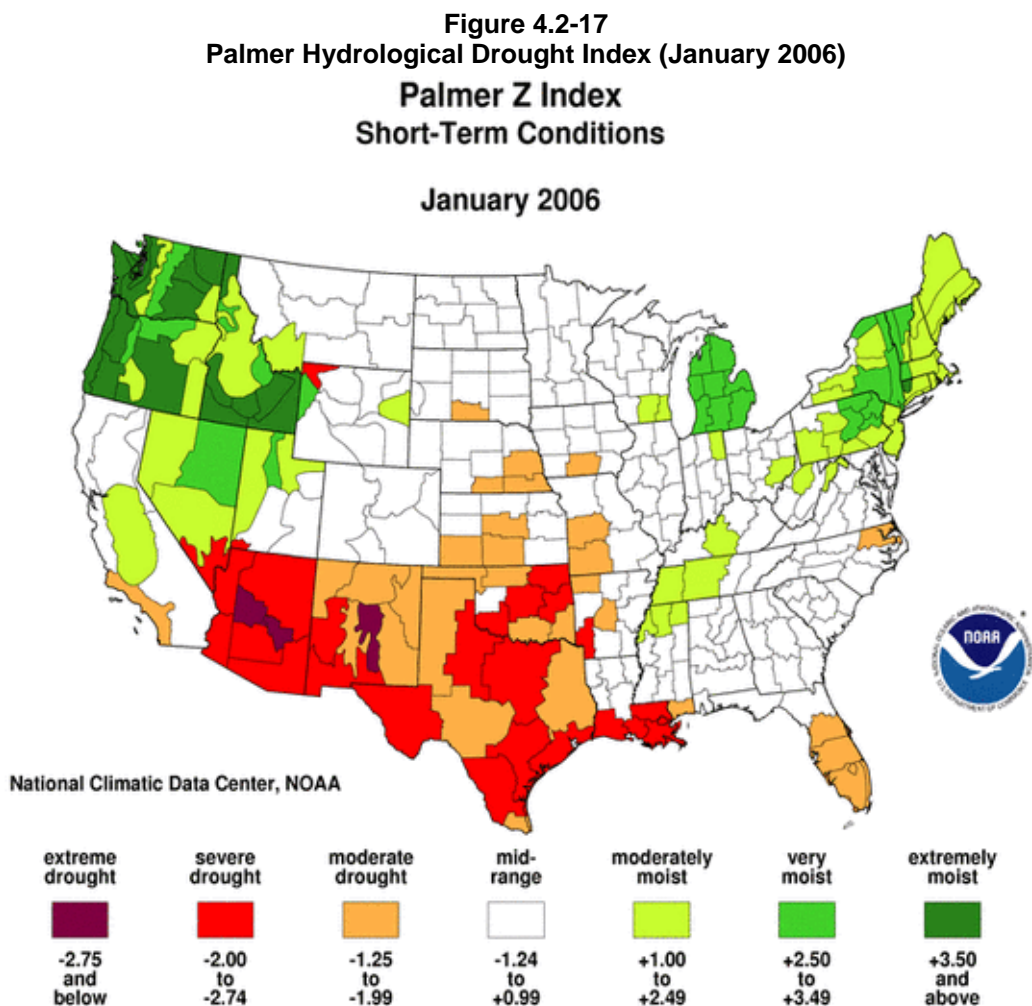
Over 20 people across the region lost their lives due to the extreme heat, and property and crop damage averaged \$8.3 million per county.

Summer 2000

The combination of excessive heat and dryness resulted in several wildfires during the first week of the month, including a 4,500 acre fire in Liberty County.⁴ By the end of September, damage estimates to cotton, wheat, and forage crops reached \$102.3 million in southeast Texas.

January - August 2006

Severe drought conditions gripped much of Oklahoma and Texas in September 2005 through mid-2006. The counties in the H-GAC region lie in the Texas Climate Divisions 4 (East Texas) and 8 (Upper Coast). The average monthly Palmer Hydrological Drought Index (PHDI) for Texas Divisions 4, 7, and 8 fell below -2 and -2.75 respectively, which according to the PHDI scale is a "moderate to severe drought". **Figure 4.2-17** depicts the moderate to severe drought conditions in Texas in January 2006.

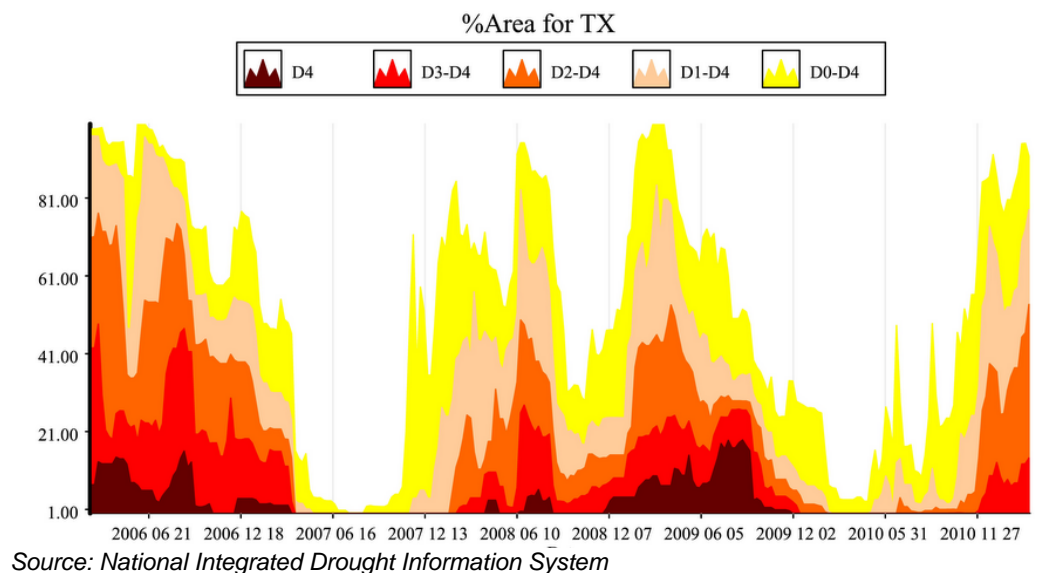


Source: <https://lwf.ncdc.noaa.gov/sotc/drought/2006/1>

Figure 4.2-18 provides the drought indices (by percent area) for the state of Texas between 2006 and 2010.

⁴ These events were not reported to the National Climatic Data Center, and are therefore not referenced under the Wildfire heading in this section.

Figure 4.2-18
2006 – 2010 Drought Index (Percent Area) for Texas

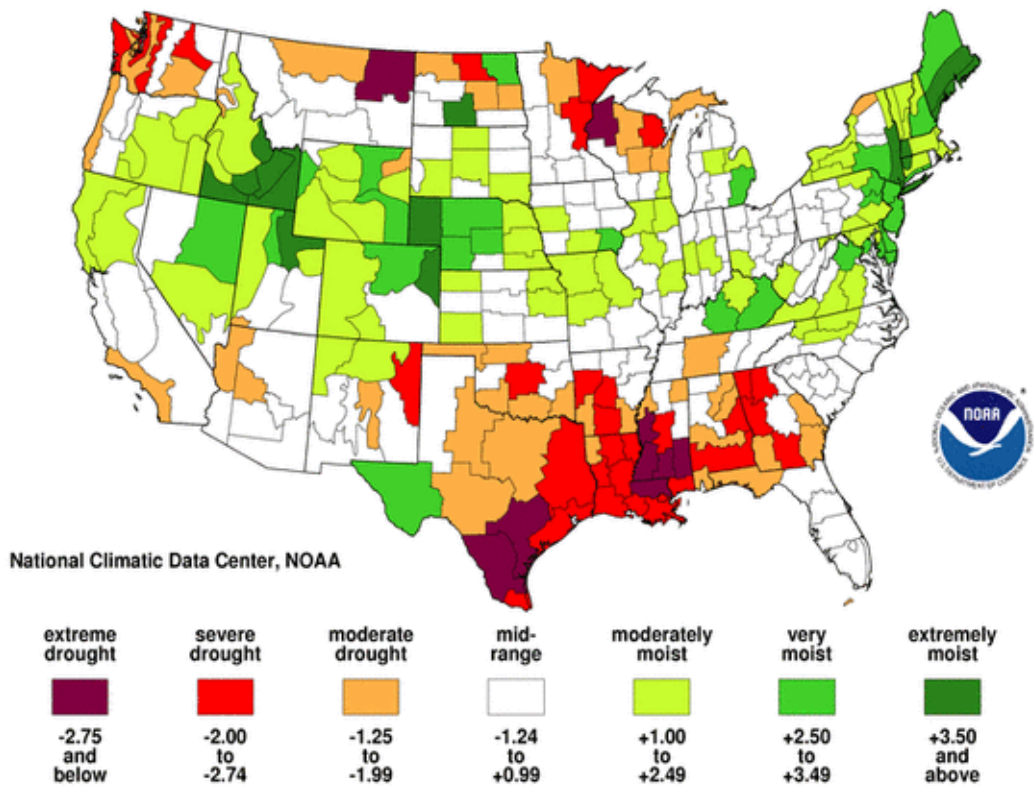


Summer 2009 - 2011

A combination of record-high heat and record-low rainfall pushed south and central Texas into the region's deepest drought in a half century, with \$3.6 billion of crop and livestock losses in 2009. The heat wave drastically reduced reservoirs and forced about 230 public water systems to declare mandatory water restrictions. Low water levels in lakes and rivers impact tourism as well, by making summer boating, swimming and fishing activities impossible in some places. High salinity levels and red tides due to the reduction in freshwater inflows in Galveston Bay and the Gulf of Mexico threatened oyster and other shellfish production **Figures 4.2-19** and **4.2-20** depict the severe to extreme drought conditions in the H-GAC region in the summer of 2009 and 2011. The drought of 2009 continued into 2010 and 2011. Note that 100% all 13 of the H-GAC region's counties are in D4 Exceptional drought conditions in Figure 4.2-20.

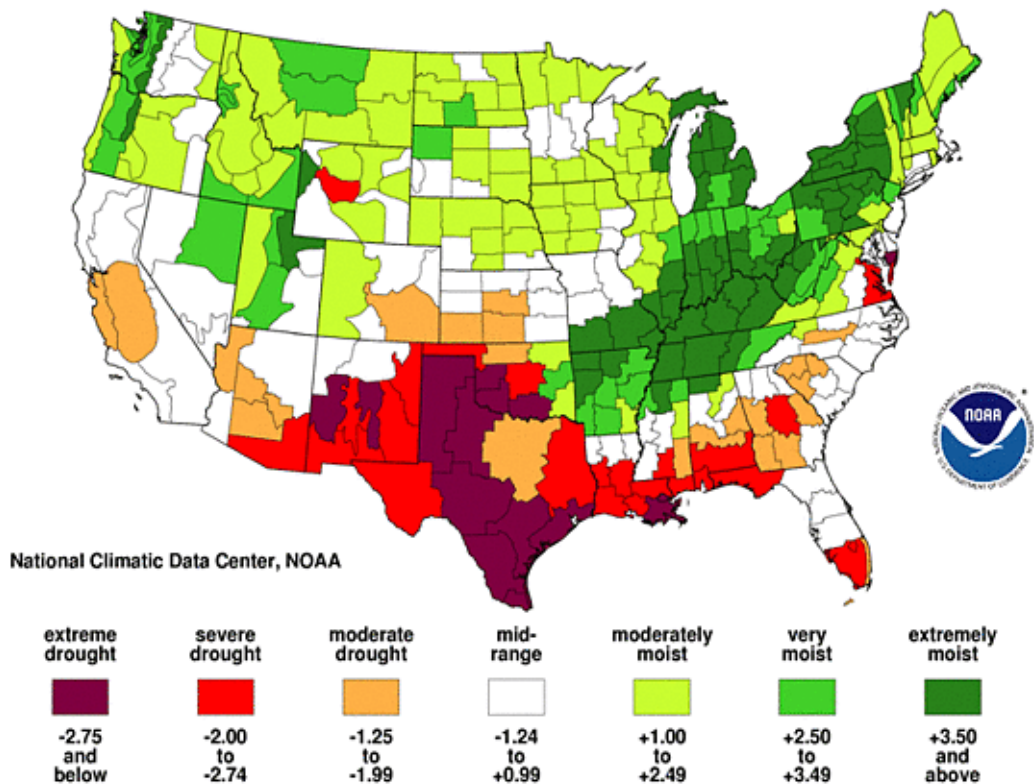
Figure 4.2-19
Palmer Hydrological Drought Index (June 2009)
Palmer Z Index
Short-Term Conditions

June 2009



Source: <https://lwf.ncdc.noaa.gov/sotc/drought/2009/6>

Figure 4.2-20
Palmer Hydrological Drought Index (April 2011)
Palmer Z Index
Short-Term Conditions
April 2011



Source: <https://lwf.ncdc.noaa.gov/sotc/drought/2011/4>

Figures 4.2-21 and 4.2-22 depict the moderate to extreme drought conditions in the H-GAC region in the July 2009 and October 2011, respectively.

Figure 4.2-21
U.S Drought Monitor (July 2009)

U.S. Drought Monitor

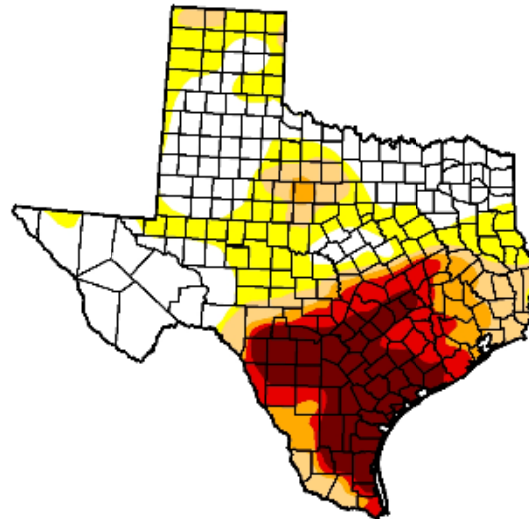
Texas

July 7, 2009
Valid 7 a.m. EST

	Drought Conditions (Percent Area)					
	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	37.7	62.3	39.4	28.8	22.4	14.1
Last Week (06/30/2009 map)	28.2	71.8	38.4	27.9	20.0	11.1
3 Months Ago (04/14/2009 map)	14.9	85.1	68.2	50.6	25.1	11.5
Start of Calendar Year (01/06/2009 map)	41.7	58.3	24.5	15.0	9.1	4.2
Start of Water Year (10/07/2008 map)	67.2	32.8	20.5	11.0	3.6	0.0
One Year Ago (07/08/2008 map)	12.4	87.6	64.0	44.9	22.6	4.6

Intensity:

 D0 Abnormally Dry	 D3 Drought - Extreme
 D1 Drought - Moderate	 D4 Drought - Exceptional
 D2 Drought - Severe	



*The Drought Monitor focuses on broad-scale conditions.
Local conditions may vary. See accompanying text summary
for forecast statements*

<http://drought.unl.edu/dm>



Released Thursday, July 9, 2009
Author: R. Tinker, CPC/NOAA

Figure 4.2-22
U.S Drought Monitor (October 2011)

U.S. Drought Monitor

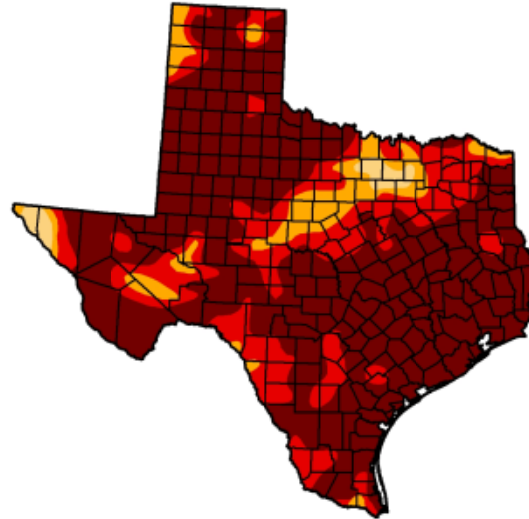
Texas

October 25, 2011
Valid 7 a.m. EST

	Drought Conditions (Percent Area)					
	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	0.00	100.00	100.00	98.34	90.87	69.61
Last Week (10/18/2011 map)	0.00	100.00	100.00	98.60	91.87	72.61
3 Months Ago (07/26/2011 map)	0.00	100.00	99.85	96.88	91.65	75.23
Start of Calendar Year (12/28/2010 map)	7.89	92.11	69.43	37.46	9.59	0.00
Start of Water Year (09/27/2011 map)	0.00	100.00	100.00	99.16	96.65	85.75
One Year Ago (10/19/2010 map)	53.55	46.45	9.48	0.96	0.08	0.00

Intensity:

 D0 Abnormally Dry	 D3 Drought - Extreme
 D1 Drought - Moderate	 D4 Drought - Exceptional
 D2 Drought - Severe	



*The Drought Monitor focuses on broad-scale conditions.
Local conditions may vary. See accompanying text summary
for forecast statements.*

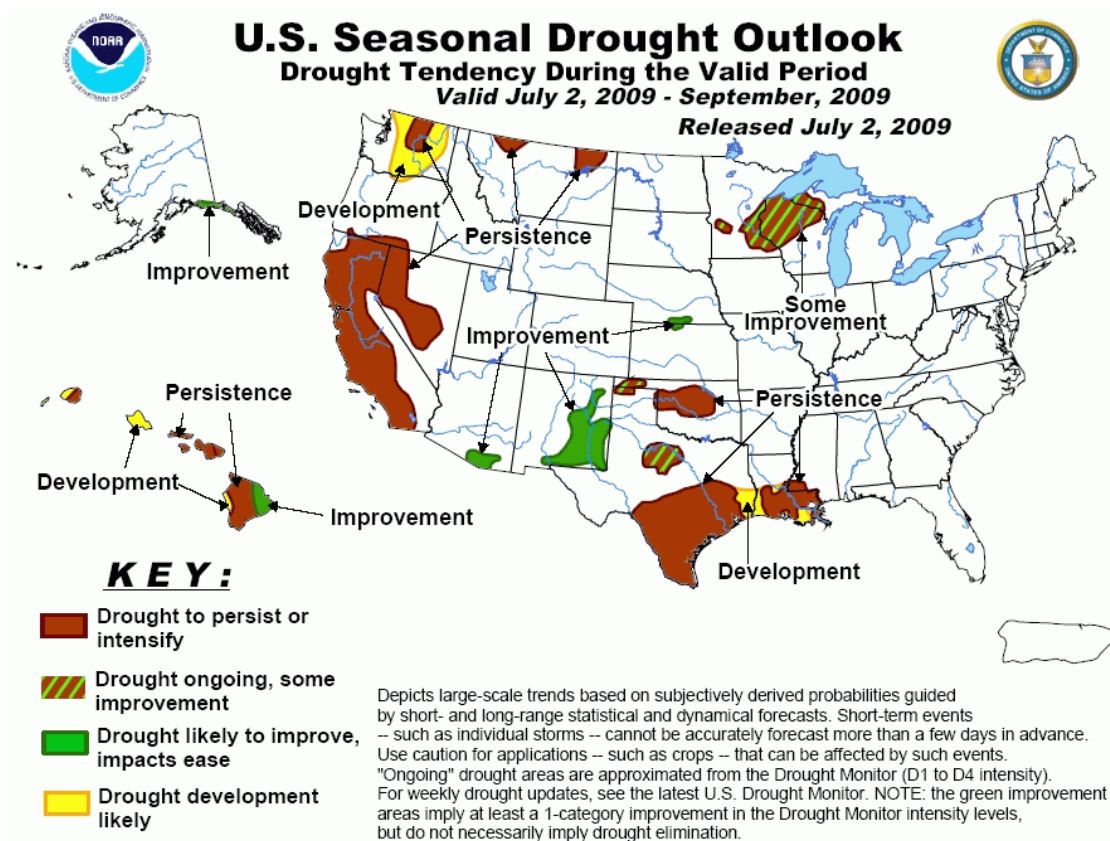
<http://droughtmonitor.unl.edu>



Released Thursday, October 27, 2011
David Miskus, NOAA/NWS/NCEP/CPC

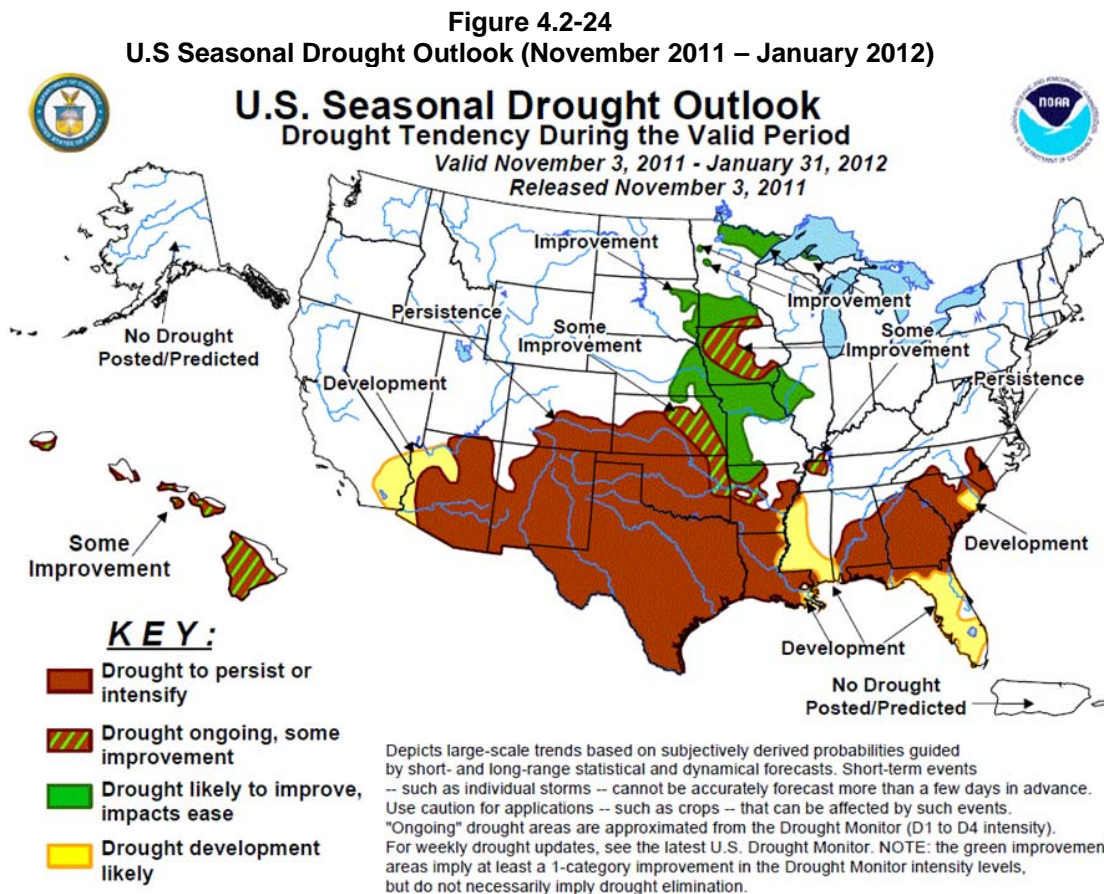
Figure 4.2-23 depicts the seasonal drought outlook from July through September 2009. The majority of the region's drought was forecast to persist or intensify.

Figure 4.2-23
U.S. Seasonal Drought Outlook (July - September 2009)



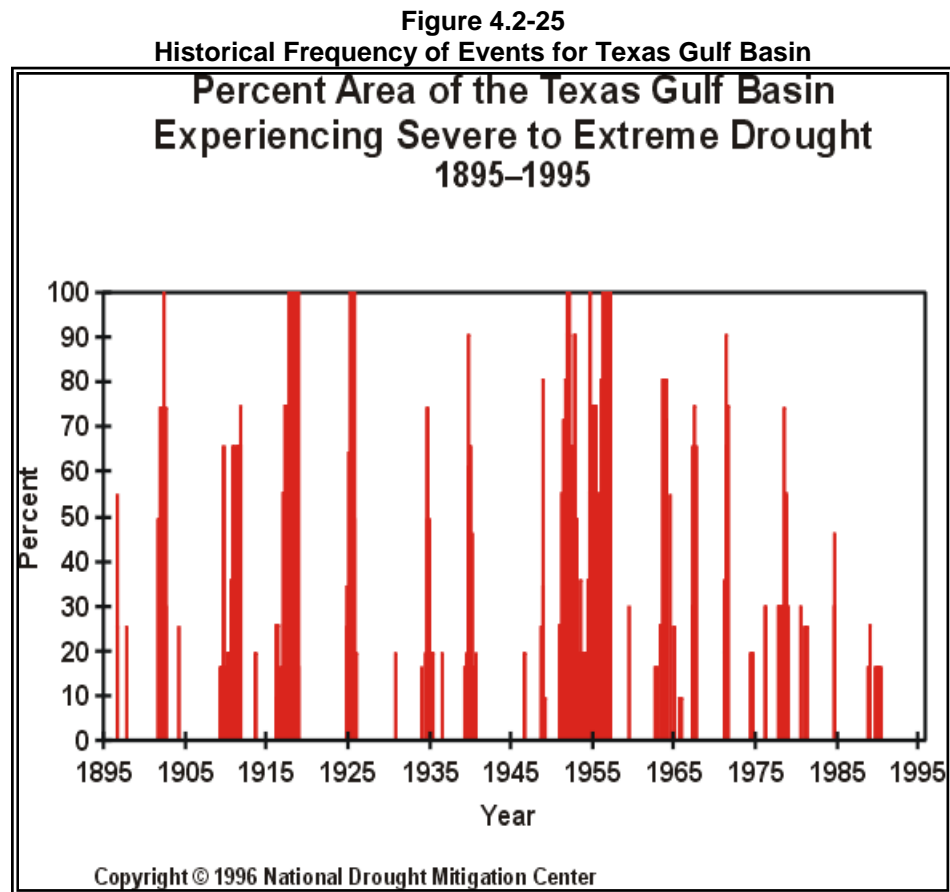
Source: NOAA

Figure 4.2-24 depicts the seasonal drought outlook from November 2011 through January 2012. The drought tendency for the region during that period is for the drought to persist or intensify.



Source: NOAA

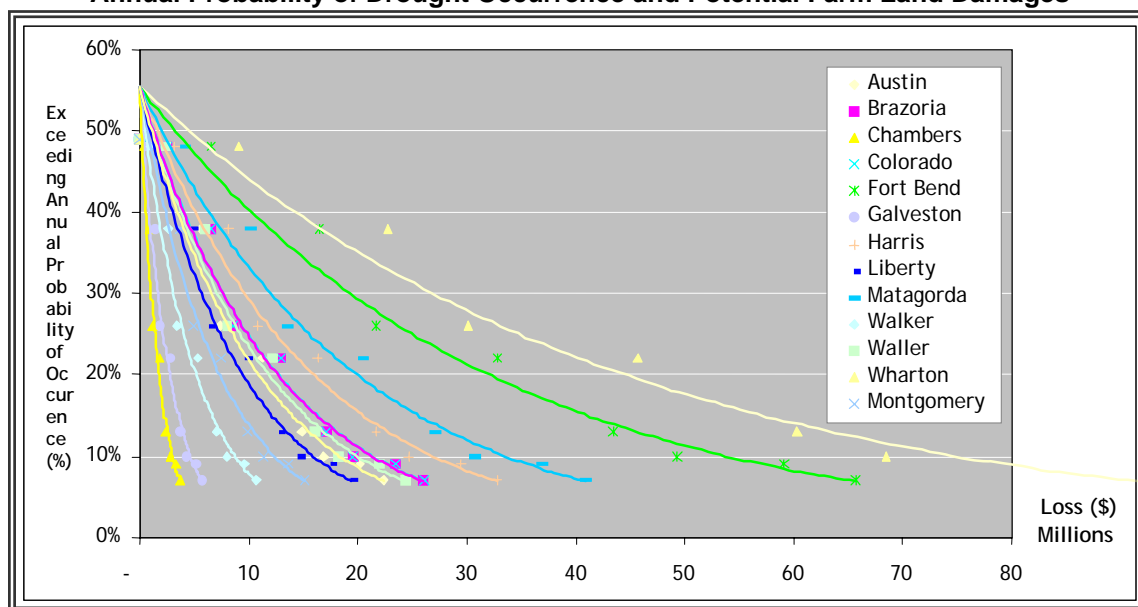
Figure 4.2-25 shows the historical frequency of drought events in the Texas Gulf Basin from 1895 to 1995.



The drought hazard is difficult to map because drought affects large areas, most times uniformly. The Texas Water Development Board maintains a webpage that provides monthly drought presentations, drought indices, and links to the National Drought Monitor website. The National Weather Service provides maps predicting drought in their Climate Prediction Center web page.

Figure 4.2-26 shows the annual probability of drought occurrence and potential farmland damages for each county in the H-GAC planning area. In any given year, most of the H-GAC counties have over a 50 percent chance of experiencing a drought.

Figure 4.2-26
Annual Probability of Drought Occurrence and Potential Farm Land Damages



According to an article published September 29, 2011 by the Texas State Climatologist, the Texas drought could last through 2016 or even until 2020. According to the Texas State Climatologist, the possible cause of the multi-year drought is the likely establishment of a new La Niña in the central Pacific Ocean. A La Niña is formed when colder than usual ocean temperatures form in the central Pacific, and these tend to create wetter than normal conditions in the Pacific Northwest but also drier than normal conditions in the Southwest. No one portion of the region is more at risk to drought than any other part of the region, therefore the entire region is in a drought hazard area and can be expected to experience between two and seven droughts every ten years. The region can expect an “extreme drought” as defined by the Palmer Z index.

Expansive Soils

As mentioned in section 4.1, expansive soils can be problematic during drought. It is differential expansion that causes damage. If the entire area under a foundation or road maintained the same moisture content, the entire structure would rise uniformly, and there would be no damage. Residential construction generally has more problems than commercial, but both experience significant losses. The foundation type most prevalent in Texas, slab on grade, is also the most susceptible to damage from expansive clays.

Commercial construction has mitigation measures applied more commonly than residential construction, and is commonly completely surrounded by waterproof paving, which acts to maintain the soil moisture at a constant level without additional irrigation. Residential losses account for the bulk of damages.

The great increase in damages in Texas caused by problems with expansive soils can be traced to the rise in residential slab-on-grade construction which began to accelerate in the 1960s. Prior to that time, most residential construction in Texas was pier and beam, with wood siding or other non-masonry covering. This construction style was still susceptible to differential soil expansion, but re-leveling was simply and inexpensively accomplished by shimming the existing piers. The non-masonry siding would warp back to its original alignment without damage. Manufactured homes in Texas also experience these advantages.

Soils expansion extent is measured by the rate of expansion, called linear extensibility. Linear extensibility refers to the change in length of an unconfined clod as moisture content is decreased from a

moist to a dry state. It is an expression of the volume change between the water content of the clod at 1/3- or 1/10-bar tension (33kPa or 10kPa tension) and oven dryness. The volume change is reported as percent change for the whole soil. The amount and type of clay minerals in the soil influence volume change. **Table 4.2-11** shows the percent of the planning area with linear extensibility. Very high linear extensibility rates are 9-30, high are 6-9, moderate are 3-6 and low are 0-3 (Natural Resource Conservation Service). The planning area expects a range of 9%-56% in linear extensibility.

Table 4.2-11
Percent of County with Linear Extensibility

County	Very High	High	Moderate	Low
Austin & Waller*	20%	0%	8%	71%
Brazoria	35%	30%	21%	14%
Chambers	44%	17%	0%	38%
Liberty	21%	18%	9%	52%
Montgomery	8%	0%	2%	90%
Walker	11%	3%	3%	83%
Region	23%	12%	9%	56%

* Austin and Waller counties are included in the same soil survey.

Figures 4.2-27 through 4.2-34 depict the soil swelling potential for the region. Developed areas, which are vulnerable to this hazard, are indicated in the figures. Approximately 29% of soils in the region have very high swelling potential, 20% have moderate to high swelling potential and 51% have low swelling potential. Very high swelling potential soils are defined by having 35% or more of vertisols, a type of soil with a high content of expansive clay. Moderate to high swelling potential soils consist of 20 to 34% vertisols. Low swelling potential soils contain less than 20% vertisols.

Figure 4.2-27 Soil Swelling Potential for the H-GAC Region

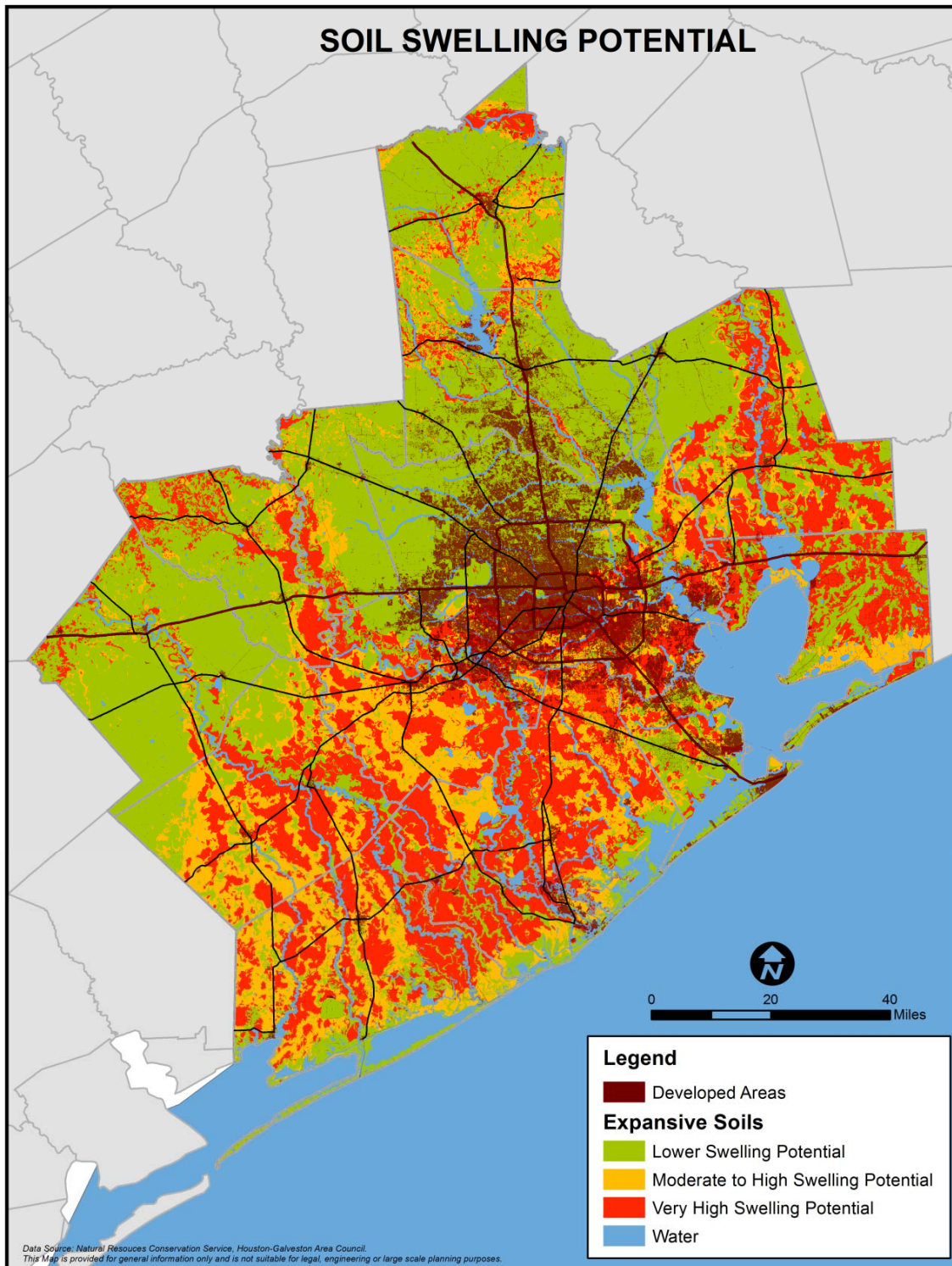


Figure 4.2-28 Soil Swelling Potential for Austin County

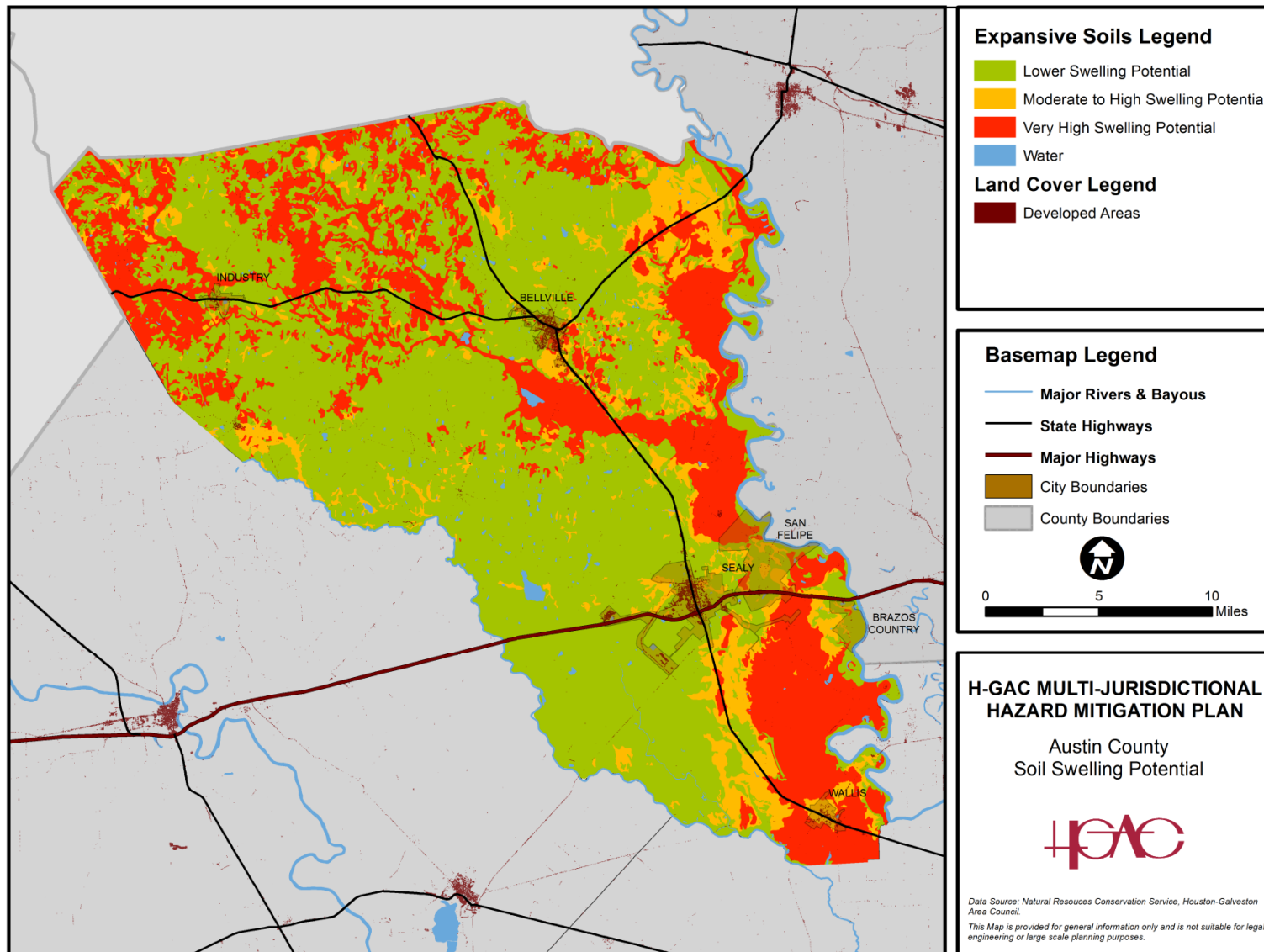


Figure 4.2-29 Soil Swelling Potential for Brazoria County

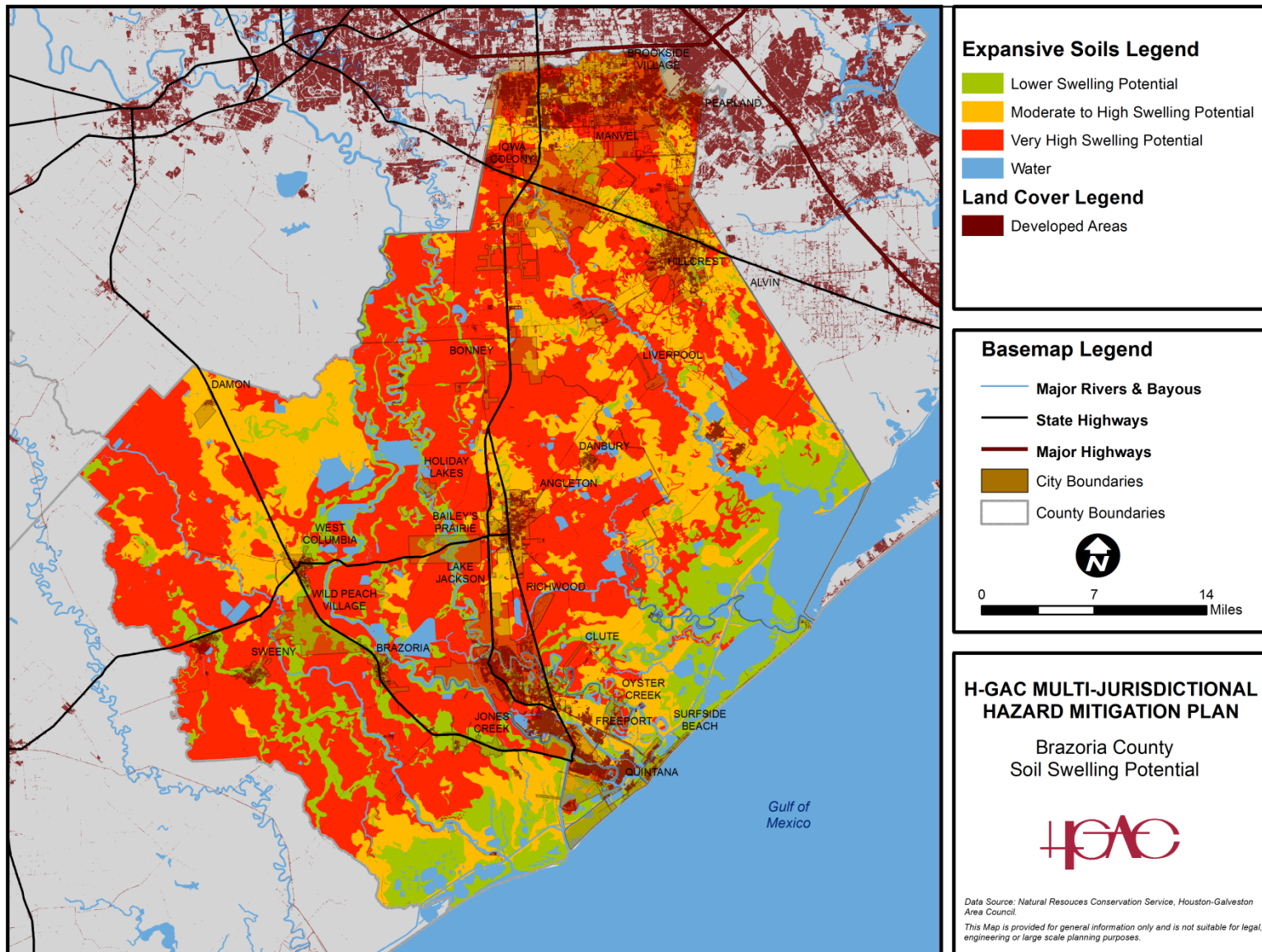


Figure 4.2-30 Soil Swelling Potential for Chambers County

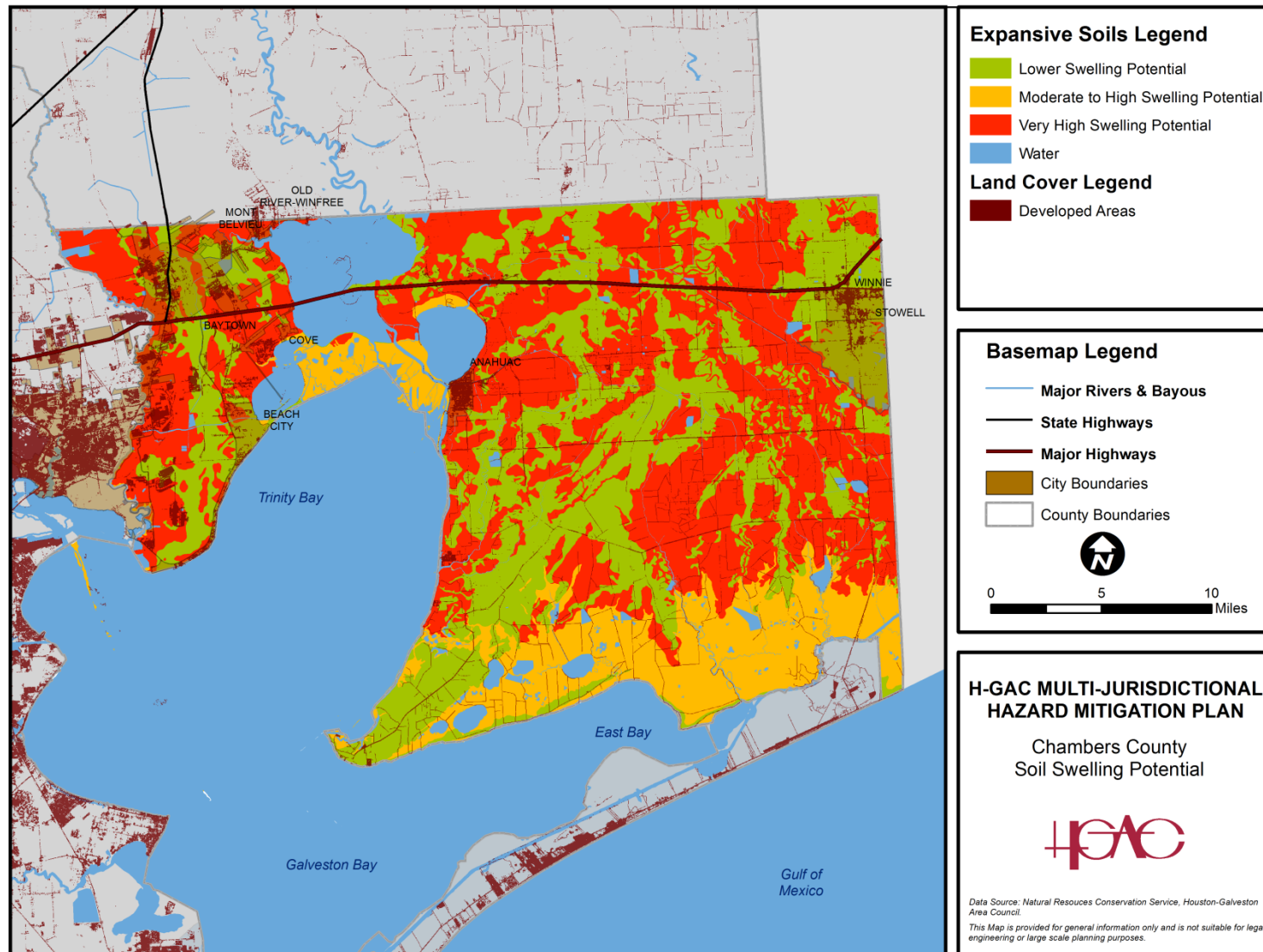


Figure 4.2-31 Soil Swelling Potential for Liberty County

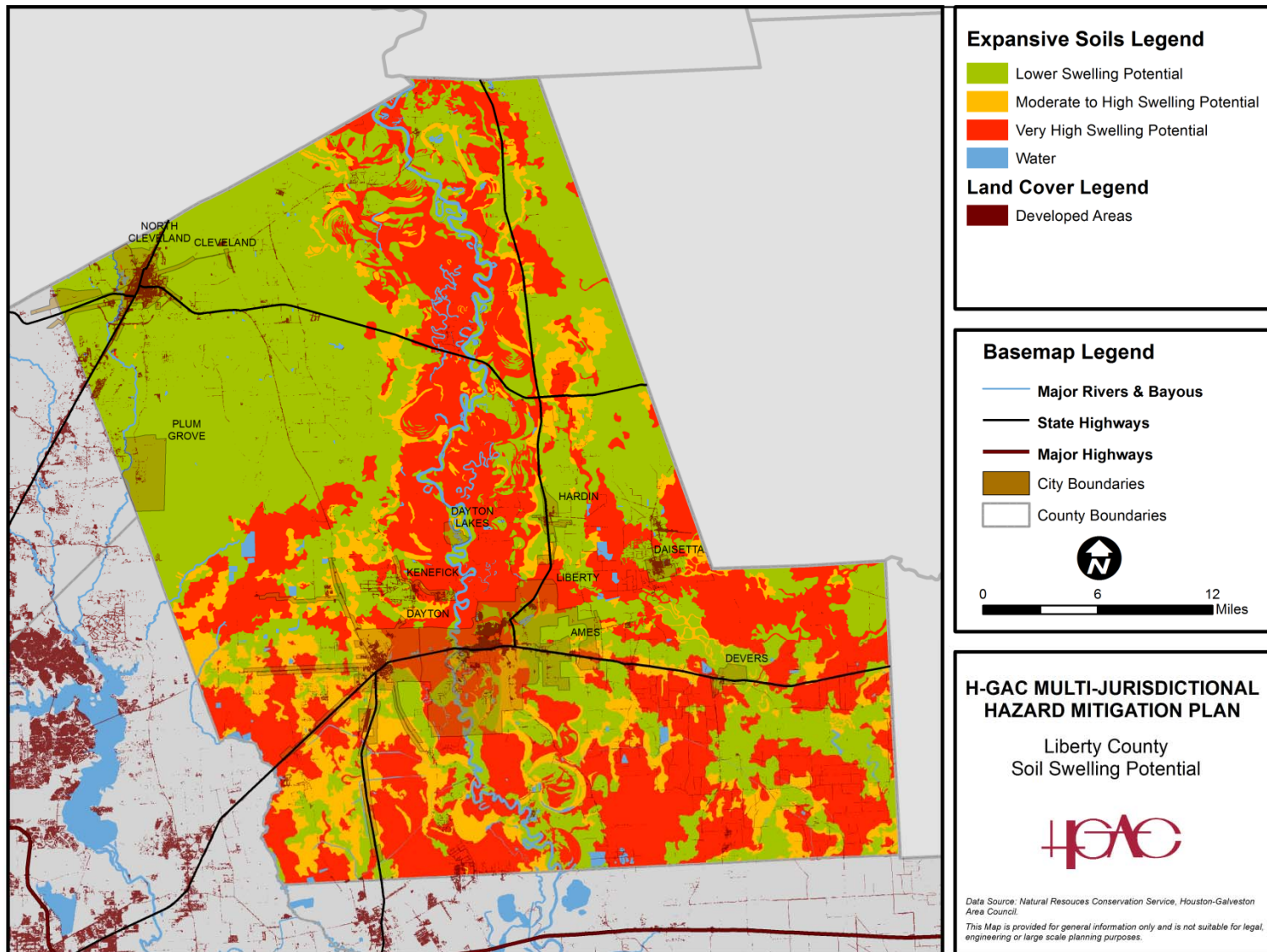


Figure 4.2-32 Soil Swelling Potential for Montgomery County

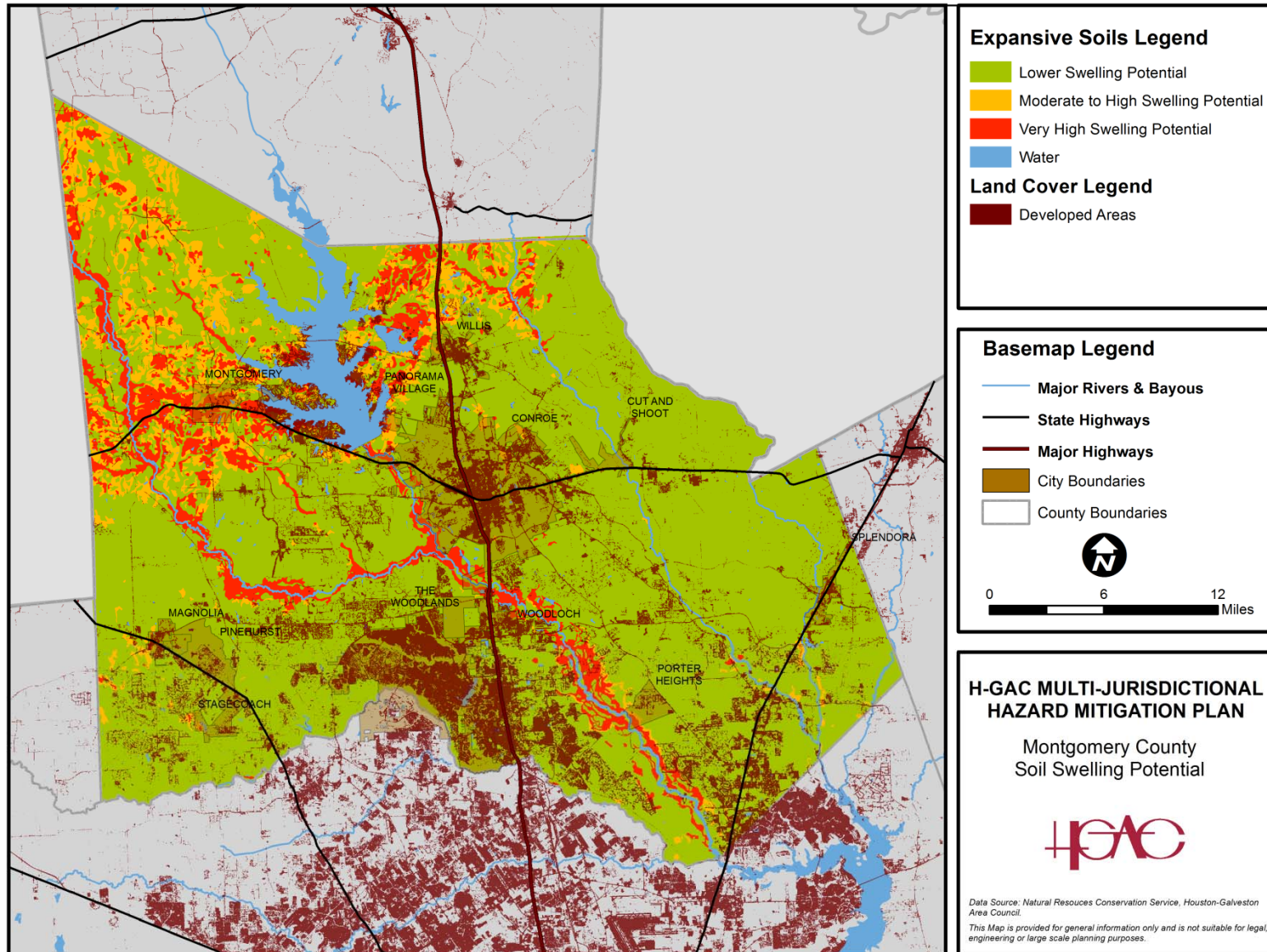


Figure 4.2-33 Soil Swelling Potential for Walker County

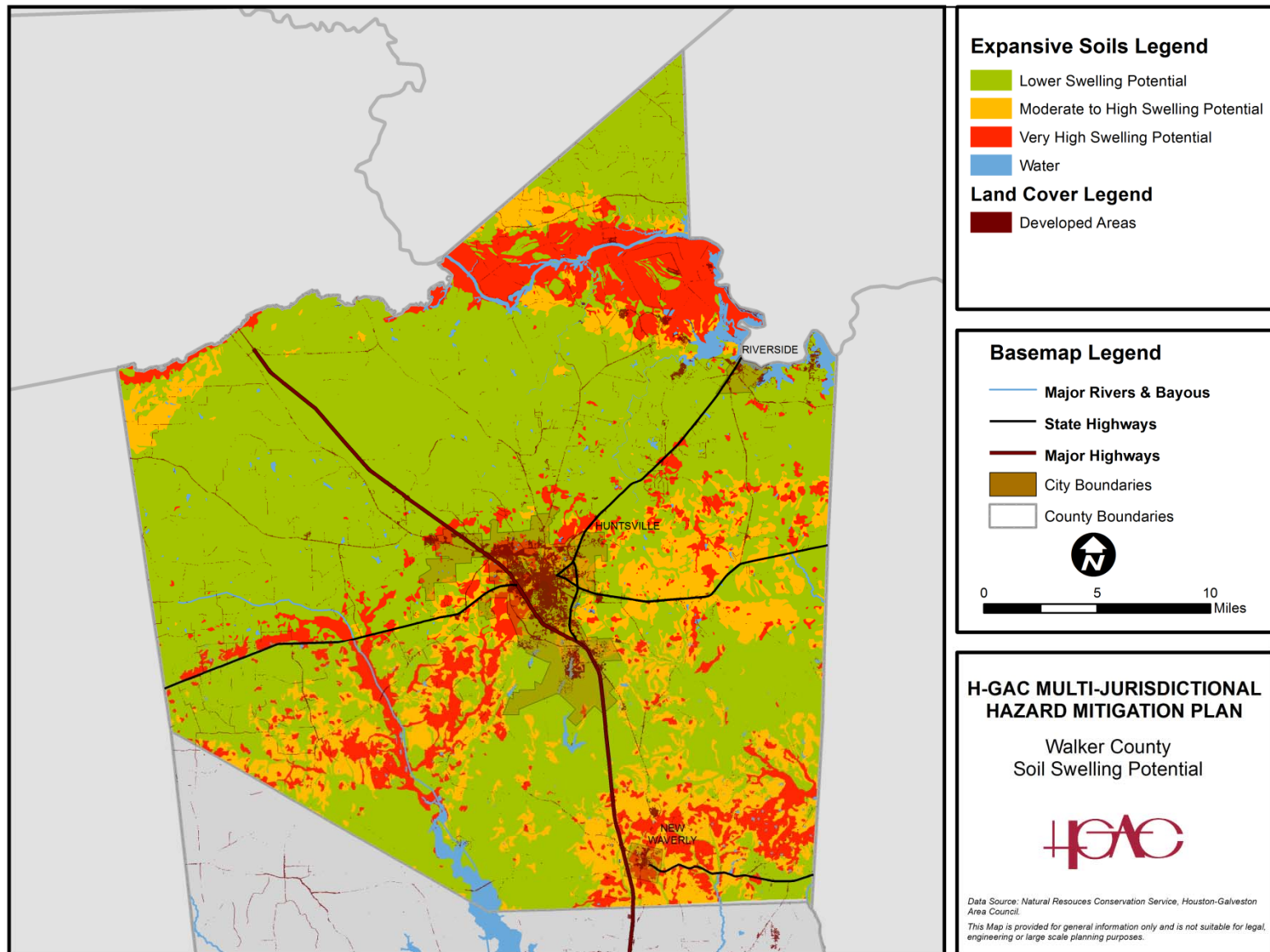


Figure 4.2-34 Soil Swelling Potential for Waller County

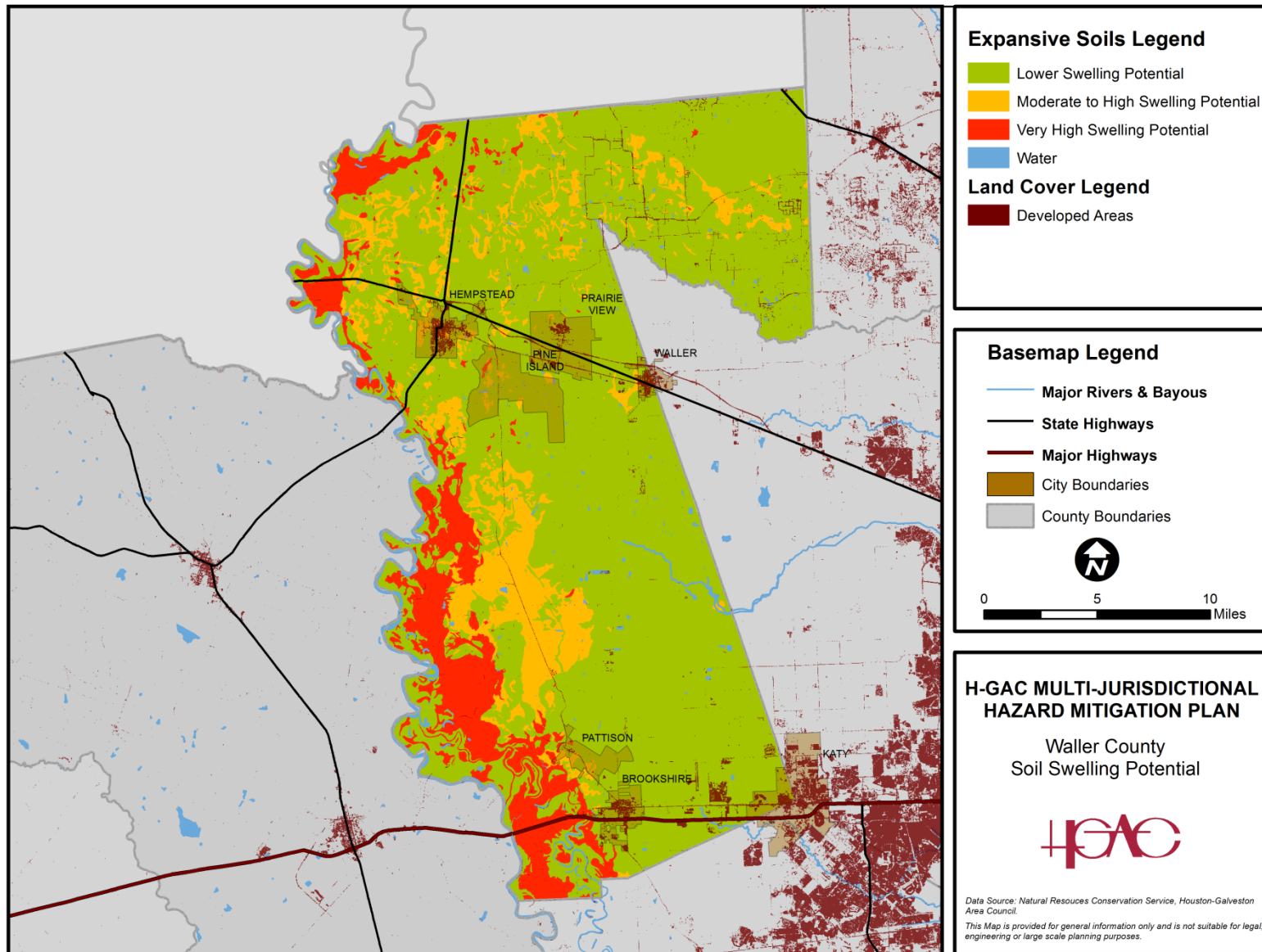


Table 4.2-12 demonstrates the swelling potential of soils for each of the participating counties on a square mile and percent basis.

Table 4.2-12: Swelling Potential for Soils in Participating Counties

County Name	Lower Swelling Potential	% of the County that is Lower Swelling Potential	Moderate to High Swelling Potential	% of the County that is Moderate to High Swelling Potential	Very High Swelling Potential	% of the County that is Very High Swelling Potential
Austin County	8.48	1.29%	1.95	0.30%	1.55	0.24%
Brazoria County	15.53	0.97%	52.83	3.31%	62.79	3.93%
Chambers County	16.34	1.87%	1.99	0.23%	21.35	2.45%
Liberty County	22.78	1.94%	7.41	0.63%	8.89	0.76%
Montgomery County	153.67	14.27%	7.77	0.72%	6.93	0.64%
Walker County	16.54	2.06%	6.04	0.75%	4.86	0.61%
Waller County	15.05	2.91%	1.37	0.26%	0.64	0.12%

Austin County

In general, the majority of soils in Austin County have lower swelling potential. Exceptions include the areas in the northern portion, north of State Highway 159. Soils with very high swelling potential are also located along the Brazos River, the eastern border of the county. Very little development occurs outside the city limit boundaries; classifications for Austin County's cities are available in Table 4.2-13.

Brazoria County

The majority of soils in Brazoria County have moderate to high and very high swelling potential. Expansive soils are pervasive throughout the county, especially near Brazos River, Oyster Creek, and Chocolate Bayou. Exceptions include areas along the coastline and away from the Brazos River and Oyster Creek. Classifications for Brazoria County's cities are available in Table 4.2-13.

Chambers County

Very high swelling potential soils are unequally distributed among lower swelling potential soils throughout Chambers County. Exceptions include the coastal areas to the south and the mouth of the Trinity River, which are underlain by moderate to high swelling potential soils. Classifications for Chambers County's cities are available in Table 4.2-13. Development occurs outside of incorporated areas. The unincorporated area of Winnie-Stowell at the northeastern corner of the county is underlain with lower swelling potential soils, as is the westernmost portion of the county near Cedar Bayou.

Liberty County

Very high swelling potential soils in Liberty County exist in the general vicinity of the floodplain associated with the Trinity River. Areas underlain by lower swelling potential soils are located in the northwestern corner and eastern boundary of the county. Development outside of incorporated areas does exist, but in general, is not concentrated in one particular area. These unincorporated areas with development occur in lower, moderate to high and very high swelling potential soils. Classifications for Liberty County's cities are available in Table 4.2-13.

Montgomery County

The majority of soils in Montgomery County have low swelling potential; however, very high and moderate to high swelling potential soils underlay the northwestern and northern portion of Montgomery County, near Lake Conroe. Very high and moderate to high swelling potential soils are also present along Lake Creek and the San Jacinto River. The majority of development in the unincorporated areas occurs in lower swelling potential soils; however, in the vicinity of Lake Conroe, larger concentrations of development existing in areas underlain by very high and moderate to high swelling potential soils. Classifications for Montgomery County's cities are available in Table 4.2-13.

Walker County

The majority of soils in Walker County have low swelling potential; however, very high and moderate to high swelling potential soils underlie the southeastern portion of Walker County as well as areas near the San Jacinto and Trinity rivers. Development in unincorporated areas is general dispersed among lower swelling potential soils. Classifications for Walker County's cities are available in Table 4.2-13.

Waller County

Waller County is dominated by soils with lower swelling potential. Very high swelling potential soils are present on the western border of the county, along the Brazos River floodplain. Moderate to high swelling potential soils are present in the center of the county and are also sporadically distributed along the northern portion of the county. Unincorporated areas with development exist predominately in lower swelling potential soils. Classifications for Waller County's cities are available in Table 4.2-13.

Table 4.2-13 characterizes the three classifications for each of the participating cities in the Plan Update.

Table 4.2-13: Soil Swelling Potential Classification for Cities in Plan Update

County	City	Soil Swelling Potential Classification
Austin	Bellville	Lower
	Brazos Country	Lower
	Industry	Lower
	San Felipe	Lower
	Sealy	Lower
	Wallis	Moderate to High
Brazoria	Alvin	Very High
	Angleton	Moderate to High
	Bailey's Prairie	Moderate to High
	Bonney	Very High
	Brazoria	Lower
	Brookside Village	Very High
	Clute	Lower
	Danbury	Moderate to High
	Freeport	Moderate to High
	Hillcrest Village	Moderate to High
	Holiday Lakes	Lower
	Iowa Colony	Very High
	Jones Creek	Lower
	Lake Jackson	Very High
	Liverpool	Very High
	Manvel	Very High
	Oyster Creek	Lower
	Quintana	Lower
	Richwood	Very High
	Surfside Beach	Lower
	Sweeny	Lower

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County	City	Soil Swelling Potential Classification
Chambers	Anahuac	Very High
	Beach City	Lower
	Cove	Very High
	Mont Belvieu	Lower
	Old River-Winfree	Very High
Liberty	Ames	Lower
	Cleveland	Lower
	Daisetta	Lower
	Dayton	Moderate to High
	Dayton Lakes	Lower
	Devers	Lower
	Hardin	Lower
	Kenefick	Very High
	Liberty	Very High
	North Cleveland	Lower
	Plum Grove	Lower
Montgomery	Conroe	Lower
	Cut and Shoot	Lower
	Magnolia	Lower
	Montgomery	Very High
	Oak Ridge North	Lower
	Panorama Village	Lower
	Patton Village	Lower
	Roman Forest	Lower
	Shenandoah	Lower
	Splendora	Lower
	Stagecoach	Lower
	Willis	Lower
	Woodbranch Village	Lower
	The Woodlands Township	Lower
	Woodloch	Lower
Walker	Huntsville	Lower
	New Waverly	Very High
	Riverside	Lower
Waller	Brookshire	Lower
	Hempstead	Lower
	Pattison	Lower
	Pine Island	Lower
	Prairie View	Lower
	Waller	Lower

Because damage associated with expansive soils is associated with droughts, previous occurrences for expansive soils are correlated with previous occurrences for drought. This same correlation between expansive soils and drought applies to the likelihood of expansive soils causing damage. The previous section on drought states the region can be expected to experience between two and seven droughts every ten years. Damage associated with expansive soils could also be expected to occur between two and seven times every ten years.

Excessive Heat

The H-GAC region has an extensive history of excessive heat dating to the 1950s. **Table 4.2-14** shows the number of days in each decade each county experienced temperatures reaching 100 degrees or more.

Table 4.2-14
Days of 100 Degrees or More

	Decade								
County	1950-1959	1960-1969	1970-1979	1980-1989	1990-1999	2000-2010	Total 1950 - 2010	Years of available data	Average number of days of excessive heat per year
Austin	260	145	53	77	97	36	668	51	13.1
Brazoria	5	2	0	11	11	9	38	54	0.7
Chambers	1	3	2	30	5	12	53	54	1.0
Colorado	No data	66	100	203	312	264	945	48	19.7
Fort Bend	41	27	3	33	28	15	147	51	2.9
Galveston	0	0	0	0	2	5	7	52	0.1
Harris	16	18	0	11	20	27	92	60	1.5
Liberty	102	21	2	14	21	23	183	58	3.2
Matagorda	5	1	0	0	0	7	13	60	0.2
Montgomery	95	64	20	64	81	59	383	60	6.4
Walker	107	113	67	69	46	81	483	60	8.1
Waller	No data	47	39	No data	No data	No data	86	15	5.7
Wharton	175	105	9	No data	No data	112	401	35	11.5

Source: NOAA Regional Climate Centers

The data in **Table 4.2-14** are based on weather station data from one location within each of the counties. Weather stations were selected based on the amount of historical data from 1950 to 2010. Based on historical information, the coastal counties of Brazoria, Chambers, Galveston, Harris and Matagorda counties experienced fewer days reaching 100 degrees or more than the inland counties of the region. These coastal counties can expect to experience approximately one day of temperatures reaching 100 degrees or greater per year. The inland counties of may experience a higher number of days of temperatures reaching 100 degrees or greater per year relative to the coastal counties of the region. Based on historical data, the counties experiencing an average number of days meeting or exceeding 100 degrees or more in ranked order are Colorado, Austin, Wharton, Walker, Montgomery, Waller, Liberty, and Fort Bend counties. Similar occurrences such as those expressed as the averages of the days of excessive heat would be expected to occur in the future.

Heat-related illnesses are associated with occurrences of excessive heat. Elderly persons, young children, persons with respiratory difficulties, and those who are sick or overweight are more likely to become victims of excessive heat. Although no repositories of data were available at the time of this Plan update, instances of roads buckling due to expansion of pavement has the potential to occur. In these situations, closure of the lanes affected and repair would be necessary.

Winter Storms

Winter storm risk maps are not readily available for this region of Texas. The below freezing data in **Table 4.2-15** are based on weather station data from one location within each of the counties. Weather stations were selected based on the amount of historical data from 1950 to 2009. Based on averaged historical information, Galveston County experienced the fewest number of instances where temperatures were 32 degrees or below. The westernmost county in the region, Colorado County, had the highest number of instances of temperatures 32 degrees or lower. There is a trend of more days at or below freezing the further a county is from the coast. The average number of days of freezing temperatures per year is given in **Table 4.2-15** below. Similar occurrences such as those expressed as the averages of the days of freezing temperatures could be expected to occur in the future. The region as a whole could experience approximately 16 days of freezing temperatures a year.

Table 4.2-15
Days at or below Freezing

County	1950-1959	1960-1969	1970-1979	1980-1989	1990-1999	2000-2009	Total 1950 - 2009	Years of available data	Average number of days of freezing temps per year
Austin	127	194	93	146	97	47	704	49	14.4
Brazoria	124	177	202	162	59	50	774	60	12.9
Chambers	130	77	184	129	86	104	710	54	13.1
Colorado	No data	174	388	314	348	313	1537	49	31.4
Fort Bend	No data	No data	No data	No data	No data	No data	No data	No data	No data
Galveston	19	41	45	46	21	11	183	55	3.3
Harris	78	124	269	167	118	92	848	60	14.1
Liberty	206	247	283	189	116	118	1159	60	19.3
Matagorda	109	149	152	93	58	46	607	59	10.3
Montgomery	208	326	279	254	164	153	1384	60	23.1
Walker	197	304	290	213	156	164	1324	60	22.1
Waller	No data	No data	No data	No data	No data	No data	No data	No data	No data
Wharton	No data	No data	No data	No data	No data	No data	No data	No data	No data
Source: NOAA Regional Climate Centers Applied Climate Information System									

Snowfall in the region is very uncommon. The region averaged less than one day and one inch of snow per year from 1950-2009. **Table 4.2-16** shows the number of days and inches of snow per decade from 1950-2009. Snowfall data are available on a monthly basis. Based on historical snowfall information, the

range of snowfall data on a monthly basis is 0.1 to 8.2 inches. Coastal counties would be on the lower end of the snowfall range, while more inland counties would be on the higher end of the snowfall range.

Table 4.2-16
Days and Inches of Snow

County	1950-1959	1960-1969	1970-1979	1980-1989	1990-1999	2000-2009	Total 1950 - 2009	Years of available data	Average per year
Austin - days	0	0	0	1	0	0	1	60	0.0
Austin - inches	0	0	0	1.5	0	0	1.5	60	0.0
Brazoria - days	0	0	2	0	1	0	3	52	0.1
Brazoria - inches	0	0	4.5	0	0.1	0	4.6	52	0.1
Chambers - days	3	1	0	1	0	0	5	59	0.1
Chambers - inches	3.8	0.2	0	0.5	0	0	4.5	59	0.1
Colorado - days	1	2	0	0	0	0	3	60	0.1
Colorado - inches	1	8	0	0	0	0	9	60	0.2
Fort Bend - days	2	1	3	1	0	0	7	60	0.1
Fort Bend - inches	1.3	4	6.3	1	0	0	12.6	60	0.2
Galveston - days	1	2	2	1	0	0	6	55	0.1
Galveston - inches	0.1	2.2	4.1	1	0	0	7.4	55	0.1
Harris - days	1	2	2	5	1	2	13	60	0.2
Harris - inches	1.7	5.4	5.2	4.8	0.1	2.4	19.6	60	0.3
Liberty - days	0	3	1	1	0	1	6	60	0.1
Liberty - inches	0	10.6	3	2	0	3.9	19.5	60	0.3
Matagorda - days	1	0	0	0	0	0	1	59	0.0
Matagorda - inches	3.8	0	0	0	0	0	3.8	59	0.1
Montgomery - days	0	3	3	1	0	0	7	60	0.1
Montgomery - inches	0	6.2	3.8	0.1	0	0	10.1	60	0.2
Walker - days	3	5	3	0	0	1	12	60	0.2
Walker - inches	2.5	16.2	5.5	0	0	0.5	24.7	60	0.4
Waller - days	0	1	0	0	0	No data	1	50	0.0
Waller - inches	0	8.2	0	0	0	No data	8.2	50	0.2
Wharton - days	1	1	1	0	0	0	3	57	0.1
Wharton - inches	2	7	1	0	0	0	10	57	0.2
Source: NOAA Regional Climate Centers Applied Climate Information System									

No one portion of the region is more at risk to winter storms than any other part of the region, therefore the entire region is in a winter storm hazard area and can be expected to experience winter storms approximately one every two years, with an event average of approximately \$50,000 worth of property damage. The winter storm may include freezing temperatures, sleet, freezing rain and/or one to four inches of snow.

Hail

According to the National Climatic Data Center, the H-GAC region experienced 1,222 hail events from 1950 through October 2010 (see **Table 4.2-17**), with some hail stones reaching three inches in diameter. These events caused over \$47 million in property damage (NCDC, 2010).

Table 4.2-17
Hail Activity in the H-GAC Region (1950-2010)

County	No. of Recorded Hail Events 1950 – 10/31/2010	Total Property Damage Recorded	Total Crop Damage Recorded	Largest Recorded Diameter (Inches)
Austin	51	\$924,000	\$100,000	2
Brazoria	90	\$691,000	\$0	2.5
Chambers	50	\$244,000	\$0	1.75
Colorado	64	\$787,000	\$0	2.75
Fort Bend	85	\$2,893,000	\$0	2.75
Galveston	94	\$1,120,000	\$0	3
Harris	416	\$23,200,000	\$0	3
Liberty	66	\$331,000	\$0	2.75
Matagorda	29	\$169,000	\$0	2
Montgomery	125	\$11,143,000	\$0	2.75
Walker	46	\$273,000	\$5,000	2.25
Waller	40	\$357,000	\$0	3
Wharton	66	\$5,230,000	\$5,000,000	2
TOTAL	1,222	\$47,362,000	\$5,105,000	-

Source: National Climatic Data Center

Figure 4.2-35 shows the location of past hail events and **Figure 4.2-36** shows the historical frequency of events by county.

Figure 4.2-35
Locations of Past Hail Events

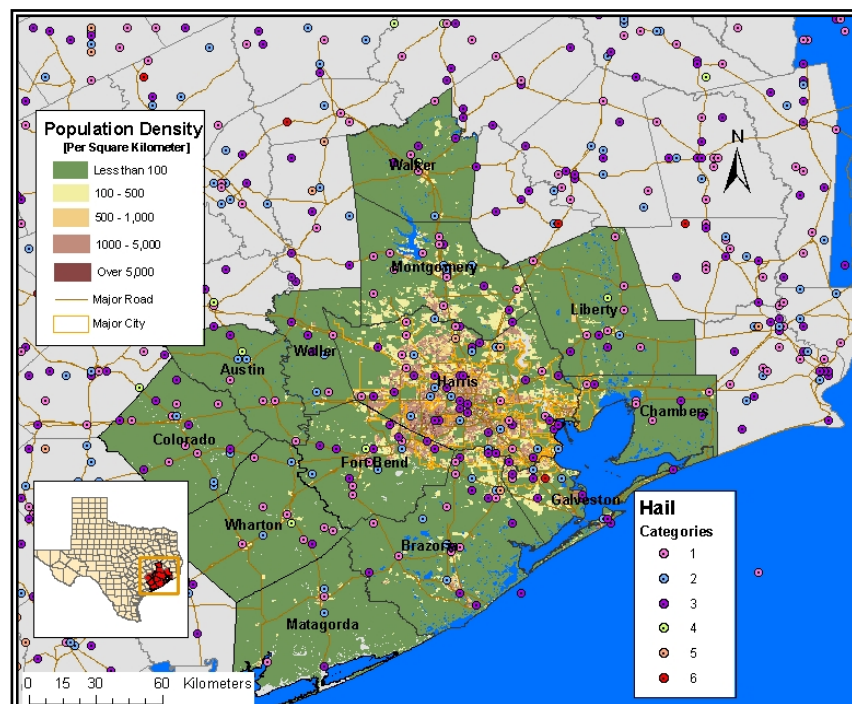


Figure 4.2-36
Historical Frequency of Hail Events by County

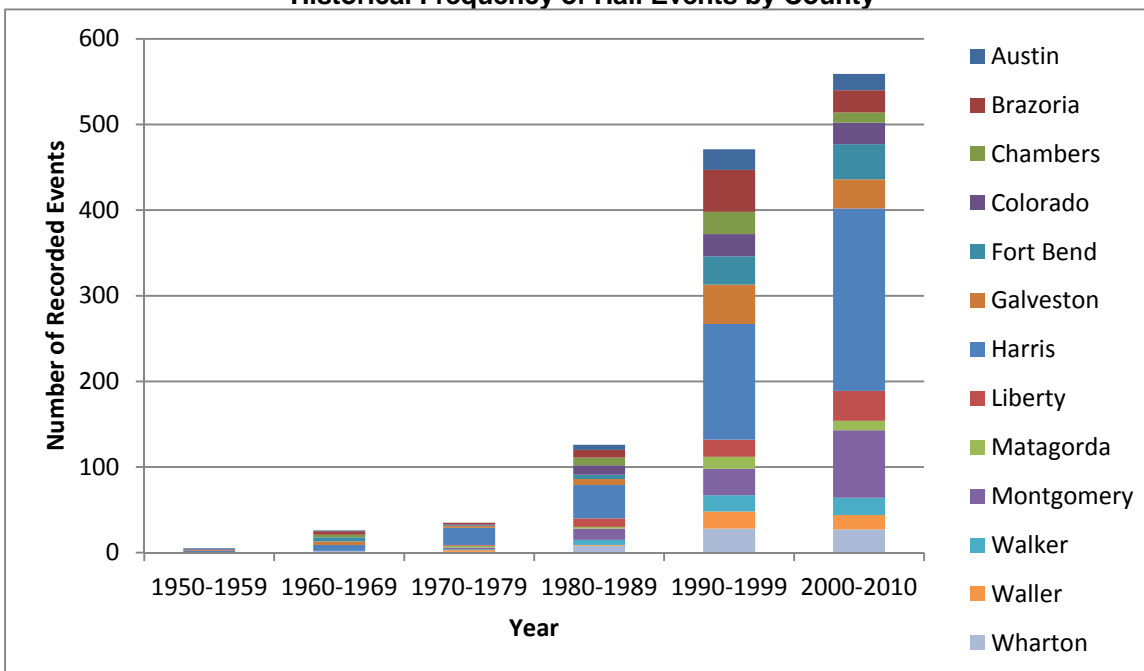
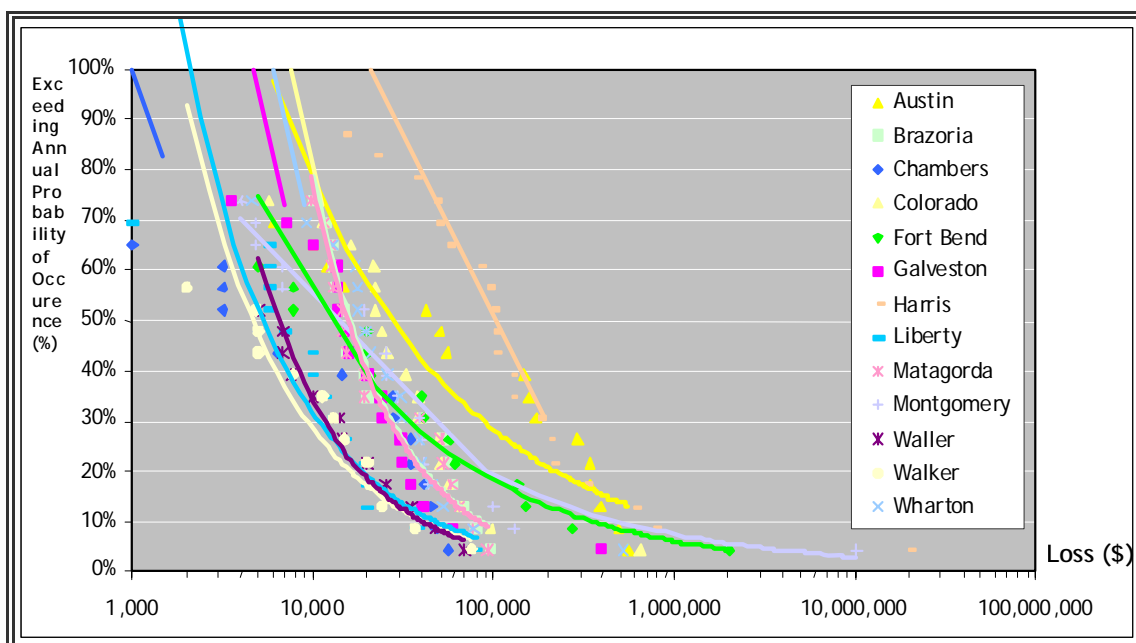


Figure 4.2-37 shows the annual probability of hail occurrence and potential monetary damages for each county in the area.

Figure 4.2-37
Annual Probability of Hail Occurrence and Potential Monetary Damages



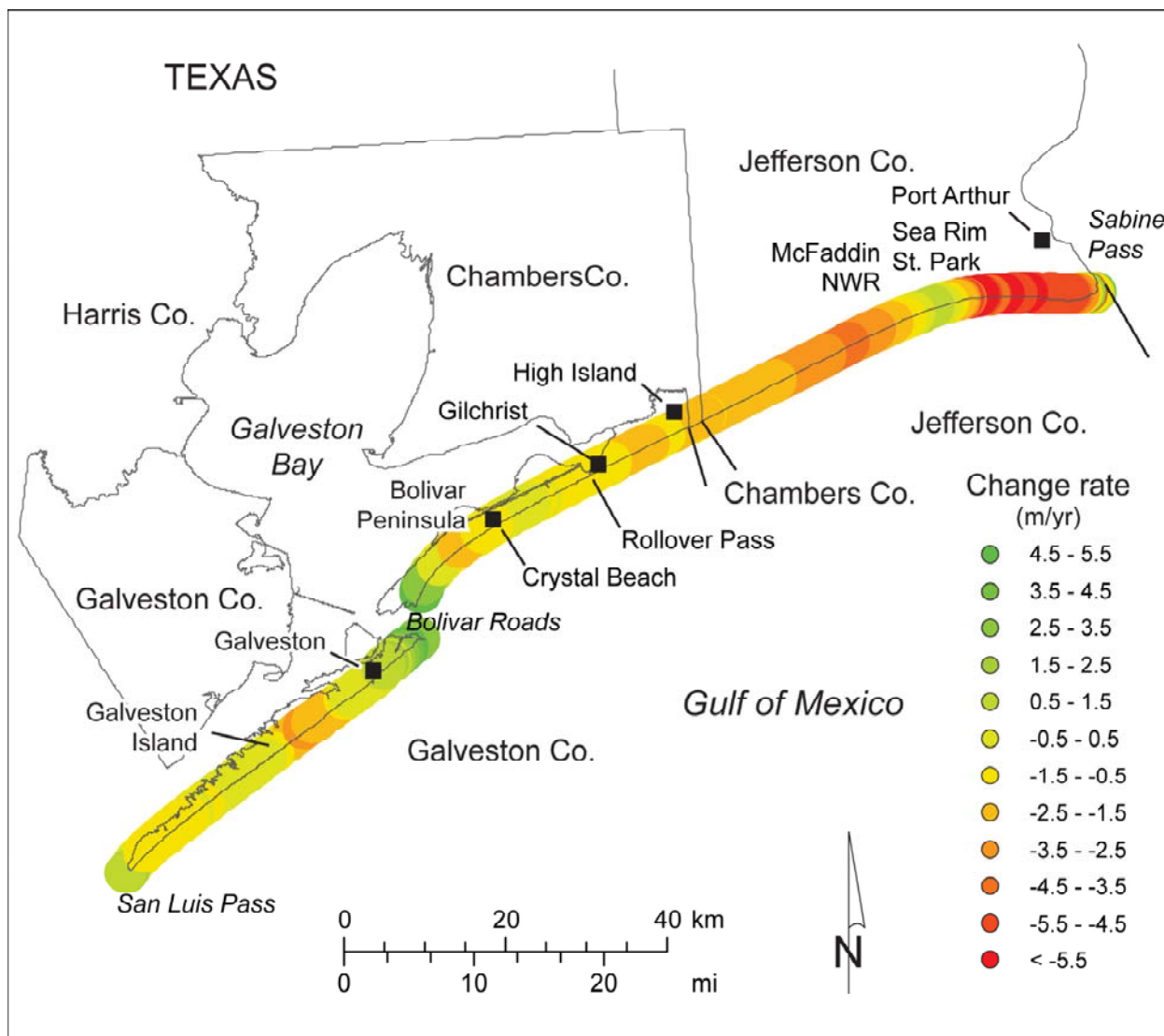
No one portion of the region is more at risk to hail than any other part of the region, therefore the entire region is in a hail hazard area and can be expected to experience approximately 20 hail events per year, with an event average of approximately \$39,000 worth of property damage and hailstones of 2.5 inches in diameter.

Coastal Erosion

According to the Texas General Land Office (GLO), Texas has one of the highest erosion rates in the country and estimates that over 27,000 acres of Gulf shoreline were lost to erosion from the mid-1800s through 1982. Long-term shoreline erosion of the upper Texas coast is occurring at an average rate of 1.6 meters (5.2 feet) per year (The University of Texas at Austin, Bureau of Economic Geology (BEG), 2011). Erosion rates along the Texas coastline average 1.24 meters (4.07 feet) per year.

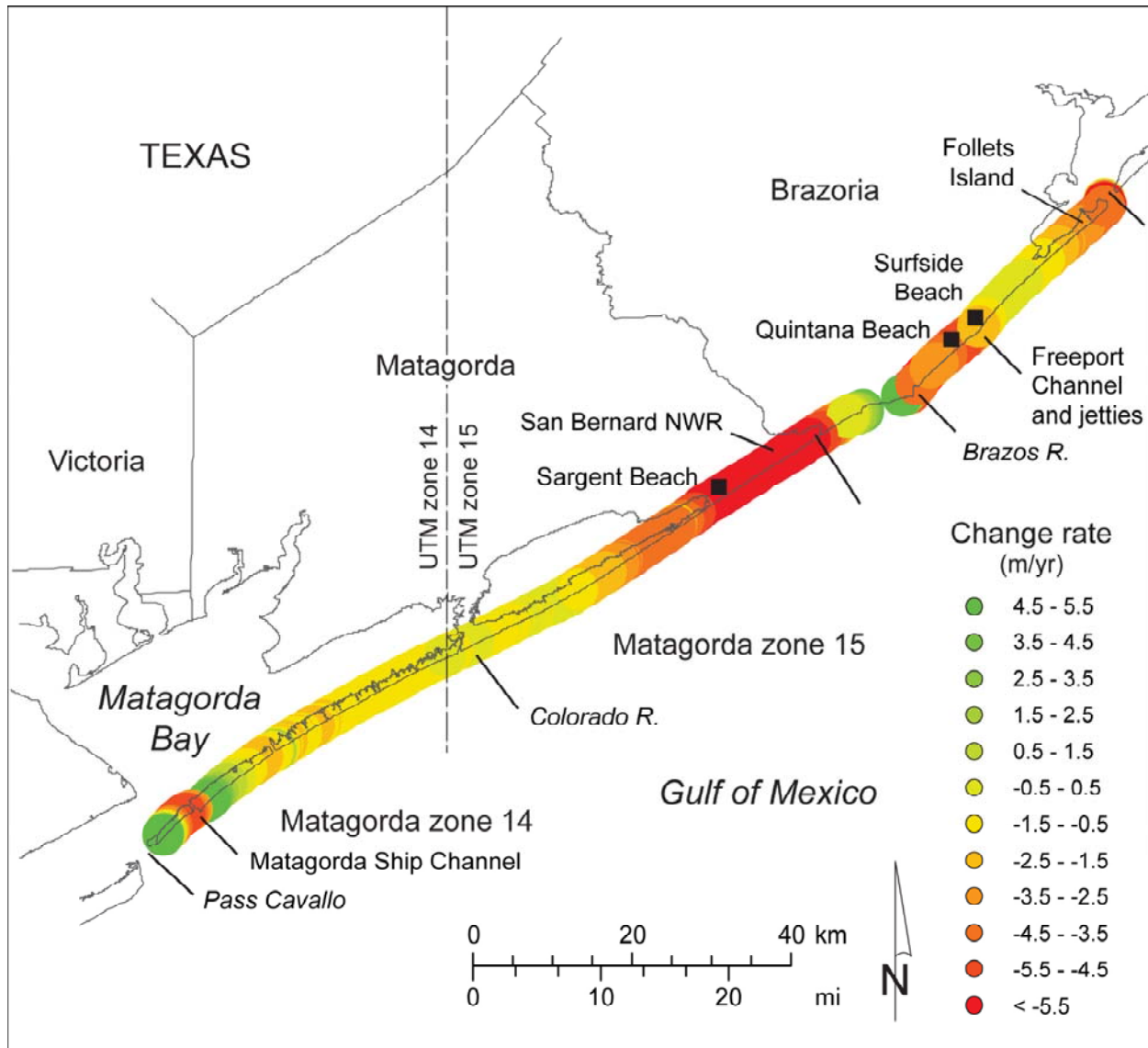
Figures 4.2-38 and 4.2-39 show the coastal erosion rates from the BEG for the coastal counties in the Houston-Galveston region.

Figure 4.2-38
Coastal Erosion Map for Chambers and Galveston Counties



Source: Bureau of Economic Geology

Figure 4.2-39
Coastal Erosion Map for Brazoria and Matagorda Counties



Source: Bureau of Economic Geology

Table 4.2-18 shows the number of miles of critically eroding shoreline on the Texas coast determined from average shoreline erosion rates measure over the past 70 years (Bureau of Economic Geology).

Table 4.2-18
Miles of Critically Eroding Shoreline

Region	Total Coastline Miles	Critically Eroding Miles	Percent Eroding Miles
1-Sabine Pass to Bolivar Roads (Galveston County)	59.0	47.0	80%
2-Bolivar Roads to San Luis Pass (Galveston and Brazoria Counties)	29.0	27.0	93%
3-San Luis Pass to Old Colorado River (Matagorda County)	63.1	63.1	100%
4-Old Colorado River to Aransas Pass (Outside of H-GAC Region)	83.7	38.5	46%
5-Aransas Pass to Padre Island National Seashore (Outside of H-GAC Region)	27.3	15.3	56%
6-Padre Island National Seashore to Mansfield Cut (Outside of H-GAC Region)	64.1	1.0	2%
7-Mansfield Cut to Rio Grande River/U.S. Border (Outside of H-GAC Region)	40.8	37.5	92%

Based on the annual erosion rates, the Coastal Studies Group of the Bureau of Economic Geology estimated future shorelines for the Texas coast. **Figure 4.2-40** presents the 1956 shoreline in relation to the projected 2056 shoreline at Pirates Beach on Galveston Island.

Figure 4.2-40
Projected Shoreline – Galveston Island



Source: *The Texas Shoreline Change Project: Combining LIDAR, Historical Photography, and Ground Surveys to Measure Shoreline Change Rates Along Bay and Gulf*, Bureau of Economic Geology, 2004.

The coastal counties Matagorda, Brazoria, Galveston, and Chambers counties can expect to continue experiencing 1.6 meters of shoreline erosion per year. In Galveston Bay, the GLO estimates that 0.6 meters (2.2 feet) of shoreline is lost each year due to erosion. This amount will be greater if hurricanes or tropical storms make contact with the shoreline.

Dam/Levee Failure

According to the U.S. Army Corps of Engineers' (USACE) National Inventory of Dams (NID), there are 273 dams classified as high hazard, significant hazard or low downstream hazard potential in the seven counties participating in the Plan Update. (see **Table 4.2-19**). Approximately 34 percent of dams in the area are classified as facing a high or significant downstream hazard potential; however, there is no record of dam failure in the H-GAC planning area. The NID consists of dams meeting at least one of the following criteria:

- 1) High hazard classification - loss of human life is likely if the dam fails,
- 2) Significant hazard classification - possible loss of human life and likely significant property or environmental destruction,
- 3) Equal or exceed 25 feet in height and exceed 15 acre-feet in storage,
- 4) Equal or exceed 50 acre-feet storage and exceed 6 feet in height.

Table 4.2-19
Dam Downstream Hazard Potential

County	High	Significant	Low	Total Dams
Austin	0	2	17	19
Brazoria	6	14	36	56
Chambers	0	0	14	14
Liberty	1	7	22	30
Montgomery	27	20	39	86
Walker	7	6	40	53
Waller	1	1	7	9
TOTAL	42	50	179	273

Source: USACE NID, 2011

Figure 4.2-41 depicts the low, significant and high downstream potential dams according to NID.

Figure 4.2-41
Low, Significant and High Downstream Potential Dams in H-GAC Region

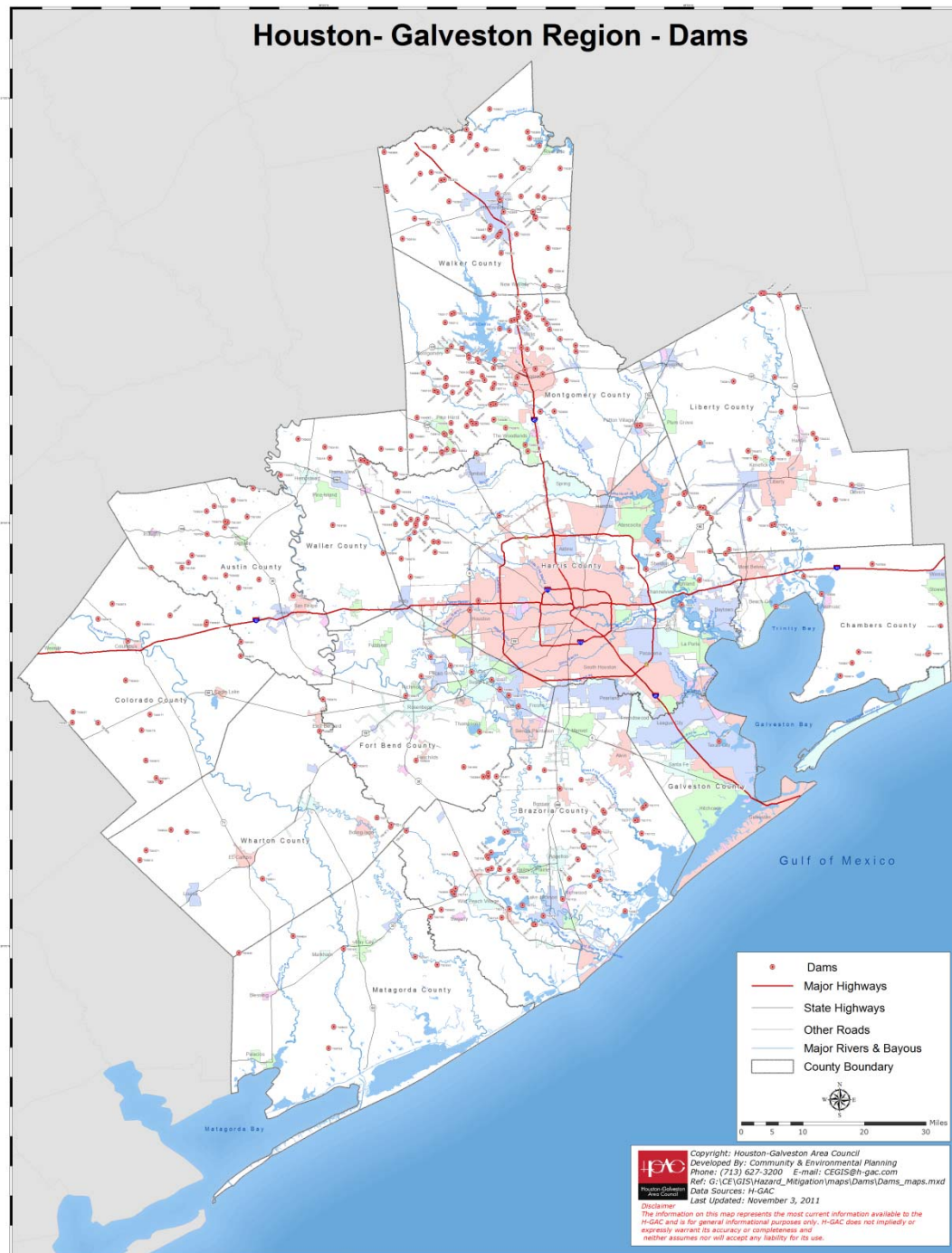


Table 4.2-20 presents location, high and significant downstream hazard potential, height, and storage for dams and levees in the NID for each participating county. For hazard potential, “S” stands for significant and “H” stands for high. Dams with low hazard potential were excluded from the table because of their low risk.

The general methodology for determining risk to buildings and people is as follows:

Low risk: 0-10 buildings downstream from the dam or levee, no structures immediately downstream.

Medium risk: 11 – 25 (sometimes more, in some cases the size and capacity of the lake or reservoir was taken into consideration) structures downstream, no structures immediately downstream from the dam.

High risk: 25+ structures within a mile downstream of the dam or levee, or a high number of structures such as a neighborhood or commercial area immediately downstream of the dam.

Table 4.2-20
Dam Location, Downstream Hazard Potential, Height and Storage

County	Characterization of Area	NID ID	Height	Storage	Hazard Potential	Downstream Description	People Risk	Building Risk
AUSTIN	Rural reservoir. Located on the south end of Butler Lake is of earthen construction. Directly south of the dam is a private road. Within a one mile radius of the dam are a few residential homes, structures that appear to be commercial grade chicken farms, agricultural fields, and range lands for cattle grazing. Although currently the area surrounding Butler Lake is sparsely populated, the available land around the lake is in consideration to be developed into a residential community.	TX01396	25	600	S	Immediately downstream, undeveloped land/agricultural fields. Further downstream, within 1-mile radius, a few structures, agricultural.	Low	Low
AUSTIN	Rural reservoir known locally for fishing and recreational boating. Approximately 1.9 miles away from the community of Peters. Peters Lake Dam is located on the south side of lake. Around the northern edge of the lake are about a dozen residential homes. Residential homes are also located directly south of Peters Lake Dam off of Gosler Rd; however, homes below the dam are few (less than 10).	TX01398	14	84	S	Immediately downstream, undeveloped forest land. Further downstream within a 1-mile radius, rural residential development (<10 structures).	Low	Low

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County	Characterization of Area	NID ID	Height	Storage	Hazard Potential	Downstream Description	People Risk	Building Risk
BRAZORIA	Dacus Lake is located southeast of the Carlton Reservoir and is northeast of the City of Brazoria. It is a small lake, which appears to interlock with the Carlton Reservoir. However, Dacus Lake is within 500 feet of a residential neighborhood. If the dam were to fail, many residential homes within Brazoria would be affected.	TX01724	9	439	H	Immediately downstream, moderate to high residential development. Residential development, undeveloped land within 1-mile radius of dam.	High	High
BRAZORIA	Located off the channel of Austin Bayou. Connected to McCullough Lake as well as a series of smaller reservoirs. To the northeast of the Lazy CZ No 1 Reservoir is a sparse residential development. The City of Danbury is located southwest of the levee; however, it is greater than one mile away.	TX01732	8	872	H	Immediately Downstream, McCullough Lake. Further downstream, within 1-mile radius, sparse residential development.	Low to Medium	Low to Medium
BRAZORIA	Part of a reservoir system that includes San Bernard Reservoirs 1 and 3. No 2 Reservoir is located on southwestern portion of system. Reservoir is in close proximity to a sparsely populated residential area as well as to agricultural buildings.	TX01747	12	3343	H	Immediately downstream, undeveloped forest land. Within 1-mile radius of dam, very sparse residential development (<10).	Low	Low
BRAZORIA	Located in a very developed area. To the north is the Columbia Lakes community and to the south west is the City of West Columbia. South of the levee is the City of East Columbia. East Columbia is within a one mile radius of the dam, downstream from the dam.	TX01751	10	2810	H	Immediately downstream, undeveloped forest land. Within 1-mile radius of levee, City of East Columbia, moderate residential and commercial development.	High	High
BRAZORIA	Located off the San Bernard River channel. Dam separates the San Bernard from the Barker Reservoir. There are a few residential or agricultural structures within one mile of the Twin Lakes Dam. The surrounding area is mostly comprised of agricultural or range land fields.	TX01761	8	960	H	Immediately downstream of dam, sparse residential development, further downstream within a 1-mile radius of dam, agricultural fields.	Low	Low

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County	Characterization of Area	NID ID	Height	Storage	Hazard Potential	Downstream Description	People Risk	Building Risk
BRAZORIA	Part of a series of agricultural reservoirs, which includes Lazy CZ No 1. The lake is located on the southeastern portion of this system. The levee is in close proximity to the south of a sparsely populated residential community, which is located off of County Rd 210.	TX04732	9	928	H	Immediately downstream, undeveloped forest land, within 1-mile radius of dam sparse rural residential development along Austin Bayou.	Low to Medium	Low to Medium
BRAZORIA	Earthen levee that forms an agricultural reservoir. Reservoir is created from inflows from Bastrop Bayou. To the north of Evans Lake on the banks of Bastrop Bayou are about a dozen residential homes. Southwest of the reservoir is the Waste Connections Inc. Seabreeze Environmental Landfill. East of the reservoir, off Fairway Rd, are a few residential homes and trailers. The area surrounding the immediate vicinity of the reservoir appears to be agricultural fields. It also appears that systems of agricultural canals are connected to the reservoir.	TX01723	10	704	S	Immediately downstream of levee, agricultural fields. Sparse residential development on north side of levee, between lake and Bastrop Bayou.	Low	Low
BRAZORIA	Located north of Jones Creek and West of Lake Jackson. Reservoir, as well as the neighboring Clemens Reservoir #2, is a small agricultural reservoir. There are no structures or dwellings within a one mile radius of the Clemens Reservoir #1 levee.	TX01725	11	1210	S	Immediately downstream, undeveloped forest land/agricultural fields. Within 1-mile buffer undeveloped land.	Low	Low
BRAZORIA	Located directly west of Clemens Reservoir #1. It is also a small agricultural reservoir. There are no structures or dwellings within a one mile radius of Clemens Reservoir #2.	TX01726	7	482	S	Immediately downstream, undeveloped forest land/agricultural fields. Within 1-mile buffer undeveloped land.	Low	Low
BRAZORIA	First in a series of numbered agricultural reservoirs. Although it appears residential buildings and other structures are not within a mile of this particular levee, one could assume that a failure of this levee could set up a chain reaction that could affect the other reservoirs (given that this particular reservoir is connected to the Austin Bayou channel). To	TX01736	7	1874	S	Immediately downstream, McCormack Reservoir, within 1-mile radius McCormack Reservoir No 4.	Low	Low

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County	Characterization of Area	NID ID	Height	Storage	Hazard Potential	Downstream Description	People Risk	Building Risk
	the south there is a residential community on the eastern bank of Bastrop Bayou.							
BRAZORIA	Located on the western edge of Brazoria. To the east of the levee is moderate to high residential and commercial development.	TX01745	7	1225	S	Immediately downstream, between reservoir and San Bernard River is undeveloped, forest land.	High	High
BRAZORIA	Located a few miles west of Wild Peach Village. Part of agricultural reservoir system including San Bernard Reservoirs 2 and 3. Dam is connected to San Bernard River channel via small channel or tributary. Area surrounding the reservoirs is sparsely populated with few residential or agricultural structures.	TX01746	27	3375	S	Immediately downstream, undeveloped forest land. Within 1-mile radius of dam, very sparse residential development (<10).	Low	Low
BRAZORIA	Latitude and Longitude coordinates do not seem to match up precisely to the levee. The area is mainly agricultural with a few residential or agricultural structures.	TX01748	9	459	S	Immediately downstream (Mound Creek), agricultural fields, further downstream within 1-mile of dam, very sparse (<10) residential development.	Low	Low
BRAZORIA	Latitude and Longitude coordinates do not seem to match up precisely to levee. Lake could be extremely low due to drought conditions. The area is mainly agricultural with a few residential or agricultural buildings.	TX01749	7	280	S	Immediately downstream (Mound Creek), agricultural fields, further downstream within 1-mile of dam, very sparse (<10) residential development.	Low	Low
BRAZORIA	Located on the eastern bank of Tenneco Lake #2 and the western bank of the Brazos River. Within the one mile radius is Tenneco Lake #1 and a few residential structures to the south, east, and north. It is in close proximity to the Columbia Lakes Neighborhood and also a sparsely populated neighborhood community to the west of Bailey's Prairie. However, these communities are just outside of a one-mile radius.	TX01752	10	2150	S	Immediately downstream, undeveloped land followed by a few residential structures (<15). Within 1-mile radius is undeveloped land.	Low	Low

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County	Characterization of Area	NID ID	Height	Storage	Hazard Potential	Downstream Description	People Risk	Building Risk
BRAZORIA	Small reservoir that is west of the much larger Mann Lake. Appears that this reservoir is influenced by a tributary of the Brazos River system. Directly south of Beal Reservoir are less than ten structures, which appear to be residential homes, trailers, and agricultural buildings. The Beal Reservoir Levee separates the Beal Reservoir from Mann Lake. If the levee should fail, an overflow from Mann Lake could cause the Beal Reservoir Levee to breach, which would certainly affect the structures to the south.	TX01755	9	927	S	Immediately downstream, residential structures (<10). Within 1-mile radius undeveloped land/agricultural fields.	Low	Low
BRAZORIA	Surrounds both Mallard Lake and neighboring Mann Lake. Many residential homes are located in western and northern portions of Mallard Lake. To the south of Mallard lake, within a one-mile radius of the levee, is the Columbia Lakes Neighborhood (High Res Density). Within the one-mile radius is also the Columbia Lakes Heliport and the Columbia Lakes Resort and Conference Center.	TX01756	8	8408	S	Immediately downstream, undeveloped land/forest land. Within 1-mile radius, northern portion of Columbia Lakes Neighborhood, moderate to high residential development.	High	High
BRAZORIA	Very narrow and long reservoir that runs along the eastern edge of the Columbia Lakes Community. Reservoir was constructed by the damming of Varner Creek. Because of its close proximity to the Columbia Lakes Community, which includes a high residential development, conference center, and heliport, it can be assumed that there is a high risk associated with proximity to people and structures.	TX04353	6	148	S	Immediately downstream, undeveloped forest land. Within 1-mile radius of dam, city of East Columbia, moderate residential and commercial development.	High	High
BRAZORIA	Part of a reservoir system that includes San Bernard Reservoirs 1 and 2. Reservoir is located on the northwestern portion of the system. Reservoir is in close proximity to a sparsely populated residential area as well as to agricultural buildings.	TX04683	15	3900	S	Immediately downstream, undeveloped forest land. Within 1-mile radius of dam, very sparse residential development (<10)	Low	Low

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County	Characterization of Area	NID ID	Height	Storage	Hazard Potential	Downstream Description	People Risk	Building Risk
BRAZORIA	Located in the northwest corner of Mallard/Man lake reservoir system. It is in close proximity to around 30 homes along the northern and western borders of Mallard Lake.	TX05887	7	1462	S	Immediately Downstream, Mann Lake. Within 1-mile radius of levee sparse residential development.	Low to Medium	Low to Medium
LIBERTY	Located in unincorporated northeastern Liberty County. Damming of a tributary that drains into Mill Creek creates the Bearfoot Lake. Reservoir is surrounded by a rural residential "ranchette" style neighborhood.	TX03916	27	3207	H	Immediately downstream, undeveloped land, further downstream very sparse rural residential development.	Medium	Medium
LIBERTY	Located close to the headwaters of Luce Bayou in unincorporated northwest Liberty County. Luce Bayou drains into Lake Houston. The area surrounding the levee is mainly agricultural fields. A structure or dwelling does not appear within a one-mile radius of the levee.	TX03909	12	5000	S	Immediately downstream, undeveloped land/agricultural fields. Within 1-mile radius of levee, undeveloped land/agricultural fields.	Low	Low
LIBERTY	Located northwest of Devers. Dam is located off the channel of Whites Bayou, which is part of the Lower Trinity River Basin and drains into Trinity Bay. Most of the western portion of the city of Devers is within a one mile radius of the dam. The area within the one mile radius contains residential homes, businesses, and a post office.	TX03911	10	440	S	Immediately downstream, undeveloped land/very sparse residential structures. Within 1-mile of dam downstream, City of Devers, moderate to high residential/commercial development.	High	High
LIBERTY	Located in south Liberty County on a small tributary of the Trinity River. The lake is to the west of the much larger Timber Lake. Surrounding the lake is an unincorporated residential neighborhood that includes homes and trailers.	TX03919	18	156	S	Immediately downstream, sparse residential development between Talley and Timber Lake. Further downstream, within 1-mile of dam downstream Timber Lake.	High	High
LIBERTY	Located to the west of the community of Fitzgerald (146 & CR 2097). The reservoir was created by damming Knight Bayou, which is a tributary of the Trinity River. Knight Bayou is part of the Lower Trinity River Basin and drains into Trinity Bay.	TX04420	11	62	S	Immediately downstream, undeveloped land. Within 1-mile of dam downstream, moderate residential and commercial development off of CR 2097.	High	High

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County	Characterization of Area	NID ID	Height	Storage	Hazard Potential	Downstream Description	People Risk	Building Risk
LIBERTY	Located off a tributary of the Trinity River. The lake is to the east of the smaller Talley Lake. Surrounding the lake is an unincorporated residential neighborhood that includes homes and trailers.	TX04816	12	204	S	Immediately downstream, sparse residential development between Timber Lake and Trinity River. Further downstream within 1-mile of dam, sparse residential development along Trinity River Channel.	High	High
LIBERTY	Small residential lake/amenity pond. Surrounding the lake is a residential "ranchette" style neighborhood. Although the lake is surrounding by homes, due to its size, it would probably not pose much of a flooding threat to the greater neighborhood.	TX04873	26	201	S	Immediately downstream, undeveloped forest land. Within 1-mile of dam, sparse residential development.	Low to Medium	Low to Medium
LIBERTY	Located on a small tributary of the Trinity River within the town of Kenefick. Dam creates a small reservoir. Area surrounding the dam is a developed rural/suburban "ranchettes" style neighborhood. Numerous residential structures are within a one-mile radius zone of the dam.	TX09018	18	29	S	Immediately downstream, sparse to moderate residential development, within 1-mile of dam, sparse to moderate residential and commercial development	High	High
MONTGOMERY	Located within Stagecoach, east of Patton Village. Patton Lake is relatively small in terms of size and water capacity.	TX00082	6	86	H	Immediately downstream is forest, Lakeland Lake.	Low	Low
MONTGOMERY	Located in Patton Village. Peach Creek Lake is west of the smaller Patton and Lakeland Lakes. The area around the Peach Creek Dam is mostly moderate residential development. To the south of the dam there is undeveloped forest land.	TX00083	10	408	H	Immediately downstream is residential development (<20) homes, further downstream is undeveloped forest land to Peach Creek.	Medium	Medium
MONTGOMERY	Located in Stagecoach, northwest of the Stagecoach Farms subdivision. Surrounding the lake is moderate residential develop, which is characterized by large residential homes and lots.	TX00086	19	273	H	Immediately downstream, undeveloped forest land. Further downstream within 1-mile radius of dam, sparse residential development.	Medium	Medium

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County	Characterization of Area	NID ID	Height	Storage	Hazard Potential	Downstream Description	People Risk	Building Risk
MONTGOMERY	Located east of the much smaller Lake Hazy in Pinehurst. Surrounding the lake and dam is sparse to moderate residential development.	TX00087	19	130	H	Immediately downstream, sparse residential development. Within one mile of dam, further downstream is sparse to moderate residential development.	High	High
MONTGOMERY	Located southwest of Magnolia. Downstream of the dam are a few residential structures. Further downstream is undeveloped forest land. The lake is surrounded by sparse residential development.	TX00091	80	63	H	A few lake front residential structures/undeveloped forest land.	Low	Low to Medium
MONTGOMERY	Located southwest of Lake Conroe. The lake itself is relatively small. To the west of Hickory Lake is the larger Rushing Springs Lake. Hickory Lake is surrounded by moderate to high residential development.	TX00094	19	59	H	Immediately downstream moderate to high residential development. Within one mile of the dam downstream moderate to high residential development.	High	High
MONTGOMERY	Located off of the lower western arm of Lake Conroe, north of the City of Conroe. Immediately north of the dam is a buffer zone; however, going further north is high residential development.	TX00095	31	168	H	Immediately downstream is undeveloped land, further downstream, within one mile of the dam is moderate urban development which continues along Lake Conroe.	High	High
MONTGOMERY	Located off of the southwestern arm of Lake Conroe. Surrounding the lake is high residential and business development.	TX00096	22	192	H	Immediately downstream, commercial development. Within one mile downstream high commercial and residential development.	High	High
MONTGOMERY	Located on the southern end of Lake Conroe. Downstream of the dam are businesses as well as medium residential development. High residential development is located on the western and eastern shores of Lake Conroe.	TX00097	82	706970	H	Immediately downstream, commercial, governmental (SJRA) buildings, undeveloped land. Further downstream within one mile of dam, high commercial developed	High	High

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County	Characterization of Area	NID ID	Height	Storage	Hazard Potential	Downstream Description	People Risk	Building Risk
						along Hwy 105, undeveloped land.		
MONTGOMERY	Located south of Lake Conroe, west of the City of Conroe. Moderate residential development is located around the lake. To the north, east, and west, there appears to be medium to high residential development. South of the lake is undeveloped forest land.	TX00101	29	925	H	Immediately downstream of dam, undeveloped forest land/sparse residential development. Further downstream, within one mile of dam campground and high commercial development along SH 105.	High	High
MONTGOMERY	Tri-Lake No 1 and the Tri-Lake Estates Dam are located southeast of Montgomery. The lake is surrounded by residential development. The lake is relatively small in size and capacity.	TX00113	21	55	H	Immediately downstream is sparse residential development. Further downstream, between the dam and Lake Creek is undeveloped land.	Low to Medium	Low to Medium
MONTGOMERY	Hidden Forest Lake and Hidden Forest Lake Dam are located west of northwestern arm of Lake Conroe. To the east is Lake Mount Pleasant. Surrounding Lake Forest Dam is a sparse residential development. Outside of the neighborhood, especially to the south, is undeveloped forest land.	TX00117	20	242	H	Immediately downstream is Lake Mount Pleasant. Further downstream within one mile of dam, sparse to moderate residential development along Lake Mount Pleasant shoreline.	Medium to High	Medium to High
MONTGOMERY	Lewis Creek Reservoir and Lewis Creek Dam are located west of Willis and east of Lake Conroe. Immediately surrounding the reservoir and dam is mostly undeveloped land intermixed with sparse residential development. There is one significant high residential subdivision located to the southwest of the reservoir along the shoreline of Lake Conroe that is within a one mile radius of the dam.	TX00119	62	23200	H	Immediately downstream is undeveloped land. Further downstream within one mile of the dam is moderate residential and commercial development between the reservoir and Lake Conroe.	High	High
MONTGOMERY	County Club Lake and County Club Lake Dam are located in the City of Conroe. Surrounding the lake and dam are businesses, such as Builders Electrical Supply, a Lutheran Church, and medium residential development.	TX00122	13	264	H	Immediately downstream, undeveloped land, within 1-mile radius, sparse to moderate commercial development, after FM 2854 undeveloped forest land.	High	High

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County	Characterization of Area	NID ID	Height	Storage	Hazard Potential	Downstream Description	People Risk	Building Risk
MONTGOMERY	Royal Forest Lake and Royal Forest Lake Dam are located east of Willis. The lake is relatively large in size and capacity.	TX00125	38	690	H	Immediately downstream is residential development, further downstream is undeveloped land.	Medium	Medium
MONTGOMERY	Shadow Lake and the Shadow Lake Dam GSC are located north of Conroe, east of Panorama Village. Mostly undeveloped forest land surrounds the lake and dam.	TX00131	27	383	H	Immediately downstream is undeveloped forest. Further downstream, within a mile of the dam is undeveloped forest.	Low	Low
MONTGOMERY	McRae Lake and the McRae Lake Dam are located north of Cut and Shoot. Northwest West and south of the lake is mostly undeveloped forest land (Lake seems to be situated on the western edge of the Sam Houston National Forest).	TX00135	21	305	H	Immediately downstream of the dam is undeveloped forest. Further downstream, within one mile of the dam is undeveloped land, a few residential structures.	Low	Low
MONTGOMERY	Lakeland Lake and the Lakeland Lake Dam are located in Patton Village. To the east is the smaller Patton Lake and to the west is the larger Peach Creek Lake. The lake's capacity is relatively small.	TX04778	9	192	H	Immediately downstream is undeveloped forest land. Further downstream, within a mile of the dam is undeveloped forest land to Peach Creek.	Low	Low
MONTGOMERY	Lake Harrison and the Lake Harrison Dam are located within the Woodlands Resort and Conference Center. Surrounding the lake are conference center buildings and a golf course.	TX04855	13	196	H	Immediately downstream, golf course and undeveloped forest. Further downstream within one mile of dam, waste water treatment facility, school, and residential development.	High	High
MONTGOMERY	Lake Dodge and the Lake Dodge Dam are located north of Willis. Area surrounding the lake is sparse to moderate residential development. The lake itself is relatively small. To the west of Lake Dodge is Frontier Lake, and to the north is Frontier Lake No 2.	TX05265	24	55	H	Immediately downstream, undeveloped forest. To east, downstream sparse residential development. Further downstream, within a mile of dam, sparse residential development.	Medium	Medium
MONTGOMERY	Bear Branch Lake and Dam is located in The Woodlands Township. The lake itself is relatively small and is buffered by green space. The lake is surrounded by high residential development and two strip mall centers.	TX05878	27	5700	H	Immediately downstream, high residential development to east and west, undeveloped green space directly south. Within one mile of dam, high residential	High	High

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County	Characterization of Area	NID ID	Height	Storage	Hazard Potential	Downstream Description	People Risk	Building Risk
						development.		
MONTGOMERY	Lake Woodlands and the Lake Woodlands Dam are located within the heart of The Woodlands Township. The lake is very large with a high capacity for water.	TX06032	20	2376	H	Immediately downstream is undeveloped land; further downstream within a mile of the dam is high residential development.	High	High
MONTGOMERY	Indigo Lake and Indigo Lake Dam are located west of Stagecoach off of Nicholls Sawmill/Magnolia-Waller Rd.	TX06916	38	4668	H	Immediately downstream undeveloped forest land. Further downstream, within one mile of dam, other side of Nicholls Sawmill Road, very rural residential development, undeveloped forest land.	Low	Low
MONTGOMERY	Upper Serenity Lake Dam is located west of The Woodlands Township.	TX07098	10	121	H	Immediately downstream is Lower Serenity Lake. Further downstream, within a mile of the dam is sparse residential development.	High	High
MONTGOMERY	Majestic Lake and Majestic Lake Dam are located southwest of Conroe in an unincorporated residential community. Lake appears to be neighborhood detention or amenity pond. Surrounding lake is moderate residential development characterized by large home on very large lots. North and west of dam (downstream) appears to be undeveloped forest land.	TX07151	31.1	514	H	Immediately downstream is undeveloped land. Further downstream, within a mile of the dam mostly undeveloped land with a few residential structures.	Low	Low
MONTGOMERY	Lake Hazy and Lake Hazy Dam are located in Pinehurst, south of Magnolia. To the east are larger Lake Hollow and Lake Hollow Dam. Lake Hazy is small amenity pond.	TX09132	15	9	H	Immediately downstream, undeveloped land. Further downstream is Lake Hollow.	Low	Low
MONTGOMERY	HEB Detention Pond and Detention Pond Dam are located within City of Conroe. Detention pond is relatively small. It is a small wet bottom detention pond. Further south, downstream of the dam is more moderate residential development and an elementary school.	TX09272	11	14	H	Immediately downstream, undeveloped forest land. Downstream to south, within one mile of dam, moderate to high residential development along Decker and Gilmore streets.	Low to Medium	Low to Medium

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County	Characterization of Area	NID ID	Height	Storage	Hazard Potential	Downstream Description	People Risk	Building Risk
MONTGOMERY	Shadow Lake and the Shadow Lake Dam are located northeast of Woodloch. The lake itself is relatively small in terms of size and capacity. South and southeast of the dam appears to be undeveloped forest.	TX00085	10	175	S	Immediately downstream of the dam is undeveloped forest. Continuing downstream is undeveloped forest.	Low	Low
MONTGOMERY	Lake Forest Dam is located southwest of Conroe off of FM 2854. Area surrounding dam is characterized by sparse to moderate residential and commercial development. Area south of dam is mostly agricultural fields.	TX00098	15	381	S	Immediately downstream, undeveloped land. Further downstream within a mile from the dam, sparse residential development, agricultural fields.	Medium	Medium
MONTGOMERY	Near Kim Lake and the Near Kim Lake Dam are located off of Jackson Road, north of Pinehurst. Lake is adjacent to Kim Lake. Area surrounded by the Kim Lake dam is mostly undeveloped forest land with some very sparse residential or commercial development.	TX00103	19.3	142	S	Immediately downstream is undeveloped forest. Further downstream is undeveloped land with a few residential structures along Jackson Road.	Low	Low
MONTGOMERY	Old Lake 177 and the Old Lake 177 Dam are located south of Montgomery, east of FM 149. Lake is to the west of Lake Seventy Seven. Old Lake 177 is relatively small in size and capacity.	TX00106	15	75	S	Immediately downstream is undeveloped land, further downstream within a mile to the dam is undeveloped land.	Low	Low
MONTGOMERY	Pine Lake is located off of the western middle arm of Lake Conroe. It is a modestly sized lake, south of Lake Lorraine.	TX00110	19	152	S	Immediately downstream is Lake Lorraine. Further downstream, moderate residential development along Lake Lorraine shoreline.	Medium to High	Medium to High
MONTGOMERY	Stewart Lake and Stewart Lake Dam are located in south Montgomery. Downstream of the dam is mostly undeveloped; however, there appears to be some development along SH 105, which is within one mile of the dam.	TX00111	29	518	S	Immediately downstream is undeveloped forest. Further downstream is some commercial development along SH 105/undeveloped land.	Low	Low

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County	Characterization of Area	NID ID	Height	Storage	Hazard Potential	Downstream Description	People Risk	Building Risk
MONTGOMERY	Spring Lake and Spring Lake Dam are located northeast of Conroe. Lake is in a rural area on edge of Sam Houston National Forest and is relatively small in terms of size and capacity. South of the dam is undeveloped forest land.	TX00124	23	255	S	Immediately downstream is undeveloped forest. Further downstream, within a mile of the dam is undeveloped forest.	Low	Low
MONTGOMERY	Dunwoody Lake and Dunwoody Lake Dam are located north of Willis, Texas. Surrounding lake is mostly woodlands and agricultural fields. Very sparse residential development is located to east off of Old Willis New Waverly Road.	TX00133	34	1000	S	Immediately downstream, undeveloped forest land. Within one mile of dam, very sparse rural development/possibly agricultural buildings	Low	Low
MONTGOMERY	Hillside Lake and Hillside Lake Dam are located southeast of Conroe, off of County Line Road. Area surrounding Hillside Lake is mostly rural and undeveloped. To the north is what appears to be a gravel quarry/operation.	TX05266	18	70	S	Immediately downstream, undeveloped forest land. Within one mile downstream of dam undeveloped forest land.	Low	Low
MONTGOMERY	Panorama Lake and Panorama Lake Dam are located north of Conroe in Panorama Village, which is off of I-45. The lake itself is relatively small in terms of size and water capacity.	TX05267	12	224	S	Immediately downstream is I-45. Further downstream within one mile of the dam is sparse residential development off of N Frazier, undeveloped land, and Shadow Lake.	Low to Medium	Low to Medium
MONTGOMERY	Lake Hardin and Lake Hardin Dam are located in Stagecoach, within Stagecoach Farms subdivision. The lake is relatively small as compared to the larger Apache Lake to the north. The area surrounding the lake and dam is moderate to sparse residential development. The area is characterized by large homes on very large lots.	TX05829	19	60	S	Immediately downstream, undeveloped forest. Further downstream within one mile of dam, undeveloped forest with some residential development.	Low to Medium	Low to Medium
MONTGOMERY	Rannefeld Dam is located in south Pinehurst. The associated lake is relatively small, more like an amenity pond. Surrounding the lake shore is a buffer zone of forest land.	TX06922	16	115	S	Immediately downstream is undeveloped forest. Further downstream, within a mile of the dam is sparse residential development.	Low	Low

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County	Characterization of Area	NID ID	Height	Storage	Hazard Potential	Downstream Description	People Risk	Building Risk
MONTGOMERY	Windcrest Lake Dam is located east of Pinehurst. To the west are the Upper and Lower Serenity Lakes. Directly downstream of the dam is undeveloped forest land. However, further downstream within a one-mile radius of the dam is sparse residential development. The Windcrest Lake is also surrounded by sparse to moderate residential development.	TX07031	20	943	S	Green space/forest undeveloped land. Within 1-mile radius sparse residential development.	Medium	Medium
MONTGOMERY	Lake Azure and the Lake Azure Dam are located west of The Woodlands Township. To the east is the Lake Windcrest Golf Course.	TX07092	18	424	S	Immediately downstream, undeveloped forest land. Further downstream within a mile of dam, sparse residential development.	Medium to High	Medium to High
MONTGOMERY	Fish Creek Dam No 1 and Fish Creek Lake are located to the southwest of Conroe. Surrounding the dam is medium residential development. This area (Honea Egypt) is mostly characterized by large homes with very large wooded lots.	TX07093	16	200	S	Immediately downstream, moderate residential development. Within a mile radius, undeveloped forest land, sparse to moderate residential development	Medium to High	Medium to High
MONTGOMERY	Lower Serenity Lake and Lower Serenity Lake Dam are located west of The Woodlands Township. Above this lake is the Upper Serenity Lake and dam.	TX07099	9	117.8	S	Immediately downstream is undeveloped forest. Further downstream is sparse residential development.	High	High
MONTGOMERY	Ridge Lake and Ridge Lake Dam are located west of the City of Conroe. To the east of the dam appears to be undeveloped forest land. Around the western and northern lake shore is sparse residential development. There is residential development to the north, west, and south of the lake that is located within a mile radius of the dam.	TX07114	21	840	S	Immediately downstream is undeveloped forest. Further downstream, within a mile of the dam is sparse residential development off of Overland Terrace.	Medium	Medium
MONTGOMERY	Downstream of Trophy Dam is sparse residential development, characterized by large homes on large lots. Between the residential development and the dam is undeveloped land.	TX07115	26	542	S	Immediately downstream, undeveloped land. Further downstream is sparse residential development.	Medium	Medium

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County	Characterization of Area	NID ID	Height	Storage	Hazard Potential	Downstream Description	People Risk	Building Risk
MONTGOMERY	Grand Lake Dam and Grand Lake are located southwest of Conroe. Downstream of the lake is undeveloped land; however, new construction seems to be taking place. In future more residential development could be in the area.	TX07262	21	201	S	Immediately downstream of dam is an amenity pond. Further south is undeveloped land, within one mile of dam downstream to the west and east is moderate residential development. Mostly undeveloped land.	Low	Low
MONTGOMERY	Wal-Mart Store No 400 Expansion Pond Dam is located in the heart of Conroe, off of I-45. The pond is small and is located on the southwestern portion of the Wal-Mart complex. Surrounding the pond, downstream of the dam, is green space to the south, and the Wal-Mart store to the north and west. East of the pond is I-45. Although the pond is located in a high density commercial area of Conroe, it would appear that due to the size of the pond, it would not pose a significant threat.	TX09343	14.5	10	S	Green Space, Apartment Complex to the west, within 1-mile radius of dam.	Low	Medium
WALKER	Tillie Lake Lower Dam is located to the east of Huntsville. Surrounding the lake is sparse residential development. Downstream of the dam is sparse residential development and undeveloped land. There is rural residential development within a one mile radius of the dam.	TX02949	18	117	H	Immediately downstream, sparse residential development. Further downstream undeveloped land, in between sparse rural residential development.	High	High
WALKER	Muecke Lake Dam is located to west of Huntsville. Downstream of dam is undeveloped forest land. The lake is surrounded by undeveloped land.	TX02954	19	357	H	Immediately Downstream, undeveloped forest land. Within 1-mile radius, undeveloped forest land/agricultural fields.	Low	Low
WALKER	Elkins Lake Dam is located in Huntsville. Immediately downstream of the dam is Lake Azalea and a neighborhood community. Surrounding Lake Elkins is moderate to high residential development.	TX02956	31	1766	H	Immediately Downstream, Lake Azalea to the West, Moderate Residential Development to south and east. Within 1-mile radius, moderate to high residential development.	High	High

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County	Characterization of Area	NID ID	Height	Storage	Hazard Potential	Downstream Description	People Risk	Building Risk
WALKER	Spring Lake Dam is located in Huntsville. Downstream of the dam is Club Lake. Further downstream, within a one-mile radius of the dam is undeveloped forest land. To the north of Spring Lake is moderate residential development.	TX02958	24	575	H	Undeveloped forest land/Club Lake	Low	Low
WALKER	Horseshoe Lake No 1 dam is located northeast of Huntsville. Immediately downstream of the dam is forest undeveloped land. To the southwest, within a one-mile radius of the dam is rural/sparse residential development off of E Walnut Lake Drive.	TX02981	17	150	H	Immediately downstream undeveloped forest land. Rural residential development to the southwest within 1 mile radius of the dam.	Low	Low
WALKER	Horseshoe Lake No 2 dam is located northeast of Huntsville, east of Horseshoe Lake No 1 dam. Downstream of the dam is sparse to moderate residential development. Further downstream, on the other side of Hwy 19 is undeveloped land.	TX04398	32	554	H	Sparse to moderate residential development, further downstream is undeveloped land.	Medium	Medium
WALKER	Located east of Huntsville. Surrounding the lake is sparse residential development. Downstream of the dam is sparse residential development, and further downstream is undeveloped land. There is rural residential development within a one mile radius of the dam.	TX06351	17	151	H	Immediately downstream, sparse residential development. Further downstream undeveloped land, in between sparse rural residential development.	High	High
WALKER	Located south of Lake Raven, south of Huntsville. Downstream of the dam is parkland, surrounding the lake is forest park land.	TX02952	35	6508	S	Forest land/Huntsville State Park.	Low	Low
WALKER	Located southwest of Huntsville. Immediately downstream of the dam is undeveloped land. Further downstream is a cemetery. A few structures are located off of Cotton Creek Cemetery Road.	TX02955	25	960	S	Undeveloped land/forest land immediately downstream. Cemetery, a few residential/commercial structures within a 1-mile radius.	Low	Low

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County	Characterization of Area	NID ID	Height	Storage	Hazard Potential	Downstream Description	People Risk	Building Risk
WALKER	Located southwest of Huntsville. Immediately downstream of the dam is national forest or undeveloped forest land. Surrounding the lake is also undeveloped forest land. Within a one-mile radius of the dam is undeveloped forest land.	TX02957	21	400	S	Undeveloped forest land/National Forest.	Low	Low
WALKER	Dawson Lake Dam is located within the Sam Houston National Forest, north of Lake Conroe. Downstream of the dam is forest, surrounding the lake is forest.	TX07086	28	102	S	National Forest.	Low	Low
WALKER	Located north of Huntsville. Immediately downstream of the dam is undeveloped forest land. Further downstream, within a one mile radius of the dam is very sparse/rural residential development.	TX07087	20	55	S	Undeveloped forest land/A few (<10) residential buildings	Low	Low
WALKER	Located west of New Waverly. East of the dam is the Sam Houston National Forest. The dam is located above a few residential structures that are off Hwy 150/Faulk Road. The development is very sparse and rural.	TX07194	14.4	81	S	Hwy 150, undeveloped land. Further downstream some rural residential development off of Faulk Rd, within 1-mile radius of dam.	Low	Low
WALLER	Located northeast of Hempstead. Immediately downstream of the dam is sparse to moderate residential development. Further downstream, within a one mile radius of the dam is agricultural land with a few agricultural structures.	TX04190	15	240	H	Immediately downstream, residential development. Further downstream undeveloped agricultural land/fields.	High	High
WALLER	Located northeast of Fairview in un-incorporated Waller County. Downstream of the dam is mainly agricultural fields and a few agricultural structures.	TX05263	15	52	S	Immediately downstream, agricultural fields. Further downstream are agricultural fields and a few structures.	Low	Low

Source: USACE NID

Despite the fact that there is no record of dam failure in the region, approximately 34 percent of dams in the area are classified as facing a high or significant downstream hazard potential. If these dams were to fail there would be immediate danger to human life, property and the environment and the loss of human life and significant property or environmental destruction is likely. All participating counties in the Plan Update have at least one dam that is classified as high or significant downstream potential.

Following acquisition of the NID from the Corps of Engineers, H-GAC staff observed when using GIS software that at least one dam was located outside the region. This led H-GAC staff to believe that accuracy of the dams is questionable in some cases. H-GAC proposes to conduct a review of the dams' and levees' locations to confirm accuracy as a mitigation action described in Appendix A.

The probability of dam and levee failure is difficult to ascertain. Currently, there is not an available inventory of dam and levee failure upon which to base a probability of future events. Factors that contribute to dam failure include rainfall, flooding, and maintenance and operations of dams, all which can vary widely throughout the region.

Toxic Release/Hazardous Materials

Toxic releases can have a substantial impact on health and safety of the public and first responders. Such events can cause multiple deaths, shut down facilities or operations, and cause major damages to nearby properties. In a hazardous materials incident, solid, liquid and/or gaseous contaminants may be released from fixed or mobile containers.

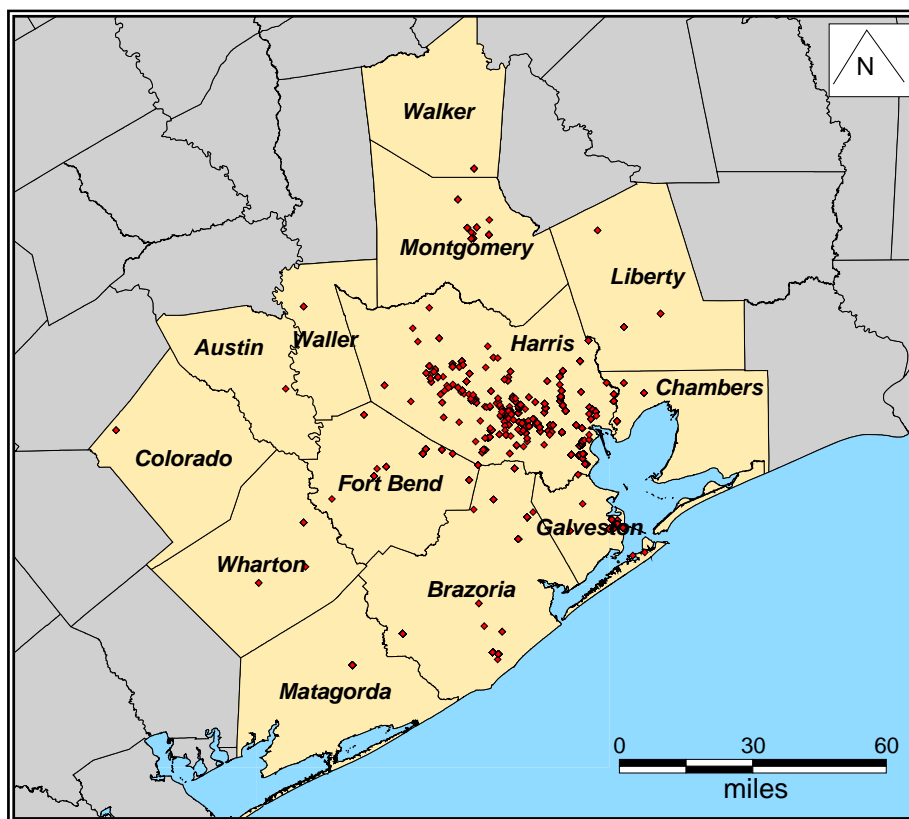
The H-GAC region is home to a multitude of industrial facilities that present the risk for a hazardous materials (HAZMAT) incident. For instance, Harris County houses one of the largest petrochemical complexes in the nation.

The Toxics Release Inventory (TRI) is a database that is publicly available from the federal Environmental Protection Agency (EPA) that contains information on toxic chemical releases and other waste management activities reported annually by certain industry groups and federal facilities. This inventory was established under the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA) and expanded by the Pollution Prevention Act of 1990.

Figure 4.2-42 shows the locations of toxic sites in the H-GAC planning area. There are 2,970 toxic chemicals identified in the TRI that are stored at 400 facilities or sites across the region.⁵ The majority of these sites are located in Harris County.

⁵ Several chemicals are often stored at the same location, which explains why the number of storage facilities is less than the number of chemicals inventoried. This data presented was collected and evaluated for the 2006 HMP.

Figure 4.2-42
Locations of Toxic Sites (from Toxic Release Inventory)*



Note: * Results are from the 2006 Regional Hazard Mitigation Plan

Based on the TRI data, the areas within a close proximity to a TRI facility would be at a higher risk of impact than those further away. Due to the large number of chemicals associated with these facilities it is not feasible to conduct an analysis based on each chemical and its potential effects. However, it is important to note that the chemical involved in a release is another factor in measuring the impact effects.

Table 4.2-21 presents the number of chemical disposal or release incidents for 2009 for jurisdictions included in this HMP Update. Of the incidents, Brazoria County has had the highest number of on-site disposals or releases and Chambers County has had the highest number of off-site disposals or releases.

Table 4.2-21
2009 TRI On-site and Off-site Reported Disposed or Released for all Industries and Chemicals

County	Total On-site Disposal or Other Releases	Total Off-site Disposal or Other Releases	Total On- and Off-site Disposal or Other Releases
Austin	1,097	7,655	8,752
Brazoria	24,830,463	507,433	25,337,895
Chambers	1,326,522	878,856	2,205,378
Liberty	47,967	2,731	50,698
Montgomery	421,632	466,883	888,514
Walker	5,950	1,220	7,170

County	Total On-site Disposal or Other Releases	Total Off-site Disposal or Other Releases	Total On- and Off-site Disposal or Other Releases
Waller	4,439	457	4,896
Total	31,622,205	1,976,017	33,598,221

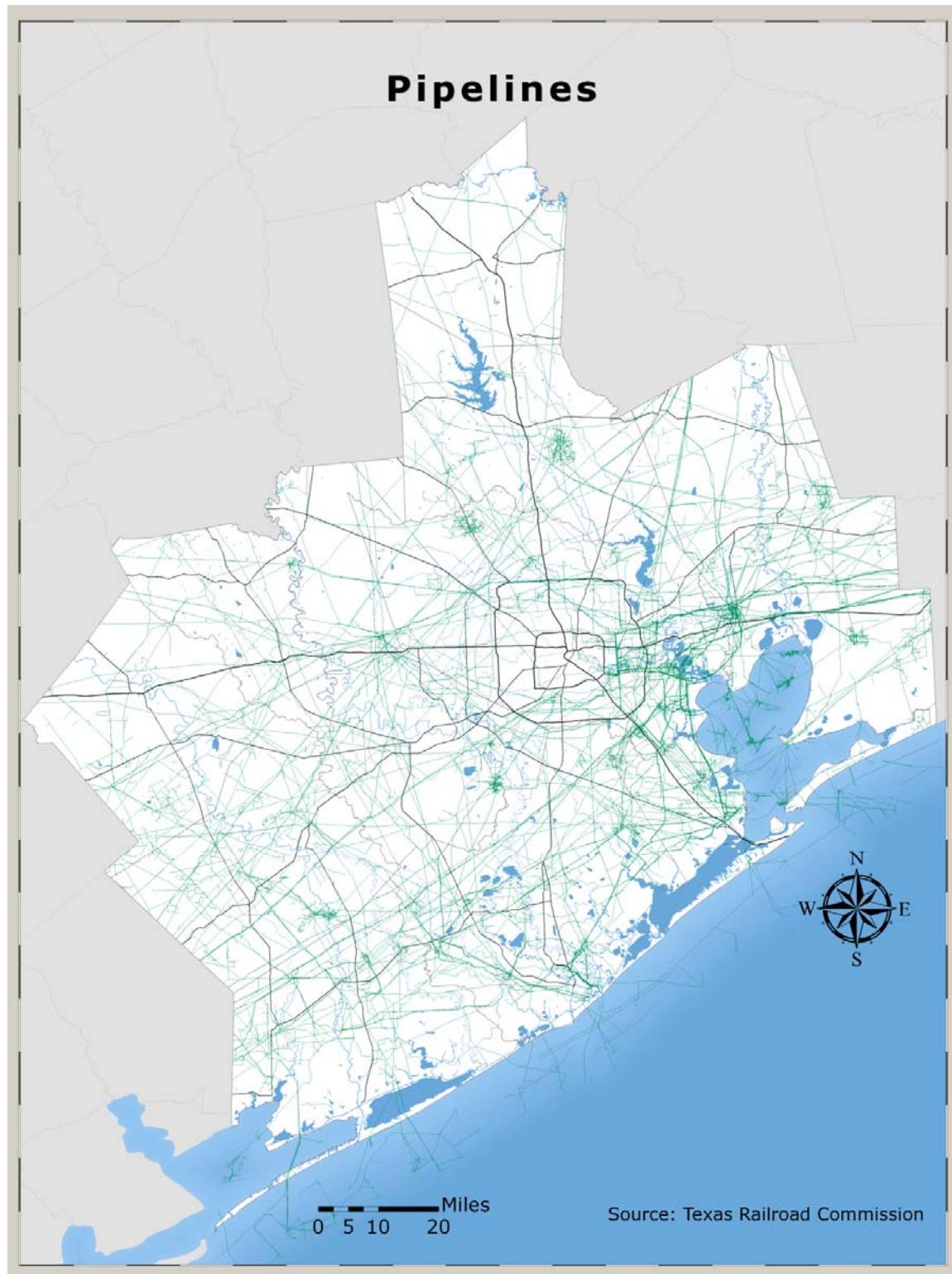
Source: Toxic Release Inventory, Environmental Protection Agency

Given the vast amount of industry throughout the region, the likelihood of a release or improper disposal is low; however, if these hazardous materials are improperly handled, an event could imminently endanger lives and cause damage to property in the immediate area. While the actual release may be isolated, the risk area may be large. All counties in the H-GAC region are susceptible to this hazard.

Energy Pipeline Failure

Energy pipelines are prevalent in the H-GAC region. Energy pipeline crossings in Texas include large diameter pipes that carry energy products to population centers along with small diameter pipes that bring products such as natural gas to homes and businesses. **Figure 4.2-43** illustrates the energy pipeline network in the H-GAC region. Please note that pipelines are present throughout all counties in the region. While the likelihood of failure is low, if any of these energy pipelines were to be damaged or rupture, such an event could imminently endanger lives and cause damage to property in the immediate area (within less than a half-mile radius). Incidents involving pipeline failures are typically isolated although the risk area may appear large. All counties in the H-GAC region are susceptible to this hazard.

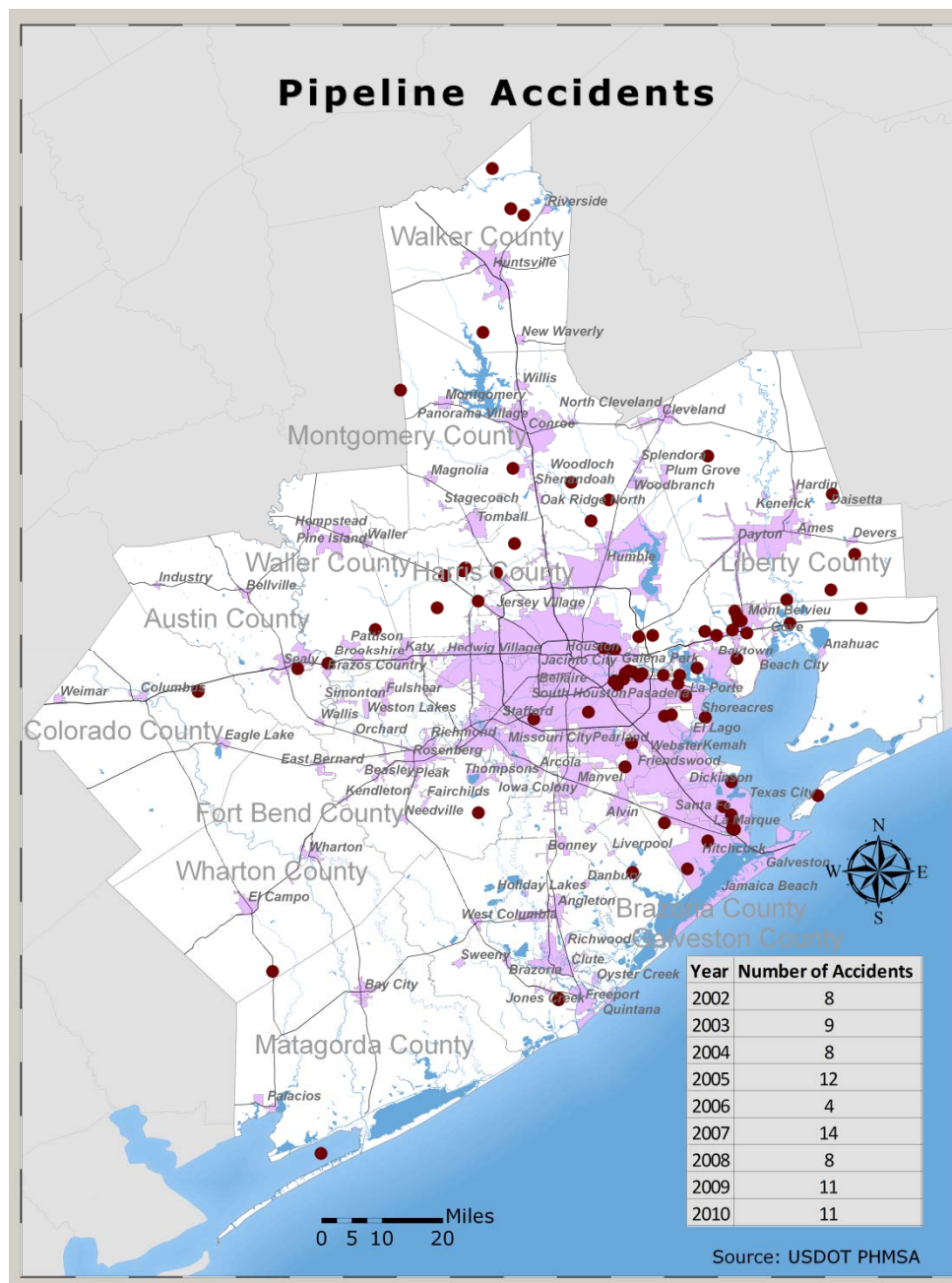
Figure 4.2-43
H-GAC Energy Pipeline Network



Between 2002 and 2010, the region experienced 85 pipeline incidents. The accidents are depicted in **Figure 4.2-44**. Note that all of the counties in the region have at least one pipeline accident. According to

available information from the US Department of Transportation Pipeline and Hazardous Materials Safety Administration (USDOT PHMSA), the 13-county region experienced 7% of the nation's onshore pipeline accidents. Given that the region has the largest petrochemical complex in the country and that pipelines are ubiquitous throughout the region, if pipeline failure were to occur, it could have a significant impact on human life and property.

Figure 4.2-44
H-GAC Pipeline Accidents



4.3 Vulnerability Assessment

This section of the Plan provides information on high-level, detailed vulnerability assessments that were completed for the following hazards:

- Flood
- Hurricanes and Tropical Storms
- Severe Thunderstorms
- Tornadoes
- Wildfire
- Drought
- Expansive Soils
- Excessive Heat
- Winter Storms
- Hail
- Coastal Erosion
- Dam/Levee Failure

Vulnerability assessments were also conducted for the following two human-caused hazards:

- Toxic Release/Hazardous Materials (HAZMAT)
- Energy Pipeline Failures

H-GAC chose these hazards for detailed analysis due to the higher level of risk for these hazards when compared to others in the H-GAC planning area. H-GAC consultants developed the loss estimates in this section using available data, and the methodologies applied resulted in an *approximation* of risk. These estimates should be used to understand relative risk from hazards and potential losses; however it is important to understand that uncertainties are inherent in any loss estimation methodology, arising in part from incomplete scientific knowledge concerning natural hazards and their effects on the built environment. Uncertainties also result from approximations and simplifications that are necessary for a comprehensive analysis (such as abbreviated inventories, demographics or economic parameters).

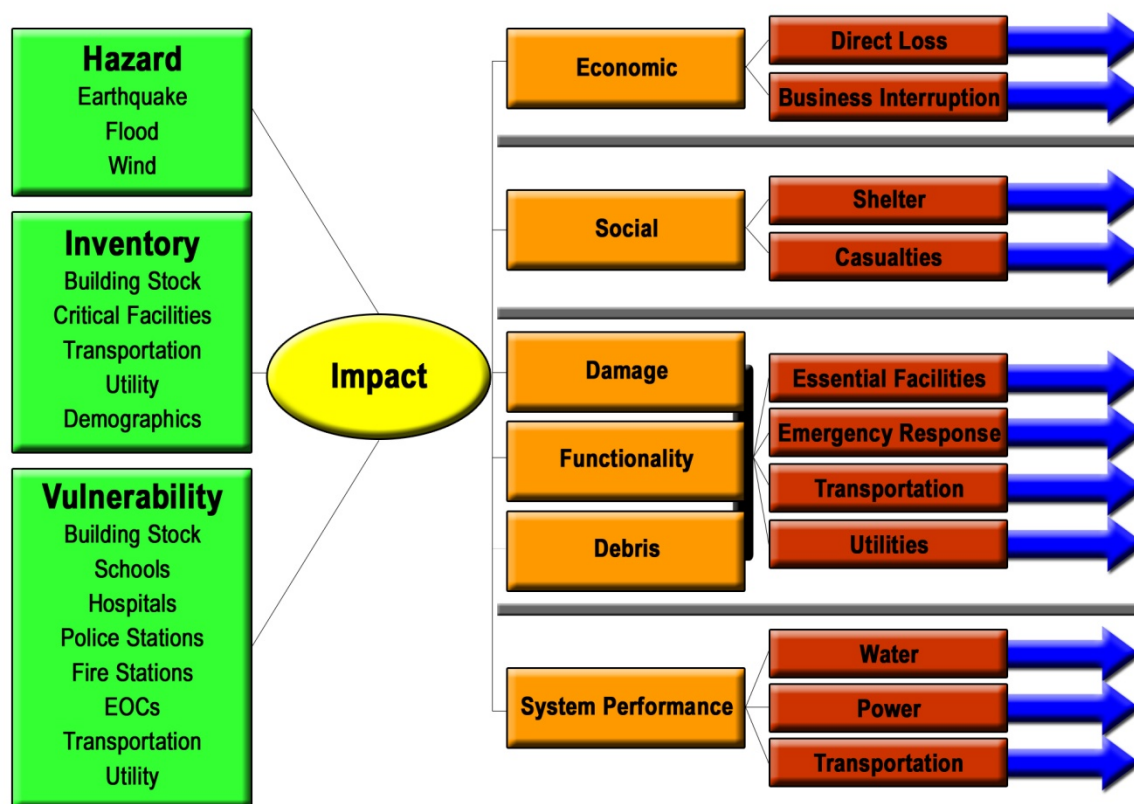
In order to conduct the risk assessment effort, three distinct hazard risk assessment methodologies were applied; utilizing both HAZUS-MH® (FEMA's loss estimation software), a statistical risk assessment methodology, and the Southern Fire Risk Assessment System (SFRAS). All three of the assessment tools provide estimates for potential impact by using a systematic framework for evaluation. The HAZUS-MH risk assessment methodology is parametric, in that distinct hazard and inventory *parameters* (for example, wind speed and building types) were modeled using the HAZUS-MH software to determine the impact (damages and losses) on the built environment. The HAZUS-MH software was used to estimate losses from wind (hurricane and tornado) and flood hazards. The second methodology, a statistically-based risk assessment approach, was applied to analyze hazards that are outside the scope of the HAZUS-MH software. The HAZUS-driven methodology uses a statistical approach and mathematical modeling of risk to predict a hazard's frequency of occurrence and estimated impacts based on recorded or historic damage information. NOTE: the HAZUS-MH analysis contained in the 2011 update pertains to the 2006 Plan. A recent release of HAZUS was not available for analysis at the time of this Plan update.

The SFRAS software is an extension to GIS and uses a multitude of data inputs to assess the susceptibility of wildfires of a given area.

Explanation of HAZUS-MH Risk Assessment Methodology

HAZUS-MH is FEMA's standardized loss estimation software program, built upon an integrated geographic information system (GIS) platform (**Figure 4.3-1**). This risk assessment applied HAZUS-MH to produce regional profiles and estimate losses for two of the eleven natural hazards addressed in this section: flood and hurricane winds. Although various versions of HAZUS-MH were released during the time between the 2006 Plan and this update, the census database was generally not updated. In late 2011, FEMA anticipated a HAZUS-MH release that will include the 2010 census data. Because this new version was unavailable during the analysis portion of the planning process, the data acquired from HAZUS-MH during the 2006 planning process was left unchanged. During the 2006 planning process, various modules and alpha versions of the HAZUS-MH software were used to estimate losses from earthquake, hurricane winds, and flood hazards.

Figure 4.3-1
Conceptual Model of HAZUS-MH



Although HAZUS-MH has not incorporated the 2010 census data, the data was available for review during the plan update. **Table 4.3-1** presents the 2000 and 2010 population data by county. Fort Bend County and Montgomery County had the highest population growth between 2000 and 2010. Matagorda County was the only county to lose population between 2000 and 2010. Using the population percent change, inferences can be made on the 2000 census based HAZUS-MH data presented in the subsequent sections.

**Table 4.3-1
2000 and 2010 County Populations**

County	2000 Total Population	2010 Total Population	Total Percent Change
Austin	23,590	28,417	20.46%
Brazoria	241,767	313,166	29.53%
Chambers	26,031	35,096	34.82%
Colorado	20,390	20,874	2.37%
Fort Bend	354,452	585,375	65.15%
Galveston	250,158	291,309	16.45%
Harris	3,400,578	4,092,459	20.35%
Liberty	70,154	75,643	7.82%
Matagorda	37,957	36,702	-3.31%
Montgomery	293,768	455,746	55.14%
Walker	61,758	67,861	9.88%
Waller	32,663	43,205	32.28%
Wharton	41,188	41,280	0.22%
Total	4,854,454	6,087,133	25.39%

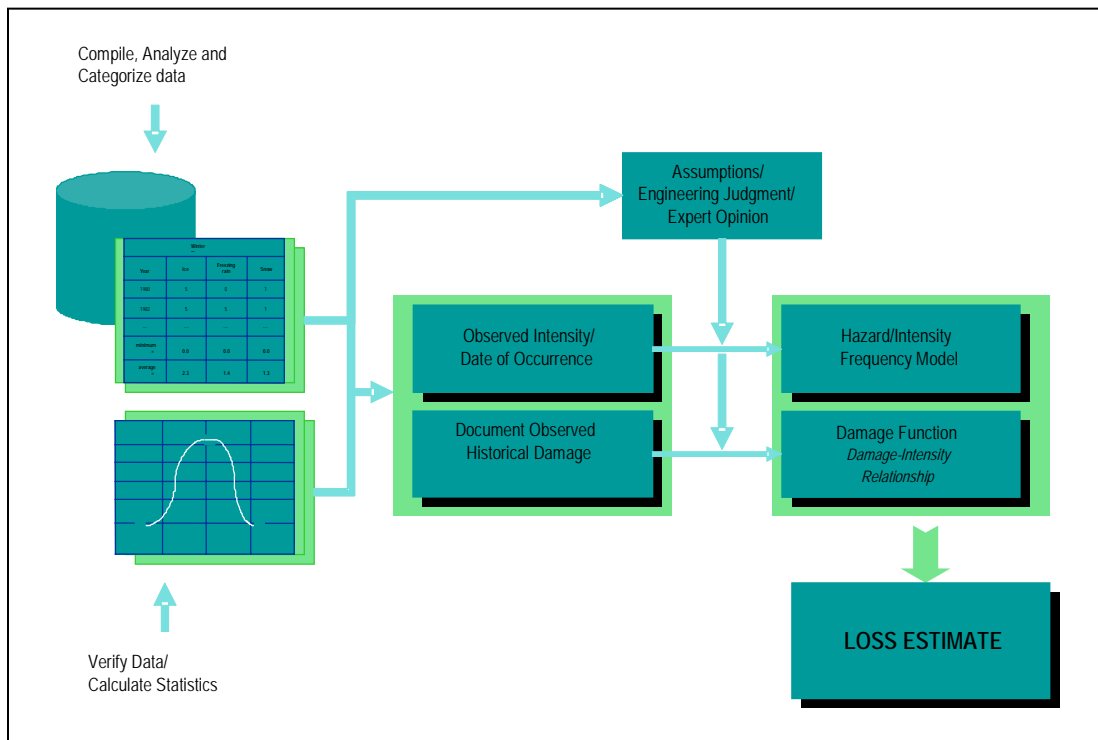
Explanation of Statistical Risk Assessment Methodology

Risks associated with other natural hazards were analyzed using a statistical assessment methodology developed and used specifically for this effort. This approach is based on the same principals as HAZUS-MH, but does not rely on readily-available automated software. Historical data for each hazard are used and statistical evaluations are performed using manual calculations. The general steps used in the statistical risk assessment methodology are summarized below.

- Compile data from national and local sources;
- Conduct statistical analysis of data to relate historical patterns within data to existing hazard models (minimum, maximum, average, and standard deviation);
- Categorize parameters for each hazard to be modeled;
- Develop model parameters based on an analysis of data, existing hazard models, and risk engineering judgment;
- Apply hazard model using the following criteria:
 - Analysis of frequency of hazard occurrence
 - Analysis of intensity and damage parameters of hazard occurrence
 - Development of intensity and frequency tables and curves based on observed data
 - Development of simple damage functions to relate hazard intensity to a level of estimated damages (*for example, one flood = \$ in estimated damages*)
 - Development of exceedance and frequency curves relating a level of damage for each hazard to an annual probability of occurrence
 - Development of loss estimate.

Figure 4.3-2 illustrates a conceptual model of the statistical risk assessment methodology as applied to this risk assessment.

Figure 4.3-2
Conceptual Model of the Statistical Risk Assessment Methodology



The economic loss results are presented here using two interrelated risk indicators:

- 1) Annualized Loss (AL), which is the estimated long-term value of losses to the general building stock in any single year in a specified geographic area (i.e., county);
- 2) Annualized Loss Ratio (ALR), which expresses estimated annualized loss as a fraction of the building inventory replacement value.

The estimated Annualized Loss (AL) addresses the two key components of risk: the probability of the hazard occurring in the study area and the consequences of the hazard, largely a function of building construction type and quality, and of the intensity of the hazard event. By annualizing estimated losses, the AL factors in historic patterns of frequent smaller events with infrequent but larger events to provide a balanced assessment of risk. The Annualized Loss Ratio (ALR) represents the AL as a fraction of the replacement value of the local building inventory. This ratio is calculated using the following formula:

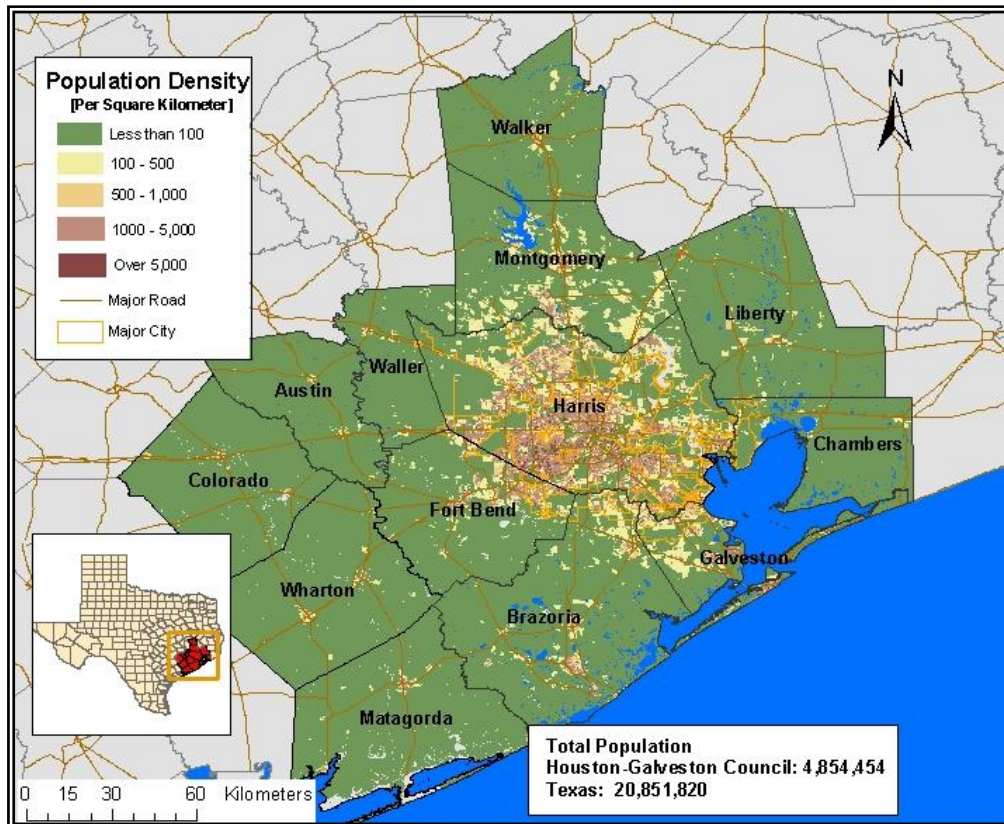
$$\text{“ALR} = \text{ANNUALIZED LOSSES} / \text{TOTAL EXPOSURE AT RISK”}$$

The annualized loss ratio gauges the relationship between average annualized loss and building replacement value. This ratio can be used as a measure of relative risk between areas and, since it is normalized by replacement value, it can be directly compared across different geographic units such as metropolitan areas or counties. It is important to note that HAZUS-MH was used to produce “worst case scenario” results. The outputs in this document are considered to be the result of a worst case scenario event for each hazard, and it is understood that any smaller events which could occur would most likely create fewer losses than those calculated here. The use of the annualized losses approach has three primary benefits. They include the ability to assess potential losses from all future disasters, results across different hazards are readily comparable and are, therefore, easier to rank, and the annualized losses method provides an objective means to evaluate mitigation alternatives.

This section provides information on hazard vulnerability across the Houston-Galveston Area Council region by jurisdiction (county). **Figure 4.3-3** shows the area's demographic distribution at the county level, based on the 2000 Census. The population in the region is expected to increase by more than two million residents over the next 40 years.

Table 4.3-2 provides a breakdown by county of the estimated number of facilities and dollar exposure that formed the basis of the risk assessment presented in this section. This information was derived from HAZUS-MH.¹

Figure 4.3-3
Population Distribution (2000 Census)



¹ It is important to note that building exposure and other loss estimates generated by the use of HAZUS represent readily available data that meet the intent of the Disaster Mitigation Act of 2000. However, as additional information becomes available, the H-GAC Regional Hazard Mitigation Plan should be updated to reflect more accurate building inventories.

Table 4.3-2
County Populations and Number of Residential Buildings

County	Population (2000)	Number of Residential Buildings
Austin	23,590	10,815
Brazoria	241,767	124,852
Chambers	26,031	13,505
Colorado	20,390	9,088
Fort Bend	354,452	253,184
Galveston	250,158	137,599
Harris	3,400,578	1,601,615
Liberty	70,154	26,522
Matagorda	37,957	17,995
Montgomery	293,768	183,817
Walker	61,758	18,937
Waller	32,663	12,172
Wharton	41,188	15,998
TOTAL	4,854,454	2,426,099

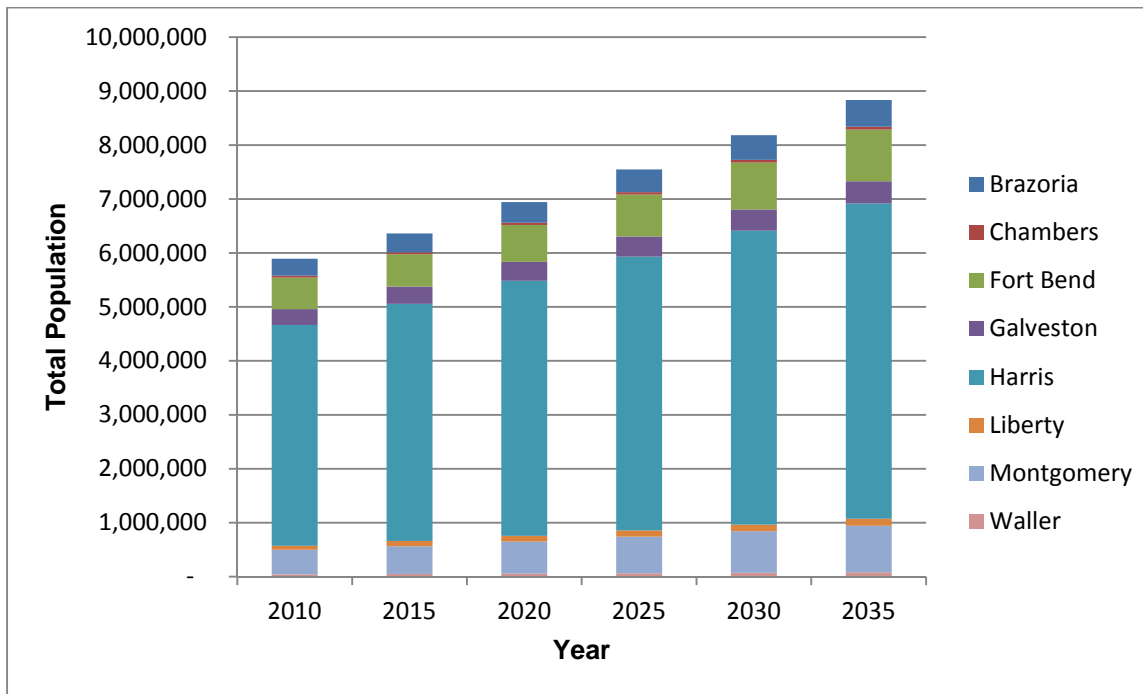
**Table 4.3-3
Exposure Based on HAZUS-MH***

Jurisdiction	Population (2000)	Residential Buildings		Commercial Buildings		Critical Facilities
		Number	Value	Number	Value	Number
Austin	23,590	10,815	\$2,304,130,000	57	\$300,375,000	38
Brazoria	241,767	124,852	\$32,187,510,000	691	\$2,843,165,000	267
Chambers	26,031	13,505	\$3,012,897,000	83	\$331,690,000	33
Colorado	20,390	8,668	\$1,913,971,000	80	\$324,172,000	42
Fort Bend	354,452	253,184	\$73,345,034,000	1,223	\$4,851,969,000	207
Galveston	250,158	137,599	\$39,635,841,000	971	\$3,943,014,000	255
Harris	3,400,578	1,601,615	\$528,429,331,000	15,936	\$71,300,514,000	2,175
Liberty	70,154	26,522	\$4,882,154,000	133	\$604,192,000	98
Matagorda	37,957	15,786	\$3,661,791,000	80	\$409,273,000	73
Montgomery	293,768	183,817	\$47,315,130,000	998	\$4,311,959,000	193
Walker	61,758	18,937	\$4,864,092,000	136	\$568,158,000	26
Waller	32,663	12,172	\$2,697,611,000	71	\$281,691,000	45
Wharton	41,188	14,626	\$3,480,988,000	121	\$538,973,000	52
TOTAL	4,854,454	2,422,098	\$747,730,480,000	20,580	\$90,609,145,000	3,504
Jurisdiction	Infrastructure and Lifelines				Hazardous Materials Facilities	
	Oil Pipe (km)	Gas Pipe (km)	Highway (km)	Railroad (km)	Number of Sites	Number of Materials
Austin	120	312	174	148	1	4
Brazoria	700	1,609	339	229	40	331
Chambers	764	586	247	32	7	68
Colorado	107	304	212	141	4	4
Fort Bend	382	622	243	150	13	102
Galveston	315	361	219	180	16	231
Harris	3,340	2,183	901	886	292	2,123
Liberty	832	948	253	214	5	16
Matagorda	209	1,011	161	132	2	23
Montgomery	441	687	324	229	14	52
Walker	223	154	286	58	3	10
Waller	121	206	99	54	4	5
Wharton	162	1,022	219	70	3	6
TOTAL	7,715	10,005	3,678	2,521	404	2,975

Note: * Results are from the 2006 Regional Hazard Mitigation Plan

Figure 4.3-4 shows current and projected total population for the region. This information, derived from 2010 census data and projections, indicates consistent growth in the area exceeding the 7 million mark by 2025.

Figure 4.3-4
Current and Projected Total Population for H-GAC Area



Explanation of Southern Fire Risk Assessment System (SFRAS) Methodology

The Southern Wildfire Risk Assessment (SWRA) is a project managed by the Southern Group of State Foresters that provides a critical assessment of the wildland fire risk for 13 southern states. The SWRA provides fire professionals and other stakeholders with a dynamic set of tools for evaluating wildfire risk in a consistent manner across the region, with the ultimate goal of reducing the potential human, environmental, and property loss caused by wildland fires. The SWRA project team is comprised of staff from Texas Forest Service, Sanborn (consultant) and the SWRA Steering Committee. The SWRA Steering Committee is comprised of representatives from the southern states represented in the database. This team includes fire planning and management specialists, fire behavior and fuels management experts, GIS and remote sensing technical specialists.

The SWRA team has compiled a substantial amount of GIS data to develop the published results to support operational staff in assessment and management of wildfire risk.

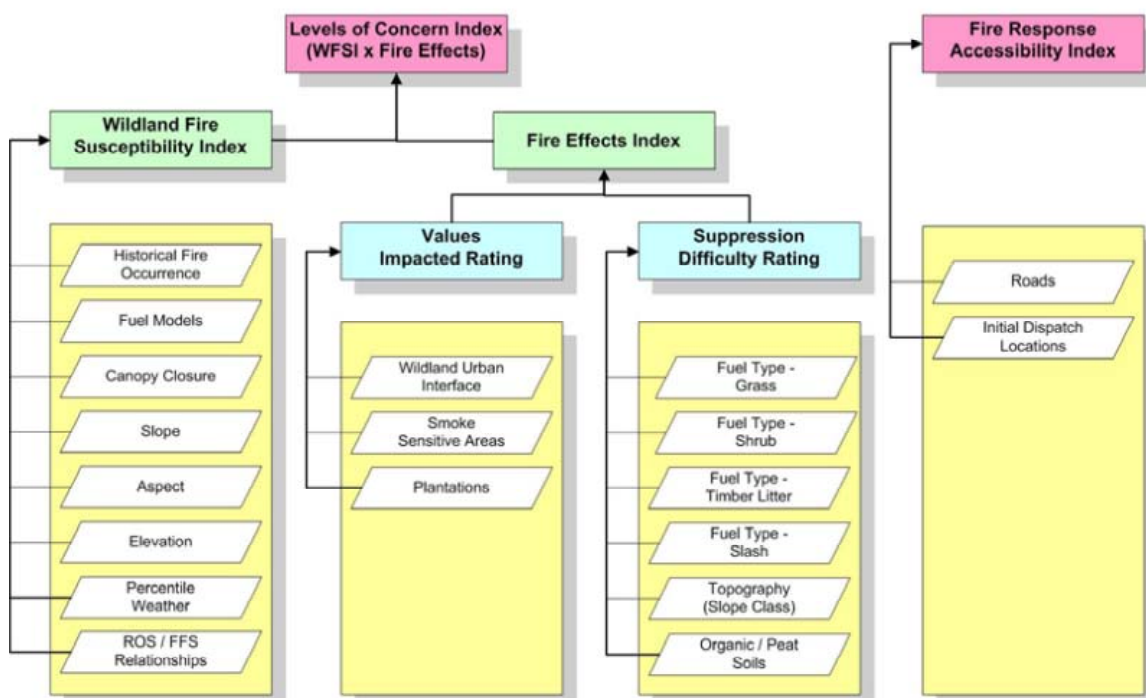
SWRA has developed the Southern Fire Risk Assessment System (SFRAS), an ArcGIS desktop application that provides capabilities for using the SWRA published results data, including tools for evaluating mitigation planning scenarios and developing risk ratings for communities. **Figure 4.3-5** illustrates the conceptual model of the SFRAS methodology.

This risk assessment uses various inputs including historic data, community data, weather patterns, and vegetation. The inputs are used to derive data outputs which were combined to develop the Wildland Fire Susceptibility Index (WFSI) or the probability of an acre burning and the Fire Effects Index (FEI) which identifies those areas that have important values at risk to wildfire and/or are costly to suppress. The

WFSI is on a scale from 0 to 1, with 0 being the least susceptible and 1 being the most susceptible. The FEI is a value between 0 and 100.

The primary outputs of the SFRAS are the Level of Concern Index and the Areas of Concern/Communities-at-Risk rating. The Level of Concern (LOC) represents the overall wildfire risk which is the combination of the probability of an acre burning with the expected effects if a fire occurs.

**Figure 4.3-5
Conceptual Model of the SFRAS Methodology**



Source: Southern Wildfire Risk Assessment Project, Final Report, 2006, Texas Forest Service

Land Uses and Development Trends

A general analysis of land uses and development trends within the planning area is an important factor in when determining the overall vulnerability of the region, predicting areas of future vulnerability and for formulating mitigation options that influence future land use decisions. General land uses and development trends for all participating jurisdictions are discussed on the next few pages.

AUSTIN COUNTY

Austin County is located in the northwestern quadrant of the H-GAC region. Land use within Austin County includes high intensity and low intensity development and open space. The majority of the county is undeveloped and rural with the cities and towns located in the central, northern and southern regions of the county. High intensity development is very limited and primarily located along community roadways (i.e., streets, farm to market roads, state highways, interstates, etc.) and the city centers. Low intensity development is primarily residential. Open space is dominated by prairie grasslands with areas of wooded forests in the north, northwestern, and south eastern areas of the county and agricultural/cultivated lands and wooded wetlands located within the southern half of the county.

City of Bellville

The City of Bellville is located in northern Austin County near the western edge of the H-GAC region. Land use within Bellville is residential, with areas of high and low intensity development. High intensity development is primarily limited to the community roadways (i.e., streets, farm to market roads, state highways, interstates, etc.) and the small urban core of the city's center and/or light industrial/commercial areas. The surrounding area is rural, with open space dominated by prairie grasslands and cultivated/agricultural lands.

City of Brazos Country

The City of Brazos Country is located in the southeastern portion of Austin County in the western portion of the H-GAC region. Land use within Brazos Country is mostly open space, with areas of high and low intensity development. High intensity development is primarily limited to the community roadways (i.e., streets, farm to market roads, state highways, interstates, etc.) and/or light industrial/commercial areas. Low intensity development is primarily residential. Open space within and around the city is dominated by prairie grasslands, with wooded drainages and wetlands, and occasional patches of cultivated/agricultural land.

City of Industry

The City of Industry is located in northwestern Austin County near the western edge of the H-GAC region. Land use within Industry is residential, with areas of high and low intensity development. High intensity development is primarily limited to the community roadways (i.e., streets, farm to market roads, state highways, interstates, etc.) and/or light industrial/commercial areas. Open space within and around the city is dominated by prairie grasslands, with wooded drainages and occasional wetlands and ponds.

Town of San Felipe

The Town of San Felipe is located in east central Austin County in the western portion of the H-GAC region. Land use within San Felipe is mostly open space, with areas of high and low intensity development. High intensity development is primarily limited to the community roadways (i.e., streets, farm to market roads, state highways, interstates, etc.) and/or light industrial/commercial areas. Low intensity development is primarily residential. Open space within and around the town is dominated by prairie grasslands, with wooded drainages and wetlands, and occasional patches of cultivated/agricultural land. The town is bordered on the east by the Brazos River.

City of Sealy

The City of Sealy is located in central Austin County near the western portion of the H-GAC region. Land use within Sealy is residential, with areas of high and low intensity development. High intensity development is primarily limited to the community roadways (i.e., streets, farm to market roads, state highways, interstates, etc.) and the small urban core of the town's center and/or light industrial/commercial areas. The surrounding area is rural, with open space dominated by prairie grasslands and cultivated/agricultural lands.

City of Wallis

The City of Wallis is located in southern Austin County near the western portion of the H-GAC region. Land use within Wallis is residential, with areas of high and low intensity development. High intensity development is primarily limited to the community roadways (i.e., streets, farm to market roads, state highways, interstates, etc.) and the small urban core of the town's center and/or light industrial/commercial areas. The surrounding area is rural, with large amounts of open space utilized as cultivated/agricultural lands.

BRAZORIA COUNTY

Brazoria County is located in the southwestern quadrant of the H-GAC region. Land use within Brazoria County includes high intensity and low intensity development and open space. The majority of the county is undeveloped and rural with the cities and towns located in the northeastern and south central regions of the county. In the northeastern part of the county, high intensity development is primarily located along roadways (i.e., streets, farm to market roads, state highways, interstates, etc.) and the city centers. In the south central part of the county, high intensity development associated with the marine shipping and port

operations of Freeport and the chemical manufacturing plants, towns and cities located directly to the north. A concentration of high intensity development is also associated with industry and chemical manufacturing located along Chocolate Bayou in the east central part of the county. Low intensity development is primarily residential. Open space includes large areas of prairie grasslands, agricultural/cultivated lands, wooded wetlands, wooded forests and coast wetlands. Open space in the northeastern part of the county is dominated by agricultural/cultivated land (i.e., rice farming), prairie grasslands, and wooded riparian zones. Open space along the southern third of the county is coastal wetlands with occasional areas of prairie grasslands. Open space in the western third of the county is dominated by wooded forests with areas of coastal prairie, and wooded wetlands. The broad floodplain of the Brazos River, located in the western half of the county, includes large tracts of open space occupied by wooded wetlands, wooded riparian zones, and prairie grasslands. The southern reaches of the Brazos River also host the previously mentioned industrial complexes and residential areas of Freeport, Lake Jackson, and a number of additional cities and towns. The southern edge of the County is bordered by the open water of the Gulf of Mexico.

City of Alvin

The City of Alvin is located in northeastern Brazoria County near the southern portion of the H-GAC region. Land use within Alvin is residential, with areas of high and low intensity development. High intensity development is primarily limited to the community roadways (i.e., streets, farm to market roads, state highways, interstates, etc.) and the small urban core of the town's center and/or light industrial/commercial areas. The majority of development is low intensity, primarily residential. The surrounding area is rural, with open space dominated by prairie grasslands, wooded areas, and cultivated/agricultural lands.

City of Angleton

The City of Angleton is located in central Brazoria County near the south central edge of the H-GAC region. Land use within Angleton is residential, with areas of high and low intensity development. High intensity development is primarily limited to the community roadways (i.e., streets, farm to market roads, state highways, interstates, etc.) and the small urban core of the town's center and/or light industrial/commercial areas. The majority of development is low intensity, primarily residential. The surrounding area is rural, with open space dominated by prairie grasslands, wooded areas, and cultivated/agricultural lands.

City of Bailey's Prairie

The City of Bailey's Prairie is located in central Brazoria County near the south central portion of the H-GAC region. Land use within Bailey's Prairie is primarily open space with minimal residential development and light commercial. Bailey's Prairie is a rural area, with open space dominated by prairie grasslands, wooded uplands and wooded wetlands.

Village of Bonney

The Village of Bonney is located in north central Brazoria County near the southern portion of the H-GAC region. Land use within Bonney is primarily open space with minimal residential development. Bonney is a rural area, with open space dominated by prairie grasslands, wooded areas.

City of Brazoria

The City of Brazoria is located in central Brazoria County near the southern edge of the H-GAC region. Land use within Brazoria Prairie is primarily open space with minimal residential development and light commercial. Brazoria Prairie is a rural area, with open space dominated by prairie grasslands, wooded uplands and wooded wetlands.

City of Brookside Village

The City of Brookside Village is located directly south of the City of Houston and north of the City of Pearland in north central Brazoria County in the central portion of the H-GAC region. Land use within Brookside Village is residential and light commercial.

City of Clute

The City of Clute is located in southern Brazoria County near the southern edge the H-GAC region. Land use within Clute is residential and commercial, with areas of high and low intensity development. High intensity development is primarily limited to the community roadways (i.e., streets, farm to market roads, state highways, interstates, etc.) and the small urban core of the town's center and/or light industrial/commercial areas. The surrounding area is Coastal and includes nearby cities (i.e., Lake Jackson) and open space dominated by prairie grasslands, wooded areas, and coastal wetlands.

City of Danbury

The City of Danbury is located in central Brazoria County near the southern edge of the H-GAC region. Land use within Danbury is primarily undeveloped with small areas of residential development. Danbury is a rural coastal community with open space dominated by prairie grasslands and cultivated/agricultural lands.

City of Freeport

The City of Freeport is located in southern Brazoria County along the southern edge of the H-GAC region. Land use within Freeport includes high intensity and low intensity development. Much of Freeport falls within the category of high intensity development with specific examples including marine shipping and port facilities, petrochemical plants, and associated heavy industry. Low intensity development is primarily residential. Freeport is located in a coastal setting bordered on the west by ship channels, on the east by the Brazoria River, the south by the Intracoastal Waterway. Open space in the vicinity of Freeport is primarily coastal wetlands and coastal prairie.

City of Hillcrest Village

The City of Hillcrest Village is directly east of the City of Alvin. Land use is primarily low intensity development characterized by residential dwellings. Surrounding open space areas are mostly outside the city limits and include prairie grasslands.

Town of Holiday Lakes

The Town of Holiday Lakes is located in central Brazoria County near the southern edge the H-GAC region. Land use within Holiday Lakes is residential and commercial, with areas of high and low intensity development. High intensity development is primarily limited to the community roadways (i.e., streets, farm to market roads, state highways, interstates, etc.). The surrounding area includes open space dominated by prairie grasslands, wooded areas, and coastal wetlands.

City of Iowa Colony

The City of Iowa Colony is located in northern Brazoria County near the southern portion of the H-GAC region. Land use within Liverpool is primarily cultivated/agricultural lands with small areas of residential development.

City of Jones Creek

The City of Jones Creek is located in southern Brazoria County near the southern edge of the H-GAC region. Land use within Jones Creek is primarily open space with small areas of residential and commercial development. Open space within Jones Creek includes prairie grasslands and wooded forests.

City of Lake Jackson

The City of Lake Jackson is located in southern Brazoria County along the southern edge of the H-GAC region. Land use within Lake Jackson includes high intensity and low intensity development. High intensity development includes petrochemical plants and associated heavy industry. Low intensity development is primarily residential. Lake Jackson is located directly north of the port city of Freeport. The majority of Lake Jackson is developed land. Lake Jackson is bordered on the west by the Brazos River. Open space in the vicinity of Lake Jackson includes coastal wetlands, wooded wetlands, wooded forests, and grassland prairies.

City of Liverpool

The City of Liverpool is located in eastern Brazoria County near the southern portion of the H-GAC region. Land use within Liverpool is primarily undeveloped with small areas of residential development. Danbury is a rural coastal community with open space dominated by prairie grasslands, wooded areas and cultivated/agricultural lands.

City of Manvel

The City of Manvel is located in eastern Brazoria County near the south central portion of the H-GAC region. Land use within Manvel is primarily residential and commercial, with areas of high and low intensity development and open space. High intensity development is primarily limited to the community roadways (i.e., streets, farm to market roads, state highways, interstates, etc.). Low intensity development is primarily residential. The surrounding area includes open space dominated by prairie grasslands and wooded areas.

City of Oyster Creek

The City of Oyster Creek is located in southern Brazoria County along the southern edge of the H-GAC region. Land use within Oyster Creek includes high intensity and low intensity development. High intensity development includes petrochemical plants and associated heavy industry. Low intensity development is primarily residential. Oyster Creek is located northeast of the port city of Freeport, and due east of Lake Jackson. Open space in the vicinity of Oyster Creek includes coastal wetlands, wetlands, wooded forests, and grassland prairies.

City of Quintana

The City of Quintana is located along the Coastline of Brazoria County near the southeast portion of the H-GAC region. Land use within Quintana is primarily residential and open space. Quintana is a rural coastal community with open space dominated by coastal wetlands, prairie grasslands and the open water of the Gulf of Mexico. Quintana is located directly south of the highly developed port city of Freeport.

City of Richwood

The City of Richwood is located in southern Brazoria County near the southern edge of the H-GAC region. Land use within Richmond is primarily residential and commercial, with areas of high and low intensity development and open space. High intensity development is primarily limited to the community roadways (i.e., streets, farm to market roads, state highways, interstates, etc.). Low intensity development is primarily residential. Open space within the city and the surrounding area includes wooded forests, wooded wetlands, coastal wetlands, and prairie grasslands.

Village of Surfside Beach

The Village of Surfside Beach is located along the coastline of Brazoria County near the southeast portion of the H-GAC region. Land use within Surfside Beach is primarily residential, light commercial and open space. Surfside Beach is a rural coastal community with open space dominated by coastal wetlands, prairie grasslands, and the open water of the Gulf of Mexico.

City of Sweeny

The City of Sweeny is located in western Brazoria County near the southern edge of the H-GAC region. Land use within Sweeny is primarily undeveloped with small areas of residential development. Sweeny is a rural community with open space dominated by prairie grasslands and wooded areas.

Velasco Drainage District

Velasco Drainage District encompasses 236 square miles in south-central Brazoria County that includes the communities of Lake Jackson, Richwood, Freeport, Oyster Creek, Quintana, and Surfside Beach. The District was established as a political subdivision of the State of Texas, May 11, 1908. The District encompasses Bastrop Bayou to the north and northeast, the Brazos River to the southwest and the Gulf of Mexico to the south and southeast. There are 72.5 miles of outfall ditches, maintained by the District

CHAMBERS COUNTY

Chambers County is located in the southeastern quadrant of the H-GAC region. Land Use within Chambers County is primarily open space with area of high and low intensity development associated with the County's cities and small towns. Most of the county is rural. High intensity development is primarily associated with light industry and commercial retail along major roadways and the town and city centers. Agriculture (rice farming and cattle grazing) and oil and gas production are frequent uses of open space. The eastern half of Chambers County is dominated by the open waters of Galveston Bay and the wooded wetlands associated with the Trinity River and Lake Anahuac to the north. The majority of dry land within the county is prairie grasslands and cultivated/agricultural lands with areas of wooded forests. The southern edge of the county is dominated by coastal wetlands and ponds, and bordered by the open water of Galveston Bay.

Trinity Bay Conservation District

Trinity Bay Conservation District provides drinking water, wastewater treatment and storm drainage for most of east Chambers County and part of West Jefferson County to the east. Drinking water plants are located in Winnie and Anahuac. The Winnie plant treats Neches River water purchased from the Lower Neches Valley Authority. The West treatment plant in Anahuac treats Trinity River Water purchased from the Chambers-Liberty Counties Navigation District. The drainage district manages storm water through constructing and maintaining more than 1,400 miles drainage ditches throughout the district.

Chambers-Liberty Counties Navigation District

The Chambers-Liberty Counties Navigation District provides service to the municipalities and agricultural producers that utilize the district's raw water supply. The district also protects the water asset for future use by constituents of Chambers and Liberty Counties and provides local support to the U.S. Army Corps of Engineers for the maintenance and development of the various navigation channels located within the district, all of which is vital to the growth and economic development of the district. The boundaries extend along the Trinity River, from Galveston Bay in Chambers County north to Liberty County.

City of Anahuac

The City of Anahuac is located in western Chambers County in the eastern portion of the H-GAC region. Land use in Anahuac is a mixture of low intensity residential development, high intensity development associated local roadways and a town center, and open space dominated by prairie grasslands and wooded areas. Anahuac is bordered on the north by the open water of Lake Anahuac, on the west by coastal wetlands, and on the south and east by prairie grasslands and cultivated/agricultural lands.

City of Beach City

The City of Beach City is located in western Chambers County in the eastern portion of the H-GAC region, along the northern edge of Galveston Bay. Land use in Beach City is a mixture of low intensity residential development, high intensity development associated local roadways and a light marine industry, and open space dominated by prairie grasslands, wooded areas, and wetlands. Beach City is bordered on the north by similar land uses as found within the city limits, on the west by wooded areas, prairie grasslands and cultivated/agricultural lands, and on the east by the open water of Galveston Bay.

City of Cove

The City of Cove is located in western Chambers County in the eastern portion of the H-GAC region, near the northern edge of Galveston Bay. Land use in Cove is primarily open space consisting of wooded areas, prairie, cultivated/agricultural lands, and coastal wetlands. Developed areas are a mixture of low intensity residential development and high intensity development associated with local roadways.

City of Mont Belvieu

The City of Mont Belvieu is located in western Chambers County north of the City of Baytown. Land use in Mont Belvieu includes high intensity development, low intensity development and areas of open space. High intensity development includes natural-gas field collection infrastructure (i.e. well heads, piping, roadways, storage vessels, produced water and wastewater lagoons, etc.), railroad loading areas and minimal commercial development. Low intensity development is primarily residential. Open space is dominated by prairie grasslands with areas of wooded forest and cultivated/agricultural lands.

City of Old River-Winfree

The City of Old River-Winfree is located in western Chambers County in the eastern portion of the H-GAC region, along the Trinity River near the northern edge of Galveston Bay. Land use in Old River-Winfree is primarily low intensity developed with large areas of open space. Open space primarily consists of wooded areas, prairie, and wooded wetlands and coastal wetlands. Developed areas are a mostly residential development and local roadways.

LIBERTY COUNTY

Liberty County is located in the northwestern quadrant of the H-GAC region. Land use within Liberty County is primarily open space with areas of high and low intensity development. High intensity development is primarily limited to the roadways (i.e., streets, railways, farm to market roads, state highways, interstates, etc.), the small core of the town and city centers, and/or light industrial/commercial areas. Low intensity development is primarily residential. Most of the county is rural open space. Open space in the northern half of the county is dominated by wooded forests and wooded wetlands with areas of prairie grasslands. Open space in the southern half of the county is dominated by prairie grasslands, cultivated agricultural lands, and wooded wetlands associated with the Trinity River. The Trinity River flows from north to south through the center of the county.

City of Ames

The City of Ames is located in central Liberty County directly east of the City of Liberty. Land use in Ames is primarily open space with areas of small areas of residential and light commercial development along community roadways. Open space within the city, and surrounding area, is dominated by prairie grasslands with areas of wooded forests and wooded wetlands.

City of Cleveland

The City of Cleveland is located in northern Liberty County near the northeastern edge of the H-GAC region. Land use within Cleveland includes areas of high and low intensity development. High intensity development is primarily limited to the roadways (i.e., streets, railways, farm to market roads, state highways, interstates, etc.), the small core of the town's center, and/or light industrial/commercial areas. Low intensity development is primarily residential. Open space within the city dominated by prairie grasslands and wooded forests. Open space in the surrounding area includes wooded forests, small ponds, wooded wetlands, and occasional patches of prairie grasslands.

City of Daisetta

The City of Daisetta is located in eastern Liberty County near the eastern edge of the H-GAC region. Land use within Daisetta includes areas of high and low intensity development. High intensity development is primarily limited to the roadways and railways (i.e., streets, railways, farm to market roads, state highways, interstates, etc.) and/or light industrial/commercial areas. Low intensity development is primarily residential. Open space within the city dominated by wooded forests, prairie grasslands, wooded wetlands and freshwater wetlands. Open space in the surrounding area is similar to that within the city with an increase in wooded wetlands to the west.

City of Dayton

The City of Dayton is located in central Liberty County near the eastern edge of the H-GAC region. Land use within Dayton includes areas of high and low intensity development. High intensity development is primarily limited to the roadways and railways (i.e., streets, railways, farm to market roads, state highways, interstates, etc.), the small core of the town's center, and/or light industrial/commercial areas. Low intensity development is primarily residential. Open space within the city dominated by prairie grasslands wooded wetlands and wooded forests. Open space in the surrounding area is similar to that within the city with an increase in cultivated/agricultural land to the west. The Trinity River flows just east of the city limits.

City of Dayton Lakes

The City of Dayton Lakes is located in east central Liberty County in the northeastern portion of the H-GAC region. Land use in Dayton Lakes is primarily open space with small areas of rural residential development. Open space within the city, and surrounding area, is dominated by wooded forests,

freshwater wetlands, prairie grasslands and wooded wetlands. The Trinity River flows to the east and south of the city limits.

City of Devers

The City of Devers is located in eastern Liberty County near the eastern edge of the H-GAC region. Land use in Devers is primarily open space with areas of residential and light commercial development. Open space within the city, and surrounding area, is dominated by wooded forests and wooded wetlands with areas of prairie grasslands. Open space in the surrounding area is similar to that within the city with an increase in cultivated/agricultural land to the south.

City of Hardin

The City of Hardin is located in central Liberty County in the northeastern portion of the H-GAC region. Land use in Hardin is primarily open space with areas of residential and light commercial development. Open space within the city, and surrounding area, is dominated by prairie grasslands with areas of wooded forests and wooded wetlands.

City of Kenefick

The City of Kenefick is located in central Liberty County, just north of Dayton, near the eastern edge of the H-GAC region. Land use within Kenefick is primarily low intensity development and open space. Low intensity development is primarily residential. Open space within the city dominated by prairie grasslands and wooded forests. Open space in the surrounding area is similar to that within the city with an increase in wooded wetlands and wetlands to the northeast. The Trinity River flows just east of the city limits.

City of Liberty

The City of Liberty is located in central Liberty County near the eastern edge of the H-GAC region. Land use within Liberty includes areas of high and low intensity development. High intensity development is primarily limited to the roadways (i.e., streets, railways, farm to market roads, state highways, interstates, etc.), the small core of the town's center, and/or light industrial/commercial areas. Low intensity development is primarily residential. Open space within the city dominated by wooded wetlands, freshwater wetlands, wooded forests, and prairie grasslands. The Trinity River runs through the city limits.

City of North Cleveland

The City of North Cleveland is located in northern Liberty County in the northeastern portion of the H-GAC region. Land use in North Cleveland is primarily open space with areas of residential and light commercial development. Open space within the city, and surrounding area, is dominated by prairie grasslands with areas of wooded forests, wooded wetlands, ponds, and prairie grasslands.

City of Plum Grove

The City of Plum Grove is located on the western edge of Liberty County. Land use within Plum Grove is primarily open space with areas of small areas of residential and light commercial development along community roadways. Open space within the city, and surrounding area, is dominated by wooded forests with occasional areas of prairie grasslands and wooded wetlands.

MONTGOMERY COUNTY

Montgomery County is located in the northern half of the H-GAC region. Land Use within Montgomery includes high intensity and low intensity development and open space. Much of the county is undeveloped and rural with the largest communities, the Woodlands Township and the City of Conroe, located in the southern and central portions of the county. Smaller cities are located across the county along major roadways. High intensity development is primarily located along community streets, farm to market roads, state highways and interstates, and the town and city centers. Low intensity development is primarily residential. Open space is dominated by wooded forests with substantial prairie grasslands, wooded wetlands, freshwater wetlands, and Lake Conroe.

City of Conroe

The City of Conroe is located in central Montgomery County near the north central portion of the H-GAC region. Land use within Conroe is primarily residential and commercial, with areas of open space. High intensity development is primarily limited to the community roadways (i.e., streets, farm to market roads, state highways, interstates, etc.). Low intensity development is primarily residential. Open space within the city, and surrounding areas, is dominated by, wooded forests with areas of prairie grasslands.

City of Cut and Shoot

The City of Cut and Shoot is located in east central Montgomery County near the north central portion of the H-GAC region. Land use within Cut and Shoot is primarily residential and commercial, with areas of open space. Open space within the city, and surrounding areas, is dominated by, wooded forests and prairie grasslands.

City of Magnolia

The City of Magnolia is located in southwest Montgomery County near the north central portion of the H-GAC region. Land use within Magnolia is primarily residential and commercial, with areas of open space. High intensity development is primarily limited to the community roadways (i.e., streets, farm to market roads, state highways, interstates, etc.). Low intensity development is primarily residential. Open space within the city, and surrounding areas, is dominated by, wooded forests and prairie grasslands.

City of Montgomery

The City of Montgomery is located in west central Montgomery County near the north central portion of the H-GAC region. Land use within Montgomery is primarily residential and commercial, with areas of high and low intensity development and open space. High intensity development is primarily limited to the community roadways (i.e., streets, farm to market roads, state highways, interstates, etc.). Low intensity development is primarily residential. The surrounding area includes open space dominated by prairie grasslands and wooded areas.

City of Oak Ridge North

The City of Oak Ridge North is located in south central Montgomery County. Land use within Shenandoah is primarily low intensity residential, open space, and a narrow band of high intensity development associated with commercial retail along Interstate 45. Open space within the city, and surrounding area, includes wooded forests and prairie grasslands.

City of Panorama Village

The City of Panorama Village is located in north central Montgomery County near the north central portion of the H-GAC region. Land use within Panorama Village is primarily residential and commercial, with areas of low intensity development and open space. Open space within the city, and the surrounding areas, is dominated by wooded forests and prairie grasslands.

City of Patton Village

The City of Patton Village is located in southeast Montgomery County near the north central portion of the H-GAC region. Land use within Patton Village is primarily residential and commercial, with areas of open space. Open space within the city, and surrounding areas, is dominated by, wooded forests and prairie grasslands.

Town of Roman Forest

The Town of Roman Forest is located in southeast Montgomery County near the north central portion of the H-GAC region. Land use within Roman Forest is primarily residential and commercial, with areas of open space. Open space within the town, and surrounding areas, is dominated by, wooded forests and prairie grasslands.

City of Shenandoah

The City of Shenandoah is located in south central Montgomery County. Land use within Shenandoah is primarily commercial with areas of residential development and open space. High intensity development is associated with commercial retail and hotel development along Interstate 45. Low intensity

development is primarily residential. The surrounding area includes open space dominated by wooded forests and prairie grasslands.

City of Splendora

The City of Splendora is located in west central Montgomery County near the north central portion of the H-GAC region. Land use within Splendora is primarily residential and commercial, with areas of high and low intensity development and open space. High intensity development is primarily limited to the community roadways (i.e., streets, farm to market roads, state highways, interstates, etc.). Low intensity development is primarily residential. The surrounding area includes open space dominated by prairie grasslands, wooded forests, and wooded wetlands.

City of Stagecoach

The City of Stagecoach is located in southwest Montgomery County near the north central portion of the H-GAC region. Land use within Stagecoach is primarily residential and commercial, with areas of open space. Open space within the city, and surrounding areas, is dominated by, wooded forests and prairie grasslands.

City of Willis

The City of Willis is located in west central Montgomery County near the north central portion of the HGAC region. Land use within Willis is primarily residential and commercial, with areas of high and low intensity development and open space. High intensity development is primarily limited to the community roadways (i.e., streets, farm to market roads, state highways, interstates, etc.). Low intensity development is primarily residential. The surrounding area includes open space dominated by prairie grasslands and wooded areas.

City of Woodbranch Village

The City of Woodbranch Village is located in southeast Montgomery County near the north central portion of the H-GAC region. Land use within Woodbranch Village is primarily residential and commercial, with areas of open space. Open space within the city, and surrounding areas, is dominated by, wooded forests and prairie grasslands.

The Woodlands Township

The Woodlands Township is located is southwestern Montgomery County. On January 1, 2010, The Woodlands, an unincorporated area in Montgomery County, merged with the Towns Center Improvement District to become The Woodlands Township. Land use within The Woodlands Township is primarily residential with supporting commercial, but it has a recently developed commercial town center that draws visitors from around the region. The Woodlands Township is dominated by wooded forests.

Town of Woodloch

Located at the intersection of State Highway 242 and Farm to Market road 1314, the Town of Woodloch lies within south central Montgomery County. Land use within Woodloch is primarily open space with areas of residential and commercial development. Open space within the city, and surrounding areas, is dominated by, wooded forests, prairie grasslands, wooded wetlands, and small ponds.

WALKER COUNTY

Walker County is located at the northern edge of the H-GAC region. Land use within Walker County includes high intensity and low intensity development and open space. The majority of the county is undeveloped and rural with the largest community, the City of Huntsville, located in the center of the county. High intensity development is primarily located along community roadways (i.e., streets, farm to market roads, state highways, interstates, etc.). Low intensity development is primarily residential. Open space is dominated by wooded forests with substantial prairie grasslands, wooded wetlands, freshwater wetlands, and the northern tip of Lake Conroe.

City of Huntsville

The City of Huntsville is located in central Walker County near the northern edge of the H-GAC region. Land use within Huntsville is primarily residential and commercial, with areas of open space. High

intensity development is primarily limited to the community roadways (i.e., streets, farm to market roads, state highways, interstates, etc.). Low intensity development is primarily residential. Open space within the city, and surrounding areas, is dominated by wooded forests with areas of prairie grasslands.

City of New Waverly

The City of New Waverly is located in south central Walker County near the north central portion of the H-GAC region. Land use within New Waverly is primarily residential and commercial, with areas of high and low intensity development and open space. Open space within the city, and surrounding areas, is dominated by prairie grasslands and wooded areas.

City of Riverside

The City of Riverside is located in northeastern Walker County near the northern edge of the H-GAC region. Land use within Riverside is primarily open space with some residential development. Open space within the city, and surrounding areas, includes prairie grasslands and wooded areas.

WALLER COUNTY

Waller County is located in the northwestern quadrant of the H-GAC region. Land use within Waller County includes high intensity and low intensity development and open space. The majority of the county is undeveloped and rural with the cities and towns located in the northern and southern reaches of the county. High intensity development is very limited and primarily located along community roadways (i.e., streets, farm to market roads, state highways, interstates, etc.) and the city centers. Low intensity development is primarily residential. Open space is dominated by prairie grasslands with areas of wooded forests in the north and western areas of the county and agricultural/cultivated lands and prairie grasslands dominating the southern half of the county.

City of Brookshire

The City of Brookshire is located in southern Waller County in the western portion of the H-GAC region. Land use in Brookshire is residential, with areas of high and low intensity development. High intensity development is primarily limited to the community roadways (i.e., streets, farm to market roads, state highways, interstates, etc.) and the small town center and/or light industrial/commercial areas. Open space within the city and surrounding area is dominated by prairie grasslands, cultivated/agricultural lands, and wooded areas.

City of Hempstead

The City of Hempstead is located in northern Waller County in the western portion of the H-GAC region. Land use in Hempstead is residential, with areas of high and low intensity development. High intensity development is primarily limited to the community roadways (i.e., streets, farm to market roads, state highways, interstates, etc.) and the small town center and/or light industrial/commercial areas. Open space within the city and surrounding area is dominated by prairie grasslands and cultivated/agricultural lands, with occasional wooded areas and wetlands.

City of Pattison

The City of Pattison is located in southern Waller County in the western portion of the H-GAC region. Land use in Pattison is primarily open space with areas of residential and light commercial development. Open space within the city and surrounding area is dominated by prairie grasslands, wooded areas, and cultivated/agricultural lands, with occasional wetlands.

Town of Pine Island

The Town of Pine Island is located in northern Waller County in the western portion of the H-GAC region. Land use in Pine Island is primarily open space. Open space within the town and surrounding area is dominated by prairie grasslands and cultivated/agricultural lands, with occasional wooded areas and wetlands.

City of Prairie View

The City of Prairie View is located in northern Waller County in the western portion of the H-GAC region. Land use in Prairie View is residential, with areas of high and low intensity development. High intensity

development is primarily limited to the community roadways (i.e., streets, farm to market roads, state highways, interstates, etc.) and the small town center and/or light industrial/commercial areas. Open space within the city and surrounding area is dominated by prairie grasslands and cultivated/agricultural lands, with occasional wooded areas and wetlands.

City of Waller

The City of Waller is located in northern Waller County in the western portion of the H-GAC region. Land use in Waller is residential, with areas of high and low intensity development. High intensity development is primarily limited to the community roadways (i.e., streets, farm to market roads, state highways, interstates, etc.) and/or light industrial/commercial areas. Open space within the city and surrounding area is dominated by prairie grasslands, with occasional wooded areas and wetlands.

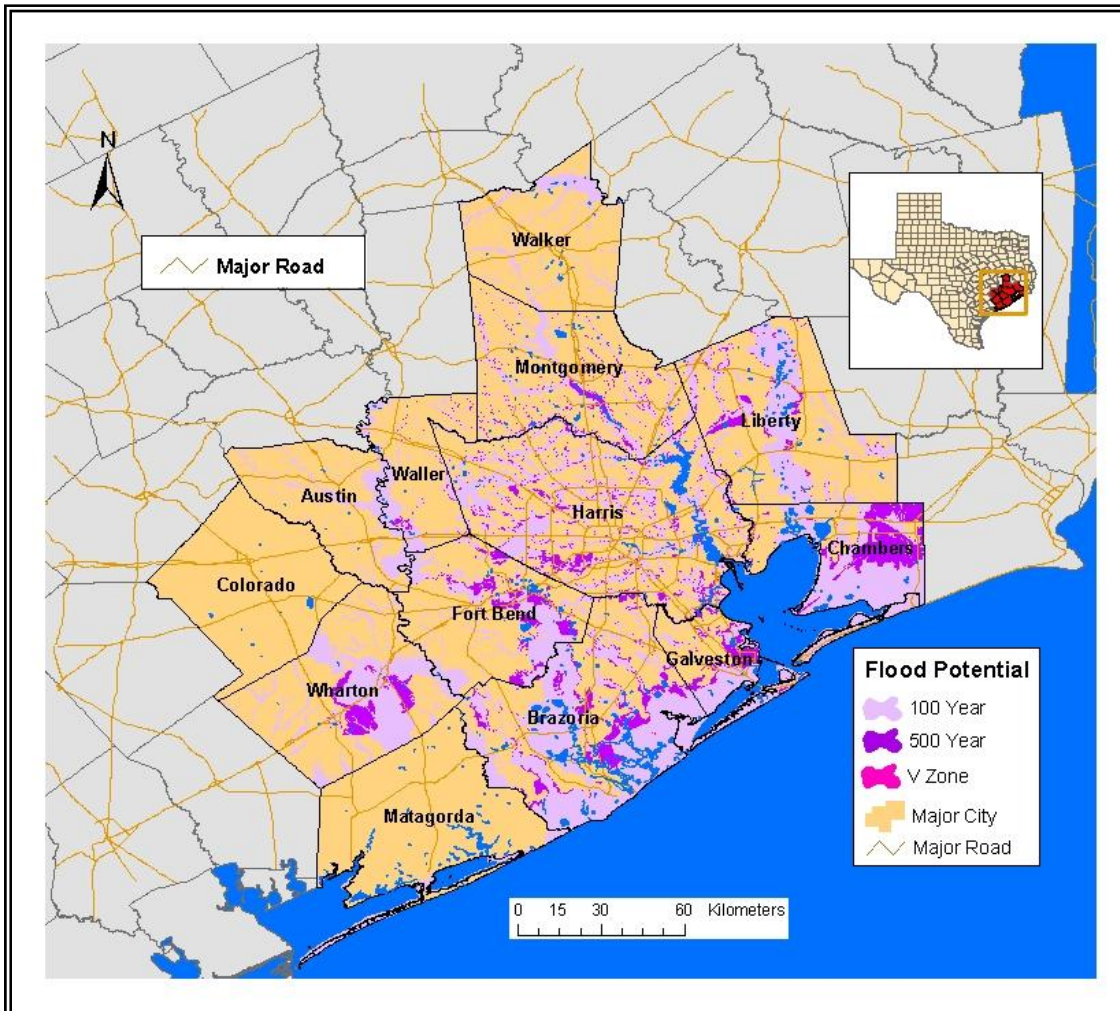
Flood

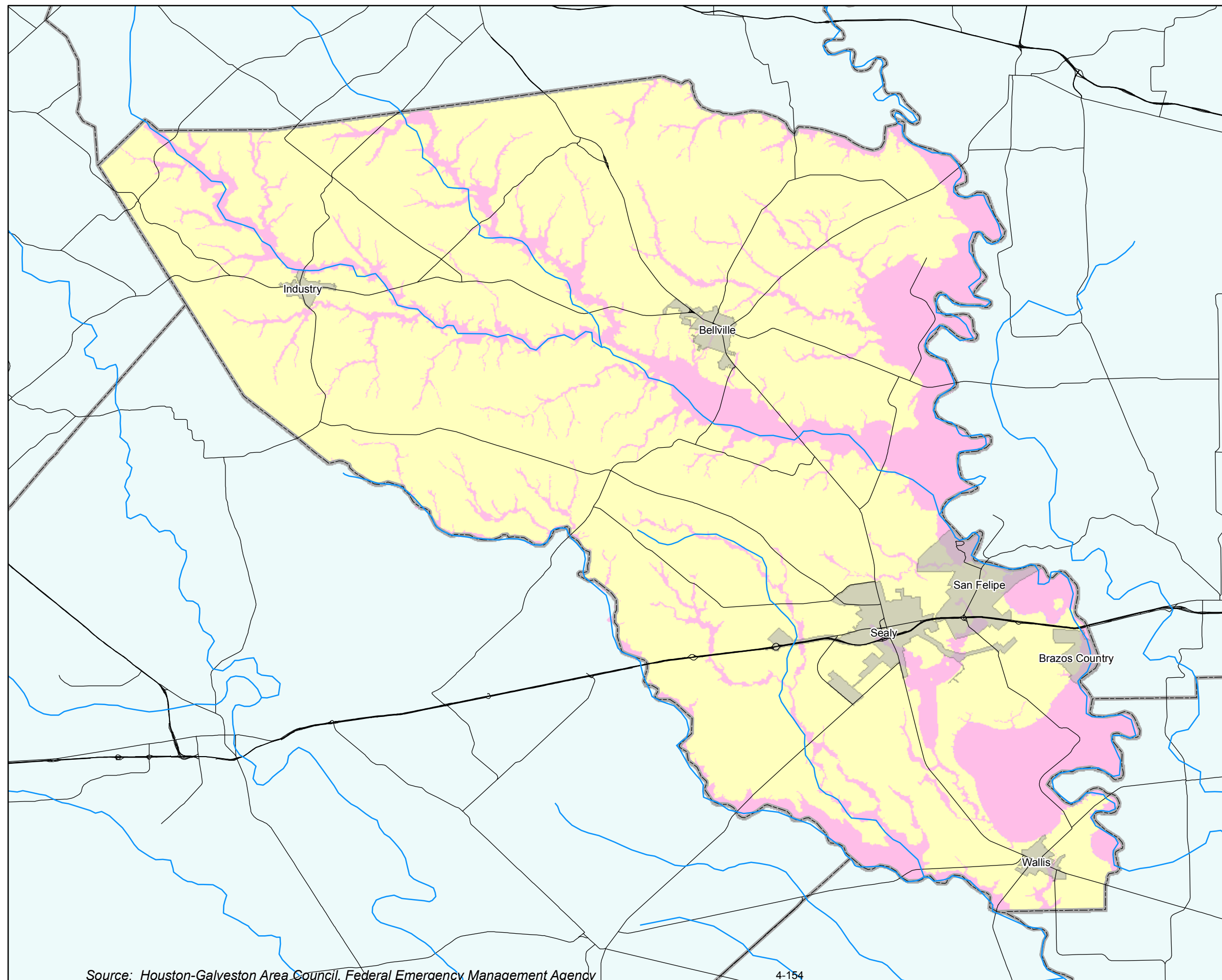
Using FEMA Q3 Digital Flood Data (digitized Flood Insurance Rate Maps) where available, along with the modeling approach as described earlier, losses were estimated using return period events ranging from 10-year to 500-year events. Assumptions based on engineering judgment were made where data were not readily available, namely related to the extent of flooded areas and the depth of flooding. Using this approach, annualized losses were calculated by accounting for the losses from different return period events and their respective annual probabilities of occurrence. For example, the annual probability of observing a 100-year flood in any given year is 1 percent. The annual probability of observing a 500-year flood in any given year is 0.2 percent.

Riverine Flooding

Riverine flooding poses a serious threat to most counties in the H-GAC planning area, as shown in **Figure 4.3-6**. Heavy rainfall events can cause flash flooding – closing roads and endangering lives. Swift water rescues are frequently required during flash flood events. **Figures 4.3-7 through Figure 4.3-13** shows the riverine flood areas in the H-GAC region based upon the digital Flood Insurance Rate Maps.

Figure 4.3-6
Riverine Flood Hazard Areas





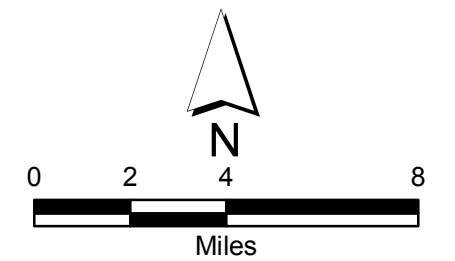
HAZARD PROFILE LEGEND

Flood Zones

- 100-Year Floodplain
- 500-Year Floodplain

BASE MAP LEGEND

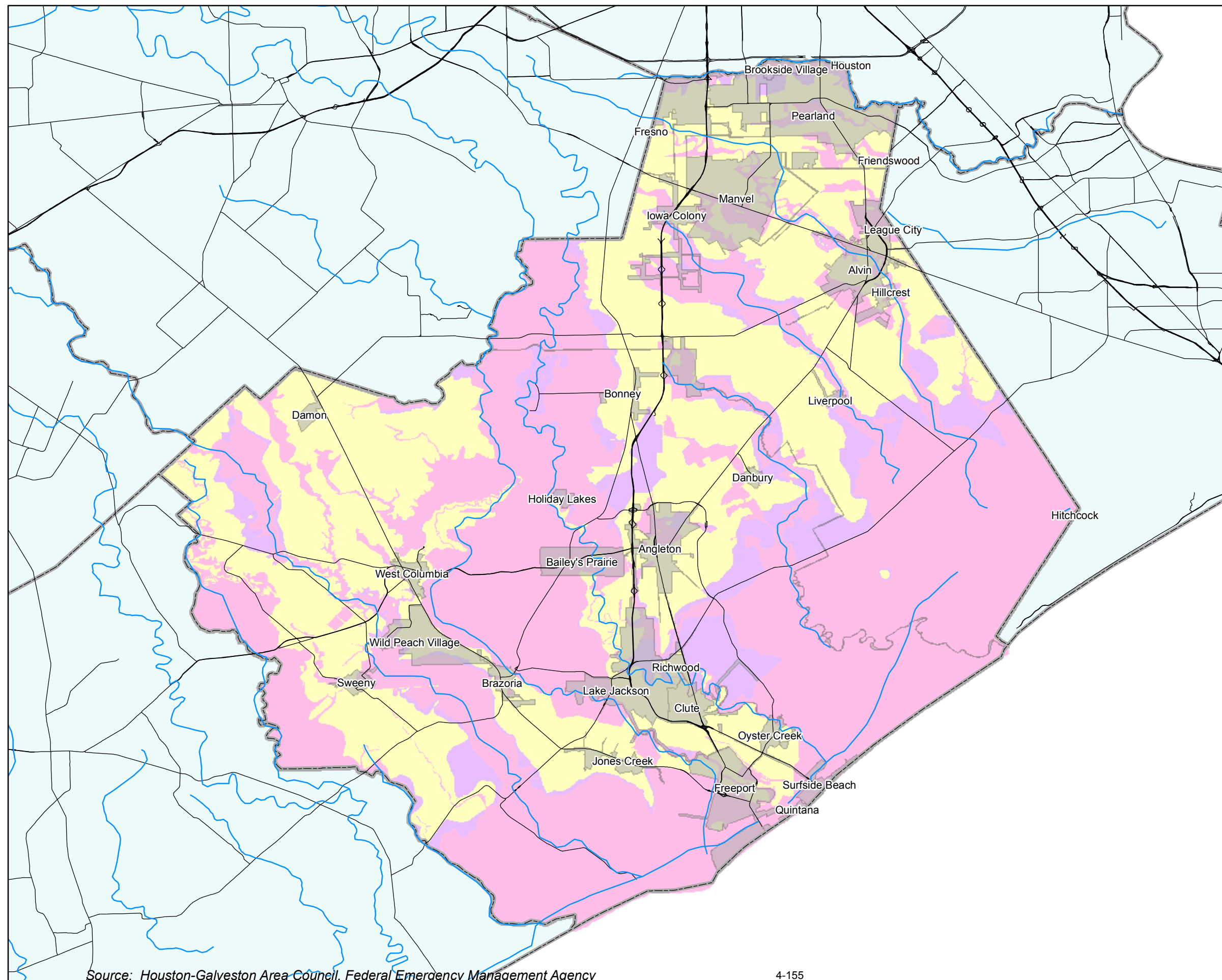
- Major Rivers
- Major Roads
- Municipalities
- Austin County



H-GAC MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN

Figure 4.3- 7
Austin County
Flood Zones





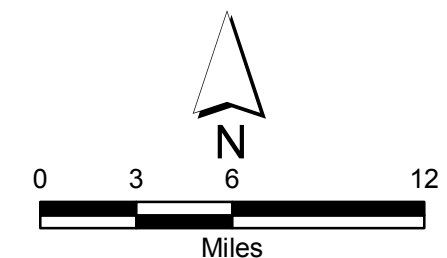
HAZARD PROFILE LEGEND

Flood Zones

- 100-Year Floodplain
- 500-Year Floodplain

BASE MAP LEGEND

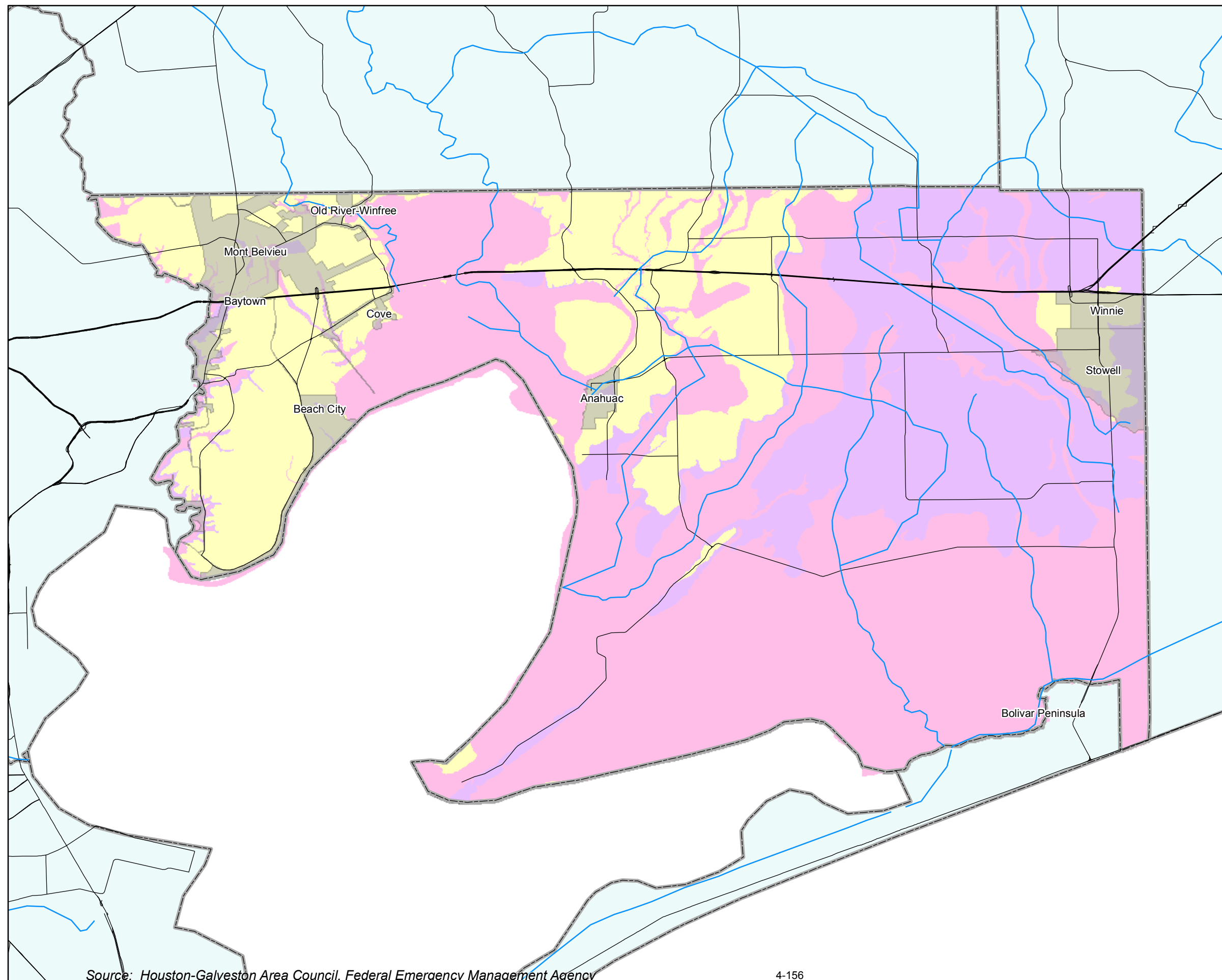
- Major Rivers
- Major Roads
- Municipalities
- Brazoria County



H-GAC MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN

Figure 4.3- 8
Brazoria County
Flood Zones





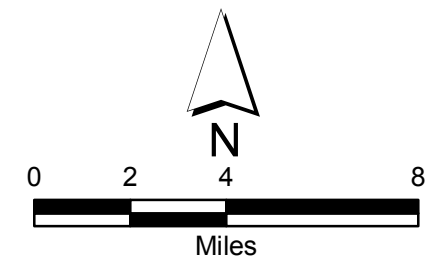
HAZARD PROFILE LEGEND

Flood Zones

- 100-Year Floodplain
- 500-Year Floodplain

BASE MAP LEGEND

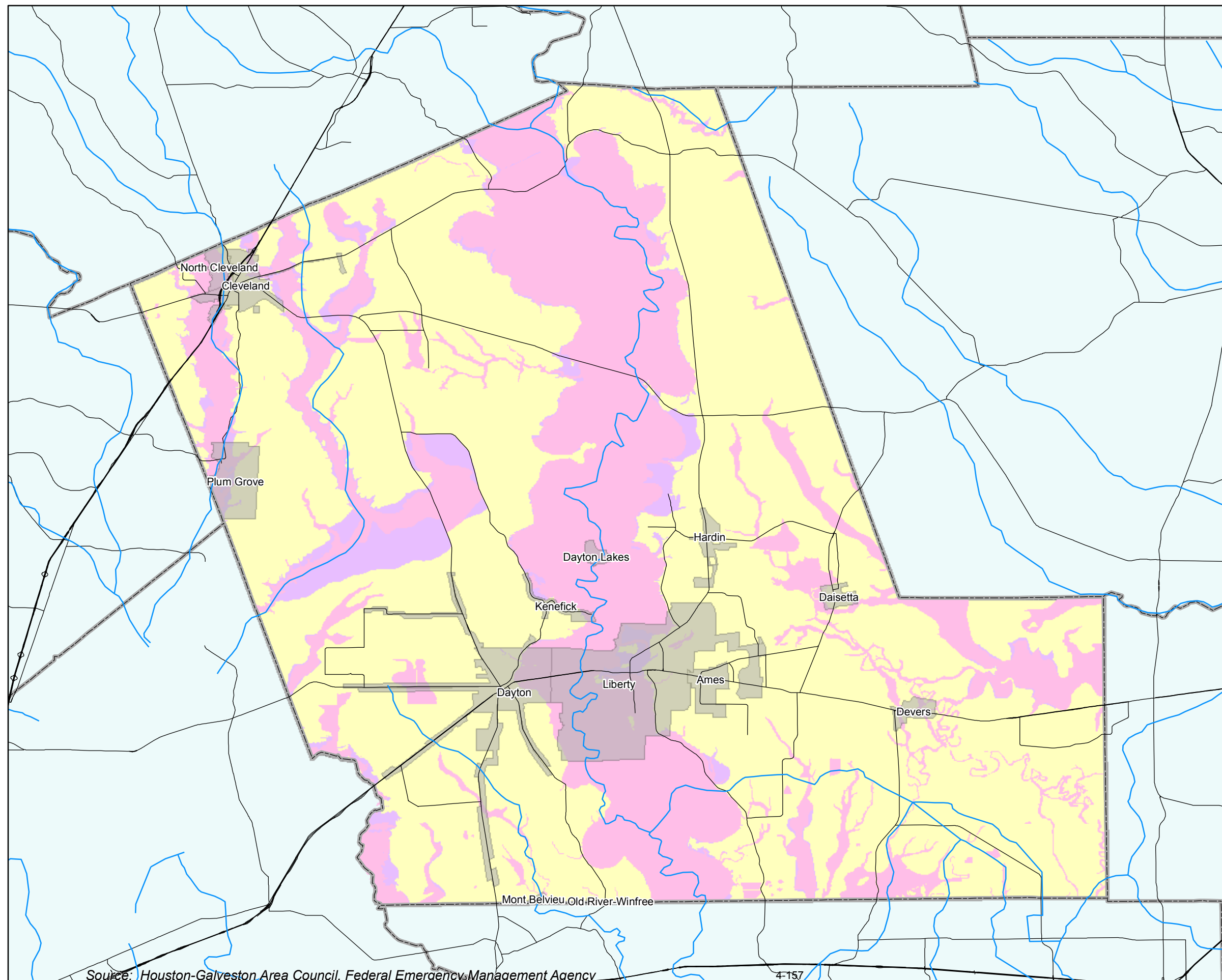
- Major Rivers
- Major Roads
- Municipalities
- Chambers County



H-GAC MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN

Figure 4.3- 9
Chambers County
Flood Zones





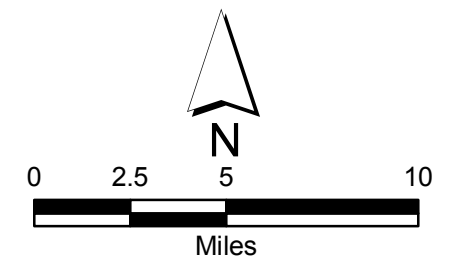
HAZARD PROFILE LEGEND

Flood Zones

- 100-Year Floodplain
- 500-Year Floodplain

BASE MAP LEGEND

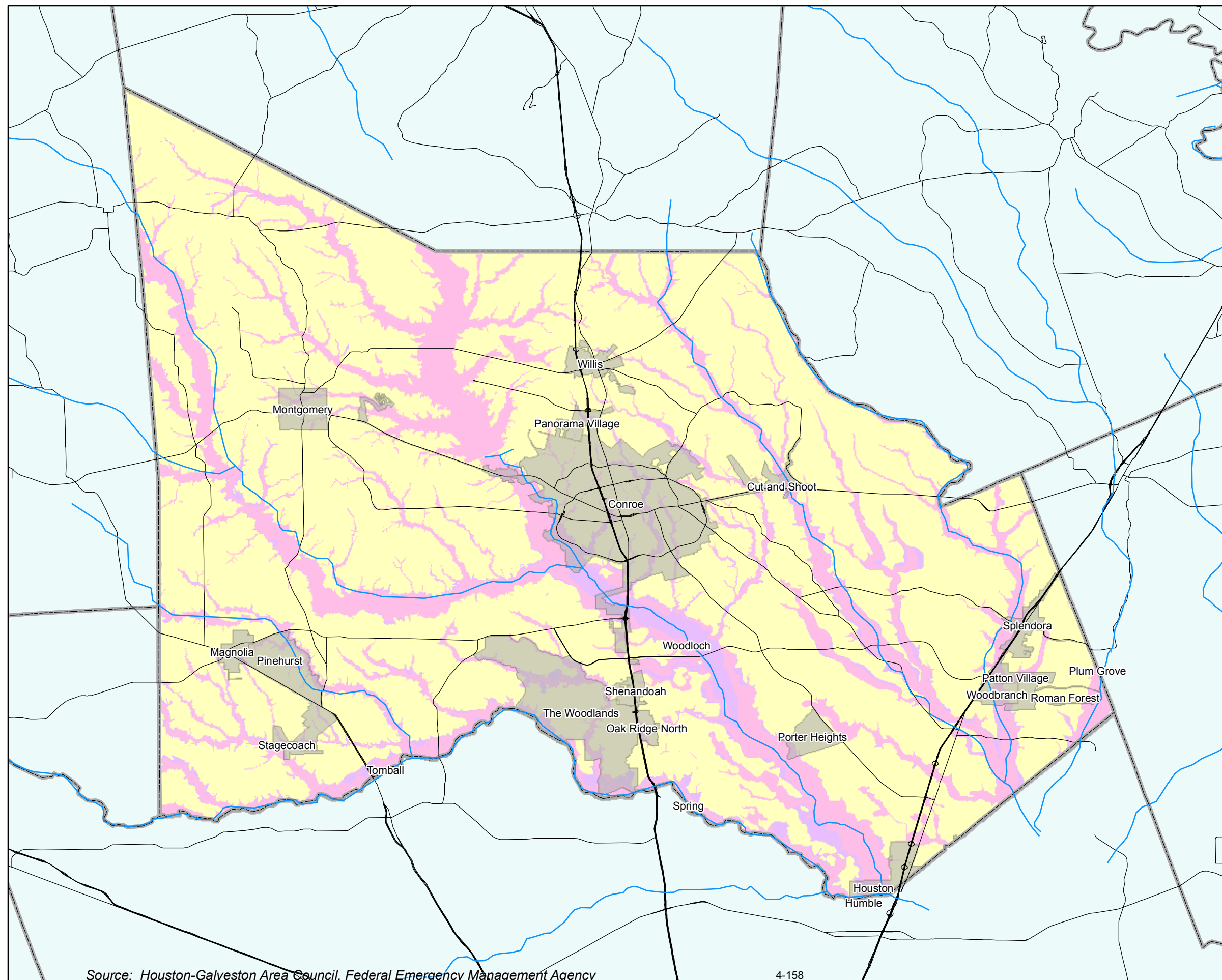
- Major Rivers
- Major Roads
- Municipalities
- Liberty County



H-GAC MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN

Figure 4.3- 10
Liberty County
Flood Zones





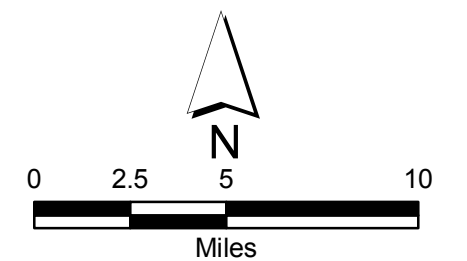
HAZARD PROFILE LEGEND

Flood Zones

- 100-Year Floodplain
- 500-Year Floodplain

BASE MAP LEGEND

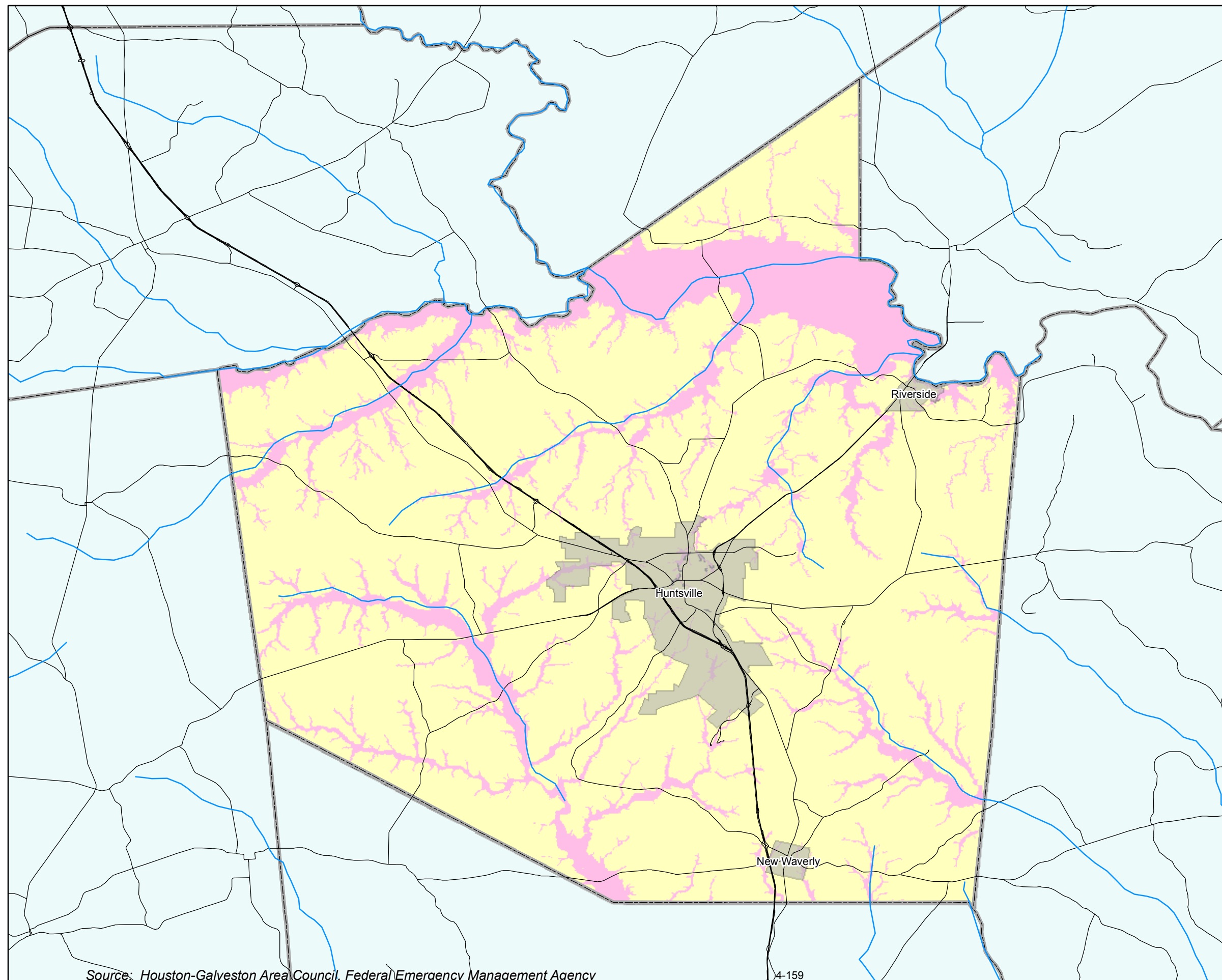
- Major Rivers
- Major Roads
- Municipalities
- Montgomery County



H-GAC MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN

Figure 4.3- 11
Montgomery County
Flood Zones





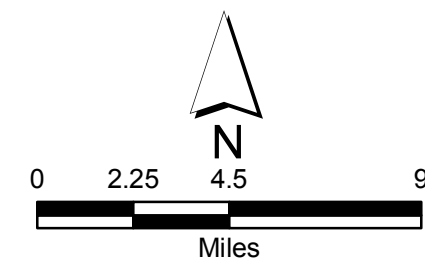
HAZARD PROFILE LEGEND

Flood Zones

- 100-Year Floodplain
- 500-Year Floodplain

BASE MAP LEGEND

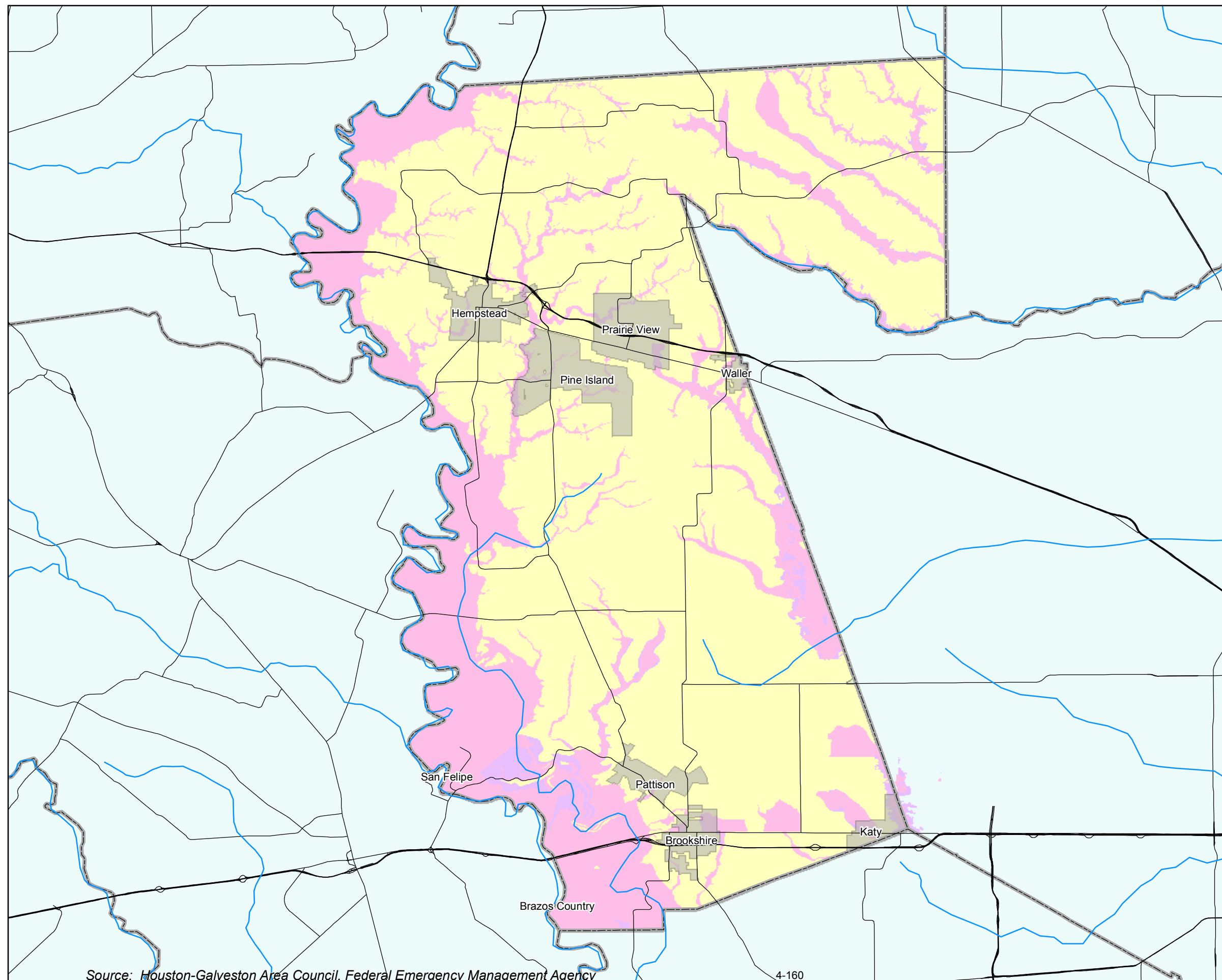
- Major Rivers
- Major Roads
- Municipalities
- Walker County



H-GAC MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN

Figure 4.3-12
Walker County
Flood Zones





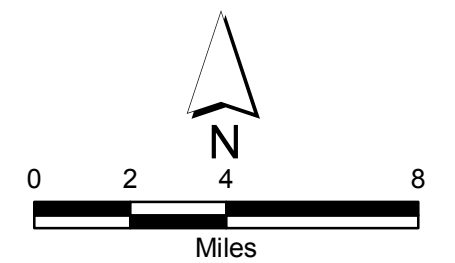
HAZARD PROFILE LEGEND

Flood Zones

- 100-Year Floodplain
- 500-Year Floodplain

BASE MAP LEGEND

- Major Rivers
- Major Roads
- Municipalities
- Waller County



H-GAC MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN

Figure 4.3-13
Waller County
Flood Zones



Tables 4.3-4 and 4.3-5 show for each county in the planning area vulnerability and estimated exposure, and potential annualized losses, respectively, due to riverine flooding. Due to the complexity of analyzing detailed flood risk for such a large planning area which encompasses numerous jurisdictions, it is important to note that this risk assessment is based on aggregated data and represents a base-level assessment for the region as a whole. Additional work will be done on an ongoing basis to enhance, expand and further improve the accuracy of the baseline established here and enhance the level of detail provided in future plan updates.

**Table 4.3-4
Vulnerability and Estimated Exposure by County (Riverine Flood)***

Jurisdiction	People at Risk	Single Family Residential Buildings at Risk		Multi-Family Residential Buildings at Risk		Commercial Buildings at Risk	
		Number	Value	Number	Value	Number	Value
Austin	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Brazoria	0	1	\$56,303	1	\$1,040	0	\$0
Chambers	4	1	\$292,140	1	\$4,352	1	\$8,549
Colorado	444	N/A	\$37,126,110	N/A	\$1,625,139	N/A	\$7,568,440
Fort Bend	12,075	4,324	\$920,137,734	11	\$88,061,625	1,215	\$634,256,250
Galveston	10,549	3,809	\$676,998,305	48	\$268,970,000	961	\$349,905,000
Harris	N/A	N/A	\$45,894,847,531	N/A	\$12,516,414,043	N/A	\$14,461,722,000
Liberty	8,722	2,673	\$445,045,816	17	\$49,677,750	131	\$135,522,500
Matagorda	1,731	N/A	\$151,212,087	N/A	\$17,854,147	N/A	\$22,638,400
Montgomery	25,289	8,334	\$1,573,298,709	43	\$298,808,750	990	\$1,069,258,750
Walker	5,840	716	\$120,607,858	9	\$40,205,250	133	\$43,043,000
Waller	2,295	597	\$104,782,542	7	\$21,686,000	70	\$19,274,250
Wharton	9,216	2,825	\$467,222,709	47	\$194,286,250	119	\$289,456,250
TOTAL	76,165	23,280	\$50,391,627,844	182	\$1,349,759,4346	3,619	\$17,032,653,389

Jurisdiction	Critical Facilities at Risk		Hazardous Materials Facilities at Risk	Total Value of Structures/ Facilities at Risk
	Number	Value	Number	
Austin	N/A	N/A	N/A	N/A
Brazoria	0	\$0	70	\$57,343
Chambers	0	\$0	1	\$305,041
Colorado	N/A	N/A	N/A	\$46,319,689
Fort Bend	1	\$5,441	16	\$1,642,461,050
Galveston	1	\$3,138	90	\$1,295,876,443
Harris	N/A	N/A	170	\$72,872,983,574
Liberty	2	\$11,869	3	\$630,257,935
Matagorda	N/A	N/A	3	\$191,704,634
Montgomery	1	\$15,574	1	\$2,941,381,783
Walker	1	\$1,013	N/A	\$203,857,121
Waller	1	\$918	N/A	\$145,743,710
Wharton	1	\$24	3	\$950,965,233
TOTAL	7	\$37,977	356	\$80,921,913,556

Note: * Results are from the 2006 Regional Hazard Mitigation Plan

Table 4.3-5
Potential Annualized Losses by County (Riverine Flood)*

Jurisdiction	Total Exposure to Flood	Single Family Residential Buildings at Risk	Multi-Family Residential Buildings at Risk	Commercial Buildings at Risk	Critical Facilities at Risk	Total Potential Annualized Losses	Total Annualized % Loss Ratio
Austin	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Brazoria	\$57,343	\$1,062	\$15	\$0	\$0	\$1,077	1.88%
Chambers	\$305,041	\$5,314	\$60	\$175	\$0	\$5,549	1.82%
Colorado	\$46,319,689	\$190,306	\$8,330	\$9,000	N/A	\$207,636	0.45%
Fort Bend	\$1,642,461,050	\$13,639,027	\$1,245,988	\$13,418,448	\$579,416	\$28,882,879	1.76%
Galveston	\$1,295,876,443	\$11,859,566	\$3,533,836	\$6,954,726	\$232,870	\$22,580,998	1.74%
Harris	\$72,872,983,574	\$282,741,211	\$77,109,006	\$99,280,000	N/A	\$459,130,217	0.63%
Liberty	\$630,257,935	\$7,796,253	\$635,951	\$2,921,926	\$1,496,763	\$12,850,893	2.04%
Matagorda	\$191,704,634	\$846,518	\$99,951	\$101,000	N/A	\$1,047,469	0.55%
Montgomery	\$2,941,381,783	\$25,758,783	\$4,630,512	\$20,820,374	\$1,562,798	\$52,772,467	1.79%
Walker	\$203,857,121	\$2,185,928	\$614,917	\$841,024	\$91,862	\$3,733,731	1.83%
Waller	\$145,743,710	\$1,630,830	\$311,220	\$415,562	\$63,155	\$2,420,767	1.66%
Wharton	\$950,965,233	\$8,227,745	\$2,906,049	\$6,045,782	\$1,775	\$17,181,351	1.81%
TOTAL	\$80,921,913,556	\$354,882,543	\$91,095,835	\$150,808,017	\$4,028,639	\$596,786,395	0.74%

Note: * Results are from the 2006 Regional Hazard Mitigation Plan

Coastal Flooding

The information presented below is based on the HAZUS analysis conducted for the 2006 Regional Hazard Mitigation Plan because the release for the most current HAZUS was not available during the 2011 planning period.

Figures 4.3-14 through 4.3-18 show those areas likely to be impacted by coastal storm surge during Category 1, 2, 3, 4 and 5 hurricane events.

Figure 4.3-14
Coastal Flood Hazard Areas During a Category 1 Storm Event

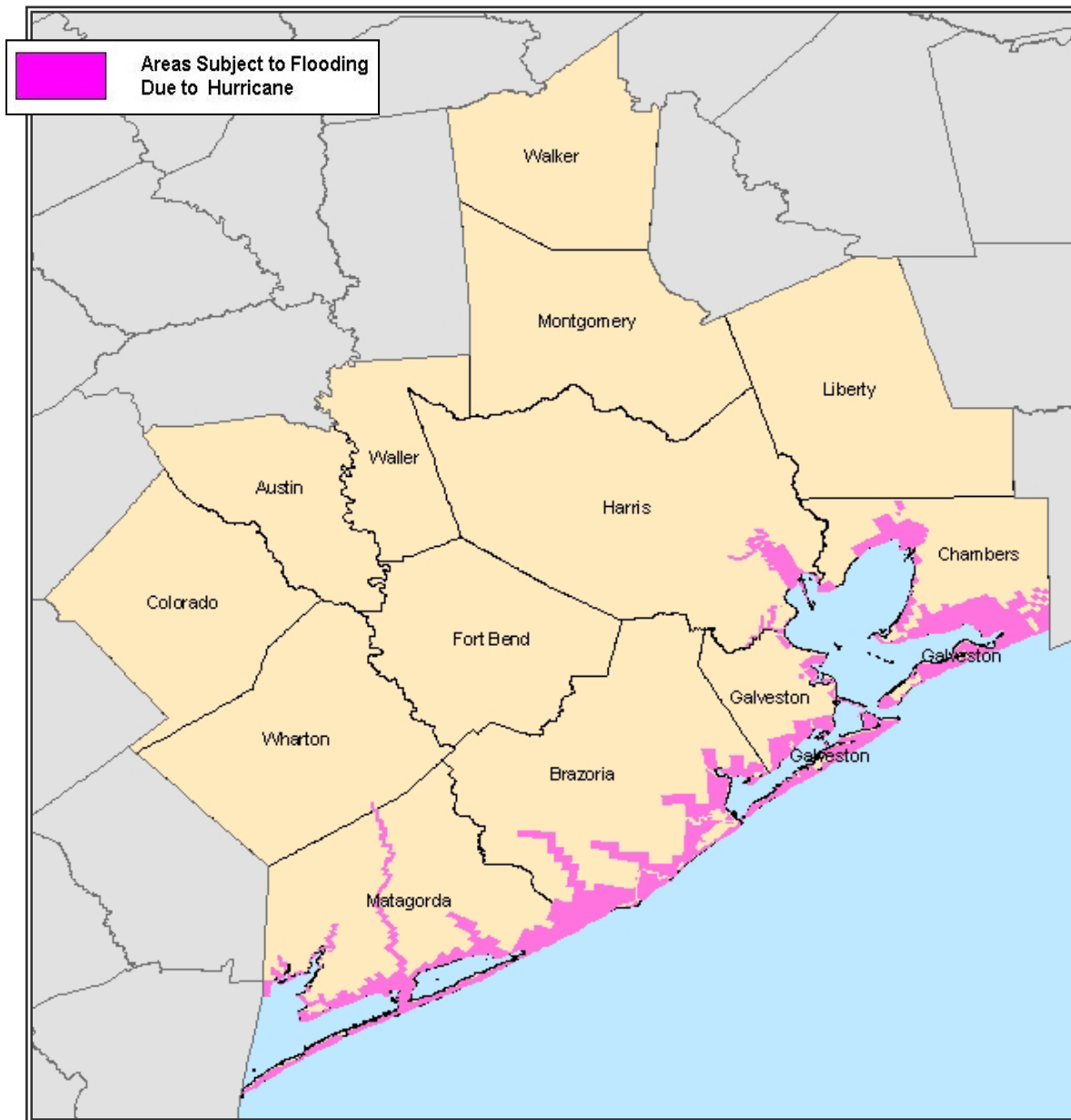


Figure 4.3-15
Coastal Flood Hazard Areas During a Category 2 Storm Event

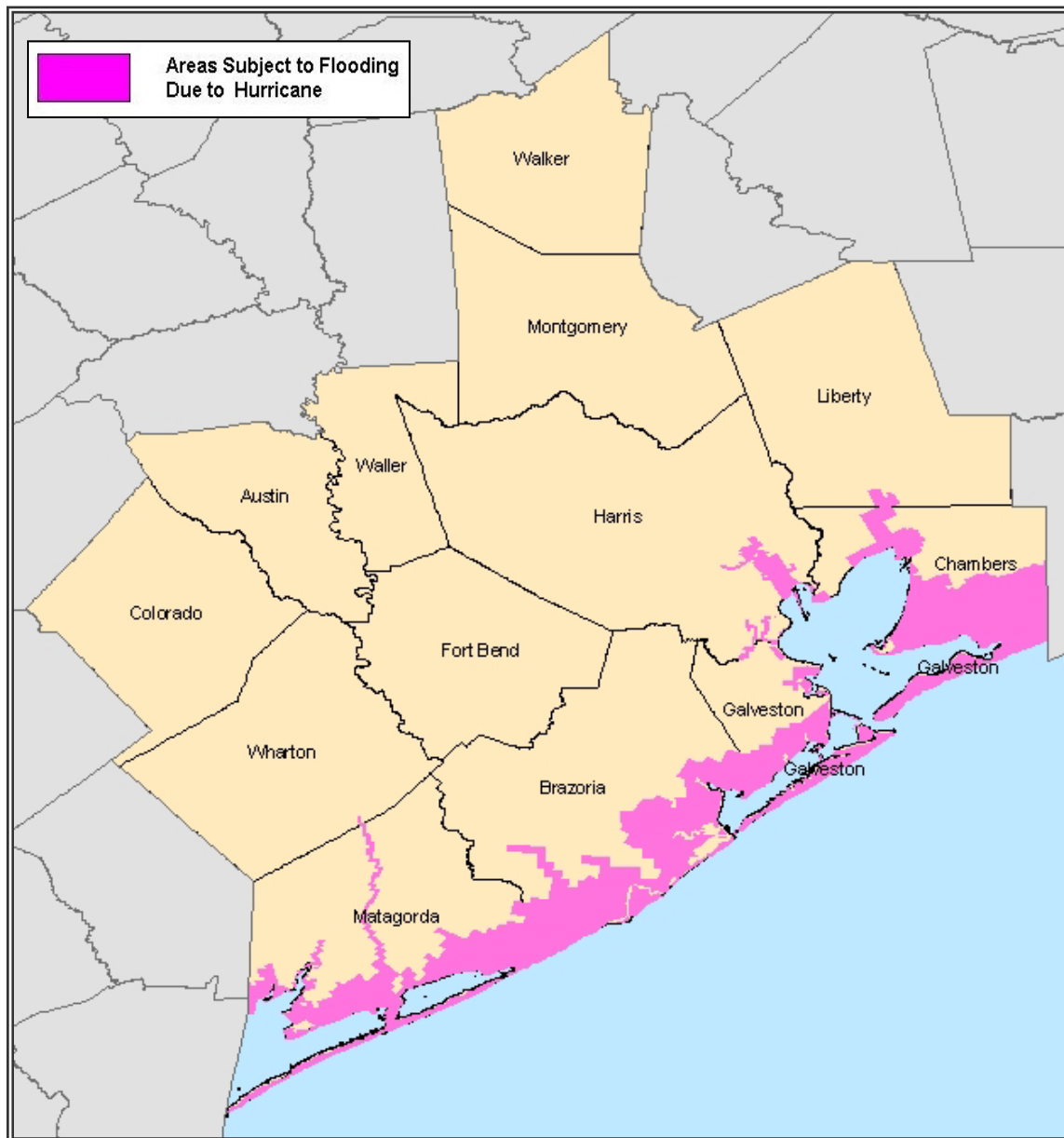


Figure 4.3-16
Coastal Flood Hazard Areas During a Category 3 Storm Event

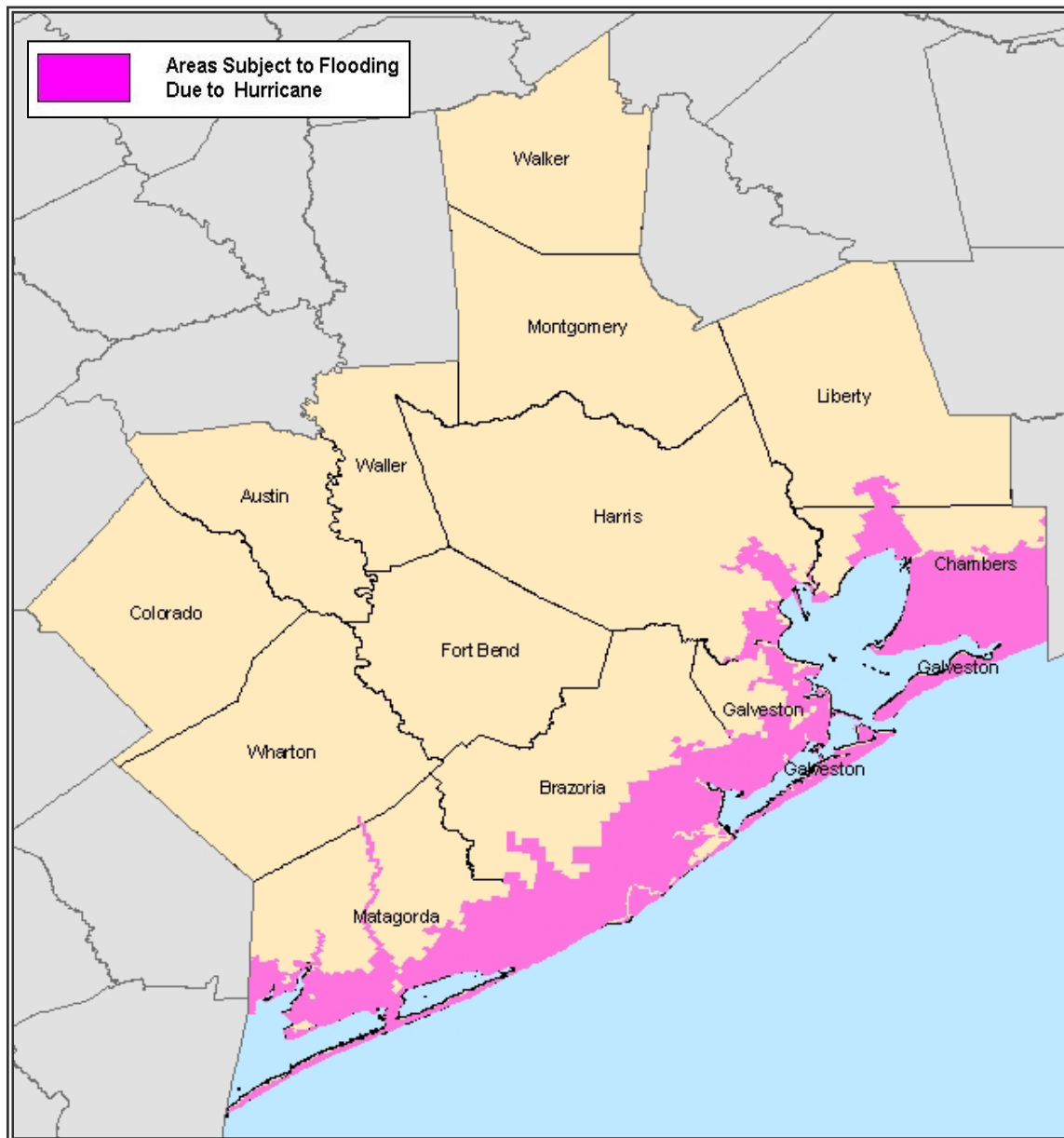


Figure 4.3-17
Coastal Flood Hazard Areas During a Category 4 Storm Event

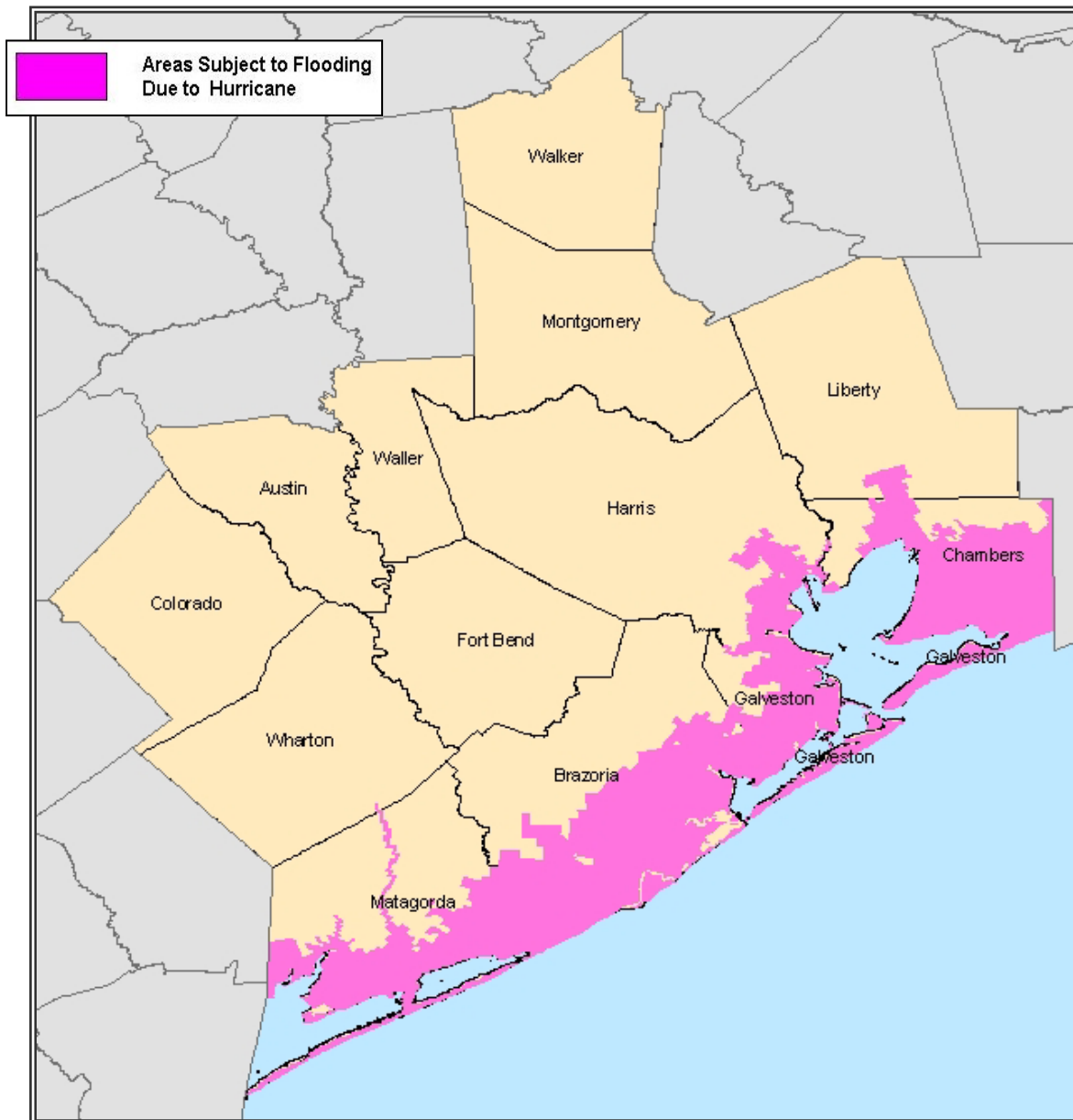
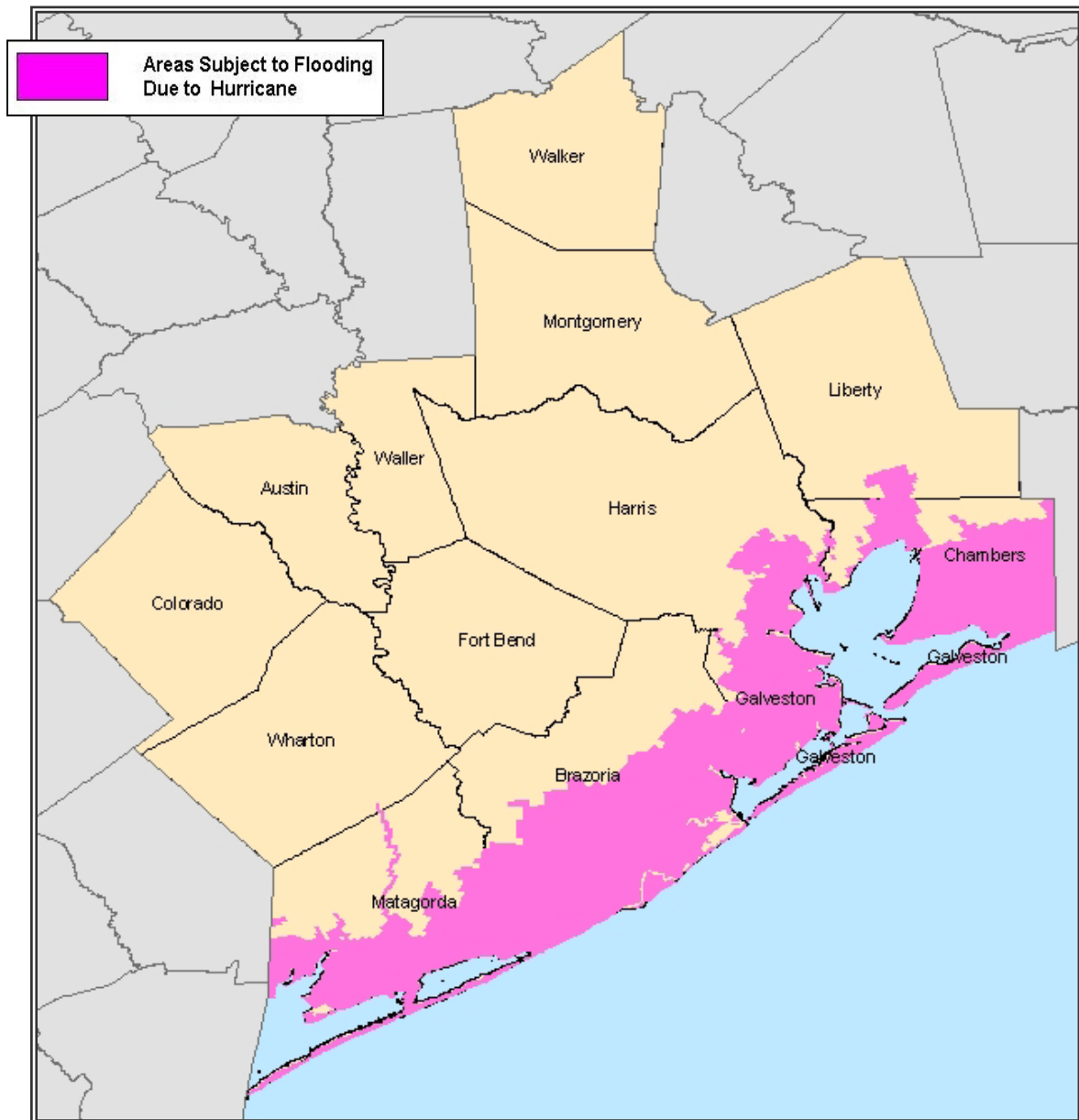


Figure 4.3-18
Coastal Flood Hazard Areas During a Category 5 Storm Event



Tables 4.3-6 through 4.3-15 show the exposure at risk from coastal flooding (storm surge), by county, by looking at both actual numbers and values of building inventory as well as by ratio for Category 1 through Category 5 storm events. To rank risk from coastal flooding, the following scale should be used:

Exposure at risk <u>ratio</u> < 1%	Very Low Risk
1 ≤ Exposure at risk <u>ratio</u> < 5%	Low Risk
5 ≤ Exposure at risk <u>ratio</u> < 20%	Medium Risk
20 ≤ Exposure at risk <u>ratio</u> < 40%	High Risk
40 ≤ Exposure at risk <u>ratio</u>	Very high Risk

Table 4.3-6
Exposure at Risk from Coastal Flooding by County (Surge—Category 1)*

CAT 1	People at Risk	Single Family Residential Buildings at Risk		Multi-Family Residential Buildings at Risk		Commercial Buildings at Risk	
		Number	Value	Number	Value	Number	Value
Jurisdiction							
Brazoria	21,958	7,558	\$1,052,193	226	\$167,757	63	\$130,981
Chambers	2,211	952	\$140,252	1	\$1,015	2	\$5,522
Galveston	70,053	27,557	\$3,903,631	1,228	\$945,805	299	\$550,012
Harris	22,199	7,092	\$1,089,943	223	\$376,892	141	\$283,295
Liberty	773	114	\$15,399	0	\$0	1	\$847
Matagorda	2,562	2,678	\$359,934	10	\$4,809	1	\$4,851
TOTAL	119,756	45,951	\$6,561,352	1,687	\$1,496,278	505	\$975,508

CAT 1	Critical Facilities at Risk		Hazardous Materials Facilities at Risk
	Number	Value	Number
Jurisdiction			
Brazoria	1	\$6,913	17
Chambers	1	\$395	0
Galveston	7	\$29,587	2
Harris	1	\$2,776	9
Liberty	0	\$0	0
Matagorda	1	\$130	1
TOTAL	7	\$39,801	29

Note: * Results are from the 2006 Regional Hazard Mitigation Plan.

Table 4.3-7
Exposure at Risk Ratio from Coastal Flooding by County (%)—Category 1*

CAT 1	People at Risk	Single Family Residential Buildings at Risk		Multi-Family Residential Buildings at Risk		Commercial Buildings at Risk	
		Count	Value	Count	Value	Count	Value
Brazoria	9.1	10.2	9.6	23.3	15.1	9.2	9.6
Chambers	8.5	11.6	11.7	0.0	2.8	2.4	3.4
Galveston	35.7	38.9	38.0	63.5	54.6	42.4	37.4
Harris	0.7	0.8	0.8	0.7	1.0	0.9	0.9
Liberty	1.1	0.7	0.7	0.0	0.0	0.0	0.3
Matagorda	6.8	19.6	19.5	3.6	2.2	0.0	2.7
TOTAL	3.0	4.1	3.9	4.9	3.6	2.9	2.6

CAT 1	Critical Facilities at Risk		Hazardous Materials Facilities at Risk
	Count	Value	Count
Brazoria	1.0	8.2	42.5
Chambers	1.0	10.7	0
Galveston	50.0	26.1	12.5
Harris	1.0	0.1	3.1
Liberty	0.0	0.0	0
Matagorda	1.0	0.4	50.0
TOTAL	2.0	1.4	8.1

Note: * Results are from the 2006 Regional Hazard Mitigation Plan

Table 4.3-8
Exposure at Risk from Coastal Flooding by County (Surge—Category 2)*

CAT 2	People at Risk	Single Family Residential Buildings at Risk		Multi-Family Residential Buildings at Risk		Commercial Buildings at Risk	
Jurisdiction		Number	Value	Number	Value	Number	Value
Brazoria	28,130	9,746	\$1,352,731	228	\$172,270	83	\$174,633
Chambers	5,162	2,028	\$293,074	1	\$4,591	12	\$25,614
Galveston	82,811	31,962	\$4,519,768	1,484	\$1,092,577	362	\$689,240
Harris	33,674	11,083	\$1,695,652	309	\$439,576	156	\$322,570
Liberty	1,374	266	\$35,743	0	\$0	1	\$847
Matagorda	4,907	3,545	\$476,162	17	\$8,218	8	\$23,520
Wharton	25	14	\$1,821	0	\$0	0	\$0
TOTAL	156,083	58,644	\$8,374,951	2,038	\$1,717,232	621	\$1,236,424

CAT 2	Critical Facilities at Risk		Hazardous Materials Facilities at Risk
Jurisdiction	Number	Value	Number
Brazoria	1	\$6,913	19
Chambers	1	\$1,007	0
Galveston	7	\$36,758	11
Harris	1	\$4,493	9
Liberty	0	\$0	0
TOTAL	7	\$50,617	40

Note: * Results are from the 2006 Regional Hazard Mitigation Plan

Table 4.3-9
Exposure at Risk Ratio from Coastal Flooding by County (%)—Category 2*

CAT 2	People at Risk	Single Family Residential Buildings at Risk		Multi-Family Residential Buildings at Risk		Commercial Buildings at Risk	
		Count	Value	Count	Value	Count	Value
Brazoria	11.6	13.2	12.3	23.5	15.5	12.1	12.8
Chambers	19.8	24.6	24.4	0.0	12.8	14.5	15.7
Galveston	42.2	45.2	44.0	76.7	63.0	51.3	46.8
Harris	1.0	1.2	1.2	1.0	1.2	1.0	1.0
Liberty	2.0	1.5	1.5	0.0	0.0	0.0	0.3
Matagorda	12.9	25.9	25.8	6.0	3.8	10.3	13.2
Wharton	0.1	0.1	0.1	0.0	0.0	0.0	0.0
TOTAL	3.9	5.2	5.0	5.9	4.1	3.5	3.4

CAT 2	Critical Facilities at Risk		Hazardous Materials Facilities at Risk
	Count	Value	Count
Brazoria	0.0	8.2	47.5
Chambers	0.0	27.3	0.0
Galveston	50.0	32.4	68.8
Harris	0.0	0.2	3.1
Liberty	0.0	0.0	0.0
Matagorda	0.0	5.0	50.0
Wharton	0.0	0.0	0.0
TOTAL	2.0	1.8	11.2

Note: * Results are from the 2006 Regional Hazard Mitigation Plan

Table 4.3-10
Exposure at Risk from Coastal Flooding by County (Surge—Category 3)*

CAT 3	People at Risk	Single Family Residential Buildings at Risk		Multi-Family Residential Buildings at Risk		Commercial Buildings at Risk	
		Number	Value	Number	Value	Number	Value
Brazoria	71,890	23,743	\$3,480,252	505	\$513,896	255	\$495,686
Chambers	10,098	3,498	\$499,869	7	\$8,750	14	\$33,247
Galveston	147,015	52,901	\$7,663,263	1,782	\$1,513,270	571	\$1,082,990
Harris	54,534	17,959	\$2,767,503	475	\$669,504	219	\$448,681
Liberty	2,650	611	\$82,238	0	\$0	2	\$4,051
Matagorda	10,111	5,189	\$701,759	19	\$19,839	39	\$70,252
Wharton	25	14	\$1,821	0	\$0	0	\$0
TOTAL	296,323	103,915	\$15,196,705	2,788	\$2,725,259	1,100	\$2,134,907

CAT 3	Critical Facilities at Risk		Hazardous Materials Facilities at Risk
	Number	Value	Number
Brazoria	8	\$16,005	28
Chambers	1	\$1,369	0
Galveston	14	\$108,155	13
Harris	1	\$19,277	42
Liberty	1	\$974	0
Matagorda	1	\$2,072	1
Wharton	0	\$0	0
TOTAL	23	\$147,852	84

Note: * Results are from the 2006 Regional Hazard Mitigation Plan

Table 4.3-11
Exposure at Risk Ratio from Coastal Flooding by County (%)—Category 3*

CAT 3	People at Risk	Single Family Residential Buildings at Risk		Multi-Family Residential Buildings at Risk		Commercial Buildings at Risk	
Jurisdiction		Count	Value	Count	Value	Count	Value
Brazoria	29.7	32.2	31.7	52.1	46.1	37.1	36.2
Chambers	38.8	42.5	41.6	33.3	24.4	16.9	20.4
Galveston	74.9	74.8	74.6	92.1	87.3	80.9	73.6
Harris	1.6	1.9	2.0	1.5	1.8	1.4	1.4
Liberty	3.8	3.5	3.5	0.0	0.0	1.5	1.4
Matagorda	26.7	38.0	38.0	6.8	9.1	50.0	39.5
Wharton	0.1	0.1	0.1	0.0	0.0	0.0	0.0
TOTAL	7.4	9.3	9.0	8.1	6.6	6.3	5.8

CAT 3	Critical Facilities at Risk		Hazardous Materials Facilities at Risk
Jurisdiction	Count	Value	Count
Brazoria	42.1	19.0	70.0
Chambers	0.0	37.1	0.0
Galveston	100.0	95.3	81.3
Harris	0.3	0.8	14.4
Liberty	0.0	1.6	0.0
Matagorda	0.0	7.1	50.0
Wharton	0.0	0.0	0.0
TOTAL	6.6	5.4	23.5

Note: * Results are from the 2006 Regional Hazard Mitigation Plan

Table 4.3-12
Exposure at Risk from Coastal Flooding by County (Surge—Category 4)*

CAT 4	People at Risk	Single Family Residential Buildings at Risk		Multi-Family Residential Buildings at Risk		Commercial Buildings at Risk	
		Number	Value	Number	Value	Number	Value
Brazoria	106,529	34,079	\$5,010,953	610	\$648,621	368	\$703,805
Chambers	14,313	4,572	\$645,000	15	\$14,260	17	\$39,686
Galveston	196,342	70,766	\$10,269,124	1,935	\$1,732,955	706	\$1,471,199
Harris	150,141	47,588	\$7,395,651	1,160	\$1,496,279	538	\$1,092,833
Liberty	3,457	759	\$102,625	1	\$31	3	\$8,408
Matagorda	10,596	5,319	\$718,940	19	\$20,284	41	\$74,207
Wharton	28	17	\$2,211	0	\$0	0	\$0
TOTAL	481,406	163,100	\$24,144,504	3,739	\$3,912,430	1,673	\$3,390,138

CAT 4	Critical Facilities at Risk		Hazardous Materials Facilities at Risk
	Number	Value	Number
Brazoria	10	\$35,792	25
Chambers	1	\$1,369	0
Galveston	14	\$113,468	15
Harris	2	\$40,796	61
Liberty	1	\$974	0
Matagorda	1	\$2,712	1
Wharton	0	\$0	0
TOTAL	26	\$195,111	102

Note: * Results are from the 2006 Regional Hazard Mitigation Plan

Table 4.3-13
Exposure at Risk Ratio from Coastal Flooding by County (%)—Category 4*

CAT 4	People at Risk	Single Family Residential Buildings at Risk		Multi-Family Residential Buildings at Risk		Commercial Buildings at Risk	
Jurisdiction		Count	Value	Count	Value	Count	Value
Brazoria	44.1	46.2	45.6	62.9	58.2	53.5	51.4
Chambers	55.0	55.5	53.7	71.4	39.8	20.5	24.3
Galveston	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Harris	4.4	5.2	5.3	3.8	3.9	3.4	3.3
Liberty	4.9	4.4	4.4	0.0	0.0	2.3	3.0
Matagorda	27.9	38.9	38.9	6.8	9.3	52.6	41.7
Wharton	0.1	0.1	0.1	0.0	0.0	0.0	0.0
TOTAL	12.0	14.6	14.4	10.9	9.4	9.5	9.2

CAT 4	Critical Facilities at Risk		Hazardous Materials Facilities at Risk
Jurisdiction	Count	Value	Count
Brazoria	52.6	42.5	62.5
Chambers	0.0	37.1	0.0
Galveston	100.0	100.0	93.8
Harris	0.7	1.7	20.9
Liberty	0.0	1.6	0.0
Matagorda	0.0	9.3	50.0
Wharton	0.0	0.0	0.0
TOTAL	7.5	7.1	28.6

Note: * Results are from the 2006 Regional Hazard Mitigation Plan

Table 4.3-14
Exposure at Risk from Coastal Flooding by County (Surge—Category 5)*

CAT 5	People at Risk	Single Family Residential Buildings at Risk		Multi-Family Residential Buildings at Risk		Commercial Buildings at Risk	
		Number	Value	Number	Value	Number	Value
Brazoria	113,565	36,723	\$5,388,837	604	\$666,821	376	\$725,241
Chambers	18,433	5,892	\$854,073	17	\$18,822	66	\$122,653
Galveston	196,342	70,766	\$10,269,124	1,935	\$1,732,955	706	\$1,471,199
Harris	198,953	66,495	\$10,544,394	1,442	\$1,868,535	794	\$1,487,834
Liberty	3,141	721	\$97,338	1	\$44	3	\$8,408
Matagorda	11,141	5,609	\$759,662	19	\$21,276	41	\$74,372
Wharton	25	14	\$1,821	0	\$0	0	\$0
TOTAL	541,600	186,220	\$27,915,249	4,017	\$4,308,453	1,986	\$3,889,707

CAT 5	Critical Facilities at Risk		Hazardous Materials Facilities at Risk
	Number	Value	Number
Brazoria	10	\$39,755	29
Chambers	1	\$2,371	1
Galveston	14	\$113,468	15
Harris	11	\$92,070	93
Liberty	1	\$974	0
Matagorda	1	\$2,712	1
Wharton	0	\$0	0
TOTAL	35	\$251,350	139

Note: * Results are from the 2006 Regional Hazard Mitigation Plan

Table 4.3-15
Exposure at Risk Ratio from Coastal Flooding by County (%)—Category 5*

CAT 5	People at Risk	Single Family Residential Buildings at Risk		Multi-Family Residential Buildings at Risk		Commercial Buildings at Risk	
Jurisdiction		Count	Value	Count	Value	Count	Value
Brazoria	47.0	49.7	49.1	62.3	59.8	54.7	53.0
Chambers	70.8	71.5	71.1	81.0	52.5	79.5	75.1
Galveston	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Harris	5.9	7.2	7.6	4.7	4.9	5.0	4.5
Liberty	4.5	4.2	4.2	0.0	0.0	2.3	3.0
Matagorda	29.4	41.0	41.1	6.8	9.7	52.6	41.8
Wharton	0.1	0.1	0.1	0.0	0.0	0.0	0.0
TOTAL	13.5	16.6	16.6	11.7	10.4	11.3	10.5

CAT 5	Critical Facilities at Risk		Hazardous Materials Facilities at Risk
Jurisdiction	Count	Value	Count
Brazoria	52.6	47.2	72.5
Chambers	0.0	64.2	14.3
Galveston	100.0	100.0	93.8
Harris	3.6	3.8	31.8
Liberty	0.0	1.6	0.0
Matagorda	0.0	9.3	50.0
Wharton	0.0	0.0	30.0
TOTAL	10.1	9.1	38.9

Note: * Results are from the 2006 Regional Hazard Mitigation Plan

Repetitive Loss Properties

Another way to gauge flood hazard risk is to identify and analyze the number of properties that have filed multiple flood insurance claims that meet a pre-determined amount. Properties that meet this criterion are typically referred to as repetitive loss properties.² For planning purposes, information on repetitive loss properties in the H-GAC region has been researched and information is available for each of the participating jurisdictions.

Table 4.3-16 provides information on these properties within participating jurisdictions within this Plan, including the number of losses per property and the dollar amount of losses paid per property.

Table 4.3-16
Repetitive Loss Properties in Participating Jurisdictions

Community Name	Repetitive Loss #	Occupancy	Number of Losses	Total Paid
<i>Austin County</i>				
AUSTIN COUNTY	0173897	SINGLE FMLY	2	\$11,422.09
AUSTIN COUNTY	0071887	SINGLE FMLY	2	\$22,706.40
AUSTIN COUNTY	0071579	SINGLE FMLY	2	\$4,518.98
AUSTIN COUNTY	0172996	SINGLE FMLY	2	\$37,798.71
AUSTIN COUNTY	0132881	SINGLE FMLY	2	\$247,320.62
AUSTIN COUNTY	0100252	SINGLE FMLY	3	\$120,512.10
AUSTIN COUNTY	0100251	SINGLE FMLY	2	\$62,741.95
SEALY, CITY OF	0097187	SINGLE FMLY	3	\$48,238.53
SEALY, CITY OF	0101086	SINGLE FMLY	2	\$22,571.20
SEALY, CITY OF	0088121	SINGLE FMLY	4	\$40,287.82
WALLIS, CITY OF	0104572	SINGLE FMLY	2	\$127,794.67
<i>Brazoria County</i>				
BRAZORIA COUNTY	0017490	ASSMD CONDO	2	\$12,043.88
BRAZORIA COUNTY	0017609	SINGLE FMLY	2	\$24,880.66

² A Repetitive Loss (RL) property is any insurable building for which two or more claims of more than \$1,000 were paid by the National Flood Insurance Program (NFIP) within any rolling ten-year period, since 1978. A RL property may or may not be currently insured by the NFIP. Currently there are over 122,000 RL properties nationwide.

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Community Name	Repetitive Loss #	Occupancy	Number of Losses	Total Paid
BRAZORIA COUNTY	0048508	SINGLE FMLY	2	\$7,031.65
BRAZORIA COUNTY	0041008	SINGLE FMLY	2	\$3,946.10
BRAZORIA COUNTY	0045237	SINGLE FMLY	4	\$54,570.24
BRAZORIA COUNTY	0025212	SINGLE FMLY	3	\$6,450.08
BRAZORIA COUNTY	0038788	SINGLE FMLY	2	\$4,814.82
BRAZORIA COUNTY	0025662	SINGLE FMLY	3	\$9,888.99
BRAZORIA COUNTY	0026721	UNKNOWN	2	\$28,495.94
BRAZORIA COUNTY	0015991	SINGLE FMLY	2	\$25,547.26
BRAZORIA COUNTY	0038638	SINGLE FMLY	2	\$16,608.61
BRAZORIA COUNTY	0041786	SINGLE FMLY	2	\$5,105.06
BRAZORIA COUNTY	0017543	SINGLE FMLY	4	\$97,583.69
BRAZORIA COUNTY	0026798	SINGLE FMLY	3	\$50,685.00
BRAZORIA COUNTY	0017452	SINGLE FMLY	2	\$34,716.83
BRAZORIA COUNTY	0018567	SINGLE FMLY	3	\$80,966.83
BRAZORIA COUNTY	0018559	SINGLE FMLY	2	\$18,071.81
BRAZORIA COUNTY	0016094	SINGLE FMLY	2	\$4,254.77
BRAZORIA COUNTY	0015990	SINGLE FMLY	4	\$33,437.04
BRAZORIA COUNTY	0025384	SINGLE FMLY	3	\$10,314.57
BRAZORIA COUNTY	0036167	SINGLE FMLY	3	\$54,332.15
BRAZORIA COUNTY	0035346	SINGLE FMLY	2	\$14,367.73
BRAZORIA COUNTY	0043105	SINGLE FMLY	2	\$42,431.12
BRAZORIA COUNTY	0045452	SINGLE FMLY	2	\$4,743.92
BRAZORIA COUNTY	0037731	SINGLE FMLY	3	\$6,119.59
BRAZORIA COUNTY	0041184	SINGLE FMLY	3	\$11,069.46
BRAZORIA COUNTY	0071507	SINGLE FMLY	2	\$54,833.36
BRAZORIA COUNTY	0026033	SINGLE FMLY	2	\$31,132.88
BRAZORIA COUNTY	0045541	SINGLE FMLY	2	\$24,714.61
BRAZORIA COUNTY	0026319	SINGLE FMLY	2	\$25,814.74
BRAZORIA COUNTY	0040644	SINGLE FMLY	2	\$36,747.17

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Community Name	Repetitive Loss #	Occupancy	Number of Losses	Total Paid
BRAZORIA COUNTY	0026524	SINGLE FMLY	2	\$22,037.00
BRAZORIA COUNTY	0037251	SINGLE FMLY	2	\$29,718.42
BRAZORIA COUNTY	0017514	SINGLE FMLY	2	\$56,118.69
BRAZORIA COUNTY	0039205	SINGLE FMLY	3	\$6,959.50
BRAZORIA COUNTY	0044406	SINGLE FMLY	2	\$44,308.83
BRAZORIA COUNTY	0016048	SINGLE FMLY	2	\$54,607.59
BRAZORIA COUNTY	0026527	UNKNOWN	2	\$6,427.00
BRAZORIA COUNTY	0017612	SINGLE FMLY	3	\$10,701.05
BRAZORIA COUNTY	0015181	ASSMD CONDO	2	\$29,901.70
BRAZORIA COUNTY	0017567	SINGLE FMLY	2	\$53,334.84
BRAZORIA COUNTY	0045810	SINGLE FMLY	3	\$21,362.59
BRAZORIA COUNTY	0043640	SINGLE FMLY	2	\$24,819.59
BRAZORIA COUNTY	0026372	SINGLE FMLY	3	\$30,100.74
BRAZORIA COUNTY	0045662	SINGLE FMLY	2	\$4,329.50
BRAZORIA COUNTY	0043301	SINGLE FMLY	3	\$8,745.33
BRAZORIA COUNTY	0035676	SINGLE FMLY	2	\$25,743.10
BRAZORIA COUNTY	0045069	SINGLE FMLY	2	\$38,851.11
BRAZORIA COUNTY	0039449	SINGLE FMLY	3	\$43,503.06
BRAZORIA COUNTY	0045227	SINGLE FMLY	2	\$12,194.03
BRAZORIA COUNTY	0044711	SINGLE FMLY	2	\$11,296.84
BRAZORIA COUNTY	0042669	SINGLE FMLY	2	\$23,195.62
BRAZORIA COUNTY	0045017	SINGLE FMLY	3	\$6,658.12
BRAZORIA COUNTY	0026824	SINGLE FMLY	2	\$21,754.08
BRAZORIA COUNTY	0044943	SINGLE FMLY	3	\$8,393.36
BRAZORIA COUNTY	0048431	SINGLE FMLY	2	\$2,597.46
BRAZORIA COUNTY	0045341	SINGLE FMLY	2	\$10,325.61
BRAZORIA COUNTY	0025216	SINGLE FMLY	3	\$66,055.89
BRAZORIA COUNTY	0026867	SINGLE FMLY	6	\$112,395.92
BRAZORIA COUNTY	0045167	SINGLE FMLY	2	\$10,687.78

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BRAZORIA COUNTY	0068235	SINGLE FMLY	2	\$19,689.07
BRAZORIA COUNTY	0018638	SINGLE FMLY	2	\$13,400.00
BRAZORIA COUNTY	0025348	SINGLE FMLY	2	\$55,238.96
BRAZORIA COUNTY	0038750	SINGLE FMLY	2	\$17,041.72
BRAZORIA COUNTY	0068844	SINGLE FMLY	2	\$59,397.44
BRAZORIA COUNTY	0025758	SINGLE FMLY	3	\$9,500.73
BRAZORIA COUNTY	0041510	SINGLE FMLY	2	\$17,218.96
BRAZORIA COUNTY	0026778	SINGLE FMLY	2	\$7,289.00
BRAZORIA COUNTY	0038506	SINGLE FMLY	2	\$6,481.31
BRAZORIA COUNTY	0044355	SINGLE FMLY	2	\$4,801.55
BRAZORIA COUNTY	0045525	SINGLE FMLY	2	\$10,620.01
BRAZORIA COUNTY	0017547	SINGLE FMLY	2	\$3,998.07
BRAZORIA COUNTY	0046054	SINGLE FMLY	2	\$20,273.22
BRAZORIA COUNTY	0025177	SINGLE FMLY	2	\$9,527.00
BRAZORIA COUNTY	0018491	NON RESIDNT	2	\$4,827.25
BRAZORIA COUNTY	0026801	SINGLE FMLY	2	\$41,629.84
BRAZORIA COUNTY	0025952	SINGLE FMLY	2	\$24,735.20
BRAZORIA COUNTY	0018393	SINGLE FMLY	2	\$37,415.60
BRAZORIA COUNTY	0018385	ASSMD CONDO	2	\$74,786.45
BRAZORIA COUNTY	0017358	SINGLE FMLY	2	\$36,125.90
BRAZORIA COUNTY	0026334	SINGLE FMLY	2	\$53,335.62
BRAZORIA COUNTY	0017583	SINGLE FMLY	3	\$32,787.84
BRAZORIA COUNTY	0026285	SINGLE FMLY	2	\$27,541.40
BRAZORIA COUNTY	0025475	SINGLE FMLY	2	\$34,370.30
BRAZORIA COUNTY	0043561	SINGLE FMLY	3	\$12,114.56
BRAZORIA COUNTY	0073452	SINGLE FMLY	2	\$24,505.54
BRAZORIA COUNTY	0003824	SINGLE FMLY	2	\$32,758.06
BRAZORIA COUNTY	0026001	SINGLE FMLY	3	\$44,873.92
BRAZORIA COUNTY	0068857	SINGLE FMLY	2	\$8,463.75

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BRAZORIA COUNTY	0002845	SINGLE FMLY	2	\$41,346.98
BRAZORIA COUNTY	0017484	SINGLE FMLY	2	\$15,324.86
BRAZORIA COUNTY	0026847	SINGLE FMLY	2	\$47,652.64
BRAZORIA COUNTY	0018514	SINGLE FMLY	2	\$20,585.44
BRAZORIA COUNTY	0097082	SINGLE FMLY	2	\$18,834.40
BRAZORIA COUNTY	0026831	SINGLE FMLY	3	\$35,853.68
BRAZORIA COUNTY	0042560	SINGLE FMLY	2	\$27,047.65
BRAZORIA COUNTY	0068848	SINGLE FMLY	2	\$32,405.73
BRAZORIA COUNTY	0018684	SINGLE FMLY	2	\$58,425.10
BRAZORIA COUNTY	0050856	SINGLE FMLY	2	\$8,475.83
BRAZORIA COUNTY	0045409	SINGLE FMLY	2	\$17,291.89
BRAZORIA COUNTY	0044654	SINGLE FMLY	3	\$8,034.50
BRAZORIA COUNTY	0016047	SINGLE FMLY	3	\$51,310.69
BRAZORIA COUNTY	0068864	SINGLE FMLY	2	\$6,732.41
BRAZORIA COUNTY	0044361	SINGLE FMLY	3	\$56,948.25
BRAZORIA COUNTY	0017564	SINGLE FMLY	2	\$6,677.66
BRAZORIA COUNTY	0017581	SINGLE FMLY	2	\$38,312.48
BRAZORIA COUNTY	0025095	SINGLE FMLY	2	\$40,297.45
BRAZORIA COUNTY	0040997	SINGLE FMLY	2	\$13,465.77
BRAZORIA COUNTY	0068856	SINGLE FMLY	2	\$45,067.08
BRAZORIA COUNTY	0072004	SINGLE FMLY	2	\$7,318.92
BRAZORIA COUNTY	0018672	SINGLE FMLY	3	\$12,362.94
BRAZORIA COUNTY	0043697	SINGLE FMLY	2	\$18,299.65
BRAZORIA COUNTY	0013052	SINGLE FMLY	9	\$49,979.76
BRAZORIA COUNTY	0120350	SINGLE FMLY	2	\$70,058.77
BRAZORIA COUNTY	0168658	SINGLE FMLY	2	\$97,238.94
BRAZORIA COUNTY	0168156	SINGLE FMLY	2	\$47,431.47
BRAZORIA COUNTY	0093357	SINGLE FMLY	2	\$14,995.66
BRAZORIA COUNTY	0026240	NON RESIDENT	3	\$16,298.19

HOUSTON-GALVESTON AREA COUNCIL
REGIONAL HAZARD MITIGATION PLAN – 2011 UPDATE

Community Name	Repetitive Loss #	Occupancy	Number of Losses	Total Paid
BRAZORIA COUNTY	0044325	NON RESIDNT	2	\$28,598.53
BRAZORIA COUNTY	0068019	NON RESIDNT	2	\$9,599.73
BRAZORIA COUNTY	0168586	SINGLE FMLY	2	\$45,398.32
BRAZORIA COUNTY	0037444	SINGLE FMLY	2	\$7,460.64
BRAZORIA COUNTY	0168908	SINGLE FMLY	2	\$43,487.07
BRAZORIA COUNTY	0119841	SINGLE FMLY	2	\$16,133.90
BRAZORIA COUNTY	0168246	SINGLE FMLY	2	\$43,788.52
BRAZORIA COUNTY	0069988	SINGLE FMLY	2	\$59,311.90
BRAZORIA COUNTY	0044934	SINGLE FMLY	8	\$200,349.02
BRAZORIA COUNTY	0071775	SINGLE FMLY	3	\$35,188.37
BRAZORIA COUNTY	0167357	SINGLE FMLY	2	\$30,802.46
BRAZORIA COUNTY	0069916	SINGLE FMLY	5	\$230,526.64
BRAZORIA COUNTY	0182795	SINGLE FMLY	2	\$73,558.03
BRAZORIA COUNTY	0068061	SINGLE FMLY	5	\$120,663.84
BRAZORIA COUNTY	0025142	SINGLE FMLY	8	\$246,124.12
BRAZORIA COUNTY	0038688	SINGLE FMLY	2	\$17,698.82
BRAZORIA COUNTY	0178178	SINGLE FMLY	2	\$6,225.12
BRAZORIA COUNTY	0119540	SINGLE FMLY	3	\$32,529.87
BRAZORIA COUNTY	0118722	SINGLE FMLY	3	\$12,060.11
BRAZORIA COUNTY	0037485	SINGLE FMLY	2	\$28,641.59
BRAZORIA COUNTY	0045420	SINGLE FMLY	2	\$3,551.62
BRAZORIA COUNTY	0002662	SINGLE FMLY	2	\$52,740.16
BRAZORIA COUNTY	0049649	SINGLE FMLY	3	\$15,020.48
BRAZORIA COUNTY	0016042	NON RESIDNT	2	\$14,084.11
BRAZORIA COUNTY	0068020	SINGLE FMLY	4	\$19,735.82
BRAZORIA COUNTY	0097189	SINGLE FMLY	3	\$29,033.67
BRAZORIA COUNTY	0119333	SINGLE FMLY	3	\$14,860.57
BRAZORIA COUNTY	0168895	SINGLE FMLY	2	\$116,058.87
BRAZORIA COUNTY	0026291	ASSMD CONDO	2	\$7,482.14

HOUSTON-GALVESTON AREA COUNCIL
REGIONAL HAZARD MITIGATION PLAN – 2011 UPDATE

Community Name	Repetitive Loss #	Occupancy	Number of Losses	Total Paid
BRAZORIA COUNTY	0122421	SINGLE FMLY	4	\$42,801.28
BRAZORIA COUNTY	0077678	SINGLE FMLY	3	\$60,503.31
BRAZORIA COUNTY	0119177	SINGLE FMLY	4	\$38,495.34
BRAZORIA COUNTY	0068977	SINGLE FMLY	4	\$57,993.04
BRAZORIA COUNTY	0040416	SINGLE FMLY	4	\$121,003.99
BRAZORIA COUNTY	0015957	SINGLE FMLY	2	\$3,529.35
BRAZORIA COUNTY	0025189	SINGLE FMLY	2	\$38,251.40
BRAZORIA COUNTY	0017763	SINGLE FMLY	2	\$9,049.74
BRAZORIA COUNTY	0009021	SINGLE FMLY	5	\$34,960.30
BRAZORIA COUNTY	0003976	SINGLE FMLY	7	\$524,139.66
BRAZORIA COUNTY	0044098	SINGLE FMLY	2	\$16,243.60
BRAZORIA COUNTY	0036865	SINGLE FMLY	2	\$4,631.28
BRAZORIA COUNTY	0025962	SINGLE FMLY	2	\$5,435.60
BRAZORIA COUNTY	0035344	SINGLE FMLY	2	\$17,451.70
BRAZORIA COUNTY	0039696	SINGLE FMLY	2	\$7,558.95
BRAZORIA COUNTY	0124920	SINGLE FMLY	3	\$44,806.73
BRAZORIA COUNTY	0018704	SINGLE FMLY	4	\$51,733.51
BRAZORIA COUNTY	0172737	SINGLE FMLY	2	\$28,655.37
BRAZORIA COUNTY	0025243	SINGLE FMLY	2	\$20,873.82
BRAZORIA COUNTY	0025347	SINGLE FMLY	2	\$5,015.28
BRAZORIA COUNTY	0124442	SINGLE FMLY	4	\$45,771.55
BRAZORIA COUNTY	0180875	SINGLE FMLY	2	\$39,958.61
BRAZORIA COUNTY	0183384	SINGLE FMLY	2	\$5,122.61
BRAZORIA COUNTY	0122388	SINGLE FMLY	3	\$27,373.89
BRAZORIA COUNTY	0054704	SINGLE FMLY	3	\$17,362.23
BRAZORIA COUNTY	0005611	SINGLE FMLY	9	\$119,038.11
BRAZORIA COUNTY	0026499	SINGLE FMLY	4	\$109,139.25
BRAZORIA COUNTY	0116975	SINGLE FMLY	3	\$39,167.22
BRAZORIA COUNTY	0116490	SINGLE FMLY	4	\$16,444.55

HOUSTON-GALVESTON AREA COUNCIL
REGIONAL HAZARD MITIGATION PLAN – 2011 UPDATE

Community Name	Repetitive Loss #	Occupancy	Number of Losses	Total Paid
BRAZORIA COUNTY	0018756	SINGLE FMLY	2	\$45,853.41
BRAZORIA COUNTY	0017536	SINGLE FMLY	2	\$66,772.89
BRAZORIA COUNTY	0040017	SINGLE FMLY	4	\$70,099.66
BRAZORIA COUNTY	0068071	SINGLE FMLY	3	\$72,448.54
BRAZORIA COUNTY	0168434	SINGLE FMLY	3	\$99,885.23
BRAZORIA COUNTY	0180895	SINGLE FMLY	2	\$84,149.95
BRAZORIA COUNTY	0025299	SINGLE FMLY	3	\$21,345.53
BRAZORIA COUNTY	0013231	SINGLE FMLY	2	\$12,434.61
BRAZORIA COUNTY	0119178	SINGLE FMLY	4	\$77,921.81
BRAZORIA COUNTY	0178985	SINGLE FMLY	2	\$23,859.38
BRAZORIA COUNTY	0123765	SINGLE FMLY	3	\$34,656.48
BRAZORIA COUNTY	0071508	SINGLE FMLY	4	\$53,592.26
BRAZORIA COUNTY	0026729	SINGLE FMLY	2	\$3,082.88
BRAZORIA COUNTY	0069678	SINGLE FMLY	2	\$2,620.66
BRAZORIA COUNTY	0045743	SINGLE FMLY	3	\$10,776.24
BRAZORIA COUNTY	0017409	SINGLE FMLY	2	\$33,774.18
BRAZORIA COUNTY	0070836	ASSMD CONDO	2	\$38,670.77
BRAZORIA COUNTY	0035941	SINGLE FMLY	2	\$34,191.54
BRAZORIA COUNTY	0017544	SINGLE FMLY	3	\$106,321.05
BRAZORIA COUNTY	0068159	SINGLE FMLY	2	\$98,036.63
BRAZORIA COUNTY	0124439	SINGLE FMLY	3	\$97,343.14
BRAZORIA COUNTY	0033833	SINGLE FMLY	2	\$8,042.98
BRAZORIA COUNTY	0196109	SINGLE FMLY	2	\$106,155.48
BRAZORIA COUNTY	0018423	SINGLE FMLY	2	\$42,067.52
BRAZORIA COUNTY	0039567	SINGLE FMLY	2	\$31,751.04
BRAZORIA COUNTY	0026276	SINGLE FMLY	3	\$39,612.20
BRAZORIA COUNTY	0017337	SINGLE FMLY	2	\$55,768.80
BRAZORIA COUNTY	0025692	SINGLE FMLY	2	\$11,006.83
BRAZORIA COUNTY	0025971	SINGLE FMLY	3	\$68,524.91

HOUSTON-GALVESTON AREA COUNCIL
REGIONAL HAZARD MITIGATION PLAN – 2011 UPDATE

Community Name	Repetitive Loss #	Occupancy	Number of Losses	Total Paid
BRAZORIA COUNTY	0119188	SINGLE FMLY	3	\$87,258.58
BRAZORIA COUNTY	0185452	SINGLE FMLY	2	\$11,058.31
BRAZORIA COUNTY	0097144	SINGLE FMLY	3	\$60,620.91
BRAZORIA COUNTY	0185461	SINGLE FMLY	2	\$63,948.44
BRAZORIA COUNTY	0172225	SINGLE FMLY	2	\$18,842.11
BRAZORIA COUNTY	0069864	SINGLE FMLY	2	\$18,716.66
BRAZORIA COUNTY	0039988	NON RESIDENT	4	\$14,360.60
BRAZORIA COUNTY	0124434	SINGLE FMLY	3	\$53,867.72
BRAZORIA COUNTY	0124286	SINGLE FMLY	3	\$46,721.18
BRAZORIA COUNTY	0093930	SINGLE FMLY	3	\$37,141.51
BRAZORIA COUNTY	0185624	SINGLE FMLY	2	\$24,004.73
BRAZORIA COUNTY	0180345	SINGLE FMLY	2	\$64,273.40
BRAZORIA COUNTY	0182796	SINGLE FMLY	2	\$12,331.58
BRAZORIA COUNTY	0118765	SINGLE FMLY	2	\$19,552.51
BRAZORIA COUNTY	0072214	SINGLE FMLY	3	\$71,015.67
BRAZORIA COUNTY	0124248	SINGLE FMLY	2	\$14,500.43
BRAZORIA COUNTY	0018394	SINGLE FMLY	2	\$25,774.95
BRAZORIA COUNTY	0184085	SINGLE FMLY	3	\$101,437.92
BRAZORIA COUNTY	0168245	SINGLE FMLY	2	\$76,323.56
BRAZORIA COUNTY	0119168	SINGLE FMLY	3	\$95,007.53
BRAZORIA COUNTY	0197026	SINGLE FMLY	2	\$54,746.33
BRAZORIA COUNTY	0018346	SINGLE FMLY	6	\$70,849.54
BRAZORIA COUNTY	0068028	SINGLE FMLY	4	\$58,154.62
BRAZORIA COUNTY	0097717	SINGLE FMLY	3	\$64,741.16
BRAZORIA COUNTY	0068031	SINGLE FMLY	3	\$75,339.66
BRAZORIA COUNTY	0017523	SINGLE FMLY	2	\$32,452.23
BRAZORIA COUNTY	0073818	SINGLE FMLY	4	\$53,043.06
BRAZORIA COUNTY	0197031	SINGLE FMLY	2	\$9,574.65
BRAZORIA COUNTY	0013265	SINGLE FMLY	4	\$32,882.05

HOUSTON-GALVESTON AREA COUNCIL
REGIONAL HAZARD MITIGATION PLAN – 2011 UPDATE

Community Name	Repetitive Loss #	Occupancy	Number of Losses	Total Paid
BRAZORIA COUNTY	0005651	SINGLE FMLY	6	\$37,638.87
BRAZORIA COUNTY	0071585	SINGLE FMLY	5	\$56,715.06
BRAZORIA COUNTY	0041764	SINGLE FMLY	2	\$6,504.96
BRAZORIA COUNTY	0091182	SINGLE FMLY	3	\$59,847.50
BRAZORIA COUNTY	0036573	SINGLE FMLY	8	\$42,536.31
BRAZORIA COUNTY	0044887	SINGLE FMLY	5	\$71,825.90
BRAZORIA COUNTY	0052718	NON RESIDENT	2	\$6,048.00
BRAZORIA COUNTY	0182067	SINGLE FMLY	2	\$34,278.19
BRAZORIA COUNTY	0043428	SINGLE FMLY	5	\$87,856.07
BRAZORIA COUNTY	0120629	SINGLE FMLY	2	\$21,501.64
BRAZORIA COUNTY	0017445	SINGLE FMLY	2	\$20,629.25
BRAZORIA COUNTY	0092100	SINGLE FMLY	2	\$63,626.86
BRAZORIA COUNTY	0191938	SINGLE FMLY	2	\$14,974.39
BRAZORIA COUNTY	0001452	SINGLE FMLY	4	\$23,475.89
BRAZORIA COUNTY	0026290	SINGLE FMLY	3	\$10,367.13
BRAZORIA COUNTY	0097801	SINGLE FMLY	4	\$18,115.52
BRAZORIA COUNTY	0005681	SINGLE FMLY	6	\$113,190.44
BRAZORIA COUNTY	0069945	SINGLE FMLY	2	\$12,151.41
BRAZORIA COUNTY	0002283	SINGLE FMLY	12	\$174,121.42
BRAZORIA COUNTY	0071443	SINGLE FMLY	3	\$13,770.97
BRAZORIA COUNTY	0005598	SINGLE FMLY	16	\$203,275.39
BRAZORIA COUNTY	0091481	SINGLE FMLY	4	\$14,669.18
BRAZORIA COUNTY	0008184	SINGLE FMLY	8	\$55,486.30
BRAZORIA COUNTY	0098456	SINGLE FMLY	2	\$39,575.14
BRAZORIA COUNTY	0089730	SINGLE FMLY	4	\$10,265.14
BRAZORIA COUNTY	0038958	SINGLE FMLY	4	\$41,470.24
BRAZORIA COUNTY	0076993	SINGLE FMLY	2	\$7,259.60
BRAZORIA COUNTY	0025289	SINGLE FMLY	2	\$67,168.84
BRAZORIA COUNTY	0026686	SINGLE FMLY	2	\$26,678.03

HOUSTON-GALVESTON AREA COUNCIL
REGIONAL HAZARD MITIGATION PLAN – 2011 UPDATE

Community Name	Repetitive Loss #	Occupancy	Number of Losses	Total Paid
BRAZORIA COUNTY	0118940	SINGLE FMLY	3	\$10,833.78
BRAZORIA COUNTY	0068834	SINGLE FMLY	7	\$242,647.33
BRAZORIA COUNTY	0037865	SINGLE FMLY	3	\$52,466.97
BRAZORIA COUNTY	0070577	SINGLE FMLY	2	\$139,685.65
BRAZORIA COUNTY	0125806	SINGLE FMLY	2	\$35,553.12
BRAZORIA COUNTY	0069911	SINGLE FMLY	2	\$34,220.67
BRAZORIA COUNTY	0094547	SINGLE FMLY	2	\$10,339.34
BRAZORIA COUNTY	0125780	SINGLE FMLY	2	\$36,264.51
BRAZORIA COUNTY	0044343	SINGLE FMLY	2	\$20,034.80
BRAZORIA COUNTY	0103529	SINGLE FMLY	2	\$86,971.93
BRAZORIA COUNTY	0045260	SINGLE FMLY	2	\$93,096.01
BRAZORIA COUNTY	0002925	SINGLE FMLY	13	\$222,684.61
BRAZORIA COUNTY	0186008	SINGLE FMLY	2	\$18,535.99
BRAZORIA COUNTY	0003059	OTHER RESID	2	\$30,053.52
BRAZORIA COUNTY	0068840	SINGLE FMLY	2	\$12,031.41
BRAZORIA COUNTY	0073506	SINGLE FMLY	3	\$18,006.77
BRAZORIA COUNTY	0182139	SINGLE FMLY	3	\$68,553.80
BRAZORIA COUNTY	0026535	SINGLE FMLY	2	\$9,153.85
BRAZORIA COUNTY	0185567	SINGLE FMLY	2	\$33,280.46
BRAZORIA COUNTY	0076297	SINGLE FMLY	5	\$81,192.19
BRAZORIA COUNTY	0117184	SINGLE FMLY	2	\$6,442.13
BRAZORIA COUNTY	0041955	SINGLE FMLY	3	\$17,889.07
BRAZORIA COUNTY	0069898	SINGLE FMLY	4	\$55,666.46
BRAZORIA COUNTY	0074071	SINGLE FMLY	7	\$107,442.17
BRAZORIA COUNTY	0097191	SINGLE FMLY	2	\$8,511.17
BRAZORIA COUNTY	0119184	SINGLE FMLY	2	\$34,122.92
BRAZORIA COUNTY	0070550	SINGLE FMLY	2	\$9,051.93
BRAZORIA COUNTY	0114145	SINGLE FMLY	3	\$46,689.08
BRAZORIA COUNTY	0068033	SINGLE FMLY	6	\$76,509.03

HOUSTON-GALVESTON AREA COUNCIL
REGIONAL HAZARD MITIGATION PLAN – 2011 UPDATE

Community Name	Repetitive Loss #	Occupancy	Number of Losses	Total Paid
BRAZORIA COUNTY	0098371	SINGLE FMLY	2	\$12,428.24
BRAZORIA COUNTY	0128227	SINGLE FMLY	2	\$4,650.70
BRAZORIA COUNTY	0025474	SINGLE FMLY	4	\$15,081.25
BRAZORIA COUNTY	0080412	SINGLE FMLY	2	\$68,015.63
BRAZORIA COUNTY	0054508	SINGLE FMLY	2	\$3,906.55
BRAZORIA COUNTY	0069785	SINGLE FMLY	7	\$258,111.36
BRAZORIA COUNTY	0018474	SINGLE FMLY	5	\$155,565.14
BRAZORIA COUNTY	0186558	SINGLE FMLY	3	\$24,434.29
BRAZORIA COUNTY	0185429	SINGLE FMLY	2	\$11,227.27
BRAZORIA COUNTY	0042450	SINGLE FMLY	2	\$66,512.01
BRAZORIA COUNTY	0048795	SINGLE FMLY	2	\$72,811.20
BRAZORIA COUNTY	0025663	SINGLE FMLY	2	\$33,226.36
BRAZORIA COUNTY	0018767	SINGLE FMLY	3	\$8,057.28
BRAZORIA COUNTY	0025145	SINGLE FMLY	2	\$27,265.44
BRAZORIA COUNTY	0056573	SINGLE FMLY	7	\$90,534.24
BRAZORIA COUNTY	0167757	SINGLE FMLY	3	\$72,023.69
BRAZORIA COUNTY	0069874	SINGLE FMLY	2	\$39,666.35
BRAZORIA COUNTY	0076942	SINGLE FMLY	2	\$44,611.06
BRAZORIA COUNTY	0186662	SINGLE FMLY	2	\$18,148.65
BRAZORIA COUNTY	0018669	SINGLE FMLY	5	\$57,353.88
BRAZORIA COUNTY	0012841	SINGLE FMLY	2	\$46,518.89
BRAZORIA COUNTY	0098428	SINGLE FMLY	2	\$24,353.45
BRAZORIA COUNTY	0099052	SINGLE FMLY	3	\$16,119.84
BRAZORIA COUNTY	0073465	SINGLE FMLY	3	\$64,081.84
BRAZORIA COUNTY	0017481	SINGLE FMLY	2	\$6,910.65
BRAZORIA COUNTY	0186830	SINGLE FMLY	2	\$34,165.62
BRAZORIA COUNTY	0035511	SINGLE FMLY	2	\$14,273.02
BRAZORIA COUNTY	0180670	SINGLE FMLY	2	\$17,136.00

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REGIONAL HAZARD MITIGATION PLAN – 2011 UPDATE

Community Name	Repetitive Loss #	Occupancy	Number of Losses	Total Paid
BRAZORIA COUNTY	0177556	SINGLE FMLY	2	\$18,325.27
BRAZORIA COUNTY	0015995	NON RESIDNT	3	\$41,027.66
BRAZORIA COUNTY	0124278	SINGLE FMLY	3	\$22,514.81
BRAZORIA COUNTY	0018614	SINGLE FMLY	2	\$7,364.94
BRAZORIA COUNTY	0182799	SINGLE FMLY	2	\$53,426.77
BRAZORIA COUNTY	0071431	SINGLE FMLY	5	\$88,202.72
BRAZORIA COUNTY	0124405	NON RESIDNT	2	\$14,841.20
BRAZORIA COUNTY	0197136	SINGLE FMLY	2	\$28,313.07
BRAZORIA COUNTY	0071594	SINGLE FMLY	2	\$63,847.63
BRAZORIA COUNTY	0069745	SINGLE FMLY	3	\$65,339.66
BRAZORIA COUNTY	0069922	SINGLE FMLY	2	\$24,688.02
BRAZORIA COUNTY	0186750	SINGLE FMLY	3	\$17,795.63
BRAZORIA COUNTY	0184787	SINGLE FMLY	2	\$11,735.10
BRAZORIA COUNTY	0012880	SINGLE FMLY	4	\$46,422.45
BRAZORIA COUNTY	0026837	SINGLE FMLY	7	\$34,938.83
BRAZORIA COUNTY	0099014	SINGLE FMLY	2	\$9,821.77
BRAZORIA COUNTY	0033684	SINGLE FMLY	2	\$17,202.90
BRAZORIA COUNTY	0044452	SINGLE FMLY	2	\$7,558.87
BRAZORIA COUNTY	0026788	SINGLE FMLY	2	\$3,648.06
BRAZORIA COUNTY	0037132	SINGLE FMLY	3	\$54,112.43
BRAZORIA COUNTY	0026860	SINGLE FMLY	2	\$10,015.42
BRAZORIA COUNTY	0002495	NON RESIDNT	3	\$16,535.09
BRAZORIA COUNTY	0179784	SINGLE FMLY	3	\$204,477.51
BRAZORIA COUNTY	0068081	SINGLE FMLY	4	\$88,481.75
BRAZORIA COUNTY	0124860	SINGLE FMLY	2	\$15,395.17
BRAZORIA COUNTY	0168603	SINGLE FMLY	2	\$88,049.03
BRAZORIA COUNTY	0093925	SINGLE FMLY	2	\$26,588.55
BRAZORIA COUNTY	0025796	SINGLE FMLY	2	\$2,240.64
BRAZORIA COUNTY	0026160	SINGLE FMLY	2	\$27,099.96

HOUSTON-GALVESTON AREA COUNCIL
REGIONAL HAZARD MITIGATION PLAN – 2011 UPDATE

Community Name	Repetitive Loss #	Occupancy	Number of Losses	Total Paid
BRAZORIA COUNTY	0034529	SINGLE FMLY	2	\$27,644.71
BRAZORIA COUNTY	0026127	SINGLE FMLY	2	\$2,927.45
BRAZORIA COUNTY	0016008	SINGLE FMLY	7	\$321,717.10
BRAZORIA COUNTY	0098922	SINGLE FMLY	2	\$25,727.34
BRAZORIA COUNTY	0119604	SINGLE FMLY	3	\$8,939.32
BRAZORIA COUNTY	0117416	SINGLE FMLY	2	\$5,535.68
BRAZORIA COUNTY	0037256	SINGLE FMLY	2	\$8,005.73
BRAZORIA COUNTY	0018561	SINGLE FMLY	2	\$15,373.80
BRAZORIA COUNTY	0088274	SINGLE FMLY	4	\$57,807.29
BRAZORIA COUNTY	0178769	SINGLE FMLY	2	\$13,950.43
BRAZORIA COUNTY	0098565	SINGLE FMLY	4	\$14,293.21
BRAZORIA COUNTY	0089795	SINGLE FMLY	3	\$41,964.61
BRAZORIA COUNTY	0123020	SINGLE FMLY	3	\$58,813.58
BRAZORIA COUNTY	0124018	SINGLE FMLY	3	\$24,128.71
BRAZORIA COUNTY	0125809	SINGLE FMLY	3	\$94,657.84
BRAZORIA COUNTY	0094862	SINGLE FMLY	2	\$21,803.39
BRAZORIA COUNTY	0127389	SINGLE FMLY	3	\$40,254.67
BRAZORIA COUNTY	0136023	SINGLE FMLY	3	\$107,707.01
BRAZORIA COUNTY	0183898	SINGLE FMLY	2	\$64,957.26
BRAZORIA COUNTY	0035850	SINGLE FMLY	8	\$170,945.75
BRAZORIA COUNTY	0100533	SINGLE FMLY	4	\$61,310.13
BRAZORIA COUNTY	0018727	NON RESIDNT	3	\$44,747.27
BRAZORIA COUNTY	0071586	SINGLE FMLY	4	\$103,176.67
BRAZORIA COUNTY	0002700	SINGLE FMLY	4	\$82,789.26
BRAZORIA COUNTY	0185454	SINGLE FMLY	2	\$25,213.13
BRAZORIA COUNTY	0089736	SINGLE FMLY	2	\$58,710.51
BRAZORIA COUNTY	0186125	SINGLE FMLY	2	\$110,319.14
BRAZORIA COUNTY	0125810	SINGLE FMLY	2	\$31,907.79
BRAZORIA COUNTY	0037583	SINGLE FMLY	2	\$52,431.35

HOUSTON-GALVESTON AREA COUNCIL
REGIONAL HAZARD MITIGATION PLAN – 2011 UPDATE

Community Name	Repetitive Loss #	Occupancy	Number of Losses	Total Paid
BRAZORIA COUNTY	0168027	SINGLE FMLY	2	\$14,058.22
BRAZORIA COUNTY	0119307	SINGLE FMLY	2	\$28,008.65
BRAZORIA COUNTY	0068080	SINGLE FMLY	2	\$9,929.83
BRAZORIA COUNTY	0118378	SINGLE FMLY	4	\$58,432.69
BRAZORIA COUNTY	0039513	SINGLE FMLY	2	\$11,941.11
BRAZORIA COUNTY	0053985	NON RESIDNT	2	\$7,293.46
BRAZORIA COUNTY	0068233	SINGLE FMLY	3	\$63,796.40
BRAZORIA COUNTY	0044725	SINGLE FMLY	2	\$14,335.83
BRAZORIA COUNTY	0070689	ASSMD CONDO	4	\$118,950.22
BRAZORIA COUNTY	0168081	SINGLE FMLY	2	\$139,687.14
BRAZORIA COUNTY	0116568	SINGLE FMLY	2	\$89,626.94
BRAZORIA COUNTY	0026826	SINGLE FMLY	2	\$3,253.06
BRAZORIA COUNTY	0017504	SINGLE FMLY	2	\$33,670.35
BRAZORIA COUNTY	0018674	SINGLE FMLY	2	\$5,383.34
BRAZORIA COUNTY	0115890	SINGLE FMLY	2	\$42,538.79
BRAZORIA COUNTY	0180872	SINGLE FMLY	2	\$23,378.12
BRAZORIA COUNTY	0098377	SINGLE FMLY	4	\$156,553.44
BRAZORIA COUNTY	0122026	SINGLE FMLY	2	\$11,129.47
BRAZORIA COUNTY	0068050	SINGLE FMLY	2	\$8,774.19
BRAZORIA COUNTY	0179400	SINGLE FMLY	2	\$97,218.03
BRAZORIA COUNTY	0025974	SINGLE FMLY	14	\$285,424.30
BRAZORIA COUNTY	0069923	SINGLE FMLY	3	\$90,113.31
BRAZORIA COUNTY	0073440	SINGLE FMLY	3	\$133,474.25
BRAZORIA COUNTY	0113228	SINGLE FMLY	3	\$107,253.56
BRAZORIA COUNTY	0114690	SINGLE FMLY	2	\$61,076.90
BRAZORIA COUNTY	0073441	SINGLE FMLY	3	\$50,460.27
BRAZORIA COUNTY	0069610	SINGLE FMLY	2	\$101,225.31
BRAZORIA COUNTY	0101644	SINGLE FMLY	2	\$4,822.75
BRAZORIA COUNTY	0043106	SINGLE FMLY	2	\$20,482.87

HOUSTON-GALVESTON AREA COUNCIL
REGIONAL HAZARD MITIGATION PLAN – 2011 UPDATE

Community Name	Repetitive Loss #	Occupancy	Number of Losses	Total Paid
BRAZORIA COUNTY	0180095	SINGLE FMLY	2	\$160,951.99
BRAZORIA COUNTY	0179052	SINGLE FMLY	2	\$41,072.57
BRAZORIA COUNTY	0000932	2-4 FAMILY	5	\$25,276.43
BRAZORIA COUNTY	0017577	SINGLE FMLY	2	\$3,713.00
BRAZORIA COUNTY	0180131	SINGLE FMLY	2	\$61,283.28
BRAZORIA COUNTY	0018521	SINGLE FMLY	2	\$45,976.62
BRAZORIA COUNTY	0002861	SINGLE FMLY	9	\$68,094.46
BRAZORIA COUNTY	0012901	OTHER RESID	2	\$5,518.10
BRAZORIA COUNTY	0026060	SINGLE FMLY	2	\$5,792.89
BRAZORIA COUNTY	0045874	SINGLE FMLY	3	\$28,725.26
BRAZORIA COUNTY	0182964	SINGLE FMLY	2	\$58,145.18
BRAZORIA COUNTY	0178768	SINGLE FMLY	2	\$7,832.23
BRAZORIA COUNTY	0119731	SINGLE FMLY	4	\$53,437.69
BRAZORIA COUNTY	0119568	SINGLE FMLY	4	\$90,843.65
BRAZORIA COUNTY	0050733	NON RESIDNT	2	\$6,236.72
BRAZORIA COUNTY	0113243	SINGLE FMLY	2	\$119,528.70
BRAZORIA COUNTY	0045401	SINGLE FMLY	4	\$36,551.82
BRAZORIA COUNTY	0112890	SINGLE FMLY	3	\$89,558.97
BRAZORIA COUNTY	0070275	SINGLE FMLY	2	\$102,273.19
BRAZORIA COUNTY	0042514	SINGLE FMLY	4	\$72,681.91
BRAZORIA COUNTY	0045921	SINGLE FMLY	4	\$174,274.88
BRAZORIA COUNTY	0042610	SINGLE FMLY	7	\$162,815.11
BRAZORIA COUNTY	0112974	SINGLE FMLY	2	\$56,737.65
BRAZORIA COUNTY	0017551	SINGLE FMLY	10	\$384,355.46
BRAZORIA COUNTY	0118755	SINGLE FMLY	3	\$83,861.33
BRAZORIA COUNTY	0070680	SINGLE FMLY	4	\$90,603.31
BRAZORIA COUNTY	0025998	SINGLE FMLY	2	\$14,232.68
BRAZORIA COUNTY	0012996	SINGLE FMLY	8	\$66,693.90
BRAZORIA COUNTY	0026412	SINGLE FMLY	2	\$29,911.69

HOUSTON-GALVESTON AREA COUNCIL
REGIONAL HAZARD MITIGATION PLAN – 2011 UPDATE

Community Name	Repetitive Loss #	Occupancy	Number of Losses	Total Paid
BRAZORIA COUNTY	0112967	SINGLE FMLY	3	\$133,680.58
BRAZORIA COUNTY	0068097	SINGLE FMLY	3	\$22,839.39
BRAZORIA COUNTY	0069942	SINGLE FMLY	3	\$38,558.61
BRAZORIA COUNTY	0115564	SINGLE FMLY	2	\$60,189.75
BRAZORIA COUNTY	0033980	SINGLE FMLY	5	\$67,913.27
BRAZORIA COUNTY	0068072	SINGLE FMLY	4	\$97,604.33
BRAZORIA COUNTY	0070114	SINGLE FMLY	2	\$20,124.59
BRAZORIA COUNTY	0072219	SINGLE FMLY	2	\$57,755.49
BRAZORIA COUNTY	0044789	SINGLE FMLY	3	\$8,496.51
BRAZORIA COUNTY	0026200	SINGLE FMLY	4	\$44,171.24
BRAZORIA COUNTY	0045013	SINGLE FMLY	4	\$66,465.50
BRAZORIA COUNTY	0026741	SINGLE FMLY	2	\$41,883.78
BRAZORIA COUNTY	0119310	SINGLE FMLY	2	\$10,007.54
BRAZORIA COUNTY	0119170	SINGLE FMLY	4	\$61,512.90
BRAZORIA COUNTY	0119172	SINGLE FMLY	3	\$36,009.99
BRAZORIA COUNTY	0119569	SINGLE FMLY	3	\$130,458.76
BRAZORIA COUNTY	0026719	SINGLE FMLY	2	\$13,719.15
BRAZORIA COUNTY	0002693	SINGLE FMLY	2	\$8,826.11
BRAZORIA COUNTY	0014120	SINGLE FMLY	5	\$49,585.50
BRAZORIA COUNTY	0018519	SINGLE FMLY	2	\$7,187.06
BRAZORIA COUNTY	0074646	SINGLE FMLY	2	\$26,871.00
BRAZORIA COUNTY	0002898	SINGLE FMLY	9	\$148,611.33
BRAZORIA COUNTY	0018450	SINGLE FMLY	2	\$36,763.76
BRAZORIA COUNTY	0026710	SINGLE FMLY	4	\$85,730.95
BRAZORIA COUNTY	0025804	SINGLE FMLY	2	\$9,414.51
BRAZORIA COUNTY	0002672	SINGLE FMLY	3	\$23,107.18
BRAZORIA COUNTY	0051941	SINGLE FMLY	8	\$325,226.02
BRAZORIA COUNTY	0026548	SINGLE FMLY	2	\$47,849.32
BRAZORIA COUNTY	0018677	SINGLE FMLY	3	\$52,123.64

HOUSTON-GALVESTON AREA COUNCIL
REGIONAL HAZARD MITIGATION PLAN – 2011 UPDATE

Community Name	Repetitive Loss #	Occupancy	Number of Losses	Total Paid
BRAZORIA COUNTY	0026277	SINGLE FMLY	2	\$45,674.85
BRAZORIA COUNTY	0037534	SINGLE FMLY	7	\$203,074.66
BRAZORIA COUNTY	0018726	SINGLE FMLY	8	\$353,082.01
BRAZORIA COUNTY	0018632	SINGLE FMLY	8	\$251,790.27
BRAZORIA COUNTY	0017559	SINGLE FMLY	14	\$496,501.26
BRAZORIA COUNTY	0018320	SINGLE FMLY	12	\$210,095.88
BRAZORIA COUNTY	0017404	SINGLE FMLY	5	\$64,170.11
BRAZORIA COUNTY	0037756	SINGLE FMLY	2	\$17,693.32
BRAZORIA COUNTY	0038353	SINGLE FMLY	2	\$16,767.61
BRAZORIA COUNTY	0182281	SINGLE FMLY	2	\$9,670.34
BRAZORIA COUNTY	0118883	SINGLE FMLY	2	\$29,450.59
BRAZORIA COUNTY	0096880	SINGLE FMLY	4	\$68,885.74
BRAZORIA COUNTY	0123864	SINGLE FMLY	3	\$31,050.28
BRAZORIA COUNTY	0025201	SINGLE FMLY	4	\$25,072.12
BRAZORIA COUNTY	0119200	SINGLE FMLY	4	\$47,588.11
BRAZORIA COUNTY	0144558	SINGLE FMLY	3	\$37,943.71
BRAZORIA COUNTY	0124661	SINGLE FMLY	3	\$36,628.82
BRAZORIA COUNTY	0008288	SINGLE FMLY	2	\$23,692.68
BRAZORIA COUNTY	0038281	SINGLE FMLY	2	\$8,851.55
BRAZORIA COUNTY	0018336	SINGLE FMLY	2	\$64,494.21
BRAZORIA COUNTY	0070686	SINGLE FMLY	2	\$11,325.81
BRAZORIA COUNTY	0025593	SINGLE FMLY	2	\$6,422.75
BRAZORIA COUNTY	0025652	SINGLE FMLY	2	\$10,288.39
BRAZORIA COUNTY	0018639	SINGLE FMLY	2	\$3,920.19
BRAZORIA COUNTY	0025730	SINGLE FMLY	2	\$12,865.77
BRAZORIA COUNTY	0003492	SINGLE FMLY	8	\$88,001.20
BRAZORIA COUNTY	0117336	ASSMD CONDO	3	\$169,640.29
BRAZORIA COUNTY	0080808	NON RESIDNT	4	\$85,320.25
BRAZORIA COUNTY	0190283	SINGLE FMLY	3	\$136,194.71

HOUSTON-GALVESTON AREA COUNCIL
REGIONAL HAZARD MITIGATION PLAN – 2011 UPDATE

Community Name	Repetitive Loss #	Occupancy	Number of Losses	Total Paid
BRAZORIA COUNTY	0069672	SINGLE FMLY	5	\$123,584.31
BRAZORIA COUNTY	0025467	SINGLE FMLY	2	\$39,523.14
BRAZORIA COUNTY	0047306	SINGLE FMLY	7	\$171,717.36
BRAZORIA COUNTY	0100354	SINGLE FMLY	2	\$10,553.61
BRAZORIA COUNTY	0008217	SINGLE FMLY	11	\$73,592.46
BRAZORIA COUNTY	0017503	SINGLE FMLY	2	\$33,054.36
BRAZORIA COUNTY	0017546	SINGLE FMLY	2	\$47,048.50
BRAZORIA COUNTY	0039931	SINGLE FMLY	2	\$22,423.00
BRAZORIA COUNTY	0080419	SINGLE FMLY	3	\$11,342.54
BRAZORIA COUNTY	0093914	SINGLE FMLY	4	\$65,834.14
BRAZORIA COUNTY	0026272	SINGLE FMLY	2	\$15,977.71
BRAZORIA COUNTY	0096796	SINGLE FMLY	2	\$8,882.82
BRAZORIA COUNTY	0069926	SINGLE FMLY	2	\$33,967.83
BRAZORIA COUNTY	0118910	SINGLE FMLY	2	\$9,778.55
BRAZORIA COUNTY	0073438	SINGLE FMLY	2	\$3,919.75
BRAZORIA COUNTY	0026757	SINGLE FMLY	2	\$20,933.07
BRAZORIA COUNTY	0097113	SINGLE FMLY	2	\$11,785.70
BRAZORIA COUNTY	0120643	SINGLE FMLY	2	\$43,628.18
BRAZORIA COUNTY	0117436	NON RESIDNT	2	\$55,653.26
BRAZORIA COUNTY	0098917	SINGLE FMLY	3	\$55,439.98
BRAZORIA COUNTY	0068847	SINGLE FMLY	4	\$34,648.16
BRAZORIA COUNTY	0068854	SINGLE FMLY	3	\$31,128.16
BRAZORIA COUNTY	0116879	SINGLE FMLY	2	\$37,661.91
BRAZORIA COUNTY	0035180	SINGLE FMLY	3	\$40,308.42
BRAZORIA COUNTY	0120553	SINGLE FMLY	2	\$25,937.74
BRAZORIA COUNTY	0114093	SINGLE FMLY	3	\$110,231.76
BRAZORIA COUNTY	0044665	ASSMD CONDO	7	\$303,266.07
BRAZORIA COUNTY	0045182	SINGLE FMLY	3	\$40,730.02
BRAZORIA COUNTY	0018490	SINGLE FMLY	2	\$5,381.55

HOUSTON-GALVESTON AREA COUNCIL
REGIONAL HAZARD MITIGATION PLAN – 2011 UPDATE

Community Name	Repetitive Loss #	Occupancy	Number of Losses	Total Paid
BRAZORIA COUNTY	0025852	SINGLE FMLY	2	\$24,035.71
BRAZORIA COUNTY	0026320	SINGLE FMLY	2	\$15,595.48
BRAZORIA COUNTY	0026497	SINGLE FMLY	2	\$15,949.37
BRAZORIA COUNTY	0026058	SINGLE FMLY	3	\$46,774.95
BRAZORIA COUNTY	0041433	SINGLE FMLY	2	\$13,652.40
BRAZORIA COUNTY	0025991	SINGLE FMLY	2	\$11,502.06
BRAZORIA COUNTY	0039095	SINGLE FMLY	2	\$42,670.50
BRAZORIA COUNTY	0017505	SINGLE FMLY	2	\$21,173.00
BRAZORIA COUNTY	0026166	SINGLE FMLY	2	\$33,615.95
BRAZORIA COUNTY	0039732	SINGLE FMLY	2	\$14,942.66
BRAZORIA COUNTY	0115588	SINGLE FMLY	3	\$18,430.11
BRAZORIA COUNTY	0016053	SINGLE FMLY	5	\$55,034.28
BRAZORIA COUNTY	0180141	SINGLE FMLY	2	\$8,826.74
BRAZORIA COUNTY	0119792	SINGLE FMLY	2	\$15,477.31
BRAZORIA COUNTY	0017655	SINGLE FMLY	2	\$8,263.68
BRAZORIA COUNTY	0025851	SINGLE FMLY	4	\$13,944.34
BRAZORIA COUNTY	0182775	SINGLE FMLY	2	\$41,239.42
BRAZORIA COUNTY	0177067	SINGLE FMLY	2	\$27,511.02
BRAZORIA COUNTY	0005813	SINGLE FMLY	4	\$55,382.62
BRAZORIA COUNTY	0045235	SINGLE FMLY	2	\$14,250.60
BRAZORIA COUNTY	0180126	SINGLE FMLY	3	\$72,516.93
BRAZORIA COUNTY	0069969	NON RESIDNT	2	\$13,865.96
BRAZORIA COUNTY	0002910	SINGLE FMLY	2	\$8,006.71
BRAZORIA COUNTY	0026836	SINGLE FMLY	2	\$27,696.74
BRAZORIA COUNTY	0015953	SINGLE FMLY	5	\$27,704.26
BRAZORIA COUNTY	0116829	SINGLE FMLY	2	\$42,916.30
BRAZORIA COUNTY	0018645	SINGLE FMLY	3	\$12,964.20
BRAZORIA COUNTY	0119351	SINGLE FMLY	2	\$5,839.53
BRAZORIA COUNTY	0003374	SINGLE FMLY	5	\$51,275.95

HOUSTON-GALVESTON AREA COUNCIL
REGIONAL HAZARD MITIGATION PLAN – 2011 UPDATE

Community Name	Repetitive Loss #	Occupancy	Number of Losses	Total Paid
BRAZORIA COUNTY	0118878	SINGLE FMLY	2	\$43,152.09
BRAZORIA COUNTY	0025818	SINGLE FMLY	2	\$20,009.92
BRAZORIA COUNTY	0186066	2-4 FAMILY	2	\$7,045.01
BRAZORIA COUNTY	0186067	2-4 FAMILY	2	\$42,964.76
BRAZORIA COUNTY	0017515	SINGLE FMLY	2	\$40,190.81
BRAZORIA COUNTY	0018663	SINGLE FMLY	2	\$19,536.61
BRAZORIA COUNTY	0025679	SINGLE FMLY	5	\$204,997.84
BRAZORIA COUNTY	0118876	SINGLE FMLY	2	\$33,424.19
BRAZORIA COUNTY	0015971	SINGLE FMLY	2	\$30,601.54
BRAZORIA COUNTY	0071472	SINGLE FMLY	4	\$59,085.52
BRAZORIA COUNTY	0099013	SINGLE FMLY	2	\$75,360.96
BRAZORIA COUNTY	0070569	SINGLE FMLY	4	\$90,111.18
BRAZORIA COUNTY	0068083	SINGLE FMLY	5	\$75,960.75
BRAZORIA COUNTY	0179564	SINGLE FMLY	4	\$91,018.06
BRAZORIA COUNTY	0168802	SINGLE FMLY	2	\$147,933.52
BRAZORIA COUNTY	0114251	SINGLE FMLY	3	\$140,786.15
BRAZORIA COUNTY	0112240	SINGLE FMLY	4	\$135,594.78
BRAZORIA COUNTY	0069936	SINGLE FMLY	4	\$146,157.92
BRAZORIA COUNTY	0017488	SINGLE FMLY	2	\$8,516.00
BRAZORIA COUNTY	0044313	SINGLE FMLY	2	\$9,966.09
BRAZORIA COUNTY	0049796	SINGLE FMLY	3	\$34,624.90
BRAZORIA COUNTY	0116885	SINGLE FMLY	2	\$9,414.50
BRAZORIA COUNTY	0008454	SINGLE FMLY	7	\$180,189.30
BRAZORIA COUNTY	0119171	SINGLE FMLY	2	\$18,698.05
BRAZORIA COUNTY	0039427	SINGLE FMLY	2	\$20,543.32
BRAZORIA COUNTY	0096794	SINGLE FMLY	4	\$43,629.62
BRAZORIA COUNTY	0124246	SINGLE FMLY	2	\$5,625.80
BRAZORIA COUNTY	0069967	SINGLE FMLY	2	\$50,822.91
BRAZORIA COUNTY	0017295	SINGLE FMLY	4	\$16,487.94

HOUSTON-GALVESTON AREA COUNCIL
REGIONAL HAZARD MITIGATION PLAN – 2011 UPDATE

Community Name	Repetitive Loss #	Occupancy	Number of Losses	Total Paid
BRAZORIA COUNTY	0112927	SINGLE FMLY	3	\$89,706.13
BRAZORIA COUNTY	0118459	SINGLE FMLY	2	\$25,493.78
BRAZORIA COUNTY	0119185	SINGLE FMLY	2	\$12,303.20
BRAZORIA COUNTY	0025789	SINGLE FMLY	2	\$15,414.32
BRAZORIA COUNTY	0025561	SINGLE FMLY	2	\$9,353.79
BRAZORIA COUNTY	0026827	SINGLE FMLY	4	\$43,771.25
BRAZORIA COUNTY	0013222	SINGLE FMLY	7	\$151,966.18
BRAZORIA COUNTY	0012991	SINGLE FMLY	7	\$94,499.76
BRAZORIA COUNTY	0097237	SINGLE FMLY	2	\$75,301.92
BRAZORIA COUNTY	0120525	SINGLE FMLY	2	\$8,615.19
BRAZORIA COUNTY	0026449	SINGLE FMLY	2	\$10,754.53
BRAZORIA COUNTY	0119542	SINGLE FMLY	2	\$9,225.36
BRAZORIA COUNTY	0068003	SINGLE FMLY	3	\$43,553.34
BRAZORIA COUNTY	0121552	SINGLE FMLY	2	\$14,989.53
BRAZORIA COUNTY	0025514	SINGLE FMLY	3	\$10,231.07
BRAZORIA COUNTY	0120647	NON RESIDNT	2	\$57,981.01
BRAZORIA COUNTY	0124435	NON RESIDNT	2	\$36,241.62
BRAZORIA COUNTY	0017608	SINGLE FMLY	2	\$66,349.63
BRAZORIA COUNTY	0117821	SINGLE FMLY	4	\$82,603.40
BRAZORIA COUNTY	0045236	ASSMD CONDO	3	\$61,754.75
BRAZORIA COUNTY	0026384	SINGLE FMLY	2	\$33,003.90
BRAZORIA COUNTY	0112852	SINGLE FMLY	3	\$155,584.34
BRAZORIA COUNTY	0112962	SINGLE FMLY	2	\$46,525.66
BRAZORIA COUNTY	0073423	SINGLE FMLY	3	\$153,538.53
BRAZORIA COUNTY	0036666	SINGLE FMLY	2	\$19,468.49
BRAZORIA COUNTY	0026199	SINGLE FMLY	5	\$94,376.33
BRAZORIA COUNTY	0121969	SINGLE FMLY	2	\$9,566.64
BRAZORIA COUNTY	0088306	SINGLE FMLY	6	\$118,211.03
BRAZORIA COUNTY	0069992	SINGLE FMLY	4	\$53,619.02

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REGIONAL HAZARD MITIGATION PLAN – 2011 UPDATE

Community Name	Repetitive Loss #	Occupancy	Number of Losses	Total Paid
BRAZORIA COUNTY	0048504	SINGLE FMLY	3	\$14,435.04
BRAZORIA COUNTY	0118932	SINGLE FMLY	2	\$25,357.18
BRAZORIA COUNTY	0119167	SINGLE FMLY	2	\$10,860.56
BRAZORIA COUNTY	0044114	SINGLE FMLY	3	\$33,221.67
BRAZORIA COUNTY	0002704	SINGLE FMLY	5	\$27,854.83
BRAZORIA COUNTY	0118922	SINGLE FMLY	3	\$110,641.57
BRAZORIA COUNTY	0168435	SINGLE FMLY	3	\$50,952.56
BRAZORIA COUNTY	0118646	SINGLE FMLY	2	\$31,306.08
BRAZORIA COUNTY	0018515	SINGLE FMLY	7	\$155,397.10
BRAZORIA COUNTY	0017252	SINGLE FMLY	3	\$14,910.33
BRAZORIA COUNTY	0069861	SINGLE FMLY	2	\$61,105.33
BRAZORIA COUNTY	0026042	NON RESIDNT	2	\$2,681.25
BRAZORIA COUNTY	0025104	NON RESIDNT	2	\$50,420.27
BRAZORIA COUNTY	0025105	SINGLE FMLY	2	\$33,663.65
BRAZORIA COUNTY	0042523	SINGLE FMLY	3	\$27,478.11
BRAZORIA COUNTY	0048666	SINGLE FMLY	3	\$18,394.75
BRAZORIA COUNTY	0018437	SINGLE FMLY	2	\$9,833.42
BRAZORIA COUNTY	0186065	2-4 FAMILY	2	\$17,440.30
BRAZORIA COUNTY	0044283	SINGLE FMLY	3	\$9,173.37
BRAZORIA COUNTY	0017558	SINGLE FMLY	2	\$23,248.20
BRAZORIA COUNTY	0044611	SINGLE FMLY	3	\$49,053.60
BRAZORIA COUNTY	0048453	NON RESIDNT	2	\$121,322.56
BRAZORIA COUNTY	0044302	SINGLE FMLY	2	\$26,209.26
BRAZORIA COUNTY	0026108	SINGLE FMLY	4	\$12,751.45
BRAZORIA COUNTY	0044865	NON RESIDNT	4	\$98,235.93
BRAZORIA COUNTY	0001455	2-4 FAMILY	3	\$32,860.54
BRAZORIA COUNTY	0017562	SINGLE FMLY	2	\$4,870.41
BRAZORIA COUNTY	0115874	NON RESIDNT	2	\$10,482.74
BRAZORIA COUNTY	0068099	SINGLE FMLY	5	\$241,745.22

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REGIONAL HAZARD MITIGATION PLAN – 2011 UPDATE

Community Name	Repetitive Loss #	Occupancy	Number of Losses	Total Paid
BRAZORIA COUNTY	0099153	SINGLE FMLY	2	\$9,495.36
BRAZORIA COUNTY	0097543	SINGLE FMLY	4	\$133,248.83
BRAZORIA COUNTY	0026012	SINGLE FMLY	3	\$65,363.46
BRAZORIA COUNTY	0050101	SINGLE FMLY	2	\$6,180.93
BRAZORIA COUNTY	0092099	SINGLE FMLY	2	\$27,400.00
BRAZORIA COUNTY	0044348	SINGLE FMLY	2	\$31,591.50
BRAZORIA COUNTY	0071528	SINGLE FMLY	3	\$118,062.28
BRAZORIA COUNTY	0041346	SINGLE FMLY	2	\$17,503.00
ALVIN, CITY OF	0043136	SINGLE FMLY	2	\$46,237.00
ALVIN, CITY OF	0039608	SINGLE FMLY	2	\$26,568.39
ALVIN, CITY OF	0025303	SINGLE FMLY	2	\$33,855.89
ALVIN, CITY OF	0025979	SINGLE FMLY	2	\$20,093.44
ALVIN, CITY OF	0034406	SINGLE FMLY	2	\$22,603.52
ALVIN, CITY OF	0037725	SINGLE FMLY	2	\$28,011.42
ALVIN, CITY OF	0044696	SINGLE FMLY	4	\$42,795.95
ALVIN, CITY OF	0045113	SINGLE FMLY	3	\$31,783.93
ALVIN, CITY OF	0017532	OTHER RESID	3	\$80,190.94
ALVIN, CITY OF	0025767	SINGLE FMLY	2	\$15,013.86
ALVIN, CITY OF	0018679	SINGLE FMLY	2	\$16,362.74
ALVIN, CITY OF	0025650	SINGLE FMLY	8	\$194,513.27
ALVIN, CITY OF	0025914	SINGLE FMLY	5	\$140,630.86
ALVIN, CITY OF	0186126	SINGLE FMLY	2	\$13,736.02
ALVIN, CITY OF	0017530	OTHER RESID	2	\$41,622.42
ALVIN, CITY OF	0017531	OTHER RESID	2	\$42,543.60
ALVIN, CITY OF	0119332	SINGLE FMLY	2	\$7,028.87
ALVIN, CITY OF	0038459	SINGLE FMLY	2	\$8,001.13
ALVIN, CITY OF	0091027	SINGLE FMLY	6	\$78,061.78
ALVIN, CITY OF	0172629	SINGLE FMLY	4	\$51,396.47
ALVIN, CITY OF	0186127	SINGLE FMLY	2	\$42,779.08

HOUSTON-GALVESTON AREA COUNCIL
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Community Name	Repetitive Loss #	Occupancy	Number of Losses	Total Paid
ALVIN, CITY OF	0093931	SINGLE FMLY	4	\$45,562.95
ALVIN, CITY OF	0181441	SINGLE FMLY	2	\$29,500.92
ALVIN, CITY OF	0002706	SINGLE FMLY	7	\$25,295.97
ALVIN, CITY OF	0012934	SINGLE FMLY	2	\$24,694.51
ALVIN, CITY OF	0044043	SINGLE FMLY	2	\$37,764.26
ALVIN, CITY OF	0017471	SINGLE FMLY	2	\$23,186.56
ALVIN, CITY OF	0115764	SINGLE FMLY	2	\$44,839.61
ALVIN, CITY OF	0012871	ASSMD CONDO	8	\$93,909.49
ALVIN, CITY OF	0013252	SINGLE FMLY	8	\$134,372.79
ALVIN, CITY OF	0091319	SINGLE FMLY	3	\$36,007.08
ALVIN, CITY OF	0186093	SINGLE FMLY	2	\$5,770.49
ALVIN, CITY OF	0179567	SINGLE FMLY	2	\$7,182.03
ALVIN, CITY OF	0185406	SINGLE FMLY	2	\$16,430.78
ALVIN, CITY OF	0044581	NON RESIDNT	5	\$41,072.42
ALVIN, CITY OF	0035331	SINGLE FMLY	2	\$35,300.95
ALVIN, CITY OF	0083529	NON RESIDNT	3	\$14,522.54
ALVIN, CITY OF	0186085	SINGLE FMLY	2	\$71,096.80
ALVIN, CITY OF	0118804	SINGLE FMLY	5	\$101,968.74
ALVIN, CITY OF	0186118	SINGLE FMLY	2	\$14,338.60
ALVIN, CITY OF	0108987	SINGLE FMLY	5	\$185,726.15
ALVIN, CITY OF	0169739	SINGLE FMLY	4	\$63,000.73
ALVIN, CITY OF	0025156	NON RESIDNT	2	\$16,815.93
ALVIN, CITY OF	0096873	SINGLE FMLY	5	\$60,338.99
ALVIN, CITY OF	0186548	SINGLE FMLY	2	\$65,545.18
ALVIN, CITY OF	0018615	SINGLE FMLY	2	\$16,249.08
ALVIN, CITY OF	0068838	SINGLE FMLY	2	\$5,081.69
ALVIN, CITY OF	0186160	SINGLE FMLY	2	\$111,779.18
ALVIN, CITY OF	0044364	NON RESIDNT	2	\$4,271.50
ALVIN, CITY OF	0002937	SINGLE FMLY	5	\$67,573.24

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REGIONAL HAZARD MITIGATION PLAN – 2011 UPDATE

Community Name	Repetitive Loss #	Occupancy	Number of Losses	Total Paid
ALVIN, CITY OF	0185925	SINGLE FMLY	3	\$94,036.24
ALVIN, CITY OF	0025983	SINGLE FMLY	2	\$14,718.00
ALVIN, CITY OF	0036616	SINGLE FMLY	2	\$39,416.14
ALVIN, CITY OF	0181159	SINGLE FMLY	3	\$102,127.05
ALVIN, CITY OF	0183779	SINGLE FMLY	3	\$103,657.68
ALVIN, CITY OF	0025954	SINGLE FMLY	2	\$14,712.84
ALVIN, CITY OF	0068830	SINGLE FMLY	5	\$65,560.64
ALVIN, CITY OF	0069910	SINGLE FMLY	3	\$42,033.54
ALVIN, CITY OF	0185441	ASSMD CONDO	2	\$11,752.61
ALVIN, CITY OF	0185254	SINGLE FMLY	2	\$23,884.08
ALVIN, CITY OF	0091026	SINGLE FMLY	3	\$42,891.30
ALVIN, CITY OF	0094233	SINGLE FMLY	3	\$60,116.71
ALVIN, CITY OF	0185383	SINGLE FMLY	2	\$13,526.00
ALVIN, CITY OF	0096871	NON RESIDNT	2	\$6,963.84
ALVIN, CITY OF	0044015	SINGLE FMLY	2	\$14,599.11
ALVIN, CITY OF	0018500	SINGLE FMLY	3	\$25,277.78
ALVIN, CITY OF	0026659	SINGLE FMLY	3	\$20,239.02
ALVIN, CITY OF	0026843	SINGLE FMLY	2	\$23,820.71
ALVIN, CITY OF	0025092	SINGLE FMLY	2	\$20,630.71
ALVIN, CITY OF	0096878	SINGLE FMLY	4	\$76,472.21
ALVIN, CITY OF	0039734	SINGLE FMLY	2	\$15,500.00
ALVIN, CITY OF	0169084	SINGLE FMLY	4	\$69,887.87
ALVIN, CITY OF	0026006	SINGLE FMLY	6	\$102,494.67
ALVIN, CITY OF	0180165	SINGLE FMLY	3	\$41,475.73
ALVIN, CITY OF	0025896	SINGLE FMLY	4	\$106,073.60
ALVIN, CITY OF	0118860	SINGLE FMLY	4	\$54,609.94
ALVIN, CITY OF	0038040	SINGLE FMLY	5	\$68,622.29
ALVIN, CITY OF	0185093	SINGLE FMLY	2	\$50,377.60
ALVIN, CITY OF	0068846	SINGLE FMLY	6	\$114,262.09

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Community Name	Repetitive Loss #	Occupancy	Number of Losses	Total Paid
ALVIN, CITY OF	0180134	SINGLE FMLY	3	\$62,424.25
ALVIN, CITY OF	0185562	SINGLE FMLY	2	\$28,956.16
ALVIN, CITY OF	0040526	SINGLE FMLY	4	\$5,210.36
ALVIN, CITY OF	0017301	SINGLE FMLY	2	\$18,418.99
ALVIN, CITY OF	0168559	SINGLE FMLY	2	\$12,584.46
ALVIN, CITY OF	0026052	SINGLE FMLY	2	\$12,032.80
ALVIN, CITY OF	0168132	SINGLE FMLY	4	\$94,835.93
ALVIN, CITY OF	0045107	SINGLE FMLY	4	\$37,505.39
ALVIN, CITY OF	0134935	SINGLE FMLY	3	\$36,800.83
ALVIN, CITY OF	0068827	SINGLE FMLY	2	\$19,223.06
ALVIN, CITY OF	0018475	SINGLE FMLY	2	\$21,348.16
ALVIN, CITY OF	0026317	SINGLE FMLY	2	\$18,965.02
ALVIN, CITY OF	0068828	SINGLE FMLY	2	\$28,595.87
ALVIN, CITY OF	0026446	SINGLE FMLY	2	\$21,256.83
ALVIN, CITY OF	0017492	SINGLE FMLY	2	\$30,687.64
ALVIN, CITY OF	0018380	SINGLE FMLY	4	\$40,267.84
ALVIN, CITY OF	0043905	OTHER RESID	3	\$27,292.20
ALVIN, CITY OF	0037512	OTHER RESID	2	\$21,030.00
ALVIN, CITY OF	0043906	OTHER RESID	2	\$26,908.39
ALVIN, CITY OF	0045108	SINGLE FMLY	2	\$6,979.62
ALVIN, CITY OF	0068832	NON RESIDNT	2	\$38,098.65
ALVIN, CITY OF	0068835	SINGLE FMLY	3	\$46,801.13
ALVIN, CITY OF	0044706	SINGLE FMLY	2	\$4,642.71
ALVIN, CITY OF	0069902	SINGLE FMLY	4	\$159,106.93
ANGLETON, CITY OF	0017797	SINGLE FMLY	2	\$13,339.47
ANGLETON, CITY OF	0039824	SINGLE FMLY	2	\$18,699.13
ANGLETON, CITY OF	0017798	NON RESIDNT	2	\$13,084.37
ANGLETON, CITY OF	0026690	SINGLE FMLY	2	\$5,676.81
ANGLETON, CITY OF	0046456	2-4 FAMILY	2	\$4,952.81

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Community Name	Repetitive Loss #	Occupancy	Number of Losses	Total Paid
ANGLETON, CITY OF	0098432	SINGLE FMLY	2	\$4,227.05
ANGLETON, CITY OF	0042414	SINGLE FMLY	10	\$150,187.03
ANGLETON, CITY OF	0038393	SINGLE FMLY	2	\$6,612.14
ANGLETON, CITY OF	0004492	SINGLE FMLY	2	\$17,486.92
ANGLETON, CITY OF	0068987	SINGLE FMLY	4	\$12,787.95
ANGLETON, CITY OF	0000800	SINGLE FMLY	9	\$164,910.64
ANGLETON, CITY OF	0001873	SINGLE FMLY	8	\$164,011.86
ANGLETON, CITY OF	0026135	SINGLE FMLY	5	\$52,195.91
ANGLETON, CITY OF	0068991	SINGLE FMLY	2	\$8,274.56
ANGLETON, CITY OF	0093902	SINGLE FMLY	2	\$28,842.08
ANGLETON, CITY OF	0045764	SINGLE FMLY	3	\$20,609.62
ANGLETON, CITY OF	0037424	SINGLE FMLY	3	\$41,155.02
ANGLETON, CITY OF	0068978	SINGLE FMLY	2	\$12,980.02
ANGLETON, CITY OF	0013091	SINGLE FMLY	2	\$5,490.38
ANGLETON, CITY OF	0077125	SINGLE FMLY	2	\$16,618.44
ANGLETON, CITY OF	0025350	SINGLE FMLY	6	\$92,122.44
ANGLETON, CITY OF	0118938	SINGLE FMLY	2	\$5,793.80
ANGLETON, CITY OF	0017804	SINGLE FMLY	5	\$40,198.06
ANGLETON, CITY OF	0093940	SINGLE FMLY	2	\$9,092.40
ANGLETON, CITY OF	0043406	SINGLE FMLY	2	\$8,420.82
ANGLETON, CITY OF	0026358	SINGLE FMLY	5	\$10,667.28
ANGLETON, CITY OF	0045057	SINGLE FMLY	2	\$7,010.74
ANGLETON, CITY OF	0038461	SINGLE FMLY	5	\$27,090.94
ANGLETON, CITY OF	0043608	SINGLE FMLY	5	\$27,642.42
ANGLETON, CITY OF	0046301	SINGLE FMLY	4	\$18,292.72
ANGLETON, CITY OF	0167356	SINGLE FMLY	2	\$17,241.21
ANGLETON, CITY OF	0068984	SINGLE FMLY	2	\$11,789.94
ANGLETON, CITY OF	0042918	SINGLE FMLY	2	\$13,619.03
ANGLETON, CITY OF	0026560	SINGLE FMLY	2	\$11,459.55

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Community Name	Repetitive Loss #	Occupancy	Number of Losses	Total Paid
ANGLETON, CITY OF	0018586	SINGLE FMLY	2	\$9,886.00
ANGLETON, CITY OF	0042272	SINGLE FMLY	3	\$28,965.49
ANGLETON, CITY OF	0017510	SINGLE FMLY	3	\$41,981.64
ANGLETON, CITY OF	0170982	SINGLE FMLY	2	\$24,257.32
ANGLETON, CITY OF	0168453	SINGLE FMLY	3	\$33,212.86
ANGLETON, CITY OF	0170983	SINGLE FMLY	2	\$8,798.36
ANGLETON, CITY OF	0037487	SINGLE FMLY	2	\$27,871.12
ANGLETON, CITY OF	0026467	SINGLE FMLY	2	\$21,501.07
ANGLETON, CITY OF	0033619	SINGLE FMLY	2	\$26,082.85
ANGLETON, CITY OF	0042755	SINGLE FMLY	2	\$19,006.41
ANGLETON, CITY OF	0025582	SINGLE FMLY	2	\$26,698.91
ANGLETON, CITY OF	0026842	SINGLE FMLY	7	\$187,020.51
ANGLETON, CITY OF	0046353	NON RESIDNT	2	\$13,769.00
ANGLETON, CITY OF	0068986	SINGLE FMLY	3	\$23,985.96
ANGLETON, CITY OF	0035285	NON RESIDNT	2	\$6,024.22
ANGLETON, CITY OF	0026841	SINGLE FMLY	5	\$85,722.42
ANGLETON, CITY OF	0008370	SINGLE FMLY	5	\$30,652.15
ANGLETON, CITY OF	0026008	SINGLE FMLY	2	\$6,994.09
ANGLETON, CITY OF	0172280	SINGLE FMLY	2	\$23,652.22
ANGLETON, CITY OF	0026130	SINGLE FMLY	2	\$9,132.30
ANGLETON, CITY OF	0043634	SINGLE FMLY	2	\$6,810.00
ANGLETON, CITY OF	0017793	SINGLE FMLY	2	\$3,067.75
ANGLETON, CITY OF	0043453	SINGLE FMLY	2	\$3,127.62
ANGLETON, CITY OF	0036349	SINGLE FMLY	2	\$8,256.94
ANGLETON, CITY OF	0077080	SINGLE FMLY	2	\$10,272.60
ANGLETON, CITY OF	0017816	SINGLE FMLY	7	\$59,498.02
ANGLETON, CITY OF	0068989	SINGLE FMLY	2	\$3,654.45
ANGLETON, CITY OF	0017767	SINGLE FMLY	2	\$9,849.88
ANGLETON, CITY OF	0069694	SINGLE FMLY	2	\$3,868.55

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Community Name	Repetitive Loss #	Occupancy	Number of Losses	Total Paid
ANGLETON, CITY OF	0004923	SINGLE FMLY	5	\$87,727.10
ANGLETON, CITY OF	0025555	SINGLE FMLY	2	\$9,853.65
ANGLETON, CITY OF	0068980	NON RESIDNT	3	\$13,578.75
ANGLETON, CITY OF	0068981	SINGLE FMLY	5	\$149,997.94
ANGLETON, CITY OF	0012898	SINGLE FMLY	6	\$125,038.27
ANGLETON, CITY OF	0013043	SINGLE FMLY	3	\$35,932.96
ANGLETON, CITY OF	0171472	NON RESIDNT	2	\$49,100.41
ANGLETON, CITY OF	0048719	NON RESIDNT	5	\$64,163.10
ANGLETON, CITY OF	0044660	NON RESIDNT	3	\$61,780.79
ANGLETON, CITY OF	0044863	NON RESIDNT	2	\$42,729.35
ANGLETON, CITY OF	0076302	SINGLE FMLY	5	\$16,119.39
ANGLETON, CITY OF	0025891	SINGLE FMLY	5	\$121,991.97
ANGLETON, CITY OF	0044609	SINGLE FMLY	6	\$139,804.41
ANGLETON, CITY OF	0044942	SINGLE FMLY	5	\$59,951.62
ANGLETON, CITY OF	0068976	SINGLE FMLY	4	\$50,211.98
ANGLETON, CITY OF	0036903	SINGLE FMLY	2	\$22,058.94
ANGLETON, CITY OF	0097093	SINGLE FMLY	2	\$20,080.99
ANGLETON, CITY OF	0025112	OTHER RESID	4	\$14,599.58
ANGLETON, CITY OF	0025113	OTHER RESID	4	\$31,765.86
ANGLETON, CITY OF	0001868	OTHER RESID	5	\$33,675.70
ANGLETON, CITY OF	0033296	2-4 FAMILY	2	\$22,194.18
ANGLETON, CITY OF	0045291	ASSMD CONDO	2	\$30,634.19
BAILEYS PRAIRIE, VILLAGE OF	0119199	SINGLE FMLY	3	\$76,074.94
BAILEYS PRAIRIE, VILLAGE OF	0013179	SINGLE FMLY	2	\$10,844.59
BRAZORIA, CITY OF	0074487	SINGLE FMLY	4	\$95,778.50
BRAZORIA, CITY OF	0044973	SINGLE FMLY	7	\$102,012.11
BRAZORIA, CITY OF	0035273	SINGLE FMLY	3	\$4,494.36

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Community Name	Repetitive Loss #	Occupancy	Number of Losses	Total Paid
BRAZORIA, CITY OF	0115671	SINGLE FMLY	2	\$61,259.55
BRAZORIA, CITY OF	0119186	SINGLE FMLY	3	\$59,965.44
BRAZORIA, CITY OF	0048874	SINGLE FMLY	2	\$2,717.42
BRAZORIA, CITY OF	0168162	SINGLE FMLY	2	\$45,473.43
BRAZORIA, CITY OF	0091965	SINGLE FMLY	3	\$43,525.71
BRAZORIA, CITY OF	0080413	SINGLE FMLY	5	\$73,015.76
BRAZORIA, CITY OF	0045287	SINGLE FMLY	3	\$21,918.98
BRAZORIA, CITY OF	0119179	SINGLE FMLY	2	\$6,658.20
BRAZORIA, CITY OF	0093170	SINGLE FMLY	4	\$42,945.52
BRAZORIA, CITY OF	0093911	SINGLE FMLY	4	\$48,812.55
BRAZORIA, CITY OF	0068030	SINGLE FMLY	3	\$13,101.43
BRAZORIA, CITY OF	0118729	SINGLE FMLY	2	\$8,095.04
BRAZORIA, CITY OF	0123800	SINGLE FMLY	2	\$61,286.24
BRAZORIA, CITY OF	0048882	SINGLE FMLY	4	\$9,335.08
BRAZORIA, CITY OF	0045259	SINGLE FMLY	3	\$6,326.91
BRAZORIA, CITY OF	0168428	SINGLE FMLY	2	\$16,181.36
BRAZORIA, CITY OF	0044886	SINGLE FMLY	3	\$15,060.39
BRAZORIA, CITY OF	0039376	SINGLE FMLY	2	\$5,679.84
BRAZORIA, CITY OF	0038629	SINGLE FMLY	4	\$9,517.08
BROOKSIDE VILLAGE, CITY OF	0112880	SINGLE FMLY	2	\$34,407.39
BROOKSIDE VILLAGE, CITY OF	0071471	SINGLE FMLY	2	\$14,958.28
BROOKSIDE VILLAGE, CITY OF	0069944	SINGLE FMLY	2	\$5,913.17
BROOKSIDE VILLAGE, CITY OF	0168026	SINGLE FMLY	3	\$75,075.07
BROOKSIDE VILLAGE, CITY OF	0168137	SINGLE FMLY	4	\$81,368.22
BROOKSIDE VILLAGE, CITY OF	0036827	SINGLE FMLY	2	\$37,949.10

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Community Name	Repetitive Loss #	Occupancy	Number of Losses	Total Paid
BROOKSIDE VILLAGE, CITY OF	0117784	SINGLE FMLY	2	\$72,547.49
BROOKSIDE VILLAGE, CITY OF	0173724	SINGLE FMLY	3	\$56,497.33
BROOKSIDE VILLAGE, CITY OF	0182797	SINGLE FMLY	2	\$5,752.29
BROOKSIDE VILLAGE, CITY OF	0182798	SINGLE FMLY	3	\$218,330.53
BROOKSIDE VILLAGE, CITY OF	0068067	SINGLE FMLY	4	\$154,041.53
BROOKSIDE VILLAGE, CITY OF	0071481	SINGLE FMLY	4	\$72,717.10
BROOKSIDE VILLAGE, CITY OF	0070927	SINGLE FMLY	3	\$74,899.99
BROOKSIDE VILLAGE, CITY OF	0115799	SINGLE FMLY	2	\$83,867.20
BROOKSIDE VILLAGE, CITY OF	0040015	SINGLE FMLY	4	\$114,494.37
BROOKSIDE VILLAGE, CITY OF	0044773	SINGLE FMLY	3	\$35,252.87
BROOKSIDE VILLAGE, CITY OF	0004477	SINGLE FMLY	8	\$108,188.31
BROOKSIDE VILLAGE, CITY OF	0187054	SINGLE FMLY	2	\$13,000.22
BROOKSIDE VILLAGE, CITY OF	0071430	SINGLE FMLY	3	\$35,542.48
BROOKSIDE VILLAGE, CITY OF	0072209	SINGLE FMLY	3	\$72,445.88
BROOKSIDE VILLAGE, CITY OF	0001459	SINGLE FMLY	9	\$249,064.62
BROOKSIDE VILLAGE, CITY OF	0117731	SINGLE FMLY	3	\$72,463.69
BROOKSIDE VILLAGE, CITY OF	0114986	SINGLE FMLY	2	\$92,894.58
BROOKSIDE VILLAGE, CITY OF	0113277	SINGLE FMLY	2	\$63,442.77

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Community Name	Repetitive Loss #	Occupancy	Number of Losses	Total Paid
BROOKSIDE VILLAGE, CITY OF	0114739	SINGLE FMLY	2	\$34,759.14
BROOKSIDE VILLAGE, CITY OF	0114608	SINGLE FMLY	2	\$84,961.03
BROOKSIDE VILLAGE, CITY OF	0025090	SINGLE FMLY	3	\$39,657.37
BROOKSIDE VILLAGE, CITY OF	0002814	SINGLE FMLY	10	\$197,556.72
BROOKSIDE VILLAGE, CITY OF	0112914	SINGLE FMLY	2	\$55,415.02
BROOKSIDE VILLAGE, CITY OF	0025161	SINGLE FMLY	7	\$208,928.84
BROOKSIDE VILLAGE, CITY OF	0113044	SINGLE FMLY	2	\$106,241.01
BROOKSIDE VILLAGE, CITY OF	0112557	SINGLE FMLY	2	\$89,938.32
BROOKSIDE VILLAGE, CITY OF	0001910	SINGLE FMLY	5	\$158,193.83
BROOKSIDE VILLAGE, CITY OF	0115985	SINGLE FMLY	2	\$84,895.42
CLUTE, CITY OF	0045116	SINGLE FMLY	2	\$5,772.06
CLUTE, CITY OF	0119195	SINGLE FMLY	2	\$8,854.94
CLUTE, CITY OF	0119583	SINGLE FMLY	2	\$16,124.55
CLUTE, CITY OF	0119191	NON RESIDNT	2	\$13,883.74
CLUTE, CITY OF	0112956	SINGLE FMLY	4	\$16,246.69
CLUTE, CITY OF	0018296	SINGLE FMLY	2	\$13,691.62
CLUTE, CITY OF	0038851	NON RESIDNT	4	\$33,999.86
CLUTE, CITY OF	0118914	SINGLE FMLY	2	\$61,172.54
CLUTE, CITY OF	0095192	SINGLE FMLY	3	\$62,497.91
CLUTE, CITY OF	0124195	SINGLE FMLY	2	\$10,036.85
CLUTE, CITY OF	0068429	SINGLE FMLY	2	\$2,898.91
CLUTE, CITY OF	0068430	SINGLE FMLY	4	\$57,985.39
CLUTE, CITY OF	0026744	SINGLE FMLY	2	\$11,639.00

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Community Name	Repetitive Loss #	Occupancy	Number of Losses	Total Paid
CLUTE, CITY OF	0041418	SINGLE FMLY	7	\$32,038.87
CLUTE, CITY OF	0026688	ASSMD CONDO	2	\$9,612.40
CLUTE, CITY OF	0097563	SINGLE FMLY	8	\$151,901.08
CLUTE, CITY OF	0119181	SINGLE FMLY	2	\$4,931.40
CLUTE, CITY OF	0035370	NON RESIDNT	2	\$33,711.44
CLUTE, CITY OF	0040207	NON RESIDNT	3	\$19,259.82
CLUTE, CITY OF	0096848	SINGLE FMLY	3	\$72,769.46
CLUTE, CITY OF	0112465	NON RESIDNT	3	\$115,534.18
DANBURY, CITY OF	0025204	SINGLE FMLY	2	\$11,341.33
DANBURY, CITY OF	0118751	SINGLE FMLY	2	\$30,836.22
DANBURY, CITY OF	0096866	SINGLE FMLY	3	\$31,461.19
DANBURY, CITY OF	0100353	SINGLE FMLY	2	\$18,754.11
DANBURY, CITY OF	0118859	SINGLE FMLY	2	\$12,866.68
DANBURY, CITY OF	0119190	SINGLE FMLY	2	\$72,394.78
FREEPORT, CITY OF	0038724	SINGLE FMLY	2	\$7,918.18
FREEPORT, CITY OF	0067999	SINGLE FMLY	6	\$55,794.76
FREEPORT, CITY OF	0118739	SINGLE FMLY	4	\$10,457.30
FREEPORT, CITY OF	0068000	SINGLE FMLY	2	\$4,391.78
FREEPORT, CITY OF	0068001	SINGLE FMLY	3	\$16,008.42
FREEPORT, CITY OF	0120650	SINGLE FMLY	2	\$20,762.62
FREEPORT, CITY OF	0169488	NON RESIDNT	2	\$19,708.76
FREEPORT, CITY OF	0044926	NON RESIDNT	2	\$5,733.65
FREEPORT, CITY OF	0118971	NON RESIDNT	4	\$156,559.12
FREEPORT, CITY OF	0118888	SINGLE FMLY	2	\$12,830.94
FREEPORT, CITY OF	0018564	SINGLE FMLY	3	\$23,340.46
FREEPORT, CITY OF	0025590	SINGLE FMLY	3	\$10,542.68
FREEPORT, CITY OF	0119548	SINGLE FMLY	3	\$40,732.21
FREEPORT, CITY OF	0128027	SINGLE FMLY	2	\$84,254.69
FREEPORT, CITY OF	0018720	SINGLE FMLY	3	\$58,491.24

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Community Name	Repetitive Loss #	Occupancy	Number of Losses	Total Paid
FREEPORT, CITY OF	0119551	SINGLE FMLY	2	\$23,413.72
FREEPORT, CITY OF	0026236	SINGLE FMLY	2	\$51,480.22
FREEPORT, CITY OF	0182777	SINGLE FMLY	2	\$71,492.93
FREEPORT, CITY OF	0026711	SINGLE FMLY	2	\$5,340.77
FREEPORT, CITY OF	0068008	SINGLE FMLY	2	\$44,385.57
FREEPORT, CITY OF	0118916	SINGLE FMLY	2	\$17,141.41
FREEPORT, CITY OF	0015145	NON RESIDNT	3	\$65,382.86
FREEPORT, CITY OF	0119183	SINGLE FMLY	2	\$5,775.25
FREEPORT, CITY OF	0118886	SINGLE FMLY	3	\$65,068.74
FREEPORT, CITY OF	0124249	SINGLE FMLY	3	\$37,595.11
FREEPORT, CITY OF	0043575	SINGLE FMLY	2	\$3,093.64
FREEPORT, CITY OF	0041928	NON RESIDNT	2	\$4,653.00
FREEPORT, CITY OF	0068005	ASSMD CONDO	2	\$18,884.44
FREEPORT, CITY OF	0038996	SINGLE FMLY	2	\$15,199.95
FREEPORT, CITY OF	0045393	SINGLE FMLY	2	\$198,975.73
FREEPORT, CITY OF	0068010	SINGLE FMLY	3	\$39,762.98
FREEPORT, CITY OF	0038133	SINGLE FMLY	3	\$53,028.00
FREEPORT, CITY OF	0118889	SINGLE FMLY	2	\$21,511.66
FREEPORT, CITY OF	0037909	SINGLE FMLY	3	\$6,625.65
FREEPORT, CITY OF	0016077	NON RESIDNT	3	\$30,482.58
FREEPORT, CITY OF	0068011	OTHER RESID	2	\$11,460.97
FREEPORT, CITY OF	0018323	ASSMD CONDO	2	\$20,770.53
FREEPORT, CITY OF	0026090	SINGLE FMLY	2	\$4,665.56
FREEPORT, CITY OF	0026147	SINGLE FMLY	3	\$12,154.49
FREEPORT, CITY OF	0068013	SINGLE FMLY	2	\$11,169.06
FREEPORT, CITY OF	0043786	SINGLE FMLY	2	\$14,906.40
FREEPORT, CITY OF	0157859	SINGLE FMLY	3	\$305,681.41
FREEPORT, CITY OF	0068017	SINGLE FMLY	2	\$7,927.30

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Community Name	Repetitive Loss #	Occupancy	Number of Losses	Total Paid
HILLCREST VILLAGE, CITY OF	0041487	SINGLE FMLY	2	\$8,254.14
HILLCREST VILLAGE, CITY OF	0017489	SINGLE FMLY	2	\$14,956.29
HILLCREST VILLAGE, CITY OF	0026419	SINGLE FMLY	2	\$25,202.95
HILLCREST VILLAGE, CITY OF	0017526	SINGLE FMLY	2	\$17,237.97
HILLCREST VILLAGE, CITY OF	0068839	SINGLE FMLY	7	\$47,962.71
HILLCREST VILLAGE, CITY OF	0026834	SINGLE FMLY	2	\$34,157.43
IOWA COLONY, CITY OF	0071503	SINGLE FMLY	3	\$99,147.87
IOWA COLONY, CITY OF	0115661	SINGLE FMLY	3	\$43,782.28
IOWA COLONY, CITY OF	0194832	SINGLE FMLY	2	\$61,034.14
IOWA COLONY, CITY OF	0168456	SINGLE FMLY	2	\$53,831.52
IOWA COLONY, CITY OF	0071470	SINGLE FMLY	7	\$171,844.21
IOWA COLONY, CITY OF	0125959	SINGLE FMLY	3	\$78,161.05
JONES CREEK, VILLAGE OF	0045643	SINGLE FMLY	2	\$11,487.33
JONES CREEK, VILLAGE OF	0068014	SINGLE FMLY	3	\$21,389.25
JONES CREEK, VILLAGE OF	0122117	SINGLE FMLY	2	\$70,446.44
JONES CREEK, VILLAGE OF	0025677	SINGLE FMLY	5	\$27,333.54
JONES CREEK, VILLAGE OF	0038948	SINGLE FMLY	2	\$11,642.73
JONES CREEK, VILLAGE OF	0040361	SINGLE FMLY	2	\$10,855.32
JONES CREEK, VILLAGE OF	0043309	SINGLE FMLY	2	\$22,429.73
JONES CREEK, VILLAGE OF	0017575	SINGLE FMLY	2	\$31,198.14

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Community Name	Repetitive Loss #	Occupancy	Number of Losses	Total Paid
JONES CREEK, VILLAGE OF	0068015	SINGLE FMLY	2	\$3,341.31
JONES CREEK, VILLAGE OF	0036431	SINGLE FMLY	2	\$4,866.04
JONES CREEK, VILLAGE OF	0040963	SINGLE FMLY	2	\$15,200.19
JONES CREEK, VILLAGE OF	0015139	SINGLE FMLY	5	\$95,938.88
JONES CREEK, VILLAGE OF	0017586	SINGLE FMLY	2	\$22,370.51
JONES CREEK, VILLAGE OF	0025664	SINGLE FMLY	2	\$10,986.69
LAKE JACKSON, CITY OF	0017462	SINGLE FMLY	4	\$14,929.74
LAKE JACKSON, CITY OF	0119858	SINGLE FMLY	2	\$19,633.38
LAKE JACKSON, CITY OF	0106780	SINGLE FMLY	3	\$11,723.38
LAKE JACKSON, CITY OF	0025754	SINGLE FMLY	3	\$19,568.49
LAKE JACKSON, CITY OF	0119194	SINGLE FMLY	2	\$44,042.08
LAKE JACKSON, CITY OF	0168452	SINGLE FMLY	2	\$4,195.11
LAKE JACKSON, CITY OF	0026758	SINGLE FMLY	4	\$21,998.72
LAKE JACKSON, CITY OF	0088134	SINGLE FMLY	2	\$5,508.31
LAKE JACKSON, CITY OF	0017508	NON RESIDNT	3	\$18,385.24
LAKE JACKSON, CITY OF	0044710	SINGLE FMLY	3	\$30,525.53
LAKE JACKSON, CITY OF	0043556	NON RESIDNT	2	\$21,287.90
LAKE JACKSON, CITY OF	0046816	SINGLE FMLY	3	\$35,478.46
LAKE JACKSON, CITY OF	0045242	NON RESIDNT	2	\$12,084.23
LAKE JACKSON, CITY OF	0040369	SINGLE FMLY	4	\$15,364.62
LAKE JACKSON, CITY OF	0049728	SINGLE FMLY	3	\$10,499.62
LAKE JACKSON, CITY OF	0025828	SINGLE FMLY	3	\$11,097.79
LAKE JACKSON, CITY OF	0044504	SINGLE FMLY	2	\$9,832.78
LIVERPOOL, CITY OF	0045288	SINGLE FMLY	2	\$14,491.03
LIVERPOOL, CITY OF	0044125	SINGLE FMLY	2	\$17,008.00

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Community Name	Repetitive Loss #	Occupancy	Number of Losses	Total Paid
LIVERPOOL, CITY OF	0123863	SINGLE FMLY	2	\$39,559.22
LIVERPOOL, CITY OF	0045103	SINGLE FMLY	2	\$19,224.77
MANVEL, CITY OF	0043388	SINGLE FMLY	2	\$36,752.39
MANVEL, CITY OF	0038814	SINGLE FMLY	2	\$17,929.48
MANVEL, CITY OF	0034320	SINGLE FMLY	2	\$11,537.70
MANVEL, CITY OF	0113964	SINGLE FMLY	3	\$44,401.14
MANVEL, CITY OF	0069918	SINGLE FMLY	2	\$11,429.82
MANVEL, CITY OF	0121370	SINGLE FMLY	2	\$29,600.60
MANVEL, CITY OF	0116004	SINGLE FMLY	2	\$19,469.65
MANVEL, CITY OF	0116812	SINGLE FMLY	3	\$43,433.95
MANVEL, CITY OF	0017435	SINGLE FMLY	5	\$154,364.25
MANVEL, CITY OF	0116813	SINGLE FMLY	2	\$8,133.20
MANVEL, CITY OF	0168804	SINGLE FMLY	2	\$71,770.74
MANVEL, CITY OF	0083536	SINGLE FMLY	3	\$115,009.07
MANVEL, CITY OF	0081789	SINGLE FMLY	4	\$104,351.99
MANVEL, CITY OF	0005609	SINGLE FMLY	3	\$28,411.65
MANVEL, CITY OF	0069001	SINGLE FMLY	2	\$16,920.62
MANVEL, CITY OF	0045537	SINGLE FMLY	2	\$6,003.52
MANVEL, CITY OF	0115730	SINGLE FMLY	4	\$49,163.31
MANVEL, CITY OF	0073583	SINGLE FMLY	3	\$127,171.56
MANVEL, CITY OF	0116833	SINGLE FMLY	3	\$65,597.68
MANVEL, CITY OF	0026047	SINGLE FMLY	5	\$53,529.20
MANVEL, CITY OF	0115660	NON RESIDNT	3	\$55,492.42
MANVEL, CITY OF	0114624	SINGLE FMLY	2	\$45,729.99
MANVEL, CITY OF	0071462	SINGLE FMLY	3	\$34,106.96
MANVEL, CITY OF	0026780	SINGLE FMLY	7	\$169,215.30
MANVEL, CITY OF	0169495	SINGLE FMLY	2	\$94,575.53
MANVEL, CITY OF	0071457	SINGLE FMLY	2	\$10,134.35
MANVEL, CITY OF	0038723	SINGLE FMLY	3	\$35,781.48

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Community Name	Repetitive Loss #	Occupancy	Number of Losses	Total Paid
OYSTER CREEK, VILLAGE OF	0124247	ASSMD CONDO	2	\$218,139.46
OYSTER CREEK, VILLAGE OF	0121436	SINGLE FMLY	3	\$18,488.47
OYSTER CREEK, VILLAGE OF	0119539	SINGLE FMLY	4	\$15,235.82
OYSTER CREEK, VILLAGE OF	0025696	SINGLE FMLY	2	\$7,528.31
OYSTER CREEK, VILLAGE OF	0016013	SINGLE FMLY	2	\$12,647.57
OYSTER CREEK, VILLAGE OF	0026118	NON RESIDNT	2	\$8,697.51
OYSTER CREEK, VILLAGE OF	0025581	NON RESIDNT	2	\$6,395.23
OYSTER CREEK, VILLAGE OF	0025363	SINGLE FMLY	2	\$8,169.53
QUINTANA, TOWN OF	0181880	SINGLE FMLY	2	\$14,803.31
RICHWOOD, CITY OF	0017261	SINGLE FMLY	2	\$54,194.00
RICHWOOD, CITY OF	0044101	SINGLE FMLY	2	\$4,556.37
RICHWOOD, CITY OF	0045839	NON RESIDNT	6	\$84,780.62
RICHWOOD, CITY OF	0040112	SINGLE FMLY	2	\$4,414.86
RICHWOOD, CITY OF	0045729	SINGLE FMLY	7	\$69,719.97
RICHWOOD, CITY OF	0018502	SINGLE FMLY	4	\$32,091.63
RICHWOOD, CITY OF	0128028	SINGLE FMLY	3	\$74,958.22
RICHWOOD, CITY OF	0183782	SINGLE FMLY	2	\$7,189.92
RICHWOOD, CITY OF	0017585	SINGLE FMLY	7	\$79,630.85
RICHWOOD, CITY OF	0048476	SINGLE FMLY	3	\$16,320.09
SURFSIDE BEACH, VILLAGE OF	0037907	NON RESIDNT	2	\$17,536.10
SURFSIDE BEACH, VILLAGE OF	0038438	ASSMD CONDO	3	\$28,024.00
SURFSIDE BEACH, VILLAGE OF	0046398	SINGLE FMLY	2	\$8,966.30

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Community Name	Repetitive Loss #	Occupancy	Number of Losses	Total Paid
SURFSIDE BEACH, VILLAGE OF	0026192	NON RESIDENT	3	\$32,579.50
SURFSIDE BEACH, VILLAGE OF	0048324	NON RESIDENT	3	\$11,169.47
SURFSIDE BEACH, VILLAGE OF	0183771	SINGLE FAMILY	2	\$108,366.00
SURFSIDE BEACH, VILLAGE OF	0183772	SINGLE FAMILY	2	\$88,098.48
SURFSIDE BEACH, VILLAGE OF	0186536	SINGLE FAMILY	2	\$11,639.91
SURFSIDE BEACH, VILLAGE OF	0146331	SINGLE FAMILY	4	\$101,978.10
SURFSIDE BEACH, VILLAGE OF	0179113	SINGLE FAMILY	2	\$133,788.30
SURFSIDE BEACH, VILLAGE OF	0182772	SINGLE FAMILY	2	\$135,556.81
SURFSIDE BEACH, VILLAGE OF	0179186	SINGLE FAMILY	2	\$235,742.49
SURFSIDE BEACH, VILLAGE OF	0177146	SINGLE FAMILY	2	\$40,564.05
SURFSIDE BEACH, VILLAGE OF	0026214	SINGLE FAMILY	4	\$11,234.86
SURFSIDE BEACH, VILLAGE OF	0178846	SINGLE FAMILY	2	\$13,398.73
SURFSIDE BEACH, VILLAGE OF	0124243	SINGLE FAMILY	2	\$4,337.48
SURFSIDE BEACH, VILLAGE OF	0124199	SINGLE FAMILY	2	\$11,271.85
SURFSIDE BEACH, VILLAGE OF	0123745	SINGLE FAMILY	3	\$40,345.81
SURFSIDE BEACH, VILLAGE OF	0124200	SINGLE FAMILY	3	\$115,543.81
SURFSIDE BEACH, VILLAGE OF	0124412	SINGLE FAMILY	4	\$28,589.54
SURFSIDE BEACH, VILLAGE OF	0123939	SINGLE FAMILY	3	\$25,589.92

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Community Name	Repetitive Loss #	Occupancy	Number of Losses	Total Paid
SURFSIDE BEACH, VILLAGE OF	0179144	SINGLE FMLY	2	\$121,039.99
SURFSIDE BEACH, VILLAGE OF	0179071	SINGLE FMLY	2	\$38,447.21
SURFSIDE BEACH, VILLAGE OF	0178847	SINGLE FMLY	2	\$16,147.07
SURFSIDE BEACH, VILLAGE OF	0181073	SINGLE FMLY	2	\$3,595.00
SURFSIDE BEACH, VILLAGE OF	0124942	SINGLE FMLY	3	\$42,017.74
SURFSIDE BEACH, VILLAGE OF	0181197	SINGLE FMLY	2	\$14,617.30
SURFSIDE BEACH, VILLAGE OF	0016111	NON RESIDNT	2	\$31,692.88
SURFSIDE BEACH, VILLAGE OF	0123948	SINGLE FMLY	3	\$18,805.86
SURFSIDE BEACH, VILLAGE OF	0124313	SINGLE FMLY	3	\$51,876.65
SURFSIDE BEACH, VILLAGE OF	0181068	NON RESIDNT	2	\$138,955.94
SURFSIDE BEACH, VILLAGE OF	0123949	NON RESIDNT	2	\$20,036.99
SURFSIDE BEACH, VILLAGE OF	0119586	NON RESIDNT	4	\$229,942.97
SURFSIDE BEACH, VILLAGE OF	0162115	OTHER RESID	2	\$19,212.80
SURFSIDE BEACH, VILLAGE OF	0132860	SINGLE FMLY	5	\$38,298.27
SURFSIDE BEACH, VILLAGE OF	0119838	SINGLE FMLY	4	\$111,166.20
SURFSIDE BEACH, VILLAGE OF	0124577	SINGLE FMLY	2	\$20,085.00
SURFSIDE BEACH, VILLAGE OF	0124214	SINGLE FMLY	2	\$10,192.00
SURFSIDE BEACH, VILLAGE OF	0182776	SINGLE FMLY	2	\$16,948.66

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Community Name	Repetitive Loss #	Occupancy	Number of Losses	Total Paid
SURFSIDE BEACH, VILLAGE OF	0098410	NON RESIDNT	4	\$293,530.78
SURFSIDE BEACH, VILLAGE OF	0119315	SINGLE FMLY	3	\$12,279.14
SURFSIDE BEACH, VILLAGE OF	0124221	SINGLE FMLY	3	\$68,279.12
SURFSIDE BEACH, VILLAGE OF	0045738	NON RESIDNT	5	\$270,139.13
SURFSIDE BEACH, VILLAGE OF	0124345	SINGLE FMLY	2	\$13,396.43
SURFSIDE BEACH, VILLAGE OF	0181066	SINGLE FMLY	2	\$25,900.87
SURFSIDE BEACH, VILLAGE OF	0098357	SINGLE FMLY	4	\$59,261.97
SURFSIDE BEACH, VILLAGE OF	0132884	SINGLE FMLY	3	\$67,926.05
SURFSIDE BEACH, VILLAGE OF	0183053	SINGLE FMLY	2	\$35,728.78
SURFSIDE BEACH, VILLAGE OF	0123978	SINGLE FMLY	2	\$6,341.00
SURFSIDE BEACH, VILLAGE OF	0181827	SINGLE FMLY	2	\$122,096.60
SURFSIDE BEACH, VILLAGE OF	0048327	SINGLE FMLY	2	\$5,376.49
SURFSIDE BEACH, VILLAGE OF	0179695	SINGLE FMLY	2	\$26,239.99
SURFSIDE BEACH, VILLAGE OF	0181171	SINGLE FMLY	2	\$28,170.70
SURFSIDE BEACH, VILLAGE OF	0118915	SINGLE FMLY	3	\$38,409.75
SURFSIDE BEACH, VILLAGE OF	0118747	SINGLE FMLY	3	\$22,116.97
SURFSIDE BEACH, VILLAGE OF	0182768	NON RESIDNT	2	\$153,069.79
SURFSIDE BEACH, VILLAGE OF	0124408	SINGLE FMLY	2	\$50,778.81

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Community Name	Repetitive Loss #	Occupancy	Number of Losses	Total Paid
SURFSIDE BEACH, VILLAGE OF	0123962	SINGLE FMLY	3	\$51,792.11
SURFSIDE BEACH, VILLAGE OF	0015175	SINGLE FMLY	5	\$25,410.73
SURFSIDE BEACH, VILLAGE OF	0088603	NON RESIDNT	2	\$7,486.27
SURFSIDE BEACH, VILLAGE OF	0181267	SINGLE FMLY	2	\$21,317.64
SURFSIDE BEACH, VILLAGE OF	0181732	SINGLE FMLY	2	\$10,600.84
SURFSIDE BEACH, VILLAGE OF	0124201	SINGLE FMLY	3	\$94,363.14
SURFSIDE BEACH, VILLAGE OF	0180876	SINGLE FMLY	2	\$18,348.40
SURFSIDE BEACH, VILLAGE OF	0124289	SINGLE FMLY	3	\$20,677.02
SURFSIDE BEACH, VILLAGE OF	0121662	NON RESIDNT	3	\$90,587.36
SURFSIDE BEACH, VILLAGE OF	0068621	NON RESIDNT	6	\$196,180.72
SURFSIDE BEACH, VILLAGE OF	0157057	SINGLE FMLY	2	\$42,782.51
SURFSIDE BEACH, VILLAGE OF	0183502	NON RESIDNT	2	\$245,301.70
SURFSIDE BEACH, VILLAGE OF	0184358	SINGLE FMLY	2	\$19,498.18
SURFSIDE BEACH, VILLAGE OF	0181076	SINGLE FMLY	2	\$19,282.14
SURFSIDE BEACH, VILLAGE OF	0178982	SINGLE FMLY	2	\$13,935.77
SURFSIDE BEACH, VILLAGE OF	0026825	NON RESIDNT	2	\$4,297.71
SURFSIDE BEACH, VILLAGE OF	0182770	SINGLE FMLY	2	\$14,016.04
SURFSIDE BEACH, VILLAGE OF	0178845	SINGLE FMLY	2	\$10,521.10

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Community Name	Repetitive Loss #	Occupancy	Number of Losses	Total Paid
SURFSIDE BEACH, VILLAGE OF	0179062	SINGLE FMLY	2	\$40,980.89
SURFSIDE BEACH, VILLAGE OF	0181245	SINGLE FMLY	2	\$18,022.73
SURFSIDE BEACH, VILLAGE OF	0180243	SINGLE FMLY	2	\$17,217.73
SURFSIDE BEACH, VILLAGE OF	0184784	SINGLE FMLY	2	\$73,084.49
SURFSIDE BEACH, VILLAGE OF	0184498	SINGLE FMLY	2	\$12,818.41
SURFSIDE BEACH, VILLAGE OF	0180196	SINGLE FMLY	2	\$20,340.72
SURFSIDE BEACH, VILLAGE OF	0181074	SINGLE FMLY	2	\$16,355.66
SURFSIDE BEACH, VILLAGE OF	0146325	SINGLE FMLY	2	\$32,396.36
SURFSIDE BEACH, VILLAGE OF	0124575	SINGLE FMLY	3	\$12,725.08
SURFSIDE BEACH, VILLAGE OF	0182962	SINGLE FMLY	2	\$20,371.95
SURFSIDE BEACH, VILLAGE OF	0181075	SINGLE FMLY	2	\$40,452.31
SURFSIDE BEACH, VILLAGE OF	0183235	SINGLE FMLY	2	\$5,591.27
SURFSIDE BEACH, VILLAGE OF	0180083	SINGLE FMLY	2	\$18,333.21
SURFSIDE BEACH, VILLAGE OF	0178848	SINGLE FMLY	2	\$17,997.58
SURFSIDE BEACH, VILLAGE OF	0157071	SINGLE FMLY	3	\$27,215.20
SURFSIDE BEACH, VILLAGE OF	0044060	SINGLE FMLY	5	\$49,744.35
SURFSIDE BEACH, VILLAGE OF	0178966	SINGLE FMLY	2	\$28,607.98
SURFSIDE BEACH, VILLAGE OF	0123813	SINGLE FMLY	3	\$37,852.65

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Community Name	Repetitive Loss #	Occupancy	Number of Losses	Total Paid
SURFSIDE BEACH, VILLAGE OF	0178994	SINGLE FMLY	2	\$12,904.98
SURFSIDE BEACH, VILLAGE OF	0123953	SINGLE FMLY	3	\$55,539.14
SURFSIDE BEACH, VILLAGE OF	0182965	SINGLE FMLY	2	\$27,651.10
SURFSIDE BEACH, VILLAGE OF	0124022	SINGLE FMLY	2	\$5,662.47
SURFSIDE BEACH, VILLAGE OF	0180093	SINGLE FMLY	2	\$42,939.23
SURFSIDE BEACH, VILLAGE OF	0180148	SINGLE FMLY	2	\$33,508.92
SURFSIDE BEACH, VILLAGE OF	0124437	SINGLE FMLY	4	\$50,925.06
SURFSIDE BEACH, VILLAGE OF	0042831	SINGLE FMLY	6	\$34,125.81
SURFSIDE BEACH, VILLAGE OF	0016107	SINGLE FMLY	3	\$5,679.55
SURFSIDE BEACH, VILLAGE OF	0181414	SINGLE FMLY	2	\$52,969.15
SURFSIDE BEACH, VILLAGE OF	0178988	SINGLE FMLY	2	\$71,907.14
SURFSIDE BEACH, VILLAGE OF	0119166	SINGLE FMLY	4	\$27,126.08
SURFSIDE BEACH, VILLAGE OF	0177170	SINGLE FMLY	2	\$66,048.66
SURFSIDE BEACH, VILLAGE OF	0189639	SINGLE FMLY	2	\$19,710.15
SURFSIDE BEACH, VILLAGE OF	0124230	SINGLE FMLY	3	\$26,467.53
SURFSIDE BEACH, VILLAGE OF	0179059	SINGLE FMLY	2	\$72,904.44
SURFSIDE BEACH, VILLAGE OF	0026820	ASSMD CONDO	5	\$145,196.64
SURFSIDE BEACH, VILLAGE OF	0182963	SINGLE FMLY	2	\$11,095.06

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Community Name	Repetitive Loss #	Occupancy	Number of Losses	Total Paid
SURFSIDE BEACH, VILLAGE OF	0119169	SINGLE FMLY	3	\$104,441.35
SURFSIDE BEACH, VILLAGE OF	0025947	SINGLE FMLY	2	\$8,216.89
SURFSIDE BEACH, VILLAGE OF	0178983	SINGLE FMLY	2	\$23,464.34
SURFSIDE BEACH, VILLAGE OF	0178765	SINGLE FMLY	2	\$11,551.50
SURFSIDE BEACH, VILLAGE OF	0124245	SINGLE FMLY	2	\$11,044.41
SURFSIDE BEACH, VILLAGE OF	0181198	SINGLE FMLY	2	\$22,333.71
SURFSIDE BEACH, VILLAGE OF	0182767	SINGLE FMLY	2	\$5,528.24
SURFSIDE BEACH, VILLAGE OF	0182961	SINGLE FMLY	2	\$50,348.99
SURFSIDE BEACH, VILLAGE OF	0124372	SINGLE FMLY	3	\$38,543.24
SURFSIDE BEACH, VILLAGE OF	0181771	SINGLE FMLY	2	\$32,296.42
SURFSIDE BEACH, VILLAGE OF	0026430	SINGLE FMLY	2	\$5,346.10
SURFSIDE BEACH, VILLAGE OF	0182164	SINGLE FMLY	2	\$72,015.36
SURFSIDE BEACH, VILLAGE OF	0124574	SINGLE FMLY	3	\$33,366.43
SURFSIDE BEACH, VILLAGE OF	0151758	SINGLE FMLY	2	\$28,150.67
SURFSIDE BEACH, VILLAGE OF	0119587	SINGLE FMLY	3	\$21,761.81
SURFSIDE BEACH, VILLAGE OF	0157854	SINGLE FMLY	3	\$146,124.03
SURFSIDE BEACH, VILLAGE OF	0025708	SINGLE FMLY	4	\$112,965.98
SURFSIDE BEACH, VILLAGE OF	0025460	SINGLE FMLY	6	\$38,288.90

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Community Name	Repetitive Loss #	Occupancy	Number of Losses	Total Paid
SURFSIDE BEACH, VILLAGE OF	0181072	SINGLE FMLY	2	\$193,965.11
SURFSIDE BEACH, VILLAGE OF	0191655	SINGLE FMLY	2	\$76,672.32
SURFSIDE BEACH, VILLAGE OF	0151760	SINGLE FMLY	2	\$60,574.59
SURFSIDE BEACH, VILLAGE OF	0111176	SINGLE FMLY	3	\$66,842.86
SURFSIDE BEACH, VILLAGE OF	0180870	SINGLE FMLY	2	\$57,958.90
SURFSIDE BEACH, VILLAGE OF	0124421	SINGLE FMLY	4	\$137,297.76
SURFSIDE BEACH, VILLAGE OF	0119801	SINGLE FMLY	3	\$151,870.78
SURFSIDE BEACH, VILLAGE OF	0124016	NON RESIDNT	2	\$64,857.31
SURFSIDE BEACH, VILLAGE OF	0124463	NON RESIDNT	3	\$548,942.69
SURFSIDE BEACH, VILLAGE OF	0123952	SINGLE FMLY	4	\$14,151.98
SWEENY, CITY OF	0005637	SINGLE FMLY	5	\$104,788.96
SWEENY, CITY OF	0076282	SINGLE FMLY	3	\$29,578.98
SWEENY, CITY OF	0068234	SINGLE FMLY	5	\$103,772.84
SWEENY, CITY OF	0120587	SINGLE FMLY	2	\$54,843.55
SWEENY, CITY OF	0042598	SINGLE FMLY	5	\$104,429.51
SWEENY, CITY OF	0195023	SINGLE FMLY	2	\$8,072.14
SWEENY, CITY OF	0103528	NON RESIDNT	3	\$53,012.05
<i>Chambers County</i>				
CHAMBERS COUNTY	0114157	NON RESIDNT	2	\$10,586.73
CHAMBERS COUNTY	0167201	NON RESIDNT	3	\$70,356.12
CHAMBERS COUNTY	0177112	SINGLE FMLY	2	\$116,018.97
CHAMBERS COUNTY	0182654	SINGLE FMLY	2	\$228,528.07
CHAMBERS COUNTY	0179377	SINGLE FMLY	2	\$159,053.68

HOUSTON-GALVESTON AREA COUNCIL
REGIONAL HAZARD MITIGATION PLAN – 2011 UPDATE

Community Name	Repetitive Loss #	Occupancy	Number of Losses	Total Paid
CHAMBERS COUNTY	0067281	ASSMD CONDO	5	\$134,347.26
CHAMBERS COUNTY	0043585	NON RESIDENT	3	\$76,262.27
CHAMBERS COUNTY	0182995	SINGLE FAMILY	2	\$67,438.62
CHAMBERS COUNTY	0129818	NON RESIDENT	7	\$310,099.15
CHAMBERS COUNTY	0036539	SINGLE FAMILY	2	\$15,856.10
CHAMBERS COUNTY	0179240	SINGLE FAMILY	2	\$216,789.91
CHAMBERS COUNTY	0039058	SINGLE FAMILY	2	\$12,892.42
CHAMBERS COUNTY	0043720	NON RESIDENT	2	\$41,997.40
CHAMBERS COUNTY	0076288	SINGLE FAMILY	4	\$57,124.88
CHAMBERS COUNTY	0043754	SINGLE FAMILY	2	\$12,941.36
CHAMBERS COUNTY	0128781	SINGLE FAMILY	4	\$38,973.06
CHAMBERS COUNTY	0183929	SINGLE FAMILY	2	\$123,851.32
CHAMBERS COUNTY	0185875	SINGLE FAMILY	2	\$54,595.39
CHAMBERS COUNTY	0185417	SINGLE FAMILY	2	\$35,349.40
CHAMBERS COUNTY	0128291	SINGLE FAMILY	3	\$41,905.75
CHAMBERS COUNTY	0184508	SINGLE FAMILY	2	\$43,064.40
CHAMBERS COUNTY	0048464	SINGLE FAMILY	8	\$85,790.90
CHAMBERS COUNTY	0185281	SINGLE FAMILY	2	\$71,071.08
CHAMBERS COUNTY	0122977	SINGLE FAMILY	3	\$14,426.90
CHAMBERS COUNTY	0013083	SINGLE FAMILY	3	\$24,611.93
CHAMBERS COUNTY	0173588	SINGLE FAMILY	2	\$32,713.04
CHAMBERS COUNTY	0025611	SINGLE FAMILY	3	\$131,465.79
CHAMBERS COUNTY	0049014	SINGLE FAMILY	2	\$6,123.95
CHAMBERS COUNTY	0128499	SINGLE FAMILY	3	\$165,299.67
CHAMBERS COUNTY	0166581	SINGLE FAMILY	2	\$69,730.68
CHAMBERS COUNTY	0128527	SINGLE FAMILY	3	\$27,588.24
CHAMBERS COUNTY	0185763	SINGLE FAMILY	2	\$23,123.46
CHAMBERS COUNTY	0048774	SINGLE FAMILY	2	\$10,175.10
CHAMBERS COUNTY	0164489	SINGLE FAMILY	2	\$18,221.88

HOUSTON-GALVESTON AREA COUNCIL
REGIONAL HAZARD MITIGATION PLAN – 2011 UPDATE

Community Name	Repetitive Loss #	Occupancy	Number of Losses	Total Paid
CHAMBERS COUNTY	0071533	SINGLE FMLY	5	\$49,739.04
CHAMBERS COUNTY	0164474	SINGLE FMLY	2	\$25,636.83
CHAMBERS COUNTY	0128350	SINGLE FMLY	2	\$17,968.95
CHAMBERS COUNTY	0081312	SINGLE FMLY	2	\$15,688.29
CHAMBERS COUNTY	0114852	SINGLE FMLY	2	\$14,307.03
CHAMBERS COUNTY	0026000	SINGLE FMLY	2	\$3,022.75
CHAMBERS COUNTY	0093933	SINGLE FMLY	3	\$14,839.86
CHAMBERS COUNTY	0025392	SINGLE FMLY	6	\$35,929.74
CHAMBERS COUNTY	0167934	SINGLE FMLY	3	\$113,563.84
CHAMBERS COUNTY	0070093	SINGLE FMLY	3	\$16,128.30
CHAMBERS COUNTY	0025448	SINGLE FMLY	2	\$23,639.66
CHAMBERS COUNTY	0025403	SINGLE FMLY	3	\$68,048.35
CHAMBERS COUNTY	0013237	SINGLE FMLY	4	\$101,701.30
CHAMBERS COUNTY	0035099	SINGLE FMLY	2	\$9,281.03
CHAMBERS COUNTY	0067282	SINGLE FMLY	5	\$130,440.33
CHAMBERS COUNTY	0164660	SINGLE FMLY	2	\$8,492.44
CHAMBERS COUNTY	0048755	SINGLE FMLY	2	\$3,561.45
CHAMBERS COUNTY	0054784	SINGLE FMLY	2	\$6,241.05
ANAHUAC, CITY OF	0093935	2-4 FAMILY	4	\$50,420.53
ANAHUAC, CITY OF	0168736	2-4 FAMILY	3	\$92,728.19
BEACH CITY, CITY OF	0172248	SINGLE FMLY	5	\$61,606.37
BEACH CITY, CITY OF	0048698	SINGLE FMLY	6	\$22,845.60
BEACH CITY, CITY OF	0184949	SINGLE FMLY	3	\$229,693.71
MONT BELVIEU, CITY OF	0185477	NON RESIDENT	2	\$32,455.38
MONT BELVIEU, CITY OF	0185476	NON RESIDENT	2	\$17,180.97
OLD RIVER-WINFREE, CITY OF	0185981	SINGLE FMLY	2	\$124,390.98
<i>Liberty County</i>				
LIBERTY COUNTY	0073565	SINGLE FMLY	2	\$82,299.90

HOUSTON-GALVESTON AREA COUNCIL
REGIONAL HAZARD MITIGATION PLAN – 2011 UPDATE

Community Name	Repetitive Loss #	Occupancy	Number of Losses	Total Paid
LIBERTY COUNTY	0090293	SINGLE FMLY	6	\$37,420.93
LIBERTY COUNTY	0072128	SINGLE FMLY	3	\$53,024.48
LIBERTY COUNTY	0124861	SINGLE FMLY	2	\$55,213.41
LIBERTY COUNTY	0025815	SINGLE FMLY	3	\$51,848.07
LIBERTY COUNTY	0108640	SINGLE FMLY	2	\$74,199.53
LIBERTY COUNTY	0056906	SINGLE FMLY	3	\$17,083.39
LIBERTY COUNTY	0100576	SINGLE FMLY	2	\$59,649.05
LIBERTY COUNTY	0099205	SINGLE FMLY	2	\$53,859.54
LIBERTY COUNTY	0001137	SINGLE FMLY	5	\$26,928.19
LIBERTY COUNTY	0070149	SINGLE FMLY	2	\$52,900.00
LIBERTY COUNTY	0068657	SINGLE FMLY	6	\$26,052.16
LIBERTY COUNTY	0005665	SINGLE FMLY	7	\$145,191.74
LIBERTY COUNTY	0071795	SINGLE FMLY	2	\$34,834.57
LIBERTY COUNTY	0007213	SINGLE FMLY	2	\$34,515.28
LIBERTY COUNTY	0012893	SINGLE FMLY	3	\$16,574.34
LIBERTY COUNTY	0071566	SINGLE FMLY	4	\$45,100.56
LIBERTY COUNTY	0071796	SINGLE FMLY	2	\$23,167.83
LIBERTY COUNTY	0012895	SINGLE FMLY	3	\$53,612.33
LIBERTY COUNTY	0070585	SINGLE FMLY	2	\$34,614.39
LIBERTY COUNTY	0012892	SINGLE FMLY	3	\$63,780.31
LIBERTY COUNTY	0073366	SINGLE FMLY	4	\$73,717.81
LIBERTY COUNTY	0050832	SINGLE FMLY	3	\$35,772.08
LIBERTY COUNTY	0025854	SINGLE FMLY	2	\$4,926.60
LIBERTY COUNTY	0094828	SINGLE FMLY	3	\$156,497.86
LIBERTY COUNTY	0004707	SINGLE FMLY	3	\$28,064.52
LIBERTY COUNTY	0008336	SINGLE FMLY	2	\$88,167.18
LIBERTY COUNTY	0002889	SINGLE FMLY	7	\$145,310.82
LIBERTY COUNTY	0001135	SINGLE FMLY	2	\$17,250.00
LIBERTY COUNTY	0070312	SINGLE FMLY	2	\$36,771.22

HOUSTON-GALVESTON AREA COUNCIL
REGIONAL HAZARD MITIGATION PLAN – 2011 UPDATE

Community Name	Repetitive Loss #	Occupancy	Number of Losses	Total Paid
LIBERTY COUNTY	0007277	SINGLE FMLY	2	\$30,695.52
LIBERTY COUNTY	0005496	SINGLE FMLY	4	\$39,672.11
LIBERTY COUNTY	0110524	SINGLE FMLY	3	\$20,743.51
LIBERTY COUNTY	0002378	SINGLE FMLY	5	\$67,557.28
LIBERTY COUNTY	0014089	SINGLE FMLY	4	\$48,831.62
LIBERTY COUNTY	0100300	SINGLE FMLY	2	\$14,821.53
LIBERTY COUNTY	0007214	SINGLE FMLY	3	\$70,322.34
LIBERTY COUNTY	0052445	SINGLE FMLY	2	\$6,374.80
LIBERTY COUNTY	0071451	SINGLE FMLY	2	\$29,846.42
LIBERTY COUNTY	0001133	SINGLE FMLY	3	\$43,500.39
LIBERTY COUNTY	0070338	SINGLE FMLY	4	\$70,132.33
LIBERTY COUNTY	0112481	SINGLE FMLY	2	\$12,950.49
LIBERTY COUNTY	0012888	SINGLE FMLY	3	\$68,945.69
LIBERTY COUNTY	0108511	SINGLE FMLY	2	\$43,783.93
LIBERTY COUNTY	0074072	SINGLE FMLY	2	\$49,893.84
LIBERTY COUNTY	0004769	SINGLE FMLY	4	\$29,740.53
LIBERTY COUNTY	0068656	SINGLE FMLY	2	\$9,412.50
LIBERTY COUNTY	0002561	SINGLE FMLY	4	\$61,403.02
LIBERTY COUNTY	0070488	SINGLE FMLY	2	\$44,271.29
LIBERTY COUNTY	0026796	SINGLE FMLY	3	\$14,318.06
LIBERTY COUNTY	0069804	SINGLE FMLY	3	\$20,176.95
LIBERTY COUNTY	0104386	SINGLE FMLY	2	\$17,660.29
LIBERTY COUNTY	0071575	SINGLE FMLY	2	\$36,849.99
LIBERTY COUNTY	0108346	SINGLE FMLY	2	\$17,271.86
LIBERTY COUNTY	0071559	SINGLE FMLY	2	\$18,168.32
LIBERTY COUNTY	0104384	SINGLE FMLY	3	\$50,250.63
LIBERTY COUNTY	0094539	SINGLE FMLY	2	\$5,817.10
LIBERTY COUNTY	0070490	SINGLE FMLY	2	\$18,233.41
LIBERTY COUNTY	0089462	SINGLE FMLY	5	\$133,477.46

HOUSTON-GALVESTON AREA COUNCIL
REGIONAL HAZARD MITIGATION PLAN – 2011 UPDATE

Community Name	Repetitive Loss #	Occupancy	Number of Losses	Total Paid
LIBERTY COUNTY	0007779	SINGLE FMLY	2	\$42,357.00
LIBERTY COUNTY	0073497	SINGLE FMLY	2	\$13,914.43
LIBERTY COUNTY	0071454	SINGLE FMLY	2	\$79,646.35
LIBERTY COUNTY	0097120	SINGLE FMLY	2	\$27,579.70
LIBERTY COUNTY	0172658	SINGLE FMLY	3	\$53,796.77
LIBERTY COUNTY	0013239	SINGLE FMLY	3	\$24,504.15
LIBERTY COUNTY	0000824	SINGLE FMLY	5	\$149,497.14
LIBERTY COUNTY	0114876	SINGLE FMLY	2	\$12,841.80
LIBERTY COUNTY	0004765	SINGLE FMLY	6	\$42,591.28
LIBERTY COUNTY	0003370	SINGLE FMLY	3	\$44,319.99
LIBERTY COUNTY	0057248	SINGLE FMLY	3	\$19,731.29
LIBERTY COUNTY	0005819	SINGLE FMLY	2	\$38,138.12
LIBERTY COUNTY	0007212	SINGLE FMLY	2	\$30,003.56
LIBERTY COUNTY	0007598	SINGLE FMLY	4	\$78,422.14
LIBERTY COUNTY	0050466	SINGLE FMLY	2	\$9,859.79
LIBERTY COUNTY	0108743	SINGLE FMLY	2	\$35,613.92
LIBERTY COUNTY	0071445	SINGLE FMLY	3	\$42,393.54
LIBERTY COUNTY	0073553	ASSMD CONDO	2	\$54,912.54
LIBERTY COUNTY	0000469	SINGLE FMLY	8	\$28,998.98
LIBERTY COUNTY	0073551	SINGLE FMLY	2	\$173,612.52
LIBERTY COUNTY	0013048	NON RESIDNT	6	\$129,101.55
LIBERTY COUNTY	0005810	SINGLE FMLY	4	\$30,364.32
LIBERTY COUNTY	0070299	NON RESIDNT	3	\$11,330.89
LIBERTY COUNTY	0005821	SINGLE FMLY	5	\$81,801.20
LIBERTY COUNTY	0108513	SINGLE FMLY	2	\$20,778.83
LIBERTY COUNTY	0108721	SINGLE FMLY	2	\$15,381.74
LIBERTY COUNTY	0071447	SINGLE FMLY	2	\$17,557.43
LIBERTY COUNTY	0045043	SINGLE FMLY	8	\$86,682.51
LIBERTY COUNTY	0088879	SINGLE FMLY	3	\$24,744.67

HOUSTON-GALVESTON AREA COUNCIL
REGIONAL HAZARD MITIGATION PLAN – 2011 UPDATE

Community Name	Repetitive Loss #	Occupancy	Number of Losses	Total Paid
LIBERTY COUNTY	0002857	SINGLE FMLY	5	\$59,596.94
LIBERTY COUNTY	0121029	SINGLE FMLY	2	\$29,599.45
LIBERTY COUNTY	0108470	SINGLE FMLY	2	\$76,750.91
LIBERTY COUNTY	0098819	SINGLE FMLY	4	\$26,849.89
LIBERTY COUNTY	0108347	SINGLE FMLY	3	\$21,654.50
LIBERTY COUNTY	0001872	SINGLE FMLY	2	\$31,144.29
LIBERTY COUNTY	0071446	SINGLE FMLY	2	\$47,262.45
LIBERTY COUNTY	0070340	SINGLE FMLY	2	\$13,313.23
LIBERTY COUNTY	0012884	SINGLE FMLY	2	\$13,440.71
LIBERTY COUNTY	0081391	SINGLE FMLY	2	\$7,058.24
LIBERTY COUNTY	0005671	SINGLE FMLY	2	\$16,345.64
LIBERTY COUNTY	0014109	SINGLE FMLY	2	\$23,192.22
LIBERTY COUNTY	0005653	SINGLE FMLY	3	\$99,850.75
LIBERTY COUNTY	0046653	SINGLE FMLY	11	\$120,381.00
LIBERTY COUNTY	0089463	ASSMD CONDO	7	\$130,931.74
LIBERTY COUNTY	0098825	SINGLE FMLY	2	\$10,666.50
LIBERTY COUNTY	0071052	SINGLE FMLY	2	\$34,485.35
LIBERTY COUNTY	0094541	SINGLE FMLY	3	\$36,844.29
LIBERTY COUNTY	0012896	OTHER RESID	3	\$30,104.10
LIBERTY COUNTY	0122515	SINGLE FMLY	2	\$19,345.42
LIBERTY COUNTY	0009977	SINGLE FMLY	11	\$155,148.97
LIBERTY COUNTY	0094538	SINGLE FMLY	3	\$16,926.31
LIBERTY COUNTY	0012899	SINGLE FMLY	2	\$11,084.53
LIBERTY COUNTY	0069674	ASSMD CONDO	2	\$96,470.67
LIBERTY COUNTY	0007832	SINGLE FMLY	2	\$28,118.90
LIBERTY COUNTY	0094542	SINGLE FMLY	3	\$59,798.43
LIBERTY COUNTY	0072354	SINGLE FMLY	2	\$13,660.58
LIBERTY COUNTY	0071591	SINGLE FMLY	2	\$60,423.24
LIBERTY COUNTY	0108641	SINGLE FMLY	3	\$72,192.75

HOUSTON-GALVESTON AREA COUNCIL
REGIONAL HAZARD MITIGATION PLAN – 2011 UPDATE

Community Name	Repetitive Loss #	Occupancy	Number of Losses	Total Paid
LIBERTY COUNTY	0004803	SINGLE FMLY	2	\$38,568.17
LIBERTY COUNTY	0069620	SINGLE FMLY	11	\$121,336.47
LIBERTY COUNTY	0067877	SINGLE FMLY	2	\$44,397.59
LIBERTY COUNTY	0070291	SINGLE FMLY	2	\$55,235.32
LIBERTY COUNTY	0071450	SINGLE FMLY	2	\$14,578.72
LIBERTY COUNTY	0025454	SINGLE FMLY	4	\$20,461.51
LIBERTY COUNTY	0012885	SINGLE FMLY	3	\$20,782.60
LIBERTY COUNTY	0012931	SINGLE FMLY	3	\$27,627.43
LIBERTY COUNTY	0071558	SINGLE FMLY	8	\$119,709.96
LIBERTY COUNTY	0012938	SINGLE FMLY	2	\$13,115.65
LIBERTY COUNTY	0073552	SINGLE FMLY	2	\$11,103.29
LIBERTY COUNTY	0049385	SINGLE FMLY	6	\$107,932.19
LIBERTY COUNTY	0056830	SINGLE FMLY	2	\$16,837.93
LIBERTY COUNTY	0056909	SINGLE FMLY	2	\$10,048.23
LIBERTY COUNTY	0117076	SINGLE FMLY	2	\$20,385.27
LIBERTY COUNTY	0056876	SINGLE FMLY	2	\$20,593.24
LIBERTY COUNTY	0070292	SINGLE FMLY	2	\$37,827.50
LIBERTY COUNTY	0070489	SINGLE FMLY	2	\$22,373.41
LIBERTY COUNTY	0013076	SINGLE FMLY	4	\$34,297.79
LIBERTY COUNTY	0012994	SINGLE FMLY	3	\$36,509.25
LIBERTY COUNTY	0070296	SINGLE FMLY	3	\$33,961.94
LIBERTY COUNTY	0070179	SINGLE FMLY	2	\$48,443.03
LIBERTY COUNTY	0070774	SINGLE FMLY	2	\$27,275.84
LIBERTY COUNTY	0071764	SINGLE FMLY	3	\$142,569.75
LIBERTY COUNTY	0071794	SINGLE FMLY	2	\$11,834.23
LIBERTY COUNTY	0046951	SINGLE FMLY	4	\$51,150.23
LIBERTY COUNTY	0098820	SINGLE FMLY	2	\$15,322.53
LIBERTY COUNTY	0013153	SINGLE FMLY	2	\$9,672.26
LIBERTY COUNTY	0073499	SINGLE FMLY	2	\$20,918.65

HOUSTON-GALVESTON AREA COUNCIL
REGIONAL HAZARD MITIGATION PLAN – 2011 UPDATE

Community Name	Repetitive Loss #	Occupancy	Number of Losses	Total Paid
LIBERTY COUNTY	0072347	SINGLE FMLY	2	\$17,684.00
LIBERTY COUNTY	0098403	SINGLE FMLY	2	\$31,070.28
LIBERTY COUNTY	0071800	SINGLE FMLY	4	\$74,187.27
LIBERTY COUNTY	0014111	SINGLE FMLY	3	\$20,132.09
LIBERTY COUNTY	0070157	SINGLE FMLY	2	\$16,799.65
LIBERTY COUNTY	0077547	SINGLE FMLY	2	\$19,221.13
LIBERTY COUNTY	0012886	SINGLE FMLY	3	\$9,670.55
LIBERTY COUNTY	0071571	SINGLE FMLY	2	\$30,971.50
LIBERTY COUNTY	0004314	NON RESIDNT	2	\$30,481.59
LIBERTY COUNTY	0004315	NON RESIDNT	2	\$14,898.44
LIBERTY COUNTY	0004316	NON RESIDNT	2	\$14,505.43
LIBERTY COUNTY	0007161	SINGLE FMLY	3	\$54,179.51
LIBERTY COUNTY	0105290	SINGLE FMLY	2	\$23,826.58
LIBERTY COUNTY	0108662	SINGLE FMLY	2	\$38,010.53
LIBERTY COUNTY	0014058	SINGLE FMLY	3	\$84,597.04
LIBERTY COUNTY	0088130	SINGLE FMLY	3	\$19,596.06
LIBERTY COUNTY	0098824	SINGLE FMLY	2	\$7,998.48
LIBERTY COUNTY	0108467	SINGLE FMLY	2	\$105,885.24
LIBERTY COUNTY	0108468	SINGLE FMLY	2	\$75,017.37
LIBERTY COUNTY	0117980	SINGLE FMLY	3	\$34,707.17
LIBERTY COUNTY	0013032	SINGLE FMLY	2	\$12,011.33
LIBERTY COUNTY	0068653	SINGLE FMLY	4	\$50,481.56
LIBERTY COUNTY	0002603	SINGLE FMLY	4	\$16,364.09
LIBERTY COUNTY	0009897	SINGLE FMLY	12	\$337,129.13
LIBERTY COUNTY	0008991	SINGLE FMLY	8	\$146,987.86
LIBERTY COUNTY	0002729	SINGLE FMLY	4	\$36,637.08
LIBERTY COUNTY	0104383	SINGLE FMLY	2	\$14,756.46
LIBERTY COUNTY	0007209	SINGLE FMLY	2	\$32,969.88
LIBERTY COUNTY	0007208	SINGLE FMLY	3	\$96,020.19

HOUSTON-GALVESTON AREA COUNCIL
REGIONAL HAZARD MITIGATION PLAN – 2011 UPDATE

Community Name	Repetitive Loss #	Occupancy	Number of Losses	Total Paid
LIBERTY COUNTY	0012943	SINGLE FMLY	3	\$55,208.22
LIBERTY COUNTY	0001136	SINGLE FMLY	2	\$17,000.00
LIBERTY COUNTY	0012944	SINGLE FMLY	2	\$7,415.70
LIBERTY COUNTY	0169389	SINGLE FMLY	2	\$3,282.99
LIBERTY COUNTY	0068206	SINGLE FMLY	2	\$44,206.49
LIBERTY COUNTY	0068654	SINGLE FMLY	3	\$81,802.16
LIBERTY COUNTY	0012894	SINGLE FMLY	2	\$107,646.92
LIBERTY COUNTY	0007251	SINGLE FMLY	2	\$10,988.09
LIBERTY COUNTY	0097171	SINGLE FMLY	2	\$37,605.81
LIBERTY COUNTY	0007210	SINGLE FMLY	3	\$161,747.82
LIBERTY COUNTY	0108509	NON RESIDNT	2	\$35,219.22
LIBERTY COUNTY	0173104	SINGLE FMLY	2	\$42,550.01
LIBERTY COUNTY	0005495	OTHER RESID	3	\$5,711.35
LIBERTY COUNTY	0069859	SINGLE FMLY	2	\$29,300.00
LIBERTY COUNTY	0068422	SINGLE FMLY	2	\$26,134.29
LIBERTY COUNTY	0070592	SINGLE FMLY	2	\$12,267.75
LIBERTY COUNTY	0007194	SINGLE FMLY	2	\$33,938.11
LIBERTY COUNTY	0068423	SINGLE FMLY	2	\$4,567.49
LIBERTY COUNTY	0014108	SINGLE FMLY	2	\$23,265.40
LIBERTY COUNTY	0071793	SINGLE FMLY	2	\$20,800.00
LIBERTY COUNTY	0091025	SINGLE FMLY	3	\$104,243.56
LIBERTY COUNTY	0070495	SINGLE FMLY	3	\$58,232.46
LIBERTY COUNTY	0053027	SINGLE FMLY	3	\$15,475.11
LIBERTY COUNTY	0012889	SINGLE FMLY	3	\$33,397.98
LIBERTY COUNTY	0012927	SINGLE FMLY	3	\$48,764.65
LIBERTY COUNTY	0057524	SINGLE FMLY	2	\$10,116.76
LIBERTY COUNTY	0005662	SINGLE FMLY	2	\$27,283.11
LIBERTY COUNTY	0005663	SINGLE FMLY	3	\$40,401.88
LIBERTY COUNTY	0040934	SINGLE FMLY	4	\$37,522.38

HOUSTON-GALVESTON AREA COUNCIL
REGIONAL HAZARD MITIGATION PLAN – 2011 UPDATE

Community Name	Repetitive Loss #	Occupancy	Number of Losses	Total Paid
CLEVELAND,CITY OF	0070341	SINGLE FMLY	2	\$36,708.00
DAYTON, CITY OF	0122071	NON RESIDNT	7	\$104,029.03
DAYTON, CITY OF	0073549	SINGLE FMLY	5	\$32,535.11
DAYTON, CITY OF	0118195	SINGLE FMLY	2	\$50,848.27
DAYTON, CITY OF	0083544	SINGLE FMLY	2	\$5,023.30
DAYTON, CITY OF	0188404	SINGLE FMLY	2	\$127,926.73
LIBERTY, CITY OF	0164899	SINGLE FMLY	2	\$144,380.55
LIBERTY, CITY OF	0068867	NON RESIDNT	3	\$83,568.72
LIBERTY, CITY OF	0108556	NON RESIDNT	2	\$7,018.96
LIBERTY, CITY OF	0108947	SINGLE FMLY	2	\$81,860.32
LIBERTY, CITY OF	0070428	SINGLE FMLY	4	\$89,004.09
LIBERTY, CITY OF	0164883	SINGLE FMLY	2	\$78,561.36
LIBERTY, CITY OF	0166155	SINGLE FMLY	2	\$13,409.35
LIBERTY, CITY OF	0108773	SINGLE FMLY	2	\$80,889.29
LIBERTY, CITY OF	0070427	SINGLE FMLY	2	\$93,564.08
LIBERTY, CITY OF	0108515	SINGLE FMLY	2	\$65,745.91
LIBERTY, CITY OF	0108554	SINGLE FMLY	2	\$134,670.64
LIBERTY, CITY OF	0164661	ASSMD CONDO	2	\$298,423.92
LIBERTY, CITY OF	0071439	SINGLE FMLY	2	\$77,600.92
LIBERTY, CITY OF	0073563	SINGLE FMLY	3	\$145,131.95
LIBERTY, CITY OF	0140219	NON RESIDNT	3	\$153,594.42
LIBERTY, CITY OF	0013157	SINGLE FMLY	5	\$111,016.25
LIBERTY, CITY OF	0013011	NON RESIDNT	7	\$145,676.57
LIBERTY, CITY OF	0166891	NON RESIDNT	2	\$54,885.25
LIBERTY, CITY OF	0108522	NON RESIDNT	8	\$95,375.28
LIBERTY, CITY OF	0109250	SINGLE FMLY	2	\$278,394.36
LIBERTY, CITY OF	0068868	SINGLE FMLY	5	\$180,302.14
LIBERTY, CITY OF	0070397	SINGLE FMLY	3	\$72,459.07
LIBERTY, CITY OF	0071562	SINGLE FMLY	2	\$106,847.24

HOUSTON-GALVESTON AREA COUNCIL
REGIONAL HAZARD MITIGATION PLAN – 2011 UPDATE

Community Name	Repetitive Loss #	Occupancy	Number of Losses	Total Paid
LIBERTY, CITY OF	0108466	SINGLE FMLY	2	\$182,695.20
LIBERTY, CITY OF	0068869	SINGLE FMLY	4	\$91,594.50
LIBERTY, CITY OF	0108924	SINGLE FMLY	3	\$117,149.32
LIBERTY, CITY OF	0073562	SINGLE FMLY	3	\$95,579.66
LIBERTY, CITY OF	0070276	NON RESIDENT	5	\$50,024.02
LIBERTY, CITY OF	0073564	SINGLE FMLY	2	\$27,370.05
LIBERTY, CITY OF	0108516	SINGLE FMLY	2	\$15,644.35
LIBERTY, CITY OF	0165205	SINGLE FMLY	2	\$36,567.23
LIBERTY, CITY OF	0108510	SINGLE FMLY	2	\$66,718.73
LIBERTY, CITY OF	0073561	SINGLE FMLY	3	\$68,057.90
LIBERTY, CITY OF	0070487	SINGLE FMLY	2	\$20,036.59
LIBERTY, CITY OF	0068877	SINGLE FMLY	3	\$24,715.61
LIBERTY, CITY OF	0035434	NON RESIDENT	2	\$7,079.74
LIBERTY, CITY OF	0046445	SINGLE FMLY	2	\$19,317.45
<i>Montgomery County</i>				
MONTGOMERY COUNTY	0071510	SINGLE FMLY	2	\$32,658.88
MONTGOMERY COUNTY	0018326	SINGLE FMLY	3	\$81,157.21
MONTGOMERY COUNTY	0041332	SINGLE FMLY	4	\$56,173.84
MONTGOMERY COUNTY	0068577	SINGLE FMLY	2	\$25,892.86
MONTGOMERY COUNTY	0057522	SINGLE FMLY	3	\$122,123.05
MONTGOMERY COUNTY	0025822	SINGLE FMLY	2	\$9,283.66
MONTGOMERY COUNTY	0068578	SINGLE FMLY	3	\$75,377.21
MONTGOMERY COUNTY	0068579	SINGLE FMLY	2	\$22,267.28
MONTGOMERY COUNTY	0068576	SINGLE FMLY	2	\$45,084.17
MONTGOMERY COUNTY	0034722	SINGLE FMLY	2	\$36,500.00
MONTGOMERY COUNTY	0025791	SINGLE FMLY	3	\$46,164.77
MONTGOMERY COUNTY	0052685	SINGLE FMLY	4	\$96,939.63
MONTGOMERY COUNTY	0040673	SINGLE FMLY	2	\$21,956.38
MONTGOMERY COUNTY	0044414	SINGLE FMLY	5	\$36,513.88

HOUSTON-GALVESTON AREA COUNCIL
REGIONAL HAZARD MITIGATION PLAN – 2011 UPDATE

Community Name	Repetitive Loss #	Occupancy	Number of Losses	Total Paid
MONTGOMERY COUNTY	0045753	SINGLE FMLY	3	\$14,611.83
MONTGOMERY COUNTY	0035563	SINGLE FMLY	3	\$34,067.31
MONTGOMERY COUNTY	0044204	SINGLE FMLY	2	\$27,129.90
MONTGOMERY COUNTY	0072013	SINGLE FMLY	2	\$54,810.40
MONTGOMERY COUNTY	0026785	SINGLE FMLY	2	\$17,090.89
MONTGOMERY COUNTY	0018308	SINGLE FMLY	2	\$46,177.57
MONTGOMERY COUNTY	0025816	SINGLE FMLY	4	\$54,745.19
MONTGOMERY COUNTY	0025149	SINGLE FMLY	5	\$29,312.20
MONTGOMERY COUNTY	0018403	SINGLE FMLY	3	\$9,499.09
MONTGOMERY COUNTY	0068575	SINGLE FMLY	2	\$40,500.00
MONTGOMERY COUNTY	0050384	SINGLE FMLY	2	\$38,017.98
MONTGOMERY COUNTY	0052708	SINGLE FMLY	2	\$19,151.43
MONTGOMERY COUNTY	0013055	SINGLE FMLY	2	\$26,611.09
MONTGOMERY COUNTY	0018298	SINGLE FMLY	4	\$69,369.43
MONTGOMERY COUNTY	0025659	SINGLE FMLY	3	\$32,550.20
MONTGOMERY COUNTY	0040715	SINGLE FMLY	2	\$28,690.21
MONTGOMERY COUNTY	0041207	SINGLE FMLY	2	\$4,594.75
MONTGOMERY COUNTY	0123730	SINGLE FMLY	2	\$204,659.76
MONTGOMERY COUNTY	0098382	SINGLE FMLY	3	\$190,631.99
MONTGOMERY COUNTY	0100339	SINGLE FMLY	3	\$246,870.18
MONTGOMERY COUNTY	0070683	SINGLE FMLY	2	\$89,095.39
MONTGOMERY COUNTY	0099110	SINGLE FMLY	2	\$44,290.29
MONTGOMERY COUNTY	0018718	SINGLE FMLY	4	\$64,717.26
MONTGOMERY COUNTY	0116076	SINGLE FMLY	3	\$136,982.82
MONTGOMERY COUNTY	0042399	SINGLE FMLY	6	\$34,514.65
MONTGOMERY COUNTY	0112626	SINGLE FMLY	2	\$105,539.17
MONTGOMERY COUNTY	0098378	SINGLE FMLY	3	\$111,417.31
MONTGOMERY COUNTY	0073574	SINGLE FMLY	5	\$254,331.25
MONTGOMERY COUNTY	0072249	SINGLE FMLY	2	\$11,877.87

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Community Name	Repetitive Loss #	Occupancy	Number of Losses	Total Paid
MONTGOMERY COUNTY	0012845	SINGLE FMLY	2	\$10,368.31
MONTGOMERY COUNTY	0053657	SINGLE FMLY	2	\$6,379.84
MONTGOMERY COUNTY	0026350	SINGLE FMLY	2	\$69,343.22
MONTGOMERY COUNTY	0025881	SINGLE FMLY	2	\$36,707.61
MONTGOMERY COUNTY	0037380	SINGLE FMLY	5	\$26,402.40
MONTGOMERY COUNTY	0026473	SINGLE FMLY	2	\$17,453.34
MONTGOMERY COUNTY	0026408	SINGLE FMLY	4	\$84,126.49
MONTGOMERY COUNTY	0038139	SINGLE FMLY	2	\$11,320.17
MONTGOMERY COUNTY	0038655	SINGLE FMLY	3	\$18,229.76
MONTGOMERY COUNTY	0026369	SINGLE FMLY	3	\$32,095.79
MONTGOMERY COUNTY	0037446	SINGLE FMLY	3	\$41,449.00
MONTGOMERY COUNTY	0025888	SINGLE FMLY	3	\$18,147.27
MONTGOMERY COUNTY	0025085	SINGLE FMLY	3	\$21,639.97
MONTGOMERY COUNTY	0018355	SINGLE FMLY	4	\$23,003.89
MONTGOMERY COUNTY	0018665	SINGLE FMLY	3	\$24,614.65
MONTGOMERY COUNTY	0025096	SINGLE FMLY	2	\$37,896.75
MONTGOMERY COUNTY	0168131	SINGLE FMLY	3	\$10,535.59
MONTGOMERY COUNTY	0039757	SINGLE FMLY	5	\$177,551.75
MONTGOMERY COUNTY	0038344	SINGLE FMLY	2	\$12,373.04
MONTGOMERY COUNTY	0112603	SINGLE FMLY	2	\$95,295.12
MONTGOMERY COUNTY	0100413	SINGLE FMLY	2	\$3,499.85
MONTGOMERY COUNTY	0026155	SINGLE FMLY	4	\$22,476.73
MONTGOMERY COUNTY	0018480	SINGLE FMLY	3	\$21,731.58
MONTGOMERY COUNTY	0036403	SINGLE FMLY	2	\$21,863.22
MONTGOMERY COUNTY	0069720	SINGLE FMLY	2	\$31,102.91
MONTGOMERY COUNTY	0006576	SINGLE FMLY	3	\$8,362.96
MONTGOMERY COUNTY	0098345	SINGLE FMLY	2	\$66,265.23
MONTGOMERY COUNTY	0097246	SINGLE FMLY	2	\$102,844.96
MONTGOMERY COUNTY	0098380	SINGLE FMLY	2	\$117,450.29

HOUSTON-GALVESTON AREA COUNCIL
REGIONAL HAZARD MITIGATION PLAN – 2011 UPDATE

Community Name	Repetitive Loss #	Occupancy	Number of Losses	Total Paid
MONTGOMERY COUNTY	0100716	SINGLE FMLY	2	\$221,301.18
MONTGOMERY COUNTY	0169136	SINGLE FMLY	3	\$35,267.06
MONTGOMERY COUNTY	0097243	SINGLE FMLY	2	\$155,054.64
MONTGOMERY COUNTY	0115619	SINGLE FMLY	2	\$107,532.70
MONTGOMERY COUNTY	0106769	SINGLE FMLY	2	\$12,181.77
MONTGOMERY COUNTY	0071500	SINGLE FMLY	2	\$24,898.85
MONTGOMERY COUNTY	0097540	SINGLE FMLY	2	\$206,213.30
MONTGOMERY COUNTY	0038022	SINGLE FMLY	4	\$218,941.97
MONTGOMERY COUNTY	0073526	SINGLE FMLY	4	\$236,592.20
MONTGOMERY COUNTY	0097247	SINGLE FMLY	2	\$256,415.41
MONTGOMERY COUNTY	0122142	SINGLE FMLY	2	\$125,192.33
MONTGOMERY COUNTY	0025764	SINGLE FMLY	4	\$186,628.63
MONTGOMERY COUNTY	0025631	SINGLE FMLY	6	\$292,022.81
MONTGOMERY COUNTY	0073523	SINGLE FMLY	4	\$268,613.35
MONTGOMERY COUNTY	0035013	SINGLE FMLY	5	\$380,041.29
MONTGOMERY COUNTY	0018305	SINGLE FMLY	6	\$337,326.54
MONTGOMERY COUNTY	0017791	SINGLE FMLY	5	\$124,745.69
MONTGOMERY COUNTY	0073522	SINGLE FMLY	4	\$320,822.90
MONTGOMERY COUNTY	0100335	SINGLE FMLY	3	\$106,573.87
MONTGOMERY COUNTY	0073524	SINGLE FMLY	4	\$263,190.08
MONTGOMERY COUNTY	0097501	SINGLE FMLY	2	\$101,660.73
MONTGOMERY COUNTY	0100733	SINGLE FMLY	3	\$224,091.55
MONTGOMERY COUNTY	0100338	SINGLE FMLY	2	\$98,062.82
MONTGOMERY COUNTY	0105269	SINGLE FMLY	3	\$150,564.84
MONTGOMERY COUNTY	0026274	SINGLE FMLY	5	\$182,020.38
MONTGOMERY COUNTY	0098971	SINGLE FMLY	3	\$234,595.78
MONTGOMERY COUNTY	0068568	SINGLE FMLY	5	\$122,777.81
MONTGOMERY COUNTY	0018325	SINGLE FMLY	4	\$123,304.06
MONTGOMERY COUNTY	0018637	SINGLE FMLY	4	\$319,696.14

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REGIONAL HAZARD MITIGATION PLAN – 2011 UPDATE

Community Name	Repetitive Loss #	Occupancy	Number of Losses	Total Paid
MONTGOMERY COUNTY	0026119	SINGLE FMLY	3	\$176,400.00
MONTGOMERY COUNTY	0073586	SINGLE FMLY	2	\$11,188.86
MONTGOMERY COUNTY	0196715	SINGLE FMLY	2	\$32,358.11
MONTGOMERY COUNTY	0038725	SINGLE FMLY	2	\$4,046.18
MONTGOMERY COUNTY	0068326	SINGLE FMLY	2	\$6,406.32
MONTGOMERY COUNTY	0005533	SINGLE FMLY	5	\$40,893.82
MONTGOMERY COUNTY	0037293	SINGLE FMLY	2	\$5,581.54
MONTGOMERY COUNTY	0050264	SINGLE FMLY	4	\$87,382.71
MONTGOMERY COUNTY	0018307	SINGLE FMLY	7	\$200,679.99
MONTGOMERY COUNTY	0003188	SINGLE FMLY	2	\$4,222.02
MONTGOMERY COUNTY	0097146	SINGLE FMLY	2	\$125,596.22
MONTGOMERY COUNTY	0070019	SINGLE FMLY	2	\$69,266.83
MONTGOMERY COUNTY	0115624	SINGLE FMLY	3	\$62,059.23
MONTGOMERY COUNTY	0003652	SINGLE FMLY	11	\$115,975.87
MONTGOMERY COUNTY	0097603	SINGLE FMLY	2	\$32,641.57
MONTGOMERY COUNTY	0177150	SINGLE FMLY	2	\$9,111.87
MONTGOMERY COUNTY	0041063	SINGLE FMLY	6	\$102,476.69
MONTGOMERY COUNTY	0115957	SINGLE FMLY	3	\$91,717.85
MONTGOMERY COUNTY	0013270	SINGLE FMLY	5	\$13,832.17
MONTGOMERY COUNTY	0071584	SINGLE FMLY	3	\$134,994.92
MONTGOMERY COUNTY	0112424	SINGLE FMLY	2	\$41,000.15
MONTGOMERY COUNTY	0068244	SINGLE FMLY	2	\$54,014.24
MONTGOMERY COUNTY	0070086	SINGLE FMLY	2	\$80,877.22
MONTGOMERY COUNTY	0070657	SINGLE FMLY	3	\$237,337.70
MONTGOMERY COUNTY	0193176	SINGLE FMLY	2	\$24,113.38
MONTGOMERY COUNTY	0101090	SINGLE FMLY	2	\$20,250.15
MONTGOMERY COUNTY	0071991	SINGLE FMLY	3	\$135,984.68
MONTGOMERY COUNTY	0037503	SINGLE FMLY	3	\$37,227.16
MONTGOMERY COUNTY	0025629	SINGLE FMLY	5	\$183,150.81

HOUSTON-GALVESTON AREA COUNCIL
REGIONAL HAZARD MITIGATION PLAN – 2011 UPDATE

Community Name	Repetitive Loss #	Occupancy	Number of Losses	Total Paid
MONTGOMERY COUNTY	0018284	SINGLE FMLY	6	\$155,352.18
MONTGOMERY COUNTY	0042365	SINGLE FMLY	3	\$123,742.81
MONTGOMERY COUNTY	0098431	SINGLE FMLY	2	\$22,133.86
MONTGOMERY COUNTY	0071105	SINGLE FMLY	2	\$45,480.21
MONTGOMERY COUNTY	0168154	SINGLE FMLY	2	\$4,199.02
MONTGOMERY COUNTY	0186731	SINGLE FMLY	2	\$56,777.59
MONTGOMERY COUNTY	0037936	SINGLE FMLY	10	\$159,282.99
MONTGOMERY COUNTY	0053868	SINGLE FMLY	6	\$116,952.96
MONTGOMERY COUNTY	0069865	SINGLE FMLY	4	\$274,866.49
MONTGOMERY COUNTY	0179689	SINGLE FMLY	2	\$65,546.15
MONTGOMERY COUNTY	0181130	SINGLE FMLY	3	\$70,690.02
MONTGOMERY COUNTY	0178893	SINGLE FMLY	2	\$13,787.39
MONTGOMERY COUNTY	0095489	SINGLE FMLY	3	\$27,326.83
MONTGOMERY COUNTY	0115696	SINGLE FMLY	2	\$34,253.25
MONTGOMERY COUNTY	0114351	SINGLE FMLY	2	\$6,077.17
MONTGOMERY COUNTY	0068330	SINGLE FMLY	4	\$70,225.86
MONTGOMERY COUNTY	0180918	SINGLE FMLY	2	\$69,462.64
MONTGOMERY COUNTY	0094665	SINGLE FMLY	5	\$133,104.63
MONTGOMERY COUNTY	0178145	SINGLE FMLY	2	\$110,429.30
MONTGOMERY COUNTY	0182394	SINGLE FMLY	2	\$86,657.84
MONTGOMERY COUNTY	0073585	SINGLE FMLY	2	\$38,553.01
MONTGOMERY COUNTY	0069715	SINGLE FMLY	2	\$114,739.32
MONTGOMERY COUNTY	0071556	SINGLE FMLY	7	\$262,088.35
MONTGOMERY COUNTY	0010424	SINGLE FMLY	4	\$30,635.93
MONTGOMERY COUNTY	0017805	SINGLE FMLY	8	\$18,741.10
MONTGOMERY COUNTY	0056191	SINGLE FMLY	4	\$40,362.02
MONTGOMERY COUNTY	0018350	SINGLE FMLY	2	\$17,621.94
MONTGOMERY COUNTY	0045315	SINGLE FMLY	2	\$13,703.25
MONTGOMERY COUNTY	0014101	SINGLE FMLY	10	\$106,327.45

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REGIONAL HAZARD MITIGATION PLAN – 2011 UPDATE

Community Name	Repetitive Loss #	Occupancy	Number of Losses	Total Paid
MONTGOMERY COUNTY	0018333	SINGLE FMLY	2	\$28,912.00
MONTGOMERY COUNTY	0018372	SINGLE FMLY	3	\$13,754.55
MONTGOMERY COUNTY	0018356	SINGLE FMLY	3	\$14,202.43
MONTGOMERY COUNTY	0099405	SINGLE FMLY	2	\$9,427.43
MONTGOMERY COUNTY	0071576	SINGLE FMLY	5	\$122,737.39
MONTGOMERY COUNTY	0113903	SINGLE FMLY	2	\$77,571.45
MONTGOMERY COUNTY	0097513	SINGLE FMLY	3	\$109,896.55
MONTGOMERY COUNTY	0037273	SINGLE FMLY	7	\$126,039.24
MONTGOMERY COUNTY	0012883	SINGLE FMLY	5	\$78,278.78
MONTGOMERY COUNTY	0036118	SINGLE FMLY	5	\$294,443.46
MONTGOMERY COUNTY	0037379	SINGLE FMLY	4	\$20,774.96
MONTGOMERY COUNTY	0037945	SINGLE FMLY	2	\$19,108.92
MONTGOMERY COUNTY	0036544	SINGLE FMLY	3	\$61,148.09
MONTGOMERY COUNTY	0168957	SINGLE FMLY	2	\$95,353.04
MONTGOMERY COUNTY	0069954	SINGLE FMLY	2	\$55,388.06
MONTGOMERY COUNTY	0115009	NON RESIDENT	2	\$47,621.46
MONTGOMERY COUNTY	0099203	SINGLE FMLY	3	\$83,221.30
MONTGOMERY COUNTY	0112416	SINGLE FMLY	2	\$13,811.35
MONTGOMERY COUNTY	0187423	SINGLE FMLY	2	\$40,317.79
MONTGOMERY COUNTY	0045370	SINGLE FMLY	2	\$13,465.76
MONTGOMERY COUNTY	0052560	SINGLE FMLY	6	\$207,480.56
MONTGOMERY COUNTY	0050414	SINGLE FMLY	5	\$130,525.52
MONTGOMERY COUNTY	0056753	SINGLE FMLY	3	\$60,871.13
MONTGOMERY COUNTY	0043159	SINGLE FMLY	4	\$101,630.32
MONTGOMERY COUNTY	0052121	SINGLE FMLY	5	\$57,188.52
MONTGOMERY COUNTY	0126146	SINGLE FMLY	10	\$91,559.67
MONTGOMERY COUNTY	0072479	SINGLE FMLY	4	\$68,849.77
MONTGOMERY COUNTY	0056639	SINGLE FMLY	3	\$68,889.02
MONTGOMERY COUNTY	0039855	SINGLE FMLY	2	\$12,054.00

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REGIONAL HAZARD MITIGATION PLAN – 2011 UPDATE

Community Name	Repetitive Loss #	Occupancy	Number of Losses	Total Paid
MONTGOMERY COUNTY	0026396	ASSMD CONDO	3	\$58,781.76
MONTGOMERY COUNTY	0025591	ASSMD CONDO	4	\$197,800.44
MONTGOMERY COUNTY	0036662	SINGLE FMLY	3	\$77,892.87
MONTGOMERY COUNTY	0018285	SINGLE FMLY	2	\$59,990.23
MONTGOMERY COUNTY	0097209	SINGLE FMLY	2	\$20,100.00
MONTGOMERY COUNTY	0182145	SINGLE FMLY	3	\$74,496.07
MONTGOMERY COUNTY	0013677	SINGLE FMLY	11	\$161,106.91
MONTGOMERY COUNTY	0036540	SINGLE FMLY	4	\$162,435.02
MONTGOMERY COUNTY	0122768	SINGLE FMLY	2	\$162,202.39
MONTGOMERY COUNTY	0097727	SINGLE FMLY	3	\$56,135.03
MONTGOMERY COUNTY	0112985	SINGLE FMLY	2	\$60,312.08
MONTGOMERY COUNTY	0115620	SINGLE FMLY	2	\$44,100.00
MONTGOMERY COUNTY	0098408	SINGLE FMLY	5	\$157,866.39
MONTGOMERY COUNTY	0068311	SINGLE FMLY	7	\$224,289.55
MONTGOMERY COUNTY	0036943	SINGLE FMLY	5	\$133,568.68
MONTGOMERY COUNTY	0068312	SINGLE FMLY	7	\$201,304.97
MONTGOMERY COUNTY	0112982	SINGLE FMLY	3	\$99,873.04
MONTGOMERY COUNTY	0112995	SINGLE FMLY	3	\$130,780.88
MONTGOMERY COUNTY	0036942	SINGLE FMLY	5	\$137,528.77
MONTGOMERY COUNTY	0112994	SINGLE FMLY	3	\$106,360.84
MONTGOMERY COUNTY	0113886	SINGLE FMLY	3	\$129,509.00
MONTGOMERY COUNTY	0112541	SINGLE FMLY	3	\$72,557.32
MONTGOMERY COUNTY	0098434	SINGLE FMLY	2	\$170,976.86
MONTGOMERY COUNTY	0100421	SINGLE FMLY	2	\$239,077.01
MONTGOMERY COUNTY	0101088	SINGLE FMLY	2	\$162,176.42
MONTGOMERY COUNTY	0018431	SINGLE FMLY	2	\$58,405.22
MONTGOMERY COUNTY	0177106	SINGLE FMLY	2	\$13,935.60
MONTGOMERY COUNTY	0098374	SINGLE FMLY	2	\$122,191.59
MONTGOMERY COUNTY	0106768	SINGLE FMLY	2	\$108,181.36

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Community Name	Repetitive Loss #	Occupancy	Number of Losses	Total Paid
MONTGOMERY COUNTY	0068313	SINGLE FMLY	3	\$110,054.60
MONTGOMERY COUNTY	0013208	SINGLE FMLY	5	\$183,913.55
MONTGOMERY COUNTY	0054892	SINGLE FMLY	6	\$85,793.66
MONTGOMERY COUNTY	0100239	SINGLE FMLY	2	\$3,487.29
MONTGOMERY COUNTY	0168587	SINGLE FMLY	2	\$29,174.15
MONTGOMERY COUNTY	0121921	SINGLE FMLY	2	\$45,331.54
MONTGOMERY COUNTY	0115124	SINGLE FMLY	3	\$139,564.30
MONTGOMERY COUNTY	0114908	SINGLE FMLY	3	\$113,401.53
MONTGOMERY COUNTY	0042527	SINGLE FMLY	11	\$497,958.85
MONTGOMERY COUNTY	0017787	SINGLE FMLY	7	\$292,783.91
MONTGOMERY COUNTY	0098424	SINGLE FMLY	4	\$160,275.51
MONTGOMERY COUNTY	0108779	SINGLE FMLY	3	\$75,418.00
MONTGOMERY COUNTY	0114355	SINGLE FMLY	3	\$142,373.19
MONTGOMERY COUNTY	0178785	SINGLE FMLY	2	\$111,081.08
MONTGOMERY COUNTY	0098426	SINGLE FMLY	2	\$146,583.68
MONTGOMERY COUNTY	0071548	SINGLE FMLY	4	\$73,787.43
MONTGOMERY COUNTY	0068560	SINGLE FMLY	2	\$50,731.70
MONTGOMERY COUNTY	0026071	SINGLE FMLY	2	\$63,098.36
MONTGOMERY COUNTY	0097465	SINGLE FMLY	3	\$227,587.23
MONTGOMERY COUNTY	0068304	SINGLE FMLY	2	\$57,818.65
MONTGOMERY COUNTY	0168146	SINGLE FMLY	2	\$17,090.96
MONTGOMERY COUNTY	0134846	SINGLE FMLY	2	\$9,704.39
MONTGOMERY COUNTY	0018354	SINGLE FMLY	2	\$5,615.71
MONTGOMERY COUNTY	0018358	SINGLE FMLY	3	\$9,704.36
MONTGOMERY COUNTY	0018534	SINGLE FMLY	3	\$11,035.15
MONTGOMERY COUNTY	0018349	SINGLE FMLY	3	\$20,055.54
MONTGOMERY COUNTY	0018673	SINGLE FMLY	2	\$16,252.54
MONTGOMERY COUNTY	0121927	SINGLE FMLY	2	\$122,443.38
MONTGOMERY COUNTY	0114173	SINGLE FMLY	2	\$6,883.54

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Community Name	Repetitive Loss #	Occupancy	Number of Losses	Total Paid
MONTGOMERY COUNTY	0100232	SINGLE FMLY	2	\$90,209.06
MONTGOMERY COUNTY	0097135	SINGLE FMLY	3	\$120,347.38
MONTGOMERY COUNTY	0076300	SINGLE FMLY	2	\$62,867.71
MONTGOMERY COUNTY	0168138	SINGLE FMLY	2	\$10,804.13
MONTGOMERY COUNTY	0178838	SINGLE FMLY	2	\$26,803.27
MONTGOMERY COUNTY	0180251	SINGLE FMLY	2	\$114,887.53
MONTGOMERY COUNTY	0013155	SINGLE FMLY	2	\$23,826.92
MONTGOMERY COUNTY	0094763	SINGLE FMLY	3	\$167,884.46
MONTGOMERY COUNTY	0121020	SINGLE FMLY	3	\$55,612.96
MONTGOMERY COUNTY	0072150	SINGLE FMLY	4	\$220,816.63
MONTGOMERY COUNTY	0071784	SINGLE FMLY	3	\$46,513.95
MONTGOMERY COUNTY	0006685	SINGLE FMLY	4	\$18,239.06
MONTGOMERY COUNTY	0100207	SINGLE FMLY	7	\$230,468.98
MONTGOMERY COUNTY	0098335	SINGLE FMLY	2	\$32,996.62
MONTGOMERY COUNTY	0018391	SINGLE FMLY	4	\$32,843.92
MONTGOMERY COUNTY	0113961	SINGLE FMLY	2	\$133,631.47
MONTGOMERY COUNTY	0073572	SINGLE FMLY	4	\$116,788.19
MONTGOMERY COUNTY	0025778	SINGLE FMLY	4	\$42,605.99
MONTGOMERY COUNTY	0018371	SINGLE FMLY	3	\$60,372.19
MONTGOMERY COUNTY	0017815	SINGLE FMLY	3	\$15,185.06
MONTGOMERY COUNTY	0025832	SINGLE FMLY	6	\$114,407.21
MONTGOMERY COUNTY	0025512	SINGLE FMLY	3	\$24,355.28
MONTGOMERY COUNTY	0037535	SINGLE FMLY	3	\$28,657.68
MONTGOMERY COUNTY	0037627	SINGLE FMLY	2	\$12,795.88
MONTGOMERY COUNTY	0037527	SINGLE FMLY	2	\$46,460.15
MONTGOMERY COUNTY	0025731	SINGLE FMLY	3	\$25,206.38
MONTGOMERY COUNTY	0018485	SINGLE FMLY	3	\$6,534.73
MONTGOMERY COUNTY	0037443	2-4 FAMILY	2	\$41,381.37
MONTGOMERY COUNTY	0018335	SINGLE FMLY	3	\$33,154.21

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REGIONAL HAZARD MITIGATION PLAN – 2011 UPDATE

Community Name	Repetitive Loss #	Occupancy	Number of Losses	Total Paid
MONTGOMERY COUNTY	0005547	SINGLE FMLY	4	\$29,541.71
MONTGOMERY COUNTY	0018386	SINGLE FMLY	3	\$65,442.40
MONTGOMERY COUNTY	0034224	SINGLE FMLY	2	\$2,593.65
MONTGOMERY COUNTY	0126890	SINGLE FMLY	5	\$202,565.43
MONTGOMERY COUNTY	0018330	SINGLE FMLY	5	\$116,794.95
MONTGOMERY COUNTY	0040501	SINGLE FMLY	3	\$61,960.10
MONTGOMERY COUNTY	0026257	SINGLE FMLY	3	\$46,955.15
MONTGOMERY COUNTY	0018342	SINGLE FMLY	2	\$66,442.76
MONTGOMERY COUNTY	0036587	SINGLE FMLY	5	\$113,326.10
MONTGOMERY COUNTY	0025656	SINGLE FMLY	4	\$60,943.09
MONTGOMERY COUNTY	0097311	NON RESIDNT	3	\$47,789.06
MONTGOMERY COUNTY	0180892	SINGLE FMLY	2	\$40,326.90
MONTGOMERY COUNTY	0121551	SINGLE FMLY	3	\$81,844.88
MONTGOMERY COUNTY	0188332	SINGLE FMLY	2	\$57,318.76
MONTGOMERY COUNTY	0068996	ASSMD CONDO	2	\$151,825.19
MONTGOMERY COUNTY	0037937	ASSMD CONDO	2	\$55,442.74
MONTGOMERY COUNTY	0036940	ASSMD CONDO	3	\$185,690.26
MONTGOMERY COUNTY	0098515	SINGLE FMLY	2	\$44,445.74
MONTGOMERY COUNTY	0040488	SINGLE FMLY	3	\$85,173.31
MONTGOMERY COUNTY	0097236	SINGLE FMLY	4	\$28,653.93
MONTGOMERY COUNTY	0098817	NON RESIDNT	2	\$61,062.15
MONTGOMERY COUNTY	0100334	SINGLE FMLY	2	\$128,988.47
MONTGOMERY COUNTY	0099489	SINGLE FMLY	2	\$314,860.98
MONTGOMERY COUNTY	0104536	SINGLE FMLY	2	\$233,314.89
MONTGOMERY COUNTY	0098347	SINGLE FMLY	2	\$192,747.20
MONTGOMERY COUNTY	0099135	SINGLE FMLY	2	\$161,735.84
MONTGOMERY COUNTY	0098480	SINGLE FMLY	2	\$169,372.84
MONTGOMERY COUNTY	0073519	SINGLE FMLY	4	\$197,799.50
MONTGOMERY COUNTY	0071540	SINGLE FMLY	2	\$14,193.39

HOUSTON-GALVESTON AREA COUNCIL
REGIONAL HAZARD MITIGATION PLAN – 2011 UPDATE

Community Name	Repetitive Loss #	Occupancy	Number of Losses	Total Paid
MONTGOMERY COUNTY	0025618	SINGLE FMLY	3	\$45,064.35
MONTGOMERY COUNTY	0002388	SINGLE FMLY	10	\$134,198.16
MONTGOMERY COUNTY	0099481	SINGLE FMLY	2	\$59,501.24
MONTGOMERY COUNTY	0098337	SINGLE FMLY	3	\$87,591.68
MONTGOMERY COUNTY	0018451	SINGLE FMLY	2	\$20,914.90
MONTGOMERY COUNTY	0051422	SINGLE FMLY	8	\$142,472.80
MONTGOMERY COUNTY	0007167	SINGLE FMLY	7	\$73,429.16
MONTGOMERY COUNTY	0026117	SINGLE FMLY	6	\$85,359.24
MONTGOMERY COUNTY	0092003	SINGLE FMLY	5	\$67,827.85
MONTGOMERY COUNTY	0113037	SINGLE FMLY	3	\$111,611.19
MONTGOMERY COUNTY	0036941	SINGLE FMLY	5	\$87,895.82
MONTGOMERY COUNTY	0179823	SINGLE FMLY	2	\$170,638.50
MONTGOMERY COUNTY	0097184	SINGLE FMLY	2	\$36,333.00
MONTGOMERY COUNTY	0097092	SINGLE FMLY	2	\$27,877.51
MONTGOMERY COUNTY	0097090	SINGLE FMLY	2	\$27,843.66
MONTGOMERY COUNTY	0122145	SINGLE FMLY	3	\$98,559.40
MONTGOMERY COUNTY	0018295	SINGLE FMLY	2	\$12,034.48
MONTGOMERY COUNTY	0070286	SINGLE FMLY	4	\$441,148.86
MONTGOMERY COUNTY	0179739	SINGLE FMLY	3	\$18,859.34
MONTGOMERY COUNTY	0100216	SINGLE FMLY	2	\$139,131.68
MONTGOMERY COUNTY	0098375	SINGLE FMLY	2	\$87,279.64
MONTGOMERY COUNTY	0115545	SINGLE FMLY	3	\$131,008.62
MONTGOMERY COUNTY	0068564	SINGLE FMLY	3	\$16,310.37
MONTGOMERY COUNTY	0127945	SINGLE FMLY	3	\$77,174.77
MONTGOMERY COUNTY	0017796	SINGLE FMLY	17	\$385,339.19
MONTGOMERY COUNTY	0018360	SINGLE FMLY	4	\$20,491.12
MONTGOMERY COUNTY	0018476	ASSMD CONDO	4	\$26,178.67
MONTGOMERY COUNTY	0018477	SINGLE FMLY	3	\$10,033.42
MONTGOMERY COUNTY	0038343	SINGLE FMLY	2	\$5,895.25

HOUSTON-GALVESTON AREA COUNCIL
REGIONAL HAZARD MITIGATION PLAN – 2011 UPDATE

Community Name	Repetitive Loss #	Occupancy	Number of Losses	Total Paid
MONTGOMERY COUNTY	0018362	SINGLE FMLY	5	\$23,301.24
MONTGOMERY COUNTY	0025760	SINGLE FMLY	5	\$74,349.06
MONTGOMERY COUNTY	0095350	SINGLE FMLY	5	\$71,823.92
MONTGOMERY COUNTY	0026791	SINGLE FMLY	3	\$17,397.97
MONTGOMERY COUNTY	0070113	SINGLE FMLY	3	\$86,093.63
MONTGOMERY COUNTY	0070102	SINGLE FMLY	3	\$87,483.10
MONTGOMERY COUNTY	0069948	SINGLE FMLY	3	\$63,904.11
MONTGOMERY COUNTY	0068240	SINGLE FMLY	4	\$171,761.35
MONTGOMERY COUNTY	0098349	SINGLE FMLY	4	\$157,866.86
MONTGOMERY COUNTY	0098940	SINGLE FMLY	2	\$48,957.41
MONTGOMERY COUNTY	0055530	SINGLE FMLY	4	\$127,661.12
MONTGOMERY COUNTY	0018351	SINGLE FMLY	2	\$31,250.85
MONTGOMERY COUNTY	0048217	SINGLE FMLY	2	\$2,595.00
MONTGOMERY COUNTY	0097640	SINGLE FMLY	2	\$10,614.54
MONTGOMERY COUNTY	0125985	SINGLE FMLY	2	\$40,506.13
MONTGOMERY COUNTY	0127061	SINGLE FMLY	2	\$70,877.67
MONTGOMERY COUNTY	0069700	SINGLE FMLY	2	\$12,949.17
MONTGOMERY COUNTY	0068239	SINGLE FMLY	2	\$36,216.00
MONTGOMERY COUNTY	0097111	SINGLE FMLY	6	\$71,741.24
MONTGOMERY COUNTY	0002628	SINGLE FMLY	7	\$304,413.94
MONTGOMERY COUNTY	0003926	SINGLE FMLY	3	\$107,622.81
MONTGOMERY COUNTY	0005795	ASSMD CONDO	10	\$307,807.22
MONTGOMERY COUNTY	0044267	SINGLE FMLY	4	\$114,605.11
MONTGOMERY COUNTY	0097494	SINGLE FMLY	2	\$5,957.96
MONTGOMERY COUNTY	0018297	SINGLE FMLY	4	\$220,087.18
MONTGOMERY COUNTY	0018357	SINGLE FMLY	2	\$62,627.42
MONTGOMERY COUNTY	0012872	SINGLE FMLY	2	\$9,939.34
MONTGOMERY COUNTY	0068946	SINGLE FMLY	8	\$338,259.75
MONTGOMERY COUNTY	0036470	SINGLE FMLY	7	\$185,375.15

HOUSTON-GALVESTON AREA COUNCIL
REGIONAL HAZARD MITIGATION PLAN – 2011 UPDATE

Community Name	Repetitive Loss #	Occupancy	Number of Losses	Total Paid
MONTGOMERY COUNTY	0114039	ASSMD CONDO	2	\$607,478.50
MONTGOMERY COUNTY	0077858	SINGLE FMLY	2	\$80,009.74
MONTGOMERY COUNTY	0097123	SINGLE FMLY	5	\$34,206.03
MONTGOMERY COUNTY	0112830	SINGLE FMLY	2	\$9,213.85
MONTGOMERY COUNTY	0070926	SINGLE FMLY	2	\$31,300.00
MONTGOMERY COUNTY	0070281	SINGLE FMLY	2	\$98,400.00
MONTGOMERY COUNTY	0070669	SINGLE FMLY	2	\$71,949.92
MONTGOMERY COUNTY	0116930	SINGLE FMLY	2	\$140,457.37
MONTGOMERY COUNTY	0071440	SINGLE FMLY	2	\$55,157.29
MONTGOMERY COUNTY	0007460	SINGLE FMLY	4	\$96,499.50
MONTGOMERY COUNTY	0117084	SINGLE FMLY	3	\$107,961.98
MONTGOMERY COUNTY	0055818	SINGLE FMLY	2	\$58,524.64
MONTGOMERY COUNTY	0071435	SINGLE FMLY	2	\$59,169.67
MONTGOMERY COUNTY	0038562	SINGLE FMLY	3	\$8,772.77
MONTGOMERY COUNTY	0002636	SINGLE FMLY	4	\$20,593.78
MONTGOMERY COUNTY	0037803	SINGLE FMLY	3	\$29,714.97
MONTGOMERY COUNTY	0070304	SINGLE FMLY	2	\$29,240.42
MONTGOMERY COUNTY	0007429	SINGLE FMLY	2	\$6,586.14
MONTGOMERY COUNTY	0013166	SINGLE FMLY	9	\$80,304.79
MONTGOMERY COUNTY	0003024	SINGLE FMLY	2	\$9,727.92
MONTGOMERY COUNTY	0040257	SINGLE FMLY	4	\$58,422.29
MONTGOMERY COUNTY	0018361	SINGLE FMLY	5	\$31,180.07
MONTGOMERY COUNTY	0025801	ASSMD CONDO	4	\$24,771.05
MONTGOMERY COUNTY	0168606	SINGLE FMLY	2	\$55,558.88
MONTGOMERY COUNTY	0072153	SINGLE FMLY	2	\$80,664.22
MONTGOMERY COUNTY	0069799	SINGLE FMLY	4	\$94,005.51
MONTGOMERY COUNTY	0098880	SINGLE FMLY	3	\$90,213.91
MONTGOMERY COUNTY	0094853	SINGLE FMLY	3	\$99,191.34
MONTGOMERY COUNTY	0042557	SINGLE FMLY	2	\$57,213.54

HOUSTON-GALVESTON AREA COUNCIL
REGIONAL HAZARD MITIGATION PLAN – 2011 UPDATE

Community Name	Repetitive Loss #	Occupancy	Number of Losses	Total Paid
MONTGOMERY COUNTY	0068558	SINGLE FMLY	3	\$96,872.97
MONTGOMERY COUNTY	0041914	SINGLE FMLY	2	\$47,410.11
MONTGOMERY COUNTY	0026462	SINGLE FMLY	10	\$141,510.67
MONTGOMERY COUNTY	0017765	SINGLE FMLY	5	\$206,751.60
MONTGOMERY COUNTY	0038086	SINGLE FMLY	8	\$133,566.18
MONTGOMERY COUNTY	0042600	SINGLE FMLY	4	\$57,671.01
MONTGOMERY COUNTY	0039752	SINGLE FMLY	2	\$67,373.33
MONTGOMERY COUNTY	0069588	SINGLE FMLY	3	\$267,648.73
MONTGOMERY COUNTY	0038290	SINGLE FMLY	2	\$8,174.00
MONTGOMERY COUNTY	0071520	SINGLE FMLY	2	\$61,668.11
MONTGOMERY COUNTY	0018488	SINGLE FMLY	4	\$41,201.72
MONTGOMERY COUNTY	0168149	SINGLE FMLY	4	\$106,208.77
MONTGOMERY COUNTY	0068565	SINGLE FMLY	3	\$5,800.35
MONTGOMERY COUNTY	0000106	SINGLE FMLY	5	\$141,305.87
MONTGOMERY COUNTY	0006517	SINGLE FMLY	13	\$273,735.89
MONTGOMERY COUNTY	0013136	SINGLE FMLY	3	\$41,922.82
MONTGOMERY COUNTY	0038543	SINGLE FMLY	2	\$38,467.55
MONTGOMERY COUNTY	0167873	SINGLE FMLY	2	\$70,506.45
MONTGOMERY COUNTY	0099064	SINGLE FMLY	3	\$72,371.25
MONTGOMERY COUNTY	0025183	SINGLE FMLY	3	\$69,708.54
MONTGOMERY COUNTY	0115658	SINGLE FMLY	2	\$51,033.40
MONTGOMERY COUNTY	0117659	SINGLE FMLY	2	\$70,185.09
MONTGOMERY COUNTY	0017774	SINGLE FMLY	7	\$592,630.27
MONTGOMERY COUNTY	0098458	SINGLE FMLY	3	\$155,722.36
MONTGOMERY COUNTY	0068947	SINGLE FMLY	6	\$160,413.52
MONTGOMERY COUNTY	0045698	SINGLE FMLY	4	\$98,681.89
MONTGOMERY COUNTY	0014088	SINGLE FMLY	4	\$125,877.80
MONTGOMERY COUNTY	0071464	SINGLE FMLY	2	\$41,152.54
MONTGOMERY COUNTY	0104501	NON RESIDNT	3	\$12,373.70

HOUSTON-GALVESTON AREA COUNCIL
REGIONAL HAZARD MITIGATION PLAN – 2011 UPDATE

Community Name	Repetitive Loss #	Occupancy	Number of Losses	Total Paid
MONTGOMERY COUNTY	0014119	SINGLE FMLY	8	\$246,442.99
MONTGOMERY COUNTY	0069848	SINGLE FMLY	2	\$41,240.14
MONTGOMERY COUNTY	0158747	SINGLE FMLY	2	\$4,533.29
MONTGOMERY COUNTY	0073536	SINGLE FMLY	4	\$90,281.99
MONTGOMERY COUNTY	0168455	SINGLE FMLY	2	\$29,367.72
MONTGOMERY COUNTY	0185835	SINGLE FMLY	2	\$20,871.87
MONTGOMERY COUNTY	0047050	SINGLE FMLY	2	\$31,047.18
MONTGOMERY COUNTY	0018420	SINGLE FMLY	2	\$13,132.40
MONTGOMERY COUNTY	0025651	SINGLE FMLY	2	\$16,131.60
MONTGOMERY COUNTY	0034359	SINGLE FMLY	6	\$107,156.59
MONTGOMERY COUNTY	0041518	SINGLE FMLY	2	\$41,556.68
MONTGOMERY COUNTY	0000473	SINGLE FMLY	9	\$332,094.33
MONTGOMERY COUNTY	0097809	SINGLE FMLY	2	\$14,213.99
MONTGOMERY COUNTY	0069719	SINGLE FMLY	2	\$87,262.00
MONTGOMERY COUNTY	0188813	SINGLE FMLY	2	\$46,699.54
MONTGOMERY COUNTY	0098638	SINGLE FMLY	2	\$57,854.13
MONTGOMERY COUNTY	0120024	SINGLE FMLY	7	\$108,879.12
MONTGOMERY COUNTY	0126847	SINGLE FMLY	2	\$24,687.97
MONTGOMERY COUNTY	0098404	SINGLE FMLY	2	\$28,886.57
MONTGOMERY COUNTY	0043782	SINGLE FMLY	2	\$6,166.71
MONTGOMERY COUNTY	0073584	SINGLE FMLY	5	\$119,348.25
MONTGOMERY COUNTY	0182297	SINGLE FMLY	3	\$137,889.42
MONTGOMERY COUNTY	0051702	SINGLE FMLY	2	\$22,750.07
MONTGOMERY COUNTY	0098388	SINGLE FMLY	2	\$7,128.74
MONTGOMERY COUNTY	0037283	SINGLE FMLY	9	\$233,449.53
MONTGOMERY COUNTY	0091285	SINGLE FMLY	4	\$107,993.88
MONTGOMERY COUNTY	0072133	SINGLE FMLY	3	\$108,993.68
MONTGOMERY COUNTY	0125993	SINGLE FMLY	3	\$49,517.37
MONTGOMERY COUNTY	0098441	SINGLE FMLY	3	\$163,519.96

HOUSTON-GALVESTON AREA COUNCIL
REGIONAL HAZARD MITIGATION PLAN – 2011 UPDATE

Community Name	Repetitive Loss #	Occupancy	Number of Losses	Total Paid
MONTGOMERY COUNTY	0025446	SINGLE FMLY	2	\$4,910.68
MONTGOMERY COUNTY	0034353	ASSMD CONDO	6	\$58,215.81
MONTGOMERY COUNTY	0043872	SINGLE FMLY	7	\$60,490.53
MONTGOMERY COUNTY	0037951	SINGLE FMLY	2	\$25,089.40
MONTGOMERY COUNTY	0038157	SINGLE FMLY	2	\$23,746.93
MONTGOMERY COUNTY	0109081	SINGLE FMLY	5	\$243,400.63
MONTGOMERY COUNTY	0070559	SINGLE FMLY	9	\$293,015.72
MONTGOMERY COUNTY	0098348	SINGLE FMLY	3	\$38,816.09
MONTGOMERY COUNTY	0115708	SINGLE FMLY	2	\$67,738.81
MONTGOMERY COUNTY	0012897	SINGLE FMLY	3	\$29,441.70
MONTGOMERY COUNTY	0037416	SINGLE FMLY	4	\$21,843.31
MONTGOMERY COUNTY	0002364	SINGLE FMLY	3	\$18,278.60
MONTGOMERY COUNTY	0037572	SINGLE FMLY	5	\$96,734.01
MONTGOMERY COUNTY	0104390	SINGLE FMLY	2	\$82,163.86
MONTGOMERY COUNTY	0098344	SINGLE FMLY	2	\$83,895.83
MONTGOMERY COUNTY	0097181	SINGLE FMLY	2	\$144,612.92
MONTGOMERY COUNTY	0018468	SINGLE FMLY	2	\$20,827.29
MONTGOMERY COUNTY	0025846	SINGLE FMLY	3	\$14,751.55
MONTGOMERY COUNTY	0188852	SINGLE FMLY	2	\$11,993.51
MONTGOMERY COUNTY	0098336	SINGLE FMLY	3	\$87,031.35
MONTGOMERY COUNTY	0181058	SINGLE FMLY	2	\$55,272.85
MONTGOMERY COUNTY	0025691	SINGLE FMLY	5	\$52,946.60
MONTGOMERY COUNTY	0073472	SINGLE FMLY	2	\$52,951.44
MONTGOMERY COUNTY	0017800	SINGLE FMLY	4	\$45,147.48
MONTGOMERY COUNTY	0004230	SINGLE FMLY	6	\$125,189.16
MONTGOMERY COUNTY	0070083	SINGLE FMLY	4	\$155,338.75
MONTGOMERY COUNTY	0187013	SINGLE FMLY	2	\$50,616.22
MONTGOMERY COUNTY	0071517	SINGLE FMLY	7	\$293,772.10
MONTGOMERY COUNTY	0096976	SINGLE FMLY	6	\$211,704.45

HOUSTON-GALVESTON AREA COUNCIL
REGIONAL HAZARD MITIGATION PLAN – 2011 UPDATE

Community Name	Repetitive Loss #	Occupancy	Number of Losses	Total Paid
MONTGOMERY COUNTY	0091256	SINGLE FMLY	4	\$261,750.03
MONTGOMERY COUNTY	0018411	ASSMD CONDO	9	\$317,046.79
MONTGOMERY COUNTY	0007538	2-4 FAMILY	7	\$283,073.20
MONTGOMERY COUNTY	0018302	SINGLE FMLY	2	\$27,414.45
MONTGOMERY COUNTY	0115657	SINGLE FMLY	2	\$58,781.69
MONTGOMERY COUNTY	0098454	SINGLE FMLY	3	\$182,452.48
MONTGOMERY COUNTY	0073576	SINGLE FMLY	3	\$130,444.05
MONTGOMERY COUNTY	0076292	SINGLE FMLY	4	\$144,054.27
MONTGOMERY COUNTY	0070284	SINGLE FMLY	2	\$58,417.06
MONTGOMERY COUNTY	0038870	SINGLE FMLY	2	\$5,506.32
MONTGOMERY COUNTY	0069701	SINGLE FMLY	2	\$20,520.54
MONTGOMERY COUNTY	0169636	SINGLE FMLY	2	\$21,947.45
MONTGOMERY COUNTY	0025825	SINGLE FMLY	2	\$15,992.00
MONTGOMERY COUNTY	0018301	SINGLE FMLY	3	\$67,895.28
MONTGOMERY COUNTY	0098419	SINGLE FMLY	3	\$67,009.51
MONTGOMERY COUNTY	0099209	SINGLE FMLY	2	\$14,905.35
MONTGOMERY COUNTY	0097183	SINGLE FMLY	2	\$98,064.45
MONTGOMERY COUNTY	0072081	SINGLE FMLY	2	\$50,500.00
MONTGOMERY COUNTY	0003543	SINGLE FMLY	4	\$75,785.13
MONTGOMERY COUNTY	0106757	SINGLE FMLY	2	\$128,261.81
MONTGOMERY COUNTY	0018287	SINGLE FMLY	2	\$61,018.90
MONTGOMERY COUNTY	0056828	SINGLE FMLY	5	\$14,637.17
MONTGOMERY COUNTY	0037563	SINGLE FMLY	5	\$105,225.86
MONTGOMERY COUNTY	0068293	SINGLE FMLY	3	\$25,094.25
MONTGOMERY COUNTY	0168898	SINGLE FMLY	2	\$132,077.28
MONTGOMERY COUNTY	0126461	SINGLE FMLY	2	\$16,010.50
MONTGOMERY COUNTY	0100433	SINGLE FMLY	4	\$233,711.04
MONTGOMERY COUNTY	0186800	SINGLE FMLY	2	\$43,922.51
MONTGOMERY COUNTY	0100215	SINGLE FMLY	6	\$86,970.26

HOUSTON-GALVESTON AREA COUNCIL
REGIONAL HAZARD MITIGATION PLAN – 2011 UPDATE

Community Name	Repetitive Loss #	Occupancy	Number of Losses	Total Paid
MONTGOMERY COUNTY	0025872	SINGLE FMLY	2	\$5,393.39
MONTGOMERY COUNTY	0018310	SINGLE FMLY	3	\$11,859.90
MONTGOMERY COUNTY	0121393	SINGLE FMLY	2	\$12,627.24
MONTGOMERY COUNTY	0098340	SINGLE FMLY	3	\$142,029.78
MONTGOMERY COUNTY	0115995	SINGLE FMLY	2	\$105,109.97
MONTGOMERY COUNTY	0168443	SINGLE FMLY	2	\$50,823.99
MONTGOMERY COUNTY	0008424	SINGLE FMLY	3	\$37,297.77
MONTGOMERY COUNTY	0097172	SINGLE FMLY	2	\$15,800.00
MONTGOMERY COUNTY	0091267	SINGLE FMLY	3	\$96,946.80
MONTGOMERY COUNTY	0097168	2-4 FAMILY	4	\$42,994.55
MONTGOMERY COUNTY	0188091	SINGLE FMLY	2	\$24,200.66
MONTGOMERY COUNTY	0068572	SINGLE FMLY	2	\$13,835.76
MONTGOMERY COUNTY	0098438	SINGLE FMLY	2	\$123,708.44
MONTGOMERY COUNTY	0100341	SINGLE FMLY	3	\$149,786.50
MONTGOMERY COUNTY	0099047	SINGLE FMLY	2	\$126,172.63
MONTGOMERY COUNTY	0068574	SINGLE FMLY	3	\$159,259.16
MONTGOMERY COUNTY	0069643	SINGLE FMLY	3	\$28,186.30
MONTGOMERY COUNTY	0069822	SINGLE FMLY	4	\$58,753.38
MONTGOMERY COUNTY	0018383	SINGLE FMLY	3	\$7,150.65
MONTGOMERY COUNTY	0018363	SINGLE FMLY	3	\$9,714.13
MONTGOMERY COUNTY	0018768	SINGLE FMLY	2	\$5,471.74
MONTGOMERY COUNTY	0013259	SINGLE FMLY	5	\$74,141.53
MONTGOMERY COUNTY	0037253	SINGLE FMLY	3	\$33,569.16
MONTGOMERY COUNTY	0036350	SINGLE FMLY	2	\$27,487.09
MONTGOMERY COUNTY	0018359	SINGLE FMLY	2	\$5,397.07
MONTGOMERY COUNTY	0071574	SINGLE FMLY	3	\$76,251.16
MONTGOMERY COUNTY	0068040	SINGLE FMLY	6	\$161,620.17
MONTGOMERY COUNTY	0072012	SINGLE FMLY	2	\$26,809.05
MONTGOMERY COUNTY	0017803	SINGLE FMLY	5	\$255,298.68

HOUSTON-GALVESTON AREA COUNCIL
REGIONAL HAZARD MITIGATION PLAN – 2011 UPDATE

Community Name	Repetitive Loss #	Occupancy	Number of Losses	Total Paid
MONTGOMERY COUNTY	0073512	SINGLE FMLY	5	\$288,216.76
MONTGOMERY COUNTY	0100330	SINGLE FMLY	2	\$232,600.00
MONTGOMERY COUNTY	0033277	SINGLE FMLY	5	\$178,821.04
MONTGOMERY COUNTY	0122031	SINGLE FMLY	2	\$86,222.22
MONTGOMERY COUNTY	0100329	SINGLE FMLY	2	\$103,524.75
MONTGOMERY COUNTY	0073513	SINGLE FMLY	3	\$118,325.76
MONTGOMERY COUNTY	0097046	SINGLE FMLY	2	\$174,764.05
MONTGOMERY COUNTY	0098687	SINGLE FMLY	3	\$157,327.43
MONTGOMERY COUNTY	0018315	SINGLE FMLY	3	\$65,603.87
MONTGOMERY COUNTY	0026360	SINGLE FMLY	4	\$69,728.35
MONTGOMERY COUNTY	0018318	SINGLE FMLY	4	\$55,008.04
MONTGOMERY COUNTY	0042711	SINGLE FMLY	2	\$46,742.62
MONTGOMERY COUNTY	0025441	SINGLE FMLY	24	\$470,756.62
MONTGOMERY COUNTY	0025424	SINGLE FMLY	17	\$177,095.51
MONTGOMERY COUNTY	0025078	SINGLE FMLY	3	\$43,964.36
MONTGOMERY COUNTY	0025079	SINGLE FMLY	14	\$209,765.02
MONTGOMERY COUNTY	0073538	SINGLE FMLY	2	\$69,386.09
MONTGOMERY COUNTY	0068571	SINGLE FMLY	3	\$43,692.70
MONTGOMERY COUNTY	0077183	SINGLE FMLY	2	\$29,676.13
MONTGOMERY COUNTY	0112978	SINGLE FMLY	2	\$58,051.62
MONTGOMERY COUNTY	0182104	SINGLE FMLY	3	\$120,088.29
MONTGOMERY COUNTY	0106772	SINGLE FMLY	3	\$187,207.00
MONTGOMERY COUNTY	0097695	SINGLE FMLY	2	\$168,000.00
MONTGOMERY COUNTY	0018329	SINGLE FMLY	4	\$152,229.26
MONTGOMERY COUNTY	0115773	SINGLE FMLY	3	\$57,361.98
MONTGOMERY COUNTY	0122274	SINGLE FMLY	2	\$44,796.73
MONTGOMERY COUNTY	0018316	SINGLE FMLY	4	\$176,660.11
MONTGOMERY COUNTY	0018369	SINGLE FMLY	7	\$373,926.11
MONTGOMERY COUNTY	0026620	SINGLE FMLY	3	\$115,253.73

HOUSTON-GALVESTON AREA COUNCIL
REGIONAL HAZARD MITIGATION PLAN – 2011 UPDATE

Community Name	Repetitive Loss #	Occupancy	Number of Losses	Total Paid
MONTGOMERY COUNTY	0017780	SINGLE FMLY	6	\$222,743.07
MONTGOMERY COUNTY	0068562	SINGLE FMLY	5	\$244,145.31
MONTGOMERY COUNTY	0018314	SINGLE FMLY	6	\$376,433.67
MONTGOMERY COUNTY	0121458	SINGLE FMLY	2	\$66,240.76
MONTGOMERY COUNTY	0026093	SINGLE FMLY	6	\$402,269.51
MONTGOMERY COUNTY	0169085	SINGLE FMLY	2	\$72,003.55
MONTGOMERY COUNTY	0005530	SINGLE FMLY	2	\$9,403.97
MONTGOMERY COUNTY	0068325	SINGLE FMLY	6	\$138,020.14
MONTGOMERY COUNTY	0101587	ASSMD CONDO	3	\$79,259.23
MONTGOMERY COUNTY	0018288	SINGLE FMLY	2	\$20,423.51
MONTGOMERY COUNTY	0097098	SINGLE FMLY	2	\$30,708.11
MONTGOMERY COUNTY	0099133	SINGLE FMLY	2	\$39,754.14
MONTGOMERY COUNTY	0097096	SINGLE FMLY	2	\$27,233.32
MONTGOMERY COUNTY	0168664	SINGLE FMLY	2	\$53,306.27
MONTGOMERY COUNTY	0013108	SINGLE FMLY	2	\$7,449.98
MONTGOMERY COUNTY	0042052	SINGLE FMLY	5	\$121,105.90
MONTGOMERY COUNTY	0042543	SINGLE FMLY	3	\$7,246.14
MONTGOMERY COUNTY	0013016	SINGLE FMLY	15	\$226,001.41
MONTGOMERY COUNTY	0098546	SINGLE FMLY	2	\$6,494.20
MONTGOMERY COUNTY	0068039	SINGLE FMLY	3	\$29,090.33
MONTGOMERY COUNTY	0013490	SINGLE FMLY	8	\$179,097.13
MONTGOMERY COUNTY	0126733	SINGLE FMLY	2	\$20,893.07
MONTGOMERY COUNTY	0071555	SINGLE FMLY	3	\$75,145.23
MONTGOMERY COUNTY	0112955	SINGLE FMLY	3	\$96,708.01
MONTGOMERY COUNTY	0025471	SINGLE FMLY	9	\$99,570.36
MONTGOMERY COUNTY	0043074	SINGLE FMLY	3	\$6,782.10
MONTGOMERY COUNTY	0013178	SINGLE FMLY	11	\$69,044.09
MONTGOMERY COUNTY	0002360	SINGLE FMLY	3	\$10,483.77
MONTGOMERY COUNTY	0001894	SINGLE FMLY	8	\$54,999.41

HOUSTON-GALVESTON AREA COUNCIL
REGIONAL HAZARD MITIGATION PLAN – 2011 UPDATE

Community Name	Repetitive Loss #	Occupancy	Number of Losses	Total Paid
MONTGOMERY COUNTY	0179757	SINGLE FMLY	2	\$110,425.38
MONTGOMERY COUNTY	0018311	SINGLE FMLY	2	\$7,504.86
MONTGOMERY COUNTY	0114397	SINGLE FMLY	2	\$58,070.31
MONTGOMERY COUNTY	0180891	SINGLE FMLY	2	\$67,044.73
MONTGOMERY COUNTY	0116380	SINGLE FMLY	6	\$343,046.04
MONTGOMERY COUNTY	0091472	SINGLE FMLY	4	\$166,187.27
MONTGOMERY COUNTY	0106771	SINGLE FMLY	3	\$137,096.27
MONTGOMERY COUNTY	0026254	SINGLE FMLY	4	\$92,445.44
MONTGOMERY COUNTY	0017779	SINGLE FMLY	5	\$232,253.69
MONTGOMERY COUNTY	0040946	SINGLE FMLY	6	\$433,551.03
MONTGOMERY COUNTY	0106770	SINGLE FMLY	2	\$153,021.88
MONTGOMERY COUNTY	0068570	SINGLE FMLY	6	\$221,255.50
MONTGOMERY COUNTY	0121026	SINGLE FMLY	2	\$92,549.69
MONTGOMERY COUNTY	0018278	SINGLE FMLY	2	\$61,871.28
MONTGOMERY COUNTY	0100331	SINGLE FMLY	2	\$187,295.14
MONTGOMERY COUNTY	0098330	SINGLE FMLY	2	\$169,301.40
MONTGOMERY COUNTY	0178120	SINGLE FMLY	2	\$105,606.94
MONTGOMERY COUNTY	0037188	SINGLE FMLY	3	\$73,882.54
MONTGOMERY COUNTY	0068300	SINGLE FMLY	2	\$14,245.41
MONTGOMERY COUNTY	0096804	ASSMD CONDO	3	\$255,475.65
MONTGOMERY COUNTY	0097089	SINGLE FMLY	3	\$27,383.02
MONTGOMERY COUNTY	0097604	SINGLE FMLY	3	\$102,767.70
MONTGOMERY COUNTY	0116258	SINGLE FMLY	2	\$41,073.24
MONTGOMERY COUNTY	0123072	SINGLE FMLY	4	\$28,638.60
MONTGOMERY COUNTY	0040341	SINGLE FMLY	6	\$25,087.67
MONTGOMERY COUNTY	0012976	SINGLE FMLY	4	\$13,600.55
MONTGOMERY COUNTY	0045584	SINGLE FMLY	5	\$31,686.71
MONTGOMERY COUNTY	0068302	SINGLE FMLY	2	\$19,450.80
MONTGOMERY COUNTY	0097250	SINGLE FMLY	3	\$15,560.30

HOUSTON-GALVESTON AREA COUNCIL
REGIONAL HAZARD MITIGATION PLAN – 2011 UPDATE

Community Name	Repetitive Loss #	Occupancy	Number of Losses	Total Paid
MONTGOMERY COUNTY	0185552	SINGLE FMLY	2	\$10,005.46
MONTGOMERY COUNTY	0026169	SINGLE FMLY	4	\$121,565.56
MONTGOMERY COUNTY	0025540	SINGLE FMLY	3	\$35,393.68
MONTGOMERY COUNTY	0026474	SINGLE FMLY	2	\$3,732.79
MONTGOMERY COUNTY	0025545	SINGLE FMLY	5	\$23,364.03
MONTGOMERY COUNTY	0018406	SINGLE FMLY	3	\$18,156.09
MONTGOMERY COUNTY	0026775	SINGLE FMLY	4	\$32,769.34
MONTGOMERY COUNTY	0018700	SINGLE FMLY	3	\$36,617.19
MONTGOMERY COUNTY	0018313	SINGLE FMLY	2	\$20,818.27
MONTGOMERY COUNTY	0001518	SINGLE FMLY	6	\$41,176.12
MONTGOMERY COUNTY	0018281	SINGLE FMLY	3	\$41,549.59
MONTGOMERY COUNTY	0037428	SINGLE FMLY	4	\$28,060.54
MONTGOMERY COUNTY	0018282	SINGLE FMLY	3	\$24,341.94
MONTGOMERY COUNTY	0025837	SINGLE FMLY	3	\$41,502.88
MONTGOMERY COUNTY	0037504	SINGLE FMLY	2	\$23,142.70
MONTGOMERY COUNTY	0025554	SINGLE FMLY	5	\$92,136.35
MONTGOMERY COUNTY	0018389	SINGLE FMLY	5	\$64,637.53
MONTGOMERY COUNTY	0026392	SINGLE FMLY	3	\$62,407.03
MONTGOMERY COUNTY	0036233	SINGLE FMLY	4	\$120,579.61
MONTGOMERY COUNTY	0068995	SINGLE FMLY	3	\$48,529.86
MONTGOMERY COUNTY	0127851	SINGLE FMLY	2	\$9,481.89
MONTGOMERY COUNTY	0116009	SINGLE FMLY	2	\$23,619.07
MONTGOMERY COUNTY	0097235	SINGLE FMLY	2	\$66,791.08
MONTGOMERY COUNTY	0185901	SINGLE FMLY	2	\$12,864.42
MONTGOMERY COUNTY	0122580	SINGLE FMLY	2	\$65,878.84
MONTGOMERY COUNTY	0122533	SINGLE FMLY	2	\$150,062.87
MONTGOMERY COUNTY	0098870	SINGLE FMLY	4	\$218,404.60
MONTGOMERY COUNTY	0098442	SINGLE FMLY	4	\$187,234.31
MONTGOMERY COUNTY	0122378	SINGLE FMLY	2	\$191,718.21

HOUSTON-GALVESTON AREA COUNCIL
REGIONAL HAZARD MITIGATION PLAN – 2011 UPDATE

Community Name	Repetitive Loss #	Occupancy	Number of Losses	Total Paid
MONTGOMERY COUNTY	0097535	SINGLE FMLY	2	\$82,510.07
MONTGOMERY COUNTY	0098816	SINGLE FMLY	2	\$33,214.26
MONTGOMERY COUNTY	0001131	SINGLE FMLY	4	\$42,862.67
MONTGOMERY COUNTY	0167036	SINGLE FMLY	2	\$39,603.57
MONTGOMERY COUNTY	0169487	2-4 FAMILY	3	\$49,318.41
MONTGOMERY COUNTY	0186110	SINGLE FMLY	2	\$59,134.23
MONTGOMERY COUNTY	0070467	SINGLE FMLY	3	\$200,313.92
MONTGOMERY COUNTY	0097173	SINGLE FMLY	2	\$58,500.45
MONTGOMERY COUNTY	0097118	SINGLE FMLY	2	\$68,111.03
MONTGOMERY COUNTY	0126881	SINGLE FMLY	2	\$20,466.38
MONTGOMERY COUNTY	0108390	SINGLE FMLY	2	\$13,789.45
MONTGOMERY COUNTY	0113904	SINGLE FMLY	2	\$97,743.86
MONTGOMERY COUNTY	0018636	SINGLE FMLY	3	\$98,208.84
MONTGOMERY COUNTY	0018300	SINGLE FMLY	4	\$219,763.46
MONTGOMERY COUNTY	0097804	SINGLE FMLY	2	\$186,683.71
MONTGOMERY COUNTY	0119612	SINGLE FMLY	2	\$91,648.41
MONTGOMERY COUNTY	0098497	SINGLE FMLY	3	\$380,557.01
MONTGOMERY COUNTY	0018602	SINGLE FMLY	2	\$72,874.20
MONTGOMERY COUNTY	0098461	SINGLE FMLY	2	\$184,073.29
MONTGOMERY COUNTY	0100340	SINGLE FMLY	2	\$181,523.11
MONTGOMERY COUNTY	0097239	SINGLE FMLY	2	\$168,180.03
MONTGOMERY COUNTY	0025735	SINGLE FMLY	3	\$88,899.26
MONTGOMERY COUNTY	0100328	SINGLE FMLY	3	\$115,564.08
MONTGOMERY COUNTY	0098334	SINGLE FMLY	2	\$77,585.20
MONTGOMERY COUNTY	0120312	SINGLE FMLY	2	\$63,771.14
MONTGOMERY COUNTY	0126462	SINGLE FMLY	2	\$9,164.81
MONTGOMERY COUNTY	0073520	SINGLE FMLY	4	\$72,858.71
MONTGOMERY COUNTY	0185986	SINGLE FMLY	2	\$35,333.16
MONTGOMERY COUNTY	0122445	SINGLE FMLY	3	\$211,336.93

HOUSTON-GALVESTON AREA COUNCIL
REGIONAL HAZARD MITIGATION PLAN – 2011 UPDATE

Community Name	Repetitive Loss #	Occupancy	Number of Losses	Total Paid
MONTGOMERY COUNTY	0121478	SINGLE FMLY	2	\$26,570.57
MONTGOMERY COUNTY	0114873	SINGLE FMLY	2	\$66,524.30
MONTGOMERY COUNTY	0116027	SINGLE FMLY	2	\$76,112.76
MONTGOMERY COUNTY	0026204	SINGLE FMLY	2	\$70,127.64
MONTGOMERY COUNTY	0180107	SINGLE FMLY	2	\$27,667.18
MONTGOMERY COUNTY	0114951	SINGLE FMLY	2	\$180,507.99
MONTGOMERY COUNTY	0181794	SINGLE FMLY	2	\$13,513.50
MONTGOMERY COUNTY	0042969	SINGLE FMLY	3	\$20,164.78
MONTGOMERY COUNTY	0100324	SINGLE FMLY	3	\$120,396.33
MONTGOMERY COUNTY	0100325	SINGLE FMLY	2	\$109,324.44
MONTGOMERY COUNTY	0100326	SINGLE FMLY	2	\$76,707.02
MONTGOMERY COUNTY	0018710	SINGLE FMLY	2	\$7,325.64
MONTGOMERY COUNTY	0107884	SINGLE FMLY	4	\$30,353.40
MONTGOMERY COUNTY	0092052	SINGLE FMLY	2	\$5,144.60
MONTGOMERY COUNTY	0018334	SINGLE FMLY	2	\$41,124.63
MONTGOMERY COUNTY	0073493	SINGLE FMLY	2	\$40,700.00
MONTGOMERY COUNTY	0069940	SINGLE FMLY	2	\$57,997.97
MONTGOMERY COUNTY	0035903	SINGLE FMLY	5	\$117,415.80
MONTGOMERY COUNTY	0100233	SINGLE FMLY	3	\$149,450.69
MONTGOMERY COUNTY	0126259	SINGLE FMLY	2	\$12,271.42
MONTGOMERY COUNTY	0018702	SINGLE FMLY	4	\$106,991.55
MONTGOMERY COUNTY	0184024	SINGLE FMLY	2	\$98,532.27
MONTGOMERY COUNTY	0168520	SINGLE FMLY	2	\$11,803.32
MONTGOMERY COUNTY	0049557	SINGLE FMLY	4	\$116,028.98
MONTGOMERY COUNTY	0105376	SINGLE FMLY	11	\$372,332.05
MONTGOMERY COUNTY	0073528	SINGLE FMLY	3	\$32,350.42
MONTGOMERY COUNTY	0180898	SINGLE FMLY	2	\$92,692.49
MONTGOMERY COUNTY	0122377	SINGLE FMLY	2	\$47,458.27
MONTGOMERY COUNTY	0112865	SINGLE FMLY	2	\$139,451.36

HOUSTON-GALVESTON AREA COUNCIL
REGIONAL HAZARD MITIGATION PLAN – 2011 UPDATE

Community Name	Repetitive Loss #	Occupancy	Number of Losses	Total Paid
MONTGOMERY COUNTY	0045497	SINGLE FMLY	5	\$34,821.44
MONTGOMERY COUNTY	0180315	SINGLE FMLY	2	\$80,667.99
MONTGOMERY COUNTY	0178297	SINGLE FMLY	2	\$89,059.78
MONTGOMERY COUNTY	0113027	SINGLE FMLY	3	\$196,224.60
MONTGOMERY COUNTY	0100238	SINGLE FMLY	4	\$162,743.32
MONTGOMERY COUNTY	0178134	SINGLE FMLY	2	\$99,448.94
MONTGOMERY COUNTY	0120296	SINGLE FMLY	3	\$151,090.93
MONTGOMERY COUNTY	0153956	SINGLE FMLY	5	\$78,989.47
MONTGOMERY COUNTY	0025592	SINGLE FMLY	5	\$69,274.42
MONTGOMERY COUNTY	0025139	SINGLE FMLY	3	\$52,075.20
MONTGOMERY COUNTY	0018279	SINGLE FMLY	2	\$46,195.32
MONTGOMERY COUNTY	0018366	SINGLE FMLY	3	\$54,375.48
MONTGOMERY COUNTY	0026752	SINGLE FMLY	3	\$49,447.09
MONTGOMERY COUNTY	0026341	SINGLE FMLY	2	\$57,605.74
MONTGOMERY COUNTY	0042286	SINGLE FMLY	2	\$54,218.70
MONTGOMERY COUNTY	0025829	SINGLE FMLY	5	\$97,085.05
MONTGOMERY COUNTY	0025615	SINGLE FMLY	4	\$75,528.96
MONTGOMERY COUNTY	0026459	SINGLE FMLY	2	\$50,059.40
MONTGOMERY COUNTY	0034859	SINGLE FMLY	2	\$36,605.31
MONTGOMERY COUNTY	0077559	SINGLE FMLY	2	\$46,971.74
MONTGOMERY COUNTY	0013257	SINGLE FMLY	8	\$42,787.34
MONTGOMERY COUNTY	0037501	SINGLE FMLY	7	\$100,100.94
MONTGOMERY COUNTY	0013009	SINGLE FMLY	3	\$38,508.61
MONTGOMERY COUNTY	0097012	SINGLE FMLY	4	\$79,071.96
MONTGOMERY COUNTY	0178861	SINGLE FMLY	2	\$82,082.63
MONTGOMERY COUNTY	0037484	SINGLE FMLY	3	\$22,638.32
MONTGOMERY COUNTY	0048848	SINGLE FMLY	3	\$11,774.66
MONTGOMERY COUNTY	0037486	SINGLE FMLY	7	\$158,300.93
MONTGOMERY COUNTY	0037515	SINGLE FMLY	9	\$91,291.53

HOUSTON-GALVESTON AREA COUNCIL
REGIONAL HAZARD MITIGATION PLAN – 2011 UPDATE

Community Name	Repetitive Loss #	Occupancy	Number of Losses	Total Paid
MONTGOMERY COUNTY	0013014	SINGLE FMLY	4	\$26,518.93
MONTGOMERY COUNTY	0121496	SINGLE FMLY	2	\$54,780.57
MONTGOMERY COUNTY	0100364	SINGLE FMLY	3	\$109,103.87
MONTGOMERY COUNTY	0073570	SINGLE FMLY	3	\$170,020.59
MONTGOMERY COUNTY	0068944	SINGLE FMLY	3	\$196,203.99
MONTGOMERY COUNTY	0071485	SINGLE FMLY	2	\$54,525.99
MONTGOMERY COUNTY	0121082	SINGLE FMLY	4	\$111,647.91
MONTGOMERY COUNTY	0025703	SINGLE FMLY	8	\$429,958.13
MONTGOMERY COUNTY	0071582	SINGLE FMLY	3	\$134,370.76
MONTGOMERY COUNTY	0073571	SINGLE FMLY	3	\$201,361.90
MONTGOMERY COUNTY	0073575	SINGLE FMLY	7	\$490,035.98
MONTGOMERY COUNTY	0025790	SINGLE FMLY	2	\$54,060.11
MONTGOMERY COUNTY	0025624	SINGLE FMLY	7	\$436,736.70
MONTGOMERY COUNTY	0127232	SINGLE FMLY	2	\$17,259.40
MONTGOMERY COUNTY	0018368	SINGLE FMLY	6	\$42,646.14
MONTGOMERY COUNTY	0025601	SINGLE FMLY	2	\$16,959.68
MONTGOMERY COUNTY	0114854	SINGLE FMLY	2	\$83,618.29
MONTGOMERY COUNTY	0034223	SINGLE FMLY	3	\$60,579.27
MONTGOMERY COUNTY	0099138	SINGLE FMLY	2	\$85,687.22
MONTGOMERY COUNTY	0017801	SINGLE FMLY	2	\$58,652.55
MONTGOMERY COUNTY	0036956	SINGLE FMLY	2	\$61,224.38
MONTGOMERY COUNTY	0018341	SINGLE FMLY	5	\$121,777.62
MONTGOMERY COUNTY	0017802	SINGLE FMLY	3	\$55,650.51
MONTGOMERY COUNTY	0025450	SINGLE FMLY	2	\$34,999.50
MONTGOMERY COUNTY	0042047	SINGLE FMLY	2	\$46,337.80
MONTGOMERY COUNTY	0038147	SINGLE FMLY	2	\$23,347.27
MONTGOMERY COUNTY	0071589	SINGLE FMLY	2	\$41,152.92
MONTGOMERY COUNTY	0098396	OTHER RESID	2	\$94,207.70
MONTGOMERY COUNTY	0120959	SINGLE FMLY	2	\$90,935.05

HOUSTON-GALVESTON AREA COUNCIL
REGIONAL HAZARD MITIGATION PLAN – 2011 UPDATE

Community Name	Repetitive Loss #	Occupancy	Number of Losses	Total Paid
MONTGOMERY COUNTY	0112959	SINGLE FMLY	2	\$141,958.61
MONTGOMERY COUNTY	0037726	SINGLE FMLY	9	\$111,879.78
MONTGOMERY COUNTY	0098413	SINGLE FMLY	5	\$101,684.45
MONTGOMERY COUNTY	0116260	SINGLE FMLY	3	\$369,460.06
MONTGOMERY COUNTY	0115608	SINGLE FMLY	3	\$390,798.77
MONTGOMERY COUNTY	0116338	SINGLE FMLY	2	\$105,740.35
MONTGOMERY COUNTY	0115110	SINGLE FMLY	3	\$124,289.97
MONTGOMERY COUNTY	0068318	SINGLE FMLY	3	\$57,826.84
MONTGOMERY COUNTY	0100236	SINGLE FMLY	4	\$269,806.28
MONTGOMERY COUNTY	0113887	SINGLE FMLY	2	\$57,717.50
MONTGOMERY COUNTY	0118582	SINGLE FMLY	2	\$58,768.08
MONTGOMERY COUNTY	0114041	SINGLE FMLY	3	\$131,672.03
MONTGOMERY COUNTY	0045293	SINGLE FMLY	2	\$22,244.05
MONTGOMERY COUNTY	0009480	NON RESIDNT	2	\$24,295.11
MONTGOMERY COUNTY	0127392	ASSMD CONDO	4	\$135,398.17
MONTGOMERY COUNTY	0181743	OTHER RESID	3	\$240,364.87
MONTGOMERY COUNTY	0103541	SINGLE FMLY	2	\$46,825.12
MONTGOMERY COUNTY	0185299	SINGLE FMLY	2	\$123,246.74
MONTGOMERY COUNTY	0100736	SINGLE FMLY	2	\$11,349.29
MONTGOMERY COUNTY	0102261	SINGLE FMLY	3	\$132,427.32
MONTGOMERY COUNTY	0099008	SINGLE FMLY	2	\$94,635.93
MONTGOMERY COUNTY	0036360	SINGLE FMLY	8	\$132,023.95
MONTGOMERY COUNTY	0117257	SINGLE FMLY	2	\$77,409.73
MONTGOMERY COUNTY	0168914	SINGLE FMLY	2	\$11,863.63
MONTGOMERY COUNTY	0008363	SINGLE FMLY	9	\$64,361.35
MONTGOMERY COUNTY	0098463	SINGLE FMLY	2	\$8,310.76
MONTGOMERY COUNTY	0091217	SINGLE FMLY	3	\$11,903.55
MONTGOMERY COUNTY	0005797	SINGLE FMLY	4	\$20,987.29
MONTGOMERY COUNTY	0043589	SINGLE FMLY	2	\$19,198.00

HOUSTON-GALVESTON AREA COUNCIL
REGIONAL HAZARD MITIGATION PLAN – 2011 UPDATE

Community Name	Repetitive Loss #	Occupancy	Number of Losses	Total Paid
MONTGOMERY COUNTY	0039240	SINGLE FMLY	2	\$47,582.00
MONTGOMERY COUNTY	0017772	SINGLE FMLY	2	\$73,236.85
MONTGOMERY COUNTY	0039591	SINGLE FMLY	2	\$36,258.26
MONTGOMERY COUNTY	0070278	SINGLE FMLY	2	\$108,956.13
MONTGOMERY COUNTY	0043265	SINGLE FMLY	2	\$17,097.60
MONTGOMERY COUNTY	0097254	SINGLE FMLY	3	\$32,335.13
MONTGOMERY COUNTY	0070317	SINGLE FMLY	2	\$40,159.85
MONTGOMERY COUNTY	0017799	SINGLE FMLY	3	\$12,107.03
MONTGOMERY COUNTY	0013129	SINGLE FMLY	2	\$34,449.03
MONTGOMERY COUNTY	0026443	SINGLE FMLY	4	\$62,581.88
MONTGOMERY COUNTY	0017778	SINGLE FMLY	3	\$155,138.56
MONTGOMERY COUNTY	0068563	SINGLE FMLY	3	\$130,477.52
MONTGOMERY COUNTY	0025700	SINGLE FMLY	2	\$84,327.50
MONTGOMERY COUNTY	0068567	SINGLE FMLY	3	\$129,297.10
MONTGOMERY COUNTY	0018283	SINGLE FMLY	3	\$137,866.45
MONTGOMERY COUNTY	0026086	SINGLE FMLY	3	\$177,371.12
MONTGOMERY COUNTY	0026759	SINGLE FMLY	2	\$84,363.09
MONTGOMERY COUNTY	0025867	SINGLE FMLY	2	\$90,000.00
MONTGOMERY COUNTY	0018280	SINGLE FMLY	2	\$65,019.00
MONTGOMERY COUNTY	0041282	SINGLE FMLY	4	\$60,104.49
MONTGOMERY COUNTY	0026856	SINGLE FMLY	3	\$105,607.90
MONTGOMERY COUNTY	0017792	SINGLE FMLY	3	\$157,259.88
MONTGOMERY COUNTY	0073494	SINGLE FMLY	2	\$46,365.28
MONTGOMERY COUNTY	0038544	ASSMD CONDO	2	\$75,238.88
MONTGOMERY COUNTY	0044083	SINGLE FMLY	4	\$78,228.30
MONTGOMERY COUNTY	0073492	SINGLE FMLY	2	\$105,218.75
MONTGOMERY COUNTY	0100336	SINGLE FMLY	2	\$164,710.31
MONTGOMERY COUNTY	0071482	SINGLE FMLY	2	\$184,628.00
MONTGOMERY COUNTY	0071993	SINGLE FMLY	2	\$48,047.84

HOUSTON-GALVESTON AREA COUNCIL
REGIONAL HAZARD MITIGATION PLAN – 2011 UPDATE

Community Name	Repetitive Loss #	Occupancy	Number of Losses	Total Paid
MONTGOMERY COUNTY	0068948	SINGLE FMLY	3	\$68,923.69
MONTGOMERY COUNTY	0048900	SINGLE FMLY	4	\$40,571.99
MONTGOMERY COUNTY	0047051	SINGLE FMLY	2	\$20,944.40
MONTGOMERY COUNTY	0070679	SINGLE FMLY	3	\$102,803.85
MONTGOMERY COUNTY	0026136	SINGLE FMLY	3	\$26,492.04
MONTGOMERY COUNTY	0018568	SINGLE FMLY	3	\$78,002.75
MONTGOMERY COUNTY	0068949	SINGLE FMLY	3	\$53,866.69
MONTGOMERY COUNTY	0068950	SINGLE FMLY	2	\$44,235.83
MONTGOMERY COUNTY	0026333	SINGLE FMLY	4	\$181,061.10
MONTGOMERY COUNTY	0035035	SINGLE FMLY	4	\$119,372.51
MONTGOMERY COUNTY	0068942	SINGLE FMLY	3	\$72,710.20
MONTGOMERY COUNTY	0071537	SINGLE FMLY	2	\$163,709.30
MONTGOMERY COUNTY	0072292	SINGLE FMLY	2	\$115,963.89
MONTGOMERY COUNTY	0018565	SINGLE FMLY	4	\$138,828.81
MONTGOMERY COUNTY	0089421	SINGLE FMLY	2	\$40,851.25
MONTGOMERY COUNTY	0026705	SINGLE FMLY	2	\$19,661.83
MONTGOMERY COUNTY	0003565	SINGLE FMLY	2	\$86,686.53
MONTGOMERY COUNTY	0043440	SINGLE FMLY	4	\$35,700.67
MONTGOMERY COUNTY	0018390	SINGLE FMLY	3	\$40,683.85
MONTGOMERY COUNTY	0017794	SINGLE FMLY	3	\$51,954.48
MONTGOMERY COUNTY	0069984	SINGLE FMLY	2	\$78,129.05
MONTGOMERY COUNTY	0073490	SINGLE FMLY	2	\$92,122.27
MONTGOMERY COUNTY	0073491	SINGLE FMLY	2	\$161,172.93
MONTGOMERY COUNTY	0037013	SINGLE FMLY	5	\$94,158.80
MONTGOMERY COUNTY	0018422	SINGLE FMLY	9	\$202,350.09
MONTGOMERY COUNTY	0098363	SINGLE FMLY	2	\$139,822.53
MONTGOMERY COUNTY	0097508	SINGLE FMLY	2	\$173,905.04
MONTGOMERY COUNTY	0098483	SINGLE FMLY	2	\$122,214.51
MONTGOMERY COUNTY	0097485	SINGLE FMLY	2	\$96,630.16

HOUSTON-GALVESTON AREA COUNCIL
REGIONAL HAZARD MITIGATION PLAN – 2011 UPDATE

Community Name	Repetitive Loss #	Occupancy	Number of Losses	Total Paid
MONTGOMERY COUNTY	0073578	SINGLE FMLY	2	\$181,224.78
MONTGOMERY COUNTY	0001921	SINGLE FMLY	6	\$340,869.10
MONTGOMERY COUNTY	0037104	SINGLE FMLY	4	\$192,737.99
MONTGOMERY COUNTY	0068945	2-4 FAMILY	3	\$71,260.13
MONTGOMERY COUNTY	0047086	SINGLE FMLY	2	\$25,387.54
MONTGOMERY COUNTY	0039354	ASSMD CONDO	4	\$218,882.86
MONTGOMERY COUNTY	0018277	SINGLE FMLY	2	\$34,653.57
MONTGOMERY COUNTY	0025661	SINGLE FMLY	2	\$25,150.55
MONTGOMERY COUNTY	0026246	SINGLE FMLY	3	\$42,186.22
MONTGOMERY COUNTY	0018340	SINGLE FMLY	2	\$44,163.15
MONTGOMERY COUNTY	0038568	SINGLE FMLY	2	\$52,431.77
MONTGOMERY COUNTY	0051428	SINGLE FMLY	3	\$32,668.97
MONTGOMERY COUNTY	0097594	SINGLE FMLY	3	\$32,820.34
MONTGOMERY COUNTY	0072231	SINGLE FMLY	7	\$314,569.59
MONTGOMERY COUNTY	0036448	SINGLE FMLY	7	\$38,262.62
CONROE, CITY OF	0113274	SINGLE FMLY	2	\$19,820.13
CONROE, CITY OF	0168445	SINGLE FMLY	2	\$105,962.95
CONROE, CITY OF	0168900	NON RESIDNT	2	\$21,292.08
CONROE, CITY OF	0070308	NON RESIDNT	8	\$336,079.09
CONROE, CITY OF	0018463	NON RESIDNT	5	\$283,589.90
CONROE, CITY OF	0071774	NON RESIDNT	2	\$36,326.94
CONROE, CITY OF	0113902	SINGLE FMLY	3	\$40,361.67
CONROE, CITY OF	0006553	NON RESIDNT	4	\$217,985.38
CONROE, CITY OF	0127099	SINGLE FMLY	2	\$59,393.05
CONROE, CITY OF	0097188	SINGLE FMLY	6	\$165,498.75
CONROE, CITY OF	0115766	2-4 FAMILY	3	\$17,399.92
CONROE, CITY OF	0113901	SINGLE FMLY	2	\$39,197.36
CONROE, CITY OF	0097229	SINGLE FMLY	3	\$69,387.17
CONROE, CITY OF	0120300	SINGLE FMLY	2	\$24,272.87

HOUSTON-GALVESTON AREA COUNCIL
REGIONAL HAZARD MITIGATION PLAN – 2011 UPDATE

Community Name	Repetitive Loss #	Occupancy	Number of Losses	Total Paid
CONROE, CITY OF	0097566	SINGLE FMLY	4	\$180,232.30
CONROE, CITY OF	0182114	SINGLE FMLY	2	\$113,856.71
CONROE, CITY OF	0073521	SINGLE FMLY	5	\$240,765.46
CONROE, CITY OF	0114165	SINGLE FMLY	2	\$63,435.11
CONROE, CITY OF	0168444	SINGLE FMLY	2	\$11,836.84
CONROE, CITY OF	0168056	SINGLE FMLY	2	\$17,946.78
CONROE, CITY OF	0068569	SINGLE FMLY	3	\$26,760.42
CONROE, CITY OF	0111709	SINGLE FMLY	2	\$8,830.16
CONROE, CITY OF	0026855	SINGLE FMLY	3	\$40,152.83
CONROE, CITY OF	0005675	NON RESIDNT	9	\$107,443.13
CONROE, CITY OF	0039292	SINGLE FMLY	2	\$8,387.22
CONROE, CITY OF	0038793	ASSMD CONDO	2	\$73,653.56
CONROE, CITY OF	0053846	ASSMD CONDO	2	\$41,712.80
CONROE, CITY OF	0098402	SINGLE FMLY	2	\$51,900.89
CONROE, CITY OF	0071572	SINGLE FMLY	4	\$59,865.69
CONROE, CITY OF	0114687	SINGLE FMLY	2	\$10,949.67
CONROE, CITY OF	0026736	SINGLE FMLY	5	\$96,883.33
CONROE, CITY OF	0005580	SINGLE FMLY	16	\$123,471.52
CONROE, CITY OF	0068559	SINGLE FMLY	3	\$52,284.73
CONROE, CITY OF	0040999	SINGLE FMLY	2	\$4,932.06
CONROE, CITY OF	0122063	SINGLE FMLY	2	\$6,963.89
CUT AND SHOOT, CITY OF	0037411	SINGLE FMLY	6	\$152,826.24
MAGNOLIA, CITY OF	0114118	SINGLE FMLY	2	\$120,136.42
OAK RIDGE NORTH, CITY OF	0013195	SINGLE FMLY	3	\$10,097.85
OAK RIDGE NORTH, CITY OF	0049100	SINGLE FMLY	6	\$32,732.39
OAK RIDGE NORTH, CITY OF	0025099	SINGLE FMLY	9	\$109,707.36

HOUSTON-GALVESTON AREA COUNCIL
REGIONAL HAZARD MITIGATION PLAN – 2011 UPDATE

Community Name	Repetitive Loss #	Occupancy	Number of Losses	Total Paid
OAK RIDGE NORTH, CITY OF	0001929	SINGLE FMLY	6	\$53,465.30
OAK RIDGE NORTH, CITY OF	0038419	SINGLE FMLY	4	\$27,402.39
OAK RIDGE NORTH, CITY OF	0013010	SINGLE FMLY	4	\$23,883.71
OAK RIDGE NORTH, CITY OF	0048629	SINGLE FMLY	6	\$24,707.33
OAK RIDGE NORTH, CITY OF	0013008	SINGLE FMLY	2	\$5,420.42
OAK RIDGE NORTH, CITY OF	0018766	SINGLE FMLY	10	\$108,795.62
OAK RIDGE NORTH, CITY OF	0033303	SINGLE FMLY	6	\$47,977.48
OAK RIDGE NORTH, CITY OF	0013196	SINGLE FMLY	10	\$85,817.30
OAK RIDGE NORTH, CITY OF	0012836	SINGLE FMLY	10	\$62,840.92
OAK RIDGE NORTH, CITY OF	0042937	SINGLE FMLY	6	\$101,216.20
PATTON VILLAGE, CITY OF	0098884	SINGLE FMLY	2	\$83,690.44
PATTON VILLAGE, CITY OF	0097086	SINGLE FMLY	2	\$41,439.10
PATTON VILLAGE, CITY OF	0071785	SINGLE FMLY	2	\$66,589.76
PATTON VILLAGE, CITY OF	0091480	SINGLE FMLY	5	\$83,562.12
PATTON VILLAGE, CITY OF	0071474	SINGLE FMLY	3	\$49,484.45
ROMAN FOREST, CITY OF	0106782	SINGLE FMLY	2	\$94,772.48
ROMAN FOREST, CITY OF	0168912	SINGLE FMLY	3	\$48,789.32
ROMAN FOREST, CITY OF	0073569	NON RESIDNT	2	\$72,371.65

HOUSTON-GALVESTON AREA COUNCIL
REGIONAL HAZARD MITIGATION PLAN – 2011 UPDATE

Community Name	Repetitive Loss #	Occupancy	Number of Losses	Total Paid
ROMAN FOREST, CITY OF	0093922	SINGLE FMLY	3	\$7,091.70
SHENANDOAH, CITY OF	0044655	SINGLE FMLY	4	\$41,089.99
SHENANDOAH, CITY OF	0038250	SINGLE FMLY	5	\$49,529.85
SHENANDOAH, CITY OF	0042356	SINGLE FMLY	2	\$6,406.36
SHENANDOAH, CITY OF	0039618	SINGLE FMLY	3	\$11,966.60
SHENANDOAH, CITY OF	0068294	SINGLE FMLY	3	\$14,522.74
SHENANDOAH, CITY OF	0012965	SINGLE FMLY	6	\$53,467.24
SHENANDOAH, CITY OF	0071432	SINGLE FMLY	4	\$14,428.11
SHENANDOAH, CITY OF	0113002	SINGLE FMLY	2	\$5,970.44
SPLENDORA, CITY OF	0053282	NON RESIDENT	8	\$142,794.23
SPLENDORA, CITY OF	0134927	SINGLE FMLY	2	\$32,383.36
STAGECOACH, CITY OF	0112445	SINGLE FMLY	2	\$38,538.22
STAGECOACH, CITY OF	0188465	SINGLE FMLY	2	\$15,039.11
WILLIS, CITY OF	0122143	SINGLE FMLY	2	\$73,913.44
WOODBANCH, CITY OF	0069786	SINGLE FMLY	2	\$38,663.17
WOODBANCH, CITY OF	0097627	SINGLE FMLY	2	\$16,203.45
WOODBANCH, CITY OF	0069645	SINGLE FMLY	7	\$94,862.17
WOODBANCH, CITY OF	0068940	SINGLE FMLY	4	\$200,436.98
WOODBANCH, CITY OF	0097155	SINGLE FMLY	2	\$88,406.20
WOODBANCH, CITY OF	0070474	SINGLE FMLY	2	\$73,696.90
WOODBANCH, CITY OF	0026434	SINGLE FMLY	4	\$62,853.20
WOODBANCH, CITY OF	0097190	SINGLE FMLY	2	\$55,773.17
WOODBANCH, CITY OF	0100722	SINGLE FMLY	2	\$9,267.60
WOODLOCH, TOWN OF	0043341	SINGLE FMLY	2	\$38,146.44
WOODLOCH, TOWN OF	0037520	SINGLE FMLY	3	\$60,615.19
WOODLOCH, TOWN OF	0068566	SINGLE FMLY	2	\$55,000.00
WOODLOCH, TOWN OF	0042555	SINGLE FMLY	3	\$69,287.89
WOODLOCH, TOWN OF	0117250	SINGLE FMLY	2	\$46,252.94

HOUSTON-GALVESTON AREA COUNCIL
REGIONAL HAZARD MITIGATION PLAN – 2011 UPDATE

Community Name	Repetitive Loss #	Occupancy	Number of Losses	Total Paid
<i>Walker County</i>				
WALKER COUNTY	0010682	SINGLE FMLY	2	\$88,351.36
WALKER COUNTY	0057546	SINGLE FMLY	2	\$16,477.57
WALKER COUNTY	0075348	SINGLE FMLY	2	\$36,042.32
WALKER COUNTY	0114434	SINGLE FMLY	2	\$53,085.73
WALKER COUNTY	0005825	SINGLE FMLY	2	\$17,593.72
WALKER COUNTY	0010699	SINGLE FMLY	3	\$122,427.57
WALKER COUNTY	0071166	SINGLE FMLY	4	\$61,418.08
WALKER COUNTY	0010654	SINGLE FMLY	4	\$118,412.14
WALKER COUNTY	0010655	SINGLE FMLY	4	\$26,041.04
WALKER COUNTY	0071168	SINGLE FMLY	2	\$19,340.48
WALKER COUNTY	0007851	OTHER RESID	5	\$34,644.68
WALKER COUNTY	0112636	SINGLE FMLY	2	\$47,039.01
WALKER COUNTY	0010695	SINGLE FMLY	5	\$61,804.39
WALKER COUNTY	0072413	SINGLE FMLY	4	\$26,155.41
WALKER COUNTY	0005827	SINGLE FMLY	5	\$64,693.12
WALKER COUNTY	0074074	SINGLE FMLY	2	\$10,399.02
WALKER COUNTY	0003559	SINGLE FMLY	2	\$4,743.38
WALKER COUNTY	0007852	SINGLE FMLY	2	\$77,574.13
WALKER COUNTY	0114283	SINGLE FMLY	4	\$79,143.45
WALKER COUNTY	0067260	SINGLE FMLY	2	\$5,692.10
WALKER COUNTY	0010701	SINGLE FMLY	5	\$42,751.47
WALKER COUNTY	0005826	SINGLE FMLY	5	\$50,540.10
WALKER COUNTY	0057540	SINGLE FMLY	5	\$36,658.62
WALKER COUNTY	0122223	SINGLE FMLY	2	\$19,969.93
WALKER COUNTY	0070342	SINGLE FMLY	2	\$24,113.34
WALKER COUNTY	0071167	SINGLE FMLY	3	\$25,302.99
WALKER COUNTY	0169316	SINGLE FMLY	2	\$9,240.38
WALKER COUNTY	0014117	SINGLE FMLY	4	\$102,377.32

HOUSTON-GALVESTON AREA COUNCIL
REGIONAL HAZARD MITIGATION PLAN – 2011 UPDATE

Community Name	Repetitive Loss #	Occupancy	Number of Losses	Total Paid
WALKER COUNTY	0075353	SINGLE FMLY	2	\$9,563.15
WALKER COUNTY	0071164	SINGLE FMLY	2	\$11,569.62
WALKER COUNTY	0005668	SINGLE FMLY	3	\$76,424.11
NEW WAVERLY, CITY OF	0168029	SINGLE FMLY	2	\$14,752.86
NEW WAVERLY, CITY OF	0100612	SINGLE FMLY	3	\$33,202.97
<i>Waller County</i>				
WALLER COUNTY	0104665	SINGLE FMLY	2	\$26,843.51
WALLER COUNTY	0071438	SINGLE FMLY	2	\$192,436.09
WALLER COUNTY	0097241	SINGLE FMLY	2	\$64,338.39
WALLER COUNTY	0097249	SINGLE FMLY	3	\$29,977.96
WALLER COUNTY	0071980	SINGLE FMLY	4	\$122,165.88
WALLER COUNTY	0097234	SINGLE FMLY	4	\$78,748.83
WALLER COUNTY	0117183	SINGLE FMLY	2	\$19,255.59
WALLER COUNTY	0099038	SINGLE FMLY	3	\$97,148.59
WALLER COUNTY	0098379	SINGLE FMLY	3	\$48,708.21
WALLER COUNTY	0118893	SINGLE FMLY	2	\$75,755.89
WALLER COUNTY	0185573	SINGLE FMLY	2	\$29,701.12
WALLER COUNTY	0103636	SINGLE FMLY	2	\$26,569.96
WALLER COUNTY	0099000	SINGLE FMLY	2	\$33,288.48
WALLER COUNTY	0040759	SINGLE FMLY	3	\$28,848.53
WALLER COUNTY	0118890	SINGLE FMLY	2	\$19,361.54
WALLER COUNTY	0100212	SINGLE FMLY	3	\$62,025.92
WALLER COUNTY	0097310	SINGLE FMLY	2	\$24,460.57
WALLER COUNTY	0098400	SINGLE FMLY	3	\$110,132.30
WALLER COUNTY	0168150	SINGLE FMLY	2	\$55,407.32
WALLER COUNTY	0080793	SINGLE FMLY	4	\$91,629.18
WALLER COUNTY	0112415	SINGLE FMLY	2	\$47,735.18
WALLER COUNTY	0101011	SINGLE FMLY	6	\$191,574.67
WALLER COUNTY	0089472	SINGLE FMLY	3	\$50,692.73

HOUSTON-GALVESTON AREA COUNCIL
REGIONAL HAZARD MITIGATION PLAN – 2011 UPDATE

Community Name	Repetitive Loss #	Occupancy	Number of Losses	Total Paid
WALLER COUNTY	0036263	SINGLE FMLY	11	\$219,465.83
HEMPSTEAD, CITY OF	0118780	SINGLE FMLY	2	\$39,558.50

Source: Federal Emergency Management Agency, as of April 1, 2011

Hurricanes and Tropical Storms

The information presented below is based on the HAZUS analysis conducted for the 2006 Regional Hazard Mitigation Plan because the release for the most current HAZUS was not available during the 2011 planning period.

Due to the Houston-Galveston area's geographic location, this area of the state is vulnerable to damage from hurricane winds and to the inland impacts associated with coastal storms. Those counties closer to the coast are more vulnerable than inland areas. **Table 4.3-17** profiles hurricane wind speeds (in miles per hour) that are expected in H-GAC counties. **Figure 4.3-19** shows the potential hurricane winds that could affect the H-GAC area assuming 100- and 500-year wind events.

Table 4.3-17
Average Hurricane Wind Speeds by Event by County*

Wind Speed (MPH) by Return Period							
County	10-year	20-year	50-year	100-year	200-year	500-year	1000-year
Austin	52	68	86	97	107	118	125
Brazoria	68	88	109	123	134	147	155
Chambers	67	86	107	121	133	147	157
Fort Bend	61	79	98	110	121	133	140
Galveston	69	90	112	126	139	153	162
Harris	62	80	99	112	123	135	143
Liberty	59	76	95	107	118	131	139
Montgomery	53	69	87	99	110	122	130
Walker	45	61	78	89	100	113	121
Waller	52	68	85	97	107	119	128
Wharton	61	79	99	111	121	131	139

Note: * Results are from the 2006 Regional Hazard Mitigation Plan

Figure 4.3-19
Potential Hurricane Wind Speeds for 100- and 500-year Events

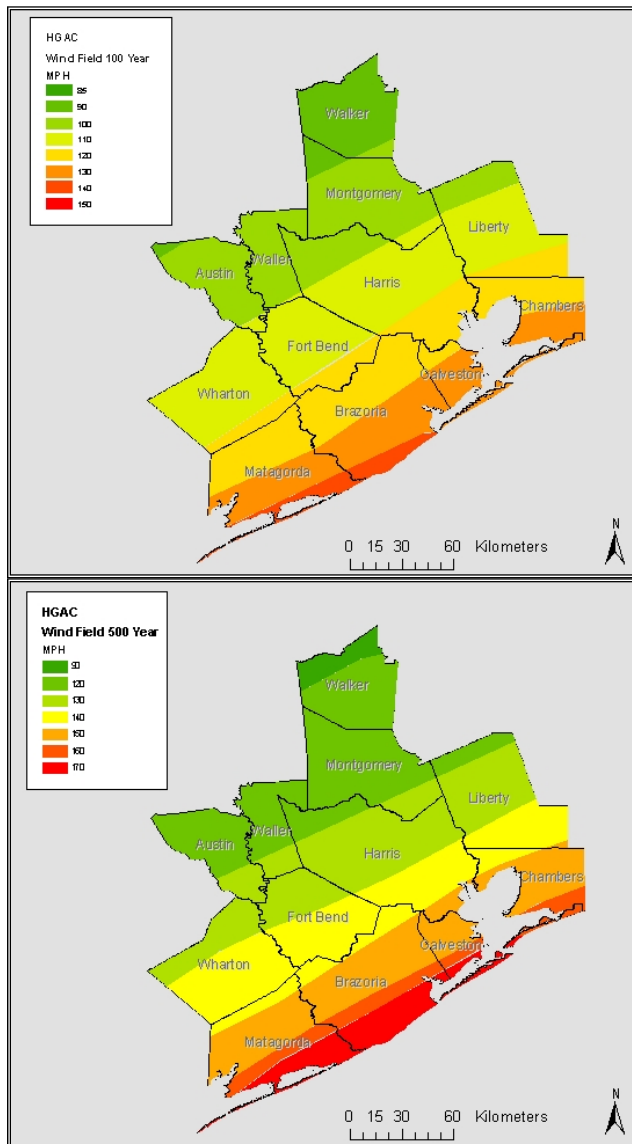


Table 4.3-18 shows estimated exposure and losses by county, and **Table 4.3-19** shows the potential damage to critical facilities by county.

Table 4.3-18
Estimated Exposure and Losses by County (Hurricane Winds)*

Jurisdiction	Potential Annualized Losses for Residential Buildings at Risk	Potential Annualized Losses for Commercial Buildings at Risk	Annualized Expected Property Losses	Percent Loss Ratio
Austin	\$1,436,706	\$187,294	\$1,740,066	0.0624%
Brazoria	\$46,566,767	\$4,113,304	\$52,940,643	0.1447%
Chambers	\$7,749,135	\$853,103	\$9,180,969	0.2572%
Colorado	\$1,691,316	\$286,461	\$2,168,772	0.0884%
Fort Bend	\$112,335,152	\$7,431,269	\$123,387,494	0.1532%
Galveston	\$128,656,680	\$12,798,898	\$145,221,012	0.3246%
Harris	\$395,874,048	\$53,414,944	\$472,194,063	0.0749%
Liberty	\$3,897,858	\$482,380	\$4,722,935	0.0798%
Matagorda	\$17,535,391	\$1,959,905	\$20,668,386	0.4789%
Montgomery	\$25,952,024	\$2,365,080	\$29,544,030	0.0548%
Walker	\$1,587,469	\$185,427	\$1,882,678	0.0326%
Waller	\$2,117,704	\$221,136	\$2,587,239	0.0785%
Wharton	\$9,141,324	\$1,415,382	\$11,274,217	0.2626%
TOTAL	\$754,541,575	\$85,714,582	\$877,512,504	

Note: * Results are from the 2006 Regional Hazard Mitigation Plan

Table 4.3-19
Critical Facilities Potentially Damaged by County (Hurricane Winds)*

Jurisdiction	Critical Facilities	100-year Severe Wind		500-year Severe Wind		
	Total Number	Slight	Negligible	Moderate	Slight	Negligible**
Austin	38	38	0	0	31	7
Brazoria	267	11	256	13	253	1
Chambers	33	2	31	0	33	0
Colorado	42	42	0	0	35	7
Fort Bend	207	110	97	0	205	2
Galveston	255	2	253	77	178	0
Harris	2,175	906	1,269	0	2,160	15
Liberty	98	44	54	0	98	0
Matagorda	73	5	68	0	73	0
Montgomery	193	193	0	0	162	31
Walker	26	26	0	0	19	7
Waller	45	45	0	0	38	7
Wharton	52	24	28	0	51	1
TOTAL	3,504	1,448	2,056	90	3,336	78

Notes: * Results are from the 2006 Regional Hazard Mitigation Plan

**Negligible means less than \$5,000 in damages may be incurred

Severe Thunderstorms

The information presented below is based on the HAZUS analysis conducted for the 2006 Regional Hazard Mitigation Plan because the release for the most current HAZUS was not available during the 2011 planning period.

Since it cannot be predicted where a thunderstorm might occur, all buildings and facilities are considered to be exposed to this hazard and could potentially be impacted. As a result, it is not possible to estimate the number of residential and commercial buildings or facilities that may experience losses. **Table 4.3-20** shows estimated exposure, potential estimated annualized losses, and annualized percent loss ratio by county.

Table 4.3-20
Potential Annualized Losses and Percent Loss Ratio by County (Thunderstorm)*

Jurisdiction	Total Exposure	Estimated Annualized Losses	Annualized Percent Loss Ratio
Austin	\$2,790,645,000	\$70,040	0.0025%
Brazoria	\$36,593,210,000	\$200,004	0.0005%
Chambers	\$3,569,600,000	\$64,097	0.0018%
Colorado	\$2,454,283,000	\$128,625	0.0052%
Fort Bend	\$80,561,247,000	\$271,633	0.0003%
Galveston	\$44,738,889,000	\$495,400	0.0011%
Harris	\$630,304,498,000	\$7,795,272	0.0012%
Liberty	\$5,915,582,000	\$52,292	0.0009%
Matagorda	\$4,316,032,000	\$35,063	0.0008%
Montgomery	\$53,863,991,000	\$88,938	0.0002%
Walker	\$5,768,629,000	\$43,009	0.0007%
Waller	\$3,295,723,000	\$16,755	0.0005%
Wharton	\$4,293,187,000	\$131,300	0.0031%
TOTAL	\$878,465,516,000	\$9,392,425	

Note: * Results are from the 2006 Regional Hazard Mitigation Plan

Tornado

The information presented below is based on the HAZUS analysis conducted for the 2006 Regional Hazard Mitigation Plan because the release for the most current HAZUS was not available during the 2011 planning period.

Historical evidence shows that the entire H-GAC area is vulnerable to tornado activity. This hazard can result from severe thunderstorm activity or may occur during a major tropical storm or hurricane. Because it cannot be predicted where a tornado may strike, all buildings and facilities are considered to be exposed to this hazard and could potentially be impacted.

Table 4.3-21 shows exposure, estimated potential annualized losses, and percent loss ratio by county.

Table 4.3-21
Exposure, Potential Annualized Losses and Percent Loss Ratio by County (Tornadoes)*

Jurisdiction	Total Exposure	Annualized Losses	Percent Loss Ratio
Austin	\$2,790,645,000	\$259,359	0.0093%
Brazoria	\$36,593,210,000	\$248,118	0.0007%
Chambers	\$3,569,600,000	\$44,956	0.0013%
Colorado	\$2,454,283,000	\$1,029,095	0.0419%
Fort Bend	\$80,561,247,000	\$337,773	0.0004%
Galveston	\$44,738,889,000	\$420,233	0.0009%
Harris	\$630,304,498,000	\$31,502,124	0.0050%
Liberty	\$5,915,582,000	\$420,832	0.0071%
Matagorda	\$4,316,032,000	\$113,816	0.0026%
Montgomery	\$53,863,991,000	\$315,898	0.0006%
Walker	\$5,768,629,000	\$57,438	0.0010%
Waller	\$3,295,723,000	\$36,133	0.0011%
Wharton	\$4,293,187,000	\$43,030	0.0010%
TOTAL	\$878,465,516,000	\$34,828,804	

Note: * Results are from the 2006 Regional Hazard Mitigation Plan











Wildfire

Level of Concern (LOC)/Wildfire Risk

The Level of Concern (LOC), the primary output of the SFRAS software, denotes the overall wildfire risk for a given area. As depicted in Figure 4.3-5, the LOC index model integrates the Wildfire Susceptibility Index (WFSI), probability of an acre burning, with the Fire Effects Index (FEI), expected effects if fire occurs, to derive the overall Level of Concern. The resulting value reflects the possibility of suffering loss.

The WFSI is a value between 0 and 1 and the FEI is a value between 0 and 100. Therefore, the LOC is a value between 0 and 100. The output values were assigned to nine LOC categories ranging from low concern (1) to high concern (1), as presented in **Table 4.3-22**. The LOC output can be used to prioritize areas with high risk for further analysis.

Table 4.3-22
Nine Classes of Level of Concern

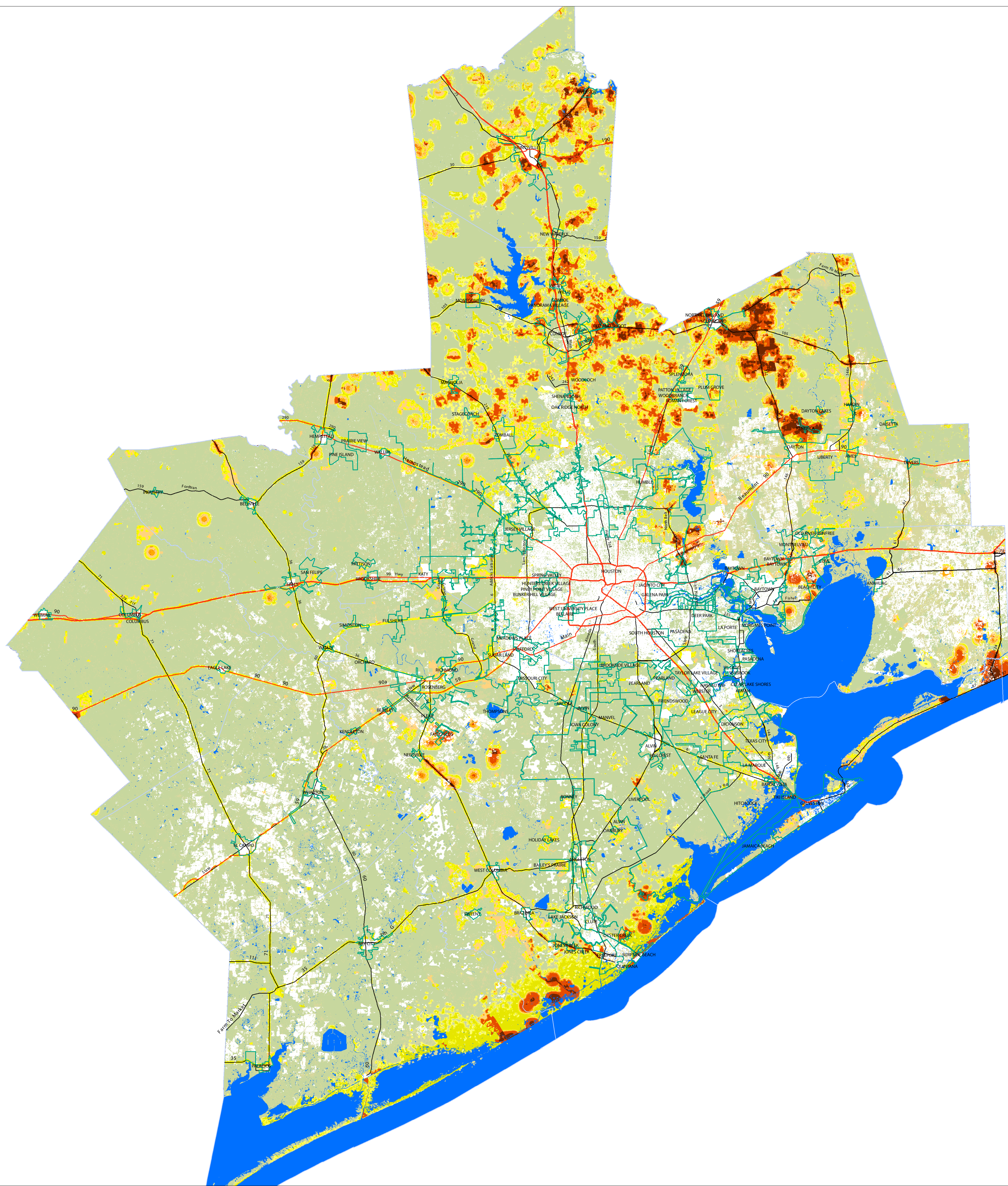
Color	Class	LOC Value
	0	0
	1	0 - 0.0001
	2	0.0001 - 0.0002
	3	0.0002 - 0.0004
	4	0.0004 - 0.0007
	5	0.0007 - 0.0011
	6	0.0011 - 0.0024
	7	0.0024 - 0.0043
	8	0.0043 - 0.0243
	9	>0.0243

The wildfire risk assessment data published by the Texas Forest Service in 2006 as a part of the SWRA project were obtained for the 13 H-GAC counties. The LOC (overall wildfire risk) map generated using SFRAS and the 2006 published results for the H-GAC area, is included as **Figure 4.3–20**.

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Level of Concern

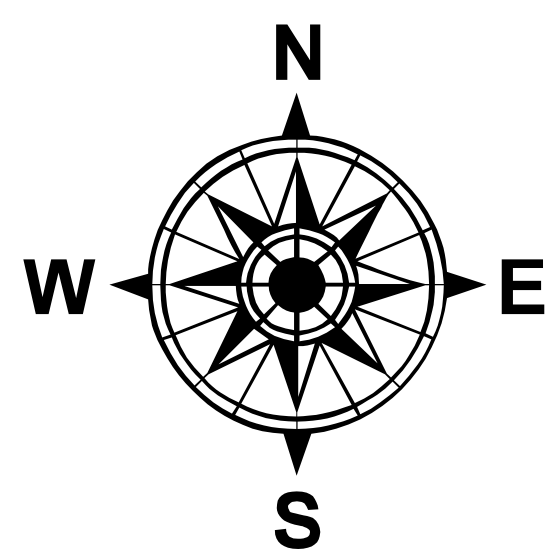
Published Results Dataset



Legend

Level of Concern (Wildfire Risk)

- 0
- 0 - 0.0001
- 0.0001 - 0.0002
- 0.0002 - 0.0004
- 0.0004 - 0.0007
- 0.0007 - 0.0011
- 0.0011 - 0.0024
- 0.0024 - 0.0043
- 0.0043 - 0.0243
- >0.0243
- City Limits
- Roads, Level 1
- Roads, Level 2
- Roads, Level 3
- County Boundaries
- Water
- County Boundaries



0 5 10 20 30 40 Miles

3/2/2011

Data Source: Texas Forest Service (2006 Published Results)
Southern Wildfire Risk Assessment Project

Disclaimer: The user assumes the entire risk related to their use of the SFRAS application and either the published or derived maps from the application. The Southern Group of State Foresters is providing these data "as is" and disclaims any and all warranties, whether expressed or implied, including (without limitation) any implied warranties of merchantability or fitness for a particular purpose. In no event will the Southern Group of State Foresters be liable to you or to any third party for any direct, indirect, incidental, consequential, special or exemplary damages or lost profit resulting from any use or misuse of these data.

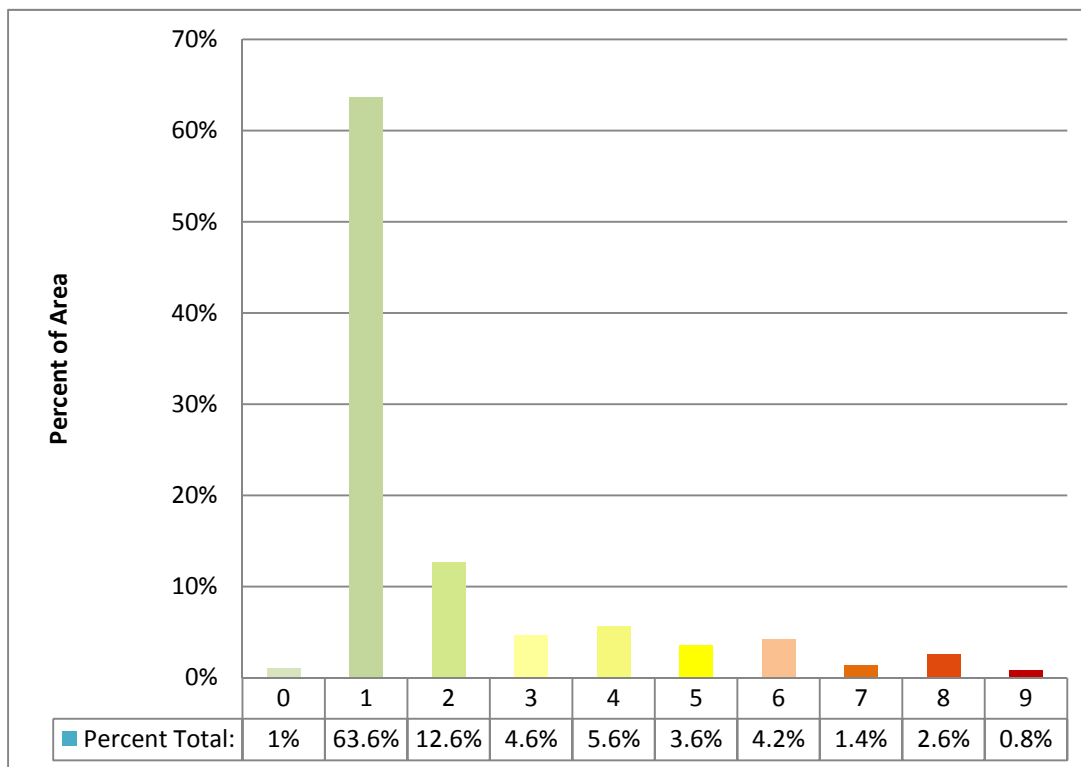


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Figure 4.3-21 provides the percentage of the total area of the H-GAC region under each risk (LOC) class based on the 2006 Published Results. Over 60 percent of the area lies in the very low LOC class.

Figure 4.3-21
Percent Acres by Level of Concern Class in the H-GAC Region



Communities at Risk/Areas of Concern Analysis

Preliminary wildfire risk assessment was conducted for the communities in the seven counties covered by this Plan using the SFRAS software application and the 2006 published results provided by the Texas Forest Service.

SWRA provides a baseline communities dataset as a part of the published results and Areas of Concern (AOC) analysis tool to analyze individual communities' wildfire risk. The AOC tool can be applied with any polygon dataset to define a risk rating for each community of interest. The AOC tool generates risk scores for each community by averaging the WFSI value for each community, including a buffer zone around the community.

This analysis has two applications. First, communities within an area of interest can be categorized based on the level of risk which helps in identifying the location where detailed fire planning is needed. Second, those areas (not necessarily communities) requiring tactical analyses and community interaction to reduce risk from wildfire can be identified and prioritized.

The Communities data in the published results is a compilation of two 2000 census datasets, including: Urban Areas 2000 and Census Blocks 2000. When the AOC tool is applied to the Communities dataset a mean WFSI value is generated. The mean WFSI values are categorized into four classes (**Table 4.3-23**) that represent the susceptibility of each community to wildfire risk.

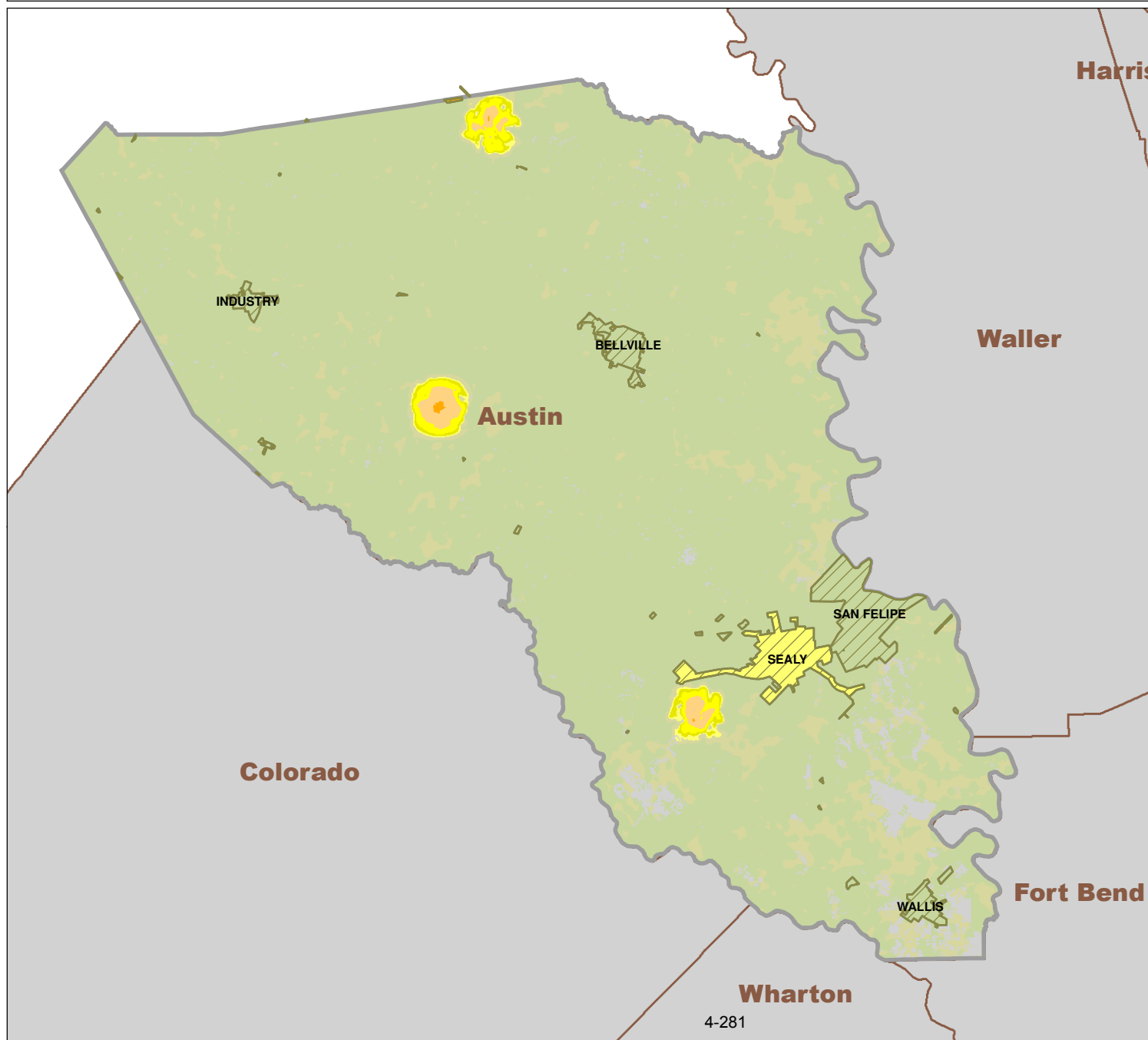
Table 4.3-23
Four Classes of WFSI

Class Description	AOC Class	Value Ranges (MEAN WFSI)
Very Low	1	0.000 to 0.000999
Low	2	0.0001 to 0.009999
Moderate	3	0.010 to 0.199999
High	4	0.020 to 0.599999
Very High	5	0.600 to 1.00000

Figures 4.3-22 to 4.3-28 depict the areas of concern/communities at risk rating for communities in the seven H-GAC counties covered under this Plan.

Areas of Concern

AOI: Austin County Model Run Description: Austin County Communities at Risk



Legend

Areas of Concern (Communities at Risk)

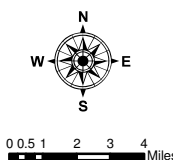
- Non-burnable
- Very Low
- Low
- Moderate
- High
- Very High

Wildland Fire Susceptibility Index

Source: 2006 Texas Forest Service Data

- 0
- 0.00000 - 0.00007
- 0.00007 - 0.00018
- 0.00018 - 0.00026
- 0.00026 - 0.00043
- 0.00043 - 0.00106
- 0.00106 - 0.00282
- 0.00282 - 0.00527
- 0.00527 - 0.01041
- 0.01041 - 1.00000

- Austin County
- City Limits
- County Boundaries



2/23/2011

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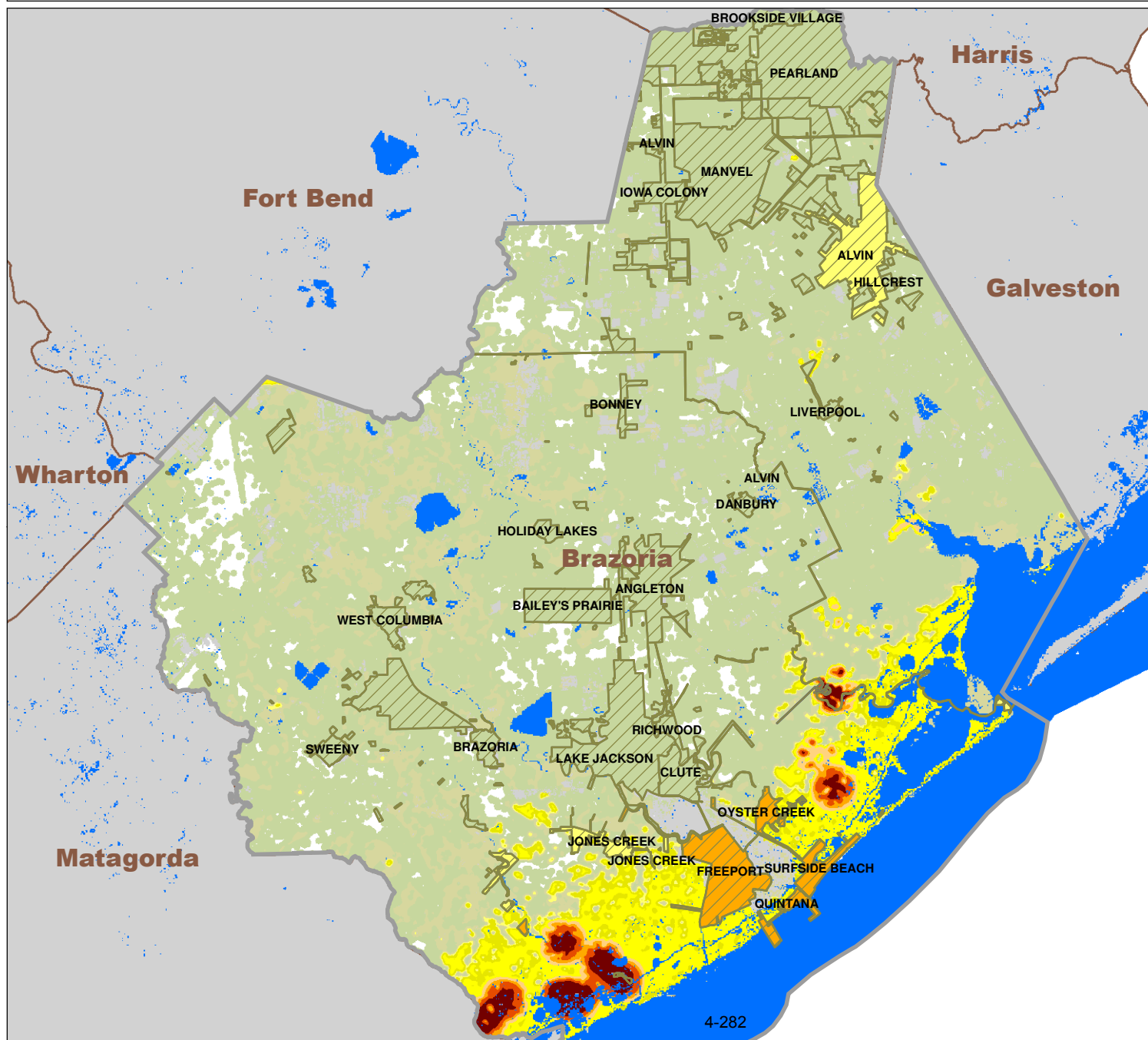
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Areas of Concern

AOI: Brazoria County Model Run Description: Brazoria County Communities at Risk



Legend

Areas of Concern (Communities at Risk)

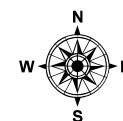
- Non-burnable
- Very Low
- Low
- Moderate
- High
- Very High

Wildland Fire Susceptibility Index

Source: 2006 Texas Forest Service

- 0
- 0.00000 - 0.00007
- 0.00007 - 0.00018
- 0.00018 - 0.00026
- 0.00026 - 0.00043
- 0.00043 - 0.00106
- 0.00106 - 0.00282
- 0.00282 - 0.00527
- 0.00527 - 0.01041
- 0.01041 - 1.00000

- Brazoria County
- City Limits
- Water
- County Boundaries



0 1.5 3 6 9 12 Miles

2/28/2011

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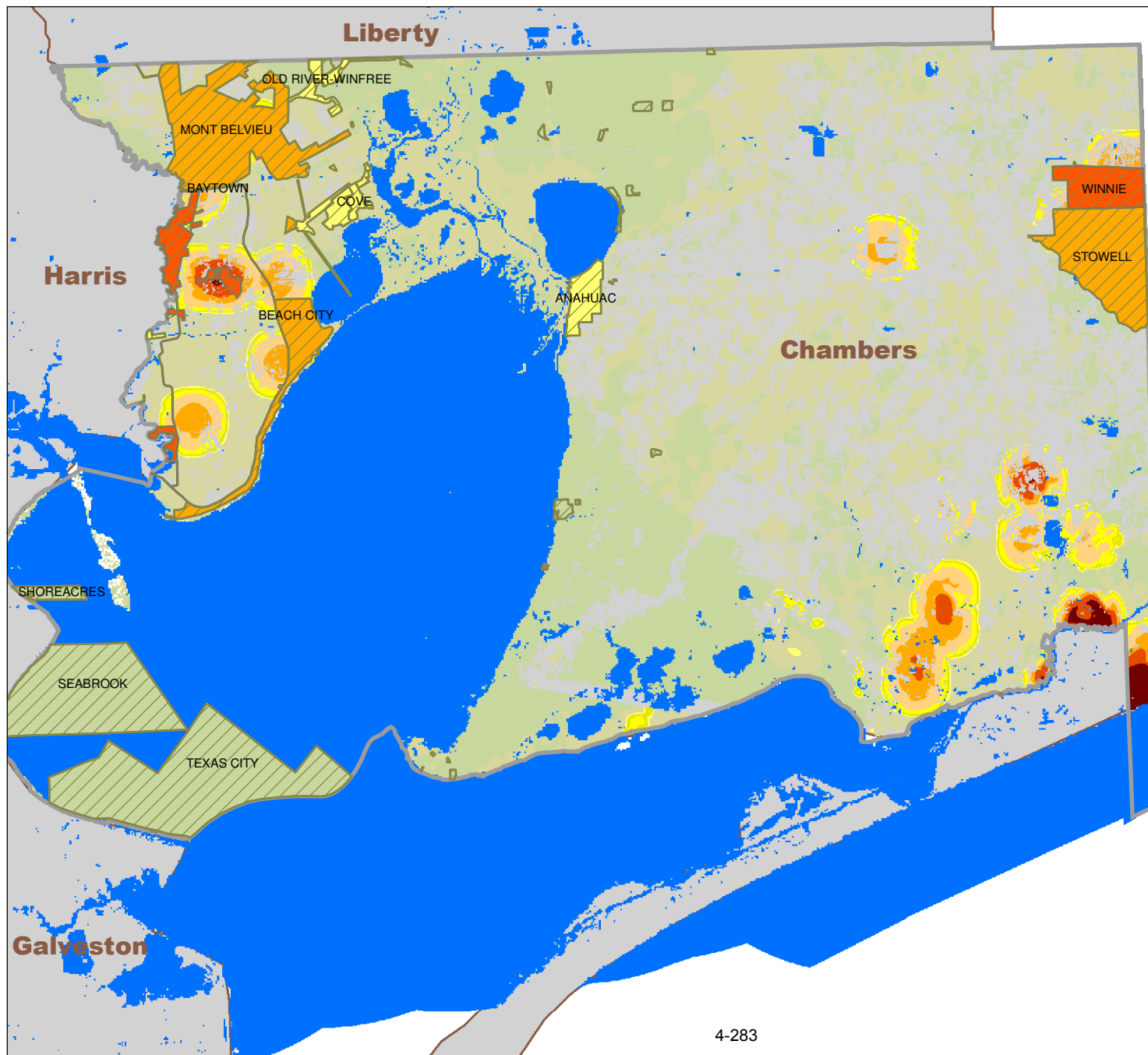
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Areas of Concern

AOI: Chambers County Model Run Description: Chambers County Communities at Risk



Legend

Areas of Concern (Communities at Risk)

- Non-burnable
- Very Low
- Low
- Moderate
- High
- Very High

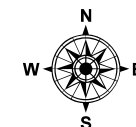
Wildland Fire Susceptibility Index

Source: 2006 Texas Forest Service Data

- 0
- 0.00000 - 0.00007
- 0.00007 - 0.00018
- 0.00018 - 0.00026
- 0.00026 - 0.00043
- 0.00043 - 0.00106
- 0.00106 - 0.00282
- 0.00282 - 0.00527
- 0.00527 - 0.01041
- 0.01041 - 1.00000

City Limits

- Area of Interest (AOI)
- Water
- County Boundaries



0 1 2 4 6 8 Miles

2/23/2011

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URS

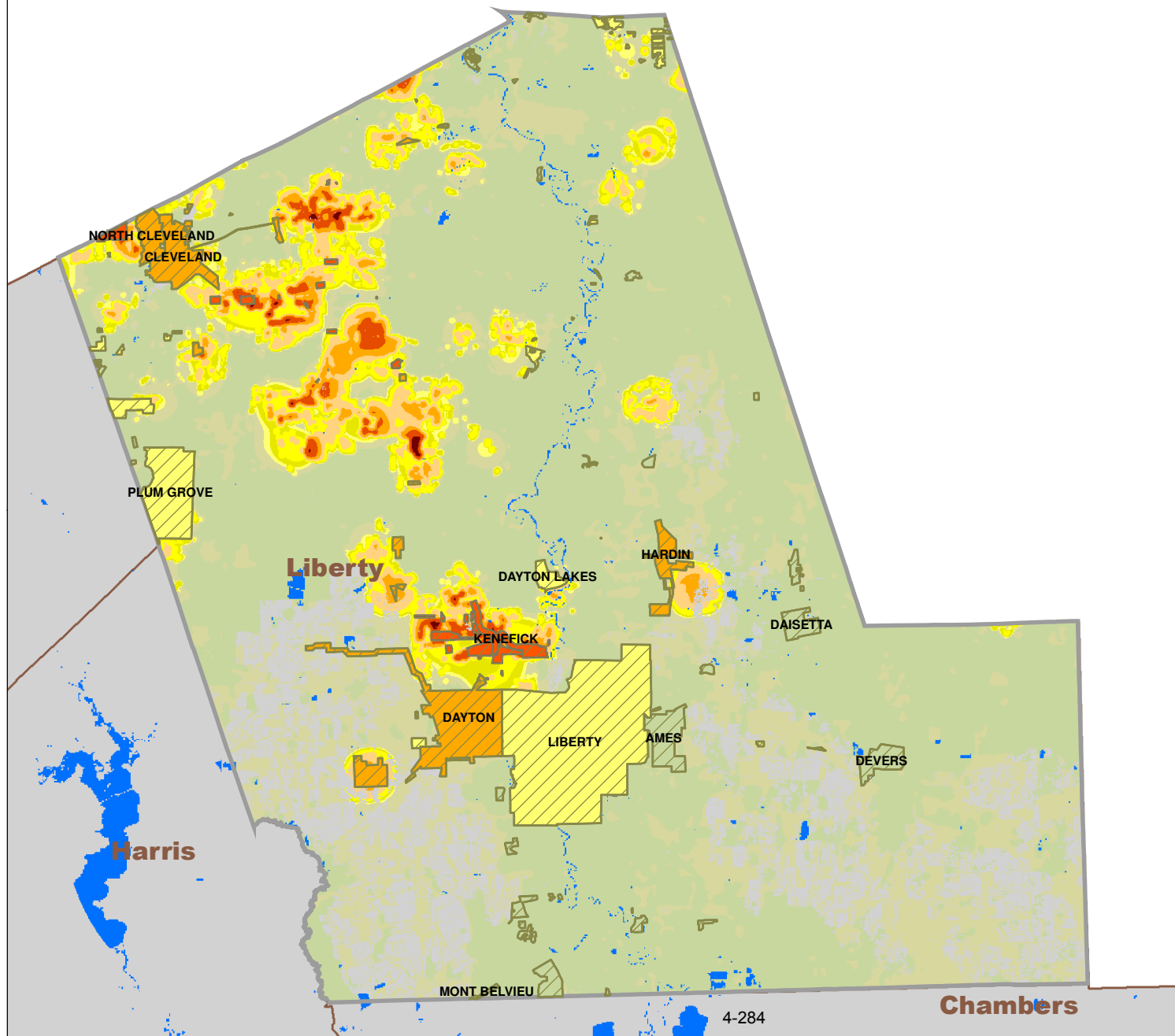
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Areas of Concern

AOI: Liberty County Model Run Description: Liberty County Communities at Risk



Legend

Areas of Concern (Communities at Risk)

- Non-burnable
- Very Low
- Low
- Moderate
- High
- Very High

Wildland Fire Susceptibility Index

Source: 2006 Texas Forest Service Data

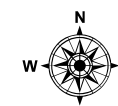
- 0
- 0.00000 - 0.00007
- 0.00007 - 0.00018
- 0.00018 - 0.00026
- 0.00026 - 0.00043
- 0.00043 - 0.00106
- 0.00106 - 0.00282
- 0.00282 - 0.00527
- 0.00527 - 0.01041
- 0.01041 - 1.00000

City Limits

Liberty County

Water

County Boundaries



0 1.25 2.5 5 7.5 10 Miles

2/28/2011

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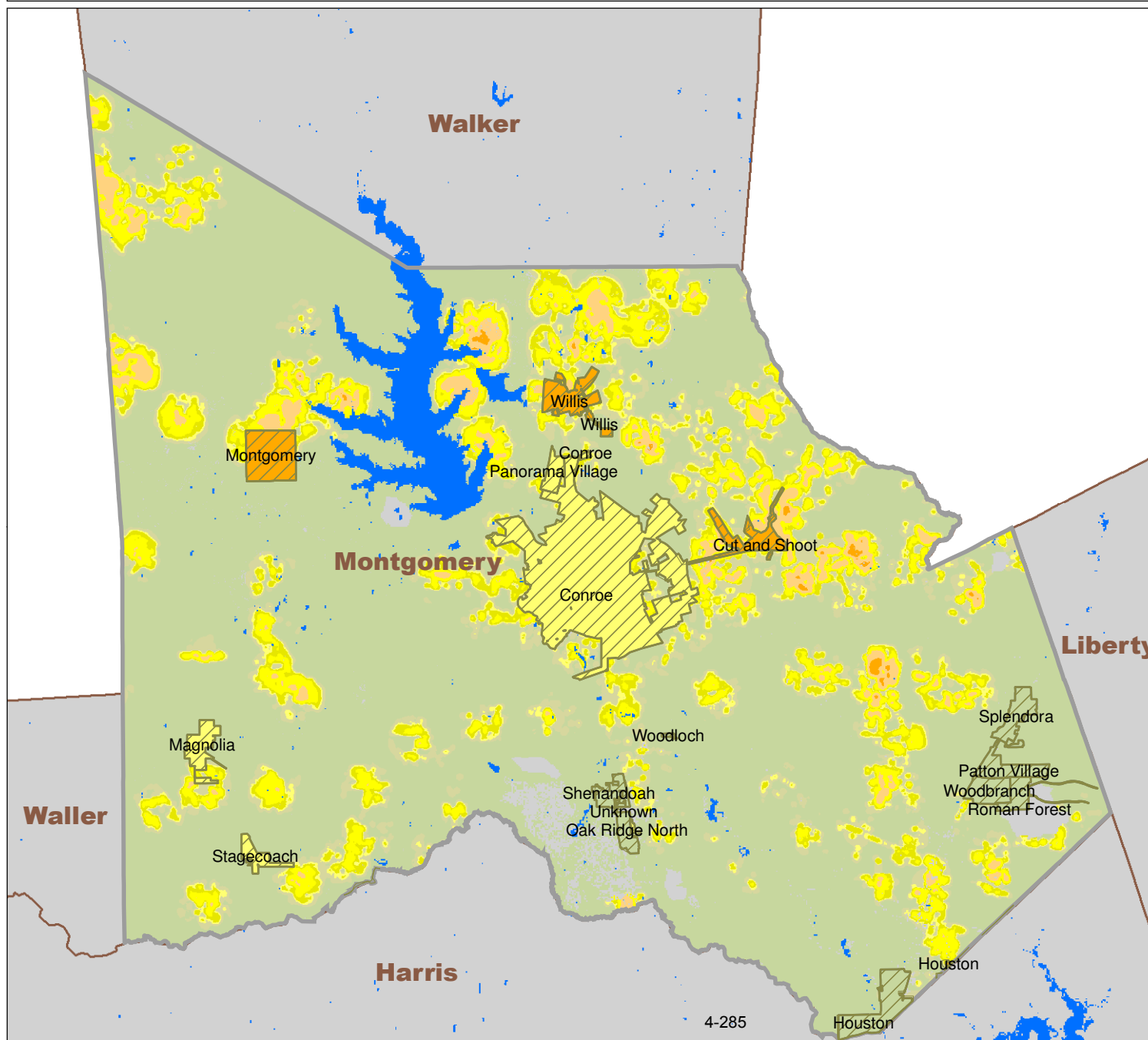
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SANBORN

Areas of Concern

AOI: Montgomery AOI Model Run Description: Montgomery County Areas of Concern



Legend

Areas of Concern (Communities at Risk)

- Non-burnable
- Very Low
- Low
- Moderate
- High
- Very High

Wildland Fire Susceptibility Index

Source: 2006 Texas Forest Service

- 0
- 0.00000 - 0.00007
- 0.00007 - 0.00018
- 0.00018 - 0.00026
- 0.00026 - 0.00043
- 0.00043 - 0.00106
- 0.00106 - 0.00282
- 0.00282 - 0.00527
- 0.00527 - 0.01041
- 0.01041 - 1.00000

- City Limits
- Montgomery County
- Water
- County Boundaries



0 1 2 4 6 8 Miles

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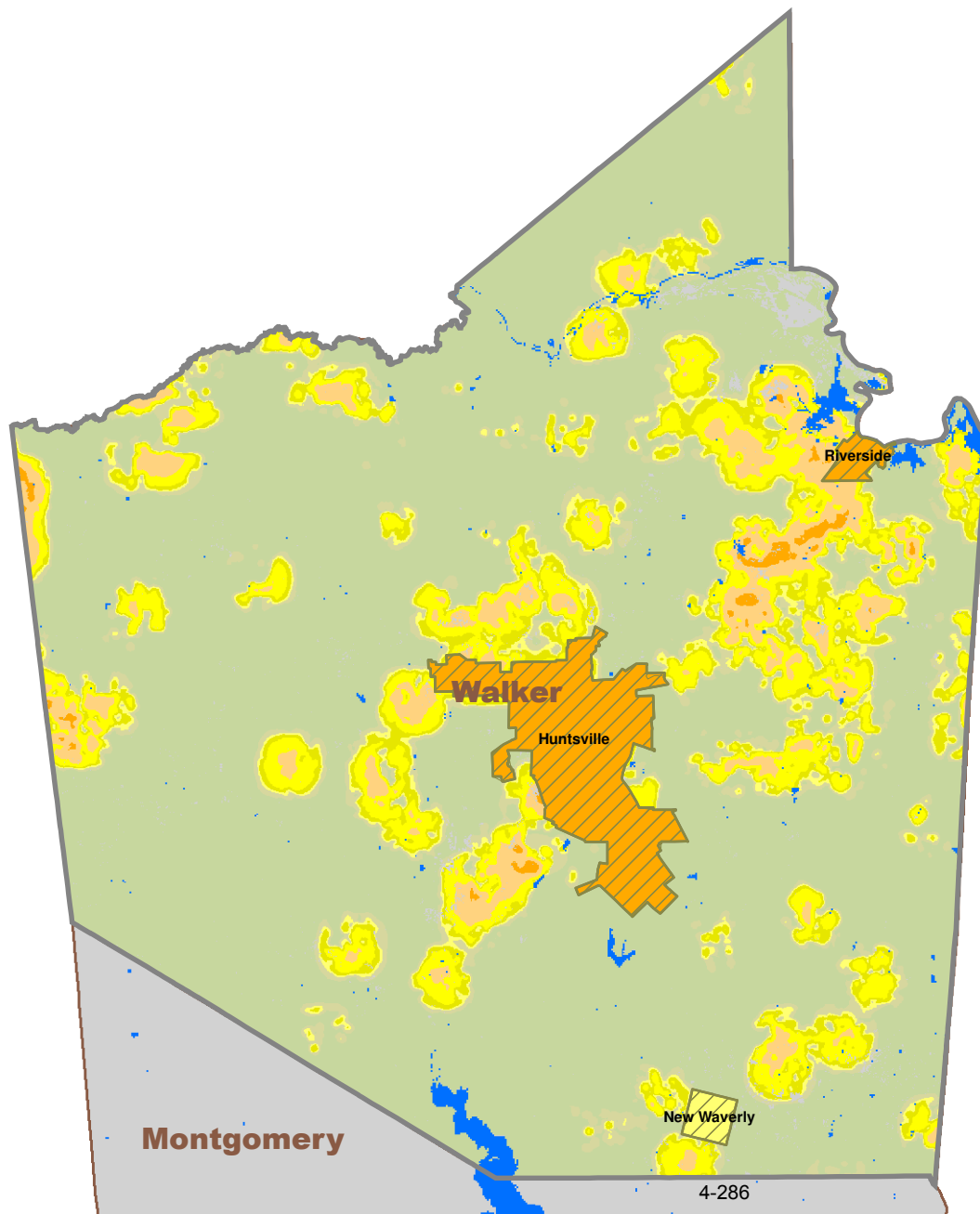
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Areas of Concern

AOI: Walker County Model Run Description: Walker County Communities at Risk



Legend

Areas Of Concern

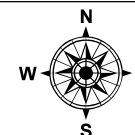
(Communities at Risk)

- Non-burnable
- Very Low
- Low
- Moderate
- High
- Very High

Wildland Fire Susceptibility Index

- 0
- 0.00000 - 0.00007
- 0.00007 - 0.00018
- 0.00018 - 0.00026
- 0.00026 - 0.00043
- 0.00043 - 0.00106
- 0.00106 - 0.00282
- 0.00282 - 0.00527
- 0.00527 - 0.01041
- 0.01041 - 1.00000

- City Limits
- Walker County
- Water
- County Boundaries



0 1 2 4 6 8 Miles

2/28/2011

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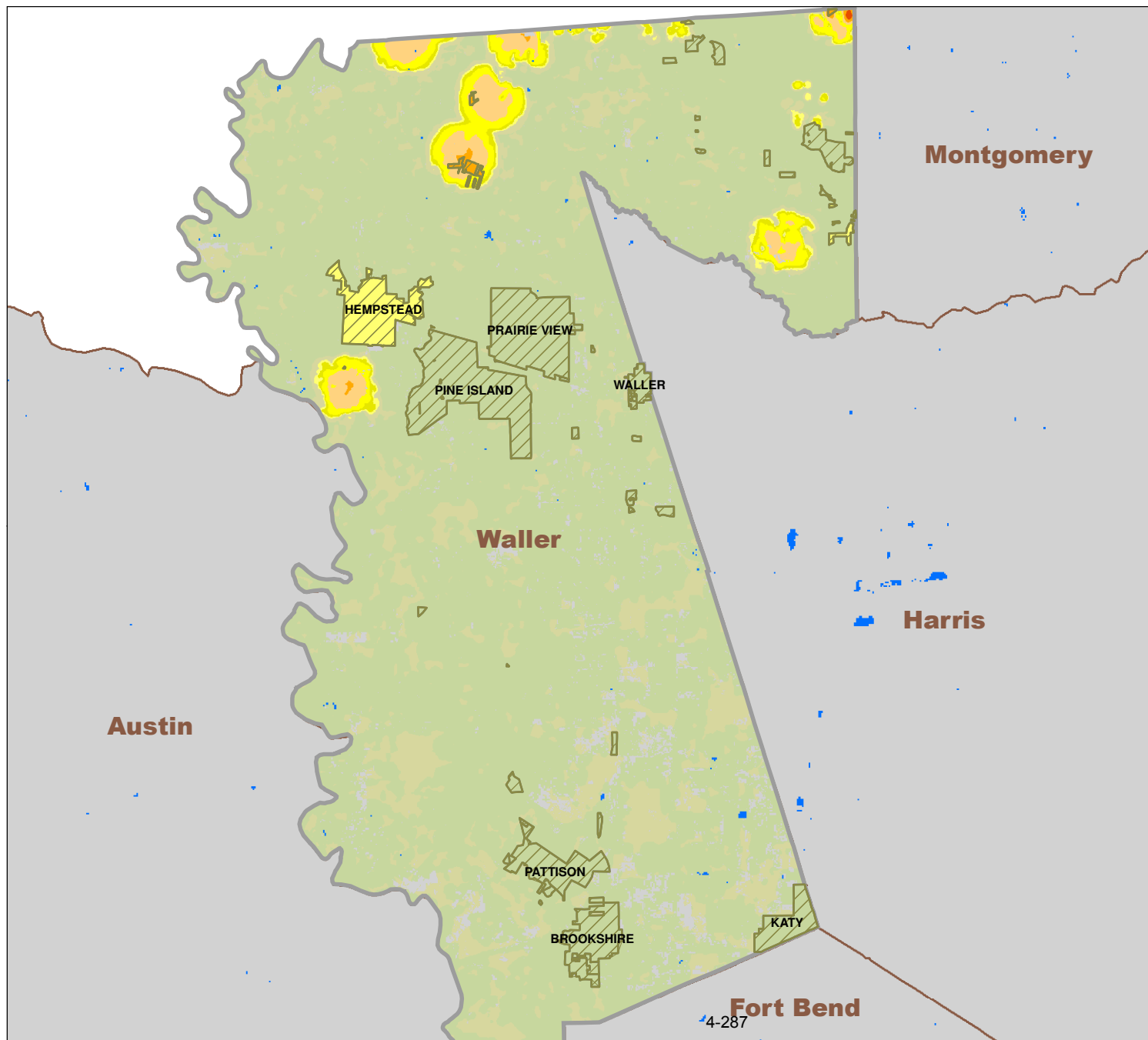
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Areas of Concern

AOI: Waller County AOI Model Run Description: Waller County Communities at Risk



Legend

Areas of Concern (Communities at Risk)

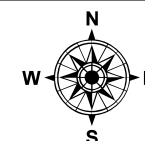
- Non-burnable
- Very Low
- Low
- Moderate
- High
- Very High

Wildland Fire Susceptibility Index

Source: 2006 Texas Forest Service Data

- 0
- 0.00000 - 0.00007
- 0.00007 - 0.00018
- 0.00018 - 0.00026
- 0.00026 - 0.00043
- 0.00043 - 0.00106
- 0.00106 - 0.00282
- 0.00282 - 0.00527
- 0.00527 - 0.01041
- 0.01041 - 1.00000

- Waller County
- City Limits
- Water
- County Boundaries



0 1 2 4 6 8 Miles

2/24/2011

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Table 4.3-24 presents the Communities Risk Ratings for the 78 communities covered under this Plan.

**Table 4.3-24
Communities Risk Ratings**

Jurisdiction	Areas of Concern (Community Risk)
H-GAC	Very Low
Austin County	Very Low
City of Bellville	Very Low
City of Brazos Country	Very Low
City of Industry	Very Low
Town of San Felipe	Very Low
City of Sealy	Low
City of Wallis	Very Low
Brazoria County	Very Low
City of Alvin	Low
City of Angleton	Very Low
City of Bailey's Prairie	Very Low
Village of Bonney	Very Low
City of Brazoria	Very Low
City of Brookside Village	Very Low
City of Clute	Very Low
City of Danbury	Very Low
City of Freeport	Moderate
City of Hillcrest Village	Very Low
Town of Holiday Lakes	Very Low
City of Iowa Colony	Very Low
City of Jones Creek	Very Low
City of Lake Jackson	Very Low
City of Liverpool	Very Low
City of Manvel	Very Low
City of Oyster Creek	Moderate
City of Quintana	Very Low
City of Richwood	Very Low
Village of Surfside Beach	Moderate
City of Sweeny	Very Low
Velasco Drainage District	Very Low
Chambers County	Low
Chambers-Liberty Counties Navigation District	Low
City of Anahuac	Low
City of Beach City	Moderate
City of Cove	Low
City of Mont Belvieu	Moderate
City of Old River-Winfree	Low
Trinity Bay Conservation District	Low
Liberty County	Low
City of Ames	Very Low
City of Cleveland	Moderate
City of Daisetta	Very Low
City of Dayton	Moderate
City of Dayton Lakes	Low
City of Devers	Very Low
City of Hardin	Moderate

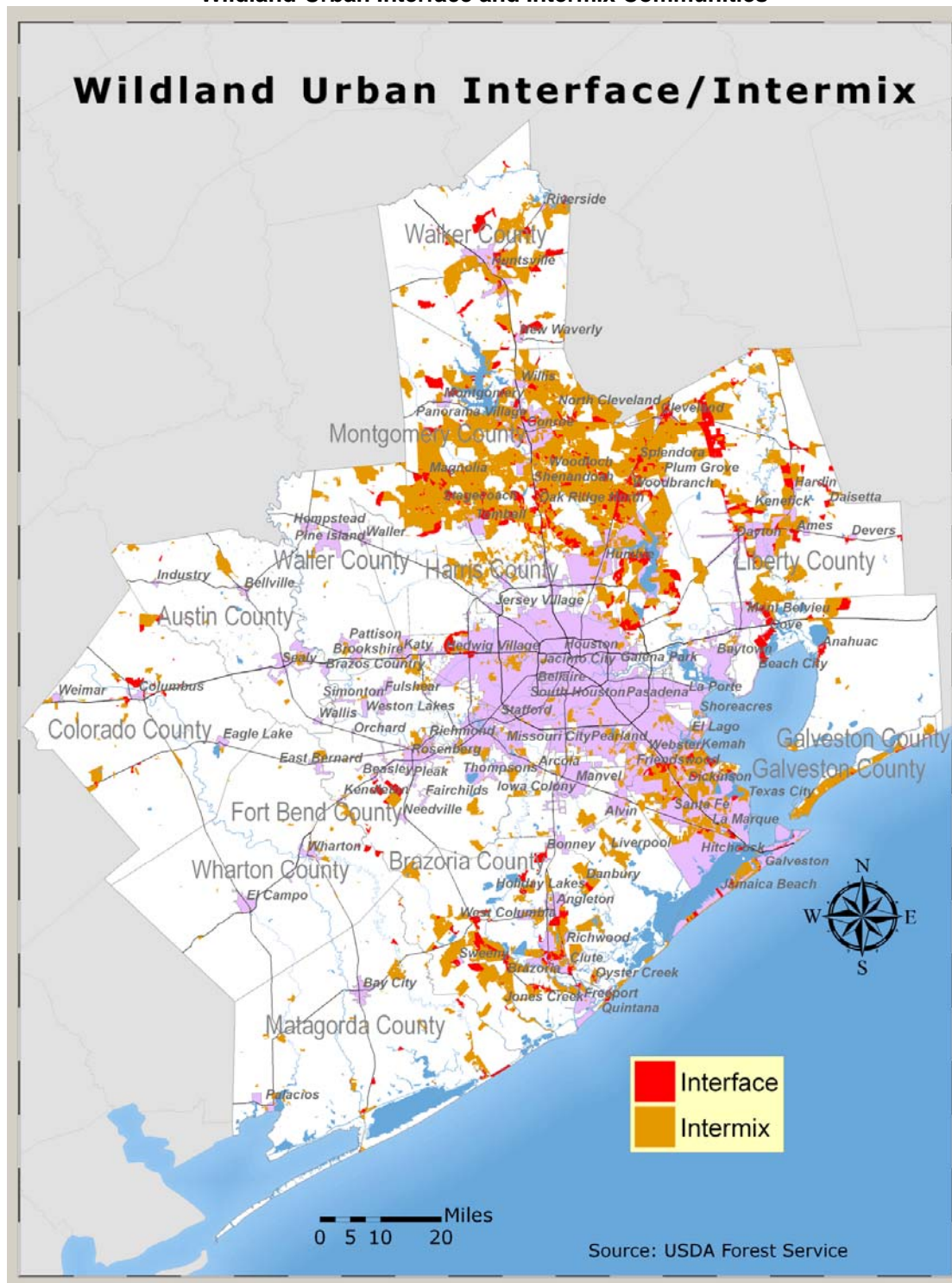
Jurisdiction	Areas of Concern (Community Risk)
City of Kenefick	High
City of Liberty	Low
City of North Cleveland	Moderate
City of Plum Grove	Low
Montgomery County	Low
City of Conroe	Low
City of Cut and Shoot	Moderate
City of Magnolia	Low
City of Montgomery	Moderate
City of Oak Ridge North	Very Low
City of Panorama Village	Very Low
City of Patton Village	Very Low
Town of Roman Forest	Very Low
City of Shenandoah	Very Low
City of Splendora	Very Low
City of Stagecoach	Low
City of Willis	Moderate
City of Woodbranch Village	Very Low
The Woodlands Township	Very Low
Town of Woodloch	Very Low
Walker County	Low
City of Huntsville	Moderate
City of New Waverly	Low
City of Riverside	Moderate
Waller County	Very Low
City of Brookshire	Very Low
City of Hempstead	Low
City of Pattison	Very Low
Town of Pine Island	Very Low
City of Prairie View	Very Low
City of Waller	Very Low

H-GAC conducted a Wildland-Urban Interface (WUI) analysis for the region. WUI is composed of both interface and intermix communities. In both interface and intermix communities, housing must meet or exceed a minimum density of one structure per 40 acres. **Table 4.3-25** summarizes the characteristics of WUI communities. **Figure 4.3-29** shows the results of the WUI analysis. As indicated by the map, the majority of the WUI communities are intermix communities. While the number of intermix and interface communities may be low for some areas, the threat of wildfire is continuous.

Table 4.3-25
Wildland-Urban Interface Community Types Characteristics

WUI Community Type	Housing/Vegetation Mix	% Vegetation	Housing Density
Intermix	Housing and vegetation intermingle; Vegetation is continuous	More than 50%	More than 1 house per 40 acres
Interface	Housing in the vicinity of contiguous vegetation	Less than 50% vegetation	Within 1.5 mi of an area (made up of one or more contiguous Census blocks) over 1,325 acres that is more than 75% vegetated

Figure 4.3-29
Wildland-Urban Interface and Intermix Communities



Impacts due to wildfire include damage or loss to public and private properties, injury and loss of life, and electrical grid failure. Communities in the WUI, intermix and adjacent to parks and green space would be more vulnerable to wildfires and thus would experience greater loss.

Drought

The information presented below is based on the HAZUS analysis conducted for the 2006 Regional Hazard Mitigation Plan because the release for the most current HAZUS was not available during the 2011 planning period.

Although the area is vulnerable to drought, estimated losses are quite difficult to calculate because drought causes little damage to the built environment. Most damages affect crops and farmland. Therefore, it is assumed that all buildings and facilities are exposed to drought but would experience negligible damage. **Table 4.3-26** shows exposure, estimated potential annualized losses and percent loss ratio by county.

Table 4.3-26
Exposure, Potential Annualized Losses and Percent Loss Ratio by County (Drought)*

Jurisdiction	Total Exposure	Annualized Losses	Percent Loss Ratio
Austin	\$2,790,645,000	\$5,385,432	0.1930%
Brazoria	\$36,593,210,000	\$6,243,119	0.0171%
Chambers	\$3,569,600,000	\$891,589	0.0250%
Colorado	\$2,454,283,000	\$6,261,017	0.2551%
Fort Bend	\$80,561,247,000	\$15,763,859	0.0196%
Galveston	\$44,738,889,000	\$1,377,968	0.0031%
Harris	\$630,304,498,000	\$7,874,500	0.0012%
Liberty	\$5,915,582,000	\$4,670,530	0.0790%
Matagorda	\$4,316,032,000	\$9,820,583	0.2275%
Montgomery	\$53,863,991,000	\$3,627,965	0.0067%
Walker	\$5,768,629,000	\$2,565,723	0.0445%
Waller	\$3,295,723,000	\$5,844,021	0.1773%
Wharton	\$4,293,187,000	\$21,925,074	0.5107%
TOTAL	\$878,465,516,000	\$92,251,381	

Note: * Results are from the 2006 Regional Hazard Mitigation Plan

Expansive Soils

Although a portion of the area is vulnerable to expansive soils, estimated losses are difficult to calculate because there is no apparent repository of data regarding losses associated with expansive soils. H-GAC contacted the Texas Department of Insurance in 2011 to determine the number of claims filed for damaged residential slab foundations, but found that claims are not classified in this manner. Local governments also do not specifically record damage to water conveyance and transportation infrastructure according to damage associated with expansive soils; it is typically rolled into maintenance costs.

Using GIS to assess vulnerability and exposure, H-GAC used 2011 land cover data and extracted the developed areas. Those developed areas were overlain on a soil swelling potential layer and a calculation was conducted to determine the square miles where the intersection of developed areas and moderate to very high soil swelling potential soils existed. **Table 4.3-27** shows the result of that exercise.

Table 4.3-27
Square Miles of Developed Areas Underlain by Soils with Swelling Potential

County Name	Developed Area Over Lower Swelling Potential Soils (sq mi)	% of County with Lower Swelling Potential Soils	Developed Area Over Moderate to High Swelling Potential Soils (sq mi)	% of County with Moderate to High Swelling Potential Soils	Developed Area Over Very High Swelling Potential Soils (sq mi)	% of County with Very High Swelling Potential Soils
Austin County	8.48	1.29%	1.95	0.30%	1.55	0.24%
Brazoria County	15.53	0.97%	52.83	3.31%	62.79	3.93%
Chambers County	16.34	1.87%	1.99	0.23%	21.35	2.45%
Liberty County	22.78	1.94%	7.41	0.63%	8.89	0.76%
Montgomery County	153.67	14.27%	7.77	0.72%	6.93	0.64%
Walker County	16.54	2.06%	6.04	0.75%	4.86	0.61%
Waller County	15.05	2.91%	1.37	0.26%	0.64	0.12%

H-GAC has estimated the vulnerability to residential slab foundations and provided this information in **Table 4.3-28**. First, H-GAC obtained 2006-2010 American Community Survey 5-year estimates for the number of single family homes in the planning area. H-GAC then developed assumptions for single family units that may experience damage due to expansive soils. For counties with a greater than 2% of developed areas with moderate to high and very high swelling potential soils (Brazoria and Chambers counties), 0.5% of all single family units was used. For counties with less than 2% of developed areas with moderate to high and very high swelling potential soils, 0.25% of all single family units was used. Mobile home units were excluded from the total of single family units. The resulting percentage was then multiplied by a typical cost to repair a slab foundation for a 2,000 square foot single family home.

Table 4.3-28
Estimated Exposure of Residential Slab Foundations to Expansive Soils

County	Total Single Family Units	% of Total Single Family Units	Typical Cost to Repair Foundations	Exposure (% of Single Family Units * Repair Costs)
Austin	9,300	23	\$ 15,000	\$ 348,750
Brazoria	83,968	420	\$ 15,000	\$ 6,297,600
Chambers	9,937	50	\$ 15,000	\$ 745,275
Liberty	17,642	44	\$ 15,000	\$ 661,575
Montgomery	118,494	296	\$ 15,000	\$ 4,443,525
Walker	12,153	30	\$ 15,000	\$ 455,738
Waller	9,932	25	\$ 15,000	\$ 372,450
Total	261,426	888	-	\$ 13,324,913

Excessive Heat

H-GAC researched several data sources such as the Texas State Climatologist's Office, NOAA and local newspapers; however, quantitative data related to excessive heat losses was not available. According to the State of Texas' Hazard Mitigation Plan, annualized physical losses for excessive heat for the State

and local jurisdictions are ranked “minimal”, indicating reliable state estimates of annualized damages come to less than \$50,000 per year. Effects of excessive heat include buckling rail tracks and pavement and heat-related illnesses and fatalities. Excessive heat also stresses the electrical power grid, occasionally resulting in rolling blackouts, which can lead to additional heat-related illnesses due to the lack of electricity to operate air conditioning and fans. According to the Center for Disease Control, vulnerable populations include infants and young children, people aged 65 or older, people who have a mental illness, and those who are physically ill, especially with heart disease or high blood pressure. **Table 4.3-29** provides the age breakdown of populations under five and over 65.

Table 4.3-29
Ages Vulnerable to Heat-Related Illness

County	Total Population	Population under 5	Percent of Population under 5	Population over 65	Percent of Population over 65
Austin County	28,417	1,850	7%	4,424	16%
Brazoria County	313,166	24,728	8%	29,923	10%
Chambers County	35,096	2,438	7%	3,294	9%
Colorado County	20,874	1,326	6%	4,040	19%
Fort Bend County	585,375	43,748	7%	42,758	7%
Galveston County	291,309	19,979	7%	32,804	11%
Harris County	4,092,459	336,314	8%	333,487	8%
Liberty County	75,643	5,189	7%	8,498	11%
Matagorda County	36,702	2,577	7%	5,249	14%
Montgomery County	455,746	33,224	7%	47,404	10%
Walker County	67,861	3,241	5%	6,980	10%
Waller County	43,205	3,140	7%	4,396	10%
Wharton County	41,280	3,006	7%	6,019	15%
Region	6,087,133	480,760	8%	529,276	9%

Some local governments mitigate effects of excessive heat by providing cooling stations at libraries and other public buildings.

Winter Storms

H-GAC researched many sources including the Texas State Climatologist's Office and NOAA for information related to annualized losses for winter storms, but was unable to identify quantitative data. Research indicates that winter storms do not often directly cause damage to infrastructure or buildings or injuries or fatalities; rather, auto accidents resulting from icy road conditions can lead to these losses. According to the State of Texas' Hazard Mitigation Plan, annualized physical losses for winter storms for the state and local jurisdictions are ranked “minimal”, indicating reliable state estimates of annualized damages come to less than \$50,000 per year. The region has approximately 32,000 homeless persons that would be vulnerable to winter storms.

Hail

The information presented below is based on the HAZUS analysis conducted for the 2006 Regional Hazard Mitigation Plan because the release for the most current HAZUS was not available during the 2011 planning period.

Since it cannot be predicted where hail may fall, all buildings and facilities are considered to be exposed to this hazard and could potentially be impacted. As a result, estimated annualized losses cannot be

broken down into further categories (residential, commercial, etc.). **Table 4.3-30** shows estimated exposure, potential annualized losses, and annualized percent loss ratio by county.

Table 4.3-30
Exposure, Potential Annualized Losses and Percent Loss Ratio by County (Hail)*

Jurisdiction	Total Exposure	Estimated Annualized Losses	Annualized Percent Loss Ratio
Austin	\$2,790,645,000	\$146,546	0.0053%
Brazoria	\$36,593,210,000	\$27,970	0.0001%
Chambers	\$3,569,600,000	\$16,529	0.0005%
Colorado	\$2,454,283,000	\$67,394	0.0027%
Fort Bend	\$80,561,247,000	\$168,403	0.0002%
Galveston	\$44,738,889,000	\$41,844	0.0001%
Harris	\$630,304,498,000	\$1,459,851	0.0002%
Liberty	\$5,915,582,000	\$13,353	0.0002%
Matagorda	\$4,316,032,000	\$27,117	0.0006%
Montgomery	\$53,863,991,000	\$693,294	0.0013%
Walker	\$5,768,629,000	\$12,096	0.0002%
Waller	\$3,295,723,000	\$12,901	0.0004%
Wharton	\$4,293,187,000	\$53,902	0.0013%
TOTAL	\$878,465,516,000	\$2,741,199	

Note: * Results are from the 2006 Regional Hazard Mitigation Plan

Coastal Erosion

According to the Texas General Land Office (TGLO), coastal erosion negatively affects the region's economy, damages natural resources, and threatens the health and safety of millions of Texans and visitors, including closure and flooding of roads used for hurricane evacuations. Erosion damage to the beach dune system has occurred along the Texas Gulf coast, compromising the integrity of this natural defense against hurricane surges and other severe storm impacts.

Statewide, about 30,000 commercial fishermen catch almost 100 million pounds of coastal fish and shellfish annually, worth about \$270 million. The total economic contribution to the state's economy from the nearly 850,000 sport fishermen is over \$2 billion per year. Coastal habitats attract 40,000 coastal waterfowl hunters, photographers, swimmers, campers, bird-watchers, boaters, and sightseers, generating an additional \$3 billion per year. Coastal destinations account for 30% of travel in Texas, which equates to \$10 billion per year. Coastal wetlands crucial to fish and waterfowl populations are increasingly impacted by erosion and conversion to open water.

Texas coastal industries depend on the Gulf Intracoastal Waterway (GIWW) and the major ports for import of raw materials and export of products. Overwhelmingly, Texas coastal industry is petrochemical-based. Among the planned expansions for Texas coastal industry are nine LNG facilities. Navigation structures (e.g., jetties and dikes) and Operation and Maintenance (O&M) practices protect and maintain the waterways for commerce, but have the unintended consequence of causing erosion of adjacent shorelines. Additionally, vessel wakes, surges, and waves are among the causes of erosion of Texas coastal land. The growth of industry and expansion of shipping will only exacerbate the erosion unless coastal erosion response projects are completed in several key areas. The GIWW extends 426 miles along the Texas Gulf Coast and links Texas's deep-water ports. The GIWW provides the state's oil, chemical, and mining industries direct access to important Midwestern markets and plays a vital economic role in Texas and the H-GAC region.

The Coastal Erosion Planning and Response Act (CEPRA) Program has been administered by the TGLO since its creation in 1999. TGLO tries to leverage funding for projects by collaborating with federal and

local governments and private citizens. TGLO funds a wide range of erosion response projects and studies, including funding for beach nourishment, dune restoration, shoreline protection, habitat restoration/protection, debris removal, structure relocation/demolition, coastal engineering/research and studies. **Table 4.3-31** shows the CEPRA funding from 2004-2011 applied in the H-GAC region for construction projects. Other project categories such as feasibility studies, design and assessments are not included.

Table 4.3-31
CEPRA Funding Applied in the H-GAC Region for Construction Projects

Biennium	Partner	County	Project	Type	Project Cost	CEPRA Share
2006-2007	City of Jamaica Beach	Galveston	City of Jamaica Beach	Dune Restoration	\$1,067,000	\$800,000
2006-2007	Village of Surfside Beach	Brazoria	Surfside Beach	Beach Nourishment and Dune Restoration	\$250,000	\$187,500
2006-2007	Texas Parks and Wildlife Department	Brazoria	West Bay Bird Island	Shoreline Protection and Habitat Protection	\$424,000	\$100,000
2006-2007	Galveston County	Galveston	Rollover Pass	Beach Nourishment	\$793,448	\$196,188
2006-2007	City of Galveston, Galveston County, City of Quintana	Galveston, Brazoria	Beach Nourishment FEMA Repairs at Bolivar Peninsula, West Galveston Island, and Quintana Beach	Beach Nourishment	\$1,507,451	\$113,059
2008-2009	Galveston County	Galveston	Beach Nourishment with Beneficial Use of Dredged Materials - FEMA Repairs at Gilchrist West (Caplen), Bolivar Peninsula	Beach Nourishment with Beneficial Use of Dredged Materials	\$749,688	\$282,474
2008-2009	City of Galveston, Galveston County	Galveston	Beach Nourishment FEMA Repairs at West Galveston Island	Beach Nourishment	\$1,203,729	\$159,323
2008-2009	Village of Surfside Beach	Brazoria	Surfside Beach Revetment Project	Shoreline Protection	\$2,285,318	\$1,371,191
2008-2009	Village of Surfside Beach	Brazoria	Surfside Beach Renourishment Project Phase 1	Beach Nourishment/Shoreline Protection	\$1,000,000	\$400,000
2008-2009	The Nature Conservancy	Galveston	Moses Lake Shoreline Protection and Marsh Restoration Phase 2	Habitat Restoration	\$665,000	\$200,000
2008-2009	Galveston Park Board of Trustees	Galveston	Galveston Seawall Emergency Beach Nourishment	Beach Nourishment	\$6,000,000	\$4,500,000
2010-2011	City of LaPorte	Harris	Sylvan Beach Shoreline Protection and Beach Nourishment	Shoreline Protection/Beach Nourishment	\$3,667,333	\$2,188,400
2010-2011	Village of Surfside Beach	Brazoria	Surfside Emergency Beach Nourishment	Emergency Beach Nourishment	\$4,400,000	\$400,000
2010-2011	Village of Surfside Beach	Brazoria	Surfside Shoreline Stabilization-Revetment Repair and Enhancement	Shoreline Protection	\$1,762,914	\$176,292

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Biennium	Partner	County	Project	Type	Project Cost	CEPRA Share
2010-2011	Texas Parks and Wildlife Department	Galveston	West Galveston Island Estuarine Restoration Project	Wetland Habitat Restoration	\$6,055,966	\$647,597
2010-2011	Texas Parks and Wildlife Department	Galveston	McAllis Point Wetland Restoration Project	Wetland Habitat Restoration	\$1,315,575	\$295,620
2010-2011	The Nature Conservancy	Galveston	Moses Lake Shoreline Protection, Phase 2	Shoreline Protection	\$738,150	\$300,000
2010-2011	U.S. Army Corps of Engineers, Galveston County	Galveston	Rollover Pass Beneficial Use of Dredged Material	Beach Nourishment	\$2,003,988	\$338,517
2010-2011	City of Jamaica Beach	Galveston	Jamaica Beach Dune Repair	Dune Restoration Repair	\$2,105,766	\$75,354
TOTAL					\$37,995,326	\$12,731,515

Dam/Levee Failure

The information presented below is based on the HAZUS analysis conducted for the 2006 Regional Hazard Mitigation Plan because the release for the most current HAZUS was not available during the 2011 planning period. If a dam or levee breaks, scores of properties can become quickly submerged in floodwaters and residents may become trapped by rapidly rising water. The failure of dams and levees has the potential to place large numbers of people and great amounts of property in harm's way. **Table 4.3-32** shows estimated dam failure exposure of people and buildings by county.

Table 4.3-32
Estimated Exposure of People and Buildings by County (Dam Failure)*

Jurisdiction	Potential Residential Buildings at Risk		Potential Commercial Buildings at Risk		Potential People at Risk
	Number	Value	Number	Value	
Austin	1	\$125,233	1	\$1,883	1
Brazoria	36	\$8,821,136	1	\$1,286,431	93
Chambers	50	\$9,868,968	1	\$38,720	102
Colorado	1	\$57,453	0	\$0	1
Fort Bend	310	\$94,521,934	1	\$1,209,234	249
Galveston	2	\$670,039	0	\$0	5
Harris	7,940	\$2,752,327,843	71	\$404,981,036	9,534
Liberty	21	\$2,581,548	1	\$30,719	52
Matagorda	1	\$59,426	1	\$14,158	1
Montgomery	3,750	\$998,023,611	8	\$40,541,703	5,006
Walker	54	\$14,232,548	1	\$32,298	100
Waller	1	\$341,689	1	\$68	3
Wharton	1	\$63,443	0	\$0	1
TOTAL	12,166	\$3,881,694,871	88	\$448,136,249	15,147

Note: * Results are from the 2006 Regional Hazard Mitigation Plan

Toxic Release/Hazardous Materials

The information presented below is based on the HAZUS analysis conducted for the 2006 Regional Hazard Mitigation Plan because the release for the most current HAZUS was not available during the 2011 planning period.

Toxic releases can have a substantial impact on health and safety of the public and first responders. Each year, facilities that meet certain activity thresholds must report their releases and other waste management activities for listed toxic chemicals to Environmental Protection Agency (EPA) and to their state or tribal entity. The Toxic Release Inventory (TRI) database serves as a repository of data related to these types of incidents. A facility must report if it meets the following three criteria:

- The facility falls within one of the following industrial categories: manufacturing; metal mining; coal mining; electric generating facilities that combust coal and/or oil; chemical wholesale distributors; petroleum terminals and bulk storage facilities; RCRA Subtitle C treatment, storage, and disposal (TSD) facilities; and solvent recovery services
- Has 10 or more full-time employees, and
- Manufactures or processes more than 25,000 pounds or otherwise uses more than 10,000 pounds of any listed chemical during the calendar year. Persistent, bioaccumulative and toxic

(PBT) chemicals are subject to different thresholds of 10 pounds, 100 pounds or 0.1 grams depending on the chemical.

Table 4.3-33 shows the number of toxic facilities and chemicals per county. **Table 4.3-34** shows the estimated exposure of people and buildings by county in the H-GAC planning region.

Table 4.3-33
Number of Toxic Facilities and Chemicals per County*

County	Number of Facilities	Number of Chemicals
Austin	1	4
Brazoria	40	331
Chambers	7	68
Colorado	4	4
Fort Bend	13	102
Galveston	16	231
Harris	292	2,123
Liberty	5	16
Matagorda	2	23
Montgomery	14	52
Walker	3	10
Waller	N/A	N/A
Wharton	3	6
TOTAL	400	2,970

Note: * Results are from the 2006 Regional Hazard Mitigation Plan

Table 4.3-34
Estimated Exposure of People and Buildings by County (Toxic Release)*

Jurisdiction	Potential Residential Buildings at Risk		Potential Commercial Buildings at Risk		Potential People at Risk
	Number	Value	Number	Value	
Austin	-	-	-	-	-
Brazoria	3,401	\$861,941,913	29	\$115,035,652	8,729
Chambers	47	\$12,079,283	1	\$954,730	70
Colorado	6	\$1,342,129	1	\$172,552	16
Fort Bend	3,693	\$1,086,631,209	56	\$194,628,733	5,219
Galveston	3,126	\$904,398,055	23	\$110,521,958	7,674
Harris	35,309	\$10,400,342,646	344	\$1,449,013,869	96,548
Liberty	531	\$95,428,206	3	\$13,386,658	1,215
Matagorda	11	\$2,251,921	0	\$0	24
Montgomery	1,111	\$273,306,265	21	\$80,621,515	3,571
Walker	1	\$30,893	1	\$41,795	1
Waller	16	\$2,845,829	1	\$1,667,447	66
Wharton	15	\$3,250,110	1	\$157,421	40
TOTAL	47,265	\$13,643,848,460	478	\$1,966,202,329	123,17113,652

Note: * Results are from the 2006 Regional Hazard Mitigation Plan

Energy Pipelines

The information presented below is based on the HAZUS analysis conducted for the 2006 Regional Hazard Mitigation Plan because the release for the most current HAZUS was not available during the 2011 planning period.

Energy pipelines cross counties throughout south east Texas. If any of these energy pipelines, were to rupture, such an event could endanger property and lives in the immediate area (within less than half a mile radius). **Table 4.3-35** shows estimated oil pipeline exposure of people and buildings by county, and **Table 4.3-36** shows estimated gas pipeline exposure of people and buildings by county.

Table 4.3-35
Potential Residential and Commercial Buildings at Risk to Oil Pipeline Rupture by County*

Jurisdiction	Potential Residential Buildings at Risk		Potential Commercial Buildings at Risk		Potential People at Risk
	Number	Value	Number	Value	
Austin	712	\$100,482	1	\$4,127	1,315
Brazoria	8,230	\$1,322,979	88	\$146,295	16,842
Chambers	3,051	\$464,723	48	\$89,090	5,799
Colorado	328	\$48,579	5	\$11,521	793
Fort Bend	22,860	\$4,377,638	89	\$175,265	28,827
Galveston	16,014	\$3,159,750	154	\$318,997	24,064
Harris	165,476	\$35,942,972	2,349	\$4,622,716	386,957
Liberty	3,172	\$354,038	10	\$20,300	10,063
Matagorda	100	\$12,648	0	\$68	215
Montgomery	13,852	\$2,241,485	150	\$357,686	24,773
Walker	801	\$92,309	4	\$6,317	1,738
Waller	601	\$79,977	1	\$1,879	1,336
Wharton	611	\$92,595	13	\$16,598	1,558
TOTAL	235,809	\$48,290,176	2,912	\$5,770,858	504,281

Note: * Results are from the 2006 Regional Hazard Mitigation Plan

Table 4.3-36
Potential Residential and Commercial Buildings at Risk to Gas Pipeline Rupture by County*

Jurisdiction	Potential Residential Buildings at Risk		Potential Commercial Buildings at Risk		Potential People at Risk
	Number	Value	Number	Value	
Austin	1,237	\$173,993	7	\$18,181	2,448
Brazoria	18,606	\$2,994,802	137	\$248,622	36,820
Chambers	3,297	\$480,106	17	\$42,074	6,545
Colorado	137	\$20,065	3	\$4,474	290
Fort Bend	27,996	\$5,572,739	136	\$298,240	35,930
Galveston	16,160	\$2,912,062	123	\$340,919	27,537
Harris	133,069	\$27,795,253	1,804	\$3,627,072	249,444
Liberty	6,034	\$710,895	38	\$66,850	19,236
Matagorda	1,962	\$312,578	9	\$24,979	5,112
Montgomery	23,652	\$3,637,124	142	\$301,009	44,534
Walker	1,192	\$134,317	6	\$14,120	3,006

Waller	1,190	\$162,516	17	\$29,239	2,536
Wharton	1,966	\$278,565	19	\$35,551	5,173
TOTAL	236,498	\$45,185,015	2,459	\$5,051,328	438,610

Note: * Results are from the 2006 Regional Hazard Mitigation Plan

Unique Risks to Individual Jurisdictions

All natural hazards impact jurisdictions in different ways. It is difficult to guess where a tornado will touch down, where hail will fall or to how severely a winter storm or drought will impact a jurisdiction. The few patterns that these hazards do follow have been discussed in Section 4.1 and 4.2.

Flood hazards are only slightly easier to gauge. Flood Insurance Rate Maps (FIRMS) have been developed to indicate what parts of jurisdictions are expected to flood during certain rainfall events, but even these are only somewhat effective.

For hazards that do not have a spatially defined area (drought, tornadoes, winter storms, thunderstorms) it is assumed that all jurisdictions are equally exposed to the hazards across the jurisdiction. Vulnerability can vary on an area-wide and building-by-building basis depending on age of structure, construction type, etc. For the next update of the plan, development of such detailed data using local datasets and follow-up with site-visits are needed, if time and resources permit.

During the Mitigation Strategy workshop, participants were provided a Unique Hazards Identification worksheet that asked questions about unique risks within individual jurisdictions³. Participants were to identify any localized risk areas that are not common to the entire region. No worksheets were returned for the entire region.

Additionally, each jurisdiction that participated in the planning process also completed local capability assessments (see Section 5, Capability Assessment) and was asked to provide information about unique hazards in their communities. Other local knowledge was gathered and combined with the aforementioned data to develop **Table 4.3-37**.

Table 4.3-37
Unique Hazards in the H-GAC Region

Jurisdiction	10 or More Repetitive Loss Properties	Target 10,000 Repetitive Loss Properties	5 or More SRL Properties ¹	Undersized Culverts	No Building Codes	Local HAZMAT Concerns	Localized Drainage Issues	At-Risk Critical Facilities/ Infrastructure
H-GAC	X							
Austin County					X	X	X	
City of Bellville						X		
City of Brazos Country					X			
City of Industry					X			
Town of San Felipe								
City of Sealy				X		X	X	
City of Wallis				X		X	X	
Brazoria County	X	X	X		X		X	
City of Alvin	X	X						
City of Angleton	X	X					X	

³ A copy of the Unique Hazard Worksheet can be found in Appendix D.

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Jurisdiction	10 or More Repetitive Loss Properties	Target 10,000 Repetitive Loss Properties	5 or More SRL Properties ¹	Undersized Culverts	No Building Codes	Local HAZMAT Concerns	Localized Drainage Issues	At-Risk Critical Facilities/ Infrastructure
City of Bailey's Prairie								
Village of Bonney								
City of Brazoria	X	X					X	
City of Brookside Village	X	X						
City of Clute	X	X					X	
City of Danbury								
City of Freeport	X	X					X	X
City of Hillcrest Village								
Town of Holiday Lakes								
City of Iowa Colony								
City of Jones Creek	X							
City of Lake Jackson	X	X		X			X	X
City of Liverpool		X						
City of Manvel	X	X						X
City of Oyster Creek						X	X	X
City of Quintana								
City of Richwood	X	X						
Village of Surfside Beach	X	X					X	X
City of Sweeny		X		X		X	X	X
Velasco Drainage District								
Chambers County	X				X	X	X	X
Chambers-Liberty Counties Navigation District								
City of Anahuac		X					X	
City of Beach City								
City of Cove								
City of Mont Belvieu							X	
City of Old River-Winfree							X	
Trinity Bay Conservation District								
Liberty County	X		X	X	X	X	X	X
City of Ames						X	X	
City of Cleveland		X				X	X	
City of Daisetta						X		X
City of Dayton		X		X		X	X	
City of Dayton Lakes				X		X	X	X
City of Devers				X	X	X	X	
City of Hardin				X	X	X	X	
City of Kenefick				X			X	

Jurisdiction	10 or More Repetitive Loss Properties	Target 10,000 Repetitive Loss Properties	5 or More SRL Properties ¹	Undersized Culverts	No Building Codes	Local HAZMAT Concerns	Localized Drainage Issues	At-Risk Critical Facilities/ Infrastructure
City of Liberty	X	X		X		X	X	X
City of North Cleveland								X
City of Plum Grove								X
Montgomery County	X	X	X		X	X	X	
City of Conroe	X	X				X	X	X
City of Cut and Shoot						X		
City of Magnolia		X				X		
City of Montgomery						X		
City of Oak Ridge North	X					X	X	
City of Panorama Village						X		
City of Patton Village						X		
Town of Roman Forest						X		
City of Shenandoah						X		
City of Splendora		X				X	X	
City of Stagecoach						X		
City of Willis						X		
City of Woodbranch Village						X		
The Woodlands Township								
Town of Woodloch						X		
Walker County	X	X		X	X			X
City of Huntsville						X	X	X
City of New Waverly								
City of Riverside								
Waller County	X				X	X	X	
City of Brookshire							X	
City of Hempstead							X	
City of Pattison							X	
Town of Pine Island					X		X	
City of Prairie View							X	
City of Waller							X	

¹ The number of severe repetitive loss (SRL) properties is only presented at a county level. Data is current as of April 1, 2011.

Future Vulnerability

The H-GAC planning area is one of the most rapidly developing regions in the United States. The vulnerability of future buildings, infrastructure and critical facilities is a great concern to community leaders across the region. As discussed in the *Capability Assessment* section of this Plan, many of the day-to-day activities in local governments in the region are designed to deal with these challenges.

Land uses and development trends in the region are briefly discussed in this section and in the *Community Profile*. Future Plan updates will address development trends and future vulnerability (to include the number and types of future buildings, infrastructure, and critical facilities located in the identified hazard areas) in more detail, in particular for hazards with a spatially defined hazard boundary, such as flood.

Conclusions on Hazard Risk

It is evident from the findings of this *Risk Assessment* that the hazards posing the greatest threat to the jurisdictions in the H-GAC planning area are the flood hazard, hurricanes and tropical storms and drought. Coastal flooding represents a medium threat. All other hazards are considered to be low risk in comparison.

County-wide uniform wildfire risk cannot be predicted accurately using the SFRAS wildfire risk assessment used in this study. The primary output from SFRAS, the Level of Concern Index (overall risk) is computed for an area of 30 meters by 30 meters. To obtain the risk for a county, the LOC values are averaged over a large area producing gross approximation of the actual risk. The Wildfire risk assessment section presents the risk for each participating county and jurisdictions.

Overview of Vulnerability

The hazards analyzed in 4.2 Hazard Analysis affect a certain portion of the participating jurisdictions. **Table 4.3-38** provides a summary of this analysis.

For the purposes of this plan, hazard vulnerability has been classified in the following categories:

Large (L):	More than 50% of the area affected
Moderate (M):	Between 10 and 50% of area affected
Small (S):	Less than 10% of area affected

Table 4.3-38
Summary of Hazard Exposure

Jurisdiction	Flood	Hurricanes and Tropical Storms	Severe Thunderstorms and Tornadoes	Tornadoes	Wildfire	Drought	Expansive Soils	Excessive Heat	Winter Storms	Hail	Coastal Erosion	Dam/Levee Failure	Toxic Release/HAZMAT	Energy Pipeline Failure
H-GAC	M	M	M	M	M	M	S	L	M	S	S	S	S	S
Austin County	M	M	M	S	S	S	S	L	L	S	S	S	S	S
City of Bellville	M	M	M	S	S	S	S	L	L	S	S	S	S	S
City of Brazos Country	M	M	M	S	S	S	S	L	L	S	S	S	S	S
City of Industry	S	M	M	S	S	S	S	L	L	S	S	S	S	S
Town of San Felipe	M	M	M	S	S	S	S	L	L	S	S	S	S	S
City of Sealy	M	M	M	S	S	S	S	L	L	S	S	S	S	S
City of Wallis	M	M	S	S	S	S	S	L	L	S	S	S	S	S
Brazoria County	L	L	M	S	S	S	S	L	L	S	L	M	S	S
City of Alvin	M	L	L	S	S	S	S	L	L	S	M	S	S	S
City of Angleton	M	L	M	S	S	S	S	L	L	S	M	S	S	S
City of Bailey's Prairie	L	L	S	S	S	S	S	L	L	S	M	S	S	S

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Jurisdiction	Flood	Hurricanes and Tropical Storms	Severe Thunderstorms and Tornadoes	Tornadoes	Wildfire	Drought	Expansive Soils	Excessive Heat	Winter Storms	Hail	Coastal Erosion	Dam/Levee Failure	Toxic Release/HAZMAT	Energy Pipeline Failure
Village of Bonney	S	L	M	S	S	S	S	L	L	S	M	S	S	S
City of Brazoria	M	L	M	S	S	S	S	L	L	S	M	S	S	S
City of Brookside Village	L	L	M	S	S	S	S	L	L	S	M	S	S	S
City of Clute	M	L	M	S	S	S	S	L	L	S	M	S	S	S
City of Danbury	M	L	L	S	S	S	S	L	L	S	M	S	S	S
City of Freeport	L	L	M	S	S	S	S	L	L	S	L	S	S	S
City of Hillcrest Village	M	L	L	S	S	S	S	L	L	S	M	S	S	S
Town of Holiday Lakes	L	L	S	S	S	S	S	L	L	S	M	S	S	S
City of Iowa Colony	L	L	M	S	S	S	S	L	L	S	M	S	S	S
City of Jones Creek	M	L	L	S	S	S	S	L	L	S	M	S	S	S
City of Lake Jackson	M	L	L	S	S	S	S	L	L	S	M	S	S	S
City of Liverpool	L	L	M	S	S	S	S	L	L	S	M	S	S	S
City of Manvel	M	L	M	S	S	S	S	L	L	S	M	S	S	S
City of Oyster Creek	M	L	M	S	S	S	S	L	L	S	M	S	S	S
City of Quintana	L	L	M	S	S	S	S	L	L	S	L	S	S	S
City of Richwood	L	L	M	S	S	S	S	L	L	S	M	S	S	S
Village of Surfside Beach	L	L	M	S	S	S	S	L	L	S	L	S	S	S
City of Sweeny	L	L	M	S	S	S	S	L	L	S	M	S	S	S
Velasco Drainage District	L	L	M	S	S	S	S	L	L	S	L	S	S	S
Chambers County	L	L	M	S	M	S	S	L	L	S	L	S	S	S
Chambers County, Trinity Bay Conservation District, Chambers-Liberty Counties Navigation District	L	L	M	S	M	S	S	L	L	S	L	S	S	S
Chambers-Liberty Counties Navigation District	L	L	M	S	M	S	S	L	L	S	L	S	S	S
City of Anahuac	L	L	M	S	M	S	S	L	L	S	L	S	S	S
City of Beach City	L	L	M	S	M	S	S	L	L	S	L	S	S	S
City of Cove	L	L	M	S	M	S	S	L	L	S	M	S	S	S
City of Mont Belvieu	L	L	M	S	M	S	S	L	L	S	S	S	S	S
City of Old River-Winfree	L	L	M	S	M	S	S	L	L	S	M	S	S	S
Liberty County	L	M	M	S	M	S	S	L	L	S	M	M	S	S
City of Ames	S	S	M	S	M	S	S	L	L	S	S	S	S	S
City of Cleveland	M	S	S	S	M	S	S	L	L	S	S	S	S	S
City of Daisetta	M	S	M	S	M	S	S	L	L	S	S	S	S	S
City of Dayton	L	M	M	S	M	S	S	L	L	S	M	S	S	S
Town of Dayton Lakes	L	M	M	S	M	S	S	L	L	S	M	S	S	S
City of Devers	S	S	M	S	M	S	S	L	L	S	S	S	S	S

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Jurisdiction	Flood	Hurricanes and Tropical Storms	Severe Thunderstorms and Tornadoes	Tornadoes	Wildfire	Drought	Expansive Soils	Excessive Heat	Winter Storms	Hail	Coastal Erosion	Dam/Levee Failure	Toxic Release/HAZMAT	Energy Pipeline Failure
City of Hardin	S	S	M	S	M	S	S	L	L	S	S	S	S	S
City of Kenefick	L	M	M	S	M	S	S	L	L	S	M	S	S	S
City of Liberty	L	M	M	S	M	S	S	L	L	S	M	M	S	S
City of North Cleveland	M	S	S	S	M	S	S	L	L	S	S	S	S	S
City of Plum Grove	L	M	S	S	M	S	S	L	L	S	M	S	S	S
Montgomery County	M	S	M	S	L	S	S	L	L	S	S	L	S	S
City of Conroe	M	S	M	S	M	S	S	L	L	S	S	L	S	S
Town of Cut and Shoot	M	S	M	S	M	S	S	L	L	S	S	M	S	S
City of Magnolia	S	S	M	S	M	S	S	L	L	S	S	S	S	S
City of Montgomery	M	S	S	S	M	S	S	L	L	S	S	M	S	S
City of Oak Ridge North	M	S	S	S	M	S	S	L	L	S	S	M	S	S
City of Panorama Village	M	S	M	S	M	S	S	L	L	S	S	M	S	S
City of Patton Village	M	S	S	S	M	S	S	L	L	S	S	M	S	S
Town of Roman Forest	S	S	S	S	M	S	S	L	L	S	S	M	S	S
City of Shenandoah	M	S	S	S	M	S	S	L	L	S	S	M	S	S
City of Splendora	M	S	M	S	M	S	S	L	L	S	S	M	S	S
City of Stagecoach	M	S	S	S	M	S	S	L	L	S	S	M	S	S
City of Willis	M	S	S	S	M	S	S	L	L	S	S	M	S	S
City of Woodbranch Village	M	S	S	S	M	S	S	L	L	S	S	M	S	S
The Woodlands Township	M	S	S	S	M	S	S	L	L	S	S	L	S	S
Town of Woodloch	M	S	S	S	M	S	S	L	L	S	S	S	S	S
Walker County	M	M	M	S	L	M	S	L	L	S	S	S	S	S
City of Huntsville	M	S	M	S	M	M	S	L	L	S	S	S	S	S
City of New Waverly	M	S	M	S	M	M	S	L	L	S	S	S	S	S
City of Riverside	M	S	L	S	M	M	S	L	L	S	S	S	S	S
Waller County	L	M	M	S	M	M	S	L	L	S	S	S	S	S
City of Brookshire	M	M	M	S	M	M	S	L	L	S	S	S	S	S
City of Hempstead	M	S	M	S	M	M	S	L	L	S	S	S	S	S
City of Pattison	S	M	M	S	M	M	S	L	L	S	S	S	S	S
Town of Pine Island	S	S	M	S	M	M	S	L	L	S	S	S	S	S
City of Prairie View	M	S	M	S	M	M	S	L	L	S	S	S	S	S
City of Waller	M	S	M	S	M	M	S	L	L	S	S	S	S	S

Potential Impact of Hazards

All of the identified hazards impact jurisdictions differently. As a result, some jurisdictions are more vulnerable to certain hazards. **Table 4.3-39** provides a summary of the potential impact that each jurisdiction can expect to experience for each hazard⁴.

For the purposes of this plan potential impact has been classified in the following categories:

Catastrophic: High number of deaths/injuries possible. More than 50% of property in affected area damaged or destroyed. Complete shutdown of facilities for 30 days or more.

Critical: Multiple deaths/injuries possible. More than 25% of property in affected area damaged or destroyed. Complete shutdown of facilities for more than one week.

Limited: Minor injuries only. More than 10% of property in affected area damaged or destroyed. Complete shutdown of facilities for more than one day.

Minor: Very few injuries, if any. Only minor property damage and minimal disruption on quality of life. Temporary shutdown of facilities.

The potential impact for certain hazards can vary drastically. For example, a Category 1 Hurricane will not impact a jurisdiction as much as a Category 4 or 5 will. Therefore, for the purposes of this plan, the potential impact for each hazard will be based upon the average expected event that can occur in this region based upon previous occurrences.

⁴ The expected potential impact is based on the average expected hazard event for the jurisdiction, not the worst case scenario.

Table 4.3-39
Summary of Potential Impacts of Hazards

Jurisdiction	Flood	Hurricanes and Tropical Storms	Severe Thunderstorms	Tornadoes	Wildfires	Drought	Expansive Soils	Excessive Heat	Winter Storms	Hail	Coastal Erosion	Dam/Levee Failure	Toxic Release/HAZMAT	Energy Pipeline Failure
H-GAC	Critical	Critical	Minor	Critical	Minor	Minor	Minor	Critical	Critical	Minor	Limited	Limited	Minor	Limited
Austin County	Critical	Critical	Minor	Critical	Minor	Minor	Minor	Critical	Critical	Minor	NA	Limited	Minor	Limited
City of Bellville	Critical	Critical	Minor	Critical	Minor	Minor	Minor	Critical	Critical	Minor	NA	NA	NA	Minor
City of Brazos Country	Minor	Critical	Minor	Critical	Minor	Minor	Minor	Critical	Critical	Minor	NA	NA	NA	Minor
City of Industry	Minor	Critical	Minor	Critical	Minor	Minor	Minor	Critical	Critical	Minor	NA	NA	NA	Minor
Town of San Felipe	Critical	Critical	Minor	Critical	Minor	Minor	Minor	Critical	Critical	Minor	NA	NA	Minor	Minor
City of Sealy	Critical	Critical	Minor	Critical	Minor	Minor	Minor	Critical	Critical	Minor	NA	NA	NA	Minor
City of Wallis	Critical	Critical	Minor	Critical	Minor	Minor	Minor	Critical	Critical	Minor	NA	NA	NA	Minor
Brazoria County	Critical	Catastrophic	Minor	Critical	Minor	Minor	Minor	Critical	Critical	Minor	Limited	Limited	Minor	Limited
City of Alvin	Critical	Catastrophic	Minor	Critical	Minor	Minor	Minor	Critical	Critical	Minor	NA	NA	Minor	Minor
City of Angleton	Critical	Catastrophic	Minor	Critical	Minor	Minor	Minor	Critical	Critical	Minor	NA	NA	Minor	Minor
City of Bailey's Prairie	Critical	Catastrophic	Minor	Critical	Minor	Minor	Minor	Critical	Critical	Minor	NA	NA	NA	Minor
Village of Bonney	Critical	Catastrophic	Minor	Critical	Minor	Minor	Minor	Critical	Critical	Minor	NA	NA	NA	Minor
City of Brazoria	Critical	Catastrophic	Minor	Critical	Minor	Minor	Minor	Critical	Critical	Minor	NA	Limited	NA	Minor
City of Brookside Village	Critical	Catastrophic	Minor	Critical	Minor	Minor	Minor	Critical	Critical	Minor	NA	NA	Minor	Minor
City of Clute	Critical	Catastrophic	Minor	Critical	Minor	Minor	Minor	Critical	Critical	Minor	NA	NA	Minor	Minor

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Jurisdiction	Flood	Hurricanes and Tropical Storms	Severe Thunderstorms	Tornadoes	Wildfires	Drought	Expansive Soils	Excessive Heat	Winter Storms	Hail	Coastal Erosion	Dam/Levee Failure	Toxic Release/HAZMAT	Energy Pipeline Failure
City of Danbury	Critical	Catastrophic	Minor	Critical	Minor	Minor	Minor	Critical	Critical	Minor	NA	NA	NA	Minor
City of Freeport	Critical	Catastrophic	Minor	Critical	Minor	Minor	Minor	Critical	Critical	Minor	Minor	NA	Limited	Minor
City of Hillcrest Village	Critical	Catastrophic	Minor	Critical	Minor	Minor	Minor	Critical	Critical	Minor	NA	NA	Minor	Minor
Town of Holiday Lakes	Critical	Catastrophic	Minor	Critical	Minor	Minor	Minor	Critical	Critical	Minor	NA	NA	NA	Minor
City of Iowa Colony	Critical	Catastrophic	Minor	Critical	Minor	Minor	Minor	Critical	Critical	Minor	NA	NA	Minor	Minor
City of Jones Creek	Critical	Catastrophic	Minor	Critical	Minor	Minor	Minor	Critical	Critical	Minor	NA	NA	NA	Minor
City of Lake Jackson	Critical	Catastrophic	Minor	Critical	Minor	Minor	Minor	Critical	Critical	Minor	NA	NA	Minor	Minor
City of Liverpool	Critical	Catastrophic	Minor	Critical	Minor	Minor	Minor	Critical	Critical	Minor	NA	NA	NA	Minor
City of Manvel	Critical	Catastrophic	Minor	Critical	Minor	Minor	Minor	Critical	Critical	Minor	NA	NA	Minor	Minor
City of Oyster Creek	Critical	Catastrophic	Minor	Critical	Minor	Minor	Minor	Critical	Critical	Minor	Minor	NA	NA	Minor
City of Quintana	Critical	Catastrophic	Minor	Critical	Minor	Minor	Minor	Critical	Critical	Minor	Critical	NA	NA	Minor
City of Richwood	Critical	Catastrophic	Minor	Critical	Minor	Minor	Minor	Critical	Critical	Minor	NA	NA	NA	Minor
Village of Surfside Beach	Critical	Catastrophic	Minor	Critical	Minor	Minor	Minor	Critical	Critical	Minor	Critical	NA	NA	Minor
City of Sweeny	Critical	Catastrophic	Minor	Critical	Minor	Minor	Minor	Critical	Critical	Minor	NA	NA	Minor	Minor
Velasco Drainage District	Critical	Catastrophic	Minor	Critical	Minor	Minor	Minor	Critical	Critical	Minor	Limited	NA	NA	Minor

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Jurisdiction	Flood	Hurricanes and Tropical Storms	Severe Thunderstorms	Tornadoes	Wildfires	Drought	Expansive Soils	Excessive Heat	Winter Storms	Hail	Coastal Erosion	Dam/Levee Failure	Toxic Release/HAZMAT	Energy Pipeline Failure
Chambers County	Critical	Catastrophic	Minor	Critical	Minor	Minor	Minor	Critical	Critical	Minor	Minor	Limited	Minor	Limited
Chambers-Liberty Counties Navigation District	Critical	Catastrophic	Minor	Critical	Minor	Minor	Minor	Critical	Critical	Minor	Minor	Minor	Minor	Limited
City of Anahuac	Critical	Catastrophic	Minor	Critical	Minor	Minor	Minor	Critical	Critical	Minor	Minor	Limited	NA	Minor
City of Beach City	Critical	Catastrophic	Minor	Critical	Minor	Minor	Minor	Critical	Critical	Minor	Critical	NA	NA	Minor
City of Cove	Critical	Catastrophic	Minor	Critical	Minor	Minor	Minor	Critical	Critical	Minor	Minor	NA	NA	Minor
City of Mont Belvieu	Critical	Catastrophic	Minor	Critical	Minor	Minor	Minor	Critical	Critical	Minor	NA	NA	Minor	Critical
City of Old River-Winfree	Critical	Catastrophic	Minor	Critical	Minor	Minor	Minor	Critical	Critical	Minor	NA	NA	Minor	Limited
Trinity Bay Conservation District	Critical	Catastrophic	Minor	Critical	Minor	Minor	Minor	Critical	Critical	Minor	Minor	Minor	Minor	Limited
Liberty County	Critical	Catastrophic	Minor	Critical	Minor	Minor	Minor	Critical	Critical	Minor	NA	Limited	Minor	Limited
City of Ames	Minor	Catastrophic	Minor	Critical	Minor	Minor	Minor	Critical	Critical	Minor	NA	NA	NA	Minor
City of Cleveland	Critical	Catastrophic	Minor	Critical	Minor	Minor	Minor	Critical	Critical	Minor	NA	NA	Minor	Minor
City of Daisetta	Critical	Catastrophic	Minor	Critical	Minor	Minor	Minor	Critical	Critical	Minor	NA	Minor	NA	Minor
City of Dayton	Critical	Catastrophic	Minor	Critical	Minor	Minor	Minor	Critical	Critical	Minor	NA	NA	Minor	Minor
Town of Dayton Lakes	Critical	Catastrophic	Minor	Critical	Minor	Minor	Minor	Critical	Critical	Minor	NA	NA	NA	Minor
City of Devers	Minor	Catastrophic	Minor	Critical	Minor	Minor	Minor	Critical	Critical	Minor	NA	Limited	NA	Minor

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Jurisdiction	Flood	Hurricanes and Tropical Storms	Severe Thunderstorms	Tornadoes	Wildfires	Drought	Expansive Soils	Excessive Heat	Winter Storms	Hail	Coastal Erosion	Dam/Levee Failure	Toxic Release/HAZMAT	Energy Pipeline Failure
City of Hardin	Minor	Catastrophic	Minor	Critical	Minor	Minor	Minor	Critical	Critical	Minor	NA	NA	NA	Minor
City of Kenefick	Critical	Catastrophic	Minor	Critical	Minor	Minor	Minor	Critical	Critical	Minor	NA	Limited	NA	Minor
City of Liberty	Critical	Catastrophic	Minor	Critical	Minor	Minor	Minor	Critical	Critical	Minor	NA	Limited	Minor	Minor
City of North Cleveland	Critical	Catastrophic	Minor	Critical	Minor	Minor	Minor	Critical	Critical	Minor	NA	NA	NA	Minor
City of Plum Grove	Critical	Catastrophic	Minor	Critical	Minor	Minor	Minor	Critical	Critical	Minor	NA	NA	NA	Minor
Montgomery County	Critical	Catastrophic	Minor	Critical	Critical	Minor	Minor	Critical	Critical	Minor	NA	Limited	Minor	Limited
City of Conroe	Critical	Catastrophic	Minor	Critical	Minor	Minor	Minor	Critical	Critical	Minor	NA	Critical	Limited	Minor
City of Cut and Shoot	Critical	Catastrophic	Minor	Critical	Minor	Minor	Minor	Critical	Critical	Minor	NA	Critical	NA	Minor
City of Magnolia	Critical	Catastrophic	Minor	Critical	Minor	Minor	Minor	Critical	Critical	Minor	NA	NA	NA	Minor
City of Montgomery	Critical	Catastrophic	Minor	Critical	Minor	Minor	Minor	Critical	Critical	Minor	NA	NA	NA	Minor
City of Oak Ridge North	Critical	Catastrophic	Minor	Critical	Minor	Minor	Minor	Critical	Critical	Minor	NA	NA	NA	Minor
City of Panorama Village	Critical	Catastrophic	Minor	Critical	Minor	Minor	Minor	Critical	Critical	Minor	NA	Minor	NA	Minor
City of Patton Village	Critical	Catastrophic	Minor	Critical	Minor	Minor	Minor	Critical	Critical	Minor	NA	Critical	NA	Minor
Town of Roman Forest	Critical	Catastrophic	Minor	Critical	Minor	Minor	Minor	Critical	Critical	Minor	NA	NA	NA	Minor
City of Shenandoah	Critical	Catastrophic	Minor	Critical	Minor	Minor	Minor	Critical	Critical	Minor	NA	Limited	NA	Minor
City of Splendor	Critical	Catastrophic	Minor	Critical	Minor	Minor	Minor	Critical	Critical	Minor	NA	NA	NA	Minor

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Jurisdiction	Flood	Hurricanes and Tropical Storms	Severe Thunderstorms	Tornadoes	Wildfires	Drought	Expansive Soils	Excessive Heat	Winter Storms	Hail	Coastal Erosion	Dam/Levee Failure	Toxic Release/HAZMAT	Energy Pipeline Failure
City of Stagecoach	Critical	Catastrophic	Minor	Critical	Minor	Minor	Minor	Critical	Critical	Minor	NA	Critical	NA	Minor
City of Willis	Critical	Catastrophic	Minor	Critical	Minor	Minor	Minor	Critical	Critical	Minor	NA	NA	NA	Minor
City of Woodbranch Village	Critical	Catastrophic	Minor	Critical	Minor	Minor	Minor	Critical	Critical	Minor	NA	Minor	NA	Minor
The Woodlands Township	Critical	Catastrophic	Minor	Critical	Minor	Minor	Minor	Critical	Critical	Minor	NA	Critical	NA	Minor
Town of Woodloch	Critical	Catastrophic	Minor	Critical	Minor	Minor	Minor	Critical	Critical	Minor	NA	NA	NA	Minor
Walker County	Critical	Critical	Minor	Critical	Minor	Minor	Minor	Critical	Critical	Minor	NA	Limited	Minor	Minor
City of Huntsville	Critical	Critical	Minor	Critical	Minor	Minor	Minor	Critical	Critical	Minor	NA	NA	NA	Minor
City of New Waverly	Critical	Critical	Minor	Critical	Minor	Minor	Minor	Critical	Critical	Minor	NA	NA	Minor	Minor
City of Riverside	Critical	Critical	Minor	Critical	Minor	Minor	Minor	Critical	Critical	Minor	NA	NA	NA	Minor
Waller County	Critical	Critical	Minor	Critical	Minor	Minor	Minor	Critical	Critical	Minor	NA	Limited	Minor	Limited
City of Brookshire	Critical	Critical	Minor	Critical	Minor	Minor	Minor	Critical	Critical	Minor	NA	NA	NA	Minor
City of Hempstead	Critical	Critical	Minor	Critical	Minor	Minor	Minor	Critical	Critical	Minor	NA	NA	Minor	Minor
City of Pattison	Minor	Critical	Minor	Critical	Minor	Minor	Minor	Critical	Critical	Minor	NA	NA	NA	Minor
Town of Pine Island	Minor	Critical	Minor	Critical	Minor	Minor	Minor	Critical	Critical	Minor	NA	NA	NA	Minor
City of Prairie View	Critical	Critical	Minor	Critical	Minor	Minor	Minor	Critical	Critical	Minor	NA	NA	NA	Minor
City of Waller	Critical	Critical	Minor	Critical	Minor	Minor	Minor	Critical	Critical	Minor	NA	NA	NA	Minor

5.0 Capability Assessment

What Is A Capability Assessment?

The purpose of conducting a capability assessment is to determine the ability of a given jurisdiction to implement a mitigation strategy.¹ As in any planning process, it is important to try to figure out what actions are feasible, based on an understanding of those departments tasked with their implementation. More specifically, the capability assessment helps to determine what mitigation actions are likely to be implemented over time given the **fiscal, technical, administrative** and **political** framework of the community.² It also provides an opportunity to assess existing plans, policies and processes in place. A careful analysis was conducted to detect any existing gaps, shortfalls or weaknesses within existing government activities that could exacerbate community vulnerability. The assessment also highlights the positive measures already in place that should continue to be supported.



Conducting the Capability Assessment

As part of the initial kickoff meetings with counties and municipal governments, H-GAC staff distributed a detailed *Local Capability Assessment Survey*. The survey, which was filled out by local officials, posed several questions regarding existing local plans, policies, programs or ordinances that contribute to and/or hinder that county or municipality's ability to implement hazard mitigation actions. In addition, respondents were asked to self-assess their capabilities.³ The information was incorporated into a database for further analysis. A general scoring methodology was applied to quantify and rank each jurisdiction's overall capability relative to one another. According to the scoring system, each plan, policy, ordinance or program was assigned a rating based on its relevance to hazard mitigation. Additional points were added based on each county and municipal government's self-assessment. A total score and general rating (Limited, Moderate or High) was then determined according to the total number of points received. The general survey results are summarized in **Table 5.1**. In addition, the results of the survey serve as a good source of introspection for those jurisdictions that wish to improve their capability. Identified gaps may be re-cast as specific mitigation actions, designed to address identified weaknesses.

An inventory and analysis of previously implemented mitigation projects was also included as part of the capability assessment. This information provided a region-wide perspective of the efforts taken to reduce the effect of natural hazards and provided insight on the effectiveness of those efforts. Documenting past mitigation measures can also serve to help assess the degree to which local governments are willing to adopt future mitigation actions.

Capability Assessment Findings

The findings of the capability assessment are described below. **Table 5.1** provides a jurisdictional overview of the plans and programs in place, followed by summary statistics of the *Local Capability Assessment Surveys*. Each county and municipality was asked to self-assess their technical, fiscal,

¹ While the Interim Final Rule for implementing the Disaster Mitigation Act of 2000 does not require a local capability assessment to be completed for local hazard mitigation plans, it is a critical step in the development of a mitigation strategy that meets the needs of each jurisdiction while taking into account their own unique abilities. However, the Rule does state that a community's mitigation strategy should be "based on existing authorities, policies, programs and resources, and its ability to expand on and improve these existing tools" (44 CFR, Part 201.6(c) (3)).

² Photo courtesy of the City of Galveston.

³ A copy of the survey and the scoring system used to assess county and municipal capabilities has been included in Appendix D of this Plan. Due to the length of the survey and the number of participating jurisdictions in the H-GAC Plan, the completed surveys were not included in this document. Copies of the surveys can be obtained by contacting the H-GAC offices.

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administrative and political capabilities, which were subsequently defined. As required by Annex P of the Texas Division of Emergency Management, completed Hazard Mitigation Grant Program (HMGP) projects were identified and described. Finally, conclusions were presented, including a discussion of the approach used to develop meaningful mitigation strategies based on the capability and risk assessment findings.

**Table 5.1
Relevant Plans and Programs in Place**

Table Key																			
HMP: Hazard Mitigation Plan DRP: Disaster Recovery Plan CLUP: Comprehensive Land Use Plan FMP: Floodplain Management Plan SMP: Stormwater Management Plan EOP: Emergency Operations Plan COOP: Continuity of Operations Plan REP: Radiological Emergency Plan SARA: SARA Title III Emergency Response Plan TRANS: Transportation Plan										CIP: Capital Improvements Plan (that regulates infrastructure in hazard areas) REG-PL: Regional Planning HPP: Historic Preservation Plan ZO: Zoning Ordinance SO: Subdivision Ordinance FDPO: Flood Damage Prevention Ordinance NFIP: National Flood Insurance Program CRS: Community Rating System BC: Building Codes									
Jurisdiction¹	HMP	DRP	CLUP	FMP	SMP	EOP	COOP	REP	SARA	TRANS	CIP	REG-PL	HPP	ZO	SO	FDPO	NFIP	CRS	BC
H-GAC	✓											✓							
Austin County	✓	✓		✓		✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓		
City of Bellville	✓			✓	✓	✓	✓	✓	✓	✓		✓			✓	✓	✓		✓
City of Brazos Country	✓	✓		✓		✓	✓	✓	✓	✓		✓				✓	✓		
City of Industry	✓																		
Town of San Felipe	✓	✓		✓		✓	✓	✓	✓	✓		✓	✓				✓		✓
City of Sealy	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓		✓
City of Wallis	✓	✓		✓		✓	✓	✓	✓	✓		✓			✓	✓	✓		✓
Brazoria County	✓	✓		✓	✓	✓	✓	✓	✓	✓					✓	✓	✓		✓
City of Alvin	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓		✓
City of Angleton	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓		✓
City of Bailey's Prairie	✓	✓				✓	✓	✓	✓								✓		
Village of Bonney	✓	✓		✓	✓	✓	✓	✓	✓							✓	✓		✓
City of Brazoria	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓			✓	✓	✓		✓
City of Brookside Village	✓	✓		✓		✓	✓	✓	✓		✓	✓		✓	✓	✓	✓		✓
City of Clute	✓	✓		✓		✓	✓	✓	✓							✓	✓		
City of Danbury	✓	✓				✓	✓	✓	✓								✓		
City of Freeport	✓	✓		✓		✓	✓	✓	✓			✓		✓	✓	✓	✓		✓
City of Hillcrest Village	✓	✓				✓	✓	✓	✓								✓		
Town of Holiday Lakes	✓	✓				✓	✓	✓	✓					✓			✓		
City of Iowa Colony	✓	✓	✓	✓		✓	✓	✓	✓		✓			✓	✓		✓		✓
City of Jones Creek	✓	✓				✓	✓	✓	✓								✓		
City of Lake Jackson	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓		✓
City of Liverpool	✓	✓		✓	✓	✓	✓	✓	✓							✓	✓		
City of Manvel	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓		✓
City of Oyster Creek	✓	✓				✓	✓	✓	✓			✓		✓	✓	✓	✓		✓

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Table Key																			
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Jurisdiction ¹	HMP	DRP	CLUP	FMP	SMP	EOP	COOP	REP	SARA	TRANS	CIP	REG-PL	HPP	ZO	SO	FDPO	NFIP	CRS	BC
City of Quintana	✓	✓		✓		✓	✓	✓	✓					✓	✓	✓	✓		✓
City of Richwood	✓	✓	✓	✓		✓	✓	✓	✓	✓				✓	✓	✓	✓		✓
Village of Surfside Beach	✓	✓	✓	✓		✓	✓	✓	✓		✓	✓		✓	✓	✓	✓		✓
City of Sweeny	✓	✓		✓		✓	✓	✓	✓						✓	✓	✓		✓
Velasco Drainage District	✓					✓					✓								
Chambers County	✓			✓		✓	✓	✓	✓			✓			✓	✓	✓		
Chambers County, Trinity Bay Conservation District, Chambers-Liberty Counties Navigation District	✓																		
Chambers-Liberty Counties Navigation District	✓																		
City of Anahuac	✓			✓		✓	✓	✓	✓			✓			✓	✓	✓		
City of Beach City	✓			✓		✓	✓	✓	✓			✓			✓	✓	✓		
City of Cove	✓			✓		✓	✓	✓	✓			✓			✓	✓			
City of Mont Belvieu	✓			✓		✓	✓	✓	✓			✓			✓	✓	✓		
City of Old River-Winfree	✓			✓		✓	✓	✓	✓			✓			✓	✓	✓		
Liberty County	✓			✓	✓	✓	✓		✓	✓	✓	✓			✓	✓	✓		
City of Ames	✓					✓						✓			✓				✓
City of Cleveland	✓			✓		✓	✓	✓		✓					✓	✓	✓		✓
City of Daisetta	✓			✓		✓			✓			✓					✓		
City of Dayton	✓		✓	✓	✓	✓				✓	✓	✓			✓	✓	✓		✓
City of Dayton Lakes ²	✓																✓		
City of Devers	✓																		
City of Hardin	✓																✓		
City of Kenefick ²	✓																		
City of Liberty	✓	✓				✓		✓	✓			✓			✓		✓		✓
City of North Cleveland ²	✓																		
City of Plum Grove ²	✓																✓		
Montgomery County	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓					✓		
City of Conroe	✓			✓	✓	✓		✓	✓		✓	✓			✓	✓	✓	✓	✓
Town of Cut and Shoot	✓			✓											✓		✓		✓

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Table Key																			
HMP: Hazard Mitigation Plan DRP: Disaster Recovery Plan CLUP: Comprehensive Land Use Plan FMP: Floodplain Management Plan SMP: Stormwater Management Plan EOP: Emergency Operations Plan COOP: Continuity of Operations Plan REP: Radiological Emergency Plan SARA: SARA Title III Emergency Response Plan TRANS: Transportation Plan										CIP: Capital Improvements Plan (that regulates infrastructure in hazard areas) REG-PL: Regional Planning HPP: Historic Preservation Plan ZO: Zoning Ordinance SO: Subdivision Ordinance FDPO: Flood Damage Prevention Ordinance NFIP: National Flood Insurance Program CRS: Community Rating System BC: Building Codes									
Jurisdiction ¹	HMP	DRP	CLUP	FMP	SMP	EOP	COOP	REP	SARA	TRANS	CIP	REG-PL	HPP	ZO	SO	FDPO	NFIP	CRS	BC
City of Magnolia ²	✓																✓		
City of Montgomery	✓	✓	✓	✓	✓	✓						✓		✓	✓	✓	✓		✓
City of Oak Ridge North	✓	✓	✓	✓	✓	✓						✓		✓	✓	✓	✓		✓
City of Panorama Village	✓	✓		✓	✓							✓		✓	✓	✓	✓		✓
City of Patton Village ²	✓																✓		
Town of Roman Forest	✓				✓										✓		✓		✓
City of Shenandoah	✓		✓	✓	✓	✓					✓		✓	✓	✓		✓		✓
City of Splendora	✓					✓						✓			✓	✓	✓		✓
City of Stagecoach ²	✓																✓		
City of Willis	✓		✓		✓	✓		✓	✓						✓	✓	✓		✓
City of Woodbranch Village ²	✓																✓		
The Woodlands Township ²	✓																		
Town of Woodloch ²	✓																✓		
Walker County	✓			✓		✓	✓	✓	✓	✓		✓				✓	✓		
City of Huntsville	✓		✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓		✓
City of New Waverly	✓					✓				✓					✓	✓	✓		
City of Riverside	✓					✓				✓							✓		
Waller County	✓		✓									✓			✓		✓		
City of Brookshire	✓														✓		✓		✓
City of Hempstead	✓					✓					✓	✓		✓	✓	✓	✓		✓
City of Pattison	✓														✓				✓
Town of Pine Island	✓																		
City of Prairie View	✓			✓		✓		✓	✓					✓	✓		✓		✓
City of Waller	✓	✓		✓		✓						✓			✓	✓	✓		✓

Notes: (1) Community data updated for the 2011 Regional Hazard Mitigation Plan unless otherwise indicated by (2).
 (2) Community did not submit a Capability Assessment Survey during the 2006 Regional Hazard Mitigation Plan.

As part of the *Capability Assessment Survey*, each county and municipality was asked to assess their own technical, fiscal, administrative and political capabilities. **Table 5.2** provides the results of this self-appraisal process. An “L” indicates low capability; an “M” indicated moderate capability; and an “H” indicates high capability.

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Table 5.2
Self-Assessment of Local Capability—2011 Regional Hazard Mitigation Plan

Jurisdiction	Technical Capability	Fiscal Capability	Administrative Capability	Political Capability
H-GAC				
Austin County	L	L	L	H
City of Bellville	M	H	H	M
City of Brazos Country	L	L	L	M
City of Industry	L	L	L	L
Town of San Felipe	L	L	L	M
City of Sealy	L	L	L	L
City of Wallis	L	L	L	L
Brazoria County	M	M	M	L
City of Alvin	M	M	H	L
City of Angleton*				
City of Bailey's Prairie*				
Village of Bonney*				
City of Brazoria	L	L	M	M
City of Brookside Village	L	M	M	M
City of Clute*				
City of Danbury*				
City of Freeport	M	H	H	M
City of Hillcrest Village*				
Town of Holiday Lakes	L	L	L	L
City of Iowa Colony	L	L	L	L
City of Jones Creek*				
City of Lake Jackson	H	M	M	M
City of Liverpool*				
City of Manvel	L	L	H	H
City of Oyster Creek	L	L	L	L
City of Quintana	H	L	L	M
City of Richwood	H	H	H	L
Village of Surfside Beach	L	L	L	L
City of Sweeny	L	M	H	H
Chambers County	L	L	L	L
Chambers County, Trinity Bay Conservation District, Chambers-Liberty Counties Navigation District*				
Chambers-Liberty Counties Navigation District*				
City of Anahuac	L	L	L	L
City of Beach City	L	L	L	L
City of Cove	L	L	L	L
City of Mont Belvieu	L	L	L	L
City of Old River-Winfree	L	L	L	L
Liberty County	M	M	M	L
City of Ames	L	L	L	L
City of Cleveland	L	L	M	L
City of Daisetta	L	L	L	L
City of Dayton	L	M	M	M
City of Dayton Lakes*				

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Jurisdiction	Technical Capability	Fiscal Capability	Administrative Capability	Political Capability
City of Devers	L	L	L	L
City of Hardin	L	L	L	L
City of Kenefick*				
City of Liberty	L	L	L	L
City of North Cleveland*				
City of Plum Grove*				
Montgomery County	M	L	M	L
City of Conroe	M	M	M	M
Town of Cut and Shoot	L	L	L	L
City of Magnolia*				
City of Montgomery	L	L	L	H
City of Oak Ridge North	M	L	L	L
City of Panorama Village	L	L	H	M
City of Patton Village*				
Town of Roman Forest	L	L	L	M
City of Shenandoah	L	M	M	L
City of Splendora	L	L	L	L
City of Stagecoach*				
City of Willis	L	L	H	L
City of Woodbranch Village*				
The Woodlands Township*				
Town of Woodloch*				
Walker County*				
City of Huntsville	L	L	H	L
City of New Waverly*				
City of Riverside*				
Waller County	L	L	L	L
City of Brookshire	L	L	L	L
City of Hempstead	L	L	L	M
City of Pattison	L	L	L	L
Town of Pine Island	L	L	L	L
City of Prairie View	L	L	M	M
City of Waller	L	L	L	L

* Did not submit a Capability Assessment Survey.

Emergency Management Capabilities

Hazard mitigation is widely recognized as one of the four primary “phases” of emergency management. Other phases include preparedness, response and recovery. In reality, each phase is interconnected with hazard mitigation as **Figure 5.1** suggests. Planning for each phase is a critical part of a comprehensive emergency management program and a key to the successful implementation of hazard mitigation actions. As a result, the *Capability Assessment Survey* asks several questions across a range of emergency management plans in order to assess the jurisdiction’s willingness to plan and their level of technical planning proficiency.

Figure 5.1
Hazard Mitigation and the Phases of Emergency Management



Hazard Mitigation Plan: A hazard mitigation plan represents a community's blueprint for how they intend to reduce the impact of natural and human-caused hazards on people and the built environment. Elements of a hazard mitigation plan include a risk assessment, capability assessment and mitigation strategy.

NOTE: The following survey results were determined during the planning process for the 2006 Regional Hazard Mitigation Plan. Current information is being updated and should be available by April 30, 2011.

- Survey results indicate that three of the seven counties participating in the H-GAC Plan have developed hazard mitigation plans.
- At the municipal level, 20 percent reported that they had a hazard mitigation plan in place at the time of the survey. Sixteen percent of participating communities indicated that they were part of a county mitigation plan. Sixty-six percent of municipalities did not have a plan in place at the time of the survey.⁴

Disaster Recovery Plan: A disaster recovery plan serves to guide the physical, social, environmental and economic recovery and reconstruction process following a disaster.

- Survey results indicated that four of the seven counties responding to the survey have developed a disaster recovery plans.

⁴ Each participating county and municipality will have a hazard mitigation plan in place once this planning process is complete.

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- Twenty-four percent of the municipalities surveyed indicated that they had a disaster recovery plan in place, while 14 percent of municipalities reported that they were part of a county recovery plan. Sixty-two percent of municipalities did not have a plan in place at the time of the survey.

Emergency Operations Plan: An emergency operations plan outlines responsibilities and the means by which resources are deployed following an emergency or disaster.

- Survey results indicated that six of the seven counties responding to the survey have an emergency operation plan.
- Fifty percent of the municipalities that responded to the survey reported having an emergency operations plan in place. Twenty-eight percent of municipalities reported that they participated in the county emergency operations plan. Twenty-two percent of reporting municipalities did not have a plan in place at the time of the survey.

Continuity of Operation Plan: A continuity of operations plan establishes a chain of command, line of succession and plans for backup or alternate emergency facilities in case of an extreme emergency.

- Survey results indicate that six counties have a continuity of operation plan.
- Survey results indicate that 24 percent of municipalities maintain a stand-alone continuity of operation plan, while 14 percent of municipalities reported that they participated in a county-level plan. Sixty-two percent of municipalities do not maintain a continuity of operation plan.

Radiological Emergency Plan: A radiological emergency plan delineates roles and responsibilities for assigned personnel and the means to deploy resources in the event of a radiological accident.

- Survey results indicate that five of the counties have a radiological emergency plan.
- Twenty-eight percent of the municipalities have radiological emergency plans, while 18 percent participate in their county's plan. Fifty-eight percent of municipalities do not have a radiological emergency plan.

General Planning Capabilities

The implementation of hazard mitigation activities often involves individuals beyond the emergency management profession. Stakeholders may include local planners, public works officials, economic development specialists and others. Similarly, hazard mitigation planning crosses multiple disciplines. As a result, the questions asked in the *Capability Assessment Survey* regarding general planning capabilities were designed to measure the degree to which mitigation was integrated into other planning efforts.

Regional Planning: Regional planning refers to any type of planning effort that involves a community working in conjunction with neighboring jurisdictions. For example, the development of this Hazard Mitigation Plan is a regional planning effort.

- Survey results indicate that six counties have participated in regional planning efforts.
- Fifty-six percent of municipalities reported participating in regional plans.⁵

Comprehensive Plan: A comprehensive plan establishes an overall community vision and a guide to municipal decision-making. Typically a comprehensive plan is comprised of demographic conditions,

⁵ These figures underestimate county and municipal involvement in regional planning, as the H-GAC Regional Mitigation Plan is a multi-jurisdictional effort.

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land use, transportation elements and community facilities.⁶ Given the broad nature of the plan and its regulatory standing, the integration of hazard mitigation measures into the comprehensive plan can enhance the likelihood of achieving risk reduction goals and actions.

- Survey results indicate that no counties maintain comprehensive plans.⁷
- Ten percent of municipalities reported the existence of a comprehensive plan, while 14 percent reported that they are in the process of developing a plan. Seventy-six percent of municipalities did not have a comprehensive plan in place at the time of this survey.

Transportation Plan: A transportation plan identifies the means to gauge transportation demands and the options to meet those needs, while considering the social, economic and environmental characteristics of the area. The development of transportation networks can significantly impact the amount, type and location of future growth. As a result, transportation planning can have a dramatic impact on future hazard vulnerability.

- Survey results indicated that five counties maintain transportation plans.⁸
- Twenty-four percent of municipalities had a transportation plan in place at the time of this survey.

Capital Improvements Plan: A capital improvement plan guides the scheduling of public improvements spending. A capital improvements plan can serve as an important mechanism to guide future development away from identified hazard areas. Limiting public spending in hazardous areas is one of the most effective long-term mitigation actions available to local governments.

- Survey results indicated that two counties have a capital improvement plan.
- Eighteen percent of the municipalities surveyed indicated that they do not have a capital improvement plan.

Historic Preservation Plan: A historic preservation plan is designed to establish a strategy for protecting historic structures or districts within a community. An often overlooked aspect of the historic preservation plan is the assessment of buildings and sites located in areas subject to natural hazards, including the identification of the means to reduce future damages.⁹ Examples involve retrofitting or relocation techniques that account for the need to protect buildings that may not meet current building standards or are located within a historic district that cannot easily be moved out of harm's way.

- None of the counties had a historic preservation plan in place at the time of this survey.
- One municipality indicated that they maintained a historic preservation plan.

Zoning Ordinances: Zoning represents the primary means by which land use is controlled by local governments. As part of a community's police power, zoning is used to protect the public health, safety and welfare of those in a given jurisdiction. A zoning ordinance is the mechanism through which zoning is typically implemented. Since zoning regulations enable municipal governments to limit the type and density of development, it can serve as a powerful tool when applied in identified hazard areas.

⁶ Adapted from *The Practice of Local Government Planning*. 1988. Frank So and Judith Getzels, Eds. International City Management Association: Washington, D.C. pp. 71-81.

⁷ County governments do not have the statutory authority to implement land use controls.

⁸ Several respondents considered the transportation plan to be part of the emergency plan (Annex S) and not a separate planning document.

⁹ See *Protecting the Past from Natural Disasters*. 1989. Nelson, Carl. National Trust for Historic Preservation: Washington, D.C.

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- No counties reported that they had a zoning ordinance in place.¹⁰
- Forty percent of participating municipalities reported that they maintained a zoning ordinance.

Subdivision Ordinances: A subdivision ordinance is intended to regulate the development of housing, commercial, industrial or other uses, including associated public infrastructure, as land is subdivided into buildable lots for sale or future development. Subdivision design that accounts for natural hazards can dramatically reduce the exposure of future development.¹¹

- Survey results indicated that six counties maintain subdivision ordinances.
- Seventy-eight percent of participating municipalities have subdivision ordinances.

Building Codes, Permitting and Inspections: Building Codes regulate construction standards. Decisions regarding the adoption of building codes (that account for hazard risk), the type of permitting process required both before and after a disaster, and the enforcement of inspection protocols all affect the level of hazard risk faced by a community.

- No counties enforce building codes.¹²
- Seventy-six percent of participating municipalities enforce building codes.

Building and Fire Codes in the H-GAC Region

Table 5.3 and **Table 5.4** provide information on local building and fire codes within the region. Where available, the date and type of codes in use have been listed, including a description of the inspection and permit process. If available, the number and qualifications of inspectors have been listed, as well as the number of building starts and inspections conducted during last 12 months.¹³

Note: The following two tables are an abbreviated version of information concerning building and fire codes. The entire tables (showing description of the building and fire inspection process, number and qualifications of inspectors, number of building starts and inspections conducted during last 12 months) can be found in Appendix D of this plan.



Table 5.3
Building Code and Inspection Programs in the H-GAC Region

Jurisdiction	Adopted Building Codes	Current Building Code (Date and Type)
H-GAC	NA	NA
Austin County	No	NA
City of Bellville	Yes	International Building Code - adopted 04/18/2000

¹⁰ Counties do not have the statutory authority to implement land use controls such as zoning (see Chapter 232, Texas Local Government Code).

¹¹ For additional information regarding the use of subdivision regulations in reducing flood hazard risk, see Subdivision Design in Flood Hazard Areas. 1997. Morris, Marya. Planning Advisory Service Report Number 473. American Planning Association: Washington, D.C.

¹² Counties are not allowed to adopt building codes. However, some counties have adopted the Uniform Fire and Building Codes for commercial buildings and certain public facilities in order to address fire safety.

¹³ Photo courtesy of the Galveston Fire Department.

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Jurisdiction	Adopted Building Codes	Current Building Code (Date and Type)
City of Brazos Country	No	NA
City of Industry	No	NA
Town of San Felipe	Yes	Southern Building Code - adopted 05/04/1999 - Ordinance No. 199-3
City of Sealy	Yes	IBC - 10/16/02
City of Wallis	Yes	SBCCI - adopted 06/01/1975
Brazoria County	Yes	IRC 2006
City of Alvin	Yes	IBC 2009 IRC 2009
City of Angleton	Yes	IBC 2003
City of Bailey's Prairie		
Village of Bonney	Yes	Interlocal w/Brazoria County
City of Brazoria	Yes	International Standard Building Code - adopted 2006
City of Brookside Village	Yes	Southern Building Code - adopted 1968
City of Clute		
City of Danbury		
City of Freeport	Yes	SBCCI - adopted in the 1960s
City of Hillcrest Village		
Town of Holiday Lakes	No	Building Ordinance
City of Iowa Colony	Yes	IRC - adopted 2000
City of Jones Creek	No	
City of Lake Jackson	Yes	International Building Code 2006
City of Liverpool	Yes	Interlocal w/Brazoria Cnty
City of Manvel	Yes	IBC
City of Oyster Creek	Yes	Standard Building Code - originally adopted codes in 1987
City of Quintana	Yes	SBCCI - originally adopted codes in 1976
City of Richwood	Yes	International Building Code
Village of Surfside Beach	Yes	IRC 2003 and IEC
City of Sweeny	Yes	International Building Code – 2000
Velasco Drainage District	NA	
Chambers County	No	NA
Chambers-Liberty Counties Navigation District	NA	NA
City of Anahuac		
City of Beach City	No	
City of Cove		
City of Mont Belvieu	Yes	2006 IBC for Building Codes 2008 NEC for Electric
City of Old River-Winfree	Yes	Adopted State Building Codes May 2007
Trinity Bay Conservation District	NA	NA
Liberty County	No	NA
City of Ames	Yes	SBCCI
City of Cleveland	Yes	IBC (2000) - originally adopted codes in 1976
City of Daisetta	No	NA
City of Dayton	Yes	IBC (2000) - originally adopted codes in 1991
City of Dayton Lakes		
City of Devers	No	NA
City of Hardin	No	NA

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Jurisdiction	Adopted Building Codes	Current Building Code (Date and Type)
City of Kenefick		
City of Liberty	Yes	ICC - 2002
City of North Cleveland		
City of Plum Grove		
Montgomery County	No	NFIP and septic only
City of Conroe	Yes	ICC - adopted 2002
Town of Cut and Shoot	Yes	International Residential Code and National Electrical Code - adopted Dec 01 to comply with Chapter 214 LGC Subchapter G
City of Magnolia		
City of Montgomery	Yes	International Residential Code - 2001
City of Oak Ridge North	Yes	International Building Code
City of Panorama Village	Yes	SBCCI - adopted in 1972
City of Patton Village		
Town of Roman Forest	Yes	Standard Building Code - adopted 1975
City of Shenandoah	Yes	ICC
City of Splendora	Yes	SBCCI – unsure of adoption date
City of Stagecoach		
City of Willis	Yes	SBCCI (1997) - adopted 04/21/98
City of Woodbranch Village		
The Woodlands Township		
Town of Woodloch		
Walker County	No	
City of Huntsville	Yes	International Building Code (2000) - adopted February 2002
City of New Waverly	No	
City of Riverside	No	
Waller County	No	NA
City of Brookshire	Yes	ICC
City of Hempstead	Yes	Southern Building Code 09/22/1998
City of Pattison	Yes	Southern Building Code (99) 10/10/2002
Town of Pine Island	No	NA
City of Prairie View	Yes	SBCCI - adopted 2000
City of Waller	Yes	Ordinance 280 - 11/11/2002 and ordinance 281 – 11/11/2002 - ICC

Table 5.4
Fire Codes in the H-GAC Region

Jurisdiction	Adopted Fire Codes	Current Fire Code (Date and Type)
H-GAC	NA	NA
Austin County	No	NA
City of Bellville	Yes	International Fire Code - 1991
City of Brazos Country	No	NA
City of Industry	No	NA
Town of San Felipe	No	NA
City of Sealy	Yes	International Fire Code - 2000 edition

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Jurisdiction	Adopted Fire Codes	Current Fire Code (Date and Type)
City of Wallis	No	NA
Brazoria County	Yes	International Fire Code
City of Alvin	Yes	IFC 2009
City of Angleton	Yes	IFC 2006 11/10/09
City of Bailey's Prairie		
Village of Bonney		
City of Brazoria	Yes	ICB 2006
City of Brookside Village	Yes	SBCC - Adopted 11/14/2000
City of Clute		
City of Danbury		
City of Freeport	Yes	Southern Building Code (1997 Edition) - adopted in 2000
City of Hillcrest Village		
Town of Holiday Lakes	No	NA
City of Iowa Colony	No	NA
City of Jones Creek	No	
City of Lake Jackson	Yes	International Fire Code 2006
City of Liverpool	Yes	Interlocal w/Brazoria County
City of Manvel	Yes	2000 International Fire Code 08/11/00
City of Oyster Creek	No	NA
City of Quintana	Yes	Fire Prevention Code - adopted 1980
City of Richwood	Yes	International Fire Code
Village of Surfside Beach	No	NA
City of Sweeny	No	NFPA
Velasco Drainage District	N/A	
Chambers County	No	NA
Chambers-Liberty Counties Navigation District	N/A	
City of Anahuac		
City of Beach City		
City of Cove		
City of Mont Belvieu	Yes	2009 IFC
City of Old River-Winfree		
Trinity Bay Conservation District	N/A	
Liberty County	Yes	Life Safety Code
City of Ames	No	NA
City of Cleveland	Yes	2000 International Fire Code - originally adopted fire codes in 1976
City of Daisetta	No	NA
City of Dayton	Yes	International Fire Code (2000) - originally adopted codes in 1991
City of Dayton Lakes		
City of Devers	No	NA
City of Hardin	No	NA
City of Kenefick		
City of Liberty	Yes	IFC
City of North Cleveland		
City of Plum Grove		
Montgomery County	No	NA
City of Conroe	Yes	International Fire Code - 2000 edition

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Jurisdiction	Adopted Fire Codes	Current Fire Code (Date and Type)
Town of Cut and Shoot	No	Fire related matters are handled by ESD 12
City of Magnolia		
City of Montgomery	Yes	Standard Fire Prevention Code – adopted 1998
City of Oak Ridge North	Yes	International Code Council – adopted 1982
City of Panorama Village	Yes	1998
City of Patton Village		
City of Roman Forest	No	NA
City of Shenandoah	Yes	International Fire Code
City of Splendora	No	NA
City of Stagecoach		
City of Willis	Yes	Standard Fire Code (1997) - adopted 04/21/1998
City of Woodbranch Village		
The Woodlands Township		
Town of Woodloch		
Walker County	No	
City of Huntsville	Yes	Adopted International Fire Code 2000
City of New Waverly	No	
City of Riverside	No	
Waller County	No	NA
City of Brookshire	Yes	SBCC
City of Hempstead	Yes	International Fire Code
City of Pattison	No	NA
Town of Pine Island	No	NA
City of Prairie View	Yes	NFPA
City of Waller	Yes	2003 ICC Fire Code

In addition to using survey results, the adoption and enforcement of building codes by local jurisdictions were assessed using the Building Code Effectiveness Grading Schedule (BCEGS) program developed by the Insurance Services Office, Inc. (ISO).¹⁴ Under the BCEGS program, ISO assesses the building codes in effect in a particular community and how the community enforces its building codes, **with special emphasis on mitigation of losses from natural hazards**. The results of BCEGS assessments are routinely provided to private insurance companies, which in turn may offer ratings credits for new buildings constructed in communities with strong BCEGS classifications. ISO assumes that communities with well-enforced, up-to-date codes should suffer fewer losses, thereby enabling insurers to offer lower rates.

In conducting the assessment, ISO collects information related to the qualifications of personnel as well as number of inspections performed per day. This type of information, combined with local building codes, is used to determine a grade for that jurisdiction. Grades range from 1 to 10, with lower grades representing a higher standard. A BCEGS grade of 1 represents an exemplary commitment to building code enforcement, whereas a grade of 10 indicates that a jurisdiction does not meet a minimum recognized protection level. The results of those jurisdictions in the H-GAC planning area that agreed to submit to the evaluation are listed in **Table 5.5**.

¹⁴ Participation in BCEGS is voluntary. Local governments must request that ISO officials conduct an evaluation.

Table 5.5
H-GAC Building Code Effectiveness Grading Schedule

Jurisdiction	County	Personal Rating	Commercial Rating	Most Recent Date of Evaluation
City of Angleton	Brazoria	5	5	1996
City of Bellville	Austin	8	8	1997
City of Brazoria	Brazoria	6	6	1999
City of Brookshire	Waller	5	5	1997
City of Cleveland	Liberty	6	6	1997
City of Clute	Brazoria	5	5	1999
City of Conroe	Montgomery	6	6	2000
City of Dayton	Liberty	5	5	1997
City of Freeport	Brazoria	6	6	1999
City of Huntsville	Walker	8	8	1997
City of Lake Jackson	Brazoria	6	6	1996
City of Liberty	Liberty	7	7	1996
City of Mont Belvieu	Chambers	7	7	1997
City of Sealy	Austin	5	5	1996

Floodplain Management Capability

Flooding represents the greatest natural hazard facing the Nation and the H-GAC planning area. H-GAC created a Regional Flood Management Council (RFMC) whose purpose is to assist and advise elected officials in their decision-making responsibilities on issues related to all aspects of flood management in the Gulf Coast Planning Region. The RFMC developed a handbook to provide an overview of best flood management practices including planning and mitigation techniques, regulatory tools, and funding resources available to local governments in the H-GAC region. The handbook is designed to help floodplain managers work more effectively with elected officials, developers, and landowners to reduce flood damage to life and property.

At the same time, the tools available to reduce the impacts associated with flooding are among the most advanced when compared to other hazard-specific mitigation techniques. In addition to approaches that cut across hazards, such as education, outreach and the training of local officials, the National Flood Insurance Program (NFIP) offers specific regulatory measures that enable government officials to determine where and how growth occurs relative to flood hazards. In order for a county or municipality to join the NFIP, they must adopt a *Local Flood Damage Prevention Ordinance* that requires jurisdictions to follow established minimum building standards in the floodplain. Another key service provided by the NFIP is the mapping of identified flood hazard areas. Flood Insurance Rate Maps (FIRMs) are used to assess flood hazard risk and set flood insurance rates. The maps also provide an important tool to educate residents, government officials and the business community about the likelihood of flooding in their community. All counties and 86 percent of municipalities in the H-GAC planning area participate in the NFIP.¹⁵ **Table 5.6** provides a snapshot of the NFIP flood insurance policies in place within the H-GAC region. This is a summary table organized by county.

¹⁵ Some jurisdictions surveyed do not participate in the NFIP due to the lack of mapped Special Flood Hazard Areas or the belief that they do not face a significant flood risk. However, localized flooding may occur regardless of existing streams, rivers or low-lying areas. Furthermore, homeowners are not eligible to maintain flood insurance unless the jurisdiction in which they own property participates in the NFIP.

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Table 5.6
National Flood Insurance Program Policy Summary

Jurisdiction	Total Number of Policies	Total Coverage	Total Number of Losses	Total Dollars Paid
Austin	283	\$46,688	57	\$1,471,819
Brazoria	28,965	\$4,766,533	12,774	\$144,122,574
Chambers	5,344	\$873,560	2,305	\$29,040,113
Liberty	1,477	\$191,723	1,792	\$22,868,393
Montgomery	11,294	\$2,276,196	5,683	\$134,486,953
Walker	185	\$26,079	189	\$2,390,511
Waller	486	\$79,950	173	\$3,867,245
TOTAL	100,813	\$16,685,888	52,522	\$624,045,715

An additional indicator of floodplain management capability is the number of participants in the Community Rating System (CRS). The CRS is an incentive-based program that encourages counties and municipalities to undertake flood mitigation activities that go beyond the minimum requirements of the NFIP. All of the 18 creditable CRS mitigation activities are assigned point values. As points are accumulated and reach identified thresholds, communities can apply for an improved CRS class rating. Class ratings, which range from 10 to 1, are tied to flood insurance premium reductions. As class ratings decrease, the percent reduction in flood insurance premiums for NFIP policyholders in that community increases. Of the 57 jurisdictions that responded to the survey, one municipality and no counties participate in this program.

Table 5.7

CRS Premium Discounts

1	45%
2	40%
3	35%
4	30%
5	25%
6	20%
7	15%
8	10%
9	5%
10	---

Table 5.8

CRS Communities and Rankings in the H-GAC Region

Jurisdiction	CRS Rating
Conroe	7

Table 5.9

Information on Floodplain Management Programs in the H-GAC Region

Note: The following information was taken from the Local Community Capability Assessment Surveys during the planning process for the 2006 Hazard Mitigation Plan. Current information is being updated and should be available by April 30, 2011. The full version of this table (including information regarding the number of inspections conducted and number of permits issued in the last 12 and the number and explanation of variances issued in the last 12 months) can be found in Appendix D.

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Jurisdiction	NFIP Participant	Current Floodplain Management Ordinance/ Court Orders	Date Adopted
Austin County	Y	Flood Damage Prevention Ordinance	11/13/1989 amended 05/24/1999
City of Bellville	Y	See Austin County	04/1998
City of Brazos Country	Y	Ordinance 2001-09	08/15/2001
City of Industry	N	NA	NA
Town of San Felipe	Y	See Austin County	
City of Sealy	Y	Flood Damage Prevention Ordinance	06/09/1999
City of Wallis	Y	See Austin County	
Brazoria County	Y	Flood Damage Prevention Order	Adopted 12/1971 Amended 2007
City of Alvin	Y	Flood Damage Prevention Ordinance	Adopted 11/7/2005
City of Angleton	Y	Flood Damage Prevention Ordinance	Adopted 3/21/89
City of Bailey's Prairie	Y		
Village of Bonney	Y	Interlocal w/Brazoria County	Adopted 12/1971
City of Brazoria	Y	Flood Damage Prevention Ordinance	Adopted 12/11/2007
City of Brookside Village	Y	Flood Damage Prevention Ordinance	
City of Clute	Y		
City of Danbury	Y		
City of Freeport	Y	Flood Damage Prevention Ordinance	04/1989
City of Hillcrest Village	Y	No ordinance	NA
Town of Holiday Lakes	Y		
City of Iowa Colony	Y	No ordinance	NA
City of Jones Creek	Y		
City of Lake Jackson	Y	No - part of Floodplain Management	NA
City of Liverpool	Y	Interlocal w/Brazoria County	Adopted 12/1971
City of Manvel	Y	Ordinance #2010-O-10	5/24/2010
City of Oyster Creek	Y	Ordinance Number 311	03/19/1987
City of Quintana	Y	Flood Damage Prevention Ordinance	1984
City of Richwood	Y	Flood Damage Prevention Ordinance	1987
Village of Surfside Beach	Y	Flood Damage Prevention	Amended 2007
City of Sweeny	Y	Ordinance Number 102-87	1987
Velasco Drainage District	NA		
Chambers County	Y		
Chambers-Liberty Counties Navigation District	NA		
City of Anahuac	Y		
City of Beach City	Y		

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Jurisdiction	NFIP Participant	Current Floodplain Management Ordinance/ Court Orders	Date Adopted
City of Cove	Y		
City of Mont Belvieu	Y		
City of Old River-Winfree	Y		
Trinity Bay Conservation District	NA		
Liberty County	Y	Flood Damage Prevention Order	07/25/1988 - entered into record 03/02/1992 (Vol. 7 Page 635)
City of Ames	Y		
City of Cleveland	Y		
City of Daisetta	Y	No ordinance	NA
City of Dayton	Y	Flood Damage Prevention Ordinance	1988
City of Dayton Lakes	Y		
City of Devers	Y	NA	NA
City of Hardin	Y	No ordinance	NA
City of Kenefick	N		
City of Liberty	Y	No ordinance	
City of North Cleveland	N		
City of Plum Grove	Y		
Montgomery County	Y	No order	Joined the program in 1978-79
City of Conroe	Y	Flood Damage Prevention Ordinance	1995 - currently being amended
Town of Cut and Shoot	Y	No ordinance	Adopted 06/1987, amended 11/1996
City of Magnolia	Y		
City of Montgomery	Y	Flood Damage Prevention Ordinance	1996
City of Oak Ridge North	Y	Flood Damage Prevention Ordinance	1982 - amended 1997
City of Panorama Village	Y	Flood Damage Prevention Ordinance	
City of Patton Village	Y		
Town of Roman Forest	Y	No ordinance	NA
City of Shenandoah	Y	Floodplain Management Ordinance (ORD. No. 0-9604)	12/11/1996 - amended 04/24/2002 to include criminal and civil penalties
City of Splendora	Y	Flood Damage Prevention Ordinance	12/04/1986
City of Stagecoach	Y		
City of Willis	Y	Flood Damage Prevention Ordinance	12/17/1996
City of Woodbranch Village	Y		
The Woodlands Township	Y		
Town of Woodloch	Y		
Walker County	Y	Regulations for Floodplain Management	05/04/1987
City of Huntsville	Y	Flood Damage Prevention Ordinance	07/05/1977
City of New Waverly	Y	Regulations for Prevention Ordinance	05/04/1987

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Jurisdiction	NFIP Participant	Current Floodplain Management Ordinance/ Court Orders	Date Adopted
City of Riverside	Y	Regulations for Prevention Ordinance	05/04/1987
Waller County	Y	Flood Damage Prevention Ordinance	Joined the program in the 1980s
City of Brookshire	Y	No ordinance	NA
City of Hempstead	Y	Flood Damage Prevention Ordinance	01/08/1988
City of Pattison	Y	No ordinance	NA
Town of Pine Island	N	NA	NA
City of Prairie View	Y	No ordinance	Joined the program in 1987
City of Waller	Y	Floodplain ordinance	

NOTE: The following survey results are from the 2006 Hazard Mitigation Plan.

Community Assistance Visits (CAVs): State and federal floodplain management officials occasionally perform Community Assistance Visits (CAVs). A CAV is performed to review the local floodplain management program and note any deficiencies. H-GAC officials sent a letter to FEMA requesting information on CAVs conducted over the past 15 years for the participating jurisdictions. FEMA responded that they could not provide this information because of limited manpower and because community files are purged on a regular basis.

Floodplain Management Plan: A floodplain management plan (or Flood Mitigation Plan) provides a framework for action regarding the corrective and preventative measures in place to reduce flood-related impacts.

- Survey results indicated that six counties had a floodplain management plan in place at the time of this survey.
- Fifty-six percent of participating municipalities reported that they had a floodplain management plan and eight percent reported that they were part of a county-level plan.

Stormwater Management Plan: A stormwater management plan is designed to address flooding associated with stormwater runoff. The stormwater management plan is typically focused on design and construction measures that are intended to reduce the impact of more frequently occurring minor urban flooding.

- Survey results indicated that two counties maintain a stormwater management plan.
- According to survey results, 24 percent of municipalities had a stormwater management plan in place at the time of this survey, and one municipality noted that they participated in their county-level stormwater management plan.

County and Municipal Self-Assessment

The *Capability Assessment Survey* was comprised of two parts: 1) an evaluation of existing plans, policies and ordinances and 2) a self-assessment of county and municipal capabilities. This section discusses the findings of the self-assessment. County and municipal officials were asked to self-assess their capabilities (as high, moderate or limited) across the following characteristics: technical, administrative/ institutional, fiscal and political capability.¹⁶ First, a description of each characteristic is

¹⁶ Seven of the eight participating counties and 59 percent of the municipalities answered the self-assessment survey questions.

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provided, followed by the regional findings. It is important to note that due to the high degree of variability across county and municipal capabilities, the mitigation actions chosen by each jurisdiction in their Mitigation Action Plans will reflect these local abilities.

Technical Capability

Technical capability can be defined as possessing the skills and tools needed to improve decision making, including the development of sound mitigation actions. Technical capability can be measured across three primary elements: 1) geographic information systems (GIS) and database management; 2) grants management; and 3) hazard mitigation planning. Measuring the degree to which each element is found in the H-GAC region was conducted using the *Capability Assessment Survey* and through discussions with county and municipal staff. Self-assessment survey questions addressing technical capability focused on the use of GIS, while questions addressing grants management and mitigation planning capability can be found in Part VI, *Participation in Grant Programs and Projects* and Part II, *Hazard Mitigation Plans, Policies and Ordinances*.

The analysis of the responses to the *Capability Assessment Survey* indicated that there is generally a low technical capability at the county and municipal level. Seventy-seven percent rated their technical capability as low. Of the 57 responding counties and municipalities, three jurisdictions (municipalities) assessed themselves as having a high level of technical capability, while 10 (three counties and seven municipalities) responded that they had a moderate technical capability. The following are a summary of key resource needs affecting technical capability:

- Information on previous disasters and mitigation projects;
- Additional training to undertake GIS-driven risk assessments, identify potential mitigation projects, and develop hazard mitigation plans; and
- Enhancing the ability to use information technologies to facilitate the formulation, development, implementation and monitoring of mitigation plans.

Recommendations: The result of the technical capability assessment highlights a belief among those who filled out the survey that the existing capability of most counties and communities could be improved. As a result, local Mitigation Action Plans should be developed that strengthen technical capabilities. While there is a wide range of technical resources across county and municipal governments, the development of a systematic protocol for sharing resources could significantly increase the level of technical capability to analyze natural hazards and develop meaningful actions to reduce their impact. The development of regional mitigation actions could also be used to assist in this effort.

Administrative/ Institutional Capability

Administrative and institutional capability was evaluated by reviewing county and municipal staffing and the existing organizational structure found across local government to implement mitigation strategies. The analysis of the responses to the *Capability Assessment Survey* indicated that there is a moderate to low administrative capability at the county and municipal levels respectively. However, this capability varies widely across municipalities. Of the six counties responding, one reported a high administrative capability, while three counties self-assessed their administrative capability as moderate and two reported a low capability. Sixty-four percent of municipalities reported their administrative capability as low, while 24 percent rated their administrative capability as moderate and 12 percent rated their administrative capability as high. The following are a summary of key issues affecting administrative capability:

- Limited integration of mitigation into county/ local government functions; and
- Limited interdepartmental coordination.

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- Limited powers granted to County governments¹⁷.

Recommendations: The results of the administrative capability assessment demonstrate that counties, generally speaking, and larger municipalities, tend to possess a stronger administrative capability than smaller, rural communities. The enhancement of administrative capability may be achieved through county/ municipal training, outreach and mentoring of smaller rural jurisdictions as well as the sharing of resources, when appropriate.

Fiscal Capability

The ability to take action is often closely associated with the amount of money available to implement policies and projects.¹⁸ This may take the form of grants received or state and locally-based revenue. The costs associated with policy and project implementation vary widely. In some cases, policies are tied primarily to staff costs associated with the creation and monitoring of a given program. In other cases, money is linked to a project, such as the acquisition of flood-prone homes, which can require a substantial commitment from local, state and federal funding sources.

The analysis of the responses to the *Capability Assessment Survey* indicated that there is a moderate to low fiscal capability at the county and municipal levels respectively. Of the six counties responding, one reported a high fiscal capability, while two counties self-assessed their fiscal capability as moderate and three reported a low capability. Seventy-eight percent of municipalities reported their fiscal capability as low, while 16 percent rated their fiscal capability as moderate and 6 percent rated their fiscal capability as high.

Recommendations: The factors used in the self-assessment of local capability should be used as a general guide to help craft mitigation actions that are achievable. When considering the effect of fiscal capability on the implementation of policies and projects, jurisdictions should ask several basic questions:

- Does the action require a monetary commitment or staff resources?
- Can jurisdictions combine resources with other counties or municipalities to address identified problems?
- Is the jurisdiction willing to commit local revenue on a sustained or one time basis?

In order to implement mitigation projects and policies, some monetary commitment or staff resources will be required. This may take the form of a non-federal match requirement or the costs associated with staff time devoted to policy development and implementation. The identification of eligible Pre-Disaster Mitigation (PDM) projects, as well as other federal funding sources identified in the H-GAC Mitigation Plan, enables communities in the region to compete nationally for available funding. County and municipal governments should consider, whenever possible, combining financial and staff resources to address hazards, most of which tend to impact regions rather than individual jurisdictions. Finally, if local governments have access to an ongoing source of revenue, a more comprehensive and sustained effort can be achieved. Examples include the development of a stormwater management fee or the development of a budgetary line item that specifically addresses hazard mitigation.

¹⁷ Counties in the state of Texas have limited powers when it comes to enacting codes. Similarly, County governments may not adopt ordinances; they may only implement court orders.

¹⁸ Gaining access to federal, state or other sources of funding is often an overriding factor driving the development of hazard mitigation plans. However, an important objective of local governments seeking a more sustainable future is the concept of self-reliance. Over time, counties and municipalities should seek the means to become less dependent on federal assistance, developing a more diversified approach that assesses the availability of federal, state and locally-generated funding to implement mitigation actions. Additional assistance may be available from the business and corporate sector as well as certain non-profit groups. This should be coupled with an attempt to identify mitigation measures that cost little or no money, yet may compliment the larger array of actions identified in the plan.

Political Capability

One of the most difficult and sensitive capabilities to evaluate involves the political will of a jurisdiction to enact meaningful policies and projects. According to the results of the survey, the H-GAC region has a low to moderate political capability to enact meaningful and proactive mitigation policies. Sixty percent of municipalities reported a low political capability. Of the 50 municipalities reporting, 34 percent expressed that they had a moderate political capability and 4 percent stated that their jurisdiction had a high political capability. Two of the seven counties reported a high political capability, and five reported that they had a low political capability.

Recommendations: County and municipal government officials reported that while there is an interest in disaster mitigation activities, there appears to be a lack of local commitment to take the steps necessary to implement mitigation activities. Political support from elected officials can prove critically important. Past events, including Tropical Storm Allison in 2001, Hurricane Rita in 2005, and Hurricane Ike in 2008, which all devastated parts of the H-GAC planning area, should be used to better educate elected officials regarding the merits of mitigation planning. When possible, local governments who have implemented hazard mitigation projects should attempt to assess their effectiveness following future events. The ability to document mitigation projects and policies that work is a high priority among FEMA officials. Therefore, local government staff should work with Texas Division of Emergency Management and FEMA officials following disasters to evaluate past mitigation projects. The results should be presented to locally elected officials in order to provide real world examples of how mitigation can protect lives and property.

Previously Implemented Mitigation Measures

The success of future mitigation efforts can be gauged, in part, by past efforts. Previously implemented mitigation measures indicate that there has been a desire to reduce the effects of natural hazards. Past success of these projects can also be influential in building support for new mitigation efforts.

Hazard Mitigation Grant Program (HMGP) Projects

The Federal Emergency Management Agency's Hazard Mitigation Grant Program (HMGP) provides competitive funding to states and local governments for the implementation of long-term hazard mitigation measures following a presidential disaster declaration. According to the Texas Division of Emergency Management, since 1991 there have been 24 HMGP and HPP-M projects completed in the region totaling \$14,647,005. This number will increase substantially as HMGP projects associated with Tropical Storm Allison and Hurricane Ike are completed. Completed projects, including a project description, award and completion date, subgrantee and budget are listed in **Table 5.10**.

Hurricane Local Grant Program and Hurricane Property Protection Mitigation Program

Each year, the Texas Division of Emergency Management (DEM) awards grants to local jurisdictions in the coastal areas of Texas for projects relating to hurricane awareness and property protection mitigation against damage from hurricanes. Through the Hurricane Local Grant Program, approximately \$10,000 in grants of \$1,000 or less per jurisdiction are awarded for projects that enhance hurricane-related public awareness and education. Through the Hurricane Property Protection Mitigation Grant Program (HPP-M), Texas DEM distributes approximately \$100,000 in grants of \$20,000 or less per jurisdiction for projects designed to enhance hurricane-related property protection mitigation. The Local Grants have no match requirement, but the HPP-M requires a 50 percent cash match by the jurisdiction.

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Table 5.10
Closed (Completed) HMGP and HPP-M Projects in the H-GAC Region

Note: The information listed below was provided by Texas Division of Emergency Management.

Jurisdiction (County)	Grant Number	Project Description	Amount	Date Awarded	Date Completed
City of Angleton (Brazoria)	DR-900-001	Storm sewer system	\$153,162	04/12/1991	01/25/1994
City of Clute (Brazoria)	HPP-M-FY-2000-011	Construction of power switching unit on City Hall/Police Station	\$14,650	06/17/1998	08/24/1998
City of Danbury (Brazoria)	HPP-M-FY-1997-017	Built structure to house generator and generator supplies	\$8,890	12/18/1997	05/21/1998
City of Richwood (Brazoria)	DR-900-008	Drainage improvements	\$45,876	04/12/1991	09/30/1994
City of Sweeny (Brazoria)	HPP-M-FY-2000-004	Replace overhead door of Fire Department to protect emergency response vehicles from hurricane force winds	\$10,480	05/24/2000	07/07/2000
Liberty County	DR-1041-041	Acquisition/demolition of 54 properties	\$1,301,429	10/18/1994	03/23/1998
Liberty (Liberty)	HPP-M-FY-1999-013	Installation of storm doors for fire station	\$20,000	02/05/1999	09/14/1999
Liberty (Liberty)	DR-930-011	Levee	\$464,042	12/26/1991	08/3/1995
Montgomery County	DR-1041-031	Acquisition/demolition of 272 properties	\$13,996,449	10/18/1994	05/16/2001

Public Assistance (PA) Program Projects

FEMA's Public Assistance (PA) grant program is available to states, local governments and eligible non-profit organizations following a presidentially-declared disaster. Grants focus on emergency measures such as debris removal, costs associated with operational response, and the repair and reconstruction of damaged infrastructure. Over 570 PA projects have been implemented in the H-GAC planning area. This listing is too extensive to include in this plan. To obtain the complete listing of PA projects as supplied by the Texas Division of Emergency Management, contact the H-GAC offices.

Corps of Engineers Studies, Plans and Projects

The United States Army Corps of Engineers (USACE) provide a variety of hazard mitigation services. Examples include developing plans, studies and projects related to the reduction or elimination of long-term risk to human life and property. While a number of USACE projects have been completed in the H-GAC planning area, only a few are directly related to mitigation. Those projects not related to mitigation have not been included in this list.

Table 5.11
Mitigation-Related USACE Studies, Plans and Projects in the H-GAC Region

Project Name	Project Sponsors	Description
Clear Creek Texas Flood Control Project	Brazoria, Galveston, Harris, Harris County Flood Control	Flood control project under development to provide flood damage reduction along Clear Creek
Freeport Hurricane Protection Levee, Texas		The project consists of a system of levees and pumping stations that protect approximately 42 square miles from storm surge inundation due to hurricanes and tropical storms – under development

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Wallisville Lake	Chambers-Liberty Counties Navigation District, City of Houston, Trinity River Authority	3,800 acre reservoir created to ease flooding problems and enhance recreational opportunities
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Texas Water Development Board Studies, Plans and Projects – Flood Mitigation Assistance Program

In the State of Texas, the Texas Water Development Board (TWDB) administers the FEMA Flood Mitigation Assistance (FMA) program. The FMA program provides funding for projects and plans that are aimed at reducing the number of insured properties that have incurred repetitive flood losses. The TWDB also provides state Flood Protection Planning Grants to communities to support regional flood protection planning efforts. Eligible activities under Flood Protection Planning include studies and analyses to identify problems resulting from or relating to flooding, and identify potential solutions.

Table 5.12
FMA Grantees in the H-GAC Region

Jurisdiction	Grant Type	Year	Amount
City of Huntsville	FMA Planning Grant	2001	\$50,000
Liberty County	FMA Planning Grant	1998	\$46,875
City of Oak Ridge North	FMA Planning Grant	1999	\$35,000

Table 5.13
TWDB Flood Protection Planning Grants in the H-GAC Region

Contract Number	Contractor Name	Description	Amount	Fiscal Year Commitment
99483318	Brazoria County	Flood Protection Study for Brazoria County	\$300,000	1999
8483519	Brazoria County C&RD No. 3	Brazoria County Conservation and Reclamation District No. 3	\$176,335	1987
5541017	Brazoria County Drainage District #4	Brazoria County Drainage District #4, Brazoria County	\$60,000	1984
8483631	Montgomery County	Southern Montgomery County	\$74,994	1988

Pre-Disaster Mitigation Program; Property Protection – Mitigation Program

The Pre-Disaster Mitigation (PDM) program is designed to provide states and communities with funding to implement cost-effective hazard mitigation activities. Eligible activities may include the acquisition or elevation of flood-prone properties, retrofitting structures, education and outreach efforts, and mitigation planning.¹⁹

Master Drainage and Stormwater Management Plans in the H-GAC Region

The following communities indicated in their local *Capability Assessment Surveys* that they have a Master Drainage and/ or Stormwater Management Plan. More detailed information regarding the effectiveness of these plans can be found in the individual surveys.²⁰

Table 5.14

¹⁹ Pre-Disaster Mitigation funding was provided to H-GAC by FEMA and Texas DEM in order to develop this Plan.

²⁰ A copy of individual local *Capability Assessment Surveys* can be obtained by contacting H-GAC staff.

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Master Drainage and Stormwater Management Plans in the H-GAC Region

Name of Community	
City of Bellville	Montgomery County
City of Brookside Village	City of Oak Ridge North
City of Conroe	City of Panorama Village
City of Dayton	Town of Roman Forest
City of Lake Jackson	City of Shenandoah
Liberty County	City of Willis
City of Montgomery	

Comprehensive Plans in the H-GAC Region

The following communities indicated in their Local Capability Assessment surveys that they maintain a Comprehensive Plan. More information regarding the effectiveness of these plans can be found in local surveys.

Table 5.15
Comprehensive Plans in the H-GAC Region

Name of Community			
City of Alvin	City of Huntsville	City of Montgomery	City of Shenandoah
City of Brazoria	City of Iowa Colony	City of Oak Ridge North	Village of Surfside Beach
City of Brookside Village	City of Lake Jackson	City of Richwood	City of Willis
City of Dayton			

H-GAC and Project Impact

The H-GAC region was designated a Project Impact community by FEMA in 1998. Project Impact was created by FEMA in an attempt to reduce future disaster losses through the widespread use of hazard mitigation prior to the onset of a disaster. Key objectives of the initiative included: identifying hazards and assessing their potential impact on communities, and educating local government officials, citizens and members of the business community about the adoption of hazard mitigation measures.

Most Project Impact communities received federal “seed” money to establish program objectives and implement hazard mitigation projects. Specific projects funded in the H-GAC region included:

- Equipping Schools with Scanners and NOAA Weather Radios
- Public Education: Hurricane Preparedness Booklet

Conclusions on Local Capability

The capability of local governments in the Houston-Galveston area varies greatly from jurisdiction to jurisdiction. Generally speaking, county-level governments scored higher than municipalities. Of the 57 respondents, five of the counties scored in the top 15 jurisdictions in the region. However, much of this variation can be accounted for when assessing the size of each jurisdiction. Larger cities tended to score higher, while smaller, more rural communities reported more limited capability. Additional factors to consider include the physical location and wealth of participating municipalities. Several smaller suburban jurisdictions scored high on the capability assessment. It is not clear whether this is due to the level of resources at their disposal or their proximity to larger urban areas, where public expectations regarding governmental services tend to be higher than in rural areas.

Perhaps one of the most significant survey findings was the widespread existence of several planning programs and tools already in use across the H-GAC area. However, many of the processes and tools do not incorporate hazard mitigation practices. For example, planning is widely applied to response-

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related activities via the use of Emergency Operations Plans, Continuity of Operations Plans, Radiological Emergency Plans and SARA Title III planning. As a result, counties and local governments are familiar with the concept of planning and it has been institutionalized across the region. Therefore, an important regional consideration in this Plan should be to work with counties and municipalities to apply this planning experience to hazard mitigation and, likewise apply hazard mitigation to planning activities already taking place. The H-GAC Regional Hazard Mitigation Plan provides the vehicle to begin this process. However, in order to succeed, it will require clearly articulating the benefits of participating in and sustaining the mitigation planning process. One of the best ways to obtain local buy-in and long-term success is to identify and implement achievable mitigation actions.

Linking the Capability Assessment, the Risk Assessment, and the Mitigation Strategy

The conclusions of the *Capability Assessment* and *Risk Assessment* serve as the foundation for a meaningful hazard mitigation strategy. During the process of identifying the goals and mitigation actions, each jurisdiction must consider not only their level of hazard risk but also their existing capability to minimize or eliminate that risk.

In jurisdictions where the overall hazard risk is considered to be HIGH, and local capability is considered LIMITED, then specific mitigation actions that account for these conditions should be considered. This may include less costly actions such as minor ordinance revisions or public awareness activities. If necessary, specific capabilities may need to be improved in order to better address recurring threats. Similarly, in cases where the hazard vulnerability is LOW and overall capability is HIGH, more emphasis can be placed on actions that may impact future vulnerability such as guiding development away from known hazard areas.

6.0 Mitigation Strategy

Introduction

A mitigation strategy provides participating counties and municipalities in the H-GAC planning area with the basis for action. Based on the findings of the *Risk Assessment* and the *Capability Assessment*, the mission statement, goals and actions that follow are intended to guide both the day-to-day operations and the long-term approach taken by counties and municipalities to reduce the impacts of hazards on their communities. In order to achieve these aims, this section was separated into the following components:

- Mission Statement;
- Mitigation Goals;
- Identification and Analysis of Mitigation Measures; and,
- Mitigation Action Plan.

Mission Statement

Develop and maintain a comprehensive pre and post-disaster hazard mitigation plan guided by enhanced education and outreach efforts, new policies and programs, improved planning processes based on study findings, and improved evacuation procedures leading to the creation of policies and projects designed to reduce the vulnerability of individuals, families, households, businesses, infrastructure and critical facilities to the negative effects of natural and human-caused hazards.

Mitigation Goals

The planning team developed mitigation goals based on input from planning sessions, workshops, and public meetings completed during development of the 2011 Regional Hazard Mitigation Plan. Additional information on the process is included in Section 2.

- | | |
|---------|---|
| Goal #1 | Improve education and outreach efforts regarding preparedness and mitigation actions that can be implemented by citizens, businesses and county and municipal government officials. |
| Goal #2 | Develop hazard mitigation policies and programs designed to reduce the impact of natural and human-caused hazards on people and property. |
| Goal #3 | Conduct studies and implement planning processes to increase the understanding of local hazard vulnerability. |
| Goal #4 | Identify and implement hazard mitigation projects to reduce the impact of hazard events and disasters. |
| Goal #5 | Improve evacuation procedures associated with natural and human-caused hazards. |

The goals of this Plan reflect similar goals found in the State of Texas Mitigation Plan and the National Flood Insurance Program. This similarity is not intentional, due to the fact that neither of those sets of goals was presented to members of the Regional Hazard Mitigation Team prior to their independent determinations. This approach was purposeful in fostering an environment that did not manipulate the goal-making process in any particular direction based on preceding determinations. It is, however understandable that the goals established through these three separate efforts are similar because of the similar purposes of the NFIP, the State of Texas Mitigation Plan, and the H-GAC Regional Hazard Mitigation Plan.

State of Texas Mitigation Planning Goals:

- *Reduce or eliminate hazardous conditions that cause loss of life;*
- *Reduce or eliminate hazardous conditions which inflict injuries;*
- *Reduce or eliminate hazardous conditions which cause property damage;*
- *Reduce or eliminate hazardous conditions which degrade important natural resources;*
and
- *Reduce flood losses through wise use of floodplains.*

Identification and Analysis of Mitigation Measures

In formulating this *Mitigation Strategy*, a wide range of mitigation actions were identified and considered by participating jurisdictions in order to help achieve the goals of Plan. Mitigation actions that were identified by participants during the development to the 2006 Regional Hazard Mitigation Plan and the 2011 Update are listed in Appendix A.

The 2006 Regional Hazard Mitigation Plan contained 494 individual mitigation action items. Of these 494 individual actions, 130 actions have been completed, 18 are in progress, and 34 are no longer being pursued. The 2011 Update identified an additional 338 mitigation actions and 312 were carried from the 2006 Regional Hazard Mitigation Plan, totaling 650 mitigation actions.

Mitigation Techniques

1. Prevention

Preventative activities are intended to keep hazard problems from getting worse. They are particularly effective in reducing a community's future vulnerability, especially in areas where development has not occurred or capital improvements have not been substantial. Examples of preventative activities include:

- Planning and Zoning
- Hazard Mapping
- Open Space Preservation
- Floodplain Regulations
- Stormwater Management
- Drainage System Maintenance
- Capital Improvements Programming
- Shoreline/Riverine/Fault Zone Setbacks

2. Property Protection

Property protection measures enable structures to better withstand hazard events, remove structures from hazardous locations, or provide insurance to cover potential losses. Examples include:

- Acquisition
- Relocation
- Building Elevation
- Critical Facilities Protection
- Retrofitting (i.e., wind proofing, flood proofing, seismic design standards, etc.)
- Insurance
- Safe Room Construction

3. Natural Resource Protection

Natural resource protection activities reduce the impact of hazards by preserving or restoring the function of natural systems. Examples of natural systems that can be classified as high hazard areas include floodplains, wetlands and barrier islands. Thus, natural resource protection can serve the dual purpose of protecting lives and property while enhancing environmental goals such as improved water quality or recreational opportunities. Parks, recreation, or conservation agencies and organizations often implement these measures. Examples include:

- Floodplain Protection
- Beach and Dune Preservation
- Riparian Buffers
- Fire Resistant Landscaping
- Erosion and Sediment Control
- Wetland Restoration
- Habitat Preservation
- Slope Stabilization

4. Structural Projects

Structural mitigation projects are intended to lessen the impact of hazards by modifying the environment or hardening structures. Structural projects are usually designed by engineers and managed or maintained by public works staff. Examples include:

- Reservoirs
- Levees, Dikes, Floodwalls or Seawalls
- Detention and Retention Basins
- Channel Modification
- Beach Nourishment
- Storm Sewer Construction

5. Emergency Services

Although not typically considered a mitigation technique, emergency services minimize the impact of a hazard on people and property. Actions taken immediately prior to, during, or in response to a hazard event include:

- Warning Systems
- Search and Rescue
- Evacuation Planning and Management
- Flood Fighting Techniques

6. Public Information and Awareness

Public Information and awareness activities are used to advise residents, business owners, potential property buyers and visitors about hazards and mitigation techniques they can use to protect themselves and their property. Examples of measures used to educate and inform the public include:

- Outreach and Education
- Training

- Speaker Series, Demonstration Events
- Real Estate Disclosure
- Hazard Expositions

Mitigation Techniques in the H-GAC Planning Area

During development of the 2011 Regional Hazard Mitigation Plan, county and municipal officials reviewed the findings of the *Capability Assessment* and *Risk Assessment* in order to determine feasible and effective mitigation techniques. The Disaster Mitigation Act of 2000 specifies that state and local governments should prioritize actions based on the level of risk a hazard poses to the lives and property of a given jurisdiction. The Mitigation Matrix (**Table 6.1**) served as a general guide; assisting local governments to make sure that they addressed, at a minimum, those hazards posing the greatest threat. Mitigation techniques, including prevention, property protection, natural resource protection, structural projects, emergency services, and public information and awareness were noted in the matrix if adopted by a participating jurisdiction. Local Mitigation Action Plans in the H-GAC planning area include an array of actions, not just those addressing high and moderate risk hazards.

Table 6.1
Mitigation Matrix

MITIGATION TECHNIQUE	HIGH RISK HAZARDS			MODERATE RISK HAZARD	
	Hurricane Wind	Riverine Flooding	Drought	Coastal Flooding/ Storm Surge	Wildfire
Prevention	X	X	X	X	X
Property Protection	X	X	X		
Natural Resource Protection	X	X		X	X
Structural Projects	X	X	X		
Emergency Services	X	X	X		X
Public Information and Awareness	X	X	X	X	X

Mitigation Action Plan

H-GAC designed the Regional Hazard Mitigation Plan to be both comprehensive and strategic in nature. That is, the Plan provides a comprehensive review of hazards and identifies far-reaching policies and projects intended to reduce the future impacts of hazards. The Plan is also strategic - adoption procedures, maintenance expectations, and mitigation actions are linked to departments or individuals responsible for their implementation. When possible, funding sources were identified that could be used to assist in project implementation.

The mitigation actions developed and adopted by participating jurisdictions are listed in Appendix A, *Locally-Specific Mitigation Actions*. **Table 6.2** represents the general format in which each mitigation action was recorded. Each action has been designed to achieve the goals identified in the H-GAC *Mitigation Strategy*. Each jurisdiction's mitigation actions form the basis of their mitigation action plan. By identifying specific projects and policies, the local mitigation action plans help lay the framework for participating counties and municipalities to engage in distinct actions that will reduce their exposure to future hazard events and disasters.

Table 6.2
Mitigation Action Worksheet

Mitigation Action	
a. Community Name:	
b. Action Item (Describe):	
c. Category	
d. Hazard(s):	
e. Lead Agency/ Department Responsible:	
f. Estimated Cost:	
g. Funding Method: (General Revenue, Contingency/ Bonds, External Sources, etc.)	
h. Implementation Schedule:	
i. Priority:	

- a. Community Name: Identify your community's name.
- b. Action Item: Identify specific actions that, if accomplished, will reduce vulnerability and risk in the impact area. Actions should match mitigation goals.
- c. Category: The mitigation technique(s) described earlier in this section.
- d. Hazard(s): The hazard(s) the action attempts to mitigate.
- e. Lead Agency/ Department Responsible: Identify the local agency, department or organization that is best suited to accomplish this action.
- f. Estimated Cost: If applicable, indicate the cost to accomplish the mitigation action. This amount should be estimated until a final dollar amount can be determined.
- g. Funding Method: If applicable, indicate how the cost to complete the action will be funded. For example, funds may be provided from existing operating budgets (General Revenue), a previously established contingency fund (Contingency/ Bonds), or a federal or state grant (External Sources).
- h. Implementation Schedule: Indicate when the action will begin, and when the action is expected to be completed. Remember that some actions will require only a minimum amount of time, while others may require a long-term continuing effort.
- i. Priority: Indicate whether the action is a 1) High priority – short-term immediate – reducing overall risk to life and property; 2) Moderate priority – an action that should be implemented in the near future due to political or community support or ease of implementation; 3) Low priority – an action that should be implemented over the long term that may depend on the availability of funds. Prioritizing mitigation actions for each jurisdiction was based on the following five factors: (1) effect on overall risk to life and property; (2); ease of implementation; (3) political and community support; (4) special emphasis on a general economic cost/benefit review; and (5) funding availability.

With regard to Factor 4 above, local governments use cost-benefit analysis of capital projects when determining priorities for locally-funded projects – and federally funded projects which require infusion of local match. In addition, project applicants are aware that viable projects need to meet certain cost-benefit criteria to receive FEMA mitigation grant funding. Although projects are not necessarily prioritized by the maximum potential benefit, cost is a consideration when establishing priorities.

Mitigation actions with “high” priority were determined to be the most cost effective and most compatible with each jurisdiction’s unique needs.

As mentioned above, each jurisdiction prioritized their respective mitigation actions. An overall ranking of High, Moderate or Low was given to each action based on analysis of the action in terms of the five factors listed above. Jurisdictions also used the criteria above (items a. through h.) to evaluate the feasibility of actions. If a jurisdiction could not identify a department or agency responsible for implementing the action, or if the action was determined not to be cost feasible, it was eliminated from consideration.

With the exception of H-GAC’s mitigation actions, these mitigation actions are specific measures to be undertaken by the city or county. It is expected that this component of the Plan will be the most dynamic as it will be used as the primary indicator to measure the Plan’s progress over time and will be routinely updated and/or revised as it is implemented and incorporated by the jurisdictions.

7.0 Plan Maintenance Procedures

This section discusses how the Mitigation Strategy will be implemented by participating jurisdictions and how the overall Hazard Mitigation Plan will be evaluated and enhanced over time. This section also discusses how the public will continue to be involved in the hazard mitigation planning process. It consists of the following three subsections:

- Implementation
- Updating and Enhancement
- Continued Public Involvement

Implementation

Each jurisdiction participating in this Plan is responsible for striving to implement specific mitigation actions as prescribed in their Mitigation Strategy (individual actions included in Appendix A). Jurisdictions assign each action to a specific person or local government office in order to increase accountability and the likelihood of implementation. This approach enables individual jurisdictions to update their mitigation strategy as needed, without altering the broader focus of the regional Plan. Jurisdictions are responsible for adopting the Plan and their locally-specific actions - and are not held responsible for the action(s) of every other jurisdiction involved in the planning process. Whenever possible, a funding source has been identified that may be considered when attempting to implement the action. In addition, an implementation time period or a specific implementation date has been assigned in order to assess whether actions are being implemented in a timely fashion. Local jurisdictions revisited each mitigation action as part of the 2011 Update and provided updated information on previous projects as well as contributing new to their Mitigation strategy (Appendix A).

It will be the responsibility of each participating jurisdiction to determine additional implementation procedures beyond adoption of the Plan and their individual mitigation actions. This includes integrating the Plan into other planning documents, processes or mechanisms such as comprehensive or capital improvement plans, where appropriate. For example, during the planning process for new and updated local planning documents, such as the comprehensive plan, capital improvements plan, or emergency management plan, the local planner or emergency management coordinator will provide a copy of the hazard mitigation plan to each respective advisory committee member. The local planner or emergency management coordinator will recommend to those persons making revisions to the afore noted plans that the goals and strategies of the new or revised planning documents should remain consistent with the goals and strategies of the hazard mitigation plan and not contribute to increasing the effects of natural hazards within the community.

Updating and Enhancement

Plan Monitoring

H-GAC is responsible for the continued monitoring of this plan. Going forward from the 2011 Update, the point of contact from each jurisdiction (see Table 7.1) will make yearly updates to H-GAC on the progress of the implementation of their mitigation actions. The timing of the yearly reports will coincide with the anniversary of the approval date of the 2011 Update.

Five (5) Year Plan Evaluation and Update

H-GAC and its participating jurisdictions will review, evaluate and update the Plan to submit to the State Hazard Mitigation Officer every five years in accordance with 44 CFR, Section 201.6. This will provide local officials with the opportunity to determine whether there have been any significant changes in the

region that may, in turn, necessitate changes in the types of mitigation actions proposed. Evaluation criteria will include:

- New development in identified hazard areas,
- An increased exposure to hazards,
- The increase or decrease in capability to address hazards, and
- Changes to federal or state legislation are examples of factors that may affect the content of the Plan.

This review also provides community officials an opportunity to evaluate those actions that have been successful and to explore the possibility of documenting potential losses avoided due to the implementation of specific mitigation measures. Updates will also be fashioned to reflect lessons learned from recently declared Federal Disasters.

The results of the five year review should be summarized in a report that is attached to this document as Appendix E. Future annual reports will include an evaluation of the Plan and any required changes or amendments. Recommended changes will be implemented based on available funding to support revisions and updates and should be assigned to appropriate officials with pre-determined timelines for completion. If changes are required of individual Mitigation Action Plans, the appropriate local designee should assign responsibility for the completion of the task. Changes to either the regional Plan or local Mitigation Action Plans will necessitate the adoption of these changes by the appropriate governing body as determined by the Texas DEM and FEMA.

Table 7.1
Local Points of Contact for Plan Monitoring and Updating

Jurisdiction	Title
H-GAC	Economic Development Program Manager
Austin County	County Judge
City of Bellville	City Manager
City of Brazos Country	Mayor
City of Industry	Mayor
Town of San Felipe	Mayor
City of Sealy	City Manager
City of Wallis	City Manager/Public Works
Brazoria County	Floodplain Administrator
City of Alvin	Floodplain Manager
City of Angleton	City Administrator
City of Bailey's Prairie	County Floodplain Administrator
Village of Bonney	County Floodplain Administrator
City of Brazoria	County Floodplain Administrator
City of Brookside Village	County Floodplain Administrator
City of Clute	Assistant City Manager
City of Danbury	County Floodplain Administrator
City of Freeport	City Manager
City of Hillcrest Village	County Floodplain Administrator
Town of Holiday Lakes	County Floodplain Administrator
City of Iowa Colony	County Floodplain Administrator
City of Jones Creek	County Floodplain Administrator
City of Lake Jackson	Assistant City Manager
City of Liverpool	County Floodplain Administrator

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Jurisdiction	Title
City of Manvel	Certified Emergency Manager
City of Oyster Creek	County Floodplain Administrator
City of Quintana	County Floodplain Administrator
City of Richwood	County Floodplain Administrator
Village of Surfside Beach	County Floodplain Administrator
City of Sweeny	County Floodplain Administrator
Velasco Drainage District	County Floodplain Administrator
Chambers County	County Emergency Management Coordinator
Chambers County, Trinity Bay Conservation District, Chambers-Liberty Counties Navigation District	County Emergency Management Coordinator, General Manager, General Manager
Chambers-Liberty Counties Navigation District	General Manager
City of Anahuac	Mayor
City of Beach City	Mayor
City of Cove	Mayor
City of Mont Belvieu	Mayor
City of Old River-Winfree	Mayor
Liberty County	County Emergency Management Coordinator
City of Ames	County Emergency Management Coordinator
City of Cleveland	Director of Fire and EMS
City of Daisetta	County Emergency Management Coordinator
City of Dayton	City Planner
Town of Dayton Lakes	County Emergency Management Coordinator
City of Devers	County Emergency Management Coordinator
City of Hardin	County Emergency Management Coordinator
City of Kenefick	County Emergency Management Coordinator
City of Liberty	Fire Chief, EMS
City of North Cleveland	County Emergency Management Coordinator
City of Plum Grove	County Emergency Management Coordinator
Montgomery County	County Emergency Manager
City of Conroe	Emergency Management Coordinator
Town of Cut and Shoot	County Emergency Manager
City of Magnolia	County Emergency Manager
City of Montgomery	County Emergency Manager
City of Oak Ridge North	County Emergency Manager
City of Panorama Village	County Emergency Manager
City of Patton Village	County Emergency Manager
Town of Roman Forest	County Emergency Manager
City of Shenandoah	Director of Public Works
City of Splendora	City Secretary
City of Stagecoach	County Emergency Manager

Jurisdiction	Title
City of Willis	City Coordinator
City of Woodbranch Village	County Emergency Manager
The Woodlands Township	Fire Chief
Town of Woodloch	County Emergency Manager
Walker County	County Sheriff
City of Huntsville	Emergency Management Coordinator
City of New Waverly	County Sheriff
City of Riverside	County Sheriff
Waller County	Deputy Sheriff, County
City of Brookshire	Deputy Sheriff, County
City of Hempstead	Deputy Sheriff, County
City of Pattison	Deputy Sheriff, County
Town of Pine Island	Deputy Sheriff, County
City of Prairie View	Deputy Sheriff, County
City of Waller	Flood Plain Administrator

Plan Amendments

Periodic revisions and updates of the Plan are required to ensure that the goals of the Plan are kept current, taking account of potential changes in hazard vulnerability and mitigation priorities. In addition, revisions may be necessary to ensure that the Plan is in full compliance with Disaster Mitigation Act and Annex P requirements.

Upon the initiation of the amendment process, H-GAC will forward information on the proposed change to all interested parties including, but not limited to, all affected jurisdictions. H-GAC will also forward information to the Texas Division of Emergency Management. This information will be disseminated in order to seek input on the proposed amendment for not less than a 45-day review and comment period.

At the end of the comment period, the proposed amendment and all comments will be forwarded to designated officials for consideration. The designee will review the proposed amendment along with the comments received from other parties, and submit a recommendation to the appropriate governing body within 30 days.

In determining whether to recommend approval or denial of a Plan amendment request, the following factors will be considered:

- There are errors or omissions made in the identification of issues or needs during the preparation of the Plan;
- New issues or needs have been identified which were not adequately addressed in the Plan; or
- There has been a change in information, data, or assumptions from those on which the Plan was based.

Upon receiving the recommendation of the designee, the governing body will hold a public hearing. The governing body will review the recommendation (including the factors listed above) and any oral or written comments received at the public hearing. Following that review, the governing body will take one of the following actions:

- Adopt the proposed amendment as presented;
- Adopt the proposed amendment with modifications;
- Refer the amendment request back to the designee for further consideration; or

- Defer the amendment request for further consideration and/ or hearing.

If, in the future, any of the jurisdictions that participated in this planning effort wish to not participate in future updates of the Plan, they must notify H-GAC in writing.

Continued Public Involvement

Public input was an integral part of the completion of 2006 Regional Hazard Mitigation Plan and will continue to be essential as the Plan changes over time. As is the case with any officially adopted plan or ordinance, significant changes to this Plan, including the 2011 Update, shall require a public hearing.

Other efforts to involve the public in the maintenance, evaluation and revision process will be made including:

- Utilizing local media to update the public of any maintenance and/ or periodic review activities taking place;
- Utilizing city and/ or county Web sites to advertise any maintenance and/ or periodic review activities taking place; and,
- Providing copies of the Plan to public libraries.

Appendix A - Locally-Specific Mitigation Actions

For this Plan Update, locally-specific mitigation action plans are organized alphabetically by county. Within each county section, county projects are presented first and then the other communities' (cities, towns, villages and districts) are presented alphabetically. Appendix A includes both new actions for 2011 as well as revised or updated actions from the 2006 Plan. The 2006 Plan included projects from Galveston County and cities therein; however, Galveston County and cities therein are not included as participating jurisdictions in the 2011 Plan and therefore, do not have mitigation actions included in the 2011 Plan. The 2011 Plan update's locally-specific mitigation actions also include several "human-caused" hazards which are not identified elsewhere in the plan.

Table A-1 presents a comparison of the 2006 locally-specific mitigation actions plans and the new mitigation action plans received from participating jurisdictions.

Appendix A
Table A-1
Locally-Specific Mitigation Actions

County	Jurisdiction	2011 Mitigation Action No	2006 Mitigation Action No	Project Description	2006 Mitigation Action Status						Reduce hazard impacts on new buildings and infrastructure	Reduce hazard impacts on existing buildings and infrastructure	NFIP Compli- ance
					Complete	In Progress	No Longer Pursuing	Carry On	Carry on with modification	Reason Not Complete			
Austin	Austin County	1		Create wildfire breaks and defensible corridors and remove hazardous fuels to protect historic areas and roadways.							X	X	
Austin	Austin County	2		Update commodity flow study for increased rail and truck traffic.							X	X	
Austin	Austin County	3		Conduct wildfire outreach and education campaign.							X	X	
Austin	Austin County	4		Expand evacuation and alert system to accommodate population growth.									
Austin	Austin County	5		Improve subdivision regulations in Extra Territorial Jurisdiction (ETJ) to protect mobile homes against wind and tornadoes. Recommendation for mobile homes will ensure protection against straight line winds high velocity winds.							X	X	
Austin	Austin County		1	Conduct a commodity flow study in 2003 (GIS Mapping).	X					Completed			
Austin	Austin County		2	Partner with TxDOT to construct alternate routes for transporting hazardous materials.				X		Funding	X	X	
Austin	Austin County		3	Develop evacuation planning and alert system.			X			Incorporated into 2011 Mitigation Action 4			
Austin	Austin County		4	Increase public awareness regarding pipeline failure.				X		Funding			
Austin	Austin County		5	Implement hazardous materials exercises.				X		Updated Schedule, Increased Cost			
Austin	Austin County		6	Post signs in high profile area(s) when burn ban is in place.	X					Completed			
Austin	Austin County		7	Increase public awareness of tornadoes and high winds.				X		On-going	X	X	
Austin	Austin County		8	Increase public awareness and education of flood hazards.				X		On-going	X	X	X
Austin	Austin County		9	Acquire GIS mapping for floodplain study and develop Microsoft PowerPoint presentations	X					Completed			X
Austin	Austin County		10	Establish drainage district for Allen's Creek to enforce floodplain regulations.				X		Funding, voter action	X	X	X
Austin	Austin County		11	Add culverts on Allen's Creek outside of City of Sealy's city limits, including headwalls, channel deepening and modifications to rail structures. Construct new channels and create detention areas to increase storage during periods of heavy rainfall.					X	Funding	X	X	X
Austin	Austin County		12	Develop countywide order requiring the construction of a tornado/severe weather shelter in all mobile home parks.				X		Updated Schedule, Increased Cost			
Austin	Austin County		13	Conduct public information and awareness campaign to promote safe room construction in schools, churches, day care centers and all critical public facilities.					X	Funding	X		
Austin	Austin County		14	Continue the routine cleaning of channels and ditches.				X		On-going	X	X	X
Austin	Austin County		15	Purchase additional road closed and flood hazard signs.				X		Funding			
Austin	Austin County		16	Create a defensible space around county buildings by removing hazardous fuels.					X	On-going		X	
Austin	Austin County		17	Develop regulatory action requiring development permit for flood damaged property.				X		On-going	X	X	X
Austin	City of Bellville	1		Improve drainage by enlarging culverts at South Holland and East O'Bryant.							X	X	X
Austin	City of Bellville	2		Enlarge ditches on S. Mechanic from First St. to Hacienda St.							X	X	X
Austin	City of Bellville	3		Conduct wildfire outreach and education campaign.							X	X	
Austin	City of Bellville	4		Expand evacuation and alert system to accommodate population growth.									
Austin	City of Bellville		1	Construct tornado/severe weather shelters in existing mobile home parks.				X		Updated Schedule, Increased Cost			
Austin	City of Bellville		2	Develop city ordinance requiring construction of tornado/severe weather shelter in all mobile home parks.				X		Updated Schedule, Increased Cost			
Austin	City of Bellville		3	Develop severe weather audible alert system.			X			Incorporated as 2011 Mitigation Action 4			
Austin	City of Bellville		4	Increase public awareness for safe room construction in homes and schools.				X		Updated Schedule, Increased Cost	X	X	
Austin	City of Bellville		5	Construct alternate evacuation route around City of Bellville.					X	Funding			
Austin	City of Brazos Country	1		Acquire signage for road closures and detours during flood event to inform citizens of flood danger.									X
Austin	City of Brazos Country	2		Conduct wildfire outreach and education program.							X	X	
Austin	City of Brazos Country	3		Expand evacuation and alert system to accommodate population growth.									
Austin	City of Brazos Country		1	Improve water system to support wildfire fighting activities.					X	On-going	X	X	
Austin	City of Brazos Country		2	Adopt and enforce floodplain regulations.				X		On-going	X		X
Austin	City of Brazos Country		3	Inspect and clear debris from stormwater drainage system.				X		On-going	X	X	X
Austin	City of Brazos Country		4	Document high water marks following flood events to update floodplain maps.				X		On-going	X		X
Austin	City of Brazos Country		5	Purchase emergency alert equipment.	X					Completed			
Austin	City of Industry	1		Expand evacuation and alert system to accommodate population growth.									
Austin	City of Industry	2		Conduct wildfire outreach and education campaign.							X	X	
Austin	City of Industry		1	Implement public education and evacuation procedures for a hazardous materials incident involving pipeline explosion.			X			Incorporated as 2011 mitigation action 1			
Austin	City of Industry		2	Equip elementary school system with weather alert system to inform parents and students of impending natural hazards.				X		Updated Schedule, Increased Cost			
Austin	City of Sealy	1		Expand evacuation and alert system to accommodate population growth.									
Austin	City of Sealy	2		Conduct wildfire outreach and education campaign.							X	X	
Austin	City of Sealy		1	Update policies and regulations to incorporate hazard mitigation practices.	X					Completed	X	X	
Austin	City of Sealy		2	Establish emergency notification system for hazardous materials spills.			X			Project has been incorporated as 2011 Mitigation Action 1			

Appendix A
Table A-1
Locally-Specific Mitigation Actions

County	Jurisdiction	2011 Mitigation Action No	2006 Mitigation Action No	Project Description	2006 Mitigation Action Status						Reduce hazard impacts on new buildings and infrastructure	Reduce hazard impacts on existing buildings and infrastructure	NFIP Compli- ance
					Complete	In Progress	No Longer Pursuing	Carry On	Carry on with modification	Reason Not Complete			
Austin	City of Sealy		3	Develop severe weather public notification system.			X			Project has been incorporated as 2011 Mitigation Action 1			
Austin	City of Sealy		4	Implement Allen's Creek drainage improvement projects by expanding detention capacity.				X		Funding	X	X	X
Austin	City of Sealy		5	Update and improve subdivision regulations in Extra Territorial Jurisdiction (ETJ).			X			Outside of city limits			
Austin	City of Sealy		6	Add culverts on Allen's Creek from US 90 to end of City limits, including headwalls, channel deepening and modifications to rail structures. Construct new channels and create detention areas to increase storage during periods of heavy rainfall.					X	Funding	X	X	X
Austin	City of Wallis	1		Expand evacuation and alert system to accommodate population growth.									
Austin	City of Wallis	2		Conduct wildfire outreach and education campaign.							X	X	
Austin	City of Wallis		1	Develop severe weather warning system.	X					Completed			
Austin	City of Wallis		2	Construct wind resistant municipal building and emergency service building.				X		Updated Schedule, Increased Cost	X		
Austin	City of Wallis		3	Construct new government/command center facilities which can resist high winds and other inclement weather conditions.				X		Updated Schedule, Increased Cost	X		
Austin	City of Wallis		4	Implement drainage improvements for Elm Slough watershed by widening bridge at Gresham Street and 7th Street.					X	Funding	X	X	X
Austin	City of Wallis		5	Develop and implement water conservation outreach program.				X		On-going			
Austin	City of Wallis		6	Acquire flood-prone property at the intersection of Gresham Street and South 7th Street.				X		On-going			X
Austin	City of Wallis		7	Conduct hazardous material training for fire department personnel.		X				On-going			
Austin	City of Wallis		8	Install electrical surge protection devices on generator at lift station.					X	On-going	X	X	
Austin	City of Wallis		9	Installation of severe weather siren.			X			Reverse 911 System in Service			
Austin	City of Wallis		10	Implement drainage improvement program to include cleaning of ditches, increasing size of drainage culverts, etc.				X		On-going	X	X	X
Austin	City of Wallis		11	Acquire flood-prone homes in floodplain.				X		Updated Schedule, Increased Cost			X
Austin	Town of San Felipe	1		Expand evacuation and alert system to accommodate population growth.									
Austin	Town of San Felipe	2		Conduct wildfire outreach and education campaign.							X	X	
Austin	Town of San Felipe		1	Establish local agreements with neighboring cities and the county to address regional flood hazards.		X				Current/Extending Programs			X
Austin	Town of San Felipe		2	Develop education and outreach effort to address pipeline hazard.		X				Current/Extending Programs			
Austin	Town of San Felipe		3	Develop flood hazard education and outreach program.				X		On-going			X
Austin	Town of San Felipe		4	Purchase flood evacuation signage.					X	Funding			X
Brazoria	Brazoria County	1		Acquisition and demolition of severe repetitive loss properties along 14 miles of the Brazoria County coastline.									X
Brazoria	Brazoria County	2		Create a feeder beach for Follett's Island to slow the current erosion rate and protect wetlands in southeast Brazoria County.							X	X	
Brazoria	Brazoria County	3		Construct berm along 14 miles of the Bluewater Highway (CR 257) to reduce impacts from storm surges. Project will protect the highway and shoreward properties.							X	X	
Brazoria	Brazoria County	4		Treasure Island Revetment project. The project also focuses on developing alternatives for a beach nourishment project in the vicinity of the revetment and fishing pier area to widen the beach and provide a buffer to reduce storm impacts to the existing shoreline							X	X	
Brazoria	Brazoria County	5		Evaluate existing gauging stations and flood gates and obtain updated software and hardware.									X
Brazoria	Brazoria County	6		Purchase 500 magnetic Burn Ban signs to be displayed on all county vehicles.							X	X	
Brazoria	Brazoria County	7		Purchase three years of use of an automated public information system to reach out to county residents prior to and during an emergency.									
Brazoria	Brazoria County	8		Conduct wildfire outreach and education campaign.							X	X	
Brazoria	Brazoria County	9		Install sprinkler systems at County's critical facilities constructed on slab foundations to reduce differential shrinking of underlying soils during drought.							X	X	
Brazoria	Brazoria County		1	Development of mutual aid/intra-local agreements with area communities for post-disaster assistance.	X					Completed			X
Brazoria	Brazoria County		2	Develop debris management plan to speed up the removal of debris generated by flood/hurricane events, etc.	X					Completed			
Brazoria	Brazoria County		3	Implement dune and beach restoration to protect county beach areas between Surfside Beach and San Luis Pass.					X	No funding			
Brazoria	Brazoria County		4	Dig ditch to take water that builds up in Quail Ridge subdivision to the Austin Bayou.			X			Not cost effective	X	X	
Brazoria	Brazoria County		5	Widen and deepen drainage ditches to reduce flooding.				X		Continuous	X	X	X
Brazoria	Brazoria County		6	Implement campaign on public education of ICC (Increased Cost of Compliance) coverage.				X		No funding			X
Brazoria	Brazoria County		7	Place flood insurance materials in libraries.	X					Completed			X
Brazoria	City of Alvin	1		Acquire flood-prone homes in floodway along Mustang Bayou.									X
Brazoria	City of Alvin	2		Elevate flood-prone homes.								X	X
Brazoria	City of Alvin	3		Construct detention ponds in Mustang Bayou Watershed.							X	X	X
Brazoria	City of Alvin	4		Implement drainage improvement projects: M-1 Ditch improvements.							X	X	X
Brazoria	City of Alvin	5		Construct detention ponds in Dickinson Bayou Watershed.							X	X	X
Brazoria	City of Alvin	6		Implement drainage improvement projects: Dickinson Bayou Ditch improvements							X	X	X
Brazoria	City of Alvin	7		Construct detention ponds in Chocolate Bayou Watershed.							X	X	X
Brazoria	City of Alvin	8		Revise and update Flood Insurance Rate Maps, join CRS program									X
Brazoria	City of Alvin	9		Purchase generators for lift stations								X	
Brazoria	City of Alvin	10		Upgrade electrical systems at lift stations, install transfer switches, and relocate above base flood elevation								X	X

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Locally-Specific Mitigation Actions

County	Jurisdiction	2011 Mitigation Action No	2006 Mitigation Action No	Project Description	2006 Mitigation Action Status						Reduce hazard impacts on new buildings and infrastructure	Reduce hazard impacts on existing buildings and infrastructure	NFIP Compliance
					Complete	In Progress	No Longer Pursuing	Carry On	Carry on with modification	Reason Not Complete			
Brazoria	City of Alvin	11		Acquire two 55 KW trailer-mounted generators for emergency power to 45 lift stations and 6 water wells									
Brazoria	City of Alvin	12		Install hurricane shutters on Public Works and Emergency Shelter Facility								X	
Brazoria	City of Alvin	13		Install new 8" water line and fire hydrants for better fire protection							X	X	
Brazoria	City of Alvin		1	Purchase 63 properties in the floodway.		X				Partially funded			X
Brazoria	City of Alvin		2	Develop Stormwater Management Plan.	X					Completed			X
Brazoria	City of Alvin		3	Develop Master Drainage Plan.		X				Partially funded	X	X	X
Brazoria	City of Alvin		4	Revise and update Flood Insurance Rate Maps.		X				Partially funded			X
Brazoria	City of Alvin		5	Conduct outreach, raise disaster awareness.				X		No funding			X
Brazoria	City of Angleton	1		Replace radio system at Fire Station to be used as backup emergency operations center.									
Brazoria	City of Angleton	2		Purchase of 750 kw generator for recreation center shelter during power outage.								X	
Brazoria	City of Angleton	3		Purchase radios for communication for public safety.									
Brazoria	City of Angleton	4		Install storm shutters for police station, city hall and rec center (shelter) building.								X	
Brazoria	City of Angleton	5		Purchase firefighting equipment (hoses & nozzles) for wildfire preparedness.							X	X	
Brazoria	City of Angleton	6		Extend water and sewer to Fire Field for training, public safety and shelter of citizens during disaster							X	X	
Brazoria	City of Angleton	7		City-wide Ditch Clean-out. Clear, widen and deepen all city ditches for better drainage.							X	X	X
Brazoria	City of Angleton	8		Participate in CRS workshop hosted by H-GAC.									X
Brazoria	City of Angleton		1	Build detention pond on Ditch 7 at Bryan Street.	X					Completed	X	X	X
Brazoria	City of Angleton		2	Slope paving on Ditch 7b between SH 288 and CR 288.	X					Completed	X	X	X
Brazoria	City of Angleton		3	Add early warning system for hazard events.				X		Funding			
Brazoria	City of Angleton		4	Network of dry hydrants in ponds to supply water for fire.				X		Funding		X	
Brazoria	City of Angleton		5	Maintain drainage ditches to reduce flooding with purchase of Gradall to carry out work.				X		Funding	X	X	X
Brazoria	City of Angleton		6	Develop debris management plan.	X					Completed			
Brazoria	City of Angleton		7	Clear land for debris management.	X					Completed			
Brazoria	City of Angleton		8	Replace radio system in the Communication Center.	X					Completed			
Brazoria	City of Angleton		9	Purchase generator for City Hall.	X					Completed			
Brazoria	City of Angleton		10	Purchase street sign and barricades to block off streets for evacuation.				X		Funding			
Brazoria	City of Bailey's Prairie	1		Participate in CRS workshop hosted by H-GAC.									X
Brazoria	City of Bailey's Prairie	2		Partner with local Drainage District to maintain ditches and culverts.									X
Brazoria	City of Bailey's Prairie	3		Conduct wildfire outreach and education campaign by distributing information at public buildings, town hall meetings, and other speaking engagements.							X	X	
Brazoria	City of Bailey's Prairie	4		Conduct flood outreach and education campaign by distributing information at public buildings, townhall meetings, and other speaking engagements.							X	X	X
Brazoria	City of Bailey's Prairie		1	Development of mutual aid/intra-local agreements with area communities for post-disaster assistance.	X					Completed			
Brazoria	City of Bailey's Prairie		2	Develop debris management plan to speed up the removal of debris generated by flood/hurricane events, etc.	X					Completed			
Brazoria	City of Bailey's Prairie		3	Purchase equipment generator.			X			No longer needed			
Brazoria	City of Bailey's Prairie		4	Develop public education campaign addressing hazard awareness.				X		No funding			
Brazoria	City of Brazoria	1		Conduct wildfire outreach and education campaign by distributing information at public buildings, town hall meetings, and other speaking engagements.							X	X	
Brazoria	City of Brazoria	2		Conduct flood outreach and education campaign by distributing information at public buildings, townhall meetings, and other speaking engagements.							X	X	X
Brazoria	City of Brazoria	3		Maintain drainage ditches to reduce flooding.							X	X	X
Brazoria	City of Brazoria	4		Street sign and barricades to block off streets for evacuation.									
Brazoria	City of Brazoria	5		Widen Highway 36 to improve evacuation.									
Brazoria	City of Brazoria	6		Replace aging Fire/EMS chief/EMS Command and Emergency Management staff command vehicles that are in excess of 100,000 miles or older than seven years old									
Brazoria	City of Brazoria	7		Purchase and install security lighting for Main Street area.								X	
Brazoria	City of Brazoria	8		Install security system for City service center.									
Brazoria	City of Brazoria	9		Retrofit Emergency Operations Center at City Hall. Add storm protection to glass doors and windows at EOC, Police Station, and Fire Station. Install network connection and Emergency Dispatch radio in EOC.								X	
Brazoria	City of Brazoria	10		Install hurricane shutters on City Hall, fire station and police department.								X	
Brazoria	City of Brazoria	11		Implement a drainage improvement program to include deepening of ditches, increasing size of culverts, including box culverts.							X	X	X
Brazoria	City of Brazoria		1	Purchase equipment generator.				X		Unfunded			
Brazoria	City of Brazoria		2	Develop drainage work program.				X		Unfunded	X	X	X
Brazoria	City of Brazoria		3	Purchase radio/communication equipment.				X		Unfunded			
Brazoria	City of Brazoria		4	Develop severe weather warning system.			X			Not cost effective			
Brazoria	City of Brazoria		5	Purchase rescue vehicle.			X			Unfunded			
Brazoria	City of Brazoria		6	Purchase fire pumper vehicle/rescue truck.				X		Unfunded	X	X	
Brazoria	City of Brazoria		7	Purchase emergency medical service, fire and police rescue equipment.				X		Unfunded			

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					Complete	In Progress	No Longer Pursuing	Carry On	Carry on with modification	Reason Not Complete			
Brazoria	City of Brazoria		8	Develop evacuation plan.			X			Included with County			
Brazoria	City of Brazoria		9	Implement emergency management training programs.				X		Unfunded			
Brazoria	City of Brazoria		10	Develop debris management plan.	X					Completed			
Brazoria	City of Brazoria		11	Develop public education campaign addressing hazard awareness.			X			Unfunded			
Brazoria	City of Brookside Village	1		Acquire 31 identified repetitive flood loss properties in Clear Creek watershed inside City of Brookside Village's city limits.							X	X	X
Brazoria	City of Brookside Village	2		Acquire 70-acre flood-prone property at north-central portion of Brookside Village.							X	X	X
Brazoria	City of Brookside Village	3		Purchase and install public warning system.									
Brazoria	City of Brookside Village	4		Widen, deepen and straighten Max Road and Roy Road ditches to reduce flooding. Install box culverts.							X	X	X
Brazoria	City of Brookside Village		1	Development of mutual aid/intra-local agreements with area communities for post-disaster assistance.	X					Completed			
Brazoria	City of Brookside Village		2	Develop debris management plan to speed up the removal of debris generated by flood/hurricane events, etc.	X					Completed			
Brazoria	City of Brookside Village		3	Purchase equipment generator.	X					Completed			
Brazoria	City of Brookside Village		4	Develop public education campaign addressing hazard awareness.				X		On-going activity	X	X	X
Brazoria	City of Clute	1		Deepen and widen drainage ditches around Brazoswood High School and Clute City Park.							X	X	X
Brazoria	City of Clute	2		Participate in CRS workshop hosted by H-GAC.									X
Brazoria	City of Clute		1	Develop debris management plan.	X					Completed			
Brazoria	City of Clute		2	Conduct Flag Lake drainage study and proceed with the revealed plan; partner with Velasco Drainage District and City of Lake Jackson.				X		Unfunded	X	X	X
Brazoria	City of Clute		3	Train city personnel to implement evacuation plans.				X		Unfunded			
Brazoria	City of Clute		4	Implement public educational campaign addressing the dangers of clogging drainage channels with debris.				X		Unfunded	X	X	X
Brazoria	City of Clute		5	Attend annual petroleum industry workshop.				X		Unfunded			
Brazoria	City of Clute		6	Develop educational campaign to inform the public of the need for water rationing, establish information site on local access channel.				X		Unfunded			
Brazoria	City of Danbury	1		Conduct wildfire outreach and education campaign by distributing information at public buildings, town hall meetings, and other speaking engagements.							X	X	
Brazoria	City of Danbury	2		Conduct flood outreach and education compaign by distributing information at public buildings, townhall meetings, and other speaking engagements.							X	X	X
Brazoria	City of Danbury	3		Work with Drainage District 8 to clear and maintain drainage ditches throughout city.							X	X	X
Brazoria	City of Danbury	4		Participate in CRS workshop hosted by H-GAC.									X
Brazoria	City of Danbury		1	Development of mutual aid/intra-local agreements with area communities for post-disaster assistance.	X					Completed			
Brazoria	City of Danbury		2	Develop debris management plan to speed up the removal of debris generated by flood/hurricane events, etc.	X					Completed			
Brazoria	City of Danbury		3	Purchase equipment generator.				X		Unfunded			
Brazoria	City of Danbury		4	Develop public education campaign addressing hazard awareness.				X		Unfunded			
Brazoria	City of Freeport	1		Install emergency generators on critical drainage pumps and lift stations at six locations.							X	X	
Brazoria	City of Freeport	2		Purchase a 5-inch rubber hose for pumping in moving water from a flood area or support the city potable water when an area goes off-line							X	X	X
Brazoria	City of Freeport	3		Implement a new storm drainage system with culvert boxes and culvert piping to be attached to an existing storm drainage system for the roadway between West 4th and West 6th streets. The drainage project will address property and roadway flooding.							X	X	X
Brazoria	City of Freeport	4		Implement a new storm drainage system with culvert boxes and culvert piping to be attached to an existing storm drainage system for the roadway between Lynn Lane and West 5th streets. The drainage project will address property and roadway flooding.							X	X	X
Brazoria	City of Freeport	5		Implement a new storm drainage system with culvert boxes and culvert piping to be attached to an existing storm drainage system for the roadway between Lynn Lane and West 7th streets. The drainage project will address property and roadway flooding.							X	X	X
Brazoria	City of Freeport	6		Implement a new storm drainage system with culvert boxes and culvert piping to be attached to an existing storm drainage system for the roadway in the alley in the 1700 Blk between between West 8th and West 7th streets. The drainage project will address							X	X	X
Brazoria	City of Freeport	7		Implement a new storm drainage system with culvert boxes and culvert piping to be attached to an existing storm drainage system for the roadway in the alley in the 1700 Blk between West 8th and West 9th streets. The drainage project will address property							X	X	X
Brazoria	City of Freeport	8		Implement a new storm drainage system with culvert boxes and culvert piping to be attached to an existing storm drainage system for the roadway for West 5th between Yaupon and Dixie Street. The drainage project will address property and roadway flooding.							X	X	X
Brazoria	City of Freeport	9		Implement a new storm drainage system with culvert boxes and culvert piping to be attached to an existing storm drainage system for the roadway – West 7th Street between Yaupon and Dixie. The drainage project will address property and roadway flooding.							X	X	X
Brazoria	City of Freeport		1	Implement drainage improvements on Gulf Boulevard close to Velasco Elementary.	X					Completed	X	X	X

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					Complete	In Progress	No Longer Pursuing	Carry On	Carry on with modification	Reason Not Complete			
Brazoria	City of Freeport		2	Implement mosquito control program (truck, equipment, materials and education).			X			County to Provide Service			
Brazoria	City of Freeport		3	Implement drainage improvements on Navigation Boulevard (FM 1495).	X					Completed	X	X	X
Brazoria	City of Freeport		4	Implement drainage improvements: Britt Baily Road.	X					Completed	X	X	X
Brazoria	City of Freeport		5	Conduct computer security/vulnerability study.			X			Not cost effective			
Brazoria	City of Freeport		6	Purchase emergency generator for Fire Station 1.	X					Completed		X	
Brazoria	City of Freeport		7	Provide elevated water supply to industry and port within ETJ in order to enhance firefighting capability.	X					Completed			
Brazoria	City of Freeport		8	Improve handicap accessibility for downtown area in case of forced evacuation.				X		Unfunded			
Brazoria	City of Freeport		9	Secure building entry access at City Hall (home to U.S. Congressman's Office and Port Administration) and city's financial offices.				X		Unfunded		X	
Brazoria	City of Freeport		10	Establish barricade system for Main Street area.				X		Unfunded			
Brazoria	City of Freeport		11	Replenish sand dunes.				X		Unfunded	X	X	
Brazoria	City of Freeport		12	Widen Highway 36 to improve evacuation.				X		Unfunded			
Brazoria	City of Freeport		13	Replace aging Fire/EMS chief/EMS Command and Emergency Management staff command vehicles that are in excess of 100,000 miles or older than seven years old.		X				Partially funded			
Brazoria	City of Freeport		14	Purchase two jet skis and trailers.		X				Partially funded			
Brazoria	City of Freeport		15	Purchase 25-foot boat with cabin.				X		Unfunded			
Brazoria	City of Freeport		16	Purchase public address system for downtown/Main Street area.	X					Completed			
Brazoria	City of Freeport		17	Purchase and install security lighting for Main Street area.	X					Completed			
Brazoria	City of Freeport		18	Install security system for City service center.	X					Completed			
Brazoria	City of Freeport		19	Install security system for Parks Center.				X		Unfunded			
Brazoria	City of Freeport		20	Refurbish Emergency Operations Center and Fire Station #1. Replace rubber roof and add storm protection to glass doors and windows		X				Partially funded		X	
Brazoria	City of Freeport		21	Refurbish Incident Command Post at Police Station. Replace rubber roof and add storm protection to glass doors and windows		X				Partially funded		X	
Brazoria	City of Hillcrest Village	1		Participate in CRS workshop hosted by H-GAC.									X
Brazoria	City of Hillcrest Village	2		Partner with local Drainage District to maintain ditches and culverts.									X
Brazoria	City of Hillcrest Village	3		Conduct wildfire outreach and education campaign by distributing information at public buildings, town hall meetings, and other speaking engagements.							X	X	
Brazoria	City of Hillcrest Village	4		Conduct flood outreach and education compaign by distributing information at public buildings, townhall meetings, and other speaking engagements.							X	X	X
Brazoria	City of Hillcrest Village		1	Development of mutual aid/intra-local agreements with area communities for post-disaster assistance	X					Completed			
Brazoria	City of Hillcrest Village		2	Develop debris management plan to speed up the removal of debris generated by flood/hurricane events, etc.	X					Completed			
Brazoria	City of Hillcrest Village		3	Purchase equipment generator to power Emergency Operations Center during power outages to maintain critical services.				X		Rural Affairs Grant		X	
Brazoria	City of Hillcrest Village		4	Develop public education campaign addressing hazard awareness.				X		Unfunded			
Brazoria	City of Holiday Lakes	1		Conduct wildfire outreach and education campaign by distributing information at public buildings, town hall meetings, and other speaking engagements.							X	X	
Brazoria	City of Holiday Lakes	2		Conduct flood outreach and education compaign by distributing information at public buildings, townhall meetings, and other speaking engagements.							X	X	X
Brazoria	City of Holiday Lakes	3		Participate in CRS workshop hosted by H-GAC.									X
Brazoria	City of Holiday Lakes	4		Partner with local Drainage District to maintain ditches and culverts.									X
Brazoria	City of Holiday Lakes		1	Development of mutual aid/intra-local agreements with area communities for post-disaster assistance				X		Unfunded			
Brazoria	City of Holiday Lakes		2	Develop debris management plan to speed up the removal of debris generated by flood/hurricane events, etc.	X					Completed			
Brazoria	City of Holiday Lakes		3	Purchase equipment generator.				X		Unfunded			
Brazoria	City of Holiday Lakes		4	Develop public education campaign addressing hazard awareness.				X		Unfunded			
Brazoria	City of Iowa Colony	1		Conduct wildfire outreach and education campaign by distributing information at public buildings, town hall meetings, and other speaking engagements.							X	X	
Brazoria	City of Iowa Colony	2		Conduct flood outreach and education compaign by distributing information at public buildings, townhall meetings, and other speaking engagements.							X	X	X
Brazoria	City of Iowa Colony	3		Participate in CRS workshop hosted by H-GAC.									X
Brazoria	City of Iowa Colony	4		Partner with local Drainage District to maintain ditches and culverts.									X

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					Complete	In Progress	No Longer Pursuing	Carry On	Carry on with modification	Reason Not Complete			
Brazoria	City of Iowa Colony		1	Development of mutual aid/intra-local agreements with area communities for post-disaster assistance				X		Unfunded	X	X	
Brazoria	City of Iowa Colony		2	Develop debris management plan to speed up the removal of debris generated by flood/hurricane events, etc.	X					Completed	X	X	
Brazoria	City of Iowa Colony		3	Purchase equipment generator.				X		Unfunded			
Brazoria	City of Iowa Colony		4	Develop public education campaign addressing hazard awareness.				X		Unfunded			
Brazoria	City of Jones Creek	1		Conduct wildfire outreach and education campaign by distributing information at public buildings, town hall meetings, and other speaking engagements.							X	X	
Brazoria	City of Jones Creek	2		Conduct flood outreach and education compaign by distributing information at public buildings, townhall meetings, and other speaking engagements.							X	X	X
Brazoria	City of Jones Creek	3		Drainage and culvert issue on Billingsley.									X
Brazoria	City of Jones Creek	4		Culvert clean out on Primrose.									X
Brazoria	City of Jones Creek	5		Culvert clean out on Bluebonnet.									X
Brazoria	City of Jones Creek	6		Highway 36 drainage (7) ditches to be cleared of debris and brush.									X
Brazoria	City of Jones Creek	7		Outfall ditches along Stephen F. Austin.									X
Brazoria	City of Jones Creek	8		TPWD Project.									X
Brazoria	City of Jones Creek	9		Cleaning of East Stephen F. Austin's drainage to Jones Creek.									X
Brazoria	City of Jones Creek		1	Development of mutual aid/intra-local agreements with area communities for post-disaster assistance.				X		Unfunded			
Brazoria	City of Jones Creek		2	Develop debris management plan to speed up the removal of debris generated by flood/hurricane events, etc.	X					Completed			
Brazoria	City of Jones Creek		3	Purchase equipment generator.				X		Unfunded			
Brazoria	City of Jones Creek		4	Develop public education campaign addressing hazard awareness.				X		Unfunded			
Brazoria	City of Lake Jackson	1		Install broad spectrum radio system to be able to communicate during emergencies through the Supervisory Control and Data Acquisition (SCADA) system with Lake Jackson's 43 lift stations and 12 wells with remote operating equipment. SCADA communicates with									
Brazoria	City of Lake Jackson	2		Install emergency power to Well 15 and 120 KW trailer-mounted generators.								X	
Brazoria	City of Lake Jackson	3		Conduct northeast quadrant flood protection study.							X	X	X
Brazoria	City of Lake Jackson	4		Participate in CRS workshop hosted by H-GAC.									X
Brazoria	City of Lake Jackson	5		Conduct public education campaign to address hazards. Outreach will be conducted through town hall meetings and other public facilities. Reading materials will be placed in public buildings such as libraries and city hall.							X	X	X
Brazoria	City of Lake Jackson		1	Improve drainage downstream from State Highway 332. Highway facility currently creates structural blockage of downstream water flow to main pump station operated by Velasco Drainage District.					X	Funding	X	X	X
Brazoria	City of Lake Jackson		2	Enhance radio tower and centralize equipment.	X					Completed			
Brazoria	City of Lake Jackson		3	Upgrade electrical system at wells 94 and 15. Install transfer switch at wells 7, 8, 9, 10, 11, 12 and 16. Enable city to run all wells off emergency generators WAT 36.	X					Completed		X	
Brazoria	City of Lake Jackson		4	Implement improvements to State Highway 332 at Oak Drive grade separation in order to speed hurricane evacuation.		X				SH288/332 improvement			
Brazoria	City of Lake Jackson		5	Install new electrical system in 24 lift stations to include power transfer switches. Transfer switches and quick connects are needed to allow mobile generators to operate. Through installation of these switches, Lake Jackson can rotate portable generators as needed as opposed to purchasing permanent generators dedicated to each lift station and well.					X	Funding	X	X	
Brazoria	City of Lake Jackson		6	Install emergency power to water/sewer - 350 KW and 120 KW trailer mounted generators.	X					Completed			
Brazoria	City of Lake Jackson		7	Clear trees and brush from Oyster Creek.	X					Completed	X	X	
Brazoria	City of Lake Jackson		8	Partner with City of Clute and Velasco Drainage District to conduct Flag Lake drainage study. Runoff from City of Lake Jackson flows into City of Clute. City of Clute and Velasco Drainage District would conduct drainage project after completion of study.				X		Unfunded	X	X	X

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Brazoria	City of Lake Jackson		9	Purchase online analyzers.				X					
Brazoria	City of Lake Jackson		10	Upgrade and enlarge drainage outfall pipe on Flag Lake Road.	X					Completed	X	X	X
Brazoria	City of Lake Jackson		11	Downtown Storm Sewer Outfall No. 5 (Oak) - Install gutter line slotted and area drain junction boxes along downtown business district loop (i.e., Circle Way, That Way, Parking Way). Oak Drive outfall drain system - upsize and regrade.	X					Completed	X	X	X
Brazoria	City of Liverpool	1		Participate in CRS workshop hosted by H-GAC.									X
Brazoria	City of Liverpool	2		Partner with local Drainage District to maintain ditches and culverts.									X
Brazoria	City of Liverpool	3		Conduct wildfire outreach and education campaign by distributing information at public buildings, town hall meetings, and other speaking engagements.							X	X	
Brazoria	City of Liverpool	4		Conduct flood outreach and education compaign by distributing information at public buildings, townhall meetings, and other speaking engagements.							X	X	X
Brazoria	City of Liverpool		1	Development of mutual aid/intra-local agreements with area communities for post-disaster assistance	X					Completed			
Brazoria	City of Liverpool		2	Develop debris management plan to speed up the removal of debris generated by flood/hurricane events, etc.	X					Completed			
Brazoria	City of Liverpool		3	Purchase equipment generator.	X					Completed			
Brazoria	City of Liverpool		4	Develop public education campaign addressing hazard awareness.		X				Partially funded			
Brazoria	City of Manvel	1		Acquire Repetitive Loss (RL) and Severe Repetitive Loss (SRL) properties in the 100-year floodplain, as identified by FEMA and NFIP.							X	X	X
Brazoria	City of Manvel	2		Improve GIS to include repetitive loss areas and structures.									X
Brazoria	City of Manvel	3		Gates Loop subdivision drainage improvements including deepening and widening ditches around Gates Loop and Sandy Point Rd.							X	X	X
Brazoria	City of Manvel	4		Flora Street drainage improvements, including storm sewer rehabilitation and ditch cleaning.							X	X	X
Brazoria	City of Manvel	5		State Highway 6 drainage improvements, including storm sewer rehabilitation, ditch deepening, and subregional detention ponds.							X	X	X
Brazoria	City of Manvel	6		Alleluia Trail drainage improvements, including storm sewer rehabilitation and ditch deepening.							X	X	X
Brazoria	City of Manvel	7		Tammy and Lira Streets drainage Improvements, including storm sewer rehabilitation and ditch deepening.							X	X	X
Brazoria	City of Manvel	8		Conduct wildfire outreach and education campaign. Make presentations at civic club meetings and local schools.							X	X	
Brazoria	City of Manvel		1	Develop actions to alleviate structure and evacuation route flooding - this action could evolve into several projects.				X		Unfunded	X		X
Brazoria	City of Oyster Creek	1		Participate in CRS Workshop hosted by H-GAC.									X
Brazoria	City of Oyster Creek	2		Conduct wildfire outreach and education campaign by distributing information at public buildings, town hall meetings, and other speaking engagements.							X	X	
Brazoria	City of Oyster Creek	3		Conduct flood outreach and education compaign by distributing information at public buildings, townhall meetings, and other speaking engagements.							X	X	X
Brazoria	City of Oyster Creek		1	Develop and implement drainage plan.				X		Unfunded	X	X	X
Brazoria	City of Oyster Creek		2	Reduce exposure to hazardous materials (pipeline leaks, transportation accidents, etc.).		X				Continuous			
Brazoria	City of Oyster Creek		3	Develop debris management plan.	X					Completed			
Brazoria	City of Oyster Creek		4	Install portable generators/pumps for water and sewer.				X		Unfunded		X	
Brazoria	City of Quintana	1		Participate in CRS workshop hosted by H-GAC.									X
Brazoria	City of Quintana	2		Partner with local Drainage District to maintain ditches and culverts.									X
Brazoria	City of Quintana	3		Conduct wildfire outreach and education campaign by distributing information at public buildings, town hall meetings, and other speaking engagements.							X	X	
Brazoria	City of Quintana	4		Conduct flood outreach and education compaign by distributing information at public buildings, townhall meetings, and other speaking engagements.							X	X	X
Brazoria	City of Quintana		1	Development of mutual aid/intra-local agreements with area communities for post-disaster assistance	X					Completed			
Brazoria	City of Quintana		2	Develop debris management plan to speed up the removal of debris generated by flood/hurricane events, etc.	X					Completed			
Brazoria	City of Quintana		3	Purchase equipment generator.	X					Completed			
Brazoria	City of Quintana		4	Develop public education campaign addressing hazard awareness.				X		Unfunded			
Brazoria	City of Richwood	1		Develop Master Drainage Plan.							X	X	X
Brazoria	City of Richwood	2		Participate in CRS Workshop hosted by H-GAC.									X
Brazoria	City of Richwood	3		Replace radio system in the Communication Center.									
Brazoria	City of Richwood	4		Purchase two rescue vehicles.									
Brazoria	City of Richwood	5		Install emergency power to water/sewer - 350 KW and 120 KW trailer mounted generators.								X	
Brazoria	City of Richwood	6		Purchase 14 to 18 foot boat, motor and trailer.									
Brazoria	City of Richwood		1	Development of mutual aid/intra-local agreements with area communities for post-disaster assistance.	X					Completed			
Brazoria	City of Richwood		2	Develop debris management plan to speed up the removal of debris generated by flood/hurricane events, etc.	X					Completed			
Brazoria	City of Richwood		3	Purchase equipment generator.	X					Completed			
Brazoria	City of Richwood		4	Develop public education campaign addressing hazard awareness.				X		Unfunded			
Brazoria	City of Sweeny	1		Enlarge culverts along Stevenson Slough.							X	X	X
Brazoria	City of Sweeny	2		Participate in a CRS workshop hosted by H-GAC in 2013.							X	X	X

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					Complete	In Progress	No Longer Pursuing	Carry On	Carry on with modification	Reason Not Complete			
Brazoria	City of Sweeny	3		Conduct outreach on flood hazards at town meetings.							X	X	X
Brazoria	City of Sweeny		1	Implement drainage improvement program to include cleaning of ditches, increasing size of drainage culverts, including box culverts on CR 332.				X		Unfunded	X	X	X
Brazoria	City of Sweeny		2	Develop an evacuation plan.				X		Unfunded			
Brazoria	City of Sweeny		3	Develop awareness program to educate residents of pipeline-related hazards.				X		Unfunded			
Brazoria	City of Sweeny		4	Develop hazardous chemicals handling plan for possible train derailment.				X		Unfunded			
Brazoria	Velasco Drainage District	1		Purchase and install additional pump equipment in the East Levee Pump Station - present station is configured with 3 blank openings. Would provide an additional 480,000 gallons per minute to the Clute/Lake Jackson watershed which improves drainage capacit							X	X	X
Brazoria	Velasco Drainage District	2		Construct detention pond in the Clute/Lake Jackson watershed. Propose to build near the East Levee Pump Station adjacent to the Clute/Lake Jackson Pump Station. Provides same pumping capacity as a pump station because water will flow into detention pond a							X	X	X
Brazoria	Velasco Drainage District	3		Safe room construction of existing building (Ditch #13 pump station), a pump station vital to flood protection in East Clute.							X	X	X
Brazoria	Velasco Drainage District	4		Construct detention pond in upper Clute/Lake Jackson watershed 75 acres. Propose to build south of Sea Center adjacent to the Clute/Lake Jackson Drainage Channel. Provides the 800,000 gallons per minute diverted flood water into pond. Helps the cities of							X	X	X
Brazoria	Village of Bonney	1		Participate in CRS workshop hosted by H-GAC.									X
Brazoria	Village of Bonney	2		Partner with local Drainage District to maintain ditches and culverts.									X
Brazoria	Village of Bonney	3		Conduct wildfire outreach and education campaign by distributing information at public buildings, town hall meetings, and other speaking engagements.							X	X	
Brazoria	Village of Bonney	4		Conduct flood outreach and education compaign by distributing information at public buildings, townhall meetings, and other speaking engagements.							X	X	X
Brazoria	Village of Bonney		1	Development of mutual aid/intra-local agreements with area communities for post-disaster assistance	X					Completed			
Brazoria	Village of Bonney		2	Develop debris management plan to speed up the removal of debris generated by flood/hurricane events, etc.	X					Completed			
Brazoria	Village of Bonney		3	Purchase equipment generator.		X				Rural Affairs Grant			
Brazoria	Village of Bonney		4	Develop public education campaign addressing hazard awareness.				X		No funding			
Brazoria	Village of Surfside Beach	1		Upgrade culverts to achieve better drainage. Heavy rain and high tides we experience flooding throughout the city. This causes roads to erode faster and has the potential to damage property as well as above and below ground infrastructure. Places an added							X	X	X
Brazoria	Village of Surfside Beach	2		Nearshore Breakwater Field to reduce erosion by 55-60%. Project would last for more than twenty years and extend the benefits of the recently renourished beach and newly constructed revetment wall.							X	X	X
Brazoria	Village of Surfside Beach	3		Extend Beach Drive revetment wall from end of existing wall all the way to the jetties.							X	X	X
Brazoria	Village of Surfside Beach	4		Purchase and install risers/expansion rings for sewer pits. Elevation at sea level rise prevention conventional wastewater treatment. Use vacuum system and transport via pipe to nearby town protected by storm levee. Sewer pits are often flooded with water							X	X	X
Brazoria	Village of Surfside Beach		1	Remove rip-rap from one mile of beach.			X			Will be handled by GLO			
Brazoria	Village of Surfside Beach		2	Acquisition of property seaward of first line of stable vegetation.	X					Completed			X
Brazoria	Village of Surfside Beach		3	Establish shoreline protection program.			X			Completed by GLO		X	
Brazoria	Village of Surfside Beach		4	Purchase new rescue vehicles.			X			Does not address mitigation			
Brazoria	Village of Surfside Beach		5	Develop a debris management plan.	X					Completed			
Brazoria	Village of Surfside Beach		6	Construct bulkhead along one mile of Beach Drive.	X					Completed			
Brazoria	Village of Surfside Beach		7	Install hurricane shutters on city hall and community center.					X	Unfunded		X	
Brazoria	Village of Surfside Beach		8	Elevate water meters. Surfside is at sea level and has very shallow water table as well as being surrounded by wetlands. Our water meters are often inundated with water for this reason.				X		Funding	X	X	
Brazoria	Village of Surfside Beach		9	Implement beach and dune preservation program.	X					Completed	X	X	
Brazoria	Village of Surfside Beach		10	Acquisition of property seaward of first line of vegetation (LOV), emphasis on area seaward of Beach Drive from Texas Street to Crab Street.				X		Unfunded			X
Chambers	Chambers County	1		Install siren system countywide to inform the public of imminent hazards.									
Chambers	Chambers County	2		Retrofit windows in EOC to protect against severe winds.								X	
Chambers	Chambers County		1	Purchase spill containment booms for all bayous and rivers intersecting with public roads.				X					
Chambers	Chambers County		2	Conduct clearing and grubbing to establish channels at Hackberry Gully and Cotton Bayou from IH-10 to Cotton Lake.				X		Right of way/easement issue	X	X	X
Chambers	Chambers County		3	Adopt policy requiring all petroleum pipelines crossing district canal system to be encased and protected by end seals.	X					Completed			
Chambers	Chambers County		4	Purchase floating boom system for use in Turtle bayou and District Canal System.	X					Completed			

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Chambers	Chambers County		5	Develop one foot freeboard requirement for new construction in the floodplain.	X					Completed	X		X
Chambers	Chambers County		6	Channelize Winnie/Stowell main drainage outfalls.				X		Right of way/easement issue	X	X	X
Chambers	Chambers County		7	Repair major breach in storage reservoir and canal laterals.	X					Completed	X	X	X
Chambers	Chambers County		8	Channelize outfall channels in unincorporated areas of west Chambers County west of the Trinity River.				X		Right of way/easement issue	X	X	X
Chambers	Chambers-Liberty Counties Navigation District	1		Purchase and install two portable generators at Lake Anahuac pump station facility to maintain water supply during power outage.							X	X	
Chambers	Chambers-Liberty Counties Navigation District	2		Purchase and install two portable generators at Anahuac pump station to maintain water supply during power outage.							X	X	
Chambers	Chambers-Liberty Counties Navigation District	3		Increase size of pipe under Double Bayou at Lone Oak south of Brown & Root pipeyard in order to supply adequate supply of water for irrigation and wildfire suppression.							X	X	X
Chambers	City of Anahuac	1		Enlarge and harden control room at water treatment plant to be more hazard resistant and continue to pump water.							X		
Chambers	City of Anahuac	2		Enlarge and harden control room at sewer treatment plant to be more hazard resistant.							X		
Chambers	City of Anahuac	3		Attend CRS workshop hosted by H-GAC.									X
Chambers	City of Anahuac	4		Purchase and install two permanent generators at water plant and city hall (critical facility and shelter in place).							X	X	
Chambers	City of Anahuac		1	Demolish and reconstruct two bridges that create obstruction and restrict flow of Anahuac outfall ditch. Increase span from 20 feet to 60 feet.					X	Right of way/easement issue	X	X	X
Chambers	City of Beach City	1		Purchase and install two portable generators to power water and sewer utility providers during power outages.								X	
Chambers	City of Beach City	2		Raise bridge on FM 2354 over Cedar Gully. Bridge is too low and flooding over it is a problem. Raising the bridge higher over Cedar Gully will avoid flooding of bridge and reduce threat of loss of life and damage to bridge and motorists.							X	X	X
Chambers	City of Beach City	3		Attend CRS workshop hosted by H-GAC.									X
Chambers	City of Beach City		1	Develop debris management plan to speed up the removal of debris generated by flood/hurricane events, etc.	X					Completed			
Chambers	City of Beach City		2	Develop public education campaign addressing hazard awareness.			X			Found alternative			
Chambers	City of Beach City		3	Conduct town meetings to educate citizens and city officials regarding preparedness, mitigation and recovery information and procedures.			X			Found alternative			
Chambers	City of Cove	1		Attend CRS workshop hosted by H-GAC.									X
Chambers	City of Cove	2		Obtain drainage right of ways in Hackberry Creek.							X	X	X
Chambers	City of Cove	3		Conduct flood outreach and education campaign by distributing information at public meetings, townhall meetings, and other speaking engagements							X	X	X
Chambers	City of Cove		1	Develop debris management plan to speed up the removal of debris generated by flood/hurricane events, etc.	X					Completed			
Chambers	City of Cove		3	Conduct town meetings to educate citizens and city officials regarding preparedness, mitigation and recovery information and procedures.				X		Found alternative	X	X	
Chambers	City of Mont Belvieu	1		Install siren system to alert citizens of hazards.									
Chambers	City of Mont Belvieu	2		Enlarge existing Cotton Bayou to I-10 to increase capacity and detention.							X	X	X
Chambers	City of Mont Belvieu	3		Enlarge existing Hackberry Gully to I-10 to increase capacity and detention.							X	X	X
Chambers	City of Mont Belvieu	4		Enlarge Old River diversion channel to increase capacity and detention.							X	X	X
Chambers	City of Mont Belvieu	5		Extension of Cotton Bayou to FM 565 to increase capacity and detention.							X	X	X
Chambers	City of Mont Belvieu		1	Excavate and realign Hackberry Gully and Cotton Bayou from IH-10 to Cotton Lake.					X	Parts of project are incorporated into other actions	X	X	X
Chambers	City of Old River- Winfree	1		Harden permanent waste water treatment plant.							X		
Chambers	City of Old River- Winfree	2		Harden sewer treatment plant.							X		
Chambers	City of Old River- Winfree	3		Attend CRS workshop hosted by H-GAC.									X
Chambers	City of Old River- Winfree		1	Channelize outfalls in Woodland Acres Subdivision/Old River outfall.					X	Funding	X	X	X
Chambers	Trinity Bay Conservation District	1		Relocate reinforced salt water barrier to north of existing Spindletop Bayou.							X	X	X
Chambers	Trinity Bay Conservation District	2		Enlarge Spindletop Bayou Lateral 1 in Winnie to increase capacity and detention.							X	X	X
Chambers	Trinity Bay Conservation District	3		Enlarge Spindletop Bayou Lateral 2 in Winnie/Stowell area to increase capacity and detention.							X	X	X

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Chambers	Trinity Bay Conservation District	4		Extend upper end of Mayhaw Bayou Lateral 2 in Stowell area to increase capacity and detention.							X	X	X
Chambers	Trinity Bay Conservation District	5		Enlarge lower end of Mayhaw Bayou in Winne/Stowell area to increase capacity and detention.							X	X	X
Chambers	Trinity Bay Conservation District	6		Harden critical infrastructure to make office compliant with current windstorm requirements.								X	
Chambers	Trinity Bay Conservation District	7		Construct a safe room attached to new office.									
Chambers	Trinity Bay Conservation District	8		Upsize culverts at Oyster Bayou and Lone Star Canal.							X	X	X
Chambers	Trinity Bay Conservation District	9		Purchase and install portable generator for Oak Island sewer plant.							X	X	
H-GAC	H-GAC	1		In the next HMP Update, use the 2010 Census data and most recent release of HAZUS that incorporates that data.							X	X	
H-GAC	H-GAC	2		Conduct feasibility study to determine policy changes needed to implement greywater use.							X	X	
H-GAC	H-GAC	3		Confirm and improve accuracy of locations of dams and levees identified in the National Inventory of Dams.							X	X	
H-GAC	H-GAC	4		Conduct wildfire outreach and education workshop for local governments. Workshop will include information on how to create defensible space, reduce hazardous fuels and structural protection through ignition-resistant construction activities.							X	X	
H-GAC	H-GAC	5		Conduct 2016 update of Regional Hazard Mitigation Plan.							X	X	X
H-GAC	H-GAC	6		Conduct dam safety workshop for private and public owners of dams and levees.							X	X	
H-GAC	H-GAC	7		For next hazard mitigation plan update, provide improved information on wildfire extent, including intensity of flames and type of fire (grassland, canopy).							X	X	
H-GAC	H-GAC	8		For next hazard mitigation plan update, provide improved information on flooding extent, including depth of flood.							X	X	X
H-GAC	H-GAC	9		Conduct workshop for aboveground and subsurface construction over expansive soils for local governments							X	X	
H-GAC	H-GAC	10		Develop brochure for homeowners describing strategies for adapting to expansive soils to minimize or eliminate damage to slab foundations.							X	X	
H-GAC	H-GAC		1	Create GIS map and database of petrochemical pipelines in greater Houston area, including location, size, ownership, commodity and affected populations and property in event of unplanned discharge or rupture. Map will be created and maintained by H-GAC.					X	Difficult to obtain data	X	X	
H-GAC	H-GAC		2	Conduct FEMA debris monitoring workshop/training.				X		On-going. Conduct annual storm debris workshop for local governments			
H-GAC	H-GAC		3	Conduct public outreach to educate local governments on disaster-resistant building methods.					X	Modified in 2011 to reflect local governments	X		
H-GAC	H-GAC		4	Conduct information workshop on the Community Rating System (CRS). Target audience is local government officials responsible for carrying out flood mitigation projects.				X		Lack of funding limits opportunities to co-hosting other workshops with TWDB and partners.	X	X	X
H-GAC	H-GAC		5	Conduct workshops to train communities how to apply for a Pre-Disaster Mitigation (PDM) grant.				X		Lack of funding	X	X	
H-GAC	H-GAC		6	Develop Vegetation Management Plans for counties and cities impacted by 2005 hurricanes - emphasis on locations within Brazoria, Chambers, Liberty, Montgomery and Walker counties.					X	Lack of funding			
H-GAC	H-GAC		7	Conduct training on developing and implementing Vegetation Management Plans for counties and cities impacted by 2005 hurricanes - emphasis on locations within Brazoria, Chambers, Liberty, Montgomery and Walker counties.					X	Lack of funding	X	X	X
Liberty	City of Ames	1		Conduct wildfire outreach and education campaign.							X	X	
Liberty	City of Ames	2		Participate in CRS workshop hosted by H-GAC.									X
Liberty	City of Ames	3		Conduct hurricane outreach and education campaign.							X	X	X
Liberty	City of Ames		1	Implement public awareness campaign regarding HAZMAT safety, including risk communication, detection, shelter in place and evacuation procedures for HAZMAT events that occur as a result of natural hazards				X		On-going			
Liberty	City of Ames		2	Improve drainage system.		X				Identifying projects, funding availability	X	X	X
Liberty	City of Ames		3	Notify public of evacuation routes.				X		Working on public education programs			X
Liberty	City of Ames		4	Develop education and awareness program in order to notify residents of the dangers associated with pipeline failures		X				Funding not available			
Liberty	City of Cleveland	1		Replace and relocate Fire Station 1.								X	
Liberty	City of Cleveland	2		Retrofit police department EOC with generators for emergency backup power to maintain critical services during power outages caused by natural hazards.								X	
Liberty	City of Cleveland	3		Attend CRS workshop hosted by H-GAC.									X
Liberty	City of Cleveland	4		Conduct wildfire outreach and education campaign.							X	X	
Liberty	City of Cleveland		1	Contract with First Call Network to notify citizens by phone of possible hazards.				X		As funding allows			
Liberty	City of Cleveland		2	Adopt 25-foot setback from pipeline right-of-way.				X		Ordinance development study underway			
Liberty	City of Cleveland		3	Install larger drainage lines in downtown Cleveland to reduce flooding.				X		As funding allows	X	X	X

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Liberty	City of Cleveland		4	Reduce exposure to hazardous materials.				X		Processes and procedures being developed			
Liberty	City of Daisetta	1		Participate in CRS workshop hosted by H-GAC.									X
Liberty	City of Daisetta	2		Drainage projects.							X	X	X
Liberty	City of Daisetta		1	Conduct public education and awareness campaign regarding hazardous materials.				X		As schedule allows			
Liberty	City of Daisetta		2	Retrofit high school, city hall for shelter during emergency.				X		As funding allows		X	
Liberty	City of Daisetta		3	Educate city council on benefits of mitigation and encourage council members to become more involved.				X		As schedule allows			
Liberty	City of Daisetta		4	Upgrade existing warning system to alert citizens of pending natural hazards.				X		As funding allows			
Liberty	City of Dayton	1		Establish GIS-based hazard information system.							X	X	
Liberty	City of Dayton	2		Implement drainage channel improvements to reduce flooding including increased culvert size at SH321 underpass to Waco St.							X	X	X
Liberty	City of Dayton	3		Local emergency evacuation transportation plan in synch with TxDOT planning and routes.									
Liberty	City of Dayton	4		Permanent back up power (generator) for SH 321 underpass.									
Liberty	City of Dayton	5		Develop a truck bypass around Dayton.									
Liberty	City of Dayton		1	Enforce wind load requirements for new construction within city limits.				X		On-going	X		
Liberty	City of Dayton		2	Develop drainage master plan.				X		In place, updated as necessary			X
Liberty	City of Dayton		3	Develop city drainage ordinance.				X		In place, updated as necessary	X	X	X
Liberty	City of Dayton		4	Develop hazardous materials (HAZMAT) plan.				X		In place, updated as necessary			
Liberty	City of Dayton		5	Work with Liberty County, TxDOT and other neighboring cities to develop a coordinated system of emergency evacuation routes.				X		Developed as possible			
Liberty	City of Dayton		6	Disseminate information on the dangers of thunderstorms.				X		On-going			
Liberty	City of Dayton		7	Disseminate information on the dangers of tornadoes.				X		On-going			
Liberty	City of Dayton		8	Disseminate information on the dangers of hurricanes and tropical storms.				X		On-going	X	X	
Liberty	City of Dayton		9	Work with county to establish a water conservation district.				X		Underway and updated as warranted			
Liberty	City of Dayton		10	Develop a capital improvement program addressing drainage issues.				X		Underway and updated as warranted			X
Liberty	City of Dayton		11	Increase culvert size at railroad crossings.				X		Underway and updated as warranted	X	X	X
Liberty	City of Dayton		12	Provide for erosion control measures at Luke Street Bridge drainage outfall.				X		Underway and updated as warranted	X	X	
Liberty	City of Dayton		13	Enlarge storm drain to reduce flooding from Main Street to Church Street.				X		Underway and updated as warranted	X	X	X
Liberty	City of Dayton		14	Increase culvert size to reduce flooding at Highway 90 and Waco Street.				X		Underway and updated as warranted	X	X	X
Liberty	City of Dayton		15	Install storm drain in place of open ditch along Lawrence Street from Willow Street to Juanita Street (approximately 2,400 linear feet).	X					Completed	X	X	X
Liberty	City of Dayton		16	Oversize to a minimum 36-inch storm drain RCP pipe and inlets along Houston Street from Cleveland heading east to major outfall (approx 4000 linear feet).	X					Completed	X	X	X
Liberty	City of Dayton Lake Estates	1		Conduct wildfire outreach and education campaign.							X	X	
Liberty	City of Dayton Lake Estates		1	Re-route County Road 2331 to area not prone to flooding.				X		As funding allows	X	X	X
Liberty	City of Dayton Lake Estates		2	Construct bulkhead along Trinity River to reduce flooding impacts to County Road 2231.				X		Funding	X	X	
Liberty	City of Dayton Lake Estates		3	Improve drainage by cleaning out/re-grading ditches within City of Dayton Lake Estates.				X		As schedule/funding allows	X	X	X
Liberty	City of Dayton Lake Estates		4	Re-size inadequately sized culverts and clean out existing culverts to allow for improved drainage of rainwater.				X		As schedule/funding allows	X	X	X
Liberty	City of Dayton Lake Estates		5	Construct detention pond.				X		Funding	X	X	X
Liberty	City of Devers	1		Attend CRS workshop hosted by H-GAC.									X
Liberty	City of Devers	2		Conduct wildfire outreach and education campaign.							X	X	
Liberty	City of Devers	3		Conduct flood hazard outreach and education campaign.							X	X	X
Liberty	City of Devers		1	Conduct hazardous materials evacuation study.				X		As funding allows			
Liberty	City of Devers		2	Conduct stormwater management study, to include ditch cleanouts and enhanced culverts.				X		As schedule/funding allows	X	X	X
Liberty	City of Devers		3	Develop identification and notification system for citizens living in the vicinity of pipelines.				X		As funding allows			
Liberty	City of Devers		4	Conduct traffic light study at intersection of Hwy 90 and SH 61 to determine evacuation-related impacts.				X		As schedule allows			
Liberty	City of Hardin		1	Develop a locally-specific hazard mitigation plan.				X		Funding			
Liberty	City of Hardin		2	Implement subdivision ordinance regulations concerning building in flood-prone areas.				X		Work in progress	X		X
Liberty	City of Hardin		3	Work with other entities to develop recovery procedures to minimize loss of life or property damages due to hazardous materials (HAZMAT) spills.				X		As time/schedule allows			
Liberty	City of Hardin		4	Educate the public regarding dangers of hazardous materials (HAZMAT) spills.				X		Work in progress			
Liberty	City of Hardin		5	Join the community rating system.				X		Study underway			X
Liberty	City of Hardin		6	Reduce flooding by increasing size of culverts to 24 inches on County Road 2361, 2362, 2363, and 2364 and CR 2358.				X		As funding allows	X	X	X
Liberty	City of Hardin		7	Educate the public on tornado-related impacts.				X		On-going			
Liberty	City of Hardin		8	Inform the public regarding the use of wind-resistant construction techniques.				X		On-going	X	X	
Liberty	City of Kenefick	1		Conduct wildfire outreach and education program.							X	X	
Liberty	City of Kenefick	2		Conduct flood hazard outreach and education program.							X	X	X
Liberty	City of Kenefick	3		Attend CRS workshop hosted by H-GAC.							X	X	X

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Liberty	City of Kenefick		1	Develop culvert maintenance program.				X		Work in progress	X	X	X
Liberty	City of Kenefick		2	Improve grading of road ditches adjacent to existing roads.				X		Work in progress	X	X	X
Liberty	City of Liberty	1		Conduct wildfire outreach and education program.							X	X	
Liberty	City of Liberty	2		Conduct flood hazard outreach and education program.							X	X	X
Liberty	City of Liberty		1	Implement drainage program in the Whittington Addition.	X					Completed	X	X	X
Liberty	City of Liberty		2	Elevate FM 2684 to secure secondary evacuation route for South Liberty Oilfield.				X		As funding allows			
Liberty	City of Liberty		3	Establish hazardous materials (HAZMAT) cargo route.	X					Completed			
Liberty	City of Liberty		4	Relocate animal shelter.	X					Completed			
Liberty	City of Liberty		5	Join the community rating system.				X		Study underway			X
Liberty	City of Liberty		6	Purchase and install generator at north water well.	X					Completed with City funds		X	
Liberty	City of Liberty		7	Construction of pump room at electrical power plant to prevent flooding at power plant.				X		As funding allows	X	X	
Liberty	City of Liberty		8	Trim tree limbs contacting electrical lines to prevent power failure at critical facility.				X		Work in progress			
Liberty	City of Liberty		9	Initiate Building Code Effectiveness Grading Schedule (BCEGS).				X		Work in progress	X		
Liberty	City of Liberty		10	Reverse 911 call system to inform citizens of imminent hazards.				X		Work in progress, updated as necessary			
Liberty	City of Liberty		11	Create safe room in public facility.				X		As funding allows			
Liberty	City of North Cleveland	1		Design and construct new bridge over East Fork San Jacinto River on Low Water Bridge Road (County Road 388) to reduce flooding.							X		X
Liberty	City of North Cleveland	2		Acquisition of property in the floodplain.							X	X	X
Liberty	City of North Cleveland	3		North Cleveland emergency shelter located at old TxDOT offices on FM 2025.									
Liberty	City of North Cleveland	4		Engineering study for drainage improvements.							X	X	X
Liberty	City of North Cleveland	5		Attend CRS workshop hosted by H-GAC.									X
Liberty	City of North Cleveland	6		Conduct wildfire outreach and education campaign.							X	X	
Liberty	City of North Cleveland	7		Conduct flood hazard outreach and education campaign.							X	X	X
Liberty	City of North Cleveland		1	Elevate Bridge Road.				X		As funding allows		X	X
Liberty	City of Plum Grove	1		Expand development of emergency notification system/work to establish public awareness of emergency notification process.									
Liberty	City of Plum Grove	2		Attend CRS workshop hosted by H-GAC.									X
Liberty	City of Plum Grove	3		Conduct wildfire outreach and education campaign.							X	X	
Liberty	City of Plum Grove	4		Conduct flood hazard outreach and education campaign.							X	X	X
Liberty	City of Plum Grove		1	Develop emergency notification system.				X		Updated as necessary			
Liberty	City of Plum Grove		2	Purchase generator for City Hall to run water well, air conditioning and lights during emergencies.				X		Expanding as funds allow			
Liberty	City of Plum Grove		3	Reduce flooding by raising road surface of Plum Grove Road and installing larger culverts from FM 1010 intersection to Paul Campbell Loop and at Orange Branch crossing.				X		As funding allows	X	X	X
Liberty	Liberty County	1		Construct FEMA-approved tornado/hurricane-proof structure.							X	X	
Liberty	Liberty County	2		Conduct structural engineering study on all public buildings.									
Liberty	Liberty County	3		Complete a master drainage study on all watersheds.							X	X	X
Liberty	Liberty County	4		Rechannelize existing feeder creeks that flow from north to south and improve drainage for stormwater runoff.							X	X	X
Liberty	Liberty County	5		Establish a countywide drainage plan.							X	X	X
Liberty	Liberty County	6		Harden bridge, dam and spillway in Winter Valley Subdivision under TCEQ permit No. 366.									
Liberty	Liberty County		1	Acquire property located in the floodplain including properties located in subdivisions along the Trinity River.				X		As funding allows	X		X
Liberty	Liberty County		2	Adopt code requiring adequate wind strapping of structures.				X		As regulations are designed and approved	X		
Liberty	Liberty County		3	Establish and enforce hazardous materials route.				X		As regulations developed and approved			
Liberty	Liberty County		4	Work with adjoining counties in regards to flood and drainage issues.				X		On going as schedule allows	X	X	X
Liberty	Liberty County		5	Installation of dry fire hydrants in selected locations throughout Liberty County.				X		As funding allows	X	X	
Liberty	Liberty County		6	Educate and inform the public regarding hurricane wind protective measures.				X		On going as schedule allows			
Liberty	Liberty County		7	Purchase updated topographic maps/complete LiDAR aerial survey for drainage plan.				X		As funding allows			X
Liberty	Liberty County		8	Update Flood Insurance Rate Maps (FIRMs).				X		As information is received and funding allows	X		X
Liberty	Liberty County		9	Add bench marks to updated Flood Insurance Rate Maps.				X		Continuing as updates needed			X
Liberty	Liberty County		10	Establish a countywide drainage district.				X		Pending grant approval	X	X	X
Liberty	Liberty County		11	Increase culvert size in identified flood hazard problem areas within Liberty County.				X		As Funding and time allow	X	X	X
Montgomery	City of Conroe	1		Public safety and risk assessment study/plan.									
Montgomery	City of Conroe	2		Regional detention feasibility study.							X	X	X
Montgomery	City of Conroe	3		Implement Ready, Set, Go Educational Program.							X	X	
Montgomery	City of Conroe	4		Enforce state regulations that prohibit dumping in streams, ditches and area waterways with concentration on those areas that have the potential to block the normal drainage of rainfall.							X	X	X

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					Complete	In Progress	No Longer Pursuing	Carry On	Carry on with modification	Reason Not Complete			
Montgomery	City of Conroe	5		Conduct wildfire outreach and education campaign by distributing information at public buildings, town hall meetings, and other speaking engagements							X	X	
Montgomery	City of Conroe	6		Conduct flood outreach and education campaign by distributing information at public meetings, townhall meetings, and other speaking engagements							X	X	X
Montgomery	City of Conroe		1	Develop comprehensive high rise disaster plan.			X			Funding not available			
Montgomery	City of Conroe		2	Develop drainage enhancement program.		X				Funding not available	X	X	X
Montgomery	City of Conroe		3	Develop contingency plan for public water system disaster.	X					Completed			
Montgomery	City of Conroe		4	Develop plan of action for civil disturbances, including riots.				X		Funding not available			
Montgomery	City of Conroe		5	Purchase secondary radio system.				X		Funding not available			
Montgomery	City of Conroe		6	Develop aircraft disaster plan.	X					Completed			
Montgomery	City of Conroe		7	Develop severe weather warning system.	X					Completed			
Montgomery	City of Conroe		8	Purchase emergency command vehicle.	X					Completed			
Montgomery	City of Conroe		9	Establish emergency shelter location database.	X					Completed			
Montgomery	City of Conroe		10	Develop hazardous materials (HAZMAT) response plan.	X					Completed			
Montgomery	City of Conroe		11	Implement Lake Conroe Dam failure plan, including education and awareness for affected neighborhoods.					X	Funding not available			
Montgomery	City of Conroe		12	Establish a secondary Emergency Operations Center.				X		Funding not available			
Montgomery	City of Cut and Shoot	1		Purchase of generators for City Hall and water plant to mitigate against the consequences of extended power failures from all disasters. City Hall is used as the City EOC when activated for disasters.								X	
Montgomery	City of Cut and Shoot	2		Attend CRS workshop hosted by H-GAC.									X
Montgomery	City of Cut and Shoot		1	Facilitate and coordinate program to improve emergency management radio, paging capabilities and reception countywide through the purchase of new equipment and necessary training of emergency personnel in the county and in member communities	X					Completed			
Montgomery	City of Cut and Shoot		2	Develop and coordinate a local hazmat team (consisting of personnel from county and member communities); procure fullyequipped hazmat mobile response vehicle to provide minor triage, decontamination	X					Completed			
Montgomery	City of Cut and Shoot		3	Implement public awareness campaign regarding HAZMAT safety, including risk communication, detection, shelter in place and evacuation procedures for HAZMAT events that occur as a result of a natural hazard such as hurricanes, floods, droughts, wildfires, etc.					X	Funding not available			X
Montgomery	City of Cut and Shoot		4	Promote use of NOAA all-hazard radios throughout County for early warning and post -event information. Place radios in area schools, businesses, critical facilities	X					Completed			
Montgomery	City of Cut and Shoot		5	Implement the National Weather Service Skywarn program into local volunteer organizations to increase the number of volunteers providing the NWS with early notification of severe weather that may result in property damage and or flooding.				X		Funding not available	X	X	X
Montgomery	City of Cut and Shoot		6	Enforce state regulations that prohibit dumping in streams, ditches and area waterways with concentration on those areas that have the potential to block the normal drainage of rainfall.				X		Funding not available	X	X	X
Montgomery	City of Cut and Shoot		7	Identify sites where stream and rain gauges are needed. Add or upgrade sites as needed and coordinate installation requests with USGS and River Authority. Additional sites will help provide early detection of potential flood areas to assist in evacuation and protection of property and inform the public of imminent hazard.				X		Funding not available	X	X	X
Montgomery	City of Cut and Shoot		8	Implement actions to support regulations that assist in reducing excess ozone pollution and urban heat. May include actions such as providing incentives for developers to increase tree planting and a county-wide public education and awareness program to promote smog awareness, volunteer mass transit, carpooling, and health tips for living in a high ozone smog area.					X	Funding not available			
Montgomery	City of Cut and Shoot		9	Implement water conservation education and incentives for low-flow plumbing and toilets, efficient washers and rain harvesting. Work with Lone Star Groundwater Conservation District and Agri Life Extension Service to promote and increase awareness for residents of Montgomery County pertaining to conserving, protecting and enhancing regional groundwater resources.				X		Funding not available		X	
Montgomery	City of Magnolia	1		Attend CRS workshop hosted by H-GAC.									X
Montgomery	City of Magnolia	2		Conduct wildfire outreach and education campaign by distributing information at public buildings, town hall meetings, and other speaking engagements							X	X	
Montgomery	City of Magnolia	3		Conduct flood outreach and education campaign by distributing information at public meetings, townhall meetings, and other speaking engagements							X	X	X
Montgomery	City of Magnolia		1	Facilitate and coordinate program to improve emergency management radio, paging capabilities and reception countywide through the purchase of new equipment and necessary training of emergency personnel in the county and in member communities	X					Completed			
Montgomery	City of Magnolia		2	Develop and coordinate a local hazmat team (consisting of personnel from county and member communities); procure fullyequipped hazmat mobile response vehicle to provide minor triage, decontamination	X					Completed			
Montgomery	City of Magnolia		3	Implement public awareness campaign regarding HAZMAT safety, including risk communication, detection, shelter in place and evacuation procedures for HAZMAT events that occur as a result of a natural hazard such as hurricanes, floods, droughts, wildfire, tornadoes.					X	Funding not available	X	X	X
Montgomery	City of Magnolia		4	Promote use of NOAA all-hazard radios throughout County for early warning and post-event information. Place radios in area schools, businesses, critical facilities	X					Completed			
Montgomery	City of Magnolia		5	Implement the National Weather Service Skywarn program into local volunteer organizations to increase the number of volunteers providing the NWS with early notification of severe weather that may result in property damage and/or flooding.					X	Funding not available			X

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					Complete	In Progress	No Longer Pursuing	Carry On	Carry on with modification	Reason Not Complete			
Montgomery	City of Magnolia		6	Enforce state regulations that prohibit dumping in streams, ditches and area waterways with concentration on those areas that have the potential to block the normal drainage of rainfall.					X	Funding not available	X	X	X
Montgomery	City of Magnolia		7	Identify sites where stream and rain gauges are needed. Add or upgrade sites as needed and coordinate installation requests with USGS and River Authority. Additional sites will help provide early detection of potential flood areas to assist in evacuation and protection of property and inform the public of imminent hazard.				X		Funding not available			X
Montgomery	City of Magnolia		8	Implement actions to support regulations that assist in reducing excess ozone pollution and urban heat. May include actions such as providing incentives for developers to increase tree planting and a county-wide public education and awareness program to promote smog awareness, volunteer mass transit, carpooling and health tips for living in a high ozone smog area.				X		Funding not available			
Montgomery	City of Magnolia		9	Implement water conservation education and incentives for low-flow plumbing and toilets, efficient washers and rain harvesting. Work with Lone Star Groundwater Conservation District and Agri Life Extension Service to promote and increase awareness for residents of Montgomery County pertaining to conserving, protecting and enhancing regional groundwater resources.					X	Funding not available			
Montgomery	City of Montgomery	1		Vegetation management program. Remove excessive vegetation to remove fuel for wildfires and create fire breaks for residences and businesses. Removal of vegetation will have added benefit of removing obstacles for drainage to mitigate flooding.							X	X	X
Montgomery	City of Montgomery	2		Participate in CRS workshop hosted by H-GAC.									X
Montgomery	City of Montgomery	3		Removal of debris, silt and vegetation obstacles in drainageways along Anders Branch. Flooding left culverts, swales, and Anders Branch creek bed blocked with silt, logs, and debris. Project will clear obstacles, reshape ditches, and upgrade culverts to restore adequate drainage in the area to mitigate flooding.							X	X	X
Montgomery	City of Montgomery		1	Facilitate and coordinate program to improve emergency management radio, paging capabilities and reception countywide through the purchase of new equipment and necessary training of emergency personnel in the county and in member communities	X					Completed			
Montgomery	City of Montgomery		2	Develop and coordinate a local hazmat team (consisting of personnel from county and member communities); procure fullyequipped hazmat mobile response vehicle to provide minor triage, decontamination	X					Completed			
Montgomery	City of Montgomery		3	Implement public awareness campaign regarding HAZMAT safety, including risk communication, detection, shelter in place and evacuation procedures for HAZMAT events that occur as a result of a natural hazard such as hurricanes, floods, droughts, wildfires, etc.					X	Funding not available	X	X	
Montgomery	City of Montgomery		4	Promote use of NOAA all-hazard radios throughout County for early warning and post -event information. Place radios in area schools, businesses, critical facilities	X					Completed			
Montgomery	City of Montgomery		5	Implement the National Weather Service Skywarn program into local volunteer organizations to increase the number of volunteers providing the NWS with early notification of severe weather that may result in property damage and or flooding.					X	Funding not available	X	X	X
Montgomery	City of Montgomery		6	Enforce state regulations that prohibit dumping in streams, ditches and area waterways with concentration on those areas that have the potential to block the normal drainage of rainfall.			X			Funding not available	X	X	X
Montgomery	City of Montgomery		7	Identify sites where stream and rain gauges are needed. Add or upgrade sites as needed and coordinate installation requests with USGS and River Authority. Additional sites will help provide early detection of potential flood areas to assist in evacuation and protection of property and inform the public of imminent hazard.				X		Funding not available			X
Montgomery	City of Montgomery		8	Implement actions to support regulations that assist in reducing excess ozone pollution and urban heat. May include actions such as providing incentives for developers to increase tree planting and a county-wide public education and awareness progra				X		Funding not available			
Montgomery	City of Montgomery		9	Implement water conservation education and incentives for low-flow plumbing and toilets, efficient washers and rain harvesting. Work with Lone Star Groundwater Conservation District and Agri Life Extension Service to promote and increase awareness for residents of Montgomery County pertaining to conserving, protecting and enhancing regional groundwater resources.			X			Funding not available	X	X	
Montgomery	City of Oak Ridge North	1		Mitigation of consequences when commercial electrical power is interrupted during crisis and emergency operations by installation of appropriate natural gas fueled electrical generator.								X	
Montgomery	City of Oak Ridge North	2		Participate in CRS workshop hosted by H-GAC.									X
Montgomery	City of Oak Ridge North	3		Cleaning out and maintaining ditches in City right of ways.									X
Montgomery	City of Oak Ridge North	4		Conduct wildfire outreach and education campaign by distributing information at public buildings, town hall meetings, and other speaking engagements							X	X	
Montgomery	City of Oak Ridge North	5		Conduct flood outreach and education campaign by distributing information at public meetings, townhall meetings, and other speaking engagements							X	X	X
Montgomery	City of Oak Ridge North		1	Facilitate and coordinate program to improve emergency management radio, paging capabilities and reception county-wide through purchase of new equipment and necessary training of emergency personnel in the county and in member communities	X					Completed			
Montgomery	City of Oak Ridge North		2	Develop and coordinate a local hazmat team (consisting of personnel from county and member communities); procure fully-equipped hazmat mobile response vehicle to provide minor triage, decontamination	X					Completed			
Montgomery	City of Oak Ridge North		3	Implement public awareness campaign regarding HAZMAT safety, including risk communication, detection, shelter in place and evacuation procedures for HAZMAT events that occur as a result of a natural hazard such as hurricanes, floods, tornadoes, droughts, wildfires, etc.					X	Funding not available			X

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					Complete	In Progress	No Longer Pursuing	Carry On	Carry on with modification	Reason Not Complete			
Montgomery	City of Oak Ridge North		4	Promote use of NOAA all-hazard radios throughout County for early warning and post-event information. Place radios in area schools, businesses, critical facilities	X					Completed			
Montgomery	City of Oak Ridge North		5	Implement the National Weather Service Skywarn program into local volunteer organizations to increase the number of volunteers providing the NWS with early notification of severe weather that may result in property damage and or flooding.					X	Funding not available			X
Montgomery	City of Oak Ridge North		6	Enforce state and local regulations that prohibit dumping in streams, ditches and area waterways with concentration on those areas that have the potential to block the normal drainage of rainfall.					X	Funding not available			X
Montgomery	City of Oak Ridge North		7	Identify sites where stream and rain gauges are needed. Add or upgrade sites as needed and coordinate installation requests with USGS and River Authority. Additional sites will help provide early detection of potential flood areas to assist in evacuation			X			Funding not available			X
Montgomery	City of Oak Ridge North		8	Implement actions to support regulations that assist in reducing excess ozone pollution and urban heat. May include actions such as providing incentives for developers to increase tree planting and a county-wide public education and awareness program to promote smog awareness, volunteer mass transit, carpooling and health tips for living in a high ozone smog area.			X			Funding not available			
Montgomery	City of Oak Ridge North		9	Implement water conservation education and incentives for low-flow plumbing and toilets, efficient washers and rain harvesting. Work with Lone Star Groundwater Conservation District to promote and increase awareness for residents of Montgomery County pertaining to conserving, protection, and enhancing regional groundwater sources			X			Funding not available			
Montgomery	City of Panorama Village	1		Retrofit Community Center roof to ensure resistance to damaging winds, heavy rains and severe thunderstorms. Provide added protection when employed as a community shelter during emergency conditions.								X	
Montgomery	City of Panorama Village	2		Reduce volume of hazardous fuels such as dead trees and flammable underbrush caused by severe drought. Clear specific areas to provide defensible space, especially vertical clearand of tree branches.							X	X	X
Montgomery	City of Panorama Village	3		Reduce hazardous fuels in open ditches city-wide.							X	X	X
Montgomery	City of Panorama Village		1	Facilitate and coordinate program to improve emergency management radio, paging capabilities and reception county-wide through the purchase of new equipment and necessary training of emergency personnel in the county and in member communities.	X					Completed			
Montgomery	City of Panorama Village		2	Develop and coordinate a local hazmat team (consisting of personnel from county and member communities); procure fully-equipped hazmat mobile response vehicle to provide minor triage, decontamination.	X					Completed			
Montgomery	City of Panorama Village		3	Implement public awareness campaign regarding HAZMAT safety, including risk communication, detection, shelter in place and evacuation procedures for HAZMAT events that occur as a result of a natural hazard such as hurricanes, floods, droughts, wildfire, tornadoes, etc.					X	Completed			
Montgomery	City of Panorama Village		4	Promote use of NOAA all-hazard radios throughout County for early warning and post-event information. Place radios in area schools, businesses, critical facilities.	X					Completed			
Montgomery	City of Panorama Village		5	Implement the National Weather Service Skywarn program into local volunteer organizations to increase the number of volunteers providing the NWS with early notification of severe weather that may result in property damage and or flooding.					X	Funding not available			
Montgomery	City of Panorama Village		6	Enforce state regulations that prohibit dumping in streams, ditches and area waterways with concentration on those areas that have the potential to block the normal drainage of rainfall.					X	Funding not available	X	X	
Montgomery	City of Panorama Village		7	Identify sites where stream and rain gauges are needed. Add or upgrade sites as needed and coordinate installation requests with USGS and River Authority. Additional sites will help provide early detection of potential flood areas to assist in evacuation and protection of property and inform the public of imminent hazard.				X		Funding not available			X
Montgomery	City of Panorama Village		8	Implement actions to support regulations that assist in reducing excess ozone pollution and urban heat. May include actions such as providing incentives for developers to increase tree planting and a county-wide public education and awareness progra			X			Funding not available			
Montgomery	City of Panorama Village		9	Implement water conservation education and incentives for low-flow plumbing and toilets, efficient washers and rain harvesting. Work with Lone Star Groundwater Conservation District and Agri Life Extension Service to promote and increase awareness for residents of Montgomery County pertaining to conserving, protecting and enhancing regional groundwater resources.				X		Funding not available			
Montgomery	City of Panorama Village		10	Widen drainage ditches city-wide.				X		Funding not available	X	X	X
Montgomery	City of Panorama Village		11	Construct bulkhead for small pond adjacent to sewer plant to prevent flooding of sewer plant					X	Funding not available		X	X
Montgomery	City of Panorama Village		12	Rechannelize the waterway and upstream Stewards Creek tributary to widen and deepen in order to reclaim the detention and flood control capability of the Panorama Lake. This will require the removal of debris and vegetation and dredging of excess silt which has accumulated over decades.					X	Funding not available	X	X	X
Montgomery	City of Panorama Village		13	Vegetation management program, emphasis on trees			X			Incorporated as 2011 Action 2	X	X	
Montgomery	City of Patton Village	1		Attend CRS workshop hosted by H-GAC.									X
Montgomery	City of Patton Village	2		Conduct wildfire outreach and education campaign by distributing information at public buildings, town hall meetings, and other speaking engagements							X	X	
Montgomery	City of Patton Village	3		Conduct flood outreach and education campaign by distributing information at public meetings, townhall meetings, and other speaking engagements							X	X	X

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					Complete	In Progress	No Longer Pursuing	Carry On	Carry on with modification	Reason Not Complete			
Montgomery	City of Patton Village		1	Facilitate and coordinate program to improve emergency management radio, paging capabilities and reception county-wide through the purchase of new equipment and necessary training of emergency personnel in the county and in member communities	X					Completed			
Montgomery	City of Patton Village		2	Develop and coordinate a local hazmat team (consisting of personnel from county and member communities); procure fully-equipped hazmat mobile response vehicle to provide minor triage, decontamination	X					Completed			
Montgomery	City of Patton Village		3	Implement public awareness campaign regarding HAZMAT safety, including risk communication, detection, shelter in place and evacuation procedures for HAZMAT events that occur as a result of a natural hazard such as hurricanes, floods, tornadoes, wildfires, drought, etc.					X	Funding not available	X	X	
Montgomery	City of Patton Village		4	Promote use of NOAA all-hazard radios throughout County for early warning and post-event information. Place radios in area schools, businesses, critical facilities	X					Completed			
Montgomery	City of Patton Village		5	Implement the National Weather Service Skywarn program into local volunteer organizations to increase the number of volunteers providing the NWS with early notification of severe weather that may result in property damage and or flooding.					X	Funding not available		X	X
Montgomery	City of Patton Village		6	Enforce state regulations that prohibit dumping in streams, ditches and area waterways with concentration on those areas that have the potential to block the normal drainage of rainfall.				X		Funding not available	X	X	X
Montgomery	City of Patton Village		7	Identify sites where stream and rain gauges are needed. Add or upgrade sites as needed and coordinate installation requests with USGS and River Authority. Additional sites will help provide early detection of potential flood areas to assist in evacuation and protection of property and inform the public of imminent hazard.				X		Funding not available	X	X	X
Montgomery	City of Patton Village		8	Implement actions to support regulations that assist in reducing excess ozone pollution and urban heat. May include actions such as providing incentives for developers to increase tree planting and a county-wide public education and awareness program to promote smog awareness, volunteer mass transit, carpooling, and health tips for living in a high ozone smog area.				X		Funding not available	X	X	
Montgomery	City of Patton Village		9	Implement water conservation education and incentives for low-flow plumbing and toilets, efficient washers and rain harvesting. Work with Lone Star Groundwater Conservation District and Agri Life Extension to promote and increase awareness for residents in Montgomery County pertaining to conserving, protecting and enhancing regional groundwater resources.				X		Funding not available	X	X	
Montgomery	City of Shenandoah	1		Improve storm sewer drainage in the Shenandoah Valley area by upgrading the roads and underground drainage to reduce the potential for flooding.							X	X	X
Montgomery	City of Shenandoah	2		Removal of hazardous fuels which will reduce the impact of wildland fires and flooding in the areas of Grogan's Mill road,Vision Park and David Memorial Drive.							X	X	X
Montgomery	City of Shenandoah	3		Storm sewer system installation in the area of the Shenandoah Valley.							X	X	X
Montgomery	City of Shenandoah		1	Facilitate and coordinate program to improve emergency management radio, paging capabilities and reception county-wide through the purchase of new equipment and necessary training of emergency personnel in the county and in member communities.	X					Completed			
Montgomery	City of Shenandoah		2	Develop and coordinate a local hazmat team (consisting of personnel from county and member communities); procure fully-equipped hazmat mobile response vehicle to provide minor triage, decontamination	X					Completed			
Montgomery	City of Shenandoah		3	Implement public awareness campaign regarding HAZMAT safety, including risk communication, detection, shelter in place and evacuation procedures for HAZMAT events that occur as a result of a natural hazard such as hurricanes, floods, droughts, wildfires, etc.					X	Funding not available	X	X	X
Montgomery	City of Shenandoah		4	Promote use of NOAA all-hazard radios throughout County for early warning and post-event information. Place radios in area schools, businesses, critical facilities	X					Completed			
Montgomery	City of Shenandoah		5	Implement the National Weather Service Skywarn program into local volunteer organizations to increase the number of volunteers providing the NWS with early notification of severe weather that may result in property damage and/or flooding.					X	Funding not available	X	X	X
Montgomery	City of Shenandoah		6	Enforce state regulations that prohibit dumping in streams, ditches and area waterways with concentration on those areas that have the potential to block the normal drainage of rainfall.				X		On-going	X	X	X
Montgomery	City of Shenandoah		7	Identify sites where stream and rain gauges are needed. Add or upgrade sites as needed and coordinate installation requests with USGS and River Authority. Additional sites will help provide early detection of potential flood areas to assist in evacuation and protection of property and inform the public of imminent hazard.				X		Funding not available	X	X	X
Montgomery	City of Shenandoah		8	Implement actions to support regulations that assist in reducing excess ozone pollution and urban heat. May include actions such as providing incentives for developers to increase tree planting and a county-wide public education and awareness program to promote smog awareness, volunteer mass transit, carpooling, and health tips for living in a high ozone smog area.				X		Funding not available	X	X	
Montgomery	City of Shenandoah		9	Implement water conservation education and incentives for low-flow plumbing and toilets, efficient washers and rain harvesting. Work with Lone Star Groundwater Conservation District and Agri Life Extension Service to promote and increase awareness for residents of Montgomery County pertaining to conserving, protecting and enhancing regional groundwater resources.				X		On-going			
Montgomery	City of Splendora	1		Implement public awareness campaign regarding HAZMAT safety, including risk communication, detection, shelter in place and evacuation procedures for HAZMAT events tha occur as a result of natural hazards such as hurricanes, floods, droughts, wildfires, tornadoes, etc.									
Montgomery	City of Splendora	2		Implement the National Weather Service Skywarn program into local volunteer organizations to increase the number of volunteers providing the NWS with early notification of severe weather that may result in property damage and or flooding.							X	X	X

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County	Jurisdiction	2011 Mitigation Action No	2006 Mitigation Action No	Project Description	2006 Mitigation Action Status						Reduce hazard impacts on new buildings and infrastructure	Reduce hazard impacts on existing buildings and infrastructure	NFIP Compliance
					Complete	In Progress	No Longer Pursuing	Carry On	Carry on with modification	Reason Not Complete			
Montgomery	City of Splendora	3		Identify sites where stream and rain gauges are needed. Add or upgrade sites as needed and coordinate installation requests with USGS and River Authority. Additional sites will help provide early detection of potential flood areas to assist in evacuation and protection of property and inform the public of imminent hazard.							X	X	X
Montgomery	City of Splendora	4		Enforce state regulations that prohibit dumping in streams, ditches and area waterways with concentration on those areas that have the potential to block the normal drainage of rainfall.							X	X	X
Montgomery	City of Splendora	5		Implement water conservation education and incentives for low-flow plumbing and toilets, efficient washers and rain harvesting. Work with Lone Star Groundwater Conservation District and Agri Life Extension Service to promote and increase awareness for residents of Montgomery County pertaining to conserving, protecting and enhancing regional groundwater resources.							X	X	
Montgomery	City of Splendora	6		Implement actions to support regulations that assist in reducing excess ozone pollution and urban heat. This may include actions such as providing incentives for developers to increase tree planting and a county-wide public education and awareness program to promote smog awareness, volunteer mass transit, carpooling, and health tips for living in a high ozone smog area.							X	X	
Montgomery	City of Splendora		1	Develop evacuation route.	X					Completed			
Montgomery	City of Splendora		2	Purchase generators to power utilities, emergency communications at water well #1.	X					Completed			
Montgomery	City of Splendora		3	Policing of post-event areas.	X					Completed			
Montgomery	City of Splendora		4	Implement traffic control program.	X					Completed			
Montgomery	City of Splendora		5	Incorporate a natural runoff or zero discharge policy for stormwater in subdivision ordinance.			X			Funding not available	X		X
Montgomery	City of Splendora		6	Improve drainage along First Street and FM 2090 East. Draining improvements include widening of existing drainage, culvert size will be increased.				X		Funding not available	X	X	X
Montgomery	City of Splendora		7	Increase culvert size on First Street under railroad tracks.	X					Completed	X	X	X
Montgomery	City of Splendora		8	Increase culvert size on Cox Street (900 feet North of FM 2090).	X					Completed	X	X	X
Montgomery	City of Splendora		9	Pursue land acquisition for parks in flood-prone locations.			X			Funding not available			X
Montgomery	City of Splendora		10	Implement stormwater management program, including the clearing of debris from waterways.			X			Funding not available	X	X	X
Montgomery	City of Splendora		11	Construct detention ponds in flood-prone areas.			X			Funding not available	X	X	X
Montgomery	City of Splendora		12	Conduct drainage study.	X					Completed	X	X	X
Montgomery	City of Splendora		13	Develop hazardous materials (HAZMAT) awareness and public education program.				X		Funding not available			
Montgomery	City of Splendora		14	Revise Local Flood Damage Prevention Ordinance to incorporate cumulative substantial damage/improvement requirements.			X			Funding not available	X		X
Montgomery	City of Splendora		15	Implement water rationing and enforcement plan.	X					Completed			
Montgomery	City of Splendora		16	Update Flood Insurance Rate Maps (FIRMs).	X					Completed			X
Montgomery	City of Stagecoach	1		Attend CRS workshop hosted by H-GAC.									X
Montgomery	City of Stagecoach	2		Conduct wildfire outreach and education campaign by distributing information at public buildings, town hall meetings, and other speaking engagements							X	X	
Montgomery	City of Stagecoach	3		Conduct flood outreach and education campaign by distributing information at public meetings, townhall meetings, and other speaking engagements							X	X	X
Montgomery	City of Stagecoach		1	Facilitate and coordinate program to imrove emergency management radio, paging capabilities and reception county-wide through the purchase of new equipment and necessary training of emergency personnel in the county and in member communities.	X					Completed			
Montgomery	City of Stagecoach		2	Develop and coordinate a local hazmat team (consisting of personnel from county and member communities); procure fully-equipped hazmat mobile response vehicle to provide minor triage, decontamination.	X					Completed			
Montgomery	City of Stagecoach		3	Implement public awareness campaign regarding HAZMAT safety, including risk communication, detection, shelter in place and evacuation procedures for HAZMAT events that occur as a result of a natural hazard such as hurricanes, floods, droughts, wildfires, etc.				X		Funding not available	X	X	X
Montgomery	City of Stagecoach		4	Promote use of NOAA all-hazard radios throughout County for early warning and post-event information. Place radios in area schools, businesses, critical facilities.	X					Completed			
Montgomery	City of Stagecoach		5	Implement the National Weather Service Skywarn program into local volunteer organizations to increase the number of volunteers providing the NWS with early notification of severe weather that may result in property damage and or flooding.				X		Funding not available		X	X
Montgomery	City of Stagecoach		6	Enforce state regulations that prohibit dumping in streams, ditches and area waterways with concentration on those areas that have the potential to block the normal drainage of rainfall.				X		Funding not available	X	X	X
Montgomery	City of Stagecoach		7	Identify sites where stream and rain gauges are needed. Add or upgrade sites as needed and coordinate installation requests with USGS and River Authority. Additional sites will help provide early detection of potential flood areas to assist in evacuation and protection of property and inform the public of imminent hazard.				X		Funding not available	X	X	X
Montgomery	City of Stagecoach		8	Implement actions to support regulations that assist in reducing excess ozone pollution and urban heat. May include actions such as providing incentives for developers to increase tree planting and a county-wide public education and awareness program to promote smog awareness, volunteer mass transit, carpooling, and health tips for living in a high ozone smog area.				X		Funding not available			
Montgomery	City of Stagecoach		9	Implement water conservation education and incentives for low-flow plumbing and toilets, efficient washers and rain harvesting. Work with Lone Star Groundwater Conservation District and Agri Life Extension Service to promote and increase awareness for residents of Montgomery County pertaining to conserving, protecting and enhancing regional groundwater resources.				X		Funding not available			

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					Complete	In Progress	No Longer Pursuing	Carry On	Carry on with modification	Reason Not Complete			
Montgomery	City of Willis	1		Implement public awareness campaign regarding HAZMAT safety, including risk communication, detection, shelter in place and evacuation procedures for HAZMAT events that occur as a result of a natural hazard such as hurricanes, floods, droughts, wildfires, etc.									
Montgomery	City of Willis	2		Implement the National Weather Service Skywarn program into local volunteer organizations to increase the number of volunteers providing the NWS with early notification of severe weather that may result in property damage and or flooding.									
Montgomery	City of Willis	3		Identify sites where stream and rain gauges are needed. Add or upgrade sites as needed and coordinate installation requests with USGS and River Authority. Additional sites will help provide early detection of potential flood areas to assist in evacuation and protection of property and inform the public of imminent hazard.									X
Montgomery	City of Willis	4		Enforce state regulations that prohibit dumping in streams, ditches and area waterways with concentration on those areas that have the potential to block the normal drainage of rainfall.									X
Montgomery	City of Willis	5		Implement water conservation education and incentives for low-flow plumbing and toilets, efficient washers and rain harvesting. Work with Lone Star Groundwater Conservation District and Agri Life Extension Service to promote and increase awareness for residents of Montgomery County pertaining to conserving, protecting and enhancing regional groundwater resources.									
Montgomery	City of Willis	6		Implement actions to support regulations that assist in reducing excess ozone pollution and urban heat. May include actions such as providing incentives for developers to increase tree planting and a county-wide public education and awareness program to promote smog awareness, volunteer mass transit, carpooling, and health tips for living in a high ozone smog area.									
Montgomery	City of Willis		1	Build stormwater detention pond on north end of John F. Kennedy and Turner Drive.				X		Funding not available	X	X	X
Montgomery	City of Willis		2	Widen and re-grade Crystal Creek from Montgomery Street to Powell Street to reduce flooding issues in town.				X		Funding not available	X	X	X
Montgomery	City of Willis		3	Enlarge and improve culverts on Crystal Creek at Worsham Street.				X		Funding not available	X	X	X
Montgomery	City of Willis		4	Locate and designate emergency crossings of Union Pacific Railroad tracks, for emergency services in case of derailment, blockage, or hazardous materials spill	X					Funding not available			
Montgomery	City of Willis		5	Improve drainage outfall from Willwood Subdivision to Janet Drive and from FM 2432 to Janet Drive. Regrade existing ditch and construct additional ditch length.				X		Funding not available	X	X	X
Montgomery	City of Woodbranch Village	1		Attend CRS workshop hosted by H-GAC.									X
Montgomery	City of Woodbranch Village	2		Conduct wildfire outreach and education campaign by distributing information at public buildings, town hall meetings, and other speaking engagements							X	X	
Montgomery	City of Woodbranch Village	3		Conduct flood outreach and education campaign by distributing information at public meetings, townhall meetings, and other speaking engagements							X	X	X
Montgomery	City of Woodbranch Village		1	Facilitate and coordinate program to improve emergency management radio, paging capabilities and reception countywide through the purchase of new equipment and necessary training of emergency personnel in the county and in member communities	X					Completed			
Montgomery	City of Woodbranch Village		2	Develop and coordinate a local hazmat team (consisting of personnel from county and member communities); procure fully equipped hazmat mobile response vehicle to provide minor triage, decontamination.	X					Completed			
Montgomery	City of Woodbranch Village		3	Implement public awareness campaign regarding HAZMAT safety, including risk communication, detection, shelter in place and evacuation procedures for HAZMAT events that occur as a result of a natural hazard such as hurricanes, floods, droughts, wildfires and tornadoes.				X		Funding not available			X
Montgomery	City of Woodbranch Village		4	Promote use of NOAA all-hazard radios throughout County for early warning and post-event information. Place radios in area schools, businesses, critical facilities	X					Completed			
Montgomery	City of Woodbranch Village		5	Implement the National Weather Service Skywarn program into local volunteer organizations to increase the number of volunteers providing the NWS with early notification of severe weather that may result in property damage and or flooding.					X	Funding not available			X
Montgomery	City of Woodbranch Village		6	Enforce state regulations that prohibit dumping in streams, ditches and area waterways with concentration on those areas that have the potential to block the normal drainage of rainfall.					X	Funding not available	X	X	X
Montgomery	City of Woodbranch Village		7	Identify sites where stream and rain gauges are needed. Add or upgrade sites as needed and coordinate installation requests with USGS and River Authority. Additional sites will help provide early detection of potential flood areas to assist in evacuation and protection of property and inform the public of imminent hazard.					X	Funding not available			X
Montgomery	City of Woodbranch Village		8	Implement actions to support regulations that assist in reducing excess ozone pollution and urban heat. May include actions such as providing incentives for developers to increase tree planting and a county-wide public education and awareness program to promote smog awareness, volunteer mass transit, carpooling, and health tips for living in a high ozone smog area.				X		Funding not available			
Montgomery	City of Woodbranch Village		9	Implement water conservation education and incentives for low-flow plumbing and toilets, efficient washers and rain harvesting. Work with Lone Star Groundwater Conservation District and Agri Life Extension Service to promote and increase awareness for residents of Montgomery County pertaining to conserving, protecting and enhancing regional groundwater resources.					X	Funding not available			

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					Complete	In Progress	No Longer Pursuing	Carry On	Carry on with modification	Reason Not Complete			
Montgomery	Montgomery County	1		Maintain mobile alternate care sites and associated resources necessary for deployment.									
Montgomery	Montgomery County	2		Implement Ready, Set, Go Educational Program.							X	X	
Montgomery	Montgomery County	3		Participate in CRS workshop hosted by H-GAC.									X
Montgomery	Montgomery County	4		Reduce hazardous fuels in ditches in county right of way to lessen the threats and impacts from wildfires, droughts and floods.							X	X	X
Montgomery	Montgomery County		1	Facilitate and coordinate program to improve emergency management radio, paging capabilities and reception countywide through the purchase of new equipment and necessary training of emergency personnel in the county and in member communities.	X					Completed			
Montgomery	Montgomery County		2	Develop and coordinate a local hazmat team (consisting of personnel from county and member communities); procure fully-equipped hazmat mobile response vehicle to provide minor triage, decontamination.	X					Completed			
Montgomery	Montgomery County		3	Implement public awareness campaign regarding HAZMAT safety, including risk communication, detection, shelter in place and evacuation procedures for HAZMAT events that occur as a result of a natural hazard such as hurricanes, floods, droughts, wildfire, tornadoes.					X	Funding not available	X	X	
Montgomery	Montgomery County		4	Promote use of NOAA all-hazard radios through County for early warning and post-event information. Place radios in area schools, businesses, critical facilities.	X					Completed			
Montgomery	Montgomery County		5	Implement the National Weather Service Skywarn program into local volunteer organizations to increase the number of volunteers providing the NWS with early notification of severe weather that may result in property damage and/or flooding.					X	Funding not available	X	X	X
Montgomery	Montgomery County		6	Enforce state regulations that prohibit dumping in streams, ditches and area waterways with concentration on those areas that have the potential to block the normal drainage of rainfall.				X		On-going project	X	X	X
Montgomery	Montgomery County		7	Identify sites where stream and rain gauges are needed. Add or upgrade sites as needed and coordinate installation requests with USGS and River Authority. Additional sites will help provide early detection of potential flood areas to assist in evacuation and protection of property and inform the public of imminent hazard.				X		Funding not available	X	X	X
Montgomery	Montgomery County		8	Implement actions to support regulations that assist in reducing excess ozone pollution and urban heat. May include actions such as providing incentives for developers to increase tree planting and a county-wide public education and awareness program to promote smog awareness, volunteer mass transit, car-pooling, and health tips for living in a high ozone smog area.				X		Funding			
Montgomery	Montgomery County		9	Implement water conservation education and incentives for low-flow plumbing and toilets, efficient washers and rain harvesting. Work with Lone Star Groundwater Conservation District and Agri Life Extension Service to promote and increase awareness for residents of Montgomery County pertaining to conserving, protecting and enhancing regional groundwater resources.				X		On-going project	X	X	
Montgomery	The Woodlands Township	1		Install hurricane shutters on newly acquired Township property (City Hall) in order to house Fire Department Dispatch and the Emergency Operations Center								X	
Montgomery	The Woodlands Township	2		Construct and integrate safe room design within the Fire Department, Dispatch and Emergency Operations Center									
Montgomery	The Woodlands Township	3		Purchase rescue boats for new fire station located south of Spring Creek - flood-prone areas.									
Montgomery	The Woodlands Township	4		Purchase flat bottom air boat for access and rescue in flood-prone areas.									
Montgomery	The Woodlands Township	5		Purchase and install building generator for Emergency Training Center and utilize for county/local/private emergency vehicle/utility vehicle staging								X	
Montgomery	The Woodlands Township	6		Implement drainage improvements for Bear Branch Park and Shadow Bend, Sawdust and Golden Road							X	X	X
Montgomery	The Woodlands Township	7		Construct localized Community Safe Rooms strategically throughout The Woodlands (approx. 8)									
Montgomery	The Woodlands Township	8		Develop and install a community hazard warning system, audio/hazard detection to alert citizens of imminent hazards									
Montgomery	The Woodlands Township	9		Purchase two wildfire suppression vehicles with 4 wheel drive and pump and roll capacities.								X	
Montgomery	The Woodlands Township	10		Purchase mobile power generator unit to assist senior/assisted living centers and Joint Powers Authority									
Montgomery	The Woodlands Township	11		Purchase and install 10,000 gallon diesel fuel service center for County and local, private emergency vehicles at Emergency Training Center									
Montgomery	The Woodlands Township	12		Purchase a small fire boat to be utilized on the "waterway" for rescue and structural exposure protection									
Montgomery	The Woodlands Township	13		Minor localized flood reduction projects.							X	X	X
Montgomery	The Woodlands Township	14		Raise pedestrian bridges that block drainage ways to prevent blockage and increase drainage flow							X	X	X
Montgomery	The Woodlands Township		1	Purchase Department of Energy Decontamination Module.				X		Funding not available			

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Montgomery	The Woodlands Township		2	Purchase Trident Technologies Pro Mag 6 Kit.				X		Funding not available			
Montgomery	The Woodlands Township		3	Purchase personal protective clothing (NOMEX jumpsuits).				X		Funding not available			
Montgomery	The Woodlands Township		4	Purchase four emergency signal lights for traffic control.				X		Funding not available			
Montgomery	The Woodlands Township		5	Purchase AM radio frequency/warning system.				X		Funding not available			
Montgomery	The Woodlands Township		6	Develop auto dial-up phone emergency notification system to notify citizens of imminent natural hazards.				X		Funding not available			
Montgomery	Town of Roman Forest	1		Attend CRS workshop hosted by H-GAC.									X
Montgomery	Town of Roman Forest	2		Conduct wildfire outreach and education campaign by distributing information at public buildings, town hall meetings, and other speaking engagements							X	X	
Montgomery	Town of Roman Forest	3		Conduct flood outreach and education campaign by distributing information at public meetings, townhall meetings, and other speaking engagements							X	X	X
Montgomery	Town of Roman Forest		1	Facilitate and coordinate program to improve emergency management radio, paging capabilities and reception county-wide through the purchase of new equipment and necessary training of emergency personnel in the county and in member communities	X					Completed			
Montgomery	Town of Roman Forest		2	Develop and coordinate a local hazmat team (consisting of personnel from county and member communities); procure fully-equipped hazmat mobile response vehicle to provide minor triage, decontamination	X					Completed			
Montgomery	Town of Roman Forest		3	Implement public awareness campaign regarding HAZMAT safety, including risk communication, detection, shelter in place and evacuation procedures for HAZMAT events that occur as a result of a natural hazard such as hurricanes, floods, droughts and wildfire				X		Funding not available	X	X	X
Montgomery	Town of Roman Forest		4	Promote use of NOAA all-hazard radios throughout County for early warning and post-event information. Place radios in area schools, businesses, critical facilities	X					Completed			
Montgomery	Town of Roman Forest		5	Implement the National Weather Service Skywarn program into local volunteer organizations to increase the number of volunteers providing the NWS with early notification of severe weather that may result in property damage and or flooding.					X	Funding not available	X	X	X
Montgomery	Town of Roman Forest		6	Enforce state regulations that prohibit dumping in streams, ditches and area waterways with concentration on those areas that have the potential to block the normal drainage of rainfall.				X		Funding not available	X	X	X
Montgomery	Town of Roman Forest		7	Identify sites where stream and rain gauges are needed. Add or upgrade sites as needed and coordinate installation requests with USGS and River Authority. Additional sites will help provide early detection of potential flood areas to assist in evacuation and protection of property and inform the public of imminent hazard.				X		Funding not available	X	X	X
Montgomery	Town of Roman Forest		8	Implement actions to support regulations that assist in reducing excess ozone pollution and urban heat. May include actions such as providing incentives for developers to increase tree planting and a county-wide public education and awareness program to promote smog awareness, volunteer mass transit, carpooling, and health tips for living in a high ozone smog area.				X		Funding not available	X	X	
Montgomery	Town of Roman Forest		9	Implement water conservation education and incentives for low-flow plumbing and toilets, efficient washers and rain harvesting. Work with Lone Star Groundwater Conservation District and Agri Life Extension Service to promote and increase awareness for residents of Montgomery County pertaining to conserving, protecting and enhancing regional groundwater resources.				X		Funding not available	X	X	
Montgomery	Town of Woodloch	1		Attend CRS workshop hosted by H-GAC.									X
Montgomery	Town of Woodloch	2		Upgrade storm drain at east end of North Woodloch to reduce flooding.							X	X	X
Montgomery	Town of Woodloch	3		Remove hazardous fuels in drainage ditches and create fire break.							X	X	X
Montgomery	Town of Woodloch		1	Facilitate and coordinate program to improve emergency management radio, paging capabilities and reception countywide through the purchase of new equipment and necessary training of emergency personnel in the county and in member communities	X					Completed			
Montgomery	Town of Woodloch		2	Develop and coordinate a local hazmat team (consisting of personnel from county and member communities); procure fully equipped hazmat mobile response vehicle to provide minor triage, decontamination.	X					Completed			
Montgomery	Town of Woodloch		3	Implement public awareness campaign regarding HAZMAT safety, including risk communication, detection, shelter in place and evacuation procedures for HAZMAT events that occur as a result of a natural hazard such as hurricanes, floods, droughts, wildfire, tornadoes.					X	Funding not available	X	X	X
Montgomery	Town of Woodloch		4	Promote use of NOAA all-hazard radios throughout County for early warning and post-event information. Place radios in area schools, businesses, critical facilities	X					Completed			
Montgomery	Town of Woodloch		5	Implement the National Weather Service Skywarn program into local volunteer organizations to increase the number of volunteers providing the NWS with early notification of severe weather that may result in property damage and/or flooding.					X	Funding not available	X	X	X
Montgomery	Town of Woodloch		6	Enforce state regulations that prohibit dumping in streams, ditches and area waterways with concentration on those areas that have the potential to block the normal drainage of rainfall.				X		Funding not available	X	X	X

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					Complete	In Progress	No Longer Pursuing	Carry On	Carry on with modification	Reason Not Complete			
Montgomery	Town of Woodloch		7	Identify sites where stream and rain gauges are needed. Add or upgrade sites as needed and coordinate installation requests with USGS and River Authority. Additional sites will help provide early detection of potential flood areas to assist in evacuation and protection of property and inform the public of imminent hazard.				X		Funding not available			X
Montgomery	Town of Woodloch		8	Implement actions to support regulations that assist in reducing excess ozone pollution and urban heat. May include actions such as providing incentives for developers to increase tree planting and a county-wide public education and awareness program to promote smog awareness, volunteer mass transit, carpooling, and health tips for living in a high ozone smog area.					X	Funding not available			
Montgomery	Town of Woodloch		9	Coordinate water conservation education and incentives for low-flow plumbing and toilets, efficient washers and rain harvesting. Work with Lone Star Groundwater Conservation District to promote and increase awareness for residents of Montgomery County pertaining to conserving, protecting and enhancing regional groundwater resources.				X		Funding not available			
Walker	City of Huntsville	1		Complete fiber optic communications link to all critical command centers.									
Walker	City of Huntsville	2		Install permanently mounted 60 KW generator on a concrete pad at KSAM Radio Station to provide continuous broadcast services.									
Walker	City of Huntsville	3		Obtain contingency fuel source to refuel generators and equipment to maintain continuity of government, emergency response and critical services.									
Walker	City of Huntsville	4		Purchase portable message centers/signs to act as public notice related to hazards.									X
Walker	City of Huntsville	5		Install outdoor warning system to alert citizens of imminent natural hazards.									
Walker	City of Huntsville	6		Mobile hospital.									
Walker	City of Huntsville	7		Construct city operations/service center including safe room to maintain continuity of government.									
Walker	City of Huntsville	8		Install permanently mounted generators on concrete slab for remaining 5 water well sites, IT infrastructure, library, transfer station and airport.								X	
Walker	City of Huntsville	9		Complete master drainage study on all watersheds to lead to projects in Town Creek West, Tanyard Creek, McDonald Creek, McGarry Creek, Hadley Creek, Shepherd Creek, Prairie Branch.							X	X	X
Walker	City of Huntsville	10		Create defensible space per Walker County County-Wide Wildland Protection Plan around buildings in Elkins Lake, Lost Meadows, Smith Hill/Gospel Hill Community, Forgotten Forest, Sunset Lake, and Club Lake Watson Lake Subdivision.							X	X	
Walker	City of Huntsville	11		Multi-jurisdictional mobile command post (equipped).									
Walker	City of Huntsville	12		Employ full-time fuel reduction and public information specialist.									
Walker	City of Huntsville	13		Construct Phase 2 of Town Creek East Mitigation Project to implement recommendations in study: increase drainage and increase culvert size, channelize.							X	X	X
Walker	City of Huntsville	14		Continue to improve and practice large scale community immunization plan.									
Walker	City of Huntsville	15		Multi-jurisdictional boat for high water rescue, patrol, dive team and fire suppression (equipped).									
Walker	City of Huntsville	16		Harden spillways and embankments to handle extreme flood events and Dawson Dam.							X	X	
Walker	City of Huntsville	17		Security (cameras and gates) for water and wastewater plants.									
Walker	City of Huntsville	18		Acquisition of repetitive loss properties in the floodplain in Spring Lake Subdivision, Elkins Lake and Town Creek.									X
Walker	City of Huntsville		1	Obtain topographical maps and aerial photography for flood and drainage improvements and map updating and to identify wildfire hazard areas.					X	Waiting for funding			X
Walker	City of Huntsville		2	Establish fiber optic communications link to all critical command centers.				X		Waiting for funding			
Walker	City of Huntsville		3	Fortify radio station safe room and include generators to keep radio station operating to notify public during emergencies.				X		Waiting for funding	X	X	
Walker	City of Huntsville		4	Establish multi-jurisdictional Emergency Operations Center in Walker County.				X		Waiting for funding			
Walker	City of Huntsville		5	Purchase automated high water indicator beacons for Bearkat Blvd and Town Creek to notify public that flash floods are imminent.				X		Waiting for funding			X
Walker	City of Huntsville		6	Purchase bucket lift truck to be used to reduce hazardous fuels and place public notice signs related to hazards.				X		Waiting for funding			
Walker	City of Huntsville		7	Develop large-scale immunization plan in the event of a bio-terrorist attack.				X		Waiting for funding			
Walker	City of Huntsville		8	Install early warning system with voice messaging capabilities to alert citizens of imminent natural hazards.				X		Waiting for funding			
Walker	City of Huntsville		9	Conduct structural engineering study on all public buildings.				X		Waiting for funding			
Walker	City of Huntsville		10	Purchase and install additional fire hydrants to assist in protecting lives and property in Tanglewood.				X		Waiting for funding	X	X	
Walker	City of Huntsville		11	Purchase 7 emergency generators for water well sites for potable water.				X		Waiting for funding			
Walker	City of Huntsville		12	Purchase real-time weather tracking computer to identify and inform citizens of optimal days for hazardous fuels removal.				X		Waiting for funding			
Walker	City of Huntsville		13	Install communication tower and necessary hardware and software for fire stations 1 and 4 to maintain continuity of critical services.				X		Waiting for funding			
Walker	City of Huntsville		14	Enhance McDonald Creek drainage.				X		Waiting for funding	X	X	X
Walker	City of Huntsville		15	Conduct hazardous fuel reduction along Town Creek.				X		Waiting for funding	X	X	X
Walker	City of Huntsville		16	Purchase HAZMAT equipment.				X		Waiting for funding			
Walker	City of Huntsville		17	Conduct HAZMAT training.				X		Waiting for funding			
Walker	City of Huntsville		18	Create defensible space around residences located in Elkins Lake subdivision.				X		Waiting for funding	X	X	
Walker	City of New Waverly	1		Participating in CRS workshop hosted by H-GAC.									X
Walker	City of New Waverly	2		Revise and implement local floodplain regulations, to include a public information campaign on regulatory awareness.									X

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County	Jurisdiction	2011 Mitigation Action No	2006 Mitigation Action No	Project Description	2006 Mitigation Action Status						Reduce hazard impacts on new buildings and infrastructure	Reduce hazard impacts on existing buildings and infrastructure	NFIP Compli- ance
					Complete	In Progress	No Longer Pursuing	Carry On	Carry on with modification	Reason Not Complete			
Walker	City of New Waverly	3		Floodplain study for watersheds within and affecting the City's municipal areas. Study to include generation of base flood elevation data acceptable by FEMA for map revision and identification of mitigation activities to improve water ways flood carrying capacities. Study to include approximately 4 miles of floodway, flood hazard area. Project may be completed in phases. Public information and awareness will be a component.									X
Walker	City of New Waverly		1	Install early warning system with voice messaging capabilities to alert citizens of imminent natural hazards.				X		Waiting for funding			
Walker	City of New Waverly		2	Create defensible space per Walker County County-Wide Wildland Protection Plan in Wildwood Shores Subdivision, Sam Houston Estates and Little Road Loop areas.				X		Waiting for funding	X	X	
Walker	City of Riverside	1		Revise and implement local floodplain regulations, to include a public information campaign on regulatory awareness.							X	X	X
Walker	City of Riverside	2		Participate in CRS workshop hosted by H-GAC.									X
Walker	City of Riverside		1	Install early warning system with voice messaging capabilities to alert citizens of imminent natural hazards.				X		Waiting for funding			
Walker	City of Riverside		2	Create defensible space per Walker County County-Wide Wildland Protection Plan in Acorn Hill subdivision.				X		Waiting for funding	X	X	
Walker	Walker County	1		Install permanently mounted 60 KW generator on a concrete pad at KSAM Radio Station to provide continuous broadcast services to citizens of the County.									
Walker	Walker County	2		Install permanently mounted 600 KW generator on a concrete pad to ensure continuity of critical services at Walker County Courthouse.								X	
Walker	Walker County	3		Install permanently mounted 100 KW generator on a concrete pad at offices of Courthouse Annex Building #3 to provide continuous critical services to County.								X	
Walker	Walker County	4		Install permanently mounted 50 KW generator, three (3) phase, on a concrete pad at the offices of the Walker County District Attorney's Office to provide continuous Critical services to the County.								X	
Walker	Walker County	5		Install Outdoor Early Warning System for the Cities of New Waverly and Riverside to provide citizens early warning of an impending disaster, or an event that would affect the life and/or property of the citizens.									
Walker	Walker County	6		Structural retrofitting - harden facility at the Walker County Criminal Justice Center.								X	
Walker	Walker County	7		Create defensible space per Walker County County-Wide Wildland Protection Plan around buildings in Elkins Lake, Lost Meadows, Smith Hill/Gospel Hill Community, Forgotten Forest, Sunset Lake, and Club Lake Watson Lake Subdivision.							X	X	
Walker	Walker County	8		Mobile hospital.									
Walker	Walker County	9		Mobile command post.									
Walker	Walker County	10		Obtain contingency fuel source to refuel generators and equipment to maintain continuity of government, emergency response and critical services.									
Walker	Walker County	11		Multi-purpose high water rescue/dive team/patrol boat.									
Walker	Walker County	12		Finish fiber optic communications project.									
Walker	Walker County	13		Implement flood/weather warning systems (5).									
Walker	Walker County	14		Construct an animal shelter that will house animals of all kinds and size for use during events where sheltering will be needed.									
Walker	Walker County	15		Construct two (2) new 7,000 square foot self sufficient, self contained storm shelters as we are a State Storm Shelter Hub.									
Walker	Walker County	16		Purchase automatic high water (flood) indicators to notify public that flash floods are imminent.							X	X	X
Walker	Walker County	17		Construct safe room with generator at KSAM radio station.							X		
Walker	Walker County		1	Acquire 57 repetitive flood loss properties and properties prone to flooding in the Deep River Plantation Subdivision.				X		Waiting for funding			X
Walker	Walker County		2	Establish multi-jurisdictional Emergency Operations Center serving Walker County including cities of Huntsville, New Waverly and Riverside.				X		Waiting for funding			
Walker	Walker County		3	Purchase real-time weather tracking computer to identify and inform citizens of optimal days for hazardous fuels removal.				X		Waiting for funding			
Walker	Walker County		4	Obtain topographical maps and aerial photography for Walker County to identify flood hazards and wildfire hazard areas.				X		Waiting for funding			X
Walker	Walker County		5	Elevate Hostetter and Gourd Creek roadways to prevent flooding on roadway.				X		Waiting for funding	X	X	X
Walker	Walker County		6	Increase culvert size in Southwood Forest Subdivision.				X		Waiting for funding	X	X	X
Waller	City of Brookshire	1		Conduct wildfire outreach and education campaign by distributing information at public buildings, town hall meetings, and other speaking engagements.							X	X	
Waller	City of Brookshire	2		Conduct flood outreach and education campaign by distributing information at public buildings, townhall meetings, and other speaking engagements.							X	X	X
Waller	City of Brookshire		1	Prepare a local emergency evacuation plan in coordination with TxDOT.	X					Completed			
Waller	City of Brookshire		2	Post signs in high profile areas when burn ban is in effect.				X		On-going			
Waller	City of Brookshire		3	Complete and maintain FEMA elevation certificates for all new/improved buildings in floodplain.				X		Funding	X		X
Waller	City of Brookshire		4	Complete a stormwater drainage study/plan for known problem areas.				X		Funding	X	X	X
Waller	City of Brookshire		5	Revise and update Flood Insurance Rate Maps.				X		Funding	X		X
Waller	City of Hempstead	1		Conduct wildfire outreach and education campaign by distributing information at public buildings, town hall meetings, and other speaking engagements.							X	X	
Waller	City of Hempstead	2		Conduct flood outreach and education campaign by distributing information at public buildings, townhall meetings, and other speaking engagements.							X	X	X
Waller	City of Hempstead		1	Prepare a local emergency evacuation plan in coordination with TxDOT.	X					Completed			
Waller	City of Hempstead		2	Post signs in high profile areas when burn ban is in effect.				X		Funding			

Appendix A
Table A-1
Locally-Specific Mitigation Actions

County	Jurisdiction	2011 Mitigation Action No	2006 Mitigation Action No	Project Description	2006 Mitigation Action Status						Reduce hazard impacts on new buildings and infrastructure	Reduce hazard impacts on existing buildings and infrastructure	NFIP Compli- ance
					Complete	In Progress	No Longer Pursuing	Carry On	Carry on with modification	Reason Not Complete			
Waller	City of Hempstead		3	Complete and maintain FEMA elevation certificates for all new/improved buildings in floodplain.				X		Funding	X		X
Waller	City of Hempstead		4	Complete a stormwater drainage study/plan for known problem areas.				X		Funding	X	X	X
Waller	City of Hempstead		5	Revise and update Flood Insurance Rate Maps.				X		Funding	X		X
Waller	City of Pattison	1		Conduct wildfire outreach and education campaign by distributing information at public buildings, town hall meetings, and other speaking engagements.							X	X	
Waller	City of Pattison	2		Conduct flood outreach and education compaign by distributing information at public buildings, townhall meetings, and other speaking engagements.							X	X	X
Waller	City of Pattison		1	Prepare a local emergency evacuation plan in coordination with TxDOT.	X					Completed			
Waller	City of Pattison		2	Post signs in high profile areas when burn ban is in effect.				X		On-going			
Waller	City of Pattison		3	Complete and maintain FEMA elevation certificates for all new/improved buildings in floodplain.				X		Funding	X		X
Waller	City of Pattison		4	Complete a stormwater drainage study/plan for known problem areas.				X		Funding	X	X	X
Waller	City of Pattison		5	Revise and update Flood Insurance Rate Maps.				X		Funding			X
Waller	City of Prairie View	1		Construct shelter/safe room at emergency operations center.							X		
Waller	City of Prairie View		1	Prepare a local emergency evacuation plan in coordination with TxDOT.	X					Completed			
Waller	City of Prairie View		2	Post signs in high profile areas when burn ban is in effect. Signs will provide the public with ways to comply with the burn ban. Signs will be placed in public buildings and be made available to commercial businesses to place in storefront windows. The City will also notify local residents via its telephone message notification system. This will be a pre-recorded voice mail message notifying the public of the burn ban with ways to comply with the ban and where to obtain additional information.				X		On-going		X	
Waller	City of Prairie View		3	Complete and maintain FEMA elevation certificates for all new/improved buildings in floodplain.				X		Funding	X		X
Waller	City of Prairie View		4	Complete a stormwater drainage study/plan for known problem areas.				X		Funding	X	X	X
Waller	City of Prairie View		5	Revise and update Flood Insurance Rate Maps.				X		Funding	X		X
Waller	City of Waller	1		Conduct wildfire outreach and education campaign by distributing information at public buildings, town hall meetings, and other speaking engagements.							X	X	
Waller	City of Waller	2		Conduct flood outreach and education compaign by distributing information at public buildings, townhall meetings, and other speaking engagements.							X	X	X
Waller	City of Waller		1	Prepare a local emergency evacuation plan in coordination with TxDOT.	X					Completed			
Waller	City of Waller		2	Post signs in high profile areas when burn ban is in effect.				X		On-going			
Waller	City of Waller		3	Complete and maintain FEMA elevation certificates for all new/improved buildings in floodplain.				X		Funding	X		X
Waller	City of Waller		4	Provide advanced training for local building inspectors.				X		Funding	X	X	X
Waller	City of Waller		5	Revise and update Flood Insurance Rate Maps.				X		Funding	X		X
Waller	Town of Pine Island	1		Conduct wildfire outreach and education campaign by distributing information at public buildings, town hall meetings, and other speaking engagements.							X	X	
Waller	Town of Pine Island	2		Conduct flood outreach and education compaign by distributing information at public buildings, townhall meetings, and other speaking engagements.							X	X	X
Waller	Town of Pine Island		1	Prepare a local emergency evacuation plan in coordination with TxDOT.	X					Completed			
Waller	Town of Pine Island		2	Post signs in high profile areas when burn ban is in effect.				X		On-going			
Waller	Town of Pine Island		3	Complete and maintain FEMA elevation certificates for all new/improved buildings in floodplain.				X		Funding	X		X
Waller	Town of Pine Island		4	Complete a stormwater drainage study/plan for known problem areas.				X		Funding	X	X	X
Waller	Town of Pine Island		5	Revise and update Flood Insurance Rate Maps.				X		Funding	X		X
Waller	Waller County	1		Implement water smart awareness/education program.							X	X	
Waller	Waller County	2		Purchase emergency generators for groundwater wells and drainage pumps in City of Waller.							X	X	X
Waller	Waller County	3		Implement Ready, Set, Go program in wildfire urban interface areas and increase education with Emergency Service Districts to promote better public wildfire awareness.							X	X	
Waller	Waller County	4		Coordinate with local fire departments to assist in acquiring grants for specialized portable wildfire fighting equipment and portable storage tankage.							X	X	
Waller	Waller County	5		Construct safe room for EOC with emergency generator to maintain services at critical facility.							X	X	
Waller	Waller County	6		Conduct flood outreach and education compaign by distributing information at public buildings, townhall meetings, and other speaking engagements.							X	X	X
Waller	Waller County		1	Prepare a local emergency evacuation plan in coordination with TxDOT.	X					Completed			
Waller	Waller County		2	Post signs in high profile areas when burn ban is in effect.				X		On-going			
Waller	Waller County		3	Complete and maintain FEMA elevation certificates for all new/improved buildings in floodplain.				X		On-going	X		X
Waller	Waller County		4	Establish watershed-based planning initiatives to address the flood hazard with neighboring jurisdictions.				X		Funding			X
Waller	Waller County		5	Revise and update Flood Insurance Rate Maps.	X					Completed			X

H-GAC

Name of Jurisdiction: H-GAC	Project Description: In the next HMP Update, use the 2010 Census data and most recent release of HAZUS that incorporates that data.	
2011 Mitigation Action No.: 1		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Prevention		
Hazard(s) Addressed: Coastal Erosion, Dam/Levee Failure, Drought, Energy Pipeline Failure, Excessive Heat, Expansive Soils, Flood, Hail, Hurricanes and Tropical Storms, Severe, Thunderstorms, Tornadoes, Toxic Release/HAZMAT, Wildfire, Winter Storms		
Priority: High		
Estimated Cost:		
Potential Funding Sources: HMGP		
Lead Agency/Department Responsible: Community and Environmental Planning		
Implementation Schedule: Within 5 years		
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: H-GAC	Project Description: Conduct feasibility study to determine policy changes needed to implement greywater use.	
2011 Mitigation Action No.: 2		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Prevention, Natural Resource Protection		
Hazard(s) Addressed: Drought, Wildfire		
Priority: High		
Estimated Cost: \$300,000		
Potential Funding Sources: FEMA HMGP, Department of Energy, Forest Service		
Lead Agency/Department Responsible: Community and Environmental Planning		
Implementation Schedule: Upon funding		
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

H-GAC

Name of Jurisdiction: H-GAC	Project Description: Confirm and improve accuracy of locations of dams and levees identified in the National Inventory of Dams.	
2011 Mitigation Action No.: 3		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Prevention		
Hazard(s) Addressed: Dam/Levee Failure		
Priority: High		
Estimated Cost:		
Potential Funding Sources: HMGP, PDM		
Lead Agency/Department Responsible: Community and Environmental Planning		
Implementation Schedule: Upon funding		
Reduce effects of hazards on new buildings and infrastructure?: Yes		Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: H-GAC	Project Description: Conduct wildfire outreach and education workshop for local governments. Workshop will include information on how to create defensible space, reduce hazardous fuels and structural protection through ignition-resistant construction activities.	
2011 Mitigation Action No.: 4		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Public Information and Awareness		
Hazard(s) Addressed: Wildfire, Drought		
Priority: High		
Estimated Cost:		
Potential Funding Sources: PDM, HMGP, local funding		
Lead Agency/Department Responsible: Community and Environmental Planning		
Implementation Schedule: Upon funding		
Reduce effects of hazards on new buildings and infrastructure?: Yes		Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

H-GAC

Name of Jurisdiction: H-GAC	Project Description: Conduct 2016 update of Regional Hazard Mitigation Plan.	
2011 Mitigation Action No.: 5		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Prevention		
Hazard(s) Addressed: Hurricane and Tropical Storms, Flood, Tornadoes, Severe Thunderstorms, Drought, Wildfire, Coastal Erosion, Dam/Levee Failure, Hail, Excessive Heat, Winter Storms		
Priority: High		
Estimated Cost: 200,000		
Potential Funding Sources: PDM, local match		
Lead Agency/Department Responsible: Community and Environmental Planning		
Implementation Schedule: Upon funding		
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

Name of Jurisdiction: H-GAC	Project Description: Conduct dam safety workshop for private and public owners of dams and levees.	
2011 Mitigation Action No.: 6		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Public Information and Awareness		
Hazard(s) Addressed: Dam/Levee Failure		
Priority: Medium		
Estimated Cost: Unknown		
Potential Funding Sources: PDM, HMGP, local funds		
Lead Agency/Department Responsible: Community and Environmental Planning		
Implementation Schedule: 2013		
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

H-GAC

Name of Jurisdiction: H-GAC	Project Description: For next hazard mitigation plan update, provide improved information on wildfire extent, including intensity of flames and type of fire (grassland, canopy).	
2011 Mitigation Action No.: 7		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Prevention		
Hazard(s) Addressed: Wildfire		
Priority: High		
Estimated Cost: Unknown		
Potential Funding Sources: PDM, HMGP, local funds		
Lead Agency/Department Responsible: Community and Environmental Planning		
Implementation Schedule: Upon funding		
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: H-GAC	Project Description: For next hazard mitigation plan update, provide improved information on flooding extent, including depth of flood.	
2011 Mitigation Action No.: 8		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Prevention		
Hazard(s) Addressed: Flood		
Priority: High		
Estimated Cost: Unknown		
Potential Funding Sources: PDM, HMGP, local funds		
Lead Agency/Department Responsible: Community and Environmental Planning		
Implementation Schedule: Upon funding		
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

Appendix A

H-GAC

Name of Jurisdiction: H-GAC	Project Description: Conduct workshop for local governments for aboveground and subsurface construction over expansive soils.	
2011 Mitigation Action No.: 9		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Public Information and Awareness		
Hazard(s) Addressed: Expansive Soils		
Priority: Medium		
Estimated Cost: Unknown		
Potential Funding Sources: PDM, HMGP, local funds		
Lead Agency/Department Responsible: Community and Environmental Planning		
Implementation Schedule: 2014		
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: H-GAC	Project Description: Develop brochure for homeowners describing strategies for adapting to expansive soils to minimize or eliminate damage to slab foundations.	
2011 Mitigation Action No.: 10		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Public Information and Awareness		
Hazard(s) Addressed: Expansive Soils		
Priority: Medium		
Estimated Cost: Unknown		
Potential Funding Sources: PDM, HMGP, local funds		
Lead Agency/Department Responsible: Community and Environmental Planning		
Implementation Schedule: 2014		
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Appendix A

H-GAC

Name of Jurisdiction: H-GAC	Project Description: Create GIS map and database of petrochemical pipelines in greater Houston area, including location, size, ownership, commodity and affected populations and property in event of unplanned discharge or rupture. Map will be created and maintained by H-GAC.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 1	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification: Yes	
Reason not complete (2006 actions): Difficult to obtain data	
Category: Prevention	
Hazard(s) Addressed: Energy Pipeline Failure	
Priority: High	
Estimated Cost: 143217	
Potential Funding Sources: Combination of grant funds and local contributions	
Lead Agency/Department Responsible: Community and Environmental Planning	
Implementation Schedule: End of 2013	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: H-GAC	Project Description: Conduct FEMA debris monitoring workshop/training.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 2	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): On-going. Conduct annual storm debris workshop for local governments	
Category: Public Information and Awareness	
Hazard(s) Addressed: Hurricane and Tropical Storms, Flood, Tornadoes	
Priority: High	
Estimated Cost: 10000	
Potential Funding Sources: Public Assistance(following federally declared disaster), PDM Program, FEMA- All Hazards Emergency Operational Planning, FEMA- Hurricane Local Grant Program, FEMA- Emergency Management Performance Grants	
Lead Agency/Department Responsible: Community and Environmental Planning	
Implementation Schedule: 6 months from funding date	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

H-GAC

Name of Jurisdiction: H-GAC	Project Description: Conduct public outreach to educate local governments on disaster-resistant building methods.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 3	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification: Yes	
Reason not complete (2006 actions): Modified in 2011 to reflect local governments	
Category: Public Information and Awareness	
Hazard(s) Addressed: Hurricane and Tropical Storms, Flood, Tornadoes	
Priority: High	
Estimated Cost: 10,000	
Potential Funding Sources: PDM Program, FEMA- All Hazards Emergency Operational Planning, FEMA- Emergency Management Performance Grants, FEMA- Hurricane Local Grant Program	
Lead Agency/Department Responsible: Community and Environmental Planning	
Implementation Schedule: 6 months from funding date	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: H-GAC	Project Description: Conduct information workshop on the Community Rating System (CRS). Target audience is local government officials responsible for carrying out flood mitigation projects.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 4	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): Lack of funding limits opportunities to co-hosting other workshops with TWDB and partners.	
Category: Public Information and Awareness	
Hazard(s) Addressed: Flood	
Priority: High	
Estimated Cost: 10,000	
Potential Funding Sources: HMGP, PDM Program, National flood Insurance Program, FEMA- Hurricane Local Grant Program, TWDB-Research and Planning Fund (Flood Protection Planning Grants)	
Lead Agency/Department Responsible: Community and Environmental Planning	
Implementation Schedule: End of 2013	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

H-GAC

Name of Jurisdiction: H-GAC	Project Description: Conduct workshops to train communities how to apply for a Pre-Disaster Mitigation (PDM) grant.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 5	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): Lack of funding	
Category: Public Information and Awareness	
Hazard(s) Addressed: Hurricane and Tropical Storms, Flood, Tornadoes	
Priority: High	
Estimated Cost: 10,000	
Potential Funding Sources: PDM Program, FEMA All Hazards Emergency Operational Planning, FEMA Emergency Management Performance Grants, FEMA-Hazard Mitigation Technical Assistance Program (post-disaster)	
Lead Agency/Department Responsible: Community and Environmental Planning	
Implementation Schedule: 6 months from funding date	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: H-GAC	Project Description: Develop Vegetation Management Plans for counties and cities impacted by 2005 hurricanes - emphasis on locations within Brazoria, Chambers, Liberty, Montgomery and Walker counties.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 6	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification: Yes	
Reason not complete (2006 actions): Lack of funding	
Category: Prevention	
Hazard(s) Addressed: Hurricane and Tropical Storms, Flood, Tornadoes	
Priority: High	
Estimated Cost: 350,000	
Potential Funding Sources: Public Assistance(following federally declared disaster), PDM Program, HMGP, TX Forest Service, local dollars	
Lead Agency/Department Responsible: Community and Environmental Planning	
Implementation Schedule: Complete with two years of funding	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

H-GAC

Name of Jurisdiction: H-GAC	Project Description: Conduct training on developing and implementing Vegetation Management Plans for counties and cities impacted by 2005 hurricanes - emphasis on locations within Brazoria, Chambers, Liberty, Montgomery and Walker counties.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 7	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification: Yes	
Reason not complete (2006 actions): Lack of funding	
Category: Public Information and Awareness	
Hazard(s) Addressed: Hurricane and Tropical Storms, Flood, Tornadoes	
Priority: High	
Estimated Cost: 75,000	
Potential Funding Sources: Public Assistance(following federally declared disaster), PDM Program, HMGP, TX Forest Service, local dollars	
Lead Agency/Department Responsible: Community and Environmental Planning	
Implementation Schedule: Complete within six month of funding	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

Austin County

Name of Jurisdiction: Austin County	Project Description: Create wildfire breaks and defensible corridors and remove hazardous fuels to protect historic areas and roadways.	
2011 Mitigation Action No.: 1		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Property Protection		
Hazard(s) Addressed: Drought, Wildfire		
Priority: High		
Estimated Cost: Unknown		
Potential Funding Sources: PDM, HMGP		
Lead Agency/Department Responsible: Road and Bridge, Public Works		
Implementation Schedule: On-going		
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: Austin County	Project Description: Update commodity flow study for increased rail and truck traffic.	
2011 Mitigation Action No.: 2		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Emergency Services		
Hazard(s) Addressed: Toxic Release/HAZMAT		
Priority: High		
Estimated Cost:		
Potential Funding Sources: PDM, HMGP, FEMA Assistance to Firefighter's Grant, FEMA All Hazards Emergency Operational Planning, Dept of Interior USGS Mapping Standards Support		
Lead Agency/Department Responsible: Austin County LEPC		
Implementation Schedule: As soon as possible		
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Austin County

Name of Jurisdiction: Austin County	Project Description: Conduct wildfire outreach and education campaign.
2011 Mitigation Action No.: 3	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Public Information and Awareness	
Hazard(s) Addressed: Wildfire	
Priority: High	
Estimated Cost:	
Potential Funding Sources: PDM, HMGP, Texas Forest Service	
Lead Agency/Department Responsible: Austin County Commissioners Court	
Implementation Schedule: 2012	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: Austin County	Project Description: Expand evacuation and alert system to accommodate population growth.
2011 Mitigation Action No.: 4	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Public Information and Awareness	
Hazard(s) Addressed: Hurricane and Tropical Storms, Tornadoes, Severe Thunderstorms, Wildfire, Toxic Release/HAZMAT, Energy Pipeline Failure	
Priority: High	
Estimated Cost:	
Potential Funding Sources: Austin County Commissioners Court, HMGP, Pre-Disaster Mitigation Grant Program, FEMA-Hurricane Local Grant Program, FEMA - Emergency Management Performance Grant, Flood Mitigation Assistance Program, HMGP, USDA- Environmental Quality Incentives Program, FEMA-Emergency Performance Grants, FEMA All Hazards Operational Planning, FEMA Hazardous Materials Assistance Program, FEMA Fire Management Assistance Grants	
Lead Agency/Department Responsible: Austin County LEPC/Emergency Management	
Implementation Schedule: 12 months	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Austin County

Name of Jurisdiction: Austin County	Project Description: Improve subdivision regulations in Extra Territorial Jurisdiction (ETJ) to protect mobile homes against wind and tornadoes. Recommendation for mobile homes will ensure protection against straight line winds high velocity winds.
2011 Mitigation Action No.: 5	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Prevention	
Hazard(s) Addressed: Hurricane and Tropical Storms, Tornadoes, Severe Thunderstorms	
Priority: Medium	
Estimated Cost:	
Potential Funding Sources: Local Commitment	
Lead Agency/Department Responsible: Austin County	
Implementation Schedule: 2-3 years	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: Austin County	Project Description: Conduct a commodity flow study in 2003 (GIS Mapping).
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 1	
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions): Completed	
Category: Emergency Services	
Hazard(s) Addressed: Toxic Release/HAZMAT	
Priority: High	
Estimated Cost:	
Potential Funding Sources: FEMA- Assistance to Firefighter's Grant, FEMA- All Hazards Emergency Operational Planning, Dept. of Interior USGS- Mapping Standards Support	
Lead Agency/Department Responsible: Austin County LEPC	
Implementation Schedule: As soon as possible	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Austin County

Name of Jurisdiction: Austin County	Project Description: Partner with TxDOT to construct alternate routes for transporting hazardous materials.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 2	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): Funding	
Category: Structural Project	
Hazard(s) Addressed: Toxic Release/HAZMAT	
Priority: High	
Estimated Cost: \$6,000,000	
Potential Funding Sources: State committed by TX Highway Commission, Dept of Interior, USGS National Digital Orthophoto Mapping, PDM, HMGP	
Lead Agency/Department Responsible: Austin County Commissioners Court, TxDOT	
Implementation Schedule: 2006	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: Austin County	Project Description: Develop evacuation planning and alert system.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 3	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Yes Carry On: Carry On With Modification:	
Reason not complete (2006 actions): Incorporated into 2011 Mitigation Action 4	
Category: Public Information and Awareness	
Hazard(s) Addressed: Toxic Release/HAZMAT	
Priority: High	
Estimated Cost:	
Potential Funding Sources: PDM, FEMA-Hurricane Local Grant Program, FEMA-Emergency Management Performance Grant, Flood Mitigation Assistance Program, HMGP, USDA-Environmental Quality Incentives Program, FEMA-Emergency Performance Grants, FEMA-All Hazards Operational Planning, FEMA-Hazardous Materials Assistance Program, FEMA-Fire Management Assistance Grants, Austin County General Fund	
Lead Agency/Department Responsible: Austin County LEPC/Emergency Management	
Implementation Schedule: 12 months	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Austin County

Name of Jurisdiction: Austin County	Project Description: Increase public awareness regarding pipeline failure.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 4	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): Funding	
Category: Public Information and Awareness	
Hazard(s) Addressed: Toxic Release/HAZMAT	
Priority: High	
Estimated Cost: \$10,000	
Potential Funding Sources: HMGP, Pre- Disaster Mitigation Grant Program, FEMA- Hazardous Materials Assistance Program, FEMA- Emergency Management Performance Grant	
Lead Agency/Department Responsible: Austin County LEPC	
Implementation Schedule: 18 months	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: Austin County	Project Description: Implement hazardous materials exercises.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 5	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): Updated Schedule, Increased Cost	
Category: Emergency Services	
Hazard(s) Addressed: Toxic Release/HAZMAT	
Priority: High	
Estimated Cost: \$10,000	
Potential Funding Sources: Dept. of Justice- State Homeland Security Program, Public Private Partnership (gas company), FEMA Emergency Management Performance Grant, FEMA- Hazardous Materials Assistance Program	
Lead Agency/Department Responsible: Austin County Emergency Management	
Implementation Schedule: 24 months	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Austin County

Name of Jurisdiction: Austin County	Project Description: Post signs in high profile area(s) when burn ban is in place.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 6	
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions): Completed	
Category: Public Information and Awareness	
Hazard(s) Addressed: Drought, Wildfire	
Priority: High	
Estimated Cost: \$2,500	
Potential Funding Sources: Austin County, FEMA- Fire Management Assistance Grants, HMGP, PDM Program, USDA National Resources Conservation Service- Environmental Quality Incentives Program	
Lead Agency/Department Responsible: Austin County Commissioners, Firefighters Association	
Implementation Schedule: as soon as possible	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: Austin County	Project Description: Increase public awareness of tornadoes and high winds.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 7	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): On-going	
Category: Public Information and Awareness	
Hazard(s) Addressed: Tornadoes, Severe Thunderstorms, Hurricanes and Tropical Storms	
Priority: High	
Estimated Cost: \$10,000	
Potential Funding Sources: HMGP, Public-Private Partnership, FEMA- Hurricane Local Government Grant Program, PDM Program, Materials available free of charge from FEMA and RED Cross	
Lead Agency/Department Responsible: Austin County Emergency Management	
Implementation Schedule: 12 months	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Austin County

Name of Jurisdiction: Austin County	Project Description: Increase public awareness and education of flood hazards.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 8	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): On-going	
Category: Public Information and Awareness	
Hazard(s) Addressed: Flood	
Priority: High	
Estimated Cost: \$10,000	
Potential Funding Sources: Austin County General Fund, HMGP, Flood Mitigation Assistance Program, Red Cross, Hurricane Local Government Grant Program, PDM Program, Materials available free of charge from FEMA and Red Cross	
Lead Agency/Department Responsible: Austin County Environmental Protection	
Implementation Schedule: 12 months	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

Name of Jurisdiction: Austin County	Project Description: Acquire GIS mapping for floodplain study and develop Microsoft PowerPoint presentations.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 9	
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions): Completed	
Category: Public Information and Awareness, Prevention	
Hazard(s) Addressed: Flood	
Priority: High	
Estimated Cost:	
Potential Funding Sources: FEMA- Map Modernization Program, FEMA-Flood Hazard Mapping Program, FEMA- Emergency Management Performance Grant, FEMA- Flood Recovery Mapping, HMGP, PDM Program	
Lead Agency/Department Responsible: Austin County Environmental Protection Dept.	
Implementation Schedule: 24 months	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

Austin County

Name of Jurisdiction: Austin County	Project Description: Establish drainage district for Allen's Creek to enforce floodplain regulations.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 10	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): Funding, voter action	
Category: Prevention	
Hazard(s) Addressed: Flood	
Priority: High	
Estimated Cost: Depends on voter approval	
Potential Funding Sources: Local Commitment	
Lead Agency/Department Responsible: Austin County Commissioners Court	
Implementation Schedule: Depends on voter approval	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

Name of Jurisdiction: Austin County	Project Description: Add culverts on Allen's Creek outside of City of Sealy's city limits, including headwalls, channel deepening and modifications to rail structures. Construct new channels and create detention areas to increase storage during periods of heavy rainfall.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 11	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification: Yes	
Reason not complete (2006 actions): Funding	
Category: Structural Project	
Hazard(s) Addressed: Flood	
Priority: High	
Estimated Cost:	
Potential Funding Sources: USACE-Small Flood Control Projects, USDA NRCS-Emergency Watershed Protection, TX Water Development-Clean Water State Revolving Fund, TWDB (Development Fund II) TX Water Development Fund, USDA NRCS Watershed Protection and Flood Prevention Program, EPA NPS Grant Program	
Lead Agency/Department Responsible: Austin County Commissioners Court	
Implementation Schedule: 36 months	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

Austin County

Name of Jurisdiction: Austin County	Project Description: Develop countywide order requiring the construction of a tornado/severe weather shelter in all mobile home parks.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 12	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): Updated Schedule, Increased Cost	
Category: Prevention	
Hazard(s) Addressed: Tornadoes	
Priority: High	
Estimated Cost:	
Potential Funding Sources: HMGP, PDM, US Small Business Administration, Pre-Disaster Mitigation Loans	
Lead Agency/Department Responsible: Austin County Commissioners Court	
Implementation Schedule: 2004	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: Austin County	Project Description: Conduct public information and awareness campaign to promote safe room construction in schools, churches, day care centers and all critical public facilities.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 13	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification: Yes	
Reason not complete (2006 actions): Funding	
Category: Public Information and Awareness	
Hazard(s) Addressed: Tornadoes	
Priority: High	
Estimated Cost:	
Potential Funding Sources: HMGP, PDM, US Small Business Administration, Pre-Disaster Mitigation Loans	
Lead Agency/Department Responsible: Austin County Commisioners Court	
Implementation Schedule: 2004	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Austin County

Name of Jurisdiction: Austin County	Project Description: Continue the routine cleaning of channels and ditches.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 14	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): On-going	
Category: Property Protection	
Hazard(s) Addressed: Flood	
Priority: High	
Estimated Cost:	
Potential Funding Sources: Austin County budget, USDA NRCS- Watershed Protection and Flood Prevention Program, USACE- Clearing and Snagging Projects	
Lead Agency/Department Responsible: Austin County Commissioners Court	
Implementation Schedule: 2005	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

Name of Jurisdiction: Austin County	Project Description: Purchase additional road closed and flood hazard signs.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 15	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): Funding	
Category: Public Information and Awareness	
Hazard(s) Addressed: Flood	
Priority: Medium	
Estimated Cost:	
Potential Funding Sources: TxDOT, Flood Mitigation Assistance Program, HMGP	
Lead Agency/Department Responsible: Austin County Commissioners Court	
Implementation Schedule: 2004	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Austin County

Name of Jurisdiction: Austin County	Project Description: Create a defensible space around county buildings by removing hazardous fuels.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 16	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification: Yes	
Reason not complete (2006 actions): On-going	
Category: Property Protection	
Hazard(s) Addressed: Tornadoes, Hurricanes and Tropical Storms, Wildfire	
Priority: Medium	
Estimated Cost:	
Potential Funding Sources: County Budget, HMGP, PDM	
Lead Agency/Department Responsible: Austin County Commissioners Court	
Implementation Schedule: On-going	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: Austin County	Project Description: Develop regulatory action requiring development permit for flood damaged property.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 17	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): On-going	
Category: Prevention	
Hazard(s) Addressed: Flood	
Priority: Medium	
Estimated Cost:	
Potential Funding Sources: Local Commitment	
Lead Agency/Department Responsible: Austin County Commissioners Court	
Implementation Schedule: In place	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

City of Bellville

Name of Jurisdiction: City of Bellville	Project Description: Improve drainage by enlarging culverts at South Holland and East O'Bryant.	
2011 Mitigation Action No.: 1		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Property Protection		
Hazard(s) Addressed: Flood		
Priority: High		
Estimated Cost: \$5,000		
Potential Funding Sources: General fund, HMGP, PDM		
Lead Agency/Department Responsible: Public Works		
Implementation Schedule: On-going		
Reduce effects of hazards on new buildings and infrastructure?: Yes		Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

Name of Jurisdiction: City of Bellville	Project Description: Enlarge ditches on S. Mechanic from First St. to Hacienda St.	
2011 Mitigation Action No.: 2		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Property Protection		
Hazard(s) Addressed: Flood		
Priority: High		
Estimated Cost: \$7,000		
Potential Funding Sources: Generally fund		
Lead Agency/Department Responsible: Public Works		
Implementation Schedule: On-going/quarterly		
Reduce effects of hazards on new buildings and infrastructure?: Yes		Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

City of Bellville

Name of Jurisdiction: City of Bellville	Project Description: Conduct wildfire outreach and education campaign.
2011 Mitigation Action No.: 3	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Public Information and Awareness	
Hazard(s) Addressed: Wildfire	
Priority: High	
Estimated Cost: Unknown	
Potential Funding Sources: PDM, HMGP, Texas Forest Service	
Lead Agency/Department Responsible: City of Bellville Police Department	
Implementation Schedule: 12 months	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: City of Bellville	Project Description: Expand evacuation and alert system to accommodate population growth.
2011 Mitigation Action No.: 4	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Public Information and Awareness	
Hazard(s) Addressed: Hurricane and Tropical Storms, Tornadoes, Severe Thunderstorms, Wildfire, Toxic Release/HAZMAT, Energy Pipeline Failure,	
Priority: High	
Estimated Cost: Unknown	
Potential Funding Sources: General fund of City of Bellville and Austin County, USDA Rural Utilities Service-Weather Radio Grant program, PDM, FEMA-Hazardous Materials Assistance Program, FEMA-Emergency management Performance Grant, HMGP, FEMA-All Hazards Operational Planning	
Lead Agency/Department Responsible: City of Bellville Police Department	
Implementation Schedule: 3 years	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

City of Bellville

Name of Jurisdiction: City of Bellville	Project Description: Construct tornado/severe weather shelters in existing mobile home parks.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 1	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): Updated Schedule, Increased Cost	
Category: Structural Project	
Hazard(s) Addressed: Tornadoes, Severe Thunderstorms, Hurricanes and Tropical Storms	
Priority: High	
Estimated Cost: \$65,000	
Potential Funding Sources: HMGP, US Small Business Administration, Pre-Disaster Mitigation Loans, PDM	
Lead Agency/Department Responsible: Emergency Management	
Implementation Schedule: 24 months	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: City of Bellville	Project Description: Develop city ordinance requiring construction of tornado/severe weather shelter in all mobile home parks.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 2	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): Updated Schedule, Increased Cost	
Category: Structural Project, Emergency Services,	
Hazard(s) Addressed: Tornadoes	
Priority: High	
Estimated Cost: \$5,000	
Potential Funding Sources: HMGP, US Small Business Administration, Pre-Disaster Mitigation Loans, PDM	
Lead Agency/Department Responsible: Emergency Management	
Implementation Schedule: 12 months	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

City of Bellville

Name of Jurisdiction: City of Bellville	Project Description: Develop severe weather audible alert system.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 3		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Yes Carry On: Carry On With Modification:		
Reason not complete (2006 actions): Incorporated as 2011 Mitigation Action 4		
Category: Public Information and Awareness, Public Information and Awareness,		
Hazard(s) Addressed: Tornadoes, Severe Thunderstorms, Toxic Release, Energy Pipeline Failure		
Priority: High		
Estimated Cost: \$50,000		
Potential Funding Sources: City and County general funds, USDA Rural Utilities Service-Weather Radio Grant program, PDM, FEMA-Hazardous Materials Assistance Program, FEMA- Emergency management Performance Grant, HMGP, FEMA-All Hazards Operational Planning		
Lead Agency/Department Responsible: Emergency Management		
Implementation Schedule: 12 months		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: City of Bellville	Project Description: Increase public awareness for safe room construction in homes and schools.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 4		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): Updated Schedule, Increased Cost		
Category: Public Information and Awareness		
Hazard(s) Addressed: Tornadoes, Wind		
Priority: High		
Estimated Cost: \$5,000		
Potential Funding Sources: PDM Program, FEMA Emergency Management Performance Grant, HMGP, FEMA-All Hazards Operational Planning, US Small Business Administration, Pre-Disaster Mitigation Loans		
Lead Agency/Department Responsible: City of Bellville Police Department		
Implementation Schedule: 12 months		
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

City of Bellville

Name of Jurisdiction: City of Bellville	Project Description: Construct alternate evacuation route around City of Bellville.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 5		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification: Yes		
Reason not complete (2006 actions): Funding		
Category: Structural Project		
Hazard(s) Addressed: Toxic Release/HAZMAT, Flood, Hurricanes and Tropical Storms, Wildfire		
Priority: High		
Estimated Cost: \$5,000,000		
Potential Funding Sources: FEMA-All Hazards Operational Planning, PDM Program, FEMA-Hazardous Materials Assistance Program, FEMA-Emergency Management Performance Grant, HMGP		
Lead Agency/Department Responsible: City of Bellville, TX Dept of Transportation		
Implementation Schedule: 24 months		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

City of Brazos Country

Name of Jurisdiction: City of Brazos Country	Project Description: Acquire signage for road closures and detours during flood event to inform citizens of flood danger.	
2011 Mitigation Action No.: 1		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Public Information and Awareness		
Hazard(s) Addressed: Flood		
Priority: High		
Estimated Cost:		
Potential Funding Sources: General Fund, HMGP, PDM		
Lead Agency/Department Responsible: City Council		
Implementation Schedule: Future		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

Name of Jurisdiction: City of Brazos Country	Project Description: Conduct wildfire outreach and education program.	
2011 Mitigation Action No.: 2		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Public Information and Awareness		
Hazard(s) Addressed: Wildfire		
Priority: High		
Estimated Cost:		
Potential Funding Sources: PDM, HMGP, Texas Forest Service		
Lead Agency/Department Responsible: City of Brazos Country		
Implementation Schedule: 2012		
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

City of Brazos Country

Name of Jurisdiction: City of Brazos Country	Project Description: Expand evacuation and alert system to accommodate population growth.	
2011 Mitigation Action No.: 3		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Public Information and Awareness		
Hazard(s) Addressed: Hurricane and Tropical Storms, Tornadoes, Severe Thunderstorms, Wildfire, Toxic Release/HAZMAT, Energy Pipeline Failure		
Priority: High		
Estimated Cost:		
Potential Funding Sources: City of Brazos Country and Austin County General Funds, HMGP, PDM, FEMA-Hurricane Local Grant Program, FEMA - Emergency Management Performance Grant, Flood Mitigation Assistance Program, HMGP, USDA- Environmental Quality Incentives Program, FEMA-EmergencyPerformance Grants, FEMA-All Hazards Operational Planning, FEMA-Hazardous Materials Assistance Program, FEMA-Fire Management Assistance Grants		
Lead Agency/Department Responsible: City of Brazos Country		
Implementation Schedule: 12 months		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: City of Brazos Country	Project Description: Improve water system to support wildfire fighting activities.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 1		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification: Yes		
Reason not complete (2006 actions): On-going		
Category: Emergency Services		
Hazard(s) Addressed: Wildfire		
Priority: High		
Estimated Cost: \$20,000		
Potential Funding Sources: Water revenues, FEMA-Fire Mgmt Assistance Grants, FEMA-Emergency Mgmt Performance Grants, FEMA-All Hazards Operational Planning, FEMA-Hazardous Materials Assistance Program		
Lead Agency/Department Responsible: City of Brazos Country		
Implementation Schedule: On-going		
Reduce effects of hazards on new buildings and infrastructure?: Yes		Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

City of Brazos Country

Name of Jurisdiction: City of Brazos Country	Project Description: Adopt and enforce floodplain regulations.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 2		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): On-going		
Category: Prevention		
Hazard(s) Addressed: Flood		
Priority: High		
Estimated Cost:		
Potential Funding Sources: General funds		
Lead Agency/Department Responsible: City of Brazos Country		
Implementation Schedule: 12 months		
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

Name of Jurisdiction: City of Brazos Country	Project Description: Inspect and clear debris from stormwater drainage system.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 3		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): On-going		
Category: Prevention		
Hazard(s) Addressed: Flood		
Priority: High		
Estimated Cost: \$1,000		
Potential Funding Sources: USACE-Clearing and Snagging Projects, General funds, USACE-Small Flood Control Projects, USDA NRCS-Emergency Watershed Protection, TWDB- Clean Water State Revolving Fund, TWDB-Texas Water Development Fund II, USDA NRCS-Watershed Protection and Flood Prevention Program, EPA NPS Grant Program		
Lead Agency/Department Responsible: City of Brazos Country		
Implementation Schedule: 18 months		
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

City of Brazos Country

Name of Jurisdiction: City of Brazos Country	Project Description: Document high water marks following flood events to update floodplain maps.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 4		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): On-going		
Category: Prevention, Public Information and Awareness, Prevention		
Hazard(s) Addressed: Flood		
Priority: High		
Estimated Cost: \$1,000		
Potential Funding Sources: General fund, FEMA Technical Assistance Contract (post-disaster) FEMA- Flood Recovery Mapping, FEMA- Hazard Mitigation Technical Assistance Program (post-disaster)		
Lead Agency/Department Responsible: City staff		
Implementation Schedule: Post disaster		
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

Name of Jurisdiction: City of Brazos Country	Project Description: Purchase emergency alert equipment.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 5		
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions): Completed		
Category: Emergency Services		
Hazard(s) Addressed: All hazards		
Priority: Medium		
Estimated Cost: \$600		
Potential Funding Sources: General fund, USDA Rural Utilities Service-Weather Radio Grant Program, HMGP, PDM, FEMA-Emergency Management Performance Grant		
Lead Agency/Department Responsible: City of Brazos Country		
Implementation Schedule: 18 months		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

City of Industry

Name of Jurisdiction: City of Industry	Project Description: Expand evacuation and alert system to accommodate population growth.	
2011 Mitigation Action No.: 1		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Public Information and Awareness		
Hazard(s) Addressed: Hurricane and Tropical Storms, Flood, Tornadoes, Severe Thunderstorms, Wildfire, Toxic Release/HAZMAT, Energy Pipeline		
Priority: High		
Estimated Cost:		
Potential Funding Sources: City of Industry and Austin County General Fund, HMGP, Pre-Disaster Mitigation Grant Program, FEMA-Hurricane Local Grant Program, FEMA - Emergency Management Performance Grant, Flood Mitigation Assistance Program, HMGP, USDA- Environmental Quality Incentives Program, FEMA-Emergency Performance Grants, FEMA-All Hazards Operational Planning, FEMA-Hazardous Materials Assistance Program, FEMA-Fire Management Assistance Grants		
Lead Agency/Department Responsible: City of Industry		
Implementation Schedule: 12 months		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: City of Industry	Project Description: Conduct wildfire outreach and education campaign.	
2011 Mitigation Action No.: 2		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Public Information and Awareness		
Hazard(s) Addressed: Wildfire		
Priority: High		
Estimated Cost:		
Potential Funding Sources: PDM, HMGP, Texas Forest Service		
Lead Agency/Department Responsible: City of Industry		
Implementation Schedule: 2012		
Reduce effects of hazards on new buildings and infrastructure?: Yes		Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

City of Industry

Name of Jurisdiction: City of Industry	Project Description: Implement public education and evacuation procedures for a hazardous materials incident involving pipeline explosion.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 1		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Yes Carry On: Carry On With Modification:		
Reason not complete (2006 actions): Incorporated as 2011 mitigation action 1		
Category: Public Information and Awareness		
Hazard(s) Addressed: Toxic Release/HAZMAT, Energy Pipeline Failure		
Priority: High		
Estimated Cost: \$20,000		
Potential Funding Sources: PDM, FEMA-Hazardous Materials Assistance Program, FEMA-Emergency Management Performance Grant, HMGP, FEMA-All Hazards Operational Planning, FEMA-Assistance to Fire Fighters Grant, USDA-Environmental Quality Incentives Program		
Lead Agency/Department Responsible: City of Industry		
Implementation Schedule: 12 months		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: City of Industry	Project Description: Equip elementary school system with weather alert system to inform parents and students of impending natural hazards.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 2		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): Updated Schedule, Increased Cost		
Category: Public Information and Awareness		
Hazard(s) Addressed: Tornadoes, Wind		
Priority: High		
Estimated Cost: \$300		
Potential Funding Sources: National Weather Service, USDA Rural Utilities Service-Weather Radio Grant Program, PDM, Emergency Management Performance Grant, HMGP, FEMA-All Hazards Operational Planning, USDA-Environmental Quality Incentives Program		
Lead Agency/Department Responsible: City of Industry		
Implementation Schedule: 24 months		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Town of San Felipe

Name of Jurisdiction: Town of San Felipe	Project Description: Expand evacuation and alert system to accommodate population growth.	
2011 Mitigation Action No.: 1		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Public Information and Awareness		
Hazard(s) Addressed: Hurricane and Tropical Storms, Tornadoes, Severe Thunderstorms, Wildfire, Toxic Release/HAZMAT, Energy Pipeline Failure		
Priority: High		
Estimated Cost:		
Potential Funding Sources: City of San Felipe and Austin County General Funds, HMGP, Pre-Disaster Mitigation Grant Program, FEMA-Hurricane Local Grant Program, FEMA - Emergency Management Performance Grant, Flood Mitigation Assistance Program, HMGP, USDA- Environmental Quality Incentives Program, FEMA-Emergency Performance Grants, FEMA-All Hazards Operational Planning, FEMA-Hazardous Materials Assistance Program, FEMA-Fire Management Assistance Grants		
Lead Agency/Department Responsible: City of San Felipe		
Implementation Schedule: 3 years		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: Town of San Felipe	Project Description: Conduct wildfire outreach and education campaign.	
2011 Mitigation Action No.: 2		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Public Information and Awareness		
Hazard(s) Addressed: Wildfire		
Priority: High		
Estimated Cost:		
Potential Funding Sources: City of San Felipe General Fund, PDM, HMGP, Texas Forest Service		
Lead Agency/Department Responsible: City of San Felipe		
Implementation Schedule: 3 years		
Reduce effects of hazards on new buildings and infrastructure?: Yes		Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Town of San Felipe

Name of Jurisdiction: Town of San Felipe	Project Description: Establish local agreements with neighboring cities and the county to address regional flood hazards.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 1	
Status of 2006 Mitigation Action: Complete: In Progress: Yes No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions): Current/Extending Programs	
Category: Prevention	
Hazard(s) Addressed: Flood	
Priority: High	
Estimated Cost:	
Potential Funding Sources: Local commitment, HMGP, PDM	
Lead Agency/Department Responsible: Brazos River Authority, Austin County, City of San Felipe	
Implementation Schedule: As soon as possible	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

Name of Jurisdiction: Town of San Felipe	Project Description: Develop education and outreach effort to address pipeline hazard.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 2	
Status of 2006 Mitigation Action: Complete: In Progress: Yes No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions): Current/Extending Programs	
Category: Public Information and Awareness	
Hazard(s) Addressed: Toxic Release/HAZMAT	
Priority: High	
Estimated Cost: \$5,000	
Potential Funding Sources: Coordinate actions with Austin County, DOJ State Homeland Security Program, HMGP, Pre- Disaster Mitigation Grant Program, FEMA Hazardous Materials Assistance Program	
Lead Agency/Department Responsible:	
Implementation Schedule: As soon as possible	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Town of San Felipe

Name of Jurisdiction: Town of San Felipe	Project Description: Develop flood hazard education and outreach program.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 3		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): On-going		
Category: Public Information and Awareness		
Hazard(s) Addressed: Flood		
Priority: High		
Estimated Cost: \$5,000		
Potential Funding Sources: Flood Mitigation Assistance Program, HMGP, PDM, Red Cross, FEMA-Hurricane Local Government Grant Program, USDA Environment Quality Incentives Program		
Lead Agency/Department Responsible: Mayor		
Implementation Schedule: As soon as possible		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

Name of Jurisdiction: Town of San Felipe	Project Description: Purchase flood evacuation signage.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 4		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification: Yes		
Reason not complete (2006 actions): Funding		
Category: Public Information and Awareness		
Hazard(s) Addressed: Flood		
Priority: High		
Estimated Cost: \$5,000		
Potential Funding Sources: Flood Mitigation Assistance Program, HMGP, PDM, FEMA-Emergency Management Performance Grants, FEMA-All Hazards Operational Planning, FEMA-Hazardous materials Assistance Program, USDA Environment Quality Incentives Program		
Lead Agency/Department Responsible: Mayor		
Implementation Schedule: As soon as possible		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

City of Sealy

Name of Jurisdiction: City of Sealy	Project Description: Expand evacuation and alert system to accommodate population growth.	
2011 Mitigation Action No.: 1		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Public Information and Awareness		
Hazard(s) Addressed: Hurricane and Tropical Storms, Tornadoes, Severe Thunderstorms, Wildfire, Toxic Release/HAZMAT, Energy Pipeline Failure		
Priority: High		
Estimated Cost: \$10,000		
Potential Funding Sources: FEMA-Hazardous Materials Assistance Program, FEMA-Emergency Management Performance Grant, HMGP, FEMA-All Hazards Operational Planning, FEMA-Assistance to Fire Fighters Grant, USDA Environmental Quality Incentives Program		
Lead Agency/Department Responsible: City of Sealy (coordinate actions with Austin County)		
Implementation Schedule: 1-2 years		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: City of Sealy	Project Description: Conduct wildfire outreach and education campaign.	
2011 Mitigation Action No.: 2		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Public Information and Awareness		
Hazard(s) Addressed: Wildfire		
Priority: High		
Estimated Cost:		
Potential Funding Sources: PDM, HMGP, Texas Forest Service		
Lead Agency/Department Responsible: City of Sealy		
Implementation Schedule: 2012		
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

City of Sealy

Name of Jurisdiction: City of Sealy	Project Description: Update policies and regulations to incorporate hazard mitigation practices.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 1	
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions): Completed	
Category: Prevention	
Hazard(s) Addressed: All hazards	
Priority: High	
Estimated Cost:	
Potential Funding Sources: Local Commitment, HMGP, PDM	
Lead Agency/Department Responsible: City of Sealy, Austin County	
Implementation Schedule: 1-2 years	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: City of Sealy	Project Description: Establish emergency notification system for hazardous materials spills.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 2	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Yes Carry On: Carry On With Modification:	
Reason not complete (2006 actions): Project has been incorporated as 2011 Mitigation Action 1	
Category: Emergency Services	
Hazard(s) Addressed: Toxic Release/HAZMAT	
Priority: High	
Estimated Cost: \$10,000	
Potential Funding Sources: FEMA-Hazardous Materials Assistance Program, FEMA-Emergency Management Performance Grant, HMGP, FEMA-All Hazards Operational Planning, FEMA-Assistance to Fire Fighters Grant, USDA Environmental Quality Incentives Program	
Lead Agency/Department Responsible: City of Sealy (coordinate actions with Austin County)	
Implementation Schedule: 1-2 years	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

City of Sealy

Name of Jurisdiction: City of Sealy	Project Description: Develop severe weather public notification system.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 3		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Yes Carry On: Carry On With Modification:		
Reason not complete (2006 actions): Project has been incorporated as 2011 Mitigation Action 1		
Category: Public Information and Awareness, Emergency Services		
Hazard(s) Addressed: Hurricane and Tropical Storms, Tornadoes, Severe Thunderstorms		
Priority: Medium		
Estimated Cost: \$10,000		
Potential Funding Sources: National Weather Service, Public-Private Partnership, USDA Rural Utilities Service-Weather Radio Grant Program, PDM, FEMA Hazardous Materials Assistance Program, FEMA Emergency Management Performance Grant, HMGP, FEMA-All Hazards Operational Planning, USDA Environmental Quality Incentives Program		
Lead Agency/Department Responsible: Public Works and Emergency Services		
Implementation Schedule: 2 years		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: City of Sealy	Project Description: Implement Allen's Creek drainage improvement projects by expanding detention capacity.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 4		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): Funding		
Category: Structural Project		
Hazard(s) Addressed: Flood		
Priority: Medium		
Estimated Cost:		
Potential Funding Sources: HMGP, PDM, USACE Small Flood Control Projects, USDA NRCS-Emergency Watershed Protection Agency, TWDB-Clean Water State Revolving Fund, TWDB (Development Fund II), USDA NRCS Watershed Protection and Flood Prevention Program, EPA NPS Grant Program		
Lead Agency/Department Responsible: Austin County, City of Sealy		
Implementation Schedule: 10 years		
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

City of Sealy

Name of Jurisdiction: City of Sealy	Project Description: Update and improve subdivision regulations in Extra Territorial Jurisdiction (ETJ).
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 5	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Yes Carry On: Carry On With Modification:	
Reason not complete (2006 actions): Outside of city limits	
Category: Prevention	
Hazard(s) Addressed: Hurricane and Tropical Storms, Tornadoes, Severe Thunderstorms	
Priority: Medium	
Estimated Cost:	
Potential Funding Sources: Local Commitment	
Lead Agency/Department Responsible: Austin County, City of Sealy	
Implementation Schedule: 2-3 years	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: City of Sealy	Project Description: Add culverts on Allen's Creek from US 90 to end of City limits, including headwalls, channel deepening and modifications to rail structures. Construct new channels and create detention areas to increase storage during periods of heavy rainfall.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 6	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification: Yes	
Reason not complete (2006 actions): Funding	
Category: Structural Project	
Hazard(s) Addressed: Flood	
Priority: Medium	
Estimated Cost: \$17,600,000	
Potential Funding Sources: Local and state resources, NRCS-Emergency Watershed Protection Program, HMGP, 406 Public Assistance Program (following federal disaster declaration), USACE Clearing and Snagging Projects, USACE Emergency Rehabilitation of Flood Control Works or Federally Authorized Coastal Protection Works, USACE Small Flood Control Projects, PDM	
Lead Agency/Department Responsible: City of Sealy Public Works	
Implementation Schedule: 3-4 years	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

City of Wallis

Name of Jurisdiction: City of Wallis	Project Description: Expand evacuation and alert system to accommodate population growth.	
2011 Mitigation Action No.: 1		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Public Information and Awareness		
Hazard(s) Addressed: Hurricane and Tropical Storms, Tornadoes, Severe Thunderstorms, Wildfire, Toxic Release/HAZMAT, Energy Pipeline Failure		
Priority: High		
Estimated Cost:		
Potential Funding Sources: City of Wallis and Austin County General Funds, HMGP, Pre-Disaster Mitigation Grant Program, FEMA-Hurricane Local Grant Program, FEMA - Emergency Management Performance Grant, Flood Mitigation Assistance Program, HMGP, USDA- Environmental Quality Incentives Program, FEMA-Emergency Performance Grants, FEMA-All Hazards Operational Planning, FEMA-Hazardous Materials Assistance Program, FEMA-Fire Management Assistance Grants		
Lead Agency/Department Responsible: City of Wallis		
Implementation Schedule: 12 months		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: City of Wallis	Project Description: Conduct wildfire outreach and education campaign.	
2011 Mitigation Action No.: 2		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Public Information and Awareness		
Hazard(s) Addressed: Wildfire		
Priority: High		
Estimated Cost:		
Potential Funding Sources: PDM, HMGP, Texas Forest Service		
Lead Agency/Department Responsible: City of Wallis		
Implementation Schedule: 2012		
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

City of Wallis

Name of Jurisdiction: City of Wallis	Project Description: Develop severe weather warning system.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 1		
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions): Completed		
Category: Public Information and Awareness, Property Protection		
Hazard(s) Addressed: Wind		
Priority: High		
Estimated Cost: \$1,000		
Potential Funding Sources: USDA-Rural Utilities Service-Weather Radio Grant Program, National Weather Service, HMGP, PDM, FEMA Emergency Operations Center Funding, FEMA-Emergency Management Performance Grant, USDA-Environmental Quality Incentives Program, DOJ-State Homeland Security Program, City of Wallis and Austin County General Funds		
Lead Agency/Department Responsible: Municipal Government		
Implementation Schedule: 6 months to 1 year		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: City of Wallis	Project Description: Construct wind resistant municipal building and emergency service building.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 2		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): Updated Schedule, Increased Cost		
Category: Structural Project		
Hazard(s) Addressed: Tornadoes, Wind		
Priority: High		
Estimated Cost: \$250,000		
Potential Funding Sources: PDM Program, FEMA-All Hazard Emergency Operational Planning, FEMA Emergency Operations Grant, HMGP, 406 Public Assistance Program (following federal disaster declaration)		
Lead Agency/Department Responsible: Municipal government		
Implementation Schedule: one to two years		
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

City of Wallis

Name of Jurisdiction: City of Wallis	Project Description: Construct new government/command center facilities which can resist high winds and other inclement weather conditions.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 3		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): Updated Schedule, Increased Cost		
Category: Property Protection		
Hazard(s) Addressed: Tornadoes, Wind		
Priority: High		
Estimated Cost: \$375,000		
Potential Funding Sources: FEMA Emergency Operations Center Grant, PDM, FEMA All Hazard Emergency Operational Planning, HMGP, 406 Public Assistance Program (following federal disaster declaration)		
Lead Agency/Department Responsible: City Administration, Police Dept, Fire Dept. Emergency Management		
Implementation Schedule: one to two years		
Reduce effects of hazards on new buildings and infrastructure?: Yes		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: City of Wallis	Project Description: Implement drainage improvements for Elm Slough watershed by widening bridge at Gresham Street and 7th Street.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 4		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification: Yes		
Reason not complete (2006 actions): Funding		
Category: Property Protection		
Hazard(s) Addressed: Flood		
Priority: High		
Estimated Cost: \$500,000		
Potential Funding Sources: USACE Small Flood Control Projects, USDA NRCS-Emergency Watershed Protection Agency, TWDB-Clean Water State Revolving Fund, TWDB (Development Fund II)-Texas Water Development Fund, USDA NRCS-Watershed Protection and Flood Prevention Program, EPA NPS GrantProgram, 406 Public Assistance, PDM, HMGP, TxDOT, Austin County Disaster Recovery CDBG		
Lead Agency/Department Responsible: City Administration and Austin County Precinct #4 Road and Bridge		
Implementation Schedule: 1-3 years		
Reduce effects of hazards on new buildings and infrastructure?: Yes		Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

City of Wallis

Name of Jurisdiction: City of Wallis	Project Description: Develop and implement water conservation outreach program.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 5		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): On-going		
Category: Public Information and Awareness		
Hazard(s) Addressed: Drought		
Priority: Medium		
Estimated Cost: \$7,500		
Potential Funding Sources: USDA NRCS Watershed Protection and Flood Prevention Program, FEMA Fire Management Assistance Grants, USDA national Resources Conservation Service Environmental Quality Incentives Program		
Lead Agency/Department Responsible: City Administration Water Dept		
Implementation Schedule: 6 months to 2 years		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: City of Wallis	Project Description: Acquire flood-prone property at the intersection of Gresham Street and South 7th Street.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 6		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): On-going		
Category: Property Protection		
Hazard(s) Addressed: Flood		
Priority: Medium		
Estimated Cost: \$12,000		
Potential Funding Sources: HMGP, Pre Disaster Mitigation Program, Flood Mitigation Assistance Program, Hazard Mitigation Assistance Program, CDBG Program		
Lead Agency/Department Responsible: City Administration		
Implementation Schedule: one to two years		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

City of Wallis

Name of Jurisdiction: City of Wallis	Project Description: Conduct hazardous material training for fire department personnel.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 7	
Status of 2006 Mitigation Action: Complete: In Progress: Yes No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions): On-going	
Category: Property Protection	
Hazard(s) Addressed: Toxic Release/HAZMAT	
Priority: Medium	
Estimated Cost: \$5,000	
Potential Funding Sources: Dept. of Justice State Homeland Security Program, FEMA Fire Management Assistance Grant FEMA Hazardous Materials Assistance Program	
Lead Agency/Department Responsible: Fire Dept	
Implementation Schedule: two to five years	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: City of Wallis	Project Description: Install electrical surge protection devices on generator at lift station.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 8	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification: Yes	
Reason not complete (2006 actions): On-going	
Category: Property Protection	
Hazard(s) Addressed: Severe Thunderstorms	
Priority: Medium	
Estimated Cost: \$10,000	
Potential Funding Sources: FEMA Emergency Operations Center Funding, FEMA Emergency Operations Center Funding, FEMA Emergency Management Performance Grant, PDM, HMGP, 406 Public Assistance Program	
Lead Agency/Department Responsible: Public Works	
Implementation Schedule: two to five years	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

City of Wallis

Name of Jurisdiction: City of Wallis	Project Description: Installation of severe weather siren.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 9		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Yes Carry On: Carry On With Modification:		
Reason not complete (2006 actions): Reverse 911 System in Service		
Category: Public Information and Awareness		
Hazard(s) Addressed: Tornadoes		
Priority: Medium		
Estimated Cost: \$5,000		
Potential Funding Sources: USDA- Rural Utilities Service-Weather Radio Grant Program, USDA-Environmental Quality Incentives Performance Grant		
Lead Agency/Department Responsible: Fire Dept		
Implementation Schedule: one to two years		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: City of Wallis	Project Description: Implement drainage improvement program to include cleaning of ditches, increasing size of drainage culverts, etc.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 10		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): On-going		
Category: Prevention		
Hazard(s) Addressed: Flood		
Priority: Medium		
Estimated Cost: \$500,000		
Potential Funding Sources: NRCS, HMGP, 406 Public Assistance Program (following federal disaster declaration), USACE-Clearing and Snagging Projects, USACE Emergency Rehabilitation of Flood Control Works or Federally Authorized Coastal Protection Works, USACE Small Flood Control Projects, PDM		
Lead Agency/Department Responsible: Public Works		
Implementation Schedule: five to ten years		
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

City of Wallis

Name of Jurisdiction: City of Wallis	Project Description: Acquire flood-prone homes in floodplain.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 11		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): Updated Schedule, Increased Cost		
Category: Property Protection, Prevention,		
Hazard(s) Addressed: Flood		
Priority: Low		
Estimated Cost: \$1,000,000		
Potential Funding Sources: HMGP, Flood Mitigation Assistance Program, HUD Disaster Relief/Urgent Needs Fund of the TX Community Development Program (Small cities CDBG Program), PDM, USDA Rural Housing Service-Section 502 Loan and Guarantee Loan Program		
Lead Agency/Department Responsible: Municipal Government		
Implementation Schedule: ten to fifteen years		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

Brazoria County

Name of Jurisdiction: Brazoria County	Project Description: Acquisition and demolition of severe repetitive loss properties along 14 miles of the Brazoria County coastline.
2011 Mitigation Action No.: 1	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Prevention	
Hazard(s) Addressed: Flood	
Priority: High	
Estimated Cost: \$5,000,000	
Potential Funding Sources: HMGP, PDM FMA, RFC, SRL	
Lead Agency/Department Responsible: Brazoria County Floodplain Dept	
Implementation Schedule: Upon availability of funding	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

Name of Jurisdiction: Brazoria County	Project Description: Create a feeder beach for Follett's Island to slow the current erosion rate and protect wetlands in southeast Brazoria County.
2011 Mitigation Action No.: 2	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Prevention, Property Protection, Natural Resource Protection	
Hazard(s) Addressed: Hurricane and Tropical Storms, Flood, Coastal Erosion	
Priority: High	
Estimated Cost: \$5,000,000	
Potential Funding Sources: HMG, PD, CEPTRA, CIAP	
Lead Agency/Department Responsible: Commissioner Donald "Dude" Payne, Brazoria County Pct 1	
Implementation Schedule: Upon availability of funding	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Brazoria County

Name of Jurisdiction: Brazoria County	Project Description: Construct berm along 14 miles of the Bluewater Highway (CR 257) to reduce impacts from storm surges. Project will protect the highway and shoreward properties.
2011 Mitigation Action No.: 3	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Prevention, Property Protection, Natural Resource Protection	
Hazard(s) Addressed: Hurricane and Tropical Storms, Flood, Coastal Erosion	
Priority: High	
Estimated Cost: \$5,000,000	
Potential Funding Sources: FEMA, HMG, CEPRA, CIAP	
Lead Agency/Department Responsible: Commissioner Donald "Dude" Payne, Brazoria County Pct 1	
Implementation Schedule: Upon availability of funding	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: Brazoria County	Project Description: Treasure Island Revetment project. The project also focuses on developing alternatives for a beach nourishment project in the vicinity of the revetment and fishing pier area to widen the beach and provide a buffer to reduce storm impacts to the existing shoreline.
2011 Mitigation Action No.: 4	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Prevention, Property Protection	
Hazard(s) Addressed: Hurricane and Tropical Storms, Flood, Coastal Erosion	
Priority: High	
Estimated Cost: \$4,000,000	
Potential Funding Sources: FEMA, HMG, CEPRA, CIAP	
Lead Agency/Department Responsible: Commissioner Donald "Dude" Payne, Brazoria County Pct 1	
Implementation Schedule: Upon availability	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Brazoria County

Name of Jurisdiction: Brazoria County	Project Description: Evaluate existing gauging stations and flood gates and obtain updated software and hardware.
2011 Mitigation Action No.: 5	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Emergency Services	
Hazard(s) Addressed: Flood	
Priority: High	
Estimated Cost: \$250,000	
Potential Funding Sources: Road & Bridge funds-operating budget, TWDB Revolving Fund, USDA NRCS, 406 Public Assistance Program, USACE Emergency Rehabilitation of Flood Control Works or Small Flood Control Projects, Drainage District within Brazoria County, HMG, PDM	
Lead Agency/Department Responsible: Brazoria County Emergency Services	
Implementation Schedule: Upon availability of funding	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

Name of Jurisdiction: Brazoria County	Project Description: Purchase 500 magnetic Burn Ban signs to be displayed on all county vehicles.
2011 Mitigation Action No.: 6	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Public Information and Awareness	
Hazard(s) Addressed: Drought, Wildfire	
Priority: Medium	
Estimated Cost: \$5,225	
Potential Funding Sources: Mitigation Grant	
Lead Agency/Department Responsible: Office of Emergency Management	
Implementation Schedule: January 2012	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Brazoria County

Name of Jurisdiction: Brazoria County	Project Description: Purchase three years of use of an automated public information system to reach out to county residents prior to and during an emergency.	
2011 Mitigation Action No.: 7		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Public Information and Awareness, Prevention		
Hazard(s) Addressed: Hurricane and Tropical Storms, Drought, Energy Pipeline Failure, Excessive Heat, Flood, Tornadoes, Hail, Toxic Release/HAZMAT, Wildfire, Severe Thunderstorms, Winter Storms		
Priority: Medium		
Estimated Cost: \$75,000		
Potential Funding Sources: HMGP Grant - Budget		
Lead Agency/Department Responsible: Office of Emergency Management		
Implementation Schedule: 6-8 months		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: Brazoria County	Project Description: Conduct wildfire outreach and education campaign.	
2011 Mitigation Action No.: 8		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Public Information and Awareness		
Hazard(s) Addressed: Wildfire		
Priority: Low		
Estimated Cost: Department Budget		
Potential Funding Sources: PDM, HMGP, Texas Forest Service		
Lead Agency/Department Responsible: Office of Emergency Management		
Implementation Schedule: 2012		
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Brazoria County

Name of Jurisdiction: Brazoria County	Project Description: Install sprinkler systems at County's critical facilities constructed on slab foundations to reduce differential shrinking of underlying soils during drought.	
2011 Mitigation Action No.: 9		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Property Protection		
Hazard(s) Addressed: Expansive Soils, Drought		
Priority: High		
Estimated Cost: Unknown		
Potential Funding Sources: PDM, HMGP		
Lead Agency/Department Responsible:		
Implementation Schedule: 2014		
Reduce effects of hazards on new buildings and infrastructure?: Yes		Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: Brazoria County	Project Description: Development of mutual aid/intra-local agreements with area communities for post-disaster assistance.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 1		
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions): Completed		
Category: Emergency Services		
Hazard(s) Addressed: Hurricane and Tropical Storms, Flood, Wildfire		
Priority: High		
Estimated Cost:		
Potential Funding Sources: None needed		
Lead Agency/Department Responsible: Commissioners Court		
Implementation Schedule: 1 year as needed		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

Brazoria County

Name of Jurisdiction: Brazoria County	Project Description: Develop debris management plan to speed up the removal of debris generated by flood/hurricane events, etc.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 2	
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions): Completed	
Category: Emergency Services	
Hazard(s) Addressed: Flood, Hurricane and Tropical Storms	
Priority: High	
Estimated Cost: \$50,000	
Potential Funding Sources: Public Assistance (following federally declared disaster) FEMA Emergency Management Performance Grant, FEMA Emergency Operations Grant	
Lead Agency/Department Responsible: Brazoria County Road and Bridge	
Implementation Schedule: As needed within five years	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: Brazoria County	Project Description: Implement dune and beach restoration to protect county beach areas between Surfside Beach and San Luis Pass.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 3	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification: Yes	
Reason not complete (2006 actions): No funding	
Category: Structural Project, Property Protection	
Hazard(s) Addressed: Flood, Hurricane and Tropical Storms	
Priority: High	
Estimated Cost: \$750,000	
Potential Funding Sources: USACE-Emergency Stream Bank and Shoreline Protection, USACE-Planning Assistance to States, HMGP, USACE-Nonstructural Alternatives to Structural Rehabilitation of Damages Flood Control Works, USACE-Planning Assistance to States	
Lead Agency/Department Responsible: County Rd and Bridge Dept and Parks Dept	
Implementation Schedule: five years	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Brazoria County

Name of Jurisdiction: Brazoria County	Project Description: Dig ditch to take water that builds up in Quail Ridge subdivision to the Austin Bayou.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 4	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Yes Carry On: Carry On With Modification:	
Reason not complete (2006 actions): Not cost effective	
Category: Property Protection	
Hazard(s) Addressed: Flood	
Priority: Medium	
Estimated Cost: \$48,960	
Potential Funding Sources: Road and Bridge funds operating budget, TWDB-Clean Water State Revolving Fund, TWDB (Development Fund II)-Texas Water Development Fund, USDA NRCS-Watershed Protection and Flood Prevention Program, EPA NPS Grant Program, 406 Public Assistance, USACE-Clearing and Snagging Projects, USACE Emergency Rehabilitation of Flood Control Works or Federally Authorized Coastal Protection Works, USACE Small Flood Control Projects, HMGP, PDM	
Lead Agency/Department Responsible: Brazoria County Road and Bridge	
Implementation Schedule: Based on easement donation/purchase	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: Brazoria County	Project Description: Widen and deepen drainage ditches to reduce flooding.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 5	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): Continuous	
Category: Structural Project	
Hazard(s) Addressed: Flood	
Priority: Medium	
Estimated Cost: \$350,000	
Potential Funding Sources: Drainage district funds as available, Local funds, TWDB-Clean Water State Revolving Fund, TWDB (Development Fund II), USDA NRCS-Watershed Protection and Flood Prevention Program, EPA NPS Grant Program, 406 Public Assistance, USACE-Clearing and Snagging Projects, USACE Emergency Rehabilitation of Flood Control Works or Federally Authorized Coastal Protection Works, USACE Small Flood Control Projects	
Lead Agency/Department Responsible: County Road and Bridge Dept. or County Drainage Districts	
Implementation Schedule: As need within five years	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

Brazoria County

Name of Jurisdiction: Brazoria County	Project Description: Implement campaign on public education of ICC (Increased Cost of Compliance) coverage.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 6		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): No funding		
Category: Public Information and Awareness		
Hazard(s) Addressed: Flood		
Priority: Medium		
Estimated Cost: \$5,000		
Potential Funding Sources: Flood Mitigation Assistance Program, Hazard Grant Program, ICC training for general public and insurance agents may be available free of charge through FEMA		
Lead Agency/Department Responsible: Brazoria County NFIP/ private insurance agencies		
Implementation Schedule: within two years		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

Name of Jurisdiction: Brazoria County	Project Description: Place flood insurance materials in libraries.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 7		
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions): Completed		
Category: Public Information and Awareness		
Hazard(s) Addressed: Flood, Hurricanes and Tropical Storms		
Priority: Medium		
Estimated Cost:		
Potential Funding Sources:		
Lead Agency/Department Responsible: County Floodplain Administrator		
Implementation Schedule: Within one year		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

City of Alvin

Name of Jurisdiction: City of Alvin	Project Description: Acquire flood-prone homes in floodway along Mustang Bayou.
2011 Mitigation Action No.: 1	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Property Protection	
Hazard(s) Addressed: Flood	
Priority: High	
Estimated Cost: \$1,000,000	
Potential Funding Sources: HMGP, Disaster Relief/Urgent Needs Fund from CDBG, PDM	
Lead Agency/Department Responsible: City of Alvin	
Implementation Schedule: One year after funding; 3-5 years completion time	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

Name of Jurisdiction: City of Alvin	Project Description: Elevate flood-prone homes.
2011 Mitigation Action No.: 2	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Property Protection	
Hazard(s) Addressed: Flood	
Priority: High	
Estimated Cost: \$1,000,000	
Potential Funding Sources: HMGP, Flood Mitigation Assistance Program, Disaster Relief/Urgent Needs Fund from CDBG, PDM	
Lead Agency/Department Responsible: City of Alvin	
Implementation Schedule: One year after funding; 3-5 years completion time	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

City of Alvin

Name of Jurisdiction: City of Alvin	Project Description: Construct detention ponds in Mustang Bayou Watershed.
2011 Mitigation Action No.: 3	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Structural Project	
Hazard(s) Addressed: Flood	
Priority: High	
Estimated Cost: \$2,000,000	
Potential Funding Sources: TWDB Small Flood Control Projects, NRCS Watershed Protection and Flood Prevention Program, Emergency Watershed Protection Program, HMGP, Disaster Relief/Urgent Needs Fund from CDBG, PDM	
Lead Agency/Department Responsible: City of Alvin	
Implementation Schedule: One year after funding; 3-5 years completion time	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

Name of Jurisdiction: City of Alvin	Project Description: Implement drainage improvement projects: M-1 Ditch improvements.
2011 Mitigation Action No.: 4	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Structural Project	
Hazard(s) Addressed: Flood	
Priority: High	
Estimated Cost: \$2,000,000	
Potential Funding Sources: TWDB Small Flood Control Projects, NRCS Watershed Protection and Flood Prevention Program, Emergency Watershed Protection Program, HMGP, Disaster Relief/Urgent Needs Fund from CDBG, PDM	
Lead Agency/Department Responsible: City of Alvin	
Implementation Schedule: One year after funding; 3-5 years completion time	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

City of Alvin

Name of Jurisdiction: City of Alvin	Project Description: Construct detention ponds in Dickinson Bayou Watershed.
2011 Mitigation Action No.: 5	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Structural Project	
Hazard(s) Addressed: Flood	
Priority: High	
Estimated Cost: \$2,000,000	
Potential Funding Sources: TWDB Small Flood Control Projects, NRCS Watershed Protection and Flood Prevention Program, Emergency Watershed Protection Program, HMGP, Disaster Relief/Urgent Needs Fund from CDBG, PDM	
Lead Agency/Department Responsible: City of Alvin	
Implementation Schedule: One year after funding; 3-5 years completion time	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

Name of Jurisdiction: City of Alvin	Project Description: Implement drainage improvement projects: Dickinson Bayou Ditch improvements.
2011 Mitigation Action No.: 6	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Structural Project	
Hazard(s) Addressed: Flood	
Priority: High	
Estimated Cost: \$1,000,000	
Potential Funding Sources: TWDB Small Flood Control Projects, NRCS Watershed Protection and Flood Prevention Program, Emergency Watershed Protection Program, HMGP, Disaster Relief/Urgent Needs Fund from CDBG, PDM	
Lead Agency/Department Responsible: City of Alvin	
Implementation Schedule: One year after funding; 3-5 years completion time	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

City of Alvin

Name of Jurisdiction: City of Alvin	Project Description: Construct detention ponds in Chocolate Bayou Watershed.
2011 Mitigation Action No.: 7	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Structural Project	
Hazard(s) Addressed: Flood	
Priority: High	
Estimated Cost: \$2,000,000	
Potential Funding Sources: TWDB Small Flood Control Projects, NRCS Watershed Protection and Flood Prevention Program, Emergency Watershed Protection Program, HMGP, Disaster Relief/Urgent Needs Fund from CDBG, PDM	
Lead Agency/Department Responsible: City of Alvin	
Implementation Schedule: One year after funding; 3-5 years completion time	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

Name of Jurisdiction: City of Alvin	Project Description: Revise and update Flood Insurance Rate Maps, join CRS program.
2011 Mitigation Action No.: 8	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Prevention	
Hazard(s) Addressed: Flood	
Priority: Medium	
Estimated Cost:	
Potential Funding Sources: FEMA-Map Modernization Program, Flood Hazard Mapping and Flood Recovery Mapping, USGS-Mapping Standards Support	
Lead Agency/Department Responsible: City of Alvin	
Implementation Schedule: Joining CRS w/in one year from approval of Mitigation Action Plan; Update FIRM 3 years after funding	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

City of Alvin

Name of Jurisdiction: City of Alvin	Project Description: Purchase generators for lift stations.
2011 Mitigation Action No.: 9	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Emergency Services	
Hazard(s) Addressed: Hurricane and Tropical Storms, Tornadoes, Wind	
Priority: High	
Estimated Cost: \$1,000,000	
Potential Funding Sources: HMGP, Disaster Relief/Urgent Needs Fund from CDBG, PDM TDRA funding	
Lead Agency/Department Responsible: City of Alvin	
Implementation Schedule: One year after funding; 3-5 years completion time	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: City of Alvin	Project Description: Upgrade electrical systems at lift stations, install transfer switches, and relocate above base flood elevation.
2011 Mitigation Action No.: 10	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Emergency Services	
Hazard(s) Addressed: Hurricane and Tropical Storms, Flood, Tornadoes	
Priority: High	
Estimated Cost: \$250,000	
Potential Funding Sources: HMGP, PDM	
Lead Agency/Department Responsible: City of Alvin	
Implementation Schedule: One year after funding; 3-5 years completion time	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

City of Alvin

Name of Jurisdiction: City of Alvin	Project Description: Acquire two 55 KW trailer-mounted generators for emergency power to 45 lift stations and 6 water wells.
2011 Mitigation Action No.: 11	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Property Protection	
Hazard(s) Addressed: Hurricane and Tropical Storms, Flood, Tornadoes	
Priority: High	
Estimated Cost: \$200,000	
Potential Funding Sources: HMGP, PDM	
Lead Agency/Department Responsible: City of Alvin	
Implementation Schedule: One year after funding	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: City of Alvin	Project Description: Install hurricane shutters on Public Works and Emergency Shelter Facility.
2011 Mitigation Action No.: 12	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Property Protection	
Hazard(s) Addressed: Hurricane and Tropical Storms	
Priority: Medium	
Estimated Cost: \$50,000	
Potential Funding Sources: HMGP, PDM	
Lead Agency/Department Responsible: City of Alvin	
Implementation Schedule: One year	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

City of Alvin

Name of Jurisdiction: City of Alvin	Project Description: Install new 8" water line and fire hydrants for better fire protection.	
2011 Mitigation Action No.: 13		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Property Protection		
Hazard(s) Addressed: Fire		
Priority: High		
Estimated Cost: \$1,000,000		
Potential Funding Sources: HMGP, PDM, Disaster Relief/Urgent Needs from CDBG		
Lead Agency/Department Responsible: City of Alvin		
Implementation Schedule: One year after funding; 3-5 years completion time		
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: City of Alvin	Project Description: Purchase 63 properties in the floodway.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 1		
Status of 2006 Mitigation Action: Complete: In Progress: Yes No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions): Partially funded		
Category: Prevention		
Hazard(s) Addressed: Flood		
Priority: High		
Estimated Cost: \$3,973,000		
Potential Funding Sources: FEMA HMGP, Flood Mitigation Assistance Program, Pre Disaster Mitigation Program		
Lead Agency/Department Responsible: City of Alvin		
Implementation Schedule: within 12 months of funding		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

City of Alvin

Name of Jurisdiction: City of Alvin	Project Description: Develop Stormwater Management Plan.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 2	
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions): Completed	
Category: Prevention	
Hazard(s) Addressed: Flood	
Priority: High	
Estimated Cost: \$40,000	
Potential Funding Sources: Unknown	
Lead Agency/Department Responsible: City of Alvin	
Implementation Schedule: 6 months after funding	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

Name of Jurisdiction: City of Alvin	Project Description: Develop Master Drainage Plan.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 3	
Status of 2006 Mitigation Action: Complete: In Progress: Yes No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions): Partially funded	
Category: Prevention	
Hazard(s) Addressed: Flood	
Priority: High	
Estimated Cost: \$150,000	
Potential Funding Sources: Unknown	
Lead Agency/Department Responsible: City of Alvin	
Implementation Schedule: 18 months after	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

City of Alvin

Name of Jurisdiction: City of Alvin	Project Description: Revise and update Flood Insurance Rate Maps.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 4	
Status of 2006 Mitigation Action: Complete: In Progress: Yes No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions): Partially funded	
Category: Prevention	
Hazard(s) Addressed: Flood	
Priority: High	
Estimated Cost:	
Potential Funding Sources: Unknown	
Lead Agency/Department Responsible: FEMA Map Modernization Program	
Implementation Schedule: 1-2 years	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

Name of Jurisdiction: City of Alvin	Project Description: Conduct outreach, raise disaster awareness.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 5	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): No funding	
Category: Public Information and Awareness	
Hazard(s) Addressed: Hurricane and Tropical Storms, Tornadoes, Flood, Wildfire, Toxic Release/HAZMAT	
Priority: Medium	
Estimated Cost: \$500	
Potential Funding Sources: FEMA HMGP, Flood Mitigation Assistance Program, Pre Disaster Mitigation Program	
Lead Agency/Department Responsible: Public Works and Inspections	
Implementation Schedule:	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

City of Angleton

Name of Jurisdiction: City of Angleton	Project Description: Replace radio system at Fire Station to be used as backup emergency operations center.
2011 Mitigation Action No.: 1	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Emergency Services	
Hazard(s) Addressed: Wildfire, Toxic Release/HAZMAT	
Priority: Medium	
Estimated Cost: \$100,000	
Potential Funding Sources: Local, state and federal funding	
Lead Agency/Department Responsible: Police, Fire, EMS and Emergency Management	
Implementation Schedule: As funds become available	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: City of Angleton	Project Description: Purchase of 750 kw generator for recreation center shelter during power outage.
2011 Mitigation Action No.: 2	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Property Protection	
Hazard(s) Addressed: Tornadoes, Hurricane and Tropical Storms	
Priority: High	
Estimated Cost: \$550,000	
Potential Funding Sources: Local, state and federal funding, HMGP	
Lead Agency/Department Responsible: Public Works and Emergency Management	
Implementation Schedule: As funds become available	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

City of Angleton

Name of Jurisdiction: City of Angleton	Project Description: Purchase radios for communication for public safety.
2011 Mitigation Action No.: 3	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Emergency Services	
Hazard(s) Addressed: Tornadoes, Hurricane and Tropical Storms	
Priority: High	
Estimated Cost: \$40,000	
Potential Funding Sources: Local, state and federal funding	
Lead Agency/Department Responsible: Emergency Management	
Implementation Schedule: As funds become available	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: City of Angleton	Project Description: Install storm shutters for police station, city hall and rec center (shelter) building.
2011 Mitigation Action No.: 4	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Property Protection	
Hazard(s) Addressed: Tornadoes, Hurricane and Tropical Storms	
Priority: High	
Estimated Cost: \$250,000	
Potential Funding Sources: Local, state and federal funding, HMGP, PDM	
Lead Agency/Department Responsible: Emergency Management	
Implementation Schedule: As funds become available	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

City of Angleton

Name of Jurisdiction: City of Angleton	Project Description: Purchase firefighting equipment (hoses & nozzles) for wildfire preparedness.
2011 Mitigation Action No.: 5	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Emergency Services	
Hazard(s) Addressed: Toxic Release/HAZMAT, Wildfire	
Priority: High	
Estimated Cost: \$25,000	
Potential Funding Sources: Local, state and federal funds	
Lead Agency/Department Responsible: Fire	
Implementation Schedule: As funds become available	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: City of Angleton	Project Description: Extend water and sewer to Fire Field for training, public safety and shelter of citizens during disaster.
2011 Mitigation Action No.: 6	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Emergency Services	
Hazard(s) Addressed: Flood, Wildfire, Toxic Release/HAZMAT	
Priority: High	
Estimated Cost: \$1,012,365	
Potential Funding Sources: Local, state and federal funds	
Lead Agency/Department Responsible: Emergency Management, Public Works, Fire	
Implementation Schedule: As funds become available	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

City of Angleton

Name of Jurisdiction: City of Angleton	Project Description: City-wide Ditch Clean-out. Clear, widen and deepen all city ditches for better drainage.	
2011 Mitigation Action No.: 7		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Structural Project		
Hazard(s) Addressed: Flood, Hurricanes and Tropical Storms, Severe Thunderstorms		
Priority: High		
Estimated Cost: \$122,000		
Potential Funding Sources: annual budget, HMGP, PDM		
Lead Agency/Department Responsible: City of Angleton Public Works Dept		
Implementation Schedule: On-going		
Reduce effects of hazards on new buildings and infrastructure?: Yes		Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

Name of Jurisdiction: City of Angleton	Project Description: Participate in CRS workshop hosted by H-GAC.	
2011 Mitigation Action No.: 8		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Public Information and Awareness		
Hazard(s) Addressed: Dam/Levee Failure, Flood		
Priority: Medium		
Estimated Cost: \$-		
Potential Funding Sources: N/A		
Lead Agency/Department Responsible: Emergency Management		
Implementation Schedule: By 2013		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

City of Angleton

Name of Jurisdiction: City of Angleton	Project Description: Build detention pond on Ditch 7 at Bryan Street.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 1	
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions): Completed	
Category: Structural Project	
Hazard(s) Addressed: Flood	
Priority: Medium	
Estimated Cost: \$200,000	
Potential Funding Sources: Local , State and Federal Funds	
Lead Agency/Department Responsible: City Public works	
Implementation Schedule: As funds become available	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

Name of Jurisdiction: City of Angleton	Project Description: Slope paving on Ditch 7b between SH 288 and CR 288.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 2	
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions): Completed	
Category: Structural Project	
Hazard(s) Addressed: Flood	
Priority: Medium	
Estimated Cost: \$67,000	
Potential Funding Sources: Local, State and Federal Funds	
Lead Agency/Department Responsible: City Public Works	
Implementation Schedule: As funds become available	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

City of Angleton

Name of Jurisdiction: City of Angleton	Project Description: Add early warning system for hazard events.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 3	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): Funding	
Category: Public Information and Awareness	
Hazard(s) Addressed: Tornadoes, Toxic Release/HAZMAT	
Priority: High	
Estimated Cost: \$175,000	
Potential Funding Sources: Local, state and federal funds, HMGP, PDM	
Lead Agency/Department Responsible: Police, Fire, Emergency Management	
Implementation Schedule: As funds become available	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: City of Angleton	Project Description: Network of dry hydrants in ponds to supply water for fire.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 4	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): Funding	
Category: Emergency Services	
Hazard(s) Addressed: Toxic Release/HAZMAT, Fire	
Priority: High	
Estimated Cost: \$35,000	
Potential Funding Sources: Local, state and federal funds	
Lead Agency/Department Responsible: Fire and Emergency Management	
Implementation Schedule: As funds become available	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

City of Angleton

Name of Jurisdiction: City of Angleton	Project Description: Maintain drainage ditches to reduce flooding with purchase of Gradall to carry out work.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 5	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): Funding	
Category: Prevention	
Hazard(s) Addressed: Flood	
Priority: Medium	
Estimated Cost: \$200,000	
Potential Funding Sources: Local, state and federal funding	
Lead Agency/Department Responsible: Public Works	
Implementation Schedule: As funds become available	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

Name of Jurisdiction: City of Angleton	Project Description: Develop debris management plan.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 6	
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions): Completed	
Category: Prevention	
Hazard(s) Addressed: Hurricane and Tropical Storms, Tornadoes	
Priority: High	
Estimated Cost: \$25,000	
Potential Funding Sources: Local, State and Federal Funds	
Lead Agency/Department Responsible: Public Works and Emergency Management	
Implementation Schedule: As funds become available	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

City of Angleton

Name of Jurisdiction: City of Angleton	Project Description: Clear land for debris management.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 7	
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions): Completed	
Category: Prevention	
Hazard(s) Addressed: Hurricane and Tropical Storms, Tornadoes	
Priority: Medium	
Estimated Cost: \$100,000	
Potential Funding Sources: Local, State and Federal Funds	
Lead Agency/Department Responsible: Public Works and Emergency Management	
Implementation Schedule: As funds become available	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: City of Angleton	Project Description: Replace radio system in the Communication Center.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 8	
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions): Completed	
Category: Emergency Services	
Hazard(s) Addressed: Wildfire, Flood, Hurricanes and Tropical Storms, Tornadoes	
Priority: High	
Estimated Cost: \$175,000	
Potential Funding Sources: Local, State and Federal Funds	
Lead Agency/Department Responsible: Police, Fire, EMS and Emergency Management	
Implementation Schedule: As funds become available	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

City of Angleton

Name of Jurisdiction: City of Angleton	Project Description: Purchase generator for City Hall.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 9	
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions): Completed	
Category: Emergency Services	
Hazard(s) Addressed: Hurricane and Tropical Storms, Tornadoes	
Priority: Medium	
Estimated Cost: \$80,000	
Potential Funding Sources: Local, State and Federal Funds	
Lead Agency/Department Responsible: Public Works and Emergency Management	
Implementation Schedule: As funds become available	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: City of Angleton	Project Description: Purchase street sign and barricades to block off streets for evacuation.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 10	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): Funding	
Category: Emergency Services	
Hazard(s) Addressed: Flood, Toxic Release/HAZMAT, Hurricanes and Tropical Storms	
Priority: High	
Estimated Cost: \$2,000	
Potential Funding Sources: Local, State and Federal Funds	
Lead Agency/Department Responsible: Police, Public Works and Emergency Management	
Implementation Schedule: As funds become available	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

City of Bailey's Prairie

Name of Jurisdiction: City of Bailey's Prairie	Project Description: Participate in CRS workshop hosted by H-GAC.	
2011 Mitigation Action No.: 1		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Public Information and Awareness		
Hazard(s) Addressed: Dam/Levee Failure, Flood		
Priority: Medium		
Estimated Cost: \$-		
Potential Funding Sources: N/A		
Lead Agency/Department Responsible: Emergency Management		
Implementation Schedule: 2013		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

Name of Jurisdiction: City of Bailey's Prairie	Project Description: Partner with local Drainage District to maintain ditches and culverts.	
2011 Mitigation Action No.: 2		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Prevention		
Hazard(s) Addressed: Dam/Levee Failure, Flood		
Priority: Medium		
Estimated Cost: \$1,000		
Potential Funding Sources: Budget		
Lead Agency/Department Responsible: Public Works		
Implementation Schedule: 12-18 months		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

City of Bailey's Prairie

Name of Jurisdiction: City of Bailey's Prairie	Project Description: Conduct wildfire outreach and education campaign by distributing information at public buildings, town hall meetings, and other speaking engagements.
2011 Mitigation Action No.: 3	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Public Information and Awareness	
Hazard(s) Addressed: Wildfire, Drought	
Priority: High	
Estimated Cost:	
Potential Funding Sources: PDM, HMGP, Texas Forest Service	
Lead Agency/Department Responsible: City of Bailey's Prairie and County OEM	
Implementation Schedule: Upon funding	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: City of Bailey's Prairie	Project Description: Conduct flood outreach and education campaign by distributing information at public buildings, townhall meetings, and other speaking engagements.
2011 Mitigation Action No.: 4	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Public Information and Awareness	
Hazard(s) Addressed: Flood, Hurricanes and Tropical Storms, Severe Thunderstorms	
Priority: High	
Estimated Cost:	
Potential Funding Sources: PDM, HMGP	
Lead Agency/Department Responsible: City of Bailey's Prairie and County OEM	
Implementation Schedule: Upon funding	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

City of Bailey's Prairie

Name of Jurisdiction: City of Bailey's Prairie	Project Description: Development of mutual aid/intra-local agreements with area communities for post-disaster assistance.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 1	
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions): Completed	
Category: Emergency Services	
Hazard(s) Addressed: Hurricane and Tropical Storms, Flood, Tornadoes, Wildfire	
Priority: High	
Estimated Cost:	
Potential Funding Sources:	
Lead Agency/Department Responsible: Commissioners Court	
Implementation Schedule: One year or as needed	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: City of Bailey's Prairie	Project Description: Develop debris management plan to speed up the removal of debris generated by flood/hurricane events, etc.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 2	
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions): Completed	
Category: Emergency Services	
Hazard(s) Addressed: Flood, Hurricane and Tropical Storms	
Priority: High	
Estimated Cost: \$50,000	
Potential Funding Sources: Public Assistance(following federally declared disaster) FEMA emergency Management Performance Grant, FEMA Emergency Operations Grant	
Lead Agency/Department Responsible: Brazoria County Road and Bridge	
Implementation Schedule:	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

City of Bailey's Prairie

Name of Jurisdiction: City of Bailey's Prairie	Project Description: Purchase equipment generator.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 3		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Yes Carry On: Carry On With Modification:		
Reason not complete (2006 actions): No longer needed		
Category: Emergency Services		
Hazard(s) Addressed: Hurricane and Tropical Storms, Flood, Tornadoes, Severe Thunderstorms		
Priority: High		
Estimated Cost: \$35,000		
Potential Funding Sources: State and Local Funds, HMGP (generator "quick connect"), PDM		
Lead Agency/Department Responsible: Public Works Dept		
Implementation Schedule: 6 months		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: City of Bailey's Prairie	Project Description: Develop public education campaign addressing hazard awareness.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 4		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): No funding		
Category: Public Information and Awareness		
Hazard(s) Addressed: Hurricane and Tropical Storms, Flood, Tornadoes, Wildfire, Toxic Release/HAZMAT		
Priority: Low		
Estimated Cost: \$20,000		
Potential Funding Sources: National Weather Service, HMGP, PDM, FEMA Emergency Operations Center Funding, FEMA Emergency Management Performance Grant, USDA-Rural Utilities Service-Weather Radio Grant Program, USDA-Environmental Quality Incentives Program, materials available from FEMA and Red Cross free of charge		
Lead Agency/Department Responsible: EMS		
Implementation Schedule: 1 year		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Village of Bonney

Name of Jurisdiction: Village of Bonney	Project Description: Participate in CRS workshop hosted by H-GAC.	
2011 Mitigation Action No.: 1		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Public Information and Awareness		
Hazard(s) Addressed: Dam/Levee Failure, Flood		
Priority: Medium		
Estimated Cost: \$-		
Potential Funding Sources: N/A		
Lead Agency/Department Responsible: Emergency Management		
Implementation Schedule: 2013		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

Name of Jurisdiction: Village of Bonney	Project Description: Partner with local Drainage District to maintain ditches and culverts.	
2011 Mitigation Action No.: 2		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Prevention		
Hazard(s) Addressed: Dam/Levee Failure, Flood		
Priority: Medium		
Estimated Cost: \$1,000		
Potential Funding Sources: Budget		
Lead Agency/Department Responsible: Public Works		
Implementation Schedule: 12-18 months		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

Village of Bonney

Name of Jurisdiction: Village of Bonney	Project Description: Conduct wildfire outreach and education campaign by distributing information at public buildings, town hall meetings, and other speaking engagements.
2011 Mitigation Action No.: 3	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Public Information and Awareness	
Hazard(s) Addressed: Wildfire, Drought	
Priority: High	
Estimated Cost:	
Potential Funding Sources: PDM, HMGP, Texas Forest Service	
Lead Agency/Department Responsible: Village of Bonney and County OEM	
Implementation Schedule: Upon funding	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: Village of Bonney	Project Description: Conduct flood outreach and education campaign by distributing information at public buildings, townhall meetings, and other speaking engagements.
2011 Mitigation Action No.: 4	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Public Information and Awareness	
Hazard(s) Addressed: Flood, Hurricanes and Tropical Storms, Severe Thunderstorms	
Priority: High	
Estimated Cost:	
Potential Funding Sources: PDM, HMGP	
Lead Agency/Department Responsible: Village of Bonney and County OEM	
Implementation Schedule: Upon funding	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

Village of Bonney

Name of Jurisdiction: Village of Bonney	Project Description: Development of mutual aid/intra-local agreements with area communities for post-disaster assistance
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 1	
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions): Completed	
Category: Emergency Services	
Hazard(s) Addressed: Hurricane and Tropical Storms, Tornadoes, Flood, Wildfire, Toxic Release/HAZMAT	
Priority: High	
Estimated Cost:	
Potential Funding Sources:	
Lead Agency/Department Responsible: Commissioners Court	
Implementation Schedule: one year or as needed	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: Village of Bonney	Project Description: Develop debris management plan to speed up the removal of debris generated by flood/hurricane events, etc.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 2	
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions): Completed	
Category: Emergency Services	
Hazard(s) Addressed: Flood, Hurricane and Tropical Storms	
Priority: High	
Estimated Cost: \$50,000	
Potential Funding Sources: Public Assistance(following federally declared disaster) FEMA emergency Management Performance Grant, FEMA Emergency Operations Grant	
Lead Agency/Department Responsible: Brazoria County Road and Bridge	
Implementation Schedule: As needed within five years	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Village of Bonney

Name of Jurisdiction: Village of Bonney	Project Description: Purchase equipment generator.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 3	
Status of 2006 Mitigation Action: Complete: In Progress: Yes No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions): Rural Affairs Grant	
Category: Emergency Services	
Hazard(s) Addressed: Hurricane and Tropical Storms, Flood, Tornadoes, Severe Thunderstorms	
Priority: High	
Estimated Cost: \$35,000	
Potential Funding Sources: State and Local Funds, HMGP (generator "quick connect"), PDM	
Lead Agency/Department Responsible: Public Works Dept	
Implementation Schedule: 6 months	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: Village of Bonney	Project Description: Develop public education campaign addressing hazard awareness.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 4	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): No funding	
Category: Public Information and Awareness	
Hazard(s) Addressed: Flood, Toxic Release/HAZMAT, Tornadoes, Wildfire	
Priority: Low	
Estimated Cost: \$20,000	
Potential Funding Sources: National Weather Service, HMGP, PDM, FEMA Emergency Operations Center Funding, FEMA Emergency Management Performance Grant, USDA-Rural Utilities Service-Weather Radio Grant Program, USDA-Environmental Quality Incentives Program, materials available from FEMA and Red Cross free of charge	
Lead Agency/Department Responsible: EMS	
Implementation Schedule: 1 year	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

City of Brazoria

Name of Jurisdiction: City of Brazoria	Project Description: Conduct wildfire outreach and education campaign by distributing information at public buildings, town hall meetings, and other speaking engagements.
2011 Mitigation Action No.: 1	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Public Information and Awareness	
Hazard(s) Addressed: Wildfire, Drought	
Priority: Medium	
Estimated Cost:	
Potential Funding Sources: HMGP, PDM, Texas Forest Service	
Lead Agency/Department Responsible: City of Brazoria, Brazoria County	
Implementation Schedule: Upon funding	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: City of Brazoria	Project Description: Conduct flood outreach and education campaign by distributing information at public buildings, townhall meetings, and other speaking engagements.
2011 Mitigation Action No.: 2	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Public Information and Awareness	
Hazard(s) Addressed: Flood, Hurricanes and Tropical Storms, Severe Thunderstorms	
Priority: Medium	
Estimated Cost:	
Potential Funding Sources: HMGP, PDM	
Lead Agency/Department Responsible: City of Brazoria, Brazoria County	
Implementation Schedule: Upon funding	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

City of Brazoria

Name of Jurisdiction: City of Brazoria	Project Description: Maintain drainage ditches to reduce flooding.	
2011 Mitigation Action No.: 3		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Prevention		
Hazard(s) Addressed: Flood		
Priority: Medium		
Estimated Cost: \$100,000		
Potential Funding Sources: Drainage district funds as available, Local funds, TWDB-Clean Water Development Board (Development Fund, USDA NRCS Watershed Protection and Flood Prevention Program, EPA-NPS Grant Program, 406 Public Assistance Program (following federal disaster declaration), USACE-Clearing and Snagging Projects, USACE-Emergency Rehabilitation of Flood Control Works or Federally Authorized Coastal Protection Works, USACE-Small Flood Control Projects		
Lead Agency/Department Responsible: Public Works Dept		
Implementation Schedule: 1 to 2 years		
Reduce effects of hazards on new buildings and infrastructure?: Yes		Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

Name of Jurisdiction: City of Brazoria	Project Description: Street sign and barricades to block off streets for evacuation.	
2011 Mitigation Action No.: 4		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Emergency Services		
Hazard(s) Addressed: Flood, Wildfire, Toxic Release/HAZMAT		
Priority: Low		
Estimated Cost: \$2,500		
Potential Funding Sources: Local State and Federal funds		
Lead Agency/Department Responsible: Police Dept and Emergency Management		
Implementation Schedule: As funds become available		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

City of Brazoria

Name of Jurisdiction: City of Brazoria	Project Description: Widen Highway 36 to improve evacuation.
2011 Mitigation Action No.: 5	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Structural Project	
Hazard(s) Addressed: Hurricane and Tropical Storms, Flood	
Priority:	
Estimated Cost: \$5,000,000	
Potential Funding Sources: Federal, State and Local	
Lead Agency/Department Responsible: Fire, Police, Public Works (TXDOT)	
Implementation Schedule: As funds become available	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: City of Brazoria	Project Description: Replace aging Fire/EMS chief/EMS Command and Emergency Management staff command vehicles that are in excess of 100,000 miles or older than seven years old.
2011 Mitigation Action No.: 6	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Emergency Services	
Hazard(s) Addressed: Wildfire, Toxic Release/HAZMAT, Hurricanes and Tropical Storms	
Priority: Medium	
Estimated Cost: \$50,000	
Potential Funding Sources: Federal, State, Local, FEMA -Assistance to Fire Fighters Grant, FEMA-All Hazards Operational Planning	
Lead Agency/Department Responsible: City Administration	
Implementation Schedule: 1 year	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

City of Brazoria

Name of Jurisdiction: City of Brazoria	Project Description: Purchase and install security lighting for Main Street area.	
2011 Mitigation Action No.: 7		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Emergency Services		
Hazard(s) Addressed: Severe Thunderstorms		
Priority: Medium		
Estimated Cost: \$7,500		
Potential Funding Sources: Federal, State, Local, FEMA- Emergency Management Performance Grant, DOJ State Homeland Security Program		
Lead Agency/Department Responsible: City Administration		
Implementation Schedule: 1 year		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: Yes	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: City of Brazoria	Project Description: Install security system for City service center.	
2011 Mitigation Action No.: 8		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Property Protection		
Hazard(s) Addressed: Hurricane and Tropical Storms, Flood, Severe Thunderstorms		
Priority: Medium		
Estimated Cost: \$5,000		
Potential Funding Sources: FEMA-Emergency Management Performance Grant, Dept of Justice-State Homeland Security Program, FEMA- All Hazards Operational Planning		
Lead Agency/Department Responsible: Public Works		
Implementation Schedule: 1 to 2 years		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

City of Brazoria

Name of Jurisdiction: City of Brazoria	Project Description: Retrofit Emergency Operations Center at City Hall. Add storm protection to glass doors and windows at EOC, Police Station, and Fire Station. Install network connection and Emergency Dispatch radio in EOC.
2011 Mitigation Action No.: 9	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Property Protection	
Hazard(s) Addressed: Hurricane and Tropical Storms, Tornadoes, Severe Thunderstorms	
Priority: High	
Estimated Cost: \$75,000	
Potential Funding Sources: City Funds, FEMA HMGP and PDM program Federal, State, Local, FEMA- Emergency Management Performance Grant, Dept of Justice- State Homeland Security Program, FEMA All Hazards Operational Planning, PDM, HMGP	
Lead Agency/Department Responsible: City Emergency Management	
Implementation Schedule: 1 year, prior to future hurricane	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: City of Brazoria	Project Description: Install hurricane shutters on City Hall, fire station and police department.
2011 Mitigation Action No.: 10	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Property Protection	
Hazard(s) Addressed: Hurricane and Tropical Storms	
Priority: High	
Estimated Cost: \$40,000	
Potential Funding Sources: USACE-Small Flood Control Projects, USDA NRCS-Emergency Watershed Protection Agency, TWDB-Clean Water State Revolving Fund, TWDB (Development Fund II)-Texas Water Development Fund, USDA NRCS-Watershed Protection and Flood Prevention Program, EPA-NPS GrantProgram, 406 Public Assistance Program (Following federal disaster declaration), HMGP, PDM	
Lead Agency/Department Responsible: City Emergency Management	
Implementation Schedule: 1 to 2 years	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

City of Brazoria

Name of Jurisdiction: City of Brazoria	Project Description: Implement a drainage improvement program to include deepening of ditches, increasing size of culverts, including box culverts.	
2011 Mitigation Action No.: 11		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Structural Project		
Hazard(s) Addressed: Flood		
Priority: Medium		
Estimated Cost:		
Potential Funding Sources: USACE- Small flood Control Projects, USDA NRCS- Emergency Watershed Protection Agency, TWDB- Clean Water State Revolving Fund, TWDB (Development Fund II), PDM , HMGP		
Lead Agency/Department Responsible: Public Works working with County's Inter-local agreement		
Implementation Schedule: 2-3 years		
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

Name of Jurisdiction: City of Brazoria	Project Description: Purchase equipment generator.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 1		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): Unfunded		
Category: Emergency Services		
Hazard(s) Addressed: Hurricane and Tropical Storms, Flood, Tornadoes, Severe Thunderstorms		
Priority: High		
Estimated Cost: \$35,000		
Potential Funding Sources: State and Local Funds, HMGP (generator "quick connect"), PDM		
Lead Agency/Department Responsible: Public Works Dept		
Implementation Schedule: 6 months		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

City of Brazoria

Name of Jurisdiction: City of Brazoria	Project Description: Develop drainage work program.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 2		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): Unfunded		
Category: Prevention, Property Protection, Structural Project		
Hazard(s) Addressed: Flood		
Priority: High		
Estimated Cost: \$750,000		
Potential Funding Sources: Local stormwater management fee, USACE-Planning Assistance to States, HMGP, PDM, USACE-Small Flood Control Projects, USDA NRCS-Emergency Watershed Protection Agency, TWDB-Clean Water State Revolving Fund, TWDB (Development Fund II)-Texas Water Development Fund, USDA NRCS-Watershed Protection and Flood Prevention Program, EPA NPS Grant Program,		
Lead Agency/Department Responsible: Public works Dept		
Implementation Schedule: 3 to 4 years		
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

Name of Jurisdiction: City of Brazoria	Project Description: Purchase radio/communication equipment.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 3		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): Unfunded		
Category: Emergency Services		
Hazard(s) Addressed: Hurricane and Tropical Storms, Flood, Tornadoes, Severe Thunderstorms, Drought		
Priority: High		
Estimated Cost: \$120,000		
Potential Funding Sources: Federal/State/Local, HMGP, PDM, FEMA Emergency Operations Center Funding, FEMA Emergency Management Performance Grant, USDA Rural Utilizes Service Weather Radio Grant Program		
Lead Agency/Department Responsible: Police/ Fire/Administration/ public Works		
Implementation Schedule: 3 to 9 years		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

City of Brazoria

Name of Jurisdiction: City of Brazoria	Project Description: Develop severe weather warning system.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 4	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Yes Carry On: Carry On With Modification:	
Reason not complete (2006 actions): Not cost effective	
Category: Public Information and Awareness	
Hazard(s) Addressed: Hurricane and Tropical Storms, Flood, Tornadoes, Severe Thunderstorms	
Priority: High	
Estimated Cost: \$95,000	
Potential Funding Sources: USDA-Rural Utilities Service-Weather Radio Grant Program, DOJ-State Homeland Security Program, National Weather Service, HMGP, PDM, FEMA-Emergency Operations Center Funding, FEMA-Emergency Management Performance Grant, USDA-Environmental Quality Incentives Performance Grant	
Lead Agency/Department Responsible: Police/ Fire	
Implementation Schedule: Immediately to 6 months	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: City of Brazoria	Project Description: Purchase rescue vehicle.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 5	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Yes Carry On: Carry On With Modification:	
Reason not complete (2006 actions): Unfunded	
Category: Emergency Services	
Hazard(s) Addressed: Flood, Wildfire, Hurricanes and Tropical Storms	
Priority: High	
Estimated Cost: \$195,000	
Potential Funding Sources: FEMA-Assistance to Firefighter's Grant	
Lead Agency/Department Responsible: Fire Dept	
Implementation Schedule: 6 months to 1 year	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

City of Brazoria

Name of Jurisdiction: City of Brazoria	Project Description: Purchase fire pumper vehicle/rescue truck.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 6	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): Unfunded	
Category: Emergency Services	
Hazard(s) Addressed: Hurricane and Tropical Storms, Flood, Tornadoes, Severe Thunderstorms, Drought, Hail,	
Priority: High	
Estimated Cost: \$220,000	
Potential Funding Sources: FEMA-Assistance to Firefighter's Grant	
Lead Agency/Department Responsible: Fire Dept	
Implementation Schedule: 6 months to 1 year	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: City of Brazoria	Project Description: Purchase emergency medical service, fire and police rescue equipment.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 7	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): Unfunded	
Category: Emergency Services	
Hazard(s) Addressed: Wildfire, Flood, Tornadoes	
Priority: High	
Estimated Cost: \$50,000	
Potential Funding Sources: Dept of Justice- State Homeland security Program, FEMA-Assistance to Firefighter's Grant	
Lead Agency/Department Responsible: Police, Fire, EMS and Administrative Dept	
Implementation Schedule: Immediately to 6 months	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

City of Brazoria

Name of Jurisdiction: City of Brazoria	Project Description: Develop evacuation plan.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 8		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Yes Carry On: Carry On With Modification:		
Reason not complete (2006 actions): Included with County		
Category: Public Information and Awareness, Emergency Services		
Hazard(s) Addressed: Hurricane and Tropical Storms, Flood, Wildfire, Toxic Release/HAZMAT, Tornadoes		
Priority: Medium		
Estimated Cost: \$10,000		
Potential Funding Sources: PDM Program, FEMA Emergency Management Performance Grant, Flood Mitigation Assistance Program, HMGP, USDA Environmental Quality Incentives Program, FEMA Emergency Performance Grants, FEMA-All Hazards Operational Planning, FEMA Hazardous Materials Assistance Program, FEMA Fire Management Assistance Grants		
Lead Agency/Department Responsible: Police/Fire/Public Works		
Implementation Schedule: 6 months		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: City of Brazoria	Project Description: Implement emergency management training programs.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 9		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): Unfunded		
Category: Emergency Services, Public Information and Awareness		
Hazard(s) Addressed: Hurricane and Tropical Storms, Flood, Tornadoes, Severe Thunderstorms		
Priority: Medium		
Estimated Cost: \$7,500		
Potential Funding Sources: Emergency Management Institute, FEMA First Responder Counter-Terrorism Training Assistance, FEMA Fire Management Assistance Grants, FEMA Hazardous Materials Assistance Program, PDM, FEMA-Assistance to Firefighters Grant, DOJ-State Homeland Security Program		
Lead Agency/Department Responsible: Police and Fire Dept		
Implementation Schedule: Immediately to 6 months		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

City of Brazoria

Name of Jurisdiction: City of Brazoria	Project Description: Develop debris management plan.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 10		
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions): Completed		
Category: Prevention		
Hazard(s) Addressed: Hurricane and Tropical Storms, Flood, Tornadoes, Severe Thunderstorms, Hail		
Priority: Medium		
Estimated Cost: \$65,000		
Potential Funding Sources: FEMA All Hazards Emergency Operation Planning, FEMA Emergency Management Performance Grant		
Lead Agency/Department Responsible: Public Works Dept		
Implementation Schedule: 12 months		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: City of Brazoria	Project Description: Develop public education campaign addressing hazard awareness.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 11		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Yes Carry On: Carry On With Modification:		
Reason not complete (2006 actions): Unfunded		
Category: Public Information and Awareness		
Hazard(s) Addressed: Hurricane and Tropical Storms, Flood, Wildfire, Toxic Release/HAZMAT		
Priority: Low		
Estimated Cost: \$20,000		
Potential Funding Sources: National Weather Service, HMGP, PDM, FEMA- Emergency Operations Center Funding, FEMA-Emergency Management Performance Grant, FEMA-Emergency Management Performance Grant, FEMA-Emergency Management Performance Grant, FEMA-Emergency Management Performance Grant, USDA Environmental Quality Incentives Program, Materials available from FEMA and Red Cross free of charge		
Lead Agency/Department Responsible:		
Implementation Schedule:		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

City of Brookside Village

Name of Jurisdiction: City of Brookside Village	Project Description: Acquire 31 identified repetitive flood loss properties in Clear Creek watershed inside City of Brookside Village's city limits.
2011 Mitigation Action No.: 1	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Property Protection	
Hazard(s) Addressed: Flood, Hurricanes and Tropical Storms	
Priority: High	
Estimated Cost: \$5,000,000	
Potential Funding Sources: HMGP, PDM	
Lead Agency/Department Responsible: Brookside Emergency Management Mayor or City Council	
Implementation Schedule: When funding becomes available	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

Name of Jurisdiction: City of Brookside Village	Project Description: Acquire 70-acre flood-prone property at north-central portion of Brookside Village.
2011 Mitigation Action No.: 2	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Property Protection	
Hazard(s) Addressed: Flood, Hurricanes and Tropical Storms	
Priority: High	
Estimated Cost: \$2,000,000	
Potential Funding Sources: Cost Sharing Federal/ State Grant Contingency Funds, HMGP, PDM	
Lead Agency/Department Responsible: Brookside Village	
Implementation Schedule: When funding becomes available	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

City of Brookside Village

Name of Jurisdiction: City of Brookside Village	Project Description: Purchase and install public warning system.
2011 Mitigation Action No.: 3	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Public Information and Awareness	
Hazard(s) Addressed: Flood, Hurricanes and Tropical Storms, Tornadoes, Wildfire, Severe Thunderstorms	
Priority: High	
Estimated Cost:	
Potential Funding Sources: Cost Sharing Federal/ State Grant Contingency Funds, HMGP, PDM	
Lead Agency/Department Responsible: Brookside Village	
Implementation Schedule: When funding becomes available	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: City of Brookside Village	Project Description: Widen, deepen and straighten Max Road and Roy Road ditches to reduce flooding. Install box culverts.
2011 Mitigation Action No.: 4	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Structural Project	
Hazard(s) Addressed: Flood, Hurricanes and Tropical Storms	
Priority: High	
Estimated Cost: \$500,000	
Potential Funding Sources: Cost Sharing Federal/ State Grant Contingency Funds, HMGP, PDM	
Lead Agency/Department Responsible: Brookside Village	
Implementation Schedule: When funding becomes available	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

City of Brookside Village

Name of Jurisdiction: City of Brookside Village	Project Description: Development of mutual aid/intra-local agreements with area communities for post-disaster assistance.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 1	
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions): Completed	
Category: Emergency Services	
Hazard(s) Addressed: Hurricane and Tropical Storms, Flood, Tornadoes	
Priority: High	
Estimated Cost:	
Potential Funding Sources:	
Lead Agency/Department Responsible: Commissioners Court	
Implementation Schedule: One year or as needed	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: City of Brookside Village	Project Description: Develop debris management plan to speed up the removal of debris generated by flood/hurricane events, etc.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 2	
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions): Completed	
Category: Emergency Services	
Hazard(s) Addressed: Flood, Hurricane and Tropical Storms	
Priority: High	
Estimated Cost: \$50,000	
Potential Funding Sources: Public Assistance, FEMA Emergency Management Performance Grant, FEMA Emergency Operations Grant	
Lead Agency/Department Responsible: Brazoria County Road and Bridge	
Implementation Schedule:	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

City of Brookside Village

Name of Jurisdiction: City of Brookside Village	Project Description: Purchase equipment generator.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 3		
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions): Completed		
Category: Emergency Services		
Hazard(s) Addressed: Hurricane and Tropical Storms, Flood, Tornadoes, Severe Thunderstorms		
Priority: High		
Estimated Cost: \$3,500		
Potential Funding Sources: State and Local Funds, HMGP (generator "quick connect"), PDM		
Lead Agency/Department Responsible: Public works Dept		
Implementation Schedule: 6 months		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: City of Brookside Village	Project Description: Develop public education campaign addressing hazard awareness.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 4		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): On-going activity		
Category: Public Information and Awareness		
Hazard(s) Addressed: Hurricane and Tropical Storms, Tornadoes, Flood, Wildfire, Toxic Release/HAZMAT		
Priority: Low		
Estimated Cost: \$20,000		
Potential Funding Sources: National Weather Service, HMGP, PDM, FEMA- Emergency Operations Center Funding, FEMA-Emergency Management Performance Grant, FEMA-Emergency Management Performance Grant, FEMA-Emergency Management Performance Grant, FEMA-Emergency Management Performance Grant, USDA Environmental Quality Incentives Program, Materials available from FEMA and Red Cross free of charge		
Lead Agency/Department Responsible: Code Enforcement/Emergency Management		
Implementation Schedule: 1 year		
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

City of Clute

Name of Jurisdiction: City of Clute	Project Description: Deepen and widen drainage ditches around Brazoswood High School and Clute City Park.	
2011 Mitigation Action No.: 1		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Structural Project		
Hazard(s) Addressed: Flood, Severe Thunderstorms, Hurricanes and Tropical Storms		
Priority: High		
Estimated Cost: \$75,000		
Potential Funding Sources: Velasco Drainage District		
Lead Agency/Department Responsible: Velasco Drainage District		
Implementation Schedule: 6-12 months		
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

Name of Jurisdiction: City of Clute	Project Description: Participate in CRS workshop hosted by H-GAC.	
2011 Mitigation Action No.: 2		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Public Information and Awareness, Prevention		
Hazard(s) Addressed: Dam/Levee Failure, Flood		
Priority: Medium		
Estimated Cost: \$-		
Potential Funding Sources: N/A		
Lead Agency/Department Responsible: Emergency Management		
Implementation Schedule: 2013		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

City of Clute

Name of Jurisdiction: City of Clute	Project Description: Develop debris management plan.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 1	
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions): Completed	
Category: Prevention	
Hazard(s) Addressed: Tornadoes, Hurricane and Tropical Storms	
Priority: High	
Estimated Cost: \$50,000	
Potential Funding Sources: Reserves, FEMA All Hazards Emergency Operational Planning, FEMA Emergency Management Performance Grant, Public Assistance funds (post disaster)	
Lead Agency/Department Responsible: Office of Public Works Director	
Implementation Schedule: Implement plan immediately following event	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: City of Clute	Project Description: Conduct Flag Lake drainage study and proceed with the revealed plan; partner with Velasco Drainage District and City of Lake Jackson.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 2	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): Unfunded	
Category: Structural Project	
Hazard(s) Addressed: Flood	
Priority: Medium	
Estimated Cost: \$250,000	
Potential Funding Sources: USACE-Planning Assistance to States, Flood Mitigation Assistance Program, Hazard Mitigation Assistance Program, PDM, USACE-Small Flood Control Projects, USDA NRCS-Emergency Watershed Protection Agency, TWDB-Clean Water State Revolving Fund, TWDB (Development Fund II)-Texas Water Development Fund, USDA NRCS-Watershed Protection and Flood Prevention Program, EPA NPS Grant Program	
Lead Agency/Department Responsible: City of Clute, Velasco Drainage District, Lake Jackson	
Implementation Schedule: Dependent on funding	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

City of Clute

Name of Jurisdiction: City of Clute	Project Description: Train city personnel to implement evacuation plans.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 3	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): Unfunded	
Category: Public Information and Awareness	
Hazard(s) Addressed: Hurricane and Tropical Storms	
Priority: Medium	
Estimated Cost: \$1,500	
Potential Funding Sources: General fund, Emergency Management Institute, FEMA Assistance to Fire Fighters Grant, FEMA Emergency Management performance Grant, FEMA- All Hazards Emergency Operational Planning	
Lead Agency/Department Responsible: Office of Emergency Management Coordination	
Implementation Schedule: conduct training in November and repeat semi annually	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: City of Clute	Project Description: Implement public educational campaign addressing the dangers of clogging drainage channels with debris.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 4	
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions): Completed	
Category: Public Information and Awareness	
Hazard(s) Addressed: Flood	
Priority: Medium	
Estimated Cost: \$5,000	
Potential Funding Sources: General funds, PDM Program, Flood Mitigation Assistance Program, HMGP, USDA-Environmental Quality Incentives Program, TCEQ Texas Clean Rivers Program, TWDB Research and Planning Fund-Research and Planning Fund Grants, USDA NRCS-Watershed Surveys and Planning	
Lead Agency/Department Responsible: Office of City Manager	
Implementation Schedule: On-going activity	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

City of Clute

Name of Jurisdiction: City of Clute	Project Description: Attend annual petroleum industry workshop.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 5	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): Unfunded	
Category: Public Information and Awareness	
Hazard(s) Addressed: Toxic Release/HAZMAT	
Priority: Low	
Estimated Cost: \$500	
Potential Funding Sources: General City Funds	
Lead Agency/Department Responsible: Office of Emergency Management Coordinator	
Implementation Schedule: Participate in annual industry workshop	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: City of Clute	Project Description: Develop educational campaign to inform the public of the need for water rationing, establish information site on local access channel.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 6	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): Unfunded	
Category: Public Information and Awareness	
Hazard(s) Addressed: Drought	
Priority: Low	
Estimated Cost: \$3,500	
Potential Funding Sources: TCEQ-Texas Clean Rivers Program, TWDB Research and Planning Fund-Research and Planning Fund Grants, USDA-NRCS Watershed Surveys and Planning, USDA Environmental Quality Incentives Program	
Lead Agency/Department Responsible: Public Works	
Implementation Schedule: October 2003-December 2003	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

City of Danbury

Name of Jurisdiction: City of Danbury	Project Description: Conduct wildfire outreach and education campaign by distributing information at public buildings, town hall meetings, and other speaking engagements.	
2011 Mitigation Action No.: 1		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Public Information and Awareness		
Hazard(s) Addressed: Wildfire, Drought		
Priority: Medium		
Estimated Cost:		
Potential Funding Sources: HMGP, PDM, Texas Forest Service		
Lead Agency/Department Responsible: City of Danbury, Brazoria County		
Implementation Schedule: Upon funding		
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: City of Danbury	Project Description: Conduct flood outreach and education campaign by distributing information at public buildings, townhall meetings, and other speaking engagements.	
2011 Mitigation Action No.: 2		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Public Information and Awareness		
Hazard(s) Addressed: Flood, Hurricanes and Tropical Storms, Severe Thunderstorms		
Priority: Medium		
Estimated Cost:		
Potential Funding Sources: HMGP, PDM		
Lead Agency/Department Responsible: City of Danbury, Brazoria County		
Implementation Schedule: Upon funding		
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

City of Danbury

Name of Jurisdiction: City of Danbury	Project Description: Work with Drainage District 8 to clear and maintain drainage ditches throughout city.	
2011 Mitigation Action No.: 3		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Structural Project		
Hazard(s) Addressed: Flood, Hurricanes and Tropical Storms, Severe Thunderstorms		
Priority: High		
Estimated Cost: \$85,000		
Potential Funding Sources: Budget, Drainage District 8		
Lead Agency/Department Responsible: Public works		
Implementation Schedule: 6-12 months		
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

Name of Jurisdiction: City of Danbury	Project Description: Participate in CRS workshop hosted by H-GAC.	
2011 Mitigation Action No.: 4		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Public Information and Awareness		
Hazard(s) Addressed: Dam/Levee Failure, Flood		
Priority: Medium		
Estimated Cost: \$-		
Potential Funding Sources: N/A		
Lead Agency/Department Responsible: Emergency Management		
Implementation Schedule: 2013		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

City of Danbury

Name of Jurisdiction: City of Danbury	Project Description: Development of mutual aid/intra-local agreements with area communities for post-disaster assistance.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 1	
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions): Completed	
Category: Emergency Services	
Hazard(s) Addressed: Hurricane and Tropical Storms, Toxic Release/HAZMAT, Flood, Tornadoes	
Priority: High	
Estimated Cost:	
Potential Funding Sources:	
Lead Agency/Department Responsible: Commission Court	
Implementation Schedule: One or as needed	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: City of Danbury	Project Description: Develop debris management plan to speed up the removal of debris generated by flood/hurricane events, etc.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 2	
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions): Completed	
Category: Emergency Services	
Hazard(s) Addressed: Flood, Hurricane and Tropical Storms	
Priority: High	
Estimated Cost: \$100,000	
Potential Funding Sources: EPA- Pesticide Environment Stewardship Program, Public Assistance (post disaster)	
Lead Agency/Department Responsible: Public Works	
Implementation Schedule: 6 to 9 months	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

City of Danbury

Name of Jurisdiction: City of Danbury	Project Description: Purchase equipment generator.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 3	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): Unfunded	
Category: Emergency Services	
Hazard(s) Addressed: Hurricane and Tropical Storms, Flood, Tornadoes, Severe Thunderstorms	
Priority: High	
Estimated Cost: \$35,000	
Potential Funding Sources: State and Local Funds, HMGP (generator "quick connect"), PDM	
Lead Agency/Department Responsible: Brazoria County Road and Bridge	
Implementation Schedule: As needed within five years	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: City of Danbury	Project Description: Develop public education campaign addressing hazard awareness.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 4	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): Unfunded	
Category: Public Information and Awareness	
Hazard(s) Addressed: Hurricane and Tropical Storms, Tornadoes, Flood, Wildfire	
Priority: Low	
Estimated Cost: \$20,000	
Potential Funding Sources: National Weather Service, HMGP, PDM, FEMA-Emergency Operations Center Funding, FEMA-Emergency Management Performance Grant, USDA Rural Utilities Service-Weather Radio Grant Program, USDA Environmental Quality Incentives Program, Materials available from FEMA and Red Cross free of charge	
Lead Agency/Department Responsible: EMS	
Implementation Schedule: 1 year	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

City of Freeport

Name of Jurisdiction: City of Freeport	Project Description: Install emergency generators on critical drainage pumps and lift stations at six locations.
2011 Mitigation Action No.: 1	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Property Protection	
Hazard(s) Addressed: Flood, Hurricanes and Tropical Storms, Severe Thunderstorms, Tornadoes	
Priority: High	
Estimated Cost: \$90,000	
Potential Funding Sources: Capital project or grant, PDM, HMGP	
Lead Agency/Department Responsible: Public Works	
Implementation Schedule: 12 months	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: City of Freeport	Project Description: Purchase a 5-inch rubber hose for pumping in moving water from a flood area or support the city potable water when an area goes off-line
2011 Mitigation Action No.: 2	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Emergency Services	
Hazard(s) Addressed: Dam/Levee Failure, Flood, Hurricanes and Tropical Storms, Severe Thunderstorms, Tornadoes	
Priority: High	
Estimated Cost: \$13,000	
Potential Funding Sources: Budget - capital projects, grants, PDM, HMGP	
Lead Agency/Department Responsible: Fire Department/EMC	
Implementation Schedule: 24 months	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

City of Freeport

Name of Jurisdiction: City of Freeport	Project Description: Implement a new storm drainage system with culvert boxes and culvert piping to be attached to an existing storm drainage system for the roadway between West 4th and West 6th streets. The drainage project will address property and roadway flooding.
2011 Mitigation Action No.: 3	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Structural Project	
Hazard(s) Addressed: Dam/Levee Failure, Flood, Hurricanes and Tropical Storms, Severe Thunderstorms, Tornadoes	
Priority: Medium	
Estimated Cost: \$125,000	
Potential Funding Sources: Budget - capital project, PDM, HMGP	
Lead Agency/Department Responsible: Public works	
Implementation Schedule: 6-12 months	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

Name of Jurisdiction: City of Freeport	Project Description: Implement a new storm drainage system with culvert boxes and culvert piping to be attached to an existing storm drainage system for the roadway between Lynn Lane and West 5th streets. The drainage project will address property and roadway flooding.
2011 Mitigation Action No.: 4	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Structural Project	
Hazard(s) Addressed: Dam/Levee Failure, Flood, Hurricanes and Tropical Storms, Severe Thundestorms, Tornadoes	
Priority: Medium	
Estimated Cost: \$125,000	
Potential Funding Sources: Budget - capital project, PDM, HMGP	
Lead Agency/Department Responsible: Public works	
Implementation Schedule: 6-12 months	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

City of Freeport

Name of Jurisdiction: City of Freeport	Project Description: Implement a new storm drainage system with culvert boxes and culvert piping to be attached to an existing storm drainage system for the roadway between Lynn Lane and West 7th streets. The drainage project will address property and roadway flooding.
2011 Mitigation Action No.: 5	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Structural Project	
Hazard(s) Addressed: Dam/Levee Failure, Flood, Hurricanes and Tropical Storms, Severe Thunderstorms, Tornadoes	
Priority: Medium	
Estimated Cost: \$125,000	
Potential Funding Sources: Budget - capital project, PDM, HMGP	
Lead Agency/Department Responsible: Public works	
Implementation Schedule: 6-12 months	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

Name of Jurisdiction: City of Freeport	Project Description: Implement a new storm drainage system with culvert boxes and culvert piping to be attached to an existing storm drainage system for the roadway in the alley in the 1700 Blk between between West 8th and West 7th streets. The drainage project will address property and roadway flooding.
2011 Mitigation Action No.: 6	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Structural Project	
Hazard(s) Addressed: Dam/Levee Failure, Flood, Hurricanes and Tropical Storms, Severe Thunderstorms, Tornadoes	
Priority: Medium	
Estimated Cost: \$125,000	
Potential Funding Sources: Budget, PDM, HMGP	
Lead Agency/Department Responsible: Public works	
Implementation Schedule: 6-12 months	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

City of Freeport

Name of Jurisdiction: City of Freeport	Project Description: Implement a new storm drainage system with culvert boxes and culvert piping to be attached to an existing storm drainage system for the roadway in the alley in the 1700 Blk between West 8th and West 9th streets. The drainage project will address property and roadway flooding.
2011 Mitigation Action No.: 7	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Structural Project	
Hazard(s) Addressed: Dam/Levee Failure, Flood, Hurricanes and Tropical Storms, Severe Thunderstorms, Tornadoes	
Priority: Medium	
Estimated Cost: \$125,000	
Potential Funding Sources: Capital project, PDM, HMGP	
Lead Agency/Department Responsible: Public works	
Implementation Schedule: 2013	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

Name of Jurisdiction: City of Freeport	Project Description: Implement a new storm drainage system with culvert boxes and culvert piping to be attached to an existing storm drainage system for the roadway for West 5th between Yaupon and Dixie Street. The drainage project will address property and roadway flooding.
2011 Mitigation Action No.: 8	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Structural Project	
Hazard(s) Addressed: Dam/Levee Failure, Flood, Hurricanes and Tropical Storms, Severe Thunderstorms, Tornadoes	
Priority: Medium	
Estimated Cost: \$370,500	
Potential Funding Sources: Budget - capital project, PDM, HMGP	
Lead Agency/Department Responsible: Public works	
Implementation Schedule: 6-12 months	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

City of Freeport

Name of Jurisdiction: City of Freeport	Project Description: Implement a new storm drainage system with culvert boxes and culvert piping to be attached to an existing storm drainage system for the roadway – West 7th Street between Yaupon and Dixie. The drainage project will address property and roadway flooding.
2011 Mitigation Action No.: 9	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Structural Project	
Hazard(s) Addressed: Dam/Levee Failure, Flood, Hurricanes and Tropical Storms, Severe Thunderstorms, Tornadoes	
Priority: High	
Estimated Cost: \$800,000	
Potential Funding Sources: Budget - capital project, PDM, HMGP	
Lead Agency/Department Responsible: Public works	
Implementation Schedule: 6-12 months	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

Name of Jurisdiction: City of Freeport	Project Description: Implement drainage improvements on Gulf Boulevard close to Velasco Elementary.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 1	
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions): Completed	
Category: Structural Project	
Hazard(s) Addressed: Flood	
Priority: High	
Estimated Cost: \$133,000	
Potential Funding Sources: USACE-Small Flood Control Projects, HMGP, USDA NRCS-Emergency Watershed Protection Agency, TWDB-Clean Water State Revolving Fund, TWDB (Development Fund II)-Texas Water Development Fund, USDA NRCS-Watershed Protection and Flood Prevention Program, 406 Public Assistance, EPA NPS Grant Program	
Lead Agency/Department Responsible: Public Works	
Implementation Schedule: Completed by 2005	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

City of Freeport

Name of Jurisdiction: City of Freeport	Project Description: Implement mosquito control program (truck, equipment, materials and education).
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 2	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Yes Carry On: Carry On With Modification:	
Reason not complete (2006 actions): County to Provide Service	
Category: Prevention	
Hazard(s) Addressed: Flood	
Priority: High	
Estimated Cost: \$1,000,000	
Potential Funding Sources: EPA-Pesticide Environment Stewardship Program, Public Assistance (post disaster)	
Lead Agency/Department Responsible: Public Works	
Implementation Schedule: 6 TO 9 MONTHS	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: City of Freeport	Project Description: Implement drainage improvements on Navigation Boulevard (FM 1495).
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 3	
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions): Completed	
Category: Structural Project	
Hazard(s) Addressed: Flood	
Priority: High	
Estimated Cost: \$1,000,000	
Potential Funding Sources: HMGP, PDM, USACE Small Flood Control Projects, USDA NRCS-Emergency Watershed Protection Agency, TWDB-Clean Water State Revolving Fund, TWDB (Development Fund II)-Texas Water Development Fund, USDA NRCS-Watershed Protection and Flood Prevention Program, 406 Public Assistance, EPA NPS Grant Program,	
Lead Agency/Department Responsible: Public Works	
Implementation Schedule: Completed by 2005	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

City of Freeport

Name of Jurisdiction: City of Freeport	Project Description: Implement drainage improvements: Britt Baily Road.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 4		
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions): Completed		
Category: Structural Project		
Hazard(s) Addressed: Flood		
Priority: High		
Estimated Cost: \$83,000		
Potential Funding Sources: HMGP, PDM, USACE Small Flood Control Projects, USDA NRCS-Emergency Watershed Protection Agency, TWDB-Clean Water State Revolving Fund, TWDB (Development Fund II)-Texas Water Development Fund, USDA NRCS-Watershed Protection and Flood Prevention Program, 406 Public Assistance, EPA NPS Grant Program,		
Lead Agency/Department Responsible: Public Works		
Implementation Schedule: WITHIN 3 MONTHS		
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

Name of Jurisdiction: City of Freeport	Project Description: Conduct computer security/vulnerability study.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 5		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Yes Carry On: Carry On With Modification:		
Reason not complete (2006 actions): Not cost effective		
Category: Prevention, Property Protection,		
Hazard(s) Addressed: Severe Thunderstorms		
Priority: High		
Estimated Cost: \$15,000		
Potential Funding Sources: FEMA All Hazards Emergency Operational Planning FEMA Emergency management Performance Grant Dept of Justice State Homeland Security Program		
Lead Agency/Department Responsible: Finance		
Implementation Schedule: No later than the end of the fiscal year (9/30/04)		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

City of Freeport

Name of Jurisdiction: City of Freeport	Project Description: Purchase emergency generator for Fire Station 1.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 6	
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions): Completed	
Category: Emergency Services	
Hazard(s) Addressed: Wildfire, Hurricanes and Tropical Storms	
Priority: High	
Estimated Cost: \$80,000	
Potential Funding Sources: Federal State and Local, FEMA Assistance to Fire Fighters Grant, HMGP (generate quick connects) FEMA Emergency Management Performance Grant, FEMA All Hazards Emergency Operational Planning	
Lead Agency/Department Responsible: Fire Dept	
Implementation Schedule: 2005	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: City of Freeport	Project Description: Provide elevated water supply to industry and port within ETJ in order to enhance firefighting capability.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 7	
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions): Completed	
Category: Emergency Services	
Hazard(s) Addressed: Fire, Toxic Release/HAZMAT	
Priority: Medium	
Estimated Cost: \$750	
Potential Funding Sources: Federal State and Local, FEMA Fire Management Assistance Grant, TWDB State Participation and Storage Acquisition program, FEMA	
Lead Agency/Department Responsible: Fire Dept	
Implementation Schedule: 2007	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

City of Freeport

Name of Jurisdiction: City of Freeport	Project Description: Improve handicap accessibility for downtown area in case of forced evacuation.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 8		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): Unfunded		
Category: Prevention, Structural Project,		
Hazard(s) Addressed: Flood, Hurricane and Tropical Storms		
Priority: Medium		
Estimated Cost: \$50,000		
Potential Funding Sources: Federal State and Local (as funds become available), FEMA-Fire Management Assistance Grants, USDA Environmental Quality Incentives Program, CDBG (Small cities), US DOJ-ADA Guide for Small Towns and ADA and City Governments: Common Problems		
Lead Agency/Department Responsible: Public Works		
Implementation Schedule: Completed by 2005		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: City of Freeport	Project Description: Secure building entry access at City Hall (home to U.S. Congressman's Office and Port Administration) and city's financial offices.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 9		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): Unfunded		
Category: Prevention, Property Protection,		
Hazard(s) Addressed: Terrorism		
Priority: Medium		
Estimated Cost: \$25,000		
Potential Funding Sources: Federal State and Local (as funds become available), FEMA-Emergency Management Performance Grant, DOJ-State and Local Domestic Preparedness Technical Assistance, FEMA-All Hazards Emergency Operational Planning, DOJ-State Homeland Security Program		
Lead Agency/Department Responsible: Finance		
Implementation Schedule: within 2 years		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

City of Freeport

Name of Jurisdiction: City of Freeport	Project Description: Establish barricade system for Main Street area.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 10		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): Unfunded		
Category: Emergency Services		
Hazard(s) Addressed: Flood		
Priority: Medium		
Estimated Cost: \$2,000		
Potential Funding Sources: FEMA Assistance to Fire Fighters Grant, FEMA Emergency Management Performance Grants, DOJ-State and Local Domestic Preparedness Technical Assistance, FEMA All Hazards Emergency Operational Planning, DOJ State Homeland Security Program		
Lead Agency/Department Responsible: Police/Fire/EMA/ Main Street		
Implementation Schedule: 6 months		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: City of Freeport	Project Description: Replenish sand dunes.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 11		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): Unfunded		
Category: Structural Project		
Hazard(s) Addressed: Flood, Hurricane and Tropical Storms		
Priority: Medium		
Estimated Cost: \$200,000		
Potential Funding Sources: Federal State and Local (as funds become available), USACE-Beach Erosion Control Projects, USACE Emergency Streambank and Shoreline Protection, USACE-Planning Assistance to States, HMGP, USACE-Nonstructural Alternatives to Structural Rehabilitation of Damages Flood Control Works, USACE-Planning Assistance to States, 406 Public Assistance		
Lead Agency/Department Responsible: Public Works		
Implementation Schedule: Completed by 2006		
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

City of Freeport

Name of Jurisdiction: City of Freeport	Project Description: Widen Highway 36 to improve evacuation.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 12	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): Unfunded	
Category: Structural Project	
Hazard(s) Addressed: Flood, Hurricane and Tropical Storms	
Priority: Medium	
Estimated Cost: \$5,000,000	
Potential Funding Sources: Federal State and Local (as funds become available), TxDOT	
Lead Agency/Department Responsible: Public Works (TXDOT)	
Implementation Schedule: Complete by 2006	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: City of Freeport	Project Description: Replace aging Fire/EMS chief/EMS Command and Emergency Management staff command vehicles that are in excess of 100,000 miles or older than seven years old.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 13	
Status of 2006 Mitigation Action: Complete: In Progress: Yes No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions): Partially funded	
Category: Emergency Services	
Hazard(s) Addressed: Wildfire, Toxic Release/HAZMAT	
Priority: Medium	
Estimated Cost: \$50,000	
Potential Funding Sources: Federal State and Local (as funds become available), FEMA-Assistance to Firefighter's Grant, FEMA-All Hazards Operational Planning	
Lead Agency/Department Responsible: Fire/ EMS	
Implementation Schedule: 2005	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

City of Freeport

Name of Jurisdiction: City of Freeport	Project Description: Purchase two jet skis and trailers.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 14		
Status of 2006 Mitigation Action: Complete: In Progress: Yes No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions): Partially funded		
Category: Emergency Services		
Hazard(s) Addressed: Flood		
Priority: Medium		
Estimated Cost: \$24,000		
Potential Funding Sources: Federal State and Local (as funds become available), FEMA-Assistance to Firefighter's Grant, FEMA-All Hazards Operational Planning		
Lead Agency/Department Responsible: Police		
Implementation Schedule: Within 2 years		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: City of Freeport	Project Description: Purchase 25-foot boat with cabin.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 15		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): Unfunded		
Category: Emergency Services		
Hazard(s) Addressed: Flood, Hurricane and Tropical Storms		
Priority: Medium		
Estimated Cost: \$50,000		
Potential Funding Sources: Federal State and Local (as funds become available), FEMA-Assistance to Firefighter's Grant, FEMA-All Hazards Operational Planning		
Lead Agency/Department Responsible: Police		
Implementation Schedule: Within 2 years		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

City of Freeport

Name of Jurisdiction: City of Freeport	Project Description: Purchase public address system for downtown/Main Street area.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 16		
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions): Completed		
Category: Emergency Services, Public Information and Awareness,		
Hazard(s) Addressed: All hazards		
Priority: Medium		
Estimated Cost: \$50,000		
Potential Funding Sources: Federal State and Local (as funds become available), FEMA Emergency Management Performance Grant, PDM, HMGP, DOJ-State Homeland Security Program, USDA Rural Utilities Service-Weather Radio Grant Program		
Lead Agency/Department Responsible: Police/Fire/EMA/ Main Street		
Implementation Schedule: 1 1/2 to 2 years		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: City of Freeport	Project Description: Purchase and install security lighting for Main Street area.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 17		
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions): Completed		
Category: Emergency Services		
Hazard(s) Addressed: Excessive Heat, Winter Storms		
Priority: Medium		
Estimated Cost: \$7,500		
Potential Funding Sources: Federal State and Local (as funds become available), FEMA Emergency Management Performance Grant, Dept of Justice-State Homeland Security Program		
Lead Agency/Department Responsible: Police/Fire/EMA/ Main Street		
Implementation Schedule: 1 year		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

City of Freeport

Name of Jurisdiction: City of Freeport	Project Description: Install security system for City service center.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 18		
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions): Completed		
Category: Property Protection		
Hazard(s) Addressed: Excessive Heat, Winter Storms		
Priority: Medium		
Estimated Cost: \$5,000		
Potential Funding Sources: Federal State and Local (as funds become available), FEMA Emergency Management Performance Grant, Dept of Justice-State Homeland Security Program, FEMA-All Hazards Operation Planning		
Lead Agency/Department Responsible: Public Works		
Implementation Schedule: 1 year		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: City of Freeport	Project Description: Install security system for Parks Center.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 19		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): Unfunded		
Category: Property Protection		
Hazard(s) Addressed: Excessive Heat, Winter Storms		
Priority: Medium		
Estimated Cost: \$7,500		
Potential Funding Sources: Federal State and Local (as funds become available), FEMA Emergency Management Performance Grant, DOJ-State Homeland Security Program, FEMA All Hazards Operational Planning		
Lead Agency/Department Responsible: Public Works		
Implementation Schedule: 1 year		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

City of Freeport

Name of Jurisdiction: City of Freeport	Project Description: Refurbish Emergency Operations Center and Fire Station #1. Replace rubber roof and add storm protection to glass doors and windows
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 20	
Status of 2006 Mitigation Action: Complete: In Progress: Yes No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions): Partially funded	
Category: Property Protection	
Hazard(s) Addressed: Hurricane and Tropical Storms, Tornadoes, Wildfire, Severe Thunderstorms	
Priority: High	
Estimated Cost: \$60,000	
Potential Funding Sources: City Funds, FEMA HMGP and PDM, Federal State and Local (as funds become available), FEMA Emergency Management Performance Grant, DOJ-State Homeland Security Program, FEMA All Hazards Operational Planning	
Lead Agency/Department Responsible: City/ Emergency Management	
Implementation Schedule: 1 year prior to future hurricane season	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: City of Freeport	Project Description: Refurbish Incident Command Post at Police Station. Replace rubber roof and add storm protection to glass doors and windows
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 21	
Status of 2006 Mitigation Action: Complete: In Progress: Yes No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions): Partially funded	
Category: Property Protection	
Hazard(s) Addressed: Hurricane and Tropical Storms, Tornadoes, Severe Thunderstorm	
Priority: High	
Estimated Cost: \$60	
Potential Funding Sources: City Funds, FEMA HMGP and PDM, Federal State and Local (as funds become available), FEMA Emergency Management Performance Grant, DOJ-State Homeland Security Program, FEMA All Hazards Operational Planning	
Lead Agency/Department Responsible: City/Emergency Management	
Implementation Schedule: 1 year prior to future hurricane season	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

City of Hillcrest Village

Name of Jurisdiction: City of Hillcrest Village	Project Description: Participate in CRS workshop hosted by H-GAC.	
2011 Mitigation Action No.: 1		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Public Information and Awareness		
Hazard(s) Addressed: Dam/Levee Failure, Flood		
Priority: Medium		
Estimated Cost: \$-		
Potential Funding Sources: N/A		
Lead Agency/Department Responsible: Emergency Management		
Implementation Schedule: 2013		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

Name of Jurisdiction: City of Hillcrest Village	Project Description: Partner with local Drainage District to maintain ditches and culverts.	
2011 Mitigation Action No.: 2		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Prevention		
Hazard(s) Addressed: Dam/Levee Failure, Flood		
Priority: Medium		
Estimated Cost: \$1,000		
Potential Funding Sources: Budget		
Lead Agency/Department Responsible: Public Works		
Implementation Schedule: 12-18 months		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

City of Hillcrest Village

Name of Jurisdiction: City of Hillcrest Village	Project Description: Conduct wildfire outreach and education campaign by distributing information at public buildings, town hall meetings, and other speaking engagements.
2011 Mitigation Action No.: 3	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Public Information and Awareness	
Hazard(s) Addressed: Wildfire, Drought	
Priority: High	
Estimated Cost:	
Potential Funding Sources: PDM, HMGP, Texas Forest Service	
Lead Agency/Department Responsible: City of Hillcrest Village and County OEM	
Implementation Schedule: Upon funding	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: City of Hillcrest Village	Project Description: Conduct flood outreach and education campaign by distributing information at public buildings, townhall meetings, and other speaking engagements.
2011 Mitigation Action No.: 4	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Public Information and Awareness	
Hazard(s) Addressed: Flood, Hurricanes and Tropical Storms, Severe Thunderstorms	
Priority: High	
Estimated Cost:	
Potential Funding Sources: PDM, HMGP	
Lead Agency/Department Responsible: City of Hillcrest Village and County OEM	
Implementation Schedule: Upon funding	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

City of Hillcrest Village

Name of Jurisdiction: City of Hillcrest Village	Project Description: Development of mutual aid/intra-local agreements with area communities for post-disaster assistance
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 1	
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions): Completed	
Category: Emergency Services	
Hazard(s) Addressed: Hurricane and Tropical Storms, Tornadoes, Flood, Wildfire	
Priority: High	
Estimated Cost:	
Potential Funding Sources: None needed	
Lead Agency/Department Responsible: Commissioner court	
Implementation Schedule: 1 year or as needed	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: City of Hillcrest Village	Project Description: Develop debris management plan to speed up the removal of debris generated by flood/hurricane events, etc.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 2	
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions): Completed	
Category: Emergency Services	
Hazard(s) Addressed: Flood, Hurricane and Tropical Storms	
Priority: High	
Estimated Cost: \$50,000	
Potential Funding Sources: Public Assistance (following federally-declared disaster, FEMA Emergency management Performance Grant FEMA Emergency Operations Grant	
Lead Agency/Department Responsible: Brazoria County Road and Bridge	
Implementation Schedule: As needed with 5 years	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

City of Hillcrest Village

Name of Jurisdiction: City of Hillcrest Village	Project Description: Purchase equipment generator to power Emergency Operations Center during power outages to maintain critical services.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 3	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): Rural Affairs Grant	
Category: Property Protection	
Hazard(s) Addressed: Hurricane and Tropical Storms, Flood, Tornadoes, Severe Thunderstorms	
Priority: High	
Estimated Cost: \$35,000	
Potential Funding Sources: State and Local funds, HMGP	
Lead Agency/Department Responsible: Public Works dept	
Implementation Schedule: 6 months	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: City of Hillcrest Village	Project Description: Develop public education campaign addressing hazard awareness.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 4	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): Unfunded	
Category: Public Information and Awareness	
Hazard(s) Addressed: Hurricane and Tropical Storms, Wildfire, Flood, Tornadoes	
Priority: Low	
Estimated Cost: \$20,000	
Potential Funding Sources: National Weather Service, HMGP, PDM FEMA Emergency Operations Center Funding FEMA Emergency Management Performance Grant, USDA Rural Utilities Service-Weather Radio Grant Program, USDA Environmental Quality Incentives Program, Materials available from FEMA and Red Cross free of charge	
Lead Agency/Department Responsible: EMS	
Implementation Schedule: 1 year	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

City of Holiday Lakes

Name of Jurisdiction: City of Holiday Lakes	Project Description: Conduct wildfire outreach and education campaign by distributing information at public buildings, town hall meetings, and other speaking engagements.
2011 Mitigation Action No.: 1	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Public Information and Awareness	
Hazard(s) Addressed: Wildfire, Drought	
Priority: High	
Estimated Cost:	
Potential Funding Sources: PDM, HMGP, Texas Forest Service	
Lead Agency/Department Responsible: City of Holiday Lakes and County OEM	
Implementation Schedule: Upon funding	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: City of Holiday Lakes	Project Description: Conduct flood outreach and education campaign by distributing information at public buildings, townhall meetings, and other speaking engagements.
2011 Mitigation Action No.: 2	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Public Information and Awareness	
Hazard(s) Addressed: Flood, Hurricanes and Tropical Storms, Severe Thunderstorms	
Priority: High	
Estimated Cost:	
Potential Funding Sources: PDM, HMGP	
Lead Agency/Department Responsible: City of Holiday Lakes and County OEM	
Implementation Schedule: Upon funding	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

City of Holiday Lakes

Name of Jurisdiction: City of Holiday Lakes	Project Description: Participate in CRS workshop hosted by H-GAC.	
2011 Mitigation Action No.: 3		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action:		
Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Public Information and Awareness		
Hazard(s) Addressed: Dam/Levee Failure, Flood		
Priority: Medium		
Estimated Cost: \$-		
Potential Funding Sources: N/A		
Lead Agency/Department Responsible: Emergency Management		
Implementation Schedule: 2013		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

Name of Jurisdiction: City of Holiday Lakes	Project Description: Partner with local Drainage District to maintain ditches and culverts.	
2011 Mitigation Action No.: 4		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action:		
Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Prevention		
Hazard(s) Addressed: Dam/Levee Failure, Flood		
Priority: Medium		
Estimated Cost: \$1,000		
Potential Funding Sources: Budget		
Lead Agency/Department Responsible: Public Works		
Implementation Schedule: 12-18 months		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

City of Holiday Lakes

Name of Jurisdiction: City of Holiday Lakes	Project Description: Development of mutual aid/intra-local agreements with area communities for post-disaster assistance.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 1	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): Unfunded	
Category: Emergency Services	
Hazard(s) Addressed: Hurricane and Tropical Storms, Tornadoes, Flood, Wildfire, Toxic Release/HAZMAT	
Priority: High	
Estimated Cost:	
Potential Funding Sources: None needed	
Lead Agency/Department Responsible: Commissioner Court	
Implementation Schedule: One year or as needed	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: City of Holiday Lakes	Project Description: Develop debris management plan to speed up the removal of debris generated by flood/hurricane events, etc.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 2	
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions): Completed	
Category: Emergency Services	
Hazard(s) Addressed: Flood, Hurricane and Tropical Storms	
Priority: High	
Estimated Cost: \$50,000	
Potential Funding Sources: Public Assistance (following federally-declared disaster, FEMA Emergency Management Performance Grant FEMA Emergency Operations Grant	
Lead Agency/Department Responsible: Brazoria County Road and Bridge	
Implementation Schedule: As needed within five years	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

City of Holiday Lakes

Name of Jurisdiction: City of Holiday Lakes	Project Description: Purchase equipment generator.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 3	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): Unfunded	
Category: Emergency Services	
Hazard(s) Addressed: Hurricane and Tropical Storms, Flood, Tornadoes, Severe Thunderstorms	
Priority: High	
Estimated Cost: \$35,000	
Potential Funding Sources: State and Local funds, HMGP (generator "quick connect"), PDM	
Lead Agency/Department Responsible: Public Works Dept	
Implementation Schedule: 6 months	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: City of Holiday Lakes	Project Description: Develop public education campaign addressing hazard awareness.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 4	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): Unfunded	
Category: Public Information and Awareness	
Hazard(s) Addressed: Hurricane and Tropical Storms, Wildfire, Tornadoes, Flood	
Priority: Low	
Estimated Cost: \$20,000	
Potential Funding Sources: National Weather Service, HMGP, PDM FEMA Emergency Operations Center funding, FEMA Emergency Management Performance Grant, USDA Rural Utilities Service-Weather Radio Grant Program, USDA Environmental Quality Incentives Program, Materials available from FEMA and Red Cross free of charge	
Lead Agency/Department Responsible: EMS	
Implementation Schedule: 1 year	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

City of Iowa Colony

Name of Jurisdiction: City of Iowa Colony	Project Description: Conduct wildfire outreach and education campaign by distributing information at public buildings, town hall meetings, and other speaking engagements.	
2011 Mitigation Action No.: 1		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Public Information and Awareness		
Hazard(s) Addressed: Wildfire, Drought		
Priority: High		
Estimated Cost:		
Potential Funding Sources: PDM, HMGP, Texas Forest Service		
Lead Agency/Department Responsible: City of Iowa Colony and County OEM		
Implementation Schedule: Upon funding		
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: City of Iowa Colony	Project Description: Conduct flood outreach and education campaign by distributing information at public buildings, townhall meetings, and other speaking engagements.	
2011 Mitigation Action No.: 2		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Public Information and Awareness		
Hazard(s) Addressed: Flood, Hurricanes and Tropical Storms, Severe Thunderstorms		
Priority: High		
Estimated Cost:		
Potential Funding Sources: PDM, HMGP		
Lead Agency/Department Responsible: City of Iowa Colony and County OEM		
Implementation Schedule: Upon funding		
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

City of Iowa Colony

Name of Jurisdiction: City of Iowa Colony	Project Description: Participate in CRS workshop hosted by H-GAC.	
2011 Mitigation Action No.: 3		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action:		
Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Public Information and Awareness		
Hazard(s) Addressed: Dam/Levee Failure, Flood		
Priority: Medium		
Estimated Cost: \$-		
Potential Funding Sources: N/A		
Lead Agency/Department Responsible: Emergency Management		
Implementation Schedule: 2013		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

Name of Jurisdiction: City of Iowa Colony	Project Description: Partner with local Drainage District to maintain ditches and culverts.	
2011 Mitigation Action No.: 4		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action:		
Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Prevention		
Hazard(s) Addressed: Dam/Levee Failure, Flood		
Priority: Medium		
Estimated Cost: \$1,000		
Potential Funding Sources: Budget		
Lead Agency/Department Responsible: Public Works		
Implementation Schedule: 12-18 months		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

City of Iowa Colony

Name of Jurisdiction: City of Iowa Colony	Project Description: Development of mutual aid/intra-local agreements with area communities for post-disaster assistance.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 1	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): Unfunded	
Category: Emergency Services	
Hazard(s) Addressed: Hurricane and Tropical Storms, Tornadoes, Flood, Wildfire, Toxic Release/HAZMAT	
Priority: High	
Estimated Cost:	
Potential Funding Sources: None needed	
Lead Agency/Department Responsible: County Commissioners Court	
Implementation Schedule: 1 year or as needed	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: City of Iowa Colony	Project Description: Develop debris management plan to speed up the removal of debris generated by flood/hurricane events, etc.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 2	
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions): Completed	
Category: Emergency Services	
Hazard(s) Addressed: Flood, Hurricane and Tropical Storms	
Priority: High	
Estimated Cost: \$50,000	
Potential Funding Sources: Public Assistance, FEMA Emergency Management Performance Grant, FEMA Emergency Operations Grant	
Lead Agency/Department Responsible: County Road and Bridge	
Implementation Schedule: As needed/within 5 years	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

City of Iowa Colony

Name of Jurisdiction: City of Iowa Colony	Project Description: Purchase equipment generator.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 3	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): Unfunded	
Category: Emergency Services	
Hazard(s) Addressed: Hurricane and Tropical Storms, Flood, Tornadoes, Severe Thunderstorms	
Priority: High	
Estimated Cost: \$50,000	
Potential Funding Sources: State and local funds, HMGP, PDM	
Lead Agency/Department Responsible: Public Works	
Implementation Schedule: 6 months	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: City of Iowa Colony	Project Description: Develop public education campaign addressing hazard awareness.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 4	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): Unfunded	
Category: Public Information and Awareness	
Hazard(s) Addressed: Hurricane and Tropical Storms, Flood, Wildfire, Tornadoes	
Priority: Low	
Estimated Cost: \$20,000	
Potential Funding Sources: NWS, HMGP, PDM, FEMA Emergency Operations Center Funding, FEMA Emergency Management Performance Grant, USDA Rural Utilities Service Weather Radio Grant Program, USDA Environmental Quality Incentives Program, free material from FEMA and Red Cross	
Lead Agency/Department Responsible: Emergency Management	
Implementation Schedule: 1 year	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

City of Jones Creek

Name of Jurisdiction: City of Jones Creek	Project Description: Conduct wildfire outreach and education campaign by distributing information at public buildings, town hall meetings, and other speaking engagements.	
2011 Mitigation Action No.: 1		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Public Information and Awareness		
Hazard(s) Addressed: Wildfire		
Priority: Medium		
Estimated Cost:		
Potential Funding Sources: HMGP, PDM, Texas Forest Service		
Lead Agency/Department Responsible: City of Jones Creek, Brazoria County		
Implementation Schedule: Upon funding		
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: City of Jones Creek	Project Description: Conduct flood outreach and education campaign by distributing information at public buildings, townhall meetings, and other speaking engagements.	
2011 Mitigation Action No.: 2		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Public Information and Awareness		
Hazard(s) Addressed: Flood		
Priority: Medium		
Estimated Cost:		
Potential Funding Sources: HMGP, PDM		
Lead Agency/Department Responsible: City of Jones Creek, Brazoria County		
Implementation Schedule: Upon funding		
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

City of Jones Creek

Name of Jurisdiction: City of Jones Creek	Project Description: Drainage and culvert issue on Billingsley.	
2011 Mitigation Action No.: 3		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Structural Project, Property Protection		
Hazard(s) Addressed: Flood, Hurricanes and Tropical Storms, Severe Thunderstorms, Tornadoes, Winter Storms		
Priority: Medium		
Estimated Cost: Undetermined		
Potential Funding Sources: General funds		
Lead Agency/Department Responsible: Jones Creek, Drainage District		
Implementation Schedule: 6 months		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

Name of Jurisdiction: City of Jones Creek	Project Description: Culvert clean out on Primrose.	
2011 Mitigation Action No.: 4		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Structural Project, Property Protection		
Hazard(s) Addressed: Flood, Hurricanes and Tropical Storms, Severe Thunderstorms, Tornadoes, Winter Storms		
Priority: Medium		
Estimated Cost: Undetermined		
Potential Funding Sources: General funds, HMGP, PDM		
Lead Agency/Department Responsible: Jones Creek, Pct 1 Road and Bridge		
Implementation Schedule: 12 months		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

City of Jones Creek

Name of Jurisdiction: City of Jones Creek	Project Description: Culvert clean out on Bluebonnet.	
2011 Mitigation Action No.: 5		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Natural Resource Protection, Property Protection		
Hazard(s) Addressed: Flood, Hurricanes and Tropical Storms, Severe Thunderstorms, Tornadoes, Winter Storms		
Priority: Medium		
Estimated Cost: Undetermined		
Potential Funding Sources: General funds, HMGP, PDM		
Lead Agency/Department Responsible: Jones Creek, Pct. 1 Road and Bridge		
Implementation Schedule: 12 months		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

Name of Jurisdiction: City of Jones Creek	Project Description: Highway 36 drainage (7) ditches to be cleared of debris and brush.	
2011 Mitigation Action No.: 6		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Natural Resource Protection, Property Protection		
Hazard(s) Addressed: Flood, Hurricanes and Tropical Storms, Severe Thunderstorms, Tornadoes, Winter Storms		
Priority: Medium		
Estimated Cost: Undetermined		
Potential Funding Sources: TxDOT		
Lead Agency/Department Responsible: TxDOT, Jones Creek		
Implementation Schedule: 12 months		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

City of Jones Creek

Name of Jurisdiction: City of Jones Creek	Project Description: Outfall ditches along Stephen F. Austin.	
2011 Mitigation Action No.: 7		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Natural Resource Protection, Property Protection		
Hazard(s) Addressed: Flood, Hurricanes and Tropical Storms, Severe Thunderstorms, Tornadoes, Winter Storms		
Priority: Medium		
Estimated Cost: Undetermined		
Potential Funding Sources: CDBG, HMGP, PDM, federal, state and local funds (as funds become available)		
Lead Agency/Department Responsible: Brazoria County Drainage District		
Implementation Schedule: Future		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

Name of Jurisdiction: City of Jones Creek	Project Description: TPWD Project.	
2011 Mitigation Action No.: 8		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Natural Resource Protection, Property Protection		
Hazard(s) Addressed: Flood, Hurricanes and Tropical Storms, Severe Thunderstorms, Tornadoes, Winter Storms		
Priority: Medium		
Estimated Cost: Undetermined		
Potential Funding Sources: TPWD		
Lead Agency/Department Responsible: TPWD		
Implementation Schedule: On-going		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

City of Jones Creek

Name of Jurisdiction: City of Jones Creek	Project Description: Cleaning of East Stephen F. Austin's drainage to Jones Creek.	
2011 Mitigation Action No.: 9		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Natural Resource Protection, Property Protection		
Hazard(s) Addressed: Flood, Hurricanes and Tropical Storms, Severe Thunderstorms, Tornadoes, Winter Storms		
Priority: Medium		
Estimated Cost: Undetermined		
Potential Funding Sources: General funds, HMGP, PDM		
Lead Agency/Department Responsible: Jones Creek		
Implementation Schedule: Future		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

Name of Jurisdiction: City of Jones Creek	Project Description: Development of mutual aid/intra-local agreements with area communities for post-disaster assistance.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 1		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): Unfunded		
Category: Emergency Services		
Hazard(s) Addressed: Hurricane and Tropical Storms, Wildfire, Flood, Tornadoes		
Priority: High		
Estimated Cost:		
Potential Funding Sources: None Needed		
Lead Agency/Department Responsible: Commissioners court		
Implementation Schedule: One year or as needed		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

City of Jones Creek

Name of Jurisdiction: City of Jones Creek	Project Description: Develop debris management plan to speed up the removal of debris generated by flood/hurricane events, etc.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 2	
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions): Completed	
Category: Emergency Services	
Hazard(s) Addressed: Flood, Hurricane and Tropical Storms	
Priority: High	
Estimated Cost: \$50,000	
Potential Funding Sources: Public Assistance, FEMA Emergency Management Performance Grant, FEMA Emergency Operations Grant	
Lead Agency/Department Responsible: Brazoria County Road and Bridge	
Implementation Schedule: As needed with five years	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: City of Jones Creek	Project Description: Purchase equipment generator.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 3	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): Unfunded	
Category: Emergency Services	
Hazard(s) Addressed: Hurricane and Tropical Storms, Flood, Tornadoes, Severe Thunderstorms	
Priority: High	
Estimated Cost: \$35,000	
Potential Funding Sources: State and Local Funds, HMGP (generator "quick connect"), PDM	
Lead Agency/Department Responsible: Public Works Dept	
Implementation Schedule: 6 months	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

City of Jones Creek

Name of Jurisdiction: City of Jones Creek		Project Description: Develop public education campaign addressing hazard awareness.
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 4		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): Unfunded		
Category: Public Information and Awareness		
Hazard(s) Addressed: Hurricane and Tropical Storms, Flood, Wildfire, Tornadoes, Toxic Release/HAZMAT		
Priority: Low		
Estimated Cost: \$20,000		
Potential Funding Sources: National Weather Service, HMGP, PDM FEMA Emergency Operations Center funding, FEMA-Emergency Management Performance Grant, USDA Rural Utilities Service-Weather Radio Grant Program, USDA-Environmental Quality Incentives Program, material available from FEMA and Red Cross free of charge		
Lead Agency/Department Responsible: EMS		
Implementation Schedule: 1 year		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

City of Lake Jackson

Name of Jurisdiction: City of Lake Jackson	Project Description: Install broad spectrum radio system to be able to communicate during emergencies through the Supervisory Control and Data Acquisition (SCADA) system with Lake Jackson's 43 lift stations and 12 wells with remote operating equipment. SCADA communicates with the wells and lift stations to determine if they are online and functioning properly.
2011 Mitigation Action No.: 1	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Structural Project	
Hazard(s) Addressed: Wildfire, Toxic Release/HAZMAT, Hurricanes and Tropical Storms, Flood, Severe Thunderstorms, Tornadoes, Winter Storms, Excessive Heat	
Priority: High	
Estimated Cost: \$250,000	
Potential Funding Sources: Fire Station Construction Fund, USDA Rural Utilities Services-Weather Radio Grant Program, FEMA-Assistance to Firefighters Grant, HMGP, PDM	
Lead Agency/Department Responsible: Lake Jackson	
Implementation Schedule: Begin 2013	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: City of Lake Jackson	Project Description: Install emergency power to Well 15 and 120 KW trailer-mounted generators.
2011 Mitigation Action No.: 2	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Property Protection	
Hazard(s) Addressed: Hurricane and Tropical Storms, Tornadoes, Flood	
Priority: High	
Estimated Cost: \$100,000	
Potential Funding Sources: State Revolving Fund, HMGP (generator quick-connects) 406 Public Assistance (following federal disaster declaration)	
Lead Agency/Department Responsible: Lake Jackson	
Implementation Schedule: 2016	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

City of Lake Jackson

Name of Jurisdiction: City of Lake Jackson	Project Description: Conduct northeast quadrant flood protection study.	
2011 Mitigation Action No.: 3		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Property Protection		
Hazard(s) Addressed: Flood		
Priority: Medium		
Estimated Cost: \$250,000		
Potential Funding Sources:		
Lead Agency/Department Responsible: Lake Jackson		
Implementation Schedule: Begin 2016		
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

Name of Jurisdiction: City of Lake Jackson	Project Description: Participate in CRS workshop hosted by H-GAC.	
2011 Mitigation Action No.: 4		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Public Information and Awareness		
Hazard(s) Addressed: Dam/Levee Failure, Flood		
Priority: Medium		
Estimated Cost: \$-		
Potential Funding Sources: N/A		
Lead Agency/Department Responsible: Emergency Management		
Implementation Schedule: By 2013		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

City of Lake Jackson

Name of Jurisdiction: City of Lake Jackson	Project Description: Conduct public education campaign to address hazards. Outreach will be conducted through town hall meetings and other public facilities. Reading materials will be placed in public buildings such as libraries and city hall.
2011 Mitigation Action No.: 5	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Public Information and Awareness	
Hazard(s) Addressed: Flood, Hurricanes and Tropical Storms, Wildfire, Excessive Heat, Toxic Release/HAZMAT, Drought, Hail, Winter Storms	
Priority: Medium	
Estimated Cost:	
Potential Funding Sources: PDM, HMGP	
Lead Agency/Department Responsible: Emergency Management	
Implementation Schedule: 2012	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

Name of Jurisdiction: City of Lake Jackson	Project Description: Improve drainage downstream from State Highway 332. Highway facility currently creates structural blockage of downstream water flow to main pump station operated by Velasco Drainage District.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 1	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification: Yes	
Reason not complete (2006 actions): Funding	
Category: Structural Project	
Hazard(s) Addressed: Hurricane and Tropical Storms, Flood, Wildfire, Toxic Release/HAZMAT	
Priority: High	
Estimated Cost: \$5,000,000	
Potential Funding Sources: Bonds, TxDOT, HMGP, PDM, Public Assistance	
Lead Agency/Department Responsible: TxDOT, City of Lake Jackson	
Implementation Schedule: Begin 2012	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

City of Lake Jackson

Name of Jurisdiction: City of Lake Jackson	Project Description: Enhance radio tower and centralize equipment.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 2	
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions): Completed	
Category: Emergency Services	
Hazard(s) Addressed: Hurricane and Tropical Storms, Tornadoes, Flood	
Priority: High	
Estimated Cost: \$200,000	
Potential Funding Sources: Fire Station Construction fund, USDA Rural Utilities Services Weather Radio Grant Program, FEMA Assistance to Fire Fighters Grant, HMGP	
Lead Agency/Department Responsible: Lake Jackson	
Implementation Schedule: Begin 2004	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: City of Lake Jackson	Project Description: Upgrade electrical system at wells 94 and 15. Install transfer switch at wells 7, 8, 9, 10, 11, 12 and 16. Enable city to run all wells off emergency generators WAT 36.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 3	
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions): Completed	
Category: Property Protection	
Hazard(s) Addressed: Hurricane and Tropical Storms	
Priority: High	
Estimated Cost: \$50,000	
Potential Funding Sources: Capital Improvements Budget, 406 Public Assistance (following federal disaster declaration), HMGP	
Lead Agency/Department Responsible: Lake Jackson	
Implementation Schedule: Begin 2004	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

City of Lake Jackson

Name of Jurisdiction: City of Lake Jackson	Project Description: Implement improvements to State Highway 332 at Oak Drive grade separation in order to speed hurricane evacuation.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 4	
Status of 2006 Mitigation Action: Complete: In Progress: Yes No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions): SH288/332 improvement	
Category: Structural Project	
Hazard(s) Addressed: Hurricane and Tropical Storms, Tornadoes	
Priority: High	
Estimated Cost: \$5,000,000	
Potential Funding Sources: TxDOT, HMGP	
Lead Agency/Department Responsible: TxDOT	
Implementation Schedule: Begin 2010	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: City of Lake Jackson	Project Description: Install new electrical system in 24 lift stations to include power transfer switches. Transfer switches and quick connects are needed to allow mobile generators to operate. Through installation of these switches, Lake Jackson can rotate portable generator s as needed as opposed to purchasing permanent generators dedicated to each lift station and well.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 5	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification: Yes	
Reason not complete (2006 actions): Funding	
Category: Property Protection	
Hazard(s) Addressed: Hurricane and Tropical Storms, Tornadoes, Hurricanes and Tropical Storms, Severe Thunderstorms, Flood, Winter Storms, Excessive Heat	
Priority: High	
Estimated Cost: \$200,000	
Potential Funding Sources: State Revolving Fund, HMGP, PDM, 406 Public Assistance	
Lead Agency/Department Responsible: Lake Jackson	
Implementation Schedule: Begin 2015	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

City of Lake Jackson

Name of Jurisdiction: City of Lake Jackson	Project Description: Install emergency power to water/sewer - 350 KW and 120 KW trailer mounted generators.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 6	
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions): Completed	
Category: Property Protection	
Hazard(s) Addressed: Flood	
Priority: High	
Estimated Cost: \$175,000	
Potential Funding Sources: State Revolving Fund, HMGP (generator quick-connects) 406 Public Assistance (following federal disaster declaration)	
Lead Agency/Department Responsible: Lake Jackson	
Implementation Schedule: Begin 2004	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: City of Lake Jackson	Project Description: Clear trees and brush from Oyster Creek.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 7	
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions): Completed	
Category: Prevention	
Hazard(s) Addressed: Flood	
Priority: Medium	
Estimated Cost: \$200,000	
Potential Funding Sources: Capital Improvement Fund, NRCS Service Watershed Protection and Flood Prevention Program, 406 Public Assistance(following federal disaster), USACE Clearing and Snagging Projects	
Lead Agency/Department Responsible: Lake Jackson	
Implementation Schedule: 2005	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

City of Lake Jackson

Name of Jurisdiction: City of Lake Jackson	Project Description: Partner with City of Clute and Velasco Drainage District to conduct Flag Lake drainage study. Runoff from City of Lake Jackson flows into City of Clute. City of Clute and Velasco Drainage District would conduct drainage project after completion of study.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 8	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): Unfunded	
Category: Prevention	
Hazard(s) Addressed: Flood	
Priority: Medium	
Estimated Cost: \$250,000	
Potential Funding Sources: USACE Planning Assistance to States, Flood Mitigation Assistance Program, HMGP, TWDB Research and Planning Fund	
Lead Agency/Department Responsible: Lake Jackson	
Implementation Schedule: Begin 2006	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

Name of Jurisdiction: City of Lake Jackson	Project Description: Purchase online analyzers.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 9	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Prevention	
Hazard(s) Addressed: Toxic Release/HAZMAT	
Priority: Medium	
Estimated Cost: \$120,000	
Potential Funding Sources: Capital Improvement Budget FEMA Hazardous Materials Assistance Program, FEMA Emergency Management Performance Grants	
Lead Agency/Department Responsible: Lake Jackson	
Implementation Schedule: Begin 2006	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

City of Lake Jackson

Name of Jurisdiction: City of Lake Jackson	Project Description: Upgrade and enlarge drainage outfall pipe on Flag Lake Road.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 10		
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions): Completed		
Category: Structural Project		
Hazard(s) Addressed: Flood		
Priority: Low		
Estimated Cost: \$2,500,000		
Potential Funding Sources: Municipal Bonds, USACE Small Flood Control Projects, USDA NRCS Emergency Watershed Protection Agency, TWDB-Clean Water State Revolving Fund, TWDB (Development Fund II)-Texas Water Development Fund, USDA NRCS-Watershed Protection and Flood Prevention Program, EPA NPS Grant Program, 406 Public Assistance, PDM, HMGP		
Lead Agency/Department Responsible: Velasco Drainage District		
Implementation Schedule: Begin 2005		
Reduce effects of hazards on new buildings and infrastructure?: Yes		Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

Name of Jurisdiction: City of Lake Jackson	Project Description: Downtown Storm Sewer Outfall No. 5 (Oak) - Install gutter line slotted and area drain junction boxes along downtown business district loop (i.e., Circle Way, That Way, Parking Way). Oak Drive outfall drain system - upsize and regrade.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 11		
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions): Completed		
Category: Structural Project		
Hazard(s) Addressed: Flood		
Priority: Low		
Estimated Cost: \$1,000,000		
Potential Funding Sources: Municipal Bonds, USACE Small Flood Control Projects, USDA NRCS Emergency Watershed Protection Agency, TWDB-Clean Water State Revolving Fund, TWDB (Development Fund II)-Texas Water Development Fund, USDA NRCS-Watershed Protection and Flood Prevention Program, EPA NPS Grant Program, 406 Public Assistance		
Lead Agency/Department Responsible: Lake Jackson		
Implementation Schedule: begin 2010		
Reduce effects of hazards on new buildings and infrastructure?: Yes		Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

City of Liverpool

Name of Jurisdiction: City of Liverpool	Project Description: Participate in CRS workshop hosted by H-GAC.	
2011 Mitigation Action No.: 1		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action:		
Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Public Information and Awareness		
Hazard(s) Addressed: Dam/Levee Failure, Flood		
Priority: Medium		
Estimated Cost: \$-		
Potential Funding Sources: N/A		
Lead Agency/Department Responsible: Emergency Management		
Implementation Schedule: 2013		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

Name of Jurisdiction: City of Liverpool	Project Description: Partner with local Drainage District to maintain ditches and culverts.	
2011 Mitigation Action No.: 2		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action:		
Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Prevention		
Hazard(s) Addressed: Dam/Levee Failure, Flood		
Priority: Medium		
Estimated Cost: \$1,000		
Potential Funding Sources: Budget		
Lead Agency/Department Responsible: Public Works		
Implementation Schedule: 12-18 months		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

City of Liverpool

Name of Jurisdiction: City of Liverpool	Project Description: Conduct wildfire outreach and education campaign by distributing information at public buildings, town hall meetings, and other speaking engagements.
2011 Mitigation Action No.: 3	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Public Information and Awareness	
Hazard(s) Addressed: Wildfire, Drought	
Priority: High	
Estimated Cost:	
Potential Funding Sources: PDM, HMGP, Texas Forest Service	
Lead Agency/Department Responsible: City of Liverpool and County OEM	
Implementation Schedule: Upon funding	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: City of Liverpool	Project Description: Conduct flood outreach and education campaign by distributing information at public buildings, townhall meetings, and other speaking engagements.
2011 Mitigation Action No.: 4	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Public Information and Awareness	
Hazard(s) Addressed: Flood, Hurricanes and Tropical Storms, Severe Thunderstorms	
Priority: High	
Estimated Cost:	
Potential Funding Sources: PDM, HMGP	
Lead Agency/Department Responsible: City of Liverpool and County OEM	
Implementation Schedule: Upon funding	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

City of Liverpool

Name of Jurisdiction: City of Liverpool	Project Description: Development of mutual aid/intra-local agreements with area communities for post-disaster assistance.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 1	
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions): Completed	
Category: Emergency Services	
Hazard(s) Addressed: Hurricane and Tropical Storms, Flood, Tornadoes, Severe Thunderstorms	
Priority: High	
Estimated Cost:	
Potential Funding Sources: None needed	
Lead Agency/Department Responsible: Commissioners Court	
Implementation Schedule: One year or as needed	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: City of Liverpool	Project Description: Develop debris management plan to speed up the removal of debris generated by flood/hurricane events, etc.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 2	
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions): Completed	
Category: Emergency Services	
Hazard(s) Addressed: Flood, Hurricane and Tropical Storms	
Priority: High	
Estimated Cost: \$50,000	
Potential Funding Sources: Public Assistance (following federally-declared disaster, FEMA Emergency management Performance grant, FEMA emergency Operations Grant)	
Lead Agency/Department Responsible: Brazoria County Road and Bridge	
Implementation Schedule: As needed within five years	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

City of Liverpool

Name of Jurisdiction: City of Liverpool	Project Description: Purchase equipment generator.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 3	
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions): Completed	
Category: Emergency Services	
Hazard(s) Addressed: Hurricane and Tropical Storms, Flood, Tornadoes, Severe Thunderstorms	
Priority: High	
Estimated Cost: \$35,000	
Potential Funding Sources: State and Local Funds, HMGP (generator "quick connect") ,PDM	
Lead Agency/Department Responsible: Public Works Dept	
Implementation Schedule: 6 months	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: City of Liverpool	Project Description: Develop public education campaign addressing hazard awareness.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 4	
Status of 2006 Mitigation Action: Complete: In Progress: Yes No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions): Partially funded	
Category: Public Information and Awareness	
Hazard(s) Addressed: Flood	
Priority: Low	
Estimated Cost: \$20,000	
Potential Funding Sources: National Weather Service, HMGP, PDM, FEMA Emergency Operations Center Funding, FEMA-Emergency Management Performance Grant, USDA Rural Utilities Service-Weather Radio Grant Program, USDA Environmental Quality Incentives Program, Materials available from FEMA and Red Cross free of charge	
Lead Agency/Department Responsible: EMS	
Implementation Schedule: 1 year	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

City of Manvel

Name of Jurisdiction: City of Manvel	Project Description: Acquire Repetitive Loss (RL) and Severe Repetitive Loss (SRL) properties in the 100-year floodplain, as identified by FEMA and NFIP.
2011 Mitigation Action No.: 1	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Property Protection	
Hazard(s) Addressed: Flood	
Priority: High	
Estimated Cost:	
Potential Funding Sources: FEMA-HMGP, PDM, FMA, SRL, City, County, Drainage Districts	
Lead Agency/Department Responsible: City of Manvel	
Implementation Schedule: 12 months after funding	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

Name of Jurisdiction: City of Manvel	Project Description: Improve GIS to include repetitive loss areas and structures.
2011 Mitigation Action No.: 2	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Public Information and Awareness	
Hazard(s) Addressed: Flood	
Priority: High	
Estimated Cost: \$20,000	
Potential Funding Sources: FEMA-HMGP, PDM, FMA, SRL, City, County, Drainage Districts	
Lead Agency/Department Responsible: City of Manvel	
Implementation Schedule: 12 Months after funding	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

City of Manvel

Name of Jurisdiction: City of Manvel	Project Description: Gates Loop subdivision drainage improvements including deepening and widening ditches around Gates Loop and Sandy Point Rd.
2011 Mitigation Action No.: 3	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Structural Project	
Hazard(s) Addressed: Flood	
Priority: Medium	
Estimated Cost: \$100,000	
Potential Funding Sources: FEMA-HMGP, PDM, FMA, City, County, Drainage Districts	
Lead Agency/Department Responsible: City of Manvel	
Implementation Schedule: 12 months after funding	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

Name of Jurisdiction: City of Manvel	Project Description: Flora Street drainage improvements, including storm sewer rehabilitation and ditch cleaning.
2011 Mitigation Action No.: 4	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Structural Project	
Hazard(s) Addressed: Flood	
Priority: Medium	
Estimated Cost: \$100,000	
Potential Funding Sources: FEMA-HMGP, PDM, FMA, City, County, Drainage Districts	
Lead Agency/Department Responsible: City of Manvel	
Implementation Schedule: 12 months after funding	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

City of Manvel

Name of Jurisdiction: City of Manvel	Project Description: State Highway 6 drainage improvements, including storm sewer rehabilitation, ditch deepening, and subregional detention ponds.
2011 Mitigation Action No.: 5	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Structural Project	
Hazard(s) Addressed: Flood	
Priority: Medium	
Estimated Cost:	
Potential Funding Sources: FEMA-HMGP, PDM, FMA, City, County, Drainage Districts, Gulf Coast Water Authority TXDOT	
Lead Agency/Department Responsible: City of Manvel	
Implementation Schedule: 24 months after funding	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

Name of Jurisdiction: City of Manvel	Project Description: Alleluia Trail drainage improvements, including storm sewer rehabilitation and ditch deepening.
2011 Mitigation Action No.: 6	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Structural Project	
Hazard(s) Addressed: Flood	
Priority: Low	
Estimated Cost: \$50,000	
Potential Funding Sources: FEMA-HMGP, PDM, FMA, City, County, Drainage Districts	
Lead Agency/Department Responsible: City of Manvel	
Implementation Schedule: 12 months after funding	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

City of Manvel

Name of Jurisdiction: City of Manvel	Project Description: Tammy and Lira Streets drainage Improvements, including storm sewer rehabilitation and ditch deepening.
2011 Mitigation Action No.: 7	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Structural Project	
Hazard(s) Addressed: Flood	
Priority: Low	
Estimated Cost: \$50,000	
Potential Funding Sources: FEMA-HMGP, PDM, FMA, City, County, Drainage Districts	
Lead Agency/Department Responsible: City of Manvel	
Implementation Schedule: 12 months after funding	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

Name of Jurisdiction: City of Manvel	Project Description: Conduct wildfire outreach and education campaign. Make presentations at civic club meetings and local schools.
2011 Mitigation Action No.: 8	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Public Information and Awareness	
Hazard(s) Addressed: Wildfire, Drought	
Priority: High	
Estimated Cost:	
Potential Funding Sources: PDM, HMGP, Texas Forest Service	
Lead Agency/Department Responsible: City of Manvel and County OEM	
Implementation Schedule: Upon funding	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

City of Manvel

Name of Jurisdiction: City of Manvel	Project Description: Develop actions to alleviate structure and evacuation route flooding - this action could evolve into several projects.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 1	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): Unfunded	
Category: Prevention	
Hazard(s) Addressed: Flood	
Priority: High	
Estimated Cost: \$10,000,000	
Potential Funding Sources: City and County Drainage Districts	
Lead Agency/Department Responsible: Emergency Management	
Implementation Schedule: Unknown	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

City of Oyster Creek

Name of Jurisdiction: City of Oyster Creek	Project Description: Participate in CRS Workshop hosted by H-GAC.	
2011 Mitigation Action No.: 1		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action:		
Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Public Information and Awareness		
Hazard(s) Addressed: Dam/Levee Failure, Flood		
Priority: Medium		
Estimated Cost: \$-		
Potential Funding Sources: N/A		
Lead Agency/Department Responsible: Emergency Management		
Implementation Schedule: 2013		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

Name of Jurisdiction: City of Oyster Creek	Project Description: Conduct wildfire outreach and education campaign by distributing information at public buildings, town hall meetings, and other speaking engagements.	
2011 Mitigation Action No.: 2		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action:		
Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Public Information and Awareness		
Hazard(s) Addressed: Wildfire, Drought		
Priority: High		
Estimated Cost:		
Potential Funding Sources: PDM, HMGP, Texas Forest Service		
Lead Agency/Department Responsible: City of Oyster Creek and County OEM		
Implementation Schedule: Upon funding		
Reduce effects of hazards on new buildings and infrastructure?: Yes		Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

City of Oyster Creek

Name of Jurisdiction: City of Oyster Creek	Project Description: Conduct flood outreach and education campaign by distributing information at public buildings, townhall meetings, and other speaking engagements.
2011 Mitigation Action No.: 3	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Public Information and Awareness	
Hazard(s) Addressed: Flood, Hurricanes and Tropical Storms, Severe Thunderstorms	
Priority: High	
Estimated Cost:	
Potential Funding Sources: PDM, HMGP	
Lead Agency/Department Responsible: City of Oyster Creek and County OEM	
Implementation Schedule: Upon funding	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

Name of Jurisdiction: City of Oyster Creek	Project Description: Develop and implement drainage plan.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 1	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): Unfunded	
Category: Property Protection, Prevention	
Hazard(s) Addressed: Flood	
Priority: Medium	
Estimated Cost:	
Potential Funding Sources: Velasco Drainage District, local funds, USACE Small Flood Control Projects, USDA Rural Development Assistance-Utilities, 406 Public Assistance, USDA NRCS-Emergency Watershed Protection Agency, TWDB-Clean Water State Revolving Fund, TWDB (Development Fund II)-Texas Water Development Fund, USDA NRCS-Watershed Protection and Flood Prevention Program, EPA NPS Grant Program	
Lead Agency/Department Responsible: Public Works	
Implementation Schedule: Pending funding	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

City of Oyster Creek

Name of Jurisdiction: City of Oyster Creek	Project Description: Reduce exposure to hazardous materials (pipeline leaks, transportation accidents, etc.).	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 2		
Status of 2006 Mitigation Action: Complete: In Progress: Yes No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions): Continuous		
Category: Property Protection, Prevention		
Hazard(s) Addressed: Toxic Release/HAZMAT		
Priority: Medium		
Estimated Cost:		
Potential Funding Sources: FEMA-Hazardous Materials Assistance Program, FEMA-Emergency Management Performance Grant, FEMA-All Hazards Operational Planning, Interagency Hazardous Materials Public Sector Training and Planning Grants (USDOT), NIEHS Hazardous Waste Worker Health and Safety Training (DHHS)		
Lead Agency/Department Responsible: TXDOT Emergency Management Coordinator		
Implementation Schedule: pending funding		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: City of Oyster Creek	Project Description: Develop debris management plan.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 3		
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions): Completed		
Category: Prevention		
Hazard(s) Addressed: Tornadoes, Hurricane and Tropical Storms		
Priority: Medium		
Estimated Cost:		
Potential Funding Sources: Federal and State officials will provide technical assistance, Reserves, FEMA All Hazards Emergency Operational Planning, FEMA Emergency Management Performance Grant, Public Assistance Funds (post disaster)		
Lead Agency/Department Responsible: Public Works		
Implementation Schedule: pending funding		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

City of Oyster Creek

Name of Jurisdiction: City of Oyster Creek	Project Description: Install portable generators/pumps for water and sewer.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 4		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): Unfunded		
Category: Emergency Services, Property Protection,		
Hazard(s) Addressed: Hurricane and Tropical Storms, Flood, Tornadoes, Severe Thunderstorms		
Priority: Medium		
Estimated Cost:		
Potential Funding Sources: Local revenue, HMGP for Permanent Generators or Quick Connects		
Lead Agency/Department Responsible: Public Works		
Implementation Schedule: pending funding		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: Yes	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

City of Quintana

Name of Jurisdiction: City of Quintana	Project Description: Participate in CRS workshop hosted by H-GAC.	
2011 Mitigation Action No.: 1		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action:		
Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Public Information and Awareness		
Hazard(s) Addressed: Dam/Levee Failure, Flood		
Priority: Medium		
Estimated Cost: \$-		
Potential Funding Sources: N/A		
Lead Agency/Department Responsible: Emergency Management		
Implementation Schedule: 2013		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

Name of Jurisdiction: City of Quintana	Project Description: Partner with local Drainage District to maintain ditches and culverts.	
2011 Mitigation Action No.: 2		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action:		
Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Prevention		
Hazard(s) Addressed: Dam/Levee Failure, Flood		
Priority: Medium		
Estimated Cost: \$1,000		
Potential Funding Sources: Budget		
Lead Agency/Department Responsible: Public Works		
Implementation Schedule: 12-18 months		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

City of Quintana

Name of Jurisdiction: City of Quintana	Project Description: Conduct wildfire outreach and education campaign by distributing information at public buildings, town hall meetings, and other speaking engagements.
2011 Mitigation Action No.: 3	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Public Information and Awareness	
Hazard(s) Addressed: Wildfire, Drought	
Priority: High	
Estimated Cost:	
Potential Funding Sources: PDM, HMGP, Texas Forest Service	
Lead Agency/Department Responsible: City of Quintana and County OEM	
Implementation Schedule: Upon funding	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: City of Quintana	Project Description: Conduct flood outreach and education campaign by distributing information at public buildings, townhall meetings, and other speaking engagements.
2011 Mitigation Action No.: 4	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Public Information and Awareness	
Hazard(s) Addressed: Flood, Hurricanes and Tropical Storms, Severe Thunderstorms	
Priority: High	
Estimated Cost:	
Potential Funding Sources: PDM, HMGP	
Lead Agency/Department Responsible: City of Quintana and County OEM	
Implementation Schedule: Upon funding	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

City of Quintana

Name of Jurisdiction: City of Quintana	Project Description: Development of mutual aid/intra-local agreements with area communities for post-disaster assistance.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 1	
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions): Completed	
Category: Emergency Services	
Hazard(s) Addressed: Hurricane and Tropical Storms, Flood, Tornadoes, Severe Thundstroms	
Priority: High	
Estimated Cost:	
Potential Funding Sources: None needed	
Lead Agency/Department Responsible: Commissioners Court	
Implementation Schedule: One year or as needed	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: City of Quintana	Project Description: Develop debris management plan to speed up the removal of debris generated by flood/hurricane events, etc.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 2	
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions): Completed	
Category: Emergency Services	
Hazard(s) Addressed: Flood, Hurricane and Tropical Storms, Tornadoes, Toxic Release/HAZMAT	
Priority: High	
Estimated Cost: \$50,000	
Potential Funding Sources: Public Assistance (following federally-declared disaster, FEMA Emergency Management Performance grant, FEMA emergency Operations Grant)	
Lead Agency/Department Responsible: Brazoria County Road and Bridge	
Implementation Schedule: As needed within five years	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

City of Quintana

Name of Jurisdiction: City of Quintana	Project Description: Purchase equipment generator.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 3		
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions): Completed		
Category: Emergency Services		
Hazard(s) Addressed: Hurricane and Tropical Storms		
Priority: High		
Estimated Cost: \$35,000		
Potential Funding Sources: State and Local Funds, HMGP (generator "quick connect") PDM		
Lead Agency/Department Responsible: Public Works Dept		
Implementation Schedule: 6 months		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: City of Quintana	Project Description: Develop public education campaign addressing hazard awareness.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 4		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): Unfunded		
Category: Public Information and Awareness		
Hazard(s) Addressed: Hurricane and Tropical Storms, Wildfire, Toxic Release/HAZMAT		
Priority: Low		
Estimated Cost: \$20,000		
Potential Funding Sources: National Weather Service, HMGP, PDM, FEMA-Emergency Operations Center Funding, FEMA Emergency Management Performance Grant, USDA Rural Utilities Service-Weather Radio Grant Program, USDA Environmental Quality Incentives Program, Materials available from FEMA and Red Cross free of charge		
Lead Agency/Department Responsible: EMS		
Implementation Schedule: 1 year		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

City of Richwood

Name of Jurisdiction: City of Richwood	Project Description: Develop Master Drainage Plan.	
2011 Mitigation Action No.: 1		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Prevention		
Hazard(s) Addressed: Flood		
Priority: High		
Estimated Cost: \$100,000		
Potential Funding Sources: Flood Mitigation Assistance Program, HMGP, TWDB- Research and Planning Fund, USACE		
Lead Agency/Department Responsible: City of Richwood		
Implementation Schedule: 18 months after funding		
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

Name of Jurisdiction: City of Richwood	Project Description: Participate in CRS Workshop hosted by H-GAC.	
2011 Mitigation Action No.: 2		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Public Information and Awareness		
Hazard(s) Addressed: Dam/Levee Failure, Flood		
Priority: Medium		
Estimated Cost: \$-		
Potential Funding Sources: N/A		
Lead Agency/Department Responsible: Emergency Management		
Implementation Schedule: 2013		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

City of Richwood

Name of Jurisdiction: City of Richwood	Project Description: Replace radio system in the Communication Center.
2011 Mitigation Action No.: 3	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Emergency Services	
Hazard(s) Addressed: Hurricane and Tropical Storms, Tornadoes, Flood	
Priority: High	
Estimated Cost: \$100,000	
Potential Funding Sources: Local, State and Federal Funds	
Lead Agency/Department Responsible: Police, Fire and Emergency Management	
Implementation Schedule: As funds become available	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: City of Richwood	Project Description: Purchase two rescue vehicles.
2011 Mitigation Action No.: 4	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Emergency Services	
Hazard(s) Addressed: Flood, Hurricanes and Tropical Storms	
Priority: Medium	
Estimated Cost: \$10,000	
Potential Funding Sources: Local, State and Federal Funds	
Lead Agency/Department Responsible: Police, Fire and Emergency Management	
Implementation Schedule: As funds become available	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

City of Richwood

Name of Jurisdiction: City of Richwood	Project Description: Install emergency power to water/sewer - 350 KW and 120 KW trailer mounted generators.
2011 Mitigation Action No.: 4	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Emergency Services	
Hazard(s) Addressed: Hurricane and Tropical Storms, Tornadoes, Flood	
Priority: High	
Estimated Cost: \$175,000	
Potential Funding Sources: State Revolving Fund, HMGP, 406 Public Assistance, Local, State and Federal Funds	
Lead Agency/Department Responsible: City of Richwood	
Implementation Schedule: As funds become available	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: City of Richwood	Project Description: Purchase 14 to 18 foot boat, motor and trailer.
2011 Mitigation Action No.: 5	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Emergency Services	
Hazard(s) Addressed: Flood, Hurricane and Tropical Storms	
Priority: Medium	
Estimated Cost: \$10,000	
Potential Funding Sources: Local, State and Federal Funds	
Lead Agency/Department Responsible: City of Richwood	
Implementation Schedule: As funds become available	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

City of Richwood

Name of Jurisdiction: City of Richwood	Project Description: Development of mutual aid/intra-local agreements with area communities for post-disaster assistance.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 1	
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions): Completed	
Category: Emergency Services	
Hazard(s) Addressed: Hurricane and Tropical Storms, Flood, Tornadoes, Severe Thunderstorms	
Priority: High	
Estimated Cost:	
Potential Funding Sources: None needed	
Lead Agency/Department Responsible: Commissioners Court	
Implementation Schedule: One year or as needed	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: City of Richwood	Project Description: Develop debris management plan to speed up the removal of debris generated by flood/hurricane events, etc.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 2	
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions): Completed	
Category: Emergency Services	
Hazard(s) Addressed: Flood, Hurricane and Tropical Storms	
Priority: High	
Estimated Cost: \$50,000	
Potential Funding Sources: Public Assistance(following federally declared disaster), FEMA Emergency Management Performance Grant FEMA Emergency Operations Grant	
Lead Agency/Department Responsible: Brazoria County Road and Bridge	
Implementation Schedule: As needed within five years	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

City of Richwood

Name of Jurisdiction: City of Richwood	Project Description: Purchase equipment generator.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 3		
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions): Completed		
Category: Emergency Services		
Hazard(s) Addressed: Hurricane and Tropical Storms, Flood, Tornadoes, Severe Thunderstorms		
Priority: High		
Estimated Cost: \$35,000		
Potential Funding Sources: State and Local Funds, HMGP (federally "quick connect") PDM		
Lead Agency/Department Responsible: Public Works Dept		
Implementation Schedule: 6 months		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: City of Richwood	Project Description: Develop public education campaign addressing hazard awareness.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 4		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): Unfunded		
Category: Public Information and Awareness		
Hazard(s) Addressed: Coastal Erosion		
Priority: Low		
Estimated Cost: \$20,000		
Potential Funding Sources: National Weather Service, HMGP, PDM, FEMA-Emergency Operations Center Funding, FEMA Emergency Management Performance Grant, USDA Rural Utilities Service-Weather Radio Grant Program, USDA Environmental Quality Incentives Program, Materials available from FEMA and Red Cross free of charge		
Lead Agency/Department Responsible: EMS		
Implementation Schedule: 1 year		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Village of Surfside

Name of Jurisdiction: Village of Surfside Beach	Project Description: Purchase of emergency vehicles - needed for storm preparation and emergency response after and during event.
2011 Mitigation Action No.: 1	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Emergency Services	
Hazard(s) Addressed: Hurricane and Tropical Storms, Flood, Coastal Erosion, Wind	
Priority: High	
Estimated Cost: \$35,000	
Potential Funding Sources: HMGP	
Lead Agency/Department Responsible: Village of Surfside Emergency First Responders	
Implementation Schedule: Two months	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: Village of Surfside Beach	Project Description: Surfside nearshore breakwater project.
2011 Mitigation Action No.: 2	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Prevention	
Hazard(s) Addressed: Hurricane and Tropical Storms, Wind	
Priority: High	
Estimated Cost: \$12,000,000	
Potential Funding Sources: HMGP	
Lead Agency/Department Responsible: Village of Surfside, Coast and Harbor	
Implementation Schedule: 36 months	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Village of Surfside

Name of Jurisdiction: Village of Surfside Beach	Project Description: Extend revetment wall to jetties.	
2011 Mitigation Action No.: 3		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Property Protection, Structural Project		
Hazard(s) Addressed: Hurricane and Tropical Storms		
Priority: High		
Estimated Cost: \$1,300,000		
Potential Funding Sources: HMGP		
Lead Agency/Department Responsible: Village of Surfside Beach, GLO, Coast and Harbor		
Implementation Schedule: 24 months		
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: Village of Surfside Beach	Project Description: Install hurricane shutters on city hall/court/police station.	
2011 Mitigation Action No.: 4		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Property Protection		
Hazard(s) Addressed: Hurricane and Tropical Storms, Flood		
Priority: Medium		
Estimated Cost: \$35,000		
Potential Funding Sources: HMGP		
Lead Agency/Department Responsible: Village of Surfside Beach		
Implementation Schedule: 2 months		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: Yes	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Village of Surfside

Name of Jurisdiction: Village of Surfside Beach	Project Description: Remove rip-rap from one mile of beach.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 1		
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions): Completed		
Category: Natural Resource Protection		
Hazard(s) Addressed: Hurricane and Tropical Storms, Flood, Coastal Erosion		
Priority: High		
Estimated Cost: \$50,000		
Potential Funding Sources: TX Coastal Coordination Council-TX Coastal Management Program, USACE-Emergency Rehabilitation of Flood Control Works or Federally Authorized Coastal Protective Works, USACE-Beach Erosion Control Projects, USACE-Emergency Stream Bank and Shoreline Protection, USACE-Planning Assistance to States, HMGP, USACE-Nonstructural Alternatives to Structural Rehabilitation of Damages Flood Control Works, 406 Public Assistance		
Lead Agency/Department Responsible: Public Works		
Implementation Schedule: ASAP		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: Village of Surfside Beach	Project Description: Acquisition of property seaward of first line of stable vegetation.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 2		
Status of 2006 Mitigation Action: Complete: In Progress: Yes No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions): Unfunded		
Category: Natural Resource Protection		
Hazard(s) Addressed: Hurricane and Tropical Storms		
Priority: High		
Estimated Cost: \$1,000,000		
Potential Funding Sources: HMGP, PDM Program, Flood Mitigation Assistance Program, HUD-Disaster Recovery Initiative, TX Coastal Coordination Council- TX Coastal Management Program, USACE-Planning Assistance to States		
Lead Agency/Department Responsible: Administration		
Implementation Schedule: ASAP		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

Village of Surfside

Name of Jurisdiction: Village of Surfside Beach		Project Description: Establish shoreline protection program.
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 3		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Yes Carry On: Carry On With Modification:		
Reason not complete (2006 actions): Unfunded		
Category: Prevention		
Hazard(s) Addressed: Hurricane and Tropical Storms		
Priority: High		
Estimated Cost: \$3,500,000		
Potential Funding Sources: TX Coastal Coordination Council-TX Coastal Management Program, USACE-Emergency Rehabilitation of Flood Control Works or Federally Authorized Coastal Protective Works, USACE-Nonstructural Alternatives to Structural Rehabilitation of Damages Flood Control Works, 406 Public Assistance		
Lead Agency/Department Responsible: Administration		
Implementation Schedule: 2004/2005		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: Village of Surfside Beach		Project Description: Purchase new rescue vehicles.
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 4		
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions): Completed		
Category: Emergency Services		
Hazard(s) Addressed: Flood, Hurricanes and Tropical Storms, Coastal Erosion		
Priority: High		
Estimated Cost: \$100,000		
Potential Funding Sources: FEMA- Assistance to Firefighters Grant, FEMA- Emergency Management Performance Grant, FEMA- All Hazards Operational Planning, Dept. of Justice- State Homeland Security Program		
Lead Agency/Department Responsible: Police Dept		
Implementation Schedule: within 6 months		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Village of Surfside

Name of Jurisdiction: Village of Surfside Beach		Project Description: Develop a debris management plan.
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 5		
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions): Completed		
Category: Prevention		
Hazard(s) Addressed: Hurricane and Tropical Storms		
Priority: Medium		
Estimated Cost: \$40,000		
Potential Funding Sources: Federal and State officials will provide technical assistance, Reserves, FEMA-All Hazards Emergency Operational Planning, FEMA- Emergency management Performance Grant, Public Assistance funds (post-disaster)		
Lead Agency/Department Responsible: Public Works		
Implementation Schedule: 6 months to a year		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: Village of Surfside Beach		Project Description: Construct bulkhead along one mile of Beach Drive.
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 6		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): Unfunded		
Category: Property Protection		
Hazard(s) Addressed: Flood, Hurricane and Tropical Storms, Coastal Erosion		
Priority: Medium		
Estimated Cost: \$2,500,000		
Potential Funding Sources: TX Coastal Coordination Council-TX Coastal Management Program, USACE Emergency Rehabilitation of Flood Control Works or Federally Authorized Coastal Protection Works, USACE-Planning Assistance to States,USACE-Nonstructural Alternatives to Structural Rehabilitation of Damages Flood Control Works, 406 Public Assistance		
Lead Agency/Department Responsible: Village of Surfside Beach		
Implementation Schedule: When monies available		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Village of Surfside

Name of Jurisdiction: Village of Surfside Beach	Project Description: Install hurricane shutters on City Hall.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 7		
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions): Completed		
Category: Property Protection		
Hazard(s) Addressed: Hurricane and Tropical Storms, Flood, Coastal Erosion		
Priority: Medium		
Estimated Cost: \$30,000		
Potential Funding Sources: HMGP, PDM Program, FEMA- Emergency Operations Center Funding		
Lead Agency/Department Responsible: Administration		
Implementation Schedule: 1 year		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: Yes	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: Village of Surfside Beach	Project Description: Relocate or elevate water meters.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 8		
Status of 2006 Mitigation Action: Complete: In Progress: Yes No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions): Partially funded		
Category: Prevention		
Hazard(s) Addressed: Flood, Hurricanes and Tropical Storms		
Priority: High		
Estimated Cost: \$35,000		
Potential Funding Sources: HMGP		
Lead Agency/Department Responsible: Public Works, Utility Department		
Implementation Schedule: 1 year		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: Yes	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Village of Surfside

Name of Jurisdiction: Village of Surfside Beach		Project Description: Implement beach and dune preservation program.
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 9		
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions): Completed		
Category: Property Protection		
Hazard(s) Addressed: Hurricane and Tropical Storms		
Priority: Low		
Estimated Cost: \$400,000		
Potential Funding Sources: TX Coastal Coordination Council-TX Coastal Management Program, USACE-Emergency Rehabilitation of Flood Control Works or Federally Authorized Coastal Protective Works, USACE-Emergency Streambank and Shoreline Protection, USACE-Planning Assistance to States, HMGP, USACE-Nonstructural Alternatives to Structural Rehabilitation of Damages Flood Control Works		
Lead Agency/Department Responsible: Administration/Public Works		
Implementation Schedule: every three years		
Reduce effects of hazards on new buildings and infrastructure?: Yes		Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: Village of Surfside Beach		Project Description: Acquisition of property seaward of first line of vegetation (LOV), emphasis on area seaward of Beach Drive from Texas Street to Crab Street.
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 10		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): Unfunded		
Category: Natural Resource Protection		
Hazard(s) Addressed: Hurricane and Tropical Storms, Flood, Tornadoes		
Priority: High		
Estimated Cost: \$740,000		
Potential Funding Sources: HMGP, PDM Program, local funds, CEPRA		
Lead Agency/Department Responsible: City of Surfside		
Implementation Schedule: 2 years following funding		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

City of Sweeny

Name of Jurisdiction: City of Sweeny	Project Description: Enlarge culverts along Stevenson Slough.	
2011 Mitigation Action No.: 1		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Structural Project		
Hazard(s) Addressed: Flood, Hurricanes and Tropical Storms, Hail, Severe Thunderstorms, Tornadoes		
Priority: High		
Estimated Cost: \$75,000		
Potential Funding Sources: West Brazos Drainage District		
Lead Agency/Department Responsible: West Brazos Drainage District		
Implementation Schedule: Completed		
Reduce effects of hazards on new buildings and infrastructure?: Yes		Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

Name of Jurisdiction: City of Sweeny	Project Description: Participate in a CRS workshop hosted by H-GAC in 2013.	
2011 Mitigation Action No.: 2		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Public Information and Awareness		
Hazard(s) Addressed: Dam/Levee Failure, Flood		
Priority: Medium		
Estimated Cost: \$-		
Potential Funding Sources: N/A		
Lead Agency/Department Responsible: Emergency Management		
Implementation Schedule: 2013		
Reduce effects of hazards on new buildings and infrastructure?: Yes		Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

City of Sweeny

Name of Jurisdiction: City of Sweeny	Project Description: Conduct outreach on flood hazards at town meetings.
2011 Mitigation Action No.: 3	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Public Information and Awareness	
Hazard(s) Addressed: Flood	
Priority: Medium	
Estimated Cost: Less than \$500	
Potential Funding Sources: PDM, HMGP, corporate sponsors	
Lead Agency/Department Responsible: Emergency Management	
Implementation Schedule: On-going annual activity	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

Name of Jurisdiction: City of Sweeny	Project Description: Implement drainage improvement program to include cleaning of ditches, increasing size of drainage culverts, including box culverts on CR 332.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 1	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): Unfunded	
Category: Structural Project	
Hazard(s) Addressed: Flood	
Priority: Medium	
Estimated Cost:	
Potential Funding Sources: USACE Small Flood Control Projects, USDA NRCS Emergency Watershed Protection Agency, TWDB-Clean Water State Revolving Fund, TWDB (Development Fund II)-Texas Water Development Fund, USDA NRCS-Watershed Protection and Flood Prevention Program, 406 Public Assistance, EPA NPS Grant Program, HMGP, PDM	
Lead Agency/Department Responsible: Public Works working with county's inter-local agreement	
Implementation Schedule: 2-3 years	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

City of Sweeny

Name of Jurisdiction: City of Sweeny	Project Description: Develop an evacuation plan.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 2		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): Unfunded		
Category: Public Information and Awareness		
Hazard(s) Addressed: Hurricane and Tropical Storms, Tornadoes, Flood, Toxic Release/HAZMAT		
Priority: Medium		
Estimated Cost: \$20,000		
Potential Funding Sources: FEMA Hurricane Local Grant Program, FEMA Emergency Management Performance Grant, Flood Mitigation Assistance Program, HMGP, USDA Environmental Quality Incentives Program, FEMA-Emergency Management Performance Grant, FEMA-All Hazards Operational Planning, FEMA-Hazardous Materials Assistance Program, FEMA-Fire Management Assistance Grants, PDM		
Lead Agency/Department Responsible: police Dept. public Works, Fire Dept		
Implementation Schedule: 6 months to 1 year		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: City of Sweeny	Project Description: Develop awareness program to educate residents of pipeline-related hazards.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 3		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): Unfunded		
Category: Public Information and Awareness		
Hazard(s) Addressed: Toxic Release/HAZMAT		
Priority: Medium		
Estimated Cost: \$10,000		
Potential Funding Sources: FEMA Hazardous Materials Assistance Program, FEMA Emergency Management Performance Grants, HMGP, PDM, DOT-Grants-in-Aid for Railroad Safety Program		
Lead Agency/Department Responsible: Public Works, Fire Dept. Railroad Commission		
Implementation Schedule: 2 to 3 years		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

City of Sweeny

Name of Jurisdiction: City of Sweeny	Project Description: Develop hazardous chemicals handling plan for possible train derailment.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 4		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): Unfunded		
Category: Prevention, Emergency Services		
Hazard(s) Addressed: Toxic Release/HAZMAT		
Priority: Medium		
Estimated Cost:		
Potential Funding Sources: FEMA Hazardous Materials Assistance Program, FEMA Emergency Management Performance Grants, FEMA-All Hazards Operational Planning, FEMA-Fire Management Assistance Grants, HMGP, PDM, DOT Grants-in-Aid for Railroad Safety Program		
Lead Agency/Department Responsible: Public Works, Fire Dept. Railroad Commission		
Implementation Schedule: 2 to 5 years		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Velasco Drainage District

Name of Jurisdiction: Velasco Drainage District	Project Description: Purchase and install additional pump equipment in the East Levee Pump Station - present station is configured with 3 blank openings. Would provide an additional 480,000 gallons per minute to the Clute/Lake Jackson watershed which improves drainage capacity for Lake Jackson, Clute, Oyster Creek.
2011 Mitigation Action No.: 1	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Property Protection, Structural Project	
Hazard(s) Addressed: Flood	
Priority: High	
Estimated Cost: \$4,500,000	
Potential Funding Sources: TWDB Small Flood Control Projects, NRCS Watershed Protection and Flood Prevention Program, Disaster Relief/Urgent needs Fund for CDBG, PDM, HMGP	
Lead Agency/Department Responsible: Velasco Drainage District	
Implementation Schedule: One year after funding2 to 3 years completion time	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

Name of Jurisdiction: Velasco Drainage District	Project Description: Construct detention pond in the Clute/Lake Jackson watershed. Propose to build near the East Levee Pump Station adjacent to the Clute/Lake Jackson Pump Station. Provides same pumping capacity as a pump station because water will flow into detention pond at rate of 800,000 gallons per minute. Will help Lake Jackson, Clute and Oyster Creek.
2011 Mitigation Action No.: 2	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Structural Project	
Hazard(s) Addressed: Flood	
Priority: High	
Estimated Cost: \$2,000,000	
Potential Funding Sources: TWDB Small Flood Control Projects, NRCS Watershed Protection and Flood Prevention Program, Disaster Relief/Urgent needs Fund for CDBG, PDM, HMGP	
Lead Agency/Department Responsible: Velasco Drainage District	
Implementation Schedule: One year after funding2 to 3 years completion time	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

Velasco Drainage District

Name of Jurisdiction: Velasco Drainage District	Project Description: Safe room construction of existing building (Ditch #13 pump station), a pump station vital to flood protection in East Clute.
2011 Mitigation Action No.: 3	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Structural Project	
Hazard(s) Addressed: Flood	
Priority: High	
Estimated Cost: \$330,000	
Potential Funding Sources: TWDB Small Flood Control Projects, NRCS Watershed Protection and Flood Prevention Program, Disaster Relief/Urgent needs Fund for CDBG, PDM, HMGP	
Lead Agency/Department Responsible: Velasco Drainage District	
Implementation Schedule: One year after funding 6 months completion time	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

Name of Jurisdiction: Velasco Drainage District	Project Description: Construct detention pond in upper Clute/Lake Jackson watershed 75 acres. Propose to build south of Sea Center adjacent to the Clute/Lake Jackson Drainage Channel. Provides the 800,000 gallons per minute diverted flood water into pond. Helps the cities of Lake Jackson, Clute and Oyster Creek.
2011 Mitigation Action No.: 4	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Structural Project	
Hazard(s) Addressed: Flood	
Priority: High	
Estimated Cost: \$2,000,000	
Potential Funding Sources: TWDB Small Flood Control Projects, NRCS Watershed Protection and Flood Prevention Program, Disaster Relief/Urgent needs Fund for CDBG, PDM, HMGP	
Lead Agency/Department Responsible: Velasco Drainage District	
Implementation Schedule: One year after funding 3 to 5 years completion time	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

Chambers County

Name of Jurisdiction: Chambers County	Project Description: Install siren system countywide to inform the public of imminent hazards.	
2011 Mitigation Action No.: 1		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Public Information and Awareness		
Hazard(s) Addressed: Toxic Release/HAZMAT, Tornadoes, Flood, Wildfire, Severe Thunderstorms		
Priority: High		
Estimated Cost: \$200,000		
Potential Funding Sources: Local funds, FEMA Hazardous Materials Assistance or Emergency Management Performance Grant		
Lead Agency/Department Responsible: Chambers County		
Implementation Schedule: 1 to 3 years		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: Chambers County	Project Description: Retrofit windows in EOC to protect against severe winds.	
2011 Mitigation Action No.: 2		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Property Protection		
Hazard(s) Addressed: Tornadoes, Hurricanes and Tropical Storms, Severe Thunderstorms		
Priority: High		
Estimated Cost: \$80,000		
Potential Funding Sources: General Funds, FEMA HMGP		
Lead Agency/Department Responsible: Chambers County		
Implementation Schedule: Future		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: Yes	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Chambers County

Name of Jurisdiction: Chambers County		Project Description: Purchase spill containment booms for all bayous and rivers intersecting with public roads.
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 1		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): Funding		
Category: Natural Resource Protection		
Hazard(s) Addressed: Toxic Release/HAZMAT		
Priority: High		
Estimated Cost: \$50,000		
Potential Funding Sources: General Funds, Public private partnership (areas chemical manufacturers), FEMA-Hazardous Materials Assistance Program, FEMA- All Hazards Operational Planning, FEMA- Emergency management Performance Grants, FEMA-Fire Management Assistance Grants		
Lead Agency/Department Responsible: Chambers County Dept of Emergency Management		
Implementation Schedule: ASAP		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: Chambers County		Project Description: Conduct clearing and grubbing to establish channels at Hackberry Gully and Cotton Bayou from IH-10 to Cotton Lake.
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 2		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): Right of way/easement issue		
Category: Structural Project		
Hazard(s) Addressed: Flood		
Priority: High		
Estimated Cost: \$500,000		
Potential Funding Sources: General Funds, USACE-Small Navigation Projects, USACE-Small Flood Control Projects, USDA NRCS-Emergency Watershed Protection Agency, TWDB Clean Water State Revolving Fund, TWDB (Development Fund II)-Texas Water Development Fund, USDA, NRCS-Watershed Protection and Flood Prevention Program, EPA NPS Grant Program, 406 Public Assistance Program, HMGP, PDM		
Lead Agency/Department Responsible: Chambers County		
Implementation Schedule: ASAP		
Reduce effects of hazards on new buildings and infrastructure?: Yes		Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

Chambers County

Name of Jurisdiction: Chambers County	Project Description: Adopt policy requiring all petroleum pipelines crossing district canal system to be encased and protected by end seals.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 3	
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions): Completed	
Category: Natural Resource Protection, Prevention	
Hazard(s) Addressed: Toxic Release/HAZMAT	
Priority: High	
Estimated Cost:	
Potential Funding Sources: N/A	
Lead Agency/Department Responsible: Chambers-Liberty Counties Navigation District	
Implementation Schedule: 3rd Quarter FY 2003	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: Chambers County	Project Description: Purchase floating boom system for use in Turtle bayou and District Canal System.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 4	
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions): Completed	
Category: Natural Resource Protection	
Hazard(s) Addressed: Toxic Release/HAZMAT	
Priority: High	
Estimated Cost: \$2,100	
Potential Funding Sources: Grants and current district funds, General funds, public-private partnership(areas chemical manufacturers), FEMA Hazardous Materials Assistance Program, FEMA-All Hazards Operational Planning, FEMA Emergency Performance Grants, FEMA-Fire Management Assistance Grants	
Lead Agency/Department Responsible: Chambers-Liberty Counties Navigation District	
Implementation Schedule: 3rd Quarter FY 2003	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Chambers County

Name of Jurisdiction: Chambers County	Project Description: Develop one foot freeboard requirement for new construction in the floodplain.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 5	
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions): Completed	
Category: Property Protection	
Hazard(s) Addressed: Flood	
Priority: High	
Estimated Cost:	
Potential Funding Sources: Technical assistance available from FEMA	
Lead Agency/Department Responsible: Chambers County Commissions Court	
Implementation Schedule: ASAP	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

Name of Jurisdiction: Chambers County	Project Description: Channelize Winnie/Stowell main drainage outfalls.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 6	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): Right of way/easement issue	
Category: Structural Project	
Hazard(s) Addressed: Flood	
Priority: Medium	
Estimated Cost: \$750,000	
Potential Funding Sources: General Funds, USACE-Small Flood Control Projects, USDA NRCS-Emergency Watershed Protection Agency, TWDB Clean Water State Revolving Fund, TWDB (Development Fund II)-Texas Water Development Fund, USDA NRCS Watershed Protection and Flood Prevention Program, EPA NPS Grant Program	
Lead Agency/Department Responsible: Trinity Bay Conservation District	
Implementation Schedule: Future	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

Chambers County

Name of Jurisdiction: Chambers County	Project Description: Repair major breach in storage reservoir and canal laterals.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 7		
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions): Completed		
Category: Structural Project		
Hazard(s) Addressed: Flood		
Priority: Medium		
Estimated Cost:		
Potential Funding Sources: General fund, USACE-Nonstructural Alternatives to Structural Rehabilitation of Damaged Flood Control Works or Emergency Rehabilitation of Flood Control Works, PDM, USDA NRCS Emergency Watershed Protection Agency, TWDB-Clean Water State Revolving Fund, TWDB(Development Fund II)-Texas Water Development Fund, USDA NRCS Watershed Protection and Flood Prevention Program, EPA NPS Grant Program		
Lead Agency/Department Responsible: Chambers-Liberty Counties Navigation District		
Implementation Schedule: Future		
Reduce effects of hazards on new buildings and infrastructure?: Yes		Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

Name of Jurisdiction: Chambers County	Project Description: Channelize outfall channels in unincorporated areas of west Chambers County west of the Trinity River.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 8		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): Right of way/easement issue		
Category: Structural Project		
Hazard(s) Addressed: Flood		
Priority: Medium		
Estimated Cost:		
Potential Funding Sources: General funds, USACE-Small Navigation Projects, USACE-Clearing and Snagging Projects, USACE-Nonstructural Alternatives to Structural Rehabilitation of Damaged Flood Control Works or Emergency Rehabilitation of Flood Control Works, PDM, USDA NRCS Emergency Watershed Protection Agency, TWDB Clean Water State Revolving Fund, TWDB (Development Fund II)-Texas Water Development Fund, USDA NRCS Watershed Protection and Flood Prevention Program, EPA NPS Grant Program		
Lead Agency/Department Responsible: Chambers County Commissioners Court		
Implementation Schedule: Future		
Reduce effects of hazards on new buildings and infrastructure?: Yes		Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

Chambers-Liberty Counties Navigation District

Name of Jurisdiction: Chambers-Liberty Counties Navigation District		Project Description: Purchase and install two portable generators at Lake Anahuac pump station facility to maintain water supply during power outage.
2011 Mitigation Action No.: 1		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Property Protection		
Hazard(s) Addressed: Flood, Hurricane and Tropical Storms, Wildfire, Excessive Heat, Tornadoes, Severe Thunderstorms, Winter Storms		
Priority: Medium		
Estimated Cost: \$638,250		
Potential Funding Sources: General funds, FEMA HMGP, USACE Small Flood Control Projects, USDA NRCS Emergency Watershed Protection Agency		
Lead Agency/Department Responsible: Chambers - Liberty Counties Navigation District		
Implementation Schedule: Future		
Reduce effects of hazards on new buildings and infrastructure?: Yes		Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: Chambers-Liberty Counties Navigation District		Project Description: Purchase and install two portable generators at Anahuac pump station to maintain water supply during power outage.
2011 Mitigation Action No.: 2		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Property Protection		
Hazard(s) Addressed: Flood, Hurricane and Tropical Storms, Wildfire, Excessive Heat, Tornadoes, Severe Thunderstorms, Winter Storms		
Priority: Medium		
Estimated Cost: \$1,477,750		
Potential Funding Sources: General funds, FEMA HMGP, USACE Small Flood Control Projects, USDA NRCS Emergency Watershed Protection Agency		
Lead Agency/Department Responsible: Chambers - Liberty Counties Navigation District		
Implementation Schedule: Future		
Reduce effects of hazards on new buildings and infrastructure?: Yes		Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Chambers-Liberty Counties Navigation District

Name of Jurisdiction: Chambers-Liberty Counties Navigation District	Project Description: Increase size of pipe under Double Bayou at Lone Oak south of Brown & Root pipeyard in order to supply adequate supply of water for irrigation and wildfire suppression.	
2011 Mitigation Action No.: 3		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Structural Project		
Hazard(s) Addressed: Flood, Hurricane and Tropical Storms, Wildfire		
Priority: Medium		
Estimated Cost: \$500,000		
Potential Funding Sources: General funds, FEMA HMGP, USACE Small Flood Control Projects, USDA NRCS Emergency Watershed Protection Agency		
Lead Agency/Department Responsible: Chambers - Liberty Counties Navigation District		
Implementation Schedule: Future		
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

City of Anahuac

Name of Jurisdiction: City of Anahuac	Project Description: Enlarge and harden control room at water treatment plant to be more hazard resistant and continue to pump water.
2011 Mitigation Action No.: 1	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Structural Project	
Hazard(s) Addressed: Hurricane and Tropical Storms	
Priority: High	
Estimated Cost: \$800,000	
Potential Funding Sources: Grant funding	
Lead Agency/Department Responsible: City of Anahuac	
Implementation Schedule: Within 5 years	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: City of Anahuac	Project Description: Enlarge and harden control room at sewer treatment plant to be more hazard resistant.
2011 Mitigation Action No.: 2	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Structural Project	
Hazard(s) Addressed: Hurricane and Tropical Storms	
Priority: High	
Estimated Cost: \$800,000	
Potential Funding Sources: Grant funding	
Lead Agency/Department Responsible: City of Anahuac	
Implementation Schedule: Within 5 years	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

City of Anahuac

Name of Jurisdiction: City of Anahuac	Project Description: Attend CRS workshop hosted by H-GAC.	
2011 Mitigation Action No.: 3		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Public Information and Awareness		
Hazard(s) Addressed: Flood		
Priority: Medium		
Estimated Cost: 0		
Potential Funding Sources: N/A		
Lead Agency/Department Responsible: Mayor		
Implementation Schedule: 2013		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

Name of Jurisdiction: City of Anahuac	Project Description: Purchase and install two permanent generators at water plant and city hall (critical facility and shelter in place).	
2011 Mitigation Action No.: 4		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Property Protection		
Hazard(s) Addressed: Hurricane and Tropical Storms, Flood, Wildfire, Excessive Heat, Tornadoes, Severe Thunderstorms, Winter Storms		
Priority: High		
Estimated Cost:		
Potential Funding Sources: HMGP		
Lead Agency/Department Responsible: City of Anahuac		
Implementation Schedule: Upon funding		
Reduce effects of hazards on new buildings and infrastructure?: Yes		Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

City of Anahuac

Name of Jurisdiction: City of Anahuac	Project Description: Demolish and reconstruct two bridges that create obstruction and restrict flow of Anahuac outfall ditch. Increase span from 20 feet to 60 feet.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 1		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification: Yes		
Reason not complete (2006 actions): Right of way/easement issue		
Category: Structural Project		
Hazard(s) Addressed: Flood		
Priority: High		
Estimated Cost: \$500,000		
Potential Funding Sources: General funds, USACE-Small Navigation Projects, USACE-Clearing and Snagging Projects, USACE Nonstructural Alternatives to Structural Rehabilitation of Damaged Flood Control Works or Emergency Rehabilitation of Flood Control Works, PDM, USDA NRCS Emergency Watershed Protection Agency, TWDB Clean Water State Revolving Fund, TWDB (Development Fund II)-Texas Water Development Fund, USDA NRCS Watershed Protection and Flood Prevention Program, EPA NPS Grant Program		
Lead Agency/Department Responsible: City of Anahuac		
Implementation Schedule: future		
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

City of Beach City

Name of Jurisdiction: City of Beach City	Project Description: Purchase and install two portable generators to power water and sewer utility providers during power outages.
2011 Mitigation Action No.: 1	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Structural Project	
Hazard(s) Addressed: Hurricane and Tropical Storms, Tornadoes, Flood	
Priority: High	
Estimated Cost: \$50,000	
Potential Funding Sources: Public Assistance (following federally- declared disaster) FEMA Emergency Management Performance Grant, FEMA Emergency Operations Grant	
Lead Agency/Department Responsible: Chambers County Road & Bridge	
Implementation Schedule: As needed within five years	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: City of Beach City	Project Description: Raise bridge on FM 2354 over Cedar Gully. Bridge is too low and flooding over it is a problem. Raising the bridge higher over Cedar Gully will avoid flooding of bridge and reduce threat of loss of life and damage to bridge and motorists.
2011 Mitigation Action No.: 2	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Structural Project	
Hazard(s) Addressed: Flood	
Priority: Low	
Estimated Cost: \$20,000	
Potential Funding Sources: National Weather Service, HMGP, PDM, FEMA- Emergency Operations Center Funding, FEMA-Emergency Management Performance Grant	
Lead Agency/Department Responsible: EMS	
Implementation Schedule: 1 year	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

City of Beach City

Name of Jurisdiction: City of Beach City	Project Description: Attend CRS workshop hosted by H-GAC.
2011 Mitigation Action No.: 3	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Public Information and Awareness	
Hazard(s) Addressed: Flood	
Priority: Medium	
Estimated Cost: 0	
Potential Funding Sources: N/A	
Lead Agency/Department Responsible: Mayor	
Implementation Schedule: 2013	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

Name of Jurisdiction: City of Beach City	Project Description: Develop debris management plan to speed up the removal of debris generated by flood/hurricane events, etc.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 1	
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions): Completed	
Category: Emergency Services	
Hazard(s) Addressed: Flood, Hurricane and Tropical Storms	
Priority: High	
Estimated Cost: \$50,000	
Potential Funding Sources: Public Assistance (following federally declared disaster) FEMA Emergency Management Performance Grant, FEMA Emergency Operations Grant	
Lead Agency/Department Responsible: Chambers County Road and Bridge	
Implementation Schedule: as needed within five years	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

City of Beach City

Name of Jurisdiction: City of Beach City	Project Description: Develop public education campaign addressing hazard awareness.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 2		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Yes Carry On: Carry On With Modification:		
Reason not complete (2006 actions): Found alternative		
Category: Public Information and Awareness		
Hazard(s) Addressed: All hazards		
Priority: Low		
Estimated Cost: \$20,000		
Potential Funding Sources: National Weather Service, USDA Rural Utilities Service-Weather Radio Grant Program, USDA-Environmental Quality Incentives Program, HMGP, FEMA Emergency Operations Center Funding, FEMA Emergency Management Performance Grant, Materials available from FEMA and Red Cross free of charge.		
Lead Agency/Department Responsible: EMS		
Implementation Schedule: 1 year		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: City of Beach City	Project Description: Conduct town meetings to educate citizens and city officials regarding preparedness, mitigation and recovery information and procedures.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 3		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Yes Carry On: Carry On With Modification:		
Reason not complete (2006 actions): Found alternative		
Category: Public Information and Awareness		
Hazard(s) Addressed: Hurricane and Tropical Storms		
Priority: Medium		
Estimated Cost: \$500		
Potential Funding Sources: City Budget, Staff time and resources, FEMA and Red Cross provide hurricane preparedness and mitigation materials free of charge		
Lead Agency/Department Responsible: City of Beach City Staff		
Implementation Schedule: May/ June 2004		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

City of Cove

Name of Jurisdiction: City of Cove	Project Description: Attend CRS workshop hosted by H-GAC.	
2011 Mitigation Action No.: 1		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Public Information and Awareness		
Hazard(s) Addressed: Flood		
Priority: Medium		
Estimated Cost: 0		
Potential Funding Sources: N/A		
Lead Agency/Department Responsible: Mayor		
Implementation Schedule: 2013		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

Name of Jurisdiction: City of Cove	Project Description: Obtain drainage right of ways in Hackberry Creek.	
2011 Mitigation Action No.: 2		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Property Protection		
Hazard(s) Addressed: Flood		
Priority: Medium		
Estimated Cost: \$500,000		
Potential Funding Sources: CDBG, general funds, FEMA-HMGP, USACE-Small Flood Control Projects, USDA/NRCS Emergency Watershed Protection Agency		
Lead Agency/Department Responsible: County Emergency Management		
Implementation Schedule: Future		
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

City of Cove

Name of Jurisdiction: City of Cove	Project Description: Develop debris management plan to speed up the removal of debris generated by flood/hurricane events, etc.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 1	
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions): Completed	
Category: Emergency Services	
Hazard(s) Addressed: Flood, Hurricane and Tropical Storms	
Priority: High	
Estimated Cost: \$50,000	
Potential Funding Sources: Public Assistance (following federally- declared disaster, FEMA Emergency management Performance Grant FEMA Emergency Operations Grant	
Lead Agency/Department Responsible: Chambers County Road and Bridge	
Implementation Schedule: As needed within five years	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: City of Cove	Project Description: Conduct town meetings to educate citizens and city officials regarding preparedness, mitigation and recovery information and procedures.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 3	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): Found alternative	
Category: Public Information and Awareness	
Hazard(s) Addressed: Hurricane and Tropical Storms	
Priority: Medium	
Estimated Cost: \$500	
Potential Funding Sources: City Budget, Staff time and resources, FEMA and Red Cross provide hurricane preparedness and mitigation materials free of charge	
Lead Agency/Department Responsible: City of Cove	
Implementation Schedule: On-going	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

City of Mont Belvieu

Name of Jurisdiction: City of Mont Belvieu	Project Description: Install siren system to alert citizens of hazards.
2011 Mitigation Action No.: 1	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Public Information and Awareness	
Hazard(s) Addressed: Toxic Release/HAZMAT, Tornadoes, Severe Thunderstorms	
Priority: High	
Estimated Cost: \$75,000	
Potential Funding Sources: Local funds, FEMA Hazardous Materials Assistance or Emergency Management Performance Grant	
Lead Agency/Department Responsible: City of Mont Belvieu	
Implementation Schedule: 1 to 3 years	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: City of Mont Belvieu	Project Description: Enlarge existing Cotton Bayou to I-10 to increase capacity and detention.
2011 Mitigation Action No.: 2	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Structural Project	
Hazard(s) Addressed: Flood	
Priority: Medium	
Estimated Cost: \$1,829,000	
Potential Funding Sources: Local funds, USACE Small Flood Control Projects, USDA NRCS Emergency Watershed Protection Agency, TWDB Clean Water State Revolving Fund, TWBD Texas Water Development Fund II, USDA NRCS Watershed Protection and Flood Prevention Program, EPA NPS Grant Program	
Lead Agency/Department Responsible: City of Mont Belvieu	
Implementation Schedule: 3 to 5 years	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

City of Mont Belvieu

Name of Jurisdiction: City of Mont Belvieu	Project Description: Enlarge existing Hackberry Gully to I-10 to increase capacity and detention.	
2011 Mitigation Action No.: 3		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Structural Project		
Hazard(s) Addressed: Flood		
Priority: Medium		
Estimated Cost: \$1,700,000		
Potential Funding Sources: Local funds, USACE Small Flood Control Projects, USDA NRCS Emergency Watershed Protection Agency, TWDB Clean Water State Revolving Fund, TWBD Texas Water Development Fund II, USDA NRCS Watershed Protection and Flood Prevention Program, EPA NPS Grant Program		
Lead Agency/Department Responsible: City of Mont Belvieu		
Implementation Schedule: 3 to 5 years		
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

Name of Jurisdiction: City of Mont Belvieu	Project Description: Enlarge Old River diversion channel to increase capacity and detention.	
2011 Mitigation Action No.: 4		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Structural Project		
Hazard(s) Addressed: Flood		
Priority: High		
Estimated Cost: \$4,000,000		
Potential Funding Sources: Local funds, USACE Small Flood Control Projects, USDA NRCS Emergency Watershed Protection Agency, TWDB Clean Water State Revolving Fund, TWBD Texas Water Development Fund II, USDA NRCS Watershed Protection and Flood Prevention Program, EPA NPS Grant Program		
Lead Agency/Department Responsible: City of Mont Belvieu		
Implementation Schedule: 3 to 5 years		
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

City of Mont Belvieu

Name of Jurisdiction: City of Mont Belvieu	Project Description: Extension of Cotton Bayou to FM 565 to increase capacity and detention.	
2011 Mitigation Action No.: 5		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Structural Project		
Hazard(s) Addressed: Flood		
Priority: Medium		
Estimated Cost: \$1,400,000		
Potential Funding Sources: Local funds, USACE Small Flood Control Projects, USDA NRCS Emergency Watershed Protection Agency, TWDB Clean Water State Revolving Fund, TWDB Texas Water Development Fund II, USDA NRCS Watershed Protection and Flood Prevention Program, EPA NPS Grant Program		
Lead Agency/Department Responsible: City of Mont Belvieu		
Implementation Schedule: Future		
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

Name of Jurisdiction: City of Mont Belvieu	Project Description: Excavate and realign Hackberry Gully and Cotton Bayou from IH-10 to Cotton Lake	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 1		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification: Yes		
Reason not complete (2006 actions): Parts of project are incorporated into other actions		
Category: Structural Project		
Hazard(s) Addressed: Flood		
Priority: High		
Estimated Cost: \$500,000		
Potential Funding Sources: General funds, USACE-Small Navigation Projects, USACE-Clearing and Snagging Projects, USACE-Nonstructural Alternatives to Structural Rehabilitation of Damaged Flood Control Works or Emergency Rehabilitation of Flood Control Works, PDM, USDA NRCS Emergency Watershed Protection Agency, TWDB Clean Water State Revolving Fund, TWDB (Development Fund II)-Texas Water Development Fund, USDA NRCS Watershed Protection and Flood Prevention Program, EPA NPS Grant Program		
Lead Agency/Department Responsible: City of Mount Belvieu		
Implementation Schedule: Future		
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

City of Old River-Winfree

Name of Jurisdiction: City of Old River-Winfree	Project Description: Harden permanent waste water treatment plant.	
2011 Mitigation Action No.: 1		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Property Protection		
Hazard(s) Addressed: Hurricane and Tropical Storms		
Priority: High		
Estimated Cost: \$800,000		
Potential Funding Sources: Grants		
Lead Agency/Department Responsible: City of Old River-Winfree		
Implementation Schedule: Within 5 years		
Reduce effects of hazards on new buildings and infrastructure?: Yes		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: City of Old River-Winfree	Project Description: Harden sewer treatment plant.	
2011 Mitigation Action No.: 2		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Property Protection		
Hazard(s) Addressed: Hurricane and Tropical Storms		
Priority: High		
Estimated Cost: \$800,000		
Potential Funding Sources: Grant funding		
Lead Agency/Department Responsible: City of Old River-Winfree		
Implementation Schedule: Within 5 years		
Reduce effects of hazards on new buildings and infrastructure?: Yes		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

City of Old River-Winfree

Name of Jurisdiction: City of Old River-Winfree	Project Description: Attend CRS workshop hosted by H-GAC.	
2011 Mitigation Action No.: 3		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Public Information and Awareness		
Hazard(s) Addressed: Flood		
Priority: Medium		
Estimated Cost: 0		
Potential Funding Sources: N/A		
Lead Agency/Department Responsible: Mayor		
Implementation Schedule: 2013		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

Name of Jurisdiction: City of Old River-Winfree	Project Description: Channelize outfalls in Woodland Acres Subdivision/Old River outfall.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 1		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification: Yes		
Reason not complete (2006 actions): Funding		
Category: Structural Project		
Hazard(s) Addressed: Flood		
Priority: Medium		
Estimated Cost:		
Potential Funding Sources: General fund, USACE-Nonstructural Alternatives to Structural Rehabilitation of Damaged Flood Control Works or Emergency Rehabilitation of Flood Control Works, PDM, USDA NRCS Emergency Watershed Protection Agency, TWDB-Clean Water State Revolving Fund, TWDB(Development Fund II)-Texas Water Development Fund, USDA NRCS Watershed Protection and Flood Prevention Program, EPA NPS Grant Program		
Lead Agency/Department Responsible: City of Old River-Winfree		
Implementation Schedule: Future		
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

Trinity Bay Conservation District

Name of Jurisdiction: Trinity Bay Conservation District	Project Description: Relocate reinforced salt water barrier to north of existing Spindletop Bayou.	
2011 Mitigation Action No.: 1		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Structural Project		
Hazard(s) Addressed: Flood		
Priority: Medium		
Estimated Cost: \$3,500,000		
Potential Funding Sources: General funds, FEMA HMGP, USACE Small Flood Control Projects, USDA NRCS Emergency Watershed Protection Agency		
Lead Agency/Department Responsible: Trinity Bay Conservation District		
Implementation Schedule: Future		
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

Name of Jurisdiction: Trinity Bay Conservation District	Project Description: Enlarge Spindletop Bayou Lateral 1 in Winnie to increase capacity and detention.	
2011 Mitigation Action No.: 2		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Structural Project		
Hazard(s) Addressed: Flood		
Priority: Medium		
Estimated Cost: \$3,000,000		
Potential Funding Sources: General funds, FEMA HMGP, USACE Small Flood Control Projects, USDA NRCS Emergency Watershed Protection Agency		
Lead Agency/Department Responsible: Trinity Bay Conservation District		
Implementation Schedule: Future		
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

Trinity Bay Conservation District

Name of Jurisdiction: Trinity Bay Conservation District	Project Description: Enlarge Spindletop Bayou Lateral 2 in Winnie/Stowell area to increase capacity and detention.	
2011 Mitigation Action No.: 3		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Structural Project		
Hazard(s) Addressed: Flood		
Priority: Medium		
Estimated Cost: \$2,800,000		
Potential Funding Sources: General funds, FEMA HMGP, USACE Small Flood Control Projects, USDA NRCS Emergency Watershed Protection Agency		
Lead Agency/Department Responsible: Trinity Bay Conservation District		
Implementation Schedule: Future		
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

Name of Jurisdiction: Trinity Bay Conservation District	Project Description: Extend upper end of Mayhaw Bayou Lateral 2 in Stowell area to increase capacity and detention.	
2011 Mitigation Action No.: 4		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Structural Project		
Hazard(s) Addressed: Flood		
Priority: Medium		
Estimated Cost: \$2,300,000		
Potential Funding Sources: General funds, FEMA HMGP, USACE Small Flood Control Projects, USDA NRCS Emergency Watershed Protection Agency		
Lead Agency/Department Responsible: Trinity Bay Conservation District		
Implementation Schedule: Future		
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

Trinity Bay Conservation District

Name of Jurisdiction: Trinity Bay Conservation District	Project Description: Enlarge lower end of Mayhaw Bayou in Winne/Stowell area to increase capacity and detention.	
2011 Mitigation Action No.: 5		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Structural Project		
Hazard(s) Addressed: Flood		
Priority: Medium		
Estimated Cost: \$5,500,000		
Potential Funding Sources: General funds, FEMA HMGP, USACE Small Flood Control Projects, USDA NRCS Emergency Watershed Protection Agency		
Lead Agency/Department Responsible: Trinity Bay Conservation District		
Implementation Schedule: Future		
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

Name of Jurisdiction: Trinity Bay Conservation District	Project Description: Harden critical infrastructure to make office compliant with current windstorm requirements.	
2011 Mitigation Action No.: 6		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Structural Project, Property Protection		
Hazard(s) Addressed: Flood, Hurricanes and Tropical Storms, Severe Thunderstorms		
Priority: Medium		
Estimated Cost: \$750,000		
Potential Funding Sources: General funds, FEMA HMGP, USACE Small Flood Control Projects, USDA NRCS Emergency Watershed Protection Agency		
Lead Agency/Department Responsible: Trinity Bay Conservation District		
Implementation Schedule: Future		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: Yes	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Trinity Bay Conservation District

Name of Jurisdiction: Trinity Bay Conservation District	Project Description: Construct a safe room attached to new office.	
2011 Mitigation Action No.: 7		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Structural Project		
Hazard(s) Addressed: Hurricane and Tropical Storms, Tornadoes, Severe Thunderstorms		
Priority: Medium		
Estimated Cost: \$950,000		
Potential Funding Sources: General funds, FEMA HMGP, USACE Small Flood Control Projects, USDA NRCS Emergency Watershed Protection Agency		
Lead Agency/Department Responsible: Trinity Bay Conservation District		
Implementation Schedule: Future		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: Trinity Bay Conservation District	Project Description: Upsize culverts at Oyster Bayou and Lone Star Canal.	
2011 Mitigation Action No.: 8		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Structural Project		
Hazard(s) Addressed: Flood		
Priority: Medium		
Estimated Cost: \$500,000		
Potential Funding Sources: General funds, FEMA HMGP, USACE Small Flood Control Projects, USDA NRCS Emergency Watershed Protection Agency		
Lead Agency/Department Responsible: Chambers County		
Implementation Schedule: Future		
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

Trinity Bay Conservation District

Name of Jurisdiction: Trinity Bay Conservation District	Project Description: Purchase and install portable generator for Oak Island sewer plant.	
2011 Mitigation Action No.: 9		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Property Protection		
Hazard(s) Addressed: Hurricane and Tropical Storms, Flood, Wildfire, Excessive Heat, Tornadoes, Severe Thunderstorms, Winter Storms		
Priority: High		
Estimated Cost:		
Potential Funding Sources: HMGP		
Lead Agency/Department Responsible: Trinity Bay Conservation District		
Implementation Schedule: Upon funding		
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Liberty County

Name of Jurisdiction: Liberty County	Project Description: Construct FEMA-approved tornado/hurricane-proof structure.	
2011 Mitigation Action No.: 1		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Structural Project		
Hazard(s) Addressed: Hurricane and Tropical Storms, Tornadoes		
Priority: High		
Estimated Cost: \$1,000,000		
Potential Funding Sources: FEMA-Hurricane Ike Recovery Funds, Texas State Shelter Initiative, PDM, HMGP		
Lead Agency/Department Responsible: Liberty County Commissioners Court, Emergency Management, Office of Economic Development		
Implementation Schedule: Application Process Underway, Pending Approval and Funding		
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: Liberty County	Project Description: Conduct structural engineering study on all public buildings.	
2011 Mitigation Action No.: 2		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Property Protection		
Hazard(s) Addressed: Tornadoes, Hurricanes and Tropical Storms, Toxic Release/HAZMAT, Energy Pipeline Failure		
Priority: Medium		
Estimated Cost: \$50,000		
Potential Funding Sources: Hazard Mitigation Grant Program, Pre-Disaster Mitigation, County Budget		
Lead Agency/Department Responsible: Liberty County Engineering Department		
Implementation Schedule: 2011-2014		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Liberty County

Name of Jurisdiction: Liberty County	Project Description: Complete a master drainage study on all watersheds.	
2011 Mitigation Action No.: 3		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Prevention		
Hazard(s) Addressed: Flood, Dam/Levee Failure		
Priority: Medium		
Estimated Cost: \$500,000		
Potential Funding Sources: Flood Mitigation Assistance, HMGP, PDM, USACE-Small Flood Control Projects, USACE Planning Assistance to States, USDA-NRCS-Watershed Protection and Flood Prevention Program, TWDB Fund		
Lead Agency/Department Responsible: Public Works-Engineering		
Implementation Schedule: 2011-2016		
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

Name of Jurisdiction: Liberty County	Project Description: Rechannelize existing feeder creeks that flow from north to south and improve drainage for stormwater runoff.	
2011 Mitigation Action No.: 4		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Prevention		
Hazard(s) Addressed: Flood		
Priority: High		
Estimated Cost:		
Potential Funding Sources: HMGP, Pre-Disaster Mitigation, County budget		
Lead Agency/Department Responsible: Liberty County Engineering Department		
Implementation Schedule: 2011-2014		
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

Liberty County

Name of Jurisdiction: Liberty County	Project Description: Establish a countywide drainage plan.	
2011 Mitigation Action No.: 5		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Prevention		
Hazard(s) Addressed: Flood		
Priority: High		
Estimated Cost: \$125,000		
Potential Funding Sources: USACE-Small Flood Control Projects, USDA NRCS-Emergency Watershed Protection Agency, TWDB-Clean Water State Revolving Fund, TWDB (Development Fund II)-Texas Water Development Fund, USDA NRCS-Watershed Protection and Flood Prevention Program, EPA-NPS GrantProgram, HMGP, 406 Public Assistance, PDM		
Lead Agency/Department Responsible: Liberty County Engineering Department		
Implementation Schedule: 2011-2014		
Reduce effects of hazards on new buildings and infrastructure?: Yes		Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

Name of Jurisdiction: Liberty County	Project Description: Harden bridge, dam and spillway in Winter Valley Subdivision under TCEQ permit No. 366.	
2011 Mitigation Action No.: 6		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Structural Project		
Hazard(s) Addressed: Dam/Levee Failure, Flood		
Priority: High		
Estimated Cost: \$350,000		
Potential Funding Sources: NRCS, USACE-Clearing and Snagging Projects, USACE-Emergency Rehabilitation of Flood Control Works for Federally Authorized Coastal Protection Works, USACE-Small Flood Control Projects, HMGP, 406 Public Assistance		
Lead Agency/Department Responsible: Liberty County Engineering Department		
Implementation Schedule: 2011-2013		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Liberty County

Name of Jurisdiction: Liberty County	Project Description: Acquire property located in the floodplain including properties located in subdivisions along the Trinity River.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 1	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): As funding allows	
Category: Prevention	
Hazard(s) Addressed: Flood	
Priority: High	
Estimated Cost:	
Potential Funding Sources: HMGP, Flood Mitigation Assistance Program, CDBG Program, HUD-Disaster Recovery Initiative, USACE-Planning Assistance to States, PDM, Repetitive Flood Claim Program	
Lead Agency/Department Responsible: Permit Department, County Engineer	
Implementation Schedule: Evaluation process on-going, actual purchases pending funding.	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

Name of Jurisdiction: Liberty County	Project Description: Adopt code requiring adequate wind strapping of structures.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 2	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): As regulations are designed and approved	
Category: Prevention	
Hazard(s) Addressed: Hurricane and Tropical Storms	
Priority: High	
Estimated Cost:	
Potential Funding Sources: Local commitment, PDM, HMGP	
Lead Agency/Department Responsible: Permit Department	
Implementation Schedule: Ongoing, target date 2012	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Liberty County

Name of Jurisdiction: Liberty County	Project Description: Establish and enforce hazardous materials route.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 3	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): As regulations developed and approved	
Category: Emergency Services	
Hazard(s) Addressed: Toxic Release/HAZMAT	
Priority: Medium	
Estimated Cost:	
Potential Funding Sources: FEMA-Hazard Materials Assistance Program, FEMA-Emergency Management Performance Grant, FEMA- All Hazards Emergency Operational Planning, TxDOT, PDM, HMGP	
Lead Agency/Department Responsible: Texas Department of Transportation	
Implementation Schedule: Planning on-going, total enforcement pending funding.	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: Liberty County	Project Description: Work with adjoining counties in regards to flood and drainage issues.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 4	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): On going as schedule allows	
Category: Prevention	
Hazard(s) Addressed: Flood	
Priority: High	
Estimated Cost:	
Potential Funding Sources: HMGP, PDM Program, USACE- Small Flood Control Projects, TWDB- Clean Water State Revolving Fund, Texas Water Development Fund, USDA NRCS Watershed Protection and Flood Prevention Program, EPA NPS Grant Program	
Lead Agency/Department Responsible: Drainage District	
Implementation Schedule: Planning on-going, development of drainage projects pending funding	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

Liberty County

Name of Jurisdiction: Liberty County	Project Description: Installation of dry fire hydrants in selected locations throughout Liberty County.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 5	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): As funding allows	
Category: Prevention	
Hazard(s) Addressed: Toxic Release/HAZMAT	
Priority: High	
Estimated Cost:	
Potential Funding Sources: FEMA-Assistance to Fire Fighters Grant, Public Assistance(Following Federally Declared Disaster), PDM, HMGP	
Lead Agency/Department Responsible: Fire Departments, Hazardous Materials Team	
Implementation Schedule: Planning on-going, projects pending funding	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: Liberty County	Project Description: Educate and inform the public regarding hurricane wind protective measures.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 6	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): On going as schedule allows	
Category: Public Information and Awareness	
Hazard(s) Addressed: Hurricane and Tropical Storms	
Priority: Medium	
Estimated Cost: \$10,000	
Potential Funding Sources: Red Cross, Emergency Management Institute, National Weather Service, HMGP, FEMA-Hurricane Local Grant Program, USDA- Environmental Quality Incentives Program, PDM Program, HMGP	
Lead Agency/Department Responsible: Emergency Management	
Implementation Schedule: Some educational programs underway, more to be added pending funding	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Liberty County

Name of Jurisdiction: Liberty County	Project Description: Purchase updated topographic maps/complete LiDAR aerial survey for drainage plan.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 7		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): As funding allows		
Category: Public Information and Awareness, Prevention		
Hazard(s) Addressed: Flood		
Priority: Medium		
Estimated Cost:		
Potential Funding Sources: FEMA-Map Modernization Program, FEMA-Flood Hazard Mapping Program, Department of the Interior, United States Geological Survey- Mapping Standards Support, FEMA-Flood Recovery Mapping, PDM, HMGP		
Lead Agency/Department Responsible: Permit Department, County Surveyor		
Implementation Schedule: maps being updated as new products become available, more to be updated as purchasing funds becomes available		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

Name of Jurisdiction: Liberty County	Project Description: Update Flood Insurance Rate Maps (FIRMs).	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 8		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): As information is received and funding allows		
Category: Prevention		
Hazard(s) Addressed: Flood		
Priority: High		
Estimated Cost:		
Potential Funding Sources: FEMA- Map Modernization Program, FEMA- Flood Hazard Mapping Program, Department of the Interior, United States Geological Survey- Mapping Standards Support, FEMA Flood Recovery Mapping, PDM, HMGP		
Lead Agency/Department Responsible: Permit Department, County Surveyor		
Implementation Schedule: Maps being updated as new products become available, more to be updated as updates and purchasing funds become available		
Reduce effects of hazards on new buildings and infrastructure?: Yes		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

Liberty County

Name of Jurisdiction: Liberty County	Project Description: Add bench marks to updated Flood Insurance Rate Maps.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 9	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): Continuing as updates needed	
Category: Prevention, Public Information and Awareness	
Hazard(s) Addressed: Flood	
Priority: Low	
Estimated Cost:	
Potential Funding Sources: FEMA Map Modernization Program, FEMA Flood Hazard Mapping Program, Dept of the Interior, USGS Mapping Standards Support, FEMA Flood Recovery Mapping, PDM, HMGP	
Lead Agency/Department Responsible: Permit Dept, County Surveyor	
Implementation Schedule: Dependent on funding	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

Name of Jurisdiction: Liberty County	Project Description: Establish a countywide drainage district.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 10	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): Pending grant approval	
Category: Prevention	
Hazard(s) Addressed: Flood	
Priority: High	
Estimated Cost:	
Potential Funding Sources: USACE-Small Flood Control Projects, USDA NRCS-Emergency Watershed Protection Agency, TWDB-Clean Water State Revolving Fund, TWDB, USDA NRCS-Watershed Protection and Flood Prevention Program, EPA NPS Grant Program, PDM, 406 Public Assistance, HMGP	
Lead Agency/Department Responsible: Drainage District	
Implementation Schedule: Dependent on Funding	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

Liberty County

Name of Jurisdiction: Liberty County	Project Description: Increase culvert size in identified flood hazard problem areas within Liberty County.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 11		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): As Funding and time allow		
Category: Structural Project		
Hazard(s) Addressed: Flood		
Priority: High		
Estimated Cost:		
Potential Funding Sources: USACE-Clearing and Snagging Projects, USACE-Emergency Rehabilitation of Flood Control Works or Federally Authorized Coastal Protection Works, USACE-Small Flood Control Projects, HMGP, 406 Public Assistance, NRCS, PDM(declaration), NRCS		
Lead Agency/Department Responsible: Drainage Department		
Implementation Schedule: Some studies underway since previous plan originated, actual projects dependent on funding		
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

City of Ames

Name of Jurisdiction: City of Ames	Project Description: Conduct wildfire outreach and education campaign.
2011 Mitigation Action No.: 1	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Public Information and Awareness	
Hazard(s) Addressed: Wildfire	
Priority: High	
Estimated Cost:	
Potential Funding Sources:	
Lead Agency/Department Responsible: City of Ames	
Implementation Schedule: Pending funding	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: City of Ames	Project Description: Participate in CRS workshop hosted by H-GAC.
2011 Mitigation Action No.: 2	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Public Information and Awareness	
Hazard(s) Addressed: Flood	
Priority: High	
Estimated Cost: \$0	
Potential Funding Sources: N/A	
Lead Agency/Department Responsible: Mayor	
Implementation Schedule: 2013	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

City of Ames

Name of Jurisdiction: City of Ames	Project Description: Conduct hurricane outreach and education campaign.
2011 Mitigation Action No.: 3	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Public Information and Awareness	
Hazard(s) Addressed: Flood, Hurricanes and Tropical Storms	
Priority: High	
Estimated Cost: Unknown	
Potential Funding Sources: PDM, HMGP	
Lead Agency/Department Responsible: City of Ames	
Implementation Schedule: 2012	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

Name of Jurisdiction: City of Ames	Project Description: Implement public awareness campaign regarding HAZMAT safety, including risk communication, detection, shelter in place and evacuation procedures for HAZMAT events that occur as a result of natural hazards.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 1	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): On-going	
Category: Public Information and Awareness	
Hazard(s) Addressed: Toxic Release/HAZMAT, Flood, Hurricanes and Tropical Storms, Drought, Tornadoes, Wildfire	
Priority: High	
Estimated Cost: \$5,000	
Potential Funding Sources: Southern Pacific Rail Road, FEMA-Hazardous Materials Assistance Program, FEMA-Emergency Management Performance Grant, USDA- Environmental Quality Incentives Program, Department of Transportation-Grants-in-Aid for Railroad Safety Program, HMGP, PDM	
Lead Agency/Department Responsible: Railroad Commission and Emergency Management	
Implementation Schedule: Pending funding	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

City of Ames

Name of Jurisdiction: City of Ames	Project Description: Improve drainage system.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 2		
Status of 2006 Mitigation Action: Complete: In Progress: Yes No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions): Identifying projects, funding availability		
Category: Structural Project		
Hazard(s) Addressed: Flood		
Priority: High		
Estimated Cost:		
Potential Funding Sources: USACE-Small Flood Control Projects, USDA NRCS-Emergency Watershed Protection Agency, TWDB (Development Fund II)-Texas Water Development Fund, USDA NRCS-Watershed Protection and Flood Prevention Program, EPA NPS Grant Program, PDM, HMGP, 406 Public Assistance		
Lead Agency/Department Responsible: Emergency Management		
Implementation Schedule: In Progress		
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

Name of Jurisdiction: City of Ames	Project Description: Notify public of evacuation routes.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 3		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): Working on public education programs		
Category: Public Information and Awareness		
Hazard(s) Addressed: Hurricane and Tropical Storms, Flood, Wildfire		
Priority: High		
Estimated Cost:		
Potential Funding Sources: Local Commitment, Partnership with Public radio		
Lead Agency/Department Responsible: Emergency Management		
Implementation Schedule: Pending funding		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

City of Ames

Name of Jurisdiction: City of Ames	Project Description: Develop education and awareness program in order to notify residents of the dangers associated with pipeline failures.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 4		
Status of 2006 Mitigation Action: Complete: In Progress: Yes No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions): Funding not available		
Category: Public Information and Awareness		
Hazard(s) Addressed: Toxic Release/HAZMAT		
Priority: Medium		
Estimated Cost: \$5,000		
Potential Funding Sources: Public-private partnership (gas company), FEMA-Emergency Management Performance Grant, HMGP, FEMA Hazardous Materials Assistance Program, USDA Environmental Quality Incentives Program		
Lead Agency/Department Responsible: Emergency Management, Fire Dept, EPA		
Implementation Schedule: Pending funding		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

City of Cleveland

Name of Jurisdiction: City of Cleveland	Project Description: Replace and relocate Fire Station 1.	
2011 Mitigation Action No.: 1		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Property Protection, Structural Project		
Hazard(s) Addressed: Hurricane and Tropical Storms, Tornadoes, Toxic Release/HAZMAT		
Priority: High		
Estimated Cost: \$1,500,000		
Potential Funding Sources: General Fund, EDC, FEMA, Homeland Security, Grants, HMGP, PDM		
Lead Agency/Department Responsible: Fire Department		
Implementation Schedule: Within 5 years		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: Yes	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: City of Cleveland	Project Description: Retrofit police department EOC with generators for emergency backup power to maintain critical services during power outages caused by natural hazards.	
2011 Mitigation Action No.: 2		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Property Protection		
Hazard(s) Addressed: Hurricane and Tropical Storms, Tornadoes, Toxic Release/HAZMAT, Flood, Severe Thunderstorms, Excessive Heat, Wildfire		
Priority: Medium		
Estimated Cost: \$100,000		
Potential Funding Sources: General Fund, EDC, FEMA, Homeland Security, Grants, HMGP, PDM		
Lead Agency/Department Responsible: Police/EOC		
Implementation Schedule: Within 3 years		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: Yes	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

City of Cleveland

Name of Jurisdiction: City of Cleveland	Project Description: Attend CRS workshop hosted by H-GAC.	
2011 Mitigation Action No.: 3		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Public Information and Awareness		
Hazard(s) Addressed: Flood		
Priority: Medium		
Estimated Cost: \$0		
Potential Funding Sources: N/A		
Lead Agency/Department Responsible: Director of Fire and EMS		
Implementation Schedule: 2013		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

Name of Jurisdiction: City of Cleveland	Project Description: Conduct wildfire outreach and education campaign.	
2011 Mitigation Action No.: 4		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Public Information and Awareness		
Hazard(s) Addressed: Wildfire		
Priority: High		
Estimated Cost:		
Potential Funding Sources: HMGP, PDM		
Lead Agency/Department Responsible: Director of Fire and EMS		
Implementation Schedule: 2012		
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

City of Cleveland

Name of Jurisdiction: City of Cleveland	Project Description: Contract with First Call Network to notify citizens by phone of possible hazards.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 1		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): As funding allows		
Category: Public Information and Awareness		
Hazard(s) Addressed: Tornadoes, Severe Thunderstorms		
Priority: High		
Estimated Cost: \$25,000		
Potential Funding Sources: General Fund, National Weather Service, USDA Rural Utilities Service-Weather Radio Grant Program, FEMA Hurricane Local Grant Program, HMGP, PDM, FEMA Emergency Management Performance Grant, USDA Environmental Quality Incentives Program		
Lead Agency/Department Responsible: Emergency management		
Implementation Schedule: October 2003		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: City of Cleveland	Project Description: Adopt 25-foot setback from pipeline right-of-way.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 2		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): Ordinance development study underway		
Category: Property Protection		
Hazard(s) Addressed: Toxic Release/HAZMAT		
Priority: Medium		
Estimated Cost: \$500		
Potential Funding Sources: General Fund- Local Commitment		
Lead Agency/Department Responsible: Building and Inspection Dept.		
Implementation Schedule: 60-90 days		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

City of Cleveland

Name of Jurisdiction: City of Cleveland	Project Description: Install larger drainage lines in downtown Cleveland to reduce flooding.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 3	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): As funding allows	
Category: Structural Project	
Hazard(s) Addressed: Flood	
Priority: High	
Estimated Cost: \$1,000,000	
Potential Funding Sources: CDBG, USACE Small Flood Control Projects, TWDB Clean Water State Revolving Fund, PDM, HMGP, 406 Public Assistance	
Lead Agency/Department Responsible: City of Cleveland Public Works	
Implementation Schedule: As soon as funding is available	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

Name of Jurisdiction: City of Cleveland	Project Description: Reduce exposure to hazardous materials.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 4	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): Processes and procedures being developed	
Category: Property Protection	
Hazard(s) Addressed: Toxic Release/HAZMAT	
Priority: Low	
Estimated Cost:	
Potential Funding Sources: State and Federal funds, FEMA - Emergency Management Performance Grant, FEMA- Hazard materials Assistance Grant, FEMA-All Hazard Emergency Operational Planning	
Lead Agency/Department Responsible: TXDOT	
Implementation Schedule: 2005	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

City of Daisetta

Name of Jurisdiction: City of Daisetta	Project Description: Participate in CRS workshop hosted by H-GAC.	
2011 Mitigation Action No.: 1		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Public Information and Awareness		
Hazard(s) Addressed: Hurricane and Tropical Storms, Flood, Severe Thunderstorms		
Priority: Medium		
Estimated Cost: \$0		
Potential Funding Sources: Budget		
Lead Agency/Department Responsible: Mayor		
Implementation Schedule: 2013		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

Name of Jurisdiction: City of Daisetta	Project Description: Drainage projects.	
2011 Mitigation Action No.: 2		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Structural Projects		
Hazard(s) Addressed: Hurricane and Tropical Storms, Severe Thunderstorms, Tornadoes, Drought		
Priority: High		
Estimated Cost: \$750,000		
Potential Funding Sources: HMGP, PDM		
Lead Agency/Department Responsible: Mayor		
Implementation Schedule: Pending funding		
Reduce effects of hazards on new buildings and infrastructure?: Yes		Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

City of Daisetta

Name of Jurisdiction: City of Daisetta	Project Description: Conduct public education and awareness campaign regarding hazardous materials.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 1		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): As schedule allows		
Category: Public Information and Awareness		
Hazard(s) Addressed: Toxic Release/HAZMAT		
Priority: High		
Estimated Cost:		
Potential Funding Sources: Public-private partnership, grant program, FEMA-Emergency Management Performance Grant, HMGP, FEMA-All Hazards Operational Planning, FEMA-Assistance to Fire Fighters Grant, USDA-Environmental Quality Incentives Program, PDM		
Lead Agency/Department Responsible: Emergency Management Committee		
Implementation Schedule: Pending funding		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: City of Daisetta	Project Description: Retrofit high school, city hall for shelter during emergency.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 2		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): As funding allows		
Category: Structural Project		
Hazard(s) Addressed: Hurricane and Tropical Storms, Tornadoes, Severe Thunderstorms		
Priority: High		
Estimated Cost:		
Potential Funding Sources: HMGP, Red Cross, FEMA-Emergency Operation Center Funding, PDM		
Lead Agency/Department Responsible: Emergency Management Committee		
Implementation Schedule: Pending funding		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: Yes	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

City of Daisetta

Name of Jurisdiction: City of Daisetta	Project Description: Educate city council on benefits of mitigation and encourage council members to become more involved.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 3	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): As schedule allows	
Category: Public Information and Awareness	
Hazard(s) Addressed: Hurricane and Tropical Storms, Flood, Tornadoes, Severe Thunderstorms	
Priority: High	
Estimated Cost:	
Potential Funding Sources: Staff time and resources, FEMA and Red Cross materials free of charge, HMGP, Pre-disaster Mitigation	
Lead Agency/Department Responsible: Emergency Management	
Implementation Schedule: As soon as possible	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: City of Daisetta	Project Description: Upgrade existing warning system to alert citizens of pending natural hazards.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 4	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): As funding allows	
Category: Public Information and Awareness	
Hazard(s) Addressed: All hazards	
Priority:	
Estimated Cost:	
Potential Funding Sources: USDA Rural Utilities Service-Weather Radio Grant Program, National Weather Service, FEMA-Assistance to Firefighters Grant, FEMA Hurricane Local Grant, DOJ State Homeland Security Program, HMGP, PDM, FEMA Emergency Operations Center Funding, FEMA Emergency Management Performance Grant, USDA Environmental Quality Incentives Program	
Lead Agency/Department Responsible: Emergency Management Committee	
Implementation Schedule: Pending Funding	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

City of Dayton

Name of Jurisdiction: City of Dayton	Project Description: Establish GIS-based hazard information system.	
2011 Mitigation Action No.: 1		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Prevention, Public Information and Awareness		
Hazard(s) Addressed: Flood, Hurricane and Tropical Storms, Toxic Release/HAZMAT, Wildfire		
Priority: Medium		
Estimated Cost: \$5,000		
Potential Funding Sources: Federal and/or State Grants, Operating Budget, PDM, HMGP		
Lead Agency/Department Responsible: Planning, Building, Code Enforcement		
Implementation Schedule: 2012		
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: City of Dayton	Project Description: Implement drainage channel improvements to reduce flooding including increased culvert size at SH321 underpass to Waco St.	
2011 Mitigation Action No.: 2		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Structural Project		
Hazard(s) Addressed: Flood		
Priority: High		
Estimated Cost: \$1,100,000		
Potential Funding Sources: TWDB & Local Matching Funds, HMGP, PDM		
Lead Agency/Department Responsible: City Manager's Office		
Implementation Schedule: Begin March 2011 Completion December 2011		
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

City of Dayton

Name of Jurisdiction: City of Dayton	Project Description: Local emergency evacuation transportation plan in synch with TxDOT planning and routes.
2011 Mitigation Action No.: 3	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Emergency Services	
Hazard(s) Addressed: Hurricane and Tropical Storms, Wildfire, Flood	
Priority: Medium	
Estimated Cost: \$2,000	
Potential Funding Sources: Operating Budget	
Lead Agency/Department Responsible: Police Department	
Implementation Schedule: Establish plan prior to Hurricane Season 2011	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: City of Dayton	Project Description: Permanent back up power (generator) for SH 321 underpass.
2011 Mitigation Action No.: 4	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Structural Project	
Hazard(s) Addressed: Flood, Hurricane and Tropical Storms	
Priority: High	
Estimated Cost: \$50,000	
Potential Funding Sources: TXDOT and Local matching Funds	
Lead Agency/Department Responsible: TXDOT/ Public Works	
Implementation Schedule: Begin Oct. 2011 Completion September 2012	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

City of Dayton

Name of Jurisdiction: City of Dayton	Project Description: Develop a truck bypass around Dayton.
2011 Mitigation Action No.: 5	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Structural Project	
Hazard(s) Addressed: Hurricane and Tropical Storms	
Priority: High	
Estimated Cost: \$10,000,000	
Potential Funding Sources: TXDOT Pass Through Funding, Toll Road	
Lead Agency/Department Responsible: City of Dayton	
Implementation Schedule: Begin 2012 Complete 2020	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: City of Dayton	Project Description: Enforce wind load requirements for new construction within city limits.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 1	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): On-going	
Category: Prevention	
Hazard(s) Addressed: Hurricane and Tropical Storms	
Priority: High	
Estimated Cost:	
Potential Funding Sources: Local Commitment, PDM, HMGP	
Lead Agency/Department Responsible: Dept of Planning and Community Development	
Implementation Schedule: 2004	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

City of Dayton

Name of Jurisdiction: City of Dayton	Project Description: Develop drainage master plan.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 2		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): In place, updated as necessary		
Category: Prevention		
Hazard(s) Addressed: Flood		
Priority: High		
Estimated Cost: \$100,000		
Potential Funding Sources: Local funding through Capital Improvements, USACE-Planning Assistance to States, Flood Mitigation Assistance Program, TWDB- Research and Planning Fund Grants, HMGP, PDM		
Lead Agency/Department Responsible: Dept of Planning and Community Development		
Implementation Schedule: begin 2003-2004		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

Name of Jurisdiction: City of Dayton	Project Description: Develop city drainage ordinance.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 3		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): In place, updated as necessary		
Category: Prevention		
Hazard(s) Addressed: Flood		
Priority: High		
Estimated Cost: \$20,000		
Potential Funding Sources: Local funding through Capital Improvements, USACE-Planning Assistance to States, Flood Mitigation Assistance Program, TWDB- Research and Planning Fund Grants, HMGP, PDM		
Lead Agency/Department Responsible: Dept of Planning and Community Development		
Implementation Schedule: 2004		
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

City of Dayton

Name of Jurisdiction: City of Dayton	Project Description: Develop hazardous materials (HAZMAT) plan.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 4		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): In place, updated as necessary		
Category: Prevention		
Hazard(s) Addressed: Toxic Release/HAZMAT		
Priority: High		
Estimated Cost: \$50,000		
Potential Funding Sources: Local funding through Capital Improvements, FEMA- Hazardous Materials Assistance Program, FEMA- Emergency Management Performance Grant, FEMA- All Hazards Operational Planning		
Lead Agency/Department Responsible: Dept of Planning and Community Development		
Implementation Schedule: 2004		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: City of Dayton	Project Description: Work with Liberty County, TxDOT and other neighboring cities to develop a coordinated system of emergency evacuation routes.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 5		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): Developed as possible		
Category: Emergency Services, Public Information and Awareness		
Hazard(s) Addressed: Hurricane and Tropical Storms, Flood, Toxic Release/HAZMAT, Wildfire		
Priority: Medium		
Estimated Cost: \$20,000		
Potential Funding Sources: Local operating and capital budget, FEMA Hurricane Local Grant Program, FEMA Hazardous Materials Assistance Program, HMGP, PDM, FEMA Emergency Management Performance Grant, USDA Environmental Quality Incentives Program		
Lead Agency/Department Responsible: Dept of Planning and Community Development		
Implementation Schedule: 2004		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

City of Dayton

Name of Jurisdiction: City of Dayton	Project Description: Disseminate information on the dangers of thunderstorms.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 6		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): On-going		
Category: Public Information and Awareness		
Hazard(s) Addressed: Severe Thunderstorms, Hail		
Priority: Low		
Estimated Cost:		
Potential Funding Sources: General Fund, FEMA and the Red Cross, HMGP, PDM		
Lead Agency/Department Responsible: Dept of Planning and Community Development		
Implementation Schedule: 2004		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: City of Dayton	Project Description: Disseminate information on the dangers of tornadoes.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 7		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): On-going		
Category: Public Information and Awareness		
Hazard(s) Addressed: Tornadoes		
Priority: Low		
Estimated Cost:		
Potential Funding Sources: General Fund, FEMA and the Red Cross, HMGP. PDM		
Lead Agency/Department Responsible: Dept of Planning and Community Development		
Implementation Schedule: 2004		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

City of Dayton

Name of Jurisdiction: City of Dayton	Project Description: Disseminate information on the dangers of hurricanes and tropical storms.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 8		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): On-going		
Category: Public Information and Awareness		
Hazard(s) Addressed: Hurricane and Tropical Storms		
Priority: Low		
Estimated Cost:		
Potential Funding Sources: General Fund, FEMA and the Red Cross, HMGP, PDM		
Lead Agency/Department Responsible: Dept of Planning and Community Development		
Implementation Schedule: 2004		
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: City of Dayton	Project Description: Work with county to establish a water conservation district.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 9		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): Underway and updated as warranted		
Category: Prevention		
Hazard(s) Addressed: Drought		
Priority: Low		
Estimated Cost:		
Potential Funding Sources: Local Commitment		
Lead Agency/Department Responsible: Dept of Planning and Community Development		
Implementation Schedule: 2004		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

City of Dayton

Name of Jurisdiction: City of Dayton	Project Description: Develop a capital improvement program addressing drainage issues.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 10	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): Underway and updated as warranted	
Category: Prevention	
Hazard(s) Addressed: Flood	
Priority: Low	
Estimated Cost:	
Potential Funding Sources: Local Commitment, PDM, HMGP	
Lead Agency/Department Responsible: Dept of Planning and Community Development	
Implementation Schedule: 2004	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

Name of Jurisdiction: City of Dayton	Project Description: Increase culvert size at railroad crossings.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 11	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): Underway and updated as warranted	
Category: Structural Project	
Hazard(s) Addressed: Flood	
Priority: Low	
Estimated Cost:	
Potential Funding Sources: Local funding through Capital Improvements, DOT Grants-in-Aid for Railroad Safety Program, USACE Clearing and Snagging Projects, USACE Small Flood Control Projects, CDBG, USDA NRCS Emergency Watershed Protection Agency, TWDB Clean Water State Revolving Fund TWDB (Development Fund II)-Texas Water Development Fund, USDA NRCS Watershed Protection and Flood Prevention Program, 406 Public Assistance, HMGP, PDM	
Lead Agency/Department Responsible: Dept of Planning and Community Development	
Implementation Schedule: 2004	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

City of Dayton

Name of Jurisdiction: City of Dayton	Project Description: Provide for erosion control measures at Luke Street Bridge drainage outfall.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 12	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): Underway and updated as warranted	
Category: Structural Project	
Hazard(s) Addressed: Flood	
Priority: High	
Estimated Cost:	
Potential Funding Sources: Local funding through Capital Improvements and operating budget, 406 Public Assistance(following federal disaster declaration), HMGP, PDM Program	
Lead Agency/Department Responsible: Dept of Planning and Community Development	
Implementation Schedule: 2005	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: City of Dayton	Project Description: Enlarge storm drain to reduce flooding from Main Street to Church Street.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 13	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): Underway and updated as warranted	
Category: Structural Project	
Hazard(s) Addressed: Flood	
Priority: High	
Estimated Cost:	
Potential Funding Sources: Local funding through Capital Improvements and operating budget, 406 Public Assistance(following federal disaster declaration), HMGP, PDM Program	
Lead Agency/Department Responsible: Dept of Planning and Community Development	
Implementation Schedule: 2005	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

City of Dayton

Name of Jurisdiction: City of Dayton	Project Description: Increase culvert size to reduce flooding at Highway 90 and Waco Street.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 14	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): Underway and updated as warranted	
Category: Structural Project	
Hazard(s) Addressed: Flood	
Priority: High	
Estimated Cost:	
Potential Funding Sources: Local funding through Capital Improvements and operating budget, 406 Public Assistance(following federal disaster declaration), HMGP, PDM Program	
Lead Agency/Department Responsible: Dept of Streets and Drainage	
Implementation Schedule: 2005	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

Name of Jurisdiction: City of Dayton	Project Description: Install storm drain in place of open ditch along Lawrence Street from Willow Street to Juanita Street (approximately 2,400 linear feet).
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 15	
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions): Completed	
Category: Structural Project	
Hazard(s) Addressed: Flood	
Priority: High	
Estimated Cost:	
Potential Funding Sources: Local funding through Capital Improvements and operating budget, 406 Public Assistance(following federal disaster declaration), HMGP, PDM Program	
Lead Agency/Department Responsible: Dept of Streets and Drainage	
Implementation Schedule: 2005	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

City of Dayton

Name of Jurisdiction: City of Dayton	Project Description: Oversize to a minimum 36-inch storm drain RCP pipe and inlets along Houston Street from Cleveland heading east to major outfall (approx 4000 linear feet).	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 16		
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions): Completed		
Category: Structural Project		
Hazard(s) Addressed: Flood		
Priority: High		
Estimated Cost:		
Potential Funding Sources: Local funding through Capital Improvements and operating budget, 406 Public Assistance(following federal disaster declaration), HMGP, PDM Program		
Lead Agency/Department Responsible: Dept of Streets and Drainage		
Implementation Schedule: 2005		
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

City of Dayton Lake Estates

Name of Jurisdiction: City of Dayton Lake Estates	Project Description: Conduct wildfire outreach and education campaign.	
2011 Mitigation Action No.: 1		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Public Information and Awareness		
Hazard(s) Addressed: Wildfire		
Priority: High		
Estimated Cost:		
Potential Funding Sources: PDM, HMGP		
Lead Agency/Department Responsible: City of Dayton Lake Estates		
Implementation Schedule: 2012		
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: City of Dayton Lake Estates	Project Description: Re-route County Road 2331 to area not prone to flooding.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 1		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): As funding allows		
Category: Structural Project		
Hazard(s) Addressed: Flood		
Priority: High		
Estimated Cost:		
Potential Funding Sources: TxDOT, 406-Public Disaster Assistance, PDM, HMGP		
Lead Agency/Department Responsible: Liberty County Pct. 2		
Implementation Schedule: Pending Funding		
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

City of Dayton Lake Estates

Name of Jurisdiction: City of Dayton Lake Estates		Project Description: Construct bulkhead along Trinity River to reduce flooding impacts to County Road 2231.
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 2		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): Funding		
Category: Structural Project		
Hazard(s) Addressed: Flood		
Priority: High		
Estimated Cost:		
Potential Funding Sources: TxDOT, 406-Public Disaster Assistance (Following a local disaster), USACE-Clearing and Snagging Projects, USACE- Small Flood Control Projects, USACE-Planning Assistance to the States, PDM, HMGP		
Lead Agency/Department Responsible: Liberty County Pct. 2		
Implementation Schedule: Pending Funding		
Reduce effects of hazards on new buildings and infrastructure?: Yes		Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: City of Dayton Lake Estates		Project Description: Improve drainage by cleaning out/re-grading ditches within City of Dayton Lake Estates.
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 3		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): As schedule/funding allows		
Category: Structural Project		
Hazard(s) Addressed: Flood		
Priority: High		
Estimated Cost:		
Potential Funding Sources: TxDOT, 406-Public Disaster Assistance (Following a local disaster), USACE-Clearing and Snagging Projects, USACE- Small Flood Control Projects, USACE-Planning Assistance to the States, PDM, HMGP		
Lead Agency/Department Responsible: City of Dayton Lake Estates		
Implementation Schedule: Pending Funding		
Reduce effects of hazards on new buildings and infrastructure?: Yes		Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

City of Dayton Lake Estates

Name of Jurisdiction: City of Dayton Lake Estates		Project Description: Re-size inadequately sized culverts and clean out existing culverts to allow for improved drainage of rainwater.
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 4		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): As schedule/funding allows		
Category: Structural Project, Prevention		
Hazard(s) Addressed: Flood		
Priority: High		
Estimated Cost:		
Potential Funding Sources: TxDOT, 406-Public Disaster Assistance (Following a local disaster), USACE-Clearing and Snagging Projects, USACE-Small Flood Control Projects, USACE-Planning Assistance to the States, CDBG, USDA NRCS-Emergency Watershed Protection Agency-Watershed and Flood Prevention Program, PDM, HMGP		
Lead Agency/Department Responsible: City of Dayton Lake Estates		
Implementation Schedule: Pending Funding		
Reduce effects of hazards on new buildings and infrastructure?: Yes		Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

Name of Jurisdiction: City of Dayton Lake Estates		Project Description: Construct detention pond.
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 5		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): Funding		
Category: Structural Project		
Hazard(s) Addressed: Flood		
Priority: Medium		
Estimated Cost:		
Potential Funding Sources: USACE-Small Flood Control Projects, CDBG, USDA NRCS Emergency Watershed Protection Agency, TWDB Clean Water State Revolving Fund, TWDB (Development Fund II)-Texas Water Development Fund, USDA NRCS Watershed Protection and Flood Prevention Program, EPA NPS Grant Program, 406 Public Assistance Program, PDM, HMGP		
Lead Agency/Department Responsible: Dayton Lakes Estates		
Implementation Schedule: Pending funding		
Reduce effects of hazards on new buildings and infrastructure?: Yes		Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

City of Devers

Name of Jurisdiction: City of Devers	Project Description: Attend CRS workshop hosted by H-GAC.	
2011 Mitigation Action No.: 1		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Public Information and Awareness		
Hazard(s) Addressed: Flood		
Priority: Medium		
Estimated Cost: \$0		
Potential Funding Sources: N/A		
Lead Agency/Department Responsible: County Emergency Management Coordinator		
Implementation Schedule: 2013		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

Name of Jurisdiction: City of Devers	Project Description: Conduct wildfire outreach and education campaign.	
2011 Mitigation Action No.: 2		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Public Information and Awareness		
Hazard(s) Addressed: Wildfire, Drought		
Priority: High		
Estimated Cost:		
Potential Funding Sources: PDM, HMGP		
Lead Agency/Department Responsible: City of Devers		
Implementation Schedule: 2012		
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

City of Devers

Name of Jurisdiction: City of Devers	Project Description: Conduct flood hazard outreach and education campaign.	
2011 Mitigation Action No.: 3		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Public Information and Awareness		
Hazard(s) Addressed: Flood		
Priority: High		
Estimated Cost:		
Potential Funding Sources: PDM, HMGP		
Lead Agency/Department Responsible: City of Devers		
Implementation Schedule: 2012		
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

Name of Jurisdiction: City of Devers	Project Description: Conduct hazardous materials evacuation study.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 1		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): As funding allows		
Category: Prevention		
Hazard(s) Addressed: Toxic Release/HAZMAT		
Priority: Medium		
Estimated Cost:		
Potential Funding Sources: FEMA-Hazardous Materials Assistance Program, HMGP, PDM, FEMA-Emergency Management Performance Grants, FEMA- All hazards Operation Planning, FEMA-Fire Management Assistance Grants, USDA-Environmental Quality Incentives Program		
Lead Agency/Department Responsible: Law Enforcement		
Implementation Schedule: Pending Funding		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

City of Devers

Name of Jurisdiction: City of Devers	Project Description: Conduct stormwater management study, to include ditch cleanouts and enhanced culverts.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 2		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): As schedule/funding allows		
Category: Prevention		
Hazard(s) Addressed: Flood		
Priority: Medium		
Estimated Cost:		
Potential Funding Sources: USACE-Planning Assistance to States, TxDOT, HMGP, 406 Public Assistance Program (following federal disaster declaration), USACE-Clearing and Snagging Projects of Emergency Rehabilitation of Flood Control Works, USACE-Small Flood Control Projects, PDM, HMG		
Lead Agency/Department Responsible: Drainage District, Liberty County Road and Bridge		
Implementation Schedule: Pending Funding		
Reduce effects of hazards on new buildings and infrastructure?: Yes		Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

Name of Jurisdiction: City of Devers	Project Description: Develop identification and notification system for citizens living in the vicinity of pipelines.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 3		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): As funding allows		
Category: Prevention		
Hazard(s) Addressed: Toxic Release/HAZMAT		
Priority: Medium		
Estimated Cost:		
Potential Funding Sources: Public-private partnership, FEMA-Hazardous Materials Assistance Program, FEMA-Emergency Management Performance Grant, FEMA-All Hazards Operational Planning, FEMA- Assistance to Fire Fighters Grant, USDA-Environmental Quality Incentives Program, PDM, HMGP		
Lead Agency/Department Responsible: City of Devers		
Implementation Schedule: Pending Funding		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

City of Devers

Name of Jurisdiction: City of Devers	Project Description: Conduct traffic light study at intersection of Hwy 90 and SH 61 to determine evacuation-related impacts.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 4	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): As schedule allows	
Category: Prevention	
Hazard(s) Addressed: Flood, Toxic Release/HAZMAT, Wildfire, Hurricanes and Tropical Storms	
Priority: Medium	
Estimated Cost:	
Potential Funding Sources: TxDOT, City of Devers, PDM, HMGP	
Lead Agency/Department Responsible: Texas Department of Transportation, City of Devers	
Implementation Schedule: Pending Funding	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

City of Hardin

Name of Jurisdiction: City of Hardin	Project Description: Develop a locally-specific hazard mitigation plan.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 1	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): Funding	
Category: Prevention	
Hazard(s) Addressed: Hurricane and Tropical Storms, Flood, Tornadoes, Severe Thunderstorms, Wildfire, Excessive Heat, Drought	
Priority: High	
Estimated Cost: \$30,000	
Potential Funding Sources: HMGP, Pre- Disaster Mitigation, Flood Mitigation Assistance Program	
Lead Agency/Department Responsible: City Council	
Implementation Schedule: Contingent on the approval of City Council	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: City of Hardin	Project Description: Implement subdivision ordinance regulations concerning building in flood-prone areas.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 2	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): Work in progress	
Category: Prevention	
Hazard(s) Addressed: Flood	
Priority: High	
Estimated Cost:	
Potential Funding Sources: Staff time and resources, HMGP, TWDB-Research and Planning Fund Grants, PDM	
Lead Agency/Department Responsible: City Council	
Implementation Schedule: Contingent on the approval of City Council	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

City of Hardin

Name of Jurisdiction: City of Hardin	Project Description: Work with other entities to develop recovery procedures to minimize loss of life or property damages due to hazardous materials (HAZMAT) spills.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 3	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): As time/schedule allows	
Category: Prevention	
Hazard(s) Addressed: Toxic Release/HAZMAT	
Priority: Medium	
Estimated Cost:	
Potential Funding Sources: FEMA-Hazardous Materials Assistance Program FEMA- Emergency Management Performance Grant FEMA- All Hazards Operational Planning	
Lead Agency/Department Responsible: City Council	
Implementation Schedule: Contingent on the approval of City Council Contingent on the approval of City Council	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: City of Hardin	Project Description: Educate the public regarding dangers of hazardous materials (HAZMAT) spills.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 4	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): Work in progress	
Category: Public Information and Awareness	
Hazard(s) Addressed: Toxic Release/HAZMAT	
Priority: Medium	
Estimated Cost:	
Potential Funding Sources: Local Commitment, FEMA-Hazardous Materials Assistance Program, FEMA- Emergency Management Performance Grant, FEMA- All Hazards Operational Planning	
Lead Agency/Department Responsible: City Council	
Implementation Schedule: Contingent on the approval of City Council	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

City of Hardin

Name of Jurisdiction: City of Hardin	Project Description: Join the community rating system.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 5	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): Study underway	
Category: Prevention	
Hazard(s) Addressed: Flood	
Priority: Medium	
Estimated Cost:	
Potential Funding Sources: City Council	
Lead Agency/Department Responsible: City Council	
Implementation Schedule: Contingent on the approval of City Council	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

Name of Jurisdiction: City of Hardin	Project Description: Reduce flooding by increasing size of culverts to 24 inches on County Road 2361, 2362, 2363, and 2364 and CR 2358.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 6	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): As funding allows	
Category: Structural Projects	
Hazard(s) Addressed: Flood	
Priority: Medium	
Estimated Cost:	
Potential Funding Sources: USACE-Small Flood Control Projects, USACE-Clearing and Snagging Projects, CDBG, USDA NRCS-Emergency Watershed Protection Agency, TWDB-Clean Water State Revolving Fund, TWDB (Development Fund II)-Texas Water Development Fund, USDA NRCS-Watershed Protection and Flood Prevention Program, 406 Public Assistance, HGMP, PDM	
Lead Agency/Department Responsible: US Army Corp of Engineers - Small Flood Control Projects, US army corp. of Engineers- Clearing and Snagging Projects, Community Development Block Grant, USDA natural Resources Conservation Service- Emergency Watershed Protection Agency, Texas Water	
Implementation Schedule: Contingent on the approval of City Council	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

City of Hardin

Name of Jurisdiction: City of Hardin	Project Description: Educate the public on tornado-related impacts.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 7	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): On-going	
Category: Public Information and Awareness	
Hazard(s) Addressed: Tornadoes	
Priority: Medium	
Estimated Cost:	
Potential Funding Sources: Local Commitment Materials available from FEMA and the Red Cross free of charge, PDM, HMGP	
Lead Agency/Department Responsible: City Council/Fire Department	
Implementation Schedule: Pending	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: City of Hardin	Project Description: Inform the public regarding the use of wind-resistant construction techniques.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 8	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): On-going	
Category: Public Information and Awareness	
Hazard(s) Addressed: Hurricane and Tropical Storms, Severe Thunderstorms, Tornadoes	
Priority: Medium	
Estimated Cost:	
Potential Funding Sources: Local Commitment, See FEMA documents, including Taking Shelter from the Storm (FEMA 320), PDM, HMGP	
Lead Agency/Department Responsible: City Council and local agencies	
Implementation Schedule: Pending	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

City of Kenefick

Name of Jurisdiction: City of Kenefick	Project Description: Conduct wildfire outreach and education program.	
2011 Mitigation Action No.: 1		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Public Information and Awareness		
Hazard(s) Addressed: Wildfire		
Priority: High		
Estimated Cost:		
Potential Funding Sources: PDM, HMGP		
Lead Agency/Department Responsible: City of Kenefick		
Implementation Schedule: Pending funding		
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: City of Kenefick	Project Description: Conduct flood hazard outreach and education program.	
2011 Mitigation Action No.: 2		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Public Information and Awareness		
Hazard(s) Addressed: Flood		
Priority: High		
Estimated Cost:		
Potential Funding Sources: PDM, HMGP		
Lead Agency/Department Responsible: City of Kenefick		
Implementation Schedule: Pending funding		
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

City of Kenefick

Name of Jurisdiction: City of Kenefick	Project Description: Attend CRS workshop hosted by H-GAC.
2011 Mitigation Action No.: 3	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Public Information and Awareness	
Hazard(s) Addressed: Flood	
Priority: High	
Estimated Cost:	
Potential Funding Sources: PDM, HMGP	
Lead Agency/Department Responsible: City of Kenefick	
Implementation Schedule: Pending funding	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

Name of Jurisdiction: City of Kenefick	Project Description: Develop culvert maintenance program.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 1	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): Work in progress	
Category: Prevention	
Hazard(s) Addressed: Flood	
Priority: High	
Estimated Cost:	
Potential Funding Sources: USACE-Small Flood Control Projects, TxDOT, HMGP, USACE-Clearing and Snagging Projects, CDBG, USDA NRCS, PDM	
Lead Agency/Department Responsible: City of Kenefick, Liberty County	
Implementation Schedule: On-going planning, pending funding for completion of project	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

City of Kenefick

Name of Jurisdiction: City of Kenefick	Project Description: Improve grading of road ditches adjacent to existing roads.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 2		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): Work in progress		
Category: Structural Project		
Hazard(s) Addressed: Flood		
Priority: High		
Estimated Cost:		
Potential Funding Sources: USACE-Small Flood Control Projects, TxDOT, HMGP, USACE-Clearing and Snagging Projects, CDBG, USDA NRCS, PDM		
Lead Agency/Department Responsible: City of Kenefick, Liberty County		
Implementation Schedule: On-going planning, pending funding for completion of project		
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

City of Liberty

Name of Jurisdiction: City of Liberty	Project Description: Conduct wildfire outreach and education program.	
2011 Mitigation Action No.: 1		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Public Information and Awareness		
Hazard(s) Addressed: Wildfire		
Priority: High		
Estimated Cost:		
Potential Funding Sources: PDM, HMGP		
Lead Agency/Department Responsible: City of Liberty		
Implementation Schedule: On-going		
Reduce effects of hazards on new buildings and infrastructure?: Yes		Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: City of Liberty	Project Description: Conduct flood hazard outreach and education program.	
2011 Mitigation Action No.: 2		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Public Information and Awareness		
Hazard(s) Addressed: Flood, Severe Thunderstorms, Hurricanes and Tropical Storms		
Priority: High		
Estimated Cost:		
Potential Funding Sources: PDM, HMGP		
Lead Agency/Department Responsible: City of Liberty		
Implementation Schedule: On-going		
Reduce effects of hazards on new buildings and infrastructure?: Yes		Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

City of Liberty

Name of Jurisdiction: City of Liberty	Project Description: Implement drainage program in the Whittington Addition.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 1	
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions): Completed	
Category: Structural Project	
Hazard(s) Addressed: Flood	
Priority: High	
Estimated Cost: \$283,000	
Potential Funding Sources: Fund Balance, USACE Small Flood Control Projects, USDA NRCS Emergency Watershed Protection Agency, TWDB Clean Water State Revolving Fund, TWDB (Development Fund II)-Texas Water Development Fund, USDA NRCS Watershed Protection and Flood Prevention Program, EPA NPS Grant Program, 406 Public Assistance, HMGP, PDM	
Lead Agency/Department Responsible: City of Liberty	
Implementation Schedule: Begin 2004- End 2005	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

Name of Jurisdiction: City of Liberty	Project Description: Elevate FM 2684 to secure secondary evacuation route for South Liberty Oilfield.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 2	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): As funding allows	
Category: Structural Project	
Hazard(s) Addressed: Flood, Wildfire, Hurricanes and Tropical Storms	
Priority: High	
Estimated Cost:	
Potential Funding Sources: TxDOT, 406 Public Assistance following federal disaster declaration, PDM Program, FEMA- Hurricane Local Grant Program, USDA- Environmental Quality Incentives Program, HMGP	
Lead Agency/Department Responsible: City of Liberty, TX DOT	
Implementation Schedule: Began in 2006 continuing to search for funding	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

City of Liberty

Name of Jurisdiction: City of Liberty	Project Description: Establish hazardous materials (HAZMAT) cargo route.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 3	
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions): Completed	
Category: Prevention	
Hazard(s) Addressed: Toxic Release/HAZMAT	
Priority: High	
Estimated Cost:	
Potential Funding Sources: FEMA- Hazardous Materials Assistance Program, FEMA- Emergency Management Performance Grant	
Lead Agency/Department Responsible: City of Liberty, TX DOT	
Implementation Schedule: 2006	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: City of Liberty	Project Description: Relocate animal shelter.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 4	
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions): Completed	
Category: Property Protection	
Hazard(s) Addressed: Flood	
Priority: High	
Estimated Cost: \$25,000	
Potential Funding Sources: Budget, PDM, HMGP, People for the Ethical Treatment of Animals, United Animals Nations-Animal Aid, FEMA Animals & Emergencies: Preparedness information, USDA Veterinary Services Emergency Programs	
Lead Agency/Department Responsible: City of Liberty	
Implementation Schedule: 2004	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

City of Liberty

Name of Jurisdiction: City of Liberty	Project Description: Join the community rating system.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 5	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): Study underway	
Category: Prevention	
Hazard(s) Addressed: Flood	
Priority: Medium	
Estimated Cost: \$1,000	
Potential Funding Sources: Budget, staff time and resources	
Lead Agency/Department Responsible: City of Liberty Emergency Management, Floodplain Manager, Public Works	
Implementation Schedule: Began in 2006 continuing to search for funds	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

Name of Jurisdiction: City of Liberty	Project Description: Purchase and install generator at north water well.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 6	
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions): Completed with City funds	
Category: Prevention, Emergency Services	
Hazard(s) Addressed: Hurricane and Tropical Storms, Flood, Tornadoes, Severe Thunderstorm	
Priority: Medium	
Estimated Cost: \$15,000	
Potential Funding Sources: HMGP (generator quick-connects), FEMA-Assistance to Fire Fighters Grant, 406 Public Assistance following federal disaster declaration, TWDB- Clean Water State Revolving Fund	
Lead Agency/Department Responsible: City of Liberty Water and Electrical Department	
Implementation Schedule: Began in 2006 continuing to work toward completion	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

City of Liberty

Name of Jurisdiction: City of Liberty	Project Description: Construction of pump room at electrical power plant to prevent flooding at power plant.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 7	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): As funding allows	
Category: Property Protection, Structural Project	
Hazard(s) Addressed: Flood	
Priority: Medium	
Estimated Cost: \$4,000	
Potential Funding Sources: Local funding through Capital Improvements, HMGP, PDM, Flood Mitigation Assistance Program	
Lead Agency/Department Responsible: City of Liberty, Public Works and Water Dept.	
Implementation Schedule: Estimated 1 week of construction time, under study since 2004, goal is no later than 2012	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: City of Liberty	Project Description: Trim tree limbs contacting electrical lines to prevent power failure at critical facility.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 8	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): Work in progress	
Category: Property Protection	
Hazard(s) Addressed: Winter Storms, Severe Thunderstorms, Tornadoes, Hurricanes and Tropical Storms	
Priority: Medium	
Estimated Cost: \$50,000	
Potential Funding Sources: City Budget item, PDM, HMGP	
Lead Agency/Department Responsible: City of Liberty Electrical Dept. Public Assistance following federally declared disaster	
Implementation Schedule: On-going	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

City of Liberty

Name of Jurisdiction: City of Liberty	Project Description: Initiate Building Code Effectiveness Grading Schedule (BCEGS).	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 9		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): Work in progress		
Category: Prevention		
Hazard(s) Addressed: Hurricane and Tropical Storms, Wildfire		
Priority: Low		
Estimated Cost:		
Potential Funding Sources: N/A regular staff duties		
Lead Agency/Department Responsible: City of Liberty Building Inspections Dept.		
Implementation Schedule:		
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: City of Liberty	Project Description: Reverse 911 call system to inform citizens of imminent hazards.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 10		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): Work in progress, updated as necessary		
Category: Public Information and Awareness		
Hazard(s) Addressed: All hazards		
Priority: High		
Estimated Cost: \$20,000		
Potential Funding Sources: Local funding, HMGP, Pre- Disaster Mitigation Grant Program, Homeland Security		
Lead Agency/Department Responsible: City of Liberty, Police and Fire Dept		
Implementation Schedule: 6 months after funding		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

City of Liberty

Name of Jurisdiction: City of Liberty	Project Description: Create safe room in public facility.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 11	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): As funding allows	
Category: Emergency Services	
Hazard(s) Addressed: Hurricane and Tropical Storms, Flood, Tornadoes, Severe Thunderstorms, Wildfire, Excessive Heat	
Priority: High	
Estimated Cost: \$150,000	
Potential Funding Sources: Local funding through Capital Improvements, HMGP, PDM	
Lead Agency/Department Responsible: City of Liberty and Public Works Dept.	
Implementation Schedule: Project to begin 1 year after funding approved	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

City of North Cleveland

Name of Jurisdiction: City of North Cleveland	Project Description: Design and construct new bridge over East Fork San Jacinto River on Low Water Bridge Road (County Road 388) to reduce flooding.	
2011 Mitigation Action No.: 1		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Structural Project		
Hazard(s) Addressed: Flood		
Priority: High		
Estimated Cost:		
Potential Funding Sources: HMGP, PDM, County funds		
Lead Agency/Department Responsible: Liberty County Engineering Dept		
Implementation Schedule: Dependent on funding		
Reduce effects of hazards on new buildings and infrastructure?: Yes		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

Name of Jurisdiction: City of North Cleveland	Project Description: Acquisition of property in the floodplain.	
2011 Mitigation Action No.: 2		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Property Protection		
Hazard(s) Addressed: Flood		
Priority: Medium		
Estimated Cost:		
Potential Funding Sources: HMGP, Flood Mitigation Assistant Program, PDM, HUD-Disaster Recovery Initiative Program, CDBG		
Lead Agency/Department Responsible: Liberty County Engineering Dept		
Implementation Schedule: As funding becomes available		
Reduce effects of hazards on new buildings and infrastructure?: Yes		Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

City of North Cleveland

Name of Jurisdiction: City of North Cleveland	Project Description: North Cleveland emergency shelter located at old TxDOT offices on FM 2025.	
2011 Mitigation Action No.: 3		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Structural Project		
Hazard(s) Addressed: Tornadoes, Hurricane and Tropical Storms, Wind, Flood		
Priority: High		
Estimated Cost: \$500,000		
Potential Funding Sources: HMGP, Pre-Disaster Mitigation, County Funds		
Lead Agency/Department Responsible: Liberty County Engineering Dept		
Implementation Schedule: 2011-2016		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: City of North Cleveland	Project Description: Engineering study for drainage improvements.	
2011 Mitigation Action No.: 4		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Prevention		
Hazard(s) Addressed: Flood		
Priority: Medium		
Estimated Cost: \$30,000		
Potential Funding Sources: HMGP, PDM		
Lead Agency/Department Responsible: Engineering dept		
Implementation Schedule: 2012-2014		
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

City of North Cleveland

Name of Jurisdiction: City of North Cleveland	Project Description: Attend CRS workshop hosted by H-GAC.	
2011 Mitigation Action No.: 5		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Public Information and Awareness		
Hazard(s) Addressed: Flood		
Priority: Medium		
Estimated Cost: \$0		
Potential Funding Sources: N/A		
Lead Agency/Department Responsible: County Emergency Management Coordinator		
Implementation Schedule: 2013		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

Name of Jurisdiction: City of North Cleveland	Project Description: Conduct wildfire outreach and education campaign.	
2011 Mitigation Action No.: 6		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Public Information and Awareness		
Hazard(s) Addressed: Wildfire		
Priority: High		
Estimated Cost:		
Potential Funding Sources: PDM, HMGP		
Lead Agency/Department Responsible: County Emergency Management Coordinator		
Implementation Schedule: 2012		
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

City of North Cleveland

Name of Jurisdiction: City of North Cleveland	Project Description: Conduct flood hazard outreach and education campaign.	
2011 Mitigation Action No.: 7		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Public Information and Awareness		
Hazard(s) Addressed: Flood, Hurricanes and Tropical Storms		
Priority: High		
Estimated Cost:		
Potential Funding Sources: PDM, HMGP		
Lead Agency/Department Responsible: County Emergency Management Coordinator		
Implementation Schedule: 2012		
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

Name of Jurisdiction: City of North Cleveland	Project Description: Elevate Bridge Road.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 1		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): As funding allows		
Category: Structural Project		
Hazard(s) Addressed: Flood		
Priority: Medium		
Estimated Cost:		
Potential Funding Sources: PDM, HMGP, County, State, Federal, TXDOT, 406 Public Assistance (following federally declared disaster)		
Lead Agency/Department Responsible: Liberty County		
Implementation Schedule: 24 months		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: Yes	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

City of Plum Grove

Name of Jurisdiction: City of Plum Grove	Project Description: Expand development of emergency notification system/work to establish public awareness of emergency notification process.	
2011 Mitigation Action No.: 1		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Public Information and Awareness		
Hazard(s) Addressed: Hurricane and Tropical Storms, Flood, Toxic Release/HAZMAT, Wildfire, Severe Thunderstorm		
Priority: High		
Estimated Cost: \$10,000		
Potential Funding Sources: National Weather Service, FEMA Emergency Management Performance Grant, Dept of Homeland Security-State Homeland Security Grant Program, Private Industry such as Insurance Companies and Pipeline Operators, HMGP, PDM		
Lead Agency/Department Responsible: City of Plum Grove and Liberty County Office of Emergency Management		
Implementation Schedule: Phase 1 Underway with the introduction of first call and nixle to the community, Phase 2 pending funding		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: City of Plum Grove	Project Description: Attend CRS workshop hosted by H-GAC.	
2011 Mitigation Action No.: 2		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Public Information and Awareness		
Hazard(s) Addressed: Flood		
Priority: Medium		
Estimated Cost: \$0		
Potential Funding Sources: N/A		
Lead Agency/Department Responsible: County Emergency Management Coordinator		
Implementation Schedule: 2013		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

City of Plum Grove

Name of Jurisdiction: City of Plum Grove	Project Description: Conduct wildfire outreach and education campaign.	
2011 Mitigation Action No.: 3		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Public Information and Awareness		
Hazard(s) Addressed: Wildfire, Drought		
Priority: High		
Estimated Cost:		
Potential Funding Sources: PDM, HMGP		
Lead Agency/Department Responsible: City of Plum Grove, Liberty County Emergency Management		
Implementation Schedule: 2012		
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: City of Plum Grove	Project Description: Conduct flood hazard outreach and education campaign.	
2011 Mitigation Action No.: 4		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Public Information and Awareness		
Hazard(s) Addressed: Flood, Hurricanes and Tropical Storms, Severe Thunderstorms		
Priority: High		
Estimated Cost:		
Potential Funding Sources: PDM, HMGP		
Lead Agency/Department Responsible: City of Plum Grove, Liberty County Emergency Management		
Implementation Schedule: 2012		
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

City of Plum Grove

Name of Jurisdiction: City of Plum Grove	Project Description: Develop emergency notification system.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 1	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): Updated as necessary	
Category: Public Information and Awareness	
Hazard(s) Addressed: All hazards	
Priority: High	
Estimated Cost: \$10,000	
Potential Funding Sources: Local Funding through Capital Improvements, National Weather Service, FEMA Emergency Management Performance Grant, USDA Rural Utilities Service-Weather Radio Grant Program, FEMA-Hurricane Local Grant Program, USDA Environmental Quality Incentives Program, HMGP, PDM	
Lead Agency/Department Responsible: Liberty County Emergency Management	
Implementation Schedule: First Quarter of 2004	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: City of Plum Grove	Project Description: Purchase generator for City Hall to run water well, air conditioning and lights during emergencies.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 2	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): Expanding as funds allow	
Category: Emergency Services	
Hazard(s) Addressed: Flood, Hurricane and Tropical Storms	
Priority: High	
Estimated Cost: \$5,000	
Potential Funding Sources: Local Funding through Capital Improvements, HMGP (generator quick-connects), FEMA- Emergency Operations Center Grant, FEMA- Assistance to Firefighters Grant, FEMA- All Hazards Operational Planning	
Lead Agency/Department Responsible: City of Plum Grove	
Implementation Schedule: 2004	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

City of Plum Grove

Name of Jurisdiction: City of Plum Grove	Project Description: Reduce flooding by raising road surface of Plum Grove Road and installing larger culverts from FM 1010 intersection to Paul Campbell Loop and at Orange Branch crossing.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 3		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): As funding allows		
Category: Structural Project		
Hazard(s) Addressed: Flood		
Priority: High		
Estimated Cost:		
Potential Funding Sources: Local Funding through Capital Improvements, TX DOT, USACE-Small Flood Control Projects, TWDB-Clean Water State Revolving Fund, TWDB, USDA NRCS-Watershed Protection and Flood Prevention Program, EPA, HMGP, 406 Public Assistance Program, PDM		
Lead Agency/Department Responsible: Liberty County Pct 3, TX DOT		
Implementation Schedule: Pending Funding		
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

Montgomery County

Name of Jurisdiction: Montgomery County		Project Description: Maintain mobile alternate care sites and associated resources necessary for deployment.
2011 Mitigation Action No.: 1		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Emergency Services		
Hazard(s) Addressed: Toxic Release/HAZMAT, Hurricane and Tropical Storms, Disease outbreak, Mass Fatality, Mass Casualty		
Priority: Medium		
Estimated Cost: 20000		
Potential Funding Sources: Montgomery County Hospital District Funds/Public Health Emergency Preparedness Grant Funds		
Lead Agency/Department Responsible: Montgomery County Hospital District/County Emergency Management		
Implementation Schedule: On-going		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: Montgomery County		Project Description: Implement Ready, Set, Go Educational Program.
2011 Mitigation Action No.: 2		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Public Information and Awareness, Property Protection		
Hazard(s) Addressed: Wildfire, Drought		
Priority: High		
Estimated Cost: 0		
Potential Funding Sources: PDM, HMGP		
Lead Agency/Department Responsible: Texas Forest Service, County Fire Marshall's Office, Montgomery County Emergency Management		
Implementation Schedule: On-going		
Reduce effects of hazards on new buildings and infrastructure?: Yes		Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Montgomery County

Name of Jurisdiction: Montgomery County	Project Description: Participate in CRS workshop hosted by H-GAC.	
2011 Mitigation Action No.: 3		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Public Information and Awareness		
Hazard(s) Addressed: Flood, Hurricanes and Tropical Storms, Severe Thunderstorms		
Priority: Medium		
Estimated Cost: 0		
Potential Funding Sources: N/A		
Lead Agency/Department Responsible: County Engineer and Emergency Management		
Implementation Schedule: 2013		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

Name of Jurisdiction: Montgomery County	Project Description: Reduce hazardous fuels in ditches in county right of way to lessen the threats and impacts from wildfires, droughts and floods.	
2011 Mitigation Action No.: 4		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Property Protection		
Hazard(s) Addressed: Wildfire, Hurricanes and Tropical Storms, Flood, Severe Thunderstorms		
Priority: Medium		
Estimated Cost: Unknown		
Potential Funding Sources: County Budget		
Lead Agency/Department Responsible: County Commissioner Precincts		
Implementation Schedule: On-going		
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

Montgomery County

Name of Jurisdiction: Montgomery County		Project Description: Facilitate and coordinate program to improve emergency management radio, paging capabilities and reception countywide through the purchase of new equipment and necessary training of emergency personnel in the county and in member communities.
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 1		
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions): Completed		
Category: Emergency Services		
Hazard(s) Addressed: All hazards		
Priority: High		
Estimated Cost: 250000		
Potential Funding Sources: National Weather Service, FEMA-Emergency Management Performance Grant, USDA Rural Utilities Service, Weather Radio Grant Program, USDA Environment Quality Incentives Program, FEMA Assistance to Firefighters Grant, FEMA All Hazards Operational Planning, HMGP, PDM		
Lead Agency/Department Responsible: County Emergency Management office and local community officials, hospitals administrators, sheriff, EMS		
Implementation Schedule: Completed by 2005		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: Montgomery County		Project Description: Develop and coordinate a local hazmat team (consisting of personnel from county and member communities); procure fully-equipped hazmat mobile response vehicle to provide minor triage, decontamination.
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 2		
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions): Completed		
Category: Emergency Services		
Hazard(s) Addressed: Toxic Release/HAZMAT		
Priority: High		
Estimated Cost: 500000		
Potential Funding Sources: FEMA- Hazardous Materials Assistance Program, FEMA- Emergency Management Performance Grant, USDA- Environment Quality Incentives Program, FEMA- Assistance to Firefighters Grant, FEMA- All Hazards Operational Planning		
Lead Agency/Department Responsible: County Emergency Management office and local community officials, hospitals administrators,		
Implementation Schedule: 2004-2005		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Montgomery County

Name of Jurisdiction: Montgomery County		Project Description: Implement public awareness campaign regarding HAZMAT safety, including risk communication, detection, shelter in place and evacuation procedures for HAZMAT events that occur as a result of a natural hazard such as hurricanes, floods, droughts, wildfire, tornadoes.
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 3		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification: Yes		
Reason not complete (2006 actions): Funding not available		
Category: Public Information and Awareness		
Hazard(s) Addressed: Hurricane and Tropical Storms, Flood, Tornadoes, Drought, Wildfire, Toxic Release/HAZMAT,		
Priority: High		
Estimated Cost: 100000		
Potential Funding Sources: FEMA-Hazardous Materials Assistance Program, USDA-Environmental Quality Incentives Program, FEMA Assistance to Fire Fighters Grant, FEMA-All Hazards Operational Planning, FEMA Homeland Security Grants, PDM, HMGP		
Lead Agency/Department Responsible: County Emergency Management office and local community officials		
Implementation Schedule: Complete Within 1 year		
Reduce effects of hazards on new buildings and infrastructure?: Yes		Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: Montgomery County		Project Description: Promote use of NOAA all-hazard radios through County for early warning and post-event information. Place radios in area schools, businesses, critical facilities.
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 4		
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions): Completed		
Category: Emergency Services, Public Information and Awareness		
Hazard(s) Addressed: All hazards		
Priority: High		
Estimated Cost: 10000		
Potential Funding Sources: National Weather Service, FEMA Emergency Management Performance Grant, USDA Rural Utilities Service, Weather Radio Grant Program, USDA Environmental Quality Incentives Program, FEMA Assistance to Fire Fighters Grant, FEMA All Hazards Operations Planning, HMGP, PDM, public-private partnership		
Lead Agency/Department Responsible: County Emergency Management Office and local community officials		
Implementation Schedule: completed by 2005		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Montgomery County

Name of Jurisdiction: Montgomery County		Project Description: Implement the National Weather Service Skywarn program into local volunteer organizations to increase the number of volunteers providing the NWS with early notification of severe weather that may result in property damage and/or flooding.
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 5		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification: Yes		
Reason not complete (2006 actions): Funding not available		
Category: Public Information and Awareness		
Hazard(s) Addressed: Flood, Hurricanes and Tropical Storms, Tornadoes, Severe Thunderstorms		
Priority: Medium		
Estimated Cost: 10000		
Potential Funding Sources: National Weather Service, USDA-Rural Utilities Service-Weather Radio Grant Program, USDA-Environmental Quality Incentive Program FEMA-Assistance to Fire Fighters Grant FEMA-All Hazards Operational Planning, HMGP, PDM, public-private partnership, FEMA-Homeland Security Grants		
Lead Agency/Department Responsible: County Emergency Management office and local community officials		
Implementation Schedule: Complete Within 2 years		
Reduce effects of hazards on new buildings and infrastructure?: Yes		Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

Name of Jurisdiction: Montgomery County		Project Description: Enforce state regulations that prohibit dumping in streams, ditches and area waterways with concentration on those areas that have the potential to block the normal drainage of rainfall.
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 6		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): On-going project		
Category: Prevention		
Hazard(s) Addressed: Flood		
Priority: Medium		
Estimated Cost: 100000		
Potential Funding Sources: Cost share with Montgomery County and local communities, EPA-NPS Grant Program, USDA NRCS-Emergency Watershed Protection Agency, TWDB-Clean Water State Revolving Fund, TWDB (Development Fund II)-Texas Water Development Fund, USDA NRCS-Watershed Protection and Flood Prevention Program, PDM, HMGP		
Lead Agency/Department Responsible: County Emergency Management, Environmental Health Services and local community officials		
Implementation Schedule: On-going program		
Reduce effects of hazards on new buildings and infrastructure?: Yes		Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

Montgomery County

Name of Jurisdiction: Montgomery County		Project Description: Identify sites where stream and rain gauges are needed. Add or upgrade sites as needed and coordinate installation requests with USGS and River Authority. Additional sites will help provide early detection of potential flood areas to assist in evacuation and protection of property and inform the public of imminent hazard.
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 7		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): Funding not available		
Category: Public Information and Awareness		
Hazard(s) Addressed: Flood		
Priority: Medium		
Estimated Cost: 10000		
Potential Funding Sources: Cost share with Montgomery County and local communities FEMA-All Hazards Operational Planning, USDA- Environmental Quality Incentives Program, EPA-NPS Grant Program, USDA NRCS-Emergency Watershed Protection, TWDB-Clean Water State Revolving Fund, TWDB (Development Fund II)-Texas Water Development Fund, USDA NRCS-Watershed Protection and Flood Prevention Program		
Lead Agency/Department Responsible: County EMC, USGS, local community officials		
Implementation Schedule: Complete within 1 year		
Reduce effects of hazards on new buildings and infrastructure?: Yes		Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

Name of Jurisdiction: Montgomery County		Project Description: Implement actions to support regulations that assist in reducing excess ozone pollution and urban heat. May include actions such as providing incentives for developers to increase tree planting and a county-wide public education and awareness program to promote smog awareness, volunteer mass transit, car-pooling, and health tips for living in a high ozone smog area.
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 8		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): Funding		
Category: Prevention		
Hazard(s) Addressed: Drought, Excessive Heat		
Priority: Medium		
Estimated Cost: 25000		
Potential Funding Sources: Public private partnership, staff time and resources		
Lead Agency/Department Responsible: County Health District, County EMS, local community officials		
Implementation Schedule: Complete with 1 year of funding		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Montgomery County

Name of Jurisdiction: Montgomery County	Project Description: Implement water conservation education and incentives for low-flow plumbing and toilets, efficient washers and rain harvesting. Work with Lone Star Groundwater Conservation District and Agri Life Extension Service to promote and increase awareness for residents of Montgomery County pertaining to conserving, protecting and enhancing regional groundwater resources.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 9		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): On-going project		
Category: Public Information and Awareness		
Hazard(s) Addressed: Drought, Excessive Heat		
Priority: Medium		
Estimated Cost: 50000		
Potential Funding Sources: Cost share with Montgomery County, GCD, grants, private funds, TWDB- Texas Natural Resources Information System, USDA- Environmental Quality Incentives Program, EPA-NPS Grant Program, USDA NRCS-Emergency Watershed Protection Agency, TWDB- Clean Water StateRevolving Fund		
Lead Agency/Department Responsible: County Emergency Management, Environmental Health Services and local community officials		
Implementation Schedule: On-going program		
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

City of Conroe

Name of Jurisdiction: City of Conroe	Project Description: Public safety and risk assessment study/plan.	
2011 Mitigation Action No.: 1		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Emergency Services, Property Protection		
Hazard(s) Addressed: Flood		
Priority: Medium		
Estimated Cost: 75000		
Potential Funding Sources: FEMA Homeland Security Grants, HMGP, PDM		
Lead Agency/Department Responsible: Planning and Fire		
Implementation Schedule: Within 2-3 years of funding		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: City of Conroe	Project Description: Regional detention feasibility study.	
2011 Mitigation Action No.: 2		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Prevention, Property Protection		
Hazard(s) Addressed: Flood		
Priority: Medium		
Estimated Cost: 75000		
Potential Funding Sources: National Weather Service, FEMA Fire Fighters Grant, FEMA All Hazards Operational Planning, HMGP, PDMGP, Public-Private Partnerships, FEMA Homeland Security Grants		
Lead Agency/Department Responsible: Planning, Engineering and Fire		
Implementation Schedule: Within 2-3 years of funding		
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

City of Conroe

Name of Jurisdiction: City of Conroe	Project Description: Implement Ready, Set, Go Educational Program.	
2011 Mitigation Action No.: 3		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Public Information and Awareness, Property Protection		
Hazard(s) Addressed: Wildfire, Drought		
Priority: High		
Estimated Cost: 0		
Potential Funding Sources: PDM, HMGP		
Lead Agency/Department Responsible: Texas Forest Service, Fire Marshall's Office		
Implementation Schedule: On-going		
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: City of Conroe	Project Description: Enforce state regulations that prohibit dumping in streams, ditches and area waterways with concentration on those areas that have the potential to block the normal drainage of rainfall.	
2011 Mitigation Action No.: 4		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Prevention		
Hazard(s) Addressed: Flood		
Priority: Medium		
Estimated Cost: 100000		
Potential Funding Sources: Cost share with Montgomery County and local communities, EPA-NPS Grant Program, USDA NRCS-Emergency Watershed Protection Agency, TWDB-Clean Water State Revolving Fund, TWDB (Development Fund II)-Texas Water Development Fund, USDA NRCS-Watershed Protection and Flood Prevention Program		
Lead Agency/Department Responsible: County Emergency Management, Environmental Health Services and local community officials		
Implementation Schedule: On-going program		
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

City of Conroe

Name of Jurisdiction: City of Conroe	Project Description: Conduct wildfire outreach and education campaign by distributing information at public buildings, town hall meetings, and other speaking engagements
2011 Mitigation Action No.: 5	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Public Information and Awareness	
Hazard(s) Addressed: Wildfire, Drought	
Priority: High	
Estimated Cost: Unknown	
Potential Funding Sources: PDM, HMGP, TFS	
Lead Agency/Department Responsible: City of Conroe	
Implementation Schedule: Upon funding	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: City of Conroe	Project Description: Conduct flood outreach and education campaign by distributing information at public meetings, townhall meetings, and other speaking engagements
2011 Mitigation Action No.: 6	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Public Information and Awareness	
Hazard(s) Addressed: Flood, Hurricanes and Tropical Storms, Severe Thunderstorms	
Priority: High	
Estimated Cost: Unknown	
Potential Funding Sources: PDM, HMGP	
Lead Agency/Department Responsible: City of Conroe	
Implementation Schedule: Upon funding	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

City of Conroe

Name of Jurisdiction: City of Conroe	Project Description: Develop comprehensive high rise disaster plan.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 1		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Yes Carry On: Carry On With Modification:		
Reason not complete (2006 actions): Funding not available		
Category: Emergency Services		
Hazard(s) Addressed: Fire, Building Collapse		
Priority: High		
Estimated Cost:		
Potential Funding Sources: FEMA Emergency Management Performance Grant, FEMA All Hazards Operational Planning, FEMA Fire Management Assistance Grants, Dep. Of Justice State Homeland Security Program Dept of Justice State and Local Domestic Preparedness Technical Assistance		
Lead Agency/Department Responsible: Fire Dept		
Implementation Schedule: 1 year		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: City of Conroe	Project Description: Develop drainage enhancement program.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 2		
Status of 2006 Mitigation Action: Complete: In Progress: Yes No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions): Funding not available		
Category: Prevention, Property Protection		
Hazard(s) Addressed: Flood		
Priority: High		
Estimated Cost: 1000000		
Potential Funding Sources: USACE-Small Flood Control Projects, HMGP, USDA NRCS, Emergency Watershed Protection Agency, TWDB Clean Water State Revolving Fund, TWDB (Development Fund II)-Texas Water Development Fund, USDA NRCS Watershed Protection and Flood Prevention Program, EPA NPSGrant Program, PDM, HMGP		
Lead Agency/Department Responsible: City Administration		
Implementation Schedule: 3 to 4 years		
Reduce effects of hazards on new buildings and infrastructure?: Yes		Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

City of Conroe

Name of Jurisdiction: City of Conroe	Project Description: Develop contingency plan for public water system disaster.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 3		
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions): Completed		
Category: Prevention		
Hazard(s) Addressed: Human-caused, Technological Hazard, Flood		
Priority: High		
Estimated Cost: 50000		
Potential Funding Sources: EPA Water Protection Coordination Grants, FENA First Responder Counter Terrorism Training Assistance, USDA Environmental Quality Incentives Program, DOJ State Homeland Security Program, USACE Emergency Rehabilitation of Flood Control, USACE Small Flood Control Projects, NRCS Watershed Surveys and Planning, Economic Development Administration		
Lead Agency/Department Responsible: Public works		
Implementation Schedule: 6 months to 1 year		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: City of Conroe	Project Description: Develop plan of action for civil disturbances, including riots.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 4		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): Funding not available		
Category: Prevention		
Hazard(s) Addressed: Civil Unrest		
Priority: Medium		
Estimated Cost:		
Potential Funding Sources: DOJ State and Local Preparedness Technical Assistance, DOJ State and Local Preparedness Exercise Support, FEMA All hazards Operational Planning, FEMA-Fire Management Assistance Grants, FEMA First Responder Counter-Terrorism Training Assistance		
Lead Agency/Department Responsible: Fire/Police Dept		
Implementation Schedule: 2 years		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

City of Conroe

Name of Jurisdiction: City of Conroe	Project Description: Purchase secondary radio system.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 5		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): Funding not available		
Category: Emergency Services		
Hazard(s) Addressed: All hazards		
Priority: Medium		
Estimated Cost: 500000		
Potential Funding Sources: National Weather Service, HMGP, PDM, FEMA Emergency Management Performance Grant, USDA Rural Utilities Service-Weather Radio Grant Program, FEMA Hurricane Local Grant Program, USDA Environmental Quality Incentives Program		
Lead Agency/Department Responsible: Fire/Police Dept		
Implementation Schedule: 2 years		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: City of Conroe	Project Description: Develop aircraft disaster plan.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 6		
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions): Completed		
Category: Emergency Services		
Hazard(s) Addressed: Aircraft disaster		
Priority: Medium		
Estimated Cost:		
Potential Funding Sources: DOJ State and Local Preparedness Technical Assistance, DOJ State and Local Preparedness Exercise Support, FEMA All Hazards Operational Planning FEMA Fire Management Assistance Grants FEMA First Responder Counter-Terrorism Training Assistance		
Lead Agency/Department Responsible: Fire/Police Dept		
Implementation Schedule: 2 years		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

City of Conroe

Name of Jurisdiction: City of Conroe	Project Description: Develop severe weather warning system.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 7		
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions): Completed		
Category: Public Information and Awareness		
Hazard(s) Addressed: Tornadoes		
Priority: Medium		
Estimated Cost: 50000		
Potential Funding Sources: National Weather Service, HMGP, PDM, FEMA Emergency Management Performance Grant, USDA Rural Utilities Service-Weather Radio Grant Program, USDA Environmental Quality Incentives Grant Program		
Lead Agency/Department Responsible: Fire/Police Dept		
Implementation Schedule: 1 Year		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: City of Conroe	Project Description: Purchase emergency command vehicle.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 8		
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions): Completed		
Category: Emergency Services		
Hazard(s) Addressed: All hazards		
Priority: Medium		
Estimated Cost: 150000		
Potential Funding Sources: FEMA Fire Management Assistance, FEMA Emergency management Performance Grant		
Lead Agency/Department Responsible: Fire Dept		
Implementation Schedule: 2 to 5 years		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

City of Conroe

Name of Jurisdiction: City of Conroe	Project Description: Establish emergency shelter location database.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 9	
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions): Completed	
Category: Public Information and Awareness	
Hazard(s) Addressed: All hazards	
Priority: Medium	
Estimated Cost:	
Potential Funding Sources: FEMA All Hazard Emergency Operational Planning	
Lead Agency/Department Responsible: City Administration	
Implementation Schedule: 6 months	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: City of Conroe	Project Description: Develop hazardous materials (HAZMAT) response plan.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 10	
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions): Completed	
Category: Emergency Services	
Hazard(s) Addressed: Toxic Release/HAZMAT	
Priority: Medium	
Estimated Cost:	
Potential Funding Sources: FEMA Hazardous Materials Assistance program, FEMA All Hazards Operational Planning, FEMA Assistance to Firefighters Grant, FEMA First Responder Counter-Terrorism Training Assistance, DOJ State and Local Domestic Preparedness Technical Assistance	
Lead Agency/Department Responsible: Fire Dept	
Implementation Schedule: 6 months to 1 year	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

City of Conroe

Name of Jurisdiction: City of Conroe	Project Description: Implement Lake Conroe Dam failure plan, including education and awareness for affected neighborhoods.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 11	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification: Yes	
Reason not complete (2006 actions): Funding not available	
Category: Property Protection, Public Information and Awareness	
Hazard(s) Addressed: Dam/Levee Failure, Flood	
Priority: Medium	
Estimated Cost: 100000	
Potential Funding Sources: FEMA National Dam Safety Program, FEMA First Responder Counter-Terrorism Training Assistance, HMGP, PDM, Flood Mitigation Assistance Program	
Lead Agency/Department Responsible: City administration, San Jacinto River Authority	
Implementation Schedule: 1 to 2 years	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: City of Conroe	Project Description: Establish a secondary Emergency Operations Center.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 12	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): Funding not available	
Category: Emergency Services	
Hazard(s) Addressed: All hazards	
Priority: Low	
Estimated Cost: 4000000	
Potential Funding Sources: FEMA Emergency Operation Center Grant Program, DOJ State Homeland Security Program, FEMA Emergency Management Performance Grant, FEMA All Hazards Operational Planning	
Lead Agency/Department Responsible: City Administration	
Implementation Schedule: 2 to 5 years	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

City of Cut and Shoot

Name of Jurisdiction: City of Cut and Shoot	Project Description: Purchase of generators for City Hall and water plant to mitigate against the consequences of extended power failures from all disasters. City Hall is used as the City EOC when activated for disasters.
2011 Mitigation Action No.: 1	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Property Protection	
Hazard(s) Addressed: Hurricane and Tropical Storms, Flood, Tornadoes, Winter Storms, Severe Thunderstorms, Excessive Heat, Wildfire	
Priority: High	
Estimated Cost: 125000	
Potential Funding Sources: FEMA- Homeland Security Grants, HMGP, PDM	
Lead Agency/Department Responsible: City of Cut and Shoot	
Implementation Schedule: Within 1 year of funding	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: City of Cut and Shoot	Project Description: Attend CRS workshop hosted by H-GAC.
2011 Mitigation Action No.: 2	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Public Information and Awareness	
Hazard(s) Addressed: Flood	
Priority: Medium	
Estimated Cost: 0	
Potential Funding Sources: N/A	
Lead Agency/Department Responsible: Emergency Management Coordinator	
Implementation Schedule: 2013	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

City of Cut and Shoot

Name of Jurisdiction: City of Cut and Shoot	Project Description: Facilitate and coordinate program to improve emergency management radio, paging capabilities and reception countywide through the purchase of new equipment and necessary training of emergency personnel in the county and in member communities.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 1		
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions): Completed		
Category: Emergency Services		
Hazard(s) Addressed: All hazards		
Priority: High		
Estimated Cost: 250000		
Potential Funding Sources: National Weather Service, FEMA Emergency Management Performance Grant, USDA Rural Utilities Service-Weather Radio Grant Program, USDA Environmental Quality Incentives Program, FEMA Assistance to Firefighters Grant, FEMA All Hazards Operational Planning, HMGP, PDM		
Lead Agency/Department Responsible: County Emergency Management, City of Cut and Shoot, Environmental Health Services and local community officials, hospital administrators, sheriff, EMS		
Implementation Schedule: Completed by 2005		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: City of Cut and Shoot	Project Description: Develop and coordinate a local hazmat team (consisting of personnel from county and member communities); procure fullyequipped hazmat mobile response vehicle to provide minor triage, decontamination.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 2		
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions): Completed		
Category: Emergency Services		
Hazard(s) Addressed: All hazards		
Priority: High		
Estimated Cost: 500000		
Potential Funding Sources: FEMA Hazardous Materials Assistance Program, USDA Environmental Quality Incentives Program, FEMA Assistance to Fire Fighters Grant, FEMA All Hazards Operational Planning, FEMA Emergency Management Performance Grant		
Lead Agency/Department Responsible: County Emergency Management and local community officials, hospital administrators		
Implementation Schedule: Completed by 2005		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

City of Cut and Shoot

Name of Jurisdiction: City of Cut and Shoot	Project Description: Implement public awareness campaign regarding HAZMAT safety, including risk communication, detection, shelter in place and evacuation procedures for HAZMAT events that occur as a result of a natural hazard such as hurricanes, floods, droughts, wildfires, etc.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 3	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification: Yes	
Reason not complete (2006 actions): Funding not available	
Category: Public Information and Awareness	
Hazard(s) Addressed: Hurricane and Tropical Storms, Flood, Tornadoes, Drought, Wildfire	
Priority: High	
Estimated Cost: 100000	
Potential Funding Sources: FEMA-Hazardous Materials Assistance Program, USDA-Environmental Quality Incentives Program, FEMA- Assistance to Fire Fighters Grant, FEMA- All Hazards Operational Planning, FEMA Homeland Security Grants, HMGP, PDM	
Lead Agency/Department Responsible: County Emergency Management Office, City of Cut and Shoot and local community officials	
Implementation Schedule: Complete within 1 year of funding	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

Name of Jurisdiction: City of Cut and Shoot	Project Description: Promote use of NOAA all-hazard radios throughout County for early warning and post - event information. Place radios in area schools, businesses, critical facilities.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 4	
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions): Completed	
Category: Emergency Services, Public Information and Awareness	
Hazard(s) Addressed: All hazards	
Priority: High	
Estimated Cost: 10000	
Potential Funding Sources: National Weather Service, USDA Rural Utilities Service-Weather Radio Grant Program, USDA Environmental Quality Incentives Program, FEMA Assistance to Fire Fighters Grant, FEMA All Hazards Operational Planning, HMGP, PDM, FEMA Emergency Management Performance Grant, Public-private partnership	
Lead Agency/Department Responsible: County Emergency management office and local community officials	
Implementation Schedule: Completed by 2005	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

City of Cut and Shoot

Name of Jurisdiction: City of Cut and Shoot	Project Description: Implement the National Weather Service Skywarn program into local volunteer organizations to increase the number of volunteers providing the NWS with early notification of severe weather that may result in property damage and or flooding.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 5	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): Funding not available	
Category: Public Information and Awareness	
Hazard(s) Addressed: Flood, Severe Thunderstorms, Tornadoes	
Priority: Medium	
Estimated Cost: 10000	
Potential Funding Sources: National Weather Service, USDA-Rural Utilities Service-Weather Radio Grant Program, USDA Environment Quality Incentives Program, FEMA- Assistance to Fire Fighters Grant, FEMA- All Hazards Operational Planning, HMGP, PDM, Public-private partnership, FEMA Homeland Security Grants	
Lead Agency/Department Responsible: County Emergency Management Office, City of Cut and Shoot and local community officials	
Implementation Schedule: Complete with 2 years of funding	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

Name of Jurisdiction: City of Cut and Shoot	Project Description: Enforce state regulations that prohibit dumping in streams, ditches and area waterways with concentration on those areas that have the potential to block the normal drainage of rainfall.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 6	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): Funding not available	
Category: Prevention	
Hazard(s) Addressed: Flood	
Priority: Medium	
Estimated Cost: 100000	
Potential Funding Sources: Cost share with Montgomery County and local communities EPA-NPS Grant Program USDA NRCS- Emergency Watershed protection Agency, TWDB-Clean Water State Revolving Fund, TWDB (Development Fund II)-Texas Water Development Fund, USDA NRCS- Watershed Protection and Flood Prevention Program, PDM, HMGP	
Lead Agency/Department Responsible: County Emergency Management, City of Cut and Shoot, Environmental Health Services and local community officials	
Implementation Schedule: On-going Program	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

City of Cut and Shoot

Name of Jurisdiction: City of Cut and Shoot	Project Description: Identify sites where stream and rain gauges are needed. Add or upgrade sites as needed and coordinate installation requests with USGS and River Authority. Additional sites will help provide early detection of potential flood areas to assist in evacuation and protection of property and inform the public of imminent hazard.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 7	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): Funding not available	
Category: Prevention	
Hazard(s) Addressed: Flood	
Priority: Medium	
Estimated Cost: 250000	
Potential Funding Sources: Cost share with Montgomery County and local communities, FEMA All Hazards Operational Planning, USDA Environmental Quality Incentives Program, EPA NPS Grant Program, USDA NRCS-Emergency Watershed Protection and Flood Prevention Program, FEMA Emergency Management Performance Grant, TWDB Clean Water State Revolving Fund, TWDB (Development Fund II)-Texas Water Development Fund, USDA NRCS Watershed Protection and Flood Prevention Program, PDM, HMGP	
Lead Agency/Department Responsible: County EMC, City of Cut and Shoot, USGS, local community officials	
Implementation Schedule: Complete within 1 year of funding	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

Name of Jurisdiction: City of Cut and Shoot	Project Description: Implement actions to support regulations that assist in reducing excess ozone pollution and urban heat. May include actions such as providing incentives for developers to increase tree planting and a county-wide public education and awareness program to promote smog awareness, volunteer mass transit, carpooling, and health tips for living in a high ozone smog area.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 8	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification: Yes	
Reason not complete (2006 actions): Funding not available	
Category: Prevention	
Hazard(s) Addressed: Drought, Excessive Heat, Tornadoes, Wildfire	
Priority: Medium	
Estimated Cost: 25000	
Potential Funding Sources: Public private partnership, staff time and resources	
Lead Agency/Department Responsible: County Health District, County EMC, City of Cut and Shoot and local communities	
Implementation Schedule: Complete within 1 year of funding	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

City of Cut and Shoot

Name of Jurisdiction: City of Cut and Shoot		Project Description: Implement water conservation education and incentives for low-flow plumbing and toilets, efficient washers and rain harvesting. Work with Lone Star Groundwater Conservation District and Agri Life Extension Service to promote and increase awareness for residents of Montgomery County pertaining to conserving, protecting and enhancing regional groundwater resources.
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 9		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): Funding not available		
Category: Public Information and Awareness		
Hazard(s) Addressed: Drought, Excessive Heat		
Priority: Medium		
Estimated Cost: 50000		
Potential Funding Sources: Cost share with Montgomery County, GCD, grants, private funds, TWDB-TNRIS, USDA Environmental Quality Incentives program, EPA NPS Grant Program, USDA NRCS-Emergency Watershed Protection Agency, TWDB-Clean Water State Revolving Fund, PDM, HMGP		
Lead Agency/Department Responsible: County Emergency Management, City of Cut and Shoot, Environmental Health Services and local community officials		
Implementation Schedule: On-going Program		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

City of Magnolia

Name of Jurisdiction: City of Magnolia	Project Description: Attend CRS workshop hosted by H-GAC.	
2011 Mitigation Action No.: 1		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Public Information and Awareness		
Hazard(s) Addressed: Flood		
Priority: Medium		
Estimated Cost: 0		
Potential Funding Sources: N/A		
Lead Agency/Department Responsible: County Emergency Manager		
Implementation Schedule: 2013		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

Name of Jurisdiction: City of Magnolia	Project Description: Conduct wildfire outreach and education campaign by distributing information at public buildings, town hall meetings, and other speaking engagements.	
2011 Mitigation Action No.: 2		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Public Information and Awareness		
Hazard(s) Addressed: Wildfire, Drought		
Priority: High		
Estimated Cost: Unknown		
Potential Funding Sources: PDM, HMGP, TFS		
Lead Agency/Department Responsible: City of Magnolia		
Implementation Schedule: Upon funding		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

City of Magnolia

Name of Jurisdiction: City of Magnolia	Project Description: Conduct flood outreach and education campaign by distributing information at public meetings, townhall meetings, and other speaking engagements.
2011 Mitigation Action No.: 3	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Public Information and Awareness	
Hazard(s) Addressed: Flood, Hurricanes and Tropical Storms, Severe Thunderstorms	
Priority: High	
Estimated Cost: Unknown	
Potential Funding Sources: PDM, HMGP	
Lead Agency/Department Responsible: City of Magnolia	
Implementation Schedule: Upon funding	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

Name of Jurisdiction: City of Magnolia	Project Description: Facilitate and coordinate program to improve emergency management radio, paging capabilities and reception countywide through the purchase of new equipment and necessary training of emergency personnel in the county and in member communities.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 1	
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions): Completed	
Category: Emergency Services	
Hazard(s) Addressed: All hazards	
Priority: High	
Estimated Cost: 250000	
Potential Funding Sources: National Weather Service, FEMA Emergency Management Performance Grant, USDA Rural Utilities Service-Weather Radio Grant Program, USDA Environment Quality Incentives Program, FEMA Assistance to Firefighters Grant, FEMA All hazards Operational Planning, HMGP, PDM	
Lead Agency/Department Responsible: County Emergency Management Office and local community officials, hospitals administrators, sheriff, EMS	
Implementation Schedule: Completed by 2005	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

City of Magnolia

Name of Jurisdiction: City of Magnolia		Project Description: Develop and coordinate a local hazmat team (consisting of personnel from county and member communities); procure fullyequipped hazmat mobile response vehicle to provide minor triage, decontamination.
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 2		
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions): Completed		
Category: Emergency Services		
Hazard(s) Addressed: Toxic Release/HAZMAT		
Priority: High		
Estimated Cost: 500000		
Potential Funding Sources: FEMA-Emergency Management Performance Grant, USDA Environment Quality Incentives Program, FEMA Assistance to Firefighters Grant, FEMA All Hazards Operational Planning		
Lead Agency/Department Responsible: County Emergency Management Office and local community officials, hospitals administrators		
Implementation Schedule: Completed by 2005		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: City of Magnolia		Project Description: Implement public awareness campaign regarding HAZMAT safety, including risk communication, detection, shelter in place and evacuation procedures for HAZMAT events that occur as a result of a natural hazard such as hurricanes, floods, droughts, wildfire, tornadoes.
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 3		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification: Yes		
Reason not complete (2006 actions): Funding not available		
Category: Public Information and Awareness		
Hazard(s) Addressed: Hurricane and Tropical Storms, Tornadoes, Drought, Wildfire, Flood		
Priority: High		
Estimated Cost: 100000		
Potential Funding Sources: FEMA-Hazardous Materials Assistance Program, USDA-Environmental Quality Incentives Program, FEMA Assistance to Fire Fighters Grant, FEMA All Hazards Operational Planning FEMA- Homeland Security Grants		
Lead Agency/Department Responsible: County Emergency Management Office, City of Magnolia and local community officials		
Implementation Schedule: Complete within 1 year of funding		
Reduce effects of hazards on new buildings and infrastructure?: Yes		Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

City of Magnolia

Name of Jurisdiction: City of Magnolia		Project Description: Promote use of NOAA all-hazard radios throughout County for early warning and post-event information. Place radios in area schools, businesses, critical facilities.
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 4		
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions): Completed		
Category: Emergency Services, Public Information and Awareness		
Hazard(s) Addressed: All hazards		
Priority:		
Estimated Cost: 100000		
Potential Funding Sources: National Weather Service, FEMA-Emergency Management Performance Grant, USDA Rural Utilities Service, Weather Radio Grant Program, USDA Environmental Quality Incentives Program, FEMA Assistance to Fire Fighters Grant, FEMA All Hazards Operational PlanningHMGP, PDM, Public-private partnership		
Lead Agency/Department Responsible: County Emergency Management office and local community officials		
Implementation Schedule: Completed by 2005		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: City of Magnolia		Project Description: Implement the National Weather Service Skywarn program into local volunteer organizations to increase the number of volunteers providing the NWS with early notification of severe weather that may result in property damage and/or flooding.
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 5		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification: Yes		
Reason not complete (2006 actions): Funding not available		
Category: Public Information and Awareness		
Hazard(s) Addressed: Flood, Severe Thunderstorms, Tornadoes, Hurricanes and Tropical Storms		
Priority: Medium		
Estimated Cost: 10000		
Potential Funding Sources: National Weather Service, USDA Rural Utilities Service-Weather Radio Grant Program, USDA- Environmental Quality Incentives Program, FEMA Assistance to Fire fighters Grant, FEMA-All Hazards Operational Planning, HMGP, PDM, Public-private partnership, FEMA-Homeland Security Grants		
Lead Agency/Department Responsible: County Emergency Management Office, City of Magnolia and local communities officials		
Implementation Schedule: Complete with 2 years of funding		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

City of Magnolia

Name of Jurisdiction: City of Magnolia		Project Description: Enforce state regulations that prohibit dumping in streams, ditches and area waterways with concentration on those areas that have the potential to block the normal drainage of rainfall.
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 6		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification: Yes		
Reason not complete (2006 actions): Funding not available		
Category: Prevention		
Hazard(s) Addressed: Flood		
Priority: Medium		
Estimated Cost: 100000		
Potential Funding Sources: Cost share with Montgomery County and local communities, USDA-Environmental Quality Incentives Program EPA-NPS Grant Program, USDA NRCS-Emergency Watershed Protection and Flood Prevention Program		
Lead Agency/Department Responsible: County Emergency Management, City of Magnolia, Environmental Health Services and local community officials		
Implementation Schedule: On-going program		
Reduce effects of hazards on new buildings and infrastructure?: Yes		Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

Name of Jurisdiction: City of Magnolia		Project Description: Identify sites where stream and rain gauges are needed. Add or upgrade sites as needed and coordinate installation requests with USGS and River Authority. Additional sites will help provide early detection of potential flood areas to assist in evacuation and protection of property and inform the public of imminent hazard.
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 7		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): Funding not available		
Category: Prevention		
Hazard(s) Addressed: Flood		
Priority: Medium		
Estimated Cost: 250000		
Potential Funding Sources: Cost share with Montgomery County and local communities FEMA-All Hazards Operational Planning, USDA-Environmental Quality Incentives Program EPA-NPS Grant Program, USDA NRCS- Emergency Watershed Protection Agency, TWDB-Clean Water State Revolving Fund, TWDB (Development Fund II), Texas Water Development Fund, USDA NRCS- Watershed Protection and Flood Prevention Program		
Lead Agency/Department Responsible: County EMC, City of Magnolia, USGS, local community officials		
Implementation Schedule: Complete within 1 year of funding		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

City of Magnolia

Name of Jurisdiction: City of Magnolia	Project Description: Implement actions to support regulations that assist in reducing excess ozone pollution and urban heat. May include actions such as providing incentives for developers to increase tree planting and a county-wide public education and awareness program to promote smog awareness, volunteer mass transit, carpooling and health tips for living in a high ozone smog area.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 8	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): Funding not available	
Category: Prevention	
Hazard(s) Addressed: Drought, Excessive Heat	
Priority: Medium	
Estimated Cost: 25000	
Potential Funding Sources: Public private partnership, staff time and resources	
Lead Agency/Department Responsible: County Health District, City of Magnolia, County EMC, local community officials	
Implementation Schedule: Completed by 2009	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: City of Magnolia	Project Description: Implement water conservation education and incentives for low-flow plumbing and toilets, efficient washers and rain harvesting. Work with Lone Star Groundwater Conservation District and Agri Life Extension Service to promote and increase awareness for residents of Montgomery County pertaining to conserving, protecting and enhancing regional groundwater resources.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 9	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification: Yes	
Reason not complete (2006 actions): Funding not available	
Category: Prevention, Public Information and Awareness	
Hazard(s) Addressed: Drought, Excessive Heat	
Priority: Medium	
Estimated Cost: 25000	
Potential Funding Sources: Cost share with Montgomery county, GCD, grants, private funds, TWDB-TNRIS, USDA-Environmental Quality Incentives Program, EPA-NPS Grant Program, USDA NRCS Emergency Watershed Protection Agency, TWDB-Clean Water State Revolving Fund	
Lead Agency/Department Responsible: County Health District, City of Magnolia, County EMC, local community officials	
Implementation Schedule: Complete within 1 year of funding	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

City of Montgomery

Name of Jurisdiction: City of Montgomery	Project Description: Vegetation management program. Remove excessive vegetation to remove fuel for wildfires and create fire breaks for residences and businesses. Removal of vegetation will have added benefit of removing obstacles for drainage to mitigate flooding.	
2011 Mitigation Action No.: 1		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Property Protection		
Hazard(s) Addressed: Wildfire, Drought, Flood		
Priority: High		
Estimated Cost: 80000		
Potential Funding Sources: TDRA- CDBG, PDM, HMGP		
Lead Agency/Department Responsible: City of Montgomery		
Implementation Schedule: Complete within 1 year of funding		
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

Name of Jurisdiction: City of Montgomery	Project Description: Participate in CRS workshop hosted by H-GAC.	
2011 Mitigation Action No.: 2		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Public Information and Awareness		
Hazard(s) Addressed: Flood, Hurricanes and Tropical Storms, Severe Thunderstorms		
Priority: Medium		
Estimated Cost: 0		
Potential Funding Sources: N/A		
Lead Agency/Department Responsible: Flood Plain Administrator		
Implementation Schedule: Continuing		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

City of Montgomery

Name of Jurisdiction: City of Montgomery	Project Description: Removal of debris, silt and vegetation obstacles in drainageways along Anders Branch. Flooding left culverts, swales, and Anders Branch creek bed blocked with silt, logs, and debris. Project will clear obstacles, reshape ditches, and upgrade culverts to restore adequate drainage in the area to mitigate flooding.
2011 Mitigation Action No.: 3	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Structural Project, Property Protection	
Hazard(s) Addressed: Flood, Hurricanes and Tropical Storms, Severe Thunderstorms	
Priority: Medium	
Estimated Cost: Unknown	
Potential Funding Sources: Hurricane Ike Round 2, Phase 1 Grant Funds	
Lead Agency/Department Responsible: City Engineer	
Implementation Schedule: Continuing	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

Name of Jurisdiction: City of Montgomery	Project Description: Facilitate and coordinate program to improve emergency management radio, paging capabilities and reception countywide through the purchase of new equipment and necessary training of emergency personnel in the county and in member communities.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 1	
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions): Completed	
Category: Emergency Services	
Hazard(s) Addressed: All hazards	
Priority: High	
Estimated Cost: 250000	
Potential Funding Sources: National Weather Service, USDA Rural Utilities Service-Weather Radio Grant Program, USDA-Environmental Quality Incentive Program, FEMA-Assistance to Fire Fighters Grant, FEMA-All Hazards Operational Planning, HMGP, PDM	
Lead Agency/Department Responsible: County Emergency Management office and local community officials, hospitals administrators, sheriff, EMS	
Implementation Schedule: Completed by 2005	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

City of Montgomery

Name of Jurisdiction: City of Montgomery		Project Description: Develop and coordinate a local hazmat team (consisting of personnel from county and member communities); procure fullyequipped hazmat mobile response vehicle to provide minor triage, decontamination.
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 2		
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions): Completed		
Category: Emergency Services		
Hazard(s) Addressed: Toxic Release/HAZMAT		
Priority: High		
Estimated Cost: 50000		
Potential Funding Sources: FEMA Hazardous Materials Assistance Program, USDA Environmental Quality Incentives Program, FEMA Assistance to Fire Fighters Grant, FEMA-All Hazards Operational Planning, FEMA Emergency Management Performance Grant		
Lead Agency/Department Responsible: County Emergency Management Office and local community officials, hospital administrators		
Implementation Schedule: Completed by 2005		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: City of Montgomery		Project Description: Implement public awareness campaign regarding HAZMAT safety, including risk communication, detection, shelter in place and evacuation procedures for HAZMAT events that occur as a result of a natural hazard such as hurricanes, floods, droughts, wildfires, etc.
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 3		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification: Yes		
Reason not complete (2006 actions): Funding not available		
Category: Public Information and Awareness		
Hazard(s) Addressed: Hurricane and Tropical Storms, Flood, Tornadoes, Drought, Wildfire		
Priority: High		
Estimated Cost: 100000		
Potential Funding Sources: FEMA Hazardous Materials Assistance Program, USDA- Environmental Quality Incentives Program, FEMA Assistance to Fire Fighters Grant, FEMA-All Hazards Operational Planning FEMA- Homeland Security Grants		
Lead Agency/Department Responsible: County Emergency Management office and local community officials		
Implementation Schedule: complete within 1 year of funding		
Reduce effects of hazards on new buildings and infrastructure?: Yes		Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

City of Montgomery

Name of Jurisdiction: City of Montgomery	Project Description: Promote use of NOAA all-hazard radios throughout County for early warning and post - event information. Place radios in area schools, businesses, critical facilities.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 4		
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions): Completed		
Category: Emergency Services, Public Information and Awareness		
Hazard(s) Addressed: All hazards		
Priority: High		
Estimated Cost: 100000		
Potential Funding Sources: National Weather Service, FEMA Emergency Management Performance Grant, USDA Environmental Quality Incentives Program, FEMA Assistance to Fire Fighters Grant, FEMA All Hazards Operational Planning, USDA Rural Utilities Service-Weather Radio Grant Program, HMGP, PDM, Public-private partnership		
Lead Agency/Department Responsible: County Emergency management office and local community officials		
Implementation Schedule: Completed by 2005		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: City of Montgomery	Project Description: Implement the National Weather Service Skywarn program into local volunteer organizations to increase the number of volunteers providing the NWS with early notification of severe weather that may result in property damage and or flooding.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 5		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification: Yes		
Reason not complete (2006 actions): Funding not available		
Category: Public Information and Awareness		
Hazard(s) Addressed: Flood, Hurricanes and Tropical Storms, Tornadoes, Severe Thunderstorms		
Priority: Medium		
Estimated Cost: 10000		
Potential Funding Sources: National Weather Service, USDA- Rural Utilities Service- Weather Radio Grant Program, USDA- Environmental Quality Incentive Program FEMA-Assistance to Fire Fighters Grant FEMA-All Hazards Operational Planning, HMGP, PDM, public-private partnership, FEMA Homeland Security Grants, PDM, HMGP		
Lead Agency/Department Responsible: County Emergency Management office and local community officials		
Implementation Schedule: Complete with 2 years funding		
Reduce effects of hazards on new buildings and infrastructure?: Yes		Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

City of Montgomery

Name of Jurisdiction: City of Montgomery		Project Description: Enforce state regulations that prohibit dumping in streams, ditches and area waterways with concentration on those areas that have the potential to block the normal drainage of rainfall.
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 6		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Yes Carry On: Carry On With Modification:		
Reason not complete (2006 actions): Funding not available		
Category: Prevention		
Hazard(s) Addressed: Flood		
Priority: Medium		
Estimated Cost: 100000		
Potential Funding Sources: Cost share with Montgomery County and local communities EPA-NPS Grant Program, USDA NRCS, Emergency Watershed Protection Agency, TWDB-Clean Water State Revolving Fund, TWDB (Development Fund II)-Texas Water Development Fund, USDA NRCS-Watershed Protection and Flood Prevention Program, PDM, HMGP		
Lead Agency/Department Responsible: County Emergency Management, Environmental Health Services and local community officials		
Implementation Schedule: Ongoing program		
Reduce effects of hazards on new buildings and infrastructure?: Yes		Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

Name of Jurisdiction: City of Montgomery		Project Description: Identify sites where stream and rain gauges are needed. Add or upgrade sites as needed and coordinate installation requests with USGS and River Authority. Additional sites will help provide early detection of potential flood areas to assist in evacuation and protection of property and inform the public of imminent hazard.
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 7		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): Funding not available		
Category: Prevention		
Hazard(s) Addressed: Flood		
Priority: Medium		
Estimated Cost: 250000		
Potential Funding Sources: Cost share with Montgomery County and local communities, FEMA-All Hazards Operational Planning, USDA- Environmental Quality Incentives Program, EPA-NPS Grant Program, USDA NRCS-Emergency Watershed Protection and Flood Prevention Program, PDM, HMGP		
Lead Agency/Department Responsible: County EMC, USGS, local community officials		
Implementation Schedule: Complete within 1 year of funding		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

City of Montgomery

Name of Jurisdiction: City of Montgomery	Project Description: Implement actions to support regulations that assist in reducing excess ozone pollution and urban heat. May include actions such as providing incentives for developers to increase tree planting and a county-wide public education and awareness program to promote smog awareness, volunteer mass transit, carpooling and health tips for living in a high ozone smog area.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 8	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): Funding not available	
Category: Prevention	
Hazard(s) Addressed: Drought, Excessive Heat	
Priority: Medium	
Estimated Cost: 25000	
Potential Funding Sources: Public private partnership, staff time and resources, PDM, HMGP	
Lead Agency/Department Responsible: County Health District, City of Montgomery, County EMC, local community officials	
Implementation Schedule: Complete within 1 year of funding	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: City of Montgomery	Project Description: Implement water conservation education and incentives for low-flow plumbing and toilets, efficient washers and rain harvesting. Work with Lone Star Groundwater Conservation District and Agri Life Extension Service to promote and increase awareness for residents of Montgomery County pertaining to conserving, protecting and enhancing regional groundwater resources.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 9	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Yes Carry On: Carry On With Modification:	
Reason not complete (2006 actions): Funding not available	
Category: Public Information and Awareness, Public Information and Awareness	
Hazard(s) Addressed: Drought, Excessive Heat	
Priority: Medium	
Estimated Cost: 50000	
Potential Funding Sources: Cost share with Montgomery county, GCD, grants, private funds, TWDB-TNRIS, USDA-Environmental Quality Incentives Program, EPA-NPS Grant Program, USDA NRCS Emergency Watershed Protection Agency, TWDB-Clean Water State Revolving Fund	
Lead Agency/Department Responsible: County Emergency Management office and local community officials	
Implementation Schedule: Ongoing program	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

City of Oak Ridge North

Name of Jurisdiction: City of Oak Ridge North		Project Description: Mitigation of consequences when commercial electrical power is interrupted during crisis and emergency operations by installation of appropriate natural gas fueled electrical generator.
2011 Mitigation Action No.: 1		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Property Protection		
Hazard(s) Addressed: Hurricane and Tropical Storms, Tornadoes, Severe Thunderstorms, Wildfire		
Priority: High		
Estimated Cost: 650000		
Potential Funding Sources: Homeland Security Grant		
Lead Agency/Department Responsible: Emergency Management, Police Department		
Implementation Schedule: December 2012		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: City of Oak Ridge North		Project Description: Participate in CRS workshop hosted by H-GAC.
2011 Mitigation Action No.: 2		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Public Information and Awareness		
Hazard(s) Addressed: Flood, Hurricanes and Tropical Storms, Severe Thunderstorms		
Priority: Medium		
Estimated Cost: 0		
Potential Funding Sources: City budget		
Lead Agency/Department Responsible: Public Works		
Implementation Schedule: Continuing		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

City of Oak Ridge North

Name of Jurisdiction: City of Oak Ridge North	Project Description: Cleaning out and maintaining ditches in City right of ways.	
2011 Mitigation Action No.: 3		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Property Protection, Prevention		
Hazard(s) Addressed: Flood, hurricanes and Tropical Storms, Severe Thunderstorms		
Priority: Medium		
Estimated Cost: Unknown		
Potential Funding Sources: City budget		
Lead Agency/Department Responsible: City of Oak Ridge North		
Implementation Schedule: Continuing		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

Name of Jurisdiction: City of Oak Ridge North	Project Description: Conduct wildfire outreach and education campaign by distributing information at public buildings, town hall meetings, and other speaking engagements	
2011 Mitigation Action No.: 4		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Public Information and Awareness		
Hazard(s) Addressed: Wildfire, Drought		
Priority: High		
Estimated Cost: Unknown		
Potential Funding Sources: PDM, HMGP, TFS		
Lead Agency/Department Responsible: City of Oak Ridge North		
Implementation Schedule: Upon funding		
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

City of Oak Ridge North

Name of Jurisdiction: City of Oak Ridge North	Project Description: Conduct flood outreach and education campaign by distributing information at public meetings, townhall meetings, and other speaking engagements.
2011 Mitigation Action No.: 5	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Public Information and Awareness	
Hazard(s) Addressed: Flood, Hurricanes and Tropical Storms, Severe Thunderstorms	
Priority: High	
Estimated Cost: Unknown	
Potential Funding Sources: PDM, HMGP	
Lead Agency/Department Responsible: City of Oak Ridge North	
Implementation Schedule: Upon funding	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

Name of Jurisdiction: City of Oak Ridge North	Project Description: Facilitate and coordinate program to improve emergency management radio, paging capabilities and reception county-wide through purchase of new equipment and necessary training of emergency personnel in the county and in member communities.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 1	
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions): Completed	
Category: Emergency Services	
Hazard(s) Addressed: All hazards	
Priority: High	
Estimated Cost: 250000	
Potential Funding Sources: National Weather Service, USDA- Rural Utilities Service-Weather Radio Grant Program, USDA Environmental Quality Incentive Program, FEMA-Assistance to Fire Fighters Grant, FEMA-All Hazards Operational Planning, HMGP, PDM, FEMA Emergency Management Performance Grant	
Lead Agency/Department Responsible: County Emergency Management office and local community officials, hospitals administrators, Sheriff , EMS	
Implementation Schedule: Completed by 2005	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

City of Oak Ridge North

Name of Jurisdiction: City of Oak Ridge North		Project Description: Develop and coordinate a local hazmat team (consisting of personnel from county and member communities); procure fully-equipped hazmat mobile response vehicle to provide minor triage, decontamination.
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 2		
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions): Completed		
Category: Emergency Services		
Hazard(s) Addressed: Toxic Release/HAZMAT		
Priority: High		
Estimated Cost: 500000		
Potential Funding Sources: FEMA Hazardous Materials Assistance Program, USDA Environmental Quality Incentives Program, FEMA Assistance to Fire Fighters Grant, FEMA-All Hazards Operational Planning, FEMA Emergency Management Performance Grant		
Lead Agency/Department Responsible: County Emergency Management office and local community officials, hospital administrators		
Implementation Schedule: Completed 2005		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: City of Oak Ridge North		Project Description: Implement public awareness campaign regarding HAZMAT safety, including risk communication, detection, shelter in place and evacuation procedures for HAZMAT events that occur as a result of a natural hazard such as hurricanes, floods, tornadoes, droughts, wildfires, etc.
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 3		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification: Yes		
Reason not complete (2006 actions): Funding not available		
Category: Public Information and Awareness		
Hazard(s) Addressed: Flood, Hurricanes and Tropical Storms, Tornadoes, Drought, Wildfire		
Priority: High		
Estimated Cost: 100000		
Potential Funding Sources: FEMA Hazardous Materials Assistance Program, USDA Environmental Quality Incentives Program, FEMA Assistance to Fire Fighters Grant, FEMA-All Hazards Operational Planning, FEMA Emergency Management Performance Grant		
Lead Agency/Department Responsible: County Emergency Management office and local community officials		
Implementation Schedule: Completed by 2005		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

City of Oak Ridge North

Name of Jurisdiction: City of Oak Ridge North		Project Description: Promote use of NOAA all-hazard radios throughout County for early warning and post-event information. Place radios in area schools, businesses, critical facilities.
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 4		
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions): Completed		
Category: Emergency Services, Public Information and Awareness		
Hazard(s) Addressed: All hazards		
Priority: High		
Estimated Cost: 10000		
Potential Funding Sources: National Weather Service, USDA Rural Utilities Service- Weather Radio Grant Program, USDA Environmental Quality Incentive Program, FEMA-Assistance to Fire Fighters Grant, FEMA-All Hazards Operational Planning, HMGP, PDM, FEMA Emergency Management Performance Grant		
Lead Agency/Department Responsible: County Emergency Management office and local community officials		
Implementation Schedule: Completed by 2005		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: City of Oak Ridge North		Project Description: Implement the National Weather Service Skywarn program into local volunteer organizations to increase the number of volunteers providing the NWS with early notification of severe weather that may result in property damage and or flooding.
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 5		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification: Yes		
Reason not complete (2006 actions): Funding not available		
Category: Public Information and Awareness		
Hazard(s) Addressed: Flood		
Priority: Medium		
Estimated Cost: 10000		
Potential Funding Sources: National Weather Service, USDA Rural Utilities Service- Weather Radio Grant Program, USDA Environmental Quality Incentive Program, FEMA-Assistance to Fire Fighters Grant, FEMA-All Hazards Operational Planning, HMGP, PDM, FEMA Emergency Management Performance Grant		
Lead Agency/Department Responsible: County EMC, local community officials		
Implementation Schedule: Completed by 2005		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

City of Oak Ridge North

Name of Jurisdiction: City of Oak Ridge North		Project Description: Enforce state and local regulations that prohibit dumping in streams, ditches and area waterways with concentration on those areas that have the potential to block the normal drainage of rainfall.
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 6		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification: Yes		
Reason not complete (2006 actions): Funding not available		
Category: Prevention		
Hazard(s) Addressed: Flood		
Priority: Medium		
Estimated Cost: 100000		
Potential Funding Sources: Cost share with Montgomery County, staff time and resources, EPA NPS Grant Program, USDA NRCS Emergency Watershed Protection Agency TWDB Clean Water State Revolving Fund, TWDB (Development Fund II) TWD Fund, USDA NRCS Watershed Protection and Flood Prevention Program		
Lead Agency/Department Responsible: County EMC, local community officials		
Implementation Schedule: 2006- Ongoing program		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

Name of Jurisdiction: City of Oak Ridge North		Project Description: Identify sites where stream and rain gauges are needed. Add or upgrade sites as needed and coordinate installation requests with USGS and River Authority. Additional sites will help provide early detection of potential flood areas to assist in evacuation and protection of property and inform the public of imminent hazard.
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 7		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Yes Carry On: Carry On With Modification:		
Reason not complete (2006 actions): Funding not available		
Category: Public Information and Awareness		
Hazard(s) Addressed: Flood		
Priority: Medium		
Estimated Cost: 250000		
Potential Funding Sources: Cost share with Montgomery County and local communities, EPA NPS Grant Program, USDA NRCS Emergency Watershed Protection Agency, TWDB-Clean Water State Revolving Fund, TWDB (Development Fund II)-Texas Water Development Fund, USDA NRCS Watershed Protection and Flood Prevention Program		
Lead Agency/Department Responsible: County EMC, USGS, local community officials		
Implementation Schedule: Completed by 2008		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

City of Oak Ridge North

Name of Jurisdiction: City of Oak Ridge North	Project Description: Implement actions to support regulations that assist in reducing excess ozone pollution and urban heat. May include actions such as providing incentives for developers to increase tree planting and a county-wide public education and awareness program to promote smog awareness, volunteer mass transit, carpooling and health tips for living in a high ozone smog area.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 8	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Yes Carry On: Carry On With Modification:	
Reason not complete (2006 actions): Funding not available	
Category: Prevention	
Hazard(s) Addressed: Drought, Excessive Heat	
Priority: Medium	
Estimated Cost: 25000	
Potential Funding Sources: Public private partnership, staff time and resources	
Lead Agency/Department Responsible: County health dept. County EMC, local community officials	
Implementation Schedule: Completed by 2009	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: City of Oak Ridge North	Project Description: Implement water conservation education and incentives for low-flow plumbing and toilets, efficient washers and rain harvesting. Work with Lone Star Groundwater Conservation District to promote and increase awareness for residents of Montgomery County pertaining to conserving, protection, and enhancing regional groundwater sources
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 9	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Yes Carry On: Carry On With Modification:	
Reason not complete (2006 actions): Funding not available	
Category: Public Information and Awareness, Public Information and Awareness	
Hazard(s) Addressed: Drought, Excessive Heat	
Priority: Medium	
Estimated Cost: 50000	
Potential Funding Sources: Cost share with Montgomery county, GCD, grants, private funds, TWDB-TNRIS, USDA Environmental Quality Incentives program, EPA NPS Grant Program, USDA NRCS Emergency Watershed Protection Agency, TWDB Clean Water State Revolving Fund, TWDB (Development FundII)-Texas Water Development Fund	
Lead Agency/Department Responsible: County EMC and Local community officials	
Implementation Schedule: ongoing program	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

City of Panorama Village

Name of Jurisdiction: City of Panorama Village	Project Description: Retrofit Community Center roof to ensure resistance to damaging winds, heavy rains and severe thunderstorms. Provide added protection when employed as a community shelter during emergency conditions.
2011 Mitigation Action No.: 1	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Property Protection	
Hazard(s) Addressed: Severe Thunderstorms, Hurricanes and Tropical Storms	
Priority: High	
Estimated Cost: 175000	
Potential Funding Sources: HMGP, PDM	
Lead Agency/Department Responsible: Mayor's Office	
Implementation Schedule: Within 3 months of funding	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: City of Panorama Village	Project Description: Reduce volume of hazardous fuels such as dead trees and flammable underbrush caused by severe drought. Clear specific areas to provide defensible space, especially vertical clearand of tree branches.
2011 Mitigation Action No.: 2	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Property Protection	
Hazard(s) Addressed: Drought, Wildfire, Flood, Hurricanes and Tropical Storms, Severe Thunderstorms	
Priority: High	
Estimated Cost: 100000	
Potential Funding Sources: HMGP, PDM	
Lead Agency/Department Responsible: Mayor	
Implementation Schedule: As soon as possible	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

City of Panorama Village

Name of Jurisdiction: City of Panorama Village	Project Description: Reduce hazardous fuels in open ditches city-wide.	
2011 Mitigation Action No.: 3		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Property Protection		
Hazard(s) Addressed: Wildfire, Drought, Flood		
Priority: High		
Estimated Cost:		
Potential Funding Sources: HMGP, PDM		
Lead Agency/Department Responsible: City of Panorama Village		
Implementation Schedule: On-going		
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

Name of Jurisdiction: City of Panorama Village	Project Description: Facilitate and coordinate program to improve emergency management radio, paging capabilities and reception county-wide through the purchase of new equipment and necessary training of emergency personnel in the county and in member communities.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 1		
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions): Completed		
Category: Emergency Services		
Hazard(s) Addressed: All hazards		
Priority: High		
Estimated Cost: 250000		
Potential Funding Sources: National Weather Service, FEMA-Emergency Management Performance Grant, USDA Rural Utilities Service-Weather Radio Grant Program, USDA-Environmental Quality Incentives Program, FEMA-Assistance to Fire Fighters Grant, FEMA-All Hazards Operational Planning, HMGP, PDM		
Lead Agency/Department Responsible: County Emergency Management office and local community officials, hospitals administrators, sheriff, EMS		
Implementation Schedule: Completed by 2005		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

City of Panorama Village

Name of Jurisdiction: City of Panorama Village		Project Description: Develop and coordinate a local hazmat team (consisting of personnel from county and member communities); procure fully-equipped hazmat mobile response vehicle to provide minor triage, decontamination.
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 2		
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions): Completed		
Category: Emergency Services		
Hazard(s) Addressed: Toxic Release/HAZMAT		
Priority: High		
Estimated Cost: 500000		
Potential Funding Sources: FEMA-Hazardous Materials Assistance Program, FEMA-Emergency Management Performance Grant, USDA-Environmental Quality Incentives Program, FEMA-Assistance to Fire Fighters Grant, FEMA-All Hazards Operational Planning		
Lead Agency/Department Responsible: County Emergency Management office and local community officials, hospital administrators		
Implementation Schedule: Completed by 2005		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: City of Panorama Village		Project Description: Implement public awareness campaign regarding HAZMAT safety, including risk communication, detection, shelter in place and evacuation procedures for HAZMAT events that occur as a result of a natural hazard such as hurricanes, floods, droughts, wildfire, tornadoes, etc.
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 3		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification: Yes		
Reason not complete (2006 actions): Completed		
Category: Public Information and Awareness		
Hazard(s) Addressed: Toxic Release/HAZMAT, Flood, Hurricanes and Tropical Storms, Tornadoes, Drought, Wildfire		
Priority: High		
Estimated Cost: 100000		
Potential Funding Sources: FEMA-Hazardous Materials Assistance Program, FEMA-Emergency Management Performance Grant, USDA-Environmental Quality Incentives Program, FEMA-Assistance to Fire Fighters Grant, FEMA-All Hazards Operational Planning		
Lead Agency/Department Responsible: County Emergency Management office and local community officials		
Implementation Schedule: Completed by 2005		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

City of Panorama Village

Name of Jurisdiction: City of Panorama Village	Project Description: Promote use of NOAA all-hazard radios throughout County for early warning and post-event information. Place radios in area schools, businesses, critical facilities.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 4	
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions): Completed	
Category: Emergency Services, Public Information and Awareness	
Hazard(s) Addressed: All hazards	
Priority: High	
Estimated Cost: 10000	
Potential Funding Sources: National Weather Service, FEMA-Emergency Management Performance Grant, USDA Rural Utilities Service-Weather Radio Grant Program, USDA-Environmental Quality Incentives Program, FEMA-Assistance to Fire Fighters Grant, FEMA-All Hazards Operational Planning, HMGP, PDM, public-private partnership	
Lead Agency/Department Responsible: County Emergency Management office and local community officials	
Implementation Schedule: Completed by 2005	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: City of Panorama Village	Project Description: Implement the National Weather Service Skywarn program into local volunteer organizations to increase the number of volunteers providing the NWS with early notification of severe weather that may result in property damage and or flooding.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 5	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification: Yes	
Reason not complete (2006 actions): Funding not available	
Category: Public Information and Awareness	
Hazard(s) Addressed: Flood	
Priority: Medium	
Estimated Cost: 10000	
Potential Funding Sources: National Weather Service, FEMA-Emergency Management Performance Grant, USDA Rural Utilities Service-Weather Radio Grant Program, USDA-Environmental Quality Incentives Program, FEMA-Assistance to Fire Fighters Grant, FEMA-All Hazards Operational Planning, HMGP, PDM, public-private partnership	
Lead Agency/Department Responsible: County Emergency Management office and local community officials	
Implementation Schedule: Completed by 2005	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

City of Panorama Village

Name of Jurisdiction: City of Panorama Village		Project Description: Enforce state regulations that prohibit dumping in streams, ditches and area waterways with concentration on those areas that have the potential to block the normal drainage of rainfall.
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 6		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification: Yes		
Reason not complete (2006 actions): Funding not available		
Category: Prevention		
Hazard(s) Addressed: Flood		
Priority: Medium		
Estimated Cost: 100000		
Potential Funding Sources: Cost share with Montgomery County, staff time and resources, EPA-NPS Grant Program, USDA NRCS-Emergency Watershed Protection Agency, TWDB-Clean Water State Revolving Fund, TWDB (Development Fund II)-Texas Water Development Fund, USDA NRCS-Watershed Protection and Flood Prevention Program		
Lead Agency/Department Responsible: County EMC, local community officials		
Implementation Schedule: 2006 - on-going program		
Reduce effects of hazards on new buildings and infrastructure?: Yes		Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: City of Panorama Village		Project Description: Identify sites where stream and rain gauges are needed. Add or upgrade sites as needed and coordinate installation requests with USGS and River Authority. Additional sites will help provide early detection of potential flood areas to assist in evacuation and protection of property and inform the public of imminent hazard.
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 7		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): Funding not available		
Category: Public Information and Awareness		
Hazard(s) Addressed: Flood		
Priority: Medium		
Estimated Cost: 250000		
Potential Funding Sources: Cost share with Montgomery County and local communities, EPA NPS Grant Program, USDA NRCS Emergency Watershed Protection Agency, TWDB-Clean Water State Revolving Fund, TWDB (Development Fund II)-Texas Water Development Fund, USDA NRCS Watershed Protection and Flood Prevention Program		
Lead Agency/Department Responsible: County EMC, USGS, local community officials		
Implementation Schedule: Completed by 2008		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

City of Panorama Village

Name of Jurisdiction: City of Panorama Village		Project Description: Implement actions to support regulations that assist in reducing excess ozone pollution and urban heat. May include actions such as providing incentives for developers to increase tree planting and a county-wide public education and awareness program to promote smog awareness, volunteer mass transit, carpooling and health tips for living in a high ozone smog area.
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 8		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Yes Carry On: Carry On With Modification:		
Reason not complete (2006 actions): Funding not available		
Category: Prevention		
Hazard(s) Addressed: Drought, Excessive Heat		
Priority: Medium		
Estimated Cost: 25000		
Potential Funding Sources: Public-private partnership		
Lead Agency/Department Responsible: County health department, county EMC, local community officials		
Implementation Schedule: Completed by 2009		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: City of Panorama Village		Project Description: Implement water conservation education and incentives for low-flow plumbing and toilets, efficient washers and rain harvesting. Work with Lone Star Groundwater Conservation District and Agri Life Extension Service to promote and increase awareness for residents of Montgomery County pertaining to conserving, protecting and enhancing regional groundwater resources.
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 9		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): Funding not available		
Category: Prevention, Public Information and Awareness		
Hazard(s) Addressed: Drought, Excessive Heat		
Priority: Medium		
Estimated Cost: 50000		
Potential Funding Sources: Cost share with Montgomery county, GCD, grants, private funds, TWDB-TNRIS, USDA Environmental Quality Incentives program, EPA NPS Grant Program, USDA NRCS Emergency Watershed Protection Agency, TWDB Clean Water State Revolving Fund, TWDB (Development FundII)-Texas Water Development Fund		
Lead Agency/Department Responsible: County EMC and local community officials		
Implementation Schedule: On-going program		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

City of Panorama Village

Name of Jurisdiction: City of Panorama Village	Project Description: Widen drainage ditches city-wide.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 10	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): Funding not available	
Category: Structural Project	
Hazard(s) Addressed: Flood	
Priority: High	
Estimated Cost: 300000	
Potential Funding Sources: Local funds, HMGP, PDM	
Lead Agency/Department Responsible: Public Works, Mayor's Office	
Implementation Schedule: Within 1 year of funding	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

Name of Jurisdiction: City of Panorama Village	Project Description: Construct bulkhead for small pond adjacent to sewer plant to prevent flooding of sewer plant
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 11	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification: Yes	
Reason not complete (2006 actions): Funding not available	
Category: Structural Project	
Hazard(s) Addressed: Flood	
Priority: High	
Estimated Cost: 125000	
Potential Funding Sources: Local funding, HMGP, PDM	
Lead Agency/Department Responsible: Public Works, Mayor's Office	
Implementation Schedule: Within 6 months of funding	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

City of Panorama Village

Name of Jurisdiction: City of Panorama Village	Project Description: Rechannelize the waterway and upstream Stewards Creek tributary to widen and deepen in order to reclaim the detention and flood control capability of the Panorama Lake. This will require the removal of debris and vegetation and dredging of excess silt which has accumulated over decades.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 12	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification: Yes	
Reason not complete (2006 actions): Funding not available	
Category: Structural Project	
Hazard(s) Addressed: Flood	
Priority: High	
Estimated Cost: 730000	
Potential Funding Sources: HMGP, PDM	
Lead Agency/Department Responsible: Public Works, Mayor's Office	
Implementation Schedule: Within 6 months of funding	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

Name of Jurisdiction: City of Panorama Village	Project Description: Vegetation management program, emphasis on trees.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 13	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Yes Carry On: Carry On With Modification:	
Reason not complete (2006 actions): Incorporated as 2011 Action 2	
Category: Prevention	
Hazard(s) Addressed: Flood, Hurricane and Tropical Storms, Wind	
Priority: High	
Estimated Cost: 225000	
Potential Funding Sources: HMGP, PDM	
Lead Agency/Department Responsible: Public Works, Mayor's Office	
Implementation Schedule: Within 2 years of funding	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

City of Patton Village

Name of Jurisdiction: City of Patton Village	Project Description: Attend CRS workshop hosted by H-GAC.	
2011 Mitigation Action No.: 1		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Public Information and Awareness		
Hazard(s) Addressed: Flood		
Priority: Medium		
Estimated Cost: 0		
Potential Funding Sources: N/A		
Lead Agency/Department Responsible: County Emergency Manager		
Implementation Schedule: 2013		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

Name of Jurisdiction: City of Patton Village	Project Description: Conduct wildfire outreach and education campaign by distributing information at public buildings, town hall meetings, and other speaking engagements.	
2011 Mitigation Action No.: 2		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Public Information and Awareness		
Hazard(s) Addressed: Wildfire, Drought		
Priority: High		
Estimated Cost: Unknown		
Potential Funding Sources: PDM, HMGP, TFS		
Lead Agency/Department Responsible: City of Patton Village		
Implementation Schedule: Upon funding		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

City of Patton Village

Name of Jurisdiction: City of Patton Village	Project Description: Conduct flood outreach and education campaign by distributing information at public meetings, townhall meetings, and other speaking engagements.
2011 Mitigation Action No.: 3	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Public Information and Awareness	
Hazard(s) Addressed: Flood, Hurricanes and Tropical Storms, Severe Thunderstorms	
Priority: High	
Estimated Cost: Unknown	
Potential Funding Sources: PDM, HMGP	
Lead Agency/Department Responsible: City of Patton Village	
Implementation Schedule: Upon funding	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

Name of Jurisdiction: City of Patton Village	Project Description: Facilitate and coordinate program to improve emergency management radio, paging capabilities and reception county-wide through the purchase of new equipment and necessary training of emergency personnel in the county and in member communities.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 1	
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions): Completed	
Category: Emergency Services	
Hazard(s) Addressed: All hazards	
Priority: High	
Estimated Cost: 250000	
Potential Funding Sources: NWS, FEMA-Emergency Management Performance Grant, USDA Rural Utilities Service-Weather Radio Grant Program, USDA-Environmental Quality Incentives Program, FEMA-Assistance to Fire Fighters Grant, FEMA-All Hazards Operational Planning, HMGP, PDM	
Lead Agency/Department Responsible: County Emergency Management office and local community officials, hospital administrators, sheriff, EMS	
Implementation Schedule: Completed by 2005	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

City of Patton Village

Name of Jurisdiction: City of Patton Village		Project Description: Develop and coordinate a local hazmat team (consisting of personnel from county and member communities); procure fully-equipped hazmat mobile response vehicle to provide minor triage, decontamination.
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 2		
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions): Completed		
Category: Emergency Services		
Hazard(s) Addressed: Toxic Release/HAZMAT		
Priority: High		
Estimated Cost: 500000		
Potential Funding Sources: FEMA-Hazardous Materials Assistance Program, FEMA-Emergency Management Performance Grant, USDA-Environmental Quality Incentives Program, FEMA-Assistance to Fire Fighters Grant, FEMA-All Hazards Operational Planning		
Lead Agency/Department Responsible: County Emergency Management office and local community officials, hospital administrators		
Implementation Schedule: Completed by 2005		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: City of Patton Village		Project Description: Implement public awareness campaign regarding HAZMAT safety, including risk communication, detection, shelter in place and evacuation procedures for HAZMAT events that occur as a result of a natural hazard such as hurricanes, floods, tornadoes, wildfires, drought, etc.
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 3		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification: Yes		
Reason not complete (2006 actions): Funding not available		
Category: Public Information and Awareness		
Hazard(s) Addressed: Flood, Hurricanes and Tropical Storms, Tornadoes, Drought, Wildfire		
Priority: High		
Estimated Cost: 100000		
Potential Funding Sources: FEMA Hazardous Materials Assistance Program, USDA Environmental Quality Incentives Program, FEMA Assistance to Fire Fighters Grant, FEMA All Hazards Operational Planning, Homeland Security Grants, PDM, HMGP		
Lead Agency/Department Responsible: County OEM, City of Patton Village		
Implementation Schedule: Within 1 year of funding		
Reduce effects of hazards on new buildings and infrastructure?: Yes		Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

City of Patton Village

Name of Jurisdiction: City of Patton Village		Project Description: Promote use of NOAA all-hazard radios throughout County for early warning and post-event information. Place radios in area schools, businesses, critical facilities.
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 4		
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions): Completed		
Category: Emergency Services, Public Information and Awareness		
Hazard(s) Addressed: All hazards		
Priority: High		
Estimated Cost: 100000		
Potential Funding Sources: National Weather Service, USDA Rural Utilities Service- Weather Radio Grant Program, USDA Environmental Quality Incentive Program, FEMA-Assistance to Fire Fighters Grant, FEMA-All Hazards Operational Planning, HMGP, PDM, FEMA Emergency Management Performance Grant		
Lead Agency/Department Responsible: County Emergency Management office and local community officials		
Implementation Schedule: Completed by 2005		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: City of Patton Village		Project Description: Implement the National Weather Service Skywarn program into local volunteer organizations to increase the number of volunteers providing the NWS with early notification of severe weather that may result in property damage and or flooding.
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 5		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification: Yes		
Reason not complete (2006 actions): Funding not available		
Category: Public Information and Awareness		
Hazard(s) Addressed: Flood		
Priority: Medium		
Estimated Cost: 10000		
Potential Funding Sources: National Weather Service, FEMA Fire Fighters Grant, FEMA All Hazards Operational Planning, HMGP, PDM, Public-Private Partnerships, FEMA Homeland Security Grants, PDM, HMGP		
Lead Agency/Department Responsible: County OEM, City of Patton Village		
Implementation Schedule: Within 2 years of funding		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

City of Patton Village

Name of Jurisdiction: City of Patton Village		Project Description: Enforce state regulations that prohibit dumping in streams, ditches and area waterways with concentration on those areas that have the potential to block the normal drainage of rainfall.
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 6		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): Funding not available		
Category: Prevention		
Hazard(s) Addressed: Flood		
Priority: Medium		
Estimated Cost: 100000		
Potential Funding Sources: EPA NPS Grant Program, USDA NRCS Emergency Watershed Protection, TWDB Clean Water Revolving Fund, TWDB Texas Water Development Fund, USDA NRCS Watershed Protection and Flood Protection Program		
Lead Agency/Department Responsible: County OEM, City of Patton Village Environmental Health Services		
Implementation Schedule: On-going program		
Reduce effects of hazards on new buildings and infrastructure?: Yes		Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

Name of Jurisdiction: City of Patton Village		Project Description: Identify sites where stream and rain gauges are needed. Add or upgrade sites as needed and coordinate installation requests with USGS and River Authority. Additional sites will help provide early detection of potential flood areas to assist in evacuation and protection of property and inform the public of imminent hazard.
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 7		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): Funding not available		
Category: Public Information and Awareness		
Hazard(s) Addressed: Flood		
Priority: Medium		
Estimated Cost: 250000		
Potential Funding Sources: Cost share with County and local communities, FEMA All Hazards Operational Planning, USDA Environmental Quality Incentives Program, EPA NPS Grant Program, USDA NRCS Emergency Watershed Protection, TWDB Clean Water Revolving Fund, TWDB (Development Fund II)-Texas Water Development Fund, USDA NRCS Watershed Protection and Flood Prevention Program		
Lead Agency/Department Responsible: County OEM, City of Patton Village, USGS		
Implementation Schedule: Within 1 year of funding		
Reduce effects of hazards on new buildings and infrastructure?: Yes		Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

City of Patton Village

Name of Jurisdiction: City of Patton Village	Project Description: Implement actions to support regulations that assist in reducing excess ozone pollution and urban heat. May include actions such as providing incentives for developers to increase tree planting and a county-wide public education and awareness program to promote smog awareness, volunteer mass transit, carpooling, and health tips for living in a high ozone smog area.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 8	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): Funding not available	
Category: Prevention	
Hazard(s) Addressed: Drought, Excessive Heat	
Priority: Medium	
Estimated Cost: 25000	
Potential Funding Sources: Public-private partnership	
Lead Agency/Department Responsible: County Health District, City of Patton Village, County OEM	
Implementation Schedule: Within 1 year of funding	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: City of Patton Village	Project Description: Implement water conservation education and incentives for low-flow plumbing and toilets, efficient washers and rain harvesting. Work with Lone Star Groundwater Conservation District and Agri Life Extension to promote and increase awareness for residents in Montgomery County pertaining to conserving, protecting and enhancing regional groundwater resources.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 9	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): Funding not available	
Category: Public Information and Awareness	
Hazard(s) Addressed: Drought, Excessive Heat	
Priority: Medium	
Estimated Cost: 50000	
Potential Funding Sources: Cost share with County, GCD, private funds, TWDB TNRIS, USDA Environmental Quality Incentives Program, EPA NPS Grant Program, USDA NRCS Emergency Watershed Protection, TWDB Clean Water Revolving Fund	
Lead Agency/Department Responsible: County OEM, City of Patton Village Environmental Health Services	
Implementation Schedule: On-going program	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

City of Roman Forest

Name of Jurisdiction: Town of Roman Forest	Project Description: Attend CRS workshop hosted by H-GAC.	
2011 Mitigation Action No.: 1		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Public Information and Awareness		
Hazard(s) Addressed: Flood		
Priority: Medium		
Estimated Cost: 0		
Potential Funding Sources: N/A		
Lead Agency/Department Responsible: County Emergency Manager		
Implementation Schedule: 2013		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

Name of Jurisdiction: Town of Roman Forest	Project Description: Conduct wildfire outreach and education campaign by distributing information at public buildings, town hall meetings, and other speaking engagements.	
2011 Mitigation Action No.: 2		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Public Information and Awareness		
Hazard(s) Addressed: Wildfire, Drought		
Priority: High		
Estimated Cost: Unknown		
Potential Funding Sources: PDM, HMGP, TFS		
Lead Agency/Department Responsible: Town of Roman Forest		
Implementation Schedule: Upon funding		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

City of Roman Forest

Name of Jurisdiction: Town of Roman Forest	Project Description: Conduct flood outreach and education campaign by distributing information at public meetings, townhall meetings, and other speaking engagements.
2011 Mitigation Action No.: 3	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Public Information and Awareness	
Hazard(s) Addressed: Flood, Hurricanes and Tropical Storms, Severe Thunderstorms	
Priority: High	
Estimated Cost: Unknown	
Potential Funding Sources: PDM, HMGP	
Lead Agency/Department Responsible: Town of Roman Forest	
Implementation Schedule: Upon funding	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

Name of Jurisdiction: Town of Roman Forest	Project Description: Facilitate and coordinate program to improve emergency management radio, paging capabilities and reception county-wide through the purchase of new equipment and necessary training of emergency personnel in the county and in member communities.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 1	
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions): Completed	
Category: Emergency Services	
Hazard(s) Addressed: All hazards	
Priority: High	
Estimated Cost: 250000	
Potential Funding Sources: NWS, FEMA-Emergency Management Performance Grant, USDA Rural Utilities Service-Weather Radio Grant Program, USDA-Environmental Quality Incentives Program, FEMA-Assistance to Fire Fighters Grant, FEMA-All Hazards Operational Planning, HMGP, PDM	
Lead Agency/Department Responsible: County Emergency Management Office and local community officials, hospital administrators, sheriff, EMS	
Implementation Schedule: Completed by 2005	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

City of Roman Forest

Name of Jurisdiction: Town of Roman Forest	Project Description: Develop and coordinate a local hazmat team (consisting of personnel from county and member communities); procure fully-equipped hazmat mobile response vehicle to provide minor triage, decontamination.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 2		
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions): Completed		
Category: Emergency Services		
Hazard(s) Addressed: Toxic Release/HAZMAT		
Priority: High		
Estimated Cost: 500000		
Potential Funding Sources: FEMA-Hazardous Materials Assistance Program, FEMA-Emergency Management Performance Grant, USDA-Environmental Quality Incentives Program, FEMA-Assistance to Fire Fighters Grant, FEMA-All Hazards Operational Planning		
Lead Agency/Department Responsible: County Emergency Management office and local community officials, hospital administrators		
Implementation Schedule: Completed by 2005		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: Town of Roman Forest	Project Description: Implement public awareness campaign regarding HAZMAT safety, including risk communication, detection, shelter in place and evacuation procedures for HAZMAT events that occur as a result of a natural hazard such as hurricanes, floods, droughts and wildfire.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 3		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): Funding not available		
Category: Public Information and Awareness		
Hazard(s) Addressed: Hurricane and Tropical Storms, Flood, Drought, Wildfire		
Priority: High		
Estimated Cost: 100000		
Potential Funding Sources: FEMA Hazardous Materials Assistance Program, USDA Environmental Quality Incentives Program, FEMA Assistance To Fire Fighters Grant, FEMA All Hazards Operational Planning, Homeland Security Grants, HMGP, PDM		
Lead Agency/Department Responsible: County OEM, City of Roman Forest		
Implementation Schedule: Within 1 year of funding		
Reduce effects of hazards on new buildings and infrastructure?: Yes		Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

City of Roman Forest

Name of Jurisdiction: Town of Roman Forest	Project Description: Promote use of NOAA all-hazard radios throughout County for early warning and post-event information. Place radios in area schools, businesses, critical facilities.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 4		
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions): Completed		
Category: Emergency Services, Public Information and Awareness		
Hazard(s) Addressed: All hazards		
Priority: High		
Estimated Cost: 10000		
Potential Funding Sources: NWS, FEMA-Emergency Management Performance Grant, USDA Rural Utilities Service-Weather Radio Grant Program, USDA-Environmental Quality Incentives Program, FEMA-Assistance to Fire Fighters Grant, FEMA-All Hazards Operational Planning, HMGP, PDM, public-private partnership		
Lead Agency/Department Responsible: County Emergency Management office and local community officials		
Implementation Schedule: Completed by 2005		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: Town of Roman Forest	Project Description: Implement the National Weather Service Skywarn program into local volunteer organizations to increase the number of volunteers providing the NWS with early notification of severe weather that may result in property damage and or flooding.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 5		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification: Yes		
Reason not complete (2006 actions): Funding not available		
Category: Public Information and Awareness		
Hazard(s) Addressed: Flood		
Priority: Medium		
Estimated Cost: 10000		
Potential Funding Sources: National Weather Service, FEMA Fire Fighters Grant, FEMA All Hazards Operational Planning, HMGP, PDMGP, Public-Private Partnerships, FEMA Homeland Security Grants		
Lead Agency/Department Responsible: County OEM, City of Roman Forest		
Implementation Schedule: Within 2 years of funding		
Reduce effects of hazards on new buildings and infrastructure?: Yes		Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

City of Roman Forest

Name of Jurisdiction: Town of Roman Forest	Project Description: Enforce state regulations that prohibit dumping in streams, ditches and area waterways with concentration on those areas that have the potential to block the normal drainage of rainfall.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 6		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): Funding not available		
Category: Prevention		
Hazard(s) Addressed: Flood		
Priority: Medium		
Estimated Cost: 100000		
Potential Funding Sources: EPA NPS Grant Program, USDA NRSC Emergency Watershed Protection, TWDB Clean Water Revolving Fund, TWDB Texas Water Development Fund, USDA NRCS Watershed Protection and Flood Protection Program, PDM, HMGP		
Lead Agency/Department Responsible: County OEM, City of Roman Forest Environmental Health Services		
Implementation Schedule: On-going Program		
Reduce effects of hazards on new buildings and infrastructure?: Yes		Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

Name of Jurisdiction: Town of Roman Forest	Project Description: Identify sites where stream and rain gauges are needed. Add or upgrade sites as needed and coordinate installation requests with USGS and River Authority. Additional sites will help provide early detection of potential flood areas to assist in evacuation and protection of property and inform the public of imminent hazard.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 7		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): Funding not available		
Category: Property Protection, Public Information		
Hazard(s) Addressed: Flood		
Priority: Medium		
Estimated Cost: 250000		
Potential Funding Sources: Cost share with County and local communities, FEMA All Hazards Operational Planning, USDA Environmental Quality Incentives Program, EPA NPS Grant Program, USDA NRCS Emergency Watershed Protection, TWDB Clean Water Revolving Fund, TWDB (Development Fund II)-Texas Water Development Fund, USDA NRCS-Watershed Protection and Flood Prevention Program, HMGP, PDM		
Lead Agency/Department Responsible: County OEM, City of Roman Forest, USGS		
Implementation Schedule: Within 1 year of funding		
Reduce effects of hazards on new buildings and infrastructure?: Yes		Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

City of Roman Forest

Name of Jurisdiction: Town of Roman Forest	Project Description: Implement actions to support regulations that assist in reducing excess ozone pollution and urban heat. May include actions such as providing incentives for developers to increase tree planting and a county-wide public education and awareness program to promote smog awareness, volunteer mass transit, carpooling, and health tips for living in a high ozone smog area.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 8	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): Funding not available	
Category: Prevention	
Hazard(s) Addressed: Drought, Excessive Heat	
Priority: Medium	
Estimated Cost: 25000	
Potential Funding Sources: Public-private partnership	
Lead Agency/Department Responsible: County Health District, County EMC, City of Roman Forest	
Implementation Schedule: Within 1 year of funding	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: Town of Roman Forest	Project Description: Implement water conservation education and incentives for low-flow plumbing and toilets, efficient washers and rain harvesting. Work with Lone Star Groundwater Conservation District and Agri Life Extension Service to promote and increase awareness for residents of Montgomery County pertaining to conserving, protecting and enhancing regional groundwater resources.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 9	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): Funding not available	
Category: Public Information and Awareness	
Hazard(s) Addressed: Drought, Excessive Heat	
Priority: Medium	
Estimated Cost: 50000	
Potential Funding Sources: Cost share with County, GCD, private funds, TWDB TNIRIS, USDA Environmental Quality Incentives Program, EPA NPS Grant Program, USDA NRCS Emergency Watershed Protection, TWDB Clean Water Revolving Fund, PDM, HMGP	
Lead Agency/Department Responsible: County OEM, City of Roman Forest Environmental Health Services	
Implementation Schedule: On-going Program	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

City of Shenandoah

Name of Jurisdiction: City of Shenandoah	Project Description: Improve storm sewer drainage in the Shenandoah Valley area by upgrading the roads and underground drainage to reduce the potential for flooding.
2011 Mitigation Action No.: 1	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Structural Project	
Hazard(s) Addressed: Flood	
Priority: High	
Estimated Cost: 26200000	
Potential Funding Sources: Bonds	
Lead Agency/Department Responsible: Public Works	
Implementation Schedule: End of 2013	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

Name of Jurisdiction: City of Shenandoah	Project Description: Removal of hazardous fuels which will reduce the impact of wildland fires and flooding in the areas of Grogan's Mill road, Vision Park and David Memorial Drive.
2011 Mitigation Action No.: 2	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Property Protection	
Hazard(s) Addressed: Wildfire, Drought, Flood	
Priority: High	
Estimated Cost: 75000	
Potential Funding Sources: Committed funds from reduction of services, PDM, HMGP	
Lead Agency/Department Responsible: City public works department	
Implementation Schedule: 2012	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

City of Shenandoah

Name of Jurisdiction: City of Shenandoah	Project Description: Storm sewer system installation in the area of the Shenandoah Valley.
2011 Mitigation Action No.: 3	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Structural Project	
Hazard(s) Addressed: Flood	
Priority: Medium	
Estimated Cost:	
Potential Funding Sources: Bonds	
Lead Agency/Department Responsible: Public Works Department	
Implementation Schedule: 2008-2011	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

Name of Jurisdiction: City of Shenandoah	Project Description: Facilitate and coordinate program to improve emergency management radio, paging capabilities and reception county-wide through the purchase of new equipment and necessary training of emergency personnel in the county and in member communities.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 1	
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions): Completed	
Category: Emergency Services	
Hazard(s) Addressed: All hazards	
Priority: High	
Estimated Cost: 250000	
Potential Funding Sources: NWS, FEMA-Emergency Management Performance Grant, USDA Rural Utilities Service-Weather Radio Grant Program, USDA-Environmental Quality Incentives Program, FEMA-Assistance to Fire Fighters Grant, FEMA-All Hazards Operational Planning, HMGP, PDM	
Lead Agency/Department Responsible: County Emergency Management office and local community officials, hospitals administrators, sheriff, EMS	
Implementation Schedule: Completed by 2005	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

City of Shenandoah

Name of Jurisdiction: City of Shenandoah		Project Description: Develop and coordinate a local hazmat team (consisting of personnel from county and member communities); procure fully-equipped hazmat mobile response vehicle to provide minor triage, decontamination.
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 2		
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions): Completed		
Category: Emergency Services		
Hazard(s) Addressed: Toxic Release/HAZMAT		
Priority: High		
Estimated Cost: 500000		
Potential Funding Sources: FEMA-Hazardous Materials Assistance Program, FEMA-Emergency Management Performance Grant, USDA-Environmental Quality Incentives Program, FEMA-Assistance to Fire Fighters Grant, FEMA-All Hazards Operational Planning		
Lead Agency/Department Responsible: County Emergency Management office and local community officials, hospital administrators		
Implementation Schedule: Completed by 2005		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: City of Shenandoah		Project Description: Implement public awareness campaign regarding HAZMAT safety, including risk communication, detection, shelter in place and evacuation procedures for HAZMAT events that occur as a result of a natural hazard such as hurricanes, floods, droughts, wildfires, etc.
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 3		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification: Yes		
Reason not complete (2006 actions): Funding not available		
Category: Public Information and Awareness		
Hazard(s) Addressed: Hurricane and Tropical Storms, Flood, Tornadoes, Drought, Wildfire		
Priority: High		
Estimated Cost: 100000		
Potential Funding Sources: FEMA Hazardous Materials Assistance Program, USDA Environmental Quality Incentives Program, FEMA Assistance To Fire Fighters Grant, FEMA All Hazards Operational Planning, Homeland Security Grants, PDM, HMGP		
Lead Agency/Department Responsible: County OEM, City of Shenandoah		
Implementation Schedule: Within 1 year of funding		
Reduce effects of hazards on new buildings and infrastructure?: Yes		Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

City of Shenandoah

Name of Jurisdiction: City of Shenandoah		Project Description: Promote use of NOAA all-hazard radios throughout County for early warning and post-event information. Place radios in area schools, businesses, critical facilities.
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 4		
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions): Completed		
Category: Emergency Services, Public Information and Awareness		
Hazard(s) Addressed: All hazards		
Priority: High		
Estimated Cost: 10000		
Potential Funding Sources: NWS, FEMA-Emergency Management Performance Grant, USDA Rural Utilities Service-Weather Radio Grant Program, USDA-Environmental Quality Incentives Program, FEMA-Assistance to Fire Fighters Grant, FEMA-All Hazards Operational Planning, HMGP, PDM, public-pri		
Lead Agency/Department Responsible: County Emergency Management and local community officials		
Implementation Schedule: Completed by 2005		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: City of Shenandoah		Project Description: Implement the National Weather Service Skywarn program into local volunteer organizations to increase the number of volunteers providing the NWS with early notification of severe weather that may result in property damage and/or flooding.
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 5		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification: Yes		
Reason not complete (2006 actions): Funding not available		
Category: Public Information and Awareness		
Hazard(s) Addressed: Flood, Hurricanes and Tropical Storms, Tornadoes, Severe Thunderstorms		
Priority: Medium		
Estimated Cost: 10000		
Potential Funding Sources: National Weather Service, FEMA Fire Fighters Grant, FEMA All Hazards Operational Planning, HMGP, PDM, Public-Private Partnerships, FEMA Homeland Security Grants		
Lead Agency/Department Responsible: County OEM, City of Shenandoah		
Implementation Schedule: Within 2 years of funding		
Reduce effects of hazards on new buildings and infrastructure?: Yes		Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

City of Shenandoah

Name of Jurisdiction: City of Shenandoah	Project Description: Enforce state regulations that prohibit dumping in streams, ditches and area waterways with concentration on those areas that have the potential to block the normal drainage of rainfall.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 6	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): On-going	
Category: Prevention	
Hazard(s) Addressed: Flood	
Priority: Medium	
Estimated Cost: 100000	
Potential Funding Sources: Cost share with County, staff time and resources, EPA-NPS grant program, USDA NRCS-Emergency Watershed Protection Agency, TWDB-Clean Water State Revolving Fund, TWDB (Development Fund II)-TX Water Development Fund, USDA NRCS-Watershed Protection and FloodPrevention Program	
Lead Agency/Department Responsible: County EMC, local community officials	
Implementation Schedule: 2006 - on-going program	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

Name of Jurisdiction: City of Shenandoah	Project Description: Identify sites where stream and rain gauges are needed. Add or upgrade sites as needed and coordinate installation requests with USGS and River Authority. Additional sites will help provide early detection of potential flood areas to assist in evacuation and protection of property and inform the public of imminent hazard.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 7	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): Funding not available	
Category: Public Information and Awareness	
Hazard(s) Addressed: Flood	
Priority: Medium	
Estimated Cost: 250000	
Potential Funding Sources: Cost share with County and local communities, FEMA All Hazards Operational Planning, USDA Environmental Quality Incentives Program, EPA NPS Grant Program, USDA NRCS Emergency Watershed Protection, TWDB Clean Water Revolving Fund, TWDB (Development Fund II)-Texas Water Development Fund, USDA NRCS Watershed Protection and Flood Prevention Program	
Lead Agency/Department Responsible: County OEM, City of Shenandoah, USGS	
Implementation Schedule: Within 1 year of funding	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

City of Shenandoah

Name of Jurisdiction: City of Shenandoah	Project Description: Implement actions to support regulations that assist in reducing excess ozone pollution and urban heat. May include actions such as providing incentives for developers to increase tree planting and a county-wide public education and awareness program to promote smog awareness, volunteer mass transit, carpooling, and health tips for living in a high ozone smog area.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 8	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): Funding not available	
Category: Prevention	
Hazard(s) Addressed: Drought, Excessive Heat	
Priority: Medium	
Estimated Cost: 25000	
Potential Funding Sources: Public-private partnership	
Lead Agency/Department Responsible: County Health District, County OEM, City of Shenandoah	
Implementation Schedule: Within 1 year of funding	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: City of Shenandoah	Project Description: Implement water conservation education and incentives for low-flow plumbing and toilets, efficient washers and rain harvesting. Work with Lone Star Groundwater Conservation District and Agri Life Extension Service to promote and increase awareness for residents of Montgomery County pertaining to conserving, protecting and enhancing regional groundwater resources.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 9	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): On-going	
Category: Public Information and Awareness	
Hazard(s) Addressed: Drought, Excessive Heat	
Priority: Medium	
Estimated Cost: 50000	
Potential Funding Sources: Cost share with County, GCD, grants, private funds, TWDB-TNRIS, USDA-Environmental Quality Incentives Program, EPA-NPS Grant Program, USDA-NRCS-Emergency Watershed Protection Agency, TWDB-Clean Water State Revolving Fund, TWDB (Development Fund II)-TexasWater Development Fund	
Lead Agency/Department Responsible: County EMC and local community officials	
Implementation Schedule: On-going program	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

City of Splendor

Name of Jurisdiction: City of Splendor	Project Description: Implement public awareness campaign regarding HAZMAT safety, including risk communication, detection, shelter in place and evacuation procedures for HAZMAT events that occur as a result of natural hazards such as hurricanes, floods, droughts, wildfires, tornadoes, etc.
2011 Mitigation Action No.: 1	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Public Information and Awareness	
Hazard(s) Addressed: Toxic Release/HAZMAT, Flood, Hurricanes and Tropical Storms, Drought, Wildfire, Tornadoes	
Priority: High	
Estimated Cost: 100000	
Potential Funding Sources: PDM, HMGP, FEMA Hazardous Materials Assistance Program, USDA Environmental Quality Incentives Program, FEMA Assistance to Fire Fighters Grant, FEMA All Hazards Operational Planning, FEMA Homeland Security Grants	
Lead Agency/Department Responsible: County OEM, City of Splendor	
Implementation Schedule: Within 1 year of funding	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: City of Splendor	Project Description: Implement the National Weather Service Skywarn program into local volunteer organizations to increase the number of volunteers providing the NWS with early notification of severe weather that may result in property damage and or flooding.
2011 Mitigation Action No.: 2	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Public Information and Awareness	
Hazard(s) Addressed: Flood	
Priority: Medium	
Estimated Cost: 10000	
Potential Funding Sources: National Weather Service, USDA Rural Utilities Service-Weather Radio Grant Program, USDA Environmental Quality Incentives Program, FEMA Assistance to Fire Fighters Grant, FEMA All Hazards Operational Planning, HMGP, PDM, Public-private partnership	
Lead Agency/Department Responsible: County OEM, City of Splendor	
Implementation Schedule: Within 2 years of funding	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

City of Splendor

Name of Jurisdiction: City of Splendor	Project Description: Identify sites where stream and rain gauges are needed. Add or upgrade sites as needed and coordinate installation requests with USGS and River Authority. Additional sites will help provide early detection of potential flood areas to assist in evacuation and protection of property and inform the public of imminent hazard.
2011 Mitigation Action No.: 3	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Prevention	
Hazard(s) Addressed: Flood	
Priority: Medium	
Estimated Cost: 250000	
Potential Funding Sources: Cost share with County and local communities, FEMA All Hazards Operational Planning, USDA Environmental Quality Incentives Program, EPA NPS Grant Program, USDA NRCS Emergency Watershed Protection, TWDB Clean Water Revolving Fund, TWDB (Development Fund II)-Texas Water Development Fund, USDA NRCS Watershed Protection and Flood Prevention Program	
Lead Agency/Department Responsible: County OEM, City of Splendor, USGS	
Implementation Schedule: Within 1 year of funding	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

Name of Jurisdiction: City of Splendor	Project Description: Enforce state regulations that prohibit dumping in streams, ditches and area waterways with concentration on those areas that have the potential to block the normal drainage of rainfall.
2011 Mitigation Action No.: 4	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Prevention	
Hazard(s) Addressed: Flood	
Priority: Medium	
Estimated Cost: 100000	
Potential Funding Sources: Cost share with Montgomery County and local communities, EPA-NPS Grant Program, USDA NRCS-Emergency Watershed Protection Agency, TWDB-Clean Water State Revolving Fund, TWDB (Development Fund II)-Texas Water Development Fund, USDA NRCS-Watershed Protection and Flood Prevention Program, PDM, HMGP	
Lead Agency/Department Responsible: County OEM, City of Splendor Environmental Health Services	
Implementation Schedule: On-going program	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

City of Splendor

Name of Jurisdiction: City of Splendor	Project Description: Implement water conservation education and incentives for low-flow plumbing and toilets, efficient washers and rain harvesting. Work with Lone Star Groundwater Conservation District and Agri Life Extension Service to promote and increase awareness for residents of Montgomery County pertaining to conserving, protecting and enhancing regional groundwater resources.
2011 Mitigation Action No.: 5	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Prevention, Public Information and Awareness	
Hazard(s) Addressed: Drought, Excessive Heat	
Priority: Medium	
Estimated Cost: 50000	
Potential Funding Sources: PDM, HMGP, Cost share with County, GCD, private funds, TWDB TNRI, USDA Environmental Quality Incentives Program, EPA NPS Grant Program, USDA NRCS Emergency Watershed Protection, TWDB Clean Water Revolving Fund	
Lead Agency/Department Responsible: County OEM, City of Splendor Environmental Health	
Implementation Schedule: On-going program	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: City of Splendor	Project Description: Implement actions to support regulations that assist in reducing excess ozone pollution and urban heat – this may include actions such as providing incentives for developers to increase tree planting and a county-wide public education and awareness program to promote smog awareness, volunteer mass transit, carpooling, and health tips for living in a high ozone smog area.
2011 Mitigation Action No.: 6	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Prevention	
Hazard(s) Addressed: Drought, Excessive Heat	
Priority: Medium	
Estimated Cost: 25000	
Potential Funding Sources: Public-private partnerships	
Lead Agency/Department Responsible: County Health District, County OEM, City of Splendor	
Implementation Schedule: Within 1 year of funding	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

City of Splendor

Name of Jurisdiction: City of Splendor	Project Description: Develop evacuation route.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 1		
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions): Completed		
Category: Emergency Services		
Hazard(s) Addressed: Tornadoes, Hurricane and Tropical Storms, Toxic Release/HAZMAT		
Priority: High		
Estimated Cost:		
Potential Funding Sources: FEMA-Emergency Management Performance grants, FEMA-All Hazards Operational Planning, FEMA-Hazardous Materials Assistance Program, FEMA-Fire Management Assistance Grants, FEMA-Hurricane Local Grant Program, USDA-Environmental Quality Incentives Program, Flood Mitigation Assistance Program, HMGP, PDM		
Lead Agency/Department Responsible: Police Department/City Management		
Implementation Schedule: As needed		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: City of Splendor	Project Description: Purchase generators to power utilities, emergency communications at water well #1.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 2		
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions): Completed		
Category: Emergency Services		
Hazard(s) Addressed: Tornadoes, Hurricane and Tropical Storms		
Priority: High		
Estimated Cost:		
Potential Funding Sources: Local funding through capital improvements, HMGP (Generator quick-connects), FEMA-Emergency Operations Center Funding, FEMA-Assistance to Fire Fighters Grant		
Lead Agency/Department Responsible: Police Department/City Management		
Implementation Schedule: As needed		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

City of Splendor

Name of Jurisdiction: City of Splendor	Project Description: Policing of post-event areas.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 3		
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions): Completed		
Category: Emergency Services		
Hazard(s) Addressed: Tornadoes, Hurricane and Tropical Storms		
Priority: High		
Estimated Cost:		
Potential Funding Sources: FEMA-Emergency Operations Center Funding, FEMA-Assistance to Fire Fighters Grant, Dept of Justice-State and Local Preparedness Technical Assistance, Dept of Justice-State and Local Preparedness Training Program		
Lead Agency/Department Responsible: Police Dept/City Management		
Implementation Schedule: As needed		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: City of Splendor	Project Description: Implement traffic control program.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 4		
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions): Completed		
Category: Prevention		
Hazard(s) Addressed: All hazards		
Priority: High		
Estimated Cost: 20000		
Potential Funding Sources: FEMA-Emergency Operations Center Funding, FEMA-Assistance to Fire Fighters Grant, Dept of Justice-State and Local Preparedness Technical Assistance, DOJ and Local Preparedness Training Program		
Lead Agency/Department Responsible: Police Dept		
Implementation Schedule:		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

City of Splendor

Name of Jurisdiction: City of Splendor	Project Description: Incorporate a natural runoff or zero discharge policy for stormwater in subdivision ordinance.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 5		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Yes Carry On: Carry On With Modification:		
Reason not complete (2006 actions): Funding not available		
Category: Prevention		
Hazard(s) Addressed: Flood		
Priority: High		
Estimated Cost: 10000		
Potential Funding Sources: USDA NRCS-Watershed Surveys and Planning, USDA NRCS-Watershed Protection and Flood Prevention Program, TWDB - Research and Planning Fund, USDA NRCS-Emergency Watershed Protection Program, TWDB-Clean Water State Revolving Fund, HMGP, Flood Mitigation Assistance Program		
Lead Agency/Department Responsible: City staff		
Implementation Schedule: 6 months to 1 year		
Reduce effects of hazards on new buildings and infrastructure?: Yes		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

Name of Jurisdiction: City of Splendor	Project Description: Improve drainage along First Street and FM 2090 East. Draining improvements include widening of existing drainage, culvert size will be increased.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 6		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): Funding not available		
Category: Structural Project, Property Protection		
Hazard(s) Addressed: Flood		
Priority: High		
Estimated Cost:		
Potential Funding Sources: USACE-Small Flood Control Projects, USDA NRCS-Emergency Watershed Protection Agency, TWDB-Clean Water State Revolving Fund, TWDB (Development Fund II)-TX Water Development Fund, USDA NRCS-Watershed Protection and Flood Prevention Program, EPA-NPS Grant Program, 406 Public Assistance, PDM, HMGP		
Lead Agency/Department Responsible: TxDOT, Utility dept		
Implementation Schedule: 6 months to one year		
Reduce effects of hazards on new buildings and infrastructure?: Yes		Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

City of Splendor

Name of Jurisdiction: City of Splendor	Project Description: Increase culvert size on First Street under railroad tracks.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 7		
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions): Completed		
Category: Prevention		
Hazard(s) Addressed: Flood		
Priority: High		
Estimated Cost:		
Potential Funding Sources: USACE-Small Flood Control Projects, TWDB-Clean Water State Revolving Fund, TWDB (Development Fund II)-TX Water Development Fund, USDA NRCS-Watershed Protection and Flood Protection Program, EPA NPS Grant Program, 406 Public Assistance, PDM, HMGP		
Lead Agency/Department Responsible: Union Pacific Railroad, Utility Dept		
Implementation Schedule: 6 months to one year		
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

Name of Jurisdiction: City of Splendor	Project Description: Increase culvert size on Cox Street (900 feet North of FM 2090).	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 8		
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions): Completed		
Category: Prevention		
Hazard(s) Addressed: Flood		
Priority: High		
Estimated Cost:		
Potential Funding Sources: USACE-Small Flood Control Projects, TWDB-Clean Water State Revolving Fund, TWDB (Development Fund II)-TX Water Development Fund, USDA NRCS-Watershed Protection and Flood Protection Program, EPA NPS Grant Program, 406 Public Assistance, PDM, HMGP		
Lead Agency/Department Responsible: Mayor		
Implementation Schedule: As funding permits		
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

City of Splendor

Name of Jurisdiction: City of Splendor	Project Description: Pursue land acquisition for parks in flood-prone locations.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 9	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Yes Carry On: Carry On With Modification:	
Reason not complete (2006 actions): Funding not available	
Category: Natural Resource Protection	
Hazard(s) Addressed: Flood	
Priority: High	
Estimated Cost: 500000	
Potential Funding Sources: TX Water Development Fund, non-profit land trusts or environmental groups, local funds, USDA NRCS Wetlands Reserve Program, USDA NRCS-Watershed Surveys and Planning, USDA NRCS Watershed Protection and Flood Prevention Program, HMGP	
Lead Agency/Department Responsible: Mayor	
Implementation Schedule: Unknown at this time/as funding permits	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

Name of Jurisdiction: City of Splendor	Project Description: Implement stormwater management program, including the clearing of debris from waterways.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 10	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Yes Carry On: Carry On With Modification:	
Reason not complete (2006 actions): Funding not available	
Category: Prevention	
Hazard(s) Addressed: Flood	
Priority: High	
Estimated Cost: 750000	
Potential Funding Sources: USACE, Clearing and Snagging Projects, USACE-Small Flood Control Projects, USDA NRCS-Emergency Watershed Protection Agency, TWDB-Clean Water State Revolving Fund, TWDB (Development Fund II)-TX Water Development Fund, USDA NRCS-Watershed Protection and Flood Prevention Program, EPA NPS Grant Program, 406 public Assistance Program, HMGP, PDM	
Lead Agency/Department Responsible: Mayor	
Implementation Schedule: As funding permits	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

City of Splendor

Name of Jurisdiction: City of Splendor	Project Description: Construct detention ponds in flood-prone areas.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 11		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Yes Carry On: Carry On With Modification:		
Reason not complete (2006 actions): Funding not available		
Category: Structural Project		
Hazard(s) Addressed: Flood		
Priority: High		
Estimated Cost: 750000		
Potential Funding Sources: Tx Water Development Fund, USACE-Small Flood Control Projects, USDA NRCS-Watershed Protection and Flood Prevention Program, USDA NRCS-Emergency Watershed Protection Program, TWDB-Clean Water State Revolving Fund, TWDB (Development Fund II)-TX Water Development Fund, EPA NPS, 406 Public Assistance Program, HMGP, PDM		
Lead Agency/Department Responsible: Mayor		
Implementation Schedule: As funding permits		
Reduce effects of hazards on new buildings and infrastructure?: Yes		Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

Name of Jurisdiction: City of Splendor	Project Description: Conduct drainage study.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 12		
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions): Completed		
Category: Prevention, Property Protection		
Hazard(s) Addressed: Flood		
Priority: High		
Estimated Cost: 100000		
Potential Funding Sources: USACE-Planning Assistance to States, USDA NRCS-Watershed Surveys and Planning, USDA NRCS-Watershed Protection and Flood Prevention Program, HMGP, PDM		
Lead Agency/Department Responsible: Mayor		
Implementation Schedule: As funding permits		
Reduce effects of hazards on new buildings and infrastructure?: Yes		Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

City of Splendor

Name of Jurisdiction: City of Splendor	Project Description: Develop hazardous materials (HAZMAT) awareness and public education program.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 13		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): Funding not available		
Category: Public Information and Awareness		
Hazard(s) Addressed: Toxic Release/HAZMAT		
Priority: Medium		
Estimated Cost: 10000		
Potential Funding Sources: Public-private partnerships, FEMA-Hazardous Materials Assistance Program, FEMA-First Responder Counter-Terrorism Training Assistance, FEMA-Emergency Management Performance Grant, FEMA-All Hazards Operational Planning		
Lead Agency/Department Responsible: Union Pacific Railroad		
Implementation Schedule: Pending funding		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: City of Splendor	Project Description: Revise Local Flood Damage Prevention Ordinance to incorporate cumulative substantial damage/improvement requirements.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 14		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Yes Carry On: Carry On With Modification:		
Reason not complete (2006 actions): Funding not available		
Category: Prevention		
Hazard(s) Addressed: Flood		
Priority: Medium		
Estimated Cost:		
Potential Funding Sources: NA		
Lead Agency/Department Responsible:		
Implementation Schedule: 6 months to one year		
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

City of Splendor

Name of Jurisdiction: City of Splendor	Project Description: Implement water rationing and enforcement plan.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 15	
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions): Completed	
Category: Natural Resource Protection	
Hazard(s) Addressed: Drought	
Priority: Medium	
Estimated Cost: 10000	
Potential Funding Sources: TCEQ-TX Clean Rivers Program, TWDB Research and Planning Fund-Research and Planning Fund Grants, USDA NRCS-Watershed Surveys and Planning, USDA-Environmental Quality Incentives Program	
Lead Agency/Department Responsible: Utilities Dept	
Implementation Schedule: ASAP	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: City of Splendor	Project Description: Update Flood Insurance Rate Maps (FIRMs).
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 16	
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions): Completed	
Category: Prevention	
Hazard(s) Addressed: Flood	
Priority: Low	
Estimated Cost:	
Potential Funding Sources: FEMA-Map Modernization Program, FEMA-Flood Hazard Mapping Program, Dept of the Interior, USGS-Mapping Standards Support, FEMA-Flood Recovery Mapping	
Lead Agency/Department Responsible:	
Implementation Schedule: Dependent on funding	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

City of Stagecoach

Name of Jurisdiction: City of Stagecoach	Project Description: Attend CRS workshop hosted by H-GAC.	
2011 Mitigation Action No.: 1		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Public Information and Awareness		
Hazard(s) Addressed: Flood		
Priority: Medium		
Estimated Cost: 0		
Potential Funding Sources: N/A		
Lead Agency/Department Responsible: County Emergency Manager		
Implementation Schedule: 2013		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

Name of Jurisdiction: City of Stagecoach	Project Description: Conduct wildfire outreach and education campaign by distributing information at public buildings, town hall meetings, and other speaking engagements.	
2011 Mitigation Action No.: 2		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Public Information and Awareness		
Hazard(s) Addressed: Wildfire, Drought		
Priority: High		
Estimated Cost: Unknown		
Potential Funding Sources: PDM, HMGP, TFS		
Lead Agency/Department Responsible: City of Stagecoach		
Implementation Schedule: Upon funding		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

City of Stagecoach

Name of Jurisdiction: City of Stagecoach	Project Description: Conduct flood outreach and education campaign by distributing information at public meetings, townhall meetings, and other speaking engagements.
2011 Mitigation Action No.: 3	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Public Information and Awareness	
Hazard(s) Addressed: Flood, Hurricanes and Tropical Storms, Severe Thunderstorms	
Priority: High	
Estimated Cost: Unknown	
Potential Funding Sources: PDM, HMGP	
Lead Agency/Department Responsible: City of Stagecoach	
Implementation Schedule: Upon funding	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

Name of Jurisdiction: City of Stagecoach	Project Description: Facilitate and coordinate program to improve emergency management radio, paging capabilities and reception county-wide through the purchase of new equipment and necessary training of emergency personnel in the county and in member communities.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 1	
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions): Completed	
Category: Emergency Services	
Hazard(s) Addressed: All hazards	
Priority: High	
Estimated Cost: 250000	
Potential Funding Sources: National Weather Service, FEMA Emergency Management Performance Grant, USDA Rural Utilities Service-Weather Radio Grant Program, USDA Environmental Quality Incentives Program, FEMA Assistance to Firefighters Grant, FEMA-All Hazards Operational Planning, HMGP, PDM	
Lead Agency/Department Responsible: County Emergency Management and local community officials, hospitals administrators, sheriff, EMS	
Implementation Schedule: Completed by 2005	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

City of Stagecoach

Name of Jurisdiction: City of Stagecoach		Project Description: Develop and coordinate a local hazmat team (consisting of personnel from county and member communities); procure fully-equipped hazmat mobile response vehicle to provide minor triage, decontamination.
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 2		
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions): Completed		
Category: Emergency Services		
Hazard(s) Addressed: Toxic Release/HAZMAT		
Priority: High		
Estimated Cost: 500000		
Potential Funding Sources: FEMA- Hazardous Materials Assistance Program, FEMA-Emergency Management Performance Grant, USDA Environment Quality Incentives Program, FEMA- Assistance to Firefighters Grant, FEMA- All Hazards Operational Planning		
Lead Agency/Department Responsible: County Emergency Management and local community officials, hospitals administrators		
Implementation Schedule: Completed by 2005		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: City of Stagecoach		Project Description: Implement public awareness campaign regarding HAZMAT safety, including risk communication, detection, shelter in place and evacuation procedures for HAZMAT events that occur as a result of a natural hazard such as hurricanes, floods, droughts, wildfires, etc.
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 3		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): Funding not available		
Category: Public Information and Awareness		
Hazard(s) Addressed: Toxic Release/HAZMAT, Hurricanes and Tropical Storms, Flood, Tornadoes, Drought, Wildfire,		
Priority: High		
Estimated Cost: 100000		
Potential Funding Sources: FEMA-Hazardous Materials Assistance Programs, USDA-Environmental Quality Incentives Program, FEMA- Assistance to Fire Fighters grant, FEMA-All Hazards Operational Planning, FEMA-Homeland Security Grants		
Lead Agency/Department Responsible: County Emergency Management Office, City of Stagecoach and local community officials		
Implementation Schedule: Complete within 1 year of funding		
Reduce effects of hazards on new buildings and infrastructure?: Yes		Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

City of Stagecoach

Name of Jurisdiction: City of Stagecoach		Project Description: Promote use of NOAA all-hazard radios throughout County for early warning and post-event information. Place radios in area schools, businesses, critical facilities.
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 4		
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions): Completed		
Category: Emergency Services, Public Information and Awareness		
Hazard(s) Addressed: All hazards		
Priority: High		
Estimated Cost: 10000		
Potential Funding Sources: National Weather Service, FEMA-Emergency Management Performance Grant, USDA Rural Utilities Service-Weather Radio Grant Program, USDA Environment Quality Incentives Program		
Lead Agency/Department Responsible: County Emergency Management Office and local community officials		
Implementation Schedule: Completed by 2005		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: City of Stagecoach		Project Description: Implement the National Weather Service Skywarn program into local volunteer organizations to increase the number of volunteers providing the NWS with early notification of severe weather that may result in property damage and or flooding.
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 5		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): Funding not available		
Category: Public Information and Awareness		
Hazard(s) Addressed: Flood		
Priority: Medium		
Estimated Cost: 10000		
Potential Funding Sources: National Weather Service, USDA Rural Utilities Service-Weather Radio Grant Program, USDA Environmental Quality Incentives Program, FEMA-Assistance to Fire Fighters Grant, FEMA-All Hazards Operational Planning, HMGP, PDM, Public-private partnership, FEMA Homeland Security Grants		
Lead Agency/Department Responsible: County Emergency Management Office, City of Stagecoach and local community officials		
Implementation Schedule: Complete within 2 years of funding		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

City of Stagecoach

Name of Jurisdiction: City of Stagecoach	Project Description: Enforce state regulations that prohibit dumping in streams, ditches and area waterways with concentration on those areas that have the potential to block the normal drainage of rainfall.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 6	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): Funding not available	
Category: Prevention	
Hazard(s) Addressed: Flood	
Priority: Medium	
Estimated Cost: 100000	
Potential Funding Sources: Cost with Montgomery County and local communities, USDA-Environmental Quality Incentives Program, EPA NPS Grant Program, USDA NRCS-Emergency Watershed Protection and Flood Prevention Program	
Lead Agency/Department Responsible: County Emergency Management, City of stagecoach, Environmental Health Services and local community officials	
Implementation Schedule: On-going program	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

Name of Jurisdiction: City of Stagecoach	Project Description: Identify sites where stream and rain gauges are needed. Add or upgrade sites as needed and coordinate installation requests with USGS and River Authority. Additional sites will help provide early detection of potential flood areas to assist in evacuation and protection of property and inform the public of imminent hazard.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 7	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): Funding not available	
Category: Prevention	
Hazard(s) Addressed: Flood	
Priority: Medium	
Estimated Cost: 250000	
Potential Funding Sources: Cost with Montgomery County and local communities, FEMA-All Hazards Operational Planning, USDA-Environmental Quality Incentives Program, EPA NPS Grant Program, USDA NRCS-Emergency Watershed Protection and Flood Prevention Program, PDM, HMGP	
Lead Agency/Department Responsible: County EMC, City of Stagecoach, USGS, local community officials	
Implementation Schedule: Complete within 1 year of funding	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

City of Stagecoach

Name of Jurisdiction: City of Stagecoach	Project Description: Implement actions to support regulations that assist in reducing excess ozone pollution and urban heat. May include actions such as providing incentives for developers to increase tree planting and a county-wide public education and awareness program to promote smog awareness, volunteer mass transit, carpooling, and health tips for living in a high ozone smog area.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 8	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): Funding not available	
Category: Prevention	
Hazard(s) Addressed: Drought, Excessive Heat	
Priority: Medium	
Estimated Cost: 25000	
Potential Funding Sources: Public private partnership staff time and resources	
Lead Agency/Department Responsible: County Health District, City of Stagecoach County EMC, local community officials	
Implementation Schedule: Complete within 1 year of funding	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: City of Stagecoach	Project Description: Implement water conservation education and incentives for low-flow plumbing and toilets, efficient washers and rain harvesting. Work with Lone Star Groundwater Conservation District and Agri Life Extension Service to promote and increase awareness for residents of Montgomery County pertaining to conserving, protecting and enhancing regional groundwater resources.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 9	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): Funding not available	
Category: Prevention, Public Information and Awareness	
Hazard(s) Addressed: Drought, Excessive Heat	
Priority: Medium	
Estimated Cost: 50000	
Potential Funding Sources: Cost share with County, GCD, grants, private funds, TWDB-TNRIS, USDA-Environmental Quality Incentives program, EPA-NPS Grant Program, USDA NRCS-Emergency Watershed Protection Agency, TWDB-Clean Water State Revolving Fund	
Lead Agency/Department Responsible: City of Stagecoach, Environmental Health and local community officials	
Implementation Schedule: On-going program	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

City of Willis

Name of Jurisdiction: City of Willis	Project Description: Implement public awareness campaign regarding HAZMAT safety, including risk communication, detection, shelter in place and evacuation procedures for HAZMAT events that occur as a result of a natural hazard such as hurricanes, floods, droughts, wildfires, etc.	
2011 Mitigation Action No.: 1		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Public Information and Awareness		
Hazard(s) Addressed: Toxic Release/HAZMAT, Hurricanes and Tropical Storms, Tornadoes, Drought, Wildfire, Flood		
Priority: High		
Estimated Cost: 100000		
Potential Funding Sources: FEMA-Hazardous Materials Assistance Program, USDA-Environmental Quality Incentives Program, FEMA-Assistance to Fire Fighters Grant, FEMA-All Hazards Operational Planning, FEMA Homeland Security Grants, HMGP, PDM		
Lead Agency/Department Responsible: County Emergency management Office, City of Willis and local community officials		
Implementation Schedule: On-going		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: City of Willis	Project Description: Implement the National Weather Service Skywarn program into local volunteer organizations to increase the number of volunteers providing the NWS with early notification of severe weather that may result in property damage and or flooding.	
2011 Mitigation Action No.: 2		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Public Information and Awareness		
Hazard(s) Addressed: Flood, Severe Thunderstorms, Tornadoes		
Priority: Medium		
Estimated Cost: 10000		
Potential Funding Sources: National Weather Service, USDA Rural Utilities Service-Weather Radio Grant Program, USDA-Environmental Quality Incentives Program, FEMA-Assistance to Fire Fighters Grant, FEMA-All Hazards Operational Planning, HMGP, PDM, Public-private partnership, FEMA-Homeland Security Grants		
Lead Agency/Department Responsible: County Emergency management Office, City of Willis and local community officials		
Implementation Schedule: Complete within 2 year of funding		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

City of Willis

Name of Jurisdiction: City of Willis	Project Description: Identify sites where stream and rain gauges are needed. Add or upgrade sites as needed and coordinate installation requests with USGS and River Authority. Additional sites will help provide early detection of potential flood areas to assist in evacuation and protection of property and inform the public of imminent hazard.
2011 Mitigation Action No.: 3	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Public Information and Awareness	
Hazard(s) Addressed: Flood	
Priority: Medium	
Estimated Cost: 250000	
Potential Funding Sources: Cost share with Montgomery County and local communities, FEMA-All Hazards Operational Planning, USDA Environmental Quality Incentives Program, EPA NPS Grant Program, USDA NRCS-Emergency Watershed Protection Agency, TWDB-Clean Water State Revolving Fund, TWDB (Development Fund II)-Texas Water Development Fund, USDA NRCS Watershed Protection and Flood Prevention Program, PDM, HMGP	
Lead Agency/Department Responsible: County EMC, City of Willis, USGS, local community officials	
Implementation Schedule: Complete within 1 year of funding	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

Name of Jurisdiction: City of Willis	Project Description: Enforce state regulations that prohibit dumping in streams, ditches and area waterways with concentration on those areas that have the potential to block the normal drainage of rainfall.
2011 Mitigation Action No.: 4	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Prevention	
Hazard(s) Addressed: Flood	
Priority: Medium	
Estimated Cost: 100000	
Potential Funding Sources: Cost share with Montgomery County and local communities, EPA-NPS Grant Program, USDA NRCS-Emergency Watershed Protection Agency, TWDB-Clean Water State Revolving Fund, TWDB (Development Fund II)-Texas Water Development Fund, USDA NRCS-Watershed Protection and Flood Prevention Program, PDM, HMGP	
Lead Agency/Department Responsible: County emergency Management, City of Willis, Environmental health Services and local community officials	
Implementation Schedule: On-going program	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

City of Willis

Name of Jurisdiction: City of Willis	Project Description: Implement water conservation education and incentives for low-flow plumbing and toilets, efficient washers and rain harvesting. Work with Lone Star Groundwater Conservation District and Agri Life Extension Service to promote and increase awareness for residents of Montgomery County pertaining to conserving, protecting and enhancing regional groundwater resources.	
2011 Mitigation Action No.: 5		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Public Information and Awareness		
Hazard(s) Addressed: Drought, Excessive Heat		
Priority: Medium		
Estimated Cost: 50000		
Potential Funding Sources: Cost share with Montgomery County, GCD, grants, private funds, TWDB, TNRIS, USDA-Environmental Quality Incentives Program, EPA-NPS Grant Program, USDA NRCS-Emergency Watershed Protection Agency, TWDB-Clean Water State Revolving Fund, PDM, HMGP		
Lead Agency/Department Responsible: County Emergency management, City of Willis, Environmental Health and local community officials		
Implementation Schedule: Ongoing program		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: City of Willis	Project Description: Implement actions to support regulations that assist in reducing excess ozone pollution and urban heat. May include actions such as providing incentives for developers to increase tree planting and a county-wide public education and awareness program to promote smog awareness, volunteer mass transit, carpooling, and health tips for living in a high ozone smog area.	
2011 Mitigation Action No.: 6		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Prevention		
Hazard(s) Addressed: Drought, Excessive Heat		
Priority: Medium		
Estimated Cost: 25000		
Potential Funding Sources: Public private partnership, staff time and resources, PDM, HMGP		
Lead Agency/Department Responsible: County Health District, City of Willis, county EMC, local community officials		
Implementation Schedule: Complete within 1 year of funding		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

City of Willis

Name of Jurisdiction: City of Willis	Project Description: Build stormwater detention pond on north end of John F. Kennedy and Turner Drive.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 1		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): Funding not available		
Category: Structural Project		
Hazard(s) Addressed: Flood		
Priority: High		
Estimated Cost: 200000		
Potential Funding Sources: USACE Small Flood Control Projects, USDA NRCS Emergency Watershed Protection Agency, TWDB Clean Water State Revolving Fund, TWDB (Development Fund II)-Texas Water Development Fund, USDA NRCS-Watershed Protection and Flood Prevention Program, EPA NPS Grant Program 406 Public Assistance Program, HMGP, PDM		
Lead Agency/Department Responsible: Public Works		
Implementation Schedule: 1-2 years		
Reduce effects of hazards on new buildings and infrastructure?: Yes		Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

Name of Jurisdiction: City of Willis	Project Description: Widen and re-grade Crystal Creek from Montgomery Street to Powell Street to reduce flooding issues in town.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 2		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): Funding not available		
Category: Structural Project		
Hazard(s) Addressed: Flood		
Priority: High		
Estimated Cost: 200000		
Potential Funding Sources: USACE Clearing and Snagging Projects, USACE Small Flood Control Projects, USDA NRCS Emergency Watershed Protection Agency, TWDB-Clean Water State Revolving Fund, TWDB (Development Fund II)-Texas Water Development Fund, USDA NRCS Watershed Protection and Flood Prevention Program, EPA NPS Grant Program, 406 Public Assistance Program, HMGP, PDM		
Lead Agency/Department Responsible: Public Works		
Implementation Schedule: 2-3 years		
Reduce effects of hazards on new buildings and infrastructure?: Yes		Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

City of Willis

Name of Jurisdiction: City of Willis	Project Description: Enlarge and improve culverts on Crystal Creek at Worsham Street.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 3		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): Funding not available		
Category: Structural Project		
Hazard(s) Addressed: Flood		
Priority: High		
Estimated Cost: 100000		
Potential Funding Sources: USACE Small Flood Control Projects, USDA NRCS Emergency Watershed Protection Agency, TWDB Clean Water State Revolving Fund, TWDB (Development Fund II)-Texas Water Development Fund, USDA NRCS Watershed Protection and Flood Prevention Program, EPA NPS Grant Program, HMGP, PDM, 406 Public Assistance Program		
Lead Agency/Department Responsible: Public Works		
Implementation Schedule: 2-3 years		
Reduce effects of hazards on new buildings and infrastructure?: Yes		Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

Name of Jurisdiction: City of Willis	Project Description: Locate and designate emergency crossings of Union Pacific Railroad tracks, for emergency services in case of derailment, blockage, or hazardous materials spill.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 4		
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions): Funding not available		
Category: Emergency Services		
Hazard(s) Addressed: Toxic Release/HAZMAT		
Priority: High		
Estimated Cost: 200000		
Potential Funding Sources: DOT Grants-in-Aid for Railroad Safety Program, FEMA Hazardous Materials Assistance Program, FEMA First Responder Counter-Terrorism Training Assistance, FEMA Emergency Management Performance Grant, FEMA All Hazards Operational Planning, 406 Public Assistance, HMGP, PDM		
Lead Agency/Department Responsible: Police Dept		
Implementation Schedule: 1-2 years		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

City of Willis

Name of Jurisdiction: City of Willis	Project Description: Improve drainage outfall from Willwood Subdivision to Janet Drive and from FM 2432 to Janet Drive. Regrade existing ditch and construct additional ditch length.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 5		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): Funding not available		
Category: Structural Project		
Hazard(s) Addressed: Flood		
Priority: High		
Estimated Cost: 250000		
Potential Funding Sources: USACE Small Flood Control Projects, USDA NRCS-Emergency Watershed Protection Agency, TWDB-Clean Water State Revolving Fund, TWDB (Development Fund II)-Texas Water Development Fund, USDA NRCS Watershed Protection and Flood Prevention Program, EPA NPS GrantProgram, 406 Public Assistance Program, HMGP, PDM		
Lead Agency/Department Responsible: Public Works		
Implementation Schedule: 1-2 years		
Reduce effects of hazards on new buildings and infrastructure?: Yes		Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

City of Woodbranch Village

Name of Jurisdiction: City of Woodbranch Village	Project Description: Attend CRS workshop hosted by H-GAC.	
2011 Mitigation Action No.: 1		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Public Information and Awareness		
Hazard(s) Addressed: Flood		
Priority: Medium		
Estimated Cost: 0		
Potential Funding Sources: N/A		
Lead Agency/Department Responsible: County Emergency Manager		
Implementation Schedule: 2013		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

Name of Jurisdiction: City of Woodbranch Village	Project Description: Conduct wildfire outreach and education campaign by distributing information at public buildings, town hall meetings, and other speaking engagements	
2011 Mitigation Action No.: 2		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Public Information and Awareness		
Hazard(s) Addressed: Wildfire, Drought		
Priority: High		
Estimated Cost: Unknown		
Potential Funding Sources: PDM, HMGP, TFS		
Lead Agency/Department Responsible: City of Woodbranch Village		
Implementation Schedule: Upon funding		
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

City of Woodbranch Village

Name of Jurisdiction: City of Woodbranch Village		Project Description: Conduct flood outreach and education campaign by distributing information at public meetings, townhall meetings, and other speaking engagements.
2011 Mitigation Action No.: 3		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Public Information and Awareness		
Hazard(s) Addressed: Flood, Hurricanes and Tropical Storms, Severe Thunderstorms		
Priority: High		
Estimated Cost: Unknown		
Potential Funding Sources: PDM, HMGP		
Lead Agency/Department Responsible: City of Woodbranch Village		
Implementation Schedule: Upon funding		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

Name of Jurisdiction: City of Woodbranch Village		Project Description: Facilitate and coordinate program to improve emergency management radio, paging capabilities and reception countywide through the purchase of new equipment and necessary training of emergency personnel in the county and in member communities.
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 1		
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions): Completed		
Category: Emergency Services		
Hazard(s) Addressed: All hazards		
Priority: High		
Estimated Cost: 250000		
Potential Funding Sources: National Weather Service, FEMA-Emergency Management Performance Grant, USDA Rural Utilities Service-Weather Radio Grant Program, USDA Environmental Quality Incentives Program, FEMA Assistance to Firefighters Grant, FEMA All Hazards Operational Planning, HMGP, PDM		
Lead Agency/Department Responsible: County Emergency Management, City of Woodbranch, Environmental Health and local community officials, hospitals administrators, sheriff, EMS		
Implementation Schedule: Completed by 2005		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

City of Woodbranch Village

Name of Jurisdiction: City of Woodbranch Village		Project Description: Develop and coordinate a local hazmat team (consisting of personnel from county and member communities); procure fully equipped hazmat mobile response vehicle to provide minor triage, decontamination.
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 2		
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions): Completed		
Category: Emergency Services		
Hazard(s) Addressed: Toxic Release/HAZMAT		
Priority: High		
Estimated Cost: 500000		
Potential Funding Sources: FEMA-Hazardous Materials Assistance Program, FEMA-Emergency Management Performance Grant, USDA-Environmental Quality Incentives Program, FEMA Assistance to Firefighters Grant, FEMA All Hazards Operational Planning		
Lead Agency/Department Responsible: County Emergency Management, City of Woodbranch, Environmental Health and local community officials, hospitals administrators		
Implementation Schedule: Completed by 2005		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: City of Woodbranch Village		Project Description: Implement public awareness campaign regarding HAZMAT safety, including risk communication, detection, shelter in place and evacuation procedures for HAZMAT events that occur as a result of a natural hazard such as hurricanes, floods, droughts, wildfires and tornadoes.
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 3		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): Funding not available		
Category: Public Information and Awareness		
Hazard(s) Addressed: Toxic Release/HAZMAT, Hurricanes and Tropical Storms, Flood, Drought, Wildfire, Tornadoes		
Priority: High		
Estimated Cost: 100000		
Potential Funding Sources: FEMA-Hazardous Materials Assistance Program, USDA-Environmental Quality Incentives Program, FEMA- Assistance to Fire Fighters Grant, FEMA- All Hazards Operational Planning, FEMA Homeland Security Grants		
Lead Agency/Department Responsible: County Emergency Management Office, City of Woodbranch and local community officials		
Implementation Schedule: Complete within 1 year of funding		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

City of Woodbranch Village

Name of Jurisdiction: City of Woodbranch Village		Project Description: Promote use of NOAA all-hazard radios throughout County for early warning and post-event information. Place radios in area schools, businesses, critical facilities.
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 4		
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions): Completed		
Category: Emergency Services, Public Information and Awareness		
Hazard(s) Addressed: All hazards		
Priority: High		
Estimated Cost: 10000		
Potential Funding Sources: National Weather Service, USDA-Rural Utilities Service-Weather Radio Grant Program, USDA-Environmental Quality Incentives Program, FEMA Assistance to Fire Fighters Grant, FEMA All Hazards Operational Planning, HMGP, PDM, Public-private partnership		
Lead Agency/Department Responsible: County Emergency Management, City of Woodbranch, Environmental Health and local community officials, hospitals administrators		
Implementation Schedule: Completed by 2005		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: City of Woodbranch Village		Project Description: Implement the National Weather Service Skywarn program into local volunteer organizations to increase the number of volunteers providing the NWS with early notification of severe weather that may result in property damage and or flooding.
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 5		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification: Yes		
Reason not complete (2006 actions): Funding not available		
Category: Public Information and Awareness		
Hazard(s) Addressed: Flood, Severe Thunderstorms, Tornadoes		
Priority: Medium		
Estimated Cost: 10000		
Potential Funding Sources: National Weather Service, USDA-Rural Utilities Service-Weather Radio Grant Program, USDA- Environmental Quality Incentives Program, FEMA- Assistance to Fire Fighters Grant, FEMA-All Hazards Operational Planning, HMGP, PDM, public-private partership, FEMAHomeland Security Grants		
Lead Agency/Department Responsible: County Emergency Management Office, City of Woodbranch and local community officials		
Implementation Schedule: Complete within 2 year of funding		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

City of Woodbranch Village

Name of Jurisdiction: City of Woodbranch Village	Project Description: Enforce state regulations that prohibit dumping in streams, ditches and area waterways with concentration on those areas that have the potential to block the normal drainage of rainfall.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 6	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification: Yes	
Reason not complete (2006 actions): Funding not available	
Category: Prevention	
Hazard(s) Addressed: Flood	
Priority: Medium	
Estimated Cost: 100000	
Potential Funding Sources: Cost share with Montgomery County and local communities, USDA-Environmental Quality Incentives Program, EPA NPS Grant Program, USDA NRCS-Emergency Watershed Protection Agency, TWDB-Clean Water State Revolving Fund, TWDB (Development Fund II)-Texas Water Development Fund, USDA NRCS-Watershed Protection and Flood Prevention Program	
Lead Agency/Department Responsible: County Emergency Management, City of Woodbranch, Environmental Health Services and local community officials	
Implementation Schedule: On-going Program	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

Name of Jurisdiction: City of Woodbranch Village	Project Description: Identify sites where stream and rain gauges are needed. Add or upgrade sites as needed and coordinate installation requests with USGS and River Authority. Additional sites will help provide early detection of potential flood areas to assist in evacuation and protection of property and inform the public of imminent hazard.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 7	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification: Yes	
Reason not complete (2006 actions): Funding not available	
Category: Prevention	
Hazard(s) Addressed: Flood	
Priority: Medium	
Estimated Cost: 250000	
Potential Funding Sources: Cost share with Montgomery county and local communities, FEMA-Hazardous Materials Assistance Program, USDA-Environmental Quality Incentives Program, EPA NPS Grant Program, USDA NRCS-Emergency Watershed Protection Agency, TWDB-Clean Water State RevolvingFund, TWDB (Development Fund II)-Texas Water Development Fund, USDA NRCS-Watershed Protection and Flood Prevention Program	
Lead Agency/Department Responsible: County EMC, City of Woodbranch, USGS, local community officials	
Implementation Schedule: Complete within 1 year of funding	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

City of Woodbranch Village

Name of Jurisdiction: City of Woodbranch Village		Project Description: Implement actions to support regulations that assist in reducing excess ozone pollution and urban heat. May include actions such as providing incentives for developers to increase tree planting and a county-wide public education and awareness program to promote smog awareness, volunteer mass transit, carpooling, and health tips for living in a high ozone smog area.
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 8		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): Funding not available		
Category: Prevention		
Hazard(s) Addressed: Drought, Excessive Heat		
Priority: Medium		
Estimated Cost: 25000		
Potential Funding Sources: Public Private partnership, staff time and resources		
Lead Agency/Department Responsible: County Health District, City of Woodbranch, County EMC, local community officials		
Implementation Schedule: Complete within 1 year of funding		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: City of Woodbranch Village		Project Description: Implement water conservation education and incentives for low-flow plumbing and toilets, efficient washers and rain harvesting. Work with Lone Star Groundwater Conservation District and Agri Life Extension Service to promote and increase awareness for residents of Montgomery County pertaining to conserving, protecting and enhancing regional groundwater resources.
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 9		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification: Yes		
Reason not complete (2006 actions): Funding not available		
Category: Prevention, Public Information and Awareness		
Hazard(s) Addressed: Drought, Excessive Heat		
Priority: Medium		
Estimated Cost: 50000		
Potential Funding Sources: Cost share with Montgomery County, GCD, grants, private funds, TWDB, TNRI, USDA-Environmental Quality Incentives Program, EPA-NPS Grant Program, USDA NRCS-Emergency Watershed Protection Agency, TWDB-Clean Water State Revolving Fund		
Lead Agency/Department Responsible: County Emergency Management, City of Woodbranch, Environmental Health and local community officials		
Implementation Schedule: On-going program		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

The Woodlands Township

Name of Jurisdiction: The Woodlands Township	Project Description: Install hurricane shutters on newly acquired Township property (City Hall) in order to house Fire Department Dispatch and the Emergency Operations Center.	
2011 Mitigation Action No.: 1		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Property Protection		
Hazard(s) Addressed: Hurricanes and Tropical Storms, Severe Thunderstorms, Hail		
Priority: Medium		
Estimated Cost: 400000		
Potential Funding Sources: HMGP, PPDM, Emergency Operations Center Funding, HLS-UASI		
Lead Agency/Department Responsible: The Woodlands Fire Dept		
Implementation Schedule: Completed by 2013		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: Yes	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: The Woodlands Township	Project Description: Construct and integrate safe room design within the Fire Department, Dispatch and Emergency Operations Center.	
2011 Mitigation Action No.: 2		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Emergency Services		
Hazard(s) Addressed: Hurricane and Tropical Storms		
Priority: Medium		
Estimated Cost: 200000		
Potential Funding Sources: HMGP, PDM, HLS-UASI, FEMA-EOC Funding		
Lead Agency/Department Responsible: The Woodlands Fire Dept		
Implementation Schedule: Completed by 2013		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

The Woodlands Township

Name of Jurisdiction: The Woodlands Township	Project Description: Purchase rescue boats for new fire station located south of Spring Creek - flood-prone areas.	
2011 Mitigation Action No.: 3		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Emergency Services		
Hazard(s) Addressed: Flood		
Priority: Medium		
Estimated Cost: 25000		
Potential Funding Sources: FEMA-Assistance to Firefighter Grant, HMGP, PDM, Emergency Management Performance Grant, All Hazards Operation Planning, HLS-UASI		
Lead Agency/Department Responsible: The Woodlands Fire Dept		
Implementation Schedule: 2012		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: The Woodlands Township	Project Description: Purchase flat bottom air boat for access and rescue in flood-prone areas.	
2011 Mitigation Action No.: 4		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Emergency Services		
Hazard(s) Addressed: Flood		
Priority: Medium		
Estimated Cost: 50000		
Potential Funding Sources: FEMA-Assistance to Firefighter Grant, HMGP, PDM, Emergency Management Performance Grant, All Hazards Operation Planning, HLS-UASI		
Lead Agency/Department Responsible: The Woodlands Fire Dept		
Implementation Schedule: 2012		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

The Woodlands Township

Name of Jurisdiction: The Woodlands Township	Project Description: Purchase and install building generator for Emergency Training Center and utilize for county/local/private emergency vehicle/utility vehicle staging.	
2011 Mitigation Action No.: 5		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Property Protection		
Hazard(s) Addressed: Hurricane and Tropical Storms, Flood, Tornadoes, Wind		
Priority: Medium		
Estimated Cost: 150000		
Potential Funding Sources: HMGP, Emergency Operations Center Funding, HLS-UASI		
Lead Agency/Department Responsible: The Woodlands Fire Dept		
Implementation Schedule: 2013		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: The Woodlands Township	Project Description: Implement drainage improvements for Bear Branch Park and Shadow Bend, Sawdust and Golden Road.	
2011 Mitigation Action No.: 6		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Property Protection		
Hazard(s) Addressed: Flood		
Priority: High		
Estimated Cost:		
Potential Funding Sources: FEMA-Emergency Operations Center Grant, HMGP, PDM, FEMA-Emergency Operations Planning Hazard Mitigation Grant, 406 Public Assistance, HLS- UASI		
Lead Agency/Department Responsible: County Commissioner's Office		
Implementation Schedule: 2014,2015		
Reduce effects of hazards on new buildings and infrastructure?: Yes		Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

The Woodlands Township

Name of Jurisdiction: The Woodlands Township	Project Description: Construct localized Community Safe Rooms strategically throughout The Woodlands (approx. 8).	
2011 Mitigation Action No.: 7		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Structural Projects		
Hazard(s) Addressed: Tornadoes		
Priority: Medium		
Estimated Cost:		
Potential Funding Sources: FEMA-Emergency Operations Center Grant, HMGP, PDM, FEMA-Emergency Operations Planning Hazard Mitigation Grant, 406 Public Assistance, HLS- UASI		
Lead Agency/Department Responsible: The Woodlands Township Parks Dept		
Implementation Schedule: Within 5 years		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: The Woodlands Township	Project Description: Develop and install a community hazard warning system, audio/hazard detection to alert citizens of imminent hazards.	
2011 Mitigation Action No.: 8		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Public Information and Awareness		
Hazard(s) Addressed: Tornadoes, Wind, Hurricanes and Tropical Storms, Toxic Release/HAZMAT, Radiological		
Priority: Medium		
Estimated Cost:		
Potential Funding Sources: FEMA- Assistance to Firefighter Grant, HMGP, PDM, Emergency Management Performance Grant, All Hazards Operation Planning, HLS- UASI		
Lead Agency/Department Responsible: The Woodlands Township Parks Dept		
Implementation Schedule: Within 5 years		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

The Woodlands Township

Name of Jurisdiction: The Woodlands Township	Project Description: Purchase two wildfire suppression vehicles with 4 wheel drive and pump and roll capacities.	
2011 Mitigation Action No.: 9		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Property Protection		
Hazard(s) Addressed: Wildfire		
Priority: Medium		
Estimated Cost: 175000		
Potential Funding Sources: FEMA-Emergency Operations Center Grant, HMGP, PDM, FEMA-Emergency Operations Planning Hazard Mitigation Grant, 406 Public Assistance, HLS- UASI		
Lead Agency/Department Responsible: The Woodlands Fire Dept		
Implementation Schedule: 2 years		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: Yes	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: The Woodlands Township	Project Description: Purchase mobile power generator unit to assist senior/assisted living centers and Joint Powers Authority.	
2011 Mitigation Action No.: 10		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Emergency Services		
Hazard(s) Addressed: Hurricane and Tropical Storms, Winter Storms, Tornadoes, Severe Thunderstorms		
Priority: Medium		
Estimated Cost: 100000		
Potential Funding Sources: FEMA-Emergency Operations Center Grant, HMGP, PDM, FEMA-Emergency Operations Planning Hazard Mitigation Grant, 406 Public Assistance, HLS-UASI		
Lead Agency/Department Responsible: The Woodlands Fire Dept		
Implementation Schedule: 2 years		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

The Woodlands Township

Name of Jurisdiction: The Woodlands Township	Project Description: Purchase and install 10,000 gallon diesel fuel service center for County and local, private emergency vehicles at Emergency Training Center.	
2011 Mitigation Action No.: 11		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Property Protection		
Hazard(s) Addressed: Hurricane and Tropical Storms		
Priority: Medium		
Estimated Cost: 80000		
Potential Funding Sources: FEMA-Emergency Operations Center Grant, HMGP, PDM, FEMA-Emergency Operations Planning Hazard Mitigation Grant, 406 Public Assistance, HLS-UASI		
Lead Agency/Department Responsible: The Woodlands Fire Dept		
Implementation Schedule: within 3 years		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: The Woodlands Township	Project Description: Purchase a small fire boat to be utilized on the "waterway" for rescue and structural exposure protection.	
2011 Mitigation Action No.: 12		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Emergency Services, Property Protection		
Hazard(s) Addressed: Flood, Hurricane and Tropical Storms, Wildfire		
Priority: Medium		
Estimated Cost: 175000		
Potential Funding Sources: FEMA-Emergency Operations Center Grant, HMGP, PDM, FEMA-Emergency Operations Planning Hazard Mitigation Grant, 406 Public Assistance, HLS-UASI, Brazos Transit Authority		
Lead Agency/Department Responsible: The Woodlands Fire Dept		
Implementation Schedule: within 5 years		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

The Woodlands Township

Name of Jurisdiction: The Woodlands Township	Project Description: Minor localized flood reduction projects.	
2011 Mitigation Action No.: 13		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Emergency Services, Property Protection		
Hazard(s) Addressed: Flood, Hurricane and Tropical Storms, Wildfire		
Priority: Medium		
Estimated Cost: 150000		
Potential Funding Sources: FEMA-Emergency Operations Center Grant, HMGP, PDM, FEMA-Emergency Operations Planning Hazard Mitigation Grant, 406 Public Assistance, HLS-UASI, Brazos Transit Authority		
Lead Agency/Department Responsible: The Woodlands Township Parks Dept		
Implementation Schedule: within 5 years		
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

Name of Jurisdiction: The Woodlands Township	Project Description: Raise pedestrian bridges that block drainage ways to prevent blockage and increase drainage flow.	
2011 Mitigation Action No.: 14		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Structural Projects		
Hazard(s) Addressed: Flood, Hurricane and Tropical Storms, Wildfire		
Priority: Medium		
Estimated Cost: 100000		
Potential Funding Sources: FEMA-Emergency Operations Center Grant, HMGP, PDM, FEMA-Emergency Operations Planning Hazard Mitigation Grant, 406 Public Assistance, HLS-UASI, Brazos Transit Authority		
Lead Agency/Department Responsible: The Woodlands Township Parks Dept		
Implementation Schedule: within 5 years		
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

The Woodlands Township

Name of Jurisdiction: The Woodlands Township	Project Description: Purchase Department of Energy Decontamination Module.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 1		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): Funding not available		
Category: Emergency Services		
Hazard(s) Addressed: Toxic Release/HAZMAT		
Priority: High		
Estimated Cost: 10000		
Potential Funding Sources: DOJ State Homeland Security Program, FEMA Hazardous Materials Assistance Program, FEMA-First Responder Counter-Terrorism Training Assistance, FEMA-Emergency Management Performance Grant, FEMA All Hazards Operational Planning		
Lead Agency/Department Responsible: The Woodland Fire Dept.		
Implementation Schedule: ASAP		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: The Woodlands Township	Project Description: Purchase Trident Technologies Pro Mag 6 Kit.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 2		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): Funding not available		
Category: Emergency Services		
Hazard(s) Addressed: Toxic Release/HAZMAT		
Priority: High		
Estimated Cost: 9850		
Potential Funding Sources: DOJ State Homeland Security Program, FEMA Hazardous Materials Assistance Program, FEMA-First Responder Counter-Terrorism Training Assistance, FEMA-Emergency Management Performance Grant, FEMA All Hazards Operational Planning		
Lead Agency/Department Responsible: The Woodland Fire Dept.		
Implementation Schedule: ASAP		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

The Woodlands Township

Name of Jurisdiction: The Woodlands Township	Project Description: Purchase personal protective clothing (NOMEX jumpsuits).	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 3		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): Funding not available		
Category: Emergency Services		
Hazard(s) Addressed: Toxic Release/HAZMAT		
Priority: High		
Estimated Cost: 400		
Potential Funding Sources: DOJ State Homeland Security Program, FEMA Hazardous Materials Assistance Program, FEMA-First Responder Counter-Terrorism Training Assistance, FEMA-Emergency Management Performance Grant, FEMA All Hazards Operational Planning		
Lead Agency/Department Responsible: The Woodland Fire Dept.		
Implementation Schedule: ASAP		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: The Woodlands Township	Project Description: Purchase four emergency signal lights for traffic control.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 4		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): Funding not available		
Category: Emergency Services		
Hazard(s) Addressed: All hazards		
Priority: High		
Estimated Cost:		
Potential Funding Sources: DOJ State Homeland Security Program, FEMA Hazardous Materials Assistance Program, FEMA-First Responder Counter-Terrorism Training Assistance, FEMA-Emergency Management Performance Grant, FEMA All Hazards Operational Planning, DOT Grant-in-Aid for Railroad Safety Program		
Lead Agency/Department Responsible: The Woodland Fire Dept.		
Implementation Schedule: ASAP		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

The Woodlands Township

Name of Jurisdiction: The Woodlands Township	Project Description: Purchase AM radio frequency/warning system.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 5		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): Funding not available		
Category: Emergency Services		
Hazard(s) Addressed: All hazards		
Priority: High		
Estimated Cost:		
Potential Funding Sources: National Weather Service, USDA-Rural Utilities Service-Weather Radio Grant Program, USDA Environmental Quality Incentives Program, HMGP, PDM, FEMA-Emergency Operations Center Funding, FEMA Emergency Management Performance Grant		
Lead Agency/Department Responsible: The Woodland Fire Dept.		
Implementation Schedule: ASAP		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: The Woodlands Township	Project Description: Develop auto dial-up phone emergency notification system to notify citizens of imminent natural hazards.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 6		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): Funding not available		
Category: Emergency Services		
Hazard(s) Addressed: All hazards		
Priority: High		
Estimated Cost:		
Potential Funding Sources: State/Federal Funding, USDA Environment Quality Incentives Program, National Weather Service, HMGP, PDM, FEMA Emergency Operations Center Funding, FEMA Emergency Management Performance Grant		
Lead Agency/Department Responsible: The Woodland Fire Dept.		
Implementation Schedule: ASAP		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Town of Woodloch

Name of Jurisdiction: Town of Woodloch	Project Description: Attend CRS workshop hosted by H-GAC.	
2011 Mitigation Action No.: 1		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Public Information and Awareness		
Hazard(s) Addressed: Flood		
Priority: Medium		
Estimated Cost: 0		
Potential Funding Sources: N/A		
Lead Agency/Department Responsible: County Emergency Manager		
Implementation Schedule: 2013		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

Name of Jurisdiction: Town of Woodloch	Project Description: Upgrade storm drain at east end of North Woodloch to reduce flooding.	
2011 Mitigation Action No.: 2		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Structural Project		
Hazard(s) Addressed: Flood		
Priority: High		
Estimated Cost:		
Potential Funding Sources: PDM, HMGP		
Lead Agency/Department Responsible: Town of Woodloch		
Implementation Schedule: Upon funding		
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

Town of Woodloch

Name of Jurisdiction: Town of Woodloch	Project Description: Remove hazardous fuels in drainage ditches and create fire break.
2011 Mitigation Action No.: 3	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Property Protection	
Hazard(s) Addressed: Wildfire, Drought	
Priority: High	
Estimated Cost:	
Potential Funding Sources: PDM, HMGP	
Lead Agency/Department Responsible: Town of Woodloch	
Implementation Schedule: Upon funding	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

Name of Jurisdiction: Town of Woodloch	Project Description: Facilitate and coordinate program to improve emergency management radio, paging capabilities and reception countywide through the purchase of new equipment and necessary training of emergency personnel in the county and in member communities.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 1	
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions): Completed	
Category: Emergency Services	
Hazard(s) Addressed: All hazards	
Priority: High	
Estimated Cost: 250000	
Potential Funding Sources: National Weather Service, USDA-Rural Utilities Service-Weather Radio Grant Program, USDA-Environmental Quality Incentives Program, FEMA Assistance to Fire Fighters Grant, FEMA All Hazards Operational Planning, HMGP, PDM	
Lead Agency/Department Responsible: County Emergency Management Office, City of Woodloch Environmental Health Services and local community officials, hospitals administrators, sheriffs, EMS	
Implementation Schedule: Completed by 2005	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Town of Woodloch

Name of Jurisdiction: Town of Woodloch		Project Description: Develop and coordinate a local hazmat team (consisting of personnel from county and member communities); procure fully equipped hazmat mobile response vehicle to provide minor triage, decontamination.
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 2		
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions): Completed		
Category: Emergency Services		
Hazard(s) Addressed: Toxic Release/HAZMAT		
Priority: High		
Estimated Cost: 500000		
Potential Funding Sources: FEMA-Hazardous Materials Assistance Program, FEMA-Emergency Management Performance Grant, USDA Environment Quality Incentives Program, FEMA Assistance to Fire Fighters Grant, FEMA All Hazards Operational Planning		
Lead Agency/Department Responsible: County Emergency Management Office, City of Woodloch Environmental Health Services and local community officials, hospitals administrators		
Implementation Schedule: Completed by 2005		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: Town of Woodloch		Project Description: Implement public awareness campaign regarding HAZMAT safety, including risk communication, detection, shelter in place and evacuation procedures for HAZMAT events that occur as a result of a natural hazard such as hurricanes, floods, droughts, wildfire, tornadoes.
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 3		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification: Yes		
Reason not complete (2006 actions): Funding not available		
Category: Public Information and Awareness		
Hazard(s) Addressed: Hurricane and Tropical Storms, Flood, Tornadoes, Drought, Wildfire		
Priority: High		
Estimated Cost: 100000		
Potential Funding Sources: FEMA-Hazardous materials Assistance Program, USDA-Environmental Quality Incentives Program, FEMA- Assistance to Fire Fighters Grant, FEMA- All Hazards Operational Planning, FEMA Homeland Security Grants		
Lead Agency/Department Responsible: County Emergency Management Office, City of Woodloch and local community officials		
Implementation Schedule: Complete within 1 year of funding		
Reduce effects of hazards on new buildings and infrastructure?: Yes		Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

Town of Woodloch

Name of Jurisdiction: Town of Woodloch		Project Description: Promote use of NOAA all-hazard radios throughout County for early warning and post-event information. Place radios in area schools, businesses, critical facilities.
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 4		
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions): Completed		
Category: Emergency Services, Public Information and Awareness		
Hazard(s) Addressed: All hazards		
Priority: High		
Estimated Cost: 10000		
Potential Funding Sources: National Weather Service, FEMA-Emergency Management Performance Grant, USDA Rural Utilities Service-Weather Radio Grant Program, USDA Environment Quality Incentives Program, FEMA Assistance to Firefighters Grant, FEMA All Hazards Operational Planning, HMGP, PDM, Public-Private partnership		
Lead Agency/Department Responsible: County Emergency Management Office, City of Woodloch Environmental Health Services and local community officials, hospitals administrators		
Implementation Schedule: Completed by 2005		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: Town of Woodloch		Project Description: Implement the National Weather Service Skywarn program into local volunteer organizations to increase the number of volunteers providing the NWS with early notification of severe weather that may result in property damage and/or flooding.
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 5		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification: Yes		
Reason not complete (2006 actions): Funding not available		
Category: Public Information and Awareness		
Hazard(s) Addressed: Flood, Severe Thunderstorms, Tornadoes		
Priority: Medium		
Estimated Cost: 10000		
Potential Funding Sources: National Weather Service, USDA Rural Utilities Service-Weather Radio Grant Program, USDA-Environmental Quality Incentives Program, FEMA-Assistance to Fire Fighters Grant, FEMA-All Hazards Operational Planning, HMGP, PDM, public-private partnership, FEMA-Homeland Security Grants		
Lead Agency/Department Responsible: County Emergency Management Office, City of Woodloch and local community officials		
Implementation Schedule: Complete within 1 year of funding		
Reduce effects of hazards on new buildings and infrastructure?: Yes		Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

Town of Woodloch

Name of Jurisdiction: Town of Woodloch	Project Description: Enforce state regulations that prohibit dumping in streams, ditches and area waterways with concentration on those areas that have the potential to block the normal drainage of rainfall.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 6	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): Funding not available	
Category: Prevention	
Hazard(s) Addressed: Flood	
Priority: Medium	
Estimated Cost: 100000	
Potential Funding Sources: Cost share with Montgomery County and local communities, USDA-Environmental Quality Incentives Program, EPA NPS Grant Program, USDA NRCS-Emergency Watershed Protection Agency, TWDB-Clean Water State Revolving Fund, TWDB (Development Fund II)-Texas Water Development Fund, USDA NRCS-Watershed Protection and Flood Prevention Program	
Lead Agency/Department Responsible: County Emergency Management Office, City of Woodloch Environmental Health Services and local community officials	
Implementation Schedule: Ongoing program	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

Name of Jurisdiction: Town of Woodloch	Project Description: Identify sites where stream and rain gauges are needed. Add or upgrade sites as needed and coordinate installation requests with USGS and River Authority. Additional sites will help provide early detection of potential flood areas to assist in evacuation and protection of property and inform the public of imminent hazard.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 7	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): Funding not available	
Category: Prevention	
Hazard(s) Addressed: Flood	
Priority: Medium	
Estimated Cost: 250000	
Potential Funding Sources: Cost share with Montgomery county and local communities, FEMA-Hazardous Materials Assistance Program, USDA- Environmental Quality Incentives Program, EPA NPS Grant Program, USDA NRCS-Emergency Watershed Protection Agency, TWDB-Clean Water State RevolvingFund, TWDB (Development Fund II)-Texas Water Development Fund, USDA NRCS-Watershed Protection and Flood Prevention Program	
Lead Agency/Department Responsible: County EMC, City of Woodloch,USGS, local community officials	
Implementation Schedule: Complete within 1 year of funding	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

Town of Woodloch

Name of Jurisdiction: Town of Woodloch	Project Description: Implement actions to support regulations that assist in reducing excess ozone pollution and urban heat. May include actions such as providing incentives for developers to increase tree planting and a county-wide public education and awareness program to promote smog awareness, volunteer mass transit, carpooling, and health tips for living in a high ozone smog area.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 8	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification: Yes	
Reason not complete (2006 actions): Funding not available	
Category: Prevention	
Hazard(s) Addressed: Drought, Excessive Heat	
Priority: Medium	
Estimated Cost: 25000	
Potential Funding Sources: Public Private partnership, staff time and resources	
Lead Agency/Department Responsible: County Health District, City of Woodloch, County EMC, local community officials	
Implementation Schedule: Complete within 1 year of funding	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: Town of Woodloch	Project Description: Coordinate water conservation education and incentives for low-flow plumbing and toilets, efficient washers and rain harvesting. Work with Lone Star Groundwater Conservation District to promote and increase awareness for residents of Montgomery County pertaining to conserving, protecting and enhancing regional groundwater resources.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 9	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): Funding not available	
Category: Prevention, Public Information and Awareness	
Hazard(s) Addressed: Drought, Excessive Heat	
Priority: Medium	
Estimated Cost: 50000	
Potential Funding Sources: Cost share with Montgomery County, GCD, grants, private funds, TWDB, TNRIS, USDA-Environmental Quality Incentives Program, EPA-NPS Grant Program, USDA NRCS-Emergency Watershed Protection Agency, TWDB-Clean Water State Revolving Fund	
Lead Agency/Department Responsible: County Emergency Management Office, City of Woodloch Environmental Health Services and local community officials	
Implementation Schedule: Complete within 1 year of funding	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Walker County

Name of Jurisdiction: Walker County	Project Description: Install permanently mounted 60 KW generator on a concrete pad at KSAM Radio Station to provide continuous broadcast services to citizens of the County.
2011 Mitigation Action No.: 1	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Property Protection	
Hazard(s) Addressed: Hurricane and Tropical Storms, Tornadoes, Wind, Winter Storms, Hail, Severe Thunderstorms	
Priority: High	
Estimated Cost: \$50,000	
Potential Funding Sources: HMGP	
Lead Agency/Department Responsible: Emergency management	
Implementation Schedule: one to two years	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: Walker County	Project Description: Install permanently mounted 600 KW generator on a concrete pad to ensure continuity of critical services at Walker County Courthouse.
2011 Mitigation Action No.: 2	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Property Protection	
Hazard(s) Addressed: Hurricane and Tropical Storms, Tornadoes, Wind, Winter Storms, Hail, Severe Thunderstorms	
Priority: High	
Estimated Cost: \$300,000	
Potential Funding Sources: HMGP	
Lead Agency/Department Responsible: Emergency management	
Implementation Schedule: one to two years	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Walker County

Name of Jurisdiction: Walker County	Project Description: Install permanently mounted 100 KW generator on a concrete pad at offices of Courthouse Annex Building #3 to provide continuous critical services to County.
2011 Mitigation Action No.: 3	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Property Protection	
Hazard(s) Addressed: Hurricane and Tropical Storms, Flood, Severe Thunderstorms, Tornadoes, Wildfire	
Priority: Medium	
Estimated Cost: \$100,000	
Potential Funding Sources: HMGP	
Lead Agency/Department Responsible: Emergency management	
Implementation Schedule: one to two years	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: Walker County	Project Description: Install permanently mounted 50 KW generator, three (3) phase, on a concrete pad at the offices of the Walker County District Attorney's Office to provide continuous Critical services to the County.
2011 Mitigation Action No.: 4	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Property Protection	
Hazard(s) Addressed: Hurricane and Tropical Storms, Flood, Severe Thunderstorms, Tornadoes, Wildfire	
Priority: Medium	
Estimated Cost: \$10,000	
Potential Funding Sources: HMGP	
Lead Agency/Department Responsible: Planning and Development Dept	
Implementation Schedule: one to two years	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Walker County

Name of Jurisdiction: Walker County	Project Description: Install Outdoor Early Warning System for the Cities of New Waverly and Riverside to provide citizens early warning of an impending disaster, or an event that would affect the life and/or property of the citizens.
2011 Mitigation Action No.: 5	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Public Information and Awareness	
Hazard(s) Addressed: Hurricane and Tropical Storms, Flood, Severe Thunderstorms, Tornadoes, Wildfire, Toxic Release/HAZMAT, Energy Pipeline Failure	
Priority: High	
Estimated Cost: \$125,000	
Potential Funding Sources: PDM Program, HMGP	
Lead Agency/Department Responsible: Emergency management	
Implementation Schedule: When funding is available	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: Walker County	Project Description: Structural retrofitting - harden facility at the Walker County Criminal Justice Center.
2011 Mitigation Action No.: 6	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Property Protection, Structural Project	
Hazard(s) Addressed: Hurricane and Tropical Storms, Flood	
Priority: High	
Estimated Cost: \$3,500,000	
Potential Funding Sources: PDM Program, HMGP	
Lead Agency/Department Responsible: County Judge	
Implementation Schedule: When funding is available	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Walker County

Name of Jurisdiction: Walker County	Project Description: Create defensible space per Walker County County-Wide Wildland Protection Plan around buildings in Elkins Lake, Lost Meadows, Smith Hill/Gospel Hill Community, Forgotten Forest, Sunset Lake, and Club Lake Watson Lake Subdivision.
2011 Mitigation Action No.: 7	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Property Protection	
Hazard(s) Addressed: Wildfire	
Priority: Medium	
Estimated Cost: \$2,000,000	
Potential Funding Sources: PDM Program, HMGP	
Lead Agency/Department Responsible: Emergency management	
Implementation Schedule: When funding is available	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: Walker County	Project Description: Mobile hospital.
2011 Mitigation Action No.: 8	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Emergency Services	
Hazard(s) Addressed: Hurricane and Tropical Storms, Flood, Toxic Release/HAZMAT, Energy Pipeline Failure, Tornadoes	
Priority: High	
Estimated Cost: \$3,000,000	
Potential Funding Sources: PDM Program, HMGP	
Lead Agency/Department Responsible: Emergency management	
Implementation Schedule: When funding is available	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Walker County

Name of Jurisdiction: Walker County	Project Description: Mobile command post.
2011 Mitigation Action No.: 9	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Emergency Services	
Hazard(s) Addressed: Hurricane and Tropical Storms, Flood, Wildfire, Tornadoes	
Priority: High	
Estimated Cost: \$750,000	
Potential Funding Sources: PDM Program, HMGP	
Lead Agency/Department Responsible: Emergency management	
Implementation Schedule: When funding is available	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: Walker County	Project Description: Obtain contingency fuel source to refuel generators and equipment to maintain continuity of government, emergency response and critical services.
2011 Mitigation Action No.: 10	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Property Protection	
Hazard(s) Addressed: Hurricane and Tropical Storms, Flood, Severe Thunderstorms, Tornadoes, Wildfire	
Priority: High	
Estimated Cost: \$100,000	
Potential Funding Sources: PDM Program, HMGP	
Lead Agency/Department Responsible: Emergency management	
Implementation Schedule: When funding is available	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Walker County

Name of Jurisdiction: Walker County	Project Description: Multi-purpose high water rescue/dive team/patrol boat.
2011 Mitigation Action No.: 11	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Emergency Services	
Hazard(s) Addressed: Hurricane and Tropical Storms, Flood	
Priority: High	
Estimated Cost: \$90,000	
Potential Funding Sources: PDM program, HMGP	
Lead Agency/Department Responsible: Emergency Management	
Implementation Schedule: When funding is available	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: Walker County	Project Description: Finish fiber optic communications project.
2011 Mitigation Action No.: 12	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Emergency Services	
Hazard(s) Addressed: Hurricane and Tropical Storms, Severe Thunderstorms, Wildfire, Tornadoes	
Priority: High	
Estimated Cost: \$125,000	
Potential Funding Sources: PDM Program, HMGP FEMA-All Hazards Operational Planning, FEMA-Fire Management Assistance Program, FEMA Emergency Operation Center Funding	
Lead Agency/Department Responsible: Emergency management	
Implementation Schedule: When funding is available	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Walker County

Name of Jurisdiction: Walker County	Project Description: Implement flood/weather warning systems (5).
2011 Mitigation Action No.: 13	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Public Information and Awareness	
Hazard(s) Addressed: Hurricane and Tropical Storms, Flood, Severe Thunderstorms	
Priority: High	
Estimated Cost: \$300,000	
Potential Funding Sources: PDM Program, HMGP	
Lead Agency/Department Responsible: Emergency management	
Implementation Schedule: When funding is available	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: Walker County	Project Description: Construct an animal shelter that will house animals of all kinds and size for use during events where sheltering will be needed.
2011 Mitigation Action No.: 14	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Structural Project	
Hazard(s) Addressed: Hurricane and Tropical Storms, Flood, Wildfire, Tornadoes	
Priority: Medium	
Estimated Cost: \$4,500,000	
Potential Funding Sources: PDM program, HMGP, HUD Disaster Recovery Initiative Program, FEMA- Emergency Management Planning Grants	
Lead Agency/Department Responsible: Emergency Management	
Implementation Schedule: When funding is available	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Walker County

Name of Jurisdiction: Walker County	Project Description: Construct two (2) new 7,000 square foot self sufficient, self contained storm shelters as we are a State Storm Shelter Hub.
2011 Mitigation Action No.: 15	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Structural Project	
Hazard(s) Addressed: Hurricane and Tropical Storms, Flood, Wildfire, Tornadoes	
Priority: High	
Estimated Cost: \$6,500,000	
Potential Funding Sources: FEMA Emergency Management Planning Grants, FEMA- Emergency Operations Center, PDM program, HMGP	
Lead Agency/Department Responsible: Emergency Management	
Implementation Schedule: When funding is available	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: Walker County	Project Description: Purchase automatic high water (flood) indicators to notify public that flash floods are imminent.
2011 Mitigation Action No.: 16	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Public Information and Awareness	
Hazard(s) Addressed: Flood	
Priority: High	
Estimated Cost: \$250,000	
Potential Funding Sources: HMGP, Flood Mitigation Assistance Program, PDM Program, HUD- Disaster Recovery Initiative Program, CDBG, FEMA-Emergency Management Performance Grant, USACE-Small Flood Control Projects, USDA NRCS-Watershed Protection and Flood Prevention Program	
Lead Agency/Department Responsible: Planning and Development Dept	
Implementation Schedule: one to four years	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

Walker County

Name of Jurisdiction: Walker County	Project Description: Construct safe room with generator at KSAM radio station.
2011 Mitigation Action No.: 17	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Structural Project	
Hazard(s) Addressed: Hurricane and Tropical Storms, Flood, Severe Thunderstorms, Tornadoes, Wildfire, Excessive Heat, Winter Storms	
Priority: High	
Estimated Cost:	
Potential Funding Sources: PDM, HMGP	
Lead Agency/Department Responsible: Walker County Emergency Management	
Implementation Schedule: When funding is available	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: Walker County	Project Description: Acquire 57 repetitive flood loss properties and properties prone to flooding in the Deep River Plantation Subdivision.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 1	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): Waiting for funding	
Category: Property Protection	
Hazard(s) Addressed: Flood	
Priority: High	
Estimated Cost: \$1,500,000	
Potential Funding Sources: HMGP, Flood Mitigation Assistance Program, PDM Program, HUD-Disaster Recovery Initiative Program, CDBG	
Lead Agency/Department Responsible: planning and Development Dept	
Implementation Schedule: When funding is available	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

Walker County

Name of Jurisdiction: Walker County	Project Description: Establish multi-jurisdictional Emergency Operations Center serving Walker County including cities of Huntsville, New Waverly and Riverside.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 2	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): Waiting for funding	
Category: Structural Project	
Hazard(s) Addressed: Wind, Hurricane and Tropical Storms, Flood	
Priority: High	
Estimated Cost: \$ 4,000,000	
Potential Funding Sources: REMA Emergency Operations Center, Dept of Justice- State Homeland Security Program, FEMA Emergency Management Planning Grants	
Lead Agency/Department Responsible: Emergency management	
Implementation Schedule: When funding is available	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: Walker County	Project Description: Purchase real-time weather tracking computer to identify and inform citizens of optimal days for hazardous fuels removal.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 3	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): Waiting for funding	
Category: Public Information and Awareness	
Hazard(s) Addressed: Tornadoes, Severe Thunderstorms, Hurricanes and Tropical Storms, Wildfire	
Priority: High	
Estimated Cost: \$20,000	
Potential Funding Sources: County funds, FEMA- All Hazards Emergency Operational Planning, FEMA Emergency Operation Center Funding, USDA Rural Utilities Services- Weather Radio Grant Program	
Lead Agency/Department Responsible: Emergency management	
Implementation Schedule: When funding is available	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Walker County

Name of Jurisdiction: Walker County	Project Description: Obtain topographical maps and aerial photography for Walker County to identify flood hazards and wildfire hazard areas.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 4	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): Waiting for funding	
Category: Prevention	
Hazard(s) Addressed: Flood, Wildfire	
Priority: Medium	
Estimated Cost: \$500,000	
Potential Funding Sources: FEMA Map Modernization Program, FEMA- Flood Hazard mapping Program Dept of the Interior, USGS- Mapping Standards Support, FEMA Flood Recovery Program	
Lead Agency/Department Responsible: Planning and Development Dept	
Implementation Schedule: When funding is available	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

Name of Jurisdiction: Walker County	Project Description: Elevate Hostetter and Gourd Creek roadways to prevent flooding on roadway.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 5	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): Waiting for funding	
Category: Structural Project	
Hazard(s) Addressed: Flood	
Priority: High	
Estimated Cost: \$400,000	
Potential Funding Sources: USACE-Small Flood Control Projects, USDA NRCS-Emergency Watershed Protection Agency, TWDB-Clean Water State Revolving Fund, TWDB (Development Fund II)-Texas Water Development Fund, EPA NPS Grant Program, PDM, HMGP, 406 Public Assistance Program USDA NRCS-Emergency Watershed Protection Agency	
Lead Agency/Department Responsible: County Commissioner, Precinct 4 Road and Bridge Dept	
Implementation Schedule: One to three years	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

Walker County

Name of Jurisdiction: Walker County	Project Description: Increase culvert size in Southwood Forest Subdivision.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 6		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): Waiting for funding		
Category: Structural Project		
Hazard(s) Addressed: Flood		
Priority: High		
Estimated Cost: \$90,000		
Potential Funding Sources: USACE-Small Flood Control Projects, USDA NRCS-Emergency Watershed Protection Agency, TWDB-Clean Water State Revolving Fund, TWDB (Development Fund II)-Texas Water Development Fund, USDA NRCS-Watershed Protection and Flood Prevention Program, EPA NPS GrantProgram, PDM, HMGP, 406 Public Assistance Program		
Lead Agency/Department Responsible: County Commissioner, Precinct 4 Road and Bridge Dept		
Implementation Schedule: one to two years		
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

City of Huntsville

Name of Jurisdiction: City of Huntsville	Project Description: Complete fiber optic communications link to all critical command centers.	
2011 Mitigation Action No.: 1		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action:		
Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Emergency Services		
Hazard(s) Addressed: Hurricane and Tropical Storms, Severe Thunderstorms, Wildfire, Tornadoes		
Priority: High		
Estimated Cost: \$125,000		
Potential Funding Sources: FEMA-Emergency Operations Center Funding, FEMA-Emergency Management Performance Grant, FEMA-All Hazards Operational Planning, FEMA-Fire Management Assistance Grants, HMGP		
Lead Agency/Department Responsible: Information Services		
Implementation Schedule: 2011-2016		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: City of Huntsville	Project Description: Install permanently mounted 60 KW generator on a concrete pad at KSAM Radio Station to provide continuous broadcast services.	
2011 Mitigation Action No.: 2		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action:		
Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Property Protection		
Hazard(s) Addressed: Hurricane and Tropical Storms, Flood, Tornadoes, Wildfire, Severe Thunderstorms		
Priority: High		
Estimated Cost: \$50,000		
Potential Funding Sources: HMGP, PDM, FEMA-All Hazards Operational Planning		
Lead Agency/Department Responsible: Community Services- Fleet		
Implementation Schedule: 2011-2016		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

City of Huntsville

Name of Jurisdiction: City of Huntsville	Project Description: Obtain contingency fuel source to refuel generators and equipment to maintain continuity of government, emergency response and critical services.
2011 Mitigation Action No.: 3	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Property Protection	
Hazard(s) Addressed: Hurricane and Tropical Storms, Severe Thunderstorms, Wildfire, Tornadoes	
Priority: High	
Estimated Cost: \$100,000	
Potential Funding Sources: FEMA-Emergency Management Performance Grant, FEMA-All Hazards Operational Planning, HMGP, Pre Disaster Mitigation	
Lead Agency/Department Responsible: Community Services- Fleet	
Implementation Schedule: 2011-2016	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: City of Huntsville	Project Description: Purchase portable message centers/signs to act as public notice related to hazards.
2011 Mitigation Action No.: 4	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Public Information and Awareness	
Hazard(s) Addressed: Hurricane and Tropical Storms, Flood, Severe Thunderstorms, Wildfire, Tornadoes, Toxic Release/HAZMAT	
Priority: High	
Estimated Cost: \$50,000	
Potential Funding Sources: USDA- Rural Utilities Service-Weather Radio Grant Program, USDA- Environmental Quality Incentives Performance Grant, HMGP, National Weather Service, FEMA- All hazards Operational Planning	
Lead Agency/Department Responsible: Public Safety- Emergency Management	
Implementation Schedule: 2011-2016	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

City of Huntsville

Name of Jurisdiction: City of Huntsville	Project Description: Install outdoor warning system to alert citizens of imminent natural hazards.	
2011 Mitigation Action No.: 5		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Public Information and Awareness		
Hazard(s) Addressed: Hurricane and Tropical Storms, Flood, Severe Thunderstorms, Tornadoes		
Priority: High		
Estimated Cost: \$500,000		
Potential Funding Sources: HMGP, PDM, FEMA-Emergency Management Performance Grant, FEMA-All Hazards Operational Planning		
Lead Agency/Department Responsible: Public Safety		
Implementation Schedule: 2011-2016		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: City of Huntsville	Project Description: Mobile hospital.	
2011 Mitigation Action No.: 6		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Emergency Services		
Hazard(s) Addressed: Hurricane and Tropical Storms, Flood, Wildfire, Toxic Release/HAZMAT, Energy Pipeline Failure		
Priority: High		
Estimated Cost: \$3,000,000		
Potential Funding Sources: FEMA-Emergency Operations Center Funding, FEMA-Emergency Management Performance Grant, FEMA-All Hazards Operational Planning, Dept. of Justice- State Home Land Security Program, HMGP		
Lead Agency/Department Responsible: Public Safety		
Implementation Schedule: As funding becomes available		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

City of Huntsville

Name of Jurisdiction: City of Huntsville	Project Description: Construct city operations/service center including safe room to maintain continuity of government.
2011 Mitigation Action No.: 7	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Structural Project	
Hazard(s) Addressed: Hurricane and Tropical Storms, Flood, Tornadoes, Severe Thunderstorms	
Priority: High	
Estimated Cost: \$5,000,000	
Potential Funding Sources: FEMA-Emergency Operations Center Funding, FEMA-Emergency Management Performance Grant, FEMA-All Hazards Operational Planning, FEMA- Fire Management Assistance Grants, Dept. of Justice-State Home Land Security Program, HMPG, PDM	
Lead Agency/Department Responsible: Public Safety, Emergency Management	
Implementation Schedule: As funding becomes available	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: City of Huntsville	Project Description: Install permanently mounted generators on concrete slab for remaining 5 water well sites, IT infrastructure, library, transfer station and airport.
2011 Mitigation Action No.: 8	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Property Protection, Prevention,	
Hazard(s) Addressed: Hurricane and Tropical Storms, Tornadoes, Severe Thunderstorms	
Priority: Medium	
Estimated Cost: \$400,000	
Potential Funding Sources: City Funds, HMGP, FEMA-All Hazards Operational Planning	
Lead Agency/Department Responsible: Public Works and Public Safety-Emergency Management	
Implementation Schedule: As funding becomes available	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

City of Huntsville

Name of Jurisdiction: City of Huntsville	Project Description: Complete master drainage study on all watersheds to lead to projects in Town Creek West, Tanyard Creek, McDonald Creek, McGarry Creek, Hadley Creek, Shepherd Creek, Prairie Branch.	
2011 Mitigation Action No.: 9		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Structural Project, Property Protection,		
Hazard(s) Addressed: Flood, Dam/Levee Failure		
Priority: Medium		
Estimated Cost: \$500,000		
Potential Funding Sources: Flood Mitigation Assistance, HMGP, PDM, USACE Small Flood Control Projects, USACE Planning Assistance to the States, USDA NRCS Watershed Protection and Flood Prevention Program, Texas Water Development Board Fund		
Lead Agency/Department Responsible: Public Safety-Fire/Emergency Management		
Implementation Schedule: 2011-2016		
Reduce effects of hazards on new buildings and infrastructure?: Yes		Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

Name of Jurisdiction: City of Huntsville	Project Description: Create defensible space per Walker County County-Wide Wildland Protection Plan around buildings in Elkins Lake, Lost Meadows, Smith Hill/Gospel Hill Community, Forgotten Forest, Sunset Lake, and Club Lake Watson Lake Subdivision.	
2011 Mitigation Action No.: 10		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Property Protection		
Hazard(s) Addressed: Wildfire		
Priority: Medium		
Estimated Cost:		
Potential Funding Sources:		
Lead Agency/Department Responsible:		
Implementation Schedule:		
Reduce effects of hazards on new buildings and infrastructure?: Yes		Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

City of Huntsville

Name of Jurisdiction: City of Huntsville	Project Description: Multi-jurisdictional mobile command post (equipped).
2011 Mitigation Action No.: 11	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Emergency Services	
Hazard(s) Addressed: Hurricane and Tropical Storms, Flood, Severe Thunderstorms, Tornadoes, Wildfire, Toxic Release/HAZMAT, Energy Pipeline Failure	
Priority: Medium	
Estimated Cost: \$750,000	
Potential Funding Sources: FEMA-Emergency Operations Center Funding, FEMA-Emergency Management Performance Grant, FEMA-All Hazards Operational Planning, FEMA-Fire Management Assistance Grants, HMGP, PDM, Dept of Justice-State Home Land Security Program	
Lead Agency/Department Responsible: Public Safety- Emergency Management	
Implementation Schedule: As funding becomes available	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: City of Huntsville	Project Description: Employ full-time fuel reduction and public information specialist.
2011 Mitigation Action No.: 12	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Prevention, Emergency Services,	
Hazard(s) Addressed: Wildfire	
Priority: Medium	
Estimated Cost: \$110,000	
Potential Funding Sources: City Funds, FEMA- Assistance to Firefighters Grant, FEMA- Fire Management Assistance Grants, FEMA-All Hazards Operations Grants	
Lead Agency/Department Responsible: Public Safety- Fire	
Implementation Schedule: 2011-2016	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

City of Huntsville

Name of Jurisdiction: City of Huntsville	Project Description: Construct Phase 2 of Town Creek East Mitigation Project to implement recommendations in study: increase drainage and increase culvert size, channelize.
2011 Mitigation Action No.: 13	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Structural	
Hazard(s) Addressed: Flood	
Priority: Medium	
Estimated Cost: \$1,000,000	
Potential Funding Sources: HMGP, PDM, USACE-Small Flood Control Projects, USACE-Planning Assistance to States, USDA NRCS-Watershed Protection and Flood Prevention Program	
Lead Agency/Department Responsible: Public Works- Engineering	
Implementation Schedule: 2011-2016	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

Name of Jurisdiction: City of Huntsville	Project Description: Continue to improve and practice large scale community immunization plan.
2011 Mitigation Action No.: 14	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Prevention, Property Protection,	
Hazard(s) Addressed: Toxic Release/HAZMAT	
Priority: Medium	
Estimated Cost:	
Potential Funding Sources: DOJ State Homeland Security Program, DOJ State and Local Domestic Preparedness Technical Assistance, Dept of Justice-State and Local Preparedness Exercise Support	
Lead Agency/Department Responsible: Public Safety- Emergency Management in conjunction with the TX Dept. of Health	
Implementation Schedule: 2011-2016	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

City of Huntsville

Name of Jurisdiction: City of Huntsville	Project Description: Multi-jurisdictional boat for high water rescue, patrol, dive team and fire suppression (equipped).
2011 Mitigation Action No.: 15	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Emergency Services	
Hazard(s) Addressed: Flood, Dam/Levee Failure	
Priority: Low	
Estimated Cost: \$90,000	
Potential Funding Sources: County/City Funds HMGP, PDM	
Lead Agency/Department Responsible: Public Safety-Fire/ Emergency Management	
Implementation Schedule: As funding becomes available	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: City of Huntsville	Project Description: Harden spillways and embankments to handle extreme flood events and Dawson Dam.
2011 Mitigation Action No.: 16	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Property Protection, Structural Project	
Hazard(s) Addressed: Flood	
Priority: Low	
Estimated Cost: \$300,000	
Potential Funding Sources: City Funds, Flood Mitigation Assistance, HMGP, PDM	
Lead Agency/Department Responsible: Public Works-Engineering	
Implementation Schedule: 2011-2016	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

City of Huntsville

Name of Jurisdiction: City of Huntsville	Project Description: Security (cameras and gates) for water and wastewater plants.
2011 Mitigation Action No.: 17	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Prevention	
Hazard(s) Addressed: Toxic Release/HAZMAT	
Priority: Low	
Estimated Cost: \$75,000	
Potential Funding Sources: HMGP, PDM, Flood Mitigation Assistant Program, HUD-Disaster Recovery Initiative Program, CDBG	
Lead Agency/Department Responsible: Public Works- Planning	
Implementation Schedule: As funding becomes available	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: City of Huntsville	Project Description: Acquisition of repetitive loss properties in the floodplain in Spring Lake Subdivision, Elkins Lake and Town Creek.
2011 Mitigation Action No.: 18	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Property Protection	
Hazard(s) Addressed: Flood	
Priority: Low	
Estimated Cost:	
Potential Funding Sources: HMGP, Flood Mitigation Assistant Program, PDM, HUD-Disaster Recovery Initiative Program, CDBG	
Lead Agency/Department Responsible: Public Works-Planning	
Implementation Schedule: As funding becomes available	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

City of Huntsville

Name of Jurisdiction: City of Huntsville	Project Description: Obtain topographical maps and aerial photography for flood and drainage improvements and map updating and to identify wildfire hazard areas.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 1	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification: Yes	
Reason not complete (2006 actions): Waiting for funding	
Category: Public Information and Awareness	
Hazard(s) Addressed: Flood, Wildfire	
Priority: High	
Estimated Cost: \$790,000	
Potential Funding Sources: FEMA Map Modernization Program, FEMA Flood Hazard mapping Program, FEMA-Flood Recovery Mapping, HMGP, PDM Program	
Lead Agency/Department Responsible: Planning and Development	
Implementation Schedule: 2004-2005	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

Name of Jurisdiction: City of Huntsville	Project Description: Establish fiber optic communications link to all critical command centers.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 2	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): Waiting for funding	
Category: Emergency Services	
Hazard(s) Addressed: All hazards	
Priority: High	
Estimated Cost: \$125,000	
Potential Funding Sources: FEMA-Emergency Management Performance Grant, FEMA-All Hazards Operational Planning, FEMA- Assistance to Firefighters Grant, FEMA Emergency Operations Center Funding, HMGP	
Lead Agency/Department Responsible: Information Systems	
Implementation Schedule: 2003-2004	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

City of Huntsville

Name of Jurisdiction: City of Huntsville	Project Description: Fortify radio station safe room and include generators to keep radio station operating to notify public during emergencies.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 3	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): Waiting for funding	
Category: Property Protection, Structural Project	
Hazard(s) Addressed: Hurricane and Tropical Storms, Flood, Severe Thunderstorms, Tornadoes, Toxic Release/HAZMAT, Energy Pipeline Failure, Wildfire	
Priority: Medium	
Estimated Cost: \$45,000	
Potential Funding Sources: USDA-Rural Utilities Service-Weather Radio Grant Program, USDA-Environmental Quality Incentives Performance Grant, FEMA All Hazards Operational Planning, public private partnership, FEMA-EMPG, HMGP, NWS	
Lead Agency/Department Responsible: Public Safety- Emergency Management	
Implementation Schedule: As funding becomes available	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: City of Huntsville	Project Description: Establish multi-jurisdictional Emergency Operations Center in Walker County.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 4	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): Waiting for funding	
Category: Structural Project	
Hazard(s) Addressed: Hurricane and Tropical Storms, Flood, Tornadoes, Wildfire	
Priority: High	
Estimated Cost: \$4,000,000	
Potential Funding Sources: HMGP, PDM, FEMA-Emergency Operations Center Funding, FEMA-Emergency Management Performance Grant, FEMA-All Hazards Operational Planning, DOJ State Home Land Security Program	
Lead Agency/Department Responsible: Public Safety- Emergency Management	
Implementation Schedule: As funding becomes available	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

City of Huntsville

Name of Jurisdiction: City of Huntsville	Project Description: Purchase automated high water indicator beacons for Bearkat Blvd and Town Creek to notify public that flash floods are imminent.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 5	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): Waiting for funding	
Category: Public Information and Awareness	
Hazard(s) Addressed: Flood, Hurricane and Tropical Storms	
Priority: High	
Estimated Cost: \$240,000	
Potential Funding Sources: City Funds, HMGP, PDM, FEMA-Emergency Management Performance Grant, FEMA-All Hazards Operational Planning, Flood Mitigation Assistance Program, USACE-Small Flood Control Projects, USDA NRCS-Watershed Protection and Flood Prevention Program	
Lead Agency/Department Responsible: Public works	
Implementation Schedule: 2011-2016	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

Name of Jurisdiction: City of Huntsville	Project Description: Purchase bucket lift truck to be used to reduce hazardous fuels and place public notice signs related to hazards.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 6	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): Waiting for funding	
Category: Property Protection, Public Information and Awareness	
Hazard(s) Addressed: Hurricane and Tropical Storms, Tornadoes, Wind, Flood	
Priority: High	
Estimated Cost: \$120,000	
Potential Funding Sources: FEMA-Emergency Management Performance Grant, FEMA-All Hazards Operational Planning, FEMA- Map Modernization Program, USACE-Planning Assistance to States, Flood Mitigation Grant Program,	
Lead Agency/Department Responsible: Public Works	
Implementation Schedule: As funding becomes available	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

City of Huntsville

Name of Jurisdiction: City of Huntsville	Project Description: Develop large-scale immunization plan in the event of a bio-terrorist attack.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 7		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): Waiting for funding		
Category: Prevention		
Hazard(s) Addressed: Bio-terrorism		
Priority: High		
Estimated Cost:		
Potential Funding Sources: Dept of Justice-State Homeland Security Program, DOJ State and Local Domestic Preparedness Technical Assistance, DOJ State and Local Domestic Preparedness Exercise Support		
Lead Agency/Department Responsible: TX Dept of Health		
Implementation Schedule:		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: City of Huntsville	Project Description: Install early warning system with voice messaging capabilities to alert citizens of imminent natural hazards.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 8		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): Waiting for funding		
Category: Public Information and Awareness		
Hazard(s) Addressed: Flood, Tornadoes, Severe Thunderstorms, Hurricanes and Tropical Storms		
Priority: Medium		
Estimated Cost: \$50,000		
Potential Funding Sources: USDA Rural Utilities Service-Weather Radio Grant Program, USDA-Environmental Quality Incentives Program, FEMA-Emergency Management Performance Grant, HMGP, National Weather Service, FEMA All Hazards Operational Planning, public private partnership		
Lead Agency/Department Responsible: Emergency Management		
Implementation Schedule: 3-5 years		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

City of Huntsville

Name of Jurisdiction: City of Huntsville	Project Description: Conduct structural engineering study on all public buildings.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 9		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): Waiting for funding		
Category: Property Protection, Structural Project		
Hazard(s) Addressed: Tornadoes, Wind, Toxic Release/HAZMAT, Energy Pipeline Failure		
Priority: Medium		
Estimated Cost: \$50,000		
Potential Funding Sources: City Budget, HMGP, PDM		
Lead Agency/Department Responsible: Public Works- Inspections		
Implementation Schedule: 2011-2016		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: City of Huntsville	Project Description: Purchase and install additional fire hydrants to assist in protecting lives and property in Tanglewood.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 10		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): Waiting for funding		
Category: Property Protection, Emergency Services		
Hazard(s) Addressed: Wildfire		
Priority: Medium		
Estimated Cost: \$30,0000		
Potential Funding Sources: FEMA-Fire Management Assistance Grants, HMGP, PDM		
Lead Agency/Department Responsible: Public Utilities-Water: Public Works-Engineering		
Implementation Schedule: 2011-2016		
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

City of Huntsville

Name of Jurisdiction: City of Huntsville		Project Description: Purchase 7 emergency generators for water well sites for potable water.
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 11		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): Waiting for funding		
Category: Property Protection		
Hazard(s) Addressed: Flood, Tornadoes, Hurricanes and Tropical Storms, Winter Storms, Wind		
Priority: Medium		
Estimated Cost: \$315,000		
Potential Funding Sources: FEMA All Hazards Operational Planning, HMGP, DOJ State Homeland Security Program, State Revolving Fund, USDA NRCS Watershed Protection and Flood Prevention Program, EPA NPS Grant Program		
Lead Agency/Department Responsible: Public Works and Recreation		
Implementation Schedule: 3-5 years		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: City of Huntsville		Project Description: Purchase real-time weather tracking computer to identify and inform citizens of optimal days for hazardous fuels removal.
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 12		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): Waiting for funding		
Category: Property Protection		
Hazard(s) Addressed: Tornadoes, Hurricane and Tropical Storms, Flood, Severe Thunderstorms, Winter Storms, Wildfire, Hail, Excessive Heat		
Priority: High		
Estimated Cost: \$20,000		
Potential Funding Sources: HMGP, PDM, National Weather Service, USDA Rural Utilities Services-Weather Radio Grant Program, FEMA Emergency Management Performance Grant, FEMA-All Hazards Operational Planning		
Lead Agency/Department Responsible: Public Safety- Emergency Management		
Implementation Schedule: As funding becomes available		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

City of Huntsville

Name of Jurisdiction: City of Huntsville	Project Description: Install communication tower and necessary hardware and software for fire stations 1 and 4 to maintain continuity of critical services.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 13	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): Waiting for funding	
Category: Property Protection	
Hazard(s) Addressed: Hurricane and Tropical Storms, Severe Thunderstorms, Tornadoes, Wildfire	
Priority: Medium	
Estimated Cost: \$200,000	
Potential Funding Sources: City Funds-Fire Station Construction Funds, FEMA- Emergency Management Performance Grants, FEMA-Assistant Firefighters Grant, HMGP, PDM	
Lead Agency/Department Responsible: Information Services	
Implementation Schedule: 2011-2016	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: City of Huntsville	Project Description: Enhance McDonald Creek drainage.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 14	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): Waiting for funding	
Category: Structural Project	
Hazard(s) Addressed: Flood	
Priority: Medium	
Estimated Cost: \$250,000	
Potential Funding Sources: USACE Small Flood Control Projects, USACE Planning Assistance to States, USDA NRCS-Watershed Protection and Flood Prevention Program, EPA-NPS Grant Program, TWDB Clean Water State Revolving Fund, TWDB (Development Fund II), HMGP	
Lead Agency/Department Responsible: Public Works	
Implementation Schedule: 2004-2005	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

City of Huntsville

Name of Jurisdiction: City of Huntsville	Project Description: Conduct hazardous fuel reduction along Town Creek.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 15		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): Waiting for funding		
Category: Property Protection		
Hazard(s) Addressed: Wildfire, Flood		
Priority: Medium		
Estimated Cost: \$1,000,000		
Potential Funding Sources: USACE Small Flood Control Projects, USACE Clearing and Snagging Projects, USACE Planning Assistance to States, USDA NRCS-Watershed Protection and Flood Prevention Program, EPA NPS Grant Program, TWDB Clean Water State Revolving Fund, TWDB (Development Fund II)-Texas Water Development Fund, HGMP		
Lead Agency/Department Responsible: Public Works		
Implementation Schedule: 2005-2006		
Reduce effects of hazards on new buildings and infrastructure?: Yes		Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

Name of Jurisdiction: City of Huntsville	Project Description: Purchase HAZMAT equipment.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 16		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): Waiting for funding		
Category: Emergency Services		
Hazard(s) Addressed: Toxic Release/HAZMAT, Technical Accidents, terrorism		
Priority: Medium		
Estimated Cost: \$700,000		
Potential Funding Sources: FEMA-Assistance to Firefighters Grant, FEMA-All Hazards Operations Grants, FEMA-All Hazardous Materials Assistance Program, FEMA-Emergency Management Performance Grants, Dept. of Justice-State Homeland Security Program		
Lead Agency/Department Responsible: Public Safety-Police/Fire/Emergency Management		
Implementation Schedule: 2011-2016		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

City of Huntsville

Name of Jurisdiction: City of Huntsville	Project Description: Conduct HAZMAT training.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 17		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): Waiting for funding		
Category: Emergency Services		
Hazard(s) Addressed: Toxic Release/HAZMAT, Technical Accidents, terrorism		
Priority: Medium		
Estimated Cost: \$50,000		
Potential Funding Sources: FEMA-Assistance to Firefighters Grant, Emergency Management Institute-First Responder Counter-Terrorism Training Assistance, FEMA-All Hazards Operations Grants, FEMA-All Hazardous Materials Assistance Program, FEMA-Emergency Management Performance Grants, DOJ-State Homeland Security Program, DOJ-State and Local Domestic Preparedness Technical Assistance		
Lead Agency/Department Responsible: Public Safety- Emergency Management		
Implementation Schedule: 2011-2016		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: City of Huntsville	Project Description: Create defensible space around residences located in Elkins Lake subdivision.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 18		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): Waiting for funding		
Category: Property Protection		
Hazard(s) Addressed: Wildfire		
Priority: Low		
Estimated Cost:		
Potential Funding Sources: FEMA Assistance to Firefighters Grant, FEMA Fire management Assistance Grants, FEMA All Hazards Operational Grants, USDA NRCS- Emergency Watershed Protection Program		
Lead Agency/Department Responsible: Fire Dept and Volunteer Fire Depts.		
Implementation Schedule: 2006		
Reduce effects of hazards on new buildings and infrastructure?: Yes		Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

City of New Waverly

Name of Jurisdiction: City of New Waverly	Project Description: Participating in CRS workshop hosted by H-GAC.
2011 Mitigation Action No.: 1	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Public Information and Awareness	
Hazard(s) Addressed: Flood, Toxic Release/HAZMAT	
Priority: High	
Estimated Cost: \$0	
Potential Funding Sources: NA	
Lead Agency/Department Responsible: City of New Waverly	
Implementation Schedule: As allowed by staffing needs	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

Name of Jurisdiction: City of New Waverly	Project Description: Revise and implement local floodplain regulations, to include a public information campaign on regulatory awareness.
2011 Mitigation Action No.: 2	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Public Information and Awareness, Prevention	
Hazard(s) Addressed: Flood	
Priority: High	
Estimated Cost: \$10,000	
Potential Funding Sources: State or federal grant funds	
Lead Agency/Department Responsible: City of New Waverly	
Implementation Schedule: 2013 or as funding becomes available	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

City of New Waverly

Name of Jurisdiction: City of New Waverly	Project Description: Floodplain study for watersheds within and affecting the City's municipal areas. Study to include generation of base flood elevation data acceptable by FEMA for map revision and identification of mitigation activities to improve water ways flood carrying capacities. Study to include approximately 4 miles of floodway, flood hazard area. Project may be completed in phases. Public information and awareness will be a component.
2011 Mitigation Action No.: 3	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Property Protection, Structural Projects	
Hazard(s) Addressed: Flood	
Priority: High	
Estimated Cost: \$2,500,000	
Potential Funding Sources: State or federal grant funds	
Lead Agency/Department Responsible: City of New Waverly	
Implementation Schedule: As funding becomes available	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

Name of Jurisdiction: City of New Waverly	Project Description: Install early warning system with voice messaging capabilities to alert citizens of imminent natural hazards.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 1	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): Waiting for funding	
Category: Public Information and Awareness	
Hazard(s) Addressed: All hazards	
Priority: High	
Estimated Cost: \$40,000	
Potential Funding Sources: USDA Rural Utilities Service-Weather Radio Grant Program, DOJ State Homeland Security Program, NWS, HMGP, PDM, FEMA-Emergency Operations Center Funding, FEMA-Emergency Management Performance Grant, USDA Environmental Quality Incentives Program	
Lead Agency/Department Responsible: Emergency Management	
Implementation Schedule: First quarter FY 2004	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

City of New Waverly

Name of Jurisdiction: City of New Waverly	Project Description: Create defensible space per Walker County County-Wide Wildland Protection Plan in Wildwood Shores Subdivision, Sam Houston Estates and Little Road Loop areas.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 2		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): Waiting for funding		
Category: Property Protection		
Hazard(s) Addressed: Wildfire		
Priority: Low		
Estimated Cost: \$1,500,000		
Potential Funding Sources: FEMA-Assistance to Fire Fighters Grant, FEMA-Fire Management Assistance Grants, FEMA-All Hazards Operational Planning Grants, USDA NRCS-Emergency Watershed Protection Program, HMGP, PDM		
Lead Agency/Department Responsible: Fire Dept and VFDs		
Implementation Schedule: January 2006-2010		
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

City of Riverside

Name of Jurisdiction: City of Riverside	Project Description: Revise and implement local floodplain regulations, to include a public information campaign on regulatory awareness.
2011 Mitigation Action No.: 1	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Public Information and Awareness, Prevention	
Hazard(s) Addressed: Flood	
Priority: High	
Estimated Cost: \$10,000	
Potential Funding Sources: State or federal grant funds	
Lead Agency/Department Responsible: City of Riverside	
Implementation Schedule: 2013 or as funding becomes available	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

Name of Jurisdiction: City of Riverside	Project Description: Participate in CRS workshop hosted by H-GAC.
2011 Mitigation Action No.: 2	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Public Information and Awareness	
Hazard(s) Addressed: Flood, Toxic Release/HAZMAT	
Priority: High	
Estimated Cost: \$0	
Potential Funding Sources: N/A	
Lead Agency/Department Responsible: City of Riverside	
Implementation Schedule: As allowed by staffing needs	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

City of Riverside

Name of Jurisdiction: City of Riverside	Project Description: Install early warning system with voice messaging capabilities to alert citizens of imminent natural hazards.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 1	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): Waiting for funding	
Category: Public Information and Awareness	
Hazard(s) Addressed: All hazards	
Priority: High	
Estimated Cost: \$40,000	
Potential Funding Sources: USDA Rural Utilities Service-Weather Radio Grant Program, DOJ State Homeland Security Program, NWS, HMPG, PDM, FEMA-Emergency Operations Center Funding, FEMA-Emergency Management Performance Grant, USDA Environmental Quality Incentives Program	
Lead Agency/Department Responsible: Emergency Management	
Implementation Schedule: First quarter FY 2004	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: City of Riverside	Project Description: Create defensible space per Walker County County-Wide Wildland Protection Plan in Acorn Hill subdivision.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 2	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): Waiting for funding	
Category: Property Protection	
Hazard(s) Addressed: Wildfire	
Priority: Low	
Estimated Cost: \$500,000	
Potential Funding Sources: FEMA-Assistance to Fire Fighters Grant, FEMA-Fire Management Assistance Grants, FEMA-All Hazards Operational Planning Grants, USDA NRCS-Emergency Watershed Protection Program, HMGP, PDM	
Lead Agency/Department Responsible: Fire Dept and VFDs	
Implementation Schedule: January 2006-2010	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Waller County

Name of Jurisdiction: Waller County	Project Description: Implement water smart awareness/education program.	
2011 Mitigation Action No.: 1		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Public Information and Awareness		
Hazard(s) Addressed: Drought		
Priority: High		
Estimated Cost: Unknown		
Potential Funding Sources: HMGP, PDM		
Lead Agency/Department Responsible: Waller County EMC		
Implementation Schedule: Dependent on Funding		
Reduce effects of hazards on new buildings and infrastructure?: Yes		Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: Waller County	Project Description: Purchase emergency generators for groundwater wells and drainage pumps in City of Waller.	
2011 Mitigation Action No.: 2		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Property Protection		
Hazard(s) Addressed: Drought, Flood, Hurricanes and Tropical Storms		
Priority: High		
Estimated Cost: \$541,081		
Potential Funding Sources: HMGP, PDM, CDBG		
Lead Agency/Department Responsible: Waller County EMC		
Implementation Schedule: Dependent on Funding		
Reduce effects of hazards on new buildings and infrastructure?: Yes		Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

Waller County

Name of Jurisdiction: Waller County	Project Description: Implement Ready, Set, Go program in wildfire urban interface areas and increase education with Emergency Service Districts to promote better public wildfire awareness.
2011 Mitigation Action No.: 3	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Public Information and Awareness	
Hazard(s) Addressed: Wildfire	
Priority: High	
Estimated Cost: Unknown	
Potential Funding Sources: HMGP, PDM	
Lead Agency/Department Responsible: Waller County EMC	
Implementation Schedule: Dependent on Funding	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: Waller County	Project Description: Coordinate with local fire departments to assist in acquiring grants for specialized portable wildfire fighting equipment and portable storage tankage.
2011 Mitigation Action No.: 4	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions): Funding	
Category: Emergency Services, Property Protection	
Hazard(s) Addressed: Wildfire	
Priority: High	
Estimated Cost: Unknown	
Potential Funding Sources: HMGP, PDM	
Lead Agency/Department Responsible: Waller County EMC	
Implementation Schedule: Dependent on Funding	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Waller County

Name of Jurisdiction: Waller County	Project Description: Construct safe room for EOC with emergency generator to maintain services at critical facility.
2011 Mitigation Action No.: 5	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Property Protection, Structural Project	
Hazard(s) Addressed: Hurricane and Tropical Storms, Wildfire, Severe Thunderstorms, Winter Storms, Excessive Heat, Wildfire, Drought	
Priority: High	
Estimated Cost:	
Potential Funding Sources: PDM, HMGP	
Lead Agency/Department Responsible: Waller County	
Implementation Schedule: Dependent on Funding	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: Waller County	Project Description: Conduct flood outreach and education campaign by distributing information at public buildings, townhall meetings, and other speaking engagements.
2011 Mitigation Action No.: 6	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Public Information and Awareness	
Hazard(s) Addressed: Flood	
Priority: Medium	
Estimated Cost:	
Potential Funding Sources: HMGP, PDM	
Lead Agency/Department Responsible: Waller County	
Implementation Schedule: Upon funding	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

Waller County

Name of Jurisdiction: Waller County	Project Description: Prepare a local emergency evacuation plan in coordination with TxDOT.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 1		
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions): Completed		
Category: Emergency Services		
Hazard(s) Addressed: Flood, Hurricanes and Tropical Storms, Severe Thunderstorms		
Priority: High		
Estimated Cost: Unknown		
Potential Funding Sources: TxDOT-Grants-in-aid, PDFM, FEMA-Hurricane Local Grant Program, FEMA-Emergency Management Performance Grant, Flood Mitigation Assistance Program, HMGP, USDA-Environmental Quality Incentives Program, FEMA-All Hazards Operational Planning, FEMA-Hazardous Materials Assistance Program, FEMA Fire Management Assistance Grants		
Lead Agency/Department Responsible: Waller County EMC		
Implementation Schedule: 24 months		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: Waller County	Project Description: Post signs in high profile areas when burn ban is in effect.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 2		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): On-going		
Category: Public Information and Awareness		
Hazard(s) Addressed: Drought, Wildfire		
Priority: High		
Estimated Cost: 2500		
Potential Funding Sources: FEMA-Fire Management Assistance Grants, HMGP, PDM, USDA NRCS-Environmental Quality Incentives Program, TxDOT		
Lead Agency/Department Responsible: Waller County EMC		
Implementation Schedule: 12 months		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Waller County

Name of Jurisdiction: Waller County	Project Description: Complete and maintain FEMA elevation certificates for all new/improved buildings in floodplain.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 3	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): On-going	
Category: Prevention	
Hazard(s) Addressed: Flood	
Priority: High	
Estimated Cost: Unknown	
Potential Funding Sources: At the cost of permitted applicant	
Lead Agency/Department Responsible: Waller County	
Implementation Schedule: 24 months	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

Name of Jurisdiction: Waller County	Project Description: Establish watershed-based planning initiatives to address the flood hazard with neighboring jurisdictions.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 4	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): Funding	
Category: Prevention	
Hazard(s) Addressed: Flood	
Priority: High	
Estimated Cost: Unknown	
Potential Funding Sources: USDA NRCS-Emergency Watershed Protection Agency, TWDB-Clean Water State Revolving Fund, TWDB (Development Fund II) TX Water Development Fund, USDA NRCS-Watershed Protection and Flood Prevention Program, EPA NPS Grant Program, HMGP, USACE-Planning Assistance to States	
Lead Agency/Department Responsible: Waller County	
Implementation Schedule: 12 months	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

Waller County

Name of Jurisdiction: Waller County	Project Description: Revise and update Flood Insurance Rate Maps.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 5		
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions): Completed		
Category: Prevention		
Hazard(s) Addressed: Flood		
Priority: High		
Estimated Cost:		
Potential Funding Sources: FEMA-Map Modernization Program, FEMA-Flood Hazard Mapping Program, Dept of Interior, USGS-Mapping Standards Support, FEMA-Flood Recovery Mapping		
Lead Agency/Department Responsible: Waller County		
Implementation Schedule: 1-2 years		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

City of Brookshire

Name of Jurisdiction: City of Brookshire	Project Description: Conduct wildfire outreach and education campaign by distributing information at public buildings, town hall meetings, and other speaking engagements.	
2011 Mitigation Action No.: 1		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Public Information and Awareness		
Hazard(s) Addressed: Wildfire		
Priority: Medium		
Estimated Cost:		
Potential Funding Sources: HMGP, PDM, Texas Forest Service		
Lead Agency/Department Responsible: City of Brookshire		
Implementation Schedule: Upon funding		
Reduce effects of hazards on new buildings and infrastructure?: Yes		Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: City of Brookshire	Project Description: Conduct flood outreach and education campaign by distributing information at public buildings, townhall meetings, and other speaking engagements.	
2011 Mitigation Action No.: 2		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Public Information and Awareness		
Hazard(s) Addressed: Flood		
Priority: Medium		
Estimated Cost:		
Potential Funding Sources: HMGP, PDM		
Lead Agency/Department Responsible: City of Brookshire		
Implementation Schedule: Upon funding		
Reduce effects of hazards on new buildings and infrastructure?: Yes		Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

City of Brookshire

Name of Jurisdiction: City of Brookshire	Project Description: Prepare a local emergency evacuation plan in coordination with TxDOT.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 1		
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions): Completed		
Category: Emergency Services		
Hazard(s) Addressed: Flood, Wind		
Priority: High		
Estimated Cost:		
Potential Funding Sources: TxDOT-Grants in aid, PDFM, FEMA-All Hazards Operational Planning, FEMA-Hazardous Materials Assistance Program, FEMA-Fire Mgmt Assistance Grants, PDM, FEMA-Emergency Mgmt Performance Grant, Flood Mitigation Assistance Program, HMGP, USDA Environmental Quality Incentives Program		
Lead Agency/Department Responsible: City of Brookshire		
Implementation Schedule: 18 months		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: City of Brookshire	Project Description: Post signs in high profile areas when burn ban is in effect.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 2		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): On-going		
Category: Public Information and Awareness		
Hazard(s) Addressed: Drought, Wildfire		
Priority: High		
Estimated Cost: \$2,500		
Potential Funding Sources: FEMA-Fire Management Assistance Grants, HMGP, PDM, USDA NRCS-Environmental Quality Incentives Program, TxDOT, USDA NRCS-Environmental Quality Incentives Program		
Lead Agency/Department Responsible: City of Brookshire		
Implementation Schedule: 12 months		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

City of Brookshire

Name of Jurisdiction: City of Brookshire	Project Description: Complete and maintain FEMA elevation certificates for all new/improved buildings in floodplain.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 3	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): Funding	
Category: Prevention	
Hazard(s) Addressed: Flood	
Priority: High	
Estimated Cost: Unknown	
Potential Funding Sources: At the cost of permit applicant	
Lead Agency/Department Responsible: City of Brookshire	
Implementation Schedule: 24 months	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

Name of Jurisdiction: City of Brookshire	Project Description: Complete a stormwater drainage study/plan for known problem areas.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 4	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): Funding	
Category: Prevention	
Hazard(s) Addressed: Flood	
Priority: High	
Estimated Cost: Unknown	
Potential Funding Sources: USACE-Planning Assistance to States, HMGP, PDM, USACE-Small Flood Control Projects, TWDB-Clean Water State Revolving fund, TWDB (Development Fund II)-TX Water Development Fund, USDA NRCS-Watershed Protection and Flood Prevention Program, EPA-NPS Grant Program	
Lead Agency/Department Responsible: City of Brookshire	
Implementation Schedule:	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

City of Brookshire

Name of Jurisdiction: City of Brookshire	Project Description: Revise and update Flood Insurance Rate Maps.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 5		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): Funding		
Category: Prevention		
Hazard(s) Addressed: Flood		
Priority: High		
Estimated Cost: Unknown		
Potential Funding Sources: FEMA-Map Modernization Program, FEMA-Flood Hazard Mapping Program, Dept of Interior, USGS-Mapping Standards Support, FEMA-Flood Recovery Mapping		
Lead Agency/Department Responsible: City of Brookshire		
Implementation Schedule: 1-2 years		
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

City of Hempstead

Name of Jurisdiction: City of Hempstead	Project Description: Conduct wildfire outreach and education campaign by distributing information at public buildings, town hall meetings, and other speaking engagements.	
2011 Mitigation Action No.: 1		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Public Information and Awareness		
Hazard(s) Addressed: Wildfire		
Priority: Medium		
Estimated Cost: Unknown		
Potential Funding Sources: HMGP, PDM, Texas Forest Service		
Lead Agency/Department Responsible: City of Hempstead		
Implementation Schedule: Upon funding		
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: City of Hempstead	Project Description: Conduct flood outreach and education campaign by distributing information at public buildings, townhall meetings, and other speaking engagements.	
2011 Mitigation Action No.: 2		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Public Information and Awareness		
Hazard(s) Addressed: Flood		
Priority: Medium		
Estimated Cost: Unknown		
Potential Funding Sources: HMGP, PDM		
Lead Agency/Department Responsible: City of Hempstead		
Implementation Schedule: Upon funding		
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

City of Hempstead

Name of Jurisdiction: City of Hempstead		Project Description: Prepare a local emergency evacuation plan in coordination with TxDOT.
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 1		
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions): Completed		
Category: Emergency Services		
Hazard(s) Addressed: Flood, Wind		
Priority: High		
Estimated Cost: Unknown		
Potential Funding Sources: TxDOT-Grants in aid, FEMA-All Hazards Operational Planning, FEMA-Hazardous Materials Assistance Program, FEMA-Fire Mgmt Assistance Grants, PDM, Flood Mitigation Assistance Program, HMGP, USDA Environmental Quality Incentives Program, FEMA Emergency Management Performance Grants		
Lead Agency/Department Responsible: City of Hempstead		
Implementation Schedule: 18 months		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: City of Hempstead		Project Description: Post signs in high profile areas when burn ban is in effect.
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 2		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): Funding		
Category: Public Information and Awareness		
Hazard(s) Addressed: Drought, Wildfire		
Priority: High		
Estimated Cost: \$2,500		
Potential Funding Sources: FEMA-Fire Management Assistance Grants, HMGP, PDM, USDA NRCS-Environmental Quality Incentives Program, TxDOT, USDA NRCS-Environmental Quality Incentives Program		
Lead Agency/Department Responsible: City of Hempstead		
Implementation Schedule: 12 months		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

City of Hempstead

Name of Jurisdiction: City of Hempstead	Project Description: Complete and maintain FEMA elevation certificates for all new/improved buildings in floodplain.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 3	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): Funding	
Category: Prevention	
Hazard(s) Addressed: Flood	
Priority: High	
Estimated Cost: Unknown	
Potential Funding Sources: At the cost of the permit applicant	
Lead Agency/Department Responsible: City of Hempstead	
Implementation Schedule: 24 months	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

Name of Jurisdiction: City of Hempstead	Project Description: Complete a stormwater drainage study/plan for known problem areas.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 4	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): Funding	
Category: Prevention	
Hazard(s) Addressed: Flood	
Priority: High	
Estimated Cost: Unknown	
Potential Funding Sources: USACE-Planning Assistance to States, HMGP, PDM, USACE-Small Flood Control Projects, TWDB-Clean Water State Revolving fund, TWDB (Development Fund II)-TX Water Development Fund, USDA NRCS-Watershed Protection and Flood Prevention Program, EPA-NPS Grant Program	
Lead Agency/Department Responsible: City of Hempstead	
Implementation Schedule: 24 months	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

City of Hempstead

Name of Jurisdiction: City of Hempstead	Project Description: Revise and update Flood Insurance Rate Maps.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 5		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): Funding		
Category: Prevention		
Hazard(s) Addressed: Flood		
Priority: High		
Estimated Cost: Unknown		
Potential Funding Sources: FEMA-Map Modernization Program, FEMA-Flood Hazard Mapping Program, Dept of Interior, USGS-Mapping Standards Support, FEMA-Flood Recovery Mapping		
Lead Agency/Department Responsible: City of Hempstead		
Implementation Schedule: 1-2 years		
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

City of Pattison

Name of Jurisdiction: City of Pattison	Project Description: Conduct wildfire outreach and education campaign by distributing information at public buildings, town hall meetings, and other speaking engagements.	
2011 Mitigation Action No.: 1		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Public Information and Awareness		
Hazard(s) Addressed: Wildfire		
Priority: Medium		
Estimated Cost: Unknown		
Potential Funding Sources: HMGP, PDM, Texas Forest Service		
Lead Agency/Department Responsible: City of Pattison		
Implementation Schedule: Upon funding		
Reduce effects of hazards on new buildings and infrastructure?: Yes		Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: City of Pattison	Project Description: Conduct flood outreach and education campaign by distributing information at public buildings, townhall meetings, and other speaking engagements.	
2011 Mitigation Action No.: 2		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Public Information and Awareness		
Hazard(s) Addressed: Flood		
Priority: Medium		
Estimated Cost: Unknown		
Potential Funding Sources: HMGP, PDM		
Lead Agency/Department Responsible: City of Pattison		
Implementation Schedule: Upon funding		
Reduce effects of hazards on new buildings and infrastructure?: Yes		Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

City of Pattison

Name of Jurisdiction: City of Pattison	Project Description: Prepare a local emergency evacuation plan in coordination with TxDOT.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 1		
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions): Completed		
Category: Emergency Services		
Hazard(s) Addressed: Flood, Wind		
Priority: High		
Estimated Cost: Unknown		
Potential Funding Sources: TxDOT-Grants in aid, FEMA-All Hazards Operational Planning, FEMA-Hazardous Materials Assistance Program, FEMA-Fire Mgmt Assistance Grants, PDM, FEMA-Emergency Mgmt Performance Grant, Flood Mitigation Assistance Program, HMGP, USDA Environmental Quality Incentives Program, FEMA Hurricane Local Grant Program		
Lead Agency/Department Responsible: City of Pattison		
Implementation Schedule: 18 months		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: City of Pattison	Project Description: Post signs in high profile areas when burn ban is in effect.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 2		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): On-going		
Category: Public Information and Awareness		
Hazard(s) Addressed: Drought, Wildfire		
Priority: High		
Estimated Cost: \$2,500		
Potential Funding Sources: FEMA-Fire Management Assistance Grants, HMGP, PDM, USDA NRCS-Environmental Quality Incentives Program, TxDOT		
Lead Agency/Department Responsible: City of Pattison		
Implementation Schedule: 12 months		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

City of Pattison

Name of Jurisdiction: City of Pattison	Project Description: Complete and maintain FEMA elevation certificates for all new/improved buildings in floodplain.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 3	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): Funding	
Category: Prevention	
Hazard(s) Addressed: Flood	
Priority: High	
Estimated Cost: Unknown	
Potential Funding Sources: At the cost of the permit applicant	
Lead Agency/Department Responsible: City of Pattison	
Implementation Schedule: 24 months	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

Name of Jurisdiction: City of Pattison	Project Description: Complete a stormwater drainage study/plan for known problem areas.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 4	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): Funding	
Category: Prevention	
Hazard(s) Addressed: Flood	
Priority: High	
Estimated Cost: Unknown	
Potential Funding Sources: USACE-Planning Assistance to States, HMGP, PDM, USACE-Small Flood Control Projects, TWDB-Clean Water State Revolving fund, TWDB (Development Fund II)-TX Water Development Fund, USDA NRCS-Watershed Protection and Flood Prevention Program, EPA-NPS Grant Program	
Lead Agency/Department Responsible: City of Pattison	
Implementation Schedule: 24 months	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

City of Pattison

Name of Jurisdiction: City of Pattison	Project Description: Revise and update Flood Insurance Rate Maps.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 5		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): Funding		
Category: Prevention		
Hazard(s) Addressed: Flood		
Priority: High		
Estimated Cost: Unknown		
Potential Funding Sources: FEMA-Map Modernization Program, FEMA-Flood Hazard Mapping Program, Dept of Interior, USGS-Mapping Standards Support, FEMA-Flood Recovery Mapping		
Lead Agency/Department Responsible: City of Pattison		
Implementation Schedule: 1-2 years		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

Town of Pine Island

Name of Jurisdiction: Town of Pine Island	Project Description: Conduct wildfire outreach and education campaign by distributing information at public buildings, town hall meetings, and other speaking engagements.	
2011 Mitigation Action No.: 1		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Public Information and Awareness		
Hazard(s) Addressed: Wildfire		
Priority: Medium		
Estimated Cost: Unknown		
Potential Funding Sources: HMGP, PDM, Texas Forest Service		
Lead Agency/Department Responsible: Town of Pine Island		
Implementation Schedule: Upon funding		
Reduce effects of hazards on new buildings and infrastructure?: Yes		Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: Town of Pine Island	Project Description: Conduct flood outreach and education campaign by distributing information at public buildings, townhall meetings, and other speaking engagements.	
2011 Mitigation Action No.: 2		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Public Information and Awareness		
Hazard(s) Addressed: Flood		
Priority: Medium		
Estimated Cost: Unknown		
Potential Funding Sources: HMGP, PDM		
Lead Agency/Department Responsible: Town of Pine Island		
Implementation Schedule: Upon funding		
Reduce effects of hazards on new buildings and infrastructure?: Yes		Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

Town of Pine Island

Name of Jurisdiction: Town of Pine Island	Project Description: Prepare a local emergency evacuation plan in coordination with TxDOT.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 1		
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions): Completed		
Category: Emergency Services		
Hazard(s) Addressed: Flood, Wind		
Priority: High		
Estimated Cost: Unknown		
Potential Funding Sources: TxDOT-Grants in aid, FEMA-All Hazards Operational Planning, FEMA-Hazardous Materials Assistance Program, FEMA-Fire Mgmt Assistance Grants, PDM, FEMA-Emergency Mgmt Performance Grant, Flood Mitigation Assistance Program, HMGP, USDA Environmental Quality Incentives Program, FEMA Hurricane Local Grant Program		
Lead Agency/Department Responsible: Town of Pine Island		
Implementation Schedule: 18 months		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: Town of Pine Island	Project Description: Post signs in high profile areas when burn ban is in effect.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 2		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): On-going		
Category: Public Information and Awareness		
Hazard(s) Addressed: Drought, Wildfire		
Priority: High		
Estimated Cost: \$2,500		
Potential Funding Sources: FEMA-Fire Management Assistance Grants, HMGP, PDM, USDA NRCS-Environmental Quality Incentives Program, TxDOT		
Lead Agency/Department Responsible: Town of Pine Island		
Implementation Schedule: 12 months		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Town of Pine Island

Name of Jurisdiction: Town of Pine Island	Project Description: Complete and maintain FEMA elevation certificates for all new/improved buildings in floodplain.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 3	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): Funding	
Category: Prevention	
Hazard(s) Addressed: Flood	
Priority: High	
Estimated Cost: Unknown	
Potential Funding Sources: At the cost of the permit applicant	
Lead Agency/Department Responsible: Town of Pine Island	
Implementation Schedule: 24 months	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

Name of Jurisdiction: Town of Pine Island	Project Description: Complete a stormwater drainage study/plan for known problem areas.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 4	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): Funding	
Category: Prevention	
Hazard(s) Addressed: Flood	
Priority: High	
Estimated Cost: Unknown	
Potential Funding Sources: USACE-Planning Assistance to States, HMGP, PDM, USACE-Small Flood Control Projects, TWDB-Clean Water State Revolving fund, TWDB (Development Fund II)-TX Water Development Fund, USDA NRCS-Watershed Protection and Flood Prevention Program, EPA-NPS Grant Program	
Lead Agency/Department Responsible: Town of Pine Island	
Implementation Schedule: 24 months	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

Town of Pine Island

Name of Jurisdiction: Town of Pine Island	Project Description: Revise and update Flood Insurance Rate Maps.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 5		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): Funding		
Category: Prevention		
Hazard(s) Addressed: Flood		
Priority: High		
Estimated Cost: Unknown		
Potential Funding Sources: FEMA-Map Modernization Program, FEMA-Flood Hazard Mapping Program, Dept of Interior, USGS-Mapping Standards Support, FEMA-Flood Recovery Mapping		
Lead Agency/Department Responsible: Town of Pine Island		
Implementation Schedule: 1-2 years		
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

City of Prairie View

Name of Jurisdiction: City of Prairie View	Project Description: Construct shelter/safe room at emergency operations center.
2011 Mitigation Action No.: 1	
2006 Mitigation Action No.:	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions):	
Category: Structural Project, Property Protection	
Hazard(s) Addressed: Flood, Wildfire, Hurricanes and Tropical Storms, Tornadoes, Severe Thunderstorms, Winter Storms	
Priority: High	
Estimated Cost: Unknown	
Potential Funding Sources: PDM, HMGP	
Lead Agency/Department Responsible: City of Prairie View, Waller County	
Implementation Schedule: Upon funding	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

Name of Jurisdiction: City of Prairie View	Project Description: Prepare a local emergency evacuation plan in coordination with TxDOT.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 1	
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:	
Reason not complete (2006 actions): Completed	
Category: Emergency Services	
Hazard(s) Addressed: Flood, Wind	
Priority: High	
Estimated Cost: Unknown	
Potential Funding Sources: TxDOT-Grants in aid, PDFM, FEMA-All Hazards Operational Planning, FEMA-Hazardous Materials Assistance Program, FEMA-Fire Mgmt Assistance Grants, PDM, FEMA-Emergency Mgmt Performance Grant, Flood Mitigation Assistance Program, HMGP, USDA Environmental Quality Incentives Program	
Lead Agency/Department Responsible: City of Prairie View	
Implementation Schedule: 18 months	
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No	

City of Prairie View

Name of Jurisdiction: City of Prairie View		Project Description: Post signs in high profile areas when burn ban is in effect. Signs will provide the public with ways to comply with the burn ban. Signs will be placed in public buildings and be made available to commercial businesses to place in storefront windows. The City will also notify local residents via its telephone message notification system. This will be a pre-recorded voice mail message notifying the public of the burn ban with ways to comply with the ban and where to obtain additional information.
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 2		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): On-going		
Category: Public Information and Awareness		
Hazard(s) Addressed: Drought, Wildfire		
Priority: High		
Estimated Cost: \$2,500		
Potential Funding Sources: FEMA-Fire Management Assistance Grants, HMGP, PDM, USDA NRCS-Environmental Quality Incentives Program, TxDOT, USDA NRCS-Environmental Quality Incentives Program		
Lead Agency/Department Responsible: City of Prairie View		
Implementation Schedule: 12 months		
Reduce effects of hazards on new buildings and infrastructure?: No		Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: City of Prairie View		Project Description: Complete and maintain FEMA elevation certificates for all new/improved buildings in floodplain.
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 3		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): Funding		
Category: Prevention		
Hazard(s) Addressed: Flood		
Priority: High		
Estimated Cost: Unknown		
Potential Funding Sources: At the cost of the permit applicant		
Lead Agency/Department Responsible: City of Prairie View		
Implementation Schedule: 24 months		
Reduce effects of hazards on new buildings and infrastructure?: Yes		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

City of Prairie View

Name of Jurisdiction: City of Prairie View	Project Description: Complete a stormwater drainage study/plan for known problem areas.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 4		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): Funding		
Category: Prevention		
Hazard(s) Addressed: Flood		
Priority: High		
Estimated Cost: Unknown		
Potential Funding Sources: USACE-Planning Assistance to States, HMGP, PDM, USACE-Small Flood Control Projects, TWDB-Clean Water State Revolving fund, TWDB (Development Fund II)-TX Water Development Fund, USDA, NRCS-Watershed Protection and Flood Prevention Program, EPA-NPS Grant Program		
Lead Agency/Department Responsible: City of Prairie View		
Implementation Schedule: 24 months		
Reduce effects of hazards on new buildings and infrastructure?: Yes		Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

Name of Jurisdiction: City of Prairie View	Project Description: Revise and update Flood Insurance Rate Maps.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 5		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): Funding		
Category: Prevention		
Hazard(s) Addressed: Flood		
Priority: High		
Estimated Cost: Unknown		
Potential Funding Sources: FEMA-Map Modernization Program, FEMA-Flood Hazard Mapping Program, Dept of Interior, USGS-Mapping Standards Support, FEMA-Flood Recovery Mapping		
Lead Agency/Department Responsible: City of Prairie View		
Implementation Schedule: 1-2 years		
Reduce effects of hazards on new buildings and infrastructure?: Yes		Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

City of Waller

Name of Jurisdiction: City of Waller	Project Description: Conduct wildfire outreach and education campaign by distributing information at public buildings, town hall meetings, and other speaking engagements.	
2011 Mitigation Action No.: 1		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Public Information and Awareness		
Hazard(s) Addressed: Wildfire		
Priority: Medium		
Estimated Cost: Unknown		
Potential Funding Sources: HMGP, PDM, Texas Forest Service		
Lead Agency/Department Responsible: City of Waller		
Implementation Schedule: Upon funding		
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: City of Waller	Project Description: Conduct flood outreach and education campaign by distributing information at public buildings, townhall meetings, and other speaking engagements.	
2011 Mitigation Action No.: 2		
2006 Mitigation Action No.:		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions):		
Category: Public Information and Awareness		
Hazard(s) Addressed: Flood		
Priority: Medium		
Estimated Cost: Unknown		
Potential Funding Sources: HMGP, PDM		
Lead Agency/Department Responsible: City of Waller		
Implementation Schedule: Upon funding		
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

City of Waller

Name of Jurisdiction: City of Waller	Project Description: Prepare a local emergency evacuation plan in coordination with TxDOT.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 1		
Status of 2006 Mitigation Action: Complete: Yes In Progress: No Longer Pursuing: Carry On: Carry On With Modification:		
Reason not complete (2006 actions): Completed		
Category: Emergency Services		
Hazard(s) Addressed: Flood, Wind		
Priority: High		
Estimated Cost: Unknown		
Potential Funding Sources: TxDOT-Grants in aid, FEMA-All Hazards Operational Planning, FEMA-Hazardous Materials Assistance Program, FEMA-Fire Mgmt Assistance Grants, PDM, FEMA-Emergency Mgmt Performance Grant, Flood Mitigation Assistance Program, HMGP, USDA Environmental Quality Incentives Program, FEMA Hurricane Local Grant Grant Program		
Lead Agency/Department Responsible: City of Waller		
Implementation Schedule: 18 months		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

Name of Jurisdiction: City of Waller	Project Description: Post signs in high profile areas when burn ban is in effect.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 2		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): On-going		
Category: Public Information and Awareness		
Hazard(s) Addressed: Drought, Wildfire		
Priority: High		
Estimated Cost: \$2,500		
Potential Funding Sources: FEMA-Fire Management Assistance Grants, HMGP, PDM, USDA NRCS-Environmental Quality Incentives Program, TxDOT		
Lead Agency/Department Responsible: City of Waller		
Implementation Schedule: 12 months		
Reduce effects of hazards on new buildings and infrastructure?: No	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: No		

City of Waller

Name of Jurisdiction: City of Waller	Project Description: Complete and maintain FEMA elevation certificates for all new/improved buildings in floodplain.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 3	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): Funding	
Category: Prevention	
Hazard(s) Addressed: Flood	
Priority: High	
Estimated Cost: Unknown	
Potential Funding Sources: At the cost of the permit applicant	
Lead Agency/Department Responsible: City of Waller	
Implementation Schedule: In place	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: No
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

Name of Jurisdiction: City of Waller	Project Description: Provide advanced training for local building inspectors.
2011 Mitigation Action No.:	
2006 Mitigation Action No.: 4	
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:	
Reason not complete (2006 actions): Funding	
Category: Prevention	
Hazard(s) Addressed: All hazards	
Priority: High	
Estimated Cost: \$5,000	
Potential Funding Sources: Local commitment, FEMA Emergency Management Institute-Floodplain Mgmt course available free of charge	
Lead Agency/Department Responsible: City of Waller	
Implementation Schedule: In place and continuing	
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: Yes
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes	

City of Waller

Name of Jurisdiction: City of Waller	Project Description: Revise and update Flood Insurance Rate Maps.	
2011 Mitigation Action No.:		
2006 Mitigation Action No.: 5		
Status of 2006 Mitigation Action: Complete: In Progress: No Longer Pursuing: Carry On: Yes Carry On With Modification:		
Reason not complete (2006 actions): Funding		
Category: Prevention		
Hazard(s) Addressed: Flood		
Priority: High		
Estimated Cost: Unknown		
Potential Funding Sources: FEMA-Map Modernization Program, FEMA-Flood Hazard Mapping Program, Dept of Interior, USGS-Mapping Standards Support, FEMA-Flood Recovery Mapping		
Lead Agency/Department Responsible: City of Waller		
Implementation Schedule: 1-2 years		
Reduce effects of hazards on new buildings and infrastructure?: Yes	Reduce effects of hazards on existing buildings and infrastructure?: No	
Does mitigation action identify, analyze and prioritize actions related to continued compliance with NFIP?: Yes		

H-GAC Regional Hazard Mitigation Plan Projects Short Listed by the Texas DEM Office. These projects are slated to be recommended for FEMA funding.		
County	Jurisdiction	Type of Project
Liberty	Liberty County	Acquisition/Demolition of 138 structures
Brazoria	Village of Surfside Beach	Acquisition/Demolition of 14 damaged homes seaward of vegetation line.
Brazoria	City of Freeport	Hurricane Shutters-fire and EMS dept, which serves as EOC
Liberty	City of Cleveland	Underground Drainage and storm water management
Liberty	City of Dayton	Construct drainage and Stormwater improvements at Hwy 90 and Waco St.
Liberty	City of Willis	Enlarge & widen drainage outfalls - provide storm water detention at Crystal Creek
Montgomery	City of Panorama Village	Bulkhead pond - protect homes adjacent to sewer plant
Chambers	City of Cove	Drainage-work on relief channel on Cotton Bayou
Liberty	City of Splendora	Drainage storm water system improvements and right-of-way acquisition
Fort Bend	City of Richmond	Drainage-2nd Street - remove and replace existing drop structure and outfall pipe.
Chambers	Chambers County	Shelter-Community
Walker	Walker County	Shelter - Huntsville Community Shelter
While funding is not currently available for additional projects, the projects listed below met with favorable review, and are considered to be Alternate Projects - which may be funded if monies become available.		
Brazoria	City of Freeport	Shutters-Police Dept.
Galveston	Village of Tiki Island	Install Storm Shutters on Public Safety Building
Brazoria	City of Sweeny	Shutters-Senior Citizens Center, also shelter
Chambers	City of Mont Belvieu	Drainage-work on relief channel on Cotton Bayou
Galveston	Kemah, City of	Replace and elevate storm water pump station
Chambers	Chambers County	Drainage Improvement to Spindletop Bayou and Winnie Stowell area
Montgomery	Panorama Village, City of	Drainage-clean out existing ditch drainage system, replace some undersized culverts
Chambers	River-Winfree, City of	Drainage Improvement in Old River

APPENDIX D

Hazard Mitigation Planning Tools

This section contains the following documents:

1. *Data Acquisition and Categorization Matrix*
2. *Identification of Hazards Unique to Individual Jurisdictions*
3. *H-GAC Local Capability Assessment Questionnaire*
4. *H-GAC Capability Assessment Points System*
5. *H-GAC Mitigation Actions Worksheet*
6. *Public Participation Survey for Hazard Mitigation Planning*
7. *H-GAC Capability Assessment Results*
8. *H-GAC Building and Fire Code Information*
9. *H-GAC Floodplain Management Program Information*

Data Acquisition and Categorization Matrix

Natural Hazards



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PURPOSE

The purpose of this document is to provide a framework to assist the project team with the collection of data needed to conduct a comprehensive risk assessment supporting mitigation planning efforts as required by the Disaster Mitigation Act of 2000.

GIS DATA COLLECTION AND CATEGORIZATION

In order to facilitate field collection and data analysis, the project team has categorized data into five broad categories consistent with criteria found in FEMA loss estimation models. The five data categories are addressed in separate tables provided below. They are as follows:

- Base Data Requirements
- Inventory Data Requirements
 - Building inventory
 - Critical Facilities
 - Lifelines
- Hazard Data Requirements

In each of the three categories, data are described in a tabular format. Below is a complete list of applicable definitions to help the reader understand the need to collect this data.

- Critical: Data required to obtain risk assessment results using HAZUS-MH and other risk assessment models
- Desirable: Use of this data will improve the quality of risk assessment results or are useful for mitigation planning efforts
- Available: Indicates whether the client has or does not have the data in a form that can be readily used in risk assessment models. (A check mark indicates that data is available)
- Source: Refers to source from which data was collected (such as a database, website, agency, or organization)

BASE DATA REQUIREMENTS

This section contains political, environmental, and base data that are important for general planning purposes. These data provide the project team with vital reference information to assess the baseline data and provide the locally derived geospatial data required for conducting a comprehensive risk assessment. It also contains information that can be used to support hazard modeling and loss estimation.

The Political, Environmental, and Base Data Requirements matrix table (Table 1) contains eight sub-groupings and their data source as follows:

- Political Boundary – political boundaries for the state, city, and outlying areas
- Base Map – planimetric data captured and mapped from aerial photography
- Hydrographic – hydrographic information for streams, creeks, watersheds
- Hypsographic – data that refers to elevations of the earth's surface and relief
- Demographic – U.S. census data on population and housing
- Land Use – datasets such as zoning and land use, which are important for obtaining an understanding of existing building characteristics
- Imagery and Scanned Maps – primarily aerial photography as well as some scanned images utilized by previous flood hazard models
- Administrative – primarily boundary data that outline areas as a unique unit for administrative purposes

Political, Environmental, and Base Data Requirements	Critical	Desirable	Available	Specify Format GIS/Tabular/ non-digital	Data Source	General Comments
Political Boundary						
Administrative Boundaries	✓					
County Boundaries	✓					
City Jurisdiction	✓					
State Counties	✓					
Base Map (Planimetric Data)						
Building Footprints/Points		✓				
Parcel and Lot lines		✓				
Landmarks		✓				
Hydrographic						
Rivers, Creeks, Stream Centerlines	✓					
Lakes, Ponds, and Bodies of Water	✓					
Drainage Basins	✓					
Hypsographic						
Contour Lines	✓					
Digital Elevation Model	✓					
Demographic Data						
Census Blocks	✓					
Census Tracts	✓					
Land Use						
Land Use 90,95,2000	✓					
Zoning	✓					
Parks		✓				
Environmental						
Geology		✓				
Soils		✓				
Wetlands		✓				
Imagery						
BW or Color Orthophotos (mosaics)		✓				

INVENTORY DATA REQUIREMENTS

INVENTORY DATA REQUIREMENT #1: BUILDING INVENTORY

The general building stock will be classified into seven general occupancy classes that include residential, commercial, and industrial buildings. National databases from HAZUS-MH will be utilized to understand the distribution of the general building stock in each jurisdiction.

National building inventory databases will be utilized to aggregate the number, type, and value per U.S. Census Block. The building classification system will group buildings with similar damage and loss characteristics into a set of pre-defined building classes. Damage and loss prediction models will be developed for each model building type across each hazard.

INVENTORY DATA REQUIREMENT #2: CRITICAL FACILITIES

Critical Facilities are those public buildings and operations that provide essential services to the community. This section describes the data required to provide damage and loss estimates for each facility.

Critical facilities must be classified by building structure type and other important characteristics in order to determine the expected economic loss and loss of functionality.

The project team will provide the project leader with a list of the needed attributes for each facility.

Critical Facilities	Critical	Desirable	Available	Specify Format GIS/Tabular/ non-digital	Data Source	General Comments
---------------------	----------	-----------	-----------	--	-------------	------------------

Critical Facilities						
Medical Care Facilities (hospitals, clinics, and laboratories)	✓					
Nursing Homes (assisted living facilities)	✓					
Schools (elementary, secondary, and university)	✓					
Police and Fire Stations	✓					
Emergency Operation Centers	✓					

DATA REQUIREMENT #3: LIFELINES

The inventory classification scheme for lifeline systems is broken into two separate systems: (1) transportation and (2) utility systems. Each lifeline system has different damage and loss characteristics. The Lifelines Data Requirements data matrix table describes the data required to provide damage and loss estimates for each of the following systems:

- Transportation systems addressed include highways, railways, light rail, bus, ports, ferries, and airports.
- Lifeline utility systems include potable water, wastewater, oil, natural gas, electric power, and communication systems.

A list of needed attributes for each lifeline will be provided to the project lead for collection. The project team realizes that the collection of these data might be difficult as many utility companies are not willing to share information due to increased security concerns.

Transportation Facilities	Critical	Desirable	Available	Specify Format GIS/Tabular/ non-digital	Data Source	General Comments

Transportation Facilities						
Highway Systems (roads, bridges, tunnels)	✓					
Railway Systems (facilities, tracks, bridges, tunnels)	✓					
Ports and Harbor Facilities	✓					
Airport Facilities and Runaways	✓					
Public Transportation System Facilities	✓					
Light Rail Systems (facilities, tracks, bridges, tunnels)	✓					

Utility Facilities	Critical	Desirable	Available	Specify Format GIS/Tabular/ non-digital	Data Source	General Comments

Transportation Facilities						
Wastewater Facilities and Pipelines	✓					
Potable Water Facilities and Pipelines	✓					
Natural Gas Facilities and Pipelines	✓					
Crude and Refined Oil Facilities and Pipelines	✓					
Electric Power Facilities and Transmission Lines	✓					
Communication Facilities and Lines	✓					

HAZARD DATA REQUIREMENTS

This section describes the hazard data that are required for the development of a comprehensive risk assessment. By gathering data for individual hazards, the project team will systematically address the potential impacts associated with each hazard. To conduct the risk assessment effort, two distinct hazard risk assessment methods will be utilized.

The **HAZUS-MH risk assessment methodology** is parametric, in that distinct hazard *parameters* (for example, wind speed) were modeled. This model will be utilized for *hazards that are known to occur in a definable jurisdiction*. For hazards where a spatial component (geographic area extent) could be defined, the number and types of buildings, infrastructure and critical facilities located in a hazard area will be assessed. This methodology will be utilized to estimate losses due to:

- Riverine Flood
- Coastal Flood
- Earthquake
- Hurricane Winds

In addition, a **statistical risk assessment methodology** will be applied to analyze *hazards that could not be determined geographically* or those in which insufficient data exists to display hazard information spatially (on a map). This methodology uses a statistical approach and expert mathematical modeling of risk to predict a hazard's frequency of occurrence and estimate impacts and intensity based on recorded or historic damage data. The hazards that will be assessed using this methodology include:

- Tornado Winds
- Hailstorm
- Severe Winter Storm
- Thunderstorm
- Wildfire
- Drought

Using this approach, the project team will begin immediately processing data. Where data gaps still exist, the project team will work to collect additional information from the appropriate sources and/or utilize proprietary hazard and weather databases. The Hazard Data Requirements data matrix table contains a description of the required data sets for 10 hazards including:

1. Riverine Flood
2. Coastal Flood
3. Earthquake
4. Hurricane Winds
5. Tornado Winds
6. Hailstorm
7. Severe Winter Storm
8. Thunderstorm
9. Wildfire
10. Drought

Flood	Critical	Desirable	Available	Specify Format GIS/Tabular/ non-digital	Data Source	General Comments

Flood						
100 Yr. Flood Boundary Map	✓					
500 Yr. Flood Boundary Map	✓					
Base Flood Elevation	✓					
Historical Flood Event Information		✓				
Damage Data from Historical Flood Events of the Area		✓				
Repetitive Losses, per municipality		✓				

Flood Assessment Output

Identifying Hazards

Sources – describe sources of information used to identify the hazards

Data – limitations and method utilized to assess the hazard

Description of Hazard (characteristics)

Profiling Hazards

Profile – qualitative description of how the flood hazard can affect the jurisdiction (i.e. greatest potential of damage is residential homes in eastern part of study region)

History – provide table of previous occurrences/damages of flood hazard event in jurisdiction

Hazard Map – depicting geographic extent of flood area (% of land affected by 100-year and 500-year events)

Hazard frequency – describe hazard frequency based on hazard history with jurisdiction

Assessing Vulnerability - Provide description of overall impact of hazard

Identifying Assets:

Types and numbers of buildings (Res, Com, Ind, Gov, Rel, Edu, and Ag) in hazard area,

Critical Facilities (Physical and Monetary Damage States)

Estimating Losses:

Monetary Losses (Res, Com, Ind, Gov, Rel, Edu, and Ag Monetary Losses)

Losses to Contents

Critical Facilities (Physical Damage States, Functionality %)

Damage Profile (recurrence curve)

Future Losses:

Provide a flood map with zoning and land use – describe how future growth will affect flood vulnerability

Coastal Flooding	Critical	Desirable	Available	Specify Format GIS/Tabular/ non-digital	Data Source	General Comments

Flood						
Coastal High Hazard Area-VE Zones	✓					
Base Flood Elevation	✓					
Still water elevation (High water marks)		✓				
High water marks from historical events		✓				
Damage Data from Historical Flood Events	✓					
Coastal Erosion		✓				
SLOSH Models	✓					

Coastal Flood Assessment Output

Identifying Hazards

Sources – describe sources of information used to identify the hazards

Data – limitations and method utilized to assess the hazard

Description of Hazard (characteristics of coastal flooding, velocity)

Profiling Hazards

Profile – qualitative description of how the flood hazard can affect the jurisdiction (i.e. greatest potential of damage is residential homes in eastern part of study region)

History – provide table of previous occurrences/damages of flood hazard event in jurisdiction

Hazard Map – depicting geographic extent of flood area (% of land affected by storm surge per 100-year, 500-year return period if possible)

Hazard frequency – describe hazard frequency based on hazard history or return period within jurisdiction

Assessing Vulnerability - Provide description of overall impact of hazard

Identifying Assets:

Types and numbers of buildings (Res, Com, Ind, Gov, Rel, Edu, and Ag),

Critical Facilities (Physical and Monetary Damage States)

Estimating Losses:

Monetary Losses (Res, Com, Ind, Gov, Rel, Edu, and Ag Monetary Losses)

Losses to Contents and Time Element

Critical Facilities (Physical Damage States, Functionality %)

Damage Profile (recurrence curve)

Future Losses:

Provide a flood map with zoning and land use – describe how flood will affect future growth

Earthquake	Critical	Desirable	Available	Specify Format GIS/Tabular/ non-digital	Data Source	General Comments
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Earthquake						
2003 USGS Probabilistic Hazard Maps	✓					
Catalog of Historical Earthquakes	✓					
Map of Historical Epicenters	✓					

Earthquake Assessment Output

Identifying Hazards

Sources – describe sources of information used to identify the hazards. This should include key earthquake hazard terms (i.e. what is probabilistic hazard map, differences between PGA and SA, etc.)

Data – limitations and method utilized to assess the hazard

Description of Hazard (characteristics of earthquake risk of the study area)

Profiling Hazards

Profile – qualitative description of how the earthquakes can affect the jurisdiction (i.e. greatest potential of damage is commercial buildings)

History – provide tabular report of historical earthquakes in region, state, and county (previous occurrences/damages).

Hazard Map – depicting geographic extent of earthquake risk (either epicenters or hazard map depicting PGA or SA intensity) – ideally we would need a susceptibility map depicting hazard intensity throughout study region

Hazard frequency – describe hazard frequency based on hazard history and/or hazard map within the jurisdiction

Assessing Vulnerability - Provide description of overall impact of hazard

Identifying Assets:

Types and numbers of buildings (Res, Com, Ind, Gov, Rel, Edu, and Ag),

Losses to Contents and Time Element

Critical Facilities (Physical and Monetary Damage States)

Estimating Losses:

Monetary Losses (Res, Com, Ind, Gov, Rel, Edu, and Ag Monetary Losses)

Losses to Contents and Time Element

Critical Facilities (Physical Damage States, Functionality %)

Damage Profile (recurrence curve)

Future Losses:

Provide a hazard susceptibility map with zoning and land use – or describe how earthquake hazard will affect areas that are designated for future growth.

Wind Hurricane	Critical	Desirable	Available	Specify Format GIS/Tabular/ non-digital	Data Source	General Comments
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Wind (Hurricane)						
NOAA Probabilistic Hazard Maps	✓					
Historical Hurricane Events and Tracks for the Area	✓					

Wind (Hurricane) Assessment Output

Identifying Hazards

Sources – describe sources of information used to identify the hazards

Data – limitations and method utilized to assess the hazard

Description of Hazard (characteristics of wind hazard specific to study area)

Profiling Hazards

Profile – qualitative description of how the wind storms/hurricanes can affect the jurisdiction (i.e. greatest potential of damage is commercial buildings)

History – provide tabular report of historical hurricanes in state and county (previous occurrences/damages).

Hazard Map – depicting geographic extent of wind storm risk (hazard map depicting 100-year and 500-year wind intensity) – if there are local characteristics that increase or decrease wind speeds – these should be mapped.

Hazard frequency – describe hazard frequency based on hazard history and/or hazard map within the jurisdiction

Assessing Vulnerability - Provide description of overall impact of hazard

Identifying Assets:

Types and numbers of buildings (Res, Com, Ind, Gov, Rel, Edu, and Ag),

Losses to Contents and Time Element

Critical Facilities (Physical and Monetary Damage States)

Estimating Losses:

Monetary Losses (Res, Com, Ind, Gov, Rel, Edu, and Ag Monetary Losses)

Losses to Contents and Time Element

Critical Facilities (Physical Damage States, Functionality %)

Damage Profile (recurrence curve)

Future Losses:

Tornado	Critical	Desirable	Available	Specify Format GIS/Tabular/ non-digital	Data Source	General Comments

Tornado						
Historical Tornado Events (#, Date of Occurrence, Location, Type, Damages, \$\$)	✓					
Historical Tornado Track Map		✓				
Description of Historical Damage Data	✓					

Tornado Assessment Output

Identifying Hazards

Sources – describe sources of information used to identify the hazards

Data – limitations and method utilized to assess the hazard

Description of Hazard (characteristics of tornados specific to study area)

Profiling Hazards

Profile – qualitative description of how tornados can affect the jurisdiction

History – provide tabular report of historical tornados in state and county (previous occurrences/damages)

Hazard Map – intensity/frequency grid depicting national data, and historical tornado track map

Hazard frequency – describe hazard frequency based on hazard history

Assessing Vulnerability - Provide description of overall impact of hazard

Identifying Assets:

Event intensity profile (i.e., F1 damage potential)

Estimating Losses:

Aggregated Monetary Losses (Res, Com, Ind, Gov, Rel, Edu, and Ag Monetary Losses)

Injury and casualties

Damage Profile (recurrence curve)

Future Losses:

Hail Storm	Critical	Desirable	Available	Specify Format GIS/Tabular/ non-digital	Data Source	General Comments

Hail Storm						
Historical Hail Events (#, Date of Occurrence, Location, Type = Size, Damages)	✓					

Hail Storm Assessment Output

Identifying Hazards

Sources – describe sources of information used to identify the hazards

Data – limitations and method utilized to assess the hazard

Description of Hazard (characteristics of hail storms specific to study area)

Profiling Hazards

Profile – qualitative description of how hail storms can affect the jurisdiction

History – provide tabular report of historical hail in state and county (previous occurrences/damages)

Hazard Map – intensity/frequency grid depicting national data

Hazard frequency – describe hazard frequency based on hazard history

Assessing Vulnerability - Provide description of overall impact of hazard

Identifying Assets:

Event intensity profile (Probability Frequency and Intensity of Different Storms: Hail Size, Duration, and Number of Hails per square foot - comparison of regional Hail Hazard data to National Hail Hazard data)

Estimating Losses:

Aggregated Monetary Losses (Res, Com, Ind, Gov, Rel, Edu, and Ag Monetary Losses)

Damage Profile (recurrence curve)

Future Losses:

Severe Winter Storm	Critical	Desirable	Available	Specify Format GIS/Tabular/ non-digital	Data Source	General Comments
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Severe Winter Storm						
Historical Winter Storms Events (#, Date of Occurrence ,Location, Type = Ice & Snow, and Damages	✓					

Severe Winter Storm Assessment Output

Identifying Hazards

Sources – describe sources of information used to identify the hazards

Data – limitations and method utilized to assess the hazard

Description of Hazard (characteristics of winter storms specific to study area)

Profiling Hazards

Profile – qualitative description of how winter storms can affect the jurisdiction

History – provide tabular report of historical winter storms in state and county (previous occurrences/damages)

Hazard Map – no spatial component to hazard

Hazard frequency – describe hazard frequency based on hazard history

Assessing Vulnerability - Provide description of overall impact of hazard

Identifying Assets:

Event intensity profile (Probability Frequency and Intensity of Different Storms -comparison of regional winter storm hazard data to national winter storm data to obtain understanding of intensity)

Estimating Losses:

Aggregated Monetary Losses (Res, Com, Ind, Gov, Rel, Edu, and Ag Monetary Losses)

Damage Profile (recurrence curve)

Future Losses:

Drought	Critical	Desirable	Available	Specify Format GIS/Tabular/ non-digital	Data Source	General Comments

Drought						
History of Regional Drought Conditions (Date, \$ Loss, Severity, Duration)	✓					
Crop Typology, Acreage, yield per acre (historical record)		✓				
Palmer Drought Severity Index		✓				
Drought Monitor summary map		✓				

Drought Assessment Output

Identifying Hazards

Sources – describe sources of information used to identify the hazards

Data – limitations and method utilized to assess the hazard

Description of Hazard (characteristics of drought specific to study area – water, agricultural, etc. describe type of drought)

Profiling Hazards

Profile – qualitative description of how drought can affect the jurisdiction

History – provide tabular report of drought in state and county (previous occurrences/damages)

Hazard Map – Palmer Drought Severity Index. Drought Monitor summary map

Hazard frequency – describe hazard frequency based on hazard history

Assessing Vulnerability - Provide description of overall impact of hazard

Identifying Assets:

Event intensity profile (Palmer Drought Severity Index)

Estimating Losses:

Aggregated Monetary Losses (Res, Com, Ind, Gov, Rel, Edu, and Ag Monetary Losses)

Damage Profile (recurrence curve)

Future Losses:

Thunder storm	Critical	Desirable	Available	Specify Format GIS/Tabular/ non-digital	Data Source	General Comments
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Thunderstorm						
Historical thunderstorms Events (#, Date of Occurrence, and Damages)	✓					

Thunderstorm Assessment Output

Identifying Hazards

Sources – describe sources of information used to identify the hazards

Data – limitations and method utilized to assess the hazard

Description of Hazard (characteristics of thunderstorms specific to study area)

Profiling Hazards

Profile – qualitative description of how thunderstorms can affect the jurisdiction

History – provide tabular report of historical thunderstorms in state and county (previous occurrences/damages).

Hazard Map – no spatial component to hazard

Hazard frequency – describe hazard frequency based on hazard history

Assessing Vulnerability - Provide description of overall impact of hazard

Identifying Assets:

Event intensity profile (Probability Frequency and Intensity of thunderstorms)

Estimating Losses:

Aggregated Monetary Losses (Res, Com, Ind, Gov, Rel, Edu, and Ag Monetary Losses)

Damage Profile (recurrence curve)

Future Losses:

Wildfire	Critical	Desirable	Available	Specify Format GIS/Tabular/ non-digital	Data Source	General Comments
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Wildfire						
Historical Wildfire Events (#, Date of Occurrence, Location, Acreage, and Damages)	✓					
Map location of wildfires in state		✓				
Land Cover Map (vegetative, forested lands)		✓				
Fire Monitoring Stations		✓				

Wildfire Assessment Output

Identifying Hazards

Sources – describe sources of information used to identify the hazards

Data – limitations and method utilized to assess the hazard

Description of Hazard (characteristics of wildfires specific to study area given fuel types)

Profiling Hazards

Profile – qualitative description of how wildfires can affect the jurisdiction

History – provide tabular report of historical wildfires in state and county (previous occurrences/damages)

Hazard Map – map location of wildfires in state (points or polygons), develop wildfire hazard map - overlay exposure

Hazard frequency – describe hazard frequency based on hazard history

Assessing Vulnerability - Provide description of overall impact of hazard

Identifying Assets:

Event intensity profile (Probability Frequency and Intensity of thunderstorms)

Estimating Losses:

Aggregated Monetary Losses (Res, Com, Ind, Gov, Rel, Edu, and Ag Monetary Losses) – if spatial component is defined damages and losses could be shown across general occupancy classes

Damage Profile (recurrence curve)

Future Losses:



**Houston-Galveston Area Council
Multi-jurisdictional Hazard Mitigation Plan**

Identification of Hazards Unique to Individual Jurisdictions

Jurisdiction: _____

Name: _____

Phone Number: _____

1. Does your jurisdiction have any unique hazards not addressed in the area-wide hazard identification and risk assessment?

Yes _____ No _____

If you answered “yes” to the question above, please continue and answer the following questions.

2. What is the unique hazard your community faces?

3. Does this unique hazard have a distinct geographic hazard boundary? If yes, please describe the geographic hazard area.

4. What are the consequences of this unique hazard to the people and property in your community?

a. How many people are at risk?

b. Are any special populations potentially at risk?

c. How much property is at risk and what type of property is at risk ?

i. What are the estimated number of residential structures at risk and a gross estimate of the dollar value of those structures?

ii. What is the estimated number of commercial structures at risk and a gross estimate of the dollar value of those structures?

iii. What is the estimated number of key and special facilities at risk and a gross estimate of the dollar value of those key and special facilities?

iv. What infrastructure and lifelines are at risk from this unique hazard?

LOCAL CAPABILITY ASSESSMENT QUESTIONNAIRE

I. GENERAL COMMUNITY INFORMATION

Please provide the following information separately, preferably on not more than three (3) pages.

- A. A narrative description of your community, including its history, distinct personality, culture and geography, along with any unique natural or physical features.
- B. A brief history of hazards in your community, including the type, date of occurrence and any known impacts.
- C. A brief description of current or projected development trends in your community.
- D. A general listing of any on-going or completed hazard mitigation projects within your community.

II. HAZARD MITIGATION PLANS, POLICIES AND ORDINANCES

Hazard Mitigation Plan	Yes or No?	Narrative / Explanation
Does your jurisdiction receive Emergency Management Performance Grant Funds?		
Does your community have a Hazard Mitigation Plan? If yes, when was it adopted? When was the plan last amended?		
Does the plan address all natural hazards found in your community, or is it a single-hazard plan? If it addresses a single hazard, what is the hazard?		
Does the plan address human-caused hazards? Human-caused hazards may include technological accidents and acts of terrorism.		

LOCAL CAPABILITY ASSESSMENT QUESTIONNAIRE

Do you believe the plan would meet the requirements established by the Disaster Mitigation Act of 2000? If no, what elements do not meet the new standards?		
Has the plan proven to be an effective measure for reducing hazard impacts? Please provide an approximate measure of its effectiveness to date (HIGH, MODERATE or LOW) and briefly explain.		
Does your community have an established Hazard Mitigation Committee? If so, please provide us with a listing specific outcomes, including plans or projects identified and implemented through the committee.		
Disaster Recovery Plan	Yes or No?	Narrative / Explanation
Does your community have a Disaster Recovery Plan? If yes, when was it adopted? When was the plan last amended?		
Does the plan address all natural hazards found in your community, or is it a single-hazard plan? If the plan addresses a single hazard, what is the hazard?		
Does the plan address human-caused hazards?		

LOCAL CAPABILITY ASSESSMENT QUESTIONNAIRE

Has the plan proven to be an effective measure for reducing hazard impacts? Please provide an approximate measure of its effectiveness to date (HIGH, MODERATE or LOW) and briefly explain.		
Coastal Zone Management Plan	Yes or No?	Narrative / Explanation
Does your jurisdiction have a Coastal Zone Management Plan? If yes, when was it adopted? When was the plan last amended?		
Does the plan address natural hazards, including ways to reduce their impact?		
Has the plan proven to be an effective measure for reducing hazard impacts? Please provide an approximate measure of its effectiveness to date (HIGH, MODERATE or LOW) and briefly explain.		
Comprehensive Plan	Yes or No?	Narrative / Explanation
Does your community have a comprehensive or master plan? If so, does the plan address natural and human-caused hazards? Please briefly explain.		
Has the plan proven to be an effective measure for reducing hazard impacts? Please provide an approximate measure of its effectiveness to date (HIGH, MODERATE or LOW) and briefly explain.		
Floodplain Management Plan	Yes or No?	Narrative / Explanation

LOCAL CAPABILITY ASSESSMENT QUESTIONNAIRE

Does your community have a floodplain management / flood mitigation plan? If yes, when was the plan adopted? When was the plan last amended?		
Does the plan contain provisions for relocating, elevating or acquiring structures currently located in the floodplain?		
Does the plan include structural measures such as rebuilding or retrofitting flood-prone structures?		
Are specific properties identified and targeted for future flood mitigation projects?		
Does the plan include reference to the "No Adverse Impact" strategy developed by the Association of State Floodplain Managers?		
Are there adequate building sites located outside the floodplain to satisfy development pressures?		
Does the plan include measures to preserve the floodplain's natural functions?		

LOCAL CAPABILITY ASSESSMENT QUESTIONNAIRE

Are floodplain management activities conducted in conjunction with neighboring communities or through a regional governing body?		
Are developers informed of the floodplain management regulations before they subdivide land in the floodplain?		
Does the plan address the location of mobile home parks in the floodplain?		
Has the plan proven to be an effective measure for reducing hazard impacts? Please provide an approximate measure of its effectiveness to date (HIGH, MODERATE or LOW) and briefly explain.		
Stormwater Management Plan	Yes or No?	Narrative / Explanation
Does your community have a stormwater management plan? If yes, when was the plan adopted? When was the plan last amended?		
Is there a regular maintenance schedule for checking and clearing storm water drains and drainage systems and removing debris from streams and watercourses?		

LOCAL CAPABILITY ASSESSMENT QUESTIONNAIRE

Are existing culverts and other drainage devices sized properly for the amount of water they must carry during peak discharges?		
Are future planned systems adequately designed to meet storm water drainage demands of the community, factoring in increased development that may increase storm water runoff?		
Does the plan call for the provision of structural measures such as retention and detention facilities that minimize the increases in runoff caused by impervious surfaces and new development?		
Are there restrictions on the amount of impervious surfaces?		
Does your community have a storm water management fee? If yes, what are the generated funds used for?		
Has the plan proven to be an effective measure for reducing hazard impacts? Please provide an approximate measure of its effectiveness to date (HIGH, MODERATE or LOW) and briefly explain.		
Emergency Operations Plan	Yes or No?	Narrative / Explanation

LOCAL CAPABILITY ASSESSMENT QUESTIONNAIRE

Does your community have an Emergency Operations Plan? If yes, when was it adopted? When was the plan last amended?		
Does the plan address natural and human-caused hazards?		
Continuity of Operations Plan	Yes or No?	Narrative / Explanation
Does your community have a Continuity of Operations Plan? If yes, when was it adopted? When was the plan last amended?		
Does the plan address natural and human-caused hazards?		

LOCAL CAPABILITY ASSESSMENT QUESTIONNAIRE

Radiological Emergency Plan?	Yes or No?	Narrative / Explanation
Does your community have a Radiological Emergency Plan? If yes, when was it adopted? When was the plan last amended?		
SARA Title III / Hazardous Material Facility Emergency Response Plan	Yes or No?	Narrative / Explanation
Does your community have a Hazardous Material Facility Emergency Response Plan? If yes, when was it adopted? When was the plan last amended?		
Does your community actively participate in a Local Emergency Planning Commission (LEPC)?		
Transportation Plan	Yes or No?	Narrative / Explanation
Does your community have a Transportation Plan? If yes, when was it adopted? When was the plan last amended?		
Does your community consider identified hazards when planning for future roads and bridges?		
Do roads, bridges, or undersized culverts impede water flow regularly in your community?		

LOCAL CAPABILITY ASSESSMENT QUESTIONNAIRE

Does your community have a plan for an emergency evacuation?		
Are roads designed for adequate evacuation capacity?		
Capital Improvements Plan	Yes or No?	Narrative / Explanation
Does the Capital Improvements Plan restrict the provision or extension of infrastructure into hazard areas?		
Are there site standards requiring the location of critical public facilities outside of hazard areas?		
Are there construction requirements for critical facilities located in hazard areas to ensure they remain operational during and after a hazard event?		

LOCAL CAPABILITY ASSESSMENT QUESTIONNAIRE

Regional Planning	Yes or No?	Narrative / Explanation
Does your community participate in regional planning decisions? If yes, please explain.		
Historic Preservation Plan	Yes or No?	Narrative / Explanation
Does your community have a Historic Preservation Plan? If yes, when was it adopted? When was the plan last amended?		
Does the plan address the protection of historic buildings and sites from natural hazards?		
Zoning Ordinance	Yes or No?	Narrative / Explanation
Does your community have a Zoning Ordinance? If yes, when was it adopted?		
Does the ordinance restrict the type/density of development in identified hazard areas? If so, please briefly explain.		
Do non-conforming use provisions of the zoning ordinance take into account structures that are damaged by hazards?		

LOCAL CAPABILITY ASSESSMENT QUESTIONNAIRE

Are any non-conforming use or substantial damage provisions strictly enforced following a disaster?		
Does your community maintain adequate technical and field inspection staff for proper administration and enforcement of the zoning ordinance?		
Has the ordinance proven to be an effective measure for reducing hazard impacts? Please provide an approximate measure of its effectiveness to date (HIGH, MODERATE or LOW) and briefly explain.		
Subdivision Ordinance	Yes or No?	Narrative / Explanation
Does your community have a Subdivision Ordinance? If yes, when was it adopted?		
Does the ordinance place restrictions on the subdivision of land in known hazard areas?		
Must all lots have a buildable site that is outside of delineated hazard zones?		

LOCAL CAPABILITY ASSESSMENT QUESTIONNAIRE

Does the ordinance establish setback requirements from delineated hazard zones?		
Are there provisions for the protection or creation of natural areas, such as wetlands, dunes or natural vegetation as a condition of subdivision approval?		
Has the ordinance proven to be an effective measure for reducing hazard impacts? Please provide an approximate measure of its effectiveness to date (HIGH, MODERATE or LOW) and briefly explain.		
Flood Damage/Management Ordinance	Yes or No?	Narrative / Explanation
Does your community have a Flood Damage Prevention Ordinance? If yes, when was it adopted?		
Please provide a description of the current inspection and permitting processes for floodplain management?		
Does your Floodplain management team have an administrator?, If so, How many staff members?		

LOCAL CAPABILITY ASSESSMENT QUESTIONNAIRE

How many flood inspections have been provided in the past twelve months?		
How many variances have been provided in the last twelve months?. Could you please provide list that includes date, address of property, and reasons for allowing the variance?		
Does your ordinance include a freeboard requirement for all new construction in the floodplain? If so, what is the freeboard requirement?		
Does the ordinance include a cumulative substantial damage provision?		
Does the ordinance incorporate any other regulations that exceed National Flood Insurance Program (NFIP) standards? If so, how?		
Has the ordinance proven to be an effective measure for reducing hazard impacts? Please provide an approximate measure of its effectiveness to date (HIGH, MODERATE or LOW) and briefly explain.		
Building Codes, Permitting and Inspections	Yes or No?	Narrative / Explanation

LOCAL CAPABILITY ASSESSMENT QUESTIONNAIRE

Has your community adopted a building code? If so, when was it adopted?		
What type of building code was adopted by your jurisdiction? Is it based on: the Uniform Building Code promulgated by the International Conference of Building Officials (ICBO)? or on the National Building Code promulgated by the Building Officials and Code Administrators International (BOCA)? or on the Standard Building Code promulgated by the Southern Building Code Congress, International (SBCCI)? or on the International Building Codes promulgated by the International Code Council (ICC)? Please specify.		
Does your community diligently enforce the building code, both at the plan approval stage and the site-inspection stage?		
Has your building code been amended? If so, what types?		
Please provide a description of the inspection and permitting processes.		
How many inspectors are used in your jurisdiction ? Please specify in terms of the number of full-time equivalent personnel.		

LOCAL CAPABILITY ASSESSMENT QUESTIONNAIRE

How many building inspectors are Certified by the ICC/CABO or other certification programs?		
On average, how many years of experience in construction and inspection do your building inspectors have?		
Is your inspections department adequately staffed and trained to enforce the building code?		
Are the same rules and practices applied during routine permitting procedures and following a disaster? If they are different, how do they differ?		
How many building starts were there in your jurisdiction in the last twelve months?		
How many building inspections have been conducted in your jurisdiction in the last twelve months.		
Does your community have a temporary building moratorium to put in place following a disaster to stop or slow reconstruction pending a damage assessment?		

LOCAL CAPABILITY ASSESSMENT QUESTIONNAIRE

Building Codes, Permitting and Inspections	Yes or No?	Narrative / Explanation
Does your jurisdiction have a current fire code?		
If yes, when did the fire code go into effect?		
What is the name of your jurisdictions's fire code?		
What is the type of fire code adopted by your jurisdiction? Is is based on the Uniform Fire Code published by the International Fire Code Institute? Or the International Fire Code published by the International Code Council? Or the Standard Fire Code published by the SBCC? or another code? Please specify the code on which it was based.		
Please describe the fire inspection and permitting process.		
How many fire inspectors does your jurisdiction use? Please specify in terms of the number of full-time equivalent inspectors.		

LOCAL CAPABILITY ASSESSMENT QUESTIONNAIRE

How many of your fire inspectors are certified?		
How many of your fire inspectors have completed the State Certification course for fire inspectors?		
On average, how many years of experience in fire service or fire inspection do your jurisdiction's fire inspectors have?		
How many fire inspections have been conducted in your jurisdiction in the last twelve months.		

III. ENVIRONMENTAL PROTECTION MEASURES

Conservation and Natural Resource Protection	Yes or No?	Narrative / Explanation
Does your community have a riparian or wetlands preservation program? If yes, does the program provide funding for the acquisition and restoration of sensitive habitat areas?		
Do you maintain provisions for protecting natural riparian cover located within a specific distance of a stream or river?		

LOCAL CAPABILITY ASSESSMENT QUESTIONNAIRE

Park, Greenways and Open Space	Yes or No?	Narrative / Explanation
Does your community have a program to acquire available land for public recreational use?		
Does your community form partnerships with non-governmental organizations to acquire or otherwise protect hazardous areas? If so, please explain.		
Does your community have an open space or forestry management plan? If so, does the plan address natural hazards (i.e., fire breaks, clearing brush, staging controlled burns, etc.)?		

IV. BUSINESS AND INDUSTRY MEASURES

Private Sector Mitigation	Yes or No?	Narrative / Explanation
Has the community established any public-private partnership initiatives to address disaster-related issues? If so, please briefly explain.		
Does the community provide training or outreach efforts aimed at educating businesses to prepare for disaster (i.e., structural mitigation measures, insurance coverage, etc.)?		
Does the community provide training for local businesses to develop continuity plans to prepare for disaster?		

LOCAL CAPABILITY ASSESSMENT QUESTIONNAIRE

V. TECHNICAL, FISCAL, ADMINISTRATIVE AND POLITICAL CAPABILITIES

Technical Capability	Yes or No?	Narrative / Explanation
Does your community maintain or have access to detailed historical information related to past disasters?		
Does your community maintain or have access to detailed documentation of actions taken to reduce future hazard impacts?		
Does your community maintain a Geographic Information System (GIS)?		
Does your community possess GIS data layers on identified hazards? If so, what type of hazards?		
Does your community use GIS to analyze hazard vulnerability? Please provide the name and contact information for your GIS point of contact.		
Does your community use FEMA's Hazards US (HAZUS) software? If yes, how is it used?		

LOCAL CAPABILITY ASSESSMENT QUESTIONNAIRE

Does your community maintain adequately trained staff to manage the GIS?		
How would you classify your community's overall technical capability to implement hazard mitigation strategies (HIGH, MODERATE or LOW).		
Fiscal Capability	Yes or No?	Narrative / Explanation
Does your community dedicate any local funds to address mitigation-related activities? If yes, please describe.		
How would you classify your community's overall fiscal capability to implement hazard mitigation strategies (HIGH, MODERATE or LOW).		
Administrative Capability	Yes or No?	Narrative / Explanation
Are mitigation-related activities assigned to a local department(s)? If so, which one(s)?		
Is there a high level of intergovernmental cooperation among local departments? Please describe the potential level of cooperation in the context of mitigation-related programs.		

LOCAL CAPABILITY ASSESSMENT QUESTIONNAIRE

Does your jurisdiction participate in a local emergency management mutual aid program? If yes, has the mutual aid program been used to address mitigation or disaster recovery related issues? Please explain.		
How would you classify your community's overall administrative capability to implement hazard mitigation strategies (HIGH, MODERATE or LOW).		
Political Capability	Yes or No?	Narrative / Explanation
Please identify the land area in square miles within your jurisdiction that is to be covered by this Hazard Mitigation Plan. For counties, this will include the unincorporated areas of the county only for which the county has jurisdiction.		_____ square miles
For cities, is your city a "home rule" or "general law" city under the Texas Government Code?		
For cities, what type of governing body do you have? An Alderman, City Manager, Commissioner or other form of Governing Body? If other, please describe.		
Political capability can be generally measured by the degree to which political leadership is willing to enact policies and programs that reduce hazard vulnerabilities in your community, even if met with opposition. Examples may include guiding development away from identified hazard areas or participating in FEMA's <i>Project Impact</i> initiative. Please identify specific examples of these efforts and reference where more documentation can be found.		

LOCAL CAPABILITY ASSESSMENT QUESTIONNAIRE

VI. PARTICIPATION IN GRANT PROGRAMS AND PROJECTS

Hazard Mitigation Grant Program Funds	Yes or No?	Narrative / Explanation
Has your community received Hazard Mitigation Grant Funds?		
If so, what is the date of the grant?		
Please describe the projects implemented utilizing these funds.		
How would you classify the overall effectiveness of the Hazard Mitigation Grant Program project in your community in terms of its effectiveness in reducing risk? Please provide an approximate measure of its effectiveness to date (HIGH, MODERATE or LOW) and briefly explain.		
Flood Protection Program Planning Funds	Yes or No?	Narrative / Explanation
Has your community received Flood Protection Program Planning Grant Funds?		
If so, what is the date of the grant?		
Please describe the projects implemented utilizing these funds.		
How would you classify the overall effectiveness of the Flood Protection Program Planning funds in your community in terms of its effectiveness in reducing risk? Please provide an approximate measure of its effectiveness to date (HIGH, MODERATE or LOW) and briefly explain.		
U.S. Army Corp of Engineers Projects	Yes or No?	Narrative / Explanation
Has your community received assistance in the form of any U.S. Army Corps of Engineers Projects?		
If so, what is the date and name of the project ?		

LOCAL CAPABILITY ASSESSMENT QUESTIONNAIRE

Please provide a brief narrative description of the project.		
How would you classify the overall effectiveness of the U.S. Army Corps of Engineers project in your community in terms of its effectiveness in reducing risk? Please provide an approximate measure of its effectiveness to date (HIGH, MODERATE or LOW) and briefly explain.		

**H-GAC Regional Mitigation Plan – Capability Assessment
Points System**

55 points max:

0-14 points = Limited overall capability

15-29 points = Moderate overall capability

30-55 points = High overall capability

Yes=3 points No=0 points

Hazard Mitigation Plan

Radiological Emergency Plan

SARA Title III/Hazardous Material Facility Emergency Response Plan

Participate in CRS Program

BCEGS Grade of 1 to 5

Yes=2 points No=0 points

Emergency Operations Plan

Comprehensive Plan (that addresses natural hazards)

Disaster Recovery Plan

Continuity of Operations Plan

Regional Planning

Riparian or Wetlands Preservation Plan

Stormwater Management Plan

Participate in NFIP

Floodplain Management Plan

BCEGS Grade of 6 to 9

Yes=1 point No=0 points

Any of the above plans/programs under County Jurisdiction

Yes=1 point No=0 points

Comprehensive Plan (but does not address natural hazards)

Coastal Zone Management Plan

Transportation Plan

Capital Improvements Plan

Historic Preservation Plan

Zoning Ordinance

Subdivision Ordinance

Adopted building code

Adopted fire code

Riparian buffers

Program to acquire land for public recreational use

Partnerships with NGOs for acquisition/protection of hazard areas

Open space or forestry management plan

Public-Private Partnership Initiatives

High=2 points Moderate=1 points Low=0 points (Self-ranked by jurisdiction)

Technical Capability

Fiscal Capability

Administrative Capability

Political Capability

No points

Flood Damage Prevention Ordinance (required if participate in NFIP)

******This methodology is based on best available information. If a jurisdiction does not provide information on any of the above items, a point value of zero (0) will be assigned for that item.***



Mitigation Actions Worksheets

Disaster Mitigation Act Required Elements

201.6(c)(3)(ii): The mitigation strategy shall include a section that identifies and analyzes a comprehensive range of specific mitigation actions and projects being considered to reduce the effects of each hazard, with particular emphasis on new and existing buildings and infrastructure.

201.6(c)(3)(iii): The mitigation strategy shall include an action plan describing how the actions identified in paragraph (c)(2)(ii) of this section will be prioritized, implemented, and administered by the local jurisdiction. Prioritization shall include a special emphasis on the extent to which benefits are maximized according to a cost benefit review of the proposed projects and their associated costs.

201.6(c)(3)(iv): For multi-jurisdictional plans, there must be identifiable action items specific to the jurisdiction requesting FEMA approval or credit of the plan.

This Mitigation Actions Worksheet should be used to identify potential Hazard Mitigation Actions that your community will consider to reduce the effect of natural hazards. This tool provides a simple way of organizing potential actions so that they are reader friendly and easily incorporated into the Mitigation Action Plan.

The worksheets are part of a strategic planning process and are designed to either

- a.) be filled out and returned at the meeting; or
- b.) be taken back to your community for consideration (for review before local Hazard Mitigation Advisory Groups, City Boards, etc) and then returned.

If you choose to take the worksheet home, **please return them no later than [date]**. Please return your community's mitigation work elements to:

Address to be determined:

Each action should be considered to be a separate project/program. By identifying project/policy requirements, the Mitigation Action Plan will help lay the framework for participating communities to engage in distinct actions that will reduce their vulnerability and risk. Below find an example of the Mitigation Action matrix followed by a brief explanation of its components.

Mitigation Action	
Community Name:	
Action Item (describe):	
Category:	
Hazard(s):	
Lead Agency/Department Responsible:	
Estimated Cost:	
Funding Method:	
Implementation Schedule:	
Priority:	

- a. Community Name: Be sure to identify your community's name.
- b. Action Item: Identify specific actions that, if accomplished, will reduce vulnerability and risk in the impact area. Actions should match mitigation goals and objectives.
- c. Category: Please indicate the most appropriate category for the proposed action (Prevention; Property Protection; Natural Resource Protection; Structural Projects; Emergency Services; or Public Education and Awareness).
- d. Hazard(s): The hazard(s) the action attempts to mitigate against.
- e. Lead Agency/ Department Responsible: Identify the local agency, department or organization that is best suited to accomplish this action.
- f. Estimated Cost: If applicable, indicate what the cost will be to accomplish this action. This amount will, of course, have to be estimated until actual final dollar amounts can be determined.
- g. Funding Method: If applicable, indicate how the cost to complete the action will be funded. For example, funds may be provided from existing operating budgets, or from a previously established contingency fund, or a cost sharing Federal or State grant, etc.
- h. Implementation Schedule: Indicate when the action will begin, and when the action is expected to be completed. Remember that some actions will require only a minimum amount of time, while others may require a long-term effort.
- i. Priority: Indicate whether the action is a 1) High priority – short term immediate; 2) Moderate priority – an action that should be implemented in the near future; 3) Low priority – an action that should be implemented over the long term. Prioritization should be based on the following:
 1. Effect on overall risk to life and property.
 2. Ease of implementation.
 3. Political and community support.
 4. Funding availability.

The following page is to be used to identify Mitigation Actions for your community. Please make copies of the Mitigation Actions Worksheet and fill out a separate worksheet per action.

MITIGATION ACTION WORKSHEET

Mitigation Action	
Community Name:	
Action Item (describe):	
Category:	
Hazard(s):	
Lead Agency/Department Responsible:	
Estimated Cost:	
Funding Method:	
Implementation Schedule:	
Priority:	

PUBLIC PARTICIPATION SURVEY FOR HAZARD MITIGATION PLANNING

We need your help!

The Houston-Galveston Area Council (H-GAC) is currently engaged in a regional planning process to become less vulnerable to disasters, and your participation is important to us!

More than 75 local governments in an eight-county area (including Austin, Brazoria, Chambers, Galveston, Liberty, Montgomery, Walker and Waller counties) are working together with H-GAC to prepare a *Regional Hazard Mitigation Plan*. The purpose of this Plan is to identify and assess our region's disaster risks and determine how to best minimize or manage those risks. Upon completion, the Plan will be presented to each local governing body for adoption and then submitted to the Texas Division of Emergency Management and the Federal Emergency Management Agency for review and approval.

This survey questionnaire provides an opportunity for you to share your opinions and participate in the mitigation planning process. The information you provide will help us better understand your hazard concerns and can lead to activities that should help lessen the impact of future hazard events.

Please help us by completing this survey and returning it to:

Christy Durham, Senior Environmental Planner
Houston-Galveston Area Council
P.O. Box 22777
Houston, TX 77227-2777

Surveys can also be faxed to: (713) 993-4503

If you have any questions regarding this survey please contact Christy Durham at (713) 993-4589 or by e-mail at cdurham@h-gac.com. If you would like to learn more about the development of the Regional Hazard Mitigation Plan please visit our website at www.h-gac.com.

1. What city/county do you live in? _____

2. Have you ever experienced or been impacted by a disaster?
 - ☐ Yes (please explain): _____
 - ☐ No

3. How concerned are you about the possibility of our community being impacted by a disaster?
 - ☐ Extremely concerned
 - ☐ Somewhat concerned
 - ☐ Not concerned

4. Please select the hazard you think is the *highest threat* to your neighborhood:

- ☐ Dam Failure
- ☐ Drought
- ☐ Earthquake
- ☐ Erosion
- ☐ Extreme Heat
- ☐ Flood
- ☐ Hail
- ☐ Hazardous Materials
- ☐ Hurricane
- ☐ Land Subsidence
- ☐ Landslide
- ☐ Lightning
- ☐ Major Urban Fire
- ☐ Pipeline Failure
- ☐ Severe Winter Storm
- ☐ Terrorism
- ☐ Tornado / Wind Storm
- ☐ Wildland Fire
- ☐ Other (please explain): _____

5. Please select the hazard you think is the *second highest threat* to your neighborhood:

- ☐ Dam Failure
- ☐ Drought
- ☐ Earthquake
- ☐ Erosion
- ☐ Extreme Heat
- ☐ Flood
- ☐ Hail
- ☐ Hazardous Materials
- ☐ Hurricane
- ☐ Land Subsidence
- ☐ Landslide
- ☐ Lightning
- ☐ Major Urban Fire
- ☐ Pipeline Failure
- ☐ Severe Winter Storm
- ☐ Terrorism
- ☐ Tornado / Wind Storm
- ☐ Wildland Fire
- ☐ Other (please explain): _____

6. Is there another hazard not listed in this survey that you think is a wide-scale threat to your neighborhood?

- ☐ Yes (please explain): _____
- ☐ No

7. Is your home located in a floodplain?

- ☐ Yes
- ☐ No
- ☐ I don't know

8. Do you have flood insurance?

- ☐ Yes
- ☐ No
- ☐ I don't know

a. If "No", why not?

- ☐ Not located in floodplain
- ☐ Too expensive
- ☐ Not necessary because it never floods
- ☐ Not necessary because I'm elevated or otherwise protected
- ☐ Never really considered it
- ☐ Other (please explain): _____

9. Have you taken any actions to make your home or neighborhood more resistant to hazards?

- ☐ Yes
- ☐ No

a. If "Yes", please explain:**10. Are you interested in making your home or neighborhood more resistant to hazards?**

- ☐ Yes
- ☐ No

11. What is the most effective way for you to receive information about how to make your home and neighborhood more resistant to hazards?

- ☐ Newspaper
- ☐ Television
- ☐ Radio
- ☐ Internet
- ☐ Mail
- ☐ Public workshops/meetings
- ☐ Other (please explain): _____

- 12. In your opinion, what are some steps your local government could take to reduce or eliminate the risk of future hazard damages in your neighborhood?**

- 13. Are there any other issues regarding the reduction of risk and loss associated with hazards or disasters in the community that you think are important?**

14. A number of community-wide activities can reduce our risk from hazards. In general, these activities fall into one of the following six broad categories. Please tell us how important you think each one is for your community to consider pursuing.

Category	Very Important	Somewhat Important	Not Important
<u>1. Prevention</u> Administrative or regulatory actions that influence the way land is developed and buildings are built. Examples include planning and zoning, building codes, open space preservation, and floodplain regulations.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<u>2. Property Protection</u> Actions that involve the modification of existing buildings to protect them from a hazard or removal from the hazard area. Examples include acquisition, relocation, elevation, structural retrofits, and storm shutters.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<u>3. Natural Resource Protection</u> Actions that, in addition to minimizing hazard losses, also preserve or restore the functions of natural systems. Examples include: floodplain protection, habitat preservation, slope stabilization, riparian buffers, and forest management.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<u>4. Structural Projects</u> Actions intended to lessen the impact of a hazard by modifying the natural progression of the hazard. Examples include dams, levees, seawalls, detention/retention basins, channel modification, retaining walls and storm sewers.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<u>5. Emergency Services</u> Actions that protect people and property during and immediately after a hazard event. Examples include warning systems, evacuation planning, emergency response training, and protection of critical emergency facilities or systems.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<u>6. Public Education and Awareness</u> Actions to inform citizens about hazards and the techniques they can use to protect themselves and their property. Examples include outreach projects, school education programs, library materials and demonstration events.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

THANK YOU FOR YOUR PARTICIPATION!



H-GAC Public Participation Survey 93 respondents as of October 9, 2003

1. What city/county do you live in?

County percentages are sometimes greater than the total for the cities in those counties, as some respondents only listed their county.

Austin County: 19.4%

Cities: Bellville: 9.7%

Bleiblerville: 1.1%

Sealy: 3.2%

Brazoria County: 1.1%

Cities: Brazoria: 1.1%

Chambers County: 31.2%

Cities: Anahuac: 11.8%

Baytown (Cove): 2.2%

Hankamer: 4.3%

Stowell: 2.2%

Winnie: 5.4%

Liberty County: 29%

Cities: Cleveland: 2.2%

Cypress Lakes: 1.1%

Daisetta: 1.1%

Dayton: 6.5%

Hardin: 1.1%

Romayor: 1.1%

Rye: 2.2%

Montgomery County: 1.1%

Cities: Willis: 1.1%

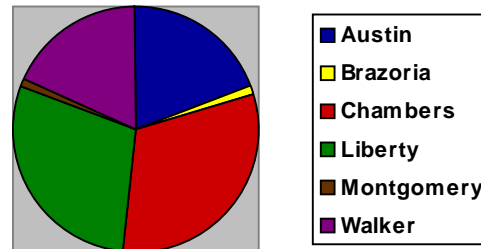
Walker County: 18.3%

Cities: Huntsville: 7.5%

New Waverly: 4.3%

Richards: 1.1%

Participating Counties



2. Have you ever experienced or been impacted by a disaster?

Yes: 50.5%

No: 49.5%

2a. If “yes”, please explain?

Exact explanations are located on the Excel spreadsheet, “hgac.” The following are grouped by subject. Percentages equal more than 100% as most respondents listed more than one hazard occurrence.

Drought: 2.1%

Earthquake: 2.1%

Fire: 8.5%

Flood: 38.3%

Hazardous Materials: 6.4%

Hurricane: 46.8%

Lightning: 2.1%

Major Highway Accident: 2.1%

Pipeline: 6.4%

Tornado/Wind Storm: 25.5%

Thunderstorm: 8.5%

3. How concerned are you about the possibility of our community being impacted by a disaster?

Extremely concerned: 31.2%

Somewhat concerned: 60.2%

Not concerned: 8.6%

4. Please select the hazard you think is the *highest threat* to your neighborhood:

Dam Failure: 1.1%

Drought: 6.5%

Erosion: 1.1%

Extreme Heat: 7.5%

Flood: 20.4%

Hazardous Materials: 9.7%

Hurricane: 33.3%

Land Subsidence: 1.1%

Lightning: 1.1%

Major Urban Fire: 3.2%

Terrorism: 1.1%

Tornado/Wind Storm: 10.8%

Other: 1.1%

4a. If “other”, please explain:

- The inability of city, county, & state law officers within Austin County to move traffic.

5. Please select the hazard you think is the *second highest threat* to your neighborhood:

Drought: 10.8%
 Extreme Heat: 5.4%
 Flood: 19.4%
 Hail: 4.3%
 Hazardous Materials: 5.4%
 Hurricane: 16.1%
 Lightning: 2.2%
 Pipeline Failure: 5.4%
 Severe Winter Storm: 1.1%
 Terrorism: 2.2%
 Tornado/Wind Storm: 18.3%
 Wildland Fire: 4.3%
 Other: 1.1%

5a. If “other”, please explain:

- Flooding due to poor drainage following heavy rain.
- None

6. Is there another hazard not listed in this survey that you think is a wide-scale threat to your neighborhood?

Yes: 16.9%
 No: 83.1%

6a. If “yes”, please explain:

As in question 2a, comments are broadly categorized. Exact responses are found in “hgac.xls”

Environmental Degradation: 7.1%
 Hazardous Materials: 14.2%
 Pests/Disease: 21.4%
 Propane Storage: 7.1%
 Transportation: 28.6%
 Water funnel off Bay: 7.1%
 Wildland Fire: 7.1%

7. Is your home located on a floodplain?

Yes: 14%
 No: 67.7%
 I don’t know: 17.2%

8. Do you have flood insurance?

Yes: 24.7%

No: 65.6%

I don't know: 8.6%

8a. If "no", why not?

Not located in floodplain: 36.1%

Too expensive: 8.2%

Not necessary because it never floods: 4.9%

Not necessary because I'm elevated or otherwise protected: 31.1%

Never really considered it: 0%

Other: 4.9%

8b. If "other", please explain:

- Live on very very high hill
- Rent the house
- Windstorm Insurance

9. Have you taken any actions to make your home or neighborhood more resistant to hazards?

Yes: 27%

No: 73%

9a. If "yes", please explain:

As in questions 2a and 6a, comments are broadly categorized. Exact responses are found in "hgac.xls"

Elevated home/structure: 16.7%

Filled with dirt: 12.5%

Cleared/cleaned home, neighborhood: 16.7%

Removed fire hazards: 12.5%

Joined organization or involved community: 16.7%

Strengthened home/structure: 20.8%

10. Are you interested in making your home or neighborhood more resistant to hazards?

Yes: 87.8%

No: 12.2%

11. What is the most effective way for you to receive information about how to make your home and neighborhood more resistant to hazards?

Percentages equal more than 100% as most respondents selected more than one medium.

Newspaper: 45.7%
 Television: 44.6%
 Radio: 21.7%
 Internet: 10.9%
 Mail: 37%
 Public workshops/meetings: 15.2%
 Other: 4.3%

11a. If “other”, please explain.

- County officials to do their job and stop lying
- Hwy 321 V.F.D.
- Liberty – Thicket Magazine – monthly publication
- Not applicable

12. In your opinion, what are some steps your local government could take to reduce or eliminate the risk of future hazard damages in your neighborhood?

Exact responses located in “hgac.xls” The following were categorized based on those responses, unless marked by a bulleted point. May add to over 100% as some respondents listed many suggestions.

Enforce laws/establish policies: 4.5%
 Public education and awareness: 34.8%
 Traffic/Evacuation procedures: 9.1%
 Better drainage/drainage structures/clean ditches more often: 33.3%
 Hazardous Material, truck routes more closely monitored: 7.6%
 Better training for police, fire, EMS personnel: 4.5%
 Insurance Rates: 3%

- Build a levee
- Fund emergency services! Sensible burn bans.
- Hire more deputies
- Good road improvement
- Water wells in event of drought
- Promote land and home ownership
- Provide facilities open to victims of disaster
- Restrict development in flood plain

13. Are there any other issues regarding the reduction of risk and loss associated with hazards or disasters in the community that you think are important?

Exact responses located in "hgac.xls" The following were categorized based on those responses, unless marked by a bulleted point.

- Public education and awareness: 15.8%
- Increased EMS: 15.8%
- Better funding/money: 15.8%
- Better training for police, fire, EMS personnel: 15.8%
- Safe evacuation route during a disaster
- Need more protective walkways in and around city.
- Keep slow burning the forest.
- Have the prisoners clean the ditches, let them pay for their keep

14. A number of community-wide activities can reduce our risk from hazards. In general, these activities fall into one of the following six broad categories. Please tell us how important each one is for your community to consider pursuing.

14.1 Prevention

- Very Important: 71.4%
- Somewhat Important: 25.3%
- Not Important: 3.3%

14.2 Property Protection

- Very Important: 42.2%
- Somewhat Important: 51.1%
- Not Important: 6.7%

14.3 Natural Resource Protection

- Very Important: 58.6%
- Somewhat Important: 35.6%
- Not Important: 5.7%

14.4 Structural Projects

- Very Important: 51.8%
- Somewhat Important: 36.5%
- Not Important: 11.8%

14.5 Emergency Services

- Very Important: 86.7%
- Somewhat Important: 12.2%
- Not Important: 1.1%

14.6 Public Education and Awareness

- Very Important: 82.2%
- Somewhat Important: 16.7%
- Not Important: 1.1%

CAPABILITY ASSESSMENT FINDINGS
H-GAC Regional Mitigation Plan

		Survey	GCI	NFIP	CRS	BCEGS	HMP	DRP	CZMP	CLUP	FMP	SMP	EOP	COOP	REP	SARA	TRANS	CIP	REG-PL	HPP	ZO	SO	FDPO	BC	FC	RIP/WET	BUFF	ACQUIS	NGOs	OS/FOR	PUB/PRI	RAW SCORE	TECH	FISC	ADMIN	POLI	FINAL SCORE	2000 Population
1	Austin County	1	1	2	0	0	3	2	0	0	2	0	2	2	3	3	1	0	2	0	0	1	Y	0	0	0	0	0	1	0	1	25	0	0	0	2	27	23,590
2	City of Bellville	1	1	2	0	2	1	0	0	0	1	2	1	1	1	1	1	0	2	0	0	1	Y	1	1	0	0	1	0	0	0	19	1	2	2	1	25	3,794
3	City of Brazos Country	1	1	2	0	0	3	1	0	0	2	0	1	1	1	1	1	0	2	0	0	0	Y	0	0	0	0	0	0	0	1	16	0	0	0	1	17	442
4	City of Industry	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N	0	0	0	0	0	0	0	0	0	0	0	0	0	0	304
5	Town of San Felipe	1	1	2	0	0	1	2	0	0	1	0	1	1	1	1	1	0	2	0	0	0	N	1	0	2	0	0	0	0	1	17	0	0	0	1	18	868
6	City of Sealy	1		2	0	3	3	1	0	1	2	2	1	1	1	1	1	1	2	0	0	1	Y	1	1	0	0	0	0	0	1	26	0	0	0	0	26	5,248
7	City of Wallis	1	1	2	0	0	1	1	0	0	2	0	1	1	1	1	1	0	2	0	0	1	Y	1	0	0	0	0	1	0	1	17	0	0	0	0	17	1,172
8	Brazoria County	1	1	2	0	0	0	2	1	0	2	0	2	2	3	3	1	0	0	0	0	1	Y	0	1	2	0	1	0	0	1	24	1	1	1	0	27	241,767
4	City of Alvin	1	1	2	0	0	0	2	0	2	2	0	2	2	3	3	1	0	2	0	0	1	Y	1	1	0	0	0	0	0	0	26	1	1	2	0	30	
9	City of Angleton			2	0	3																								5					5	18,130		
10	City of Bailey's Prairie			2	0	0																								2					2	694		
11	City of Bonney			2	0	0																								2					2	384		
12	City of Brazoria	1	1	2	0	2	0	0	0	1	2	0	0	0	0	0	0	0	2	0	0	1	Y	1	0	0	0	0	1	0	0	12	0	0	1	1	14	2,787
13	City of Brookside Village	1		2	0	0	0	2	1	2	2	2	2	0	0	0	0	1	2	0	1	1	Y	1	1	0	0	0	0	0	0	20	0	1	1	1	23	1,960
14	City of Clute			2	0	3																								5					5	10,424		
15	City of Danbury			2	0	0																								2					2	1,611		
16	City of Freeport	1	1	2	0	2	0	1	0	0	2	0	1	1	3	3	0	0	2	0	1	1	Y	1	1	0	0	0	1	0	1	23	1	2	2	1	29	12,708
17	City of Hillcrest Village			2	0	0																								2					2	722		
18	City of Holiday Lakes	1	1	2	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	1	0	N	0	0	0	0	0	0	0	0	5	0	0	0	0	5	1,095
19	City of Iowa Colony	1		2	0	0	0	0	0	1	2	0	2	0	1	0	0	1	0	0	1	1	N	1	0	0	0	0	0	0	0	12	0	0	0	0	12	804
20	City of Jones Creek			2	0	0																								2					2	2,130		
21	City of Lake Jackson	1		2	0	2	0	1	1	2	2	2	1	1	1	1	1	1	1	0	1	1	N	1	1	0	0	1	1	0	1	26	2	1	1	1	31	26,386
22	City of Liverpool			2	0	0																								2					2	404		
23	City of Manvel	1	1	2	0	0	0	2			2		2	2				1	2		1	1	N	1	1	2	1	1	1	1	1	24	0	0	2	2	28	3,046
24	City of Oyster Creek	1	1	2	0	0	1	0	0	0	0	0	1	1	0	1	0	0	2	0	1	1	Y	1	0	0	0	0	0	0	0	11	0	0	0	0	11	1,192
25	City of Quintana	1		2	0	0	0	2	1	0	1	0	1	0	0	1	0	0	0	0	1	1	Y	1	1	2	0	0	0	0	0	14	2	0	0	1	17	38
26	City of Richwood	1		2	0	0	0	0	0	2	2	0	1	0	1	1	0	0	0	0	1	1	Y	1	0	0	0	0	0	0	0	12	2	2	2	0	18	3,012
27	Village of Surfside Beach	1		2	0	0	0	2	1	2	2	0	1	0	1	1	0	1	0	0	1	1	Y	1	0	0	1	1	1	0	1	20	0	0	0	0	20	763
28	City of Sweeny	1		2	0	0	0	2	0	0	2	0	2	0	3	3	0	0	0	0	0	1	Y	1	0	0	0	0	0	0	0	16	0	1	2	2	21	3,624
29	Chambers County	1		2	0	0	0	0	1	0	2	0	2	2	3	3	0	0	2	0	0	1	Y	0	0	0	0	0	0	0	0	18	0	0	0	0	18	26,031
30	City of Anahuac	1		2	0	0	0	0	1	0	2	0	2	2	3	3	0	0	2	0	0	1	Y	0	0	0	0	0	0	0	0	18	0	0	0	0	18	2,210
31	City of Beach City	1		2	0	0	0	0	1	0	2	0	2	2	3	3	0	0	2	0	0	1	Y	0	0	0	0	0	0	0	0	18	0	0	0	0	18	1,645
32	City of Cove	1		0	0	0	0	0	1	0	2	0	2	2	3	3	0	0	2	0	0	1	Y	0	0	0	0	0	0	0	0	16	0	0	0	0	16	323
33	City of Old River-Winfree	1		2	0	0	0	0	1	0	2	0	2	2	3	3	0	0	2	0	0	1	Y	0	0	0	0	0	0	0	0	18	0	0	0	0	18	1,364
34	City of Mont Belvieu	1		2	0	2	0	0	1	0	2	0	2	2	3	3	0	0	2	0	0	1	Y	0	1	0	0	0	0	0	0	21	0	0	0	0	21	2,324
35	Liberty County	1	1	2	0	0	0	0	0	0	2	2	2	2	0	3	1	1	2	0	0	1	Y	0	1	0	0	0	0	1	1	21	1	1	1	0	24	70,154
36	City of Ames	1	1	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	0	0	1	N	1	1	0	0	0	0	0	0	7	0	0	0	0	7	1,079
37	City of Cleveland	1	1	2	0	2	3	0	0	0	2	0	2	2	3	0	1	0	0	0	0	1	Y	1	1	0	0	1	0	0	0	21	0	0	1	0	22	7,605
38	City of Daisetta	1		2	0	0	3	0	0	0	2	0	2	0	0	3	0	0	2	0	0	0	N	0	0	0	0	0	0	0	1	15	0	0	0	0	15	1,034

CAPABILITY ASSESSMENT FINDINGS
H-GAC Regional Mitigation Plan

		Survey	GCI	NFIP	CRS	BCEGS	HMP	DRP	CZMP	CLUP	FMP	SMP	EOP	COOP	REP	SARA	TRANS	CIP	REG-PL	HPP	ZO	SO	FDPO	BC	FC	RIP/WET	BUFF	ACQUIS	NGOs	OS/FOR	PUB/PRI	RAW SCORE	TECH	FISC	ADMIN	POLI	FINAL SCORE	2000 Population	
39	City of Dayton	1	1	2	0	3	0	0	0	1	2	2	1	0	0	0	1	1	2	0	0	1	Y	1	1	0	0	0	0	1	0	19	0	1	1	1	22	5,709	
40	City of Dayton Lakes			2	0	0																									2					2	101		
41	City of Devers	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N	0	0	0	0	0	0	0	0	0	0	0	0	0	0	416	
42	City of Hardin	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N	0	0	0	0	0	0	0	0	2	0	0	0	0	2	755	
43	Town of Kenefick			0	0	0																									0					0	667		
44	City of Liberty	1	1	2	0	2	3	2	0	0	0	0	2	0	3	3	0	0	2	0	0	1	N	1	1	0	0	0	0	0	0	22	0	0	0	0	22	8,033	
45	City of North Cleveland			0	0	0																									0					0	263		
46	City of Plum Grove			2	0	0																									2					2	930		
47	Town of Cut and Shoot	1		2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	1	N	1	0	0	0	0	0	0	0	6	0	0	0	0	6	1,158	
48	City of Magnolia			2	0	0																									2					2	1,111		
49	City of Montgomery	1	1	2	0	0	1	1	0	1	1	2	1	0	0	0	0	0	2	0	1	1	Y	1	1	0	0	0	0	0	0	15	0	0	0	2	17	489	
50	City of Oak Ridge North	1		2	0	0	3	2	0	2	2	2	2	0	0	0	0	0	2	0	1	1	Y	1	1	0	0	1	0	1	0	23	1	0	0	0	24	2,991	
53	Town of Roman Forest	1	1	2	0	0	3	0	0	0	0	2	0	0	0	0	0	0	0	0	0	1	N	1	0	0	0	1	0	0	0	10	0	0	0	1	11	1,279	
54	City of Shenandoah	1		2	0	0	3	0	0	2	2	2	2	0	0	0	0	1	0	1	1	1	N	1	1	0	0	0	0	0	0	19	0	1	1	0	21	1,503	
55	City of Splendora	1		2	0	0	3	0	0	0	0	0	2	0	0	0	0	1	0	0	0	1	Y	1	0	0	0	0	0	0	0	10	0	0	0	0	10	1,275	
56	The Woodlands			0	0	0																																	
57	City of Willis	1		2	0	0	0	0	0	2	0	2	2	0	1	1	0	0	0	0	0	1	Y	1	1	0	0	1	0	0	0	14	0	0	2	0	16	3,985	
58	Walker County			2	0	0																									2					2	61,758		
59	City of Huntsville	1	1	2	0	2	0	0	0	1	2	2	0	0	0	0	1	0	2	0	1	1	Y	1	1	0	0	1	0	0	0	17	0	0	2	0	19	35,078	
60	City of New Waverly			2	0	0																									2					2	950		
61	City of Riverside			2	0	0																									2					2	425		
62	Waller County	1	1	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2	0	0	1	N	0	0	0	0	0	0	0	0	7	0	0	0	0	7	32,663	
63	City of Brookshire	1		2	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	N	1	1	0	0	0	0	0	0	8	0	0	0	0	8	3,450	
64	City of Hempstead	1	1	2	0	0	0	0	0	0	0	0	2	0	0	0	0	1	2	0	1	1	Y	1	0	0	0	0	0	0	0	10	0	0	0	1	11	4,691	
65	City of Pattison	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	N	1	0	0	0	0	0	0	0	2	0	0	0	0	2	447	
66	City of Pine Island	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N	0	0	0	0	0	0	0	0	0	0	0	0	0	0	849	
67	City of Prairie View	1		2	0	0	0	0	0	0	2	0	2	0	3	3	0	0	0	0	1	1	N	1	1	0	0	1	1	0	1	19	0	0	1	1	21	4,410	
68	City of Waller	1	1	2	0	0	0	2	0	0	2	0	2	0	0	0	0	0	2	0	0	1	Y	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2,092
TOTAL		51	29																																				

POINTS SYSTEM:

Up to 3 points

Up to 2 points

Up to 1 point

No points

Appendix D

H-GAC Building and Fire Code Information by Jurisdiction

Jurisdiction	County	Adopted Building Codes	Current Building Code (Date and Type)	Describe Inspection/Permit Process	Number and Qualifications of Inspectors	Number of Building Starts During Past 12 Months	Number of Inspections Conducted During Past 12 Months	Jurisdiction	County	Adopted Fire Codes	Current Fire Code (Date and Type)	Describe Inspection/Permit Process	Number and Qualifications of Inspectors	Number of Fire Inspections Conducted During Past 12 Months	
Austin County	Austin	No	NA	NA	NA	NA	NA	Austin County	Austin	No	NA	NA	NA	NA	
Belville	Austin	Yes	International Building Code - adopted 04/18/2000		1 - certified	38	152	Belville	Austin	Yes	International Fire Code - 1991			1	
Brazos Country Industry	Austin	No	NA	NA	NA	NA	8	Brazos Country Industry	Austin	No	NA	NA	NA	NA	
San Felipe	Austin	Yes	Southern Building Code - adopted 05/04/1999 - Ordinance No. 199-3	Application is given to council. Site plan(s) inspected and approved at the next council session.		1	5	5	San Felipe	Austin	No	NA	NA	NA	
		Yes	IBC - 10/16/02	Plan review - permit issued, site inspection, stake-out inspection, foundation, rough-in electrical, plumbing, taps, framing, top-out plumbing, intermediate electrical, final plumbing, electrical mechanical and building.						Yes	International Fire Code - 2000 edition				
Sealy	Austin					2	33	1151	Sealy	Austin				2	
Wallis	Austin	Yes	SBCCI - adopted 06/01/1975	Inform them of the set-back lines from property line and then inspect from there.		2	4	4	Wallis	Austin	No	NA	Use Fort Bend County Fire Marshall. Also use the Fireman and Fire Marshall office.	4	
Brazoria County	Brazoria	No	NA	NA	NA	NA	NA	Brazoria County	Brazoria	Yes	International Fire Code	Currently EMC is in charge of fire code.	0 - in training	0	
Alvin	Brazoria	Yes	No answer	No answer	2.5		A lot	Alvin	Brazoria	Yes	SBCCI Inspected annually on request	No answer	1	1200	
Angleton	Brazoria	Yes	2003 International building code					Angleton	Brazoria	Yes	2006 Fire Code Nov. 10, 2009				
Bailey's Prairie	Brazoria							Bailey's Prairie	Brazoria						
Bonney	Brazoria							Bonney	Brazoria						
Brazoria	Brazoria	Yes	International Standard Building Code - adopted 2000	Submit plans, inspection based on plans, inspections are foundation, framing, etlrical and plumbing prior to cover-up, pre-final walk though and final for CO		7	6	85	Brazoria	Brazoria	No		2 - volunteers	16	
Brookside Village	Brazoria	Yes	Southern Building Code - adopted 1968	On site inspections during all stages after plan review	1 - part-time - certified	3	20-24		Brookside Village	Brazoria	Yes	SBCC - Adopted 11/14/2000	1 - part-time - certified	2	
Clute	Brazoria								Clute	Brazoria					
Danbury	Brazoria	Yes	2003 Edition International Building Code in 2006 & 2011 National Electrical Code in 2010						Danbury	Brazoria	Yes	1979 Standard Fire Prevention Code in 1983			
Freeport	Brazoria	Yes	SBCCI - adopted in the 1960s	Permits are issued prior to construction, inspections ongoing	1 - certified		25	25	Freeport	Brazoria	Yes	Southern Building Code (1997 Edition) - adopted in 2000	Fire inspections are conducted on new construction or projects that require permits through the Building Official's office. Proactive inspections as time permits.	1 - certified	25
Hillcrest Village	Brazoria	No	Building Ordinance			0	0	0	Hillcrest Village	Brazoria	No	NA	NA	NA	
Holiday Lakes	Brazoria	Yes	IRC - adopted 2000		1 - certified		4	25	Holiday Lakes	Brazoria	No	NA	NA	NA	
Iowa Colony	Brazoria								Iowa Colony	Brazoria	No	NA	NA	NA	
Jones Creek	Brazoria								Jones Creek	Brazoria					
Lake Jackson	Brazoria	Yes	International Building Code - adopted 2000	Building permits are not issued until all plans have been approved by the Building Official. Once building permits are issued, construction is inspected at various stages.	3 - certified	366	4250		Lake Jackson	Brazoria	Yes	Adopted in 1958 - upgraded to International Fire Code in 2000	1 - certified	310	
Liverpool	Brazoria		In Process of doing inter-local w/Brazoria County						Liverpool	Brazoria					
Manvel	Brazoria	Yes	SBCCI and ICBO	No answer	6 - all certified by the state	48	118		Manvel	Brazoria	Yes	2000 International Fire Code 08/11/00	No answer	1 - Fire Marshall	90
Oyster Creek	Brazoria	Yes	Standard Building Code - originally adopted codes in 1987		1	8	8		Oyster Creek	Brazoria	No	NA	NA	NA	
Quintana	Brazoria	Yes	SBCCI - originally adopted codes in 1976	Obtain permit, on site inspections during work, final inspection	1	0	0		Quintana	Brazoria	Yes	Fire Prevention Code - adopted 1980	No answer	1	No answer
Richwood	Brazoria	Yes	International Building Code		1 - certified	1	16	17	Richwood	Brazoria	Yes	International Fire Code		0	7
Surfside Beach	Brazoria	Yes	SBCCI - originally adopted codes in 1994	No answer		1	30	30	Surfside Beach	Brazoria	No	NA	NA	NA	
Sweeny	Brazoria	Yes	International Building Code - 2000	Inspected at all phases (electrical, plumbing, mechanical, etc.)	2	12	50		Sweeny	Brazoria	No	NFPA	2 - certified	No answer	
Chambers County	Chambers	No	NA	NA	NA	NA	NA	Chambers County	Chambers	No	NA	NA	NA	NA	
Cove	Chambers								Cove	Chambers					
Anahuac	Chambers								Anahuac	Chambers					
Beach City	Chambers	No							Beach City	Chambers					
Old River-Winfree	Chambers/Liberty	Yes	Adopted State Building Codes May 2007						Old River-Winfree	Chambers/Liberty					
Mont Belvieu	Chambers/Liberty	Yes	2006 IBC for Building Codes 2008 NEC for Electric						Mont Belvieu	Chambers/Liberty	Yes	2009 IFC			
Liberty County	Liberty	No	NA	Inspect elevation only	NA	22	NA		Liberty County	Liberty	Yes	Life Safety Code	1 - certified	45	
Ames	Liberty	Yes	SBCCI		1	5	0		Ames	Liberty	No	NA	NA	NA	
Cleveland	Liberty	Yes	IBC (2000) - originally adopted codes in 1976	Builder applies for permit, must have plans as required in IBC code. Aminum of four building inspections are made.	3 - all certified	3	55		Cleveland	Liberty	Yes	2000 International Fire Code - originally adopted fire codes in 1976	1 - certified	60+	

Appendix D

H-GAC Building and Fire Code Information by Jurisdiction

Daisetta	Liberty	No	NA	NA	NA	NA	NA	Daisetta	Liberty	No	NA	NA	1 - Fire Marshall	2
		Yes	IBC (2000) - originally adopted codes in 1991	IBC is required for construction plans and compliance during inspections	1 - Building Official	159	1431			Yes	International Fire Code (2000) - originally adopted codes in 1991	Process is the same as the subdivision and building -- the Fire Marshall and Building Official are in charge of fire code compliance.	2 - state certification	No answer
Dayton	Liberty							Dayton Lakes	Liberty					
Devers	Liberty	No	NA	NA	NA	NA	NA	Devers	Liberty	No	NA	NA	NA	NA
Hardin	Liberty	No	NA	NA	NA	NA	NA	Hardin	Liberty	No	NA	NA	NA	NA
Keneffick	Liberty							Keneffick	Liberty					
Liberty	Liberty	Yes	ICC - 2002			1	10	Liberty	Liberty	Yes	IFC		11 - 1 certified	80
North Cleveland	Liberty							North Cleveland	Liberty					
Plum Grove	Liberty							Plum Grove	Liberty					
Montgomery County	Montgomery	No	NFIP and septic only	NA	NA	NA	NA	Montgomery County	Montgomery	No	NA	NA	NA	NA
		Yes	ICC - adopted 2002	Building plans must be approved prior to start of construction. Site inspections required throughout the process and prior to issue of an Occupancy Permit.	5 - 1 certified	519	7504			Yes	International Fire Code - 2000 edition	Occupant must request a fire inspection and receive approval prior to applying for a building occupancy permit.	3 - all certified	2500
Conroe	Montgomery							Conroe	Montgomery					
		Yes	International Residential Code and National Electrical Code - adopted Dec 01 to comply with Chapter 214 LGC Subchapter G			0	0			No	Fire related matters are handled by ESD 12			
Cut and Shoot	Montgomery							Cut and Shoot	Montgomery			Unknown	Unknown	Unknown
Magnolia	Montgomery							Magnolia	Montgomery					
		Yes	International Residential Code - 2001	The permit process starts with a plot plan and two sets of plans. The plans are turned over to the inspections office for the approval. When the approval is done, one set of plans are returned to the person with any corrections on them. The inspections are called in as work progresses. When an inspection is completed, it is recorded.	Contracted service to certified inspectors.	4	56			Yes	Standard Fire Prevention Code - adopted 1998	Fire service provided through the County.	No answer	No answer
Montgomery	Montgomery							Montgomery	Montgomery					
Oak Ridge North	Montgomery	Yes	International Building Code			1 part-time and 1 full-time - 1 is certified	12 90+	Oak Ridge North	Montgomery	Yes	International Code Council - adopted 1982		2 part-time, certified	120
		Yes	SBCCI - adopted in 1972			3 - all volunteers (Planning and Zoning Board)	15-20			Yes		1998	Volunteer Fire Department	No answer
Panorama Village	Montgomery							Panorama Village	Montgomery					
Patton Village	Montgomery							Patton Village	Montgomery	No	NA	NA	NA	NA
Roman Forest	Montgomery	Yes	Standard Building Code - adopted 1975			1 - certified	25	Roman Forest	Montgomery	No	NA	NA	NA	NA
Shenandoah	Montgomery	Yes	ICC	No answer		1	No answer	Shenandoah	Montgomery	Yes	International Fire Code		1 - certified	No answer
		Yes	SBCCI - unsure of adoption date	No answer		Unknown - building permits are not issued by the city	0			No	NA	Fire protection is provided by Montgomery County Emergency Service #11	NA	NA
Splendor	Montgomery							Splendor	Montgomery					
The Woodlands	Montgomery							The Woodlands	Montgomery					
		Yes	SBCCI (1997) - adopted 04/21/98	An application for a building permit is submitted along with plans and specifications for the building. The plans are reviewed for compliance with all applicable codes and other requirements. If the plans are specifications meet all code and other requirements, a building permit is issued.		2	11			Yes	Standard Fire Code (1997) - adopted 04/21/1998	Fire inspections are performed on request of the property owner or building tenant.	0	3
Willis	Montgomery							Willis	Montgomery					
Walker County	Walker	No						Walker County	Walker	No				
		Yes	International Building Code (2000) - adopted February 2002	Plan review, permitting, inspecting (site inspection, drainage, setbacks, foundation, plumbing, electrical, HVAC, structural, fire)	4 - 2 certified	295	3955			Yes	Adopted International Fire Code 2000	Fire Department inspects buildings for compliance of the fire code annually.	3	270
Huntsville	Walker							Huntsville	Walker					
Riverside	Walker	No						Riverside	Walker	No				
New Waverly	Walker	No						New Waverly	Walker	No				
Waller County	Waller	No	NA	NA	NA	NA	NA	Waller County	Waller	No	NA	NA	NA	NA
Brookshire	Waller	Yes	ICC			1	40	Brookshire	Waller	Yes	SBCC		1	5
		Yes	Southern Building Code 09/22/1998	Plans submittal, approval, permits issued and inspection according to permits - building/electrical, plumbing and mechanical		1	12			Yes	International Fire Code			
Hempstead	Waller							Hempstead	Waller					
Pattison	Waller	Yes	Southern Building Code (99) 10/10/2002			1	7	Pattison	Waller	No	NA	NA	NA	NA
Pine Island	Waller	No	NA	NA	NA	NA	NA	Pine Island	Waller	No	NA	NA	NA	NA
		Yes	SBCCI - adopted 2000			1.5 - 1 Full-time Fire Marshall and one contract inspector	5			Yes	NFPA	Upon request or when applying for a permit	2.5	9
Prairie View	Waller							Prairie View	Waller					
Waller	Waller/Harris	Yes	Ordinance 280 - 11/11/2002 and ordinance 281 - 11/11/2002 - ICC			1 - ICC certified	7	Waller	Waller/Harris	Yes	2003 ICC Fire Code		1	15

Appendix D

H-GAC Community Floodplain Program Information

Jurisdiction	County	NFIP Participant	Current Floodplain Management Ordinance/Court Orders	Date Adopted	Explanation of inspection/permit process	Number of Floodplain Administrator(s) and Staff	Qualifications of Floodplain Administrator(s) and Staff	Number of inspections and permits approved	Number of variances allowed	Explanation of Variances
Austin County	Austin	Y	Flood Damage Prevention Ordinance	11/13/89 amended 5/24/99	Written development applications reviewed by staff for compliance	1 - Administrator	No answer	14 permits, 216 exemption certificates	0	NA
Bellville	Austin	Y	See Austin County Ordinance 2001-09	Apr-98	Interlocal agreement with Austin County	See Austin County	See Austin County	See Austin County	0	NA
Brazos Country Industry	Austin	Y	NA	8/15/2001	No answer	1 - Administrator	No answer	No answer	No answer	No answer
San Felipe	Austin	N	NA	NA	NA	NA	NA	NA	NA	NA
	Austin	Y	See Austin County	No answer	No answer	No answer	No answer	0	0	NA
Sealy	Austin	Y	Flood Damage Prevention Ordinance	6/9/1999	Administrator is required to sign off on all building permit applications and verify if the permit request is indie or outside of the floodplain. If located inside the floodplain, construction is subject to all requirements found in the ordinance	1 Floodplain Administrator	Director of Public Works	0	0	NA
Wallis	Austin	Y	See Austin County	No answer	City Hall issues permit and then inspector inspects the work	1 - staff member	No answer	NA	NA	NA
Brazoria County	Brazoria	Y	Flood Damage Prevention Ordinance	Adopted Dec 1971	A detailed description of the inspection process can be obtained through the County	1 administrator and 2 office staff		Total 2002-582, Jan-May 2003 - 160	0	NA
Alvin	Brazoria	Y	No answer	No answer	No answer	3 certified floodplain managers	all certified	0	0	NA
Angleton	Brazoria	Y								
Bailey's Prairie	Brazoria	Y								
Bonney	Brazoria	Y								
Brazoria	Brazoria	Y	Flood Damage Prevention Ordinance	No answer	Application is received and reviewed, the site is inspected several times before receiving final approval	2	No answer	0	0	NA
Brookside Village	Brazoria	Y	Flood Damage Prevention Ordinance	No answer	elevation certificate required for development in the floodplain	1		15	0	NA
Clute	Brazoria	Y								
Danbury	Brazoria	Y								
Freeport	Brazoria	Y	Flood Damage Prevention Ordinance	Apr-89	Integrated with routine building permitting and inspection process	1	No answer	4	0	NA

Appendix D

H-GAC Community Floodplain Program Information

Jurisdiction	County	NFIP Participant	Current Floodplain Management Ordinance/Court Orders	Date Adopted	Explanation of inspection/permit process	Number of Floodplain Administrator(s) and Staff	Qualifications of Floodplain Administrator(s) and Staff	Number of inspections and permits approved	Number of variances allowed	Explanation of Variances
Hillcrest Village	Brazoria	Y	No	NA	No answer	1	Mayor	0	0	NA
Holiday Lakes	Brazoria	Y								
Iowa Colony	Brazoria	Y	No	NA	No answer	No answer	No answer	0	0	NA
Jones Creek	Brazoria	Y								
Lake Jackson	Brazoria	Y	No - part of Floodplain Management	NA	We either allow it or not.	1	City Manager	0	0	NA
Liverpool	Brazoria	Y								
Manvel	Brazoria	Y	Ordinance #2-90-05	8/10/2000	No answer	Emergency Management Coordinator		7	0	NA
Oyster Creek	Brazoria	Y	Ordinance Number 311	3/19/1987	No answer	0	NA	1 - Velsaco Drainage Dict.	0	NA
Quintana	Brazoria	Y	Flood Damage Prevention Ordinance	1984	Detailed explanation of the inspection process can be obtained through the city.	1	No answer	No answer	No answer	No answer
Richwood	Brazoria	Y	Flood Damage Prevention Ordinance	1987		1 - other existing staff as needed	Public Works Director	0	0	NA
Surfside Beach	Brazoria	Y	Flood Damage Prevention Ordinance	11/14/2000	require engineers drawings and elevation certificate	1 staff	No answer	30	0	NA
Sweeny	Brazoria	Y	Ordinance Number 102-87	1987	No answer	1	City Manager	30+	0	NA
Chambers County Cove	Chambers	Y			Per FEMA guidelines	3 staff		25	0	NA
Anahuac	Chambers	Y								
Beach City	Chambers	Y								
Old River-Winfree	Chambers/Liberty	Y								
Mont Belvieu	Chambers/Liberty	Y								
Liberty County	Liberty	Y	Flood Damage Prevention Order	July 25, 1988 - entered on record March 2, 1992 Vol. 7 page 635	OSSF Inspectors regularly tour river bottom subdivisions and report any new construction. Any new construction or addition (including mobile home) must have elevation certificate before permits issued in floodplain.	1 Floodplain administrator and 1 assistant		25 floodplain permits issued from Jan 2 - Dec 2 with 21 approvals and 4 not complete	0	NA
Ames	Liberty	Y	NA	NA	NA	NA	NA	NA	NA	NA

Appendix D

H-GAC Community Floodplain Program Information

Jurisdiction	County	NFIP Participant	Current Floodplain Management Ordinance/Court Orders	Date Adopted	Explanation of inspection/permit process	Number of Floodplain Administrator(s) and Staff	Qualifications of Floodplain Administrator(s) and Staff	Number of inspections and permits approved	Number of variances allowed	Explanation of Variances
Cleveland	Liberty	Y			Anyone requesting to build within the floodway must request for a permit and has to provide an elevation certificate	2		2	0	NA
Daisetta	Liberty	Y	No ordinance							
Dayton	Liberty	Y	Flood Damage Prevention Ordinance	1988	The permitting process starts with preliminary plans with the development review committee; plans must show the required contents; final plans will be submitted with corrections for final approval, a master copy is submitted along with permitting fees for building permit. Inspections are made during construction and a Certificate of Occupancy is given after as-builts are submitted.	Administrator - City Manager		0	0	NA
Dayton Lakes	Liberty	Y								
Devers	Liberty	Y	NA	NA	NA	NA	NA	NA	NA	NA
Hardin	Liberty	Y	Answered no to all							
Kenefick	Liberty	N								
Liberty	Liberty	Y	No ordinance	No answer	No answer	No answer	No answer	1	0	NA
North Cleveland	Liberty	N								
Plum Grove	Liberty	Y								
Montgomery County	Montgomery	Y	No ordinance	Joined the program in 1978-79	No answer	1 - Floodplain Administrator	No answer	0	0	NA
Conroe	Montgomery	Y	Flood Damage Prevention Ordinance	1995 - currently being amended	Certificates are required for any new construction within the existing floodplain	1 - Floodplain Administrator	No answer	67	0	NA
Cut and Shoot	Montgomery	Y	No ordinance	Adopted June 1987, amended November 1996		NA	NA	NA	NA	NA
Magnolia	Montgomery	Y								
Montgomery	Montgomery	Y	Flood Damage Prevention Ordinance	1996	Plans for single family homes reviewed by City engineer. Subdivision plans reviewed by Planning and Zoning Commission for compliance before submitting to City Council for approval	No administrator	NA	NA	0	NA

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Oak Ridge North	Montgomery	Y	Flood Damage Prevention Ordinance	1982 - amended 1997	All building permits are reviewed for location in or out of floodplain. All construction in Zone AE must be one foot above the BFE	1 - Floodplain Administrator	No answer	3	0	NA
Panorama Village	Montgomery	Y	Flood Damage Prevention Ordinance	No answer	No answer	1	No answer	No answer	No answer	No answer
Patton Village	Montgomery	Y								
Roman Forest	Montgomery	Y	No	NA	NA	NA	NA	0	0	NA
Shenandoah	Montgomery	Y	Floodplain Management Ordinance (ORD. No. 0-9604)	12/11/1996 - amended 4/24/02 to include criminal and civil penalties	No answer	No answer	No answer	0	0	NA
Splendor	Montgomery	Y	Flood Damage Prevention Ordinance	12/4/1986	We do not have a written process. We have had only one major reconstruction. An engineering study was provided to the City by the property owner as directed by the TNRCC office.	1 - City Secretary	No answer	0	0	NA
The Woodlands	Montgomery	Y								
Willis	Montgomery	Y	Flood Damage Prevention Ordinance	12/17/1996	An application for development is submitted to the Floodplain Administrator with plans drawn to scale showing the location, dimensions, and elevation of proposed landscape alterations, existing and proposed structures and the location of the foregoing in relation to areas of special flood hazard. With additional information required. Approval or denial of the Development Permit is based on the compliance with the ordinance and other relevant factors.	1 - Administrator and 1 staff member	No answer	0	0	NA
Walker County	Walker	Y								
Huntsville	Walker	Y	Flood Damage Prevention Ordinance	5-Jul-77	No answer	1 - Floodplain Administrator	No answer	0	0	NA
Riverside	Walker	Y								
New Waverly	Walker	Y								

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H-GAC Community Floodplain Program Information

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Waller County	Waller	Y	Flood Damage Prevention Ordinance	Joined the program in the 1980's	No	No	No	No	No	No
Brookshire	Waller	Y	Answered no to all							
Hempstead	Waller	Y	Flood Damage Prevention Ordinance	8-Jan-88	All new construction is inspected	2 members	No answer	0	0	NA
Pattison	Waller	Y	Answered no to all							
Pine Island	Waller	N	NA	NA	NA	NA	NA	NA	NA	NA
Prairie View	Waller	Y	No ordinance	Joined the program in 1987	NA	NA	NA	0	3	No explanation
Waller	Waller/Harris	Y	Floodplain Ordinance	No answer	Floodplain permits are issued to homeowners in the floodplain. Elevation certificates from surveyors are required	1- administrator and 1 inspector	No answer	0	0	NA

Appendix E – Summary of Changes – 2011 HMP Update

This section describes the changes made to the 2006 H-GAC Hazard Mitigation Plan Mitigation for the 2011 Plan Update. It serves as a record of major changes made for each section of the Plan.

Project Background

In December 2010, the Houston-Galveston Area Council contracted with URS Corporation to update the 2006 H-GAC Regional Hazard Mitigation Plan. The Disaster Mitigation Act of 2000 requires communities to update their mitigation plans every five years to remain eligible for Pre-Disaster Mitigation (PDM) program funding, Flood Mitigation Assistance (FMA) program funding, and Hazard Grant Mitigation Program (HGMP) funding. The H-GAC met with counties and jurisdictions in the region to update the Locally-specific Mitigation Action Plans. The planning team met to review the plan goals and action items in the 2006 HMP and review all changes made for the 2011 update prior to submittal to FEMA.

The planning team made several major changes to the 2006 HMP. The major changes are documented and summarized in this memo for each section of the mitigation plan.

2011 Update Changes by Section

The sections below discuss only the major changes made to the 2006 H-GAC Regional Hazard Mitigation Plan for the 2011 Plan Update. Major changes include replacing or removing large portions of text and new additions to the Plan.

Cover Page

The cover page for the HMP has been revised to include the 2011 planning team and the date of the Plan Update.

Section 1.0 Introduction

Section 1.0 includes an introduction, purpose for the plan, and identifies the counties and jurisdictions participating the 2011 HMP Update. The major changes in Section 1.0 include the following:

1. Background: The text of this section was revised and irrelevant information was removed. A brief section summarizing the 2006 HMP and the 2011 HMP Update was included as well.
2. Table 1.1: This table was revised to reflect the counties and jurisdictions participating in this Plan Update. Galveston County and its jurisdictions were removed from the table.

Section 2.0 Planning Process

Section 2.0 included a summary of the planning process for developing the 2006 HMP. The revised Section 2.0 includes a description of the 2011 update including participation from the public and the participating jurisdictions. The major changes in Section 2.0 include the following:

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1. The description of the 2006 planning process was removed.
2. A new section, "Preparing the 2011 Update," was added which included a description of the efforts taken to update the 2006 HMP. The section included a list of items included in this update, identification of the planning team, a list of regional and county level planning meetings and participants, a list of participating jurisdictions, a description of input from the public, and the efforts taken to support multi-jurisdictional participation.
3. The list of data sources was moved from Section 4.2 to the end of Section 2.

Section 3.0 Community Profile

Section 3.0 provides a brief description of the region through summaries on geography, environment, services, demographics, land use/development/housing, political subdivisions, and lists of declared disasters. The major changes in Section 3.0 include the following:

1. Figure 3.2: A revised version has been included.
2. Figure 3.3: A revised version with key has been included.
3. Figure 3.4: A revised map has been included.
4. Figure 3.5: A revised map has been included.
5. Table 3.6, Figure 3.6: List and map of major institutions of higher education have been revised.
6. Tables 3.8, 3.10, 3.11, 3.13, 3.14, 3.16, 3.18, 3.19 and 3.21 were updated to reflect available 2010 Census data. Tables 3.19, 3.22, 3.23 and 3.27 contain 2009 estimates.
7. Table 3.25: The data in this table was revised to reflect the most recent percent employment by industry type.
8. Table 3.26: The data in this table was revised to reflect the most recent top 15 Houston area employers and their respective number of employees in 2010.
9. Tables 3.12 and 3.29: Updated population forecasts calculated by H-GAC were also included in the 2011 Plan Update; the population forecasts included in the 2006 HMP were removed.
10. Table 3.28: The unemployment rate was revised using Texas Workforce Commission rates from 2011.
11. Table 3.30 and Table 3.31: These two tables were updated to reflect the most recent information on the number and the event for Presidential and SBA declared disasters in the region. Data included was current as of March 2011.
12. Table 3.32: Communities potential eligible for special consideration were updated.

Section 4.1 Hazard Identification

This section provides a general description of hazards that may affect the H-GAC region. The major changes in Section 4.1 include the following:

1. Flood: Table 4.1-1 was updated to show the available data for 2002 and 2003.
2. Hurricanes and Tropical Storms: Data was added reflecting the public's unease with the Saffir-Simpson scale related to storm surge prediction. This discussion referenced lessons from recent Hurricane Ike in 2008.
3. Tornadoes: This section was updated to include the Enhanced Fujita Scale.
4. Wildfires: Text was added to this section regarding prevention measures the Texas Fire Service has instituted and a discussion on Wildland Urban Interface.
5. Drought: Figure 4.1-5 shows the U.S. Drought Monitor summary map as of November 2011.

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6. Expansive Soils: a new hazard for expansive soils has been added.
7. Excessive Heat: Additional information on the threats to human. A heat index table as Figure 4.1-6 has been included.
8. Earthquake: Statement included that the region is in a very low earthquake hazard area and no earthquake further hazard discussions will be made.
9. Toxic Release/Hazardous Materials (HAZMAT): Text was added to this section about the HAZMAT incidents from Hurricanes Katrina and Ike.
10. Expansive Soils: Included statement that expansive soils discussion is included in Drought section and that no further discussion addressing expansive soils as a natural hazard will be made.
11. Wind: Included statement that no separate discussion of wind as a hazard will be made, as it is included within hurricanes and tropical storms, severe thunderstorms and tornadoes.
12. Sinkholes: Update provided on a sinkhole that occurred in 2008 in Daisetta. Statement made that due to the low incidence of sinkholes in the region, no further discussion of sinkholes as a hazard will be made.
13. Subsidence: Statement made that no further discussion of subsidence as a hazard will be made.
14. Tsunami: Text was added to this discussion regarding the most recent two tsunamis in the Pacific region. Statement added that due to the low incidence of tsunamis in the region, no further discussion of tsunamis as a hazard will be made.

Section 4.2 Hazard Analysis

This section presents data related to historical hazard occurrence in the H-GAC region. Generally, this section was updated with the data from events that occurred between the 2006 HMP and this 2011 HMP Update. The major changes in Section 4.2 include the following:

1. Flood: Table 4.2-1 was updated to include regional information through October 2010. Table 4.2-2 was included to reflect the highest magnitude floods for the seven participating counties. A conclusion paragraph was added, providing information on the likelihood of future events.
2. Hurricanes and Tropical Storms: Descriptions were added regarding Hurricane Rita (2005) and Hurricane Ike (2008). Figure 4.2-1: was updated to show major hurricanes through October 2011. Figure 4.2-2: was added; it presents the historic hurricane tracks along the Texas Coast. The data presented in the figure is from 1851 through 2005 and was compiled by the Center for Texas Beach & Shores, Texas A&M University. Following Figure 4.2-2 is a new discussion on storm surge. This section presents figures that depict storm surge and also include maps from the Harris County Flood Control District that show storm surge experienced by the coastal counties from Hurricane Ike. A conclusion paragraph was added, providing information on the likelihood of future events.
3. Severe Thunderstorms: Table 4.2-4 and Figure 4.2-9 were updated to include regional information through October 2010. Figure 4.2-10 was added showing the probability of thunderstorm wind occurrence and potential monetary damages. A conclusion paragraph was added, providing information on the likelihood of future events.
4. Tornadoes: Table 4.2-5, Figure 4.2-12 and text were updated to include regional information through October 2010. A conclusion paragraph was added, providing information on the likelihood of future events.
5. Wildfires: Tables 4.2-6 through 4.2-9 were added. Figure 4.2-14 associated in this section was replaced with a new figure showing wildfire locations in the H-GAC

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region between 2005 and 2011. KBDI values were provided for November 15, 2011 as Figures 4.2-15 and 16.

6. Drought: The figures in this section have been updated with more recent data. The text also reflects updated drought occurrences. Drought indices are available as Figures 4.2-18 through 4.2-20. Figures 4.2-21 and 22 depict two benchmarks for the U.S. Drought Monitor. Figures 4.2-23 and 24 provide annual probability of drought occurrence and potential farm land damages. Discussion on expansive soils, including a map of soil swelling potential (Figure 4.2-26) has been added. A conclusion paragraph was added, providing information on the likelihood of future events.
7. Expansive Soils: a new hazard for expansive soils has been added.
8. Excessive Heat: Enhanced section on excessive heat was added. Included are a table including the number of days of 100 degrees or more, a conclusion paragraph which provides information on the likelihood of future events, and a discussion on people at risk to heat-related illness.
9. Winter Storms: Tables 4.2-14 through 15 were added to show days at or below freezing and days and inches of snow. A conclusion paragraph was added, providing information on the likelihood of future events.
9. Hail: Table 4.2-16 and Figure 4.2-35 were updated to show major hail events through October 2011. Figure 4.2-36 presents historical frequency of hail events. Figure 4.2-37 provides annual probability of hail occurrence and potential farm land damages. A conclusion paragraph was added, providing information on the likelihood of future events.
10. Coastal Erosion: Figures 4.2-38 and 39 were added showing coastal erosion in Chambers, Galveston, Brazoria and Matagorda Counties. Table 4.2-17 was added showing miles of critically eroding shoreline. Figure 4.2-40 was added to show estimated coastal erosion along Pirates Beach in Galveston County. A conclusion paragraph was added, providing information on the likelihood of future events.
11. Dam/Levee Failure: Table 4.2-18 was added to reflect the number of dams with low, significant and high downstream hazard potential for the current number of dams in the region based on NID. Figure 4.2-41 provides a map of the NID dams with low, significant and high downstream potential. Table 4.2-19 provides additional detail on a county basis. A conclusion paragraph was added, providing information on the likelihood of future events.
12. Toxic Release/Hazardous Materials: A hazard analysis was included in this section for the man-made hazard, toxic release/hazardous materials.
13. Energy Pipeline Failure: A hazard analysis was included in this section for the man-made hazard, energy pipeline failure.

Section 4.3 Vulnerability Assessment

Section 4.3 provides a detailed vulnerability assessment for the hazards deemed most probable in the H-GAC region. The assessments in this section are mostly conducted using FEMA's HAZUS software package. Because of the proximity of this plan update to the 2010 Census, HAZUS has not been revised to reflect this recently collected data. Tables reflecting probabilities were relocated to section 4.2 to indicate likelihood of future events. Updates were made, when possible, and include the following major changes:

1. A discussion on the use of the existing HAZUS release and a table presenting the revised 2010 population numbers for the H-GAC region was added to the beginning of this section.
2. Figure 4.3-4: This chart was revised to reflect the most recent population projections in the H-GAC region.

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3. An explanation regarding the use of the Southern Fire Risk Assessment System was added. This system was used in conjunction with the new wildfire vulnerability assessment for the H-GAC region. Figure 4.3-5 was also added which illustrates the system's methodology.
4. Land Uses and Development Trends: Galveston County and its jurisdictions were removed from this section as they are no longer part of this plan.
5. Flood: Figures 4.3-6 through 4.3-13 were updated with the latest FEMA Q3 Digital Flood Data.
6. The repetitive loss data presented in the 2006 HMP was removed and recent repetitive loss data was added.
7. Wildfire: This section is new to the HMP. It includes a vulnerability assessment based on the community risk rating, WUI and new figures.
8. Expansive Soils: a new hazard for expansive soils has been added.
9. Coastal Erosion: New section added.
10. Excessive Heat: New section added.
11. Table 4.3-35: Severe Repetitive Loss was added to the table.
12. Other Hazards: Discussion deleted. Have been incorporated into hazards in Section 4.3.
13. Table 4.3-29: Probability of Future Hazard Occurrences by Jurisdiction has been removed.
14. Table 4.3-30: Risk by County and by Hazard for the H-GAC Region has been removed.
15. Table 4.3-31: Summary of Vulnerability by Jurisdiction has been removed.
16. Table 4.3-36: Summary of Hazard Exposure has been added.

Section 5.0 Capability Assessment

Section 5.0 provides a description each jurisdiction's capabilities with regard to implementing mitigation strategies. Participating communities were asked to complete a capability assessment survey. Galveston County and its jurisdictions were removed from this section. Tables in Section 5.0 were updated based on the submission of these surveys.

1. Table 5.1, Table 5.2, Table 5.3, and Table 5.9 were updated with information for the following communities:
 - a. Austin County and all participating jurisdictions
 - b. Brazoria County and all participating jurisdictions
 - c. Chambers County and all participating jurisdictions
 - d. Walker County and all participating jurisdictions
2. Table 5.10 reflects updated closed HMGP and HPP-M projects in the region

Section 6.0 Mitigation Strategy

Section 6.0 describes the mitigation strategy utilized by the participating counties and jurisdictions. This section includes the mission statement and the mitigation goals, along with a description of the development of the locally-specific mitigation actions.

1. Introduction: The introduction portion of this section was reduced to be more concise and to include only relevant information.
2. Mitigation Goals: This portion of the text was reduced to include an introduction statement along with the five mitigation goals. The text now refers the reader to Section 2.0 for more information on the mitigation planning process.
3. Table 6.1: This table was removed. Mitigation actions are included in Appendix A.

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4. Figure 6.1: The table was modified to include wildfires under the “Moderate Risk Hazard” column. The appropriate mitigation techniques were checked.

Section 7.0 Plan Maintenance Procedures

Section 7.0 describes the plan maintenance procedures. Minimal changes were made to this section, which include:

1. **Table 7.1** was updated to reflect the most current contacts for the plan monitoring and updating.
2. The reference to Appendix A was added.

Appendix A Locally-Specific Mitigation Actions

Appendix A presents the locally-specific mitigation actions for participating communities. The following major changes were made.

1. A.1 presents a new table that includes the status of locally-specific mitigation actions, which is followed by new or revised actions.
2. Section A.2 presents detail on locally-specific mitigation actions that have not been updated and were included in the 2006 HMP. Actions are arranged alphabetically by county and then by city.