



FINAL REPORT

A PROJECT OF THE
CENTER FOR SUSTAINABLE DEVELOPMENT
SCHOOL OF ARCHITECTURE
THE UNIVERSITY OF TEXAS AT AUSTIN

PREPARED FOR
GALVESTON BAY ESTUARY PROGRAM
TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

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Executive Summary

As required by the NEP, GBEP must review and revise their CCMP every five years. This five-year review is a time to take a critical look at current action plans and programs and revisit goals to determine a course of action for the future.

In 2002, a three-year retrospective review, involving principally the public outreach and marketing strategic efforts at the GBEP, was contracted by the GBEP to the University of Texas at Austin. As result, it was determined that the GBEP needed to more fully address public outreach and increase the program's community involvement and awareness. The Galveston Bay Council identified public awareness and advocacy as one of the three priority issues for the next ten years of plan implementation. It was also identified in this report that GBEP needs a more focused agenda and increased outreach distinct from education efforts is necessary for continuing to successfully implement *The Plan*.

Because of the public outreach and marketing study done, the GBEP entered into another contract with the University of Texas at Austin for a ten-year plan implementation review. This project, entitled *Charting the Course to 2015 (CTC)*, focused on reaching new constituents not currently active and seeking to re-involve former constituents. CTC was designed to explore ways to enhance stakeholder involvement in implementing bay management actions and increase public awareness of the value and needs of the estuary and surrounding communities.

The CTC project will provide a wide array of assistance measures in order for GBEP to reach out to new users of the Bay resources and to those that are not fully aware of the environmental, economic and community issues associated with the Bay region. *Charting the Course to 2015* is striving to foster meaningful communication and support for the estuary program. These efforts will hopefully yield a more informed and engaged public, as well as more partnerships and collaborations for GBEP in the future.

Introduction

The Galveston Bay Plan (*The Plan*) 10-year review process is being facilitated by a team of contractors from the University of Texas at Austin (UT), Center for Sustainable Development (CSD). After finalization of the contract, the UT-CSD team was formed in May 2005.

A team of experts was assembled to research and prepare the *Charting the Course* ten-year review, including:

- Kent Butler, Ph.D. and professor at The University of Texas at Austin (UT Austin) and Director of the Center for Sustainable Development
- Terri Buchanan, Project Manager, Center for Sustainable Development
- Robin Loving, Principal of Communication Results
- Peter Dana, Ph.D. and former professor at the University of Texas at Austin

Several UT students were also involved including:

- Ahmed Abukhater, PhD CRP and research assistant at UT Austin
- Robert Borowski, PhD CRP and research assistant at UT Austin
- Sarah Buckley, BA Communications and undergrad research assistant at UT Austin
- Vipin Nambiar, MSCRP and research assistant at UT Austin
- Sarah Slovak, MSCRP and research assistant at UT Austin
- Jeffrey Wood, MSCRP and research assistant at UT Austin

Project Methodology

The University of Texas at Austin Center for Sustainable Development (CSD) team spent a considerable amount of time researching several elements of the *Charting the Course to 2015* project before implementation could begin.

The research areas for the project included: definition of watershed boundaries and planning areas, open house style and format, stakeholder involvement and target audience identification, public involvement plan and media outlets, GIS atlas, video style and development, community survey parameters, and event logistics.

Throughout the *Charting the Course* project, the CSD team arranged weekly (and later, less frequent) conference calls with GBEP staff to discuss all aspects of the process and gain approval of processes and decisions made. The CSD team also conducted both primary and secondary research to gain a greater understanding of approaches to address all issues in implementing the *Charting the Course* goals and programs.

Watershed Boundaries and Planning Areas

Extensive research was done to determine the watershed boundaries of the seven planning areas for the *Charting the Course* project. Delineation of watershed boundaries were then used to determine logical breaks in regions and distribution of the community Open Houses. Factors such as major towns and cities, population distribution, the locations of various bodies of water, and available Open House facilities were also taken under consideration in this process.

This team also interviewed staff and conducted research at the following entities to collect information and material that could assist in the development of the watershed boundaries and planning areas:

- Galveston Bay Estuary Program (GBEP)
- Houston Advanced Research Center (HARC)
- Texas Commission on Environmental Quality (TCEQ)

Community Open House “Workshop” Style and Format

To gather information on various workshop formats and successful approaches, the team did extensive web research, literature review, and conducted interviews (both phone and in person) with staff from various organizations and several Bay-area individuals. After reviewing several different workshop or open house formats, the CSD team recommended a “read, write, and roam” format, which was adapted by Dr. Butler from a workshop style utilized by the Texas Department of Transportation. This format provides one-on-one contact with citizens and allows for valuable input and communication from the public. The theme of these Open Houses is two-way “information exchange” where the citizen participant/community leader should learn and get as much if not more out of coming to the workshop, as the GBEP receives in return. The

workshop is a resource and information exchange forum, in which citizens/community leaders are able to browse and peruse many resources and experts, deciding where and how to engage in exchange information.

In addition to the community open houses, it was the recommendation of the CSD team that other, more specifically targeted outreach be done to specific stakeholder groups and organizations. The initial recommendation of the team was to conduct focus-group meetings. Due to staffing and time limitations this suggestion was adapted and the CSD team created a "stakeholder meeting" style and format for use by the GBEP staff. The Stakeholder-Based Meetings and Presentations are ongoing opportunities for GBEP staff and selected Galveston Bay Council (GBC) members to reach stakeholders. Staff and GBC members will be able to host and/or make presentations at meetings with stakeholder groups that have been identified as critical to ongoing success of the process.

This team also interviewed and researched the following entities to collect information and material that could assist in the development of the community Open House style and format.

- Galveston Bay Estuary Program (GBEP)
- Texas Commission on Environmental Quality (TCEQ)
- Houston-Galveston Area Council (H-GAC)
- University of Houston-Clear Lake faculty and staff
- Buffalo Bayou Partnership
- Jim Blackburn, attorney
- Sharon Stewart and Glenda Callaway, public involvement leaders

Bay Briefings and Fact Sheets

Seven (7) Bay Briefings and six (6) Watershed Fact Sheets were produced for use in the community area Open Houses using information from the HARC issue papers, GBEP materials (Website, Bay Barometer) and other sources. The Briefings and Fact Sheets were edited and revised by HARC and passed out and utilized during the community Open Houses at each specific issue area.

Stakeholder Involvement and Target Audience Identification

Done in tandem with research on workshop styles and formats, the CSD researched stakeholder involvement and target audience identification for *Charting the Course*. To gather information on various audience identification processes and involvement approaches, the team did extensive web research, literature review, and conducted interviews (both phone and in person) with staff from various organizations and several Bay-Area individuals. As the goal of "Charting the Course to 2015" is to enhance stakeholder involvement in implementing bay management actions and increase public awareness of the value and needs of the estuary and surrounding communities, significant time was spent on this stage of the process by both the CSD and GBEP staff members.

Throughout this process, the goals of stakeholder and target audience identification were to involve stakeholders in the *Charting the Course* process and incorporate their input into the subsequent *Plan* update and to sustain positive, ongoing stakeholder involvement and support for the next ten years.

To gather information on past outreach approaches used by GBEP, assess its current status, issues and expectations related to outreach, the CSD team consulted with several groups that collaborate with GBEP through different activities. A variety of methods were employed to contact GBEP-affiliated entities and seek their perspectives on outreach approaches and their effectiveness. The CSD team interviewed and researched the following entities to collect information and material that could assist in the development of the community Open House style, locations, outreach efforts and overall format.

- Galveston Bay Estuary Program (GBEP)
- Texas Commission on Environmental Quality (TCEQ)
- Houston-Galveston Area Council (H-GAC)
- Buffalo Bayou Partnership
- Jim Blackburn
- Sharon Stewart and Glenda Callaway (list with organizations?)
- University of Texas faculty in the Community and Regional Planning Program

Public Involvement Plan and Media Outlets

In preparation for the *Charting the Course* community Open Houses, the CSD team conducted an extensive research campaign in order to increase public involvement. CSD team spent considerable time assessing the outreach and education issues that created barriers to the implementation of the PPE Support Plan for the GBEP. The research assessed similar issues faced by other coastal organizations in the U.S., and also analyzed the context of the GBEP in depth through a series of activities with its members.

CSD conducted a variety of primary and secondary research to gain a greater understanding of approaches to address issues in implementing PPE goals.

To gather information on the national perspective and trends regarding outreach and marketing, the team surveyed and compiled information from ANEP EPA Regions 1, 2, 4, 6, 9, 10, and EPA National Headquarters. These entities were selected on account of their ability to provide CSD with a broader perspective of the NEPs, as well as point out the specific strengths of particular NEPs and their outreach strategies.

CSD also contacted and interviewed other entities related to coastal management in order to gather information on past experiences, current issues, and future goals on public outreach and marketing. Specifically, CSD contacted the following: EPA Great Lakes National Program (GLNP), EPA Chesapeake Bay Program (CBP), NOAA Office of Ocean and Coastal Resource

Management (OCRM), NOAA National Estuarine Research Reserve System (NERRS), and the Coastal States Organization (CSO).

These entities were surveyed due to the similarities in issues they faced regarding outreach. The GLNP and CBP are older coastal programs with a strong commitment to public outreach and marketing. Their experience over the years has yielded valuable knowledge about what approaches have proven effective or ineffective, and the reasons why.

To gather information on past Public Participation and Education approaches used by GBEP, assess its current status, issues and expectations related to outreach, CSD consulted with several groups that collaborate with GBEP through different activities. A variety of methods were employed to contact GBEP-affiliated entities and seek their perspectives on outreach approaches and their effectiveness.

Based on this research, the public involvement plan (PIP) was created. This timeline established due dates for both GBEP and CSD product along with giving a specific guideline of the creation of the community Open Houses. The PIP was addressed weekly in both internal CSD team meetings along with weekly GBEP staff and CSD staff meetings via conference call. CSD staff updated the PIP with new deadlines and information on weekly basis based on team progress. This document laid the foundation of the entire Charting the Course to 2015 community Open House process. Due to its effectiveness a similar timeline was drafted for the development of the Strategic Implementation Plan.

CSD utilized the help of a communications consultant, Robin Loving, to assist in the creation of the PIP as an effective and comprehensive communication strategy. The PIP is an overview of the activities that will be initiated to communicate the message of *Charting the Course*; and a description and plan of the events that will be held to increase public participation and feedback. It was developed to create a method to outreach to communities, the media, public and elected officials, and other stakeholders. A timeline was developed to accompany the PIP and outline the task details necessary to accomplish the Plan. The PIP underwent several revisions on a weekly basis in order to be as specific and accurate to the scope of work as possible.

CSD staff met with GBEP staff several times and held meetings with key stakeholders prior to creating the PIP. Valuable input was gathered from this series of meetings and conference calls. Since then, the PIP has undergone several revisions to be as specific and accurate to the scope of work as possible.

In preparation for the community Open Houses CSD staff conducted widespread calendar and media research. Once the community Open House regions were established, CSD staff worked closely with GBEP staff to research the local events in each area that might be occurring at the same time as the community Open Houses. This was done in attempt to schedule the Open Houses at a time where it would be the only major event going on during that certain time. CSD staff also conducted extensive media outlet research. This research included gathering information from all major newspapers, potential magazines, online websites and other outlets for advertisement prices and available space. Specifically, the CSD team and GBEP focused on the minority outreach and staff researched all minority newspapers in the seven areas that were

potentially affected by the community Open Houses. Once all research was compiled, CSD staff provided this valuable information to GBEP.

Also, in anticipation of potential online advertising along with the updating of the GBEP website CSD staff researched potential e-Newsletter formats, web banners and web blurbs. CSD staff drafted template web advertisements and CSD consultant Randy Reed finalized these graphic designs for implementation on the GBEP website. Several e-Newsletter formats were analyzed for the efficiency and their benefit for GBEP. The ideal e-Newsletter formats were sent to GBEP as potential suggestions.

Bay resolutions, to be adopted by local governments throughout the Bay area, were also extensively researched by the CSD team. CSD staff gathered all information necessary for establishing resolutions in each county of the community Open Houses. CSD staff also developed the terminology necessary for such resolutions along with establishing a potential timeline for implementing the resolutions.

CSD staff also spent extensive time researching, formatting and creating draft news releases for GBEP. These draft news releases were sent to GBEP throughout the process for editing and approval. Final drafts were sent to GBEP to send to TCEQ for distribution. CSD staff also illustrated other potential news releases implementation strategies through the Texas Media Directory.

Since the time of the Open House events, GBEP has made numerous presentations including speeches and exhibits to, reaching over 2,000 culturally diverse adults and children with the following message:

*GBEP is Charting the Course to 2015 for a healthier
Galveston Bay that will yield a healthier economy and
a better lifestyle in the Houston-Galveston Bay Region.*

“Open House” Event Logistics

To prepare for the *Charting the Course* community Open Houses, the CSD team conducted extensive research and logistical preparations. The team prepared a detailed list of facility recommendations and needs, a facility questionnaire for each location, and did extensive research into the locations and surrounding community events. Extensive time was also spent preparing the logistical details for the Open Houses. This included the creation of a detailed logistical timeline for the day, a staffing and volunteer matrix, detailed supply lists, Open House material checklists organized by Open House table and area, pre-event task matrices, Open House task matrices, and an extremely detailed PIP timeline, which included all tasks and a timeframe for all of this to be completed.

Significant time was spent working with the CSD consultant, Robin Loving as well as weekly meetings with Scott Jones and other GBEP staff to coordinate all details and delegate tasks among CSD and GBEP staff.

Video

Extensive research was done to determine the scope, mood, length and specifics of the GBEP video to support the *Charting the Course* project. The goal for the CSD was to hire a subcontractor to produce a "Charting the Course to 2015" video. The video was then intended to be used to educate stakeholders and the public about the Galveston Bay Estuary and ongoing activities to restore and protect Galveston Bay as a natural resource.

The CSD first conducted research to determine the best video production companies to pursue for this contract. After several meetings with GBEP staff, Texas Parks and Wildlife staff (with video experience and expertise), TCEQ staff, and other Austin organizations the CSD team began the process to create a Request for Proposal (RFP) to send to video production companies.

After researching the scope and feel of similar organizations' videos an RFP was created to encompass the desired elements of the GBEP video. The CSD team determined that the video should reach out to new users of the Bay resources and to those that are not fully aware of the environmental, economic and community issues associated with the Bay region. It should explore and portray the Bay in a way that is exciting, intriguing, inviting, fun, attractive and valuable. A focus is to create excitement about the nature and recreational opportunities and experiences that the Bay has to offer users. At the same time it should create a sense of urgency about preserving the Bay, in a way that encourages stewardship and sustainability. The video should consider the threats and challenges to the Bay and explore what users can do to restore and sustain its resources.

Three companies answered the RFP and submitted their work for consideration. After much consideration and discussion, Arrowhead Films was selected as a sub-contractor and work on the video was able to begin. Throughout the video production process, the CSD team arranged for many Bay Area community stakeholders to participate in both behind the scenes and in front of the camera work for the video. CSD, Arrowhead Films, and GBEP staff met several times to review video scope, footage, and edits before the final video version was complete.

Arrowhead Films produced several draft videos for review. After review of the considerable footage and draft videos, the decision was made to produce a longer video. Final products include: "A Day in the Bay" a 14-minute video; several vignettes that will be posted as streaming video to the GBEP website; a 30-second video PSA; and radio PSAs. The number and length of work product exceeds the contract commitment.

The video was shown at all of the Open Houses and has been used for stakeholder meetings and other events. Several copies have been distributed to various media outlets and Partners.

There were literally dozens of individuals and organizations that contributed to the research, filming, and production of the film. It was shown extensively at the Open House events and by GBEP at other community events.

GIS Mapping

UT compiled and manipulated GIS and map data from 12 different sources around the State and Country into a geospatial database. These sources included:

- Bureau of Economic Geology (UT BEG)
- City of Houston
- Galveston Bay Estuary Program (GBEP)
- Houston-Galveston Area Council (H-GAC)
- Texas Commission on Environmental Quality (TCEQ formerly TNRCC)
- Texas General Land Office (GLO)
- Texas Natural Resource Information Systems (TNRIS)
- Texas Parks and Wildlife Department (TPWD)
- Texas Water Development Board (TWDB)
- United States Census Bureau, United States Department of Agriculture (USDA)
- United States Geological Survey (USGS).

Data files collected from these sources ranged from road lines to bird rookeries to specific soil data. More than 160 ESRI 'shape file' format data layer files were collected and clipped by a regional boundary made up of eight counties in the Houston-Galveston Region. After each file had been clipped, they were re-projected into the State Plane Texas South Central coordinate system that was chosen to best represent the data.

Data acquisition, preparation, management, and manipulation have been done for each element prior to mapping. Regional and planning area maps, in the form of posters, were produced to support the regional Open Houses. A plethora of changes and ameliorations were made for all posters. Posters were revised several times in correspondence with feedback and comments.

A general Galveston Bay Watershed base map was produced in response to a special request from GBEP that will replace the currently used map and may be published for wide distribution. Additionally, the CSD staff worked on a newly formatted and updated poster of the entire Lower Galveston Bay Watershed. The content and format of this map was carefully negotiated by GBEP staff and the CSD staff, so as to meet their ongoing needs for a general-purpose poster showing land and water resources of the watershed. The CSD team acquired considerable additional data from H-GAC and other sources to expand the geographic area shown on the poster. Also, various other revisions were made to meet the needs of GBEP staff. In mid-August, the CSD staff submitted the revisions and final format of the watershed poster to GBEP for review and approval. Final approval by GBEP is due at the end of the contract period.

Other regional and planning area map posters were produced to support the following issue topics: Fish and Wildlife; Parks and Recreation; Water Quality; Open Space and Natural Areas; Communities, Culture and Change; and Coastal Hazards. More than 30 large-scale posters have been plotted and displayed at each of the Community Open Houses.

Also, a large-scale, 20-panel satellite image of the Houston-Galveston Bay region was produced and laminated for display during the Open Houses. The image provides a unique and system-wide geographic perspective for Open House attendees.

Considerably more maps were produced for the Open Houses than were outlined in the original contract. The additional maps are providing a scale and detail that lends considerable additional support to the Open Houses and were a valuable tool for conversation with attendees.

The posters that were exhibited at the Open Houses were submitted to GBEP for quality control. GBEP in turn distributed the poster files to a group of resource managers in various agencies for review of accuracy and appropriateness. As a result, GBEP staff compiled and then submitted to the CSD staff a list of questions and recommended map revisions. The CSD staff then spent considerable time and effort to review the comments, collect additional information, verify certain data, and finally revise and reformat approximately 29 regional-scale maps for final presentation. In early August, the CSD staff submitted their revisions to GBEP for approval.

The CSD team also prepared two paged-size maps for inclusion in the final SIP related documents. These maps show geographical locations and surface water resources in the Lower Watershed.

The CSD team also compiled the poster map files for future production of a digital atlas on CDs. This atlas concept could compile and display all regional maps and other important documents in an interactive and user-friendly interface that is compatible with all systems.

Community Survey

A crucial element of the *Charting the Course* project was the creation of the community survey. Extensive research was performed by the CSD team into survey techniques, appropriate questions, and review of prior Galveston Bay surveys. Extensive web research and literature review was done to determine the most appropriate and beneficial survey style and format for this arena.

Initially, and throughout the survey creation process, the CSD team met via conference call with Dr. Stephen Kleinberg of Rice University. Dr. Kleinberg is a professor of sociology, is considered a survey expert, and has conducted surveys for the Galveston Bay Estuary Program and Galveston Bay area in previous years. Dr. Kleinberg provided recommendations and review of the CSD team's community survey.

The survey was also sent to GBEP staff for review and recommendations along the way, to gather input and recommendations. After final revisions were made for content and style by the CSD and GBEP staff, the survey was sent to the University of Texas Institutional Review Board (IRB), as required by university policy, for official approval. A first run of the survey was administered to several UT students for input and comments. After some last revisions, the survey was complete and has begun to be administered at the Open Houses.

After the community Open Houses, UT staff worked with the assistance of UT doctoral candidate, Bige Yilmaz, to quantitatively analyze the *Charting the Course to 2015* community survey. Survey data went under a rigorous process of cross tabulations including checks for both internal and external consistency. As a result, over 50,000 pages of tabulations and analysis were created. A summary of this information will be included with a survey report in the appendix. The report on the survey project and major findings was submitted to GBEP shortly after the completion of the Open House events.

Strategic Action Plan

Extensive research was done to determine the scope, length and specifics of the Galveston Bay Strategic Action Plan to support the *Charting the Course* project. The goal for the CSD was to develop actions and implementation strategies that reflected the desire and need of the community and GBEP staff based on the *Charting the Course to 2015 Community Open Houses* and other research.

Extensive meetings were conducted with the CSD team via conference call with Robin Loving, CSD consultant, and GBEP staff in order to develop a plan that was easily useable and proficient for GBEP.

Several drafts of the Galveston Bay Strategic Action Plan were sent to GBEP staff for review and recommendations along the way, to gather input and recommendations. After final revisions were made, for content and style, by the CSD and GBEP staff, the Action Plan was sent to The Galveston Bay Council for further edits and review. Based on these edits, GBEP and CSD finalized the Galveston Bay Strategic Action Plan. Helen Drummond, Executive Director of GBEP, made a presentation of it at the Eighth Biennial *State of the Bay Symposium*.

Project Results

In the first year of work we saw many accomplishments including the creation of a detailed draft work plan, work on a GIS atlas, the creation of a communication strategy, the creation of a public involvement plan and workshop design, and the beginning development of a GBEP promotional and educational video.

In the second year, we had many accomplishments including continued work on the GIS atlas, further development of the communication strategy, the finalizing of the public involvement plan, decisions and reservations regarding workshop dates and locations, the filming of the GBEP promotional and educational video, and work on the HARC white papers and workshop issue papers and fact sheets.

We had many accomplishments in the first and second fiscal years of the project, including:

- Completion of the GBEP video.
- Completion of the bay briefings and fact sheets.
- Implementation of the communication strategy.
- Completion of the community survey.
- Finalization of all Open House logistics.
- Completion of the GIS atlas and posters.
- Successful implementation of seven community Open Houses.
- Continued updates to the public involvement plan and timeline.
- Budget and contract amendments finalized and accepted.

In the third year we also had many accomplishments including:

- Extensive discussion and concept development of a methodology for strategic planning and performance measures, including development of draft performance measures for each of the goals and objectives of the GB 2015 plan.
 - Completion of the first draft of the Galveston Bay Charting the Course to 2015 Strategic Action Plan.
 - Several draft appendices for the final report completed.
 - Completion of a Charting the Course Summit involving the B&P Committee and the Bay Council and many active public and citizen leaders who actively participate in GBEP-sponsored activities.
 - Completion of Galveston Bay watershed poster map.
 - Statistical analysis of survey results was completed. Thousands of pages of data generated.
 - Completion of the stakeholder slide presentation for GBEP use
 - Budget and contract amendments finalized and accepted.
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Project Conclusions and Lessons Learned

The CSD team can formulate preliminary conclusions and reflectively identify a number of lessons learned from the *Charting the Course* project.

First, it is still quite early to formulate meaningful conclusions on the *Charting the Course* project. The project's objective, beginning in 2005, was to look forward for a ten-year period and determine how GBEP could best utilize the next 10 years, to complete as many of the original goals of the *Galveston Bay Plan*, as well as numerous refinements to those goals. Many of the core tasks of the *Charting the Course* project involved public outreach and engagement, as this area was identified in the preceding year of work by the CSD and GBEP staff as having the highest priority for direct, short-term action among GBEP's many program areas.

As such the prior programs of outreach and education at GBEP have been enhanced during the *Charting the Course* project in a variety of new ways. GBEP has utilized the CSD team and the events and activities of this project to engage some community sectors that were previously not as fully engaged—areas farther inland from the immediate bayshore environment, commercial sectors not previously as well connected to GBEP programs and activities, and the like.

It takes considerable time and persistence to make meaningful differences in programs of community awareness, outreach and education. Short of a crisis event, it is always a challenge to engage communities in programs that are not central to their existence. And while there are many problems and concerns about the future fate of Galveston Bay, virtually all are gradual, cumulative forces that have not materialized in recent years in the form of a crisis. So, any conclusions relating to the success of the *Charting the Course* project, given its intimate connections with the ongoing core mission of public involvement at GBEP, must be considered preliminary.

It is also unclear as to how to make meaningful conclusions or measures as to the success of the *Charting the Course* project in an objective manner, having few if any outcome measures or performance criteria for determining effectiveness or success at this point in time. Throughout the next ten years, GBEP will have many opportunities to evaluate its programs objectively and ask the constituents of Bay area management and protection, what they see as the effectiveness of GBEP's programs in shaping the future environmental fate of Galveston Bay and the surrounding region.

Inevitably, the level of resource commitment is a determining factor in the outcome of programs such as *Charting the Course*. GBEP made considerable commitments of time and resources to launch and participate in the program. The training and foundational work of *Charting the Course* for future participation and education programs was substantial, not the least of which have been the internal commitments of resources and structural reorganizations within GBEP, to embrace and sustain the mission of widespread public engagement.

Lessons Learned

There are many lessons learned from the *Charting the Course* project, and observations that will hopefully be of benefit to future initiatives of a similar theme. Some of them are presented here.

An academic institution is a logical, but complicated partner for an agency seeking public engagement program development assistance. The CSD team, being part of a public body, was a logical choice for partnering with GBEP on a program such as *Charting the Course*. The challenges of partnering with an academic institution, however, are formidable. For instance, the academic calendar posed numerous scheduling difficulties. The remote location of a team located in Austin made face-to-face meetings difficult and expensive. And the independence of a university team is sometimes less than fully understanding of the constraints state agency activities.

Working for a public agency can pose many constraints on the use of outreach methods and resources. In a few cases, the CSD team had to forego or take considerable additional measures to provide desired resources and services in support of public events. The purchase of food, procurement of contractual services, publication of documents for public review, and other tasks in the *Charting the Course* project were considerably less automatic and sometimes quite cumbersome as a result of having to comply with agency rules or policies. Certainly, any such constraint can be managed or avoided, or authorizations can be granted, with additional planning and environment of and preparation and early initiative on making proposals in appropriate fashions.

A project that requires very close collaboration and involvement of the client agency is both an opportunity and challenge, for introducing new ideas and methods as a result of the project. The *Charting the Course* project was truly a partnership activity, involving two or more GBEP staff on a weekly basis over a three-year period. It was a tremendous opportunity for university investigators to learn about, and from, the public agency's operations and its front-line involvement with communities of diverse types. Students involved in *Charting the Course* were given invaluable insights and perspectives on environmental policy development, interagency coordination, public sector roles in shaping public sentiment on resource issues, and the like. The challenges of such close involvement were also large, partially as a result of the geographic separation of the agency and the university, the vastness of the study area, as well as the need to understand and work within the complex organizational structure of a state agency with upper management positions that are not all stationed in one location. The *Charting the Course* project also required the active participation and consensus of state officials, university staff, and citizen and corporate policy leaders (the Bay Council) in arriving at consensus to proceed to the next step of contract execution. The scheduling and work on future stages could only begin when the key committees and councils and agency officials were ready to proceed to the next stage. These kinds of collective policy- and decision-making procedures are on the one hand, uncharacteristic of internal institutional operations at a university, while on the other hand, quite normal and necessary as a part of public agency involvement in civic and environmental programs.

Longer-term projects must be resilient and able to respond to unanticipated changes over the life of a project. During the course of the *Charting the Course* project, there was some

staffing turnover that significantly affected the course and operations of the *Charting the Course* project. There were changes in the leadership at the central offices of TCEQ, in the staff assignments at GBEP, reorganization at GBEP in the area of public participation and education, resignation of a key staff member on the CSD team, and expected turnover of student support during the course of the project. Throughout these unanticipated changes in circumstance, both GBEP and the CSD team have proceeded to fulfill their missions and work very cooperatively to the end.

Recommendations for the Future

The CSD team respectfully makes the following recommendations:

The GBEP staff should consider inviting the University of Texas to participate in a biennial evaluation of the progress and prospect of the *Charting the Course* project over the next eight years. Such an evaluation might include a couple of meetings and work sessions, an evaluation of project reports and descriptions, and participation in a single half-day presentation meeting, to review and discuss GBEP's ongoing operations in public participation and education and outreach generally.

GBEP should cultivate and support university and other public sector entities in the Galveston Bay region to contribute to the same types of extra-ordinary or contractable functions and assignments as were taken on as work tasks in the *Charting the Course* project. Continuity of local institutional involvement could be a key to success of GBEP's partnership relations.

GBEP should continue to hold a special forum at the biennial State of the Bay conference to address long-term community involvement and engagement activities. It is obvious to all parties involved, that the geographic scale and complexity of this region makes for a formidable, if not impossible, task to engage all community sectors and public and private entities that have a stake in the Bay. Hence, it is recommended that GBEP maintain and cultivate its facilitative role rather than a core functional role, in its activities that carry forward the mission of the *Charting the Course* project.

Appendices

Attached is a preliminary list of the appendices to the Final Report. They represent the completed documents of the CSD team over the course of the contract period.

Due to the high volume of appendices, a CD containing all the various documents will be sent under separate cover, via US Postal Service.

