

## ***Galveston Bay Habitat Conservation Blueprint Update Draft Final Report***

Submitted to: Galveston Bay Estuary Program

Submitted by: Environmental Institute of Houston - University of Houston at Clear Lake

Date Submitted: October 30, 2007

### ***Background***

On July 10, 2006, the Galveston Bay Estuary Program (a division of the Texas Commission of Environmental Quality) contracted the Environmental Institute of Houston at the University of Houston at Clear Lake (EIH\UHCL) to update the *Galveston Bay Habitat Conservation Blueprint (HCB)* with the support of the Galveston Bay Estuary Program's Natural Resource Uses Subcommittee. In 1998, the Galveston Bay Habitat Conservation Blueprint was published by the Galveston Bay Foundation as a catalyst for habitat conservation and restoration for the Galveston Bay System. This inventory of sites has been used as an efficient tool by many resource managers to restore and protect habitat. However, since the original version was published much has changed. Many sites have been improved and some have degraded either by land use changes, damage due to storms and flooding, or have become inundated with invasive species. Flood control methods have altered hydrology and habitat of wetlands. Water quality is continuously being threatened by the increase in population of coastal communities. Within the last 8 years natural resource experts and local organizations have published new watershed studies that are increasing our knowledge of habitats among many Galveston Bay tributaries. With the changing landscape and increased knowledge of Galveston Bay systems, EIH hopes that updating the Blueprint will assist in the implementation of the Galveston Bay Plan and be used as a tool for planning for the upcoming Coastal Impact Assistance Program.

### ***Discussion of Project Goals***

The goals stated in the HCB Update Work Plan, submitted on September 10<sup>th</sup>, 2006, are as follows:

1. Document any completed or ongoing restoration/conservation activities at preciously documented sites
2. Identify new sites
3. Incorporate any new restoration or conservation techniques that have been established as valued practices for restoring, enhancing, or conserving habitat in the Galveston Bay region

As mentioned in the *Galveston Bay Habitat Conservation Blueprint First Quarterly Report* submitted November 29, 2006, three HCB Update Working Group Meetings were held in the fall of 2006, to gather updated information for the 167 original HCB sites as well as nominate new sites. Dr. George Guillen, Heather Biggs, and Alecyia

Galloway facilitated the meetings. The meetings were successful in acquiring updates on the original 167 blueprint sites as well as nominating 20 new sites. Approximately 60 people attended the three meetings.

As stated in the Second, Third, and Fourth Quarterly Reports, correspondence between EIH personnel and various groups with potential information regarding existing and potential sites were conducted. Groups contacted included City of Baytown, US Army Corps of Engineers, Scenic Galveston, Anahuac National Wildlife Refuge, and Audubon.

EIH, completed the textual updates on two out of the five major Bays of Galveston Bay (East Bay and Galveston Bay). EIH has constructed approximately 80% of the GIS polygons for new and existing sites. EIH is in the process of determining the number of sites that have undergone restoration or conservation efforts as well as the number of sites that are no longer potential habitat restoration or conservation areas due to decreased priority.

Research is currently underway to update the *Introduction* section of the original *Blueprint*. The *Approach* section will be revised to reflect the new process that was used to complete this current revision. An *Implementation* section is also being researched. A summary of any new *proven methods of restoration techniques* will also be included in the revised *Habitat Conservation Blueprint*.

Correspondence between EIH personnel and various conservation groups and state and federal agencies is ongoing to successfully gather the most recent information pertaining to the original sites and to obtain information for potential conservation or restoration properties. The Galveston Bay Foundation, the United States Corps of Engineers and the Galveston Bay Estuary Program have provided EIH with site information pertaining to their organization's involvement since the last quarterly report.

*(Timeline on next page)*

***Habitat Conservation Blueprint Update Timeline:***

<b><i>OBJECTIVE</i></b>	<b><i>SCHEDULE OF DELIVERABLES</i></b>
HCB Update Contract Signed	Completed July 10, 2006
Introduce Project Scope to NRU Subcommittee	Completed Aug. 29, 2006
Request NRU Subcommittee to nominate additional participants for the HCB Working Groups	Completed Oct. 2006
Request original survey participants to update any site information applicable to existing sites	Completed Sept - Oct 2006
Submit HCB Update Work Plan to GBEP	Complete Sept. 10, 2006
Acquire aerial images to design GIS-Based Database for revised HCB	Acquired 2006 imagery from HGAC in February 2007 Database is in Progress
Hold 3 HCB Update Working Group Meeting	Completed – Meetings were held on Oct 5 & 30, Nov 13 <sup>th</sup> , 2006
Incorporate Working Group Comments to draft HCB revision	Completed – January 2007
Submit 3 Quarterly Project Report to GBEP	Nov 30, 2006 - Completed; Feb 28, 2007 - Completed; May 30, 2007
Present and Request comments at SOB	Completed – Jan. 23 - 25, 2007
Draft HCB Update	To be Completed Nov. 2007
Update HCB Sites for GIS Database	To be Completed Nov. 2007
Submit Draft HCB Update	To be Completed Nov. 2007
Submit Final HCB Update	To be Completed Nov. 2007

A draft of the HCB Update is nearly complete and will be submitted in November for participant and NRU Subcommittee Review.