

SUMMARY SHEET

Project Proposal Form - Gulf Coast Ecosystem Restoration Council

Council Member: Environmental Protection Agency		Point of Contact: John F. Bowie	
		Phone:	(228)688-3888
		Email:	Bowie.John@epa.gov
Project Identification			
Project Title: GULF of MEXICO ESTUARY PROGRAM			
State(s): TX, LA, MS, AL, FL		County/City/Region: Counties/City/Regions included in the following targeted watersheds/estuaries	
Specific Location: <i>Projects <u>must</u> be located within the Gulf Coast Region as defined in RESTORE Act. (attach map or photos, if applicable)</i> Gulf Coast estuaries with priority consideration given to the following watersheds/estuaries: Lower Laguna Madre (TX); San Antonio/Matagorda Bays (TX); Sabine/Neches (TX); Calcasieu/Mermentau Basin (LA); Atchafalaya/Vermillion (LA); Mississippi Sound (MS); Perdido (AL,FL); Pensacola (FL); Choctawhatchee (FL); St. Andrews (FL); Apalachicola (FL); Suwannee (FL).			
Project Description			
RESTORE Goals: <i>Identify all RESTORE Act goals this project supports.</i>			
<input type="checkbox"/> Restore and Conserve Habitat		<input type="checkbox"/> Replenish and Protect Living Coastal and Marine Resources	
<input type="checkbox"/> Restore Water Quality		<input type="checkbox"/> Enhance Community Resilience	
<input type="checkbox"/> Restore and Revitalize the Gulf Economy			
RESTORE Objectives: <i>Identify all RESTORE Act objectives this project supports.</i>			
<input type="checkbox"/> Restore, Enhance, and Protect Habitats		<input type="checkbox"/> Promote Community Resilience	
<input type="checkbox"/> Restore, Improve, and Protect Water Resources		<input type="checkbox"/> Promote Natural Resource Stewardship and Environmental Education	
<input type="checkbox"/> Protect and Restore Living Coastal and Marine Resources		<input type="checkbox"/> Improve Science-Based Decision-Making Processes	
<input type="checkbox"/> Restore and Enhance Natural Processes and Shorelines			
RESTORE Priorities: <i>Identify all RESTORE Act priorities this project supports.</i>			
<input checked="" type="checkbox"/> Priority 1: Projects that are projected to make the greatest contribution			
<input checked="" type="checkbox"/> Priority 2: Large-scale projects and programs that are projected to substantially contribute to restoring			
<input checked="" type="checkbox"/> Priority 3: Projects contained in existing Gulf Coast State comprehensive plans for the restoration...			
<input checked="" type="checkbox"/> Priority 4: Projects that restore long-term resiliency of the natural resources, ecosystems, fisheries...			
RESTORE Commitments: <i>Identify all RESTORE Act Comprehensive Plan commitments that this project supports.</i>			
<input checked="" type="checkbox"/> Commitment to Science-based Decision Making			
<input checked="" type="checkbox"/> Commitment to Regional Ecosystem-based Approach to Restoration			
<input checked="" type="checkbox"/> Commitment to Engagement, Inclusion, and Transparency			
<input checked="" type="checkbox"/> Commitment to Leverage Resources and Partnerships			
<input checked="" type="checkbox"/> Commitment to Delivering Results and Measuring Impacts			
RESTORE Proposal Type and Phases: <i>Please identify which type and phase best suits this proposal</i>			
<input type="checkbox"/> Project <input checked="" type="checkbox"/> Planning <input checked="" type="checkbox"/> Technical Assistance <input checked="" type="checkbox"/> Implementation <input checked="" type="checkbox"/> Program			
Project Cost and Duration			
Project Cost Estimate:		Project Timing Estimate:	
Total :	Low \$ 11.0M* (5 estuaries)	Date Anticipated to Start:	<u>JUNE 2015</u>
	High \$ 26.4 M* (12 estuaries)	Time to Completion:	<u>60 / 5</u> months / years
	\$ 2 M / Estuary + 10%	Anticipated Project Lifespan:	<u>50</u> years

*Project is scalable.

EXECUTIVE SUMMARY

The U.S. Environmental Protection Agency (EPA) proposes the Gulf Coast Ecosystem Restoration Council (RESTORE Council) provide funding for a Gulf of Mexico Estuary Program (GMEP) that would develop and stand-up place-based estuary programs across all 5 Gulf states. The following estuaries are to be given priority consideration for this program: Lower Laguna Madre (TX); San Antonio/Matagorda Bays (TX); Sabine/Neches (TX); Calcasieu/Mermentau Basin (LA); Atchafalaya/Vermillion (LA); Mississippi Sound (MS); Perdido (AL,FL); Pensacola (FL); Choctawhatchee (FL); St. Andrews (FL); Apalachicola (FL); and Suwannee (FL).

The priority estuaries and contributory watersheds identified in this proposal are located adjacent to, but outside of, the study areas of the seven Gulf of Mexico National Estuary Programs (NEPs) and the Lake Pontchartrain Basin Restoration Program (LPBRP). For this proposal, EPA estimates 5-12 place-based estuary programs would be developed and stood-up. The actual number of programs is scalable and flexible to meet the desires of the RESTORE Council and funding availability. Additionally, the Council may decide to consolidate some of the targeted estuaries that are adjacent to one another or add additional estuaries based on input from major estuary stakeholders. Once developed and operational, this program would cover approximately 45% of the U.S. Gulf of Mexico coastal zone. These newly established place-based estuary programs would be a superb complement to the existing NEPs and to the LPBRP, which when taken together, would cover approximately 85% of the U.S. Gulf of Mexico coastal zone.

EPA would form a Technical Support Team (TST) that would include and actively engage the leadership and representatives of the EPA Regions, EPA Gulf Program Office, State Programs, the Gulf NEPs and LPBRP as advisors to ensure the place-based estuary programs are effectively stood up with RESTORE funding and have full access to the NEP Program expertise and knowledge in forming and subsequently operating the Management Conferences, effectively engaging the public outreach programs, integrating science, developing Comprehensive Conservation and Management Plans (CCMPs) and implementing restoration projects.

EPA would apply many elements of the governance model called for by Section 320 of the 1987 Clean Water Act Amendments to establishment and management of the GMEPs. Working closely with the TST and key estuary stakeholders, EPA will request proposals, identify or establish an organization to serve as the host for each place-based estuary program. This host will provide administrative and financial management support for the program along with initial program organizational support.

Once a host is identified, a Management Conference would be established which will direct the operation of the estuary program. A top level organizational unit (TLOU) within the Management Conference will be established, with advice from the technical support team, as the decision making body for the estuary program. This TLOU, often called the Policy Committee for NEPs, will be made up of top officials from key local, federal, and state resource or decision making organizations for the estuary program study area. One of the first actions

of the TLOU will be to direct the host organization to advertise for and hire a Program Director based on a position description and salary rate approved by the TLOU. The Program Director under direction of the Management Conference will develop and implement a Comprehensive Conservation and Management Plan.

Each GMEP Management Conference will be comprised of inter-jurisdictional bodies of local elected officials and federal and state agency directors as well as scientists, citizens, business leaders, commercial fishing, universities, agricultural, timber, ports, and industry representatives. Each Management Conference would act on recommendations from citizens, scientists, businesses, industries and other resource users, and implement local solutions to address complex water quality and habitat restoration and protection needs.

The Goals, Objectives and Actions comprising the CCMPs would primarily focus on restoring water quality, while also addressing restoration and conservation of habitat, replenishing and protecting living coastal and marine resources, enhancing community resilience, and revitalizing the coastal economy. Specific actions identified may include: implementing best management practices for nonpoint source water quality improvement; protecting shoreline and upland habitat through easement or purchase; implementing green infrastructure measures; designing and constructing storm water parks; completing and implementing watershed management plans; protecting, restoring, and managing critical aquatic, shoreline, and upland habitat through a variety of hydrologic, landscape, vegetation and wildlife management actions; and establishing living shoreline habitat; and other water quality and habitat restoration techniques.

Due to the long history of success and the strong partnerships on which these programs are based, there is a very low risk that RESTORE Council-funded efforts would fail to meet RESTORE Council and NEP CCMP goals. For example, the NEPs have a proven track record of effectively partnering with Federal resource agencies like the USACE, NOAA, NRCS, USFWS, and USGS, which reduces the risk of failure. The eight programs also have withstood the impacts of hurricanes, oil spills, changes in governing structure and administration, and fluctuation in funding sources and levels over their 20-25 year history while remaining effective agents of estuary protection and restoration. By demonstrating their capacity to effectively implement projects and programs in the face of those challenges, the NEPs and LPBF have earned the support and trust of local, state, and federal agencies, media, and general public.

By funding this proposal to establish new place-based estuary programs across the Gulf region, the RESTORE Council will have taken a major foundational and sustainable step toward achieving its Comprehensive Plan Goals. Establishing these place-based estuary programs, using a science-based process to develop and implement comprehensive management plans, will help ensure that local programs will be in place to directly address RESTORE Council Comprehensive Plan goals. Implementation of each estuary's plans via on-the-ground, place-based actions will help promote water quality protection and improvements and habitat.

PROPOSAL NARRATIVE

Introduction

EPA is requesting funding from the Gulf Coast Ecosystem Restoration Council (RESTORE Council) to establish the Gulf of Mexico Estuary Program (GMEP) that would develop and stand-up place-based estuary programs across all 5 Gulf states, develop comprehensive conservation and management plans and implement water quality and habitat restoration and protection projects. The following estuaries are to be given priority consideration in selecting participating estuaries: Lower Laguna Madre (TX); San Antonio/Matagorda Bays (TX); Sabine/Neches (TX); Calcasieu/Mermentau Basin (LA); Atchafalaya/Vermillion (LA); Mississippi Sound (MS); Perdido (AL,FL); Pensacola (FL); Choctawhatchee (FL); St. Andrews (FL); Apalachicola (FL); and Suwannee (FL).

The priority estuaries and contributory watersheds identified in this proposal lie outside of the service areas of the seven Gulf of Mexico National Estuary Programs (NEPs) and the Lake Pontchartrain Basin Restoration Program (LPBRP). Under this proposal, EPA estimates 5-12 place-based estuary programs would be developed and stood-up. The actual number is scalable and flexible to meet the desires of the RESTORE Council and funding availability. Additionally, the Council may decide to consolidate some of the targeted estuaries that are adjacent to one another or to add additional estuary areas. Once developed and operational, this program would cover approximately 45% of the U.S. Gulf of Mexico coastal zone. These newly established place-based estuary programs would be a superb complement to the existing NEPs and to the LPBRP, which when taken together, would cover approximately 85% of the U.S. Gulf of Mexico coastal zone

This proposal is primarily focused on restoring and protecting the Gulf Coast region's fresh and estuarine water quality. However, the proposal also focuses on: restoring and conserving habitat; replenishing and protecting living coast and marine resources; enhancing community resilience; and revitalizing the gulf coastal economies that are inextricably linked to the estuaries. Establishing the new place-based estuary programs is foundational, sustainable, and has a high likelihood for success. The program will benefit the human communities they serve as well as the entire Gulf region. Once the efforts of these new place-based estuary programs are combined with the already highly-effective work of the seven currently-existing Gulf NEPs and the LPBRP, the Gulf region will be in a very strong position to better understand the impacts of stressors on Gulf region estuaries. The region also will have institutionalized Gulf-wide an effective governance and management approach for addressing those impacts.

The Model – NEPs and LPBRP

National Estuary Programs (NEPs) were created by Section 320 of the 1987 Clean Water Act amendments, in which Congress designated them as nationally significant and needing special attention. Section 320 designated the U.S. Environmental Protection Agency (EPA) as the federal program manager.

There are seven NEPs in the Gulf of Mexico region with the mission to protect and restore the water quality and ecological integrity of their respective estuaries. From West to East, the NEPs are: Coastal Bend Bays and Estuaries Program (CBBEP); Galveston Bay Estuary Program (GBEP); Barataria-Terrebonne National Estuary Program (BTNEP); Mobile Bay National Estuary Program (MBNEP); Tampa Bay Estuary Program (TBEP); Sarasota Bay Estuary Program (SBEP); and Charlotte Harbor National Estuary Program (CHNEP). These NEPs are located in four of the five Gulf States, with Mississippi being the only state that does not have an NEP.

Although not designated an NEP, the LPBRP was established in response to environmental concerns voiced throughout the Basin. In 1989, professors at Tulane University and the University of New Orleans wrote a report entitled "To Restore Lake Pontchartrain" that resulted in the Lake Pontchartrain Basin Restoration Program and the Lake Pontchartrain Basin Foundation being established.

It is important to note that each of these estuary programs address unique place-based issues, and have estuary-specific goals, objectives and actions. It is also important to note that these estuaries face many common challenges, including pollutant (bacterial, organic, toxic and nutrient) loads; alteration of natural hydrology (*i.e.*, freshwater inflows); aquatic nuisance species; sea level and climactic changes and; beneficial reuse of dredged sediments; declines in fish and wildlife populations; and habitat loss and degradation.

Each NEP is governed by a Management Conference, including an inter-jurisdictional body of local elected officials, scientists, citizens, business leaders, industry, and federal and state agency directors. NEP governing boards act on recommendations from citizens, scientists, businesses, industries and other resource users, and they implement local solutions to address complex water quality and habitat restoration and protection needs. Schneider et al. (2003) found that the networks in the NEP areas span more levels of government, integrate more experts into policy discussions, nurture stronger interpersonal ties between stakeholders, and create greater faith in the procedural fairness of local policy than do other networks in comparable estuaries.

Each NEP developed and adopted a Comprehensive Conservation and Management Plan (CCMP) and the LPBRP developed and adopted a Comprehensive Management Plan (CMP). These management plans include virtually the same goals as the Gulf Coast Ecosystem Restoration Council's Comprehensive Plan. CCMPs focus on restoring water quality; restoring and conserving habitat; replenishing and protecting living coastal and marine resources; enhancing community resilience; and restoring and revitalizing the Gulf economy. Each NEP and the LPBRP assembled teams to assess and understand impacts and stressors in the estuary, and then to develop goals, objectives and actions for inclusion in the management plans to drive water quality protection and improvements in each estuary. Additionally, each NEP has a standing Technical/Science Advisory Committee (TAC) which reviews all science and technical reports and Management Conference/NEP Management Committee recommendations.

The NEP management and administrative structure uniquely positions each NEP to receive funds and contract, permit and construct projects to produce results quickly. The Management Conference of each NEP prepares an Annual Work Plan in which priority projects and responsible parties are identified and a budget adopted to implement the Work Plan. These work plans are approved by each Management Conference governing board and EPA prior to implementation. Projects typically use local workers and often benefit geographically or socially vulnerable communities.

The Gulf NEPs have been implementing projects and actions that address their CCMPs in seven study areas comprising ~40% of the US Gulf Coast. Similarly, the LPBRP has also been implementing projects and actions that address their CMP in the Lake Pontchartrain Basin. Results from the Gulf NEPs and LPBRP include significant expansion of seagrass beds, marshes, and mangroves. Water quality is measurably improved in the program areas based on reporting in status and trends reports. The NEPs and LPBRP have proven they have the community involvement and support, appropriate and successful management structure and administrative capacity, engagement of state and federal resource agencies (*i.e.*, USACE, NOAA, NRCS, USFWS, NPS, USGS, DOI) and scientific knowledge to continue their successful restoration trajectories.

Through the Management Conference framework, these existing estuary programs have access to many resources and are very effective in identifying and implementing water quality and habitat restoration projects. Their science-based and consensus-driven partnerships provide local scientific and technical expertise, leveraged funding, citizen and elected official support, project monitoring, and public outreach. Basic operational funding for the NEPs and the LPBRP are provided annually by Congress and, where appropriate, their respective states.

By funding this proposal to establish new place-based estuary programs across the Gulf region, the RESTORE Council will have taken a major foundational and sustainable step toward achieving its Comprehensive Plan Goals. Establishing these place-based estuary programs and using a science-based process to develop comprehensive management plans will help ensure that local programs will be in place to directly address RESTORE Council Comprehensive Plan goals. Implementation of each estuary's plans via on-the-ground, place-based actions will help promote water quality protection and improvements.

Implementation approach

Upon notification of proposal selection for funding by the Council, EPA would engage key stakeholders (*i.e.* – states, NGOs, NEPs, LPBRP, other federal agencies) and develop the best approach(s) to utilize in identifying and establishing the specific place-based estuary programs. EPA will form a Technical Support Team (TST) that will include and actively engage the leadership and representatives of EPA, State and other Federal Agencies, the existing Gulf NEPs and LPBRP. This GMEP organizational TST will work with the new Management Conferences to ensure the place-based estuary programs are stood up and have full access to the program's expertise and knowledge in forming and having capacity to subsequently operate Management Conferences, public outreach programs, integrated science and developing Comprehensive

Conservation and Management Plans (CCMPs). The TST will continue to operate following establishment of the Management Conference and Program Office at the pleasure of the Management Conference and Program Director and TST member availability.

EPA proposes to utilize many elements of the successful management model established and used by the National Estuary Programs (NEPs) that were created by Section 320 of the 1987 Clean Water Act amendments and operate under EPA guidance. Under the GMEP, EPA, working with the TST and key stakeholders in the selected estuaries and their contributory watersheds will request proposals for, identify or establish an organization to serve as the host organization for each place-based estuary program. This host will provide administrative and financial management support for the program along with initial program organizational support.

Once a host is identified, a Management Conference will be established which will direct the operation of the estuary program. A top level organizational unit (TLOU) within the Management Conference will be established as the decision making body for the estuary program. This TLOU, often called the Policy Committee for NEPs, will be made up of top officials from key local, federal, and state resource or decision making organizations for the estuary program study area. One of the first action items for the TLOU will be to direct the host organization to advertise for and hire a Program Director based on a position description and salary rate approved by the TLOU. The Program Director will be selected by and serve at the pleasure of the Management Conference TLOU. This Program Director will receive direction from the TLOU of the Management Conference.

The GMEP Director, working with the TLOU members, and with support from the TST, will develop the foundational components of the Management Conference and program office. The foundational components include the Director developed options for staffing the program office, options for a program budget, options for the organization and membership of the Management Conference committee structure, draft by laws for the program office, and draft bylaws for all Management Conference organizational units. These option papers and draft documents will be submitted to the TST for review and comment and subsequently to the Management Conference TLOU for review and approval.

Following approval of the foundational components of the Management Conference and program staffing by the Management Conference TLOU, the Director will hire staff and establish the sub units of the Management Conference. The Director will draft a program workplan, with assistance from the TST, and will utilize the Management Conference to develop consensus, draft and submit the workplan to the TLOU for approval. This workplan will define the process to complete the development of a draft and final Comprehensive Conservation and Management Plan and any initial restoration actions.

Each GMEP Management Conference is an inter-jurisdictional body of local elected officials, scientists, citizens, business leaders, commercial fishing, universities, agricultural, timber, ports, industry, and federal and state agency directors. Each Management Conference will act on

recommendations from citizens, scientists, businesses, industries and other resource users, and implement local solutions to address complex water quality and habitat restoration and protection needs.

Once established, the Management Conference TLOU for each of the place-based Estuary programs will establish, following recommendations from the Program Director and the TST, appropriate subcommittees to facilitate the successful functioning of the Management Conference. Often but not always, the Management Conference includes a Management Committee, a Technical/Science Advisory Committee (TAC) and a Citizens Advisory Committee (CAC). A mid-level committee, often called a Management Committee, typically includes local, federal and state agencies as well as other key management stakeholders. The Management Committee receives, reviews and makes recommendations for actions to the Management Conference TLOU. A TAC is typically comprised of scientists, engineers, and environmental professionals from a variety of sources including as appropriate: academia, NGOs, the local communities, business, state resource agencies and federal resource agencies including EPA, USGS, DOI, NPS, USFWS, NOAA, NRCS, and USDA. A CAC is typically composed of local community organizations and key citizens that have an interest in the estuary and links essential for outreach and public input for the program. The TAC and CAC often report to the Management Committee.

Following the standup of the GMEP Management Conference and Program Office, the Management Conference will begin the process of determining the estuary-specific water quality and habitat significant resources, stressors, impacts, and action items that can be undertaken to address these stressors and impacts. This process will lead to the development of the CCMP that is unique to that estuary. The CCMP is approved by the Management Conference and EPA. Each CCMP will provide goals and objectives as well as specific actions to restore and protect the estuary based on a stakeholder driven process rooted in strong science.

The Goals, Objectives and Actions comprising the CCMPs would primarily focus on restoring water quality, while also addressing restoration and conservation of habitat, replenishing and protecting living coastal and marine resources, enhancing community resilience, and revitalizing the coastal economy. Specific actions identified would include: implementing best management practices for nonpoint source water quality improvement; protecting shoreline and upland habitat through easement or purchase; implementing green infrastructure measures; designing and constructing storm water parks; completing and implementing watershed management plans; protecting critical aquatic, restoring and managing critical aquatic, shoreline and upland habitat through a variety of hydrologic, landscape, vegetation and wildlife management actions; and establishing living shoreline habitat; and implementing other water quality and habitat restoration techniques.

EPA anticipates and would strive to have each of the place-based estuary programs established, stood up, and have their CCMPs completed and approved by their respective Management Conferences and EPA within the first three years of receiving the RESTORE funding. Subsequent to the CCMPs being approved, their respective Management Conferences would identify

specific high-priority water quality and habitat restoration and protection projects that would be implemented utilizing the remainder of existing grant funds and for potential future funds.

Input would be obtained from the scientific community and the public consistent with the specific Management Conference procedures. Plans would be developed and approved by the Management Conference to design (if needed) and implement selected projects. Coordination among federal, state and local partners for permitting and approvals would be immediately initiated, as needed. EPA anticipates each of the place-based estuary program's identified high priority water quality and habitat restoration and protection projects could be initiated within 6-9 months of Management Conference approval.

Each program would build the administrative and project management capacity to receive funds and contract, permit and construct projects to produce results quickly. The Program Office would develop and the Management Conference would review and approve an Annual Work Plan. The Work Plan would identify priority projects and responsible parties and establish a budget for the year. These Work Plans would be approved by the Management Conference and the EPA prior to implementation. Each program will establish a financial tracking system that is fully capable of tracking multiple projects and expenditures. These programs would be subject to audits, thus assuring that funds are managed and expended appropriately.

Monitoring and adaptive management

Projects undertaken by these programs would include a baseline and post implementation monitoring component. Such monitoring would provide the basis for determining the effectiveness of the project in meeting the project goals and objectives. The design of the monitoring would be reviewed by the TAC as part of the project plan approval process. This monitoring would also be used to identify any additional measures that need to be taken through an adaptive management process. All monitoring results would be reviewed by the TAC and the Management Conference for scientific and technical acceptability and as a basis for feedback from the stakeholders.

Measures of Success

Within each of the GMEP place-based estuary programs, the Program Office will develop and the Management Conference would approve reports on progress under the Annual Work Plans. These work plan reports would provide a concise summary of major accomplishments achieved each year. Reports would also include updates on the progress of activities, the status of expenditures for each activity, any financial or work related problems encountered, actions taken to resolve problems, and a discussion of the anticipated schedule and expenditures needed to successfully complete each activity, providing timely updates on progress.

Risks and uncertainties

Due to the long history of success and the strong partnerships in the existing NEPs and LPBRP, there is a low risk of failure in the RESTORE Council funding this proposal to establish and stand up new place-based estuary programs in the Gulf region. As demonstrated by the existing programs, place-based estuary programs have withstood hurricanes, oil spills, changes in

governing structure and administration, and fluctuation in funding sources over their 20-25 year history while remaining very effective. Place-based estuary programs, like the NEPs and LBPRP, earn the strong support and trust of local, state, and federal agencies, media, and general public resulting from their science-based and consensus-driven approach to succinctly understanding the environmental issues and priorities facing their estuaries and the capacity to effectively implement projects and programs. Additionally, the Management Conferences provides ready access to scientists, engineers, environmental professionals and others from academia, NGOs, the local communities, business, state resource agencies and federal resource agencies including EPA, USGS, DOI, NPS, USFWS, NOAA, NRCS, and USDA which further reduces the chances of failure. These partnerships and strong community support have brought project success and longevity, ensuring that they would not be neglected after completion and sustained far into the future. As with the existing NEPs and LPBRP and other programs, there is always the uncertainty of future funding becoming a hindrance.

Outreach and education opportunities

The GMEP place-based estuary programs would develop an effective public education and outreach program to ensure community involvement and understanding. Based on the experience of the NEPs and LPBRP, developing Management Conference procedures and dedicating staff would result in sophisticated and significant efforts that highlight the value of the resource, raise awareness and support for actions needed to protect their watersheds. Some programs may utilize social marketing programs to elicit change and increase stewardship and knowledge of citizens so that they become stakeholders. Examples of the outreach/education efforts at the NEPs, some of which may be used in the GMEP, include the following:

Coastal Bends Bays and Estuary Program (CBBEP): An education program at the Nueces Delta Preserve, near Corpus Christi, Texas, that administers education-based field trips to grades K-12. The CBBEP Educators have developed a curriculum that meets and exceeds all state standards. On average the program provides a field trip free of charge to over 10,000 students per year from schools within the 12 county Coastal Bend region. CBBEP educators also provide teacher workshops and continuing education classes to help teachers with their continuing education requirements.

Galveston Bay Estuary Program (GBEP): “Back the Bay” is GBEP’s public awareness campaign designed to engage citizens in the Houston-Galveston region to improve water quality, conserve water, and protect fish and wildlife habitat. The campaign features tips for residents to help preserve the Bay and surrounding waterways and includes surveys taken before and after the campaign seasons to assess effectiveness of the campaign messaging.

Barataria-Terrebonne National Estuary Program (BTNEP): BTNEP sponsors teacher workshops each year including: “From H2O” provides water quality and sampling kit training as part of the “Bayouside Classroom” sampling network; “WETSHOP” provides wetland habitat training; and “Tools for Teachers” provides wetlands curriculum training.

Mobile Bay National Estuary Program (MBNEP): A central component of the current CCMP is “Create a Clean Water Future,” a public service campaign to help Alabamians

learn more about stormwater runoff and its impacts; increase demand for stormwater management programs; and provide tools that empower Alabama residents to reduce polluted runoff in our waterways. The campaign has separate components targeting homeowners, businesses, and elected officials with specific ways to reduce stormwater pollution. Since its inception, four municipalities have adopted the campaign.

Tampa Bay Estuary Program (TBEP): TBEP has developed a social marketing campaign to educate and encourage homeowners to change their behavior when caring for their Florida residential landscape, resulting in reduced nutrient loading to streams, rivers and estuaries. Called “Be Floridian”, the campaign supports local ordinances restricting the use of nutrient fertilizer in the summer rainy season in a fun and engaging way.

Sarasota Bay Estuary Program (SBEP): The SBEP has a multifaceted social marketing campaign facilitated annually through a Citizen Action Plan focusing on stewardship and the SBEP Website (www.sarasotabay.org). Key components of the CCMP include: SBEP curriculum is State certified and supported with teacher training, field tech kits and contractor support.. A study recommended by local residents set the economic value of Sarasota Bay to the local residents at \$11.8 billion; with a regional value of \$57.9 billion. The study estimates 21,400 jobs are created by the Bay and Gulf of Mexico.

Charlotte Harbor National Estuary Program (CHNEP): In 2012, CHNEP adopted a Strategic Communications Plan. The plan builds on a number of successful initiatives. One CHNEP initiative provides a children’s book to every child at one grade level throughout the seven school districts and to home-school and other groups. For many kids, this is the first book of their very own. The book presents the stories of four animals offered in short segments. The book also introduces many local natural resource topics to kids. The Strategic Communications Plan includes an on-line Citizens Academy, videos, events and audiences such as law enforcement. Plan components are being implemented.

Leveraging of resources and partnerships

Leveraging of resources and partnerships would be at the heart of the GMEP place-based estuary programs, just like the NEPs. Each Management Conference would work with federal, state, local, NGO and other stakeholders to identify opportunities for leveraging additional resources to ensure the goals, objectives and actions developed in the CCMPs are accomplished. The programs Annual Work Plans would incorporate input and leveraged resources from a wide variety of study area stakeholders.

Proposal project/program benefits

The primary goal and benefit from the Comprehensive Plan that is addressed by this proposal is to Restore Water Quality. An equally important and included goal and benefit is to Restore and Conserve Habitat. Other secondary Comprehensive Plan goals and benefits addressed by this proposal include Restoring and Conserving Habitat, Replenishing and Protecting Living Coastal and Marine Resources, Enhancing Community Resilience, and Restoring and Revitalizing the Gulf Economy.

RESTORE Act and Comprehensive Plan Priority Criteria

Establishment and standing up these place-based estuary programs, developing CCMPs, and implementing specific projects, just like the seven Gulf NEPs and the LPBRP, would collectively address all four of the criteria. Examples of ongoing and proposed projects and benefits for each Criterion, which will be applied similarly in the GMEP, include the following:

Projects that make the greatest contribution to restoring and protecting the natural resources of the Gulf Coast region, without regard to geographic location. Examples include:

CBBEP targets large tracts of important habitat within the Coastal Bend of Texas for acquisition for perpetual conservation or for conservation easements. CBBEP currently owns approximately 6,000 acres in the Coastal Bend region.

GBEP and partners have developed the Conservation Assistance Program to protect habitat and water quality for a diversity of birds, fish and wildlife, reduce flood and storm damage, provide recreational opportunities for residents in the area, and to preserve the region's unique natural heritage by placing priority coastal habitat in the Galveston Bay area in permanent conservation

BTNEP is partnering with the Louisiana Department of Environmental Quality (LDEQ) and the Louisiana Department of Health and Hospitals to provide grants to low income residents in need of sewerage system repairs and upgrades to their individual wastewater treatment systems. The impaired waterbodies and improperly functioning systems were identified through a scientific data collection effort on the part of the LDEQ and Nicholls State University over the past 10 years.

LPBRP offers free education, technical assistance, and assistance with permits to the owner/operators of wastewater treatment plants (WWTPs) in the Lake Pontchartrain Basin. The LPBRP, in partnership with LDEQ and the Louisiana Department of Health and Hospitals (LDHH), also provides technical training sessions for WWTP plant operators to assist with their continuing education.

MBNEP has been developing and implementing watershed management plans for the Mobile Bay tributaries. Plans have been developed for the D'Olive Creek watershed, the Three Mile Creek watershed, and the Eight Mile Creek watershed. Planning is being initiated in several other tributary watersheds. Corrective actions have been taken in the D'Olive Creek watershed and are planned for the Three Mile Creek and Fowl River watershed

TBEP partners have developed a Tampa Bay Habitat Masterplan which focuses on restoring a mosaic of estuarine habitats to support the suite of estuarine-dependent fauna inhabiting the bay (Cicchetti and Greening 2013). To date, partners have completed restoration of about 5,000 acres of estuarine habitat.

SBEP partners are currently implementing a Five Year Habitat Restoration Plan with a goal of restoring at least 18 acres of critical juvenile fish habitat annually. The concept is to reclaim publicly owned lands altered by massive dredge and fill through a series of projects in the pipeline: planning, design and construction. The SBEP is also constructing reefs (oysters and artificial) specifically designed to create juvenile fish habitat in the Bay.

CHNEP Partners adopted a land acquisition and restoration vision resulting in increases of conservation lands from under 275,000 acres to over 460,000 acres. The restoration component of the vision includes significant hydrologic restoration, which would result in more natural freshwater flows to the estuaries and the Gulf of Mexico.

Large-scale projects and programs that are projected to substantially contribute to restoring and protecting the natural resources of the Gulf Coast ecosystem. Examples include:

CBBEP: Planning and designing a breakwater structure is underway to protect 15,000 acres of wetlands located in the Nueces River Delta located near Corpus Christi, Texas. The Nueces River Delta is eroding approximately 10 acres of marsh per year including emergent intertidal and sub-tidal marsh habitat.

GBEP: A Conservation Assistance Program (CAP) supports coordination, identifies priority habitat areas, builds funding, works with willing sellers, and provides legal and title transaction support.

BTNEP: Established native woody species beneficial to Neotropical migratory birds on a constructed maritime ridge that beneficially utilized saline sediments in Fourchon, LA over the past 10 years, in partnership with the Greater Lafourche Port Commission. Findings from these experiments would provide BMPs for future maritime ridge-forest projects.

MBNEP: A major goal of the new CCMP is to “Improve trends in water quality in priority watersheds.” Watersheds in Alabama’s two coastal counties were assessed based upon the presence of critical habitats, sources of stress, tidal exchange, and other factors.

SBEP, TBEP and CHNEP: The three Florida NEPs and many partners are currently developing a Southwest Florida Tidal Tributaries Action Plan, with a goal of defining water quality criteria necessary to support flora and fauna dependent on these unique systems.

SBEP is supporting development and construction of large scale infrastructure projects throughout the region to reduce nitrogen loading by: upgrading wastewater treatment plants, reclaiming wastewater and providing sewer service to priority areas listed in the CCMP.

CHNEP works in partnership with the Corps of Engineers, water management districts, state, counties and cities to develop large-scale and significant hydrologic restoration.

Projects contained in existing Gulf Coast State comprehensive plans for the restoration and protection of natural resources of the Gulf Coast region.

The GMEP Management Conferences will develop science-based CCMPs, modeled after those developed by the 7 NEPs and the LPBRP which will be approved by their respective Management Conferences, which include local elected officials and community leaders, state agencies and the EPA. The plans will include measurable goals for restoring and protecting water quality and habitat. Annual Work Plans, approved by the elected officials and agency leads serving on each of the program’s policy or executive committees, will include specific projects which implement actions to help attain the habitat and water quality goals identified by the community. Annual Work Plans are required to include detailed reporting of accomplishments of the previous

year, providing assurance of rigorous and regular assessment of progress and/or identification of problem areas. CCMPs are a major source of comprehensive planning that the states will utilize in developing their State Comprehensive Plan under the RESTORE Act.

Projects that restore long-term resiliency of the natural resources, ecosystems, fisheries, marine and wildlife habitats, beaches and coastal wetlands most impacted by the DH oil spill.

Past and proposed examples, which are expected to be similar to projects in the GMEP, include:

CBBEP: The Nueces Estuary Ecosystem Management Initiative (Montagna et al. 2011), was a planning effort over a three year period with local community leaders and natural resource experts to assess the habitat needs of the Nueces Bay and Corpus Christi Bay region waterbirds.

GBEP: Coastal wetlands in Texas are highly productive and serve as nursery grounds for more than 95% of the recreational and commercial fish species found in the Gulf of Mexico., The Galveston Bay system lost a net of nearly 35,000 acres (20%) of its wetlands and 1,800 acres (70%) of its seagrass between 1950s and 1985, much of this occurring in West Galveston Bay.

TBEP: Restoring critical estuarine habitat in Tampa Bay can assist in improving resiliency of the gulf-wide stock of valuable species. TBEP is undertaking an assessment of potential changes in estuarine habitats due to climate change (Sherwood and Greening 2013), which would include an Action Plan for vulnerable habitats.

SBEP: The SBEP assisted the local emergency management officials and the Coast Guard by forging a series of community workshops in preparation for the arrival of oil in the Bay and on area beaches. The heavily attended meetings created a calming effect. Gulf

CHNEP: CHNEP and the other Florida NEPs provided reservoirs for many of the natural resources affected by the BP oil spill.

Comprehensive Plan Commitments

These new place-based estuary programs, modeled after the seven Gulf NEP programs, would be committed to the Council's Comprehensive Plan through the following mechanisms:

Science-based Decision Making - Each of the place-based estuary programs would have a standing Technical/Science Advisory Committee (TAC) which provides extensive vetting of all science and technical reports and management recommendations. TAC members include academics, resource managers and agency technical staff. The TAC provides technical recommendations to a Management Committee/Board, consisting of agency and local government resource management department leads. Examples of science-based decision making that would be provided in these place-based estuary programs, from the existing NEP programs, include:

CBBEP established a real-time salinity monitoring program in 2009 to monitor changes in salinity throughout a 20,000 acre marsh complex known as the Nueces Delta (Lloyd 2014). Salinity stations were located along the old river channel to support management decisions on how much water the pipeline should pump and when to pump.

GBEP addresses non-point source pollution through development and implementation of watershed protection plans and total maximum daily load implementation plans (TMDL I-Plans). 80 percent of impaired water bodies in the Galveston Bay area are managed under a watershed protection plan.

BTNEP responded to a natural disaster by incorporating the best available science during the Marsh Dieback/Brown Marsh event of 2000. BTNEP convened university and government scientists who worked cooperatively and developed a plan of action. The investigators concluded that extreme drought, high salinities, sulfide accumulation/oxidation, heat and evaporation, combined with extremely low Mississippi and Atchafalaya River discharges the stress.

MBNEP: Over 30 scientists and ecologists rated 1,820 combinations of habitats, stressors, and services. Three habitat types - freshwater wetlands; streams, rivers and riparian buffers; and intertidal marshes and flats - were identified as most stressed. This work resulted in strategies included in the current CCMP.

TBEP adopted a Residential Fertilizer Model Ordinance (TBEP 2009), based on model-based estimates of nutrient runoff from residential lawns, local rainfall patterns, urbanization extent and projected cost-benefit. Local municipalities and counties have adopted versions of the Model Ordinance.

SBEP established local policy (and completed a conceptual master plan) to eliminate direct wastewater discharge to the Bay by reclaiming the effluent for alternative supply. Nitrogen loading in the wastewater media to Sarasota Bay has been reduced 95% as a result. Plans are in place to eliminate discharge with 65% of the product reclaimed for alternative supply.

CHNEP hosted several forums to address highly controversial issues. Flows to the lower Peace River and the Area-wide Environmental Impact Statement for the Central Florida Phosphate were addressed. By focusing on science, consensus recommendations were issued and accepted.

Regional Ecosystem-Based Approaches to Restoration. Examples of existing NEPs that may be applied to the GMEP include:

CBBEP partners completed a comprehensive review of water and sediment quality of the entire Texas Coastal Bend in 2012. Water and sediment quality status and trends for all parameters were compiled to create a complete look at where problems or concerns might be within each of the 3 major bay systems.

GBEP implements the West Bay Water Quality and Wetland Protection Initiative which addresses a highly biologically productive area, featuring extensive tidal and brackish marshes, coastal prairies pockmarked with freshwater depressional wetlands created by ancient stream meanders, and forested wetland areas.

BTNEP restored a chenier ridge and adjacent wetlands at Fourchon, LA. BTNEP planted hundreds of trees and thousands of grasses in south LA wetlands, installed thousands of feet of sand fencing on barrier islands and shorelines, and removed invasive species.

MBNEP efforts focused on watershed planning in coastal Alabama have resulted in expanded watershed efforts to reach up into the State and larger Mobile Bay Watershed.

TBEP partners finalized a Tampa Bay Watershed Freshwater Wetland Masterplan in 2014 showing that herbaceous wetlands have been lost in larger proportion than forested wetlands in all 10 drainage basins within the Tampa Bay watershed
SBEP established water quality targets based on seagrass targets set at 1950 conditions or the average of 2004-6, whichever was higher.
CHNEP partners identified declines in mangrove forests as a result of hydrologic alterations including sea level rise.

Engagement, Inclusion and Transparency. The consensus based nature of the estuary programs includes NGOs, local communities, state agencies, federal agencies and other key stakeholders. The true value of these programs is in their ability to bring all parties together toward common agreed upon goals through networking, scientific assessment, project development and issues vetting. The Management Conferences used in the GMEP will employ the same structure and should experience the same benefits.

Leveraging of Resources and Partnerships. Each Management Conference would work with federal, state, local, NGO and other stakeholders to identify opportunities for leveraging additional resources to ensure the goals, objectives and actions developed in the CCMPs are accomplished. The programs Annual Work Plans would incorporate input and leveraged resources from a wide variety of study area stakeholders.

Delivering Results and Measuring Impacts. GMEP will incorporate program measures into the CCMPs to ensure the delivery of results and the measuring of the impacts of the actions. These program measures will be modeled after those developed and incorporated into the existing NEP CCMPs and management programs and measures. Examples of how each existing program measures impacts and reports results include the following:

CBBEP initiated a Seagrass Monitoring Workgroup in 2003 which established a Seagrass Monitoring Plan in 2011. All of the data and reports are available on CBBEP's website.

GBEP developed the Galveston Bay Status and Trends database, a coordinated effort to bring together the existing datasets collected by the local, state and federal agencies. An update of the Galveston Bay Status and Trends database is currently underway.

BTNEP is monitoring impacts associated with species of concern, such as, the Piping, Wilson's Plover, Red Knot, and Snowy Plover. These surveys evaluate how successive habitat changes after construction impact the number of wintering species utilize the restored habitat. This data is being shared with the U. S. Fish and Wildlife Service, the Louisiana Dept. of Wildlife and Fisheries, and researchers across the country.

MBNEP conducts the monitoring of ecosystem service provision at three completed projects in Mobile County: habitat creation/shoreline stabilization at Mon Louis Island, restored salt marsh at Helen Woods Park, and shoreline stabilization and habitat enhancement at Dog River Park. Efforts to monitor restoration efforts are reported to the community.

TBEP provides annual assessments of attainment of water quality and seagrass goals (Sherwood 2014) in a short report to the community, as well as more in-depth community Progress Reports every two years.

SBEP and its partners have established statistically significant relationships between water quality parameters and seagrass response; and have developed numeric nutrient criteria for protection.

CHNEP identified nine priority indicators of watershed health. Status, trends and quality were assessed and communicated in a graphic way to the public.

Science

The basis for the GMEP place-based estuary programs, exactly like the NEPs and LPBRP, is the implementation of a Science-based Management Plan. Science is key to all place-based estuary programs' actions. All monitoring, analyses and proposed actions are vetted through science advisory mechanisms to insure a quality science based result. Examples of peer-reviewed science which drives the programs are provided in the examples above and in the references list below.

LOCATION INFORMATION

The GMEP would develop and stand-up place-based estuary programs across all 5 Gulf states. The following estuaries are to be given priority consideration for this program: Lower Laguna Madre (TX); San Antonio/Matagorda Bays (TX); Sabine/Neches (TX); Calcasieu/Mermentau Basin (LA); Atchafalaya/Vermillion (LA); Mississippi Sound (MS); Perdido (AL,FL); Pensacola (FL); Choctawhatchee (FL); St. Andrews (FL); Apalachicola (FL); and Suwannee (FL). The estuaries and contributory watersheds targeted under this proposal lie outside of the service areas of the seven Gulf of Mexico National Estuary Programs (NEPs) and the Lake Pontchartrain Basin Foundation (LPBRP). See refer to Figures 1 thru 6, found in Section 6 of this proposal.

HIGH-LEVEL BUDGET NARRATIVE

EPA requests funds from the RESTORE Council to establish 5-12 community-based estuary programs the Gulf region over the next five years. The funds would be obligated through one or more contract and/or grant mechanisms. Expert partners located in or near each new estuary program would collaborate on program implementation. The Clean Water Act (CWA) 104(b)(3) allows EPA “to make grants to State water pollution control agencies, interstate agencies, other public or nonprofit private agencies, institutions, organizations, and individuals” for the following purposes, which are listed in CWA 104(a)(1): research, investigations, experiments, training, demonstrations, surveys, and studies relating to the causes, effects, extent, prevention, reduction, and elimination of pollution. 90% of the funds would be obligated to each GMEP through cooperative agreements, grant agreements, and contracts for program management and development and implementation of the CCMP. A portion (<10%) of the budget request is proposed for administrative, grant management, technical management and travel as needed to coordinate the GMEP program, and for the Technical Support Team.

Program Funds

The estimate of funds necessary to establish the proposed community-based estuary programs in the Gulf region over the next five years is scalable based on funding availability. Additionally, the major stakeholders may decide to consolidate some of the priority estuaries that are adjacent and complimentary to each other or add additional estuaries. The Program Funds include salaries for staffed positions anticipated to be hired by each estuary program (e.g. – Director, Scientist, Outreach Coordinator, administrative assistant), office, travel expenses, equipment, public meeting expenses, Management Conference support, and technical assistance to develop a Comprehensive Conservation and Management Plan for each estuary program. If funds are remaining, the respective Management Conferences would identify and implement specific high-priority water quality and habitat restoration and protection projects.

5 programs - **\$400,000** per year/estuary program = **\$2M** per year (\$10M over 5 years)

12 programs - **\$400,000** per year/estuary program = **\$4,800,000** per year (\$24M over 5 years)

Program Overhead and Technical Support (10%)

5 programs – **40,000** per year/estuary program = **\$200,000** per year (\$1M over 5 years)

12 programs - **\$40,000** per year/estuary program = **\$480,000** per year (\$2.4M over 5 years)

Total Program Request

5 programs – **\$2,200,000** per year = **\$11,000,000** (5-year total)

12 programs – **\$5,280,000** per year = **\$26,400,000** (5-year total)

ENVIRONMENTAL COMPLIANCE CHECKLIST

The items included on the environmental compliance checklist are not applicable to developing and standing up the place-based estuary programs described in this proposal. Following development and adoption of Comprehensive Management Plans by their respective Management Conferences, then specific projects selected to be implemented would be required to prepare an individual environmental compliance checklist for review prior to initiation of project implementation.

<u>Environmental Compliance Type</u>	Yes	No	Applied For	N/A
Federal				
National Marine Sanctuaries Act (NMSA)				X
Coastal Zone Management Act (CZMA)				X
Fish and Wildlife Coordination Act				X
Farmland Protection Policy Act (FPPA)				X
NEPA – Categorical Exclusion				X
NEPA – Environmental Assessment				X
NEPA – Environmental Impact Statement				X
Clean Water Act – 404 – Individual Permit (USACOE)				X
Clean Water Act – 404 – General Permit(USACOE)				X
Clean Water Act – 404 – Letters of Permission(USACOE)				X
Clean Water Act – 401 – WQ certification				X
Clean Water Act – 402 – NPDES				X
Rivers and Harbors Act – Section 10 (USACOE)				X
Endangered Species Act – Section 7 – Informal and Formal Consultation (NMFS, USFWS)				X
Endangered Species Act – Section 7 - Biological Assessment (BOEM,USACOE)				X
Endangered Species Act – Section 7 – Biological Opinion (NMFS,				X
Endangered Species Act – Section 7 – Permit for Take (NMFS, USFWS)				X
Magnuson-Stevens Fishery Conservation and Management Act Essential Fish				X
Marine Mammal Protection Act – Incidental Take Permit (106) (NMFS, USFWS)				X
Migratory Bird Treaty Act (USFWS)				X
Bald and Golden Eagle Protection Act – Consultation and Planning				X
Marine Protection, Research and Sanctuaries Act – Section 103 permit (NMFS)				X
BOEM Outer Continental Shelf Lands Act – Section 8 OCS Lands Sand permit				X
NHPA Section 106 – Consultation and Planning ACHP, SHPO(s), and/or THPO(s)				X
NHPA Section 106 – Memorandum of Agreement/Programmatic				X
Tribal Consultation (Government to Government)				X
Coastal Barriers Resource Act – CBRS (Consultation)				X
State				
As Applicable per State				X

DATA / INFORMATION SHARING PLAN

During the process of developing their respective comprehensive management plans, each GMEP place-based estuary program would establish a data/information sharing plan that would ensure approved data would be readily accessible to its stakeholders, including EPA and the RESTORE Council members and staff.

REFERENCES

Charlotte Harbor National Estuary Program. 2013. Committing to our Future: A Comprehensive Conservation and Management Plan for the Greater Charlotte Harbor Watershed from Venice to Bonita Springs to Winter Haven, Charlotte Harbor National Estuary Program, Fort Myers, Florida. 156 pp.

Cicchetti, G. and H. Greening. 2011. Estuarine Biotope Mosaics and Habitat Management Goals: An Application in Tampa Bay, FL, USA. Estuaries and Coasts 34: 1278 – 1292.

Cook, M. 2007. Analysis of sediment loading rates and impacts of land-use change on the D'Olive and Tiawasee Creek Watersheds, Baldwin County, Alabama, 2007. Retrieved from [http://www. mobilebaynep.com/images/uploads/library/DOlive-and-Tiawasee-Creeks-Sedimentation-Final-Report.pdf](http://www.mobilebaynep.com/images/uploads/library/DOlive-and-Tiawasee-Creeks-Sedimentation-Final-Report.pdf).

Forbes, M.G. et al. 2012. "Nutrient Transformation and Retention by Coastal Prairie Wetlands, Upper Gulf Coast, Texas," Wetlands 32(4): 705-715

Galveston Bay National Estuary Program. 1994. The Galveston Bay Plan: The comprehensive conservation and management plan for the Galveston Bay ecosystem. Webster, Texas, Galveston Bay National Estuary Program, GBNEP-49, Texas Natural Resource Conservation Commission: 457 pp.

Galveston Bay National Estuary Program. 2009. Charting the course to 2015: Galveston Bay Strategic Action Plan. Houston, Texas: 39 pp.

Galveston Bay Status and Trends database. <http://www.galvbaydata.org/>

GBF. 1998. Habitat conservation blueprint: a plan to save the habitats and heritage of Galveston Bay; sites strategies and resources. Webster, Texas, Galveston Bay Foundation: 189 pp.

Gonzalez, L. A. and L. J. Lester. 2008. Galveston Bay Status and Trends Final Report. Houston, Texas, Texas Commission on Environmental Quality, Galveston Bay Estuary Program: 83 pp.

Greening, H.S., L.M. Cross and E.T. Sherwood. 2011. A Multiscale Approach to Seagrass Recovery in Tampa Bay, Florida. Ecological Restoration 29: 82-93.

Greening, H.S., A. Janicki, E.T. Sherwood, R. Pribble and J.O.R. Johansson. In press. Ecosystem responses to long-term nutrient management in an urban estuary: Tampa Bay, Florida, USA. Estuarine, Coastal and Shelf Science.

Gulf Coast Ecosystem Restoration Council. 2013. Restoring the Gulf Coast's Ecosystem and Economy

Gulf Coast Ecosystem Restoration Task Force. 2011. Gulf of Mexico Regional Ecosystem Restoration Strategy

Gulf of Mexico Alliance. 2006. Gulf of Mexico Alliance Governors' Action Plan for Healthy and Resilient Coasts. www.gulfofmexicoalliance.org

Gulf of Mexico Alliance. 2009. Governors' Action Plan for Healthy and Resilient Coasts II. www.gulfofmexicoalliance.org

Hill, E.M, Tunnell, J.W. and L. Lloyd. 2012. Spatial Effects of Rincon Bayou Pipeline Inflows on Salinity in the Lower Nueces Delta, Texas. Coastal Bend Bays & Estuaries Program. Corpus Christi, Texas. Project 1202, CBBEP-81. 29 p.

Hill, E.M., Besonen, M., Tissot, P. and B. Nicolau. 2014. Nueces Bay Zinc in Sediment Profiling Assessment. Coastal Bend Bays & Estuaries Program. Corpus Christi, Texas. Project 1313, CBBEP-91. 56 p.

Lake Pontchartrain Basin Foundation. 2008. Comprehensive Recommendations Supporting The Use Of The Multiple Lines of Defense Strategy To Sustain Coastal Louisiana, (Version I).

<http://saveourlake.org/index.php>

Lane, W. G., et al. (1994). Regional Monitoring Program for the Galveston Bay Plan. Webster, TX, Galveston Bay National Estuary Program: 350.

Lester, L. J. and L. A. Gonzalez, Eds. 2011. The State of the Bay: A Characterization of the Galveston Bay Ecosystem, Third Edition. Texas Commission on Environmental Quality, Galveston Bay Estuary Program, Houston, Texas, 356 pp.

Krebs, J.M., S.S. Bell and C.C. McIvor. 2014. Assessing the link between coastal urbanization and the quality of nekton habitat in mangrove tidal tributaries. Estuaries and Coasts 37: 815-831.

Lloyd, L. .2014. Nueces Delta Salinity Effects from Pumping Freshwater into the Rincon Bayou: 2009 to 2014. Coastal Bend Bays & Estuaries Program. Corpus Christi, Texas. Project 1411, CBBEP-94.

Mabus, 2010. America's Gulf Coast: A Long Term Recovery Plan after the Deepwater Horizon Oil Spill. Found at: www.RestoreTheGulf.gov

Mobile Bay National Estuary Program. 2014. Comprehensive Conservation and Management Plan for Alabama's Estuaries and Coast 2013-2018. 141 pp.

Mobile Bay National Estuary Program. 2014. Respect the Connect. Comprehensive Conservation & Management Plan for Alabama's Estuaries & Coast 2013-2018. Retrieved from http://www.mobilebaynep.com/images/uploads/library/Final_CCMP_2013-2018.pdf.

Mobile Bay National Estuary Program and Barry A. Vittor and Associates. 2005. Historical SAV distribution in the Mobile Bay National Estuary Program area and ranking analysis of potential SAV restoration sites. Retrieved from http://www.mobilebaynep.com/images/uploads/library/NEP_historicSAV.pdf.

Montagna, P.A., Hutchison, L.M., Scholz, D., Palmer, T., Arismendez, S. and D. Yoskowitz. Nueces Estuary Ecosystem Management Initiative. Coastal Bend Bays & Estuaries Program. Corpus Christi, Texas. Project 1018, CBBEP-72. 170 p.

Montagna, P.A. and T.A. Palmer. 2012. Water and Sediment Quality Status and Trends in the Coastal Bend Phase 2: Data Analysis. Coastal Bend Bays & Estuaries Program. Corpus Christi, Texas. Project 1206, CBBEP-78.

Moore, D.M. and R.D. Rivers. 1996. The Technical Supplement: Comprehensive Conservation and Management Plan (CC MP) Action Plan Details for Plan Implementation. Part 3 of 4. Barataria-Terrebonne National Estuary Program. Thibodaux, Louisiana.

Morrison, G., Greening, H.S. and Yates, K.K. 2011. Management Case Study: Tampa Bay, Florida. IN: Wolanski, E. and McLusky, D.S. (eds) Treatise on Estuarine and Coastal Science, Vol. 11, pp 31-76. Waltham: Academic Press.

National Oceanographic and Atmospheric Administration, 2011. The Gulf at a Glance: A Second Glance. Found at: www.stateofthecoast.noaa.gov/gulfreport.html

Rains, M. C., S. Landry, K. C. Rains, V. Seidel and T. L. Crisman. 2013. Using Net Wetland Loss, Current Wetland Condition, and Planned Future Watershed Condition for Wetland Conservation Planning and Prioritization, Tampa Bay Watershed, Florida. Wetlands 33:949–963. DOI 10.1007/s13157-013-0455-4

Russell, M. and H. Greening. 2013. Estimating Benefits in a Recovering Estuary: Tampa Bay, Florida. *Estuaries and Coasts* doi: 10.007/s/12237-013-9662-8.

Schneider, M., J. Scholz, M. Lubell, D. Mindruta and M. Edwardsen. 2003. Building Consensual Institutions: Networks and the National Estuary Program. *American Journal of Political Science* 47: 143-158.

Sherwood, E.T. 2014. 2013 Tampa Bay Water Quality Assessment. Technical Publication #01-14 of the Tampa Bay Estuary Program. St. Petersburg, Florida.

Sherwood, E.T. and H.S. Greening. 2013. Potential Impacts and Management Implications of Climate Change on Tampa Bay Estuary Critical Coastal Habitats. *Environmental Management*. doi: 10.1007/s00267-013-0179-5.

Tampa Bay Estuary Program (TBEP). 2006. Charting the Course 2006: The Comprehensive Conservation and Management Plan for Tampa Bay. Tampa Bay Estuary Program, St. Petersburg, Florida. 151 pp.

Tampa Bay Estuary Program. 2008. Tampa Bay Watershed Model Ordinance for Residential Fertilizer. Adopted by the TBEP Policy Board November 2008. Tampa Bay Estuary Program, St. Petersburg, FL.

Tampa Bay Estuary Program. 2012. A Tampa Bay Estuary Program Progress Report 2012: The state of our seagrasses, water quality, habitat, research and community outreach. Tampa Bay Estuary Program, St. Petersburg, Florida.

Thompson Engineering. August, 2010. Watershed Management Plan for the D'Olive Creek, Tiawasee Creek, and Joe's Branch Watersheds, Daphne, Spanish Fort, and Baldwin County, Alabama. Retrieved from <http://www.mobilebaynep.com/images/uploads/library/Dolive-Final-Report-Full.pdf>.

Wilcox, B.P. et al. 2011. Evidence of Surface Connectivity for Texas Gulf Coast Depressional Wetlands. *Wetlands* 31: 451-458

Wilson, C.J. and K.H. Dunton. 2012. Assessment of Seagrass Habitat Quality and Plant Physiological Conditions in South Texas Waters. Coastal Bend Bays & Estuaries Program. Corpus Christi, Texas. Project 1201, CBBEP-80.

Yates, K.K., Greening, H. and Morrison, G., eds. 2011. Integrating Science and Resource Management in Tampa Bay, Florida. *U.S. Geological Survey Circular* 1348, 280 p.

FIGURES

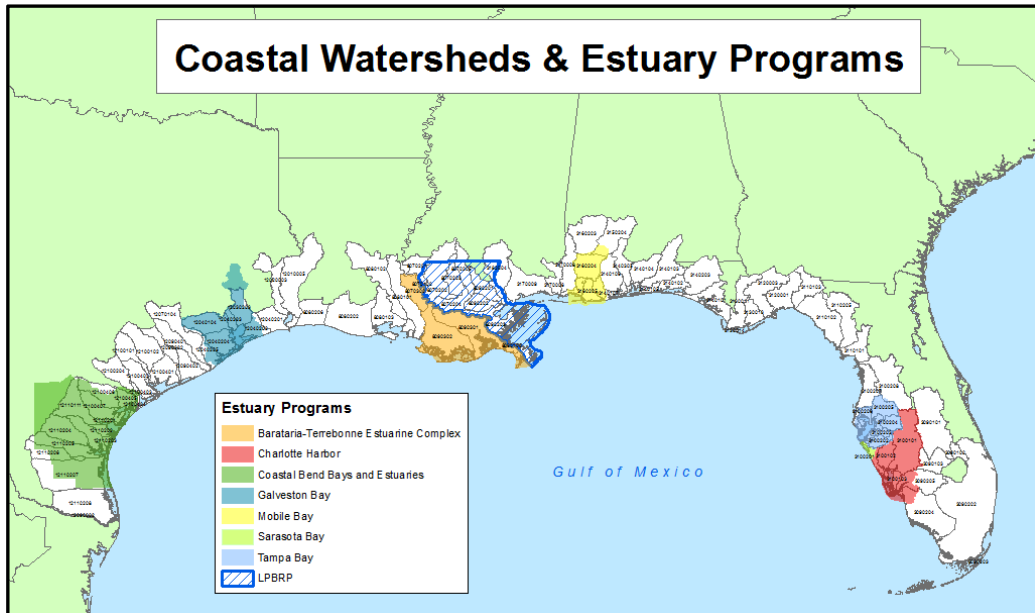


Figure 1. Map showing Gulf of Mexico Coastal Watersheds & Estuary Programs

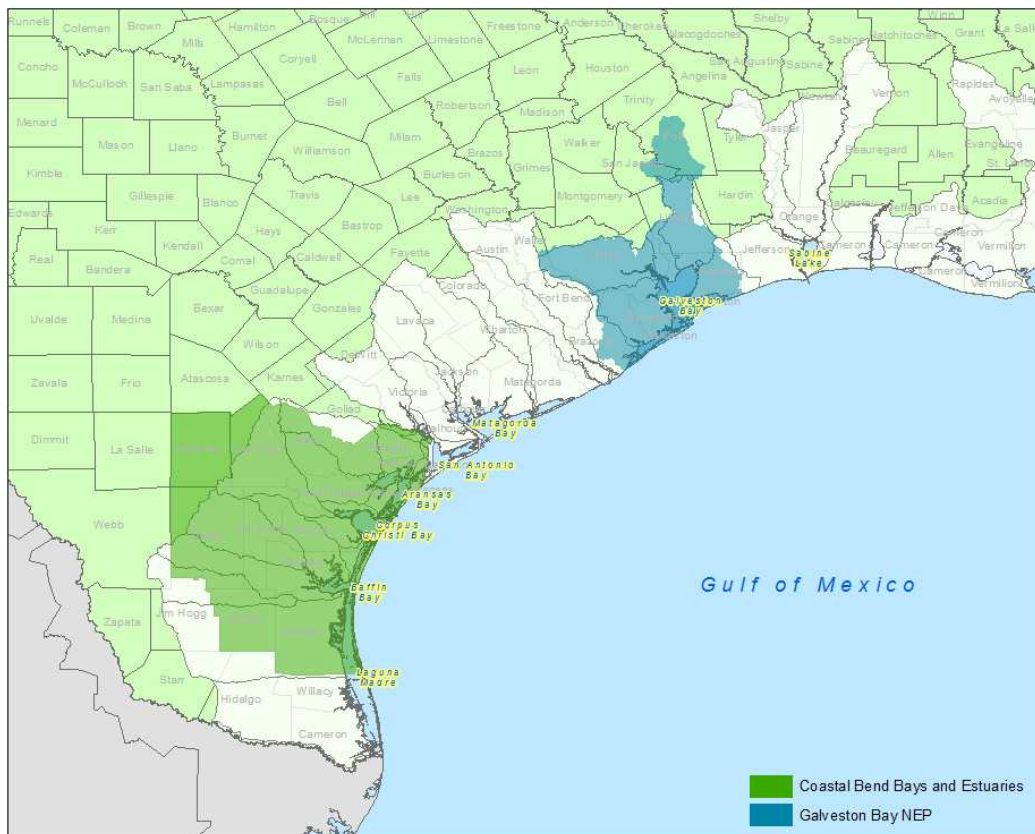


Figure 2. Map showing Texas Coastal Watersheds & Estuary Programs

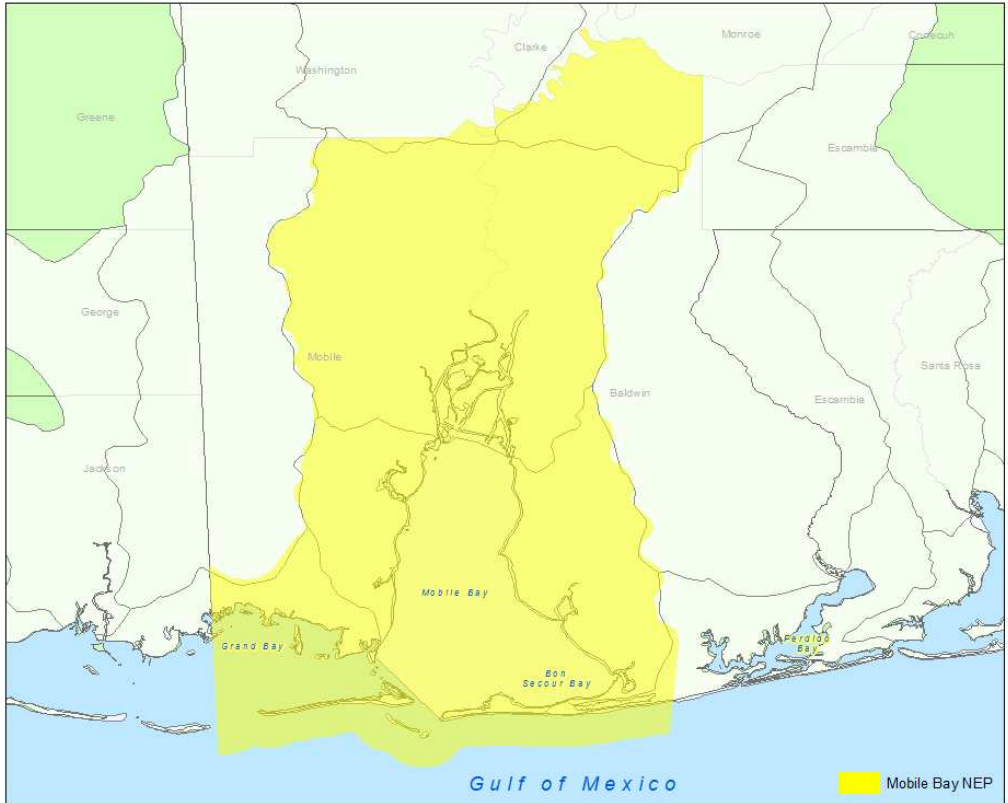


Figure 5. Map showing Alabama Coastal Watersheds & Estuary Programs

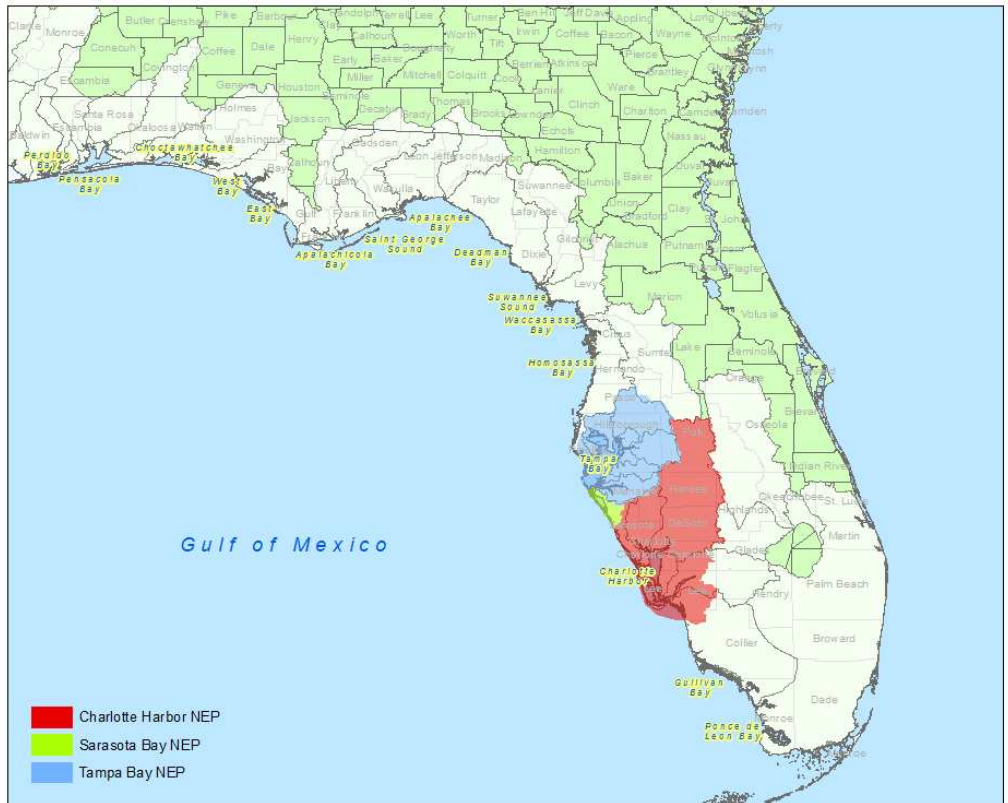


Figure 6. Map showing Florida Coastal Watershed & Estuary Programs



ELIGIBILITY REVIEW

Bucket 2 – Council Selected Restoration Component

PROPOSAL TITLE

Gulf of Mexico Estuary Program

PROPOSAL NUMBER

EPA-3

LOCATION

Gulf Coast Estuaries: Lower Laguna Madre (TX); San Antonio/Matagorda Bays (TX); Sabine/Neches (TX); Calcasieu/Mermentau Basin (LA); Atchafalaya/Vermillion (LA); Mississippi Sound (MS); Perdido (AL/FL); Pensacola (FL); Choctawhatchee (FL); St. Andrews (FL); Apalachicola (FL); and Suwannee (FL).

SPONSOR(S)

Environmental Protection Agency

TYPE OF FUNDING REQUESTED (Planning, Technical Assistance, Implementation)

Planning, technical assistance and implementation

REVIEWED BY:

Bethany Carl Kraft

DATE:

November 18, 2014

1. Does the project aim to restore and/or protect natural resources, ecosystems, fisheries, marine and wildlife habitat, beaches, coastal wetlands and economy of the Gulf Coast Region?

YES NO

Notes:

This proposal seeks funding to develop and stand-up place-based estuary programs across all 5 states.

2. Is the proposal a project?

YES NO

If yes, is the proposed activity a discrete project or group of projects where the full scope of the restoration or protection activity has been defined?

YES NO

Notes:

3. Is the proposal a program?

YES NO

If yes, does the proposed activity establish a program where the program manager will solicit, evaluate, select, and carry out discrete projects that best meet the program's restoration objectives and evaluation criteria?

YES NO

Notes:

4. Is the project within the Gulf Coast Region of the respective Gulf States?

YES NO

If no, do project benefits accrue in the Gulf Coast Region?

YES NO

Notes:



Eligibility Determination

ELIGIBLE

Additional Information

[Empty box for additional information]

Proposal Submission Requirements

1. Is the project submission overall layout complete? *Check if included and formatted correctly.*

- | | | | |
|--------------------------------|-------------------------------------|---------------------------------------|-------------------------------------|
| A. Summary sheet | <input checked="" type="checkbox"/> | F. Environmental compliance checklist | <input checked="" type="checkbox"/> |
| B. Executive summary | <input checked="" type="checkbox"/> | G. Data/Information sharing plan | <input checked="" type="checkbox"/> |
| C. Proposal narrative | <input checked="" type="checkbox"/> | H. Reference list | <input checked="" type="checkbox"/> |
| D. Location information | <input checked="" type="checkbox"/> | I. Other | <input checked="" type="checkbox"/> |
| E. High level budget narrative | <input checked="" type="checkbox"/> | | |

If any items are NOT included - please list and provide details

[Empty box for listing missing items and details]

2. Are all proposal components presented within the specified page limits (if applicable)?

YES NO

Notes: