PLANNING PROCESS

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Plan Preparation and Development

Mitigation planning involves bringing together multiple components and players to create more disaster-resistant communities. This section provides an overview of the planning process, highlighting key steps as well as providing a detailed description of how stakeholders and the public were involved.

Overview of the Plan Update

The Guadalupe Blanco River Authority (GBRA) is sponsoring an update to their 2005 Plan, "Protecting the Region Against All Hazards" The purpose of this Plan Update is to meet FEMA's requirement to provide updated hazard mitigation plans every five years.

Although many of the natural and man-caused disasters that affect the Basin are the same for the 2005 Plan, an update is necessary to take into account all modified or revised data from the past five years, including changing demographics and mitigation strategies. This 2011 Multi-Jurisdictional Hazard Mitigation Action Plan Update reflects current local conditions as well as newly established mitigation goals and objectives.

The GBRA prepared the Plan with technical support from the outside consultant team of H2O Partners, Inc. and PBS&J¹. In developing the plan the consultant team used the FEMA "Mitigation Planning How-To" (Pub 386 series), the "Multi-Hazard Mitigation Planning Guidance Under the Disaster Mitigation Act of 2000" (Blue Book) and standards found in FEMA's "Local Multi-Hazard Mitigation Planning Guidance"

¹ PBS&J is a subcontractor to H2O Partners for this planning effort.

(released July 1, 2008) to meet the Interim Final Rule for Local Mitigation Planning found in 44 CFR 201.6.

Review and Analysis of the 2005 Plan

According to 44 CFR §201.6(d)(3), the updated plan must contain a description of the process used to revise each section of the plan. The Advisory Committee, composed of GBRA staff, and the consultant team met in August 2009 to review the 2005 Plan.

At this meeting the Committee reviewed, analyzed and commented on every section of the 2005 Plan. Edits and comments were made to the introductory and profile sections. Although Census 2010 data was not available, the Committee decided to use the most current information in updating the demographics and land use of the GBRA for the profile section. Upon review of the introductory and overview sections of the risk assessment, the Committee decided to keep the same hazards in the Plan Update as no new hazards had affected the area that were not considered in 2005. Although occurrence and probability data will be updated, the Advisory Committee decided to maintain the hazards to be profiled. For the vulnerability assessment, critical facilities, building counts and losses were updated to reflect changes over the past five years. The overall goals and objectives of the 2005 Plan were reviewed and it was determined that although the same objectives and goals would remain in the Plan Update, the order of the goals would be rearranged as reflected in Section 19. Plan maintenance procedures were also reviewed and updated to reflect current changes in staff and annual/bi-annual meetings.

In addition to the initial review by the Advisory Committee, all of the participating jurisdictions reviewed the mitigation strategies developed in the 2005 Plan and any amendments thereto and provided an analysis as to whether each action is ongoing, has been completed or should be deleted from the Plan Update.

The following factors were taken into consideration when reviewing the 2005 Plan:

- Whether the goals address current and expected conditions;
- If the nature/magnitude of risks have changed;
- If there are current resources appropriate for implementing the Plan;
- Whether implementation problems, such as technical, political, legal or coordination issues hinder development;
- If outcomes have occurred as expected; and
- How communities, agencies and partners participated in the implementation process.

Review and Incorporation of Existing Plans

A variety of existing studies, plans, reports, and technical information were reviewed as part of the planning process. Sources of the information included FEMA, the United States Army Corps of Engineers (USACE), the U.S. Fire Administration, NOAA, the Texas Water Development Board, the TCEQ, the State Comptroller, the Texas State Data Center, Texas Forest Service, the Texas Division of Emergency Management (TDEM), and local hazard assessments and plans.

The hazard-specific sections of the Plan (Sections 5-18) summarize the findings from these information sources. Some of these documents, including those from FEMA, provided information on risk, existing mitigation actions currently underway, and ideas for possible future mitigation actions. Other documents, including those from NOAA, provided histories of disasters in the area. The USACE studies were reviewed for their assessment of risk and potential projects in the region. The Water Development Board studies were reviewed for population and other projections and for flood-related grant funding. The State Comptroller materials were reviewed for regional economic projections. State Data Center documents were used to obtain population projections. Materials from FEMA and the Texas Division of Emergency Management were reviewed for guidance on plan development requirements. Communities included actions from other plans, such as Floodplain Management Plans, in developing actions.

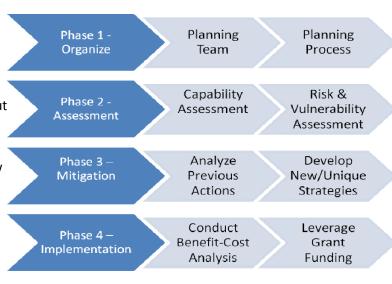
Planning Team

The planning team was developed using a Steering or Advisory Committee comprised of executive members of GBRA that were involved in the original 2005 Plan. The Advisory Committee was then supported by one or more representatives from each participating community in the Plan Update. Stakeholders and the public were also included in the planning process as described in this section. The entire planning team consisted of

participating stakeholders, GBRA staff and Figure 2-1. Overview: Mitigation Planning Process

project team members of H2O Partners. A specific listing of representatives can be found in Appendix A.

Some of the responsibilities of the planning team included: providing input regarding the identification of hazards, revising mitigation goals to reflect modified conditions and developing new mitigation strategies. Each planning team member is also responsible for ensuring that their jurisdiction formally adopts the plan update pending FEMA approval.



Planning Process

Four milestones were met over the course of approximately 12 months beginning in August 2009. A critical work outcome was produced in each step. After the planning team was established, a series of kickoff workshops were held where capability assessments were distributed. Next, hazards were identified and analyzed, the results of which were presented at the Risk Assessment Workshop. Finally each member community reviewed and developed an analysis for the mitigation actions included in the 2005 Plan and developed new and unique actions at the Mitigation Workshop.

Kickoff Workshop

A series of kickoff workshops were held throughout the region to optimize participation. The first Kickoff Meeting was held on August 11, 2009. This initial meeting was an opportunity to inform participating communities about the planning process with their distinct roles and responsibilities and involve stakeholder groups such as area school districts and businesses. A second Kickoff workshop was held on August 18, 2009.

In addition to the Kickoff presentation, the following information was distributed to planning member attendees:

- background information about the plan update;
- public participation survey for distribution; and
- capability assessment survey for completion



Hazard Identification

Following the initial kick-off meeting on August 11, 2009, Planning Team members met to conduct preliminary hazard identification. At this meeting, the group reviewed and considered a full range of natural and man-caused hazards, then narrowed the list to significant hazards by reviewing the 2005 Plan, the State of Texas Hazard Mitigation Plan, and initial results from reputable sources such as federal and state agencies². Based on this initial analysis, the team identified a total of 14 natural and man-caused hazards that could affect the Basin region.

A hazard questionnaire was distributed to each member. Participating jurisdictions were asked to provide input on the selection of hazards, concurrence with the selection, variances in risk compared to other communities and the region as a whole.

Risk Assessment

A risk assessment for the Plan Update was completed in January 2010. The results of the assessment were presented at two Risk Assessment workshops. The first workshop was held in the upper Basin in

² For detailed information regarding the hazard identification process, please see Section 5.

Buda, TX, the second in Victoria, TX in the lower Basin. A public meeting followed the workshop in Buda, TX. At these workshops, the characteristics and consequences of each hazard were evaluated to determine how much of the area would be affected, in terms of potential danger to property and citizens.

Potential dollar losses from each hazard were estimated, using the Federal Emergency Management Agency's Hazards U.S. (HAZUS) Multi-Hazards (MH) Model (HAZUS-MH) and other HAZUS-like modeling techniques. The assessments examined the impact of various hazards on the built environment, including on general building stock (e.g., residential, commercial, industrial), critical facilities, lifelines, and infrastructure. The resulting risk assessment profiled hazard events, provided information on previous occurrences, estimated probability of future events, and detailed the spatial extent and magnitude of impact on people and property. Each jurisdiction was also given a hazard ranking sheet at the workshops in order to reflect unique and varied risks among jurisdictions. Participants ranked hazards in terms of the probability or frequency of occurrence and the extent or magnitude of impact.

The assessments were also used to set priorities for mitigation based on potential dollar losses and loss of lives. A hazard profile and vulnerability analysis for each of the 14 hazards can be found in sections 5 through 18 in this Plan Update.

Mitigation Review and Development

The mitigation strategy development for the Plan Update involved revising mitigation goals included in the 2005 Plan, providing analyses for past actions, and developing new mitigation actions. Two Mitigation Workshops were held in the Basin; one in Buda on March 23, 2010 and one in Victoria on March 25, 2010. As with the Risk Assessment Workshops, stakeholder groups were invited to the workshops and to the public meeting the evening of the 23rd. A listing of the dates and location for each workshop can be found in Table 2-1 below. Documentation for workshops and meetings is found in Appendix E.

At the Mitigation Workshops, after an initial presentation regarding types and examples of actions and the importance of mitigation planning, participants were asked to review the mitigation goals and objectives from the 2005 Plan and determine what changes, if any, should be made. At each workshop the consensus among participants was not only to retain mitigation goals or objectives, but reorder the primary three goals, so that protecting life and property are the first two goals, followed by increasing public understanding. For a detailed review of the mitigation goals and objectives please see Section 19.

Each participant received a copy of their mitigation actions submitted for the 2005 Plan, and provided an analysis as to whether each action should be deleted, had been completed, or should be deferred for the Plan Update. Following the development of mitigation actions, communities were also asked to review procedures for keeping the plan up to date and devise strategies for plan maintenance.

March 23, 2010

March 25, 2010

Victoria, TX

Table 2-1. Mitigation Strategy Workshops

An inclusive and structured process was used to develop and prioritize new mitigation actions for this plan update. It included the following steps:

- Review of the vision statement, mitigation goals, and objectives from the 2005 Plan.
- A "menu" of optional mitigation actions was developed based on plan reviews, studies, and
 interviews with federal, state and local officials. The participants reviewed the optional
 mitigation actions and narrowed the list down to those that were most applicable to their area
 of responsibility, most cost-effective in reducing risk, could be implemented easily, and would
 be likely to receive institutional and community support.
- Potential Federal and State funding sources to assist implementing proposed actions were inventoried. Information was collected including the program name authority, purpose of the program, types of assistance and eligible projects, conditions on funding, types of hazards covered, matching requirements, application deadlines, and a point of contact.
- Planning team members considered benefits that would result from the mitigation actions
 versus the cost of those projects. Detailed cost-benefit analyses were beyond the scope of this
 plan. However, economic evaluation was one factor that helped team members select one
 mitigation action from competing actions.

Team members then selected and prioritized mitigation actions. Each team member evaluated the mitigation action of their own jurisdiction as well as the Regional Mitigation Actions found in Section 20. The prioritization method was based on FEMA's STAPLE+E criteria and included social, technical, administrative, political, legal, economic and environmental considerations. As a result of this exercise, an overall priority was assigned to each mitigation action by each team member. The overall priority of each action is reflected in the mitigation actions found in Section 21.

Team members developed action plans identifying proposed actions, costs and benefits, the responsible organization(s), effects on new and existing buildings, implementation schedule, priority, and potential funding sources.

Finally, the draft of the Plan Update was made available on the GBRA website for review and comment at the end of September 2010. A copy of the Plan was made available by Team Members for public inspection, review and comment within each jurisdiction.

Public and Stakeholder Involvement

An important component of mitigation planning is public participation and stakeholder involvement. Input from individual citizens and the community as a whole provides the planning team with a greater understanding of local concerns and increases the likelihood of successfully implemented mitigation actions. If citizens and stakeholders, such as local businesses, non-profits, hospitals and schools, are involved, they are more likely to gain appreciation of the hazards present in their community and take steps to reduce their impact.

Public Participation

Public involvement in the development of the update was sought at separate periods in the planning process: (1) the beginning of the planning process, (2) the drafting stage and (3) between completion of the final draft and plan approval and adoption. Public input was sought using three methods: (1) open public meetings, (2) survey instruments and (3) making copies of draft Plan deliverables available for public review on the GBRA's website as well as government offices and public libraries.

Public Meetings

Public meetings were held three times in two locations. Sign-in sheets from public meetings and workshops can be found in Appendix E.

The Public is Invited to Participate in the Hazard Mitigation Plan Update for Guadalupe Blanco River Authority (GBRA) Basin Plan Update for Guadalupe Blanco River Authority (GBRA) Basin Plan Update for Guadalupe Blanco River Authority (GBRA) Basin Plan Update. The public meeting information is in follows:

Meday, February 1, 1940, 6-7 PM

Cabels's Sporting Goods meeting room
14579 III.5

The purpose of the open meeting is to inform the community on the development of the Update and to solicir information that can help the project team in information and anti-participation of the public in invited and encouraged to strond the meeting and analyzing hazards different resident, as well as recommending proised sections from the taken to reduce the mapter of flow hazards. The public is invited and encouraged to strond the meeting.

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The first open public meeting was held after the Kickoff Workshop in August of 2009. The second meeting was held after the Risk Assessment Workshop in February 2010, and the third public meeting was held following the Mitigation Workshop in March 2010. Each meeting was advertised through a variety of means including newspaper ads, radio ads, flyers at meeting locations, notices on the GBRA website, and invitations sent to GBRA's e-mail distribution list of community members.

At each meeting the purpose of the plan was presented along with the latest results on the development of the risk assessment and mitigation strategy. Questions were encouraged to facilitate an open discussion.

Public Participation Survey

In addition to the open public meetings, the GBRA was able to get input from citizens and stakeholders through the use of a public participation survey. This survey was designed to obtain data and information from residents along the Guadalupe Blanco River Basin.

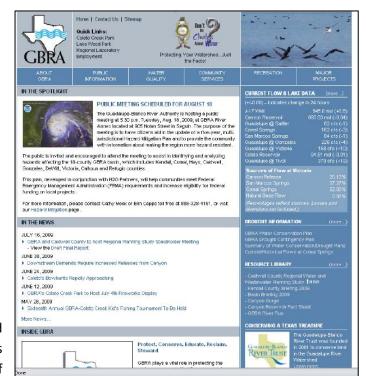
Copies of the Public Participation Survey were distributed by local officials and made available for citizens to download from the GBRA website. A total of 77 responses to the survey were submitted, which provided valuable input for the GBRA to further consider in developing the plan update. A summary of the survey findings is provided in Appendix B.

Stakeholder Involvement

Stakeholders provide an essential service in hazard mitigation planning. Throughout the planning process, members of state and federal agencies, community groups, local businesses, schools, and hospitals were invited to workshops. Specific groups targeted in the development of the plan are listed below.

- Christus Santa Rosa Hospital
- Guadalupe Regional Hospital
- National Oceanic and Atmospheric Administration (NOAA)
- American Red Cross
- Texas Lutheran University
- Victoria College
- Cemex Quarry
- Hunter Industries
- CMC Steel (formerly Structured Metals Inc.)

Stakeholders were notified about meetings and opportunities to participate or provide comments during the Plan development through a variety of mechanisms, including:



Screenshot: www.GBRA.org August 17, 2009 announcing the first Public Meeting.

• Radio spots announcing upcoming meetings

- Flyers at government buildings
- Newspaper ads
- Website postings

In addition to the methods above, stakeholders were also sent direct emails with invites attached providing information about the planning process and any upcoming meetings. Sign in sheets and documentation of meetings can be found in Appendix E.