


 CEPRA Project No. _____
 (Agency Use Only)

PROJECT GOAL SUMMARY (PGS) APPLICATION FORM

For Erosion Response Project Funding Under the
 Coastal Erosion Planning and Response Act (CEPRA)
 Cycle 7

Potential project partners must submit all required information using this form.

Applicant Information

Application Type: ☐ Regular Submission ☒ Emergency Submission

If emergency submission, briefly explain the emergency situation the project proposes to mitigate:

This emergency PGS proposes to mitigate potential erosion of the seawall footings, and protect the integrity of the Galveston seawall thereby protecting upland life and property. Recent news reports have documented a portion of the Galveston seawall sidewalk collapsing, and the emergency repair response by Galveston County. Galveston Island is a sand starved historically eroding system with a seawall that was constructed following the Storm of 1900. The original seawall sections were constructed atop untreated pilings and historic erosional problems are threatening to potentially expose the pilings to saltwater intrusion and parasite attack. A nourished beach is required to maintain a level of protection for these untreated pilings, and the overall integrity of the seawall itself. This necessity has resulted in the development of the groin field and sand beach between 10th street to 61st street. This emergency PGS is requesting the re-establishment of a wide sand beach along this beach frontage.

PGS Application Submittal Date (mm/dd/yy): 04/05/2013 Date Received: _____
 (Agency Use Only)

Project Title: **10th to 61st Street Emergency Placement Beach Nourishment**

Name of Potential Project Partner: **Galveston Park Board of Trustees**

Physical Address: **601 Tremont**

City: **Galveston** Zip+4: **77550**

Point of Contact (POC): **Ms. Kelly de Schaun** Title: **Executive Director**

Phone: **409.797.5141** ext.: Fax: - -

Email: **kdeschaun@galvestonparkboard.org**

Authorizing Official (if different from POC): Title:

Project Type (check all that apply)

- | | |
|---|--|
| <input checked="" type="checkbox"/> Beach Nourishment | <input type="checkbox"/> Dune Restoration |
| <input type="checkbox"/> Shoreline Protection | <input type="checkbox"/> Marsh Restoration or Protection |
| <input type="checkbox"/> Study/Research Project | <input type="checkbox"/> Debris Removal |
| <input type="checkbox"/> Demonstration Project | <input type="checkbox"/> Storm Damage Mitigation Project |
| <input type="checkbox"/> Post-Storm Damage Assessment Project | |
| <input type="checkbox"/> Other (describe): | |

For Beach Nourishment and Dune Restoration projects only:

Does project incorporate beneficial use of dredged material (BUDM)? ☐ yes ☒ no

Is a sand source identified for beach nourishment? ☒ yes ☐ no

If "Yes" to either of the above two questions, please respond to the following:

1. Location of sand source: **Big Reef**
2. Owner of sand source: **State of Texas- state owned submerged land with a Park Board USACE permit.**
3. Cost of sand per cubic yard: **Approximately \$15 - \$20 cu/yd. depending on bids**
4. Is the source permitted by the US Army Corps of Engineers? ☒ yes ☐ no
If no, please attach, if available:
 - a. sieve analysis of sand
 - b. chemical analysis of sand
 - c. archeological survey of borrow area
5. Quantity of sand available (cubic yards): **Approximately 1.5M**
6. Describe any availability restrictions:
Dredging, endangered species- addressed in USACE permit

Project Length

For Beach Nourishment and Shoreline Protection projects, linear length of project:

Approx. 3.8 miles

For Marsh Restoration projects, linear length and acreage: **N/A**

Project Location

County or counties where project is located:

Galveston

State Representative name(s) /district(s) where project is located:

Hon. Craig Eiland; Texas House District #23

State Senator name(s) /district(s) where project is located:

Hon. Larry Taylor; Texas Senate District #11

US Congressional Representative name(s) /district(s) where project is located:

Hon. Randy Weber; U.S. Representative; 14th Congressional District of Texas

Erosion Rate at Project Location

Describe the erosion rate (feet/year) in the vicinity of the project:

Galveston Island is an historically eroding sand starved barrier island

Cite the source of information:

Texas General Land Office

Funding Summary

Total CEPRA Funds Requested: **75% of 10% Improved Project cost (FEMA Decision)**
75% of 19% Alternate project costs (FEMA Decision)

Total Partner Federal Match Funding: **FEMA PW's**

Total Partner Non-Federal Match Funding: **25% of 19% project costs**

Total Project Cost:

Approximately \$13.5M dependent of FEMA determination alternate vs. improved project

Sources of Match Funding

In the table below, list secured or potential sources of match funding including any federal funding sources and in-kind services. **Do not include CEPRA funding in this table.**

Accurately list timelines and limitations associated with funding sources:

Funding Source for Match	Cash Amount	In-Kind Amount	Is funding committed for the Cycle 7 biennium? (Y/N)	Funding Availability Date (mm/dd/yy)	Funding Expiration Date (mm/dd/yy)	Other Constraints (describe)
PW #01168 Sands of Kahla Beach	\$1,569,637.00		Y	03/27/13	Aug. / Sept. 2014	Federal determination of alternate vs. improved (19% or 10% local match)
PW #01175 Hershey Beach	\$1,440,674.00		Y	03/27/13	Aug. / Sept. 2014	Federal determination of alternate vs. improved (19% or 10% local match)
PW #01181 Sunny Beach	\$846,573.00		Y	03/27/13	Aug. / Sept. 2014	Federal determination of alternate vs. improved (19% or 10% local match)
PW #01182 Bermuda Beach	\$3,313,597.00		Y	03/27/13	Aug. / Sept. 2014	Federal determination of alternate vs. improved (19% or 10% local match)
PW #01185 Spanish Grant Beach	\$2,452,824.00		Y	03/27/13	Aug. / Sept. 2014	Federal determination of alternate vs. improved (19% or 10% local match)
PW #01325 West Beach Grand/Riviera	\$485,156.00		Y	03/27/13	Aug. / Sept. 2014	Federal determination of alternate vs. improved (19% or 10% local match)
PW #07579 Pirates Beach West	\$942,785.00		Y	03/27/13	Aug. / Sept. 2014	Federal determination of alternate vs. improved (19% or 10% local match)
PW #07623 Palm Beach	\$986,785.00		Y	03/27/13	Aug. / Sept. 2014	Federal determination of alternate vs. improved (19% or 10% local match)
PW #07835 Pirates Beach	\$4,640,314.00		Y	03/27/13	Aug. / Sept. 2014	Federal determination of alternate vs. improved (19% or 10% local match)
Galveston Park Board of Trustees	25% of 19% or 25% of 10%		Y	03/27/13	Aug. / Sept. 2014	Funding potentially secured from IDC
TOTALS	\$16,677,733 \$15,009,960 \$13,508,963.73	At 100% At 90% At 81%				
Local Match Requirements	\$0 \$1,667,773.30 \$3,168,769.27	At 100% At 10% At 19%				
CEPRA Local Match Per cost share 75% GLO	\$0 \$1,250,829.98 \$2,376,576.95	At 100% At 10% At 19%				
CEPRA Local Match Per cost share 25% Park Board	\$0 \$416,943.32 \$792,192.34	At 100% At 10% At 19%				

Beach Access and Use Plan Eligibility

If the local government(s) within whose jurisdiction(s) the study or project is proposed is/are required to administer a beach/dune program, does/do the local government(s) have a Beach Access and Use Plan in place? ☒ **yes** ☐ **no**

If yes, name of the local jurisdiction: **City of Galveston**

Local Coastal Erosion Response Plan Eligibility

If the local government(s) within whose jurisdiction(s) the study or project is proposed is/are required to administer a beach/dune program, will the local government(s) have submitted a draft erosion response plan to the GLO on or before July 1, 2011? ☒ **yes** ☐ **no**

If yes, name of the local jurisdiction: **City of Galveston**

Hazard Mitigation Eligibility

Is there a Hazard Mitigation Plan in place for the proposed project area? ☒ **yes** ☐ **no**

If yes, name of local jurisdiction responsible for hazard mitigation: **City of Galveston**

Is the proposed project eligible for FEMA disaster Public Assistance or mitigation funds under the Hazard Mitigation Grant Program? ☒ **yes** ☐ **no**

Engineered Beach/Dune Maintenance and Monitoring

If the project is proposing renourishment of an existing engineered beach/dune or is for a new engineered beach/dune nourishment, is an ongoing beach/dune maintenance and monitoring plan in place for the proposed project area? ☒ **yes** ☐ **no**

Project Description (500-word limit)

Provide a narrative of the project description that addresses each of the following:

- Describe the location and geographic scope of the erosion problem:

Galveston Island is a sandy barrier island located 50 miles southeast of Houston along the upper Texas coast whose northeastern tip is approximately 60 miles from the Texas / Louisiana state line, at 29°18'17" latitude and 94°46'30" longitude. The primary location of the project area is the public beaches between 10th street and 61st street (approximately 3.6 miles / 19,008 lineal ft.). This is the original footprint of the 1995 nourishment project. The island, 30 miles long and up to 3 miles wide, separates the Gulf of Mexico from West Bay, part of the Galveston Bay system and also protects the mainland. It lies at the northeastern end of an almost continuous chain of barrier islands that extends more than 600 miles along the Texas and Mexican coasts. The majority of the island is erosional with accretional areas adjacent to the south jetty and immediately northeast of the San Luis Pass inlet. Primary areas in front of the seawall require ongoing nourishment to protect the untreated pilings supporting the seawall. Since the original 1995 beach nourishment project the Galveston Park Board has maintained the beach width through small upland "truck haul" nourishment efforts.

- Describe the desired outcome(s) of the proposed project:

An ideal scenario for the project outcome would be successful nourishment of the seawall beaches between 10th and 61st street (approximately 3.6 miles/19,008ft.) using the Park Board's USACE permit and the permit's identified sand source. The project would leverage the existing nine beach nourishment loss project worksheets (specifically PW's #01168; #01175; #01181; #01182; #01185; #01325; #007579; #07623; and #07835) held by the GLO and currently in danger of their funding lapsing resulting from the Severance Court decision and cancellation of CEPRA project #1391. Implementation of this project would leverage federal and local funding.

- Discuss any prior erosion response work, including a listing of any known erosion response studies and investigations in the vicinity of the proposed project, and whether the proposed project compliments existing erosion response measures:

The Galveston Park Board and the City of Galveston have both conducted beach nourishment projects in the area. The City of Galveston implemented the 1995 project that is referenced in the 2008 Economic Impact Study conducted by Angelou Economics. Minor veneer nourishments were implemented almost annually between 1995 and 2008. However, following Hurricane Ike in 2008 a large emergency "truck haul" project was implemented in front of the seawall in an attempt to restore a portion of the beach width Ike had taken away, that emergency project totaled \$9.3M. The General Land Office has often partnered with the City and Park Board to help mitigate against the historic erosion continuing to plague the island, previous nourishments in this area have totaled \$23,143,752.00. The USACE has implemented three phases of a sand search investigation through the Sabine Pass to Galveston Bay Feasibility Study and the GLO has supplemented that work with additional studies and investigations in coordination with Texas A&M at Galveston. The USACE Engineer Research and Development Center (ERDC) at Vicksburg participated in the Sabine Pass to Galveston Bay Study and developed a "Wave and Beach Processes Modeling for Sabine Pass to Galveston Bay, Texas Shoreline Erosion Feasibility Study". The proposed nourishment project helps to restore existing beach width and complies with the City of Galveston Hazard Mitigation Plan.

- Describe the proposed work sequencing including, if applicable, whether the proposed project will be divided into phases (e.g. reconnaissance study, preliminary engineering, alternatives analysis/feasibility study, permitting, engineering design, construction):

The proposed project is a construction project to be managed by the GLO; with support from the City of Galveston and the Galveston Park Board. The Galveston Park Board of Trustees has already secured the USACE permit to conduct the required work and the GLO (it is believed), has the ability to leverage existing FEMA beach loss project worksheets that could bring additional funding into the project. Since the permitting has been largely completed the majority of this project is a construction effort.

- Recommend the preferred erosion response alternative that would address the problem, if known:

Completion of a beach nourishment project in front of the Galveston seawall between 10th to 61st street with a minimum placement of 50 cu/yds. per lineal ft. to help stabilize the shoreline and protect the untreated pilings supporting the original sections of the seawall.

Project Benefits

- Describe the effect and benefits of the proposed project on public safety, access and public infrastructure and property threatened by erosion:

The proposed project will provide additional storm damage reduction benefits ahead of the seawall; studies have shown and Hurricane Sandy recently proved that wider beaches and higher dunes reduce and mitigate storm surge. Additionally, along sections of the seawall the public beach easement is inaccessible due to high tides stopping the lateral movement along the beach, a nourished beach would reestablish beach width and provide greater opportunity for the general public to enjoy and visit the beach. Public safety would be improved with the placement of additional sand, serving to cover exposed granite and riprap along some sections of the seawall. The seawall itself is one of the single most important pieces of public infrastructure on Galveston Island, a nourished beach would help extend the life of the seawall by reducing wave and storm contact, wave run-up, and would serve as an additional barrier to storm surge.

Describe the effects and benefits of the proposed project on private infrastructure and property threatened by erosion:

The Galveston Seawall was originally constructed following the 1900 storm with the intent to protect the private infrastructure- homes, businesses, and most immediately life and property. The proposed project would enhance beach width and provide much needed protection for the untreated pilings, and as a result serve to protect the integrity of the seawall. In reviewing the 1995 beach nourishment project that was so successful for the City of Galveston an economic analysis conducted by Angelou Economics found the 1995 nourishment

- Describe the effects and benefits of the proposed project on natural resources threatened by erosion:

Reestablishment of beach width provides foraging habitat for endangered Piping Plover and other migratory shorebirds; additionally, the project has the potential to help create a source of material for building dunes. Nesting sea turtles dig their nests at the base of the dunes, and lay their eggs; eroding beaches and dunes do not have the sustainability to support the nesting sea turtles.

- Describe whether the proposed project will provide for the beneficial use of dredged material from the construction and maintenance of navigation inlets and channels of the State:

It is possible that dredged material may be incorporated into the project but at this point it is not likely.

- Describe how project costs are reasonable relative to benefits:

In reviewing the 1995 beach nourishment project that was so successful for the City of Galveston an economic analysis conducted by Angelou Economics found the nourishment project resulted in an increased tourism growth worth \$1.96B(billion); for every one dollar of public funds spent on beach restoration and re-nourishment in Galveston produces over \$5.20 in local tax revenues. An explanation is possible when view as a continuing circle in that growing tourism allows for expansion and improvements that attracts new guests, resulting in growing tourism, allowing for more improvements ...

Project Permitting

List all required local, state, and federal permits that have been or will need to be acquired to undertake the proposed project:

Permit Type	Estimated Date of Receipt (Month/Year)	Who will obtain permit?
USACE Permit	March 2013- already obtained	GLO for Galveston Park Board
USACE Sec. 408	May 2013	Galveston Park Board
City of Galveston Beachfront Construction	June 2013	Galveston Park Board
Galveston County Seawall Permit	June 2013	Galveston Park Board

Elaborate on any known permitting or regulatory issues that will need to be addressed:

Approval from the City of Galveston Planning Commission, Concurrence from GLO, USACE Section 408 concurrence, Galveston County seawall permit.

For proposed Gulf beach projects, describe how the proposed project will comply with the local beach and dune plan, floodplain administration, and beach access:

The proposed project is entirely consistent with the City of Galveston planning activities. One of the success measures of the Galveston Park Board is the amount of lineal beach width restored annually; wider beaches creates greater open space for use by the public.

Project Phasing and Timeline

- Is this project a single-phase project or one phase of a multi-phase project?

☒ **Single-Phase Project**

☐ One phase of a multi-phase project

- Can the project or phases proposed in this application be completed between 9/1/2011 and 8/31/2013? ☐ yes ☒ **no**

It is not likely the project could be constructed prior to the end of the biennium, due to the limited time available. However, the project could easily be implemented during the fall of 2013 and completed prior to the tourist season and species monitoring windows of 2014.

- Describe the phases of the proposed project, if applicable, including a description of the phases that would extend into future funding cycles:

The proposed project is primarily a construction phase project that would be managed by the GLO, with assistance and support from the City of Galveston and the Galveston Park Board. It is understood the GLO has the ability to "reactivate" an existing dredging contract and could expedite the overall project timeframe. It is doubtful if the project could be completed prior to the end of the current biennium; however it is believed the project could be approved, implemented and completed within 6-8 months pending the availability of the necessary equipment.

- Describe anticipated delays due to permitting timelines, match funding approval/timelines, habitat issues, tourist and bird-nesting season provisions, or approval process timelines from local governing bodies:

The largest potential delay is in acquiring a USACE permit for the project; however, with the support, dedication and funding from the GLO the USACE permit has already been obtained. Minor coordination is expected with the USACE regarding their responsibilities with Section 408 compliance. This sections requires their concurrence on projects that are conducted within a federal project ROW. As this project will be adjacent to the seawall and groin field the USACE will require a consultation. But that concurrence is expected to be minor because the proposed beach nourishment project is not attaching or anchoring to the existing seawall. The placement of sand will not affect the structural integrity of the seawall and will in fact help protect the footing of the seawall itself.

- Does an adequate financial infrastructure exist to maintain the project/perform post-project monitoring following construction? ☒ **yes** ☐ no

- If yes, please describe:

The Galveston Park Board is the primary entity on Galveston with responsibility to maintain its beaches for the approximate 5.5M visitors to the island each year and is the second most visited tourist destination behind the Alamo. The Park Board has the necessary expertise through its Executive Director and Comptroller along with support staff to oversee and dedicate the necessary resources to ensure post-project monitoring and financial support infrastructure. The Park Board has

dedicated funding for depth of closure surveys previously and intends to make this an annual effort.

Attachments/Supporting Documentation

Project Location Map

Attach to this application a map with sufficient detail to show the specific geographic location and boundary of the proposed project.

Letters of Support

Please attach to this application letters of support you have received from potential co-sponsors, elected officials, affected jurisdictions, and other stakeholders with an interest in the project. While letters in support of your proposed project are not required, they are strongly recommended.

