

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;

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

- 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

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

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.

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

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.

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

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

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

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

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

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

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

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 Phillip	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

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

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

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

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

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

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	

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

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.

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

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.